Oracle **Primavera Unifier Business Processes User Guide**

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Working with Unifier Business Processes

The following explains how to work with Unifier business processes.

Within our documentation, some content might be specific for cloud deployments while other content is relevant for on-premises deployments. Any content that applies to only one of these deployments is labeled accordingly.

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Best Practices

To assist you with producing results that are superior to those achieved by other means, Oracle recommends the following methods as the most effective.

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Auto-creation Conditions

Ensure that you allow sufficient amount of time (depending on the number of running background jobs) for routing of the workflow, if you are using a condition-based auto-creation.

When designing business processes, especially when you are designing the relation between the business processes, note that there can be only one auto-creation job per record.

When the workflow advances, Unifier schedules an auto-creation job and executes it with high priority. If the workflow advances again, before the auto-creation job is executed, then Unifier will not schedule a new auto-creation job.

Notes: The manual auto-creation is transactional. The condition-based auto-creation is not transactional.

Because of the general way that processes are organized and relate to each other in Unifier, when you create a job, a number of factors come to play in order to determine the job processing time.

Regardless of the job prioritization (high priority or low priority), Unifier will hold, or delay, processing the succeeding job when a record is being updated concurrently (for example, through web service, RAP, or manual updates), until the current job, or auto-creation, is complete. In other words, if a record is updated manually, and the record auto-creation is in progress, then the next request that is submitted by way of "UpdateRecord" will not trigger an auto-creation procedure because the previous job must finish first.

Example:

When a workflow advances from step 2 to step 3, the auto-creation initiates and is in progress. When the workflow advances from step 3 to step 4, if Unifier detects that the first job was not completed, then Unifier will prevent the second job from completing (auto-creation will not take place for the subsequent job).

Additional Information about Auto-creation Conditions

- Only manual auto-creation is form based.
- Unifier auto-creation process does not depend on a business process form.
- Reverse Auto-population (RAP) process begins when the workflow advances. RAP uses the Unifier auto-creation process; therefore, RAP does not depend on a business process form.

Unifier Business Processes

Unifier transactions and collaboration are driven by business processes. Information is entered and stored in Unifier using electronic Business Process (BP) forms.

Each time you fill out a BP form, you are creating a new record in Unifier. These forms may be routed to project or shell team members or other Unifier users via workflows.

Non-workflow business processes will simply be stored as records.

BP records are stored in logs, which are accessible in the Navigator. You can think of these logs as filing cabinets, with each drawer storing a different type of BP.

The information that you enter into BP form fields may be used throughout Unifier. Each field corresponds to a Data Element (DE) that can be identified, reported upon, and tracked; some data element values may be rolled up to sheets such as a cost sheet or resource sheet.

The look and feel of a field (Data Element) is determined by the Data Definition (DD) on which the Data Element is based. The Data Definition determines whether the field is a text-entry field, a drop-down list of options, a checkbox that you can select, a picker that is used to select an existing Unifier record, etc.

BPs can be associated with specific Project or Shell (Project/Shell-level BP), or they can be applicable for the entire Company (company-level BP) and not to be specific to a Project/Shell. The Administrator (Project/Shell or Company) determines which forms are to be used and how the workflows operate.

Business Process forms are designed in uDesigner.

For information about internationalization and CSV files refer to *Unifier General User Guide*.

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Workflow Versus Non-Workflow

Business processes can be designed with or without workflows. A workflow specifies how a business process should proceed, from start to finish. Workflows define how records are routed and govern the behavior of each step in the business process. Each step uses the forms that were designed for it in uDesigner.

Most business processes will include a workflow or workflows; however, some business processes have a single purpose of storing data. These business processes are called non-workflow BPs. An example of a non-workflow BP is one or more forms that record contact and other general information about a company.

Business Process Types

Different business needs require different types of business processes. In uDesigner, many different types of business processes are available that perform various functions within Unifier.

The business process forms can be of the following types:

- Cost
- Document
- Line Item
- Project/Shell Creation
- Request for Bid (RFB)
- Resource
- Simple
- Text

The following explains each type.

Cost

The Cost type business process form enables you to track and manage cost information and interact with the Project/Shell cost sheet. Examples include base contracts or purchase orders, change orders, budget change requests, invoices, fund appropriations, and leases.

Additional cost-related functionality includes schedule of values (SOV) and payment applications.

In any change order (including change orders with Unit Cost-type Contract when the Unit Cost Contract option is selected), when you select a reference SOV, for selecting an SOV line item, Unifier uses the value of the Item Unit Cost field from the referenced SOV and makes the field read-only.

The Cost type business process form has several sub-types that are used to perform specific cost-type functions in Unifier. The cost business process subtypes are:

Commit at company level (also known as Blanket Purchase Order)
This sub-type allows tracking and control of costs at the company level above the CBS level.

It is independent of a budget or cost sheet, and it is used for tracking non-CBS expenses across projects or shells.

Project/Shell level *Commit at company level sub-type* can be set up to reference a company commit.

Example of **Blanket Purchase Order**

A Blanket Purchase Order is a type of purchase order that the customer makes with its supplier. A Blanket Purchase Order contains multiple delivery dates over a period of time (often negotiated) to take advantage of predetermined pricing. It is usually used when there is a recurring need for expendable goods.

Line items with CBS code

This sub-type relates to the Project/Shell cost sheet, directly.

The business processes that use a CBS picker to reference CBS codes must use the *Line items with CBS code* sub-type.

These business process transactions can directly affect the budget. Examples include Base Commits, Change Commits, General Spends, and Payment Applications.

Line items with fund code

This sub-type is used for fund appropriation at the Project/Shell level.

Business processes can be created to automatically allocate or consume funding source funds, which are chosen using a Fund picker. These transactions are for fund management and do not necessarily affect the budget. Transactions on *Line items with fund code* sub-type roll up to the **Fund Manager**.

Line items with both CBS and fund code

This sub-type is used during fund appropriation at the CBS level. These transactions are for fund management and do not necessarily affect the budget. Transactions on *Line items with both CBS and fund code* sub-type roll up to the **Fund Manager** and **Cost Manager**.

Line Items with Both CBS and WBS Codes

This sub-type is used to roll up transaction data to the **EVM-WBS Sheet** and **Cost Manager**.

▶ Line items with company accounts code

This is a company-level business process that can be used to roll up transaction data to the company accounts sheet.

Line items with asset code

This is a company-level business process that can be used to roll up transaction data to asset sheets.

Line items with multiple codes

This sub-type is for business processes that can be used with a generic (non-CBS) cost manager.

Document

The Document type business process form can be used as an "envelope" to package a set of files, such as spreadsheets, drawings, and design documentation that flow from one group to another.

The **Advanced** functionality allows documents to be attached to the form as line items, with line item status control. This allows the ability to change the status (for example, approve or reject) for each attached document. Examples are submittals and transmittals.

The following are the sub-types of Document type business process form:

With folder structure

Both documents and folders can be uploaded to the business process. The folder navigator in the lower left of the form displays the folder structure.

Without folder structure

The folder structure will be ignored, and documents are attached in a flat list. The contents of selected folders and sub-folders are attached.

Line Item

The Line Item type business process form can:

- Lend itself well to business processes that involve miscellaneous information that you want to document for a company or project, for example, a vendor contact list.
- ▶ Be useful for project-specific information that only needs to be documented on a single form, such as the overall project scope, or meeting minutes.

The Line Item type business process form is also useful for collecting data that other (more restricted) types of business processes cannot collect. For example, while a Simple type business process form can be used to collect basic vendor information, a company-level Line Item type business process form can collect additional vendor information, such as multiple business addresses.

At the project level, you can use a Line Item type business process form to filter large numbers of company records into smaller lists of records that are more appropriate for a specific project.

The Line Item type business process form uses a separate detail form to enter line items, which then appear on a line item list at the bottom of the form.

For short line items, Unifier users can enter information directly into the line item list using a "grid view" of the list.

You can design the Line Item type business process form to accommodate line item status, so you can control modifications to individual line items based on their status.

The following are the sub-types of the Line Item type business process form:

Generic

Use the *Generic* sub-type for all Line Item type business process forms unless you want to filter the business process records.

To filter BP records, use the sub-type explained below.

▶ Line items to filter business process records

Use the *Line items to filter business process records* sub-type to filter company records into smaller lists of records for your projects.

This sub-type is particularly suited for selecting specific vendors from a company's master vendor list (vendor master list) to create a sub-set of the master list that contains vendors who are appropriate for a particular project.

Used for this purpose, this sub-type can be linked (as a reference process) to an RFB to supply a project-specific vendor list for bid invitations.

Unifier allows your company to only designate one "Vendors" business process as the RFB master vendor list.

Preventive Maintenance (If the module is available)

Use the Preventive Maintenance sub-type to maintain assets proactively and on a regular basis, even when no issue has been reported on the asset.

The Preventive sub-type has the following classifications:

- Asset
- Asset Template
- PM Book
- PM Book Template
- Meter Reading

These classifications are available for selection from the **Classification** drop-down list, once you select Preventive Maintenance.

Note: A Company can have more than one business of a particular sub-type, for example, two or more Asset BPs, two or more Asset Template BPs, and so forth).

Project/Shell Creation

The Project/Shell Creation type business process form enables you to create new standard projects and shells from the upper form of the business process or from line items.

The data necessary to create projects/shells is provided by this business process.

In addition to creating a new shell, this type of business process form can also be designed so that you can choose the managers and employees who should be automatically assigned to the shell when it is created.

This type of business process form enables your to create projects and shells using the templates that have been designed in Unifier.

Project/Shell Creation type business process form can also work with the **Planning Manager** by automatically linking new projects/shells with planning items. That is to say, instead of linking a planning item to a project in the **Planning Manager**, the Project/Shell Creation type business process form can be designed to automatically create the link (when the project/shell is created) and roll up data to the **Planning Sheet** from the business processes in that project/shell.

If integration was defined in the business process, Unifier can export/import a CSV template for the Simple type business process form.

Request for Bid (RFB)

The Request for Bid (RFB) type business process form allows companies to invite project- or shell-related bids from different vendors.

- There is a business process form for requestors.Unifier user requesting the bids.
- There is a business process form for bidders.
 Bidders do not need to be existing Unifier users and are provided with a simple interface that does not require special training to use.

See Request for Bid (RFB) Business Processes (on page 261) for more information.

Resource

The Resource type business process form works with the **Resource Manager**.

There are two subtypes of the Resource type business process form:

Resource booking

This is a project-level business process.

In the upper form, you pick a date range to book resources.

The line item list displays a summary of booking rows.

You can one resource booking BP per project.

Time sheet

The time sheet business process can be designed to roll up hours and costs from the time sheet to cost sheets.

There is one per company, but there can be multiple schemas.

Simple

The Simple type business process form consists of an upper form only (like a line-item-type BP without the line items). It is used to add company or project or shell information that does not require line items.

The Simple type business process form can be a:

- Company-level, non-workflow, single record.
- Company-level, non-workflow, multi record.
- Project-level, non-workflow or workflow, multi-record.
- ▶ Shell-level, non-workflow or workflow, multi-record.

An example of the Simple type business process form is a project information form to capture basic reference information.

Text

The content of the Text type business process form is typically a text comment in the lower portion of the form.

Examples of text type BPs include:

- RFIs (Request for Information).
- Action items, which track issue resolution.

Business Process Editor

The **Editor** designation allows someone other than the assignee to edit the business process record. Editors can be added to the following workflow, or non-workflow, business process types:

- Line Item
- Cost (all types, including Lease and Line Item with Multiple Codes)
- Document
- Simple
- ▶ RFB
- Text

If you are designated as an **Editor** on a business process, it means that you are a user, or member of a group, who can open and edit a business process record without being granted explicit record-level permission.

If you are an **Editor** on a business process, you can open and edit any record that you can see listed in the business processes log, per your view access permission (View User Records, View Company Records, or View All Records).

Note: You must have at least one of the above permissions to be able to view the record in the log to access it to edit.

The editors *cannot* edit a Workflow Business Process record until the task assignee accepts the task and saves the draft.

Edits performed by editors are not audited.

Edits performed on the end step of a Workflow Business Process affect the record directly because no draft exists.

If there are multiple editors, the last **Editor**, who saves changes/edits, overwrites all other changes/edits.

If multiple editors and the assignee are editing the business process record at the same time, the data saved by the last edit overwrites all previous edits.

Example

If User 1 changes an amount field from 15,000 to 23,000 and saves the change, and User 2 changes an address field, but does not change the amount field on her copy of the form, when User 2 saves her change, Unifier will commit User 2's edits and overwrite User 1's changes. In this scenario, the amount field value will be 15,000.

For information about responding to your tasks, see *Working with Tasks* (on page 161) and *Completing Tasks via Email* (on page 171).

Business Process Dates and Calendars

Unifier supports multiple calendars, enabling the Administrator to create a library of calendars that can be selected for use at the Company or project/shell levels. The multiple calendars enable you to have calendars to support varying work schedules (depending on locality) and to account for holidays and other non-working days. For example, some countries in the Middle East have weekends that are other than Saturday and Sunday.

Calendars affect the calculation of both business process workflow due dates and task due dates, and formula calculations. When the calendar changes for the Company, or for the project/shell, any subsequent computation of dates will use the new or changed calendar. Dates are not affected for records that are in process. The Date Picker and the Date Only Picker will show the changed calendar.

Business Process Forms

The electronic forms in Unifier are consistent throughout Unifier, with a similar look and feel. When you send a workflow business process form to the next step, the assignee receives a task.

When you first open a task, it appears in "view" mode. On the "view" version of this form, you can do the following:

- Accept the task
- Decline the task
- Print the form
- Terminate the record
- Send Mailbox
- Transfer ownership of the record
- Add an assignee to the current step
- Copy users to the current step
- Audit the progress of the record
- Add a comment, if you have permission

If you accept the task, the form becomes editable. On the editable, or "action," version of this form, you can do the following:

- Undo task acceptance, which allows someone else to accept the task.
- Decline the task, which takes you out of the list of assignees.
- Select the step's next action.
- Add or edit form content
- Save a draft of the record
- Terminate the record
- Transfer ownership of the record
- Display the view form of the business process
- Audit the progress of the record
- Spell check the record content
- Add attachments, line items, etc.

Send the form to the next step

The electronic form appears similar to a paper form—you complete the form by typing information directly into the form fields or choosing options through drop-down lists, pickers, or checkboxes.

Note: The section labels are determined in uDesigner and may vary. The basic form functionality remains the same.

If a data element in a BP form contains a tooltip (associated in the design, in uDesigner), then at runtime a question mark (?) symbol appears next to that field.

When you click on the **Tooltip** option, the Tooltip window opens which displays the following information in columns:

- **Data Element**: The name of the data element.
- **Form Label**: The label for the data element.
- **Tooltip**: The description of the tooltip.

The toolbar of the **Tooltip** window has the following options:

- Open
- Find
- Update from Data Element Properties

When you open the **Tooltip** window from the **Upper Forms**, all unique data elements from across all of the **Action** and **View** forms are displayed.

Note: If a data element exists in multiple forms, the data element will appear on this window once, only.

The data elements can be read-only or editable.

When you open the **Tooltip** window from the **Detail Form**, the data elements from across all of the line item detail forms are displayed.

When you open the **Tooltip** window from the **Attribute** form, the data elements present in the **Attribute** form are displayed.

When you click the **Update from Data Element Properties**, the **Update tooltip Description** window opens which contains the following information in columns:

- Data Element
- Form Label

You can select multiple items from the list.

The list of data elements are filtered based on the data elements available in the **Tooltip** window. You can select one or multiple fields and click **Update**. When you click **Update**, Unifier processes the changes and updates the tooltip contents.

Existing Designs

If a design existed prior to including the tooltip option, and you decide to use the tooltip feature at runtime, then you must perform the following:

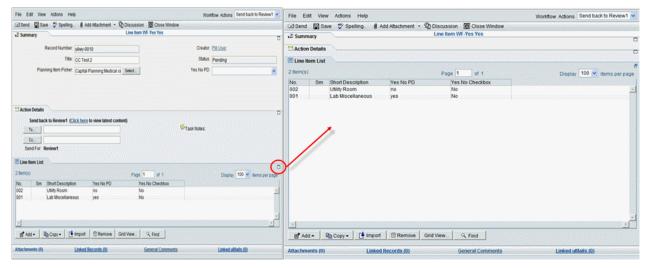
- ▶ Enter the tooltip in the **Data Element** properties.
- In uDesigner, in the tooltip window, click on the **Update from Data Element Properties** option to get the updated tooltip from the data element properties.
- Deploy the design to see the tooltip at runtime.
- Alternatively, you can open the data element in the tooltip of the design and manually enter the tooltip and then redeploy the design.

Parts of the Form

In general, most workflow business process forms consist of three major sections:

- Upper form
- Action (or Task) Details
 Non-workflow business processes do not have an Action Details section.
- Line Item Details, unless otherwise noted.

You can minimize and later expand a business process form. For example, you might want to minimize the General and workflow portions of the form to avoid scrolling through many line items.



Toolbar: The business process form has a toolbar at the top of the form, with the following buttons:



After you are done working on the business process form, click **Send** to route the workflow business process to the specified recipients. You can click **Save** to save a draft of the form, so you can work on it again. Click **Spelling** to check the spelling in your form. You can click **Add Attachment** to add attachments to the form. If the BP is designed to include discussions among members of a group, in Classic View you can click **Discussion** to open a discussion forum. When you have completed work on the business form, click **Close Window**.

Note: The Close Window action does **not** save the information on the form. To save the information, you must click **Save** before you click the

Close Window button.

Collapse by Default Option in Business Process Forms

In the Block Properties window of a BP form, there is a new checkbox called **Collapse by Default**. If the checkbox is checked, the block is collapsed by default. If the checkbox is unchecked, the block is expanded by default.

With the Collapse by Default option, you can avoid scrolling through irrelevant information.

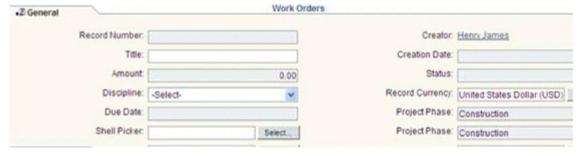
The Block Properties are searched during the rendering of a BP form to determine whether a block is collapsed or expanded at runtime.

Collapse by Default is applicable to Upper forms and Detail forms related to Line Item BPs. This option is also applicable to places where a preview of a BP form is displayed, such as a variety of logs, Query-Based Tabs, and Reference records among others.

Note: If you change the default behavior by performing the opposite action at runtime, the default expand or collapse option is displayed when the page is reloaded.

Additional Elements of the Form

Upper Form: The upper portion of the business process contains the basic (General) information that the form is managing, such as the name of the record and its description, who created the record and when, and other general information. It may also contain fields for referencing other forms, and it may contain fields that are required for specific functionality. This is an example of an upper form for a business process type called Work Orders:



Workflow or Action Details: This section appears in the middle part of workflow business processes. It is for viewing or assigning the next assignee in the workflow or shows the last person who took action on it. Depending on how the workflow has been set up for the BP, the next assignees may be predetermined, or you may be able to choose the next assignee or send a copy of the BP to another user. You can print workflow progress using custom print.

Non-workflow business processes do not have an Action Details section.

This is an example of the Action Details section of a business process.



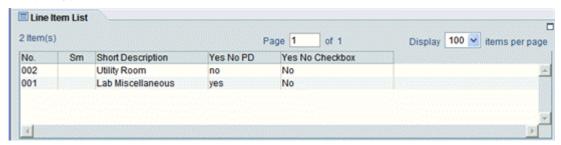
The **To**: and **Cc**: buttons are active after you select a workflow action in the **Workflow Actions** drop-down list.

Note: If there is only one possible workflow action for a step, the action is auto-populated in the field.

You can track a step through the workflow by clicking on the link "Click here" to view latest content.

In Classic View, click the notepaper icon next to **Task Notes** in the Action Details section to add notes to the routed task. These are notes for the task recipients.

Content or Lower Form: The lower portion of the form contains the details and main content of the record, such as line items, file attachments for Document-type business processes such as transmittals or submittals, or comments or instructions in text-type BPs such as RFIs. Simple-type BPs do not have a Content section.



The lower form of certain BPs may be organized using multiple tabs. The BPs that support tabs in the lower form are:

- Line item type
- Cost type with the classification generic (line items with CBS codes, multiple codes, or account codes)
- Cost type with the classification lease, and the subtype line items with multiple codes

Tip: If the entire name is too long to appear on the tab, hover over the tab. Unifier will display the complete name in a tool tip.

There are buttons under the lower form portion of the business process form that enable you to work with line items:



Use the Add button to add detail or summary line items to the record.

Use the **Copy** button to copy another line item from the record, included consolidated line items.

Use the **Import** button to import a line item from a CSV file.

Use the **Remove** button to delete a line item from the record.

Use the **Grid** feature to enter line items directly into the Item log. (This is best used for short line items.)

Use the **Find** function to locate a line item in a long list of line items.

Links: Links at the bottom of the business process form allow you to access attachments, linked records, comments, and Mailbox:

Attachments (0) Linked Records (4) General Comments Linked Mail (0)

About summary line item

Example

When a subcontractor wants to provide input related to the cost of a Change Order, the subcontractor can add summary line items to the change order without being able to see the cost breakdown structure that the contractor, or the owner, is using. The contractor, or the owner, can then review the summary line items and add them to the cost breakdown, for each of the summary lines added by the subcontractor.

Auto-sequencing and Unique Values in Fields

The Administrator can specify values on business process upper or lower forms that enable auto-sequencing, or that specify unique values (upper form only). These features are available for both company-level and project-level business processes, and can be used on workflow and non-workflow business processes.

Auto-sequencing

The Administrator can configure auto-sequencing for certain data elements on a business process form. This is in addition to the standard business process numbering, and allows the numbering of up to two fields on a upper form, and two fields on a lower form. For example, the Administrator can specify that a "Name" field uses auto-sequencing in order to number business processes that have similar names. Auto-sequencing generation occurs for the business process when the you click:

- Send on workflow business processes
- **Save** on non-workflow business processes
- Finish Editing on non-workflow business processes for line items
- ▶ Apply or OK for line items

Note: Fields configured for auto-sequencing are not available for Bulk Edit, since the values for these fields are system-generated.

Unique values

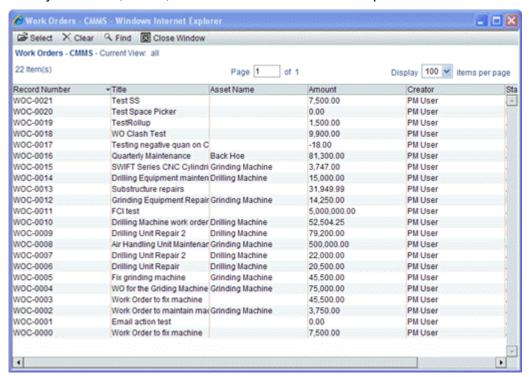
The Administrator can configure unique value validation on data elements on business process upper forms. For example, if a business process has a field called **Invoice**, and should enforce that each invoice number is a unique string, this field can be configured to validate for a unique value. If you attempt to enter a string that is not unique (has been entered on another business process), you will get a warning message that an alternate value must be entered. Unique value validation occurs for the business process when the you click:

- Send on workflow business processes
- Save on non-workflow business processes
- Finish Editing on non-workflow business processes for line items

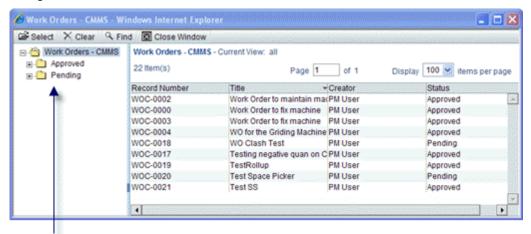
Note: If you use **Bulk Edit** to update multiple records, and attempt to update a field that has value uniqueness configured, only the first record will update (and is therefore unique).

Pickers

When you select a picker on a form, it opens a list, as shown in the image below. These pickers allow you to view, select, or reference another business process record.



Some pickers can be designed to display a group by structure to guide you to the correct location where a record resides, such as a specific project or a specific business process. Below is a list of *Work Order* business process records that have been designed to show an additional navigation column on the left.



Tree structure that will display "approved" and "pending" records.

By using this additional tree structure column, you can navigate more easily through your business process records to the one you want. The *Cost Control* base product uses the following pickers:

| Picker | Description |
|---------------------|---|
| Account Code | Found on cost-type business processes for choosing company account codes. |
| Activity | Found on project- or shell-level business process forms for selecting activities from the master schedule sheet. |
| | Note : Activity Picker is supported on Timesheet BP (Line Item Details form) and can be used for selecting activities from the Master Schedule Sheet. |
| ВР | For linking one business process to another (for example, to tie invoice business processes to purchase order business processes). Often, the field will be named something like Reference BP, although this is up to the designer of the business process. Depending upon the design of the form, some fields may be automatically populated when the referenced business process is selected. |
| | Note : The business process list that you see will depend on your permissions. Users who do not have permission to view a BP that may be part of the business process picker list will not see that business process on the list. |
| Commit Line Item | Used when you create a new line item for a change commit business process. This picker displays a composite view of base commit and change commits. The data elements on the picker are |

| | reference, description, and CBS code. |
|---------------|--|
| Currency | For selecting a currency on a cost-type business process. If no currency is chosen by the creator of the record, the default is the project or shell currency. If there isn't a Currency picker is on the form, the currency defaults to the project or shell currency. |
| Date | Displays an interactive calendar from which the date can be chosen. For some business processes, dates in Date pickers can be set in uDesigner to automatically default. For example, this defaulting can be useful in the case of entering a delivery date and having the date default to today's date rather than have to use the Date picker to get a date. |
| Date Only | Displays an interactive calendar from which the date can be chosen. This picker allows you to select a date from the picker, or enter a date into the field. This picker allows you to choose the date only, with no associated time or time zone. For example, you would not need time and time zone for a date like an equipment purchase date. Also, for some business processes, dates in Date Only pickers can be set in uDesigner to automatically populate the server date. For example, this defaulting can be useful in the case of completing an equipment purchase and having the date default to today's date rather than have to use the Date picker to get a date. |
| Fund | On Cost business processes, for selecting which fund (from the company funding sheet) the business process will allocate funds to or consume funds from. |
| Location | For selecting a shell. |
| Planning Item | For selecting a planning item at the company level. |
| Project | For selecting a company-sponsored project. You can use this picker to auto-populate project data elements on other BP fields. The picker is designed to show Active, Inactive, View-Only, and On-Hold projects. |

| Project Template | For selecting a template to use to auto-create a project. |
|------------------|---|
| Resource | On time sheet, booking, or assignment business process, for selecting the resource to report on or assign. This picker always opens in Find mode and requires you to enter at least one search criteria, such as a name or a skill, to narrow the field of names to choose from. For time sheet business processes, use this picker to select the personnel to report time on. At runtime in Unifier, the picker will default to read-only mode and show the current user's name, as Unifier assumes the user will be reporting his or her own time. However, depending on permissions, the picker can be editable to allow others, such as project managers, to complete time sheets on behalf of other workers. |
| Role | On time sheet, booking, or assignment business processes or for resource allocation sheets. It allows you to choose the roll to report on or assign. On time sheet business processes at the project level, it will filter out those roles that have already been booked for other projects |
| Shell | For selecting a company-sponsored shell to auto-populate shell data elements on other business process fields. The picker is designed to show Active, Inactive, View-Only, and On-Hold shells. |
| Shell Template | For selecting the template that should be used by a business process to auto-create a shell. The picker will show you a list of active templates that have been created for the shell. |
| User/Group | For selecting project/shell users (members of a project team) or company users (all users defined within a company). See more information under <i>User Picker and Group Picker</i> (on page 37). |
| CBS | On Cost-type business processes, project/shell cost sheets, and on schedule activity forms, for selecting CBS codes. |

| Week | On Resource or Time Sheet business processes for selecting a specific week for reporting. |
|--------------|---|
| Work Package | On Cost-type business processes, for selecting a work package for a Cost Sheet. This picker is populated with the work packages that have been created. |

The following lists all the pickers:

- Account Code picker
- Activity Picker
- Allocation Template Picker
- Asset Picker
- Auto-update Status Setup Picker
- Bid Picker
- BP Picker
- ▶ BP Line Item Picker
- BP Line Item Data Picker
- CBS Picker
- CBS Code Picker
- CM0 Picker (Generic Cost Manager)
- CMx (Code and Record based) Picker
- CMx (Code based) Picker
- Commit Line Item Picker
- Company Picker
- Configurable Manager [Name] Picker
- Cost Attribute Picker
- Cost Code Picker
- Currency Picker
- Data Picker
- Date Picker
- Date Only Picker
- Fund Picker
- Generic Cost Code Picker
- Group Name Picker
- Hyperlink Picker
- Image Picker
- Level Picker
- Location Picker

- ▶ P6 Activity Picker
- ▶ Planning Item Picker/Planning Line Item Picker
- Planning Period Picker
- Program Picker
- Project Picker
- Project Template Picker
- Resource Picker
- Role Picker
- Role Data Picker
- Seasonal Date Picker
- Shell Picker
- Shell Code Picker
- Shell Template Picker
- Shell Data Picker
- Single User Picker
- SOV Picker
- Space Picker
- SYS Date Picker
- User Picker
- User Data Picker
- WBS Code Picker
- WBS Picker
- Week Picker
- Work Package Picker

For the following details, for each picker, refer to the *Unifier Reference Guide*:

- Data Element Name
- Label that will Appear on the Form
- Available for Forms on Mobile Device
- What it Does

At run-time, when a record is selected for a BP Data picker, all the line items for referenced BP Line Item Data Picker that meet the query conditions defined on the Line Item Data Picker are displayed.

In the Action form, a data line item picker can be designed to be either editable or read-only. At runtime based on the design of the action form, the data picker is either editable or read-only:

- ▶ Editable: A line item from a data line item picker.
- Read-only: A disabled text box without select icon.

In the View form, a Line item data picker can be designed to be read-only.

Read-Only: A disabled text box without select icon.

If picker is read-only, the display element of the selected line item in previous step is displayed. if no line item is picked, or the display element does not have value then picker shows empty text box and is disabled.

Click the picker icon for BP Line Item Data Picker to view the detail forms of the source BP displayed as different line items.

Note: The tabs that are set as visible in picker configuration are shown.

All the source line items within each tab that satisfy the query conditions are displayed.

The Toolbar options are:

- Lineitem: This is a drop down that shows tabs from source BP. Tabs that are hidden in picker configuration will not be shown.
- Find: All the search elements that were added in **Find** tab in uDesigner are shown. You can further filter the line items based on the search parameters.
- ▶ Find on Page: Same behavior as in other logs in standard Unifier.

Line item log for each tab is displayed as designed in uDesigner.

CBS Picker

The CBS Picker has an auto-completion feature. If you know the code, begin typing in the CBS Code field, and the picker will show the top 10 matches. If you continue to type, the picker will narrow the list as it matches more of the characters you type.



In this picker, you can use the following keyboard shortcuts:

- Use the Up and Down arrows to move through the list
- Press the Enter key on a highlighted CBS code to confirm a selection
- Press the Backspace key to delete a selection
- Use the Tab key to make a selection and move to the next field on the form.

In the CBS Picker log, you can click **Find on Page** to do a text-based search for each column. You can click **Find** to filter CBS codes. When you click **Find**, any additional elements defined in uDesigner become present and a **Show CBS Hierarchy** checkbox appears. To view the entire CBS hierarchy of filtered CBS codes, check the Show CBS Hierarchy checkbox. When the Show CBS Hierarchy checkbox is selected, summary level codes and child level codes become visible beneath the CBS code.

WBS Picker

When you select the WBS Picker, the field displays all WBS codes that are available in WBS Sheet. You can select a leaf-level and summary-level WBS code per P6 project. The auto-populate data elements that are defined from the WBS Picker will be populated for the selected WBS code.

When the BP record (CBS-type or WBS-type) is routed to the next step, or to the terminal step, then the amount or quality (amount and uuu_quantity data elements) will roll up to the WBS Sheet, per selected WBS code in the BP record.

In the WBS Sheet, when you add the columns, which are of data source type SYS BP Currency Amount and SYS BP Decimal Amount, then the amount and uuu_quantity data elements values from the new Cost BP (Standard tab) line items will be rolled up.

When the BP record (CBS-type or WBS-type) is created and routed to the next step by way of CSV import, SOAP Services, and RESTFUL Services, then the pertinent roll up will take place. Refer to the *Integration Interface User Guide* for more details.

Bulk Edit

When you bulk edit multiple BP records (CBS-type or WBS-type) and change the status, the corresponding amount and quantity will roll up.

Note: You can use bulk edit to update all other data elements in the action forms.

Bulk Action

You can route multiple records at a time by going to the Task log and selecting one of the following options:

- Bulk Action with Preview
- Bulk Action without Preview

You can route the BP records (CBS-type or WBS-type) to the next step by using bulk action and roll up will occur if the BP status is added as a column in the WBS Sheet.

For the current workflow BPs, you can route the BP record through email. When routing the BP record through email to the next step, or terminal status, the corresponding amount and quantity data elements are rolled up to the WBS Sheet, in the same way the same line item rolls up to the Cost Sheet for the corresponding CBS Code.

The new BP records (CBS-type or WBS-type), are available to be used for User-Defined Reports (UDRs), similar to other BPs.

In a project:

- If the WBS has not been created yet, then Unifier does not allow the creation of a new BP record (CBS-type or WBS-type).
- When a BP record (CBS-type or WBS-type) is terminated, then the data rolls back from both Cost Sheet and WBS Sheet.
- You cannot delete a WBS code that has line item data and is removed from P6.
- If the Cost Sheet is not locked, then Unifier does not allow you to route the new BP record (CBS-type or WBS-type) to next step.

When you create a new BP record (CBS-type or WBS-type), the main form of the record appears and each line item appears as a tab (**Create New CBS/WBS BP** window). The following explains this form in details.

The form is split into two panes. The left-hand pane contains the upper form and contains tabs that contain line item details:

- ▶ General tab
- ▶ Standard tab
- **Payments** tab
- Schedules tab

The right-hand pane contains th following tab:

Attachments tab

To add attachments by way of browsing or Document Manager (if the uDesigner option is selected).

▶ General Comments tab

To add general comments (if the uDesigner option is selected).

Linked Records tab

To include a link to additional records, similar to other BPs.

Linked Mail tab

To include a link to emails.

The menu option (the three horizontal lines icon) enables you to conduct the following:

Auto-create

To use if there are any BP creators on the form, where user can define scheduled auto-creation.

Export Line Item Template

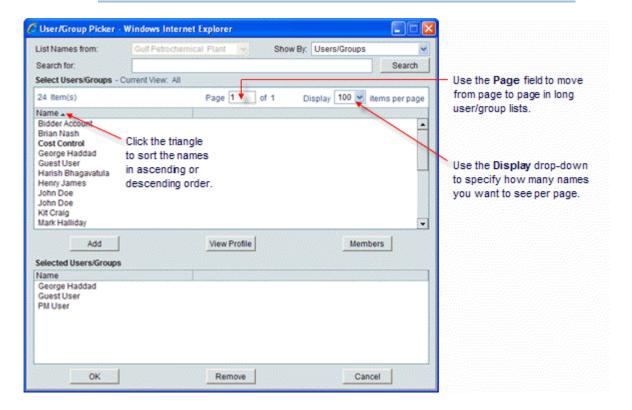
To use the CSV template to import the line items, in bulk.

- Print
- Reload
- ▶ Help
- Close

User Picker and Group Picker

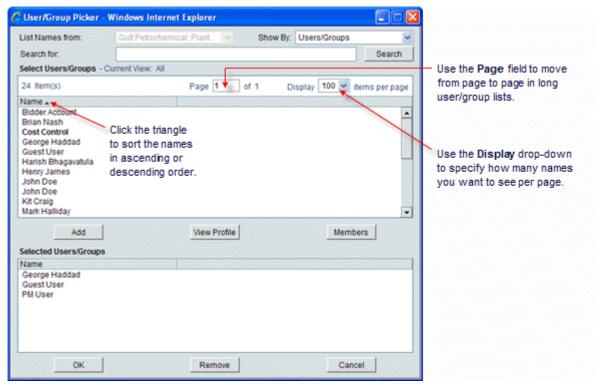
Most pickers operate in the same way. However, the User/Group Picker has several features that other pickers do not.

Note: If a User Administration design has been imported, the content of the User/Group picker (in User view) can vary. The Find window and sort order can also vary depending on the optional design created in uDesigner.



To filter the user/group list

The list of users and groups in your company may be very long. To make reading the picker list easier, you can filter the names on the list by project/shell and by user or group, or both.



To filter the list by project or shell, use the **List Names From** field and choose the name of the project or shell. (This filter option is usually available only to administrators; for example, when an administrator is adding project or shell members.)

To filter the list by user or group, use the **Show By** field to display users, groups, or both users and groups on the list.

To select a user or group

- To select a user or group for an action, select the name. To select multiple names, hold down the Ctrl key while you click the names.
- 2) To add the names for the action, click **Add**. Unifier displays the names at the bottom of the window.
- 3) Click OK.

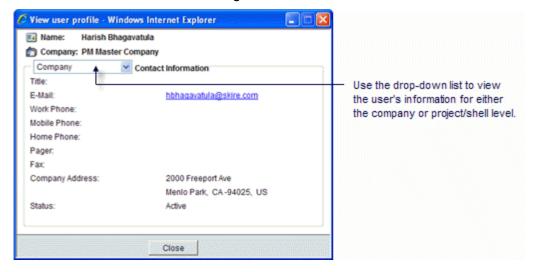
To remove a user or group

If you change your mind, you can remove a name from the action as follows:

- 1) At the bottom of the window, select the user or group you want to remove. To select multiple names, hold down the **Ctrl** key while you click the names.
- 2) Click **Remove**. Unifier removes the names from the bottom of the window.
- 3) Click OK.

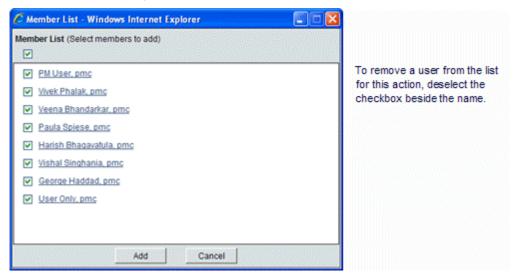
To view a user's profile

To view a user's profile, select the name and click the **View Profile** button. Unifier displays the View User Profile window, showing work information for the user.



To see a list of group members

To see a list of the members in a group, select the name of the group and click the **Members** button. Unifier displays the Member List window.



Shell Data Picker

When you open the shell properties in user mode and use the shell data picker hyperlink:

- ▶ The shell data picker can be editable, read-only, or read-only with a hyperlink on the Action form.
- The shell data picker can be read-only or read-only with a hyperlink (in read-only mode) on the View form.

When you click the shell data picker hyperlink (in read-only mode) on the View form:

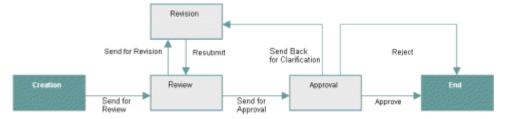
- If you are a member of the shell and have permission to the View form, then you can see the View form in the shell details in view-only mode.
- If you are not a member of the shell, then you cannot see the View form.
- If you are a member of the shell and have "Modify Properties" permission (in Access Control) for the shell, then you can view the Action form of the shell in view-only mode.
- If the shell administrator accesses the shell data piker hyperlink, then the administrator will see the Action form of the shell in view-only mode.

Note: Starting in 19.12.3, when you select the shell data picker, only the General tab information of the shell properties is seen.

About Workflows

The Unifier workflow engine routes a business process form through your company's business protocols.

When you participate in a business process workflow, you are taking action on the form (for example, reviewing and approving an invoice, or responding to a request for information). Depending upon the workflow setup, you may choose the next recipient of the business process in the workflow, or this may be automatically selected for you. When you send the business process to the next step, it proceeds along the workflow and records each action taken at each step.



In the workflow example above, the form is created and filled out, and then sent for review. The reviewer has the option of sending the form for revision (after which, it is resubmitted to the reviewer), or sending it on for approval. The approver may send the form back for further clarification or revisions, may reject the form, or may approve the form. A rejection or approval status essentially ends the workflow. At the approval or rejection step, the business process is considered to be in a "terminal" status, and this status cannot be changed; however, comments and certain edits can still be made to the record. From a terminal status, the business process proceeds to the End step.

Note: A "terminal" status differs from a "terminated" status. A business process is at a terminal status when it reaches the final step (not the End step) in the workflow. A business process with a terminated status was stopped at some point before it reached the final step in the process.

Auto-Populating Fields in a BP Record

Using uDesigner auto-population feature, you can automatically populate fields on a form or line item at the time the form/line item is created. Auto-population can occur on business processes that are in the same shell, or across shells. Using auto-population means that you do not have to enter data in every field in a form. For example, this feature could automatically fill in a "Plant Location" field from an attribute form.

For another example, the date field on a time sheet could be set up to default to the server date and time so that you do not need to use a date picker. Or, a field could be set up to automatically display a title or other text that you would normally need to fill in on a frequent basis.

In addition, auto-population can be used with the Unifier portal. When a user logs into the portal to submit a form, such as a work order, the user's information, such as his/her location and department, can be automatically populated on the work order. Or, when an employee "move" request is created, the current location of the employee can be auto-populated onto the move request form.

Fields on a form can be auto-populated from the following sources:

- Fields on an attribute form for managers (except a code-based configurable manager)
- Fields on another business process form or line item
- Fields on a user attribute form (via a user data picker)
- Shell attribute forms
- Fields from an upper form (to fields on a detail form)
- Fields on single-record BPs at the company, shell, or standard project level
- Fields on an SOV (for a payment application BP)
- ▶ Fields from document properties of a line item attachment
- ▶ The total value from a line-item numeric field (can populate a field on an upper form; becomes a read-only field)
- A constant value that was specified for a field when the form was created in uDesigner

Reverse Auto-Populating (RAP) Fields in a BP Record

Some data elements on forms can be updated using "reverse auto-population." These data elements are specified in uDesigner when the form is designed. Reverse auto-population means that some values can be automatically updated when other values are modified in a business process form.

Notes:

- The data fields in a business process form can be updated through reverse auto-population, including those in the behavior set of a DDS.
- Reverse auto-population does not occur for projects and shells with View-Only or Inactive status.
- Reverse auto-population is not supported for single-record business processes, except in the case of BPs existing under child shells,

- which can reverse auto-populate to single-record BPs under any parent shell in the shell hierarchy.
- Unifier does not allow Reverse Auto-Population (RAP) for any data pickers that use the BP Line Item selectors. None of data picker data elements (including the user data picker data element) can have "Reference BP Line Item Selectors," when defining Reverse Auto-Population (RAP). Other data elements can have "Reference BP Line Item Selectors," when defining RAP.

Reverse Auto-Population in Auto-Created Business Processes

A business process can be designed to update the record or line item that auto-created it. For example, a Meeting Minutes business process auto-creates **Action Items** business processes from line items. If you update the Meeting Minutes business process line item, the Action Item business process can be updated via reverse auto-population.

In another case, if a business process auto-creates a new line item for an existing record, that line item can be updated with information from subsequent steps in the workflow.

Business cases that might use reverse auto-population:

- A work order could reference the line items on a preventive maintenance type business process. Certain updates in the work order could be reverse auto-populated onto the line items of the preventive maintenance type business process.
- Changes to the detail form in a business process under a child shell could result in changes to the upper form of a single record non-workflow business process under any parent shell in the shell hierarchy.
- Lease payment requests could be auto-created from a lease business process. An approved payment request could reverse auto-populate the lease BP's line item status to "approved."
- A move order business process could reference an asset record. Updates on the move order could be reverse auto-populated onto the asset record.
- An office move order business process could reference a user attribute form. Once the move is complete, the user's new location could be updated on the attribute form. (This kind of reverse auto-population is normally triggered when you choose a user from a data picker, rather than when a business process is auto-created.)

Reverse Auto-Populate Status of non-Workflow BP

The Status DE on a non-Workflow Business Process can be Reverse Auto-Populated (RAP) from another non-Workflow or Workflow Business Process.

Example

A non-Workflow Asset Business Process (BP) (a non-workflow BP) record is in an "In_Service" status. Another Business Process goes through approvals to shut down that Asset. As a result, the Asset BP status changes to "Inactive."

The following explains the function of the Data Element (DE) of Data Definition (DD) = "Record Status Pulldown" at runtime:

If the DE is set to Reverse Auto-Population on a BP form and a default value has been defined, then the BP form renders the DE to display the default value. You can chang the default value.

If the DE is not set to Reverse Auto-Population on a BP form, then the BP form renders a read-only value because the BP form does not have a configured RAP, in which a dataset has been defined for the DE.

Example

BP Form 1 is configured for RAP and two DDs (DD = "Record Status Pulldown") have been set in uDesigner as A and B. The BP Form 1, will render the DE as Editable, Required, or Read-Only as defined in uDesigner. If the DE is designated as "Editable," then you can select A or B.

BP Form 2 is not configured for RAP in uDesigner, so the BP Form 2 renders the DE as read-only, irrespective of the settings in uDesigner. The DE value is the one that you have selected for BP Form B.

BP Form 3 is configured for RAP and two DDs (DD = "Record Status Pulldown") have been set in uDesigner as C and D. The BP Form 3, will render the DE as Editable, Required, or Read-Only as defined in uDesigner. As a result, the value from BP Form 1 is deleted. If the DE is designated as "Editable," then you can select C or D.

BP Form 4 is configured for RAP and two DDs (DD = "Record Status Pulldown") have been set in uDesigner as D and E. The BP Form 4 will render the DE as Read-Only as defined in uDesigner. If you select C in BP Form 3, then the value is deleted. If you select D in BP Form 3, then the value will be retained. If the DE is designated as "Editable," then you can select D or E.

If RAP is configured such that the destination is a non-Workflow BP, and the destination record is in finished or edited state, then the RAP first brings the record to an "Edit" state and then back to finished or edited state (rollback).

Reverse Auto-Populate Status of non-Workflow BP Errors

The RAP will fail if an invalid Status has been defined in the dataset value during RAP configuration of a destination non-Workflow BP (RAP to "Status" has failed because an invalid value was detected in the source element). The system logs this error, and you can send this error message to the user who has been designated to receive source BP error notifications in the Business Process Setup window > "Send error notification to."

Note: You can find the reasons for the reverse auto-population (RAP) failures in the audit log of the business process record. In addition, on occasion Unifier generates error codes for reverse auto population failures which can be used to troubleshoot the reverse auto population failures.

Viewing Notifications (CC'd Tasks)

If someone copies you (cc) on a task, it is not a task for you, but it is for your information only and called a message. These business process record copies are listed in your **Notifications** log. You will usually be notified by email when you have a new a message. If you receive an email notification, click on the hyperlink at the bottom of the email. You will be directed to the Unifier Sign In screen and, once you log in, to the project or shell or company **Notifications** log.

Note: Notifications for View-Only projects or shells are listed in the **Notifications** log, but you cannot add general comments to these messages.

Notifications are view-only snapshots of the form at a particular step and remain available for viewing until the BP is sent to the next step. Notifications received for an end-step will remain available in the log.

To view your messages from:

- Home page > Home node > click the Messages link listed under Items Requiring Your Attention.
- ► Home page > Notifications.
- Project/Shell tab > User mode > Notifications.

Accessing a BP Record from an External System

Unifier provides a data element for business processes that can display a URL for access to Unifier from an external system. If the business process contains this URL field, you can open a view-only copy of the record from that external system.

For example, you might have notifications from Unifier that are sent to email programs, such as Microsoft Outlook or Yahoo Mail, outside of Unifier. From that email program, you could open a view-only copy of the business process.

Or, you might have an approval process that resides outside of Unifier. At a certain point in the workflow, the business process record data could be sent from Unifier to that external approval process. From that external system, you could open a view-only copy of the business process record.

Note: If this business process created records before this URL field was added to the form, those records will not show data in the URL field. Only new records will show data in the URL field. Any business process designed to be opened from an external system must be available in the **Master Log - Business Processes** node.

To open a business process from an external system

You must be an active member of the project, shell, or sub-shell, and have at least view permission to the **Master Log - Business Processes** node that lists/contains the business process record you want to view.

Use the URL to access Unifier. This URL will open the Unifier sign in window. Once you are signed in, Unifier will display the business process record in view-only mode.

Note: If Unifier has been configured to sign in users using single sign-on (SSO), the **Sign In** window will not appear.

Depending on what permissions you have, you can take the following actions from this view-only copy of the record:

- Terminate the business process
- Print the business process
- Send Mailbox
- Transfer ownership
- View reference records
- View the audit log
- View record attachments, general comments, linked records, and linked Mailbox
- Click line item tabs and open the line items in grid view
- Use the Find feature to locate line items
- Use any hyperlinked field, such as a picker, an image, or a URL, or the workflow progress link
- View the assignees and cc'd users on the step

Business Processes in Company Logs and Logs Nodes

The **Company Logs** node is in **Company Workspace**, and the **Logs** node can be accessed in a project or shell. You can use the **Company Logs** node and the **Logs** node to access the business processes which you have permission for.

To access the business processes in **Company Logs** node:

- 1) Go to your Company Workspace (User mode).
- 2) Click **Company Logs** node to expand and see the business processes.

To access the business processes in **Logs** node:

- 1) Go to your project or shell (User mode).
- 2) Click **Logs** node to expand and see the business processes.

The following explains the log elements in both **Company Logs** and **Logs** nodes. The log in each node is divided into two panes, left and right.

The toolbar options and columns on the left-pane are:

| Create | To create a new record and subsequently add attachments, add comments, |
|--------|--|
| | and include link to other records. |

| Actions | To perform the following actions: Import Export CSV Template Create From Template Bulk Edit Print Transfer Ownership Terminate Record To change the view of the log based on the following options: All Records (default) Records Created by Me Records Received by Me Records Created and received by Me Records from My Company Create New View | | |
|----------------------|---|--|--|
| Edit View | To edit the current view. | | |
| Refresh | To refresh the contents of the log. | | |
| Print | To print or export the contents of the log. | | |
| Search | Enables you to search in the record for a specific field. | | |
| Find on Page | Enables you to find items on the displayed page. | | |
| View Help Menu | Specific help for the selected BP | | |

The tabs on the right-pane are as follows. The information in each tab corresponds to the record that has been selected.

Note: Displaying a tab depends on the business process type, such as Workflow or non-Workflow.

| Recor | Enables you to see the details of the record that are selected on the left-hand |
|---------|---|
| | page. The record details seen depend on the form that you have access to. |
| Details | |

Workfl Enables you to see the details of the workflow progress which includes: ow View Graphic **Progre** Title SS Record Number Current Step BP Setup Used Step Name Assignee Company: This column displays the assignee's company name. For Partner users, this column shows the assignee's Partner Company name. Status Action You have the option of filtering (Filter By) the information displayed on the workflow progress. Enables you to access the record attachment, if available. For each Attach ments attachment, you can click the gear menu to conduct the following: Open in AutoVue (You can also open an attachment by double-clicking the name of the attachment) Download

Additional View Form Accessibility in Record and Log Previews

When you view the record preview and the record details upon opening a record, the content seen depends on the form that you have access to. Your administrator may have set up restrictions to view certain form data and may have given access to a View form. This View form may be different from the View form associated with the workflow.

If you have View restrictions for multiple View forms, then the first View form from the View Forms list in the BP setup is displayed. If you do not have View restrictions, then the Step form is displayed. This is applicable for Record Owners, Record Editors, and Step Editors.

If the end form is an Action form and you have View restrictions, then the appropriate View form is displayed. However, if you do not have View restrictions, then the Action form is displayed.

If the end form is a View form and you have View restrictions, then the Restricted View form is displayed. However, if you do not have View restrictions, then the View form that is part of the end step of the workflow is displayed.

Record Content Impacted by Additional View Form Accessibility

The additional accessibility of View forms impacts all areas where you can open and view record content. These areas are listed below:

- Workflow BP and Task logs
- ▶ Reference Records
- Linked Records
- Dashboard Drill Down Records

- ▶ BP Picker, BP Data Picker, and BP Creator links
- Permission-driven Data Sources
- Cost Sheet, Funding Sheet, SOV Sheet, Schedule Sheet, etc.
- Email Notifications
 - If you have View restrictions for the View form in the BP setup, then the email has the data elements that are part of the View form. In the case of a task assignee, if the previous checkbox is not selected, then the email has the Step form elements.
- HTML and PDF Print views
 - If you have access to a Restricted View form, then the View form data is displayed.
- ▶ I-Step Records
- Mobile applications

Note: Additional accessibility is not applicable for Master logs since the BP setup is done at the project and shell levels.

When user is an I-Step Assignee, and the record is in the I-Step (initiation step), the existing form will be seen as read-only end-form for Workflow BP records and read-only action-form for Non-workflow BP records.

If the user is an I-Step Assignee but not the creator of the record, and the record is in post-creation step, then restricted view form will be seen if the I-step Assignee has access to restricted view forms.

| User Name | User Role | Record Status | Form The form that will be seen upon opening the record, as well as in the Logs (BP log) Preview. |
|--------------|-------------------------------------|--------------------|---|
| User A | I-Step Assignee | Initiation Step | Read-only Action Form/End Form |
| User B | I-Step Assignee-Cre ator | Creation Step | Action Form |
| User C | I-Step Assignee-Not a Creator | Creation Step | Restricted View Form |

Deleting View Forms

When you delete a View form, Unifier removes the View form from **View Forms** tab in the **Business Process Setup** window.

Important

When you delete a View form in the Staging environment and create a new View form, the new form:

- a) 1- Gets the ID of the deleted form (permissions, users, etc.).
 Company Workspace > Admin mode > uDesigner > Business Processes > BP ... View Forms (delete or add new one).
- b) 2- Appears in the Business Process Setup automatically; meaning, it does not go through the regular way of creating a new form, deployment, and then added (within the BP Setup module).

Project/Shell > User mode > Business Processes Setup > BP ... (same as above) View Forms (Deleted or added new one)

When you open a Non-Workflow Business Process, Unifier checks to see if you have the appropriate permissions, or not.

Note: There are no changes to the **Permissions** tab in a Non-Workflow Business Process log and **Access Control**.

To be able to view Non-Workflow Business Process records, you must have the following permissions:

- Navigation-level access (left-hand Navigator) to view the Non-Workflow Business Process record.
- View All Records
- View Company Records
- View User Records

At the Non-Workflow Business Process log level, you must have at least the "View" permission in order to view the record content.

The **Views** setting of the **Permission Settings** block (**View Forms** tab) of a Non-Workflow Business Process sets the visibility of the data (including tabs) when you open the record.

Creating a Business Process (BP) Record

You can create a business process (BP) record and access that record from any of the business process logs (**Company Logs** in **Company Workspace** or **Logs** in a project or shell).

Note: You must have the proper permissions to create a new BP record.

Important information

Once a workflow record is created by using any workflow schema (unique combination of Setup Name + Workflow Name), the workflow record continues to reference the workflow schema even if the Status of the workflow schema has been set to Inactive.

This condition includes workflow records that are in the following statuses:

- Draft
- Initiation Step (I-Step)
- Also, this condition includes any workflow record at any other step in the workflow.

If there is an Active BP Template, then the Template continues to create records referencing the Inactive workflow schema. For instructions on creating a template, see Create BP Templates and Schedule BP Creation.

A new BP record can be created in the following ways:

- Manually create a new BP record, starting with a blank form.
- ▶ Copy an existing BP record in the same log. The fields will be populated with the original record entries, which can be edited as necessary.
- Create a BP record from a template.
- Auto-create a BP record from another record at a specified step (S-Step) in a workflow.
- ▶ Auto-create a BP record when certain conditions are met or at a specified frequency.
- Create a BP record from the Master Log Business Processes node.
- Create a BP record from within the Document Manager, selecting the documents or folders to include as attachments.
- Auto-create a BP record using the Scope Management feature of the Schedule Manager.

Before you begin

Be sure that you have the proper permission settings. All Unifier functions are controlled by fully configurable permission settings, including creating business processes. Contact your project or shell or company administrator regarding permission settings.

A business process (form and workflow) must be imported, configured, and set up by an administrator before it can be used.

You cannot create records of other business processes in a business process log (except in the **Tasks** log and **Master Log - Business Processes** node).

For a Workflow Business Process, when you create a new record, if the next step is match step *Creation* (per workflow setup), then the *To* list will be populated with the user who has signed in.

Gaps in Generated Business Process Record Number

Business Process (BP) record number is sequentially generated when you create a new record. The newly generated record number is locked so that other records (being created at the same time) cannot use that number. If the BP record cannot be created for any reason (for example, Cost Sheet rules or validations that exist at the SOV level), then Unifier only voids the generated record number and does not reset the record numbering sequence to allow another BP record to pick up that generated number. This operation generates gaps in BP record number generation.

Manually Creating a New BP Record from a BP Log (Standard View)

The following is a general procedure that can be used to create a new BP record from any BP log (Company and/or Project/Shell -- **Company Logs** and/or **Logs**).

To create a new BP record from Company BP log:

- 1) Go to **Company Workspace** and switch to **User** mode.
- 2) From the left-hand Navigator, click the **Company Logs** node to expand.
- 3) Click to select a BP and open the BP log.

4) Click the **Create** icon to open the **New Record** window. The value for **Business Process Origin** is read-only and set to **Company Workspace**.

The **Create** option is not available if you do not have the permission to create a record.

You can no longer create records of other business processes in a business process log (except in the **Tasks** log and **Master Log - Business Processes** node).

Example

You cannot create a Meeting Minutes business process record in an **Action Items** business process log.

5) For the **Select Business Process** field, click the drop-down list and select a BP.

The New Record window, for a BP, has a Select Workflow field which displays value if:

- The BP is a non-Workflow BP.
- There is only one Workflow schema available that you can choose.
- 6) When finished, click Create.

To create a new BP record from *Project/Shell BP log:*

- 1) Go to your Project/Shell and switch to **User** mode.
- 2) From the left-hand Navigator, click the **Logs** node to expand.
- 3) Click to select a BP and open the BP log.
- 4) Click the **Create** icon to open the **New Record** window. The value for **Business Process Origin** is read-only and set to **Company Workspace**.

The **Create** option is not available if you do not have the permission to create a record.

You can no longer create records of other business processes in a business process log (except in the **Tasks** log and **Master Log - Business Processes** node).

Example

You cannot create a Meeting Minutes business process record in an **Action Items** business process log.

5) For the **Select Business Process** field, click the drop-down list and select a BP.

The New Record window, for a BP, has a Select Workflow field which displays value if:

- The BP is a non-Workflow BP.
- There is only one Workflow schema available that you can choose.
- 6) When finished, click **Create**.

Manually Creating a New BP Record from the Master Log (Standard View)

If you have permission to create BP records, then you can go to the master log (**Home > Master Log - Business Processes** node).

Note: The name of the **Master Log - Business Processes** node can be customized.

Auto-population and reverse auto-population are supported for BP records that are created or edited in the master log, also.

Note: The default elements and fields (log layout, view, search, etc.) that

are defined in the Standard Log, in uDesigner, determine the Standard user interface elements and fields of all logs.

The following BP records actions and functions are not supported in the master log:

- Import template
- Export template
- Permissions

There are specific conditions for creating workflow BP records and non-workflow BP records in the master log.

Creation conditions for workflow BP records:

- The BP must have an Active setup in the selected Project/Shell If no active setups exist for the BP, the system will notify you.
- The selected Project/Shell controls the list of enabled workflow setups
- You must be an assignee on the Create step of the BP, within the selected Project/Shell
- If you save a BP record (during its creation) instead of sending it, the system lists the BP record drafts folder (**Home** > **Drafts**) and not the master log.
- After you create a BP record, the system lists the BP record in both the:
 - Project/Shell BP log (Project/Shell > User mode > Logs)
 - Master log (master log (Home > Master Log Business Processes node)

Creation conditions for *non-workflow* BP records:

- ▶ The BP must have an Active setup in the selected Project/Shell If no active setups exist for the BP, the system will notify you.
- You must be on the Creator list, for the BP, in the selected Project/Shell
- After you create a BP record, the system lists the BP record in both the:
 - Project/Shell BP log (Project/Shell > User mode > Logs)
 - Master log (master log (Home > Master Log Business Processes node)

To create a BP record from the master log:

- 1) Go to **Home** page and from the left-hand Navigator, click the **Master Log Business Processes** node to expand.
- 2) Click to select a BP and open the BP log.
- 3) Click the **Create** icon to open the **New Record** window.
- 4) Select a value for the **Business Process Origin** field. You can select a BP from **Shells** or **Standard Projects**.

The **Details** icon (), next to the **Select Business Process Origin** field drop-down list in the **New Record** window, enables you to see a list of available options under **Shells** or **Standard Projects**. The list on the left-hand pane is displayed according to your permissions. After you select an entry from the list and click **Select**, your selected option becomes the value of the **Select Business Process Origin** field of the **New Record** window.

The **Select Business Process** field displays the BP that you have selected to create a new record for.

The **New Record** window, for a BP, has a **Select Workflow** field which displays value if:

- The BP is a non-Workflow BP.
- There is only one Workflow schema available that you can choose.
- 5) When finished, click **Create**.

Manually Creating a New BP Record from the Tasks Log (Standard View)

- 1) Go to the **Home** page and click the **Tasks** node.
- 2) From the Tasks log click the Create icon to open the New Record window.

When you create a BP record, you generate tasks for assignees on the next step, and the tasks appear in the assignees' logs.

The BP record appears in the BP log, including the status, as the BP record moves through the workflow.

The **Create** option is not available if you do not have the permission to create a record.

You create records of other business processes in the **Tasks** log and **Master Log - Business Processes** node, only.

You cannot create records of other business processes in business process log (**Company Logs** node and **Logs** node).

Example

You cannot create a Meeting Minutes business process record in an **Action Items** business process log.

3) Select a value for the **Business Process Origin** field. You can select a BP from **Company Workspace**, **Shells**, or **Standard Projects**.

The **Details** icon (**Tasks** log only), next to the **Select Business Process Origin** field drop-down list in the **New Record** window, enables you to see a list of available options under **Shells** or **Standard Projects**.

The list on the left-hand pane is displayed according to your permissions.

Select the option from the left-had pane, then select an entry from the list (on the right-had pane), and click **Select**. The list of business process names includes those business processes that you have the "Create" permission for.

Your selected option becomes the value of the **Select Business Process Origin** field of the **New Record** window.

If applicable and if you have the "Create" permission, select a workflow (Select Workflow).

4) In the **Select Business Process** field, click the drop-down list and select a BP that you want to create a new record for.

The New Record window, for a BP, has a Select Workflow field which displays value if:

- The BP is a non-Workflow BP.
- There is only one Workflow schema available that you can choose.
- 5) When finished, click **Create**. The BP record is now created in the appropriate log.

Creating a BP Record by Copying an Existing BP Record (Standard View)

You can copy an existing business process record to create another business process record of the same type.

The original data in all data entry fields, including line items (if applicable), will be copied. For most business processes, you will have the option to copy attachments to the new form. Other attached information, such as general comments, linked records, and linked Mailbox, will not be copied.

The copied record will reflect the data found in the original record. Auto-populated fields will not be refreshed or recalculated.

For non-workflow BPs, copying a record results in creation of a record and not creation of a draft.

In addition, you can restrict the line items to be copied and specify other copy options by using the **Copy with Conditions** copy option. The **Copy with Conditions** enables you to:

- Copy specific (rather than all) line items
- Include or exclude attachments
- ▶ Retain or remove references to records auto-created from an upper form
- ▶ Retain or remove references to records auto-created from line items (from all tabs)
- Include linked records

The above options are not available for Payment Applications.

Business processes that have been auto-created and are currently in the Initiation step (prior to the Create step in the workflow) cannot be copied. You cannot copy these business processes until the record has been sent or is in a "finish edit" status.

To create a new BP record by copying another BP record in Company BP log:

- 1) Go to **Company Workspace** and switch to **User** mode.
- 2) From the left-hand Navigator, click the **Company Logs** node to expand.
- 3) Click to select a BP and open the BP log.
- 4) Click the gear menu () next to the record that you want to copy and click **Copy**.
- 5) Follow the prompts to complete copying your record for use.

To create a new BP record by copying another BP record in *Project/Shell BP log:*

- 1) Go to your project/shell and switch to **User** mode.
- 2) From the left-hand Navigator, click the **Logs** node to expand.
- 3) Click to select a BP and open the BP log.
- 4) Click the gear menu () next to the record that you want to copy and click to select one of the following option:
 - Copy with Attachments
 - Copy without Attachments
- 5) Follow the prompts to complete copying your record for use.

Note: You cannot create a new BP record by copying another BP record in **Tasks** log (**Home** > **Tasks** node).

Reset on Copy of Record

- A reset works on Workflow business process records, only.
- If the Action form associated with the "Creation Step" of record has data elements that have "Reset" property, then after copy the system resets the values of these fields.
- If the reset is done on an element that has a data set of value/label pairs, and if there is a default value specified, then the default value is displayed.
- For fields with Data Picker as auto-population source, if the value of the Data Picker (as auto-population source) has been reset, then the system resets the value of the field. This means that the auto-population of the form fields from a Data Picker will change if the Data Picker value is reset.
- After a reset is done, any formula that depended on the Reset field will be re-evaluated.
- If a default value has been specified for a Data Element with Reset property, then this default value will be seen in the Upper Forms after the Reset operation has been performed. This will be applicable to Upper Forms, *only*. Reset will not work for Line items since the system will treat a reset operation as though the user has edited the record and saved it as a draft.

Copying a BP Record in Master Log (Standard View)

To create a new BP record by copying another BP record in *master log* (**Master Log - Business Processes** node):

Note: The name of the **Master Log - Business Processes** node can be customized.

- 1) Go to **Home** page and from the left-hand Navigator, click the **Master Log Business Processes** node to expand.
- 2) Click to select a BP and open the BP log.
- 3) Click the gear menu () next to the record that you want to copy and click to select one of the following option:
 - Copy with Attachments
 - Copy without Attachments
 - Copy with Conditions
- 4) Follow the prompts to complete copying your record for use.

Note: You cannot create a new BP record by copying another BP record in **Tasks** log (**Home** > **Tasks** node).

See **Restricting Line Items by Using Copy with Conditions Option (Standard View)** (on page 97) for more details.

Visibility of Properties tabs in BPs

In a company, a shell, or a project (Master Log, Company Logs, Single-Record BP Log, Portal BP Log, and Logs nodes), when you open a business process, or any user-defined BP, and select a record, the log window displays the properties pane with a series of applicable tabs (record properties tabs) such as Record Details tab, Notifications tab, Record Properties tab, Attachments tab, Permissions tab, and so forth.

The visibility of these tabs is based on restrictions made within the BP setup. This rule also applies to the following nodes:

- Drafts
- Tasks

For the **Attachments** tab, if you have restrictions to download, you will be able to only view or access the attachment, and you cannot download or save the attachment to a local system.

Auto-Creating BP Records

There are three ways of auto-creation:

- Spawning a record at a particular point in a workflow (S-Step)
- Auto-creating a record or line item when it reaches a particular condition or frequency (I-Step)
- Using a template that is scheduled to auto-create records

For auto-creating BP records in S-Step or I-Step, the following rules apply:

Reset on Creation Step

- If the Action form associated with the Creation Step has Data Elements (DEs) that have Reset property, then post auto-creation the values of these fields will be reset.
- ▶ Regardless of whether the auto-created record is in I-Step or not, the values must get reset.
- ▶ Fields with auto-population source, "Data Picker" whose value has been set as reset must get reset.
- ▶ After a reset is done, any formula-dependent field, in the reset field, will be re-evaluated.
- ▶ Reset will work for Workflow BPs only (This is an existing limitation).
- If a default value in the reset field has been specified for a DE that has reset property, then this default value will be seen in the Upper Forms after the Reset operation has been performed post auto creation. This will be applicable to Upper Forms only.
 - Reset will not work for Line items since system will treat a reset operation as though the user has edited the record and saved it as a draft.

Auto-Create a BP Record from a Workflow Step (S-Step)

You can use uDesigner to design a business process form that automatically creates a new Unifier BP record, after reaching a designated status in a workflow (for example, approved).

The user who owns the original record becomes the owner of the auto-created record. After being created, the new record is sent automatically to the next step in the workflow if it is a workflow business process. Non-workflow business process records will reside in the log.

Note: Business processes are not auto-created in projects or shells that have the **View-Only** or **Inactive** status.

The original record can be set up to automatically populate upper form (header) information on the new record, provided the data elements of the upper form fields are the same on both records. That is, for example, if a **Description** field using the same data element appears on both records, the text in the original record can be entered automatically into the new record.

Auto-Create a BP Record, or Line Item, Based on Conditions or Frequency

You can use uDesigner to design a form that automatically creates a new record, line item, or planning item if certain criteria are met. The criteria can be:

- A condition, such as a dollar amount.
- A **frequency**, such as a daily or weekly time frame.
 - Only for a record
 - Line items cannot be created with a frequency trigger.
- ▶ Both a condition and a frequency.

When the business process, planning item, or line item reaches the condition or frequency trigger(s), the form will automatically create a new record and send it to an **Initiation step (I Step)**. These forms contain a **Creator** field to activate the auto-creation, either automatically, or manually. If you have **Modify Ownership** permission on the source record, you can auto-create new records or line items. You can also override conditional auto-creation and immediately invoke the auto-creation manually if necessary.

Note: If the line items have been grouped (as part of the administrator's business process setup), you can manually invoke the auto-creation; however, only those line items in a status of "pending creation" will be grouped.

Bypassing the I Step

During business process setup in Unifier, the administrator can set up the auto-created workflow business process to skip the initiation step and send the record directly into the workflow, where it normally arrives at the first step after the Create step (or the first step in a conditional routing). For a workflow business process, the administrator specifies the schema, the step in the workflow that the record should use as its first step, the workflow duration, and the name of the person or group who will be the owner of the auto-created record. When the record is created, data will roll up to manager sheets at the appropriate status; however, if Unifier encounters errors or invalid data, the record will remain at the Create step, and roll-ups will not occur until the user resolves the errors.

For a non-workflow business process, the administrator can set up an auto-created record to skip the initiation step. In this case, Unifier creates the non-workflow business process record and lists it in users' logs in either:

- ▶ Edit mode. When the record is in edit mode, you can see the **Finish Editing** button.
- ▶ Read-only mode. When the record is in read-only mode, you can see the **Edit** button.

If it appears in edit mode, the user will have to open the record and add or correct information on the form. If it appears in read-only mode, the record is considered complete, and data will roll up to manager sheets.

Note: Business processes are not auto-created in projects or shells that have the view-only or inactive status.

Your administrator sets up the auto-creation by specifying:

- The name of the person or group who will be the owner of the auto-created record.
- (For workflow business processes) The workflow schema to use.
- ▶ (For workflow BPs) Which step in the workflow the record should use as its first step
- ▶ (For workflow BPs) The workflow duration
- ▶ The criteria that will trigger the auto-creation
- Whether or not attachments to the record or line item will be included when the record is auto-created
- Whether or not records that were linked to the creating record should also be linked to the newly created record, or to the new line item
- Whether or not the I Step should be bypassed when Unifier auto-creates a new record
- Whether or not the line items from line item tabs should be grouped

Delete Error Lines

The **Delete Error Lines** option appears in the **Errors and Warnings** window when you finish editing (or send) a BP when the BP line items are failing validation errors (such as required field check, etc.). The Delete Error Lines option enables you to delete the faulty BP line items and route the BP record to the next step, if the BP line items are not needed.

Note: Once you delete the faulty BP line items, Unifier removes them permanently without providing an option to access them.

If line item auto-creation fails

If the line-item creation is auto-created with a condition-based query (that is, not manually), Unifier will send an email notification to the business process owner. The email will contain location information so that the recipient can see where the auto-creation originated and where it failed. Following are conditions under which line item creation can fail:

- ▶ The To field is empty. This is possible if the assignee becomes inactive after the schedule is created or if a group is empty.
- ▶ The CBS code is invalid, which can happen if the CBS code becomes inactive after selecting in the template.
- ▶ The rules engine validation fails.
- For payment applications, the associated SOV is locked, either by the payment application record in routing, or by a change commit with a negative line item value. See *Payment Application Business Processes* (on page 203) for details.

Note: If the destination business process does not exist or has not been imported into Unifier, the location specified in the email notification might

be non-existent or incorrect.

Bypassing the Initiation Step (I-Step)

During the Business Process (BP) setup in Unifier, the administrator can set up the auto-created workflow BP to skip the **Initiation** step and send the record directly into the workflow, where it normally arrives at the first step after the **Create** step (or the first step in a conditional routing).

Workflow BP

For a workflow BP, the administrator specifies the workflow schema to use, the step in the workflow that the record should use as its first step, the workflow duration, and the name of the person or group who will be the owner of the auto-created record. When the record is created, data will roll up to any applicable manager sheets (e.g., the cost sheet) at the appropriate status; however, if Unifier encounters errors or invalid data, the record will remain at the Create step, and roll-ups will not occur until the user resolves the errors.

Non-workflow BP

For a non-workflow BP, the administrator can set up an auto-created record to skip the initiation step. In this case, the non-workflow BP will be created and will appear in the users' BP logs in either an "edit" or "finish edit" mode. If it appears in an "edit" mode, the user will have to open the record and add or correct information on the form. If it appears in a "finish edit" mode, the record is considered complete, and data will roll up to any applicable manager sheets.

Additional information about bypassing the I-Step

In the following scenarios, If the auto-creation of a change commit BP is set to "Bypass I-Step," the auto-created record will remain in I-Step and the element "refid" will remain blank:

- If the source BP form has no BP Data Picker, or BP Picker, pointing to the Change Commit "refid" Base Commit BP.
- If the source BP form has more than one BP Data Picker, or BP Picker, that satisfy the conditions needed to populate "refid" (map to the Change Commit "refid" Base Commit BP).
- If the conditions on "refid" picker are not satisfied by the value from the source BP, for example, the "refid" picker allows an "Approved" Base Commit, only, but the source BP sends a "Pending" record.
- If the value from the source BP that is mapped to the "refid" element is set as: <null>.
- When copying the Line Items form a source to the destination record:
 - ▶ The source Detail form does not contains the element: uuu_sovlinum
 - The destination Change Commit Detail tab contains the element: uuu_sovlinum

Note: In this scenario, the Line Items will be copied from the source to destination, and the uuu_sovlinum field will be set as blank. All other fields will be mapped from source to destination Detail form.

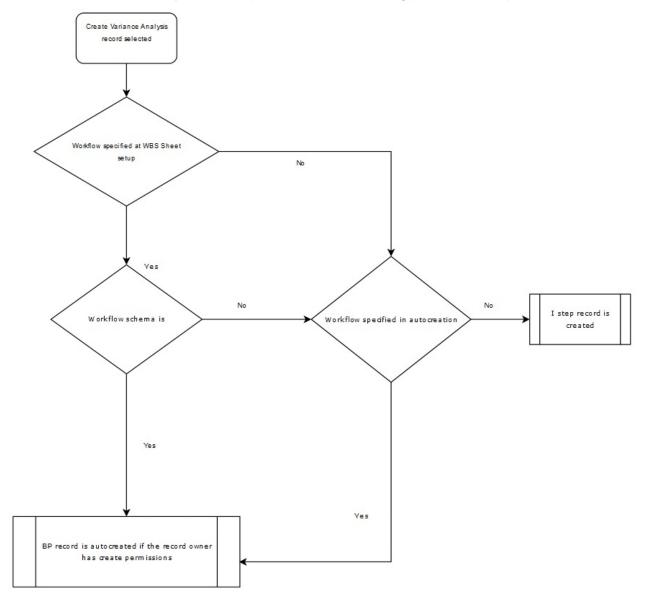
In the above scenarios, since the "refid" is blank, no Line Items will get copied into the "Standard" tab of the auto-created Change Commit record.

Note: If any other tab in the "Change Commit" is configured to copy Line

Items from the source, those Line Items will be copied.

You will be able to auto-create a "Change Commit" type BP from any type of BP Upper or Detail forms.

For Workflow BP, when By Pass I-step selected, the following process takes place:



Auto-Create a BP Record via a Template

For information on this type of auto-creation, see **Schedule Automatic BP Record creation Based on a Template** (on page 80).

Examples of Auto-Creation

You can use Unifier auto-creation feature to manage events such as the following:

- ▶ Line Items of Lease Business Process generating Payment Request BP records: A lease business process with a pre-generated payment schedule can use this feature to generate Payment Request records at appropriate days in advance of the payment due date so that the record can be routed for approvals.
- ▶ Preventive Maintenance BP line items generating Work Order BP records: A Preventive Maintenance type business process (Preventive Maintenance Book) can be set up to create Work Orders for assets at periodic intervals depending on the service needs of the asset.
- ▶ Create Action Items from Meeting Minutes: Auto-creation feature can be used to create and assign tasks to different people creating a fully automated flow for routing of action items from meeting minutes records that have lines items. For example, each line item Action Item could auto-create a separate Action Item records from the meeting minutes record.
- Create a planning item from a business process: You can create a planning item from a business process when the business process, with its details (such as expense estimates, owners, etc.) has been approved.
- Add a new line item to an existing record: You can add a line item to an existing business process. For example, a submittal registry record could contain line items that auto-create separate submittal business process forms for each contractor on a project. In the course of work, you might realize that the original submittal registry record is missing a submittal for an architectural drawing. You could submit a new submittal business process form that would add the missing architectural drawing submittal to the original registry record.

For Line Item Creation

- You cannot create a line item on a record that is at a terminal or terminated status.
- If you create a line item on a non-workflow cost type business process, the cost amount(s) will roll up to the Cost Sheet.
- If you create a line item on a workflow cost type business process, the cost amount(s) will not roll up to the Cost Sheet.

Rules for Checking Conditions for Auto-Creation

There are rules that govern when Unifier scheduler checks the conditions for auto-creation, and then if the conditions are met, auto-creates the BP.

Rule 1

The Company Administrator selected the Enable Auto creation checkbox for BP Creator when the auto-creation was set up in Unifier.

If the Enable Auto creation checkbox is checked, it implies system based auto-creation, and the BP Creator Select button is not displayed in User Mode.

For non-workflow BPs: The condition check occurs on **Finish Edit**. If condition met, creates record and shows the link for the auto-created BP. If no condition is specified auto-creates records and shows the link for the auto-created BP.

For workflow BPs: The condition check occurs on **Send**. If end step reached and Action Form is used on End Step, the condition check occurs on **Save** instead of **Send**. If condition met, creates record and shows the link for the auto-created BP. If no condition specified blindly creates records and shows the link for the auto-created BP.

If the Enable Auto creation checkbox is not checked, it implies manual creation.

For non-workflow BPs: The condition check does not occur on Finish Edit.

For workflow BPs: The condition check does not occur on Send.

BP Creator- Select button shown in User Mode so that the user can create the business process manually. If clicked, creates BP record without checking any condition, and creates record and shows the link.

Rule 2

Date Trigger Condition check: Are checks on the specified Date Data Element. Setting this up implies that condition checks are done on a date instead of Finish Edit/Send in case of Non workflow and Workflow respectively provided a link does not already exist next to BP creator element. If a link already exists, it will not create any new records for that BP Creator element in the chosen line item of the record.

Rule 3

Trigger Condition check based on frequency (Periodic): Are checks on frequency for BP Creator elements with Enable Auto creator checked. If specified, these are the only time condition checks are done. This overrides any other checks for date. This is the only method to create multiple records even if a link already exists and a record has already been creator for this BP Creator element. The link created using this will always point to last auto-created record.

Auto-Creation In Operation

Upon auto-creation, the following are *not* copied to the auto-created Business Process (BP) from the source BP:

- Line item status
- Creator fields
- Hidden tab data

These elements are copied from the source BP to the auto-created BP on certain conditions:

- ▶ BP Pickers are not copied if the auto-creation occurs from a Project (Standard) to a Shell and the BP Picker location is not defined or is no longer valid
- ▶ Configurable Manager codes and CBS codes are copied from the source business process to the auto-created business process if the codes are available in the destination shell.
- User/Group Picker values are copied only if they are available in the destination shell.
- ▶ Transaction currency field is copied if that currency is available in the destination shell.

Change Commit

If you configure a BP Creator field to auto-create a "Change Commit," during the runtime the field will behave the same way as any other BP Creator field. Also:

- A "Change Commit" type BP always holds a required BP Picker element (refid) on the BP Upper form. In uDesigner, this BP Picker is configured to point to Base Commit BP.
- During the auto-creation of a "Change Commit," the required BP Picker element (refid) on the BP Upper form gets populated with the value of the same BP Data Picker, or BP Picker (the source BP). This value:
 - Resides on the same form as the BP Creator, and

Points to the same Base Commit type BP as the BP Picker element (refid) is configured to point to in uDesigner.

Attachments

Including attachment in the **Auto Creation** tab of the BP setup enables the copying of attachments from both the upper and detail forms.

When a record is auto-created and receives Line Items from a reference record during the auto-creation, the Line Item attachments transfer from the source reference record.

If the option of including attachment in a BP setup BP creator configuration is checked, then the source Line Items from a "Referenced" picker will be copied into auto-created record with attachments. This applies to BP creators on upper as well as detail form.

In case when an attachment existing in the Line Items of the Source BP record needs to get copied over to the upper form of the destination BP record, the project administrator can specify the levels for the transfer of attachments; Upper form to Upper Form, Line Item to Upper Form, and so forth.

Example

An operations manual (existing as an attachment) in the Line Items of the Source BP of PM Book has to be seen as an Upper form attachment on the auto created BP record of the Work Order.

The following provides more details:

The **Business Process Setup** window enables you administrator to provide additional levels of granularity for copying attachments when auto-creations are happening from Record to Record and Line Item to Record methods of Auto creation.

Record to Record

This is the option seen in the Creation Method field "Record Auto Creation: Upper Configuration" in uDesigner > BP > Auto Creation Process > Upper. This option is pre-populated by the system based on where the BP Creator is located. If the BP creator is located in the upper form of the BP, then this option will be seen in the above mentioned field.

Line Item to Record

This is the option seen in the Creation Method field "Record Auto Creation: Detail Configuration" in uDesigner > BP > Auto Creation Process > Detail. This option is pre-populated by the system based on where the BP Creator is located. If the BP creator is located in the detail form of the BP, then this option will be seen in the above mentioned field.

The **Auto Creation** tab (in the **Business Process Setup** window) provides the following attachment options:

- Include Upper Form Attachments
- Include Detail Form Attachments
 - Copy Line Item Attachments to Upper Form of the Record
 - Copy Line Item Attachments to Line Items of the Record
- Bypass Initiation Step during auto creation

Copy Linked Records

The following explains the results of the selections:

When the **Include Upper Form Attachments** option is selected, and the source is a Line Item BP, the attachments from the Upper Form of the source record are copied over to the Upper Form of the auto-created record.

- If the destination is a Line Item BP, then:
 - The line items may get created but no attachments from the line items will get copied over.
- If the destination is a Simple BP, then:
 - No attachments from the line items will get copied over to the Upper Form.

When the **Include Detail Form Attachments** option is selected, and the source is a Line Item BP, the **Copy Line Item Attachments to Upper Form of the Record** option will be selected by default.

Note: The Copy Line Item Attachments to Upper Form of the Record option will be selected by default to inform you that since the destination is a Simple BP, checking the option of Include Detail Form Attachments will always add the line item attachments to the Upper Form of the Simple BP.

- If the destination is a Line Item BP, then:
 - The attachments from the line items of the source record are copied over to the Upper Form of the auto-created record. If the Upper Form of the source BP record has attachments, the attachments will not get copied over.
 - The line items may get created and any attachments from the source line items will get copied over as Upper Form attachments. The line items from the source may be seen in the auto-created record; however, the line items will not have any attachments.
- If the destination is a Simple BP, then:
 - The attachments from the line items of the source record are copied over to the Upper Form of the auto-created record. If the Upper Form of the source BP record has attachments, the attachments will not get copied over.

When the **Include Detail Form Attachments** option is selected, and the source is a Line Item BP, the **Copy Line Item Attachments to Upper Form of the Record** option will be selected by default. The attachments from the line items of the source record are copied over to the line items of the auto-created record. If the design of the source BP does not have any tab mapping then the line items will not get created, and the line item attachments will not get copied over.

- If the destination is a Line Item BP, then:
 - ▶ The line items created in the destination record will have attachments from the corresponding line items of the source record.
- If the destination is a Simple BP, then:
 - The option will not be available.

When the Include Upper Form Attachments and the Include Detail Form Attachments options are selected, and the source is a Line Item BP, the Copy Line Item Attachments to Upper Form of the Record option will be selected by default.

- For Line Item BPs and Simple BPs:
 - The Upper Form attachments from the source record and the line item attachments from the line items are copied over as an Upper Form record attachments in the destination record.

When the **Include Upper Form Attachments** and the **Include Detail Form Attachments** options are selected, and the source is a Line Item BP, the **Copy Line Item Attachments to Upper Form of the Record** option will be selected by default.

- ▶ For Line Item BPs:
 - The Upper Form attachments from the source record are copied over as an Upper Form record attachments in the destination record. The Line Item BP attachments, from the line items of the source record, will are over as line item attachments, if the design permits the creation of line items.

When the Include Upper Form Attachments is selected, the source is a Simple BP, the Copy Line Item Attachments to Upper Form of the Record option is selected (disabled by the system), and the Copy Line Item Attachments to Line Items of the Record option is disabled by the system:

- If the source is a Simple BP:
 - The only option that is available is the Include Upper Form Attachments.
- If the source is a Simple BP and the destination is either a Simple BP or a Line Item BP:
 - The Upper Form attachments from the source record of the Simple BP is copied over as Upper Form attachments in the destination record.

Schedule BP Auto-Creation Dynamically

Auto-created business processes can be scheduled for creation from setups created by an administrator, or you can create them dynamically.

To create new business process records using auto-creation

- 1) Navigate to a business process log and open the source BP record to use for auto-creation.
- 2) Choose File > Auto-create.
- 3) Select the **Enable Scheduled Runs** checkbox.
- 4) Under **Frequency**, choose how often you want the auto-creation to occur: Daily, Weekly, Monthly, or Yearly.
- 5) Under **Range of Recurrence**, specify the date range during which the auto-creation should occur.
- 6) Click OK.

After the new record is auto-created, there is a link in the source record to the newly created record. Click this link to access the auto-created record. The link always accesses the last record created by the auto-creation.

Once you create a new **workflow** record, Unifier sends it to the assignees as an **initiation task** (I **Step**) that will appear on their **Tasks** log and the Business Process (BP) log to which the record belongs. If a new record is sent as an initiation task, users must accept the task to manually launch the record.

Once you create a new **non-workflow** record, Unifier sends it to the designated creators as an **initiation task (I Step)** that will appear on their **Tasks** log and the BP log to which the record belongs. Users must accept the task to view the record.

Note: If your administrator has set up these business processes to bypass the I Step, the new records will appear in Unifier at different workflow steps, or in different statuses. For information about this, see *Bypassing the Initiation Step (I-Step)* (on page 60).

Stop Auto-Creation

To stop the creation of new auto-created business process records:

- Navigate to a business process log and select the source record or records to use for auto-creation.
- 2) Choose File > Auto-create.
- 3) De-select the Enable Scheduled Auto creation checkbox.
- 4) Click OK.

Create a BP Record, or Line Item, with Manual Auto-Creation

Note: For line item creation, you cannot add a line item to a record in a terminal or terminated status.

To create a new business process record or line item with manual auto-creation

- 1) Open the record that will auto-create the new record or line item.
- 2) Click the **Create** button next to the creator field.
 - The field will display the words "Pending Creation."
 - Unifier immediately auto-creates the destination record or line item. The new, auto-created record or line item will show a link to the source record that created it. You can click this link to view the source record.
 - If you manually auto-create a line item, Unifier will validate the creation and tell you immediately if there are errors that caused the auto-creation to fail.

The Reset button

When you manually auto-create a new record or line item, the button beside the creator field changes from Create to **Reset**. You can use this **Reset** button to break the link from this (the source) record to the new record/line item so that you can auto-create another record or line item manually. When you click the Reset button, it changes back to a **Create** button.

Note: You can find the reasons for the auto-creation failures in the audit

log of the business process record. In addition, on occasion Unifier generates error codes for auto-creation failures which can be used to troubleshoot the auto-creation failures.

Auto-Create SPA Commits with Variable Unit Cost Lines

You can auto-create the SPA commits with both the Lump Sum and the Unit Cost line items. You can also auto-create the SPA commits with the variable unit cost line items. Similar to other cost line item types, the summary along with cost breakdown will be created if the source is a cost BP and has line items with CBS Codes. This is applicable to both the record-level and the line item auto-creation using the BP Creator and the Line item creator when the source and the destination tabs are mapped in the auto-creation design.

| Source Business Process | Destination Business Process | Expected Results |
|-------------------------|-------------------------------------|-------------------------|

The Cost-type BP of CBS type, and the Line Item-type BP (with the line items having Cost line item-type) selected as variable unit cost type.

Summary Payment Applications SOV BP (SPA commits). In the auto-created BP record both the summary line item and the cost breakdown will be created if all of the required field data is defined.

In the summary line item for the variable unit cost type, both the uuu_quantity and the amount are populated. The cost breakdown will be created with the uuu_quantity, uuu_unit_price, and the amount.

The CBS Code, from the source, will be copied in to the cost break down in the destination record.

If the Cost line item-type in the source BP record is a variable unit cost, and the destination design does not have the uuu_quantity and the uuu_unit_price elements, then the auto-creation cannot take place.

If the BP record is auto-created across the shell, and the CBS Code does not exist, then only the summary line item will be created, with the quantity and the amount values.

All other validations such as the Cost line item-type value and other required fields will take place during the auto-creation of the BP record, and the auto-created BP record will be in the Creation Step, if any of the required field values are missing.

| SPA commits type BP | The Cost BP of CBS type and Line item type BPs (with their line items having cost line item type selected) as variable unit cost type. | In the auto-created BP record, a line item will be created if all of the required fields are available, in case of Bypass-I-Step and S-Step auto-creation. |
|---------------------|--|--|
| | | In case the required field values are missing, the BP record will remain in the Creation Step. |

Create a BP Record in Document Manager

If you have permission to access the **Document Manager** node (cproject/shell> > User mode > Document Manager), then you can create a business process directly from the **Documents** sub-node.

You can create a BP record from the **Document Manager** node by:

- Selecting the files/folders that have to be attached to the BP record.
- Not selecting the files/folders that have to be attached to the BP record.

The following explains how to create a BP record from **Document Manager** node without selecting the files/folders that have to be attached to the BP record.

| | ` |
|-----|---|
| 1 | ١ |
| - 1 | |

- 2)
- 3)
- 4)

In Standard View

- Click Documents sub-node (project/shell> > User mode > Document Manager>
 Documents) to open the log.
- 2) In the **Documents** log page, click **Create** (Create T) drop-down menu.
- 3) Click Business Process. to open the New Record window.
- 4) Click the drop-down arrow in the field under **Select Business Process**.
- 5) Select the business process type.
- 6) Click Create.

Note: The format of the business process form changes depending on the availability of the standard forms (new user interface) option.

The name of the project/shell (for the Documentation Manager in which the business process is being created) appears under **Business Process Origin**.

The drop-down arrow in the field under **Select Business Process** lists business processes that you have permission to access.

Once you select a business process:

- For single workflow setup for the business process, the workflow name appears under **Select Workflow**.
- For multiple workflows setups for the business processes, the drop-down arrow in field under **Select Workflow** enables you to select a workflow setup for the newly created business process record, from a list of applicable workflow setups.

Note: The list of workflow setups appearing in the drop-down list depends on whether you (user) have been designated as an assignee, in the creation step, or not.

Standard forms (new user interface)

In the **Standard View**, only the following business process types support the standard forms (new user interface) format:

- Line Item type Business Processes
- Simple type Business Processes

From the top right-hand corner of the application, before User control panel which displays your name, click the standard forms (new user interface) icon () to turn the option on ().

See **Business Processes with Redesigned User Interface** (on page 305) for details about the new user interface of standard forms.

If you create a business process that has the standard forms (new user interface) format, and selected files/folders when creating, then Unifier adds the files/folders as attachments for the business process record that you have just created.

- If you select one file, or multiple files, then the file, or files, will be included in the attachment tab.
- If you select one folder, or multiple folders, then the folder, or folders, then:
 - For Document Manager business processes that do not support folder structure, Unifier displays an alert message and the documents from selected folders and sub-folders are attached without the folder structure.
 - For Document Manager business processes that support folder structure, Unifier displays the folder structure.

Create a BP Record from a Template

If you have created a business process template for a BP, you can manually create BP records by copying the template. For instructions on creating BP templates and scheduling BP creation,, see *Create BP Templates and Schedule BP Creation* (on page 77).

Creating a BP record from a template is similar to copying an existing BP record. Any values in any of the form fields on the template (either manually entered or auto-populated) will be copied to the new record. Line items, file attachments, and attachments to line items will also be copied. Other attached information, such as general comments, linked records, and linked Mailbox, will not be copied to the new form.

To create a business process record from a business process template

- 1) Open a business process log.
- 2) In the log, click the **Actions** and select one of the two options (available for all Workflow type BPs, only) that enable you to create BPs by way of BP templates:
 - a. Create From Template...
 - b. Create From Template...(New UI)

If you click Create From Template...

- 1) The **[BP name]: Template List** window opens, which displays the list of templates created for the selected BP.
- 2) Select a template from the list and click **Open**. The BP form opens. Data is populated based on the template. You can modify the data or enter additional data.

Note: You can save the record by clicking **Save**, which saves a draft of the record but does not affect the template. When the BP is ready to move to the next step, click Send.

If you click Create From Template...(New UI)

The **Action Items Template List** window opens. The **Action Items Template List** window log contains the following toolbar options:



You can select (Ctrl+click) multiple templates and delete them at the same time.

The log contains the following columns, displayed on the left-hand pane:

- Name
- Description
- Workflow
- Status
- Scheduled

Creator

The log contains the following options on the right-hand pane:

- ▶ If there are templates created for the BP, then click to select a template and click **Open**. The BP form opens. Data is populated based on the template. You can modify the data or enter additional data.
- If there are no templates created for the BP, then the "No Templates are available" is displayed. In this case, you need to create a template as described below:

Click **Create** to display the following tabs:

- General
- Schedule

In **General** tab, enter a name for the BP template (in the **Name** field) and select a workflow (from the **Workflow** field drop-down).

If the BP has only one workflow, then Unifier selects that workflow automatically.

If the BP has more than one workflow, then a list of the workflows appear in the **Workflow** drop-down list field.

The **Cancel** option enables you to abort creating the template, cancel the changes, and reload the previous template properties.

The **Create** option enables you to save the template changes, and open the record.

You can:

- Click Save to save updates to a newly created template.
- Double-click on a template to open it for viewing.

Simple type Business Processes

- Unifier *enables* the **Refresh auto-populated and calculated fields on record creation** checkbox option if you use the **Create From Template...** option to create a new template.
- Unifier does not enable the Refresh auto-populated and calculated fields on record creation checkbox option if you use the Create From Template...(New UI) option to create a new template.

Use the **Schedule** tab to schedule a run. A template can be set for scheduled run if it is marked as **Complete** (under **Status**), only. The fields in the **Schedule** tab are disabled until the time that the template is marked as Complete. The following options are available in the **Schedule** tab:

- Schedule
 - Enable scheduled record creation

Note: You can schedule auto-creation of records when the template marked as **Complete** (under **Status**).

- Frequency
 - Daily
 - Weekly, end of day
 - Monthly

- Yearly
- Range of Recurrence
 - No end date
 - End by
- Additional Information
 - Auto-email creator if scheduled creation fails

When the template is in **Complete** status, and user is setting up the schedule, the Schedule tab shows the following options:

- Cancel
- Save

When the template is in **Draft** status, after the Creation step, the Schedule tab shows the following options:

- Cancel
- Save

Under other conditions the following two options are not available:

- Cancel
- Save

By default the very first template is selected, and the details for the first template are displayed on the right-hand pane.

In the creation step, no template will be highlighted on the left-hand pane. After you save, the template is added to the template list, highlighted on the left-hand pane, and the details are displayed on the right-hand pane.

Templates with **Draft** status

Note: The options described below are displayed based on BP type and the availability of the new user interface. The final template format is adjusted accordingly. All templates created by using the new user interface will keep the new format in the event of a subsequent edits.

When you open a template that is in draft status, Unifier displays the following toolbar options on the top right-hand section:

- Complete
- Save
- ▶ Menu Options icon (■ ▼)

Auto-create

Export Line Item Template

Print (HTML and PDF)

Reload

[BP name] Help

Close

When you finish drafting and click Complete, Unifier displays the **Workflow [BP name] Details** window. In this window, you can enter all the workflow information and click **Save** when finished. When you click **Save**, the toolbar options change to:

- Edit
- View Workflow
- Send
- ▶ Menu Options icon (■ ▼)

Templates with Complete status

Note: The options described below are displayed based on BP type and the availability of the new user interface. The final template format is adjusted accordingly. All templates created by using the new user interface will keep the new format in the event of a subsequent edits.

When the template status is marked as **Complete**, the template turns into read-only mode. If you decide to edit a template marked as **Complete**, you can open the template and click **Edit**. This action changes the status of the template to **Draft**. In this case, Unifier checks to see if there is any scheduled auto-creation for the template.

If a schedule is detected, Unifier displays a confirmation dialog box. If you click **Yes**, Unifier changes the template status to **Draft** and stops the scheduled auto-creation for the template; however, Unifier retains the previously entered scheduled runs information.

Template log and the gear menu (**)

The options available for gear menu are context sensitive, based on the status of the template. The following gear menus are displayed when the template is in **Draft** status:

- Open
- Create Record
- Delete

The following gear menus are displayed when the template is in **Complete** status:

- Open
- Create Record
- Delete

The following gear menus are displayed when multiple templates, regardless of status, are selected:

Delete

Creating a record from a template with Complete status

When you select a completed template and click Create Record, Unifier opens the **Create New [BP name]** and **Workflow [BP name] Details** window simultaneously. The fields in **Workflow [BP name] Details** window is populated with the workflow information that was stored at the time of drafting and subsequent completing of the template. The toolbar options change to:

Send

The **Create Record** option replaces the **Send** option in the new user interface window.

- Save
- ▶ Menu Options icon (▼)

If you click **Cancel** in the **Workflow [BP name] Details** window to work in the **Create New [BP name]** window in order to make necessary changes, or to review the record information, you must click **Send** to route the record to the next step. In these two scenarios:

- The **Workflow [BP name] Details** window opens, but the fields will not be populated with the workflow information that was stored at the time of drafting and subsequent completing of the template.
- You must re-enter the workflow details as Unifier treats this instance as a one-time creation.

Create BP Templates and Schedule BP Creation

You can create templates for project- or shell-level and company-level workflow business processes. This allows:

- ▶ Easy creation of records for business processes that you use often or are recurring (for example, lease renewals or time sheets)
- Scheduling automatic creation of recurring BP records

This section discusses how to:

- Create and edit business process templates
- Schedule automatic business process record creation from the template

Note: When you create BP records from a BP template, any values in any of the form fields on the template (either manually entered or auto-populated) will be copied to the new record. Line items, file attachments, and attachments to line items will also be copied. Other attached information, such as general comments, linked records, and linked Mailbox, will not be copied to the new form.

Create a BP Template

You can create a template for any business process for which you have at least "view user records" permission.

Note: Since draft option is not available for *non-workflow* business process records, and draft option is essential in storing a business record template, you can only create a template for a *workflow* business process record.

To create a template

- 1) In User Mode, open to the log containing the business process for which you want to create the template.
- 2) In the Navigator, select the business process.

- 3) Click the **File** menu and choose **Template**. The Template List window for that business process opens. The window displays any templates that have been created for the selected BP.
- 4) Click the **New** button. The Properties window opens.
- 5) Use the information in the table below to fill in the General tab.

Note: Although the Schedule tab is visible, it is disabled until you have changed the status to Complete. At this point, you can use this template to manually create BP records; however, if you want to schedule automatic creation, you must first change the template status to Complete.

6) Click OK.

Unifier adds the template to the Template List with a status of Draft and opens the form as it would in the create step of the workflow. This form will be used as the template.

- 7) Enter any information into the template form that you want to include in the records that you create from it.
- 8) You can add line items as needed. You can also add file attachments, which will be attached when a record is created from the template. This includes attachments to the record itself and attachments to line items.
 - You can also add linked records, linked Mailbox, and general comments to the template, but these will not be included in the records created from this template.
- 9) Click the **Save** button at the top of the form.

Unifier saves the template in Draft mode, and the window remains open. You can use the template at this point to manually create BP records; however, if you want to schedule automatic creation, you must first change the template status to Complete (see the following procedure).

| In this field: | Do this: | | |
|--|---|--|--|
| Name | Enter a name for the new template. | | |
| Description | Enter a description of what this template is used for. | | |
| Workflow | Select the workflow that should be used for the BPs that will use this template. | | |
| Refresh auto-populated and calculated fields on record creation | (This option will appear for simple type business processes only) Select this check box if the values in the fields that are auto-populated and calculated should be refreshed whenever a record is created from this template. If this simple type BP contains fields that are being auto-populated from the attribute form of the current or any parent shell in the hierarchy, or from a single-record business process in any parent shell in the hierarchy, you can refresh these values so that this new record contains the latest data. | | |
| Copy Linked | Select the check box if you want to copy any linked records | | |

| Records | whenever a record is created from this template. |
|---------|--|
|---------|--|

Change the Template Satus (Draft and Complete)

Each template will either be in **Draft** mode or **Complete** mode. You can change the status of a template between the two statuses at any time. The template status controls whether a BP creation schedule can be defined.

If the template status is **Draft**, the template can be edited and used to manually create BP records. Required fields and assignee information can be left blank. Scheduled record creation cannot be performed.

If the template status is **Complete**, the **Schedule** tab of the Properties window is activated and can be used to define and schedule automatic record creation. The form is no longer editable (unless changed back to **Draft**). Required fields and assignee information must be completed before the status can be changed to **Complete**.

To change the status of a business process template to Complete

- 1) In User Mode, navigate to the log of the business process for which to edit the template. Click the **File** menu and choose **Template**. The Template List window opens.
- 2) Select a template and click **Open**. The template form opens.
- 3) Complete the BP form:
 - Complete all required fields.
 - Be sure the rest of the template form is filled out appropriately, including line items and attachments, if applicable. Remember that if you will be scheduling automatic record creation from this template, the information that you enter here will used for the creation step and sent to the first step in the workflow.
 - Select a workflow action (for the first step in the workflow).
 - Complete the assignees information (To field) as necessary.
- 4) Click the **File** menu and choose **Template Status > Complete**. A validation check will verify the following:
 - All required fields have valid data (and all other information on the form is valid).
 - The workflow action has been selected.
 - ▶ The Action Details/Assignees section **To** field is populated with valid users or groups, based on the BP setup.

When the status is **Complete**, the template form becomes view-only. If you have defined a record creation schedule in the **Schedule** tab, the schedule will be activated.

To change the status of a business process template to Draft

- 1) Open the template form.
- 2) Click the File menu and choose Template Status > Draft.
- 3) At the confirmation window, click **Yes**.

In **Draft** mode, the template form becomes editable. Scheduled record creation is disabled until you change the status back to **Complete**.

Schedule Automatic BP Record creation Based on a Template

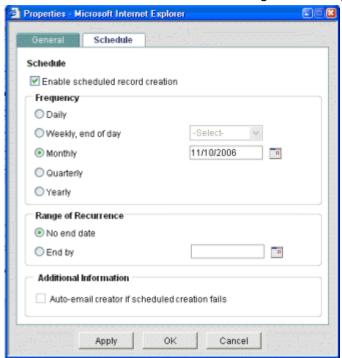
You can schedule automatic BP record creation runs that are based on a BP template. The templates must have a status of Complete before you can define and activate the schedule.

For information on manual creation from a BP template, see *Create a BP Record from a Template* (on page 73).

Note: Business process creation cannot be scheduled from a template in projects or shells that have the View -Only or Inactive status.

To define a BP creation schedule

- 1) In User Mode, navigate to the log of the business process for which to edit the template.
- 2) Click the File menu and choose Template. The Template List window opens.
- 3) Select a template and click **Properties**. The Properties window opens.
- 4) Click the **Schedule** tab.
- 5) Complete the Schedule tab as described in the following section.
- 6) Click **OK**. The schedule is active as long as the template status is Complete.



| In this field | Do this |
|----------------------------------|---|
| Enable scheduled record creation | Select this checkbox if you want to enable automatic record creation based on the schedule defined below. |
| Frequency | The frequency determines how often the new records are created from the template. The options are: |
| | Daily |

| | Weekly (select the day of the week) |
|--|--|
| | Monthly (select the day of the month) |
| | Quarterly (runs on the last day of the calendar quarter) |
| | Yearly (runs on the last day of the calendar year) |
| | All scheduled record creation is performed at 11:59:59 PM (PST). |
| | Choose one of the options: |
| Range of Recurrence | No end date (runs until changed or schedule is disabled) |
| | End by (select an end date) |
| Auto-email creator if scheduled creation fails | Select this option if you want the template owner or creator to receive email notification if the scheduled creation fails. The email will contain location information so that the recipient can see where the auto-creation originated, and where it failed. |

Edit, or Delete, a BP Template

Users with view permission to a business process log will be able to view any associated templates. The template form and properties can be edited by the owner or creator and by users with Modify Record Ownership.

Only the owner or creator of a template can delete it.

To edit a template

- 1) In User Mode, navigate to the log of the business process for which to edit the template. Click the **File** menu and choose **Template**. The Template List window opens.
- 2) Select a template and click **Open**. The template form opens.
- 3) The fields, line items, file attachments, and other data are editable. You cannot change the workflow once the template has been created.

To delete a template

In the Template List window, select the template and click the **Delete** button. Click **Yes** to confirm.

Edit, or Cancel a BP Schedule

To edit a business process schedule

You can edit the schedule information in the Schedule tab at any time. The Schedule tab is active only when the BP status is Complete. After saving changes, the new schedule will be activated immediately.

To pause or cancel scheduled business process creation

Do one of the following to deactivate scheduled BP creation:

- Open the Properties window, and choose the Schedule tab. Deselect the Enable scheduled record creation checkbox. To reactivate the schedule, select the checkbox.
- Open the template form and change the status to Draft (from the File menu, choose Template Status > Draft). As long as the template remains in Draft mode, the BP schedule will be inactive. You can still manually create BP records from a draft template. To reactivate the schedule, change the status back to Complete.

Failed Scheduled BP Record Creation

If a scheduled BP creation fails, email notification will be sent to the template owner (as long as the checkbox enabling the notification has been selected on the Schedule tab of the template Properties window). The email will contain location information so that the recipient can see where the auto-creation originated and where it failed. Following are conditions under which scheduled record creation can fail:

- ▶ The To field is empty. This is possible if the assignee user becomes inactive after the schedule is created or if a group is empty.
- ▶ CBS code is invalid, which can happen if the CBS code becomes inactive after selecting in the template.
- If the rules engine validation fails.
- For payment applications, if the associated SOV is locked either by the payment application record in routing, or by a change commit with a negative line item value. See **Payment Application Business Processes** (on page 203) for details.

Note: If the destination business process does not exist or has not been imported into Unifier, the location specified in the email notification might be non-existent or incorrect.

Using CSV and Restful Services

You can use CSV and Restful Services to create a BP Record or Line Item with Line Item Data Picker. When you export your CSV template, the Line Item Data Pikcer are shown and the direction is set as an input or both, in the Integration tab in uDesigner.

When you create a record or line items using a csv import:

- If the CSV input request has Line item Data Picker values, then the following validations need to be done:
 - The associated data picker has a record selected. If a record is not selected, then Unifier displays the message: <value> is invalid value for Line item Data Picker <DE name>.
 - The record selected verifies that the line item belongs to the selected record. If not verified, then Unifier displays the message: <value> is invalid value for Line item Data Picker <DE name>.
 - The line item exists.
 If it does, then Unifier runs the guery conditions defined for the Line Item Data Picker.

If it does not, then Unifier displays the message: <value> is invalid value for Line item Data Picker <DE name>.

Similarly, all the following Restful Services support Line Item Data Pickers. The validations are the same validations for users who try to create record using CSV import.

- Get BP Record List
- Get BP Record
- Get BP Record with attachments
- Create BP Record
- Create BP Record with lineitems
- Update BP Record

Working with Permissions (Non-Workflow BPs)

To grant permission to a non-workflow business process record

- 1) Create a BP record in the Company Data Manager, Company General, or project or shell General log.
- Select one or more BP records and click **Actions > Permissions**. You can also click the gear menu and click Permissions to assign permissions to only one BP Record. The Permissions window opens.
- 3) In the Permissions table, type the user or group name in the **Add** box and select the user or group to grant access.
- 4) By default, each listed user or group will be granted **View** permission, allowing them to open the BP Record. To grant additional permissions, select the checkboxes that correspond to the user or group:
 - All: User will have View, Edit, and Modify Permission.
 - Modify Permissions: Allows user to control the BP record's permission settings.
 - ▶ **Edit Data:** User can import BP record information, save a snapshot, edit BP record properties, and add columns.
 - View: User can view the BP record.
- 5) Click Save.
- 6) When editing one record at a time, click the **left arrow** to view the previous BP record or the **right arrow** to view the next BP record.
- 7) After exiting the Permissions window, the Permissions tab will be refreshed with the updated information.

You can Remove user or group permission by clicking the trash-can icon in the **Remove** column.

Filling Out a Business Process Form

To fill out a Business Process (BP) form:

1) Complete the Upper form. Fields marked with a red asterisk (*) require an entry.

- 2) Add line items, if applicable.
 - If this is a cost or line item-type BP add line items as necessary.
 - If this is a Document-type BP, attach any documents to the form.
- 3) Add additional information, if applicable.
 - General comments.
 - Attachments to General comments.
 - In Classic View, Task Notes, which are impermanent record notes that are available only on the next step, and only on the View form.
- 4) When you have completed the form, do one of the following:
 - If this is a non-workflow BP:
 - a. Click **Save** to save your changes. Saving the form creates a permanent record.
 - b. Click **Finish Editing** to render the record in view-only mode.
 - Unifier uses statuses to track the state of a business process record and any line items it may contain. For example, a Pending status generally means people are still working with the record, while a Closed status suggests the record is completed. Records in Closed status are typically marked as Terminal, meaning the record has reached a point where no further input is either required or desired. You can still access a non-workflow record in a terminal status as long as the record is in **Edit** mode. However, if you click **Finish Editing** when the record is in a terminal status the record becomes permanently read-only and un-editable.
 - If this is a workflow BP:
 - a. When you have completed the form, select an action from the Workflow Actions drop-down list. Action selections depend on the BP design, for example, if this is a review step, an action that you may be able to select is "Approve Budget Approval." Selecting a Workflow Action activates Action Details. If there is only one possible workflow action for a step, the action is auto-populated in the field.
 - b. In **Action Details**, designate assignees for the next step; that is, the users and groups who will receive the record as a task on the next step in the workflow. If the next step is the **End** step, then the **To** field will be preassigned.
 - c. Click the **Send** button. At the **Creation** step, sending the form to the next step in the workflow creates a permanent record.
 - If the workflow is not yet complete, the form will be forwarded to the next step in the workflow.
 - If the workflow is complete (that is, your task was the last step of the workflow), the record will appear as complete in the business process log.

Use the **Workflow Progress** hyperlink, in the **Action Details** section of a *Workflow BP*, to open the **Workflow Progress** window and view the workflow progress status.

When you accept the task, the form becomes editable. On the editable, or "action," version of a form (belonging to an accepted task), you can see the view form of the business process (**Task Details**). In the view form, you are able to view the Workflow progress status by clicking on the **Workflow Progress** hyperlink. This option is available for Workflow records of both company-level and Project-level BPs.

Saving a Draft of a Workflow Business Process

At any time while filling out a business process form (whether creating a new one or responding to a task), you can save your work as a draft and return to it later. The record remains in your Drafts log until you send it. In addition, if you initiate a discussion group in Classic View, the record remains in your Drafts log (the log displays a **Yes** in the Discussion column) until the discussion group ends.

Note: Saving a draft is only applicable to Workflow type of BP records. For non-workflow type of BPs, saving a record results in creation of a record and not a draft.

To save a draft copy of the workflow business process form

From the File menu of an open business record, click **Save**. A draft copy of the form with your edits so far is saved in your **Drafts** log.

To view your drafts

Navigate to the Drafts log by doing one of the following:

- In the Navigator, click **Drafts** directly under the Home node. The Drafts log lists all draft business processes.
- In the Navigator go to your project or the Company Workspace and navigate to Drafts.

Notes:

- Drafts for View-Only and Inactive projects or shells are not listed in the Drafts log.
- Unifier displays the Tasks, Notifications, and Drafts nodes, in the respective Company Workspace and Project/Shell, based on the deployment of your user mode navigators.

To open a draft

Select a record from the Drafts log and click **Open**.

To delete a draft

Select the record from the Drafts log and click **Delete**. The draft form will be permanently deleted. A draft is automatically deleted from the log after the record has been sent or otherwise completed, or the discussion group ends.

Accessing Custom Business Process Help PDF File

Your company or your Project/Shell administrator may provide a custom Help file to give you information about a specific business process. This file is provided as a PDF file, which can be read with Adobe Reader. If a custom help file is available, it will be listed under the Help menu for the business process log or form.

Adding and Managing Line Items

Detailed information, such as transactions, can be entered as line items on Cost BPs and Line Item BPs, as well as on Document-type BPs, if they have been designed to accommodate documents that are attached as line items.

You can edit or delete line items on a BP form as long as the form is still editable; that is, before it reaches its terminal status (for example, approved). If you add a new line item in any step (other than the creation step), you can modify the line item until the BP is sent to the next step. The line item status will always default to the default line item status specified in the design. Users with permission can change the status if modification to the line item status is allowed in that step.

Note: Document and Line Item BPs can be designed to include line item status control, which allows users to choose a status for individual line items and control whether they can be modified.

If designed in uDesigner, there may be multiple tabs in the line item area of your BP form. Click these tabs to access the various line items.

You can enter line items using either a line-item entry form, or the **Grid** feature. **Line item entry** forms open in a separate window, which you must fill in and click **OK** to insert into the Item log at the bottom of the form. With the **Grid** feature, you can enter information directly into the Item log, but it is best used for short line items.

You can access the attachments in Workflow task emails under General comments section in the Document type BP.

Note: The Enable response via email option must be selected.

Add Line Items Using a Line-Item Entry Form

You can add either a **Detail Line Item**, or a **Summary Line Item**.

To add a line item

- 1) On the business process form, click the **Add** button.
 - If the business process does not use summary line items, Unifier opens the Line Item window.
 - If the business process uses summary line items, choose **Detail Line Item** or **Summary Line Item**, as appropriate. Unifier opens the Line Item window.
- 2) Fill in the line item fields.

If you select the **Detail Line Item** for the following types of BPs:

- ▶ RFB
- Line Item
- Document
- Cost

The **Detail Line Item** window allows you to perform the following actions:

Example

Your Project > Logs > Create > Add > Detail Line Item > Save & Close/Save & Add New/Cancel

Save & Close

To save the information that you have entered and close the window.

Save & Add New

To save information that you have entered and refresh the window in order to add another line item.

Cancel

To discard changes that you have made and close the window.

If you select the Summary Line Item, click Save.

Example

Your Project > Logs > Create > Add > Summary Line Item > Save

For information about adding documents to Document type business processes with line items, see *Attach Files to Document-Type Business Process Forms* (on page 114).

Add Line Items Using the Grid View

For Document-type BPs (with or without folders), you can create multiple line items, files, or folders one-by-one (by way of the right pane).

To reduce the time that it takes to conduct a one-by-one creation, you can add line items by using the **Grid View**.

Note: Unifier will notify you of the incomplete line items, before allowing the BP record to move to the next step.

Create Line Items by way of the Import Attachments option

You can use the **Grid View** to enter line items in a Document-type BP without folder.

Whether the "**Enforce mandatory fields on Line Items**" option is checked is uDesigner, or not, you can select to allow the newly created line items to be added to the BP record. This prevents creating incomplete line items in the BP record.

When you access a Document-type BP without folder:

If the "Enforce mandatory fields on Line Items" option is checked in uDesigner, Unifier conducts all the necessary validations during creation of line items.

The **Upload** option in the **Grid View** is visible only when the above option is checked. The **Upload** option enables you to create multiple line items in one attempt by way of the **Upload** window. When you upload files, Unifier inserts each file in the grid as a new row.

The **Upload** option enables you to create multiple line items in one attempt by way of the **Upload** window. When you upload files, Unifier inserts each file in the grid as a new row.

Uploading through the file upload window will populate only the **Name**, **Title**, **Rev No.**, and **Issue Date** fields from the **Upload** window into the grid. The remaining fields, if any are required, must be populated by you, for a successful save of the grid.

If the "Enforce mandatory fields on Line Items" option is not checked in uDesigner, then you can add line items by way of grid view, or Grid View entry.

You cannot upload or import attachments in bulk, in the **Grid View**, if the "**Enforce mandatory fields on Line Items**" option is not checked in uDesigner. Use the **Add** option to insert a row in the grid, similar to adding a row in a BP record where detail line item entries can be done by way of the **Grid View**.

Note: You *can* create line items by way of bulk action (Action > Import Attachment) in the Form View, when the "Enforce mandatory fields on Line Items" option *is not checked* in uDesigner.

Uploading through the file upload window will populate only the **Name**, **Title**, **Rev No.**, and **Issue Date** fields from the **Upload** window into the grid.

The **Grid View** columns:

Errors

Displays the errors that have occurred when saving a line.

Line Number

Displays the line number

Attachments

Displays the attachment, if the line has any.

Linked Records

Displays the link, if the line has any.

The remaining columns display information according to the system-defined tab detail form, designed in uDesigner.

Note: The Name column is an attachment picker enabling you to browse through your local folders, or Unifier Document Manager, and attach files. For more details, see image picker in the BP line item entry in **Grid View**.

The right-pane of the grid is collapsed, by default. When you expand the right-pane, you can see the **Attachments** and **Linked Records** tabs (similar to the BPs line item entry by way of **Grid View**).

When you go to the system-defined detail tab, select Grid view, and right-click on a line item row:

- ▶ The gear icon options when the BP record *cannot* be edited (non-editing mode: BP record is not accepted or has been submitted) are:
 - Open

To open the line item attachment in a viewer.

Open in AutoVue

To open the line item attachment in AutoVue.

Download

To download the attachment (on the selected line item).

- The gear icon options when the BP record *can* be edited are:
 - Copy

To insert a new row with all values copied over from the source row below the selected row.

Delete

To delete the selected line item, similar to the **Remove** option in the **Form View**.

Open

To open the line item attachment in a viewer.

Open in AutoVue

To open the line item attachment in AutoVue.

Download

To download the attachment (on the selected line item).

Additional Information

- If the **Make Attachment to a Line Item Mandatory** is *not checked* in uDesigner, then you can do one of the following:
 - Add attachment to a line item.
 - Leave it without any attachments and just enter a name as a placeholder for the attachment to the line item.
- If the **Make Attachment to a Line Item Mandatory** is *checked* in uDesigner, then the **Name** field in the grid will be editable and with an attachment picker. In this scenario, you can attach from a local source, or from the browser, by way of using this picker. If needed, the attachment can be removed by using the **x** option, within the cell.

Edit or Remove Line Items

To edit a line item

As long as the BP form is still a draft, you can edit a line item at any time by selecting it and clicking **Open**.

If you open an existing Line Item form for the following types of BPs:

- ▶ RFB
- Line Item
- Document
- Cost
- Fund

Then, you can click the following options from the Line Item window:

<< (previous)</p>

To go to the previous Line Item record.

This option is disabled if you open the first Line Item record.

Note: If you modify the values in the Line Item and click next/previous,

the system saves the values that you have entered.

>> (next)

To go to the next Line Item record.

This option is disabled if you open the first Line Item record.

Note: If you modify the values in the Line Item and click next/previous, the system saves the values that you have entered.

Save & Close

To save the values that you have entered in the Line Item and close the window.

Cancel

To discard changes that you have made and close the window.

If you have "View" permission, or the Line Item has been closed, then you can *only* view the line items by:

- Opening each Line Item one-by-one Or
- Open one Line Item and use the << (previous) and >> (next) to access the other line item records.

To remove a line item

In the BP form, select the line item to remove, and click **Remove**.

Note: When you remove a line item, Unifier also removes link information, both from the record the line item belongs to, and from the record the line item was linked to.

To edit line items on cost business processes

If configured in uDesigner (with the Allow Modify Line Item checkbox selected), then you can edit line items on cost business processes under the following circumstances:

- ▶ For workflow business processes, you can edit cost line item information at any step in the workflow, except for the end step. If the original line item data has already rolled up to the cost sheet, then the cost sheet will reflect the modified data after sending the business process to the next step.
- For non-workflow Cost BPs, line item data can be modified before clicking the **Finish Editing** button.

Note: If the line item contains Yet To Buy (YTB) or AFC values, it cannot be modified.

This table lists the sub-types of business processes and locations that allow the edit of line items on cost business processes:

The classification for all of the sub-types in the following table is Cost.

| Sub-Type | Project (Standard) | Shell (CBS Code) | Shell (Generic Code) | Company Workspace | Edit Line Item |
|---|-----------------------|---------------------|----------------------------|----------------------|-------------------|
| Line Item with CBS Code | Yes | Yes | No | No | Yes |
| Line Item with Both Fund Code and CBS Code | Yes | Yes | No | No | Yes |
| Line Item with Fund Code | Yes | Yes | No | No | Yes |
| Line Item with Account | No | No | No | Yes | No |
| Line Item with Asset Code | No | No | No | Yes | No |
| Line Item with Multiple Codes | No | No | Yes | No | Yes |
| Commit at Company Level | No | No | No | Yes | No |

Add and Manage Summary Line Items

The uDesigner cost and Line Item BPs support summary line items allow regular line items to be grouped together, with only the summary appearing on the BP. The sub line items are rolled up to other areas such as the Cost Manager.

To add summary line items

- From the business process form, choose Add > Summary Line Item. The Summary Item window opens.
- 2) Click Save, and then click Close Window.

The summary line item will appear at the top of the line items area of the business process form in bold. The amount column will show the sum total of the line items you added.

To edit or copy a summary line item

From the Summary Line Item window, you can edit or copy summary line items just as you would line items in the business process form (see the previous procedures).

To remove a summary line item

1) In the BP form, double-click the **Summary Line Item**. The Summary Line Item window opens.

- 2) Select the line items in the summary (press **Shift** or **Ctrl** to select multiple line items). Click **Remove**.
- 3) Click the **Delete Summary** button. Click **Yes** to confirm.

Filtering the Line Item List

Some business processes can include many line items, and filtering the list of line items can make the form easier to use. To narrow the list of line items you see, you need to use Unifier Find function. The Find function will search for and display specific line items according to the criteria you specify.

To filter the line item list

- 1) On the BP form and click **Search** to open the window.
 - The window shows fields from the line item list, which you can use to narrow the list of line items you see.
 - Each field shows an *operator*, such as "contains" or "equals," which you can use to specify more precisely which line items you want to see on the list.
 - You can narrow the list of line items to show only certain class levels or cost categories.
- 2) To specify search criteria, first choose the operator you want to use on the field, such as "equals," "does not contain," or "is empty".
- 3) Enter the value the field should contain, or click the **Select** button and select the value from the list that appears.
- 4) Click **Search** (or press **Enter**).
 - Unifier displays all the line items that met the search criteria you entered.
 - If you choose to, you can cancel the filtering action by clicking **[Cancel Filter]** or the **x** icon in the upper-right corner of the Find window. Unifier will restore the list of line items to its unfiltered state.

To display the filtered Total Amount

For Cost-type and Line Item-type business process that display the total amount for line items (in the **Total Amount** field), you can select to see the total amount for the filtered line items by selecting the **Show Filtered Total Amount** option when creating your filter. This selection enables you to see the sum of the amounts for all individual line items in your filter list.

Note: If you do not select the **Show Filtered Total Amount** option when creating your filter, then the value in the **Total Amount** field displays the total amount for all line items and not the total amount for filtered line items.

If you have multiple tabs, you have the option of selecting the **Show Filtered Total Amount** option when creating your filter for each tab independently.

The total amount displayed at the bottom of the screen enables you to select:

- Total Amount
- Filtered Total Amount

Total Amount is defined as: Sum of the "Amount" field from across all the line items.

Filtered Total Amount is defined as: Sum of the "Amount" field from the line items which are the result of the Search criteria.

When a Search is active, then the option that you select from the drop-down will be the "Filtered Total Amount."

When the Search is canceled, then the system will default the option back to Total Amount. At any given point of time, you will be able to toggle between the two options.

Example

Filtered Total Amount

| Line # | Spend Category | Amount |
|--------|----------------|--------|
| 001 | Labor | \$100 |
| 002 | Materials | \$200 |
| 003 | Labor | \$300 |

If the Search parameter is set to "Spend Category = Labor," then after applying of the filter:

Total Amount = \$600.00; (Option selected); Filtered Total Amount = \$400.00

If the Search parameter is set to "Spend Category = Agreements," then after applying of the filter:

Total Amount = \$600.00; (Option selected); Filtered Total Amount = \$600.00

If the user cancels the Search, then:

Total Amount (Option selected) = \$600.00; Filtered Total Amount = \$600.00

Note: There is no page total. The user has the option to select between the above two mentioned totals.

Copy a Line Item from the Same Form

You can create a new line item by copying an existing line item. You can choose to include any attachments that are on the source line item; however, any links the line item has to other records will not be copied.

To copy a line item

- 1) In the business process form, select the line item to copy.
- 2) Click Copy, and choose Copy Line Items.
- 3) A confirmation window opens. To copy any attachments from the original line item to the new line item, click **Yes**. To ignore any attachments, click **No**.
- 4) The Line Item window opens, with the original line item fields filled in. You can leave the data as is or make necessary changes.
- 5) Click **OK** to close the window.

Copy and Consolidate Line Items from Different Business Process Forms

Business processes can be designed to accommodate line item consolidation: the ability to select individual line items from one or more BP records (the source BPs) and copy them into a new record (the destination BP). The selected line items can be from the same BP type, or they can be from different types, as long as they are compatible (see the table below). The source and destination BPs must be at the same level (both company level or both project or shell level). File attachments can also be copied.

This functionality is built into business processes through the uDesigner design, which includes specifying which BPs can be used for the source and destination. Also, the ability to filter the business process records that can be consolidated (by status) can be added in uDesigner. This enables you to filter the records you see in the list to consolidate by the record status, allowing you, for example, to exclude records that have the status of Pending or Rejected.

For example, this functionality can be used to consolidate specific line items from multiple change order requests submitted over a period of time into a single change commit.

The following BP types are supported:

- Cost type (except payment applications)
- Document (with a detail form)
- RFB (Requestor form only)
- Line item type

There are some restrictions when consolidating line items from different BP types:

Note: Line Items cannot be edited after consolidation, if the "Prevent consolidating the same line item across multiple records" checkbox is checked.

| | Source (across) | | | |
|--------------------|-----------------|----------|-----|-----------|
| Destination (down) | Cost Type | Doc Type | RFB | Line Item |
| Cost Type | Yes | No | No | No |
| Doc Type | No | Yes | No | No |
| RFB | Yes | Yes | Yes | Yes |
| Line Item | Yes | Yes | Yes | Yes |

To copy line items from one or more business process records into another

- Open the business process record into which the line items will be consolidated (the destination business process).
- 2) On the bottom toolbar, click Copy and choose Consolidate Line Items. The Line Items Consolidation window opens. This window lists the business processes that are eligible for consolidation with this BP.

Note: This window will not appear if there is only one eligible business process. Instead, a list window opens, displaying a list of the eligible

records from that business process. Continue with step 4.

For Shells:

If you are consolidating line items from a business process in a shell, the window will display a Choose Location field. Use this field to specify which shell the business process resides in. (View-only shells are not usable with this feature.)

For Data Pickers:

If the source BP includes a data picker on the form, it might be set up to present the list of records in a hierarchy. If this is the case, Unifier will ignore the Choose Location field.

- 3) Select the source business process and click **OK**. A list window opens, displaying a list of eligible records from that business process.
- 4) Select a record from the list. To search for a particular record, click **Find**.
- 5) To copy specific line items from the selected record:
 - Click the Select Line Items button. The BP Line Item(s) window opens, displaying the line items for that record.
 - Select one or more line items and click Copy.
 - Choose With Attachments to include any file attachments that may be present on the line item to be copied, or choose Without Attachments to ignore attachments.
- 6) To copy all line items from the selected record:
 - Click All Line Items.
 - ► Choose **With Attachments** to include any file attachments that may be present on the line item to be copied, or choose **Without Attachments** to ignore attachments.

Note: If there are multiple tabs on the record you selected, Unifier will prompt you to select the tab you want to copy the line items from.

Close this window by clicking the Close Window button.
 Unifier copies the line items to the consolidated business process record.

Note the following:

- Once you copy a line item for consolidation, that line item will no longer be available for other consolidations—unless the BP design specifies that, once the consolidated BP reaches a certain status, the line items from the source BP(s) will be available again. For example, if a Change Order with consolidated line items reaches a "rejected" status, then all the consolidated line items will be available so you can consolidate them again in another Change Order. In addition, line items will be available again for consolidation if the consolidated business process record reaches a terminal status, or if the line item is deleted in the originating (source) business process or is terminated.
- You can consolidate the line items of the Standard tab of a Document-type business process into the line items of the Standard tab of another Document-type business process, only.

- ▶ Be aware that line items on a draft business process are also unavailable for consolidation. If the consolidated line item business process has not been saved or sent to the next step in a workflow, Unifier considers it to be in draft mode and will lock the line item for any other consolidation. To unlock the line item, you must delete the draft BP.
- If the consolidation setup was designed so in uDesigner, the line item in the consolidated BP can be automatically updated whenever the source line item changes (as long as the consolidated record has not reached a terminal status). For example, pickers that are auto-populated will be updated, formulas will be re-calculated, roll-ups will be updated, attachments will be modified or removed, reverse auto-population will be performed. However, if any new attachments are added to the source line item, these will **not** be added to the line item on the consolidated BP. If uuu_li_consolidated (Field Label: Consolidated) is a part of the detail form design of the consolidation source BP record, then the Data Element (DE) will be set to "yes," if the line item has been consolidated.
- If there is a BP Line Item picker on the source and destination detail forms, the BP Line Item picker data will be ignored (will not be copied) while copying line items.
- BP picker information can exist on source and destination detail forms. Data will be copied only if the underlying BP picker reference is the same on both the source and destination. If the reference is not the same, data will not be copied. For example, a destination BP has a BP picker on the detail form that references a vendor BP. To populate data via this BP picker, the source BP must have a BP picker that is the same vendor BP. If it is not, the vendor data cannot be copied.
- A Commit Line Item picker on the detail form of a change order business process will allow you to select a line item from SOV (contract + change orders). A Commit Line Item picker always works in conjunction with a Reference Commit picker on the upper form. The Reference Commit picker on the source and destination should refer to the same base contract.
- If the destination line item form and the source line item form both contain a data element that is designed to be auto-populated from another source, the auto-populate will be ignored during consolidation. The copied line item data will take precedence over auto-populated data in the destination BP.
- When consolidating line items from a Cost BP to a SPA type commits BP, if the Cost Line Item Type in the source BP record is the Variable Unit Cost, and the destination design does not have the uuu_quantity and the uuu_unit_price, then Unifier will display this message: Cost Line Item Type of Variable Unit Cost cannot be created. Detail Form design for this tab in uDesigner must include the data elements uuu_unit_price and uuu_quantity. The functionality is the same in the case with the auto-creation of the SPA commit record, from non-SPA BP.
- When consolidating line items, from a non-SPA BP to SPA type commit BP and in the destination if the amount data element is not defined as formula of uuu_unit_cost * uuu_quantity, the amount value in the copied line item will be zero (0).
- ▶ Validations to be considered when consolidating or auto-creating line items into SPA BP:
 - The costed amount total must be equal to the line item amount, based on the form properties in the design.
 - All of the fields which are marked as required must have data in the destination line item.
- When the line items are auto-created from a non-SPA BP, if the CBS Code does not exist in the destination, then the BP record will be created in the I-step. In this case, only the summary line will be created.

Restricting Line Items by Using Copy with Conditions Option (Standard View)

You can use the **Copy with Conditions** option (from the gear menu () next to the record) to copy a specific line item, rather than copying all line items. You can use this option to also:

- Include, or exclude attachments
- Include linked records
- Retain or remove references to auto-created records or line items

These copy options are set up by your administrator and will appear in a list that you can choose from.

If no copy options have been created, then the Copy with Conditions sub-menu option will be disabled.

To restrict line items using the Copy with Conditions option:

Note: The following is applicable to Company, Project/Shell, and master logs. This option is not available in the **Tasks** log.

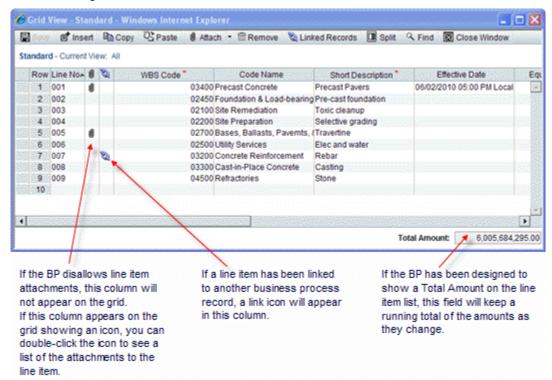
- 1) Click to select a BP and open the BP log.
- 2) Click the gear menu () next to the record that you want to copy and click to select **Copy** with **Conditions**.
- 3) Follow the prompts to complete copying your record for use.

Adding and Managing Line Items Using the Grid View Feature

For Line Item business processes, Unifier provides a grid feature (**Grid View**) that shows the line-item entry form in a lateral sheet view, where you can enter the data directly without having to open a line item form. In this regard, the sheet works the same way the line-item entry form works—rows might not be editable because of their statuses, auto-populated fields will be filled in for single-record BPs, if a yet-to-buy amount has already rolled up from a cost BP to the cost sheet, you will not be allowed to modify the line item, etc.

Note: The Grid feature is best used for short line items.

The following shows the Standard View of the Grid View:



The grid feature (**Grid View**) shows the line item number and all the fields on the line item entry form, including fields that are required, formulaic, or populated, as well as fields that are part of a dynamic data set. The fields on this grid work the same way they do on a line item entry form—pickers display picker windows, menus display lists, formula fields produce calculations, date picker fields display calendars, etc.; however, radio buttons will appear as pull-down menus, and image, hyperlink, and BP Creator fields have special behaviors.

You can resize the columns by dragging, and sort the data by column (except for Row and image fields). You can use the **Tab** and arrow keys to move from field to field and open them. For business processes that include many line items, you can use the **Find** function to filter the list to display only certain line items.

The grid feature (**Grid View**) is not available on:

- RFB bidder forms
- Line Item with CBS Code BPs (Transfer classification)
- Standard tab of Payment Application Line Item with CBS Code BPs
- Line Item with Asset Code BPs
- Line Item with Multiple Codes BPs (Transfer and Lease classifications)
- Simple type BPs
- Text type BPs
- Document type BPs
- Resource Booking type BPs for project/shell

Project/Shell Creation BPs (Simple sub-type)

What is not available on the grid:

- Summary row functions: Summary line items do not appear on the grid and cannot be created on the grid. In addition, line items within the summary do not appear.
- Transaction currencies
- Line item consolidation
- Import function

Behavior Set DEs in the Grid Feature

Since fields displayed in the grid feature (**Grid View**) can come from DDS, the behavior set DEs can be seen in the grid. If you select **Disabled and Clear** for a behavior set that is present on the grid, then the updated value is displayed in the grid. This value is either populated with a value or left blank.

Last One to Save Over-Writes Other Edits (Except for Deleted Rows)

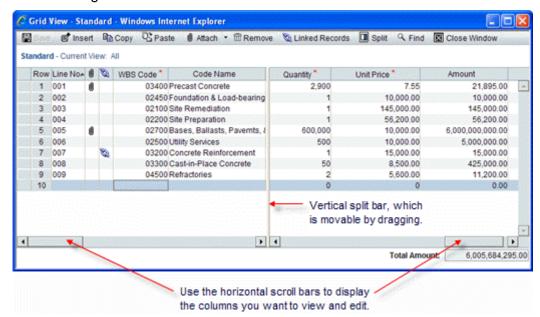
The Grid feature can be used simultaneously by multiple users. To accommodate multiple editors using the grid simultaneously, the commit order of saved edits is on a line-by-line basis, not on the entire grid view. If two users are editing the same line item, but different fields, at the same time, the edits made by the last user to save that line item are the edits Unifier will commit to the record.

For example, if User 1 changes an amount field from 15,000 to 23,000 and saves the change, and User 2 changes a different field, but does not touch the amount field, when User 2 saves the grid, Unifier will commit User 2's edits; and the amount field will show 15,000 rather than 23,000.

The order of saved edits is particularly important for deleted rows on the grid. Once a row is deleted, it cannot be reinstated with a later edit. For example, if User 1 deletes a row and saves the grid view, and User 2 changes the amount field in that row from 15,000 to 23,000 and saves the grid view, the row will **not** be reinstated with the new amount of 23,000.

Split screen

To make editing line items easier, you can use the **Split** button to split the screen into two halves.



The following shows the Standard View of the Grid View:

Error messages

If Unifier detects errors when you save line items, error messages will appear at the bottom of the Grid window, indicating the row where Unifier found the error.

Add line items using the Grid

- 1) On the business process form, select the tab containing the line items you want to add to.
- 2) On the Line Item window, click the **Grid** button. The Grid window opens, showing a new, empty row at the bottom of the list to use for the new line item.
- 3) To enter data into the grid, double-click a cell in the new row. The cell opens for editing. As soon as you begin adding a line, a change icon appears in the first column as a reminder that a line item has been added to the record, and the **Save** button becomes active.
- Fill in the fields on the grid as necessary.
- 5) (Optional) To include an attachment to a line item, click the **Attach** button.

An upload window opens.

- a. Click **Add** and navigate to the file you want to attach.
- b. Select the file, click **Open**, then click **Upload**.
- c. When the upload is complete, click Close.
- 6) To save the line item to the record, click **Save**.

When you save the line item, Unifier:

- Refreshes the grid view.
- Removes the change icon.
- Adds the line item to the list.
- Inserts a blank line at the bottom of the list for another new line item.

- Updates the line items on the business process form.
- Updates summary if configured in uDesigner to do so.
- Line item summaries, for totals and summary averages, update in real time.
- 7) To add additional line items, repeat steps 3 through 6.

Link line items to other business process records

Once you have entered a line item onto the grid and clicked the **Save** button, you can link the line item to a business process record.

To link a line item to a BP record

- 1) On the BP form, select the tab containing the line item you want to link to a record.
- 2) On the Line Item window, click the **Grid** button. The Grid window opens.
- 3) Select the line item you want to link and click the **Linked Records** button. The Links window opens.
- 4) Do one of the following:
 - If you are linking to a record from the same business process log, click the **Attach** button.
 - If you want to link to a record from another business process log, click the arrow next to the Attach button, and then choose the log where that business process record resides.
- 5) From the resulting list of BP records, select the record(s) to link to the line item and click **Attach**.

When you link a business process record, the Links window shows the Current View for all records and provides the following details:

- Direction
- Type

The contents of the Type column indicates whether the linked record has been associated automatically (by way of Line Item Consolidation), or manually (by way of manual linking).

- Record Number
- Record Title
- Record Location
 - If the BP is a company-level BP, then the Record Location shows the Company Workspace tab name.
 - If the BP is a Project-level BP, then the Record Location shows the Project name.
 - If the BP is a Shell-level BP, then the Record Location shows the Shell location.

Notes:

- You cannot remove the link Type: Line Item Consolidation.
- If there are multiple line items consolidated from the same BP record, then the BP record will be seen as a linked record for that many line items.
- If the line item with the link Type: Line Item Consolidation moves to the status, "Previously consolidated lines are available when terminal status equals" in uDesigner, or is terminated, then the link will be

- automatically removed.
- If using a Detail form, click Linked Records, at the bottom right-hand corner of the Detail form. You do not need to save the line item in order to link a record.
- 6. Click **Close Window** to close the Links window.

Edit line items using the Grid

To edit line items using the line item grid

- 1) On the BP form, select the tab containing the line items you want to edit.
- 2) Click the Grid View icon.
- 3) On the Grid, double-click the cell you want to edit. The cell opens for editing.

 As soon as you begin editing, a red change icon appears in the first column as a reminder that the line item has been modified, and the **Save** button becomes active.
- 4) Click Save.
 - When you save the line item, Unifier refreshes the grid view, removes the change icon, and updates the line items on the BP form.
- 5) To edit additional line items, repeat steps 1 and 2.
- 6) When you have finished, click the Close Window button.

Notes:

- When editing the element of Dynamic Data Set, use the drop-down list to select the values or labels.
- When editing the element of Multi-line Text Data Element (DE)/field, use the text box to conduct your in-line editing. You can change the width of the box, but the height of the box is set according to the DE properties (i.e., Number of lines).

When you edit a line item grid, the row counts (at the bottom left corner of the grid) captures the following actions:

New

The count will depend upon the **Add** action and the **Copy** action on the line item. The number gets updated when you add new line items.

Deleted

The count will depend on the **Remove** action on the line item.

Note: These counts will not appear when the grid is in view only mode.

To edit an image field on a line item grid

An image field on the grid displays only an image icon: however, you can see a thumbnail of the image if you double-click on the icon. If you want to change or remove the image, double-click the cell anywhere but on the icon. Unifier displays a menu, from which you can choose to upload a different image, or move the image.

To edit a hyperlink field on a line item grid

If you want to change a hyperlink, double-click the cell anywhere but on the hyperlink. Unifier displays the Hyperlink window, where you can change or remove the link.

To edit a check box field on a line item grid

When the field is opened in **Grid View**, it is rendered as a box that you can select or de-select.

If the list of line items is opened in **From View**, all of the line items for a given tab are displayed. Similar to **Grid View**, the check box in the line item list is also rendered as a disabled box with the value.

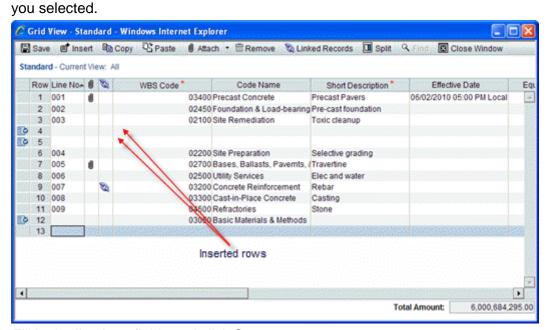
The **Find on Page** option in the grid renders the check box field as a text box that allows you to enter **Yes** or **No**. If you enter **Yes**, then the system selects the check box, and the line item associated with the check box is displayed along with the selected check box. If you enter **No**, then the system does not select the check box, and the line item associated with the check box is displayed along with the deselelected check box.

Insert a row into the grid

Inserting a row in the grid can be convenient if you have a long list of line items. Unifier automatically opens a new line item at the bottom of the list, but if the list is long, it can be more convenient to insert line items wherever you are in the list. When you save the grid view, Unifier re-sorts the added rows into their proper place.

To insert a row or rows

On the Grid, select a row and click the **Insert** button on the toolbar.
 To insert multiple rows, click the **Insert** button again. Unifier inserts the row(s) above the row



2) Fill in the line item fields and click Save.

Unifier reassigns the line numbers as follows:

- If any rows have been deleted during an edit, the line numbers are reused so that the line numbering remains continuous. (*Exception*:If the amount on a CBS line item has been rolled up to the cost sheet, the line number will not be reused.)
- After deleted line numbers have been reused, any new line items are assigned numbers in ascending or descending order, depending on how the sort order was specified when the Item log was created.

Manually create a business process from the Grid

A BP Creator field configured for automatic creation mode will appear as a read-only field on the grid. But if the field is configured for manual creation, you can set up the business process creation from the Grid. The new business process will be created when you finish editing the form, or send the form on to the next step in the workflow.

To manually create a business process from the Grid

- 1) Double-click the BP Creator field.
 - The field will display the words "Pending Creation."
- 1) Click Close Window to close the Grid and return to the form.
- 2) On the form, click **Finished Editing** (if this is a non-workflow BP), or **Send** to send the BP form on to the next step in the workflow.
 - Unifier creates the new business process. After the business process has been created, this field will show a hyperlink to the new business process.

To prevent a business process from being created

- 1) Double-click the BP Creator field.
 - The field will display the words "Pending Creation."
- 2) Double-click the BP Creator field again.
 - Unifier clears the text from the field, and will not create the business process.

Copy a line item on the Grid

- 1) On the form, select the tab containing the line item you want to copy.
- 2) On the Line Item window, click the **Grid** button. The **Grid** window opens
- 3) Select the line item (or items, using the **Ctrl** key) you want to copy and click the **Copy** button.
- 4) Select a line and click the **Paste** button. Unifier pastes the copied line item(s) into the row(s) above the selected line, giving it (or them) a line item number of 0.
- 5) Click **Save**. Unifier renumbers the line item(s) with the next incremental number(s), and updates the line items on the form.

You have the ability to copy cell values by way of:

a) Dragging cell value

When you click a field (cell) in a line item grid that is editable, Unifier displays a small blue square icon (indicator) on the bottom right-hand corner of the cell. The indicator is available for fields that are editable.

You can drag the indicator to copy the cell value onto the cell below. After you copy the value, the value in the recipient cell appears as modified (the font will be purple in color, and the format will be italic.

When you drag the cell values for multiple cells, the pattern of values of the copied cells will be copied, also.

If you select two cells and drag the values into three cells, then the system will replace the value of the third cell with the value of the first cell that was copied.

b) Changing cell value

When you want to change the value of a field (cell) that is editable in multiple line items, use the **Shift** key to select the consecutive (adjacent) line items, click on the cell, in one of the line items, enter the value that you want, and click **Enter**. You can use the **Ctrl** key to select inconsecutive (not adjacent) line items.

Note: The search functionality is not available when the grid is being edited.

Adding and Managing Line Items in Document-type BP Without Folder Structure

Creating a Document-type Business Process Line Item Record

You can create a Document-type BP line item record:

- ▶ Through **Form View** (a single line item and without importing attachments):
 - You cannot submit the record to the next level without completing the required fields. If you try to save the line item without completing the fields, Unifier will not create the line item.
- ▶ Through **Form View** (importing attachments):
 - You can submit the record to the next level without completing the required fields, in the line item, by way of the "import attachments" option.
 - When you open the same line items that were created in the Form View, from the Grid View, you can send the record to the next level without completing the required fields.
- ► Through **Grid View**:
 - You cannot submit the record to the next level without completing the required fields for a single line item or for multiple line items created through bulk upload.

For more information, see "Add Line Items Using the Grid View (on page 87)" topic, above.

Adding and Managing General Comments

Business processes provide a general comments section that allows you to add text comments that are like notes that accompany the business process but do not become part of it.

Depending upon the workflow setup and your permission settings:

You can hide or delete comments.

- You can attach supporting documents to your comments, which do not become part of the attachments of the BP itself, or mark up attached documents. See *Working with File Attachments and Markups* (on page 111).
- You can initiate a discussion group to help you draft your comments or markups (Classic View only). See *Participating in a Discussion Group (Classic View only)* (on page 177).
- You can add general comments if you are a task assignee or if you have been copied (cc'd) on the business process.
- You can add comments to a business process at the **End step**, and also at any status in a workflow, including **Terminated** (which means the business process was stopped at some point in the workflow). To add comments at those points in a workflow, you must have the **Add General Comments** permission.

Note: Some users, such as project managers, may have an additional permission that allows them to add general comments to any form (workflow or non-workflow) that they can view, without accepting the task.

Add comments to a business process form

When you add a new comment to a business process form, it remains as a draft until you send the form to the next step in the workflow. Draft comments remain editable until you send the form. After that, they cannot be modified.

To add general comments to the business process form

1) At the bottom of the business process form, click the **General Comments** link. The General Comments window opens.

Note: If any comments already exist on this business process, they will be listed in the Comments section of the window.

- 2) Click Add. The Edit General Comment window opens.
- 3) Type your comments in the text box. You may spell-check by clicking the **Spelling** button.
- 4) To add files to the comment, click **Attach**.
 - **My Computer:** Attach the file from your local system. The procedure is the same as for uploading files to the Document Manager.
 - Primavera Unifier Folder: Attach documents from the Document Manager. The window opens displaying the project or shell documents files and folders. Select the files and folders to attach and click OK. Folders are not attached. Instead, the contents of selected folders are attached in a flat list. Documents with duplicate file names will not attach.
- 5) To copy information in a previous draft comment, click the **Copy From** button. See **Copying and Consolidating Comments and Markups** (on page 179) for more information.
- 6) Click **OK** to save the comment and close the Edit General Comment window.

Note: The Text Comments box does not recognize formatting, including line breaks. Even if you press the Enter key to make a new line in the

Edit General Comment window, the final comment will not reflect the new line.

7) Click **Close Window** to save your comments and return to the business process form. An icon will appear at the bottom of the form next to the **General Comments** link.

Add comments to a document type business process

To add comments to an attached document on a document type business process

- 1) Select the document from the document list at the bottom of the form.
- 2) Click the **Comments** button.
- 3) Click **Add** to add the comment. Enter the text comment. Click the **Spelling** button to spell-check the comment.
- 4) You can also add a graphic markup to the document or attach a file to the comment.
- 5) Click OK.

Note: If the document type BP has been designed to use line item status, and a specified status has already been reached (e.g., approved), the line item may no longer be editable, and you may not be able to add comments to it.

View comments

If a BP form has comments added, a Comments icon will display next to the General Comments link.

To view comments on a business process form

Click the **General Comments** link at the bottom of the BP form. The General Comments window opens displaying previous comments. You can collapse or expand individual comments by clicking the arrow in the upper left corner of each comment.

Edit or delete comments

When you add a new comment to a BP form, it remains as a draft until you send the form to the next step in the workflow. Draft comments remain editable until you send the form. After that, they cannot be modified. (You can only modify your own comments, and only if you have not yet sent the BP to the next step in the workflow after creating the comments.)

Comments can be deleted after being sent only if the BP workflow has been set up to allow deleting of comments.

To edit a comment

From the General Comments window, select the comment to edit and click **Modify** from the toolbar. The Edit General Comment window opens. Make the necessary edits. Comments are editable until you click **Send** (workflow BP) or **Finished Editing** (non-workflow BP).

To delete a comment

From the General Comments window, select the comment to delete and click the **Remove** button. Draft comments can be edited before sending a BP. You must have proper permissions to delete final comments.

Hide comments

You can hide comments that you do not want to be generally viewed on workflow business processes. If you have permissions, you can view previously hidden comments. Other users will not be able to see the hidden comments unless they have the View Hidden Comments permission set, and using that permission, can also unhide the hidden comments. As the creator of the comment, you can view your own hidden comments, whether or not you have the View Hidden Comments permission (until the comments are published).

Note: Hidden comments are never included in the PDF attached to emails, regardless of a user's view permissions.

To hide or unhide comments

- 1) From the Comments window, select the comment to hide and click the **Hide Comments** button at the bottom of the window. The color of the hidden comment title bar lightens, and the Hidden Comment column will display Yes.
- 2) To unhide the comment, select it and click **Unhide Comments**.

Note: Due the nature of end steps, you cannot hide or delete comments on the end step of the workflow, even if the end step is an action (editable) form.

Add comments to an attached document

For Document-type BPs (such as transmittals or submittals), you can add comments directly to an attached document.

You can access the attachments in Workflow task emails under General comments section in the Document type BP.

Note: The Enable response via email option must be selected.

To add comments to an attached document

- 1) Select an attached document in the Attachments portion of the Document-type BP.
- 2) Click the **Comments** button on the toolbar. The File Comments window opens.
- 3) Click Add. The Edit General Comment window opens.
- 4) Type your comments in the text box. You may spell check by clicking the **Spelling** button.
- 5) You can hide comments on the attachments of workflow business processes by selecting the **Hide Comment** checkbox. See *Hide comments* (on page 108) for details on working with hidden comments.
- 6) Click OK.

To attach files to comments

To add files to the comment, click **Attach** and choose:

- ▶ **My Computer:** Attach the file from your local system. The procedure is the same as for uploading files to the Document Manager.
- ▶ **Primavera Unifier Folder:** Attach documents from the Document Manager. The window opens displaying the project or shell documents files and folders. Select the files and folders to attach and click **OK**. Folders are not attached. Instead, the contents of selected folders are attached in a flat list. Documents with duplicate file names will not attach.

Note: The attachment sources (My Computer and Primavera Unifier Folder) that are available depend on the BP design. Both choices may not be available for a given BP.

For additional information, see *Working with File Attachments and Markups* (on page 111).

Using or Viewing a Query-Based Tab

To use or view a Query-Based Tab (QBT):

- 1) Navigate to the parent Business Process log in your Project/Shell.
- 2) Open a record to view the QBT.

Note: The source Business Process/Space/Level of the QBT must be active in order for the tab to display.

3) Click New or Copy to create a record. The new record will display if query conditions are met.

As a pre-process to defining the Query tab in the business process (applicable for Line Item, Cost, and Document-type business processes), you need to use a reference picker in one of the upper forms of the business process, Space, or Level from where you want to create the Query tab. For defining a Query tab, click on the **Query Tabs** link in uDesigner, click **New**, and select a business process, Space, or Level. The system allows you to create a maximum of 8 tabs in uDesigner, including the QBT.

Query-based tab enables the user to:

- View a filtered list of business process records associated with the parent business process. Once the QBT in a business process is correctly configured and deployed, the QBT appears in the business process (User mode) for which the QBT has been configured.
- Create a new business process from the QBT in the same Project/Shell, where the parent business process resides.
 - Users can create new business process records from the QBT provided that the users have permission to create business process records for the Project/Shell that contains the business process.
- Copy a business process in the same location as the parent business process.Users can copy a business process either with or without attachments. In addition, a user can copy any of the records, in the QBT, and create a new business process record.

Note: Users can copy one record at a time.

When the user copies a business process record in order to create a new business process, the new business process record contains all the information present in the copied/based business process record. So, in case of business records with attachments, the user has the option of including or excluding (copying or not copying) the attachments when copying a business process record.

Search for business process records based on user-entered criteria.
Users can find any record from the list of records included in the QBT.

Note: The fields available for the Find feature must be defined in the uDesigner for the business process.

Format of the Currency for Query-Based Data Element (QBDE)

When the values for the query conditions are set, you can see the QBDE values according to the values that had been setup in the **Modify Data Element** window (selecting, or deselecting, the **Hide Currency Symbol in Cost type Business Process** option). Go to your project (**User** mode) and click the item.

When you open the record, you will see the same QBDE value, in the new user interface. You can print the record. In the Classic View, the **Upper Form** contains the values, accordingly.

Administrator

Go to Company Workspace (Admin mode) > Configuration > Business Process.

Click on a BP to open the **Configuration** window.

Click the **Query** tab.

Under the Query Conditions block, click the guery element name, and click Modify.

Define the values under the **Definition** and **Condition** blocks and deploy.

Creating a Record from the Query-Based Tab

When creating a record from its own BP log, the "SYS Numeric Query Based" Data Definition is updated when the user picks a reference process.

When creating a record from the Query Based tab of another BP (that auto-populates data to the record being created), the "SYS Numeric Query Based" Data Definition is not updated, unless the user:

- Manually changes the value.
- Uses a triggering element.

You cannot create a company-level business process record within a project, from a Query-Based tab.

QBDE Evaluation Upon Creating Record From Query-Based Tab

When creating a new record from a Query-Based Tab (QBT), if the trigger element gets populated, then the Query-Based Data Element (QBDE) will be evaluated.

When you create a Change Order record from a QBT (on Base Commit), the reference commit is populated and QBDE will be evaluated, if the reference commit is selected as the trigger element.

Whenever a reference picker is selected as the trigger element, and the reference picker is updated by means of record creation from the QBT, then the QBDE is evaluated.

Unifier:

- a) Calculates any formula elements that are based on QBDEs.
- b) Auto-populates the auto-populate element that is based on QBDE in the Line Item tab.
- c) Triggers any form validations (based on QBDE), when routing the record or saving line item.

When you create a record by way of copy in the QBT (with attachments or without attachments), Unifier evaluates the QBDEs, if the reference picker is selected as the trigger element, Unifier updates the reference picker. Unifier calculates any formula elements that are based on QBDEs and triggers form validation based on QBDEs.

Working with File Attachments and Markups

You can attach files to be routed with a business process (BP) form. These attachments can be documents that are sent within a Document-type BP, such as a transmittal, or they may be supporting documents that are attached to a BP record of any type in the **General Comments** section of the BP.

Note: You cannot upload and attach two documents with the same name to a BP record. If you are using a Document-type BP (such as a submittal or transmittal), and you are using a folder structure, then you can have two documents with the same name in different folders (as you would on a local machine or network drive).

You can access the attachments in Workflow task emails under General comments section in the Document-type BP.

By default, files attached to business processes are placed in the **Unpublished Documents** folder in the **Document Manager**. A **Publish Path** data element can be designed in business processes in uDesigner to specify the automatic publishing of documents to a specified path and override the default.

Refer to *Unifier Managers User Guide* for details about automatic publishing of documents.

If you are uploading drawing files, see *Attach Drawing and Reference Files to a Business Process* (on page 116) for handling drawing file attachments.

You may also initiate a discussion group in Classic View to help you draft your comments or markups. See *Participating in a Discussion Group (Classic View only)* (on page 177).

Note: For security, the Company Administrators can specify the list and size of files that can be uploaded to the Company Properties page, by users and per company policy. Contact your Company Administrator for more information.

Attach Files to General Comments Section of a Business Process

The General Comments option allows you to enter your comments and attach documents, or files, that can provide more information about a BP record.

Note: The General Comments option cannot be used for updating any BP record.

To use the General Comments option to enter your comment and attach files, or documents:

- Go to Unifier > User mode > Project/Shell and open the BP record.
 A Business Process (BP) record could be in a folder such as Project Delivery, Cost Manager, Cost Controls, and so forth, in the right-hand Navigator.
- 2) From the bottom of the BP record, click **General Comments** to open the **General Comments** window.
- 3) In the General Comments window click Add to open the Edit General Comment window.
- 4) Enter your comments in the **Text Comment** box and select the **Hidden Comment** option, if you prefer.
- 5) Click **Attach** and select one of the following options:
 - a. My Computer (local system)
 - b. Unifier Folder (Document Management)

Note: The attachment sources (**My Computer** and **Unifier Folder**) are available based on the BP design and both of these two options may not be available for a given BP.

The following explains these options in details.

- Attaching files to a Document-type business process from My Computer
- Attaching files to a Document-type business process from Unifier Folder

Attach Files to a Document-type BP from My Computer

This option allows you to attach files, from your computer or your local system onto a Document-type Business Process record.

There are multiple ways in which files can be uploaded to a Document Type BP depending upon your use case.

You can upload files to a Document-type BP, based on your use-case, as follows:

- If one file (attachment) needs to be added to a single line item, then click **Add** > **Attachment** > **Add Attachment** > **My Computer**, select the file that you wish to upload, and click **Open**.
- If multiple files (attachments) need to be uploaded simultaneously, click **Import** and select **Import Attachments**. In the **File Upload** window, click **Browse**, select the files that you want to upload, and click **Open**. Once all the files are available in the **File Upload** window, click **Upload**. This will upload all the files as Line Items into your Business Process Record.

If you need to upload multiple files (attachments) simultaneously, and in addition to the files you also wish to provide more details about the line item, then click **Import** and select **Import Line Items** to open the CSV import wizard. You can use the CSV import file to specify the files (attachments) that are required for the line items and then import the line items as well as the files (attachments).

Note: The system does not attach folders. If you select a folder, the system attaches the contents of the selected folder, in a flat list.

By default, files attached to a business process are placed in the **Unpublished Documents** folder in the Document Management node (Project/Shell > User mode > Document Management > Unpublished Documents).

A Publish Path data element can be designed in uDesigner (Business Processes) to specify the automatic publishing of documents to a specified path and override the default. Refer to *Unifier Managers User Guide* for details about automatic publishing of documents.

Attach Files to a Document-type BP from Unifier Folder

This option allows you to attach files, from the **Document Management** (Documents folder).

When you select this option, the **Select Files** window opens, which displays all the folders of the Project/Shell documents (**Current Phase > Documents > Project Documents**). If Line Items, then select **Attachment > Add Attachment > Unifier Folder**.

From the Current Phase (right-hand pane) select the appropriate folder to see the contents in the right-hand pane.

- Selecting Current Phase enables you to view the folders and documents associated with the current phase.
- Selecting **All Phases** enables you to view all folders and documents in the Document Management, regardless of the phase.
- If you want to include the comments that are attached to the documents, select the **Copy Comments** checkbox.

From the right-hand pane, click to select a folder, and then click **OK** to attach the files in the folder. The attached files appear in the lower portion of the window. If the BP has line items and you select a folder or multiple documents, the system adds each document to a separate line item.

Notes:

- Folders are not attached. Instead, the contents of a selected folder are attached in a flat list.
- The system does not allow attaching files with duplicate file names.

By default, files attached to a business process are placed in the **Unpublished Documents** folder in the Document Management node (Project/Shell > User mode > Document Management > Unpublished Documents).

A Publish Path data element can be designed in uDesigner (Business Processes) to specify the automatic publishing of documents to a specified path and override the default. Refer to *Unifier Managers User Guide* for details about automatic publishing of documents.

Attach Files to Document-Type Business Process Forms

Document-type business processes, such as Transmittals or Submittals, can be used for routing documents such as specifications or drawings for review.

Note: Comments and graphic markups can be added to individual files, and the document list is easily accessible from the BP form.

Document-type BPs can be designed such that files can be added to individual line items. This feature allows you to assign line-item status to individual documents. If the status of the line item (and therefore, the associated document) reaches a specified status, for example, Approved, then the BP can be set up so that the line item is no longer editable. At this point, attachments and comments to that line item are no longer allowed.

There are two subtypes of Document-type BPs:

Document-type BPs with folder structure

A Document-type BPs with folder structure maintains the folder structure of the attached documents and folders, and the folder structure is displayed in the left-hand pane of the lower portion of the form.

For Document-type BPs with folder structure, the designer can specify that a configured folder path be appended to the folder structure. This appended path is based on the path configured in the uuu_dm_publish_path data element on the business process form, and the selection of the Append Line Items Folder Structure to AutoPublish Path option, which is documented in the Unifier uDesigner User Guide (Starting an Upper Form).

Document-type BPs without folder structure

A Document-type BPs *without* folder structure does not maintain the folder structure of the attached documents and folders, and the files (within the attached folders and sub-folders) are listed in a flat list.

To attach files to a Document-type BP:

1) Go to **Unifier > User** mode > **Project/Shell** and open the BP record.

Note: A Business Process (BP) record could be in a folder such as Project Delivery, Cost Manager, Cost Controls, and so forth, in the right-hand Navigator.

- 2) Go to the **Line Item** tab <tab name> (the very last tab) and click **Add** to open the **Line Item** window.
- 3) In the **Line Item** window click **Attachments**, click **Add Attachments**, and select one of the following options:
 - a. **My Computer** (local system)
 - b. **Unifier Folder** (Document Management)

Note: The attachment sources (**My Computer** and **Unifier Folder**) are available based on the BP design and both of these two options may not

be available for a given BP.

The following explains each option in details.

Attaching files to a Document-type business process from My Computer

This option allows you to attach files, from your computer or your local system.

When you click **Add Attachments** and select **My Computer**, the **File Upload** window opens. Select the document that you want to attach.

Note: You cannot select a folder.

After you select the file, click **Open** in the **File Upload** window. The **Line Item** window opens.

Enter the information in the fields listed under **General** and click **OK**.

Once you attach your files, you can see the files listed in the **Line Item** window, the **Line Item** tab <tab name> (the very last tab). The **Line Item** tab <tab name> (the very last tab) has two panes. The pane on the left displays the Attachment folder which contains the files that you have attached. The pane on the right displays all attached files.

When you upload a file from My Computer as an attachment, in order to be able to enter file-related values for that attachment, the Detail Form design of Document Type with Folder Structure BP (Advanced Document Type BP), must have the following fields:

- uuu title
- uuu revision no
- uuu issue date

Note: When attaching files from the Document Manager, some fields on the line item may auto-populate with data from the document or folder Properties window. Document-type BPs can be designed to auto-populate certain data elements on the detail form with data from matching data elements on the document attribute form.

By default, files attached to a business process are placed in the **Unpublished Documents** folder in the **Document Management** node (**Project/Shell > User** mode > **Document Management > Unpublished Documents**).

A **Publish Path** data element can be designed in business processes in uDesigner to specify the automatic publishing of documents (Automatic Publishing to a Specified Path) to a specified path and override the default. Refer to *Unifier Managers User Guide* for details about automatic publishing of documents.

Attaching files to a Document-type business process from Unifier Folder

This option allows you to attach files, from the **Document Management** (Documents folder).

When you select this option, the **Select Files** window opens, which displays all the folders of the Project/Shell documents (Current Phase > Documents > Project Documents).

If the Document-type BP has line items, click **Add** and select **Import Line Item** w/Attachments > Unifier Folder.

If the Document-type BP does not have line items, click **Add Attachments** and select **Unifier Folder**.

From the Current Phase (right-hand pane) select the appropriate folder to see the contents in the right-hand pane.

- ▶ The Current Phase section enables you to view folders and documents associated with the current phase
- ▶ The All Phases section enables you to view all folders and documents in the Document Management, regardless of the phase.

If you want to include the comments that may be attached to the documents, select the **Copy Comments** checkbox.

From the right-hand pane, click to select a folder and click **OK** to attach the files in the folder.

The attached files appear in the lower portion of the window. If the BP has line items and you select a folder or multiple documents, each document will be added in a separate line item.

Notes:

- Folders are not attached. Instead, the contents of a selected folder are attached in a flat list.
- The system does not allow attaching files with duplicate file names.

By default, files attached to a business process are placed in the **Unpublished Documents** folder in the **Document Management** node (**Project/Shell > User** mode > **Document Management > Unpublished Documents**).

A **Publish Path** data element can be designed in business processes in uDesigner to specify the automatic publishing of documents to a specified path and override the default. Refer to *Unifier Managers User Guide* for details about automatic publishing of documents.

Attach Drawing and Reference Files to a Business Process

Drawing files attached to Document-type business processes may be accompanied by multiple reference files, which may need to be resolved when attaching a drawing file.

Add Markups to a Business Process Attachment

You can add markups, such as circles or other graphical elements as well as text, to a document, which display directly on the document, but do not alter the document itself. Markups are layered on top of a file, as if the markups had been done on an acetate sheet that had been placed on top of the file. Each user who adds a markup is adding a new layer to the file.

To add a markup to an attachment on a business process using the Unifier Default viewer, see topic *Revising and Reviewing Attachments in a Business Process* (on page 119) .

To add a markup to an attachment on a business processes using AutoVue:

- 1) Do one of the following:
 - For non-Document-type BPs, click the **Attachments** link. In the Attachments window, select the document and click the **Comments** button.

- For document type BPs, select the document in the lower portion of the Document-type business process and click the **Comments** button. The File Comments window opens. If you have added any previous comments since the last time the business process was sent, they will be listed in the Draft Comments portion of the window.
- 2) Click the Add button. The Edit File Comment window opens.
- 3) Click the **Graphic Markup** button. The AutoVue Professional viewer window opens displaying the document content. The window opens initially in View mode.
- 4) In the viewer window, click the **NewMarkup** tool or select **File > New Markup**. If there are existing markups, the Markup Files window opens. Each saved markup session is listed in the window. Select the checkbox by the markups to view and click **OK**. The viewer switches to Markup mode, and the markup tools become available.
- 5) Add graphic markups to the drawing as necessary, using the tools on the horizontal toolbar.

Note: Each markup shape is a separate entity. The navigation pane on the left shows the Bookmarks tab and Markup Tree tab. The Markup Tree tab shows the markups. Click an entity to select it.

6) Click the **Save** button or select **File > Save** to save your markups. Enter a name for the markup and click **OK**.

Note: Markups are saved as a single layer and are no longer editable once you close the window. Each markup is listed by name in the Markup Tree tab as a separate layer. To add another markup layer, click the New button.

7) When you have completed your markups, close the viewer window to return to the Edit File Comment window.

Note: At this point, the comment is still in Draft mode. You can add additional markups or file attachments if desired. You must enter some text in the Text Comment box to save it.

- 8) Click **OK** to save and exit the Edit File Comment window.
- 9) Close the File Comments window.

Viewing and Adding New Markups in AutoVue

In addition to adding markups to a BP attachment, you can add and view old markups simultaneously. With this functionality, multiple members can add various markups across shared files throughout the life cycle of a design document.

When you select **AutoVue Review** in the **Gear** menu of the **Attachments** tab, a **View All Markups** option is available in the **File Viewer** of the **Comments** section. If you select **View All Markups**, the document is displayed in View-Only mode.

You can also choose the markups that are displayed by selecting the checkbox next to each markup. After selecting **OK**, all the chosen markups are displayed.

Including Stamps in Documents

After you include markups on a document that you have reviewed, you can follow these instruction to include a stamp in order to indicate the validity of your comments. To learn who to import stamps from AutoVue to Unifier, Refer to the *Using User-Defined Stamps* (on page 122) in the *Unifier User Guide*.

To include a stamp in a document:

- 1) Open the comments for your document.
- 2) You can do this from the comments window, or from the BP attachment viewer.
- 3) Add your comment.
- 4) Click the markup icon to add markup.
- 5) Click the stamp icon, on the AutoVue window.
- 6) Select a stamp that you want to include in your document. The system places the stamp on your document.

To update the value for any of the editable attributes, or fields, in your stamp:

- 1) Open the stamp properties (double-click on the stamp).
- 2) Make changes and save.

After you are done with updating or changing your markup, ensure that you save (Save Markup) your markup on AutoVue Stamp.

When you post your comment, the system saves your stamp (as a markup), along with your comment, on you document.

View Attachments in a Business Process

To view attached files in all BPs (except Document-type BP)

- 1) Do one of the following:
 - If the file is attached to the comments on a BP form, click the **General Comments** link. Open the comment with the attachment, and then click the **Attachments** link at the bottom of the Edit General Comment window to open **Attachments** window.
 - If the file is attached directly to the BP form, click the **Attachments** link at the bottom of the form to open **Attachments** window.
- 2) When the Attachments window opens, select a file and click **View**. The file opens in the viewer selected in your user preferences.

Note: If the file is a drawing file with references, you can select the file in the Attachments window and click **Reference Records** to open the Reference Record window.

To view attached files in Document-type BPs with line items

Double-click the document from the list at the bottom of the form. The Line Item window opens. Double-click the document to open.

Refer to *Unifier Managers User Guide* (Document Manager) for information about downloading AutoVue Client Certificate and launching AutoVue Web Start Client.

Download Attachments in a Business Process

Do one of the following:

- For non-Document-type BPs, in the Attachments window, select the file to be downloaded and click **Download**.
- For Document-type Line Item BPs, select the document to be downloaded and click Download.

Revising and Reviewing Attachments in a Business Process

You can revise/edit documents that are attached to any BP record, or Line Item.

Note: Revising a document replaces the existing file (with the same name) in BP record, or Line Item.

Revising attachments in all BPs (except Document-type BP)

- 1) Go to the **Attachments** window.
- 2) Select the file to be revised and click **Revise**.
- 3) Revise your document and save.
- 4) From the Advanced Options section, select your preferences.
- 5) Click **Upload**.

You can click **View Revisions** to see a list of revised documents. All revised documents are available for download.

If the name of a file that you attach to a BP record, or Line Item, matches the name of a file that exists in the BP record, or Line Item, Unifier allows you to automatically revise the existing file (Revise automatically if file with same name exists) with the newly attached file.

Note: If the terminal status of a BP record has been reached, then the system disables the document revision option.

Revising attachments in a Document-type BP

- 1) Go to the document Detail tab and click the **Revise** drop-down list and select **Revise**.
- 2) Click the Revise drop-down list and select View Revisions to view your revisions.

Reviewing attachments in a Business Process Record

If you have a BP record that has several attachments (documents) attached to the BP record, as well as Line Items, then you can review all the attached files in one place.

To review, select the attached document that you want to review, enter your comments, and save the document back in the BP. The details are as follows:

- 1) Open the BP record that has attachments.
- 2) Click Review > Review (or File > Review > Review) to open attachments in the default Unifier viewer. To open attachments in AutoVue, click Review > AutoVue Review (or File > Review > AutoVue Review).
 - The Review option is available for an Action Form as well as a View Form. The option **AutoVue Review** is displayed only if your Unifier server is configured to use AutoVue.
- 3) Click to select the attachment that you want. The attachments and comments are displayed in the BP Attachment Viewer.
- 4) Review the comments posted by others.
- 5) Enter your comments and post your comments on the document.

Using the Unifier Default Viewer:

- a. Click the Comments icon.
- b. Click the **Annotation** icon to display the annotation toolbar.
- c. Use the annotation toolbar to markup your document.
- d. Enter your comments and click **Post**.
- e. To add attachments to your comments, click the **Attachment** icon.

Using AutoVue:

- f. Click the **Markup** icon in the **Comments and Revision** window.
- g. Use the markup toolbar displayed in the **Document** window to markup up your document.
- h. Enter your comments in the Comments and Revisions window and click Post.
- i. To add attachments to your comments, click the **Attachment** icon .

Notes:

- You can add comments in one document and then move on to the next document.
- All comments are displayed in both viewers regardless of which viewer the comments were added in. Markups are visible only in the viewer they were made in.
- You can consolidate attachments and multiple comments (and their respective mark ups). This option is available if you are viewing the file in AutoVue.
- You can use the existing, default, and imported stamps to stamp the documents that you have revised.
- 6) Click **Finish** to complete your document revision.

Additional information about the Review screen

If a BP record has reached the terminal status, (Terminal Status or Terminated Status), the Review window opens in Read-Only mode.

If a hidden tab, on a BP record, contains attachments, then the review screen does not display those attachments.

The attachments present on Query-based tab (QBT), on a BP record, contains attachments, then the review screen does not display those attachments.

The Review screen does not display the line times for Cost BP Records of Summary Payment Application (SPA) Schedule of Values (SOV) type. For this type of BP, you can include comments in the General Comments field.

The Review screen lists all document revisions for each revised document.

The Review window lists all the BP Record-level and Line Item-level attachments grouped first by BP Record attachments and then by Line Item attachments, according to the tab order.

When you select a file in the Review screen, the system displays the files content in the AutoVue section of the screen. If you click the comment icon, the system opens the comments window.

Publish Attachments or Revised Attachments in a Business Process

By default, documents attached to BP record, or Line Item are published in the **Unpublished Documents** folder. For Document-type BP record, or Line Item, with Folder Structure, the Company Administrator can specify that a configured folder path be appended to the folder structure. Refer to *Unifier Reference Guide* for details.

Unifier publishes to the Document Manager:

- Documents attached to the BP record.
- Documents attached to the Line Item of the BP record.

Note: Comments related to a document attached to the BP record and/or its Line Item are not carried over to the Document Manager when published.

You can set the auto-publishing process by including the **uuu_dm_publish_path** Data Element in the BP record, or Line Item. Alternatively, you can go the unpublished documents, select your file, and click **Publish**.

View Graphic Markups in a Business Process Attachment

To view graphic markups:

- 1) From the BP Attachment Viewer, locate the comments pane. Markups are associated with a specific comment.
- 2) Click the **View** link next to a comment to view the markup.

Note: All comments are displayed in both viewers regardless of which

viewer the comments were added in. Markups are visible only in the viewer they were made in.

Remove Attachments from a Business Process

Removing attachments from a BP

Do one of the following:

- For non-Document-type BPs, in the Attachments window, select the file to be deleted, and then click **Remove**.
- For Document-type Line Item BPs, select the document in the bottom of the form, and then click **Remove**.

Removing attachments from a Document-type BP

To remove attachments from a Document-type BP, you can remove the entire line item, or you can leave the line item intact and remove the attachment from it.

Note: If the Document-type BP has been designed to use line item status, and the specified status has already been reached (e.g., approved), the line item may no longer be editable.

To remove attachments from a Document-type business process (remove line item)

- 1) From the Document-type BP form, select the line item to be removed.
- 2) Click the **Remove** button.
- 3) Click **Yes** to confirm. The line item and attachment are removed.

To remove attachments from a Document-type business process (remove attachment from the line item)

- 1) From the Document-type BP form, double-click the line item to be removed. The detail line item window opens.
- 2) Click the Remove Attachment button.
- 3) Click **Yes** to confirm. The attachment is removed from the line item.

Note: All fields that had been auto-populated when the file was originally attached (for example, name, issue date, revision number, etc.) will be cleared.

Since **Name** is a required field, you must give the line item a new name before closing the line item detail window. If you close the line item detail window before entering a new name, the name of the file that has been removed will remain in the field.

Using User-Defined Stamps

In addition to the default stamps, you can use the **Stamps** module (**Company Workspace** > **Admin** mode > **Configuration** > **Stamps**) to import the stamps into Unifier for use.

Your custom-stamps can include Data Elements (DEs) which are used on Business Process (BP) and/or Document Management Attribute form (File Properties).

When you add markups on Comments in Unifier, you can include stamps onto the documents as Markups, also.

When creating your custom stamp, you can include the DEs that you want to be enabled to read data from Unifier. You must mark the included attributes with properties of "Read" or "Read-Once" in Stamp properties, and ensure that the attributes names match the DE name in Unifier, exactly.

To import your custom-stamp into Unifier go to: **Company Workspace** > **Admin** mode > **Configuration** > **Stamps** > **Import** and follow the prompts in the **Import Stamps** wizard. The **Import Stamps** wizard contains information about the stamp name, background image, size, and status. The system lists all referred files, and their images, for you to upload. Once you upload all the needed files, you can click **Import** to import the stamp files and their background images.

Note: If a stamp file exists in Unifier already, Unifier will not let the user to import the file again.

On the Stamps screen you can use the gear menu to delete an existing stamp.

Note: Before including an attribute onto a stamp, which needs to read data from Unifier Data Elements, you must include the DE into the DE section of the stamp. (Click on the DE button in the stamp, on the Stamps screen, search for the DE, and then include the DE in the selected DE section.

The following Attribute properties from the Stamp are currently supported in Unifier:

Read

If you assign Read as the property of an attribute, then AutoVue reads the value from the Document DMS properties in Unifier. The stamp reads the value from the DMS properties every time the stamp is opened.

Read Once

If you assign Read Once as the property of an attribute, then AutoVue reads the value from the Document DMS properties in Unifier. The stamp reads the value from the DMS properties only for the first time (when the stamp is put onto the document).

Hidden

If you assign Hidden as the property of an attribute, then the system does not display the attribute value onto the stamp but stores the value onto the stamp.

Edit

If you assign Edit as the property of an attribute, then you will be able to edit the property value on the stamp (double-click the stamp or use the properties of the stamp).

Comparing File Attachments

Unifier allows you to compare different revisions of a file that is attached to a:

- Business Process (BP) record.
- BP Line Item.
- Document in Document Manager.

To compare different revisions of a file, or document, that is attached to BP record and BP Line Item:

- 1) Open the BP that has attachments.
- 2) Click **Review** to open the **BP Attachment Viewer** window.
- 3) Click to select an attachment.
- 4) Click **Analysis** and select **Compare**.
- 5) Select the revision that you want to compare the current version with.
- 6) Follow the prompts and click **Finish** when done.

To compare different revisions of a file, or document, in **Document Manager**:

- 1) Go to **Document Manager** and open the folder.
- 2) Click to select a file that has revisions and click **Open** to open the **View File** window.
- 3) Click **Analysis** and select **Compare**.
- 4) Select the revision that you want to compare the current version with.
- 5) Follow the prompts and click **Finish** when done.

Unifier also allows you to compare any Unifier file with a file on your local system.

- 1) Open the BP that has attachments.
- 2) Click Review to open the BP Attachment Viewer window.
- 3) Click to select an attachment.
- 4) Click **Analysis** and select **Compare**.
- 5) Deselect the checkbox for revisions.
- 6) Click **Browse** to select the file from your local system.
- 7) Follow the prompts and click **Finish** when done.

To compare file, or document, in **Document Manager** with a file on your local system:

- 1) Go to **Document Manager** and open the folder.
- 2) Click to select a file that has revisions and click **Open** to open the **View File** window.
- 3) Click **Analysis** and select **Compare**.
- 4) Deselect the checkbox for selecting revisions.
- 5) Click **Browse** to select the file from your local system.
- 6) Follow the prompts and click **Finish** when done.

Republishing DM Document from BP Record

When a BP type enables you to select Republish if Publish Path is different from current location (Move or Copy), then:

Note: This option is not available for the Text-type BPs (since these types of BPs do not support attachments) and RFB BPs bidder upper

action form.

You can change the Publish option (in the Attachments tab) in the BP record in any attachment that you add from the Document Manage (DM).

When you select the Publish option, then you can move, or copy, the attachment to a location (publish path as captured in the uuu_dm_publish_path).

If the uuu_dm_publish_path is the same as the current location of the file in DM, then the file in DM stays as is, and there will be no revision or republish.

If the uuu_dm_publish_path is different from the current location of file in DM, then:

- If the Move option has been selected (in uDesigner), then the file (with all its revisions) can be moved from the original DM location to the new uuu_dm_publish_path. This type of move is the same as a manual move of a file from one location to another location in DM, and it is captured in the Audit Log. Furthermore, the BP record assignee (the user who initiated the move action) is also captured in the Audit Log.
- If the BP step assignee does not have Add Folder or Add Documents permission, then if the BP step assignee:
 - Selects Send or Finish Editing, Unifier displays the following alert:

The following attachment(s) cannot be moved to <label of DE uuu_dm_publish_path> as you do not have permissions:

<File 1 Name>

<File 2 Name>

Do you want to proceed?

If the answer is Yes, the record is sent to the next step or finish edit without moving the file

If the answer is No, the record is not moved to next step or finish edit, and the record stays at the current step giving the BP step assignee a chance to change the publish path or take other action.

Note: If the source file is locked or checked out, then the source file remains in the same state, at the destination after the move.

If the Copy option has been selected (in uDesigner), then the latest revision of the file (from the original DM location) is copied into the uuu_dm_publish_path. The new copied file, at a new DM location, is linked to the BP record. The original file (with all its revisions) remains in the original DM location, as is, and it is not linked to the BP record.

If the BP step assignee does not have Add Folder or Add Documents permission, then if the BP step assignee:

Selects Send or Finish Editing, Unifier displays the following alert:

The following attachment(s) cannot be copied to <label of DE uuu_dm_publish_path> as you do not have permissions:

<File 1 Name>

<File 2 Name>

. . .

Do you want to copy these attachment(s) to Unpublished Documents?

If the answer is Cancel, then the record stays at the current step.

- If the answer is Skip, then the file (or files) will not be copied and stay as is. The original file shows as an attachment and linked to the BP record. The record can be moved to the next step or finish edit.
- If the answer is Copy, then the file (or files) will be copied to the Unpublished Documents for the project/shell. This new file in the Unpublished Documents is linked to the BP record. The original file stays as is, and it is not linked to the BP record. The record can be moved to the next step or finish edit.

For both the Move and Copy option, if the destination location already has a file with the same name as the file that is being moved or copied, then the existing file will be revised with the new file from the BP. And if:

- ▶ The same name file in the destination is already checked out, then Unifier revises the checked out file with new file from BP and leaves this new file as checked out in the new location.
- ▶ The same name file in destination is locked, then Unifier revises the locked file and the newly revised file will be locked (same as if a user revises a locked DM file attached to a BP record).
- ▶ The source file is in a checked out, or locked state, and at the destination the same name file is also checked out or locked, then the destination file state remains (the final file at destination location shows as locked or checked out based on its previous state in same location). In these scenarios (when destination location has a file with same name), the permission to revise the destination file has to be selected.

If the user has the permission:

- In the case of move, the source file revises the destination file with all its revisions. As a result, if source file has two revisions, and the destination file has three revisions, then the final file in destination location after the move will have five revisions (two revisions from source file added on top of the three revisions in destination file).
- In the case of copy, only the latest revision of the source file revises the destination file.

If the user does not have the permission:

In the case of move, if Send or Finish Editing is selected, then Unifier displays the following alert:

The following attachment(s) cannot be moved to <label of DE uuu_dm_publish_path> as you do not have permissions:

<File 1 Name>

<File 2 Name>

. . .

Do you want to proceed?

In the case of Copy, if Send or Finish Editing is selected, then Unifier displays the following alert:

The following attachment(s) cannot be copied to <label of DE uuu_dm_publish_path> as you do not have permissions:

<File 1 Name> <File 2 Name>

...

Do you want to copy these attachment(s) to Unpublished Documents?

If the uuu_dm_publish_path is blank, then:

- If the republish option as Move is selected, then the file stays at the original location, and the file will not be moved to Unpublished documents.
- If the republish option as Copy is selected, then the latest revision of that file is copied into the Unpublished Documents.

Note: The above scenarios apply to both Upper Forms and Detail form attachments of a BP record.

When a BP record moves from one step to the next (in uDesigner the Publish Path is different from current location option is selected):

If the next step form has the option Publish Path is different from current location checked, in uDesigner, then the same process occurs (as stated above). If the you select Publish for an already published attachment again, then that attachment will be published to the uuu_dm_publish_path again.

Note: This is the same as When the destination already has a file with same name as the one being published is triggered (as stated above).

If the next step form does not have the option Publish Path is different from current location checked, in uDesigner, then the same process occurs as for attachments from DM on a BP record.

Note: If you add any attachment to the BP record from the DM, the attachment moves into the Published Attachments group, on the log. If you add an attachment from a local area, then the attachment moves into the Unpublished Attachments group. As the unpublished attachments get published to the DM (upon Finish Editing or routing the record to next step), those attachments move into the Published group.

Linking Business Process Records

You can create a link from one business process to another, or from a line item to a business process. Other users will be able to click on the link and view the referenced business process. Linked records are added and viewed from the Linked Records link at the bottom of the BP form. If records have been linked, the number of records will appear next to the Linked Records link.

Note: This option is available only in BPs that have been designed to accommodate linked records. A user's ability to view a linked BP record is based on the user's permissions. If users cannot see the record in the log, they cannot see it in the link.

Link a business process record

To link a business process record to another business process:

- 1) At the bottom of the BP form, click the **Linked Records** link. The Links window opens.
- 2) Do one of the following:
 - If you are linking to a record from the same business process log, click the **Attach** button.
 - If you want to link to a record from another business process log, click the arrow next to the Attach button, and then choose the log where that business process record resides.
- 3) From the resulting list of BP records, select the record(s) to link to the open business process form and click **Attach**.
- 4) Click Close Window to close the Links window.

To link a line item to a business process record:

- 1) Open the business process that contains the line item you want to link.
- 2) Open the line item.
- 3) At the bottom of the line item detail form, click the **Linked Records** link. The Links window opens.
- 4) Do one of the following:
 - If you are linking to a record from the same business process log, click the **Attach** button.
 - If you want to link to a record from another business process log, click the arrow next to the Attach button, and then choose the log where that business process record resides.
- 5) From the resulting list of BP records, select the record(s) to link to the open business process form and click **Attach**.

To link a line item from a business process record to another business process record by way of consolidation, use the **Copy** option, select **Copy Consolidated Line Items**, and create a line item.

Note: The "Prevent consolidating the same line item across multiple records" option must be selected in uDesigner to prevent the Primavera Unifier user from consolidating line items that have already been consolidated. If this option is selected, the line Items cannot be edited, later. Primavera Unifier ensures that the line items can be consolidated only once, across all the business.

When you link a business process record, using any of the methods explained above, the Links window shows the Current View for all records and provide the following details:

- Direction
- Type

The contents of the Type column indicates whether the linked record has been associated automatically (by way of Line Item Consolidation), or manually (by way of manual linking).

- Record Number
- Record Title
- Record Location

- If the BP is a company-level BP, then the Record Location shows the Company Workspace tab name.
- If the BP is a Project-level BP, then the Record Location shows the Project name.
- If the BP is a Shell-level BP, then the Record Location shows the Shell location.

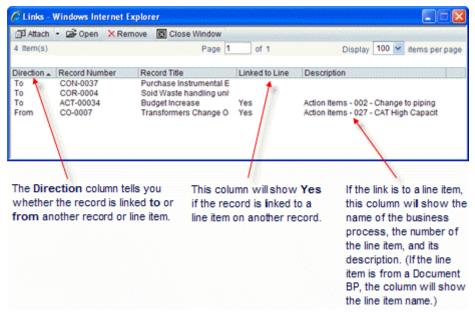
Notes:

- You cannot remove the link Type: Line Item Consolidation.
- If there are multiple line items consolidated from the same BP record, then the BP record will be seen as a linked record for that many line items.
- If the line item with the link Type: Line Item Consolidation moves to the status, "Previously consolidated lines are available when terminal status equals" in uDesigner, or is terminated, then the link will be automatically removed.
- 6. Click Close Window to close the Links window.

Manage linked records

To view a linked record:

At the bottom of the BP form, click the **Linked Records** link. The Links window opens.
 The Links window shows all the records and line items to which or from which the record is linked.



2) From the Links window, select the record to view and click **Open**. A read-only version of the form will open.

To remove a linked record

1) At the bottom of the BP form, click the **Linked Records** link. The Links window opens.

2) From the Links window, select the record link to remove and click **Remove**.

Note: From this window, you cannot delete a record with a From direction. To delete the record, you must open that record, click the **Linked Records** link and remove it from the Links window.

Linking Mailbox Messages to a Record

You can attach Mailbox messages directly to a BP record. On any action form in the workflow, users can click on the link and view the referenced Mailbox. Attached Mailbox are added and viewed from the **Linked Mail** link at the bottom of the BP form. This link will show the number of emails, both Mailbox and external emails, that have been attached to the record. A single email message can be attached to more than one BP record.

Note: This option is available only in BPs that have been set up to accommodate linked Mailbox messages.

About permissions

The Mailbox messages that users have access to (whether linking a Mailbox message or viewing a message linked to the business process by someone else) will depend on their Mailbox permissions. By default, users can see linked Mailbox that reside in their personal Inbox and Sent boxes (either they have sent the Mailbox or were a recipient). A user who has permission can view the Project Mailbox folder that contains messages sent and received by other project members. For example, users with Project Mailbox view permission can see all Mailbox generated within a project.

Note: There are special conditions for linking Mailbox in the Request for Bid functionality. See **Send and Manage Linked Mailbox from RFB Forms** (on page 132) for more information.

Attach an existing Mailbox message

You can attach new or existing Mailbox messages to a BP record. A single Mailbox message can be attached to one or multiple BPs.

To attach an existing Mailbox message to a BP

- 1) At the bottom of the BP form, click the **Linked Mail** link. The Linked Mail window opens.
- 2) Click the **Add** button and choose **My Mailbox**. The My Mailbox window opens, displaying the list of available Mailbox messages.
- 3) From the list, select the Mailbox to link to the open BP form and click **Attach**.
- 4) Click Close Window to close the Linked Mailbox window.

Create and attach a new Mailbox message

You can create and send a Mailbox message from the BP record. You must send the Mailbox before sending the BP to automatically attach it to the BP record. The Mailbox message will be stored in your current project or shell Mailbox Sent folder, in the Project Mailbox folder, and the Inbox of recipients. In addition, if you reply to or forward the message, the reply and forwarded copies will also automatically be linked to the BP record.

Note: If you create a new Mailbox message and save it without sending, it will remain in your Mailbox Draft log in the current project or shell. You can later access this draft Mailbox and send it, but it will not be automatically linked to the BP record from which you originally created it. To link it, send the message first, and then attach it as you normally would an existing Mailbox message.

If a recipient replies to or forwards the linked Mailbox message, the reply or forwarded message will also be automatically linked to the BP.

To create and attach a new Mailbox message to a business process

- 1) At the bottom of the BP form, click the **Linked Mail** link. The Linked Mail window opens.
- 2) Click **New**. A Mailbox message window opens.
- 3) Complete the Mailbox message window as normal, and click **Send** to send the message. Once the BP record is sent, the Mailbox message and any subsequent replies to that message by other users will be automatically attached to the BP record.

Manage linked Mailbox

You can view or remove linked Mailbox messages.

To view linked Mailbox messages

From the Linked Mail window, click on the gear menu, then click **Open** or double click on the email. The Message window opens.

To remove a linked Mailbox message

From the Linked Mail window, click on the gear menu, then click **Delete**.

Reply to or forward a linked Mailbox message

If you receive a Mailbox message with a link in the upper portion of the window, that Mailbox message is linked to one or more BP records. If you click **Reply**, **Reply All**, or **Forward** and then send your response, the reply or forwarded message will also automatically be linked to the BP record.

View the list of linked BPs from a Mailbox message

To view linked BP records from a Mailbox message:

1) Open the business process record.

- 2) Click the **Linked Mail** button. The Linked Mail window opens, showing the emails that are attached to the record.
- 3) Select the email you want to view, and use the gear menu to click **Open** or double click on the email. Unifier opens the email.
- 4) Below the Subject line is an information icon with the following caption:
 - This Mailbox and any future replies are linked to business process records.
- 5) Click the **business process records** link. Unifier opens the Linked Business Process Records window, which shows a list of all business process records to which this email is attached.

You can select a business process record from the list to view its record details in the right pane.

Send and Manage Linked Mailbox from RFB Forms

The *Request for Bid (RFB) Business Processes* (on page 261) have special linked Mailbox functionality. For RFB business processes, the creator of the RFB form will be allowed to correspond with internal users or with RFB bidders.

To send a Mailbox message from an RFB form

- 1) Open the RFB BP form and click the **Linked Mail** link in the lower-right corner of the form. The Linked Mail window opens.
- 2) Click **New** and select one of the following:
 - ▶ **To Internal:** The Message window opens. The selection list for To, Cc, and Bcc includes your Unifier project or shell team, as in other Mailbox messages.
 - ▶ **To Bidder:** The Message window opens. The selection list for To, Cc, and Bcc is generated from the list of invited bidders (selected from the Master Vendor BP/Vendor Master BP and invited to submit a bid during the creation of the RFB record).

Note: You will not be able to save a draft copy of the Mailbox from this selection.

Bidders will be allowed to view and access Mailbox once they are signed in Unifier using a special sign in.

Bidders can also create and add Mailbox messages from the RFB form. The **To** field is auto-populated with the requestor name. The **Cc** and **Bcc** buttons are not available; however, bidders can fill in external **Cc** and **Bcc** fields with external email addresses. When bidders reply or forward Mailbox messages, these will be linked with the record.

Bidders will not be able to create any new Mailbox after the bid due date.

Attaching External Emails from the Project or Shell Mailbox to a Record

Unifier collects all external emails it receives for a project or shell in a dedicated mailbox. You can attach these external emails directly to a business process record. Other users can view the email from a link on the record. A single email can be attached to more than one business process record.

External emails that have been blind copied (Bcc'd) are not collected by the Mailbox.

To attach an external email to a record

- 1) Open the business process record to which you want to attach the email.
- 2) Click the **Linked Mail** link at the bottom of the form. The Linked Mail window opens.
- Click Add and choose Mailbox or Project Mailbox. The Add from Mailbox or Add from Project Mailbox window opens, showing a list of the external emails that have been received for the project or shell.
- 4) Select the emails you want to attach to the record, and click the **right arrow** button. Unifier adds the email to the Linked Mail window.
- 5) Click done.

To open an external email attached to a record

- 1) Open the business process record.
- 2) Click the **Linked Mail** link at the bottom of the form. The Linked Mail window opens, showing the emails that are attached to the record.
- 3) Select the email you want to view, and use the gear menu to click **Open**. Unifier opens the email.

From this email window, you can:

- Reply to the sender
- Forward the email to others in the project or shell
- Flag the email for follow-up
- Clear a Flag from the email
- Delete the email
- Print the email

Note: You must have permissions to view, reply to, or delete external emails.

To view linked BP records from a Mailbox message:

- 1) Open the business process record.
- 2) Click the **Linked Mail** button. The Linked Mail window opens, showing the emails that are attached to the record.
- 3) Select the email you want to view, and use the gear menu to click **Open** or double click on the email. Unifier opens the email.
- 4) Below the Subject line is an information icon with the following caption:

This Mailbox and any future replies are linked to business process records.

5) Click the **business process records** link. Unifier opens the Linked Business Process Records window, which shows a list of all business process records to which this email is attached.

You can select a business process record from the list to view its record details in the right pane.

Sending Attachments for E-Signature

If you have configured and activated **Company Properties > E-Signatures** tab with details about the entity that provides electronic signature technology (**DocuSign** or **AdobeSign**), then when you access your BP record Upper Form or Detail Form and open the properties window, you can use the **Attachments** tab to send the attachment for signature.

The toolbar options and column headings for the **Attachments** tab are:

| Attach Files (paper clip icon drop-down) | Enables you to select a file by way of: • Browse • Document Manager |
|--|---|
| Publish to Document Manager | This column displays the hierarchy and the location of the attachment. |
| Name | This column displays the name of the attachment. |
| Comments | This column displays the comments associated with the attachment. |
| Revise | This column displays the revision information about the attachment. |
| Upload Date | This column displays the date that the attachment was uploaded. |
| Title | This column displays the title of the attachment. |
| Other information about the attachment | These columns display other information related to the attachment such as Pub. No., Rev. No, etc. |

When you select an attachment in the **Attachments** tab, you can click the gear menu and conduct the following operations:

- Review
- AutoVue Review
- Download
- Revise
- Remove

To sign documents within Unifier Document Manager and Business Processes using DocuSign or AdobeSign, you can select one or more documents and send them to one or more assignees for an electronic signature (e-sig). In addition, for documents in Document Manager, you can select a document and self-sign it using DocuSign or AdobeSign, whichever E-Signature provider is configured for the project. This functionality is missing for Business Process attachments. The Self-sign functionality is also available in BP record attachments.

The self-sign is available for BP record upper as well as line item attachments. When you conduct a self-sign, the file opens in DocuSign or AdobeSign. The status of the signature is reflected in the **Attachments** tab log, **E-signatures** column. When the file is signed (E-Signature status = Completed), the signed file gets added as a revision of the original file (as a pdf file and name appended by "_signed.pdf").

Business Process records

In the **Attachments** tab for BP Upper form, or detail form:

- If you select multiple attachments that their E-Signature process has not yet been started, or it is complete, then Unifier enables the option Send for E-signature.
- If the E-Signature process of any of the selected attachments is ongoing, then Unifier disables the option Send for E-signature.
- If you select multiple attachments such that their E-Signature process for at least one of them is In-Progress, then when you right-click, you have the option Recall E-Sign Request. If you select recall, then for each selected attachment with E-Signature status = In-Progress:
 - ► The E-Signature request sent out to each signee who has not yet completed the E-Signature request (Status = In-Progress) is set to recalled, and the E-Signature Status in the E-Sign Log is set as recalled.
 - The E-Signature Status column in the Attachments tab is set as recalled.
 - The E-Signature status in the E-Signatures node for each signee who has not yet completed the E-Sign task is set as recalled.

In the **Attachments Review** tab:

- ▶ The E-Signature status in the Review window is set as recalled.
- ▶ For each selected attachment with E-Signature status as complete, or not started, Unifier ignores the recall request.

The Review window (similar to the Attachments tab for BP Upper form, or detail form) displays the Send for E-Signature and Recall E-Sign Request actions by way of the:

- Gear menu
- Right-click

The right-click options will be visible based on the E-Sign Status of selected attachments. Use the right-click options to send, or recall, multiple attachments for E-signatures. The **Recall E-Sign Request** option is available only to the:

- ▶ E-Signature request sender
- Document Owner

Note: Other users will not be able to view or take action even if all other conditions are met.

E-Signature Log (Declining an E-Signature)

If a signee declines an E-signature request, then the E-Signature log captures the E-Signature status as Declined. When the E-Signature Status = Declined, then the tooltip (triggered by placing the pointer on the status), or the gear menus, displays the reason for decline.

E-Signature Node (E-Signature request)

When you select an E-Signature request from the E-Signatures node, you can see the E-Sign log in the right-hand pane (E-Sign Log). This contains the message which was sent out a the time of sending the E-Signature request and a log of all signature requests' statuses. When you expand the Attachments tab for BP Upper form, or detail form, if a file has E-Signature requests associated with it, the right-hand pane displays the E-Sign Log tab, next to the preview tab.

Publish from BP to DM

If you attach a file in the DM to a BP record and send it for E-Signature from the BP record, then the revised (signed) file will be published back into the DM at the same location from where the original file was attached. This is irrespective of the publish path on the BP record.

The ability to re-publish DM Document from a BP record allows you to choose to republish (move or copy) a revised DM attachment, if this option is selected in uDesigner then the signed file will be published using the Publish Path.

Adding or Viewing a Map (Geocoding)

If the functionality is configured in uDesigner for a business process, you can add an interactive map to a record. The location will be based on a property address, and/or longitude and latitude (Geocoding). You can add or view maps from the upper form of these business process types:

- Line item
- Simple
- Text
- Document
- Cost (classification generic)

Maps are supported on company, project, and shell-level BPs. You can also search for a map by an address or longitude or latitude.

To add a map to a business process

- 1) Click the globe icon next to the **Latitude** and **Longitude** fields. The Latitude/Longitude picker window displays with a map that you can manipulate as needed.
- 2) Do one of the following:
 - Enter the address of the property to compute the latitude and longitude, and click the Map It button.
 - ▶ Enter the numbers for latitude and longitude in degrees, or in degrees, minutes, and seconds, and click the **Map It** button.
 - Click on the map to compute latitude and longitude. A map pin displays the location of your click.
- 3) Click **OK** when finished computing latitude and longitude. Latitude and longitude are populated in the corresponding fields on the BP in decimal degrees.
- 4) If you click the globe icon again, the latitude and longitude values are displayed in the Latitude Longitude picker window and are retained there until you calculate a new latitude and longitude. A map pin on the map indicates the location of the property represented by the current latitude and longitude displayed in the picker.

To view maps from the business process log

- 1) Navigate to a business process log.
- 2) Select one or more records.

- 3) Click **View Map**. A map opens displaying the various locations that are mapped, indicated by map pins. If the locations indicated on the map are far apart, the map zooms to the closest location.
- 4) Click a map pin for location details.
- 5) Click **Close** to close the map.

Note: If multiple records are selected that have the same latitude and longitude, the map will show only one pin marker.

To view a map for a specific business process record

- 1) Navigate to a BP record and click **View Map**. If the BP has latitude and longitude address details, a map opens displaying the property location, indicated by a map pin.
- 2) Click the map pin for location details.
- 3) Click Close to close the map.

Adding an Image

In many forms, you can add an image to your project or shell. For example, you can add an image that shows progress on the project or shell information record, pictures of assets related to a specific asset record, or a photo of an employee in the Resource Manager. You can add images to attribute forms in shells, project or shells, companies, and business processes.

If the Image picker functionality has been added to your project or shell in uDesigner, forms with the functionality display the image name and a virtual box that will hold the uploaded image.

Note: The image name is based on the data element name provided in uDesigner.

To add an image

- 1) Click **Upload Images** in the toolbar at the top of the form.
- 2) Browse for the image to upload and click **OK**.

Valid image file types are:

- .jpg
- .jpeg
- .gif
- .png
- .tif

You can change the image by replacing it with another uploaded image. Images appear on the HTML or PDF formats of printed forms. They appear in print preview as well. The Image picker can be added to all forms except for those in the Cost Manager, Generic Cost Manager, Schedule Manager, and the Document Manager.

Note: The image appears online in Unifier, but it is not available for printing. Also, images do not appear in UDRs or email notifications.

Adding a Hyperlink

In many forms, you can add a hyperlink to your project. For example, you can add a hyperlink to equipment documentation, details on a resource, or external websites that contain information pertinent to a BP record. You can add hyperlinks to attribute forms in shells, projects, companies, and BPs.

If the Hyperlink picker functionality has been added to your project in uDesigner, forms with the functionality display a hyperlink name, such as vendor website.

To add a hyperlink

- 1) Click on the hyperlink area on the form. The Hyperlink window displays:
- 2) Enter the hyperlink name and the URL. Only the URL is mandatory. If you enter the name and the URL, the hyperlink displays as the name you entered. If you enter the URL only, the hyperlink displays as the URL. The protocols HTTP and HTTPS are the only protocols allowed. FTP is not supported for hyperlink creation on forms.

Note: The URL should not reference the same domain that Unifier is using for operation. If you attempt to use the same domain, a warning message will result.

3) Click OK.

To reset a hyperlink

- 1) Click on the hyperlink area on the form. The Hyperlink window displays.
- 2) In the Hyperlink window, click Clear. This will remove the existing hyperlink.
- 3) Enter a new hyperlink name and URL.
- 4) Click OK.

Viewing Referencing Records

For any business process with referencing records, Unifier can show you a Reference Records window that displays a graph and a list of the records that the record you are viewing refers to, as well as those records that refer to the record you are viewing. (To see the records, you must have view permissions.)

For example, you might want to view all the change orders that refer to a particular purchase order. For other examples, you could view:

- All the invoices that a commit business process **refers to** so that you can reconcile all the invoices against the purchase order
- All the change order requests that are **referred to by** a specific change commit business process in order to track the progress of a construction project
- All the lease payment requests that **refer to** a Master Lease, in order to view and reconcile all payment records for a lease
- All the base commits that are referred to by a vendor record in order to review payment progress

All the work order BPs refer to a Preventive Maintenance type BP in order to view all the work orders for a Preventive Maintenance Book.

Business process records can reference other records and be referenced to using the following Unifier features:

- A BP picker on a business process record, including line items
- A BP line item picker on a business process record
- Auto-creation of a record through the workflow (S-Step)
- Auto-creation of a record through meeting specific criteria set up by your administrator
- A data picker

View a list of referencing records

The Reference and Linked Records section of the reference records window displays the reference records and the linked records associated with the BP record (both from the Upper form and Detail forms), but the graphical section of the reference records window does not display the linked records.

The grid section of the reference window lists all the linked records associated with the line items including the ones established by means of consolidation.

The record details of the consolidated line item are also displayed in the grid section, and you will be able to open the record from the grid.

To view a list of referencing records

- 1) From the business process log, open the record.
- 2) Choose View > Reference Records. The Reference Records window opens.

The Reference Records window is split into two sections, a graph and a list. The records shown on this window include records from across shells.

The graph displays:

- Records that the business process references (i.e., references to other business processes)
- Records that reference the business process (i.e., other business processes that reference the BP you are looking at)

The list displays:

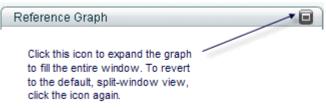
- Records that the business process references (i.e., references to other business processes)
- Records that reference the business process (i.e., other business processes that reference the BP you are looking at)
- Records that have been linked to the business process via the Linked Records feature (*Linking Business Process Records* (on page 127))
- Line items that have been linked to the business process via the Linked Records feature.

Note: This list will not display single-record business processes.

What you can do on the Reference Graph window:

Enlarge the graph pane

You can enlarge this half of the window by placing the cursor between the two windows and dragging the cursor right. You can also use the expand icon on the title bar:

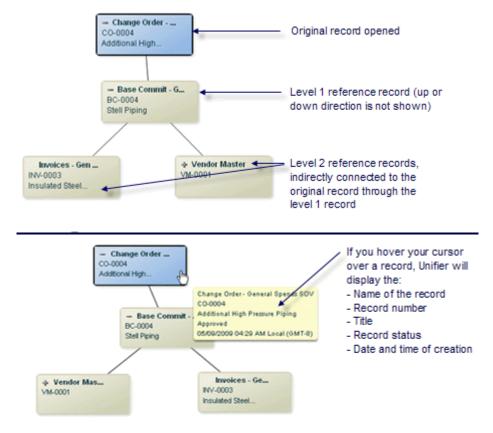


View high-level record information

When you first open the graph, it displays a total of five levels:

- Two levels "up" (that is, two record levels that refer to the original record)
- Two levels "down" (that is, two record levels that the original record refers to)

The graph does not indicate the direction of the up or down levels; only that the records are connected.

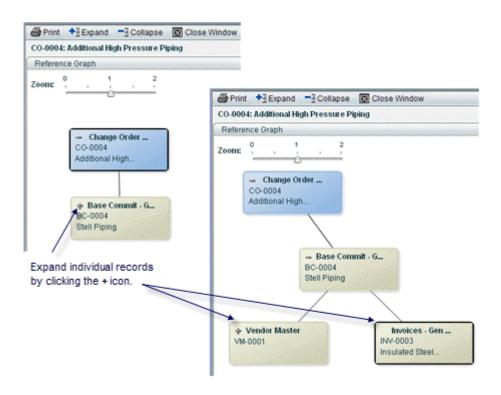


Expand the graph

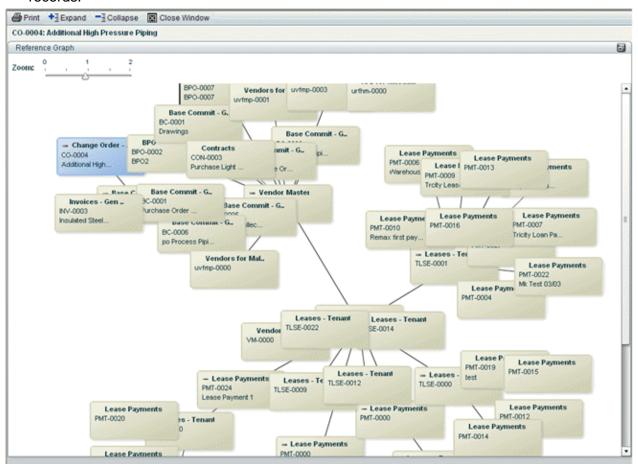
You can expand the graph display in two ways:

By individual record

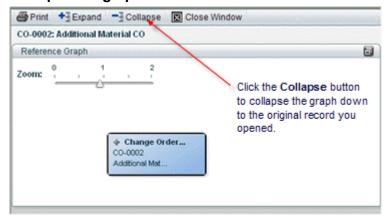
Using the Expand button



If you expand the graph using **Expand**, Unifier will display all records that are directly and indirectly connected to the original record you opened. This means that all records will be expanded through all levels. It may take a moment to gather and display all the records.

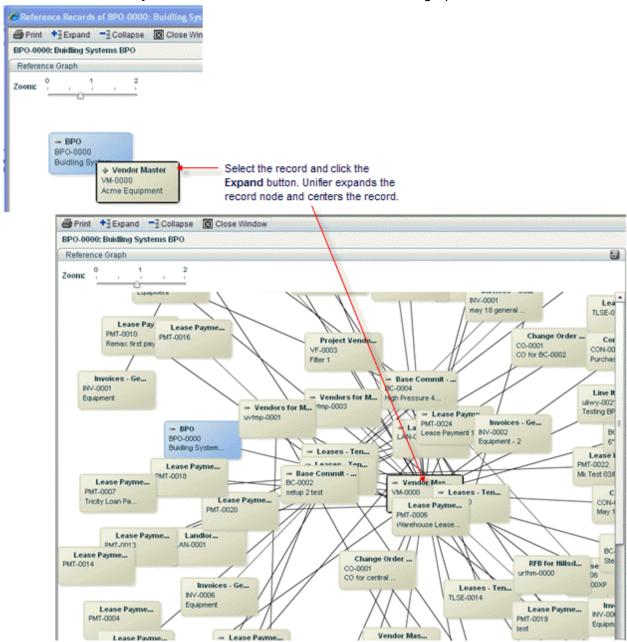


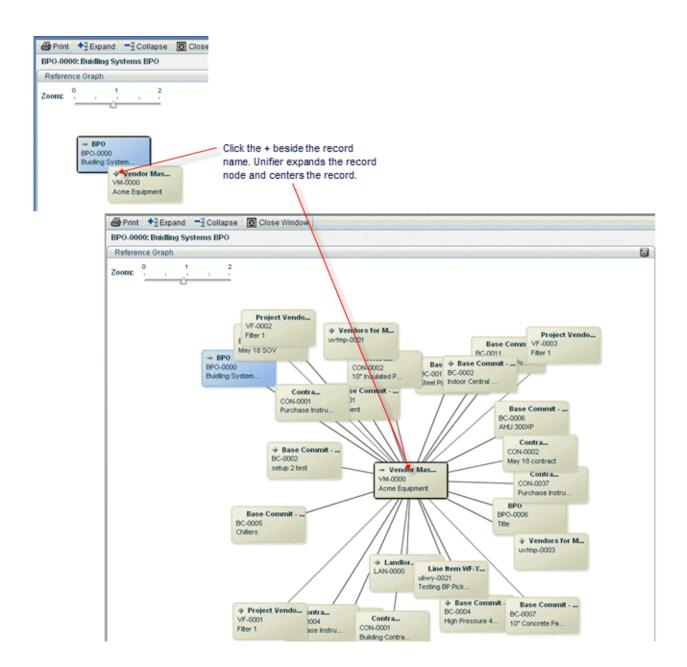
Collapse the graph

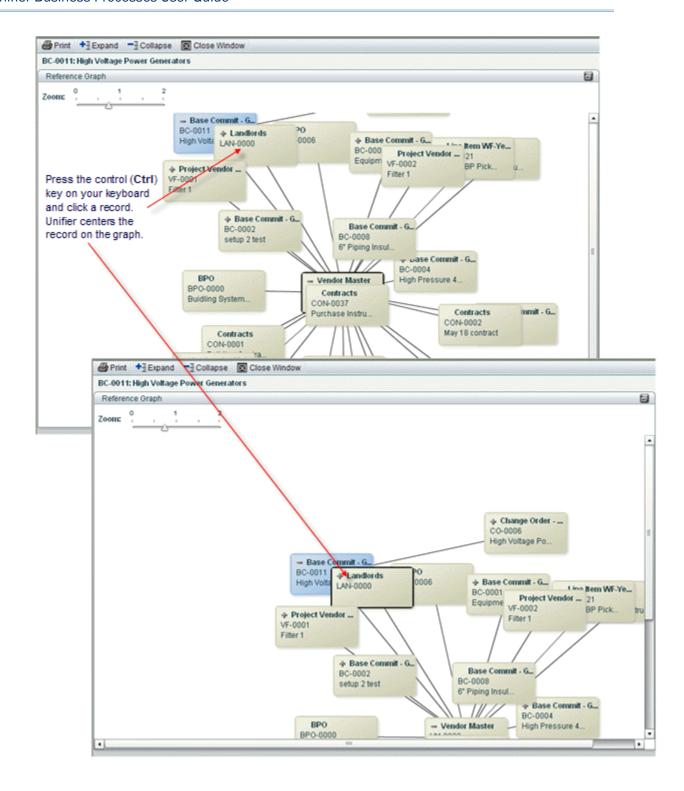


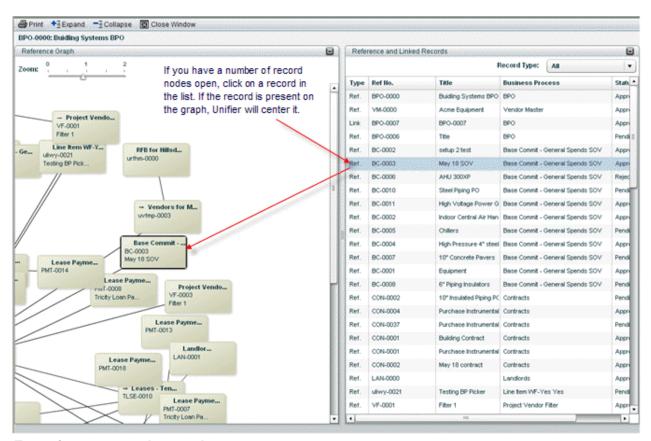
Center a record or a record node on the graph

There are several ways to center a record or record node on the graph:

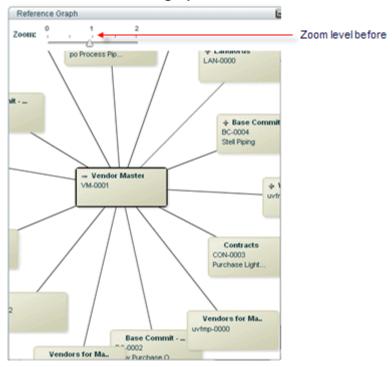


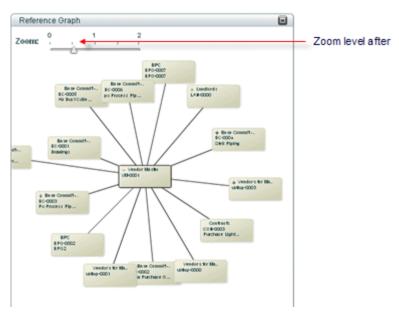




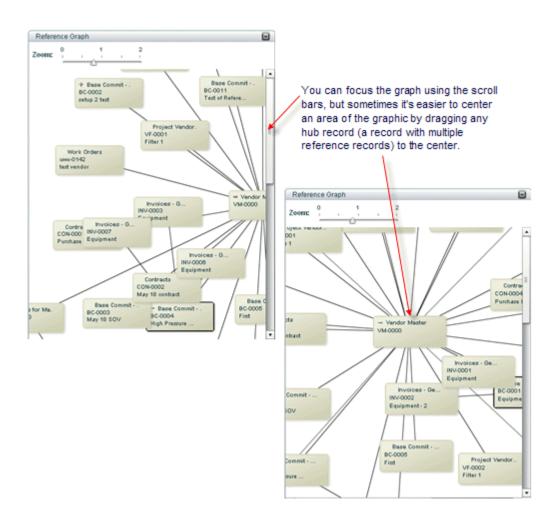


Zoom in or out on the graph

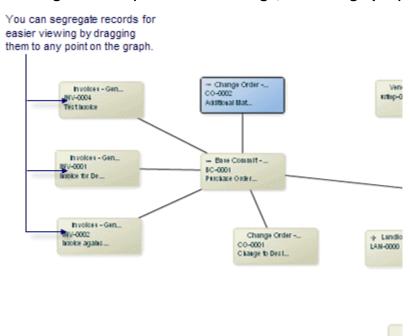




Move the display (convenient for large graphics)



Rearrange records (convenient for large, crowded graphs)



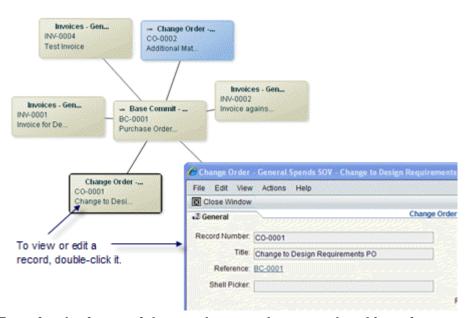
View or edit a record (if you have permissions)

From the graph, you can open a record and view it. In addition, if you have permissions, you can edit and take action on the record the same way you would by opening the record directly from a Unifier log. When you finish the edits and close the form, Unifier will return to the Reference Graph window. The records you can edit must be at the same level as the focused record. If the referenced record that you open from the graph resides at another level (such as in a different shell, project, or at the company level), you will not be able to edit it; it will open in view mode only, regardless of your permissions.

Note:

A few things:

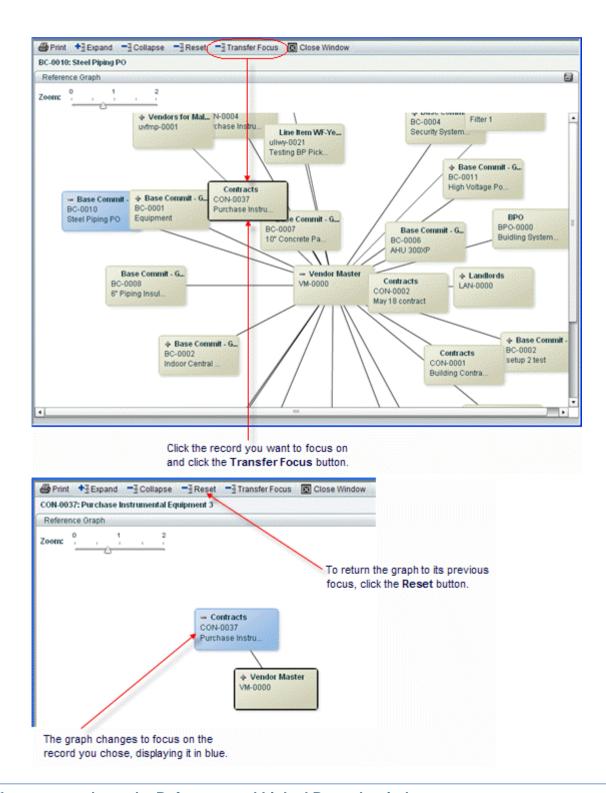
- If you make changes to the record (including referencing links, linked records, title, status, etc.), the graph and the reference list on the right pane will not reflect these changes until you click the Expand, Collapse, Reset, or Transfer Focus buttons.
- The edits and actions you take on the form from the Reference Graph window will behave in the same way they would if you opened the record from a log; that is, roll-ups will occur, workflow actions and auto-creations will proceed, email notifications will be sent, etc.
- If you have only view permissions, regardless of where the record is in the workflow, Unifier will display the view form from the End step of the workflow.



Transfer the focus of the graph to another record and its references

You can change the focus of the graph to another record and display all of its referencing records. The record you transfer to will change to blue to indicate that all referencing records shown on the graph are now connected to the new record. In addition, the list on the right panel will change accordingly. The new focus of the graph will display five levels of records:

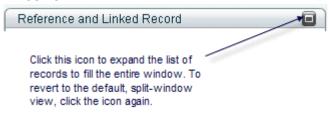
- The record you transferred the focus to (shown in blue)
- Two levels "up" (that is, two record levels that refer to the new record)
- Two levels "down" (that is, two record levels that the new record refers to)



What you can do on the Reference and Linked Records window

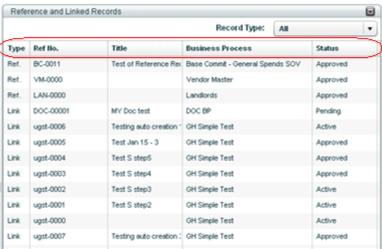
▶ Enlarge the list pane

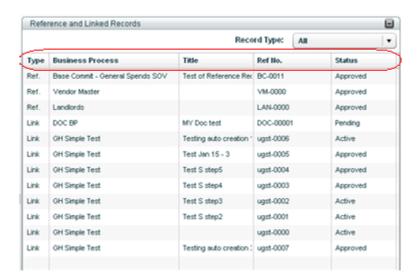
You can enlarge this half of the window by placing the cursor between the two windows and dragging the cursor left. You can also use the expand icon on the title bar:



Rearrange the columns

To present the information in a way that is more convenient to you, you can rearrange the columns of the list by dragging them left or right.





View high-level record information



The list of records shows the following information:

| The list of records shows the following information. | | | |
|--|---|--|--|
| This column | Displays this | | |
| Туре | Displays Ref. if the record is | | |
| | Referred to by the original record you opened, or | | |
| | Referring to the original record you opened | | |
| | Displays Link if the record is linked to the original record via the Linked Record feature. | | |
| | Displays Link to Line if the record is linked to a line item on another business process. | | |
| | Note: If the record is both a referenced record and a linked record, Unifier will show it as a referenced ("Ref.") record, not a linked record. | | |
| Ref No. | Displays the number of the record. | | |
| Title | Displays the title of the record. | | |
| Business Process | Displays the name of the business process to which the record belongs. | | |
| Status | Displays the status of the record. Records in a terminal status will also appear on this list. | | |
| Descriptio n | For links to line items on a record, this column displays the line number, the short description of the line item, and the tab. For line items from a Document type BP, the column shows the name of the line item. | | |
| Creation Date | Displays the date the record was created. | | |

Reference Records - Windows Internet Explorer MTG-00012: MM6 1 E Reference and Linked Records Reçord Type: All All Ref No. Title **Business Process** Status Meeting Minutes MTG-00012 MMS Pending Meeting Minutes Action Items ACT-00016 MMS Pending Action Items MTG-00003 923 UAT - 2 Meeting Minutes Pending MTG-00006 923 UAT - 5 Meeting Minutes Pending MTG-00005 923 UAT - 4 Meeting Minutes Pending MTG-00004 923 UAT - 3 Meeting Minutes Pending

Filter the list of records

Use the Record Type drop-down to filter the list of records according to business process.

View or edit a record (if you have permissions)

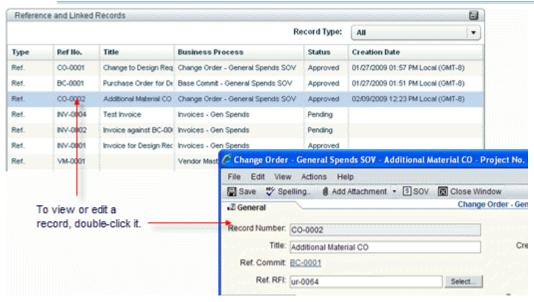
From the Reference and Linked Records list, you can open a record and view it. In addition, if you have permissions, you can edit and take action on the record the same way you would by opening the record directly from a Unifier log. When you finish the edits and close the form, Unifier will return to the Reference and Linked Records window. The records you can edit must be at the same level as the focused record. If the referenced record that you open from the list resides at another level (such as in a different shell, project, or at the company level), you will not be able to edit it; it will open in view mode only, regardless of your permissions.

Contrary to the graph, you can also open and view or edit **linked** records (if you have permissions).

Note:

A few things:

- If you make changes to the record (including referencing links, linked records, title, status, etc.), the graph and the reference list will not reflect these changes until you click the Expand, Collapse, Reset, or Transfer Focus buttons.
- The edits and actions you take on the form from the Reference and Linked Records list will behave in the same way they would if you opened the record from a log; that is, roll-ups will occur, workflow actions and auto-creations will proceed, email notifications will be sent, etc.
- If you have only view permissions, regardless of where the record is in the workflow, Unifier will display the view form from the End step of the workflow.

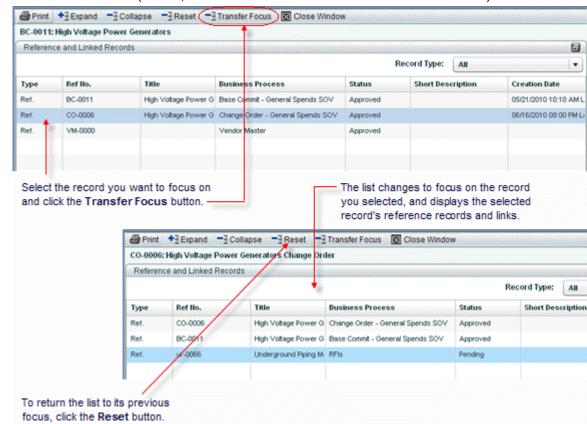


Transfer the focus of the list to another record and its references

You can change the focus of the list to another record and display all of its referencing records. In addition, the graph will change accordingly. You cannot transfer the focus to linked records; only referenced records.

The new focus of the graph will display five levels of records:

- The record you transferred the focus to (shown in blue)
- Two levels "up" (that is, two record levels that refer to the new record)



Two levels "down" (that is, two record levels that the new record refers to)

Spell-Checking a Form

The spell check feature is available for all BP forms, including cost, document, text, simple, and line item. You can spell-check information that you have entered in text fields and any other text areas.

To spell check a business process form in Unifier:

- 1) Open a business process form at the project or shell or company level.
- 2) Click the **Spell Checker** button on the toolbar of the BP form. All form fields will be checked.
- 3) Make spelling corrections as necessary and click **OK**.

The Spell Checker icon is also available if you click the **Comments** button of a BP form.

Participating in a Workflow

Each step in the workflow is set up individually. Step-by-step, the administrator can define responsibilities for users and groups through task assignments, completion policies and resolving action settings, and email notification settings. Non-administrative users can complete business process forms, select **Workflow Actions**, and assign task recipients. They can track business process routing between steps and trace a record's path through the workflow.

Completion Policies and Resolving Actions

Your administrator sets a "completion policy" on each step in a workflow. This policy determines when the step is complete and where the step proceeds from there. A step can be complete under the conditions listed below.

- **Single** completion policy: Any single user can accept a task and complete it, and the record will move forward to the next step.
- All-majority completion policy: All assignees to the task have responded to it and a majority has agreed on the action that moves the record forward to the next step. If there is no clear majority on the action, Unifier will use a resolving action to determine how the record moves forward.
- ▶ **All-consensus** completion policy: All assignees to the task have responded to it and all assignees have agreed on the action that moves the record forward to the next step. If there is no consensus on the action, Unifier will use a *resolving action* to determine how the record moves forward.

A **resolving action** moves the step to either a following step, a previous step, or a conditional step that essentially "re-addresses" or "revisits" the task. This step must be completed before the workflow can continue. The assignees on this resolving action step can include the original task assignees and can also include new assignees.

If there is only one action in the Workflow Actions drop-down list, then Unifier defaults the selection. As a result, Unifier updates the **To** and **CC** fields with the relevant users and groups. When you click **Send**, if the list of users changes based on either an assignee filter in the workflow setup or via conditional routing, then Unifier displays a window informing you that the list of users will change. Once the list of users is changed, then you must click Send again. The list of assignees changes to reflect the change in the next step and will be displayed when you save the workflow BP record.

Note: Clicking **Send** will not route the BP record if the conditional routing is not resolved.

If the Admin sets up the Business Process policy, then you have the ability to choose that a step be completed without all assignees having to act on it, if the result can be determined without the assignee action. This is to prevent unnecessarily wait for all users to take action on the record before moving it to next step.

If the Admin sets the Completion Policy for a step in a business process workflow setup as "All - Majority" and checks the option "Advance workflow when next step is determined," then during runtime, when a record for this business process reaches this step, as soon as majority of the step assignees take the same action at this step, the step will be completed and the workflow moves to the selected step.

Note: One or more assignees on the step could choose to decline acting on their tasks. In this case, the majority count is determined by dismissing the count of users who declined the task.

Example

There are four assignees on a step. Two of the assignees take the same action. The third assignee declines the task. As soon as the third assignee declines, since the majority (two of the assignees) have taken the same action, the record will move to the next selected step.

In addition, the "Workflow Progress" tab (in the BP log and within the BP record) gets updated correctly (with the correct "Status" and "Action") for all of the users who took action on the step. For all users who did not act on the step:

- The "Status" gets updated as: Closed.
- The "Action" remains blank.

If the Admin sets the Completion Policy for a step in a business process workflow setup as "All - Consensus," and checks the option "Advance workflow when next step is determined," then during runtime:

When a record for this business process reaches this step, and:

- As soon as one assignee on the step takes the "Resolving action" as chosen in the BP setup in the Admin mode, or
- As soon as two assignees on the step take two different actions on the step

Then, this step will be completed, and the workflow moves to the "Resolving action" step; otherwise, if all of the assignees take the same action (which might be different from the resolving action), then the record moves to the step, as chosen by the assignees.

The "Workflow Progress" tab (in the BP log and within the BP record) gets updated correctly (with the correct "Status" and "Action") for all of the users who took action on the step. For all users who did not act on the step:

- ▶ The "Status" gets updated as: Closed.
- ▶ The "Action" remains blank.

For both options "All - Majority" and "All - Consensus" completion policies, if an assignee accepts the task and has been working on a draft record, and while the assignee has been working on a draft record a majority or consensus has been reached, then the draft will be deleted, and the record moves to the next step.

Note: In case the assignee has who has worked on the draft had added new line items, or edited existing line items, the changes will be retained when the record moves to the next step.

Statuses

The statuses you see on this window are internal to Unifier and are used only to display the status of the workflow step **relative to the completion policy**. These statuses are:

| Status | Description |
|----------------|---|
| Not Started | The assignee has not accepted the task. |
| In Progress | The assignee has accepted the task. |

| Status | Description | | | | |
|--------------|---|--|--|--|--|
| Locked | This status is used when the step has a single completion policy and one of the assignees accepted the task. This status denotes those assignees who were also assigned to the task, but because of the single completion policy, the task was locked and these assignees no longer have access to it. | | | | |
| View Only | This status indicates that this user was cc'd on the task, but is not expected to take action on the task. | | | | |
| Complete d | This status is given to an assignee's action if the task was finished and needed no resolving action. At any step, a task can have only one status of "Completed." | | | | |
| Closed | This status is given to an assignee's action if the task was finished, but triggered a resolving action. The task will either return to a previous step, move forward to a next step, or divert to a conditional step, which will resolve the condition and move the task forward in the workflow. The step the action moves to for resolution will show a status of "Not Started." The number of times the task shows a "Closed" status indicates the number of times the step has been revisited. | | | | |
| | To illustrate: | | | | |
| | Tasks for the selected step: | | | | |
| | Assignee Company Status Action Due Date | | | | |
| | Stacey Epstein pbc In Progress Respond 12/07/2009 3:13 PM | | | | |
| | View Graphic Close | | | | |
| | This status indicates a resolving action case. Morris Stanley completed the task, but the result triggered a resolving action in the workflow, so Unifier put the task in a "Closed" status, rather than "Completed," and re-opened the task with a status of "Not Started." Morris Stanley was also an assignee on the resolving action. He completed the task, and no resolving action was triggered, so the status of the action is now "Completed." | | | | |

Working with Tasks

Unifier helps you to collaborate with your fellow team members through business processes. Your tasks are business processes that are in process and with which you are involved. When you are part of a business process workflow, or, in Classic View, have been invited to participate in a discussion group within a business process, you are assigned a task.

After you create and send a workflow business process, Unifier creates a task for each of the assignees in the next step in the workflow, and sends a message to each user that has been Cc'd.

In general, your are assigned a task under the following conditions:

- You are part of a BP workflow, and you are requested, or required, to take some sort of action.
- You have been invited to join a discussion group in Classic View by another user who is requesting assistance with drafting comments or markups on a BP. These are indicated as being sent for "Discussion" in the task.

The following tasks are *not* listed in your **Tasks** log:

- Tasks for view-only.
- Tasks for inactive Projects/Shells.

If you are designated as an assignee on a task, you will receive an email notification, and the task will appear in your Tasks log.

After you create and send a workflow business process, Unifier creates a task for each of the assignees in the next step in the workflow, and sends a message to each user that has been Cc'd.

Taking Action on your Task (Standard View)

To take action on your task, you can use the following sub-options of the **Actions** option:

- Action with Preview
- Action without Preview

For Action with Preview:

- 1) Go to your **Tasks** log and ctrl+click the tasks that you want to modify.
- Click Actions drop-down list and click to select Action Preview.
 Unifier opens the record that you have selected in a separate window.
- 3) Modify the record.
- 4) Click Save.
- 5) Click Close Window.

If your tasks have been accepted, then the **Action with Preview** option will not be available.

For Action without Preview:

- 1) Go to your **Tasks** log and ctrl+click the tasks that you want to modify.
- Click Actions drop-down list and click to select Action without Preview to open the Action Without Preview window.

The **Action Without Preview** window is divided into two panes:

- Use the left-hand pane to edit the **Upper Form** of your business process and perform workflow action (**Workflow Actions**).
 - Use the **Workflow Actions** to send records to the next step in the workflow, after completing the task, and assign record status such as pending, in-review, and so forth. Unifier automatically selects the checkbox under the **Update** column when you type into or modify a field. You can deselect it if you do not want to modify the field at this time. Unifier updates the field values if you click to select the checkbox under the **Update** column of that field.
 - If you change the value of a field and click to select the checkbox under the **Update** column of that field, then Unifier will update the value of that field.
 - If you erase the value of a field (blank) and click to select the checkbox under the **Update** column of that field, then Unifier erases the pre-existing value of that field.
- Use the right-hand pane to preview the status of the task (Action Status).
 The Action Status indicates whether your update was a success or not (using a green check-mark symbol or a red x symbol, respectively), and a message explaining why an update has failed.
 - You can use Action without Preview to create multiple shells using the Project/Shell Creation business process. The Action without Preview functionality in the **Tasks** log supports data elements such as Shell Location and Shell Template pickers (existing in the Upper Form) that are required for shell creation.
- 3) When finished, click Close. Unifier will update the tasks.

For more information about editing business process records see *Editing Business Process Records* (on page 185).

Taking Action on Multiple Tasks at the Same Time (Standard View)

Use the **Actions** option to take similar actions for multiple tasks.

You can select multiple tasks (ctrl+click), click **Actions** drop-down list, and perform the following actions:

- Accept
- Undo Accept
- Hide
- Unhide All
- Print

You can use the following options to modify multiple records:

Action with Preview

To open multiple records one record at a time, and modify the contents.

Note: The records must belong to the same business process, and the same step.

Action without Preview

To open multiple records in Action Without Preview window and modify the contents.

Notes:

- The records do not need to belong to the same business process, and the same step.
- When tasks are updated through the **Action without Preview** option (in the **Tasks** log), the values of the Data Elements (DEs) that have Reset property will not be reset.

The following provides more details about modification of multiple records.

Taking similar actions for multiple tasks that belong to the same business process, and the same step

- 1) Go to your **Tasks** log and ctrl+click the tasks that you want to modify.
- Click Actions drop-down list and click to select Action without Preview to open the Action Without Preview window.

The **Action Without Preview** window is divided into two panes:

- Use the left-hand pane to edit the **Upper Form** of your business process and perform workflow action (**Workflow Actions**).
 - Use the **Workflow Actions** to send records to the next step in the workflow, after completing the task, and assign record status such as pending, in-review, and so forth. Unifier displays Master DE, value set DE, and the behavior set DEs (Required, Disabled, Disabled and Clear). If the data element is disabled, it is based on the Master DE and value set DE in the DDS configuration.

Notes:

- The elements of a DDS, especially behavior set DEs, play a role on many of these actions. This is due to Bulk Update honoring any change brought on by a behavior set DE. For example, if the fields become **Disabled and Clear** based on the values selected in the Master Data Element, the fields become disabled with no values.
- When you select **Disabled and Clear**, other formula fields are re-evaluated.
- A similar reaction occurs when updating records, as the **Update** checkbox also becomes disabled.

Unifier automatically selects the checkbox under the **Update** column when you type into or modify a field. You can deselect it if you do not want to modify the field at this time. Unifier updates the field values if you click to select the checkbox under the **Update** column of that field.

- If you change the value of a field and click to select the checkbox under the **Update** column of that field, then Unifier will update the value of that field.
- If you erase the value of a field (blank) and click to select the checkbox under the **Update** column of that field, then Unifier erases the pre-existing value of that field.
- Use the right-hand pane to preview the status of the task (Action Status).
 When working with multiple tasks, you (the assignee) can select multiple records of the same business process and same step and perform the action in one place.

The Action Status indicates whether your update was a success or not (using a green check-mark symbol or a red x symbol, respectively), and a message explaining why an update has failed.

3) When finished, click Close. Unifier will update the tasks.

Taking similar actions for multiple tasks that do not belong to the same business process, and the same step

The **Action without Preview** is not available for tasks that do not belong to the same business process, and the same step.

- 1) Go to your **Tasks** log and ctrl+click the tasks that you want to modify.
- Click Actions drop-down list and click to select Action Preview.
 Unifier opens each record that you have selected in a separate window.
- 3) Modify the record.
- 4) Click Save.
- 5) Click **Close Window**. Unifier opens the window of the next record.
- 6) Continue modifying the records, Save, and click Close Window until finished.

If your tasks have been accepted, then the **Action with Preview** option will not be available.

Additional information about taking actions for multiple records

- You can update a maximum of 200 records using Workflow update (**Action Without Preview** window > **Workflow Actions**).
- Only the Upper Form is modified during Workflow update (Action Without Preview window > Workflow Actions).
- The Workflow update (Action Without Preview window > Workflow Actions) is not supported on tasks that are on the Initiation step.
- When you send the record to the next step, Unifier performs validation for the required fields.
- At the company-level and project-level, when you are taking action on multiple tasks, you must have **Allow Bulk Edit** permission for each task.
- ▶ For bulk update, the fields are from both Upper Form and Details forms (drawn from integration templates in uDesigner). Some business processes do not support integration. As a result, you cannot take multiple actions on these business processes because integration is used in multiple action.

For more information about editing multiple business process records, see *Editing Business Process Records* (on page 185).

Accepting your Tasks (Standard View)

You must accept a task in order to complete it.

Oracle recommends that you accept a task from the Home page: **Home** page > **Tasks**. You can also accept a task from the specific business process log, provided you have permission to the log (Company Workspace and Project/Shell). See *Accepting your Tasks (Standard View)* (on page 164) for details on how to access the Tasks node in the Company Workspace or Project/Shell.

Note: If the Project/Shell in which a business process resides becomes View-Only, any in-process records will be placed on the View form of the current step of the workflow. If the project or shell is re-activated, the business processes will revert to the Action form.

To accept a task from the Home page:

- 1) Go to **Home** page and click the **Tasks** node.
- 2) Hover over the record and click the gear menu (?).
- 3) Click Accept.

Alternatively, you can also click **Actions** and then click **Accept**. or use the Task Status (the check-mark icon).

To *accept* a task from the specific business process log (Company Workspace and Project/Shell):

- 1) Go to your business process and open the log from the **Tasks** node.
- 2) Hover over the record and click the gear menu (??).
- 3) click Accept.

Alternatively, you can also click **Actions** and then click **Accept**. or use the Task Status (the check-mark icon).

To accept multiple tasks (of the same BP and same workflow schema):

- 1) Go to Home page, or your business process, and open the log from the **Tasks** node.
- Ctrl-click to select the necessary tasks.
- 3) Click **Actions** and then click **Accept**.

Every task you complete will be deleted from the **Tasks** log (**Tasks** node). Those you do not complete will remain on your **Tasks** log.

Additional information about accepting your tasks

Task Notifications

- If the task belongs to the Create step of a workflow, you will receive a message confirming that the record was (or was not) created successfully.
- If you open a task from a project/shell that is on-hold, Unifier will notify you and delete the task from the log.

Initiation Step

In general, if a business process has been auto-created and sent to an **Initiation Step**, you will usually need to select a workflow schema to launch the business process into the workflow. When you accept the task, Unifier displays a **Select Workflow** window, where you must choose the workflow schema this business process should use. See **Creating a Business Process (BP) Record** (on page 50) for more information.

Unifier does not display the **Select Workflow** window if:

- ▶ The BP is a non-workflow business process.
- There is only one workflow schema you can choose for this business process.

Undoing Accepting your Tasks (Standard View)

If you change your mind after accepting a task, you can use the **Undo Accept** option, if:

- You are the last person on the task distribution list and everyone else has declined the task.
- You are the only task recipient.

The **Undo Accept** option restores the business process form, and data, back to the state it was in just prior to accepting the task, even if you have made some modifications to it. This applies only to additions or changes made between accepting the task and selecting **Undo Accept**.

Note: The Undo Accept is not available for Initiation Steps.

The **Undo Accept** will roll back the following to their previous state:

- Changes to Upper Form fields
- Auto-populated fields
- Changes to the action details (To and Cc fields)

Any new additions of the following are removed:

- Summary, detail, or imported line items
- Comments
- File attachments
- Linked records

These changes are not rolled back:

- Changes made to existing line items.
- Anything that is deleted, such as attachments, linked records, linked Mailbox, and line items, cannot be restored. The exception is upper form fields, which will be restored to their previous state.
- Transfer ownership.
- Mailbox messages sent through linked Mailbox.
- Discussion group activity.

To undo an accepted task from the Home page:

- 1) Go to **Home** page and click the **Tasks** node.
- 2) Hover over the record and click the gear menu ().
- 3) click Undo Accept.

Alternatively, you can also click **Actions** and then click **Undo Accept**. or use the Task Status (the check-mark icon).

To *undo an accepted task* from the specific business process log (Company Workspace and Project/Shell):

- 1) Go to your business process and open the log from the **Tasks** node.
- 2) Hover over the record and click the gear menu ().
- 3) click Undo Accept.

Alternatively, you can also click **Actions** and then click **Undo Accept**. or use the Task Status (the check-mark icon).

To accept multiple tasks (of the same BP and same workflow schema):

- 1) Go to Home page, or your business process, and open the log from the **Tasks** node.
- 2) Ctrl-click to select the necessary tasks.
- 3) Click Actions and then click Undo Accept.

Declining a Task (Standard View)

Sometimes you have the option of declining a task. If you are the only person assigned to a step in the workflow, or if the creator of the workflow has not granted permission to decline a task, this is not an option.

To decline a task from the Home page:

- 1) Go to **Home** page and click the **Tasks** node.
- Hover over the record and click the gear menu (\$\frac{\pi}{2}\$).
- 3) Click Decline.

To *decline* a task from the specific business process log (Company Workspace and Project/Shell):

- 1) Go to your business process and open the log from the **Tasks** node.
- 2) Hover over the record and click the gear menu ().
- 3) Click Decline.

Note: You cannot decline multiple tasks.

Completing a Business Process Form

To complete a business process form

- Review the form carefully. If you have the proper permissions, you can perform the following functions, as long as the business process is set up for them or is of the proper type to accommodate them.
 - Make changes or additions in editable fields of the business process.
 - Add, edit, or remove line items or summary line items (see *Adding and Managing Line Items* (on page 86)).
 - Add or view file attachments (see *Working with File Attachments and Markups* (on page 111)).
 - View or add general comments (see Adding and Managing General Comments (on page 105)).
 - Add or review graphic markups to an attached document (see *Add Markups to a Business Process Attachment* (on page 116)).
 - Provide a link to another completed BP form. Other participants will be able to click on the link and view the referenced BP form (see *Linking Business Process Records* (on page 127)).

- Initiate or participate in a BP discussion group (see *Participating in a Discussion Group (Classic View only)* (on page 177)). (Classic View only)
- Consolidate discussion group comments. (Classic View only)
- 2) In the Action Details area of the form, designate the next assignees (users and groups) who will receive the next step in the workflow as a task. (See Assign users to the next step (see "Assigning Users for the Next Step or Sending a Copy (Standard View)" on page 168)) You can choose the next users to send the BP to if the BP has been set up this way. Some BPs have a fixed workflow. If this is the last step in the workflow, this is not applicable.
 - You may also be able to designate the **Task Due Date** for the next assignees. (See *Modifying Step Due Date* (on page 169).)
 - In Classic View, you may also add **Task Notes** for the next participants in the workflow. **Task Notes** apply to the next workflow step only and are not stored with the permanent record. (See **Adding or Viewing Task Notes** (**Classic View Only**) (on page 171).)
- 3) When you have completed any necessary edits or additions, select an action or workflow action from the **Workflow Actions** drop-down list. If there is only one possible workflow action for a step, the action is auto-populated in the field. The action you take depends on the task assigned. For example, if this is a review step, an action that you may be able to take is "approve."
- 4) Click the **Send** button.
 - If the workflow is not yet complete, the form will be forwarded to the next team members in the workflow.
 - If the workflow is complete (that is, your input was the last step of the workflow), the record will appear as complete in the business process log.

Tip: You can also save your work as a draft at any point. This is recommended if you are going to leave your desk or have a lot of work to do on it. There is no autosave. If you change your mind after making a selection, click the **Undo Action** button, and then choose another action. In Classic View, after you have accepted the task or initiated an action, you can still review what you received prior to doing so without having to undo. Click **View > Received** or the **Click here to view latest content** button. Unifier displays another pop-up window of the original record as you received it. **Assign users to the next step** (see "**Assigning Users for the Next Step or Sending a Copy (Standard View)**" on page 168)

Assigning Users for the Next Step or Sending a Copy (Standard View)

Assigning users, and workflow routing, must be done after opening a record.

Depending upon the workflow configuration and your user permissions, you may select one or more users or groups to whom the form will be sent as the next step in the workflow. The assignee fields are:

- ▶ **To:** The users or groups that you choose will be assigned the next task in the workflow. Team members listed will receive an email notification of the task. This can include users designated as Editors on the task, as well as proxy users.
- ▶ **Cc:** These users and groups receive an email notification and a copy of the BP record in their Message log. They can review the record, but cannot take action on the workflow.

Depending on the workflow setup, you may also be able to set the due date for the next step.

Assigning Users for the Next Step

You can assign a user for the next step from the tasks log (**Task** node in Home page, Company Workspace, and Project/Shell).

- 1) Go to your business process and open the log.
- 2) Click to select the record, click the gear menu (), and click Open.
- 3) In the **Assignee** portion of the BP form, click the **To** button. The User/Group picker window opens (to learn how to search and use the picker refer to *Unifier General User Guide*).
- 4) Follow the assign team members procedure to select users or groups.
- 5) Click OK.

When the business process form is sent, each member will receive an email message regarding their task assignment and a copy of the BP form in their **Tasks** log.

Sending a Copy of the Business Process Form

If you need to send a copy of a business process form to another user:

- 1) Go to your business process and open the log.
- 2) Click to select the record, click the gear menu (\$\square\$), and click **Open**.
- 3) In the **Assignee** portion of the BP form, click the **Cc** button. The User/Group picker opens.
- 4) Follow the assign team members procedure to select users or groups.
- 5) Click OK.

The selected users or groups appear in the **Cc** field on the form.

When the business process form is sent, each member will receive an email message and a copy of the BP form in their **Notifications** log.

Note: The BP form may be set up to have pre-assigned **Cc** users. In this case, if the **Cc** button is enabled, you can add additional **Cc** users. If not, the BP is not set up to allow additional **Cc** users. You cannot remove pre-assigned **Cc** users.

Modifying Step Due Date

If the step duration and workflow override are enabled on the business process, you can also set the task due date for the next step.

To change the task due date

- 1) Click the **Calendar** icon next to the **To** field. The Task Due Dates window opens.
- 2) Choose one of the following options:
 - > Set all task due dates as: Lets you set the same due date for all assignees.
 - > Set individual task due dates: Allows you to assign different due dates for each assignee one at a time.

- 3) Click the **Calendar** icon corresponding to the option you chose. For the second option, click the **Calendar** icon next to each user's name on the list. The Date picker opens.
- 4) Select the month and year, and then click the date you want to select.

Note: The workflow engine uses the company workday calendar. Grayed-out dates are those that have been set as non-working days (for example, weekends and holidays) by your company administrator. You cannot select non-working days for a task due date.

Adding Additional Assignee or Sending Additional Copy (Standard View)

The current step assignee can add assignees to the next step in the workflow. This is useful if you want to send a copy of the record or add another assignee before you take action on it.

You can add additional assignees or copy users if:

- You have not yet accepted the task, and the form is still in view form. If you have already accepted the task, you can reverse the action by clicking the menu icon (three horizontal lines) and selecting Undo Accept.
- ▶ The business process workflow has been set up to allow adding assignees or allowing to Cc.

Adding Additional Assignee

You can add additional assignees or copy users from the tasks log (Tasks node of Home page, Company Workspace, and Project/Shell).

Note: Adding additional assignees must be done after opening a record.

To add an additional assignee to a task:

- 1) Go to your business process and open the log.
- 2) Click to select the record , click the gear menu (¶), and click **Open**.
- 3) Click the **Edit** menu and choose **Add Assignees to Current Step**. The User/Group picker window opens (to learn how to search and use the picker refer to *Unifier General User Guide*). The list displays the list of users or groups that can be assigned, according to the business process setup.
- 4) Follow the assign team members procedure to select users or groups.
- 5) Click OK.

The user or group will be added to the list of assignees. The record will appear in each new user's Tasks log and applicable business process log, and users will receive an email informing them of the task, depending on their email subscription preferences.

Sending Additional Copy of Business Process Form

To send a copy of a business process to additional users:

- 1) Go to your business process and open the log.
- 2) Click to select the record, click the gear menu (\$\frac{\pi}{2}\$), and click **Open**.

- 3) Click the **Edit** menu and choose **Copy Users to Current Step**. The User/Group picker window opens. The list displays the list of users or groups that can be copied according to the business process setup.
- 4) Follow the assign team members procedure to select users or groups.
- 5) Click OK.

The user or group will be copied. This means that the record will appear in each new user's **Notifications** log and applicable business process log, and the users will receive an email informing them of the copy, depending on their email subscription preferences.

Adding or Viewing Task Notes (Classic View Only)

Notes that are specific to a task can be added to a business process form. They are temporary notes that can be used as comments or specific instructions to the next user in the workflow. Task notes are not forwarded throughout the workflow and are not archived. You can think of them as sticky notes that stay with the form for one step in the workflow only.

A task note only applies to the current task. If you are part of the current task and a task note is present, be sure to take notice. The task note will not be included in the rest of the workflow. If a task note is present, a "(1)" will display by the Task Notes field in the Action Details section of the business process.

To add task notes to a business process

In the **Action Details** section of the business process, click the **Task Notes** icon. The Add Notes window opens. Enter the text for the task note and click **OK**.

To view task notes

If a task note is present, click the **(1)** next to the **Task Notes** icon in the **Action Details** section of the business process. The Notes window opens displaying the note and the user who created it

When you accept a task, the business process form becomes editable and the **Task Notes** field will clear. If you want to review a task note but have already accepted the task, you can click the **View** menu and choose **Received** or click the link **Click here to view latest content** in the **Action Details** section. Another window opens displaying the record as you received it, with the task note intact.

Completing Tasks via Email

You may receive BP-related email notifications that contain hyperlinks that represent actions in a BP workflow.

Actions you can take via email are shown as hyperlinks and represent actions you can take in a workflow step. When you click the hyperlink, an email reply is generated. Your reply text becomes a general comment in the BP record, except in the case of Document Type business processes; reply text is not attached for those business processes. Assignees need to be pre-assigned on the workflow steps for the email workflow action to occur. Attachments can be included in the workflow action replies if the BP is set up to include them. Email clients supported for workflow actions via email include HTML and text. If you are using a text client for your email, the possible actions are listed, but are static text (not hyperlinks). In that case, you can reply to the email manually and provide the appropriate To, Subject, and body text. Your subject should be the name of the action you want to take as shown in the email notification.

Your subject should be the name of the action you want to take as shown in the email notification.

Tasks that are assigned to you are listed in your **Tasks** logs. The **Tasks** logs display business process-related tasks in which you are being requested to participate. Refer to *Unifier General User Guide* for details about the **Tasks** log.

The following tasks may appear in your Tasks logs:

- You are part of a business process workflow and are requested or required to take some sort of action.
- You have been invited to join a discussion group by another user who is requesting assistance with drafting comments or markups on a BP (Classic View only). These are indicated as being sent for "Discussion" in the Tasks log.
- You are designated as the Initiation step assignee for an auto-created business process.

Validation for email task flow actions are as follows:

- ▶ Email address must match that of the assignee
- Valid Notification ID/Password (NID)
- Active (Unifier) User
- BP record has not moved or been terminated
- Record has not already met completion policy
- Assignees must be Preassigned at the destination step

To respond to a workflow task directly from email

- 1) Open the email notification.
 - If **Response via email** has been enabled in the business process design, the email includes action links. The email message also displays data from the business process form.
- 2) To take action, review the email, then click an action link. In an email program such as Outlook, this will create a response email.

Note: (1) Do not change the subject line of the email. Changing the subject line text will cause the email response to fail. (2) If you are using a text client for your email, you can open a new email message, copy the subject line of the notification, and paste it into the subject line of the response email.

3) You can add text to the body of the email. This will create a **General Comment** on the business process record.

Note: Email response text is not saved as General Comments for Document Type business processes.

4) You can add file attachments to your email response.

If the business process has been set up to accept attachments, they will be added to the record in Unifier. If the business process does not allow attachments, then attachments you add to the email response will be ignored. If a file already exists on the record with the same name as the file you are trying to send, then your attachment will be ignored.

5) Send the email, which will send the action to Unifier.

For all Workflow Business Processes where the steps are enabled for "Enable Response via email," the following Workflow processes are completed when you perform, or approve, a task via email:

Capture of Workflow progress elements in the form:

- Taken By
- Action Name
- Taken On

Formula calculations on the form:

When record progresses to the next step, the system evaluates the formulas on the form that are associated to the Workflow.

Form level validations:

Form-level validations are applied. If any errors, it will not advance the Workflow to the next step.

Additional form processing:

- Auto population (sum of line items)
- Dynamic Data Set (DDS) check: The system performs DDS checks prior to routing the record to the next step when action is taken through Email.

Note: If the step where the action is being performed has a DDS behavior set field which is required, and that field is empty, then the record will not progress to the next step.

Reset Form: Data Elements (DEs) in the form that have the Data Entry as Reset are processed when the record is progressed to the next step via email action.

Auto-Population for Behavior Set DEs

The data fields in a business process form can be updated through auto-population, including those in a behavior set of a DDS. Auto-population can occur during the creation of a form or during the selection of a picker value within a form. If the value of a Master Data Element clears a previously entered value of a behavior set data element and disables it, then any fields auto-populated from the behavior set data element are re-evaluated.

Similarly, any formulas dependent on the behavior set data element are re-evaluated. For example, in an **Upper** or **Detail** form, when a behavior set DE changes, the auto-population fields do not change. In the case of selecting a picker value, when the value of a picker changes, the auto-population fields do change.

Additional Processing

Query and Summary DEs:

Query and summary-based DEs, in the subsequent forms of the Workflow, are populated correctly when the record is progressed to the next step via email action.

Other post processing logic:

- Reverse auto population
- ▶ Roll-up to Cost sheet
- ▶ Roll-ups to other sheets
- Auto Creation S Step
- ▶ Auto Creation I Step and so forth

About Email Notifications for Business Processes

Email notifications are designed in uDesigner and set up by the Primavera Unifier Administrator. To initiate this feature for yourself, you need to set up an option in your user preferences that specifies that you wish to receive these notifications.

Refer to *Unifier General User Guide* for information about selecting email subscription options.

Once you make this specification, you will be notified whenever a business process to which you have been assigned is created, modified, or closed.

In addition, if you are creating or editing a business process that has been set up for email notifications, you can notify additional users or groups at your discretion.

Users who receive email notification (based on events triggered) will see the data elements based on email notification elements setup in uDesigner which is across all view forms for Workflow BPs. For Non-workflow BPs, the email notification received will show all the data elements based on email notification elements setup across all upper forms in uDesigner.

Email Notifications for Workflow Business Processes

You may be notified by email when you have a new task, if you are late responding to an assigned task, if you have been requested to join a business process discussion group (Classic View only), you are an editor on the task (in which case, you receive notification each time a draft is created), or if you were the creator of the business process and someone has taken action on their task.

Depending on your company Unifier email notification setup and your own user preferences, you may receive such emails one at a time as the task is generated, or you may receive one daily email digest summarizing all of the day's email notifications (including non-business process related notifications).

Note: Email notifications can be configured in your user preferences.

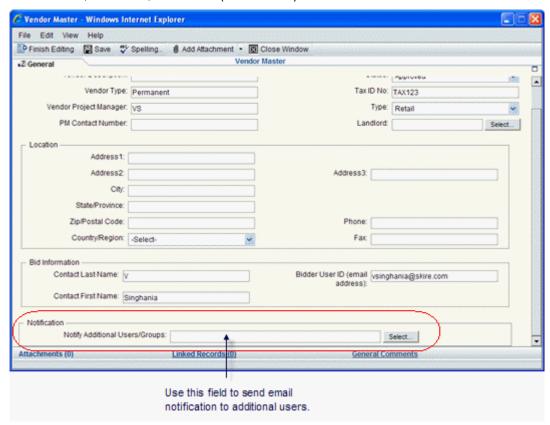
If you receive an email notification

You may receive BP-related email notifications for the following:

- You have a new task. A task can be generated if you need to take action on a BP workflow step, or if you have been requested to be part of a BP discussion group. Click on the hyperlink at the bottom of the email. When you click the link, you will be directed to the Unifier sign in screen. Once you sign in, Unifier will display the record, where you can complete the form and send it to the next step.
- You are late responding to an assigned task. The actions you can take are similar to when you have a new task.
- You are the owner or creator of the BP and someone has taken action on their task. This is a notification only and no action is required.
- You are an Editor on a task (you receive notification each time a draft is created).
- You are designated as an active proxy user, and the user you are acting for has received a task.
- A BP workflow has been completed. This is a notification only and no action is required.
- You have to take action during a BP workflow.

Email Notifications for Non-Workflow Business Processes

Your company may require that **non-workflow** business processes be acknowledged when they are created, modified, or closed (terminated).



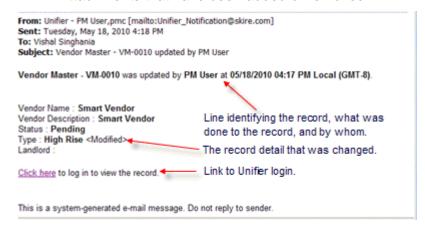
What the email looks like. Email notifications for non-workflow business processes include the fields from the business process that were chosen to appear on the email. The notification also includes a link you can click that will open the record for you to view.

When you click the hyperlink, you will be directed to the Unifier sign in screen. Once you sign in, Unifier will display the record, where you can complete the form and send it to the next step.

The email will display summary information, such as:

- What record was created
- Which upper form fields have been modified
- Comments that have been added to the BP or a line item.
- Line items that have been added, edited, or deleted
- General comments that have been added to the record (excluding any hidden comments)

Attachments that have been added or removed.



Participating in a Discussion Group (Classic View only)

Any user who is part of a business process workflow can initiate a discussion group to solicit input from other project or shell team members. Eligible participants are pulled from the business process' "add assignee" list. Invited members of the discussion group can contribute their own text comments and graphic markups.

Note: You cannot participate in a discussion group on the Create or End steps of a business process.

The task owner can select which, if any, of the comments and markups to use in creating final comments or markups for the task. The task owner can hide or delete these comments or consolidate them for use in creating the final comment or markup.

To consolidate comments received in a discussion group into a single, cohesive comment, see *Copying and Consolidating Comments and Markups* (on page 179).

A discussion group can take place in one of two places:

- The General Comments section of any cost, line item, or document BPs.
- On individual documents that are part of a Document-type BP document list.

Discussion groups end at the discretion of the task owner or when the task is completed.

Initiating a discussion group (Classic View only)

You can initiate a discussion group during any step in the workflow except the creation step.

To initiate a discussion group in general comments

- Open a business process record and click the **Discussion** button. The Discussion Group Invitation window opens.
- 2) Give a name to the discussion group.
- 3) Click **To** and choose the users to include in the discussion group. This list is generated from the discussion group list on the workflow setup of the business process.

Note: To include users who are not part of the original business process workflow, you must first add them to the discussion group list. The workflow must be set up to allow this, and you must have the proper permissions.

- 4) In the **Discussion Notes** text field, write a description of the assistance or input you are asking for from the participating members of the discussion group.
- 5) Click Send.

The receivers get a task in their Tasks log and an email message. The subject of the email will show the record number of the business process and the phrase "is sent to you for discussion." When the receiver opens the form, only the comments section is editable. When users respond to a discussion group, the discussion group owner is notified by email.

To initiate a discussion group on a particular document in a Document-type business process

Open the Document-type business process record. Select the document from the document list on the form. Click the **Discussion** button and follow the procedure to initiate a discussion group.

Closing a discussion group (Classic View only)

When a discussion group is closed, all invited participants will receive an email notification.

To close a discussion group

The initiator can close the discussion group at any time by clicking **Close**. This will remove the task from each receiver's task log, regardless of whether they have completed it.

Discussion groups are closed automatically when the task in which the discussion group had been initiated is completed, regardless of the status of the discussion group comments.

Participating in a discussion group (Classic View only)

If you are invited to join a discussion group, a new task will appear in your Tasks log, and you will receive an email message. The **Sent for** column of the Tasks log will indicate "discussion," distinguishing it from workflow-related tasks.

To participate in a discussion group in comments

1) From the Tasks log, select the discussion group business process and click **Open**. The form will be view-only, except for the comments area.

Note: Pay particular attention to the **Discussion Notes** area of the Action Details portion of the form. This is where the owner of the discussion group will add information regarding what input is needed.

2) Click General Comments. Add text comments.

To participate in a discussion group on a Document-type business process

1) From the Tasks log, select the discussion group business process and click **Open**. The business process form will be view-only, except for the comments and document list.

Note: Pay particular attention to the **Discussion Notes** area of the Action Details portion of the form. This is where the owner of the discussion group will add information regarding what input is needed and the documents that need review.

2) Select the document to comment on and click **Comments**. Add text comments and graphic markups.

Copying and Consolidating Comments and Markups

These procedures are useful for consolidating comments and markups received during a discussion group (Classic View only), but can also be used anytime you want to copy or consolidate comments or markups on a BP attachment.

When you copy and consolidate comments, all attachments to comments will display as attachments to the consolidated comment. All graphical markups will also be copied and included in the new consolidated comment in a separate, editable markup layer.

You can also consolidate graphic markups made to documents that are attached directly to the BP form (that is, documents attached in the lower portion of a Document-type BP, or documents attached directly to the BP form).

You can copy and consolidate text comments in general comments, but not graphic markups to file attachments added to a general comment. The following table summarizes:

| BP Feature | Consolidate Text Comments | Consolidate Graphic Markups |
|---|---|--|
| Documents attached to Document-type BPs | Can copy and consolidate comments made directly to attached documents | Can copy and consolidate graphic markups on attached documents |
| File attachments: all BP types | Can copy and consolidate comments made to files attached directly to BPs (listed in the Attachments link) | Can copy and consolidate markups made to files attached directly to BPs (listed in the Attachments link) |
| General comments | Can copy and consolidate general comments | Cannot copy or consolidate markups on files attached to a general comment. |

Copy or consolidate text comments

You can copy one or more existing comments to use in formulating your own comment. Copied comments also include any attached files and graphic markups.

When used in conjunction with the discussion group function (Classic View only), this can be used to consolidate the comments you receive from the group and create a single, cohesive comment. Because discussion group comments remain draft until the BP is sent to the next workflow step, the task owner can choose to delete or include the other draft comments.

You can also copy and consolidate comments made to documents attached directly to a BP. This allows you to consolidate several comments made by multiple users into a single comment by copying the existing comments into a new one and editing as necessary.

Note: The option to consolidate review comments is available only in AutoVue.

To copy general comments

- 1) On the BP form, click the **General Comments** link. The General Comments window opens.
- Click Add (or Modify to modify an existing comment). The Edit General Comment window opens.
- 3) Click the **Copy From** button. The Copy General Comments window opens, displaying the list of existing comments.
- 4) Click the selection box next to each of the comments you want to copy into your comments and click **OK**. Any additional file attachments or markups associated with each comment are also copied to the new comment.
- 5) Make edits as necessary and click **OK**.

To copy and consolidate text comments on a BP attachment

- 1) Do one of the following:
 - Click the Attachments link at the bottom of the BP form. The Attachments window opens. Select the file and click the Comments button.
 - For Document-type BPs, in the document list in the lower portion of the Document-type BP, select the file to mark up and click the **Comments** button.

The File Comments window opens.

- 2) Click the Add button. The Edit File Comment window opens.
- 3) Click the **Copy From** button. The Copy General Comments window opens, displaying the list of existing comments.
- 4) Click the selection box next to each of the comments that you want to copy into your comments and click **OK**. The comments are copied into the new comment and are listed in the Text Comment box of the Edit File Comment window. Any additional file attachments or markups associated with each comment are also copied to the new comment.
- 5) In the Edit File Comment window, make any necessary edits to consolidate the text comments.

Note: At this point, you can also consolidate graphic markups before saving the newly consolidated comment by clicking the Consolidate link next to Graphic Markup.

6) When you are done consolidating comments and markups, click **OK** to save and exit the Edit File Comment window.

To consolidate discussion group comments on a business process or document

- 1) Use the copy text comments procedure to copy any of the draft comments that you received from the discussion group that you initiated.
- 2) Click the selection box next to the text comments that you want to include in your new comment and click **OK**. The text comments and any graphic markups will be copied in to your new comment.
- 3) Edit as necessary and click OK.
- 4) You may select any of the draft comments and click **Remove** if you do not want to include them in the BP record.

Copy or consolidate graphic markups

You can copy and consolidate graphic markups made on document attachments to BPs.

Note: The option to consolidate review comments is available only in AutoVue.

To copy and consolidate graphic markups on a BP attachment

The business process must have been sent. You cannot consolidate draft comments.

- 1) Do one of the following:
 - Click the Attachments link at the bottom of the BP form. The Attachments window opens. Select the file and click the Comments button.
 - For Document-type BPs, in the document list in the lower portion of the Document-type BP, select the file to mark up and click the **Comments** button.

The File Comments window opens.

- 2) Click the **Add** button. The Edit File Comment window opens.
- 3) Click the **Copy From** button. The Copy General Comments window opens, displaying the list of existing comments.
- 4) Click the selection box next to each of the comments that you want to copy into your comments and click **OK**. The comments are copied into the new comment and are listed in the Text Comment box of the Edit File Comment window. Any additional file attachments or markups associated with each comment are also copied to the new comment.
- 5) In the Edit File Comment window, make any necessary edits to consolidate the text comments. Note that the link next to Graphic Markup at the bottom of the Edit File Comment window changes to "Consolidate."
- 6) Click the **Consolidate** link. The document opens in for viewing in the AutoVue viewer.
- 7) In the viewer window, click the **Open Markup(s)** tool or select **File > Open**. The Markup Files window opens, displaying the list of existing markups.
- 8) Select the markups to be copied and click **OK**. The selected markups will display in layers on the document.
- 9) Click the **File** menu and choose **Consolidate**. The Consolidate Markups window opens.
- 10) Do the following to create a new consolidated markup layer:
 - Enter a name for the new consolidated markup.

- Select the checkbox next to the markup layers to include, or click the Select All button to select all markup layers.
- Select the Open as active markup and hide the others checkbox.
- Click OK.

The markup elements from the selected layers will be copied into the new consolidated layer. These elements are editable. You can select, modify, or delete individual elements, or add new markups as necessary.

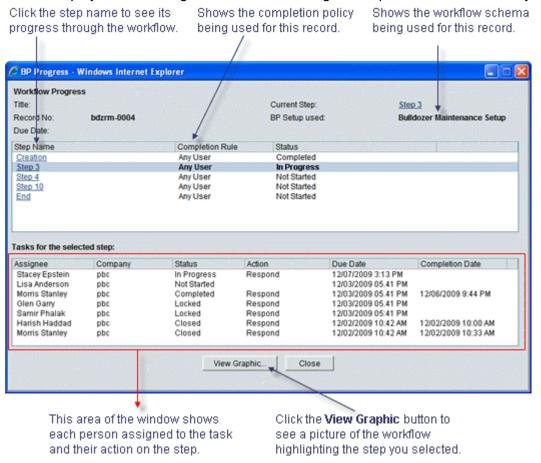
- 11) Click the **Save** button or select **File > Save** to save the new consolidated markup layer. If you want to add another markup layer, click the **New Markup** button and add markups as necessary.
- 12) Close the AutoVue viewer window.
- 13) In the Edit File Comment window, click **OK** to save the consolidated markups and text comments. Close the File Comments window.

Track a Step Through the Workflow

There are times when you might need to examine a record's workflow in detail to see the progression of a step or task through each assignee's actions. You can track a step in this way using a single window, which is available from the business process form.

To track the progress of a workflow step

- 1) From the log node in the Navigator, select the business process.
- 2) On the right pane, double-click the record you want to track. Unifier displays the BP record window.
 - If the record is open or pending, click the **Task Status** link in the **Task Details** section of the form.
 - If the record is closed, click the link to view the process details in the **Task Details** section of the form



Unifier displays the BP Progress window, showing the step the record is currently on.

Example of progress tracking for a workflow

You can use this window to display every step in the workflow schema, the action of the step, the assignees (and those cc'd) on the task, and the status of the task at each assignee's action.

3) Click the name of the step you want to audit.

Unifier displays the history of each assignee's action on that step and the step's status at that time. The actions are shown in reverse chronological order by Due Date (i.e., the latest due date is at the top of the list).

Large Workflows

If you view the workflow by clicking the **View Graphic** button, be aware that workflows can often be very large. If you are viewing a large workflow, you can enlarge the canvas screen to make it easier to see all the steps to the workflow progression.

To enlarge the canvas, you can drag the window sides until the workflow fits in the window, or you can quickly maximize the canvas. To maximize the canvas, click the icon in the upper-right corner of the window. To restore the canvas window to its normal size, click the Restore icon.

Managing Business Process Records

The following topics describe how to manage business process records.

Transferring Ownership - Business Process Records

If you are a BP record owner or creator, you can transfer ownership at any time in the workflow process, other than the creation step, or after its termination step. The new owner will have all privileges of a BP owner, and the originator name on the BP form and the log will show the new owner.

To transfer ownership

Open a BP record. From the **Edit** menu, click **Transfer Ownership**. Choose the user from the User/Group picker and click **OK**. The selected user becomes the BP's new owner. You can also transfer a record from the BP log, **Actions > Transfer Ownership**. If you have enabled to view forms in the redesigned user interface, the option to transfer ownership is under **Menu > Transfer Ownership**.

Granting Business Process Record Permissions

To grant permission to a non-workflow business process record

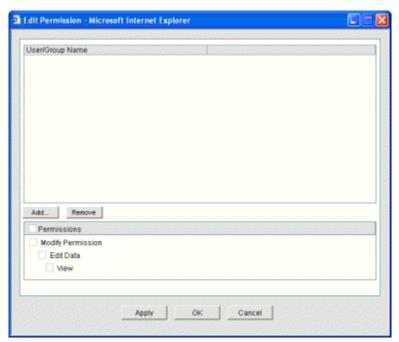
- Create a BP record in the Company Data Manager, Company General, or project or shell General log.
- 2) Select one or more BP records and click **Actions > Permissions**. You can also click the gear menu and click Permissions to assign permissions to only one BP Record. The Permissions window opens.
- 3) In the Permissions table, type the user or group name in the **Add** box and select the user or group to grant access.
- 4) By default, each listed user or group will be granted **View** permission, allowing them to open the BP Record. To grant additional permissions, select the checkboxes that correspond to the user or group:
 - ▶ All: User will have View, Edit, and Modify Permission.
 - Modify Permissions: Allows user to control the BP record's permission settings.
 - **Edit Data:** User can import BP record information, save a snapshot, edit BP record properties, and add columns.
 - View: User can view the BP record.
- 5) Click Save, or click Save & Next to go to the next worksheet.

You can Remove user or group permission by clicking the trash-can icon in the **Remove** column.

Note: You must have permissions for specific business process logs to create or view records. Contact your project or shell administrator if you are having trouble accessing BPs or BP logs to which you need access.

To grant permission to a business process record

- 1) Create a BP record in the Company Data Manager, Company General, or project or shell General log.
- 2) From the log window, select the record (for Company Data Manager records, select an individual BP log node) and click **Permission**.
- 3) Add the users or groups you wish to grant permission, set the permission level, and click **OK**.



Editing Business Process Records

When a workflow business process (BP) is in route, depending upon your permission settings, you can add or edit information on the form. A non-workflow BP can be edited as needed, as well.

In Unifier, you can be designated as either a step editor on a specific step in a workflow, or as a record editor. As an editor, you must have at least the "View" permission to be able to view the record in the log and access it for editing.

- Step editors cannot edit a workflow record until the task assignee accepts the task, and saves the draft.
- Edits made and saved by assignees are not viewable until the assignee sends the record on to the next step; however, edits made, and saved, by record editors are viewable at any time.

Edits performed on the end step of a workflow BP affect the record directly, as no draft exists.

For details about editing your tasks records, see Taking Action on your Task (*Working with Tasks* (on page 161)).

Editing a BP Record for Editors

In Unifier, you can be designated as either an Editor on a specific step in a workflow, or as a Record Editor. As an Editor, you must have at least view permission to be able to view the record in the log and access it for editing.

Notes:

- Step editors cannot edit a workflow record until the task assignee accepts the task, and saves the draft.
- Edits made and saved by assignees are not viewable until the assignee sends the record on to the next step. However, edits made and saved by record editors are viewable at any time.
- Edits performed by editors are not audited; however, changes made by record editors are audited.
- Edits performed on the end step of a workflow business process affect the record directly, as no draft exists.

Concurrent editors in a business process

While a workflow BP is on a step, or a non-workflow BP is in Edit mode, Unifier saves edits to fields, but does not commit the changes. For example, if editor one revises fields 1 to 5 and then saves the record, and editor two revises fields 6 to 10 and saves, the record retains all 10 edits. However, if editor two revises field 4, and saves the record after editor one saved the record, then the data from editor two over-writes editor one's revision.

To edit a non-workflow BP that is already complete, click to open the BP and click Edit.

Note: If the BP is in a terminal status and you click **Finish Editing**, Unifier disables the **Edit** button and the form can never be edited again.

You can edit a workflow BP during the workflow process.

Note: If a view form is used on a terminal step, further editing is not possible.

Editing a BP Record from Master Log - Business Processes Node (Standard View)

You can edit a Project/Shell BP record from the master log (**Master Log - Business Processes** node), provided that you:

Note: The name of the **Master Log - Business Processes** node can be customized.

Are an active member of the project, shell, or sub-shell

▶ Have the appropriate permissions in the associated project or shell.

When you open a BP record from the master log, the record will open in either **Edit** or **View** mode, depending on the user permissions associated with that record in the Project/Shell.

For editing workflow BP records:

- After you open a BP record from the master log, the Project/Shell permissions are in effect.
- You can accept a task and take action on the workflow BP record by opening the BP record from the master log, if you are the assignee on the current workflow-step in the BP. If not, the BP record is opened in View mode only.
- You can add general comments, if you are a cc user on a particular step.
- You can add general comments provided that the current step has general comments option enabled.
- If you are not an assignee on a particular step, you must have **Bulk Edit** permission on the BP record, in the master log, in order to be able to edit data elements on the record.

For editing non-workflow Bp records:

- If you have **Edit Data** permissions for a non-workflow BP record, then you can open the record from the master log and proceed to edit the BP record.
- If you are an **Editor** of a non-workflow BP record, then you can open the record from the master log and proceed to edit the BP record.

To edit a BP record from the master log

- 1) Go to **Home** page.
- 2) Click Master Log Business Processes node.
- 3) Click to select the BP record that you want to edit.
- 4) Click the gear menu (and select **Open** to open the BP record.
- 5) When finished editing, click Save.

Editing Multiple BP Records (Bulk Edit) (Standard View)

If you have a large number of projects or shells with several business processes in the same state, you can edit/modify (update) multiple BP records (bulk edit) at once.

In order to be able to edit/modify multiple BP (bulk edit) records through integration:

- An interface must have been defined in uDesigner.
- You must have permission to perform bulk edit (Allow Bulk Edit).

Note: You can update a maximum of 200 records using bulk workflow update.

You can edit/modify multiple BP records, both the workflow and non-workflow, at the following levels:

- Project
- Shell
- Company

You can edit/modify multiple BP records (bulk edit), both the workflow and non-workflow, from the following nodes:

- Company Logs
- Project/Shell Logs

To edit/modify multiple BP records (bulk edit), both the workflow and non-workflow, from the Company Logs node

- 1) Go to Company Workspace and switch to User mode (Suser mode).
- 2) From the left-hand Navigator, click Company Logs node to expand.
- 3) Click the desired BP to open the BP log.
- 4) From the log, ctrl+click to select the BP records that you want to edit.
- 5) Click **Actions** and click **Bulk Edit** to open the **Bulk Edit** window.

The window is divided into two panes. Use the left-hand pane to edit the Upper Form of your business process.

Unifier automatically selects the Update checkbox when you type into or modify a field. You can deselect it if you do not want to modify the field at this time.

Use the right-hand pane (Action Status) to preview the status of each record.

6) When finished, click Close.

To edit/modify multiple BP records (bulk edit), both the workflow and non-workflow, from the Project/Shell Logs node

- 1) Go to your Project/Shell and switch to **User** mode (Admin mode).
- 2) From the left-hand Navigator, click Logs node to expand.
- 3) Click the desired BP to open the log.
- 4) From the right-hand pane, log, ctrl+click to select the BP records that you want to edit.
- 5) Click the desired BP to open the BP log.
- 6) From the log, ctrl+click to select the BP records that you want to edit.
- 7) Click **Actions** and click **Bulk Edit** to open the **Bulk Edit** window.

The window is divided into two panes. Use the left-hand pane to edit the Upper Form of your business process.

Unifier automatically selects the **Update** checkbox when you type into or modify a field. You can deselect the **Update** checkbox if you do not want to modify the field at this time.

Use the right-hand pane (Action Status) to preview the status of each record.

8) When finished, click Close.

Additional information about editing/modifying multiple BP records (bulk edit)

The **Bulk Edit** option (for multiple BP records) enables you to edit the fields from the Action Form (Upper Form) of the current step in the workflow.

You cannot use the **Bulk Edit** option for multiple BP records to edit:

- Fields in a dynamic data set
- Fields from line items

System-defined fields, such as record number, status, or due date

The **Bulk Edit** option for multiple BP records is *not available* for the following BPs:

- Resource Booking BP
- Timesheet BP
- Single-record BP

Fields that are configured for auto-sequencing are not available for bulk edit since the values for these fields are system-generated.

You cannot use the **Bulk Edit** option for single, or multiple, BP records to update a field that has value uniqueness configured.

You can update a maximum of 200 records using Workflow update (**Action Without Preview** window > **Workflow Actions**).

Only the Upper Form is modified during Workflow update (Action Without Preview window > Workflow Actions).

The Workflow update (Action Without Preview window > Workflow Actions) is not supported on tasks that are on the Initiation step.

When you send the record to the next step, Unifier performs validation for the required fields.

At the company-level and project-level, when you are taking action on multiple tasks, you must have **Allow Bulk Edit** permission for each task.

For bulk update, the fields are from both Upper Form and Details forms (drawn from integration templates in uDesigner). Some business processes do not support integration. As a result, you cannot take multiple actions on these business processes because integration is used in multiple action.

Unifier does not allow Bulk edit of Data Picker based on a query.

Editing Multiple BP Records (Bulk Edit) from Master Log - Business Process Node (Standard View)

If you have the **Allow Bulk Edit** permission, you can select one or more business process records from a master log (**Master Log - Business Processes** node) and perform bulk edits on those selected records.

Note: The name of the **Master Log - Business Processes** node can be customized.

You can select records across projects or shells to perform bulk edit.

The following Data Definitions cannot be modified using Bulk Edit in a Master Log:

You cannot modify the following data definitions when using the **Bulk Edit** option from a master log.

- Image Picker
- Program Picker
- Company Picker
- Group Name Picker

- User Picker
- Project Picker
- BP Creator

To edit multiple BP records (bulk edit) from the master log (availability based on permission)

- 1) Go to **Home** page.
- 2) Click Master Log Business Processes node.
- 3) Click to select the BP record that you want to edit.
- 4) From the right-hand pane, log, ctrl+click to select the BP records that you want to edit.
- 5) Click Actions and click Bulk Edit to open the Bulk Edit window.

The window is divided into two panes. Use the left-hand pane to edit the Upper Form of your business process.

Unifier automatically selects the Update checkbox when you type into or modify a field. You can deselect it if you do not want to modify the field at this time.

Use the right-hand pane (Action Status) to preview the status of each record.

- 6) When finished, click Close.
- 7) Proceed with your edits, save, and close the window.

Additional information about editing/modifying multiple BP records (bulk edit)

The **Bulk Edit** option (for multiple BP records) enables you to edit the fields from the Action Form (Upper Form) of the current step in the workflow.

You cannot use the **Bulk Edit** option for multiple BP records to edit:

- Fields in a dynamic data set
- Fields from line items
- System-defined fields, such as record number, status, or due date

The **Bulk Edit** option for multiple BP records is *not available* for the following BPs:

- Resource Booking BP
- Timesheet BP
- Single-record BP

Fields that are configured for auto-sequencing are not available for bulk edit since the values for these fields are system-generated.

You cannot use the **Bulk Edit** option for single, or multiple, BP records to update a field that has value uniqueness configured.

You can update a maximum of 200 records using Workflow update (**Action Without Preview** window > **Workflow Actions**).

Only the Upper Form is modified during Workflow update (Action Without Preview window > Workflow Actions).

The Workflow update (Action Without Preview window > Workflow Actions) is not supported on tasks that are on the Initiation step.

When you send the record to the next step, Unifier performs validation for the required fields.

At the company-level and project-level, when you are taking action on multiple tasks, you must have **Allow Bulk Edit** permission for each task.

For bulk update, the fields are from both Upper Form and Details forms (drawn from integration templates in uDesigner). Some business processes do not support integration. As a result, you cannot take multiple actions on these business processes because integration is used in multiple action.

Auditing Business Processes

The business process (BP) **Audit Log** tab lists the actions that have been taken on a specific BP record. The following table describes the events that are, or are not, captured in the **Audit Log** tab.

Note: Unless note otherwise, the following information applies to both workflow and non-workflow BPs.

The following events are captured in the BP Audit Log:

- Workflow steps
 - When and to whom (To and Cc) each step was sent (workflow BPs)
- Record creation date (non-workflow BPs)
- General comments
- File comments
- Linked Mailbox
- Linked records
- Discussion group: start and end (Classic View only)
- Add or manage Document-type BP folders: new, remove, rename, move
- Add, remove, open, view, or download file attachments
- Decline task
- Transfer ownership
- Add, modify, or delete a line item: detail or summary
- ▶ File attachments to existing line items
- Copied (cc) user views the record
- Updates performed on any part of the BP using the Reverse Auto-Population feature
- Record print

The entries include:

- Printing from BP record
- Single & Bulk Printing from the BP log
- Single & Bulk Printing from the Task log

The log entries are:

- Event Print > <Print Type>
- Action Run Print
- User Name User who ran the print

The print type can be PDF, HTM or Custom. In case of custom print, the format in Event will be Print > Custom > <Template : Format>

Disabled and Clear

The Audit Log captures the number of clearing and disabling of data fields, based on the Disabled and Clear behavior set option in a DDS.

The following events are *not* captured in the BP Audit Log:

- Actions undertaken at the creation step
- Accept task
- Undo accept task
- Add assignees or copy users between steps

Printing and Distributing BP Forms

At times, you may need to print copies of a Business Process form, such as an invoice or a purchase order. You can save a copy of the form as a PDF file and print or email the file, print an HTML view, or print from a Word file if a custom print layout has been created for the form.

Notes:

- You can print a form that is in view mode or in edit mode.
- The print output is based on your permissions to certain data in Unifier. If you cannot see the hidden comments in a particular step within a Workflow, then the hidden details will not be printed and will not be visible in the Custom Print.

Print a BP Form in Different Formats

When printing business process forms from PDF or HTML format, you can choose to include not only the information on the form itself, but also associated information such as general comments and information about file attachments. The print options are:

- Upper form data
- Workflow progress information (for business processes with a workflow)
- Line item list
- Line item data
- General comments made to the record
- Information about file attachments on the record or line items
- Comments made to file attachments

Note: Some fonts may not be supported. Ensure that you adjust your language settings correctly (go to region format tab and review changing language topics in the Help) in cases of printing a BP form or attaching a pdf version of a BP form to an email when a workflow is routed.

If custom print layouts have been created for the business process, the form will print according to the layout that you select.

Note: For PDF and HTML layouts, the ability to print hidden comments will respect permissions: if you can see hidden comments, you can print them. In custom print, hidden comments are not printed.

To preview and print a business process form:

Note: Workflow Progress section in Print options is driven by permissions. If you can see workflow progress, you can print the workflow progress.

- 1) Open the BP record that you want to print.
- 2) From the File menu, choose Print Preview, then choose one of the following:
 - **HTML** to view the form in the browser which can then be printed.
 - PDF to open the form in Adobe Reader, which can be saved or emailed as a PDF file, or printed process, you are asked to save the changes to the form.
 - Custom to select the BI Publisher, Microsoft Word, and PDF custom print templates from the same place as the current custom prints (Custom Format Print selection window).

Note: Even if you have not made any edits, you may be asked to save changes. This can occur if the form includes fields that are auto-populated or automatically updated, as these automatic functions are considered to be changes.

- 3) The Print Options window opens.
 - This window displays the business process record information that can be printed; see the table below. Select the checkboxes for the information that you want to print. Only those options that are applicable to that business process design will appear on the Print Options window. For example, line items options are available for business process types that support line items, the Task Details option appears only for workflow business processes.
- 4) To select all the checkboxes, click the **Select All** checkbox. To deselect all, uncheck the **Select All** checkbox.
 - Selecting or deselecting this checkbox will have no affect on any Workflow Progress options you choose.
- 5) Click **OK**. The preview form opens in an HTML or PDF (Adobe Acrobat or Reader) window, from which you can print.

If you chose PDF, you can save a copy by clicking the **Save a Copy** button, or print. To print from HTML format, click on the **Print** icon in the upper right corner.

| Print option | What it prints |
|-------------------|--|
| Upper Form | Selected by default. This prints the information entered on the upper form. |
| Workflow Progress | Prints a log of the steps in a workflow, showing the step name, the assignee(s) on the step, the action that was taken on the step and the completion date. You have additional print options: |

| | All Steps will include all the steps in the workflow, whether or not they were visited by users. The steps will be listed in order according to the workflow setup. All assignees on each step will be listed in the log, whether or not they took action on the step. Visited Steps will include only those steps that have been visited by users. Only the assignees who took action on the steps will be listed. You can display the steps sorted by the completion date or the step name, in ascending or descending order. | |
|--|--|--|
| Line Item List | Selected by default. This prints line information as it appears on the business process form itself. This is applicable for business processes that support line items. | |
| General Comments | The general comment text and create details are printed. | |
| Record Attachments | File attachments to the record are listed alphabetically by file name, and also include the file title, issue date, revision number, and file size. This is not applicable for document type business processes, which list file attachments in the line item section. | |
| Record Attachments > Comments | rints comments associated with file attachments to the cord. Record Attachments must also be selected to elect this option. | |
| Detail Form | Line item data is displayed in order by line item, and grouped by tab if the business process has multiple line item tabs. This will print all line item data elements present on the detail form, and reflects the layout of the detail form (for example, if the detail form is two-column, the print data is displayed in two columns). | |
| Detail Form > Attachments | Prints information about attachments to each line item. Detail Form must also be selected to select this option. | |
| Detail Form > Attachments> Comments | Prints comments associated with file attachments to a line item. Detail Form and Attachments must also be selected to select this option. | |

BI Publisher custom print in I Step BP records

In I step BP records, and where the record number does not exist for a record, if you print the BP record using a BI Publisher custom print template, the print output will be blank.

Note: You cannot print a Portal Enabled BP record in the Creation step.

Custom Format Print Options For BPs

Custom Format Print Window for a non-Workflow BP

The Custom Format Print window, for a *non-Workflow* BP, has two sections:

- Select a custom print template
- Select a template and format to print

Both sections facilitate custom print template and format selections.

Select a custom print template

Lists all the custom print templates existing for the non-workflow BP, including the custom print templates created in the **Custom Templates** node and the custom print templates created in the configuration of the non-workflow BP. For example, the list may include BI Publisher custom print templates, Word, and PDF custom print templates.

If there are multiple custom print templates for the same non-workflow BP, all the published templates are listed in this section.

The "Select a template and format to print" is populated by the selection made in the "Select a custom print template" section.

Select a template and format to print

- If you select a BI Publisher custom print, then you can select the desired template and format from the drop-down lists.
- ▶ Template drop-down displays all the available templates for the selected format.
- ▶ Format drop-down displays the available formats for the selected template.
- If the custom print template was created using PDF or Word, then the "Select a template and format to print" is disabled.

Default template and format (non-Workflow)

- If a BI Publisher print template is selected, then the default values in the drop-down lists are set based on the default in the custom print template.
- When a BI Publisher print template is selected in the "Select a custom print template" section, the template and format are populated based on the default value selected at the time of designing the print template.

Custom Format Print Window for a Workflow BP

If there is only one custom print template, and it happens to be a BI Publisher template, then the print template is selected in the "Select a custom print template" section, and the template and format are populated based on the default value selected at the time of designing the print template.

The Custom Format Print window has three sections for a Workflow BP.

- Select a custom print template
- Select a template and format to print
- Select options for Workflow Progress

By default, when the Custom Format Print window is launched, all three sections are enabled and the first template is selected. The options seen in the subsequent sections are based on the selection made in the "Select a custom print template" section.

You are able to select options for workflow progress in the 'Select options for Workflow Progress" section of the Custom Format Print window for PDF and Word templates, which are created at the time of configuring the non-workflow BP.

If the selected custom print template is of a BI Publisher type, then the "Select options for Workflow Progress" section is disabled. This is because the custom print template designers can always use the system provided Workflow views to include workflow-related information in the template.

Default template and format (Workflow)

- When a BI Publisher print template is selected in the "Select a custom print template" section, the "Select a template and format to print" section is populated based on the default value selected at the time of designing the print template.
- If there is only one custom print template, and it is a BI Publisher template, then the print template is selected in the "Select a custom print template" section, and the template and format is populated based on the default value selected at the time of designing the print template.

Note: If you custom print a draft business process record, the modified record values will not be displayed in the in the Output of the BI Publisher print.

Custom Format Print Window for Shells

In addition to editing shells that you have permissions for, you can view all Custom Print Templates and define them at the shell level. Once you navigate to your system logs, you must select a BP. After you choose an item from the list of available items in the BP, click the **Settings** icon and select the **Print – Custom** option.

When you select **Print – Custom**, a new window is displayed where you can choose a Custom Print Template from the dropdown. Upon choosing one of the available Custom Print Templates, select **Print**.

Note: If you copy a shell that has an existing setup and the **BPSetup** module is selected, then the Custom Print Templates are also copied.

Print Using a Custom Layout

Custom printing can be used with templates created in BI Publisher, Microsoft Word, and PDF format. Depending upon the template used for custom print, you can print the upper form, the current workflow step, comments and attachments of the record. The template may also allow printing of specific line items in their tabs. The printed output will list the name of the tab with the line items following on separate lines.

To print a BP form with a custom print layout:

- 1) Open the business process record that you want to print.
- From the File menu, choose **Print Preview**, then choose **Custom** to select the BI Publisher, Microsoft Word, or PDF custom print templates from the same place as the current custom prints (Custom Format Print selection window).

If you are editing the business process, you are asked to save the changes to the form.

Note: Even if you have not made any edits, you may be asked to save changes. This can occur if the form includes fields that are auto-populated or automatically updated, as these automatic functions are considered to be changes.

- 3) Select a template and format.
- 4) Select Workflow progress options. Refer to *Unifier Managers User Guide* (Printing a Configurable Manager Form) for details on non-Workflow progress options.

Workflow progress prints a log of the steps in a workflow, showing the:

Step name

Assignee: on the step

Company: the assignee company

Status: of the step Action: on the step

You have additional print options:

- All Steps will include all the steps in the workflow, whether or not they were visited by users. The steps will be listed in order according to the workflow setup. All assignees on each step will be listed in the log, whether or not they took action on the step.
- Visited Steps will include only those steps that have been visited by users. Only the assignees who took action on the steps will be listed. You can print the selected steps (including the current workflow step) sorted by completion date or step name, in ascending or descending order.
- 5) Click **OK**. The File Download window opens.
- 6) Choose to Open or Save the file.
- 7) Print the file.

Send a PDF copy of a BP form via Mailbox

You can create and send a PDF copy of a business process record directly from Mailbox.

To send a PDF copy of a BP form using Mailbox

- 1) Open the business process form in View mode.
- 2) From the **File** menu, click **Send Mailbox**. The Mailbox window opens. A PDF copy of the form is automatically attached.
- 3) Complete the Mailbox form and send.

Auto-Populating BP Data Picker on BP Auto-Creation

When a source business process (BP) record has a BP creator that auto-creates another BP record that has a BP Data Picker referencing the source BP record, the BP Data Picker values will be auto-populated referencing the source BP record, even when the source BP record is in a different shell.

The auto-creation of the destination BP records (from source BP record) can be either of the type:

- Record to Record or
- Line-item to Record

Both types support the BP Data Picker in destination record that will be auto-populated.

Note: Unifier ignores the queries that have been defined for the BP Data Picker.

The source BP record in a Project/Shell can auto-create another BP record in the same Project/Shell

As a result, when the source BP (BP A) record and the auto-created BP (BP B) record reside in the same Project/Shell, then the BP Data Picker in the auto-created BP (BP B) record is auto-populated with reference to the source BP (BP A) record, similar to all BP Pickers.

The source BP record in a Project/Shell can auto-create another BP record in different Projects/Shells

As a result, when the source BP (BP A) record and the auto-created BP (BP B) record reside in different Projects/Shells, then the BP Data Picker in the auto-created BP (BP B) record is auto-populated with reference to the source BP (BP A) record.

Auto-Populating BP Line Item Data Picker on BP Auto-Creation

When a record is auto-created from a line item:

- If the created record has a BP Data Picker, it will be populated with a reference to the source record. If the upper form also has the BP Line Item Data Picker, it will be populated with a reference back to the line item on the source record.
- If the created record has a BP Data Picker on the detail form, the line items copied from the source will have the picker populated with a reference to the source record. If the detail line also has BP Line Item Data Picker, it will be updated with a reference to the detail line. You can auto-populate and reverse auto-populate back to the source upper or detail form.
- ▶ BP Line item Data Picker displays the line item based on query conditions that are evaluated similar to Data Picker in the auto-created record.

When a record is auto-created from another record upper form:

If the created record has a BP Data Picker, it is populated with a reference to the source record and any Line Item Data Picker on record is empty.

- If the created record has a BP Data Picker on the detail form, the Line Items copied from the source will have the picker populated with a reference to the source record. If the detail line also has BP Line Item Data Picker, it will be updated with a reference to the detail line. The design can then auto-populate and reverse auto-populate back to the source upper or detail form.
- ▶ BP Line Item Data Picker displays the Line Item based on query conditions that are evaluated similar to Data Picker in the auto-created record.

When a line item is auto-created from source BP line item:

If the source record has a BP Line Item Data Picker, it is populated with a reference to the auto-created line item, provided BP Data pickers refer to the source record.

Auto-population and Reverse Auto-Population of data elements, based on BP Line Item Data Picker, is supported. A Reverse Auto-Population can be done from both the Upper and Detail forms.

When you select a Line Item Data Picker without selecting a BP Data Picker, Unifier displays a picker window without line items.

When you change the selection in a BP Data picker, if there is already a line item selected, then Unifier displays the message: You cannot change a BP Data picker that has line item(s) associated with it.

Upon copying a record, the selected values for a BP Line Item Data Picker will be copied from the source record.

Upon auto-creation of the record or line item, the value for the BP Line Item Data Picker (on the destination record or line item) is retained from the source. The value of the BP Data Picker is also retained on the destination from the source.

A data element that is based on a Line Item Data Picker data definition is supported as part of HTML or PDF prints. The Display Element value is printed as part of HTML or PDF prints.

A Line Item Data Picker element is available as part of Custom Print schema so that you can use it on Custom print XML file. At runtime the Display Element value will be printed.

Updates on Document Attributes for Business Processes

When a document gets published to the Document Manager (DM), the document attributes get updated by matching DEs from the BP record. If the matching DEs on the source record get updated during the life of the record, then the corresponding DM attributes can get updated, if it has been configured in uDesigner to do so.

If the option of **Update attributes for already published documents** is checked on a BP Upper Form at a given step (in uDesigner), then the attributes of all record and line item published attachments will be updated according to the matching DEs between the record and the DM attribute form. Also:

If the uDesigner option (**Update attributes for already published documents**) is checked at multiple steps, the DM attributes gets updated at each such step.

For a Workflow type BP:

If the uDesigner option (**Update attributes for already published documents**) is checked on current step, the DM attributes get updated as the record is routed to next step.

If the user causing the record to move to next step does not have **Modify Properties** permission on a document, the DM attributes get updated, if the uDesigner option (**Update attributes for already published documents**) is checked.

If the end step has an edit form, then the DM attributes get updated at each save of the record, if the uDesigner option (**Update attributes for already published documents**) is checked.

For a non-Workflow type BP:

The attributes get updated when the record is **Finish Edited**, if the uDesigner option (**Update attributes for already published documents**) is checked.

If the user who edits the record does not have **Modify Properties** permission on a document, the DM attributes get updated, if the uDesigner option (**Update attributes for already published documents**) is checked.

For both Workflow and non-Workflow type BPs:

If the attribute on DM form is set to **Formula** or **Auto-populate with a Constant Value**, the attributes get updated from the BP if there are matching DEs with the BP form; however, when you manually open the **Properties**, and click **OK**, the **Formula** or **Auto-populate with a Constant Value** on the DE gets recalculated and repopulated.

If a BP record is created by attaching file(s) from the DM directly, and the uDesigner option (**Update attributes for already published documents**) is checked, then the files are treated as a published document(s) and their attributes get updated as the record progresses in workflow, or the record is **Finish Edited**.

Note: If the uDesigner (**Update attributes for already published documents**) *is not checked*, then there will be no update of DM attributes as a record progresses in workflow, or the record is **Finish Edited**.

Unifier Business Processes with Special Behaviors

Some business processes have special features and behaviors that make them operate differently from most business processes in Unifier. These business processes and their features are described in this section.

For information about internationalization and CSV files refer to Unifier General User Guide.

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Schedule of Values (SOV) Sheets and Business Processes

This section discusses how to manage BP records, including searching for existing BPs, transferring ownership, viewing BP properties, and viewing Schedule of Values (SOV) or funding information from within a Cost type BP.

View an SOV sheet from the BP form

Commit (contract) or spend (invoice) BPs can be set up to automatically create a Schedule of Values (SOV) sheet. These transactions can be easily accessed directly from the BP form. The BP form remains active.

If the BP has been set up to automatically create an SOV sheet, once the SOV sheet has been created, an SOV button appears at the top of the BP form.

For more information about Schedule of Values (SOV) sheets refer to *Unifier Managers User Guide* (Unifier Cost Manager, About Schedule of Values (SOV)).

To view the SOV sheet created from the Cost type BP:

- 1) Wait for the BP to reach terminal status.
- 2) Click the **SOV** button to open the SOV sheet that corresponds to the transaction.
- 3) Close the SOV sheet to return to the BP form.

Create SOV breakdowns

You can add SOV breakdowns from this view. Breakdowns are only in use in the SOV sheet, not the cost sheet. If another transaction exists for the CBS code, you will not be able to do a breakdown.

To add CBS code breakdowns that can be used to create invoices:

- 1) Open the SOV sheet by clicking the SOV button.
- 2) Click on a listed CBS code from the sheet. The CBS Detail window opens.

For more information about adding CBS breakdowns refer to *Unifier Managers User Guide* (Unifier Cost Manager, Adding Breakdowns to SOV sheet by Importing).

View, or edit, fund transaction details from the BP form

Commit (contract) or spend (invoice) BPs can be set up to consume or appropriate funds in the project/shell funding sheet or commitment funding sheet. These transactions can be easily accessed directly from the BP form.

If the BP form has been set up for funding (and is in the appropriate step, and you have funding permissions), a Funding button will appear at the top of the BP form. This allows you to perform a fund assignment while routing and approving a BP, such as a payment. Access to this button and fund information is dependent upon your Fund Manager permissions.

Refer to *Unifier Managers User Guide* (Unifier Cost Manager, About business processes enabled for commitment funding).

Refer to *Unifier Managers User Guide* (Unifier Cost Manager, About business processes enabled for funding).

Composite view of Base Commits and Change Commits

You can view a composite view of both Base Commits and Change commits. The SOV sheet is used as a composite view, and the SOV sheet will be the composite of the PO and all added lines from Change commits.

To support the line-item mode, the SOV sheet has a column called **Ref** that represents line item numbers.

There are other fixed columns, and the columns will be dependent on the mode.

Line item mode:

- The Ref column represents the line item numbers for both Commits and Change Commits.
- The **Description** column shows the short description of the line item from the Commit.

CBS mode:

The **Ref** column does not have any data. The breakdown items do not include a ref number. The column width is four characters.

Note: For Base Commits Business Processes (BPs) with SOV type of "Summary Payment Applications," a special behavior line item has been provided to allow you to add further cost distribution details to the line items. This option is accessible in the Standard detail tab of the

properties window and contains two options: Lump Sum and Cost Unit. Click Add and select the appropriate option.

To view funding details from the Cost type BP:

- 1) Wait for the BP to reach terminal status.
- 2) Click the **Funding** button to open the Cell Detail window.
- 3) Review the details of the transaction.

Note: This is the same window that you would see if you clicked on the link corresponding to this transaction on the project or shell funding sheet.

To reassign funding, click the **Reassign Funds** button. Refer to *Unifier Managers User Guide* (Unifier Cost Manager, About business processes enabled for funding).

Payment Application Business Processes

A Payment Application BP enables you to track the payment information using the standard payment application method such as tracking retainage, stored and materials. Each Payment Application BP record references a particular Base Commits record. The line items on the Payment Application BP will reflect the line items on the Base commits as well as any associated Change Commits.

Payment Application BPs, and associated Base Commits and Change Commits, are designed in uDesigner. For more information, refer to the *Unifier uDesigner User Guide*. Your Company Administrator can include or remove SOV restrictions when setting up a Base Commit BP, or a negative Change Commit (negative change order) BP.

Payment Application Tasks and Performing Multiple Actions-Bulk Action (Standard View)

The **Tasks** node of the Payment Application enables you to perform bulk action on Payment Application records, when Unifier detects multiple payments, or negative change orders.

When you select multiple Payment Application BP records (or Summary Payment Application BP records) and perform a workflow action (bulk action), then Unifier (based on the "remove SOV restrictions" selection on the Commit BP) updates all the records that you selected, and:

- If you select the **Action with Preview** option (**Tasks** node > **Actions**), then Unifier displays messages related to payment applications and negative change commits, when applicable.
- If you select the **Action without Preview** option (**Tasks** node > **Actions**), then Unifier does not display messages related to payment applications and negative change commits, when applicable.

For non-Workflow BP records, when the "Status" is updated through Bulk Edit, Unifier does not display messages related to payment applications and negative change commits.

When the BP records are progressed from email notifications (when you perform a workflow action through email notifications), Unifier does not display messages related to payment applications and negative change commits.

Payment Application BP and Multiple Payments

If the **Remove SOV restrictions** option *is selected* in the **Business Process Setup** window (**General** tab), then multiple Payment Application type BPs can be configured for a Project/Shell and multiple Payment Application BP records can be routed, at any time, for a commit.

Note: You can go to the Base Commit Setup section for setting information.

Example

First, the user creates the contract record CON-001 and sends the contact to a step that creates Schedule of Values.

Then, the user creates a Payment Application BP record PA-001 and sends the BP record to the next step for approval. At this point the BP record is in progress (in-flight).

Then, the user creates a second Payment Application BP record PA-002 and sends the BP record to the next step for approval.

Then, the user tries to create a second Payment Application BP record for the same Contract CON-001.

An Alerts icon (Alerts...) is displayed and when the user clicks the icon, information about pending payments and negative change orders is presented.

Unifier does not block the creation of the second Payment Application BP record PA-002, but informs the user that a Payment Application BP record is pending on the contact.

If the **Remove SOV restrictions** option *is deselected* in the **Business Process Setup** window (**General** tab), then only one Payment Application type BP can be configured for a Project/Shell and only one Payment Application BP record can be routed, at any time, for a commit.

After a Payment Application has reached the terminal step, if you open an in progress (in-flight) BP record, Unifier notifies you that the SOV has been refreshed.

After the system refreshes, Unifier retrieves the latest information, from the SOV. At run time, whenever you open a draft, or an in-flight, payment record and accept the SOV merge alert the data element (which has the "Do not get latest SOV values when merging" checked in uDesigner) will not get refreshed with the latest updated values from SOV.

Before SOV merge, payment grid for data element 'Unit price/gallon' which has 'Do not get latest SOV values when merging' checked.

All the fields populated from the SOV will be updated based on the latest SOV.

All formula fields, in the Payment Application Detail Form, defined using fields from SOV, will be re-evaluated.

Example

There are two Payment Applications P1 and P2. P1 has reached the terminal step. P2 is in progress (in-flight).

User has not yet accepted the task. Upon accepting the task, the system will refresh the SOV and inform user with an alert.

When the user changes to Payment Application BP, an alert icon appears on the window. Click the Alerts icon (Alerts...) to see any pending payments, and negative change orders, associated with the selected reference commit. The Alerts icon is available for both Workflow and non-Workflow BPs and might appear after a selection for the contract record is made.

User has accepted the task, and SOV has changed because of another payment. When user open this record, system will perform an SOV merge, and inform user with an alert.

If the user has left P2 open, and P1 has reached terminal status and P1 has impacted the SOV used in P2, then when the record P2 is sent to the next step, system will refresh the SOV and throw an alert to the user stating that the SOV has changed.

Payment Application BP and Negative Change Commits (Standard View)

If the **Remove SOV** restrictions option *is selected* in the **Business Process Setup** window of the Base Commit (**General** tab), then multiple Payment Application type BPs and Negative Change Commits can be configured for a Project/Shell.

At the time of creating the Payment Application record, upon selecting the reference commit, the system will check for any existing negative change orders for the selected reference commit. Unifier displays a message if there any negative change orders.

After the record has been created, subsequently, when you open Payment Application record, the system checks to see if there are any pending payments, or negative change orders. If detected, Unifier displays a message.

Payment Grid which has negative line items

When you open the Payment Application grid, the line items which will be modified because of a pending Negative Change order will have an yellow alert in the Scheduled Value cell. You can click on the cell to view the details of the Change Order. The details include the BP name, BP record number, Line Number, and the Amount fields.

Line items from negative Change orders which are in draft status will not be seen in the Payment Application grid, but if a line item has been modified or removed from an existing record which is in draft status, the line item from negative change order can be seen in the Payment Application grid.

In case of Summary Payment Application, the alert will be seen in the Summary line, if the summary line item amount is negative. Similar alert will be seen if the costed line item is negative.

The sort order in the window begins by Business Process, then by Record Number, then by Line Number, and finally by Costed Line Number.

Creating negative change orders when the Payment Application is in progress (in-flight)

Example

First, the user creates the contract record CON-001 and sends the contact to a step that creates Schedule of Values.

Then, the user creates a Payment Application BP record PA-001 and sends the BP record to the next step for approval. At this point the BP record is in progress (in-flight).

Then, the user creates a Change Order (Change Commit) BP record to modify the committed line with a line item with a negative amount (a Negative Change Order CC-001) and sends it to the next step for approval.

The creation is successful.

Creating multiple negative change orders

Note: The following is applicable to Change Orders (Change Commits) that point to the Base Commit that does not have any SOV restrictions.

Example

First, the user creates the contract record CON-001 and sends the contact to a step that creates Schedule of Values.

Then, the user creates a Change Order (Change Commit) BP record to modify the committed line with a line item with negative amount (a Negative Change Order CC-001) and sends it to the next step for approval.

Then, the user creates another Negative Change Order for the same contract record CON-001.

The creation is successful.

Enter Payment Application Line Item Information

Line items on payment applications have special functionality. Payment application line items are created automatically from the line items on the associated base commit and any change commits. The columns that appear on the grid (including formula columns) are part of the business process detail form design.

To enter line item information on a payment application

1) In the Standard tab of the payment application business process form, click **Add**. This displays all the SOV lines with the selected Base Commit BP record in the upper form.

Notes:

- Depending upon the design of the BPs, some fields may be auto-populated with data from the base commit and change commit. For a field to auto-populate, the same data element must be used on the base commit, change commit, and payment application. Line items appear from the base commit and any change commits based on the statuses of those business processes, as designed in uDesigner.
- For classic Payment Applications BP, when the upper form has a DE which is configured as "Auto-populate <sum of all lines>," the system will calculate the sum of all SOV line items. The system will not calculate the sum of all detail line items.
- 2) Enter details for the line items that must be paid. You can enter values in any editable field on the grid.

- 3) The grid is locked after the first five columns. To lock another column while viewing or editing data, you can drag the column from the unlocked part of the sheet into the locked part of the sheet. This layout will not be saved into the database.
- 4) When you have completed editing the Line Items window, click Save.
 - I. When the form is saved, lines that have payments are added to the grid.
 - 2. If a payment must be made in a subsequent step, click on **Add** again to re-invoke the SOV lines screen. All lines become visible and any lines that were previously added open up in edit mode.

A pen icon appears in the second column to indicate which rows have been modified. When a payment has been added and saved, the pen icon turns green. When the row is still being edited, the pen icon is yellow.

To **Remove** an SOV line that you added to the grid, click the trash-can button on the toolbar.

Errors

The first column of the payment applications grid is marked by an (x) icon and indicates errors within edited line items. An (x) icon appears in this column when rows have errors. To view errors in the log, click **Check Errors** or click on the (x) icon.

Payment Status

The second column of the payment applications grid is marked by a pen icon and indicates payment status. A pen icon appears in this column to indicate which rows have been modified. When a payment has been added and saved, the pen icon turns green. When the row is still being edited, the pen icon is yellow.

To undo line item changes without closing the Line Items window

In the Line Items window, click the **Cancel** button. Any line item information that you have entered or changed will be cleared, and the fields will revert back to their original values.

SOV type Payment Application and SOV line items type Individual commit line items

Note: The following applies when the "**Update Auto-populate on payment application**" option (in **Options** tab) is selected for a Change Order BP, in uDesigner.

When you create a new Payment Applications in your project (**Payment Applications** node), in the **Line Items** tab of the **Create New Payment Applications** window:

- a) The **Description** column and the **Spend Category** column are set to auto-populate from the Base Commit and receive the latest updated values from the Change Order that references this SOV line items.
- b) The Change Order then routes the record to the terminal status.
- c) The **Description** column and the **Spend Category** column are set to auto-populate from the Base Commit and receive the latest updated values from the Change Order that references this SOV line items.

When the auto-populated data elements are updated in referenced SOV line items (in the Change Order) and route to approved step, creating a new payment record elements that are set to auto-populate from Base Commit will be updated with the latest values from the Change Order. The new payment record elements will always get the values from the latest Change Order whenever these values are updated in the payment record. Upon routing the payment record to terminal status, it will further update the values in SOV line items.

Pending SOV type Payment Application, or SOV type Summary Payment Application, and SOV line items type Individual commit line items

Note: In the payment record, the values are auto-populated from the Base Commit if the "**Update Auto-populate on payment application**" option (in **Options** tab) is not selected for a Change Order BP, in uDesigner.

For a pending payment record, in the **Line Items** tab of the **Payment Applications** window:

- a) The **Description** column and the **Spend Category** column are set to auto-populate from the Base Commit and receive the latest updated values from the Change Order that references this SOV line items.
- b) The Change Order then routes the record to the terminal status.
- c) The **Description** column and the **Spend Category** column are set to auto-populate from the Base Commit and receive the latest updated values from the Change Order that references this SOV line items.

When the auto-populated data elements are updated in referenced SOV line items (in the Change Order) and route to approved step, the pending payment (after opening and accepting the task) will receive an SOV alert, if there is an SOV merge. When you click OK, the auto-populate data elements (from Base Commit) are updated with the latest Change Order in the grid, along with the latest SOV line items values.

If you open a pending payment which is in accepted state and navigate to the payment grid, then all of the existing payment lines will receive the latest values for the auto-populated data elements from the latest Change Order.

Summary Payment Applications behavior for Variable Unit Cost Lines

For the Variable Unit Cost line items, the Quantity this Period column is editable for both the summary and costed lines. You can enter quantity at the summary and push that quantity to the costed lines.

The Requested this Period amount will be calculated based on the Unit Price and Quantity this Period for each costed line. In the summary line item, the Amount this Period is populated with the sum of costed lines - unit price * Quantity this Period, and the request this period will be calculated accordingly.

In the Payment Applications for the Variable Unit Cost line items, the Amount this Period for the summary line will be calculated as sum of each costed line (uuu_unit_price * quantity this period), if "Total the cost breakdown values to line item" is in the design. The Amount this Period will be read-only for both the summary and the costed lines.

Amount this Period (uuu_spa_amt_tp)

This uuu_field DE will be calculated by the system in the summary line if you enter Qunatity this Period in the costed lines. The calculation of this field in summary line will be: uuu_spa_amt_tp = sum of each costed line (uuu_unit_price * quantity this period). In the design,the "Total the cost breakdown values to line item" must be selected. For costed lines, the uuu_spa_amt_tp DE value will always zero (0).

The same applies when you import the payment line items for Variable Unit Cost line items, using CSV or Restful services. The Amount this Period in summary line will always be the sum of each costed line (uuu_unit_price * quantity this period). For the costed line items, the uuu spa amt tp DE value will be zero (0).

The Requested this Period will be calculated based on the user-defined formula, for both the summary and the costed line items, and % Complete to Date (for the summary and the costed line items) is calculated based on the existing formula as: % complete to date = (uuu_spa_prev_amt + (uuu_spa_qty_tp * uuu_unit_price) + uuu_spa_amt_tp + uuu_spa_other_tp + uuu_pa_mat_stored) / scheduled_value.

Note: The Percent Complete to Date field is read-only for the summary Variable Unit Cost line item.

Percentage Complete to Date

In the Create New Payment application with Summary grid, you can edit the value of the Percentage Complete to Date for the variable unit cost line items, when the Apply line item value of Percentage Complete to Date to costed lines check box is selected--and can push percentage down to the costed lines).

Note: In the Create New Payment application with Summary grid, the value of the Percentage Complete to Date for the variable unit cost line items is read-only if the Apply line item value of Percentage Complete to Date to costed lines check box is selected.

In the Create New Payment application with Summary grid, based on the value of the Percentage Complete to Date for the variable unit cost line items, the value of the Quantity this Period will get calculated *for costed lines*, and the value of the Amount this Period will be calculated *for summary line*.

View Payment Application Line Item History

When payment application records in view mode, a **Line Item History** button becomes available. This provides a snapshot view of the line item grid as of the last entry.

Note: View mode refers to the non-editable version of the form. For example, for workflow BPs, this is before clicking the **Accept Task** button or after the form has gone through all the workflow steps and is complete. For non-workflow BPs, this is after editing has been completed.

To access line item history

1) Open a payment application record from the log. Be sure the record is in view mode.

- 2) Click the **Line Item History** button. The Line Items window opens, displaying the payment application line item grid, as view-only, with data entered to date.
- 3) You can optionally split the grid so that the cost codes or other columns are always in view on the left, allowing you to scroll through other columns to view data on the right.
 - a. To split the grid, click the Split button.
 - b. You can click the **Freeze** button to make the left side of the vertical bar unmovable.
 - c. To unfreeze the left side, click the **Freeze** button again. To remove the split, click the **Split** button again.
- 4) Click the **Close** button to close the window.

By default, the first 100 line items are displayed on the page. If your payment application BP has more than 100 line items, you can scroll through the other pages, or you can choose to display up to 500 line items on the same page. Displaying more than 100 line items on the page may take several seconds to load.

Export line item history

You can export the line item history of a payment application record to a CSV file.

To export payment application line item history information

- 1) Open a payment application record from the log. Be sure the record is in view mode.
- 2) Click the **Line Item History** button. The Line Items window opens.
- 3) Click the **Export** button. A confirmation window opens. If there are many line items, the operation can take more than 20 seconds.
- 4) Click **Yes** on the confirmation window. The File Download window opens.
- 5) Click **Save** and specify the file name and location to which to save a copy of the CSV (export) file.

Save payment application in draft mode

You can save a payment application record in draft mode by clicking the **Save** button from the toolbar.

When you open the draft again to send, the system will check to see if there is any modification done by other users. If the system identifies that there is modification to your payment application, you will be asked to accept new changes before proceeding.

Draft mode and SOV synchronization

If you create a payment application record and save it in Draft mode, and your SOV changes before you route the draft payment application, an error can result when you attempt to route the record. The error *Line Items must be validated before proceeding* can result if the SOV has changed while your payment application is in Draft mode.

To fix payment application BPs that are affected by changes to the SOV

1) Open the draft payment application record.

- 2) Click the **Add** button and click **Detail Line Item** to open the line item entry grid. Line items that are affected by SOV changes are indicated with check marks.
- 3) Click **OK**. The line items are validated against the SOV.

View the Schedule of Values (SOV) Sheet

The Schedule of Values (SOV) for Payment Application functionality provides a way to assemble information from the Base commits and Change commits (Commit), as well as the payment history, in an SOV sheet. You can open the SOV sheet either from the Schedule of Values (SOV) log, or from within a payment application record (the record must be in an editable mode).

When the base commit record is created and reaches a specified terminal status (for example, Approved), the SOV sheet is automatically created, and line items display as rows. As change commits are created and approved (or other specified status), they are added automatically to the SOV sheet. As payment records are created, these also will affect the SOV.

Data that is displayed on the SOV sheet will depend on the columns that have been added to the SOV structure.

The SOV displays the source information from the base commit any change commits. The source for each line can be one or more lines from one or more records.

Depending on the design of the associated business processes, the SOV may list each line entry for the base commit and all change commits as separate line items, or it may group entries with the same CBS code and display the total.

When you are working with the SOV sheets, in a Project/Shell, you can enter the item number (**Item #** field) for each of the SOV lines:

- ▶ Unifier stores the SOV sheet based on the Item # column.
- When line items roll up to the SOV sheet from the Base Commit and Change Commit BP records, then the system generates the values in the Item # field.
- ▶ The Item # for each SOV sheet starts with 000010 and this value is incremented by 10. So, if there are 2 lines coming from the Base Commit, then the values seen are: 000010 and 000020.
- ▶ Although the system generates these numbers, you can edit the numbers. This enables you to reorder the SOV lines. To edit the values, double-click on the field. Entries to this field must be Numeric. No alphanumeric fields are allowed. Similarly, no other characters such as punctuation marks, non ISO characters, -ve sign etc. are permitted. For the summary lines, you cannot enter dot "." character. Dots are reserved for costed lines.
- If you edit an existing value, for example 000030, and enter 27, then the value seen in the field will be 000027. The leading zeros are added by the system in order to align and help sort all the values in the column.
- The values entered should be in the range of 000000 to 999999.
- ▶ The subsequent lines coming from the Change Commit (CC) records (with reference to the above mentioned Base Commit (BC) record) can be seen in the SOV sheet with increments of 10.
- If you make any changes to the Item # field, click Apply to save the values in the column and to change the Sort order of the rows. The new sort order is maintained in the database and next time when you open the SOV sheet the sort order is displayed in the SOV sheet be based on the last saved view.

For Payment Applications SOV and Summary Payment Applications SOV, the structure is copied from the line item grid structure of the Payment Application BP.

When a Payment Application BP references a Base Commits of the Summary Payment Applications SOV, the line items of the Payment Application BP will reflect the line items of the Base Commits as well as any associated Change Commits.

In a Payment Application BP referring to the commits and the Summary Payment Applications SOV type, depending on the BP setup, you can:

- Include only one Payment Application record, or
- Include multiple Payment Application records

See Payment Application Business Processes (on page 203) for details.

To open the Line Item window of a Payment Application BP form, click Add. The window displays a list of line items from the Base Commits (and any Chance Commits), and the values are populated if auto-population (from Base Commits and Change Commits) has been defined.

To view the associated SOV sheet

- In the Navigator, click Cost Manager > Schedule of Values > Payment Applications. The Schedule of Values: Payment Applications log opens. The SOVs are listed by their associated base comment record numbers and descriptions (SOV Base Record and SOV Description).
- 2) Select an SOV and click **Open** (or double-click the record). The Schedule of Values sheet for the base commit associated with the payment application opens.
- 3) You can optionally split the grid so that the cost codes or other columns are always in view on the left, allowing you to scroll through other columns to view data on the right.
 - a. To split the grid, click the **Split** button.
 - b. You can click the **Freeze** button to make the left side of the vertical bar unmovable.
 - c. To unfreeze the left side, click the **Freeze** button again. To remove the split, click the **Split** button again
- 4) To view source information from the base commit and/or change commits, locate the **Scheduled Value** column.

Note: This assumes that a column has been added to the SOV that is associated with the datasource "Scheduled Value." The column name may vary. Click the link in a cell. The Cell Details window opens, displaying the source of the line item information -- the commit record(s) with a line item entry for that CBS code.

- 5) Click Scheduled Value link (the column header) to open the View Column window and review the source information (Name, Data Source, Date Format, and Display Mode).
- 6) Click the **Close** button to close the window.

To view the associated SOV sheet from within the payment application BP

- 1) In the Navigator, click **Logs > Payment Applications**.
- 2) Select a Payment Application record and click **Open** (or double-click the record). The Payment Application form opens.

3) Click the **SOV** button from the record toolbar to open the Schedule of Values window for the Application BP record that you selected.

Note: Ensure that the form is not in a view-only mode.

4) Click the **Close** button to close the window.

Importing, Exporting, and Integration

You can use CSV import to create new Payment Application Business Processes, or to add SOV line items to an existing Business Process.

You can export payment application CSV templates at the log level (for header and line item templates) and at the record level (for line item templates). You can then modify the templates and import them to create new records (at the log level) or to add line items to an existing record (at the record level).

An integration interface must be defined to support CSV import. If you find that you cannot perform the file import, see your Administrator. Also, new records can be created and line items added using integration through Web Services. Integration through Web Services must be coordinated with an Oracle Primavera representative.

Multiple Payment Applications and negative change orders (Change Commits) and CSV import and Web Services

Previously, Unifier only allowed one Payment Applications, or negative Change Commit record, per SOV. You can now create multiple Payment Applications, or negative Change Commit records, against the SOV in Unifier. You can also create these types of records through CSV import and Web Services.

Note: You can create only one record for each import.

Import new payment application records

You can export a CSV template that includes the upper form and detail form fields as columns. These fields include the header fields from the upper form and the line item SOV fields from the detail form, including the detail line item fields defined in Integration. The Reference Number field is exported as a column for payment application business processes that use individual line items. The Reference number field is not exported as a column for payment application business processes that use Group by CBS.

You can then modify the exported CSV template and import it to create the upper form header and the detail form line items for the new business process.

To export a copy of the payment application business process template

- 1) Navigate to the payment application business process log.
- Choose File > Export Template > CSV.
- 3) Click **Open** to open the file in Excel, or click **Save** to save the file to your local drive. The template exports with no data in it, and contains only the column headings.

To modify the exported payment application business process template

- 1) Open the exported CSV file in Microsoft Excel.
- 2) Enter the business process information into the spreadsheet. Each upper form header record must begin with an "H". Each line item must begin with a "D". For multiple tabs, you must enter appropriate tab name in the Tab Name column.
- 3) Enter data into the required fields, as well as non-required fields as needed.

Notes:

- Data for formula-based columns is ignored.
- If auto-populated data is provided, the system will import the value, and will not override the imported values except for fields auto-populated by Base Commit, Change Commit, or Unit Cost Control.
- Any line items with the Amount equal to zero will not be imported.
- SOV locking is enforced
- Use to add new business process records only; not to modify existing business processes.
- You might find that you have to change some of the cells in the CSV file to Text type in order for data to import correctly. For example, if you have a CBS code of 1-1, Microsoft Excel can interpret this entry as a month-day combination and reformat it to Jan-1. In this case, your data import will fail because this data is now an invalid CBS code.
- If the Integration design for the business process includes a Description field for line items, and the associated SOV sheet also contains a Description field, the description from the SOV sheet is imported, and the line item description is not imported.

To import the payment application business process template

- 1) Navigate to the payment application business process log.
- 2) Choose File > Import.
- 3) Browse to select the file to import.
- 4) Click **OK**. The new business processes are listed in the log.

 If there are any import errors, you can open the CSV file to view and correct the error. No records are imported if any rows contain an import error.

Import payment application line items into a BP

You can export a template that includes the detail form fields as columns for a specific business process. These fields include the SOV data and detail line item fields defined in Integration. The Reference Number field is exported as a column for payment application business processes that use individual line items. The Reference number field is not exported as a column for payment application business processes that use Group by CBS. If multiple tabs are designed for the line items in the business process, the tab columns are included in the export. All of the data on the Standard tab is exported; no data on the other tabs is exported.

You can then modify the exported template and import it to create new line items for the business process. The exported template contains SOV record information.

Notes:

The Payment Application of Summary Payment Application SOV type supports Record, Line Item, and Cost Allocation creation through CSV integration.

If the payment line items have already been added in the **Standard** tab, then importing of the line items through CSV is not permitted.

To export the payment application line item template

If multiple tabs are designed for the line items in the business process, only the data in the Standard tab is exported. For the other tabs, the tab name is included in the exported data for reference, but no data in these tabs is exported.

- 1) Navigate to the payment application business process log.
- 2) Click **New** to create a new business process.
- 3) Select a **Reference Base Commit** for the business process. If you do not select a Reference Base Commit, the exported template will not contain data. Data from all columns in the Reference Base Commit is exported.
- 4) Choose File > Export Line Item Template.
- 5) Click **Open** to open the file in Microsoft Excel, or click **Save** to save the file to your local drive. The template exports with SOV line item data in it, based on the selected Reference Base Commit.

To modify the payment application line item template

- 1) Open the exported CSV file in Microsoft Excel. The SOV line items are listed.
- 2) Enter the line item information into the spreadsheet. Each line must begin with a "D". For multiple tabs, you must enter appropriate tab name in the Tab Name column.
- 3) Enter data into the required fields, as well as non-required fields as needed.

Notes:

- Data for formula-based columns is ignored.
- If auto-populated data is provided, the system will import the value, and will not
- override the imported values except for fields auto-populated by Base Commit, Change Commit, or Unit Cost Control.
- Any line items with the Amount equal to zero will not be imported.
- SOV locking is enforced
- Any line items that you import will replace the existing line items in the business process.
- Use to add new lines only, not to modify existing lines
- You might find that you have to change some of the cells in the CSV file to Text type in order for data to import correctly. For example, if

you have a CBS code of 1-1, Microsoft Excel can interpret this entry as a month-day combination and reformat it to Jan-1. In this case, your data import will fail because this data is now an invalid CBS code.

• If the Integration design for the business process includes a Description field for line items, and the associated SOV sheet also contains a Description field, the description from the SOV sheet is imported, and the line item description is not imported.

To import the payment application line item template

Note: Line items you import will replace any existing line items.

- 1) Navigate to the Payment Application business process log.
- 2) Select a business process and click Open.
- 3) Click the Import button. The imported line items replace any existing line items. If there are any import errors, you can open the CSV file to view and correct the error. No line items are imported if any row contains an import error.

You can add line items with 0 (zero) value in the CSV template. In such scenario, after you import your CSV template to our BP record, the BP record will have your added line items with 0 (zero) value.

Example

You import a CSV template that has the following three line items to your BP record:

- 1-Amount = 1000
- 2-Amount = 0
- 3-Amount = 0

Once the import is complete, all three line items will be added to your BP record.

Payment Application Grid Column Total

The following information is related to BP run-time for the *Payment Applications and Summary Payments Applications Business Processes* (Standard tab), only.

For Payment Applications and Summary Payments Applications Business Processes, based on the options set for the Total property for the Data Elements (DEs) in uDesigner, when you add or modify the grid, the Total row displayed shows the following values:

- Blank
 - Unifier displays the value as empty in the Total Column (that particular DE column).
- Sum of All Rows
 - Unifier displays the value as "Sum of All Rows" in the Total Column.
- Use Formula Definition
- Unifier displays the value as "Formula Defined" in the Total Column. In other words, Unifier calculates the formula by using the values from the Total row for the respective DEs.

If the formula was reset to Manual, then Unifier resets the Total to "Sum of All Rows."

Unifier calculated the Total, for DEs with predefined formula, as follows:

- %Complete to Date (uuu_spa_per_comp)
 - Custom formula
 Based on the property selected in uDesigner.
 - System-defined formula
 Based on the property selected in uDesigner.
- Amount This period (uuu_spa_amt_tp)

Based on the property selected in uDesigner. (Either Blank or Sum of All Rows)

General Spends Business Processes

General spends business processes enable you to invoice at the CBS or breakdown level, supporting multiple invoices per SOV. These business processes do not calculate retainage or stored materials. General spends business processes are designed in uDesigner. For more information, refer to the *Unifier uDesigner User Guide* or Unifier Help.

You can use CSV import to create new general spends business processes or to add SOV line items to existing business processes. You can export general spends business process templates at the log level (for header and line item templates, with no data exported) and at the record level (for line item templates with SOV line item data exported). You can modify the templates and import them to create new records (at the log level) or to add line items to an existing record (at the record level).

An Integration interface must be defined to support CSV import. If you find that you cannot perform the file import, see your Administrator.

Also, new records can be created and line items added using Integration through Web Services. Integration through Web Services must be coordinated with an Oracle Primavera representative.

Import new general spends records

You can export a CSV template that includes the upper form and detail form fields as columns. These fields include the header fields from the upper form and the line item SOV fields from the detail form, including the detail line item fields defined in Integration. These fields are always exported in the template as well:

- Reference Number
- Description
- CBS Code
- Breakdown

You can then modify the exported template and import it to create a the upper form header information and the detail form line items for the new business process.

To export a copy of the general spends business process template

- 1) Navigate to the General Spends business process log.
- 2) Choose File > Export Template > CSV.

3) Click **Open** to open the file in Excel, or click **Save** to save the file to your local drive. The template exports with no data in it, and contains only the column headings.

To modify the exported general spends business process template

- 1) Open the CSV file in Microsoft Excel.
- 2) Enter the business process information into the spreadsheet. Each upper form header record must begin with an "H". Each line item must begin with a "D". Add a new "D" line for each line item in the business process. For multiple tabs, you must enter appropriate tab name in the Tab Name column.
- 3) Ensure that you enter the required values for the Amount, CBS Code, and Short Description columns.

Notes:

- Data for formula-based columns is ignored.
- If auto-populated data is provided, the system will import the value, and will not override the imported values except for fields auto-populated by Base Commit, Change Commit, or Unit Cost Control.
- Any line items with the Amount equal to zero will not be imported.
- Use to add new business process records only, not to modify existing business processes.
- You might find that you have to change some of the cells in the CSV file to Text type in order for data to import correctly. For example, if you have a CBS code of 1-1, Microsoft Excel can interpret this entry as a month-day combination and reformat it to Jan-1. In this case, your data import will fail because this data is now an invalid CBS code.
- If the Integration design for the business process includes a Description field for line items, and the associated SOV sheet also contains a Description field, the description from the SOV sheet is imported, and the line item description is not imported.

To import the general spends business process template

- 1) Navigate to the General Spends business process log.
- 2) Choose File > Import.
- 3) Browse to select the file to import.
- 4) Click **OK**. If the import is successful, you receive the message Record Creation is in Progress. When the record is created, it is listed in the log.
 - If there are any import errors, you can open the CSV file to view and correct the errors. No records are imported if any row in the CSV file contains an import error.

Import general spends line items into a business process

You can export a template that includes the detail form fields as columns for a specific business process. These fields include the detail line item columns defined in Integration. These fields are always exported in the template as well:

- Reference Number
- Description
- CBS Code
- Breakdown

You can then modify the amounts on the exported template and import it to create new line items for the business process. The exported template contains SOV record information.

To export the general spends line item template

If multiple tabs are designed for the line items in the business process, only the data in the Standard tab is exported. For the other tabs, the tab name is included in the exported data for reference, but no data in these tabs is exported. Data from all columns in the Reference Base Commit is exported.

- 1) Navigate to the General Spends business process log.
- 2) Click **New** to create a new business process.
- 3) Select a Reference Base Commit for the business process. If you do not select a Reference Base Commit, the exported template will not contain data.
- 4) Choose File > Export Line Item Template.
- 5) Click **Open** to open the file in Microsoft Excel, or click Save to save the file to your local drive. The template exports with SOV data in it, based on the selected Reference Base Commit. No business process line item data is exported.

To modify the general spends line item template

- 1) Open the CSV file in Microsoft Excel. The SOV line item data is shown.
- 2) Enter the line item information into the spreadsheet. Each line item must begin with a "D". For multiple tabs, you must enter appropriate tab name in the Tab Name column.
- 3) Enter required values for the Amount, CBS Code, and Short Description columns.

Notes:

- Data for formula-based columns is ignored.
- If auto-populated data is provided, the system will import the value, and will not override the imported values except for fields auto-populated by Base Commit, Change Commit, or Unit Cost Control.
- Any line items with the Amount equal to zero will not be imported.
- Use the import to add new line items only, not to modify existing line items.
- Any line items you import will be added after any existing line items.
- You might find that you have to change some of the cells in the CSV

file to Text type in order for data to import correctly. For example, if you have a CBS code of 1-1, Microsoft Excel can interpret this entry as a month-day combination and reformat it to Jan-1. In this case, your data import will fail because this data is now an invalid CBS code.

• If the Integration design for the business process includes a Description field for line items, and the associated SOV sheet also contains a Description field, the description from the SOV sheet is imported, and the line item description is not imported.

To import the general spends line item template

- 1) Navigate to the General Spends business process log.
- 2) Select a business process and click **Open**.
- 3) Click the **Import** button. The line items in the imported file are listed after any existing line items.

If there are any import errors, you can open the CSV file to view and correct the errors. No line items are imported if any row in the CSV file contains an import error.

Lump Sum and Unit Cost

The Cost Line Item Type (uuu_cost_li_type) on the detail form is populated with Lump Sum or Unit Cost based on the selection of the option that you have made at the time of adding line items. When you click Add and select either Lump Sum, or Unit Cost, Line Items window opens. The Line Items window has two section: Upper form (Detail form that follows the uDesigner Detail form design) and lower grid (fixed by system). The following explains all the fields in detail:

Line Item window toolbar

- Save
- Spelling
- Attach
- Upload Images
- Delete
- Line Item
- Close window

Line Item window fields

Add > Lump Sum (No added cost) - Upper form (General)

- Short Description
- Cost Line Item Type
- Amount
- Role Effective Date
- Description
- Spend Category
- Work Package
- Item Quantity

- Unit of Measure
- Item Unit Cost
- Costed Amount

Add > **Lump Sum** (Added cost) - Upper form (General)

- Short Description
- Cost Line Item Type
- Amount
- Description
- Costed Quantity
- Not Costed Quantity
- Spend Category
- Work Package
- Item Quantity
- Unit of Measure
- Item Unit Cost
- Costed Amount
- Not Costed Amount

Add > Unit Cost (No added cost) - Upper form (General)

- Short Description
- Cost Line Item Type
- Amount
- Role Effective Date
- Description
- Costed Quantity
- Not Costed Quantity
- Spend Category
- Work Package
- Item Quantity
- Unit of Measure
- Item Unit Cost
- Costed Amount
- Not Costed Amount

Add > Unit Cost (Added cost) - Upper form (General)

- Short Description
- Cost Line Item Type
- Amount
- ▶ Role Effective Date
- Description
- Costed Quantity
- Not Costed Quantity

- Spend Category
- Work Package
- Item Quantity
- Unit of Measure
- ▶ Item Unit Cost
- Costed Amount
- Not Costed Amount

Toolbar - Upper form (lower block)

Add Cost

This option allows you to add cost distribution lines to the grid, within a line item. You can add more than one cost lines by selecting multiple items from the CBS Picker window (Select CBS Code). Selecting more than one CBS/CBS code results in added lines to the grid and the Cost Code/Code Name fields are populated accordingly. You can edit the CBS/CBS code by double-clicking the cell. The Add Cost option is available when the Allow Cost Breakdown is checked in uDesigner. Add Cost will be disabled when the record reaches terminal status.

Remove Cost

This option allows you to remove cost distribution lines from the grid, within a line item. You can select multiple lines and remove them collectively. The Remove Cost option is available when the Allow Cost Breakdown is checked in uDesigner. Remove Cost will be disabled when the record reaches terminal status.

Note: When you remove a line item from the grid, it will impact the calculations in the General section. If the line item is coming from an SOV sheet, then deletion is not permitted on those lines.

Copy Cost

This option allows you to select/copy one costed line item and create a new costed line item using the selected/copied costed line item. You cannot select more than one costed line item for copying. The Copy Cost option is available when the Allow Cost Breakdown is checked in uDesigner. Copy Cost will be disabled when the record reaches terminal status.

Add Remaining

- When you select this option, the CBS Picker window (Select CBS Code) opens and allows you to select multiple codes. You can allocate the remaining cost, or quantity, to multiple codes.
- If you select Lump Sum as the cost line item type, you can use the Add Remaining option for adding Not Costed Amount line, and the Amount field is auto-populated based on Not Costed Amount. If the Costed Amount (total amount from all costed lines), on the General section, is equal to the Line Item Amount, then the Add Remaining option will be disabled.
- If you select Unit Cost as the cost line item type, you can use the Add Remaining option for adding Not Costed Quantity line, and the Quantity field is auto-populated based on Not Costed Quantity. If the Costed Quantity (total quantity from all costed lines), on the General section, is equal to the Line Item Quantity, then the Add Remaining option will be disabled.

The Add Remaining option is available when the Allow Cost Breakdown is checked in uDesigner. Add Remaining will be disabled when the record reaches terminal status.

Fields - Upper form (lower block)

You can make change within the editable or required cells of the following columns:

Cost Code

You can click the cell and select a Cost Code from a Cost Sheet of the same Shell.

Code Name

This is a read-only field. The value is auto-populated by the system according to the Cost Code selection.

Short Description

The value is auto-populated from the line item Short Description field. You can modify the default value.

Quantity

If the type of the line item is Unit Cost, you can edit the value of this field and enter the costed quantity. If the type of the line item is Lump Sum, this field will not display.

Unit Cost

If the type of the line item is Unit Cost, the value of this field is read-only. The value is auto-populated according to the unit price value that you entered in the upper form (General). If no value was entered in the upper form (General), the default value of this field will be zero. If the type of the line item is Lump Sum, this field will not display.

Amount

If the type of the line item is Unit Cost, this field is calculated by the system (Quantity * Unit Cost). If the type of the line item is Lump Sum, you can edit the value of this field and enter the costed amount.

Change Commits BP of Summary Payment Applications SOV type

The Change Commits BP of Summary Payment Applications SOV type, similar to the Base Commits, you use Lump Sum and Unit Cost items to add new line items. In addition, you can use the Modify Committed Line Item option (Add) to modify a reference commit line item that exists in the Reference Base Commits record. When you select the Modify Committed Line Item option (Add), the Commit Line Item Picker window opens, and the line items existing in the SOV sheet.

Commit Line Item Picker window

You can select any summary line item from the Commit Line Item picker

The following explains the fields in the Commit Line Item Picker window:

Ref

This column contains the reference number of the Change Commits Detail Line Item. The summary row displays the reference number of the Detail Line Item and the child row displays the reference number of the Cost Distribution Line Item (costed line item) from the parent line. For example, 1.1 is the costed line item for line item 1.

Cost Code

This column contains the CBS Code associated with each distribution line. For summary rows (parent), the value for this column is blank.

Code Name

This column contains the CBS Code associated with the code. For summary rows, the value for this column is blank.

Cost Type

This column contains the Cost Line Item type for the Summary rows. For child rows, the value for this column is blank.

Description

This column contains the contents of the Short Description (short_desc) field in the Detail Line item. For summary rows (parent), this column contains the Short Description of the Line Item. For distribution rows, this column shows the Short Description of each costed line item, and based on the user input, the value might, or might not be, the same as the Short Description of the Line Item.

Note: The names of the columns are based on the Summary Payment Applications SOV sheet structure.

Cost Distribution Grid log columns

Cost Code

This field is both editable and required. You can click the cell and select a Cost Code from a Cost Sheet of the same Shell. Similar to the Line Items, you can enter a Cost Code and the same Cost Code will be available to select. You cannot change the Cost Code for exisiting Line Items coming from SOV.

Code Name

This field is read-only and the value is auto-populated by the system according to the Cost Code that you have selected

Short Description

This field is editable and the default value is auto-populated according to the Short Description (short_dec) field.

Current Quantity

This field is read-only and the value is auto-populated by the system if you have selected Modify Reference Commit option, and the Cost Line Item type (uuu_cost_li_type) of the selected Commit Line Item is Unit Cost.

Note: If the conditions are not met, then the system auto-populates the value as "Quantity," from the source commit distribution line item.

Current Scheduled Value

This field is read-only and the value is auto-populated by the system (regardless of the Cost Line Item type (uuu_cost_li_type). The value of this field can be updated when modifying an existing line is from an SOV sheet.

Change Quantity

This field is read-only if the Cost Line Item type (uuu_cost_li_type) of the selected Commit Line Item is Lump Sum. If the Cost Line Item type (uuu_cost_li_type) of the selected Commit Line Item is Unit Cost, then you can edit this field and enter the costed quantity.

Change Amount

If the Cost Line Item type (uuu_cost_li_type) of the selected Commit Line Item is Lump Sum, then you can edit this field and enter the costed amount. If the Cost Line Item type (uuu_cost_li_type) of the selected Commit Line Item is Unit Cost, then the value of this field is calculated by the system as: Change Quantity * Unit Cost.

New Schedule Value

This is a read-only field and the value is auto-populated by the system when modifying an existing line is from an SOV sheet. The value of this field is calculated by the system as: Current Scheduled Value + Change Amount.

CSV Integration

You can use a Comma Separated Values (CSV) file to save Cost Allocation data for Base Commit and Change Commit of Summary Payment Application SOV type.

The Payment Application of Summary Payment Application SOV type supports Record, Line Item, and Cost Allocation creation through CSV integration.

If the payment line items have already been added in the **Standard** tab, then importing of the line items through CSV is not permitted.

The "CA" (Cost Allocation) row, in the CSV file, includes the following information about Cost Allocation.

- Cost Code
- Short Description
- Quantity
- Amount

Note: Ensure that all Costed Line Item details are entered in the "CA" row.

Multiple Cost Allocation Line Items can be added to the CSV file by way of multiple CA rows.

If your CSV template contains Cost Allocation details, but the design does not permit entering the Cost breakdown information (i.e., the option of Allow Cost Breakdown is unchecked), then importing the CSV file will fail and you will receive an error message.

Creating Lump Sum and entering Unit Cost details

The "D" row, in the CSV file, includes the information about Summary Line Item. If the Cost Line Item type is Unit Cost type, then you must enter the Unit Cost in the D row.

Based on the Cost Line Item type specified in the "D" row, the system will check for the presence of required fields for the specified Cost Line Item type.

Change Commit: Adding Line Items to modify committed lines

The CSV template contains a "Reference" field that you can use for adding lines that have already been committed from a reference commit. The system uses the value in the "Reference" field to select a specific row in the committed lines (SOV).

Note: The availability of the "Reference" field depends on the design set in uDesigner. If this field is not present in the Detail Form integration interface, then modification of committed lines cannot take place.

The Costed Line Item of the Summary Line Item that needs to be updated will be identified by the value in the "Reference" field and the Cost Code. The "Reference" column label is the label set for "sovlinum" and will appear after the CA column.

After the record creation, all the Costed Line Items belonging to the selected Line Item (Summary Line Item and child Line Item) will be added to the record.

Payment Application

For Payment Application of Summary Payment Application (SPA) SOV type, the "CA" row will have the columns similar to the details row.

Unit Cost

The following additional informational texts are displayed in the exported CSV template:

- Cost Code
- Short Description
- Quantity
- Unit Cost
- Amount

Enter the unit cost value either at "D" or "CA" row but not in both rows. Variable

You can enter the uniti cost value either in the "D" row or in the "CA" row but not both. You can create the variable unit cost lines by entering the unit cost in the "CA" row.

Importing the Lump Sum or Unit Cost line items remains as is. The Unit Cost, in the "CA" row is ignored even if the Unit Cost column is seen in the "CA" row, and the cost line item type selected is Lump Sum or Unit Cost.

When importing the line items for Lump Sum and Fixed Unit Cost line items, if the "CA" row has values (based on the cost line item type mentioned in "D" row) Unifier will check the presence of teh required fields.

You can create both the Base Commit and the Change Commit records with the variable unit cost line items. The "CA" row is populated with the variable rates for the Unit Cost column.

In the "D" row (Summary), if the uuu_li_cost_type value is entered as "Variable Unit Cost," and you enter the unit cost for the "CA" rows, then the variable unit cost line items will be created with uuu_li_cost_type, as the "Unit Cost."

If you enter the unit cost value and select cost line item type as "Variable Unit Cost" at summary row "D," you will see the message: Unit Cost is not allowed on summary line for variable unit cost lines.

If the design does not permit cost breakdown (Allow Cost Breakdown is unchecked), and if the CSV Template has cost allocation details, then you will see the message: Business Process design does not allow cost allocation.

Change Commit Business Processes

Change commit business processes enable you to change the value of a base commit and to also update the SOV created by the contract. This business process is also known as a change order. Change commit business processes are designed in uDesigner. For more information, refer to the *Unifier uDesigner User Guide*.

You can use CSV import to create new change commit business processes or to add SOV line items for an existing business process. You can export change commit business process templates at the log level (for header and line item templates with no data exported) and at the record level (for line item templates with SOV data exported). You can then modify the templates and import them to create new records (at the log level) or to add line items to an existing record (at the record level).

An **Integration** interface must be defined to support CSV import. If you find that you cannot import the file see your Administrator.

Also, new records can be created and line items added using Integration through Web Services. Integration through Web Services must be coordinated with Primavera Unifier Consulting Services.

Import new change commit records

You can export a CSV template that includes the upper form and detail form fields as columns. These fields include the header fields from the upper form and the line item SOV fields from the detail form, including the detail line item fields defined in Integration.

You can modify the exported CSV template and import it to create a the upper form header information and the detail line items for the new business process.

To export a copy of the change commit business process template

- 1) Navigate to the change commit business process log.
- Choose File > Export Template > CSV.
- 3) Click **Open** to open the file in Excel, click **Save** to save the file to your local drive. The template exports with no data in it, and contains only the column headings.

To modify the exported change commit business process template

- 1) Open the exported CSV file in Microsoft Excel.
- 2) Enter the business process information into the spreadsheet. Each upper form header record must begin with an "H". Each line item must begin with a "D". For multiple tabs, you must enter appropriate tab name in the Tab Name column.
- 3) Enter data into the required fields, as well as non-required fields as needed.

Notes:

- Data for formula-based columns is ignored.
- If auto-populated data is provided, the system will import the value, and will not override the imported values except for fields auto-populated by Base Commit, Change Commit, or Unit Cost Control.
- Any line items with the Amount equal to zero will not be imported.
- Use to add new business process records only; not to modify existing business processes.
- All data created through the CSV import is rolled up to the cost sheet
- You might find that you have to change some of the cells in the CSV file to Text type in order for data to import correctly. For example, if you have a CBS code of 1-1, Microsoft Excel can interpret this entry as a month-day combination and reformat it to Jan-1. In this case, your data import will fail because this data is now an invalid CBS code.

To import the change commit business process template

- 1) Navigate to the change commit business process log.
- 2) Choose File > Import.
- 3) Browse to select the file to import.
- 4) Click **OK**. The new business processes are listed in the log. If there are any import errors, you can open the CSV file to view and correct the error. No records are imported if any row contains an import error.

Import change commit line items into a BP

You can export a template that includes the detail form fields as columns for a specific business process. These fields include the detail form line item fields defined in Integration.

You can then modify the exported template and import it to create new line items for the business process. The exported template contains SOV record information.

To export the change commit line item template

If multiple tabs are designed for the line items in the business process, only the data in the Standard tab is exported. For the other tabs, the tab name is included in the exported data for reference, but no data in these tabs is exported. Data from all columns in the Reference Base Commit is exported.

- 1) Navigate to the change commit business process log.
- 2) Click **New** to create a new business process.
- 3) Select a **Reference Base Commit** for the business process.
- 4) Choose File > Export Line Item Template.

5) Click **Open** to open the file in Microsoft Excel, or click **Save** to save the file to your local drive. The template exports with SOV data in it, based on the selected Reference Base Commit. No business process line item data is exported.

To modify the change commit line item template

- 1) Open the exported CSV file in Microsoft Excel. The SOV line items are listed.
- 2) Enter the line item information into the spreadsheet. Each line must begin with a "D". For multiple tabs, you must enter appropriate tab name in the Tab Name column.
- 3) Enter data into the required fields, as well as non-required fields as needed.

Notes:

- Data for formula-based columns is ignored.
- If auto-populated data is provided, the system will import the value, and will not override the imported values except for fields auto-populated by Base Commit, Change Commit, or Unit Cost Control.
- Any line items with the Amount equal to zero will not be imported.
- Ensure that you are importing the records you want to import. Any line items that you import will be added after any existing line items.
- Use to add new lines only, not to modify existing lines
- All data created through the CSV import is rolled up to the cost sheet
- You might find that you have to change some of the cells in the CSV file to Text type in order for data to import correctly. For example, if you have a CBS code of 1-1, Microsoft Excel can interpret this entry as a month-day combination and reformat it to Jan-1. In this case, your data import will fail because this data is now an invalid CBS code.

To import the change commit line item template

- 1) Navigate to the change commit business process log.
- 2) Select a business process and click **Open**.
- 3) Click the **Import** button. The line items in the imported file are listed after any existing line items.

If there are any import errors, you can open the CSV file to view and correct the error. No line items are imported if any row contains an import error.

SOV Summary Payment Applications Sheets and Business Processes

The Summary Payment Applications Schedule of Values (Summary Payment Applications SOV) allows users to allocate cost to line items based on the line item type (Lump Sum or Unit Cost). Use the Summary Payment Applications SOV type in association with *Commit* and *Spends* Business Processes (BPs) that are designed for Summary Payment Applications SOV (SPA SOV) type.

For a given Project/Shell, there can be multiple Payment Application Business Processes of Summary Payment Applications SOV Type.

For *Base Commits* Business Processes (BPs) with SOV type of "Summary Payment Applications," a special behavior line item has been provided to allow you to add further cost distribution details to the line items.

Note: Cost allocation/distribution can be done only for line items that are in the Standard tab of the *Base Commits* and *Change Commits* BPs of SPA SOV type.

The Standard detail tab of the properties window contains two options:

- Lump Sum
- Cost Unit

Click **Add** and select the appropriate option. For more information, see the topic "Cost Distribution Grid log columns," below.

The **Summary Payment Applications** sub-node will be available under the **Schedule of Values** node only if a *Base Commits* or *Change Commits* of SOV type Summary Payment Applications is deployed in uDesigner.

The Grid functionality is *not supported* for the *Base Commits* BP with SOV type of "Summary Payment Applications."

When a *Base Commits* BP with SOV type of "Summary Payment Applications" is configured to auto-populate Data Elements on a Payment Application with values from the *Base Commits*, the runtime auto-populate occurs for the:

- Summary lines
- Costed lines

The Audit log, at the record level, captures the Line Item as well as the Costed Line Item changes (taking place through Web Services) for both *Base Commits* and *Change Commits* BPs with SOV type of "Summary Payment Applications." In this case the Event field of the Audit Log for the BP displays "Line Items: Costed Line Item." In other words, any updates that are made to the Costed Line Items, through Update calls, will have the Event as "Costed Line Item" for Costed Line Item changes.

Grid functionality is not supported for *Change Commits* BPs with SOV type of "Summary Payment Applications."

Summary Payment Applications SOV sheet is created when the *Base Commits* BP reaches the terminal step as set in uDesigner.

Note: If a BP has been set up in uDesigner to automatically create a Summary Payment Applications SOV sheet upon the end step, the following procedures are not applicable.

Adding Values to a Summary Payment Applications SOV Sheet

To create a Summary Payment Applications SOV sheet, manually, begin by allocating cost to line items based on the line item type (Lump Sum or Unit Cost).

To allocate cost to line items based on the line item type (Lump Sum or Unit Cost), follow these steps.

- Open the Project/Shell, switch to User mode, and click Cost Manager > Schedule of Values in the left Navigator.
- 2) Click to expand the **Summary Payment Applications** node.
- 3) Select a Base Commit BP (SOV Base Record) that you want to allocate cost to.
- 4) In the left-hand Navigator pane, go to **Logs** node and click to expand.
- 5) Select the Base Commit BP that you want to allocate and click to open the log window.
- 6) Click to select a record and from the toolbar click **Open** to open the Base Commit BP form. The Base Commit BP must be Approved before you can allocate.
- 7) Click Edit from the toolbar and change the Status to **Approved**.
- 8) Add cost by clicking the Add button, located at the lower left-hand corner of the window, and selecting your cost option (**Lump Sum** or **Unit Cost**).
- 9) Ensure that the Line Item fields have correct values (Add Cost, Remove Cost, etc.) and when finished click **Close Window**.
- 10) Click Finish Editing from the toolbar and wait for the process to complete.
- 11) Go to the Base Commit BP under the Summary Payment Applications node.
- 12) Find the SOV Base Record that you have added, select the record, and click **Open**.
- 13) Inspect the fields to ensure that the record has been added.

Note: Some of the column headings are links. If you click on these types of column headings, you can view more details about the column.

14) When finished, click Close Window.

Summary Payment Applications SOV Sheet window

Use the toolbar to expand, collapse, find, split the screen, and export records.

Note: You can use the menu bar options as an alternative and perform the same operations.

Expand

Allows you to view the Summary and the associated child rows.

Collapse

Allows you to view only the Summary rows. This will be the default view.

Find

Allows you to search the Summary Payment Applications SOV sheet for specific line items. Find will be based on the columns and will have fields of Column, Value, and Search.

Split

Allows you to split the sheet into two sections.

Export

Allows you to export the entire summary sheet along with the costed lines (the line item summary and the associated costed line items). The generated CSV is for information purpose only.

Summary Payment Applications SOV sheet structure (columns)

The columns in the Summary Payment Applications SOV sheet window are based on the SOV structure. The following is a list of the default columns:

- Ref.
- Cost Code
- Code Name
- Cost Line Item Type
- Description

To modify the columns, click **File > Properties**, to open the Properties window, and then click the **Options** tab.

Note: The CBS Code and CBS Item fields are read-only and the values are based on the Cost Sheet.

The rows display the summary lines and the associated child rows, within the summary lines.

The grid displays the summary rows (Detail line item) with cost distributed rows, and the child cost rows within a Detail line item appears under the row and indented. All the fields are read-only and the currency is displayed on the right upper-corner of the grid.

The grid also has a Total field, which appears at the bottom of the sheet, that displays the sum of all the lines.

Grid Support in Base Commit and Change Commit

You can enter line items using either a line-item entry form, or the Grid feature. For the Base Commit and Change Commit, you can use the Grid feature to enter line items directly into the item logs.

Note: The Grid feature is best used for short line items.

Grid Support for Base Commit

The toolbar for the Base Commit and Change Commit item logs has the following options:

- Save
- Attach
- Linked Records
- Expand
- Collapse

- Split
- Find
- Close Window

Additional Grid Toolbar Options

Upon selecting the Line Items tab of a Business Process record, the Form View is displayed by default. In Form View, the view options are displayed in the toolbar alongside options like Refresh, Print, Search, and Find on Page.

The Line Item list, along with line item Details, Attachments, and Linked Records, is displayed in the right-hand pane.

You can switch to Grid View by selecting the Grid View option in the toolbar. In Grid view, the view options are displayed in the toolbar alongside Refresh, Print, Find on Page, and Expand/Collapse. When a row or cell in the grid is edited, additional toolbar options are available, including: Add, Cancel, Error Check, Save, Print, and Find on Page.

Note: In the Grid view of Line Item tabs, the additional options are applicable to Pending records. Only the Refresh, Print, Find on Page, and Expand/Collapse options are applicable to Approved records and Terminated records.

Other Elements of Line Items and the Grid

The options of Attach and Linked Records are available for Line Items, only. If you attempt to add attachments or linked records to a Costed line, an error message is displayed. If a Costed Line Item (Cost allocated Line Item which belongs to a Summary Line Item) is selected, then these options are not available.

Before adding attachments or linked records to a line item, you must save the line item.

If a Costed Line Item and a Summary Line Item are selected, then you can upload the attachments, or link records, to the Summary Line Item.

If multiple Summary Line Items are selected, and you click Attach, or Linked Records, the system notifies you then an alert will be seen informing user that only one record needs to be selected (this is existing elsewhere in the grid).

The search parameters, in the Find option, are based on the design of the Line Item list, prepared in uDesigner.

Note: The search parameters are not for the Costed Line Items.

Any time you run a search, the Line Item that matches the search parameter is found. In addition to the parent Line Item, the Costed Line Items belonging to that Line Item will be found.

The Grid rows can be expanded.

The Grid columns contain the Cost Allocation columns, and the fields designed in the Detail Form, in uDesigner.

The sorting order is based on the order set in uDesigner. Line items are sorted first, followed by Costed lines.

You can use the Split option to split the view into 2 sections.

By default, the order of the following columns will be fixed:

- Row
- Line No.
- Attachment
- Linked Record
- Cost Line Item Type
- Cost Code
- Cost Name
- Short description
- Item Quantity
- Item Unit Cost
- Amount

Subsequent columns appear in the order that was set in the Detail Form, during the design.

Note: The system uses the Row number to display an error messages.

The column names are based on the Data Element (DE) labels specified in the Data Structure setup. Cost Code and Cost Name columns have fixed labels and cannot be changed.

The first column (Gear menu) provides the following options:

- Insert Line Item
- Insert Multiple Line Items
- Insert Costed Line Items
- Add Remaining
- Copy
- Paste
- Remove
 - In the Remove gear menu, the following message is displayed when the action is triggered: "Are you sure you want to remove the selected Line Items and all the associated Costed Line Items?

Effect of uDesigner on Gear Menus

The options on the corresponding uDesigner Upper form affect the toolbar and Gear menus when a line item and a Costed line are selected in the Grid view. The table below indicates the effects of the uDesigner options.

| | | 1 |
|--|---|---|
| uDesigner Upper form options | Toolbar and Gear menus seen at runtime when a line item is selected | Gear menus seen at runtime when a Costed line is selected |
| Allow Add/Remove/Copy | Toolbar | Gear menus |
| line items option checked | Add option is seen | No actions in the gear |
| Allow Cost Breakdown | Gear menus | |
| unchecked | Insert Line Item with submenu options of Lump Sum and Unit Cost | |
| | Insert Multiple Line Items with submenu options of Lump Sum and Unit cost | |
| | Copy-To make an exact copy of the line item | |
| | Remove-To remove a line item | |
| Allow Add/Remove/Copy | Toolbar | Gear menus |
| line items option unchecked | Add option is not seen | No actions in the gear |
| Allow Cost Breakdown unchecked | Gear menus | |
| uncneckea | No actions in the gear | |
| Allow Add/Remove/Copy | Toolbar | Gear menus |
| line items option checked | Add option is seen | No actions in the gear |
| Allow Modification of Line Item checked with Allow | Gear menus | |
| Cost Breakdown unchecked | Insert Line Item with submenu options of Lump Sum and Unit Cost | |
| | Insert Multiple Line Items with submenu options of Lump Sum and Unit cost | |
| | Copy-To make an exact copy of the line item | |
| | Remove-To remove a line item | |
| Allow Add/Remove/Copy | Toolbar | Gear menus |
| line items option unchecked | Add option is not seen | No actions in the gear |
| Allow Modification of Line Item checked with Allow | Gear menus | |
| Cost Breakdown unchecked | No actions in the gear | |

| Allow Add/Remove/Copy | Toolbar | Gear menus |
|---|---|---|
| Allow Add/Remove/Copy line items option unchecked Allow Cost Breakdown checked | Add option is not seen Gear menus Insert Costed Line Items-To add cost break down to a line item Add Remaining-To add a costed line which will have the Amount field=Non-Costed Amount – Costed Amount. This option will not be seen when the Costed Amount=Amount in the Costed lines Copy-To make an exact copy of the line item | Gear menus Insert Costed Line Items-To add cost break down to a line item Copy-To make an exact copy of the line item Remove-To remove line items |
| | Remove-To remove a line item and its costed lines | |
| Allow Add/Remove/Copy line items option checked Allow Cost Breakdown checked | Add option is seen Gear menus Insert Line Item with submenu options of Lump Sum and Unit Cost Insert Multiple Line Items with submenu options of Lump Sum and Unit cost Insert Costed Line Items-To add cost break down to a line item Add Remaining-To add a costed line which will have the Amount field=Non-Costed Amount – Costed Amount. This option will not be seen when the Costed Amount=Amount in the Costed lines Copy-To make an exact copy of the line item Remove-To remove a line item and its costed lines | Gear menus Insert Costed Line Items-To add cost break down to a line item Copy-To make an exact copy of the line item Remove-To remove line items |

Line Items in the Grid

When the Grid is launched for the very first time and no Line Items exist for the BP record:

A blank line (first line) is displayed in the Grid, by default, and the blank line is treated as a Summary Line Item. The uuu_cost_li_type field will be set as "Lump Sum" for the Summary Line Items.

Note: The uuu_cost_li_type field cannot be blank. It can either be set as "Lump Sum" or "Unit Cost."

If you click the Gear menu (in the first column) in the first line, these options will be available, only:

- ▶ Insert Line Item
- Insert Multiple Line Items

All other options are disabled.

You can change the default value set in the uuu_cost_li_type field to "Unit Cost." The value specified in this field governs whether the other fields can be edited, or not.

When a new Line Item is inserted, the new Line Item will be a Summary Line Item.

You can add the Summary Line Item by selecting the "Insert Line Item..." option, using the Gear menu, also. The "Insert Line Item..." option enables you to add on Line Item, only.

You can add multiple Summary Line Items by selecting the "Insert Multiple Line Items..." option.

If you insert a new row, based on key actions (tab, enter), then the inserted new row type will be the same as the previous row.

The line number (1, 2, 3, 4, and so forth) are generated after you click Save.

The "Add Remaining" option is enabled for all Summary Line Items as long as the:

- "Total Amount" from the Costed Line Items is not = Line Item Amount, in case of Lump Sum
- "Quantity" from the Costed Line Items is not = Line Item Quantity, in case of Unit Cost

When you select the "Insert Multiple Line Items..." option, the Insert Multiple Line Items window appears which allows you to determine the number of Line Items that you want to add.

The total amount row (at the bottom of the Grid) displays the Total Line Item Amount of all the Summary Line Item rows.

Note: The added Line Items are all Summary Line Items and will be populated with Lump Sum as the Cost Line Item Type.

Gear Menus for Summary Line Item

The following explains the functions of the Gear menus when you select the Summary Line Item and click the Gear menu (in the first column).

| | T | |
|----------------------------------|--|--|
| Option | Enabled/ Disabled | Description |
| Insert Line Item | Enabled | If you highlight a Summary Line Item and click this option, then the system inserts another Summary Line Item row above the highlighted row. |
| Insert Multiple Line Items | Enabled | If you highlight a Summary Line Item and click this option, then the system inserts multiple Summary Line Items. |
| Insert Costed Line Items | Enabled | If you highlight a Summary Line Item and click this option, then, you can add Costed Line Items below the highlighted row. |
| Add Remaining | Enabled | If you highlight a Summary Line Item and click this option, then the system launches the CBS Picker window. |
| | | When you select the CBS code, the system adds a Costed Line Item, with the Short Description field auto-populated from the Short Description of the Summary Line Item, and the system calculates the value in the Amount field as Non Costed Amount – Costed Amount. |
| | | The system inserts these Line Items at the end of the Costed Line Item for that parent/Summary Line Item. This option is disabled when the Costed Amount = Amount in the Costed lines. |
| Paste | Disabled (until you perform a Copy) | If you highlight a blank row and perform a Paste action, then the system inserts the Summary Line Item and the Costed Line Item above the highlighted Line Item. You can insert the Summary Line Item and the Costed Line Item between Summary Line Item, also. |
| | | If you select a Summary Line Item, the system inserts the Summary Line Item above the highlighted row. |
| | | You cannot perform a Paste action for more than one Costed Line Item. |
| | | When you perform a Paste action, the system updates the number of each Line Item, after you click Save. When you click Save, the newly pasted Summary Line Items appear at the end of the Line Item list. |

| Option | Enabled/ Disabled | Description |
|--------|----------------------|---|
| Сору | Enabled | If you highlight a Summary Line Item and click this option, then you copy the Summary Line Item and the associated Costed Line Items. |
| | | If you highlight a Summary Line Item and a Costed Line Item, from a set of Costed Line Items, and click the Gear menu > Copy, then the Summary Line Item and all the associated Costed Line Items are copied. |
| | | Example |
| | | Line 1 has 1.1, 1.2, and 1.3. |
| | | You select Line 1 and click copy. |
| | | When you paste, the system inserts Line 1 along with 1.1, 1.2, and 1.3 in the Grid. |
| Remove | Enabled | If you highlight a Summary Line Item and click this option, then the Summary Line Item and all the associated Costed Line Items are removed. |

Adding Line Items in Grid View

Upon selecting the Line Items tab of the record, you can add a Lump Sum item or a Unit Cost item using the Add dropdown.

Fields seen in the grid are based on the detail form design. The editable field cells are bolded while the read-only field cells are italicized. Row numbers for the line items are generated upon saving the grid.

Adding Multiple Line Items in the Grid

After selecting to add multiple line items, a dialog box is displayed where you can specify the number of added line items. When adding these line items, the total number of rows displayed depends on the number indicated in the dialog box.

The Cost Line Item Type for each line item is populated based on the selected sub-menu option.

Modifying Cost Line Item Types

When an alert window is displayed regarding a change of value for uuu_cost_li_type, the rules are applied as listed below:

- If the line item has not been saved and the line item remains in entry mode, no error message is displayed.
- If the summary line item has been saved, a confirmation message is displayed.
 - This indicates that the field values for the Cost Line Item Type are reset.
- If the summary line item has Costed lines, a confirmation message is displayed.
 - This indicates that the field values for both the line item and Costed line are reset.
- If you select, "Yes" in the alert window, system fields dependent on uuu_cost_li_type are reset for both the line item and Costed line.

Note: If "Allow Cost Breakdown" is unchecked in uDesigner and Costed lines exist as part of a previous step, then changing uuu_cost_li_type modifies the Costed lines. This is applicable for Workflow Business Processes.

Handling Errors in the Grid

The handling of errors in this updated grid is similar to other grids. All required field validation errors are displayed with a red circle in their respective fields.

When you select Save or Error Check, form and system-level validations are performed. If any rows on the grid contain errors, the Error Indicator column displays an error.

System-defined Fields for the Summary Line Item

The following explains the function of the system-defined fields in the *Summary Line Item*.

Columns

- ▶ The first 10 columns will be fixed as Line No., attachment, link records, uuu_cost_li_type field, Cost Code, Cost Name, Short Description, Item Quantity, Item Unit Cost and Amount.
- ▶ Remaining columns will be as per the detail form design in uDesigner.

uuu_cost_li_type

The uuu_cost_li_type will be a drop down and will have the values of Lump Sum and Unit Cost.

This field is a required field and should be marked with an asterisk. This field cannot be blank and by default will be set as Lump Sum.

The drop-down will have the values of Lump Sum and Unit Cost.

The editing of remaining fields in the grid will be dynamic in nature.

Meaning the uuu_cost_li_type will drive the editable and non-editable fields in the grid.

Note: Once the selection has been made, this value should be grayed out post shift of focus. This will be important since this field drives the behavior of other fields.

If the option selected is Lump Sum then:

- uuu_quantity: Disabled (Any auto population and formula definition on this field will not be honored when the LI type is lump sum.)
- uuu_unit_price: Disabled (Any auto population and formula definition on this field will not be honored when the LI type is lump sum.)
- amount: Required.
- Manual or Formula destination. User must type in the amount value. This DE could also be set as formula in uDesigner. Runtime should honor the formula calculation.

If the option selected is Unit Cost then:

- uuu_quantity: Required.
- Manual or Formula destination. User must type in the Quantity value. This DE could also be set as formula in uDesigner. Runtime should honor the formula calculation.

- uuu unit price: Required
- Manual or Formula destination. User must type in the unit cost value. This DE could also be set as formula in uDesigner. Runtime should honor the formula calculation.
- amount: Read-only, populated by formula as configured by user in uDesigner. At runtime this field should always be calculated as uuu quantity*uuu unit price

If the detail form design does not have the uuu_quantity and uuu_unit_price fields but user selects the Unit Cost option for uuu_cost_li_type then upon shift of focus, an error should be thrown alerting the user that the fields are missing. (Use existing alert currently being thrown when user clicks unit cost option in the classic line item Unit Cost option).

Other System Elements in the Grid

uuu costed amt

Always read-only. This DE should show value as sum of 'Amount' from all costed lines.

(Note that when uuu_cost_li_type = Lump Sum, amount will be entered by user in the cost allocation window. When uuu_cost_li_type = Unit Cost, amount will be calculated in the grid by system as Unit Cost*Quantity. Either case, uuu_costed_amt in the summary line item will be calculated as sum of 'amount' from all costed lines.)

This field will be displayed only at the summary line item level in the grid.

uuu_not_costed_amt

Always read-only, this DE should show value = (amount – uuu_costed_amount)

This field will be displayed only at the summary line item level in the grid.

uuu costed qtv

Always read-only. This DE should show value as sum of 'Quantity' from all distributed cost child lines.

(Note that when uuu_costed_li_type = Lump Sum, this will be zero. When uuu_cost_li_type = Unit Cost, Quantity will be entered by user in the Cost Allocation window. Either case, uuu_costed_qty in the summary line item should calculate as sum of 'Quantity' from all costed lines.)

This field will be displayed only at the summary line item level in the grid.

uuu_not_costed_qty

Always read-only, this DE should show value = (uuu_quantity - uuu_costed_quantity). Note that when uuu_cost_li_type = Lump Sum, this will calculate as zero.

This field will be displayed only at the summary line item level in the grid.

All other fields designed in the Detail form

User defined fields will be editable in the summary line item and not in the costed lines.

Costed Line Items in the Grid

The option of "Insert Costed Line Items..." allows you to add Costed Line Items for a Line Item. Clicking this option will launch the CBS Picker window. Multiple CBS Codes can be selected.

The number of Costed Line Item inserted depends on the number of codes selected in the CBS Picker window. After you insert the Costed Line Items, along with the CBS codes, you can edit the rest of fields according to the Cost Line Item Type that these Costed Line Items belong to.

Line Numbers for the Costed Line Items follow the parent number (+ 1,2,3,4 etc.).

Example

If parent line item has a Line No. of 1, then the subsequent Costed Line Items have the numbers of 1.1, 1.2, 1.3 and so forth.

Note: The Line Item numbers are generated after you click Save.

Both the Summary Line Item and the Costed Line Item are indented on the page. The Summary Line Item has the option of Expand and Collapse.

The "Short Description" field is auto-populated from the Short Description field in the parent Line Item.

If you insert a blank Line Item through a key action, and there are no rows after the inserted row in the Grid, then the inserted row will be a Costed Line Item. If you want to change the next Line Item to a Summary Line Item, then you must insert the Line item by clicking the Gear menu and select the option "Insert Line Items..." The "Add Remaining" option is disabled for the Costed Line Item.

Gear Menus for Costed Line Item

The following explains the functions of the Gear menus when you select the Costed Line Item and click the Gear menu (in the first column).

| Option | Enabled/ Disabled | Description |
|-------------------------------------|----------------------|---|
| Insert Line Item | Disabled | You cannot add a Summary Line Item when a hierarchical relationship exists between the Costed Line Item and a Summary Line Item. |
| Insert Multiple Line Items | Disabled | You cannot add a Summary Line Item when a hierarchical relationship exists between the Costed Line Item and a Summary Line Item. |
| Insert Costed Line Items | Enabled | If you highlight a Costed Line item and click this option, then you can add additional Costed Line Items below the highlighted row. |
| Add Remaining | Disabled | You can perform this action for Summary Line Items, only. |

| Option | Enabled/ Disabled | Description |
|--------|----------------------------------|--|
| Paste | Disabled | You can paste a copied Summary Line Item, only. |
| | (until you perform a Copy) | If you copy a Costed Line Item, for example 1.1, from the parent line, for example Line 1, then you can paste the copied Costed Line Item under the parent line. |
| | | After you paste, the new Costed Line Item is inserted below the selected Line Item and renumbering of the Costed Line Items takes place automatically. |
| | | You can paste Costed Line Items that have the same source and destination. |
| Сору | Enabled | If you highlight a Costed Line Item and click this option, then the highlighted Costed Line Item is copied. |
| | | You can copy multiple Costed Line Items and insert them below the highlighted/selected Costed Line Item. The Costed Line Items copied must belong to the same Summary Line Item. |
| | | You cannot copy Costed Line Items that belong to different Summary Line Items. |
| Remove | Enabled | If you highlight a Costed Line Item and click this option, then the Costed Line Item will be removed. |

System-defined Fields for the Costed Line Item

The following explains the function of the system-defined fields in the Costed Line Item.

| Option | Enabled/ Disabled | Description |
|--------------------------|---|--|
| Cost Code | Always Enabled regardless of the uuu_cost_li_type value | The initial value that is populated in this field is based on the selection that you had made when you clicked the "Insert Costed Line Items" option. You can modify the value later. |
| Cost Name | Disabled | The value in this field depends on the CBS Code that you had selected. |
| Short Descrip tion | Always enabled regardless of the uuu_cost_li_type value | The initial value that is populated in this field is based on value of the Short Description field of the Summary Line Item. You can modify the value later. |
| Item Quantit y | Enabled only when uuu_cost_li_type = Unit Price | User will be allowed to enter the quantity. |

| Option | Enabled/ Disabled | Description |
|-----------------------|---|--|
| Item Unit Price | Disabled | This field will get populated based on the Item Unit Price value in the Line Item. |
| Amount | Enabled when: uuu_cost_li_type = Lump Sum Disabled when: uuu_cost_li_type = Unit Cost | Amount will be editable when uuu_cost_li_type = Lump Sum. Amount will be derived as Item Quantity* Item Unit Price when uuu_cost_li_type = Unit Cost |

Other Grid functionalities

In the Grid, you can:

- Reverse auto-population
- Auto-population of other fields in the Grid based on the selection of certain fields
- Printing of Line Items (Line Items and Costed Line Items created through the Grid)
- Audit log

Grid Support for Change Commit

Note: Except when noted, other functions of the Change Commit Grid are similar to those for the Base Commit Grid.

The Grid for the Change Commit Business Processes of Summary Payment Application (SPA) SOV type enables you to add:

- Lump Sum
- Unit Cost
- Modify Committed Lines

The first column (Gear menu) provides the following options:

- Insert Line Item
- Insert Multiple Line Items
- Insert Costed Line Items
- Modify Committed Line Item
- Add Remaining
- Copy
- Paste
- Remove
 - In the Remove gear menu, the following message is displayed when the action is triggered: "Are you sure you want to remove the selected Line Items and all the associated Costed Line Items?"

Note: The "Modify Committed Line Item ..." option will be disabled when you select a Costed Line Item.

When you click the "Modify Committed Line Item ..." option, the Commit Line Picker window opens. Follow the prompts to select a Commit Line Item from SOV to insert in the Grid.

The columns in the Change Commit grid are similar to the Base Commit grid. Alongside Item Quantity, Item Unit Cost, and Amount are the following new columns:

- Error Indicator
- Attachment
- Linked Record
- Cost Line Item Type
- Cost Name
- Short Description
- Current Quantity
- Current Scheduled Value
- New Scheduled Value

The remainder of the columns display based on the form design established in uDesigner.

Total Amount Row

Similar to a Base Commit grid, a total amount row (at the bottom of the Grid) displays the Total Line Item Amount of all the Summary Line Item rows.

Form Validations

All form level validations at the system and user-defined levels are done once the Save option is selected in the toolbar.

For Lump Sum validations, the Costed Amount must be the same as the Line Item Amount for the Cost Line Item Type.

For Unit Cost validations, the Costed Quantity must be the same as the Line Item Quantity for the Cost Line Item Type.

Selecting and Modifying Line Items

You can use the "Item Quantity" and "Amount" to enter "Change Quantity" and "Change Amount" when modifying the Committed Line Items.

When you select "Modify Committed Line Item ..." option, the Committed Line Item Picker window opens to allow you to select the Line Item that you want to modify. The behavior of a line item selection is similar to the one seen when line items are added through selecting the Modify Committed Line option in Form View. You can select any Summary Line Item, from this window. Once you select the Line Item, the following occurs:

▶ The uuu_cost_li_type and uuu_unit_price fields, when Cost LI type = Unit Cost, are copied from the reference Commit Line Item and transferred into the Change Commit Line Item as read-only fields.

- ▶ The uuu_cost_li_type and uuu_unit_price fields are read-only and cannot be modified because the fields are from the SOV sheet.
- ▶ The short_desc field is also copied from the reference Commit Line Item and transferred into the Change Commit Line Item.

The following Costed Line Items, below the Commit Line Item, are copied into the Change Commit Line Item:

- The currency field Scheduled Value
- ▶ The bi_item, bitemid, and short_desc fileds

Note: The fields mentioned above are copied from the source distribution row and transferred into the destination distribution row.

If you select a Costed Line Item instead of a Summary Line Item, and you select Costed Line Item from the Commit Line Item Picker window, then you will add the parent Line Item, along with all the child distribution Line Items, into the Change Commit Line Item.

The short description field of the Change Commit Line Item updates the SOV sheet.

Gear Menus for Modify Committed Line Item > Summary Line Item

The following explains the functions of the Gear menus when you select the Modify Committed Line Item > Summary Line Item and click the Gear menu (in the first column).

| Option | Enabled/ Disabled | Description |
|-------------------------------------|----------------------|--|
| Insert Line Item | Enabled | If you highlight a Committed Summary Line Item and click this option, then the system inserts another Committed Summary Line Item row above the highlighted row. |
| Insert Multiple Line Items | Enabled | If you highlight a Committed Summary Line Item and click this option, then the system inserts multiple Committed Summary Line Items. |
| Modify Committed Line Item | Enabled | If you highlight a Committed Summary Line Item and click this option, you will launch the Commit Line Item picker, and you can select the Summary Line Item for insertion. |
| Insert Costed Line Items | Enabled | If you highlight a Committed Summary Line Item and click this option, then, you can add Costed Line Items below the highlighted row. |

| Option | Enabled/ Disabled | Description |
|----------------------|--|--|
| Add Remaining | Enabled | If you highlight a Committed Summary Line Item and click this option, then the system launches the CBS Picker window. |
| | | When you select the CBS code, the system adds a Costed Line Item, with the Short Description field auto-populated from the Short Description of the Summary Line Item, and the system calculates the value in the Amount field as Non Costed Amount – Costed Amount. |
| | | This option is disabled when the Costed Amount = Amount in the Costed lines. |
| Paste | Disabled (until you perform a Copy) | If you highlight a blank row and perform a Paste action, then the system inserts the Committed Summary Line Item and the Costed Line Item above the highlighted Line Item. |
| Сору | Enabled | If you highlight a Committed Summary Line Item and click this option, then you copy the Committed Summary Line Item and the associated Costed Line Items. |
| Remove | Enabled | If you highlight a Committed Summary Line Item and click this option, then the Committed Summary Line Item and all the associated Costed Line Items are removed. |

Gear Menus for Modify Committed Line Item > Costed Line item

The following explains the functions of the Gear menus when you select the Modify Committed Line Item > Costed Line Item and click the Gear menu (in the first column).

| Option | Enabled/ Disabled | Description |
|-------------------------------------|----------------------|--|
| Insert Line Item | Disabled | You cannot add a Summary Line Item when a hierarchical relationship exists between the Costed Line Item and a Committed Summary Line Item. |
| Insert Multiple Line Items | Disabled | You cannot add a Summary Line Item when a hierarchical relationship exists between the Costed Line Item and a Committed Summary Line Item. |
| Modify Committed Line Item | Disabled | You cannot add a Committed Summary Line Item from an SOV sheet when a Costed Line Item is highlighted. |

| Option | Enabled/ Disabled | Description |
|--------------------------------|--|--|
| Insert Costed Line Items | Enabled | If you highlight a Costed Line item and click this option, then you can add additional Costed Line Items below the highlighted row. |
| Add Remaining | Disabled | You can perform this action for Committed Summary Line Items, only. |
| Paste | Disabled (until you perform a Copy) | You can paste a Costed Line Item within the Summary Line Item. For example, if you copy the Costed Line Item 1.1 from the parent Line 1, then the copied Costed Line Item can be pasted under Line 1, only. Renumbering of the Costed Line Items occurs automatically. You can paste Costed Line Items that have the same source and destination. |
| Сору | Enabled | If you highlight a Costed Line Item and click this option, then the highlighted Costed Line Item is copied. You can copy multiple Costed Line Items and insert them below the highlighted/selected Costed Line Item. The copied Costed Line Items must belong to the same Summary Line Item. You cannot copy Costed Line Items that belong to different Summary Line Items. |
| Remove | Enabled or Disabled depending on the case | Case 1: A new Costed Line Item that does not exist in the SOV sheet: If you highlight the Costed Line Item and click this option, then Costed Line Item will be removed. Case 2: The Costed Line Item exists in the SOV sheet: This option is disabled if you select a Committed Costed Line Item (the Costed Line Item exisits in the SOV sheet). |

Column Details Specific to Cost Allocation

The following provides the details specific to the Cost Allocation.

| Log Column | Description |
|------------|--|
| Cost Code | Required and editable within the Grid. You can select a Cost Code from the Cost Code Sheet, within the same Shell, by clicking inside the cell. Similar to the Line Items, you can enter a Cost Code in the cell and the system provides the matching Cost Codes for you to choose from. You cannot change the Cost Code of an existing Line Item that originates from an SOV sheet. |

| Log Column | Description |
|---------------------------------------|---|
| Code Name | Read-only. The value in this field is auto-populated by the system according to the Cost Code that you have selected. |
| Short Description | Editable. The default value in this field is auto-populated by the system according to the Line Item "short_desc" field. You can update/modify the default value. |
| Current Quantity | Read-only. You can see the column and the values if 1) You select the Modify Reference Commit option and 2) The Commit Line Item = Unit Cost in the Cost Line Item type: uuu_cost_li_type. If the two conditions are satisfied, then the system auto-populates the value in this column as "Quantity" (from the source Commit distribution line). |
| Current Scheduled Value | Read-only. The system displays this column and populates the value (regardless of the uuu_cost_li_type). The value in this column is populated when you modify an existing Line Item, from the SOV sheet, only. |
| Item Quantity (Change Quantity) | Read-only if uuu_Cost_li_type = Lump Sum. Editable if uuu_cost_li_type = Unit Cost. You can enter the Costed Quantity. |
| Amount (Change Amount) | Editable if uuu_cost_li_type = Lump Sum. You can enter the Costed Amount. The system calculates the value as "Change Quantity * Unit Cost" if uuu_cost_li_type = Unit Cost. The value of the Unit Cost must be according to the Detail Form (uuu_unit_price). If DE is missing, the value will be zero. |
| New Schedule Value | Read-only. This column is populated when you modify an existing Line Item, from the SOV sheet, only. The value is calculated by the system as "Current Schedule Value + Change Amount". |

Summary Payment Application Grid Column Total

The following information is related to BP run-time for the *Payment Applications and Summary Payments Applications Business Processes* (Standard tab), only.

For Payment Applications and Summary Payments Applications Business Processes, based on the options set for the Total property for the Data Elements (DEs) in uDesigner, when you add or modify the grid, the Total row displayed shows the following values:

- Blank
 - Unifier displays the value as empty in the Total Column (that particular DE column).
- Sum of All Rows
 - Unifier displays the value as "Sum of All Rows" in the Total Column.
- Use Formula Definition
- ▶ Unifier displays the value as "Formula Defined" in the Total Column. In other words, Unifier calculates the formula by using the values from the Total row for the respective DEs.

If the formula was reset to Manual, then Unifier resets the Total to "Sum of All Rows."

Unifier calculated the Total, for DEs with predefined formula, as follows:

- %Complete to Date (uuu_spa_per_comp)
 - Custom formula
 - Based on the property selected in uDesigner.
 - System-defined formula
 Based on the property selected in uDesigner.
- Amount This period (uuu_spa_amt_tp)

Based on the property selected in uDesigner. (Either Blank or Sum of All Rows)

SOV Summary Payment Application Business Process (Standard View)

View Mode

In View Mode, you can use the toolbar to Reload, Print, Find, Collapse, and Expand.

Add

Allows you to add lines. When you click **Add**, a confirmation dialog will be displayed. After lines have been added, the **Add** button will be hidden.

Note: After lines have been added manually, the payment lines cannot be added through CSV import.

Import

Allows you to import lines. After lines have been added, the **Import** button will be hidden.

Reload

Allows you to reload line items.

Print

Allows you to print or export the entire summary sheet along with the costed lines (the line item summary and the associated costed line items). The sheet can be exported to CSV or EXcel. The generated CSV or Excel sheet is for information purpose only.

Find on Page

Allows you to search the Summary Payment Applications SOV for specific line items.

Collapse

Allows you to view only the Summary rows.

Expand

Allows you to view the Summary and the associated child rows. This will be the default view.

Summary Payment Applications SOV structure (columns)

The grid columns seen in the classic payment application will be as per the detail form design specified in uDesigner.

The grid also has a Total field, which appears at the bottom of the sheet, that displays the sum of all the lines.

Edit Mode

In Edit Mode, you can use the toolbar to Cancel, Error Check, Save, Find, Collapse, and Expand. Additionally, a checkbox option of "Apply line item value of Percentage Complete to Date to Costed Lines" will be visible on the right.

Cancel

Allows you to exit **Edit Mode**.

Error Check

Allows you to check the sheet for errors.

Save

Allows you to save any changes made to the sheet in **Edit Mode**.

Collapse

Allows you to view only the Summary rows.

Expand

Allows you to view the Summary and the associated child rows. This will be the default view.S

Locking of the Grid

In View and Edit mode, the system will automatically lock the grid after the first 5 columns. To lock another column while viewing or editing data, you can drag the column from the unlocked part of the sheet into the locked part of the sheet. This layout will not be saved into the database.

Total Mismatch Indicator

When the line item field value does not match the sum of costed line values, the line item cell displays a small red triangle to indicate that the totals do not match. When you click the small triangle, the system displays an information text and informs you of the differences. This is applicable only for the line item.

Multiple Payment Applications

If SOV restrictions are removed and multiple Payment Applications are detected, an Alerts icon will be displayed in the upper right corner of the window. When you hover over the icon, information about pending payments is presented.

Negative Change Orders

When the Payment Application grid is opened, the line items that will be modified because of a pending Negative Change order will have an Alerts icon in the Scheduled Value cell. You can click on the cell to view the details of the Change order. The Pending Change Orders with negative amounts screen will be displayed. The screen will include columns for the Business Process name, Record Number, Line Number, and Amount.

Overpayment in Summary Payment Applications SOV

The Data Element (DE) uuu_spa_per_comp (Percentage Complete to Date) is mandatory on the detail form of a Summary Payment Applications type Payment Application business process.

You can enter values in the detail form (grid) (for uuu_spa_per_comp (Percentage Complete to Date)) that is above 100 percent.

In the Summary Payment Application SOV structure, you can add a column with Datasource = **Commits Remaining Balance**.

If the **Commits Remaining Balance** column has not been added to the SOV structure, you will have the ability to overpay (assign a payment amount that exceeds the remaining balance and the uuu_spa_per_comp value exceeds 100%).

If the **Commits Remaining Balance** column has been added to the SOV structure, you will not have the ability to overpay (you will not be allowed to assign a payment amount that exceeds the remaining balance or to make the uuu_spa_per_comp greater than 100), and Unifier displays a detailed message notifying you that the payment amount exceeds the remaining reference commit balance.

Totaling Cost Breakdown Values

This section explains the following topics:

Note: The following applies when the "Total the Cost Breakdown values to the line item" option is checked in the form. Go to uDesigner node > Payment Applications > Upper Forms > Properties > General tab > Line Items block.

- Totaling Cost Breakdown to the Line Item Totaling cost breakdown values to the line item
- Totaling Line Item in Payment Application
 Totaling the line in the Payment grid of Payment Application
- Totaling Line Item in Summary Payment Application
 Totaling the line in the Payment grid of the Summary Payment Application
- Line Item and Sum of Costed Line
 When the line item field value does not match the sum of costed line values
- Summary Line item
- Summary Row Totals
 - Summary total
 - Line item total

Totaling Cost Breakdown to the Line Item

The totaling cost breakdown to the line item can be done for:

Line items with editable numeric data element columns (line item and costed lines)

- Line items with editable numeric data element columns (line item and costed lines)
- Line items with cells that are based on formula
- Line items with cells that are percentages

The following explains each option.

Line items with editable numeric data element columns (line item and costed lines)

You can see the sum of all the costed line item values after entering the pertinent values in the editable fields (line item and costed lines). That is to say, when you enter values in the costed line items, the system sums up those values and displays the resulting value in the corresponding cell of the line item.

Example

Contracts with Cost Break down

Enter the costed line item information in the "Other Amount this Period" field. Once you click elsewhere, the system displays the sum total of the costed line item values in the "Other Amount this Period" field of the line item.

Line items with editable numeric data element columns (line item and costed lines)

If the fields are read-only, then there are not summations.

Line items with cells that are based on formula

When the line item cell has a formula definition, then the sum (roll up) for the cell in the line item is not generated from the costed line items. The calculation for this cell is based on the line item values.

Example

"Completed and Stored to Date" is a formula field = Total Previous Payments <uuu_spa_prev_amt> + Requested this Period <spz_total_tp> + Stored Materials Amount <uuu_spa_mat_stored>. As a result, the cell value for "Completed and Stored to Date" in the line item = Total Previous Payments <uuu_spa_prev_amt> + Requested this Period <spz_total_tp> + Stored Materials Amount <uuu_spa_mat_stored>.

During runtime, the system Data Element (DE) uuu_spa_prev_amt, on a Summary Payment Applications detail form, is calculated by the system as the sum of following (from SOV):

- The uuu_spa_prev_amt, and
- ► The data element selected in udesigner option "Total Previous Payments = Total Previous Payments + ..."

By default, uDesigner selects the "Amount" field from the system detail form in this option and the formula for uuu_spa_prev_amt equals the sum of:

- The uuu_spa_prev_amt from SOV, and
- The amount from the SOV.

If the user selects some other option in uDesigner, for example, the data element "Amount Requested this Period," then the formula for this field would become:

- ▶ The uuu_spa_prev_amt from SOV, and
- The amount Requested This Period from SOV

Line items with cells that are percentages

System-defined uuu fields, and user-defined custom formula fields, which are treated as percentages field and set as formulas, do not sum up the values from the costed lines to the line item.

Totaling Line Item in Payment Application

The Total row, at the bottom of grid, displays the total for payment lines (costed line items) when the values are:

- Manually entered
- Formula based
- Percentages

In the total Row, all the numeric columns display the total of the Summary Line items.

Totaling Line Item in Summary Payment Application

In the Total Row, the manual data element columns display the total of the Summary line item values.

The calculation in the Total Row is applicable for both Payment Application and Summary Payment Application.

Line Item and Sum of Costed Line

When the line item field value does not match the sum of costed line values:

For fields that are editable, the line item cell displays a small triangle to indicate that the totals do not match.

Note: The small triangle is displayed based on the selection that has been made in the Upper Form option "Costed line item total must be equal to the line item total". If the checkbox for Costed line item total must be equal to the line item total is unchecked, then the red triangle does not display. If the checkbox for Costed line item total must be equal to the line item total is checked, then the Data Element is configured in uDesigner to show the Summary Total as Sum of All Rows (there is a total mismatch), and the red triangle is displayed.

When the user clicks the small triangle, the system displays an information text and informs the user about the differences. This is applicable only for the line item.

Note: The alert is not displayed for uuu_spa_per_comp field since the field values of costed lines and summary lines will always have a discrepancy.

Summary Line Item

The (Summary) Line item row is grey when the line is not editable.

The (Summary) Line item row is editable if the row is displayed:

- In bold font.
- With thick borders.

To be able to modify Line Items, you must select the "Allow Modification of Line Items" option in the Creation step.

You can define whether you want the value of the Data Element (DE) uuu_spa_per_comp (from summary row) to apply to all costed lines (in a summary Payment Application grid) automatically, or not. This enables you to avoid filling each costed line value manually and have a better user experience.

If the **Allow viewing of Costed line items** and **Allow Modification of line item** options are selected (checked) in the Upper Form of a Payment Application type BP (which references a Base Commit of SOV Type = Summary Payment Applications) in uDesigner, then the runtime SPA grid provides a checkbox option labeled **Apply line item value of <label of DE uuu_spa_per_comp> to costed lines** (at the top right-hand corner of the grid) to enable you to apply the line item value to costed lines.

When you select checkbox option labeled **Apply line item value of <label of DE uuu_spa_per_comp> to costed lines**, Unifier copies the value of the data element uuu_spa_per_comp (from the summary lines) into the corresponding costed lines. The subsequent impact on fields uuu_spa_amt_tp / uuu_spa_qty_tp in the costed lines is similar to just as if you made a manual edit of uuu_spa_per_comp in the costed lines to trigger the update of these fields.

To proceed, click to select the **Apply line item value of <label of DE uuu_spa_per_comp> to costed lines** option (at the top right-hand corner of the detail form).

This selection impacts only those lines that are edited after checking the box, and the existing, or edited, lines will remain as they were.

The following scenarios explain the behavior, when you edit a line item, or costed rows, after checking the box.

Scenario 1

Scenario 1-a: The uuu_spa_per_comp is editable and the Apply line item value of 'Percentage Complete to Date' to costed lines options is selected (checked) when the user enters a value for field uuu_spa_per_com in the summary row:

- a) The corresponding uuu_spa_amt_tp or uuu_spa_qty_tp (depending on whether it is a Lump sum or Unit Cost type line item) in the summary row should get back-calculated as per the new value of uuu spa per com.
- b) All child costed lines should get auto-populated with the same value as the summary cell for uuu_spa_per_com.
- c) The fields uuu_spa_amt_tp or uuu_spa_qty_tp for all costed lines get back-calculated according to the newly populated value of uuu_spa_per_com.

In this case, Unifier stops at back-calculating the costed row values for uuu_spa_amt_tp or uuu_spa_qty_tp and does not roll the values into the line item value again (even if the option **Total the Cost Breakdown values to the line item** is checked). Here, if the back-calculated values of uuu_spa_amt_tp or uuu_spa_qty_tp total to a penny off from the line item cell value, Unifier adjusts that penny in the last costed line.

Scenario 1-b: The uuu_spa_per_comp is editable and the **Apply line item value of**'Percentage Complete to Date' to costed lines options is selected (checked) when the user enters a value in the summary cell for fields uuu_spa_amt_tp or uuu_spa_qty_tp, depending whether it is a *Lump sum* or *Unit Cost* type line item:

- a) The summary row field uuu_spa_per_com is calculated by the system.
- b) At the same time, all child costed lines get auto-populated with the same value as the summary cell for uuu_spa_per_com.
- c) The fields uuu_spa_amt_tp or uuu_spa_qty_tp (depending on whether it is a Lump sum or Unit Cost type line item) for all costed lines get back-calculated according to the newly populated value of uuu_spa_per_com.
 - In this case, Unifier stops at back-calculating the costed row values for uuu_spa_amt_tp or uuu_spa_qty_tp and does not roll the values into the line item value again (even if the option **Total the Cost Breakdown values to the line item** is checked). Here, if the back-calculated values of uuu_spa_amt_tp or uuu_spa_qty_tp total to a penny off from the line item cell value, Unifier adjusts that penny in the last costed line.

Scenario 1-c: The uuu_spa_per_comp is editable and the **Apply line item value of**'Percentage Complete to Date' to costed lines options is selected (checked) when the user enters a value in the summary cell for a field that impacts calculation of uuu_spa_per_comp (such as uuu_spa_mat_stored or uuu_spa_other_tp):

- a) The summary row field uuu_spa_per_com get calculated by the system.
- b) At the same time, all child costed lines get auto-populated with the same value as the summary cell for uuu_spa_per_com.
- c) The fields uuu_spa_amt_tp or uuu_spa_qty_tp (depending on whether it is a Lump sum or Unit Cost type line item) for all costed lines get back-calculated according to the newly populated value of uuu_spa_per_com.
 - In this case, Unifier stops at back-calculating the costed row values for uuu_spa_amt_tp or uuu_spa_qty_tp and does not roll the values into the line item value again (even if the option **Total the Cost Breakdown values to the line item** is checked). Here, if the back-calculated values of uuu_spa_amt_tp or uuu_spa_qty_tp total to a penny off from the line item cell value, Unifier adjusts that penny in the last costed line.

Scenario 2

In this scenario, the uuu_spa_per_comp field is read-only, but any of the other fields that impact its calculation (uuu_spa_amt_tp, uuu_spa_qty_tp, uuu_spa_mat_stored, or uuu_spa_other_tp) are editable, and the option Apply line item value of <label of DE uuu spa per com> to costed lines is checked. In such scenario:

Scenario 2-a: If the user modifies the summary cell value for any of the editable fields, the behavior will be similar to Scenario 1-b and Scenario 1-c, above.

Scenario 2-b: If the user modifies the costed row value for any of the editable fields (existing functionality), then the corresponding costed row value of uuu_spa_per_com gets calculated by system. This does not result in roll up, or impact, the summary cell value of uuu_spa_per_com, even if the option **Total the Cost Breakdown values to the line item** is checked.

You can select (check) the **Apply line item value of <label of DE uuu_spa_per_com> to costed lines** option and the proceed to deselect (uncheck) it. Deselecting the option does not revert any of the changes that you had made when the option was selected, but it impacts the future operation and the subsequent summary value changes for uuu_spa_per_com will not automatically copy into the costed lines.

If you make manual changes (after deselecting the option), then select the option again:

- ▶ The manual changes that you had made remain as they were.
- ▶ The roll-down behavior from summary to costed rows occurs for all of the subsequent summary row changes.

If you select (check) the **Apply line item value of <label of DE uuu_spa_per_com> to costed lines** option, the system allows you to only push the values down from the line items to the costed row (for uuu_spa_per_com).

Even if the option Total the Cost Breakdown values to the line item is selected in uDesigner, the system does not allow roll-up from the costed rows to line item for the following Data Elements:

```
uuu_spa_per_com
```

- uuu_spa_amt_tp
- uuu_spa_qty_tp

Summary Row Totals

The costed lines can be defined to rollup to their summary line items as "Sum of all rows" by using the form option "Total the Cost Breakdown values to the line item" in uDesigner (for a Payment Application BP which has reference to a Contract type BP of SOV Type: "Summary Payment Applications").

Similar to the "Totals: for fields on a Summary Payment Application detail form, you can define:

- The fields from costed lines sum up to the summary line item.
- ▶ The fields from costed lines do no sum up to the summary line item.

The values in summary line item fields populate as defined in uDesigner (Manual, Formula, or Auto-populate).

The following sub-sections provide details about when the option **Total the Cost Breakdown values to the line item** *is checked* (Summary Row Totals), or *is not checked* (Line Item Total), in uDesigner.

Summary Total

During runtime, if the uDesigner upper form option "Total the Cost Breakdown values to the line item" *is checked*, then the Summary row values in Payment Applications grid displays per "Summary Total" option, selected by the user in detail form. The following table "Summary Total" provides details:

| Costed Row Data Element Settings in uDesigner Data Entry / Access | Costed Row Data Element Settings in uDesigner Summary Total | Summary Row Value |
|---|---|--|
| Manual / Editable/Editabl e Required | As Defined | Editable. The value shows as 0 or \$0.00, per Data Element (DE) Data Definition (DD). The user can double-click into the cell and enter any value as per the DE Data Definition**. If the user deletes the value in the cell, it reverts back to 0 (zero) or \$0.00, whichever applicable. |
| Manual / Editable/Editabl e Required | Sum of All Rows | Editable. The value shows sum of all costed lines. The user can double-click into the cell and enter any other value, per the DE Data Definition**. If the user deletes the value in the cell, it reverts back to 0 (zero) or \$0.00, whichever applicable. |
| Manual / Read-Only | As Defined | Read-Only. Value: 0 (zero) or \$0.00 |
| Manual / Read-Only | Sum of All Rows | Read-Only. Value: Sum of all costed lines |
| Formula (Always Read-Only) | As Defined | Read-Only. Value: Calculated according to the formula defined for the DE, in uDesigner |
| Formula (Always Read-Only) | Sum of All Rows | Read-Only. Value: Sum of all costed lines |
| Auto-populate / Editable/Editabl e Required | As Defined | Editable. The value shows the auto-populated value, per definition in uDesigner. The user can double-click into the cell and enter any value as per the DE Data Definition**. If the user deletes the value in the cell, it reverts back to 0 (zero) or \$0.00, whichever applicable. |
| Auto-populate / Editable/Editabl e Required | Sum of All Rows | Editable. The value shows sum of all costed lines The user can double-click into the cell and enter any value as per the DE Data Definition**. If the user deletes the value in the cell, it reverts back to 0 (zero) or \$0.00, whichever applicable. |
| Auto-populate / Read-Only | As Defined | Read-Only. Value: The auto-populated value, per definition in uDesigner |
| Auto-populate / Read-Only | Sum of All Rows | Read-Only. Value: Sum of all costed lines |

** If there is a total mismatch, then a red triangle symbol appears in the cell and when you click the red triangle symbol the cell displays the difference.

During runtime, the following DEs (summary row total value fields) are exception to the above settings:

- scheduled_value
- uuu_spa_prev_amt
- uuu_spa_per_comp

The uDesigner properties for the fields above are set as "Manual," but Unifier calculates the value of these fields as a system-calculated hard-coded formula.

- ▶ The summary cells for these three fields are calculated per system-defined hard-coded formula for each line.
- ▶ The fields are Read-Only, Editable, or Required per uDesigner setting.
 - If Editable, or Required, then you can double-click into the cell and enter any other value, per the DE Data Definition.
 - If there is a total mismatch, then a red triangle symbol appears in the cell and when you click the red triangle symbol the cell displays the difference.

Line Item Total

If the uDesigner option "Total the Cost Breakdown values to the line item" is unchecked, even if the "Summary Total" option has been defined in detail form, then the costed lines does not roll up to the summary rows in any of the forms. The following table lists additional scenarios:

| Ite m | Checkbox "Total the Cost Breakdown values in the line item" in the BP upper form | Checkbox "Costed Amount must be equal to the line item total" in the BP upper form | Summary Total definition for a numeric Data Element on the BP detail form | Expected behavior of corresponding summary cell during runtime |
|----------|--|--|--|--|
| 1 | Unchecked | Unchecked | As Defined | Blank, editable/required/read-only, per definition in uDesigner. |
| 2 | Unchecked | Unchecked | Sum of All Rows | Blank, editable/required/read-only, per definition in uDesigner. |
| 3 | Unchecked | Checked | As Defined | Blank, editable/required/read-only, per definition in uDesigner. |
| 4 | Unchecked | Checked | Sum of All Rows | Blank, editable/required/read-only, per definition in uDesigner. |
| 5 | Checked | Unchecked | As Defined | If the DE is set to "Manual" in uDesigner, then the summary cell is 0 (zero). The field is editable/required/read-only, per definition in uDesigner. If the field is |

| Ite m | Checkbox "Total the Cost Breakdown values in the line item" in the BP upper form | Checkbox "Costed Amount must be equal to the line item total" in the BP upper form | Summary Total definition for a numeric Data Element on the BP detail form | Expected behavior of corresponding summary cell during runtime |
|----------|--|--|--|--|
| | | | | editable/required, then you can change the value. |
| 5 | Checked | Unchecked | As Defined | If the DE is set to "Formula" in uDesigner, then the summary cell is calculated per formula. The field is read-only. |
| 5 | Checked | Unchecked | As Defined | If the DE is set to "Auto-populate" in uDesigner, then the summary cell shows the auto-populated value. The field is editable/required/read-only, per definition in uDesigner. If the field is editable/required, then you can change the value. |
| 6 | Checked | Unchecked | Sum of All Rows | The summary cell is populated by the system as sum of all rows. This field is editable/required/read-only, per definition in uDesigner. |
| 7 | Checked | Checked | As Defined | If the DE is set to "Manual" in uDesigner, then the summary cell is 0 (zero). The field is editable/required/read-only, per definition in uDesigner. If the field is editable/required, then you can change the value. Note: This behavior overrides the checkbox "Costed Amount must be equal to the line item total" and must be allowed. |
| 7 | Checked | Checked | As Defined | If the DE is set to "Formula" in uDesigner, then the summary cell is calculated per formula. The field is read-only. Note: This behavior overrides the checkbox "Costed Amount must be equal to the line item total" and must be allowed. |

| Ite m | Checkbox "Total the Cost Breakdown values in the line item" in the BP upper form | Checkbox "Costed Amount must be equal to the line item total" in the BP upper form | Summary Total definition for a numeric Data Element on the BP detail form | Expected behavior of corresponding summary cell during runtime |
|----------|--|--|--|--|
| 7 | Checked | Checked | As Defined | If the DE is set to "Auto-populate" in uDesigner, then the summary cell shows the auto-populated value. The field is editable/required/read-only, per definition in uDesigner. If the field is editable/required, then you can change the value. Note: This behavior overrides the checkbox "Costed Amount must be equal to the line item total" and must be allowed. |
| 8 | Checked | Checked | Sum of All Rows | The summary cell is populated by the system as sum of all rows. The field is editable/required/read-only, per definition in uDesigner. The system applies the checkbox "Costed Amount must be equal to the line item total" and prevents if you manually change the value to something other than sum of all rows. |

Request for Bid (RFB) Business Processes

The Request for Bid (RFB) feature allows companies to invite bids from vendors and suppliers.

Note: Unifier allows your company to only designate one **Vendors** business process as the RFB master vendor list (master vendor BP/vendor master BP).

The bid invitation can be addressed to a specific set of vendors, or can be opened up to the public. The bidders are provided with a simple Unifier interface that does not require special training to use. Bidders receive email notifying them that they have received a bid invitation so they can log into Unifier and submit their bids.

The bidder portal enables the bidder to use the Announcement icon () to view announcements by the owner company. The Bidder Business Process log (Bidder BP log) enables the bidder to view all requests, their titles, due date, and status.

The Bidder BP log has the following options:

- View
 - Active
 - All
- Refresh: To refresh the log items.
- Print: To print the log contents.
- Search
 - Status with values of All, Open and Closed
 - Search parameters based on Bidder log set in uDesigner
- **Find on Page**: To find content on the visible page.
- ▶ **Help**: To view help options.

The gear menu (), in front of each record, is context sensitive and provides the following conditions and corresponding options:

| Condition | Options |
|---|---|
| Bid has been received and no submissions have been made | Open - Opens the requestor's form Create - Will open the bid form |
| Bid has been submitted | Open - Opens the requestor's form View Submission Withdraw Submission - Confirmation asking user to confirm action. After a successful withdrawal, an alert will be seen Note: After a bid has been withdrawn, options seen will be: Open |
| Bid has been closed | View Submission - This will open the submitted bid Double clicking the record will open the submitted bid form. |

The preview pane, on the right-hand side, contains:

- ▶ The form content, based on the current state of the record.
 - If the bid is active (just received a RFB or submitted a bid), then the requestor form is displayed.
 - If the bid is closed, then the content of the submitted bid is displayed.
- ▶ The Attachments tab is displayed.

The Mailbox provides a preview of a selected email, in the right- hand pane. The Mailbox has Inbox and Sent Items. The Inbox enables bidders to view all the mails received from Unifier.

The RFB type BP supports the **Grid** feature when the RFB design (developed in uDesigner) includes the subtype: **Line Item with CBS Code**. The **Grid** feature is available both in the Requestor and Bidder sides, within the Line Item tab.

Language, Time Zone, and Date Format for Vendors BP

While creating a Vendors BP, *you have an option* to set the language, date format, and time zone specific to your bidders:

Note: The languages listed are the active languages selected in the **Configuration - Internationalization** log window, by the administrator.

- Contact Language:
- Date Format:
- Time Zone:

Note: The DEs mentioned above must be included in the RFB master vendor list BP (master vendor BP/vendor master BP) in uDesigner in order to be selected by the user in runtime.

The notifications follow the preferences of the user who has been specified in Bid Management Account field (**Company Workplace** > **Admin** mode > click **Open** from left-hand > **Bid Management Account**), who is designated as the manager for all bidders, or the company bid contact.

Selecting the above options enables the bidder to receive email notifications (also Unifier Bidder Portal web page content and Bidder forms) in the bidder's language, date format, and time zone.

If the above options are not available, or not selected, then the bidder receives email notifications (also Unifier Bidder Portal web page content and Bidder forms) following the user preferences whose name is indicated in the **Bid Management Account** field.

Note: If the RFB master vendor list BP (master vendor BP/vendor master BP) includes Date Format data element but no value is selected, the system displays a default date format (e.g., MM/DD/YYYY HH:MM AM). The Company Administrator has to set the respective bidder's date format in the RFB master vendor list BP.

Unlike a standard Unifier user, a bidder user cannot change the preferences in the bidder portal. When this option is clicked, the **Preferences** set forth in Vendor information record (for the vendor) will be seen in view only mode.

Working with RFBs

The RFB business process has a reference process to a vendor list business process, which contains the pool of vendors to whom the RFB will be sent. This vendor reference process will populate the upper fields of the RFB at runtime. Unifier automatically launches this reference process, when the RFB is activated.

Once the RFB Business Process is active in Unifier, the bid procedure runs as follows:

You (the person who starts the bidding process and sends the invite):

1) Start the bid procedure by opening the RFB, filling in the form, and sending it for internal review (if necessary).

- 2) When the internal review is complete, you:
 - a. Assemble the bid package and prepare the bid invitation for distribution.
 - b. Send out the bid invitations, along with a user name and password so that the vendors can log into Unifier and submit their bids.

Once the bid invitations have been sent, you must wait, then, for the bid due date to pass.

The vendors:

- 1) When the vendors receive the bid invitation, they log into Unifier and open the bid request.
- 2) (Optional) The vendors can request clarification of any questions or issues before submitting the bid. (The vendors can use the Mailbox link on the bid request for this purpose.)
- 3) The vendors then submit their bids.

You (the person who started the bidding process and sent the invite):

- 1) When the due date for all bids is reached, you tabulate the bids for comparison.
- 2) Open discussions about the bids, if necessary.
- 3) Award the bid to a vendor and automatically generate a contract copying relevant details from bid record into the contract.
- 4) Select a winning bid, after discussions with the members of your team.

In Unifier, you can create a contract from the winning bid (the bid that was selected from multiple bids) automatically, and the contract that is generated automatically will have a copy of the data from the winning bid (terms and negotiating amounts), if any.

See Select Winning Bid and Auto-create Contract sections for details.

Active bids in Bidder log

When you open the **Attachments** tab, the following blocks and sub-blocks will be present, depending on the bid status:

- Unpublished Attachments
 - Addendums
- Published Attachments
 - Original Attachments

All of the active bids can receive additional attachments, from the requestor. When the bidder opens or views the bidding in the log, the new or additional attachments will be shown under the **Addendums** block.

When a bid receives a new attachment, as addendums, then Unifier sends a new email to all of the bidders. Unifier sends a similar email when an existing bid attachment is removed.

Sending the Bid Request for Internal Review and Approval

For most companies, an internal review is necessary for the purpose of verifying the scope of the project as well as other issues such as terms and conditions, architectural drawings, and structural materials.

To send the Bid Request for internal review and approval:

1) Navigate to the RFB log and click **New**. The RFB BP form opens.

2) Complete the form, then use the **Workflow Actions** drop-down list to send the RFB into the workflow.

Once the approval request reaches the middle of the workflow, you receive the completed BP as a task in your **Tasks** log. When you open the form this time, you should see an **Invite** button on the toolbar, with which you can start the bidding process.

After the bid request is approved, you can start the bidding process.

Starting the Bidding Process

After the RFB has completed the internal review and approval, you can start the bidding process.

To start the bidding process:

- 1) Go to your **Project** > **User** mode > **Logs** > **Requests for Bid**.
- 2) Open the bid that you want to send.
- 3) Click Invite to open Invitations window.

If this is the first time you are sending an invitation, click **Add** to open the **Vendors** window, select a vendor BP and click **Attach**. A list of vendors in the selected Vendor BP is now available in the **Invitations** block. See the **Public Bidding** (on page 266) and **Private or Non-Public Bidding** (on page 268) for more details about the options in the **Invitation** block.

- 4) Select a vendor from the **Invitations** window and follow one of the instructions below: *If Unifier is not integrated with Oracle Identity Manager (OIM)*, and you are sending invitation for the first time, open the RFB and click **Send Invitation**. *Unifier* sends two emails:
 - An invitation email (contains the Bid Access UR)
 - A credential email (contains the username and password).

In this case, if a vendor who has already received an invitation loses password and request to receive another password, open the RFB, click **Send Password** to send a credential email (contains the username and new password). Oracle recommends that the bidders change the password at the very first log in, and then sign in to Unifier using the newly set password.

If Unifier is integrated with OIM, and you are sending invitation for the first time, open the RFB, click **Send Invitation**. OIM sends one email:

A credential email (contains the username and password). There might be a delay receiving a credential email from OIM based on the bidder reconciliation job interval set in OIM.

If a bidder accesses Unifier through OIM, the bidder cannot change password in Unifier. Changing password can be done only in Unifier when it is not accessed through OIM. Oracle recommends that the bidders change the password at the very first log in, and then sign in to Unifier using the newly set password.

The following provides additional information regarding the bidding process:

- If you need, you can click **Modify** to modify the bidding end date.
- ▶ The list of vendors you use to distribute the bid invitations can include your company's entire list of vendors or a list of "approved vendors" specific for the project you are working on.

- Your administrator can design a business process that filters the master list of vendors into a sub-set of this list for your project. If such a sub-set of the vendor list has been created for your project, this is the list of vendors you will see in the Bidders window, unless this is a public bid. For public bids, the filtered vendor list will be ignored.
- ▶ To see the approved list of vendors with more information, go to your project **Logs** node in the Navigator and click on the business process that created the vendor list for your project. Unifier will display the list of records in that business process. To see the approved list, click the **Filtered Referenced Records** button on the toolbar.

Note: Once you have sent out all the bid invitations, Unifier freezes the RFB until the bid due date passes. After the due date passes, you can compare the bids.

Filtering Bidders

During the BP run-time, the list of available bidders depends on the options set in uDesigner.

- When you do not select set additional filter for a bidder in the RFB BP, and you are in a Shell, then:
 - If a Line Item type BP of sub-type, "Line item to filter Company BP record" exists and the option of, "Use Master Vendor list filtered at Project level is checked, then the list of vendors will be filtered based on this existing functionality.
- When you select set additional filter for bidder in the RFB BP and you are in a Shell, then: A filtered list of potential bidders is listed which includes all those bidders referenced by the BP Data Picker and the system ignores the Line Item type BP of sub-type, "Line item to filter Company BP record."

The BP Data Picker:

- Does not need to be populated in the RFB form.
- Value will always be ignored and the system uses the query conditions on the Data Picker to filter the list of vendors.

If no query conditions are defined for the BP Data Picker, then you will see the list of all vendors.

In the uDesigner, you can place the BP Data Picker, in the RFB BP, in a hidden block. If the BP Data Picker is placed in the hidden block, then you can filter the list of vendors through the defined query conditions.

Public Bidding

For public bidding, invitations are sent to the Vendors that you have selected from the Vendors business process (a company-level BP). The Vendors BPs can be found in **Company Logs** > **User** mode > **Vendors BP**.

The option for public bidding is set in uDesigner: Company Workspace > Admin mode > uDesigner; Selected RFB Business Process > Open > General > Options tab: Allow public bidding (no pre-defined bidders).

Public Bids: Requestor BP - Invite form

When you select the **Invite** option (from the menu icon), after the BP has been opened for public bidding, the **Invite** overlay page opens. The following blocks are displayed on the **Invite** overlay page:

General

This block has the following fields:

- Title
- Requester Name
- Phone
- Due Date
- Email

Invitation

This block has the following toolbar options:

▶ Add

To add invitee.

Send

To send password.

This block has the following columns:

- First Name
- Last Name
- Company
- User Id
- Sent Date

The **Invite** overlay page has the following tabs (right-hand pane):

Attachments

Go to this tab to add additional attachments through using the **Browse** or **Document Manager** options, similar to the **Private or Non-Public Bidding** (on page 268).

All of the attachments that have been added, from this form, are shown in the Addendums as well as the Attachments tab of the Requestor form (Request for Bid), similar to the *Private or Non-Public Bidding* (on page 268).

In the Requestor form (Request for Bid), **Attachments** tab, you can see the attachments that have been added from the **Invite** form.

The new column, Addendums, can be seen under the Attachments tab in the BP log of the RFB records. The additional attachments, added from the **Invite** form and sent to bidders, are also shown under the Attachments tab in the BP log, but they will be listed as Addendums.

The requestor can make changes to the attachments. Changes made to the **Attachments** tab, before an invitation is sent out to the invitees, will be audited (**Requests for Bid** > **Request for Bid** tab > **Audit Log** tab).

Mail

Go to this tab to send email to the vendors, when the bidding is open (**Send** > **Mail**).

The emails that have been sent to the bidders are shown in the **Mail** tab, similar to the **Private** or **Non-Public Bidding** (on page 268).

Private or Non-Public Bidding

For private non-public bidding, where you want to select who is invited to bid, the "**Allow public bidding (no pre-defined bidders)**" option is *deselected* in uDesigner.

In the **Invitations** window, click **Add**, select vendors, and click **Invite** to send the invitation to the Vendors. See the "Additional Information about starting a bidding process" section below for details.

Private Bids: Requestor BP - Invite form

In an RFB, the Requestor can send an email to the bid-invitees from the Linked Mail tab. The Requestor is also able to send emails from the Invite form. The Invite form enables the Requestor to add attachments while the bid is open.

Note: On the Attachment tab, the attachments must be identified as being added as addendums. So when the Bidder opens the bid (or views the bid) from the log, the newly added attachments are shown as addendums for the open bids.

When you select the **Invite** option (from the menu icon), the **Invite** overlay page opens. On the left-hand pane, the following blocks are displayed:

Gener al

The requestor information is displayed in the **General** block. This block contains the following fields:

- block Title
 - Requestor Name
 - Phone
 - Due Date
 - ▶ Email

Invitati on block

The information related to adding invitees, as well as the list of the existing invitees (vendors) to whom an invitation has been sent or will be sent, are displayed in the **Invitation** block. This block contains the following toolbar options:

▶ Add

To show a list of all vendors who can receive bid invitation. You can select more than one vendor.

Send

Invitation

To send a bid invitation to all of the selected vendors, under the invitation section.

Password

To send a password to all of the selected vendors, under the invitation section. The system sends the system-generated password to every invitee (with invitation), whenever the send password is used.

Note: The Password option is not available for Unifier Oracle Identity Manager (OIM) users.

Mail

To send email to the invitees, instead of using the linked mail option, when the bid is open. All of the sent emails are displayed within the Mail tab (on the right-hand pane) and also within the linked mail tab on the BP form.

Delete

To delete any entry in the selected vendors, under the invitation section.

Find on Page

To find an item by searching in a column.

On the right-hand pane of the **Invitation** block, the following tabs are displayed:

Attachments tab

▶ Mail tab

The following explains each tab in details.

The **Attachments** tab has two sections:

Unpublished Attachments

The attachments added from the **Browse** option are displayed under the **Unpublished Attachments**. The **Unpublished Attachments** has two sections:

Addendums

When the bid is still open, it lists all of the additional attachments that have been added, using the **Browse** option (the paper-clip icon) in the invite form.

Original Attachments

Lists attachments that have already been sent as part of the bid invitation (and are originally attached to the Requestor form (Request for Bid) through the **Browse** option) but have not been published, yet.

Published Attachments

The attachments added from the **Document Manager** option are displayed under the **Published Attachments**. The **Published Attachments** has two sections:

Addendums

When the bid is still open, it lists all of the additional attachments that have been added, using the **Document Manager** option (the paper-clip icon) in the invite form.

Original Attachments

Lists attachments that have already been sent as part of the bid invitation (and are originally attached to the Requestor form through the **Document Manager** option) but have been published. There are two ways to add attachments (click the paper-clip icon):

- Browse
- Document Manager

When you click to add an attachment, Unifier displays the message: All the invitees will receive the addendums. Do you want to continue?

- If you select, **Yes**, then you can add the attachment.
- If you select, **No**, then the Upload File window does not open.

Any attachment that gets added under the Attachments tab will be shown in the Requestor form (**Attachments** tab), as **Addendums**.

You must send emails to all invitees regarding any added, removed, or updated attachments to the bids.

The gear menu, for the items within the **Attachments** tab enable you to conduct the following functions on each item:

- Revise: To revise the document contents.
- Review: To review the document contents.
- Download: To download the document.
- Remove: To remove the document.

When you select any of the gear menus, Unifier displays the message: All the invitees will receive the addendums. Do you want to continue?

The **Attachments** tab log (grid) columns in the Invite form and the Requestor form are similar to any other BP form. The **Upload Date** column (under the toolbar section and to the right) lists the dates that each attachment was uploaded.

Any Attachments that are added from the Invite form as addendums are shown in the Attachments tab of the Requestor form (as addendums) once the form becomes editable. The attachments that were added as addendums can be identified under the Addendums section, under unpublished or published documents.

All additional attachments that have been added from the invite form and sent to bidders are shown under the Attachments tab, in the BP log, but they will be listed as addendums.

The **Mail** tab:

The **Mail** tab lists all of the emails sent to bid invitees. When you select **Send** > **Mail** from the Invite form, a new email window will display which contains the following columns, similar to the **Linked Mail** tab:

- ▶ Flag: Flagged mails can be identified by using this column.
- Attachments: When attachments are added to an email, then the **Attachment** icon is seen.
- From: Shows the requestor name (logged in username).
- ▶ To: Shows the selected bid invitees. You can select one or more invitees, and you can send emails while the bid is open.
- Subject: Shows the subject of the email that is sent.
- Date: Shows the date the email is sent.

Unifier adds the sent emails (from the Invite form) to the Mail tab in the Invite form, and the Linked Mail tab in the Requestor form. The sent bid-invitations are displayed in the Mail tab of the Invite form.

Note: Emails must be sent through the Invite form, only. The Linked Mail tab does not allow you to send emails to the bid-invitees.

The emails sent to the bid-invitees, from the **Invite** form, are shown in the **Linked Mail** tab, also.

All the mails sent to bid invitees from the **Invite** form should also be shown in **Linked Mail** tab.

Bidders and Passwords

The bidders who have used the system before:

- Will not receive a new password when they create/submit a new bid.
- Are expected to use the password they had used from the previous bid to login to Unifier Cloud.
- Can choose to go through the "Forgot Password" process, if they have forgotten their password.
 - Alternatively, a Unifier Cloud Administrator can reset their password, from the cloud admin app, so that the bidders can receive new passwords.
- ▶ The "Send Password" option in the RFB module is disabled in Unifier in Cloud deployments.
- ▶ Receive an email from Unifier containing the new bid, and the url which they can use.

The new bidders who have not used the system before, receive two emails:

One from Unifier, inviting them to the bid.

• One from OIM, containing instructions on how to login to Unifier Cloud. This email contains a system-generated password.

Comparing the Bids (Classic View)

Once the bidding process ends (after the bid due date has passed), you can open a bid tabulation to compare the bids you received. A default bid tabulation sheet is available in Unifier, or your company may have a custom-designed bid tabulation sheet.

To compare bids

- 1) Open the Request for Bid (RFB) record. The toolbar displays a **Show** button.
- 2) Click **Show**. The Show window opens, listing the bids you received. Once the bid is closed, upon selecting the bid, you can only view the information of the invitation that was sent, along with the bids that have been received. The information within the Invitation tab is read-only, and you (requestor) can only view the information about the bid-invitees, the addendums sent, and the emails sent to the invitees.
- 3) From the list, select the vendors you want to compare and click Compare Classic. Unifier tabulates the bids from the vendors you selected and displays a Compare sheet. This sheet will look different, depending on whether you are using the default comparison sheet supplied by Unifier, or a custom-designed comparison sheet created by your company. The default bid comparison sheet shows the bid amounts for each line item for which the vendor submitted a bid.

The custom-designed bid comparison sheet shows the following:

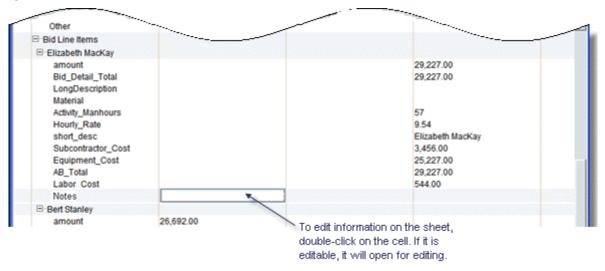
- General bid information from each vendor who submitted a bid.
- Each line item from the RFB that the vendor has bid on. If the vendor adds line items of their own to the bid, these line items will appear on the sheet as well.

Bid Comparison Options (Classic View)

On the custom bid comparison sheet window, you have the following options:

| Use this button: | To: |
|------------------|---|
| Save | Save the data you entered or modified on the sheet. (This will not affect the bidder's data.) |
| Split | Split the screen so you can easily compare vendors by column. |
| Find | Find specific data on the sheet. When you click Find , a window opens where you can specify the vendor (column) and the value you want to locate. Unifier will search the line items in that column and highlight the value, if it finds it. |

In addition, some fields on the sheet may be editable, depending on how the sheet was designed.



Comparing the Bids (Standard View)

Once the bidding process ends (after the bid due date has passed), you can open a bid tabulation to compare the bids you received. A default bid tabulation sheet is available in Unifier, or your company may have a custom-designed bid tabulation sheet.

To compare bids

- 1) Open the Request for Bid (RFB) record.
- 2) Click on the **Proposal Management** tab to view the bids you received. Once the bid is closed, upon selecting the bid, you can only view the information of the invitation that was sent, along with the bids that have been received.
- 3) From the list, select the vendors you want to compare and click **Compare**. The Bids Comparison window opens, showing the bids you selected. In the toolbar, check **Star Vendors Only** to view the data of only shortlisted vendors. To compare the line item total with reference to the selected proposal, select a proposal from the **Compare with** dropdown list. The dropdown list includes all proposals selected for comparison.
- 4) Click Save or Cancel after making any edits.

Record Details tab

By default, the Bids Comparison sheet opens in the **Record Details** tab where you can view proposals in a multiform view.

Reorder bids by hovering the top of the bids and dragging them to the desired position.

Hover the top of a bid to view a dropdown menu in which you can:

- Send Email
- Open Vendor Details
- Open Proposal

Line Items tab

To view the bid comparison in a grouped grid view, navigate to the **Line Items** tab.

The grid contains a **Short Description** column and **Vendor Column Groups**.

The **Short Description** column lists all lines entered by the requestor and additional lines entered by each vendor. Additional lines display 0.00 for vendors who have not quoted.

Each **Vendor Column Group** contains all data elements that have been included for comparison from the detail form. The lowest amount per line item among all visible vendors in the grid displays in green. The highest amount per line item among all visible vendors in the grid displays in red.

Select Winning Bid

Requestor Upper Forms

The Bid Picker (Winning Bid) is available on any Requestor Upper Forms of and RFB type Business Process as a second Detail tab (Winning Bid). The "Select Winning Bid" properties window allows you to select a bid, clear bid selections, and find bids.

- You cannot select a winning bid unless the bidding process has been completed.
- After the bidding process has been completed, you can select a bid and click Select. When you select a bid as the winner, then:
- ▶ The winning bid picker displays the name of the company that has been selected (Company Name).

If the Requestor form has the second Detail tab (Winning Bid), all the lines of the winning bid form will be copied into the second Detail tab (Winning Bid). Lines are copied according to the matching DEs from the Bidder Detail form and the Bid Comparison Sheet. If additional DEs have been included in the Bid Comparison Sheet, in uDesigner, the additional DEs will be copied into the second Detail tab (Winning Bid) if the second Detail tab (Winning Bid) contains the matching DEs. The DEs in the Bidder Detail form and the DEs in the Bid Comparison must match so you can copy data.

For each copied line item, the value of the CBS Code (bitemID), or a CBS Name (bi_item) must be mapped from the corresponding line item in the standard tab Detail line item.

Example

Assume a standard tab that has 3 line items and each line item is associated with a CBS Code. When bids are requested, these 3 line items will be copied into the Bidder Detail tab so that the Bidder can bid on those 3 line items. The Bidder form (Bidder Detail tab) does not allow placing bitemID, bi_item DEs. As a result, the Bidder form line items will not display the CBS Code, or the CBS Name.

When Bidder A adds 2 more line items to the Bidder form before submitting the bid. After all bids have been submitted, the Bid Comparison Sheet column for Bidder A shows 5 line items (3 line items from the Requestor standard tab, and the 2 line items that have been added by Bidder A, manually).

If Bidder A is selected as winner, and the requestor adds more line items such as the negotiated amount, price, quantity, and so forth, then the Bid Comparison Sheet, for the winner (Bidder A) will have more information than originally included by Bidder A, when Bidder A submitted the bid.

Note: The additional line items that the requestor has added must be captured in the "Bid Comparison Sheet" by the requestor by way of adding corresponding DEs in uDesigner (uDesigner > RFB Business Process > Bid Comparison Sheet > Detail).

All line items, within the second Detail tab (Winning Bid) must be valid before an RFB record can be successfully routed to next step. If you change the value of a "Winning Bid" picker on the Requestor Upper form, the existing line items in the tab (<winning bid tab name>) will be removed and the system sends a confirmation request. If you confirm the change, the Winning Bid selector displays the new value and all the line items from the second Detail tab (Winning Bid) will be deleted.

If you use the Clear option in the winning bid selector window, the existing line items in the tab (<winning bid tab name>) will be removed and the system sends a confirmation request. If you confirm the change, the confirmation window and the winning bid selector window will close, the winning bid selector value will be cleared, and all line items from second Detail tab (Winning Bid) will be deleted, including line items add manually.

Unifier saves the following information to the database, each time you make a winning bid selection:

- Winning Bid picker value
- Winning Bid Detail tab line items
- Any DEs on Requestor Upper form which are set to auto-populate from winning bid picker

As a result, if you select a winning bid and perform an Undo Accept Task, then:

- Winning bid will stay as selected
- Winning bid tab Detail line items will persist and not revert back
- Fields that receive AP from winning bid will be persisted and will not revert back
- Other DEs will be reverted back as per existing functionality

Note: If the winning bid picker is blank, but the Winning Bid Detail tab has line items that have been manually added, then the manually added line item will be removed when you perform an Undo Accept Task.

If you close a form window without saving the form:

- Winning bid Picker, auto-populated fields, and the winning bid Detail tab line items will still be saved as records
- Other fields will not be saved (as per existing functionality)

To clear the winning bid related information, you can do one of the following:

Clear, or reselect, the winning bid Detail tab to its previous value before performing Undo Accept Task

or

If you performed Undo Accept Task, then click Accept Task, and reselect, or deselect the winning bid picker.

If there are more than one assignees on a step:

- When user 2 tries to select the winning bid, if user 1 has already done a selection, then user 2 will receive an alert notifying user 2 that some of the line items have already been saved to the winning bid tab (<winning bid tab name>) and the action taken by user 2 will remove all those lines and recreate lines as per new information in the DE (<label of DE uuu_rfb_winning_bid>) selection.
- New line items will be created in the winning bid Detail tab as per user 2's response.

The special runtime behavior of the winning bid Detail tab is connected to the winning bid selector DE (uuu_rfb_winning_bid). You can select not to place the winning bid selector DE (uuu_rfb_winning_bid) on the form and still use the winning bid Detail tab by naming it something else. The winning bid Detail tab will behave like any other non-standard detail tab in such a scenario.

Also, similar to other Detail tabs in Business Processes, you have the ability to delete line items from the winning bid Detail tab if it is configured so in uDesigner.

Additional information about selecting winning bid

To keep winning bid details hidden from the bidder, if a user signs in as a "Bidder," the requestor Winning Bid Detail tab will remain hidden.

If you select a bid using the winning bid selector on RFB Upper form, the winning bid will be highlighted in the following window:

- Select Winning Bid: By way of displaying the selected bid in bold typeface.
- Show: By way of displaying the "Winning Bid" column.
- Compare: By way of displaying the selected bid in bold typeface.

Note: The DE of DD = Bid Picker will not be available for bulk editing or bulk action.

When you copy an RFB record to create a new RFB record, note that:

- Not all the line items in the winning bid Detail tab are going to be copied.
- ▶ The picker "Winner Bid" will not be copied.
- ▶ DEs will be copied, similar to the standard copy behavior for records in Unifier.

Auto-create Contract

When an additional Detail tab (for the Requestor section of all RFB type Business Process forms) is available, you can use the second **Detail** tab (non-standard tab) to record the lines of the winning bid, as the user copies the data from the **Bid Comparison Sheet**.

In general, the **Bid Comparison Sheet**, for a preferred bidder, contains more information than the information submitted by the bidder.

The second **Detail** tab is similar to that of any other non-standard **Detail** tab on any other Cost-type BP which allows multiple tabs.

To be able to use this feature, the following conditions must exist:

- ▶ The "uuu_rfb_winning_bid" data element must be included in the RFB requestor form.
- At least one bidding process must be completed.

Once these conditions are met, then you can select the winning bid.

The **Result** window displays all of the completed biddings. You can select one bid as the winning bid and after selecting that bid the system copies all the lines of the winning bid onto the **Winning Bid** tab.

The system copies the lines base on the matching data elements available on the:

- **Bidder** detail form
- Bid Comparison Sheet

The destination record is created by auto-creation and selecting a Winning Bid is not a must for successful auto-creation.

The BP Creator is available after all the mapping to the second Detail tab (Winning Bid) is complete. If the BP Creator is configured to auto-create a CBS Cost type Business Process, but the source Bidder Detail form did not contain a CBS picker (bitemid), the auto-creation will fail. To correct this error, you must correct the data (for example, selecting the CBS code before routing it to the next step), manually.

Note: The value of *bitemid* cannot be copied over when a record is auto-created from a Summary Base Commit to a non-Summary Base Commit.

What the Vendor Does

Use the instructions in this section to familiarize vendors with the Unifier interface so they can submit bids.

Note: If a bidder accesses Unifier through Oracle Identity Manager (OIM), the bidder cannot change password in Unifier. Changing password can be done only in Unifier when it is not accessed through OIM.

When a bidder is invited to bid for the first time, the system sends two emails simultaneously:

- Invitation email, which contains the Bid Access URL.
- ▶ Credential email, which contains the username and system-generated password.

Note: Oracle recommends that the bidders change the password at the very first log in, and then sign in to Unifier using the newly set password.

About the Bid Due Date Time

Be aware that the due date and time for the bid reflect the time of the server on which Unifier is running. (Unifier servers operate on Pacific Standard Time.)

To sign in to Unifier

If you received a bid invitation, you should also have received an email containing a link to Unifier, a user name, and a password.

- 1) Open the bid invitation and click the link provided.
- 2) At the login screen, enter the user name and password provided in the email. The Primavera Unifier home screen opens.

To submit a bid

- In the left Navigator, click Request for Bid/Bids (or Request for Bid Private/Bids if you have been invited for a private bid). A bid log appears on the right pane showing a list of open bids you have been invited to submit.
 - By default, Unifier displays only open bids. If you want to see all the bids you have been invited to submit, use the View menu on the right corner of the tool bar. Click the arrow and choose All Bids from the list. Unifier will display all your bids, past and present.
- 2) On the right pane, double-click the name of the RFB you have received (or click the **View** button). The **Request for Bid** form opens.
 - Before you submit the bid, you can communicate with the requestor about any questions or issues that need clarification. The Request for Bid form provides a link to Unifier Mailbox feature. To send a communication:
 - I. Click the **Linked Mail** link in the lower-right corner of the window. A **Linked Mail** window opens, showing a chronological list of any existing communications.
 - 2. Click **New**. An email-type form opens, where you can send a communication to the requestor.
- 3) Click the **Create** button in the upper-left corner of the screen. The request for bid form opens for editing.
- 4) Fill in the upper form fields that are required.
- 5) Click the **Add** button in the lower-left corner and choose **Detail Line Item**. The Request for Bid Line Item window opens.
- 6) Fill in the fields on this form and click **OK**.
 - The line item detail you entered appears on the tab at the bottom of the screen.
- 7) (Optional) To add an attachment to the bid, click **Add Attachment** in the toolbar. A file upload window opens.
 - Click the Add button. A window opens showing the directory tree of files on your machine.
 - b. Navigate to the file you want to attach and select it. Then click **Open**. The file name appears in the **Upload List** field.
 - c. Click the **Upload** button. An Upload Status window opens.
 - d. When the file has been uploaded, click the Close button.
 On the Request for Bid form, Unifier indicates the attachment in the lower-left corner of the window. You can click on Attachments to verify that the attachment is correct.
- 8) Click **Submit**. Unifier accepts the bid.

Toolbar

| Mode | Options | | | |
|--------------------|--|--|--|--|
| Create | Auto-create | | | |
| Create | Export Line Item Template | | | |
| | Print | | | |
| | ▶ Reload | | | |
| | ▶ Help | | | |
| | ▶ Close | | | |
| | ▶ View | | | |
| View | ▶ Add more assignees | | | |
| | ▶ CC more users | | | |
| | Email as Attachment | | | |
| | ▶ Print | | | |
| | ▶ Review | | | |
| | ▶ Terminate Record | | | |
| | Note: The bidder log in bidder portal will not display terminated records. | | | |
| | ▶ Transfer Ownership | | | |
| | ▶ Help | | | |
| | ▶ Close | | | |
| Edit | ▶ Invite | | | |
| Before the Due | ▶ Print | | | |
| Date has past. | ▶ Reload | | | |
| | ▶ Review | | | |
| | ▶ Terminate Record | | | |
| | Note: The bidder log in bidder portal will not display terminated records. | | | |
| | ▶ Transfer Ownership | | | |
| | ▶ Undo Accept Task | | | |
| | ▶ Help | | | |
| | ▶ Close | | | |
| Edit | ▶ Show | | | |
| After the Due Date | ▶ Print | | | |
| has past. | ▶ Reload | | | |
| | ▶ Review | | | |
| | ▶ Terminate Record | | | |
| | Note: The bidder log in bidder portal will not display terminated records. | | | |
| | ► Transfer Ownership | | | |
| | ▶ Undo Accept Task | | | |
| | ▶ Help | | | |
| | ▶ Close | | | |

| Mode | Options |
|--------|--|
| Invite | Left-hand pane > General Information: |
| | ▶ Title |
| | Due Date |
| | Requestor Name |
| | ▶ Email |
| | Phone |
| | Right-hand pane > Invitation options: |
| | Send Invitation |
| | Send Password |
| | ▶ Add |
| | Delete |
| | Find on page |
| | Right-hand pane > Invitation columns: |
| | ▶ First Name |
| | ▶ Last Name |
| | Company |
| | ▶ User Id |
| | Sent Date |
| | Under the Invitation columns: |
| | ► Total |
| | ▶ Cancel |
| | Done |
| | If you have been invited for a public bid, then you receive an RFB business process form that is configured for public bidding. In this case, when you click Invite (after the bid has become open for public bidding) Unifier displays an overlay that enables you to send password and modify the Due Date, using the icons. |

The following rules apply when a bidder accesses new forms:

- If the Requestor has created the bid request in Classic view, then the bidder will be able to perform all subsequent actions (such as View the request/Create Bids in Classic view).
- If the Requestor has created the bid request in Standard view, then the bidder will be able to perform all subsequent actions (such as View the request/Create Bids in Standard view).
- Once the bid is submitted, and the due date is crossed, Unifier opens the RFB form in Standard view.

To withdraw a bid

- 1) Sign in to Unifier.
- 2) In the left Navigator, click **Request for Bid/Bids** (or **Request for Bid Private/Bids**, if you were invited for a private bid). A bid log appears on the right pane.

- 3) On the right pane, double-click the name of the RFB you received. The Request for Bid form opens.
- 4) Click the **Create** button in the upper-left corner of the window. The request for bid form opens for editing.
- 5) Click the **Withdraw** button in the upper-left corner of the window.

To view or print the bid after submitting it

- 1) Sign in to Unifier.
- 2) In the left Navigator, click **Request for Bid/Bids** (or **Request for Bid Private/Bids**, if you were invited for a private bid). A bid log appears on the right pane.
- 3) In the log, select the bid record that you want to view or print.
- 4) Click the **View** button. The bid form that you submitted opens for viewing.
- 5) (Optional) Print the bid form from the **File** menu. Choose either:
 - Print Preview > HTML Format: The print view of the form will open in the browser. Landscape orientation usually provides best results for HTML format. To print the bid, click the print icon in the upper-right corner of the window.
 - Print Preview > PDF Format: Opens the form in Acrobat Reader. Print the bid using the File menu in Acrobat.

Changing Vendor Email Address

You can change the bidder email in the **RFB Vendors BP > Line Item Type Vendor > Bidder Email**.

If you accept the change (click **Finish Editing** or **Save** > **Yes**), then the system updates the vendor record, with the new email address.

If Unifier is not integrated with Oracle Identity Manager (OIM), then:

- If there are active bids for the vendor, then the system sends an email to the vendor with their username and password.
- If there are no active bids, then the system changes the email address, but the system does not send an email to the vendor.

Note: Unifier deactivates the old email address.

If you do not accept the change (click **Finish** > **No**), then the system reverts back to the original email address.

If Unifier is integrated with OIM, then the system does not send a notification/email if you update the vendor email address, regardless of the status of the bid (active/inactive).

If Unifier is integrated with OIM, and a new account has been established for a vendor, then OIM sends a notification/email if you change the vendor email address. The notification/email contains the new sign-in information.

To change the vendor email address through integration, Reverse Auto-population (RAP), or Bulk Edit

If Unifier is integrated with OIM, then:

If you update the vendor's email address on the vendor record by way of integration, Reverse Auto-population (RAP), or Bulk Edit, then the system updates the record with the new email address and creates a new account in OIM, automatically. The OIM sends a notification/email that includes the sign-in information (username and password) to the vendor's new email address from OIM.

If Unifier is not integrated with OIM, then:

If you update the vendor's email address on the vendor record by way of integration, Reverse Auto-population (RAP), or Bulk Edit, then the system updates the record with the new email address and sends an email to the vendor, if the bids are active.

Note: The system does not send an email to the vendor if the bids are inactive.

Lease Business Processes

Lease business processes are a Cost type business process. You can use the Lease business process at the project or shell level to set up and manage real estate leases and view the expected Payment Schedule (regular as well as straight line) using the lease data from the business process. You can set up a Lease business process if you are the landlord (lessor), or if you are the tenant (lessee). You can use it for new leases you have just contracted, or existing leases. The Lease business process allows you to track incoming or outgoing payments, and you can use the Generic Cost Manager to roll up the amounts.

Lease business processes are typically used to auto-create invoices (if you are the landlord) or payment requests (if you are the lessee). These auto-created business processes are designed and set up by your administrator. For more information, see *Auto-create an invoice or payment request from a Lease business process* (on page 288).

Lease business processes can be workflow or non-workflow cost business processes. If they are workflow business processes, you can route them like other workflow business processes in Unifier.

Note: Lease business processes cannot be defined at the Company level, and do not support CBS functions.

Leases can be designed with fields that you can use in line items to perform lease data calculations. These calculations generate lease payment schedules. For example, you could add lines items for rent, cost of maintenance, or taxes to a lease. The data in these line items is data that you enter, or data that is populated based on calculations.

On Leases, you can:

- View expected payments for the lifetime of the lease using the Regular Payment Schedule and Straight Line Schedule reports
- Disable the auto-creation of related BPs, or re-enable these auto-created BPs as needed
- Create Payment Schedules (regular and straight line)
- Create snapshots of the lease for historical purposes

In addition to typical behavior, the Lease business process supports:

- Consolidation from other Cost BPs
- Snapshot creation
- Auto-creation
- Auto generation of Regular and Straight Line Payment schedules
- Integration methods for creating upper form as well as line items of all tabs
- Multiple tabs for line items (up to 8 tabs)
- An allocation template to divide lease payments into different amounts for multiple tenants in a building.

Lease business process terminology

Lease: An agreement whereby the owner of real property (the landlord or lessor) gives the right of possession to another (the tenant or lessee) for a specified period of time (the terms of the lease) and for a specified consideration (the rent or lease payments).

Straight line: The straight-line method implies that the cash flows in the form of fixed lease payments over the lease term are aggregated and divided by the lease term to arrive at the monthly income or expense. This results in an equal impact in the income statement in each reporting period irrespective of the fact that cash flows differ.

Escalation: A clause in a lease which provides for the rent to be increased to reflect changes in expenses paid by the landlord such as real estate taxes, or operating costs. An escalation can be accomplished by several means such as fixed periodic increases, increases tied to the Consumer Price Index, or adjustments based on changes in expenses paid by the landlord in relation to a dollar or base year reference.

In addition to the terminology above, you can find more information about the special fields that can be used on Lease business processes in the *Unifier Reference Guide*.

Lease business process use cases

The following are examples of how you can the Lease BP to manage leases.

Various Payment Terms for the same lease

You start a lease on December 1, 2003 with a commencement date of April 1, 2004 and a termination date of March 28, 2005.

Payment Term 1: A term of \$4,000 per month for rent begins on April 1, 2004 and ends on March 28, 2005. The due day is 1.

Payment Term 2: A term of \$300 per month for common area maintenance (CAM) starts on April 1, 2004 and ends on March 28, 2005. The due day is 1.

Payment Term 3: A semi-annual term of \$500 for taxes begins on September 1, 2004 and ends on March 28, 2005. The due day is 1.

Different payment allocations for multiple tenants

For accounting purposes, the rent for a building is to be charged back to departments, based on each department's space usage. The Marketing Department uses 60% of the space and IT uses 40% of the space. If the total rent for the building is \$5000 per month, then Marketing would be charged \$3000 and IT would be charged \$2000 per month.

Semi-annual lease terms with proration

The lease term start date is February 15, 2002, the end date is January 1, 2003. The frequency is semi-annual, and the amount is \$1,000 per term. The Proration Rule accounts for the date difference in days, with the end date included.

Handling rent pre-payments

The lease term start date is January 1, 2003, the end date is June 30, 2003. The frequency is monthly, and the amount is \$6,000 per month. The due day is 1. The pre-payments are the first and last month's rent.

Straight lining with quarterly payments

The lease begins mid-month on 15 January, 2002 and ends mid-month on 14 January, 2003.

- ▶ Rent for the first quarter is \$100
- Rent for the second quarter is \$200
- Rent for the third quarter is \$300
- Rent for the fourth quarter is \$400
- ▶ Rent for the fifth quarter is \$500

The rent abatement of \$10 is given only in the first month. The rent is scheduled to be paid in full at the beginning of each month.

Note: Information about Straight-line Payment Adjustments: Straight-line payments can be modified if the business process design includes special data elements (fields). These fields can override the start and end dates of a lease, add or subtract days from the lease term, or add or subtract specific dollar amounts to the lease amount. These adjustment fields do not change the line item dates or amounts. Unifier takes these adjustments into consideration when it calculates the straight-line payments after you click Save or Finish Editing. When you open the form in view mode, you will see the adjustments reflected on the Payment Schedule you open from the Payment Schedule button on the toolbar.

Straight Lining with monthly payments

The terms are a 12-month lease, with the first month rent-free. The rent is \$1000 per month. Real estate rules (FASB 13) require that this rent be normalized (or straight-lined) across the entire lease term.

Lease term of 20 years with escalation

The base, or primary, lease term is 20 years. During the base lease term, the monthly lease payment is \$10,000 for the first 10 years and \$12,000 for the next 10 years.

Note: Payment Schedule calculations for Lease base frequencies and Escalation frequencies will differ slightly depending on the frequency used. For example, a 10 year lease escalating each year will differ slightly from a lease escalating every 52 weeks (as opposed to a lease escalating every 365 days). Over a 10 year period, if the lease calculation is done in days, there can be years with more than 365 days. Also, if the calculation done in weeks, 52 weeks might be a day or two short of a full year depending on the year used.

Escalation Based on Index Rate

Set lease payments to increase based on the Consumer Price Index of a country. This escalation method allows lessors to increase the rent by aligning it with inflation and without going into an agreement using a pre-determined % escalation. On the Lease Business Process, you can specify the index rate to use, the payment schedules are updated whenever the index rate is changed.

Create and manage Lease business processes

To create a Lease business process record

- 1) Navigate to the Lease business process log.
- 2) In the Lease BP log, click **New**. The Lease form opens.
- 3) Complete the Lease business process record. Add the basic lease information to the upper form, including the lease name, number, class of lease, and other details. Add the routing information for the workflow if the BP is a workflow BP.
- 4) On the detail form, add the payment terms in the Payment Setup tab. Click the **Add** button to add a line item for each aspect of the lease for which you want to create a payment schedule. For example, you can add individual line items for rent, maintenance costs, and taxes.
- 5) Click Save.

To edit a line item

As long as the Lease BP form is still a Draft, you can edit a line item at any time. Open the grid by clicking the **Add** button. The Line Items window opens. Enter the payment general setup, payment trigger dates setup, straight line settings, payment escalation setup, and the cost account setup. Make changes and click **OK**.

To remove a line item

In the Lease BP form, select the line item to remove and click the **Remove** button.

If you have created an allocation template, you can link the record to it. See *Create and use an allocation template* (on page 287).

Create and use an allocation template

If the rent you charge (or pay) should be pro-rated for different tenants in a building, you can create an allocation template and assign it to a Lease BP. The template will designate a breakdown of the costs for each tenant and Unifier will use this breakdown to create the payment calculations.

For example, for accounting purposes, the rent for a building is to be charged back to departments, based on each department's space usage. The Marketing Department uses 60% of the space and IT uses 40% of the space. If the total rent for the building is \$5000 per month, then Marketing would be charged \$3000 and IT would be charged \$2000 per month.

To create an allocation template

- 1) Open the Lease BP you want to create the template for.
- 2) Click the **Allocation** button. The Allocation Templates window opens.
- 3) Click the **New** button. The Add/Edit Allocation Details window opens.
- 4) Use the information in the first table below to complete the top three fields in this window.
- 5) Click the **Add** button. Unifier enters a row number and opens an editable text box in the Description field.
- 6) Use the information in the second table below to add rows to the allocation template.
- 7) To add more rows to the allocation template, repeat steps 5 and 6.
- 8) Click OK.

| In this field: | Do this: | |
|--------------------|--|--|
| Allocation Name | Enter a name for the allocation template. This name will appear on the list of allocation templates you can select for the record or line item you create. | |
| Payment Type | Click the arrow and select the payment type that should be used for the allocations. | |
| Allocation Type | Select the type of allocation to use for the pro-ration. Percent will pro-rate the lease according to the percentage you specify (see Allocation Value). Fixed will allocate a fixed cost to each tenant. Area will pro-rate the lease according to the square footage each tenant occupies (see Allocation Value). | |

| In this field: | Do this: |
|----------------|---|
| Description | Enter a name to identify the allocation, such as "Sales Dept" or "Uptown Restaurant". |

| | Enter the value of the Allocation Type. |
|---------------------|--|
| Allocation Value | For Percent, enter the percentage of the lease that should be paid by the tenant. If you specify percent, the values in all these fields must add up to 100%. |
| | For Fixed, enter the lease amount that should be paid by the tenant. For Area, enter the square footage for which the tenant is paying. |
| Cost Code | From the picker that opens, select the cost code for the allocation. |

To link an allocation template to a lease business process

- 1) Open the Lease business process record to which you want to link the template.
- 2) Click the **Allocation** button. The Allocation Templates window opens.
- 3) Select the template you want and click **Open**.

View or export payment schedule

The Lease BP creates the Regular Payment Schedule and the Straight Line Schedule to allow you to view your future lease payments.

The lease payment schedule is generated automatically after you add or change a line item for the Lease BP. The schedule is time stamped, and is overwritten each time you add or modify a line item. You can capture a particular schedule by exporting it to a PDF file.

To view or export payment schedule

- 1) Open a Lease BP record from the log.
- 2) On the toolbar, click the **Payment Schedules** button and choose **Regular** or **Straight Line**. The payment schedule window opens.

The schedule shows currency amounts to two decimal places (e.g., \$3120.33).

The Regular Payment Schedule lists the lease payments as calculated using Frequency, Start Date, and End Date.

The Straight Line Schedule lists the lease payments averaged over all of the line items of the payment terms for the lease over the life of the lease. You can specify which line items that you want to include in the Straight Line Schedule by clicking the Straight Line radio button on the detail form of each line item to Yes for each item you want listed in the schedule.

- 3) Click the **Export** button to save all of the schedule rows or selected rows to a PDF file. Click **Save** to create the PDF file of the schedule.
- 4) Click the **Close Window** button when you are done viewing the schedule.

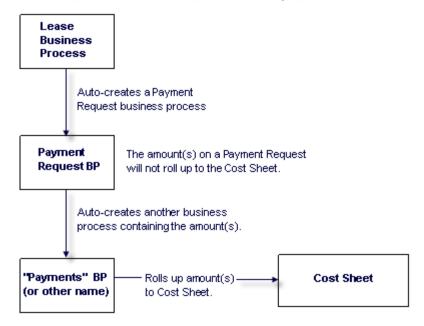
Auto-create an invoice or payment request from a Lease business process

Lease business processes are typically used to auto-create invoices (if you are the landlord) or payment requests (if you are the lessee). For example, a lease business process with a payment schedule can use auto-creation to generate payment request records at appropriate days in advance of the payment due date to be routed for approval.

Note: You receive a single auto-created line item based on the defined

grouping criteria.

For cost purposes, these invoices/payment requests do not roll up amounts to the Cost Sheet. To roll up these amounts, the invoice/payment request should, in turn, auto-create another business process for the purpose of rolling up the amount(s) to the Cost Sheet.



Allocation Templates: Whenever a Lease BP auto-creates an invoice or payment request, Unifier will check for an allocation template. If one is linked to the Lease BP, Unifier will copy it to the invoice or payment request, and use it to calculate the payments. Each allocation will appear as a separate line item under the Standard tab of the invoice or payment request.

Take a snapshot of a Lease

Use the lease snapshot feature to create a historical picture of the lease that you can preserve before the lease is amended or otherwise modified. The snapshot can be created automatically when the Lease BP reaches a certain status, or you can create it manually whenever necessary. Automatic snapshot creation is set up in uDesigner.

To save an automatically created snapshot

- 1) When the status of the Lease BP changes and a snapshot is created automatically, you receive a message.
 - Enter a title for the snapshot (if you want to overwrite the default title), and an optional description.
- 2) Click **OK**. The snapshot is saved in Unifier.

To create a snapshot manually

- 1) While in the Lease BP, choose **File > Create Snapshot**.
- 2) Enter a title for the snapshot (if you want to overwrite the default title), and an optional description.

3) Click **OK**. The snapshot is saved in Unifier.

To view and manage snapshots

- While in the Lease BP, choose View > Snapshots. The Snapshots window opens.
 The snapshots are listed in the window. Manually created snapshots display Yes under the User Created column; system created snapshots display No.
- 2) To save the snapshot as a PDF file, select a snapshot from the list and click **Open**. Unifier displays the PDF file, which shows all the fields from the detail forms for all the tabs on the business process.
- 3) To view snapshot properties and change the title or description of the snapshot, select a snapshot from the list and click **Properties**.
- 4) To delete a snapshot, select a snapshot from the list and click **Delete**.
- 5) Click **Close** when you a done viewing snapshots.

Calculating Net Present Value (NPV)

If you the data elements corresponding to the Net Present Value (NPV) are included in Lease BP design, then the following information will be available:

| Annual discount rate | NPV Amount | Comments |
|----------------------|---------------|---|
| Detail Form | Detail Form | · |
| | | The calculated amount will then be populated into the NPV present on each payment setup respectively. |
| Detail Form | Upper Form | The NPV amount for each payment setup will be calculated individually using the discount rate present on the respective payment setup. |
| | | The summarized NPV amount will be populated on the upper form. |
| Upper | Detail Form | The NPV amount for each payment setup will be calculated using the discount rate present on upper form. |
| Form | | The calculated amount will then be populated into the NPV present on each payment setup respectively. |
| Upper Form | Upper Form | The NPV amount for each payment setup will be calculated using the discount rate present on the upper form and the summarized amount will be populated on the upper form. |
| Upper Form, | Upper | The NPV amount for each payment setup will be calculated using the discount rate present on the each setup. |
| Detail Form | Form | If the rate is not present on the payment setup then we will use the rate present on the upper form. |

| | | The summarized amount will then be populated on the upper form. |
|----------------------------------|-------------------------------|--|
| Upper Form, Detail Form | Detail Form | The NPV amount for each payment setup will be calculated using the discount rate present on the payment setup. If the rate is not present on the payment setup then we will use the rate present on the upper form. Calculated NPV amount for each payment setup will be populated in the respective form. |
| Detail Form | Upper Form, Detail Form | The NPV amount for each payment setup will be calculated individually using the discount rate present on the payment setup. The NPV for each payment setup will be populated in the respective form. Also, the summarized amount will populated in the upper form. |
| Upper Form | Upper Form, Detail Form | The NPV amount for each payment setup will be calculated using the discount rate present on the upper form. The NPV for each payment setup will be populated in the respective form. Also, the summarized amount will populated in the upper form. |

If you have added the following data elements, then you will be able to calculate the Net Present Value (NPV):

- Annual discount rate
- NPV Amount
- Include in Net Present Value

The NPV calculation will be triggered after the following events:

- Finish editing
- Index rate change (at the end of the day)
- Index rate change through user interface (UI) or Integration.
- Reverse Auto-population of the base lease record.

After you finish editing, the system refreshes values in the Regular Line Schedule and Straight Line Schedules.

For a Workflow BP, the system calculates the NPV value when Payment Schedule is refreshed. This feature applies to the Line Item updates, as well.

The system checks changes in the following values, daily:

- Index rate
- Payment schedules
- Discount rate

If there are any changes in the values of the fields above, then the system triggers NPV recalculation based on the updated values.

Reservation Business Process

Some objects in Unifier can be reserved for use. For example, in the Asset Manager, you could reserve a piece of equipment that needs to be used at a project site for three weeks.

In Unifier, you can reserve the following objects:

- Assets
- Document Manager records
- Configurable manager objects
- The object of a line item or simple type business processes (both workflow and non-workflow)

When these objects (assets, shells, spaces, etc.) are designed, they can be "calendar enabled," which means that the business process form for these objects will show a calendar option, and the object will be available for reservation.

In conjunction with these calendar-enabled objects, Unifier provides a reservation type business process which you can use to reserve these objects. A reservation BP is considered a type of cost BP in that it integrates with the Cost Manager to use cost codes at the company and project/shell level.

There are two ways to make a reservation:

1) Using a reservation business process

By using a reservation business process (that has been designed and configured for your use), you can specify the date and time of the reservation. Depending on its design, this business process can also:

- Display availability and identify scheduling conflicts
- Denote the reservation as "tentative" or "confirmed"
- Gather cost information
- Specify additional details, such as the number of attendees, A/V requirements, food catering, etc.
- Show the reservation as a recurring event.
- Trigger another business process, such as a work order.
- 2) Using a quick calendar

By using the quick calendar option that is available on any business process (that was designed to be calendar-enabled), you can open the calendar and enter the parameters for your reservation.

Note: For an asset in the Asset Manager, the quick calendar is the only way you can reserve an asset; you cannot use the reservation business process.

Using a Reservation Business Process

The reservation business process is similar to any other business process. You need to fill in the upper form fields as necessary, and add line items for detail information about the reservation.

The upper form of the reservation business process should include **From Date** and **To Date** fields which you need to complete, and should also include one or more data pickers, where you choose the object or objects that you want to reserve. In the example above, the room and projector fields are the data pickers from which you can select multiple objects to reserve for this event.

The reservation business process can be designed to include additional information about this reservation, such as food catering for the event.

The reservation business process has two special features:

Schedules

- Enables you to open the Schedules window and view the reservation schedule for the objects you are reserving with this reservation BP.
- Is useful for comparing the availability of multiple objects being booked for the same event, and to resolve conflicts or identify openings in the schedule.

Recurrence

Enables you to specify how often this reservation should be created. When you use this options, Unifier continues to automatically reserve the object according to the specifications you select with this feature.

The following describes the reservation business process log (Standard View):

From your project, go to your reservation BP and click to open the reservation BP log. On the left-hand pane, a set of toolbar options and a list of records, if available, are displayed. On the right-hand pane, the following tabs explain more information about each item on the list:

- Record Details tab
- Workflow Progress tab
- Attachments tab

The following explains the toolbar options of the reservation BP log:

| Create | Enables you to create a new reservation BP. From the Requester Information block, you can click the Space data picker field to open the Usable Space Reservation window which contains a calendar that enables you to determine the duration of the reservation. |
|-------------|---|
| Action s | Enables you to conduct the following on a selected record, or multiple records: Import Export CSV Template Create From Template Bulk Edit Print Transfer Ownership Terminate Record |

| View | The View data picker enables you to arrange the list of records listed, as follows: | | |
|--------------------|--|--|--|
| | Records Created by Me Records Received by Me Records Created and Received by Me Records from My Company | | |
| | In addition, the View data picker enables you to: | | |
| | Create New ViewManage Views | | |
| Edit View | To edit, or customize, the view of the log. | | |
| Refres h | To refresh the data displayed on the log. | | |
| Print | To print a record. | | |
| Searc h | To search for a record. | | |
| Find on Page | To find a record based on a column heading. | | |
| Help | To access documentation. | | |

The following explains the columns on the reservation BP log:

- ▶ Record Duration Status (Calendar icon)
- ▶ Attachments (Paper clip icon)
- Record Number
- ▶ Reservation name
- Space
- ▶ From Date
- ▶ To Date
- Amount
- Status
- Creation Date
- Creator

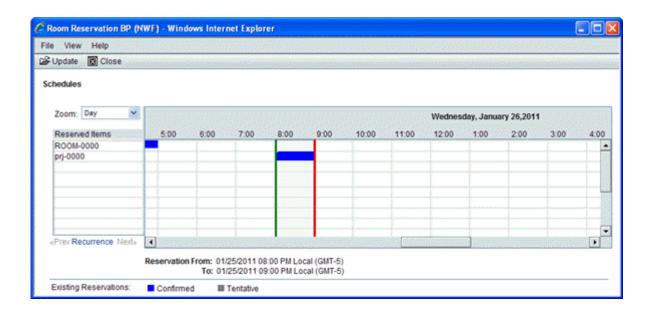
For each item on the list, the gear menu enables you to perform the following:

- Open
- Copy with Attachments
- Copy without Attachments

- Print
- Transfer Ownership
- **▶** Terminate Record

Using the Schedules Feature

The Schedules feature is most useful for resolving scheduling conflicts.



Standard View

When you open a reservation BP record, the BP record page that opens contains the following menu options (on the top right-hand corner):

| Send | Enables you to send the BP to the next step. |
|------|---|
| Save | Enables you to save any changes that you have made. |

Menu Options drop-down (the three horizontal line icon) Enables you to complete, set up, or access any of the following operations:

- Cancel Reservation
- Export Line Item Template
- Print
 - HTML
 - PDF
 - Custom
- Recurrence
- Reload
- Review
 - Review
 - AutoVue Review
- Schedules (See below for more details)
- Transfer Ownerships
- Undo Accept Task
- Help
- Close

When you open a reservation BP record, the BP record page that opens contains the following tabs:

> <BP name> Reservation Details tab

This tab enables you to see the details of the BP and access the following tabs for the record that you had selected:

- Attachments
- Comments
- Linked Records
- Lined Mail
- Workflow Progress
- Audit Log
- Reference Records

Reservation Charges tab

This tab enables you to view and work with all the charges related to your selected record.

When open a record and click Schedules (the Menu Options drop-down (the three horizontal line icon) > **Schedules**), a new window opens which contains the following tabs:

Schedule

This tab enables you to set the schedule for the reservation. You can see and set the reservation period and see any conflicts.

Recurrence

This tab enables you to set the frequency and range of the reservation. See the next topic for more details.

Making a Recurring Reservation

The reservation business process includes a "recurrence" feature, where you can specify how often this reservation should be created. Unifier will continue to automatically reserve the object according to the specifications you select with this feature.

| 1) | | |
|----|--|--|
| 2) | | |
| 3) | | |
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| | | |

To make a recurring reservation (Standard View)

When open a record and click Schedules (the Menu Options drop-down (the three horizontal line icon) > **Schedules**), a new window opens which contains the following tabs:

Schedule

This tab enables you to set the schedule for the reservation. You can see and set the reservation period and see any conflicts.

Recurrence

This tab enables you to set the frequency and range of the reservation. See the next topic for more details.

Recurrence Daily

In the **Recurrence** tab, when the "Recurrence On" checkbox is checked, the Frequency and Range of Recurrence sections will be displayed.

In case the checkbox is unchecked, the two sections are not displayed.

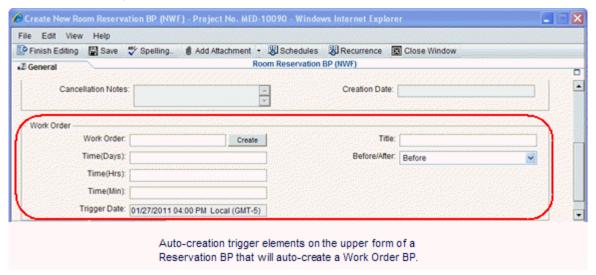
In case of an existing recurrence, if the checkbox is unchecked, all recurrences will be removed when you click **Save**. The interaction is the same as that occurs on clicking on 'Remove Recurrence' button in existing screen.

Recurrence Weekly

In case of an existing recurrence, if the checkbox is unchecked, and then it is checked again (without clicking on **Save**), the values present for the frequency and range of recurrence sections will remain the same, as before.

Auto-Creating Another Business Process From the Reservation

If the reservation business process is designed to do so, it can automatically create one or more new business processes. For example, for a room reservation, the Reservation business process could auto-create a work order for catering two days before the event, and auto-create an "action item" follow-up business process that would go to all attendees eight hours after the event. In order to trigger the auto-creation, the form (either the upper form, or a line item form) will contain fields you must fill in.



If a reservation business process is designed to auto-create another business process, the fields you need to fill in are as follows:

| In this field: | Do this: |
|----------------|--|
| Before/After | Specify whether Unifier should auto-create the business process Before or After the reservation event. |
| Time (Days) | Specify the number of days before/after the event this business process should be created. For example, the Work Order in the illustration should be created 2 days after the event. |
| Time (Hrs) | Specify the number of hours before/after the event this business process should be created. For example, the Work Order in the illustration should be created 8 hours after the event. |
| Time (Min) | Specify the number of minutes before/after the event this business process should be created. For example, the Work Order in the illustration should be created 30 minutes after the event. |
| Trigger Date | This is a read-only field. Initially, it will display the date of the reservation. When you fill in the Time fields, Unifier will recalculate the trigger date according to the values you entered and display it in this field. |

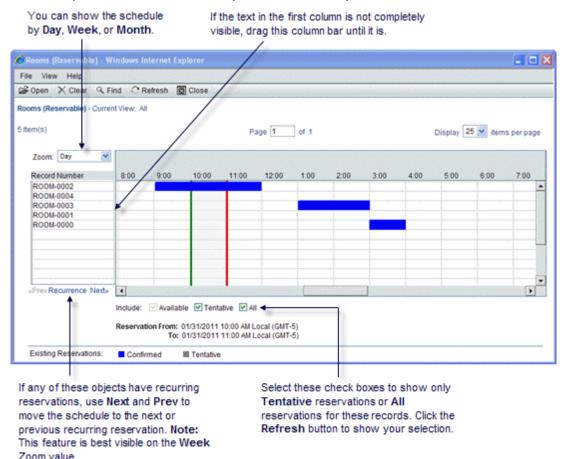
Auto-creation and recurring reservations: For auto-creation on a recurring reservation, Unifier re-evaluates the trigger date for each recurrence. The Reservation business process will show a hyperlink to only the last record created; however, you can see all the records created by opening the View References window. You cannot manually auto-create a business process for a recurring reservation.

How the data pickers work on a Reservation business process

The data pickers designed for Reservation business processes differ from most other data pickers in that they are very interactive: You can check availability and change reservation dates and times from the picker itself.

Note: This works best if you are reserving a single object, such as a room. If you are reserving multiple objects for the event, any time you change the date or timeframe for any one of the objects, Unifier will reflect that change for all the objects, and you are likely to encounter scheduling conflicts this way. To change the dates or time frames of multiple objects on a reservation, use the Schedules feature.

The data pickers for reservable objects show the object in a schedule-like window:



To select a reservable object from the picker

Select the object row and click Open.

To change a reservation time on the picker

At the bottom of the data picker window, the **Reservation From** and **To** fields show the timeframe you specified in the **From Date** and **To Date** fields on the Reservation form. This timeframe is also denoted by the green and red lines on the schedule. If the object shows a reservation conflict at that time, you can change the timeframe on the picker before you select the object.

To change the timeframe, drag the green and red lines to the timeframe you want. Unifier will change the **Reservation From/To** fields at the bottom of the window to reflect your change. When you click the **Open** button to select the object to reserve, Unifier will update the Reservation record with the new time.

Using Quick Calendar Entry on a Business Process

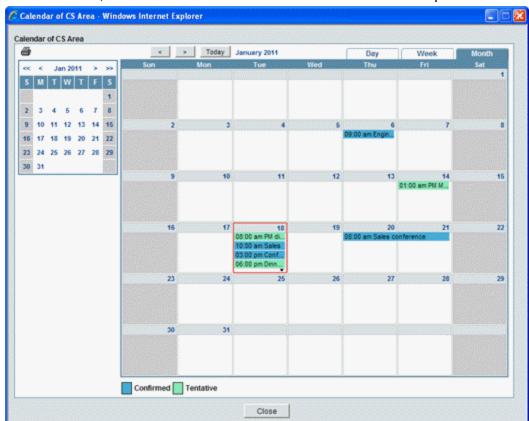
The Quick Calendar is available on any business process that was designed to include the calendar feature (calendar-enabled). From the business process record, you can open the calendar and enter a reservation.

Any entry you make on the calendar will update the record.

Assets in the Asset Manager can be reserved only by using the Quick Calendar entry method. You cannot reserve an asset with a Reservation business process. The calendar does not show draft or terminated records.

To make a reservation using a Quick Calendar Entry

1) From the log, open the business process record.



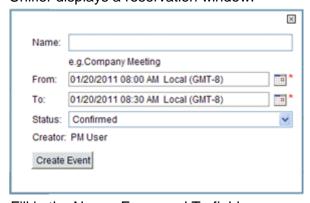
2) On the toolbar, click the Calendar button. The Calendar window opens.

By default, the calendar opens in the "Month" view. You can change this to a day or week view if you want using the tabs at the top of the calendar. If there are more reservations than are visible on any day, click the down arrow at the bottom of the day cell to see the rest of the reservations.

The calendar shows confirmed and tentative reservations in color. The current day is outlined in red.

3) Click the day you want to make the reservation for. If you are using the Day view of the calendar, click the beginning hour for the reservation.

Unifier displays a reservation window.



4) Fill in the Name, From, and To fields.

- 5) In the Status field, specify whether this reservation is tentative or confirmed.
- Click CreateEvent.
 Unifier adds the reservation to the calendar.

To view all reserved objects in a log

If you want to see all the reserved objects in a log, click the Calendar button above the log. Unifier displays a calendar showing all the reserved objects from that log. The Calendar button will not appear above the log unless there are calendar-enabled objects in the log.

To view and edit a reservation

- 1) Open the record of the business process that is reservable and click the **Calendar** button.
- 2) On the calendar, click the reservation bar. Unifier displays a summary details window.
- 3) To see or edit reservation details, click the details link. Unifier displays the reservation window.
- 4) Edit the details, if necessary, and click **Update Event**.
- 5) To delete the reservation, click the delete link.

To print a calendar

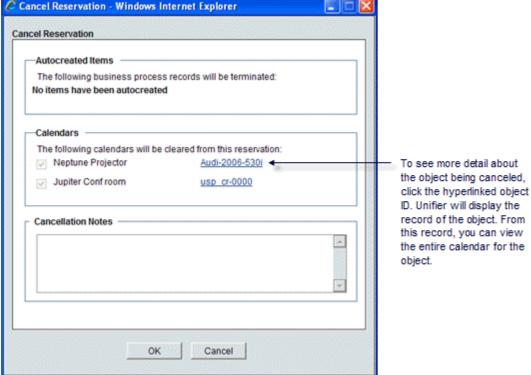
- 1) Open the record of the business process that is reservable and click the Calendar button.
- 2) On the calendar, click the printer icon in the upper-left corner. Unifier opens the Calendar Print Preview window.
- 3) Click the Print button. Unifier displays the Print window, where you can choose the printer and other options.
- 4) Click the Print button.

Canceling a reservation

To cancel a reservation

1) Open the reservation business process you want to cancel.

2) From the File menu, choose Cancel Reservation. Unifier displays a Cancel Reservation window.
Cancel Reservation - Windows Internet Explorer



On this window, Unifier tells you exactly what will be removed from the calendars, and provides an area for notes on the cancelation. It shows:

- Any business processes this reservation auto-creates. These will also be canceled.
- All the objects associated with this reservation that will be canceled. In the example above, the room is being canceled as well as the projector that was reserved for the room.
- 3) In the **Cancelation Notes** area, enter any notes you wish regarding the cancelation.
- 4) Click OK.

Business Processes with Redesigned User Interface

The redesigned Business Process user interface allows you to:

- View, edit, and manage all relevant details within a single form.
- Access record details with limited popup and clicks.
- ▶ See only relevant, context-sensitive menu and toolbar functions.
- Use the enhanced form layout to navigate, expand, and collapse field blocks.
- Create, enter, and update record data and line items in one place.
- Navigate easily between tabs to complete the main and line item forms.
- Add and view attachments in one place.
- Route workflows with minimized alerts and errors.
- ▶ Use enhanced field interaction in text boxes, pickers and data pickers.

To use the redesigned user interface to view BP records, from the top toolbar click . To turn off the redesigned interface, click .

For information about internationalization and CSV files refer to *Unifier General User Guide*.

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Business Process Types with Redesigned UI

Different business needs require different types of business processes. In uDesigner, many different types of business processes are available that perform various functions within Unifier.

The business process forms of the following types have redesigned UI:

- Cost
 - Line Items with CBS codes
 - Line Items with Fund codes
 - Line Items with CBS and Fund codes
 - Commit at Company Level
 - Line Items with Company Accounts Code (except Reservation)
 - Line Items with Multiple Codes (except Reservation)
- Document
 - Document with Folder
- Line Item
 - Line Item (Generic)
- Project/Shell Creation
 - Project/Shell Creation (Simple and Line Item)
- Base Commit and Change Commit (SPA)
- Text

The following explains each type.

See Business Process Types (on page 17) for details.

Cost

The following Cost-type BPs have redesigned UI:

- Line Items with CBS codes
 - Generic
 - Transfer
 - Base Commit
 - SOV
 - General Spends
 - SPA
 - Change Commit
 - SOV
 - General Spends
 - SPA
 - General Spends
- Line Items with Fund codes
 - Generic

- Transfer
- Line Items with CBS and Fund codes
 - Generic
 - Transfer
- Line Items with Both CBS and WBS Codes
 - Generic
- Commit at Company Level
- ▶ Line Items with Company Accounts Code (except Reservation)
- ▶ Line Items with Multiple Codes (except Reservation)
 - Lease
- Base Commit and Change Commit of Summary Payment Application SOV type

Document

The following Document-type BPs have redesigned UI:

Document with Folder BP

Line Item

The following Line Item-type BPs have redesigned UI:

Line Item (Generic)

This includes Generic Line Item BPs that have either one of the options indicated in the Cost-type BPs checked.

Use this process as RFB Master Vendor List or Enable Calendar.

Preventive Maintenance

Project/Shell Creation

The following Project/Shell-type BPs have redesigned UI:

- Simple
- Line Item

Text

The content of the Text-type business process form is typically a text comment in the lower portion of the form.

Creation Step

The create BP record form opens as a pop up window. The top part of the form contains tabs (main form and line item tabs), and toolbar options. The main form is displayed as the first tab and each line item tab appears as subsequent tabs. The left pane displays the record details and line item details. The right pane displays additional tabs associated with the main form or line

items. You can resize the left and right panes using the **Resize** icon.

Main form:

This top portion of the business process form contains information about the BP record, such as the name of the record, description, who created the record and when, and other general information. Additional informational blocks defined in uDesigner by your administrator are also displayed. You can collapse and expand these blocks.

| Toolbar Option | Description |
|-------------------|---|
| Save | To save a draft of the form. You can view your drafts under Home > Drafts . This option is displayed only for workflow BPs. |
| Send | To route a workflow business process to the specified recipients. This option is displayed only for workflow BPs. |
| Submit | Use Submit when you have finished editing a record. Displayed on all Non Workflow BPs when in Edit Mode. |
| ■ ▼Menu | The options you see under this menu are based on the BP design. Auto-Create: Displayed on any BP that can auto create other BPs. Print HTML, PDF and Custom: Displayed on all BPs. You cannot print draft records. Export Line item template: Displayed on any BP that has detail form integration interface defined. Reload: Displayed on all BPs. This option will reload the page. Help: BP specific help option. Your company or project/Shell administrator may provide a custom Help file to give you information about a specific business process. If a custom help file is available, it will be listed under the Help menu for the business process log or form. Close: Close the record. |

The right pane displays the following tabs associated with the main form: Attachments, Comments, linked Records, and Linked Mail. For Portal BPs, Attachments and Comments tabs are displayed.

- Notes:
- If the **Attachments** tab of the business process form contains any attachments, then an **Attachment** indicator is displayed. If the tab contains no attachments, then the right pane is refreshed and the indicator is no longer displayed.
- If the Comments tab of the business process form contains any comments, then a Comment indicator is displayed. If the tab contains no comments, then the right pane is refreshed and the indicator is no longer displayed.

Line Item form:

Line item tabs are displayed after the main form tab. All line items are displayed on the left pane, and the right pane displays the details form associated with the selected line item. The right pane contains the Details form, Attachments, and Linked Records. The Attachments tab is displayed only if the line item form supports the addition of attachments. Query based tabs will not be seen in the Creation step. The gear menu displays next to each line item on the left pane and contains all available actions you can perform on the line item. The following options are displayed on the gear menu: Copy, Copy With Attachments(Option seen only if attachments exist), Add to Group, and Remove. The Copy, Add to Group, and Remove options are displayed only if it is specified in the form design.

| Toolbar Options | Description |
|------------------------|--|
| Add | To add new line items. The Add button will be seen only if the form design allows for line item additions. |
| Actions ▼ | The following actions will be seen: Import Consolidate Line Items |
| Refresh | Refreshes the line items. All unsaved manual edits will be lost. |
| Print | Prints the list view. You can choose from: Print, Export to CSV, Export to Excel. |
| Search | Enables users to search for specific line items across all pages. |
| Find on Page | Enables users to type in find parameters to quickly search line items matching the criteria. |
| Collapse All Groups | To expand or collapse line items groups. These icons are displayed only when line item groups are present. |
| Expand All Groups | |

Update Step

The following options are displayed when the form is in edit mode. You must have edit permissions to edit a BP record form.

| Toolbar Options Send | Description To route a workflow business process to the specified recipients. This option is displayed only for workflow BPs. |
|----------------------|--|
| Save | To save a draft of the form. You can view your drafts under Home > Drafts . |
| Submit | Use Submit when you have finished editing a record. Displayed on all Non Workflow BPs when in Edit Mode. |
| ■ ▼Menu | The options you see under menu are based on the BP design. Auto-Create: Displayed on any BP that can auto create other BPs. Print HTML, PDF and Custom: Displayed on all BPs. Export Line item template: Displayed on any BP that has detail form integration interface defined. Terminate Record: Displayed on all BPs. This option is displayed only if the user has permissions to terminate records. Transfer Ownership: Displayed on all BPs. This option is displayed only if the user has permission to transfer ownership. Undo Accept Task: Displayed on all workflow BPs. This option is displayed only after the user has accepted a task. View Map: Displayed on all BPs that support geo-coding in their design. |

View Step

The View BP record form contains read-only fields and options that are applicable in the View step. The form is divided into two panes- the left pane displays the main upper form and the line items associated with the record, the right pane displays additional tabs associated with the main form or line items. The main form is displayed on the left pane as the first tab, and each line item tab appears as subsequent tabs. You can resize the left and right panes using the

Resize icon.

The main form contains Task Details, General, and other informational blocks defined in udesigner by your administrator. You can collapse and expand these blocks. The Task Details section of the form contains details of the assigned task and displays the following fields: From, To, CC (if applicable), Sent For, and Task Due Date (displayed if the task has an assigned due date). This section is not shown for users who have previously declined the task or are on the CC list. The General section contains all the upper form information.

The Attachments, Linked Records, General Comments, Linked Mail, Reference Records (displayed only if reference records are present), Workflow Progress (displayed if user has permission to view progress), and Audit Log (displays only if user has the required permission) appears as tabs on the right pane. The information in these tabs are read-only.

| Toolbar Option | Description |
|----------------|---|
| Accept | Accept a task. This option is displayed for workflow BPs. You may see this option if your non-workflow BPs is an i step record. |
| Decline | Decline a task. This option is displayed for workflow BPs. You may see this option if your non-workflow BP is an i step record. |
| ■ ▼Menu | The options displayed under this menu will vary based on the BP design. |
| | Add more assignees (Displayed for workflow BPs.) CC more users (Displayed for workflow BPs.) Review View Record location Auto-Create Export Line Item Template Email as Attachment Print - HTML, PDF and Custom Terminate Record Transfer Ownership Help Close |
| Edit | Edit non-workflow BPs. This option is displayed only you have permission to edit. |

Completing a BP Record Form

See topic Creating BP Records for detailed instructions on creating a BP record.

To complete a Business Process (BP) form:

- 1) Complete the Main form. Fields marked with a red asterisk (*) require an entry.
- 2) Add line items, if applicable.
 - If this is a cost or line item-type BP add line items as necessary.
 - If this is a Document-type BP, attach any documents to the form.
- 3) Add additional information, if applicable.
 - General comments.
 - Attachments to General comments.
- 4) When you have completed the form, do one of the following:
 - If this is a non-workflow BP:
 - a. Click **Save** to save your changes. Saving the form creates a permanent record.
 - b. Click **Submit** to finalize the record. The record will be displayed in view-only mode.

Unifier uses statuses to track the state of a business process record and any line items it may contain. For example, a Pending status generally means people are still working with the record, while a Closed status suggests the record is completed. Records in Closed status are typically marked as Terminal, meaning the record has reached a point where no further input is either required or desired. You can still access a non-workflow record in a terminal status as long as the record is in Edit mode. However, if you click **Submit** when the record is in a terminal status the record becomes permanently read-only and un-editable.

Note: For non-workflow business processes, Unifier evaluates the upper form validations specified in uDesigner only when the BP record is submitted by clicking the **Submit** option.

- If this is a workflow BP:
- a. When you have completed the form, click **Send**. The Workflow Action Details form is displayed.
- b. From the **Workflow Actions** drop-down, select a workflow action. If there is only one possible action name, then this step is pre-populated.
- c. The **Send For** field displays the Step name. The step name is populated based on the selected Action name, and is a read-only field.
- d. The **To** field displays the possible list of assignees for the workflow step. Use the User/Group picker to select an assignee, if not already preassigned.
- e. The **CC** field displays only if the workflow step allows CC users. Use the User/Group picker to select users who will receive notification on the BP record form. This field might be pre-populated based on the step setup.
- f. If the selected step has a due date, the details of the due date are displayed. If not already preassigned, you can choose from one of the following options:

Set all task due dates as: Lets you set the same due date for all assignees. **Set individual task due dates:** Allows you to assign different due dates for each assignee one at a time.

Click the **Calendar** icon corresponding to the option you chose. The Date picker opens. Select the month and year, and then click the date you want to select.

g. Click Send.

Editing Values on a BP Record Form

The following table describes the values:

Tips:

- Click X to clear out values. You can also clear all field values by selecting Menu > Reload.
- ▶ Use the **Search** and **Find on Page** options displayed on pickers to find specific items. Use the pagination controls if multiple records are present.

| Form Values | Description |
|--------------------------------|---|
| Text fields | Text fields have an input box. |
| Data Pickers | You can click on the Picker icon to launch the picker screen and either select a record and then click Select or double click the record. |
| BP Pickers | You can click on the Picker icon to launch the picker screen and either select a record and then click Select or double click the record. |
| Line Item Picker | Use the Line Item picker to select a line item. You can click on the Picker icon to launch the picker screen and either select a line item and then click Select or double click the line item. |
| - Shell Picker | For selecting a company-sponsored shell to auto-populate shell data elements on other business process fields. The picker is designed to show Active, Inactive, View-Only, and On-Hold shells. You can use the Type drop-down menu to view by Shell types. |
| Space Picker | The space log and space types are displayed. You can filter using the View drop-down menu. Space types are displayed on the left and the right grid displays the log for the selected space type. |
| Image Picker | For uploading images. |
| Hyperlink Picker | For adding and updating hyperlinks. |
| CBS Picker | On Cost-type business processes, project/shell cost sheets, and on schedule activity forms, for selecting CBS codes. |
| Work Package Picker | On Cost-type business processes, for selecting a work package for a Cost Sheet. This picker is populated with the work packages that have been created. |
| Transaction Currency Picker | The Transaction Currency picker displays the Project Currencies. Columns seen here are Currency Name and Currency Symbol. |

| Form Values | Description |
|-------------------------------------|---|
| User Picker | For selecting project/shell users (members of a project team) or company users (all users defined within a company). The options you see are contextual. Use the > or < controls to move the selected group or user from the Available Items list to the Selected Items list. |
| Commitment Summaries Picker (CM) | For selecting commitment summary that is used by a Generic Cost Manager in a shell. |
| Account Code Picker | For selecting company account codes included in the Cost-type BP. |
| CM0 Picker | For selecting Generic Cost Code. |
| | |
| Seasonal Dates Picker | For selecting Seasonal Dates record in Unifier. This is a system-defined picker. |

Supported Data Pickers

The following is a list of the data pickers supported in the BPs with redesigned user interface:

Note: These data pickers support the type ahead feature.

- Account Code Picker
- Activity Picker
- Allocation Template Picker
- Asset Picker
- Auto-update Status Setup Picker
- Bid Picker
- ▶ BP Line Item Picker
- ▶ BP Picker
- ▶ CM0 ,1 to 25 Picker
- Commit Line Item Picker
- Company Picker
- Cost Attribute Picker
- Cost Code Picker
- Currency Picker
- Date Only Picker
- Date Picker
- Fund Picker
- Group Name Picker

- Hyperlink Picker
- Image Picker
- Location Picker
- P6 Activity
- Planning Item
- Program Picker
- Project Picker
- Project Template Picker
- SOV Picker

Unifier does not permit type ahead for the SOV Picker field, in both form view and grid view.

- Resource Picker
- Role Picker
- Seasonal Dates Picker
- Shell Code Picker
- Shell Picker
- Shell Template Picker
- SYS Date Picker
- User Picker
- WBS Code Picker
- WBS Picker
- Week Picker
- Work Package Picker

Refer to the Unifier Reference Guide for details.

Adding and Managing Line Items

Detailed information, such as transactions, can be entered as line items on BP records, if they have been designed to accommodate documents that are attached as line items.

You can edit or delete line items on a BP form as long as the form is still editable; that is, before it reaches its terminal status (for example, approved). If you add a new line item in any step (other than the creation step), you can modify the line item until the BP is sent to the next step. The line item status will always default to the default line item status specified in the design. Users with permission can change the status if modification to the line item status is allowed in that step.

You can add attachments and comments to line items. In addition, you can filter, copy, and consolidate line items.

Note: Document and Line Item BPs can be designed to include line item status control, which allows users to choose a status for individual line items and control whether they can be modified.

Adding Line Items

To add a line item:

- 1) Select a line item tab and click **Add**. The right pane displays the Line Item Details.
- Complete the Line Item Details section. You can expand and collapse these information blocks.
- 3) If your line item supports attachments, you can add attachments. The Attachments and Linked Records tabs are seen only after you save the line item. For more information, see topic *Adding Attachments*.
- 4) When done, select from one of the following options:
 - > Save & Close: To save the information that you have entered and close the window.
 - Save & Add New: To save information that you have entered and refresh the window in order to add another line item.
 - **Cancel:** To discard changes that you have made and close the window.

Editing and Deleting Line Items

You can edit the line items on a BP record only if the design permits modification of line items and if the record has not reached the terminal step.

Note: If the line item contains Yet To Buy (YTB) or AFC values, it cannot be modified.

To edit line items:

- 1) Select the line item tab.
- 2) From the left pane, select a line item. The line item details are displayed on the right pane.
- 3) Update the line items.
- 4) When done, select from one of the following options:
 - **Save & Close:** To save the information that you have entered and close the window.
 - > Save & Add New: To save information that you have entered and refresh the window in order to add another line item.
 - **Cancel:** To discard changes that you have made and close the window.

To delete line items:

- 1) Select the line item tab.
- 2) From the left pane, select a line item.
- 3) From the gear menu, select **Remove**.

Note: When a line item is removed, Unifier removes link information, both from the record the line item belongs to, and from the record the line item item was linked to.

When you edit a line item grid, the row counts (at the bottom left corner of the grid) captures the following actions:

New

The count will depend upon the Add action and the Copy action on the line item. The number gets updated when you add new line items.

Deleted

The count will depend on the Remove action on the line item.

Note: These counts will not appear when the grid is in View only mode.

To edit an image field on a line item grid

An image field on the grid displays only an image icon; however, you can see a thumbnail of the image if you double-click on the icon. If you want to change or remove the image, double-click the cell anywhere but on the icon. Unifier displays a menu, from which you can choose to upload a different image, or remove the image.

To edit a hyperlink field on a line item grid

If you want to change a hyperlink, double-click the cell anywhere but on the hyperlink. Unifier displays the Hyperlink window, where you can change or remove the link.

To edit a checkbox field on a line item grid

When the field is opened in **Grid View**, it is rendered as a box that you can select or de-select.

If the list of line items is opened in **Form View**, all of the line items for a given tab are displayed. Similar to **Grid View**, the checkbox in the line item list is also rendered as a disabled box with the value.

The **Find on Page** option in the grid renders the checkbox field as a text box that allows you to type **Yes** or **No**. If you type **Yes**, then the system selects the checkbox and the line item associated with the checkbox is displayed along with the selected checkbox. If you type **No**, then the system does not select the checkbox and the line item associated with the checkbox is displayed along with the unselected checkbox.

Copy Line Items

You can create a new line item by copying an existing line item. You can choose to include any attachments that are on the source line item; however, any links the line item has to other records will not be copied.

To copy line items from the same form:

- 1) In a business process form, select a line item tab.
- Select a line item to copy and select > Copy.

- 3) From the **Line Item Details** tab on the right pane, complete all the required fields.
- 4) Click Save.

Line Item Consolidation

Business processes can be designed to accommodate line item consolidation: the ability to select individual line items from one or more BP records (the source BPs) and copy them into a new record (the destination BP). The selected line items can be from the same BP type, or they can be from different types, as long as they are compatible. The source and destination BPs must be at the same level (both company level or both project or shell level). File attachments can also be copied. For example, this functionality can be used to consolidate specific line items from multiple change order requests submitted over a period of time into a single change commit.

This functionality is built into business processes through the uDesigner design, which includes specifying which BPs can be used for the source and destination. Also, the ability to filter the business process records that can be consolidated (by status) can be added in uDesigner. This enables you to filter the records you see in the list to consolidate by the record status, allowing you, for example, to exclude records that have the status of Pending or Rejected.

Note: Line Items can be edited after consolidation, if your administrator has enabled it by un-checking the "Prevent consolidating the same line item across multiple records" checkbox.

There are some restrictions when consolidating line items from different BP types.

The top pane of the Line Item Consolidation page is used to select BPs and records, and the bottom pane is used to select the line items. Pagination in the top and bottom panes is seen only if the number of records and line items (in both available and selected panes) exceeds 1000 and 200 respectively. You can expand and collapse the top and bottom panes.

Top Pane Toolbar Options

| Toolbar Options | Description |
|----------------------------------|---|
| Select Business Process | This drop-down menu lists all BPs that allow consolidations. |
| View | This drop-down menu is context-sensitive based on the selected BP. |
| Consolidate from other locations | The Shell Picker window is displayed. Select shell. |
| Search | Enables users to search for specific line items. Search parameters seen here are based on the Find parameters set for the line item list. Search is performed on the database and works across all pages. |

| Find on | Enables users to type in parameters to quickly search line items |
|---------|--|
| Page | matching the criteria. |

Bottom Pane Toolbar Options

| Toolbar Options | Description |
|-------------------------|--|
| Available Line Items | |
| Select Tab | Displays the line item tabs visible in the form. Select a tab. |
| Group By | Group line items by column header. This drop-down menu lists all log columns for the selected log view of the BP. By default the <record_no label="">is selected.</record_no> |
| Search | Enables users to do search for specific line items. Search parameters seen here will be based on the Find parameters set for the line item list. Search criteria defined in uDesigner for each tab's log layout will appear as search parameters. Search will be a database search and will work across all the pages. |
| Find on Page | Enables users to type in find parameters to quickly search line items matching the criteria. |
| Include Attachments | This option will be checked by default. When this option is checked, attachments if any existing in the line items will get copied over. |

To consolidate line items:

- 1) Select a line item tab.
- 2) From the **Actions** menu, select **Consolidate Line Items**.
- 3) From the **Select Business Process** drop-down top menu, select a BP.
- 4) Select a BP record.
- 5) From the **Available Line Item List** pane, select the line item tab.
- 6) Select the line items and click the arrows to move it to the Selected line Items pane.
- 7) Click Done.

Additional Information:

- If you open a record from the shell and try to consolidate line items, you will see the shell picker (BP location picker).
- If you open a record from a project, when you try to consolidate line items, you will not be able to see the BP location picker.
- If you are opening the record at the company level, when you try to consolidate line items, you will not be able to see the BP location picker.

- If data picker is configured for a BP in uDesigner, line item consolidation displays records across all shells or projects. This is applicable for source BP, either associated with a standard project or a shell.
- If there is a source BP that is associated with a data picker, then Unifier hides the shell location picker.
- If the records are displayed based on data picker configuration for a shell, then the "Records from <Shell Name>" label changes to "Records from All Locations" label.

You can consolidate lineitems that have Line Item Data Pickers. While copying, the system runs the query condition defined for the Line Item Data Picker, under the destination business process configuration.

- If the query condition does not return the value that is getting copied, then the Line Item Data Picker value will not be copied over.
- If the query conditions are met. then only teh Line Item Data Picker value will be copied in to destination line item and any other auto-population based on this picker will be populated.

If in the destination BP Line Item Data Picker the tab is hidden, and you are copying line items from another BP record where the Line Item Data Picker has that tab lineitem selected, then the line item will be copied with out the picker value.

The Line Item Data Picker value from the source line items cannot be copied in to destination if in destination teh record BP Data Picker has different record or no record selected.

Grouping Line Items

If your BP design allows adding or copying of line items, you can also choose to group line items into meaningful categories. You can select one or more line items to add to a group and each group displays the line items under it. The groups are displayed in alphabetical order, and the line items that are not part of a group are displayed under the group **Not Grouped**. You can change the name of the groups and move line items between groups. When a record or line items are copied, the groups are also copied.

Notes:

- The Manage Groups option is available for Line Item and Cost BP types. The Manage Groups option is not available for SOV type BP (Summary Payment Applications).
- By design, you cannot move a group from the Selected Columns section to the Available Columns section.

To create a group

- 1) After the line items are created, open a business process record, and select a line item tab (for example, **Line Item List** tab).
- 2) Select one or more line items.
- 3) Click the **Actions** drop-down menu and select **Manage Groups** to open the **Manage Groups** window.
- 4) In the **Manage Groups** window, click the plus icon () to create a new group on a new row.

- 5) Enter a name, and description, for the new group.
- 6) Select one of the following options:
- ▶ Cancel: If you make any changes to the groups and click Cancel, the window closes without any changes saved.
- Save: If you make changes and click Save, your changes will be saved, but the Manage Groups window will still be available to make more changes.
- ▶ Save & Close: If you make changes and click Save & Close, your changes will be saved, and the Manage Groups window closes.

To edit group property

- 1) From the line item tab, select a group by hovering over the group name.
- 2) From the gear menu, select Edit Group Properties.
- 3) Change the name or description of the group, and select Save.

You cannot change the properties of the default group **Not Grouped**.

To add line items to a group

- 1) Open a business process record, and select a line item tab.
- 2) Select one or more line items. In order to select multiple line items, you have to click **Cancel** or **Save**.
- 3) From the gear menu, select **Add to Group** and select a group.

The group line item will appear at the top of the line items area of the business process form in bold. The **Amount** column will show the sum total of the line items you added.

If a line item has been copied and the copy source is already in a group, then the new copied line item will be in the same group.

If checked in uDesigner, then in the **Line Items** tab, the **Amount** column displays the total amount (only the amount value).

To remove line items added to a group

Select a line item and from the gear menu, select **Add to Group** and select **Not Grouped**. You can also choose to move line items to other groups.

To manage groups

From the toolbar, select **Actions** > **Manage Groups** to open the **Manage Groups** window and display all of the existing groups, excluding the Not Grouped items. The sorting order is ascending, by default.

The **Manage Groups** option is available for Line Item type BP and Cost type BP (excluding the SPA type BP), only. When there is a flat list of line items in line item log, the **Manage Groups** option is not available. The **Manage Groups** option is available when there is at least one group available to select.

In the **Manage Groups** window, you can delete existing groups, also (click a row and click the trash-can icon). You can select multiple groups, right-click (or click the gear menu), and select **Remove**, to move the groups to the Not Grouped items.

The groups are sorted in alphabetical order. The sort order of the line items within the group will be governed by the Line Item List Sort as set in uDesigner.

To expand or Collapse Groups

From the line items tab, select the Collapse all Groups or Expand all Groups icons.

To create line item groups by using CSV

You can group line items by CSV import.

Unifier inserts an additional column in the CSV file, **Tab Name**, D row. The cell under the **Group Name** column contains the line item group name. It is optional to enter a value. The column is provided to allow you to assign line items to the groups, at the time of creation.

When you import a line item, if the group name that you enter in the template already exists in the record, then Unifier adds a line to the group.

If the CSV template has multiple line items, and if few lines have **Group Name** value and others do not, then the ones with the empty **Group Name** will be in the "Not Grouped" group at runtime.

If the CSV template has no **Group Name** specified for any of the line items, then the line items will not be grouped.

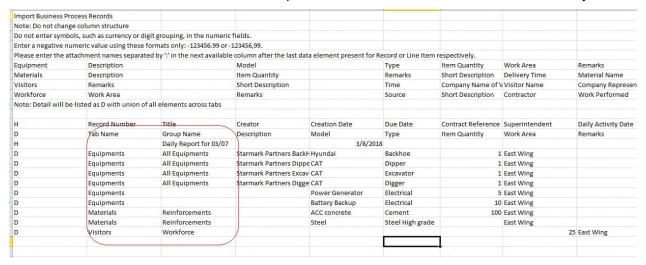
Example

In the CSV template below, the user is attempting to create a Daily Report record.

The user has entered H for the upper form details and wants to create the record with line items in Equipments, Materials, and Visitors tabs.

- 1) Six line items have been entered against the Equipments tab, and four of the line items belong to a Group called "All Equipments." The subsequent columns in the D rows pertain to the line item details.
- 2) The two line items that do not have any group mentioned will go under "Not Grouped," post import.
- 3) The two line items have been entered for the Materials tab. Post a successful import, the group "Reinforcements" will be created.

4) One line item has been entered against the Visitors tab, and the user does not want to group this one line item. As a result, the Group Name value has been left blank, intentionally.



Viewing Groups when Referencing Line Items by Way of Line Item Data Picker

You can create line item groups under each line item tab in a business process record and view the line items by group. When referencing a line item within a source BP record, you can also select a line item (from the line item data picker) that belongs to a specific group (e.g., contract type). This is to state that if your selected source record line items have groups, then the line item data picker shows the line items along with the group names; otherwise, a flat list of line items (that match the query conditions) is displayed.

In the line item data picker:

- The groups are displayed in ascending order.
- ▶ The line items that do not belong to any group will be displayed under "Not Grouped" column, similar to the line item log.
- In a line item data picker, when line items are filtered using query conditions defined in uDesigner, group names should be shown along with filtered line items. The same behavior is applicable if additionally user filters record using search or find on page in the line item data picker.
- When line items are filtered (using query conditions defined in uDesigner), the group names are displayed along with the filtered line items. The same condition applies if you filter a record using the **Search** or **Find on Page** options in the line item data picker.

If you select a group node in the line item data picker, then the select option will not be enabled; therefore, you cannot pick a group from the line item data picker.

The type-ahead feature of the line item data picker displays:

- Display element value
- Line number
- Group Name

Removing Line Item Attachments

The ability to remove an attachment depends on certain conditions. When you are assigned to a task that has a line item attachment, you can remove the attachment *if you have uploaded the attachment yourself*; otherwise, only the record owner (the creator) of the Business Process (BP) record can remove the attachments.

Note: If you are working in the Classic View, you (the assignee) can delete attachments uploaded by yourself as well as deleting attachments uploaded by other assignee, users after the current user (you) accepts the task.

To remove a line item attachment:

- 1) Go to the business process and click on the **Line Items** tab.
- 2) Click to select a line item from the log.
- 3) On the right-hand pane, click the **Attachments** tab.
- 4) Click the gear menu to open the menu and click **Remove** (Remove).

Working with Attachments

You can attach files to be routed with a business process (BP) form. These attachments may be supporting documents that are attached to a BP record. You can also include attachments to the Comments section of the BP.

By default, files attached to business processes are placed in the **Unpublished Documents** folder in the **Document Manager**. A **Publish Path** data element can be designed in business processes in uDesigner to specify the automatic publishing of documents to a specified path and override the default. Refer to *Unifier Managers User Guide* for details about automatic publishing of documents.

If you are uploading drawing files, see **Attach Drawing and Reference Files to a Business Process** (on page 116) for handling drawing file attachments.

Notes:

- You cannot upload and attach two documents with the same name to a BP record.
- For security, the Company Administrators can specify the list and size
 of files that can be uploaded to the Company Properties page, by
 users and per company policy. Contact your Company Administrator
 for more information.

Viewing Attachments Associated with a BP Record

To view attachments:

- Open a business process record.
- 2) Select the **Attachments** tab from the right pane. A list of attachments is displayed on the right pane.

- 3) To view the **Revisions** and the **References** tabs, maximize the right pane. The **References** tab is displayed only if there are references to drawing file attachments.
- 4) When you maximize the **Attachment** tab, the system selects the first file in the grid, by default, and a preview of the file is displayed on the right-hand side of the window.

The **Previous** and **Next** page buttons allow you to navigate between multiple pages.

The **Revisions** tab, located under the **Attachments** tab grid, allows you to access the previous version of the file that you have selected, if available.

The preview screen displays the following file types:

- Image
- PDF

The audio and video files cannot be previewed. You cannot preview DLL and SWF files, but you can open them in AutoVue or download the attachment.

Document Review

When you click and select a document, use the gear menu () to perform the following operations:

- Review
- Open in AutoVue (You can also open an attachment by double-clicking the name of the attachment)
- Download
- Revise
- Remove

If you click **Review**, the **Document Review** window opens. This window has the following sections:

- Attachment grid
- File viewer

Use the File viewer to perform the following operations, using the icons on top:

Maximize

To expand the viewer.

Download

To download a raw file.

- Zoom
- Rotate

To rotate the attached graphic.

Rotation happens clockwise, by 90 degrees.

Context-sensitive **Cancel** and **Save** options are made available when the system detects rotation. The **Save** option enables you to save the rotational changes, and the **Cancel** option enables you to reset the image back to its original state.

Rotation will not be permitted after the first annotation is completed.

Comments

To open the Comments pane.

The Comments pane enables you to insert your comments and annotate the file.

Click the pin icon to see the annotation options (Brush, Pin, Square, Circle, and colors palette).

You can remove your annotation by using the Clear option, when adding a new comment. Once you post an annotation, you cannot remove or update it.

In annotation addition mode, you can mark up multiple areas and enter a comment. You can create more than one annotation per comment. To view annotations, hover over the pin icon and select View Annotations. You can also add multiple markups or annotations to a comment. Use the pin icon to open the annotations options and add markups one after the other. After you post the comment, the markups will be associated with that comment.

You can edit or delete a comment by selecting the comment block, right-click, and select Edit or Remove options.

When you select Edit, you can edit the comments and annotations.

The Remove option removes the comment and associated annotations.

Adding Attachments

To add attachments to the main form of a business process record:

- 1) Open a business process record.
- 2) Select the **Attachments** tab from the right pane.
- 3) To select a file from your computer, select **Attachment** > **Browse**.
 - a. Drop and drag files from you computer, or click **Browse** and navigate to your file.
 - b. Select if you want to include reference files and if you want to revise the file automatically if a file with the same name exists.
 - c. Click Upload.
- 4) To select a file from Document Manager, select **Attachment** > **Document Manager**.
 - a. Select a file. You can select the **Find on Page** icon to help you find a file. You can expand and collapse the document structure to easily navigate to your file.
 - b. Select the **Copy Comments** checkbox to copy the comments that are associated with the file you are attaching.
 - c. Click Select.

The Publish checkbox is disabled for documents that have been added from the Document Manager. For files attached from your local system, the Publish column is automatically checked, you can choose to un-check it.

If the **Attachments** tab of the business process form contains any attachments, then an **Attachment** indicator is displayed. If the tab contains no attachments, then the right pane is refreshed and the indicator is no longer displayed.

Adding Attachments from Document Manager

You can use the Search option (Document Manager picker > Select Files) to find documents that you want to add to the Business Process record, from Document Manager (DM).

Opening an Attachment

To open an attachment:

- Select the Attachments tab from the right pane. A list of attachments are displayed on the right pane. File revisions are displayed under the Revisions tab only if the file has revisions. The References tab is displayed only if there are references to drawing file attachments.
- 2) Select an attachment and select > Open in AutoVue. Or, double-click the name of the attachment.

For more information on adding annotations and markups, see topic *Add Markups to a Business Process Attachment*.

Reviewing an Attachment

When reviewing a document, you can do the following when editing a document or adding comments:

- Undo your changes (use the toolbar option or Ctrl+z)
- Redo your changes (use the toolbar option or Ctrl+y)

You can only make changes in comments that are in draft status. You cannot make changes on existing comments.

Revising an Attachment

To revise an attachment:

- Open a business process record.
- 2) Select the **Attachments** tab from the right pane.
- 3) Select an attachment and select *> Revise.
- 4) Select the file you want to revise and click > Browse.
- 5) Select the revised file to upload, and click **Open**.
- 6) Click Upload.

To see a list of revised documents, maximize the Attachments tab on the right pane.

If the name of a file that you attach to a BP record, or Line Item, matches the name of a file that exists in the BP record, or Line Item, Unifier allows you to automatically revise the existing file (Revise automatically if file with same name exists) with the newly attached file.

Note: If the terminal status of a BP record has been reached, then the system disables the document revision option.

Downloading an Attachment

To download an attachment:

- Open a business process record.
- 2) Select the Attachments tab from the right pane.
- 3) Select an attachment and select > Download.

Deleting an Attachment

To delete an attachment:

- Open a business process record.
- 2) Select the Attachments tab from the right pane.
- 3) Select an attachment and select *> Remove.

Adding and Managing Linked Records

To add linked records to the main form or line item tab:

- 1) Open a BP record. If you are adding a linked record to a line item tab, select the line item tab and select a line item.
- 2) Select the **Linked Records** tab on the right pane.
- 4) From the **Select Business Process** drop-down menu, select a business process. You can use the **View** drop-down menu or **Find on Page** options to filter the list of available records.
- 5) Select records and use the arrows to move it to the **Selected Records** pane.
- 6) Click Done.

To open the linked record:

- 1) Open a BP record. If you are opening a linked record associated with a line item, select a line item tab and select the line item.
- Select the Linked Records tab on the right pane. All the associated linked records are displayed.
- 3) Select a linked record and and select * > Open.

To remove a linked record:

- 1) Open a BP record. If you are deleting a linked record associated with a line item, select a line item tab and select the line item.
- Select the Linked Records tab on the right pane. All the associated linked records are displayed.
- 3) Select a linked record and and select * > Delete.

Viewing Reference Records

The Reference Records tab is visible only after a record has been created. This tab displays the reference records and linked records associated with a BP record. The linked records associated with the line items, including the ones established by means of consolidation, are also displayed.

In the Reference Records log, reference records are represented with this icon and linked records are represented with this icon if it is linked to the record, and this icon if linked to a line item. You can open a record by clicking on the record name. When the tab is maximized, the record information is seen on the right pane.

To view a list of referencing records

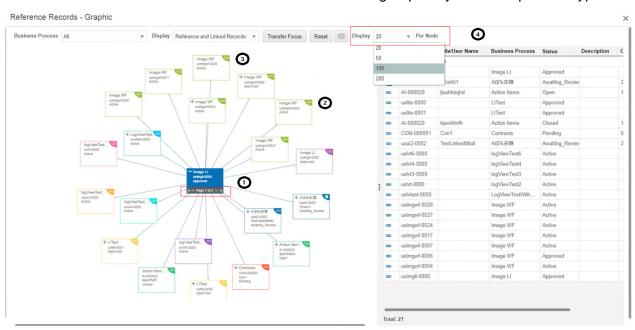
- 1) From the business process log, open the record.
- 2) From the right pane, select the Reference Records tab. The Reference Records log is displayed on the right pane. The log displays the reference and linked records that the selected record references or links to, and records that reference or link to the selected business process record.
- 3) To view a graphical representation of this log, click the View Graph button. The Reference Records window is split into two panes, with the graph on the left pane and the list on the right pane.

Note: This list will not display single-record business processes.

Using the Reference Graph

To view the reference graph, click the **View Graphic** button on the right pane. The reference graph allows you to view all the reference and linked records that are associated with a record. You can move the nodes, transfer focus, filter to view selected business processes that are either referenced or linked to the root node, view child nodes, filter the graph display to view only linked records or reference records or both. In addition, you can also filter to view only a specific business process record associated with the root node.

The right pane lists the reference records and linked records associated with the root node. When you make changes to the graph, the right pane is dynamically updated. For example, when a child node is expanded on the graph, the right pane also displays the child node with all its reference records and linked records. The records are grouped by business process type.



| Item | Description |
|---------------------|--|
| 1 | The root node, this node is highlighted and shows the record you started with. It displays the BP type, record number, title, and status. |
| 2 | Reference records. The nodes are color coded based on the BP type. It displays the BP type, record number, title, and status. |
| 3 | Linked records. It displays the BP type, record number, title, and status. The icon color indicates if the record is linked to the record or a line item. This icon is displayed if the record is linked to the record, and this icon is displayed if it is linked a line item. |
| 4 | The right pane. When a child node is expanded on the graph, then the right pane displays the child node with all its reference records and linked records. The records are grouped by BP type. |
| + | Expand to view child records associated with the record. When expanded, the right pane shows the child reference and linked records grouped by business process type. Collapse child records. |
| Business Process | Displays all Business Processes that are either referenced or linked to the record in focus (root node). You can filter to view specific business processes records that are either referenced or linked to the root node. Both the log and the graph are updated based on the value selected. |

| Item | Description | | |
|---------------------|---|--|--|
| Display | Filter the graph and log to view only linked records, reference records, or both. Select from one of the following options: Reference and Linked Records , Reference Records , or Linked Records . | | |
| | Both the log and the graph are updated based on the value selected. | | |
| Transfer Focus | Changes the focus of the log and the graph to another record and displays all of its reference and linked records. Select a node, and click Transfer Focus . | | |
| Reset | Resets the root node. | | |
| Print | Prints the reference graph. | | |
| Display Per Node | Displays the value for page size. The page navigation, on the paging bar of root record that has children, displays the current page number (out of the total number) with navigation arrows. | | |
| | Available page sizes are 20, 50, 100, and 200. When you change the page size, the graph resets along with the root node that has been expanded. | | |

Working with General Comments

You to add text comments that are like notes that accompany the business process record, but do not become part of it.

Depending upon the workflow setup and your permission settings:

- You can hide or delete comments.
- You can attach supporting documents to your comments, which do not become part of the attachments of the BP itself, or mark up attached documents. See Working with File Attachments and Markups (on page 111).
- You can add comments if you are a task assignee or if you have been copied (cc'd) on the business process.
- You can add comments to a business process at the **End step**, and also at any status in a workflow, including **Terminated** (which means the business process was stopped at some point in the workflow). To add comments at those points in a workflow, you must have the **Add General Comments** permission.

Note: Some users, such as project managers, may have an additional permission that allows them to add general comments to any form (workflow or non-workflow) that they can view, without accepting the task.

Adding General Comments

When you add a new comment to a business process form, it remains as a draft until you send the form to the next step in the workflow. Comments are editable in the draft stage, you cannot modify the comment once it has been sent to the next step. Comments that are in draft mode and editable have the **Edit** icon. By default comments you post are automatically hidden, you can uncheck the **Hide** box to make comments public. Private draft comments have the following hidden icon next to them and when the records moves to the next step in the workflow, the hidden icon changes to red .

To add general comments to the business process form:

- 1) Open a business process record.
- 2) Select the main form (**Record Details**) tab.
- 3) From the right pane, select the **Comments** tab.
- 4) Click the **Attachment** button.
- 5) Enter your comments in the **Comments** box.
- 6) To add an attachment to a comment from your computer, click **Attachment** > **Browse**.
 - a. Drop and drag files from you computer, or click **Browse** and navigate to your file.
 - b. Select if you want to include reference files and if you want to revise the file automatically if a file with the same name exists.
 - c. Click Upload.
- 7) To add an attachment from Document Manager, click **Attachment** > **Document Manager**.
 - a. Select a file. You can select the **Find on Page** icon to help you find a file. You can expand and collapse the document structure to easily navigate to your file.
 - b. Click **Select**.
- 8) De-select the **Hide** checkbox to post a public comment.
- 9) Click Post.

Note: The Comments box does not recognize formatting, including line breaks. Even if you press the Enter key to make a new line in the Text Comments section, the final comment will not reflect the new line.

If the **Comments** tab of the business process form contains any comments, then a **Comment** indicator is displayed. If the tab contains no comments, then the right pane is refreshed and the indicator is no longer displayed.

Copying Comments

To copy your comments:

- 1) From the Comments tab, right-click on a comment and select **Copy**. A new comment row is created.
- 2) Use the **Comments** box to add or edit the comment.
- 3) To add attachments, click **Attachment** and select **Browse** or **Document Manager**.

4) Click Post.

Tips:

- Click on an attachment to open it.
- To download and attachment, select the arrow next to the attachment and select **Download**.
- ▶ To delete an attachment, select the arrow next the attachment and select **Delete**.

Editing and Deleting General Comments

Comments on a business process record are displayed in the **Comments** tab.

When you add a new comment to a BP form, it remains as a draft until you send the form to the next step in the workflow. Comments are editable in the draft stage, you cannot modify the comment once it has been sent to the next step. Comments can be deleted after being sent, only if the BP workflow has been set up to allow deleting of comments.

To edit a comment

- 1) From the **Comments** tab, select a comment.
- 2) Right-click on a comment, and select Edit.
- 3) Update your comments.
- 4) Click Post.

To delete a comment

- 1) From the **Comments** tab, select a comment.
- 2) Right-click on a comment and select **Remove**.

Viewing Comments

To view comments:

- 1) Open a business process record.
- 2) Select the Comments tab from the right pane. A list of comments are displayed on the right pane. The name of the user who posted the comment, the company name of the user, and the timestamp when the comment was added or updated are displayed. You can also view the attachments associated with the comment.
 - When the tab is expanded, the left pane displays the grid and the right pane displays the content of the selected comment.
- 3) To filter the comments, use the **Posted By** drop-down menu to view comments by a specific user or by all users.

Working with Linked Mail

The **Linked Mail** tab enables you to link existing emails (Mailbox items), or compose new emails to a BP record. On any action form, you can view the referenced mail. Click the **Add** drop-down menu to view the following options:

Mailbox

To link mails from your Mailbox

Project Mailbox

To link mails from the Project Mailbox

New Mail

To compose emails and add attachments from your computer or Document Manager. After the mail is submitted, it gets linked to the record and displayed in the **Linked Mail** tab.

When the **Linked Mail** tab is maximized, the left section displays the grid, and the right displays the functions, content and attachments of the selected mail. If you are a participant in the email, you can see the action buttons: **Reply**, **Reply all**, and **Forward**, as well as the **More** drop-down menu which has options to **Flag**, **Clear Flag**, **Print**, and **Delete**. If you are not a participant in the mail, you can see the option to **Print**.

Opening or Deleting mail

To open a mail or delete a mail:

From the grid, click on the gear menu and select **Open** or **Delete**. Alternatively, you can double click on the mail, in the grid. When you select multiple mails, the only option available is **Delete**.

Viewing content of the linked record

To view the full content of the linked record, double-click on an entry in the grid.

Composing Linked Mails

To compose a new message to link to a BP record:

- 1) Select a BP record.
- 2) From the right-pane, select the **Linked Mail** tab.
- 3) Click and select New Mail.
- 4) Compose your message and click **Send**. The following additional options are displayed: **Save**, **Delete**, **Attach**, **Flag**, **Clear Flag**, **Print**, **CC**, and **Bcc**.

After the mail is sent, it will appear in the Linked Mail grid.

Adding from Project Mailbox

Project Mailbox option will be seen only if user has permissions to the Project Mailbox.

To link message from the Project Mailbox to a BP record:

- Select a BP record.
- 2) From the right-pane, select the **Linked Mail** tab.
- 3) Click and select **Project Mailbox**. The Add from Project Mailbox page is displayed.
- 4) Use arrows to select the messages you want to link from the Available Items column to the Selected Items column.
- 5) Click Done.

Working with Query-Based Tabs

Query-based tab (QBT) enables the user to:

- View a filtered list of business process records associated with the parent business process. Once the QBT in a business process is correctly configured and deployed, the QBT appears in the business process for which the QBT has been configured.
- Create a new business process from the QBT in the same Project/Shell, where the parent business process resides.
 - Users can create new business process records from the QBT provided that the users have permission to create business process records for the Project/Shell that contains the business process.
- Copy a business process in the same location as the parent business process.
 Users can copy a business process either with or without attachments. In addition, a user can copy any of the records in the QBT and create a new business process record. Note, only one record at a time can be copied.
 - When the user copies a business process record in order to create a new business process, the new business process record contains all the information present in the copied/based business process record. So, in case of business records with attachments, the user has the option of including or excluding (copying or not copying) the attachments when copying a business process record.
- Search for business process records based on user-entered criteria.
 Users can find any record from the list of records included in the QBT.

Notes

- The fields available for the Find feature must be defined in the uDesigner for the business process.
- The source Business Process/Space/Level of the QBT must be active in order for the tab to display.

Using Query-Based Tab Logs

From the Query-Based tab log, you can view, create, and copy BP records. The following toolbar options are displayed in the log.

| Toolbar Options | Description |
|-----------------|---|
| + Create Create | Create new records from the QBT. This button is seen only if you have permissions to create the record. Click the arrow to select a workflow if multiple workflows exist for the BP |
| Refresh | Refresh and reload the page |

| Print | Prints the list view. You can choose from: Print , Export to CSV , Export to Excel . |
|--------------|---|
| Find on Page | Enables users to type in find parameters to quickly search line items matching the criteria. |
| Search | Enables users to search for specific line items across all pages. |

The gear menu displays next to each record and contains all available actions that you can perform on the record. The following options are displayed in the gear menu: **Open**, **Copy**, **Copy With Attachments**, and **Copy Without Attachments**. The copy options are displayed only if you have permissions to create records in the current shell.

Working with Quick Calendar Entry

The Quick Calendar is available in the following business process types that were designed to be "calendar-enabled."

- Document
- ▶ Line Item or Simple

The Quick Calendar is available for **Space Manager**.

Note: The functions of the options presented below have been explained in the preceding sections (Reservation Business Process). This section explains new functions and procedural differences.

The following scenarios describe the details when you click the **Calendar** option.

Viewing a Calendar in View only mode from log for Month: Viewing details of an existing event

The default view of the Calendar is set to Month.

When you hover over a date, on which an event or reservation has been created, the tool-tip (Details) displays all event details such as:

- Name (Event)
- From (time)
- To (time)
- Status
- Creator

When clicking on the Event, a Detail overlay is displayed with Name (time), From (time), To (Date). Status & Creator.

The Tentative events are marked with a gray bullet, and the Confirmed events are marked with a green bullet.

Create event in month view

When you click on a date, for which an event has not created, an overlay is displayed. In the Details overlay, you can enter values for:

- Name (Event)
- From (time)
- To (time)
- Status

Note: You must have permission to make Quick Calendar entries.

When you click the calendar symbol (next to From and To fields), the calendar opens and you can pick a date.

The Creator field is auto-populated with the name of the signed-in user.

When you click Done, the event details are saved, the overlay screen closes, and the saved event is displayed on the Calendar.

When you click Cancel, the event details will not be saved and the overlay screen closes.

Edit event in month view

When you double-click on a date cell, for an existing event, the Details overlay screen is displayed.

Click Delete to remove the event.

Click Edit to open an overlay screen and edit the event details.

Viewing a calendar in View only mode from log for Week (Viewing details of an existing event)

Upon hovering over a date, on which an event/reservation has been created, the date will be highlighted by en-circling it in Red color.

When you hover over an Event, the date of the event is highlighted by en-circling it in Red color.

A tool-tip, Details, opens and displays the event details such as:

- Name (Event)
- From (time)
- To (time)
- Status
- Creator

The Tentative events are highlighted in gray, and the Confirmed events are highlighted in green.

Create event in week view

When you click on a date, for which an event has not created, an overlay is displayed. In the Details overlay, you can enter values for:

- Name (Event)
- From (time)
- To (time)
- Status

Note: You must have permission to make Quick Calendar entries.

When you click on the calendar symbol (next to the From and To fields), the calendar opens and enables you to pick a date.

The Creator field is auto-populated with the name of the user who has signed in.

The To and From fields are auto-populated based on the time displayed.

When you click Done, the event details will be saved, and the saved event is displayed on the calendar.

When you click Cancel, the event details will not be saved.

Edit event in Week view

When you double-click on a date cell, for an existing event, the Details overlay screen is displayed.

Click Delete to remove the event.

Click Edit to open an overlay screen and edit the event details.

View mode for Day view

The events displayed for the day are marked with green highlight, in case the event is confirmed.

The events displayed for the day are marked with grey highlight, in case the event is tentative.

As a result, when you click an event, if the event status is confirmed, the event is marked with green highlight, and if the event status is tentative, the event is marked with grey highlight.

The event details for both cases above are displayed.

Create event in day view

When you click on a time cell in Day view, an overlay is displayed. In the Details overlay, you can enter values for:

- Name (Event)
- From (time)
- To (time)
- Status

Note: You must have permission to make Quick Calendar entries.

When you click on the calendar symbol (next to the From and To fields), the calendar opens and enables you to pick a date.

The Creator field is auto-populated with the name of the user who has signed in.

The To and From fields are auto-populated based on the time displayed.

When you click Done, the event details will be saved, and the saved event is displayed on the calendar.

When you click Cancel, the event details will not be saved.

Edit event in Day view

When you double-click on an event, for an existing event, the Details overlay screen is displayed.

Click Delete to remove the event.

Click Edit to open an overlay screen and edit the event details.

Other Calendar Features

Note: Other events, scheduled within the extended events, are displayed accordingly.

Display of Mini-Calendar

A mini-calendar is displayed besides the Quick Entry Calendar, to enable you to go through years and months irrespective of the selected view.

Display of Upcoming Events

A mini-calendar is displayed besides the Quick Entry Calendar, to enable you to go through years and months irrespective of the selected view. A list of 10 future upcoming events are displayed on calendar. For the current day, according to the current time, the future events are displayed.

Example

If the event "Lunch Meeting" is scheduled for 2:00 PM to 3:00 PM, today, and the current time is 3:30 PM, then the "Lunch Meeting" even is not displayed in the upcoming event list.

Document-Type Business Process Forms (Without Folder Structure)

A Document-type BP *without* folder structure does not maintain the folder structure of the attached documents and folders, and the files (within the attached folders and sub-folders) are listed in a flat list.

- 1) Go to you Project/Shell, **User** mode.
- 2) From the left-hand Navigator, click **Logs** and open a Document-type BP *without* folder structure.
- 3) Open a record. By default, the record properties window (General tab) opens.

Note: Document BP without attribute form is not supported in the new user interface.

The following explains each tab.

General tab.

On the top right-hand side of the record window, you can **Accept** or **Decline**, and use the **Menu Options** icon (three horizontal lines) to perform and access the following:

- Add more assignees
- Auto-create
- CC more users
- Email as Attachment

- Print (HTML, PDF, Custom)
- AutoVue Review
- Terminate Record
- Transfer Ownership
- Help (record help and User Productivity Kit)
- Close

On the left-hand pane you have the following options:

- Record No.
- Status
- Title
- Revision no.
- Issue Date
- BP Creator
- Other fields

On the right-hand pane you have the following tabs:

- Comments
- Linked Records
- Linked Mail
- Workflow Progress
- Audit Log
- Reference Records

The **Maximize** icon is also available to expand the screen.

Line Items < line items > tab. The line items for Document-type BP are displayed according to the line item log designed in uDesigner.

On the top right-hand side of the record window, you can **Accept** or **Decline**, and use the **Menu Options** icon (three horizontal lines) to perform and access the following:

- Add more assignees
- Auto-create
- CC more users
- Email as Attachment
- Print (HTML, PDF, Custom)
- AutoVue Review
- Terminate Record
- Transfer Ownership
- Help (record help and User Productivity Kit)
- Close

On the left-hand pane you have the following toolbar options:

- View Comments by
- Download

- Refresh
- Print
- Search
- Find on Page

The following columns are also displayed:

- Name
- Record Comments (callout icon)
- Draft Comments (pen icon)
- Line Item Status
- Short Description
- Other fields

On the right-hand pane you have the following tabs:

- Line Item Details
- Attachments
- Linked Records

Refer to *Unifier Managers User Guide* for more details.

Adding Attachment to the Line Item

- 1) Go to you Project/Shell, **User** mode.
- 2) From the left-hand Navigator, click **Logs** and open a Document-type BP *without* folder structure.
- 3) Open a record. The record **General** tab opens, by default.
- 4) Click the **Line Items** < line items> tab.
- 5) On the right-hand pane, click the **Attachments** tab.

Attachments tab

When you create a line item, Unifier allows you to use the paper-clip icon to attach a file to your record. Once you save the line item, the **Attachment** tab appears for the record.

The **Attachment** tab provides additional details about an attachment in the following columns:

Note: You can preview the file in the **Attachment** tab. Click the expand icon to expand the window and see the file preview.

- Publish (select or deselect)
- Name
- Comments
- Revised
- Title
- Pub. No.
- Rev. No.

- Issue Date
- Size

In addition, if there is a revision to an attachment, the following columns are displayed in the **Revisions** block:

- Publish (select or deselect)
- Name
- Comments
- Ref.
- Pub. No.
- Upload Date
- Size
- Upload By
- Rev. No.
- Issue Date

Use the gear menu, next to the file to:

Note: After saving the line item, you must use the gear menu, next to the attachment (file), to remove the attachment. Use the trash can icon to remove your attachment prior to saving the line item.

- Review
- Open in AutoVue (You can also open an attachment by double-clicking the name of the attachment)
- Download

Importing Attachments (Without Folder Structure)

You can create line items in a Document Type BP without folder structure record and import attachments into the line items (go to a Document Type BP without folders record, click **Actions**, and select **Import Attachments**). For any Workflow, or Non-Workflow, Document Type BP without folder structure record you must ensure that all the required fields have values.

Document-Type Business Process Forms (With Folder Structure)

A Document-type BPs *with* folder structure maintains the folder structure of the attached documents and folders, and the files (within the attached folders and sub-folders) are listed in a flat list.

- 1) Go to you Project/Shell, **User** mode.
- 2) From the left-hand Navigator, click **Logs** and open a Document-type BP *without* folder structure.
- 3) Open a record. By default, the record properties window (General tab) opens.

Note: Document BP without attribute form is not supported in the new user interface.

The following explains each tab.

General tab.

On the top right-hand side of the record window, you can **Submit** or **Decline**, and use the **Menu Options** icon (three horizontal lines) to perform and access the following:

- Email as Attachment
- Print (HTML, PDF, Custom)
- AutoVue Review
- Transfer Ownership
- View Record Location
- Help (record help and User Productivity Kit)
- Close

On the left-hand pane you have the following options:

- Record No.
- Status
- Publish Path
- Issue Date
- Other fields

On the right-hand pane you have the following tabs:

- Comments (use the paper clip icon to Browse uploaded files or go to Document Manager to select files)
- Linked Records
- Linked Mail
- Reference Records

The **Maximize** icon is also available to expand the screen.

Line Items < line items > tab. The line items for Document-type BP are displayed according to the line item log designed in uDesigner.

On the top right-hand side of the record window, you can **Submit** or **Decline**, and use the **Menu Options** icon (three horizontal lines) to perform and access the following:

- Email as Attachment
- Print (HTML, PDF, Custom)
- AutoVue Review
- Transfer Ownership
- View Record Location
- Help (record help and User Productivity Kit)
- Close

On the left-hand pane you have the following options:

View Comments by

- Refresh
- Print
- Search
- Find on Page
- Expand All Groups

The following columns are also displayed:

- Name
- Record Comments (callout icon)
- Line Item Status
- Issue Date
- Other fields

On the right-hand pane you have the following tabs:

Folder Details

Refer to *Unifier Managers User Guide* for more details.

Adding Attachment to the Line Item

- 1) Go to you Project/Shell, **User** mode.
- 2) From the left-hand Navigator, click **Logs** and open a Document-type BP *without* folder structure.
- 3) Open a record. The record **General** tab opens, by default.
- 4) Click the **Line Items** < line items> tab.
- 5) On the right-hand pane, click the **Attachments** tab.

Attachments tab

When you create a line item, Unifier allows you to use the paper-clip icon to attach a file to your record. Once you save the line item, the **Attachment** tab appears for the record.

The **Attachment** tab provides additional details about an attachment in the following columns:

Note: You can preview the file in the **Attachment** tab. Click the expand icon to expand the window and see the file preview.

- Publish (select or deselect)
- Name
- Comments
- Revised
- Title
- Pub. No.
- Rev. No.
- Issue Date
- Size

In addition, if there is a revision to an attachment, the following columns are displayed in the **Revisions** block:

- Publish (select or deselect)
- Name
- Comments
- Ref.
- Pub. No.
- Upload Date
- Size
- Upload By
- Rev. No.
- Issue Date

Use the gear menu, next to the file to:

Note: After saving the line item, you must use the gear menu, next to the attachment (file), to remove the attachment. Use the trash can icon to remove your attachment prior to saving the line item.

- Review
- Open in AutoVue (You can also open an attachment by double-clicking the name of the attachment)
- Download

Importing Attachments (With Folder Structure)

You can create line items in a Document Type BP with folder structure record and import attachments into the line items (go to a Document Type BP with folders record, open the folder, open the record, click **Actions**, and select **Import Attachments**). For any Workflow, or Non-Workflow, Document Type BP with folder structure record you must ensure that all the required fields have values.

Copying Folder (Standard View)

If you have permission to create folders in a Document-Type Business Process For (With Folder Structure), then you can see an additional option in the gear menu: Copy. The gear menu options will be:

- Add Sub Folder
- Move
- Copy
- Delete

Note: The above gear menu options apply to the customer-created folders only and not to the system-defined root folder, "Attachments."

Using the "Copy" option enables you to copy a folder into the same path where it currently exists. In this case, the name of the newly created folder will be: "Copy of <original folder name>."

Notes:

- ▶ The bracket ">" symbol between the source folder and the destination folder has the hover over text: "Copy to."
- ▶ The option "Copy" remains disabled until you select a destination folder.
- When the copy action is complete for a folder, the original source folder continues to show as the selected folder in the grid.

Request for Bid (RFB) Type Business Process Form (Private)

If you have been invited for a private bid, then you receive an RFB business process form that is not configured for public bidding. In such case, the upper form and detail form contain the following elements:

- 1) Go to you Project/Shell, **User** mode.
- 2) From the left-hand Navigator, click Logs and open a RFB BP.
- 3) Open a record.

The record details screen opens with the following elements:

- Send
- Save
- Menu Options
- Tabs
- General
- Line Item
- Winning bid

The Menu Options enables to do and access the following:

Show

To show the details of the received form (Winning Bid, First name, Last Name, Company, User Id) and supporting information.

Auto-create

To auto create scheduled runs.

Print

To print the form (HTML, PDF, Custom)

Reload

To reload the information presented.

AutoVue Review

To preview an attachment.

- Terminate Record
- Transfer Ownership
- Undo Accept Task
- Help

To access the BP help and User Productivity Kit)

Close

Tabs (RFB Creation Form)

On the left-hand pane, the **RFB Creation Form** tab contains the following field blocks:

- General
- Details
- Calculation

On the right-hand pane, the **RFB Creation Form** tab contains the following tabs:

- Attachments
- Comments
- Linked Records
- Linked Mail
- Workflow Progress
- Audit Log
- Reference Records

Tabs (RFB Line Item List)

On the left-hand pane, the RFB Line Item List tab contains the following toolbar options:

- Add
- Actions
- Refresh
- Print
- Search
- Find on Page

On the left-hand pane, the RFB Line Item List tab contains the following columns:

- No.
- Sort
- Attachments
- Linked Records
- WBS Code
- Short Description
- Qty
- Unit Cost
- Amount
- **▶** Total Amount

On the right-hand pane, the RFB Line Item List tab contains the following tabs:

- Line Item Details
- Attachments
- Linked Records

Tabs (Winning bid)

On the left-hand pane, the **Winning bid** tab contains the following toolbar options:

- Add
- Actions
- Refresh
- Print
- Search
- Find on Page

On the left-hand pane, the **Winning bid** tab contains the following columns:

- No.
- Sort
- Attachments
- Linked Records
- WBS Code
- Short Description
- Qty
- Unit Cost
- Amount
- **▶** Total Amount

Inviting to RFB

For public bidding, invitations are sent to the Vendors that you have selected from the Vendors business process (a company-level BP). The Vendors BPs can be found in **Company Logs** > **User** mode > **Vendors BP**.

To start the bidding process:

- 1) Go to your **Project** > **User** mode > **Logs** > **Requests for Bid**.
- 2) Open the bid that you want to send.
- 3) From top right-hand section of the screen click the **Menu Options** (three horizontal bars) and click **Invite**.

The left-hand section includes the general information about the requestor and the bid.

To modify the date, click on the date icon, modify the date and click **Done**.

The right panel includes the list of invitees to whom the invitations have been either sent out or will be sent in future.

Toolbar options:

- Send Invitations
- Send Password
- ▶ Add

To add vendors to invitees list.

- Delete
- Find on Page

The **Done** action will save the changes in the left section (**General** information).

The Cancel action will close the window.

When you click **Add**, a new full-screen window overlay appears (similar to BP Picker) which enables you to select the list of vendors (from the Master Vendor List BP) that you want to add to the invitees list.

Click **Select** to add the invitees to the invitation list and close the overlay window.

Click the **Menu Options** (three horizontal bars) and click **Show** to view the list of bids that have been received from the bidders.

The toolbar enables you to:

- Send Password
- **Compare** (opens the compare window)
- Search
- Find on Page

The gear menu, next to each item, enables you to open and send password.

When you click on a row and select it in the **Received From** window, Unifier displays the Upper Form preview of the Bidder BP Upper Form (in the **Preview** tab). You can open the record and view both the Upper Form and Detail Form of the Bidder BP form.

The following lists the options available under the toolbar and **Menu Options** (three horizontal bars):

- Create
- View
- ▶ Edit (before RFB Due Date is past) and Edit (after RFB Due Date is past)

For an RFB BP that is enabled for public bidding, if you click Invite after the BP is opened for public bidding, then Unifier displays an overlay screen that enables you to send password and modify due date. Modifying the due date in public bidding is similar to the same feature in private bidding.

Audit Log in Requestor BP (Private Bid and Public Bid)

Unifier audits all of the emails sent to the bidder (send password, send new password, revised attachments, and so forth) and makes the information available in the **Audit Log** tab of the Requestor BP record. The Audit **Audit Log** captures the following events when an email is sent to a the bidder:

- Adding new addendums
- Revising Addendums

- Removing Addendums or original attachments
- Password sent to invitees

In all of the above cases, the event name will be Bidding. Furthermore:

- ▶ For adding addendums, the Action name will be "Send Addendum <Attachment name>."
- ► For Revising addendums, the Action name will be "Send Revised Addendum <Attachment name>."
- When addendums or original attachments are removed, the Action name will be "Removed Addendum <Attachment name>" or "Removed Original Attachment <Attachment name>."
- When a password is sent to the invitees, the Audit Log Action name will be "Send Password."
- Also, the attachment name is displayed in the Audit Log entry.

Note: The send password **Audit Log** changes are applicable to private bidding, only.

User Picker and Group Picker

With the introduction of profile picture, the **User Picker**, **User Data Picker**, and **User** and **Group Picker** include the profile picture, before the User name.

User Picker

This picker has the list of users. For users who have uploaded their profile picture, their picture will be displayed. If there are not pictures, then Unifier displays the initials of the user's first and last names.

User Data Picker

This picker has the list of users. For users who have uploaded their profile picture, their picture will be displayed. If there are not pictures, then Unifier displays the initials of the user's first and last names.

Depending on how the business process (BP) form is configured in uDesigner, the user data picker, in any business process (BP) record, can be used to auto-populate the user attribute values of the fields corresponding to the selected user in the BP form.

User Group Picker

This picker has Groups followed by Users. For users who have uploaded their profile picture, their picture will be displayed. If there are not pictures, then Unifier displays the initials of the user's first and last names.

View User Profile

The **View User Profile** window enables you to see the profile for multiple users who are assigned to, or cc'd in, workflow tasks.

The left section of the **View User Profile** window lists the users, and the right section displays the following for the user:

Basic Information

Additional Information

You can view the user attributes from both the company and the shell directories.

If the **Apply values for the picker log from Project directory** option is selected, then Unifier fetches the user attribute data from the project directory. The data that is displayed under the project directory (**User** mode) can be fetched from the shell-level when the project directory option is selected. When the user's name is launched from the shell, the project-level or shell-level information is fetched as defined at the shell-level.

Cost-Type Business Processes

The following explain the Cost-type business processes with redesigned user interface.

Note: The Payment Application of Summary Payment Application SOV type supports Record, Line Item, and Cost Allocation creation through CSV integration.

Base Commit Summary Payment Application SOV Type

Create New Base Contract Summary Payment Application

Based on the upper form properties, designed in uDesigner, if the add, copy, and remove lineitems options are checked, then you can select **Add** and create a line item from the **Standard** tab, in the **Create New Base Contract Summary Pay App** window. The following options will be made available when you click **Add**:

Lump Sum

Enables you to create line items with lump sum amount defined at the summary line item and at the cost breakdown level.

When you select **Lump Sum**, the summary line item and cost breakdown creation are set. The amount data element in the summary line item will be editable and any formulas defined on the amount data element will be honored. The uuu_quantity and uuu_unit_price will be disabled. The cost line item type for this type of line item will be lump sum. For the lump sum cost breakdowns, the uuu_amount data element will be editable. You can add the cost breakdowns with the amounts when the "allow cost breakdown" is configured, in uDesigner.

Unit Cost

Enables you to create line items with fixed unit rate defined at summary line item and cost breakdowns that were added. Unifier will use the same unit rate to calculate the line item amount.

When you select **Unit Cost**, the summary line item will have uuu_quantity and uuu_unit_price data elements as editable fields. The summary line item can be set as formula, in uDesigner. The Amount field will be read-only and always calculated based on the formula configured in uDesigner.

When adding cost break downs, you can enter the CBS Code, a short description, and the uuu_quantity data element. The uuu_unit_price, for each break own line, will be read-only and is populated with the value from summary line. The Amount field, for each cost breakdown, will be calculated based on the formula: quantity * unit price. The Cost Line Item Type will be displayed as **Unit Cost** in the line item.

Variable Unit Cost

Enables you to define a variable unit rate at cost breakdowns. The line item amount is calculated based on the variable unit rate.

When you select Variable Unit Cost, the summary line item will have the uuu_quantity and amount data elements editable, but the uuu_unit_price data element will be disabled and read-only. The Cost Line Item Type will be displayed as Variable Unit Cost in the line item. The following describes the data elements on the summary line item when the **Variable Unit Cost** is selected:

uuu_quantity

The uuu_quantity is an editable and required field. It can be set for either a manual or formula destination. The uuu_quantity DE can be set formula, or it can be set as auto-populate, in uDesigner. The auto-population or formula will work in user mode (at runtime).

uuu unit price

The uuu_unit_price is a disabled field. The formula or auto-populate design does not work for the Variable Unit Cost line item.

amount

The amount is an editable and required field. It can be set for either a manual or formula destination. The amount DE can be set as auto-populate, in uDesigner. The auto-population or formula will work in user mode (at runtime).

In the Variable Unit Cost, the data element uuu_costed_amount (in the upper section of the line item) will be calculated as sum of the amount (from all cost breakdowns). The uuu_non_costed amount will be calculated as (amount - uuu_costed_amount). The amount, in this case, is the line item amount. Similarly, the data element uuu_costed_quantity (in the line item) will be calculated as sum of quantity entered in all cost breakdown. In the uuu_non_costed_quantity DE, the data element uuu_costed_quantity, will be calculated as: uuu_quantity - uuu_costed_quantity.

Regardless of the Line Item type, the right-hand pane displays the Line Item and Cost Breakdown options.

Note: The availability of the Cost Breakdown options of Add Cost and Add Remaining is per uDesigner design. If the Business Process form does not permit cost breakdown, then these options will not be available.

- Cancel
- Save
- Save & Add New

When you click the **Save & Add New** option, the Line Item type displayed will be based on the last cost line item type selected. As a result, if you click Add > Lump Sum and then save the Line Item and continue to click **Save & Add New**, then the new Line Item will be of Lump Sum type.

On the right-hand pane:

The Line Item option contains fields that have been designed in uDesigner, and the fields are similar to those in other Business Processes with the Standard user interface.

The Cost Breakdown option enables you to open a grid that contains fields related to the Cost Line Item type such as the number, cost code, etc.

Use the Add Cost and Add Remaining toolbar options to add your cost or the remainder of the cost.

The "Not Costed Amount" (for Lump Sum) and "Not Costed Quantity" (for Unit Cost) options are also available.

Cost Breakdown option (Adding costed lines)

When you click the plus (+) icon, Unifier launches the CBS picker, and you can select one or more codes and add the codes to the grid.

The gear menu is available when you select a single line item or multiple line items, and it allows you to copy or remove an item.

Note: You can copy multiple costed lines by selecting multiple line items, click the gear menu, and click Copy.

Errors

In case of errors in Line Items, Unifier displays a detailed report inline (Error Location and Description). Unifier displays all form level validation errors and required field errors at the record level error location.

In case of errors in Cost Breakdown, Unifier populates an error column that contains the error indication followed by a message.

Add Cost

In the Line Item Details tab, the Cost BreakDown tab, the add cost(+) option will be enabled if in the upper form properties the Allow Cost Breakdown option is selected in uDesigner.

When you select the add cost option, in the Cost BreakDown tab, the CBS picker will be shown so you can select a single or multiple CBS codes to add their breakdowns. In the cost breakdown line:

Cost Code and Code Name

The Cost Code is editable and the default value will be populated from selected code in the CBS picker. You can double click and modify the cost code. The Code Name is read-only and populated by cost code selection.

Short Description

The Short Description should is editable. By default, the Short Description data element is populated from the value of the summary line item short_desc field. You can edit and modify the field.

uuu_unit_price and uuu_quantity

The uuu_unit_price and uuu_quantity DEs are editable and available for you to enter the values.

uuu_amount

The uuu_amount, in cost breakdown, will be calculated as uuu_unit_price * uuu_quantity.

Not Costed Quantity and Non Costed Amount

The Not Costed Quantity and Non Costed Amount will be calculated and displayed on the top of the costed lines.

Total Amount

The Total Amount for all costed lines is displayed.

uuu_costed_amount and uuu_costed_quantity

The uuu_costed_amount and uuu_costed_quantity, in the summary line item, will be calculated as the sum of amount and quantity from the costed lines.

Remove Cost

You can remove one or more cost breakdowns by using the Remove option (gear menu). When the selected cost breakdowns are removed, the total amount of the costed lines will be updated. The uuu_non_costed_amount and uuu_non_costed_quantity will be recalculated accordingly.

Copy Cost

You can copy one or more cost breakdowns by using the Copy opion (gear menu). For copied costed lines, besides the CBS code, the quantity unit cost and the amount will be copied.

Adding Variable Unit Cost lines by using the grid

You can add Variable Unit Cost line items in the grid view. Click Insert Line Item and select the Variable Unit Cost option (similar to the form view). When you click the Insert Line Item, the following options will be available, based on the form properties

- Lump Sum
- Unit Cost
- Variable Unit Cost

The Cost Line Item Type is set as "Variable Unit Cost" in the line item, when the Variable Unit Cost option is selected.

The behavior of data elements uuu_quantity, uuu_unit_price and amount in the Variable Unit Cost lines will be similar to the cost lines created from the form view. The uuu_unit_price DE, in the cost breakdowns, will be editable, and you can specify the variable rates for each costed line. The amount for each cost breakdown will be calculated based on the unit rate specified. Accordingly, both the uuu_costed_amount DE and uuu_noncosted_amount DE will be calculated.

In unit cost lines, the uuu_unit_price DE will be editable only on the summary line and read-only in cost breakdowns.

Once the base contract record which has the line items of both fixed and variable unit cost reaches the terminal step, the SOV will be created. The variable unit rates provided in the cost breakdowns will be rolled up to SOV along with quantity and amount.

The following table explains how the line item consolidation of the **Variable Unit Cost** lines takes place:

| Source Business | Destination Business | Expected Results | What If Scenarios |
|------------------------|-----------------------------|-------------------------|-------------------|
| Process | Process | | |

Generic Cost BP of CBS type and Non-SPA BP with the line items having cost (Non-SPA) selected as variable unit cost type.

Change Commit BP Summary Payment Applications SOV BP (SPA commits) Copy the line item from the source. In the destination record, the summary line item will be created and cost line item type is populated as variable unit cost type.

Cost breakdown will be created if the source line item has CBS Code defined. If the source BP is a CBS cost type, and the line items are consolidated from the standard source, then both the summary and the costed line items will be created and data will be populated as follows:

- The summary line item will have both the uuu_quantity and the amount populated. In this case, the uuu_unit_price will be disabled and no value should be populated from the source.
- The cost breakdown will have the CBS Code, description, uuu_quantity, uuu_unit_pri ce, and the amount populated.

If the line items are consolidated from the non-standard tab and CBS Code is not part of the source line item, then only the summary line item will be created with uuu_quantity and the amount populated.

If the source BP is a line item type, then only the summary line item will be copied into the destination.

The summary line item will have both the uuu_quantity and the amount populated. In this case, the uuu_unit_price will be disabled and no value should be populated from the source.

| SPA commits and change commits type BPs with variable unit cost line items. | Generic Cost BP of CBS type and Line item type BP with the line items having cost line item type selected as variable unit cost type. | Only the summary line item will be copied. | If the destination BP is a CBS cost type, then the consolidation will fail because the summary line item will not have CBS codes. If the destination BP is a line item type, then using the line item consolidation line items will be copied if all of the required fields have values defined. In this case, the short description and the amount are copied in to the destination line item, if it exists. |
|---|---|---|--|
| SPA commits and change commits type BPs with variable unit cost line items. | SPA commits and change commits type BPs with variable unit cost line items. | Both the summary line item and thecost breakdowns will be copied in to the destination. | New summary line items will be created (with all of their cost break downs) in the destination record. |

Change Commit Summary Payment Application SOV Type

Create New Change Order with Summary Payment Application

Based on the upper form properties, designed in uDesigner, if the add, copy, and remove lineitems options are checked, then you can select **Add** and create a line item from the **Standard** tab, in the **Create New Change Order with Summary Pay App** business process window. The following options will be made available when you click **Add** and when a referenced Base Commit has "**Allow Variable Unit Cost in Cost Breakdown**" is selected in uDesigner:

- Lump Sum
- Unit Cost
- Variable Unit Cost
- Modify Committed Line Item

For Summary Payment Application SOV type business processes, the Amount field can be either editable or read-only based on the following conditions:

- If you add a Lump Sum type line item to a BP, then Unifier will ignore the existing formula of the Amount field.
- If you add a Unit Cost type line item to a BP, then Unifier will honor the existing formula of the Amount field.

The cost breakdown of Lump Sum and Unit Cost is similar to the Base Commit Summary Payment Application SOV type BP (cost), explained in the previous section.

The summary and costed line item behavior for the first three options selected will be similar to Base Commit Summary Payment Application SOV type Business Process records with checkbox checked in uDesigner.

For the **Variable Unit Cost** line items, you are allowed to enter the uuu_unit_price for each cost breakdown. The amount will be calculated based on the unit rate and the quantity entered. The summary line item will have the uuu_unit_price disabled.

When you select the **Modify Committed Line Item** option, the **Commit Line Item Picker** window will be displayed. This window enables you to select and modify any line item from the picker. The cost line item type for the unit cost lines will be the **Unit Cost**; whereas, for the variable unit cost lines, the cost line item type will be the **Variable Unit Cost**.

When you click Save & Add New option, Unifier displays the Line Item type based on the last cost line item type that was selected. As a result, if you click Add > Lump Sum and then saved the Line Item and continue to click Save & Add new, then the new Line Item will be of Lump Sum type.

When you click **Modify Committed Line Item** option, and then click Save & Add new, Unifier launches the SOV picker.

Commit Line Item Picker

Note: The fields displayed vary based on the line item selected from the Commit Line Item Picker

The Cost Break down field, when you select a committed line:

- Committed line = Lump Sum, then the field seen will be "Not Costed Amount."
- ▶ Committed line = Unit Cost, then the field seen will be "Not Costed Quantity."

The grid columns are always dependent on line item creation.

Note: Grouping of line items through CSV is not supported for SPA BPs.

When you select the line item of type "Variable Unit Cost," the data element uuu_cost_li_type is copied over from the reference commit line item into the Change Commit line item and will be set as read-only.

The uuu_quantity and amount data elements, in the summary line item are editable. The uuu_unit price DE will be disabled for the summary line item.

If the selected line item has variable unit rates at costed lines, then an additional column (uuu unit price) will be seen in cost breakdowns that is copied over from the SOV.

The following columns will be in cost breakdowns in the Commit Line Item Picker, for the costed lines that are copied from SOV:

Cost Code

The Cost Code is a read-only field, and the value gets populated from the Commit Line Item Picker (for the SOV referenced lines). For the new costed lines, the Cost Code field can be edited, and it can pick from the CBS picker.

Code Name

The Code Name is a read-only field, and the value gets populated from the Cost Code selection.

Short Description

The Short Description is an editable field. By default, the value for this data element gets populated from the summary line item short_desc field.

Current Quantity

The Current Quantity column is read-only, and the value for the existing lines will be copied from the selected commit record. For the new costed lines that are added, this column will be empty and read-only.

Unit Cost

The Unit Cost column is read-only, and it displays the uuu_unit_price value that is coming from the selected commit record. For new costed lines added, this column will be empty and editable.

Current Scheduled Value

The Current Scheduled Value column is read-only, and it gets populated with the scheduled value from the SOV for the existing costed lines. For the new costed lines, this column will be 0 and will be read-only.

Change Quantity

The Change Quantity column is editable and you can enter the values for existing and new costed lines.

Change Amount

The Change Amount column is read-only, and the value is populated based on the calculation: Change Quantity * Current Unit Cost.

New Scheduled Value

The New Scheduled Value column is read-only, and the value gets calculated as: Current Scheduled Value + Change Amount.

In the Commit Line Item Picker, you can:

- Add new costed lines
- Copy existing costed lines
- Remove newly added costed lines

The In the Commit Line Item Picker toolbar options that are available in the Cost Breakdown tab (for the Commit Line Item) are:

Add Cost

When you select this option, the CBS picker is displayed so you can select single or multiple CBS codes in order to add the breakdowns. In the cost breakdown line, the following columns are displayed:

Cost Code

Editable field with value populated from the selected code, in the CBS picker. You can double-click the field and modify the value.

Code Name

Read-only field with value populated from the selected cost code.

Short Description

Editable field with value populated from the summary line item short_desc field.

Current Quantity

For the new costed lines added, the Current Quantity column value will be empty and read-only.

Unit Cost

For the new costed lines added, the Unit Cost column value will be empty and read-only.

Current Scheduled Value

For the new costed lines added, the Unit Cost column value will be 0 and cannot be edited.

Change Quantity

This column is editable and you can enter the values for new costed lines.

Change Amount

This column is read-only and the value is populated based on calculation: Change Quantity * Current Unit Cost.

New Scheduled Value

This column is read-only and is calculated as: Current Scheduled Value + Change Amount.

The gear menu options available for the costed lines are as follows:

Note: You cannot remove the existing line items that are coming from the SOV.

Copy

If you select an existing line item and click Copy, then you will copy the costed line item. THe current scheduled value will not be copied. Only the unit cost and change quantity columns are editable. The new scheduled value will be calculated based on the: change amount + current scheduled value.

You can copy multiple costed line items at the same time. All these line items must belong to the same summary line item.

You cannot pick costed lines from different summary line items.

Remove

If you select a new costed line item, then by clicking this option you will remove the costed line item.

For the committed costed line item (line items coming from the SOV), the Remove option is not available.

Once the Change Commit record is routed to the terminal step, the SOV will be updated with both the modified quantity, and the new scheduled value, for costed lines that exists in the SOV.

The variable unit rates that are provided in the cost breakdowns will be rolled up to the SOV, along with the quantity and amount for new lines.

Text-Type Business Process

The content of the Text-type business process form is typically a text comment in the lower portion of the form.

You can view responses from other users who may have acted on the record at a given step while working on the record.

Note: The functions of the options presented below have been explained in the preceding sections. This section explains new functions and procedural differences.

A Text-type BP has a:

- Upper Forms (main form)
- Text Entry Form
- Response List form

In edit mode, you can see the:

- Upper Forms (main form) tab name: General
- ▶ Text Entry Form tab name: Collaboration

When you click on the **Collaboration** tab, you can enter the response in the input box.

When you are viewing the form, Unifier displays the **General** tab and the **Response** tab. You can filter the responses, based on user, by clicking on the **Posted By** drop-down list. Each of the responses received will be placed in a separate block, and no actions are permitted on these blocks.

When you want to update a record, the following tabs are displayed:

Upper Forms (main form): General
 Text Entry Form: Collaboration
 Response List form: Response

Note: In edit mode, the Response List form: **Response** looks the same as the one seen in view mode.

Simple-Type Business Process

The Simple type business process form consists of an upper form only (like a line-item-type BP without the line items). It is used to add company or project or shell information that does not require line items.

The Simple type business process form can be a:

- Company-level, non-workflow, single record.
- Company-level, non-workflow, multi record.

- Project-level, non-workflow or workflow, multi-record.
- ▶ Shell-level, non-workflow or workflow, multi-record.

An example of the Simple type business process form is a project information form to capture basic reference information.

Preventive Maintenance Business Process

Preventive Maintenance Business Process toolbar options:

- Form View (default view)
- Grid View
- Add
- Actions
 - Import
 - Consolidate Line Items
- Reload
- Print
 - Print
 - Export to CSV
 - Export to Excel
- Search
- Find on Page

You can click the Gear menu to the left of each row in the grid or **right click** rows to see the following options:

- Copy
- Remove
- Group line items

Additionally, you can select multiple rows and **right click** to see the following options:

- Add line item below
- Copy
- Paste below
- Remove
- Group line items

Adding and Modifying Line Items

To add a line item to the grid, click Add. A blank row will be inserted and the following toolbar options will be visible:

Create

To add a new line item.

- Search
- Find on Page

Note: Any fields that have default values will display them.

After a line item is created, you can double click the cell to modify its content (if the form properties permit modifications).

Error Reporting

If any rows have an error, the red **Error icon** appears in the first column. You can click the **Error icon** to see an error message. Columns with required fields display red triangles in the upper-right corner.

Hyperlink Fields and Image Fields

When you double click a hyperlink field, the **Hyperlink icon** appears in the cell. When you click the **Hyperlink icon**, a box appears. Here, you can enter the **Name** and **URL** that appear in the cell.

When you double click an image field, the Upload icon appears in the cell. Clicking on the Upload icon gives you the options of **Browse** and **Document Manager**. When you click **Browse**, the File browser will open. When you click **Document Manager**, the image field from Document Manager will appear.

Unifier Business Process Forms, Managers Attributes, and Shell Dashboards - User Interface

The Oracle Primavera Unifier has been undergoing significant changes in the overall user interaction in the Business Process forms, various Logs, Cost Sheet, etc. These changes were focused on the user interface (UI) and few structural changes related to the user interaction. These changes have been rolled-out in early 2018, in phases. In November of 2019, the Classic View of the business process forms, managers attributes, and shell dashboards have been replaced with the Standard View (the new view). There are also other functional improvements as a result of the UI improvements such as type-ahead, auto-fill in pickers, tool-tips, etc. Those improvements have been covered in pertinent user documents.

The redesigned business process user interface allows you to:

View, edit, and manage all relevant details within a single form.

- Access record details with limited pop-up and clicks.
- ▶ See only relevant, context-sensitive menu, and toolbar functions.
- Use the enhanced form layout to navigate, expand, and collapse field blocks.
- Create, enter, and update record data and line items in one place.
- Navigate easily between tabs to complete the main and line item forms.
- Add and view attachments in one place.
- Route workflows with minimized alerts and errors.
- Use enhanced field interaction in text boxes, pickers and data pickers.

Note: This updated version does not impact the fundamental ways in which a business process, manager attributes, or shell dashboards are created in the new User Interface.

The following describes the business process types that are not supported in the new User Interface and will continue to be shown in Classic View:

- Cost BP > Line Items with Asset Code
- Resource > Resource Booking
- Resource > Time Sheet

The following describes the business process types and sub-types that support the new UI:

- Cost
 - Line Items with CBS codes
 - Line Items with Fund codes
 - Line Items with CBS and Fund codes
 - Commit at Company Level
 - Line Items with Company Accounts Code
 - Line Items with Multiple Codes
- Document
 - With Folder Structure

- Without Folder Structure
- Line Item
 - Line Item (Generic)
 - Line item to filter Company Business Process Records
 - Preventive Maintenance
- Simple
- ▶ RFB
 - Generic
 - Line Items with CBS Codes
 - Line Items with Generic Cost manager
- Project/Shell Creation
 - Project/Shell Creation Simple
 - Project/Shell Creation Line Item
- Text

In This Section

| Classic View User Interface Features Not Supported in Standard View | 366 |
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| Classic View and Standard View Labels | 369 |
| Classic View and Standard View Tabs, Menus, and Actions | 374 |
| Classic View and Standard View Functions | 376 |

Classic View User Interface Features Not Supported in Standard View

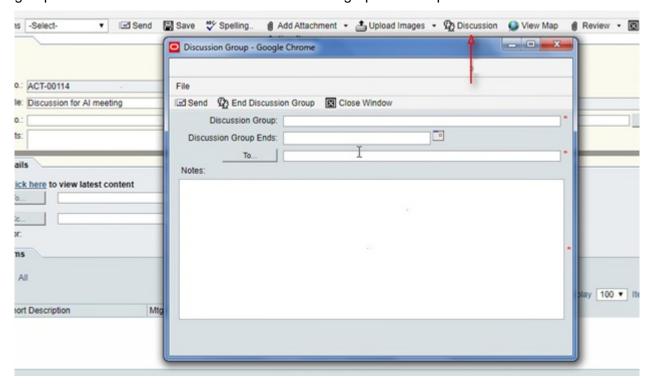
The following features will not be supported in the Standard View of the business processes forms:

- Discussion Groups in workflow business processes
- Adding or Viewing of Task Notes
- View Received Task option
- Uploading images from the toolbar
- Summary Items in business processes that support Summary line items
- Spell-check feature in business process

The following explains each feature in details:

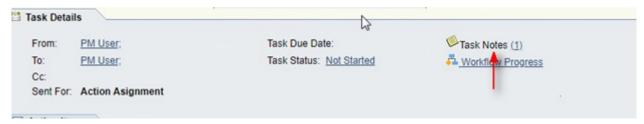
Discussion Groups in workflow business processes

In the Classic view, users who are a part of a business process workflow can initiate a discussion group to solicit input from other project or shell team members. Eligible participants are pulled from the business process "Add Assignee" list. Invited members of the discussion group can contribute their own text comments and graphic markups.



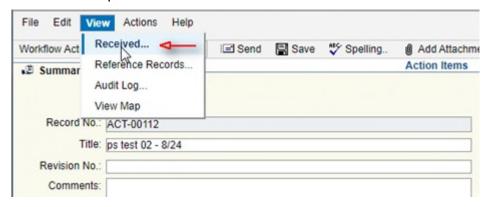
Adding or Viewing of Task Notes

In the Classic View, notes that are specific to a task can be added to a BP form. They are temporary notes that can be used as comments for, or specific instructions to, the next user in the workflow. Task notes are not forwarded throughout the workflow and are not archived. You can think of them as sticky notes that stay with the form for one step in the workflow only. A task note only applies to the current task.



View Received Task option

In the Classic View, after a Task assignee accepts a Task, the form seen is based on the Action Form associated with the current step of the workflow. In the event that an assignee wants to see the received task, then the assignee can click on View menu option and select the "Received..." option.



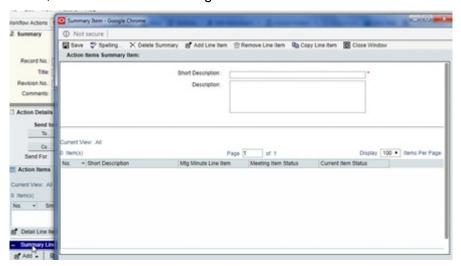
Uploading images from the toolbar

In the Classic View, if there are multiple image-picker fields in the form, then the Upload Images option in the toolbar can be used to upload images in bulk.



Summary Items in business processes that support Summary line items

In the Classic View, the Summary Items window enables you to group regular line items together, with the summary appearing on the BP, only. The sub-line items are rolled up to other areas, such as the Cost Manager.



Spell-check feature in business process

In the Classic View, the spell-check feature is available for all BP forms, including the Cost, Document, Text, Simple, and Line Item BPs. You can spell-check information that you have entered in the text fields and any other text areas.



Classic View and Standard View Labels

The following provides a comparison between the labels of the Classic and Standard View. The left-hand picture shows the label in the Classic View, and the right-hand picture shows the label in the Standard View:

In a non- workflow business process, the **Finish Editing** label has changed to **Submit** label, as shown below. When you click **Submit**, you submit the form changes.

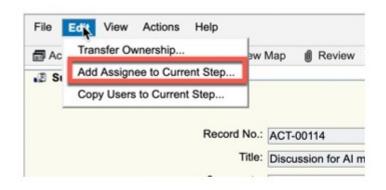
Classic View



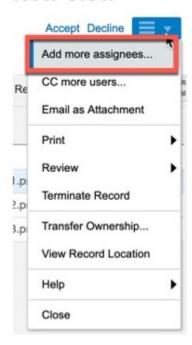


In a workflow business process view form, The **Add Assignee to Current Step...** label has changed to **Add more assignees...**, as shown below:

Classic View



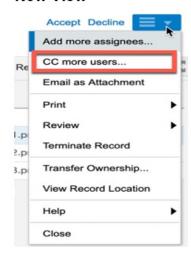
New View



In a workflow business process view form, the **Copy Users to Current Step...** label has changed to **CC more users...**, as shown below:

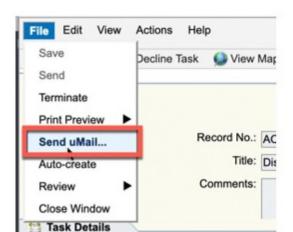
Classic View





In a workflow business process view form, the **Send uMail...** label has changed to **Email as Attachment**, as shown below:

Classic View

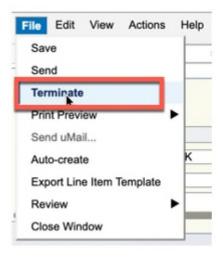


New View



In a workflow business process view form, the **Terminate** label has changed to **Terminate Record**, as shown below:

Classic View



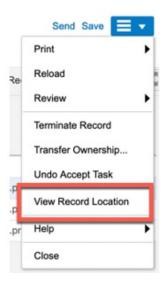


In both the workflow and non-workflow business process forms, where the business process is enabled for **Geo-Coding**, the **View Map** label has changed to **View Record Location**, as shown below:

Classic View

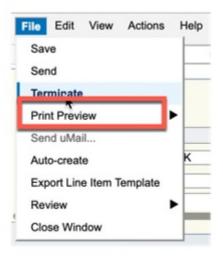


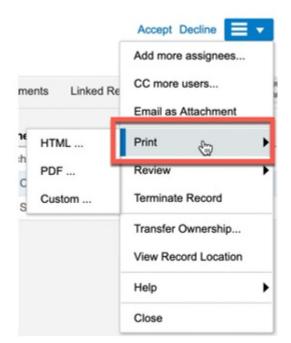
New View



In both the workflow and non-workflow business process forms, the **Print Preview** label has changed to **Print**, as shown below:

Classic View



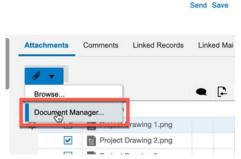


In both the workflow and non-workflow business process forms, the Attachment source **Unifier Folder** label has changed to **Document Manager**, as shown below:

Classic View

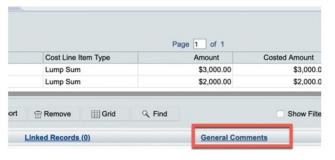


New View



In both the workflow and non-workflow business process forms, the **General Comments** label has changed to **Comments**, as shown below:

Classic View



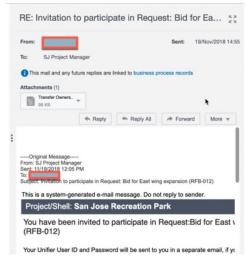
New View



In the **Mailbox**, when mails are linked to business process records, the **Show List** label has changed to **business process records**, as shown below:

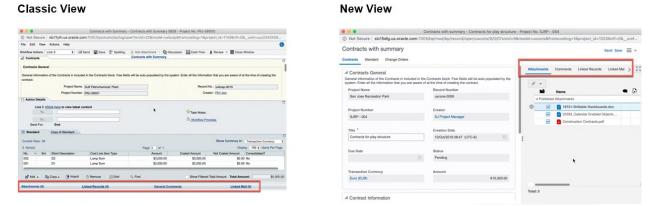
Classic View





Classic View and Standard View Tabs, Menus, and Actions

In the Standard View of both workflow and non-workflow business processes, the right-hand pane displays tabs that contain additional attributes of the business process record such as **Attachments**, **Comments**, **Lined Records**, **Linked Mail**, **Reference Records**, **Workflow Progress**, and **Audit Log**, in the Standard View, as shown below:



All non-primary actions such as printing record content, reviewing upper form and line item attachments at the record level, and setting up schedule for auto-creation are part of the Menu option (three horizontal line icon), in the Standard View, as shown below:

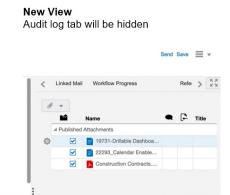
Classic View New View





In the Standard View, if the signed-in user does not have permission to view certain content of the record, then the right-hand pane does not display the corresponding tab. As an example, the following shows the Standard View when the signed-in user does not have View permission for **Audit Log**:

File Edit View Actions Help Workflow Act Rederence Records... Audit Log... Contracts General information of the Contracts in contract. Project Project You do not have permission to perform this action. Creator: PM. File Edit View Actions Help Revie Contracts Contracts with Summary Add Attachment - Discussion Acts Flow Revie Review Reference Records... Contracts with Summary Ed. Save Spelling... Add Attachment - Discussion Acts Flow Review Contracts with Summary Contracts With Summary Alert Project You do not have permission to perform this action. Creator: PM. Creator: PM.



In the Standard View, if the signed-in user does not have permission to perform certain actions such as **Terminate Record**, then the user would not see that action option under the Menu option (three horizontal line icon)

Workflow Progre

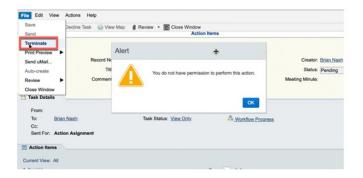
ОК

Classic View

Co.

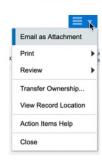
Send For:

Line 3 (Click here to view



New View

Terminate Record option will be hidden

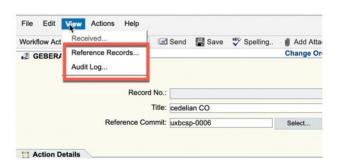


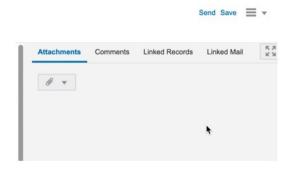
Classic View and Standard View Functions

Note: If a Workflow Business Process was created in the Classic View and remained as draft, then when you open the draft from Standard View, the draft will open in the Classic View. After you submit the draft, the submitted record opens in Standard View.

In a workflow business process, at any given step of a business process record, only those options (both tabs and menu) that are applicable to the given step will be displayed. For example, in the Classic View the **Reference Records** and **Audit Log** options were seen in the creation stage (although not applicable to the creation step). In the Standard View, these options are not displayed, as shown below:

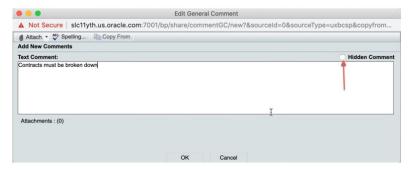
Classic View New View





In the Standard View of both the workflow and non-workflow business processes, when you add a comment, by default the checkbox of **Hide** is selected, as shown below. This means that a comment is hidden by default and if you want your comment to be viewed by everyone, then you must deselect this option.

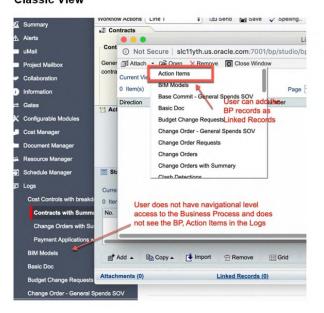
Classic View



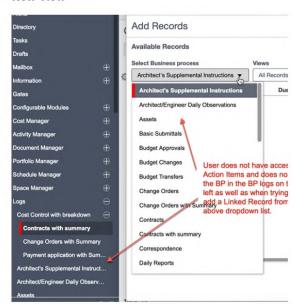


In the Standard View, when you add Linked Records to a workflow or non-workflow business process record, the list of the business processes displayed will be based on your (the user's) node access (items on left-hand Navigation screen). For example, if you do not have access (for example, view permission) to a certain node (sub-node) under the **Logs**, then that node (in this case a BP record) will not appear under the **Logs**. As a result, you cannot add the BP record as a linked record because you do not have permission, as shown below:

Classic View

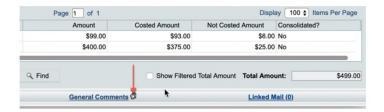


New View



In the Standard View, the comments indicator will not be displayed even if comments exist for a record, as shown:

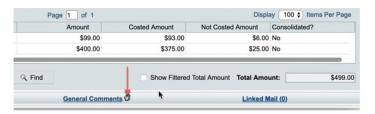
Classic View



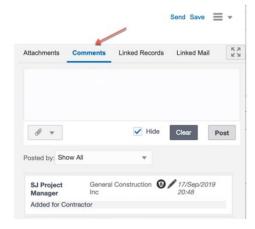


In the Standard View, the numbers (counts) of **Attachments**, **Linked Records**, and **Linked Mail** are not displayed even if the record has these attributes, as shown below:

Classic View

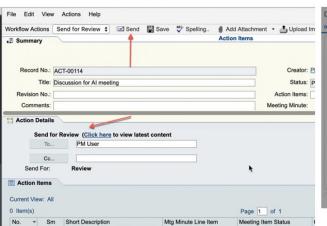


New View

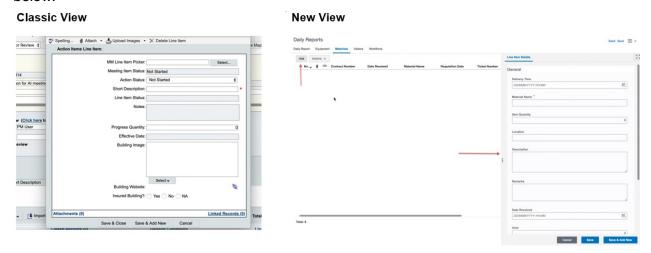


In the Standard View, the workflow details are displayed after you click **Send**. When the workflow details are displayed, the data validations, filtering of assignees (if applicable), and so forth, have already been completed.

Classic View



In the Standard View, the line item forms are no longer displayed as pop-ups. Instead, the line item detail form (**Line Items Details**) opens on the right-side of the line item list, as shown below:



In the Standard View, for a line item, attachments and linked records can only be added after you save the line item, as shown below:

New View

Classic View

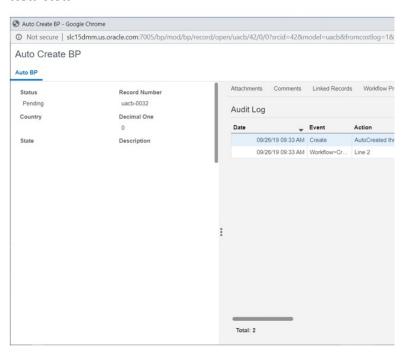
Specifing # Attachments (8) Save & Close Save & Add New Cancel Action Reserved Building Websites Insured Building Websites Save & Close Save & Add New Cancel Action Reserved Building Websites Insured Building Websites Save & Close Save & Add New Cancel Action Reserved Building Websites Insured Building Websites Save & Close Save & Add New Cancel

In the Standard View, for auto-created records (**Auto Create BP**) that are in Initiation Step, but the job is not yet complete, the accept and decline actions will not be displayed, as shown below:

Classic View

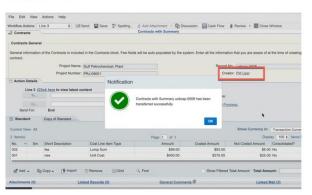
In Classic the buttons were disabled.

New View

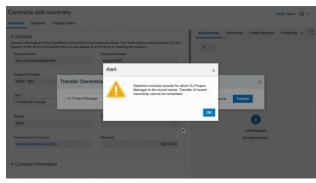


In the Standard View, you cannot transfer ownership if the selected user is the record owner, as shown below:

Classic View



New View

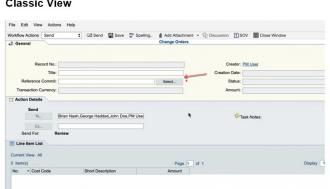


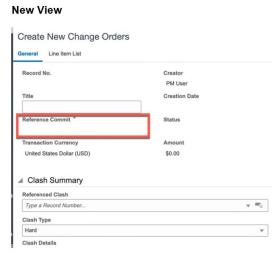
In the Standard View, the form design is honored without any exceptions.

In the Classic View of Change Commit BP, if the **Reference Commit** field is marked as read-only, in the design (uDesigner), then in the Standard View the **Reference Commit** field will be rendered as a read-only data element, as shown below:

Note: Prior to this improvement, in the Classic View, this data element had an exception, wherein even if the field was marked as read-only, at

runtime, the field would have been enabled. Classic View

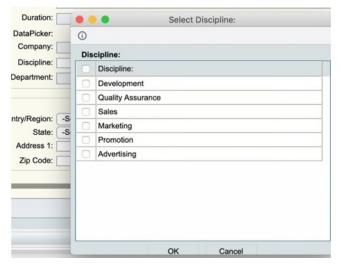




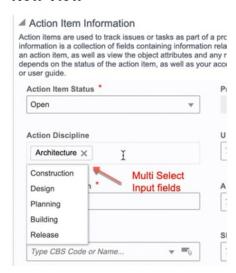
In the Standard View, fields that are multi-select-input data definition type do not support selection of multiple values in one attempt, as shown below:

Note: This is a technology limitation at this point of time.

Classic View

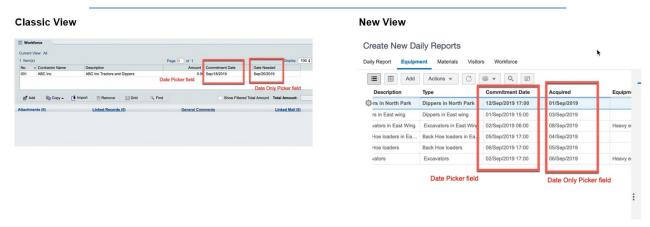


New View



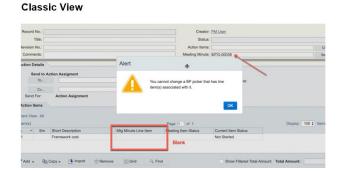
In the Standard View, if a **Date Picker** field has been added to the Line Item List, then the value displayed will include both the **Date** and the **Time**, as shown below:

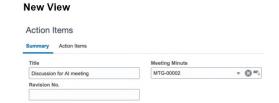
Note: In the Classic View, the value displayed only included the **Date** and not the **Time**.



In the Standard View, you can change the BP picker field value (referenced by a **Line Item Picker** field) in a line item. The BP picker field value cannot be changed if the **Line Item Picker** field has a line item reference in the field, as shown below:

Note: In the Classic View, you could not change the BP picker field value even if the **Line Item Picker** field in the line item did not have a value.



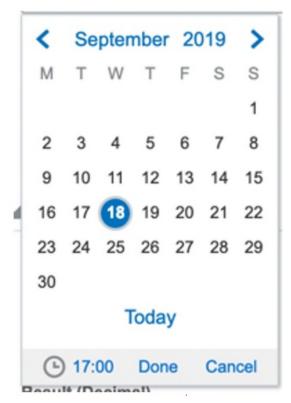


In the Standard View, the **Date Picker** controls will not have the **Time Zone** information, as shown below:

Classic View

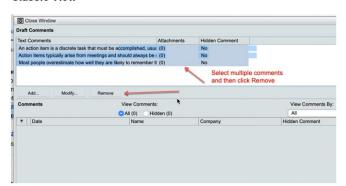


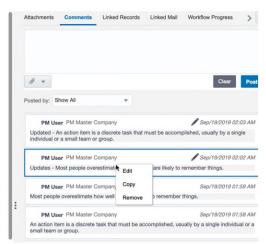
New View



In the Standard View, you cannot delete multiple draft comments (from the **Comments** tab), as shown below:

Classic View



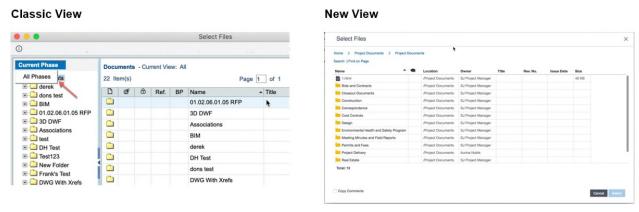


In the Standard View, the **Document Review** option is present at the time of creating the record, unlike Classic View where the option is seen only after creating the record, as shown below:

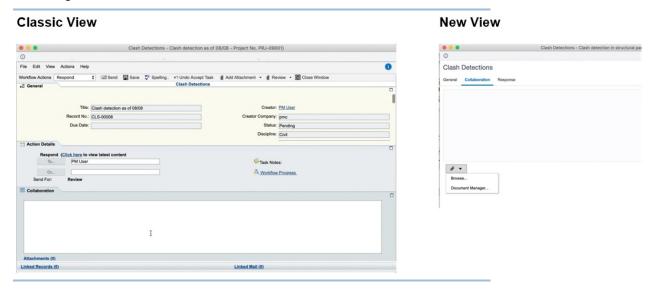
Classic View New View



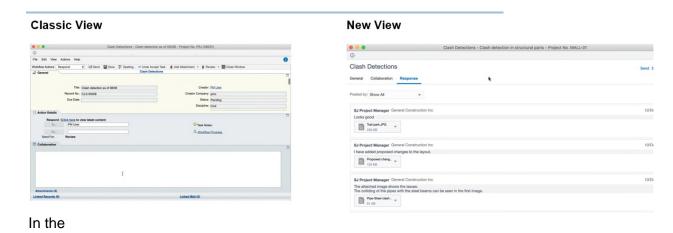
In the Standard View, the document management picker (displayed when adding attachments from Unifier **Document Manager**) does not show phase selection, as shown below:



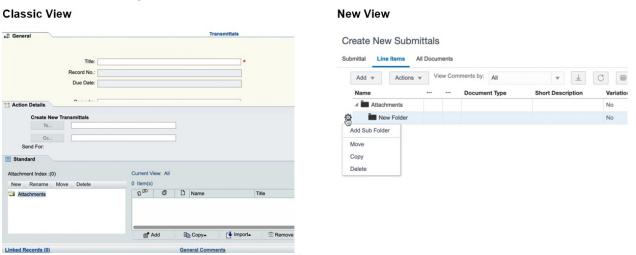
In the Standard View, for the Text-type business process, the way the comments are added and displayed has changed, as shown below:



Standard View, for the Text-type business process, you can view previous comments in the **Response** tab, as shown below:

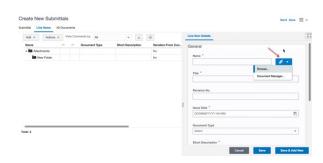


In the Standard View, for the Document-type business process, the steps to create folders and line items have changed, as shown below:



In the Standard View, for the Document-type business process, the steps to add an attachment to a line item has changed, as shown below:





In the Standard View, in the **Linked Mail** tab, the **Add** drop-down list includes the options:

Linked Records (0)

- Mailbox: To attach existing Mailbox mails as well as Project Mailbox inbound emails
- ▶ New Mail: To compose a new email

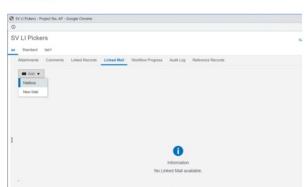
Save & Close Save & Add New

See below for details:



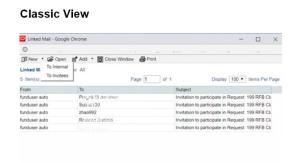


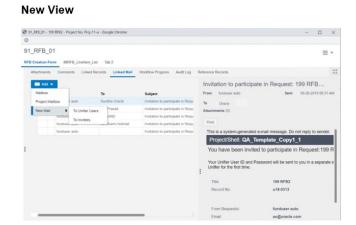
New View



In the Standard View, in the **Linked Mail** tab of the RFB-type (Request for Bid) business process, you can send emails to Unifier users and bid invitees through **Add** > **New Mail**, as shown below:

Note: In the Classic view, you used the New menu option to send emails to Unifier users and bid invitees.

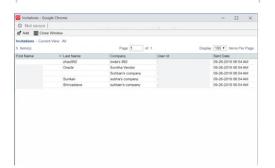


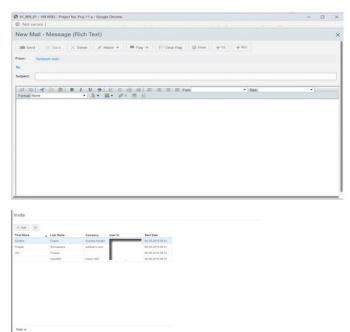


In the Standard View, for the RFB-type business process, when sending email to invitees, you can click the **To** *hyperlink* to access the list of all available invitees, as shown below:

Note: In the Classic View, you clicked the **To** option to access the list of all available invitees.

Classic View



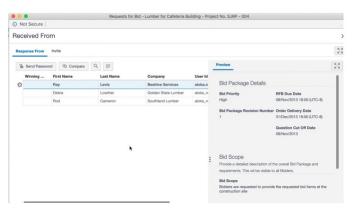


In the Standard View, for the RFB-type business process, after a bid is closed, the show bid screen (**Preview**) has been enhanced, as shown below:

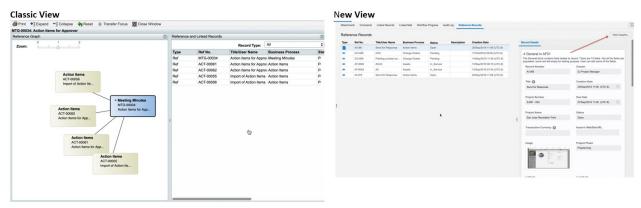
Classic View



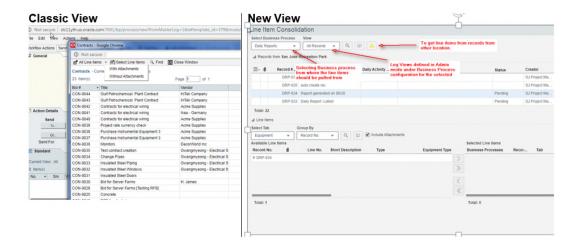
New View



In the Standard View of both the workflow and non-workflow business processes, the graphical diagram and the list view (while viewing of reference records in the **Reference Records** tab) have been enhanced, as shown:



In the Standard View, the **Line Item Consolidation** window has been enhanced, as shown below:



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