



What's New

New Features in Primavera Unifier 19

Features introduced in 19.12.4

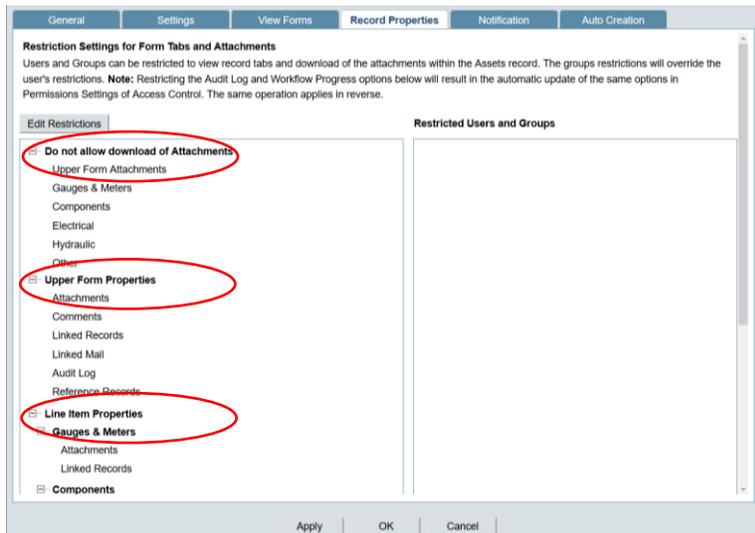
(See the video version at <https://youtu.be/5ELMLHyvsLg> .)

Spotlight

Ability to Define Permissions to View Tabs on Business Process Records

Previously, there was no way to control the visibility of the tabs such as attachments, linked records, linked emails etc., seen in a business process record.

Newly introduced this month, you can completely hide a business process record tab at the business process design level. Additional restrictions can be established for users and groups, controlling the visibility of the record tabs. Additional restrictions can be placed on the downloading of attachments.



Day 1 Impact: Immediately upon upgrading to this version of Unifier, users and groups who have permission to “Hide Record Audit Log” and “Hide Task Statuses” will be added to the Restricted Users and Groups viewers list in the Record Properties tab in the business process setup.

Auditing Attachments in BP Records: Add, View, Download, & Delete

A user can now audit a business process record to see whether – or when – attachments have been added, viewed, downloaded, or deleted. Being able to audit deletion of records is particularly helpful during the RFB process. This enhancement applies to all types of Business Processes which allow attachments on them and on their line items.

Corrective Work Orders

Corrective Work Order Tasks & Labor Materials Tools Invoice History Meter Readings

Attachments Comments Linked Records Linked Mail Workflow Progress **Audit Log** Reference Records

Audit Log: CWO-0211

Date	Event	Action	Field	Old Value	New Value	User Name
20/Nov/2019 22:27	Attachment via web to line item 'Soil and hole covers'	Add 'Ocean.png'				SJ Project Manager: ...
20/Nov/2019 22:25	Attachment via webservice (createCompleteBPRecord(v2)) to record	Add 'Snow.jpg', Version: 2.0				SJ Project Manager: ...
20/Nov/2019 19:43	Workflow->Form	Modify	Work Order ...		CWO-0211	SJ Project Manager: ...
20/Nov/2019 19:43	Workflow->Shop Supervisor Review	Estimate= No	Send to		Technicians, SJ Project Manager: Gen_Con...	SJ Project Manager: ...
20/Nov/2019 19:42	Attachments to Line Item 'tool 1'	Add 'Ocean with mist.png'				SJ Project Manager: ...
20/Nov/2019 19:41	Tools: Workflow->Line Item	Add 'tool 1'				SJ Project Manager: ...
20/Nov/2019 19:39	Attachments to Line Item 'task 01'	Add 'snow_3.png'				SJ Project Manager: ...
20/Nov/2019 19:38	Workflow->Creation	Send to Shop Supervisor	Send to		SJ Project Manager: Gen_Con	SJ Project Manager: ...

Deletion of Users and Groups in Shell Templates

Starting in this version of Unifier, specific users and groups can be deleted from a shell template. However, if a user is the owner of an item such as a document, cost sheet, or work sheet in the template, then that user cannot be deleted. Similarly, the Project Administrators group cannot be deleted. Note that users and groups that are deleted from a shell template will not automatically be deleted from existing shell instances that were created using the template when those users and groups were present.

Summary Pay App-type BPs – Variable Unit Rates & % Complete to Date

Last month, the Commits business processes of summary payment applications SOV type were enhanced to support variable rates while creating and updating line items. In this release, the Payment application business process of SPA SOV type is also enhanced to support variable unit rate line items.

Along with “quantity this period”, customers should be able to edit “percentage complete to date” in unit cost lines with variable unit rates. “Percentage complete to date” can be entered in a summary line and pushed to the cost breakdowns using the “Apply line item value of percentage complete to date to costed lines” checkbox.

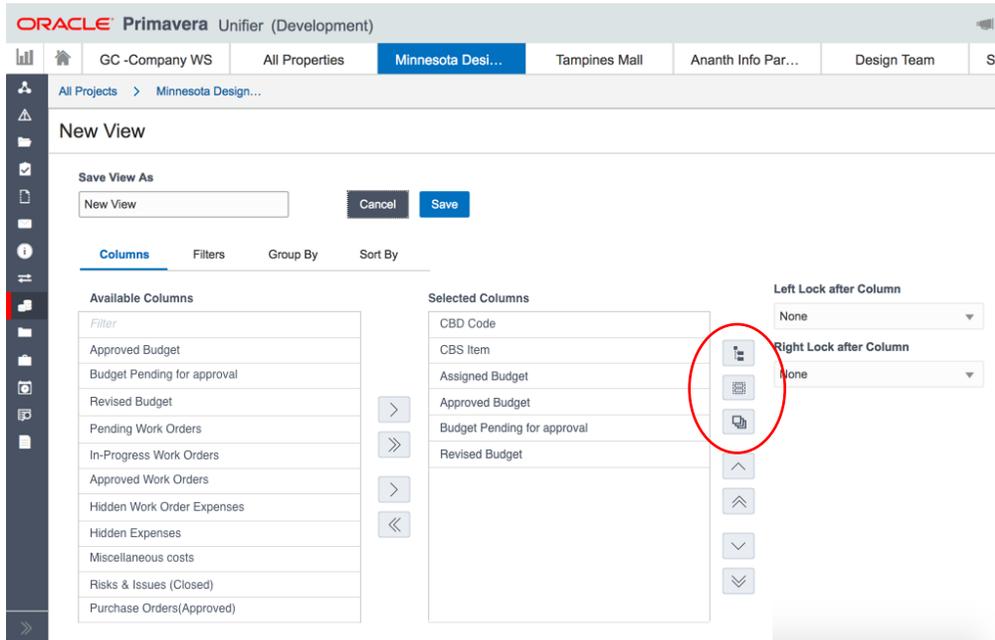
Shell Attributes Support View Forms

A Configuration Package can import and export View Forms tab information for shell templates and single-instance shells.

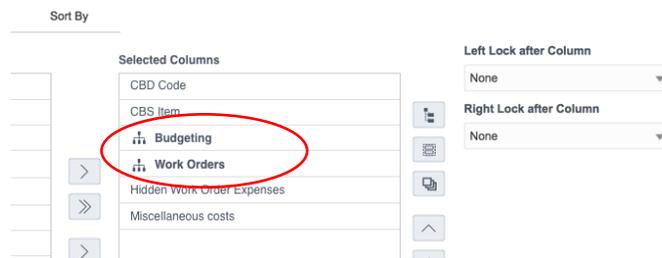
Cost Sheet UI/UX – Column Grouping

Although the tree structure and the “group by” feature enable users to view groups of rows, grouping columns has remained impossible until now. With this version of Unifier, multiple columns can be grouped into a view, and a user can collapse column groups to see a condensed view of the Cost Sheet.

When creating a new view, select some columns and click on the new Group Management, Group, and Ungroup buttons.



Columns that have been grouped will appear in the Selected Columns list in bold type, with a tree icon to the left.



Edit a column group by clicking on it to enter the Group Management screen.

EVM-WBS Sheet UI Enhancements

Unifier's WBS Sheet has been enhanced. If you have permission to modify the sheet, you can hide or unhide columns by right-clicking on a column header.

WBS Code	WBS Name	WBS Actuals	Proposedamo...	WBS Type	Floor Area	Actual Units	Planned Value - Activity Sheet	Planned Units	Cost
1	EC00515-1	\$32,814.46	11		56	474	\$0.00	31521	\$
2	D&E	\$18,000.00	7				\$0.00	5162	
3	Ex-Finish	\$14,814.46	1				\$0.00	13723	
4	Brick	\$8,800.00	1				\$0.00	7728	
5	Roof	\$5,717.46	0				\$0.00	5183	
6	Win	\$72.00	0				\$0.00	812	
7	Found	\$0.00	3				\$0.00	7188	
8	Structure	\$0.00	0				\$0.00	5448	

In addition, WBS codes now act as hyperlinks; clicking on one provides details about the WBS code itself, rather than its line item.

New View

Save View As
New View

Columns **Filters** Group By Sort By

Search Parameters

WBS Code
contains WBS Name
contains

WBS Type
contains Select

EAC
equals

Planned Units
equals

Actual Units
equals

WBS Codes with Linked BP Records

Also starting in this version of Unifier, a user can define views in the WBS Sheet to filter data based on rows or columns, enabling you to work on just a subset of your data – this is particularly useful if you have a large sheet and you want to focus on a specific set of records.

Set up search terms when creating a view, and then select group and sorting parameters.

Save View As
New View

Columns Filters **Group By** Sort By

Group By
EVA - Planned Cost Order
Ascending

Save View As
New View

Columns Filters Group By **Sort By**

Sort By
None Order
Ascending

Announcement

Internet Explorer 11 was deprecated in 19.10. While it is supported in this release, it may not be supported in a future release.

We do not support the following:

- Unifier Mobile Browser /m. Oracle recommends using the Unifier Mobile application.
- Web SOAP Service "mainservice" (endpoint URL: .../ws/service/mainservice). Oracle recommends using the endpoint URL: .../ws/un/service/UnifierWebServices or using the new Restful Services.

Features introduced in 19.12.3

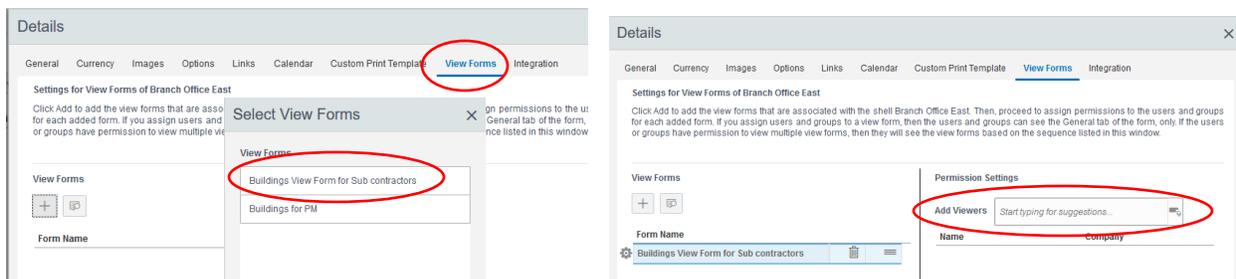
(See the video version at <https://youtu.be/-pt1nXNPYBQ> .)

Spotlight

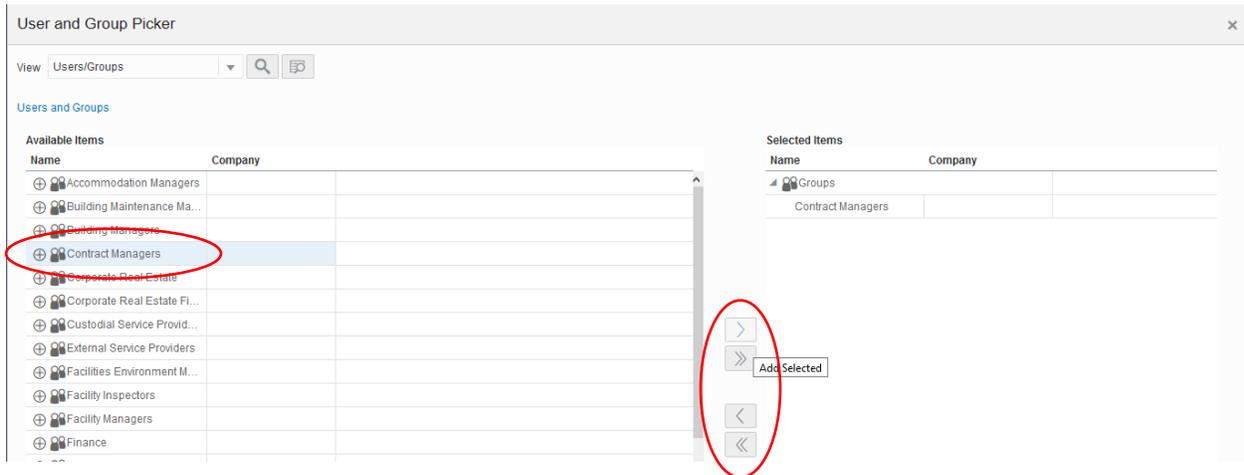
Shell attributes to support multiple view forms

Starting in this version of Unifier, a designer can define one or more view forms when specifying shell attributes. This enables view-only forms for certain users and groups. Prior to this upgrade, only one detail form was available, which provided all users with all details and editing rights.

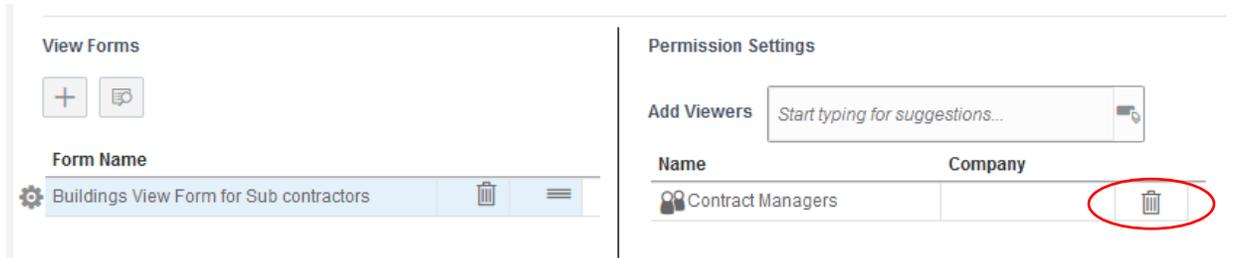
If there is already more than one form in your shell attributes, click on the View Forms tab. Select one of the forms and click Add Viewers.



Add users and groups by clicking on the chevrons in the middle of that pop-up. Click Done to finish.



Now the right half of that pop-up window will display the names of users & groups who have access to the currently-selected form on the left side. If a user or group doesn't explicitly have access to a given form, they won't be able to view it.



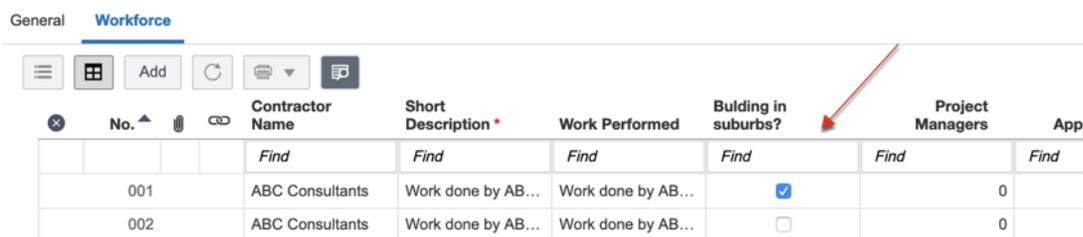
To remove access to a view form, select the form, select a user or a group, and click on the trash can icon.

Other Enhancements

Grid View supports the checkbox

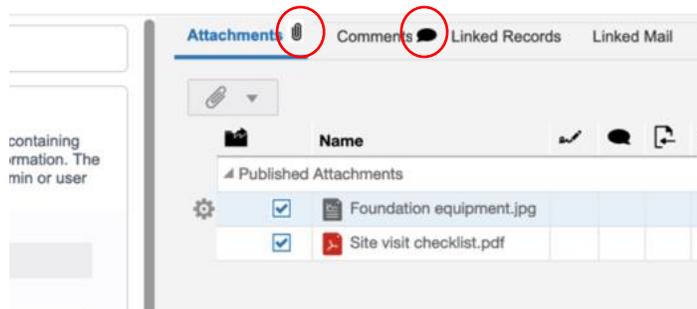
Previously, the grid view (sheet view) would display a checkbox element as “yes” or “no”, corresponding to a value being checked or unchecked. Now in the grid view, a checkbox will appear as a checkbox rather than yes/no text.

Create New Daily Reports



Visual indicators for attachments and comments

When you open a form, the attachments and comments tabs will now have icons showing whether there are any attachments or comments associated with the current item. If you delete all attachments, then the indicator will disappear when you refresh the window. This means you can look at a record detail and know whether there are comments and attachments without having to look at each tab of the details pane.



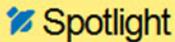
Summary payment application supports variable unit rates

With this enhancement, the user can record line items with different unit costs when defining or modifying cost breakdowns. Variable unit rates are available in two business processes: base commit with summary payment applications, and change commit with summary payment applications.

Performance boost when viewing logs

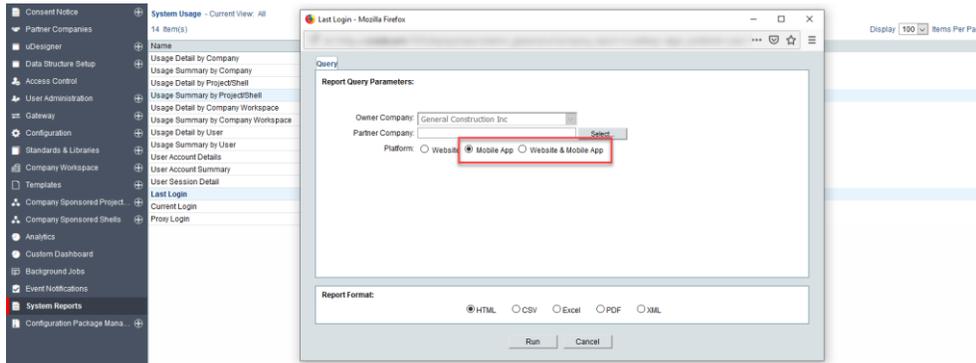
Starting with this version of Unifier, clicking on a log in the Navigator will show a list of log records but unlike previous versions, Unifier will NOT automatically display the details of the first record. To see details, you must select a log first, resulting in a performance boost when first opening the log.

Features introduced in 19.12.2



Unifier reports mobile app logins.

An administrator can see who has signed into Unifier through a mobile device.



Last Login

Owner Company: General Construction Inc
Partner Company: All

Report Run by: SJ Project Manager
02-03-2020 07:10 PM (UTC-8)

User Name	User ID	User Type	Company Name	User Status	Operating System	Device	Last Login Date	Days Since Last Login
Dan Smith	dsmith	Standard	General Construction Inc	Active	13.3	iPhone7Plus	01-16-2020 03:43 AM	18
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	iOS 13.3	iPhone 8 Plus Simulator	01-23-2020 02:15 PM	10
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	Android 10	Google Android SDK built for x86	01-17-2020 11:24 AM	16
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	iOS 13.2	iPhone 8 Plus	01-15-2020 06:25 PM	18
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	13.3	iPhone7Plus	01-16-2020 02:57 AM	18
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	13.2	iPhone8Plus	01-15-2020 10:36 PM	18
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	iOS 13.2.2	iPhone XS Max Simulator	01-28-2020 10:22 AM	6
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	iOS 13.3	iPhone 7 Plus	01-29-2020 05:15 AM	5
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	13.2.2	iPhoneXR	01-14-2020 03:38 PM	19
SJ Project Manager	coadmin	Standard	General Construction Inc	Active	iOS 13.2	iPhone 8 Plus Simulator	01-19-2020 11:56 AM	14
Total	10							

Page 1

Other Enhancements

Important sign-in information for on-premises installations on non-SSO servers.

For on-premises customers on non-SSO server (*prior* to 19.12.2): the Unifier mobile app used the Basic Authentication for login while connecting to the Unifier web application deployed on a non-SSO server.

For on-premises customers on non-SSO server (*on or after* 19.12.2): Unifier mobile app now uses the Form-based Authentication while connecting to the Unifier web application deployed on a non-SSO server. As a result, you must use the latest version of Unifier mobile app to access app data on your device.

Note: the user preferences, in the Unifier web application, will be effective when you sign in to the Unifier mobile app.

Features introduced in 19.12.1

Spotlight

Event Notifications

When data within a Workflow or a Non-workflow Business Process changes, Unifier notifies the external systems users so they can integrate the latest data from Unifier into their applications. The process of notifying the external systems users takes place by way of the Event Notifications node, available in Company Workspace, Admin mode.

Other Enhancements

View Actuals in default project view, captured from P6, and graphs.

A user is able to view:

- Unifier Actuals, in default project view.
- All Actuals from P6 and Unifier, in a single row in EVA Sheet--when filtered by WBS, CBS, or P6 project.
- Graph for all Actuals--by WBS.

Pull units from the EVA Sheet to, and define formulas for indexes in, the WBS Sheet.

You can:

- Pull CPI, SPI, TCPI, and CSI values into your WBS sheet, from the EVA Sheet.
- Pull units into your WBS sheet, from unit-based EVA.
- Pull numeric custom DEs into your WBS Sheet, from the Activity Sheet.
- Define the summary values in the formula columns in order to use the sum of child rows, or to use the user formula definition.
- Pull the custom DEs into the Cost Sheet, from the Activity Sheet.

Audit Log in RFB BP captures changes made to the Attachment tab in the invite form.

Requestors can see the Audit Log events associated with changes made to the Attachments tab in the invite form.

In an RFB BP the Audit Log captures the events when the user uploads additional attachments, revises an attachment, or removes an attachment in the invite form before the bidding process starts.

Ability to select the Shell image that you want to use in printing Shell Details.

You can choose the image that you want to be displayed in the custom print from the list of available images in the Images tab.

Features introduced in 19.12

Spotlight

Define relationship between time and meter in Preventive Maintenance (PM) Work Orders.

You have the ability to define the relationship between time and meter schedules in recurring generation of PM Work Orders. This enables you to avoid having two PM Work Orders if a meter schedule occurs sooner than a time schedule or vice versa.

Other Enhancements

Define default sort order in CBS Picker.

You can see Cost Codes in order that they appear in default view of the Cost Sheet, when accessing a CBS picker from a Cost BP to locate the Cost Codes.

Adding support for Arabic language.

Unifier supports Arabic language, which is a right-to-left layout language. You can select Arabic as the language in User Preferences, or a Company Administrator can set Arabic as the language for the Company users. When set, Unifier will be rendered in Arabic.

Technical improvements and bug fixes.

Features introduced in 19.11

Spotlight

Select line items of a BP record using the Line Item Data Pickers.

A new data definition, the "Line Item Data Picker," allows you to pick line items from a record selected through a BP Data Picker. Similar to the other data pickers, the query conditions can be defined to filter out the line items of interest.

Technical improvements and bug fixes.

Other Enhancements

In a Request for Bid BP, a requestor can send additional attachments, as addendums, to the invitees after the invitation has been sent.

When a bid is not closed yet, a requestor can send additional attachments, as addendums, to the invitees after the invitation has been sent. You have the ability to send additional attachments as addendums when the bid is open, update attachments when bid is open, and send a mail to invitees from Invite form instead of Linked Mail tab. The revised or existing attachments are removed from the Invite form of the Requestor BP. The new addendums can be viewed in the Audit Log of the requestor's record.

Customize the subject of the BP-related email notifications that represent actions in a BP Workflow step.

Previously, when you sent Unifier task notification emails from various trigger points, the subject line of those emails were pre-set, for example: Rec_Num_0011 is sent to you for approval. With this enhancement, when you send Unifier task notification emails from various trigger points, you can customize the email subject line to provide more context to those notifications, for example: Package_9081 from Boston General Hospital, is sent to you for approval. The customized email can be a combination of simple text, shell information, data elements from the BP Upper Forms, and Workflow step.

Modify line items for pending FBS-type Business Process.

Previously, when you wanted to modify rolled up line items of an FBS-type Business Process, you had to delete the line item and add a new line item. With this enhancement, the FBS-type Business Process supports modifications of its line items, similar to other CBS Cost type BPs. The line item attributes (such as: Short Description, Fund Code, or CBS code) are editable once you send the record to the next step.

Customize CBS Pickers.

Previously, you could not define the content of a CBS picker, in uDesigner, and at run time, fixed columns were displayed whenever you used a CBS picker in a Business Process. With this enhancement, you can define the content of a CBS picker (in uDesigner), configure the columns in the CBS picker, and filter the CBS codes.

Note: This enhancement is applicable to the Standard view at run time.

Usability Improvements

The user interface for the following features have been enhanced as follows:

User-Defined Report (UDR)

When you run a report, Unifier opens new report-parameters pop-up window so you can select the report format, filter the records using query parameters, etc.

Cash Flow log

When you create, or edit, filters within a view and save the view, the resulting records (in the view) will be according to the filter conditions, only, and the log will not display additional information such as the summary-type curves.

When you select one or more detail curves from the log and create a summary curve, then the resulting form will automatically show the selected curves from the log in the "Selected Curves" section.

Shell dashboard

When working with the print option, you can view the tab name and shell dashboard information in the Dashboard tab-level print output.

Cost Sheet supports Views

You can have a more customized view of the Cost Sheet and view the data that is of your interest by defining Views.

Cost Sheet

When editing, you can see if the Cost Sheet is locked or unlocked for editing.

Removal of switch to toggle between classic and standard views

The option to switch between the Classic view and Standard view, for Business Process records and Shell Dashboards not supported.

E-Signature tab enables you to connect to third-party document signing applications.

To establish a connection between Unifier and DocuSign, you can use the token that is automatically generated in Unifier company properties (Company Workspace log > Admin mode > Open > Edit Company window > E-Signatures tab).

All Document-type BPs support a detail form.

You must always have a detail form. As a result, when you run error check on any existing basic Document-type BP (with or without folder), in uDesigner, you must create a detail form for that Document-type BP and complete the detail form by placing the mandatory (or any additional needed) data elements according to the business needs.

When creating records through CSV template or Web Services, you can add the contractor's name in the template.

In Unifier, a Company Picker is used for identifying a partner company in a business process record. The records can be created in bulk, along with the populated contractor's name. Previously, you could launch the Company Picker and select the Company Name of choice; however, when records were created through CSV and the CSV template contained the Company Name, the system would have ignored the value since the field was not supported through CSV. With this enhancement, the Company Picker value is accepted by the system, when records are created through CSV import as well as when records are created or updated through Web Services.

Note: The existing CSV templates, with the values already populated, will not reflect this change. You must re-export the template for the changes to get reflected, post import.

The User-Defined Report (UDR) log has additional columns.

With this enhancement, the UDR log displays columns allowing you to see the dates a UDR was created, when the UDR was modified, and who last modified the UDR.

Ability to set the Behavior Set DE to be disabled and clear.

The option "Disabled and Clear" in DDS definition enables you to set a Behavior Set DE to be disabled and clear upon the change of value in the master data element. This prevents the incorrect data in the Behavior Set DE to reset to blank.

As an Administrator, you can set up different View Forms for Workflow BPs.

Previously, there was no provision to assign view options to specific users or groups. That is to state that the users with only "View" permission could see the entire form and there was no way to control which segments of the form could be viewed. With this enhancements you can set user-permissions so users can view the entire form, a portion of the form, by designing user specific View Forms in uDesigner.

Delete option has been re-introduced in shell templates.

You can delete components or items in a shell template except for Users and Groups. This enables you to delete items that are incorrect or no longer relevant (items such as Business Processes, Gates, Planning Managers, and so forth) in a shell template.

Note: Deleting items in the shell template does not remove them from instances previously created using that template.

Reactivate Partner users in individual shells and projects at the company-level.

With this enhancement:

- If you (the administrator) deactivate a Partner Company user from a project or shell that the Partner company was associated with and later decide to reactivate the Partner Company user for that project or shell, the status of that Partner Company user changes to what it was prior to the deactivation of that Partner Company user.
- If you (the administrator) remove a Partner Company from a project or shell and later decided to re-add the Partner Company to that project or shell, the status of the Partner Company users changes to what it was prior to the removal of the Partner Company.

Company Administrators can now mandate users to setup password recovery secret questions.

Previously, for on-premises customers, it was not mandatory to set up security questions upon first or any login. Administrators would have to set new passwords in the case of lost or forgotten passwords. With this enhancement, you can set up security questions for password reset upon first time login. An administrator can choose whether or not to enforce the security questions setup. If they choose to do so, you cannot navigate further upon first login unless the security questions are set up. The option to choose whether or not to enforce the security questions setup is given at the company-level.

Take action on a BP record when it is opened from the Cost Sheet.

Previously, when a BP record was opened from the details of a cost sheet column cell, it opened in View form. You would have to navigate to a BP log or Task log to take action. With this enhancement, you can take action on a BP record when it is opened from the cost sheet. In a Workflow BP record, you can accept a task and take action if the record is not on the end step. In a Non-Workflow BP record, you can edit the record if you have edit permissions. The cost sheet is refreshed when changes are made to either type of record.

Note: This feature is available only when the Cost Sheet is opened in the new interface.

Use a workflow step form to validate while creating or updating a record through new REST Services.

Previously, REST services that created and updated BP workflow records used a validation form defined in uDesigner integration. Users who did not use a validation form ended up having data integrity issues due to not triggering field and form validations. With this enhancement, you can use a workflow step action form for validation while creating or updating BP records through a new rest service. When optional workflow details are provided in the input request, an Action form is used on the creation step of the workflow. If not provided, BP auto-creation setup is considered.

Project Managers and Shell Administrators can now restrict the custom print templates that are available for business processes when the end-users print record information.

With this enhancement, Custom Print Templates applicable for a given shell can be setup in the Custom Print Template tab of the Shell Details page. All custom print templates will be available for setup. These include both the BIP templates as well as the templates defined using Word and Adobe plug-ins. BIP templates that are published at least once will be displayed. At runtime, the user sees those templates added (by the admin) under this tab.

Update auto-populated values in a Payment grid when data element values are updated.

Previously, data elements defined in "Auto-populate on Payment Application" on the base commit were populated into the payment grid when lines were created and rolled up to SOV. When these data

element values were updated in the Change Order SOV referenced lines, the latest values did not show up in the payment grid, or the SOV. With this enhancement, the latest values from the Change Order will update the auto-populated values in the payment grid.

Note: This enhancement applies to Payment Applications, Summary Payment Applications, and individual Commit line items.

Create multiple View forms and decide what data can be placed in each form.

Previously, a Non-Workflow Business Process had only one form, the Action form, which held all the data. Since there was only one supported form, the visibility of data in non-workflow business processes could not be controlled. With this enhancement, you can create multiple View Forms in uDesigner and place restrictions on the View Forms for specific Users and Groups in the business process setup, later.

Grid support for Base Commit and Change Commit business processes of Summary Payment Application SOV type.

Base Commit and Change Commit business processes of Summary Payment Application SOV type now support the grid or sheet view of line items. With this enhancement, you can view line items in Grid view when viewing contract or change orders.

Create views on rows and columns within a cost sheet.

With this enhancement, you can create views on rows and columns within a cost sheet. You can create these views with filters, groupings, etc. so you can turn a larger cost sheet into a smaller one.

Query-Based Data Elements (QBDE) get evaluated when a Reference Picker trigger element is updated.

Previously, when a BP record was created from a query-based tab (QBT), and the Reference Picker trigger element was populated, the trigger element that was populated would not trigger any evaluation on QBDEs. With this enhancement, you can see the QBDEs get evaluated when the Reference Picker trigger element becomes populated within a record created from a QBT.

Define whether a block is expanded or collapsed at the time of rendering the form.

Previously, at runtime, you expanded and collapsed the blocks in objects such as BP forms and shell attribute forms. With this enhancement, in uDesigner, you can define whether a block is expanded or collapsed at the time of rendering the form. This is to prevent unnecessary scrolling through irrelevant blocks.

Configure, view, and edit the email subject lines for multiple Workflow BPs.

With this enhancement, you can configure, view, and edit the email subject lines for multiple Workflow BPs. The customized subject line can consist of simple text, shell information, DEs from BP Upper Forms, and Workflow steps. You can configure the subject lines in multiple languages as well as import them in another environment. Some examples of Workflow BPs that have configurable subject lines include: Overdue tasks, Declined tasks, and Record Workflow Complete.

View and add new markups at the same time in Autovue Review.

Previously, attempting to add new markups while viewing previous existing markups in Autovue caused discontinuation and inconsistency. With this enhancement, you can view and add new markups at the

same time. Therefore, multiple design team members can add markups across shared files throughout the lifecycle of a design document.

Note: This enhancement applies to both BP attachments and DM documents where Autovue markups are created.

Features introduced in 19.10

 Spotlight

Technical improvements and bug fixes.

 Other Enhancements

Not applicable.

Features introduced in 19.9

 Spotlight

Technical improvements and bug fixes.

 Other Enhancements

Not applicable.

Features introduced in 19.8

 Spotlight

Improved the way you can assign permissions to the Documents and Folders.

Starting with this release, you can assign permissions to files and folders from the Document Manager (DM) log (company-level, shell-level, and project-level). In a DM log, click the Actions toolbar options and click Permissions option.

You can also assign permissions to multiple items, in bulk. When you select multiple files and click Permissions, the Permissions window opens, and it will not contain any permissions, even if some of the selected documents have user permissions assigned to them. When you select multiple files and click Permissions, you need to assign permissions to the users either individually, or by way of inheriting from the parent folder, if applicable.

Alternatively, you can opt to click the gear icon and click Permissions.

 Other Enhancements

Not applicable.

Features introduced in 19.7

 Spotlight

Click Open on the cost sheet to view its new inline-grid design. The layout opens in the same tab, allowing you to navigate to other nodes in Unifier. Click X in the top-right corner to close the cost sheet and return to the Cost Sheet log.

CBS Code	CBS Item	Assigned Budget	Purchase Orders (Approved)	Change Orders (Approved)	Invoices (Approved)	Contingencies	LI Content	Risks & Issues (Closed)	Forecasts	Budget Approval (Approved)	Tt (Apt)
1.0-0-0000	Milestones & Prelims	\$10,000.00	\$0.00	\$0.00	\$0.00	\$30,000.00	\$0.00	\$0.00	\$30,000.00	\$0.00	
2.0-0-0000	Design	\$80,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00	\$0.00	\$0.00	\$20,000.00	\$0.00	
3.0-0-0000	Procurement	\$1,000,000.00	\$0.00	\$0.00	\$0.00	\$40,000.00	\$0.00	\$0.00	\$40,000.00	\$0.00	
4.0-0-0000	Construction	\$1,415,000.00	\$63,640.00	\$0.00	\$0.00	\$88,000.00	\$0.00	\$0.00	\$151,640.00	\$0.00	
4.1-0-0000	Separable Part 1	\$1,415,000.00	\$63,640.00	\$0.00	\$0.00	\$88,000.00	\$0.00	\$0.00	\$151,640.00	\$0.00	
4.1.1-0000	Earthworks	\$160,000.00	\$0.00	\$0.00	\$0.00	\$29,000.00	\$0.00	\$0.00	\$29,000.00	\$0.00	
4.1.1-0010	Scrub & clear	\$90,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00	\$0.00	\$0.00	\$20,000.00	\$0.00	
4.1.1-0020	Trim & grade	\$70,000.00	\$0.00	\$0.00	\$0.00	\$9,000.00	\$0.00	\$0.00	\$9,000.00	\$0.00	
4.1.2-0000	Structure	\$290,000.00	\$63,640.00	\$0.00	\$0.00	\$22,000.00	\$0.00	\$0.00	\$85,640.00	\$0.00	
4.1.2-0030	Formwork	\$50,000.00	\$19,500.00	\$0.00	\$0.00	\$8,000.00	\$0.00	\$0.00	\$27,500.00	\$0.00	
4.1.2-0040	Reinforcements	\$90,000.00	\$20,640.00	\$0.00	\$0.00	\$7,000.00	\$0.00	\$0.00	\$27,640.00	\$0.00	
4.1.2-0050	Concrete	\$150,000.00	\$23,500.00	\$0.00	\$0.00	\$7,000.00	\$0.00	\$0.00	\$30,500.00	\$0.00	
4.1.3-0000	First Fix Services	\$595,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00	\$0.00	\$0.00	\$20,000.00	\$0.00	
4.1.3-0050	Hydraulic	\$80,000.00	\$0.00	\$0.00	\$0.00	\$3,000.00	\$0.00	\$0.00	\$3,000.00	\$0.00	
4.1.3-0070	Mechanical	\$195,000.00	\$0.00	\$0.00	\$0.00	\$8,000.00	\$0.00	\$0.00	\$8,000.00	\$0.00	
4.1.3-0080	Electrical & fire	\$320,000.00	\$0.00	\$0.00	\$0.00	\$9,000.00	\$0.00	\$0.00	\$9,000.00	\$0.00	
4.1.4-0000	First Fix Services	\$370,000.00	\$0.00	\$0.00	\$0.00	\$17,000.00	\$0.00	\$0.00	\$17,000.00	\$0.00	
4.1.4-0090	Framing	\$50,000.00	\$0.00	\$0.00	\$0.00	\$7,000.00	\$0.00	\$0.00	\$7,000.00	\$0.00	
4.1.4-0100	Ceilings	\$100,000.00	\$0.00	\$0.00	\$0.00	\$3,000.00	\$0.00	\$0.00	\$3,000.00	\$0.00	
4.1.4-0110	Walls	\$100,000.00	\$0.00	\$0.00	\$0.00	\$7,000.00	\$0.00	\$0.00	\$7,000.00	\$0.00	
4.1.4-0120	Joinery	\$80,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
4.1.4-0130	Services Fit off	\$40,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
4.2-0-0000	Separable Part 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
4.2-1-0000	Earthworks	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
4.2-1-0010	Scrub & clear	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total		\$2,505,000.00	\$63,640.00	\$0.00	\$0.00	\$178,000.00	\$0.00	\$0.00	\$241,640.00	\$0.00	

Click on a CBS Code link to open the details pane, where you can make changes, add attachments/notes, and change fund assignment order. Click the toolbar to Manage Rows, Add Columns, Forecast, Refresh, Print, Find on Page, Expand All Groups, and access Menu Options

The screenshot shows the Cost Sheet grid with the 'CBS Details' pane open for CBS Code 4.1-1-0010. The pane includes tabs for General, Attachments, Notes, and Fund Assignment Order. The General tab is active, showing fields for Parent (4.1-1-0000), TB Segment 1 (4), TB Segment 2 (1), TB Segment 3 (1), TB Segment 4 (0010), Cost Code (4.1-1-0010), Cost Item (Scrub & clear), Cost Type (Capital), Status (Active), Owner (Type a User Name...), and Cost Attributes (Select).

Add rows by hovering over a row and clicking the gear icon. Choose Add Sibling or Add Child. In the toolbar, click Manage Rows to open the cost sheet grid over the original cost sheet.

ORACLE Primavera Unifier (Development)

GC -Company WS San Jose Recre...

San Jose Recreation Park - Home All Projects > San Jose Recrea...

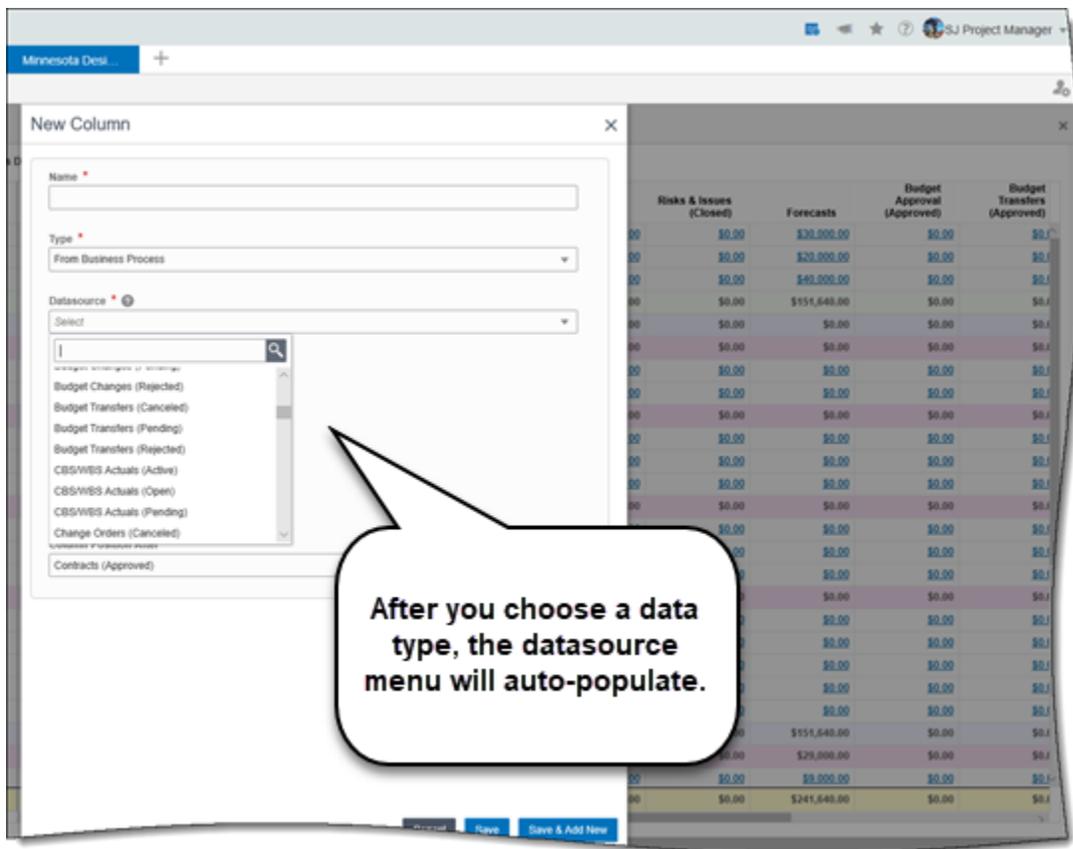
Manage Rows

+ Add Sibling + Add Child

	Cost Code	Code Name *	Segment 1 *
1	00000	Division 0 — Contracti...	00000
	00500	Agreement	00500
	00600	Bonds & Certificates	00600
	00700	General Conditions	00700
	00800	Supplementary Condi...	00800
	00900	Modifications	00900
	01000	Division 1 — General R...	01000
8	01100	Summary	01100
9	01200	Price & Payment Proce...	01200
10	01300	Administrative Require...	01300
	01400	Quality Requiremts.	01400
		Temporary Facilities	

In Manage Rows, add sibling and child rows to cost sheet.

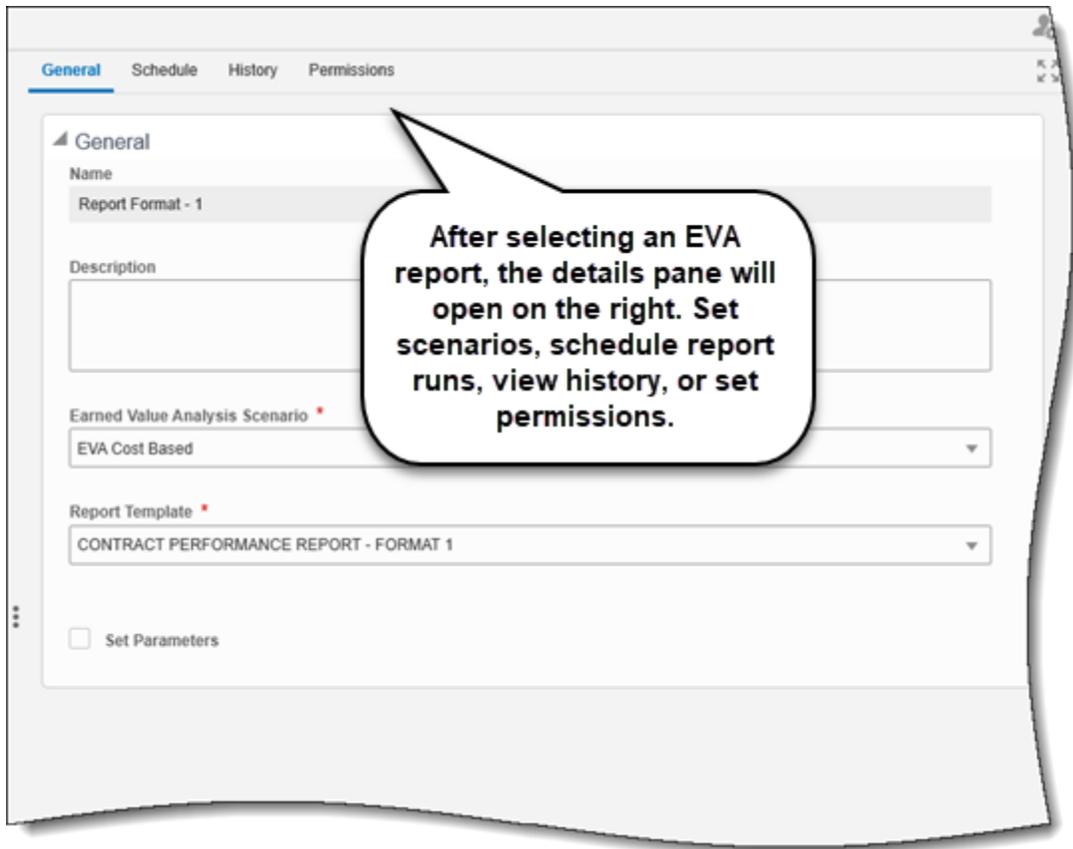
Click Add Column in the toolbar or menu options to open the Add Column details window. Use the pull-down menu to select a data type. The datasource menu will auto-populate with data sources related to the chosen data type. Select data format, display mode, column total, and column position before creating the new column. To insert a column from the cost sheet window, right-click the heading of any column and choose Insert from menu.



👍 Other Enhancements

Add Custom Attributes columns to a Work Breakdown Structure Sheet. Data Format is now displayed in both currency and decimal.

In the Earned Value Analysis report, set record-level permissions and schedule recurring reports. In EVA reports, select a report and assign permissions for the specific report. You have the option to select multiple reports and assign permissions for every report. You can also select a report in the EVA report list and make changes to a report in the details pane.



A linked record column is now available in the WBS Sheet. Click on the link icon in the linked record column to open details pane to the right of WBS Sheet. All records linked to WBS code appear in the details pane, where you can perform a variance analysis or run a variance analysis history. Auto-create a Variance Analysis record by right-clicking WBS Sheet record and choosing Create Variance Analysis Record.

Company authentication key is now used only for cloud admin and P6 gateway integration. As part of the upgrade process, the system will automatically create an Integration user with the company short name as the Integration User and the existing authentication key as the password.

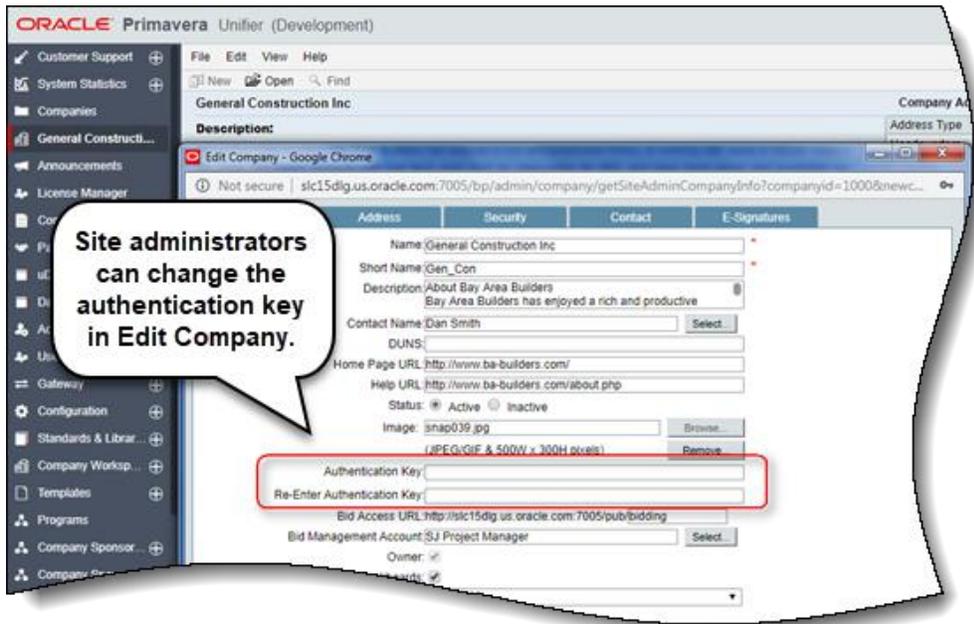
- User Name - \$\$\${Company shortname}
- Password - {Existing authentication Key}
- First Name - \$\$\${Company shortname}
- Last Name - \$\$\${Company shortname}
- Time Zone - Company timezone as seen in the Background Jobs
- Language - Company language as seen in the Internationalization node

If a company does not have an authentication key, then the integration user will not be created.

If a customer has an integration user `$${shortname}`, then Unifier will leave it unchanged.

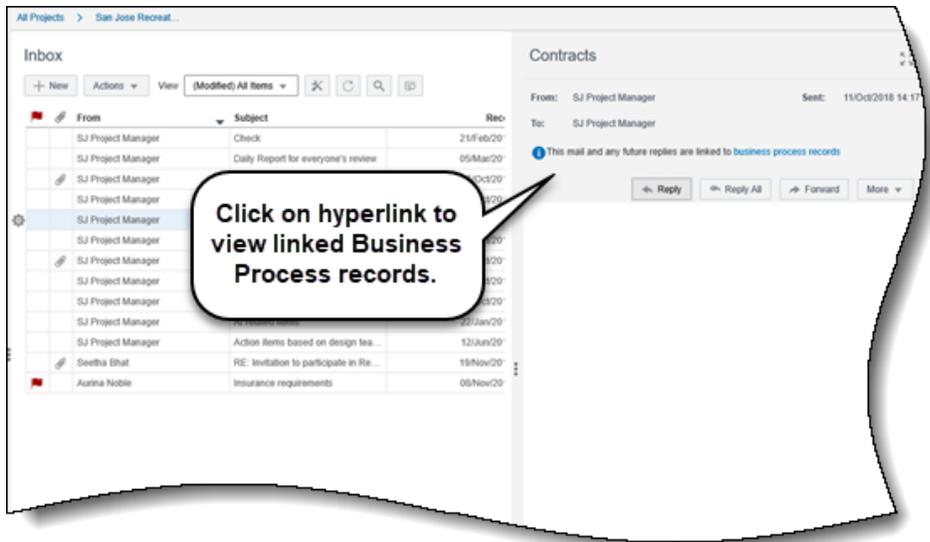
All web services will still be accessible by Company shortname or authentication key, and it will not have any impact on existing customer's webservice methods.

The original authentication key remains the same for existing users.



Click on Unifier Login button in an email notification to display the E-Signature log. After signing in, Unifier displays the shell log where the E-signature will be completed.

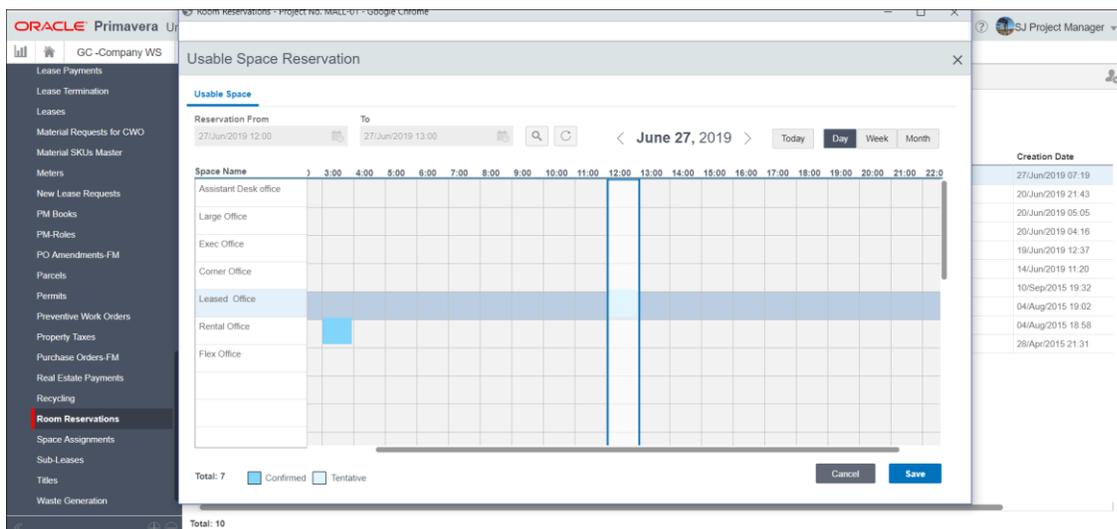
When a business process record is linked to an email, view the linked BP list in the Standard View of business process records. When you send or reply to an email with a linked BP record, the information is recorded for that BP record. The text -- This mail and any future replies are linked to business process records -- appears in an email linked to Business Process records.

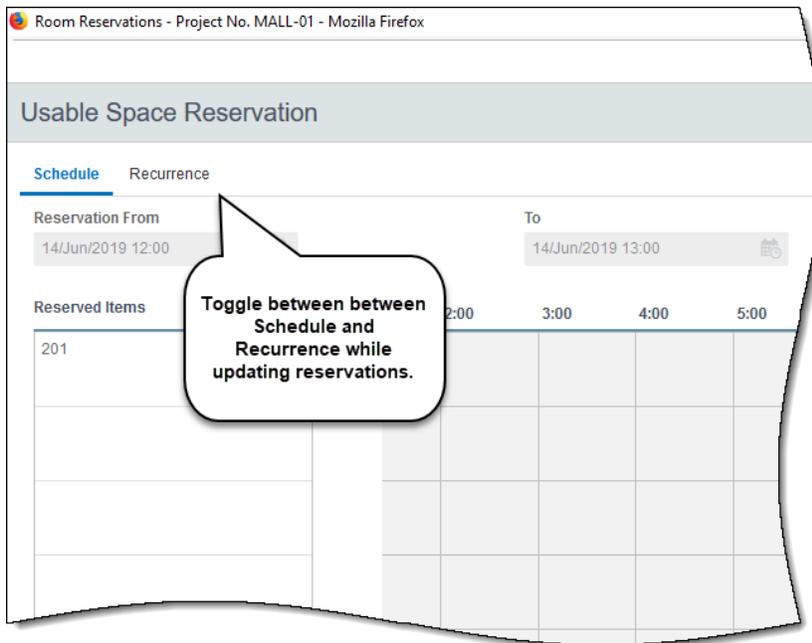


Add editable data elements to hidden blocks. This enhancement applies to all forms in Unifier. You can change the behavior of data elements from read-only to editable or editable required in a hidden block.

Tooltip is now an available field in the Data Element Properties window, enabling you to create mouse-over text for data elements in the Cost Attribute form. Users will see the mouse-over text in Cost attributes in the new Cost Sheet interface.

Reservation business processes are enhanced with a new design. Calendar buttons function in the same way as other calendar-enabled BPs – for example, zoom in and zoom out of the Calendar grid. The Reservation From and To button is editable. After saving, values selected in The From and To fields are updated in the upper form of Reservation BP. Click on schedules to opens the Usable Space Reservation screen, which is in the same space as the Room Reservations window





Schedule of Values sheet log is now enhanced with new design. In user mode, General Spends, Payment Applications, and Summary Payment Applications are enhanced with the new log header, toolbar, grid, and right details pane.

Run recurring jobs, such as scheduled user-defined reports, for shells in specific time zones. If you do not set a shell-specific time zone, then the company-level time zone will be the default time zone for background jobs. This enhancement only impacts shells, and not standard projects.

Features introduced in 19.6

No new features are introduced in 19.6.

Features introduced in 19.5

Spotlight

Advance workflows to the next step as soon as the resulting action is determined. This features allows the workflow to be advanced without waiting for all assignees to take action. When the Completion Policy of the workflow step is set to All – Majority or All – Consensus, select this option: Advance workflow when next step is determined.

Unifier auto-creates variation reports every reporting period when a Control Account is not performing. The WBS Sheet is updated with Variance Analysis, and a new tab Variance Analysis Setup is available for each WBS code.

A new preconfigured business process assigns both CBS and WBS codes to cost items, enabling you to track expenses by WBS.

Create configurable columns in the WBS Sheet. WBS Sheet now has similar functionality as the Cost Sheet. Roll-up data is available from the following sources: Activity Sheet, Cost BP sub-types WBS/CBS, EVM Sheet, and Formula columns.

Define a rate using a formula based on another cost type. When you edit the cell Price/Unit, click the Formula icon to open a formula builder window.

Attachments of Project Mailbox are now available for publishing in the Document Manager of the project/shell. Set the visibility of Unpublished Attachments under Project Mailbox in Access Control. A new folder under the Project Mailbox node contains unpublished mail attachments available for publishing.

When cash flows are created using templates, the permissions set in the Cash Flow template is carried over to all created cash flows.

Other Enhancements

New UI enhancement for Document Type BPs. Document type business processes without folders can now be sorted by Name attribute. Other UI improvements include creating, opening, revising, and removing attachments from line items. You can also now copy a folder and its content into another location. After folder creation, either create a folder or a line item.

Project Directory is enhanced with the ability to view the directory list with Users/Groups, Users, and Groups. Preview the user profiles on the right pane and send email to users and groups via the Send Email button.

Classic Payment Application BP enhanced with new UI framework. The redesigned grid is similar to the grid in the General Line Item BP.

User Defined Report Log is updated with new UI framework.

UI improvements for the Non-Workflow BP permissions and Worksheet permissions in Cost Manager. You can now assign user and group permissions in a tabular format. Permissions to multiple records can be assigned by Actions > Permissions option. Permissions to individual items can be viewed in the right pane of the respective logs.

Map pickers of the shell attribute forms to Analytic fields. Map the following pickers for both system-based and user-defined attributes: BP Data, User Data, Planning Data, User, Location, P6 Activity, and Auto-update Status Setup.

Features introduced in 19.4

Spotlight

Commitment-level cash flow curves are now supported in Analytics. In Analytics, select the Cash Flow tab to add commitment-type cash flows. The Data Mapping tab enables you to map the Data Source of the commitment curves.

Grid support in Payment Applications of Summary Payment Application SOV type is updated with new user interface including data input fields such as pickers, radio buttons, and check boxes. The Payment BP has a summary row. You can also create and modify Line Item and Cost business processes via updated grid.

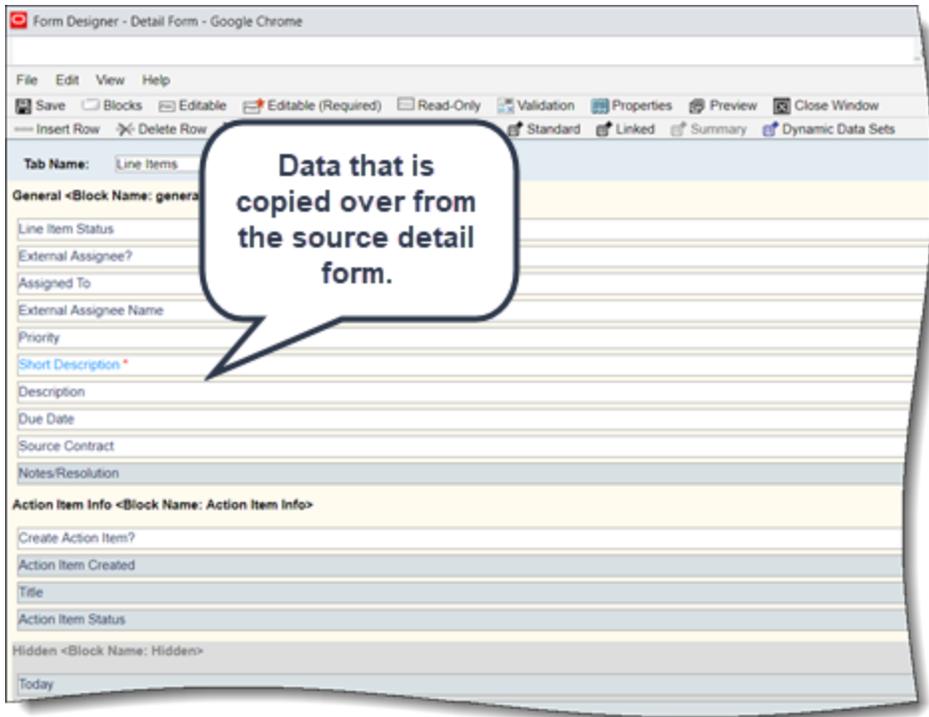
Earned Value enhancements for ANSI-748:

- New node Earned Value Analysis Reports allows you to generate ANSI reports.
- Enhancements to Rate Sheet: Perform costing in Rate sheet using additional type of costs (labor, G&A) along with the standard rate. Each cost type can have categorization for reporting purposes, e.g., Direct, Indirect. The types can be defined in a priority order to calculate the values correctly.
- Assign the Control Account Manager as the owner of a business process record. When the new system data element uuu_obs_assignee is added to the OBS attribute form, then it is available in the Data Picker list. Assign an active Unifier user based on query conditions. Access control for the OBS Sheet has the permission Create and add users to Project, allowing users with this permission to add active users from the template or active project.

Other Enhancements

Copy workflows and detail forms from other business processes. In uDesigner Workflows, click New and select Copy From to open a selection of business process workflows to copy. Select a business process to open the Workflow Properties window.

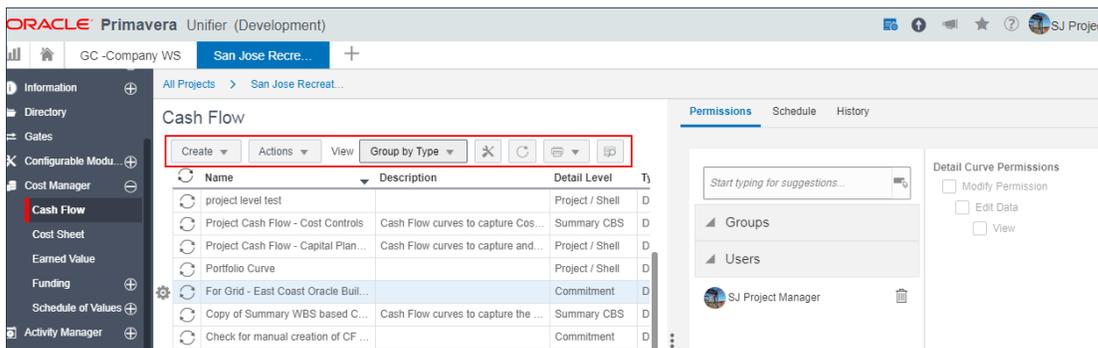
Copy one workflow at a time. The copied workflow data contains steps and their names, action links, sub-workflows that exist in the source BP design, any S-Step auto-creation process along with BP name, and any data elements that trigger Workflow action.



All form custom elements, linked, and standard elements are copied over to the new detail form. Form properties such as auto-population and reverse auto-population are copied over. Data pickers and all pickers that are part of the design are copied over. However, references for all pickers must be established in the destination BP post copy -- referenced BPs are not copied over. Tooltips are not copied over.

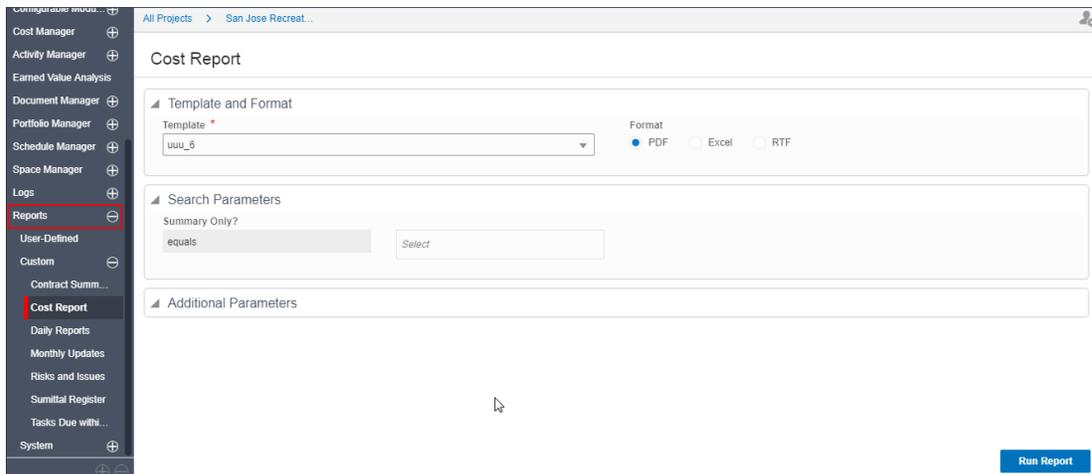
UI Enhancements:

- Cash Flow Log layout is updated with current standard UI log design. Log will now have log header, toolbar, grid and columns view, and right pane. Toolbar buttons include Create, Actions, View, Refresh, Print, and Find on Page. Grid columns view allows you to order, set default sort, adjust widths, etc. Right pane is visible by default and displays informative message.



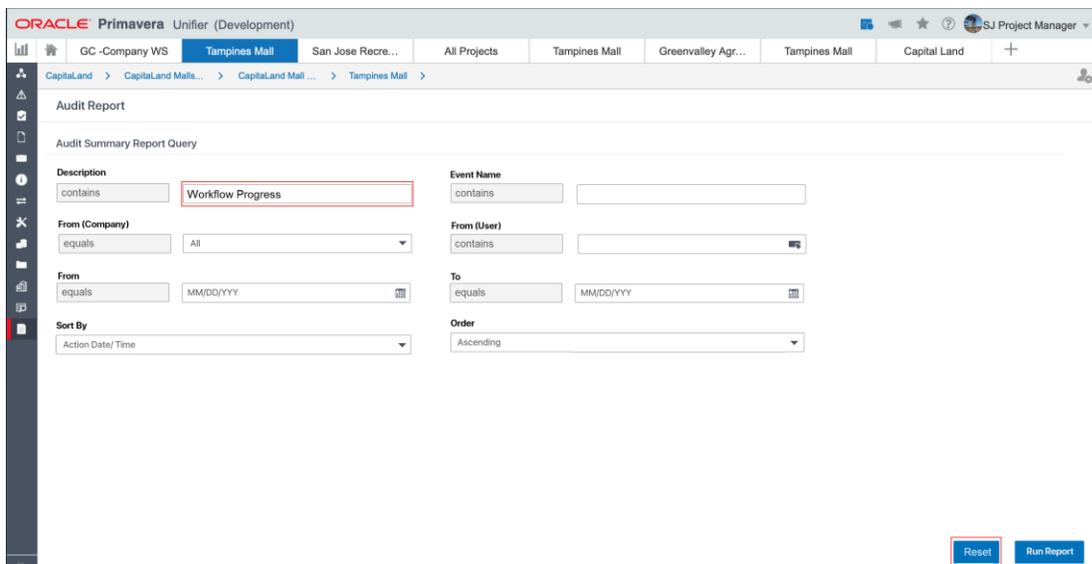
The log layout is similar to other Standard UI logs such as Cost Sheet and Planning Sheet logs.

- New UI is now available for custom reports, enabling you to run BI Publisher reports. The new UI does not have a log for the report. When you click on the report name node, a report page displays with fields for data.



The new UI will not have a log for this report.

- For those who have permission to run audit reports, the new UI is available for capturing data related to audits. When you click on the audit reports node, the Audit Report page displays with fields for entering data.



Click the Reset button to clear out your entries. It will not clear default values set by the system.

Choose to receive SOV values in payment applications. At run time, whenever you open a draft or an in-flight payment record and accept the merge alert, data elements which have Do not get latest SOV values when merging checked in uDesigner will not be refreshed with latest updated values from SOV.

Features introduced in 19.3

Spotlight

Define the log for the Business Process Picker and Data Picker. In uDesigner, configure business processes and data pickers from the Business Process log. For existing business processes that use the Advanced log structure, there will be no change at runtime. All other business process logs will use the new Picker log. In tabs, Group By tab replaces the Navigation tab in the Picker log.

Scan files for viruses. All types of files, including those in Document Manager, BP record attachments, Shell image, CSV import files, etc., will be scanned. If a threat is detected, Unifier sends a notification to the user who uploaded the file.

Other Enhancements

Make Announcements available in Company Administration. Company administrators are able to create announcements and define which users see them. In the Announcements node, company administrators have the option to send announcements to users in your company. Choose between single and/or multiple records to display as system-wide announcements to users.

Mouse-hover text for data elements is available for various managers. Include or edit mouse-hover text for data elements on a form in code-based, record-based, space, planning, document, and activity managers.

Master Data Element can now be read-only. Enter data efficiently by using Dynamic Data Sets to eliminate fields that are not necessary for specific conditions. Master data element of a Dynamic Data Set can be set to Read-Only.

E-Signature updated with ability to switch between types. Change the default e-signature type at the company, shell, and project level. Users receive a notification when switching between e-signature types. Automatically recall tasks with change of e-signature type in shell or project properties.

Data Pickers Queries now support OR condition. Create database queries to enable data pickers, including user data pickers, to extract records that appear on the picker list based on one, multiple, or all conditions.

Company name is now displayed in the Workflow Progress window. View the company and company name of the step-assignee in the workflow progress window. Click Workflow Progress tab in business process records to view Company name.

ANSI EVM - WBS form & Sheet. Create a Work Breakdown Structure Sheet with custom Work Breakdown Structure attributes, assign Work Breakdown Structure picker to a Business Process, and see rolled up amount from the Business Process as a new column in the Work Breakdown Structure. Also, define control-account for a more powerful earned value analysis by assigning control-account manager, using an Organization Breakdown Structure picker.

ANSI EVM - EVM Graph additional filtering. Filter the Organization Breakdown Structure by adding the Control Account Manager to the filter on the Work Breakdown Structure.

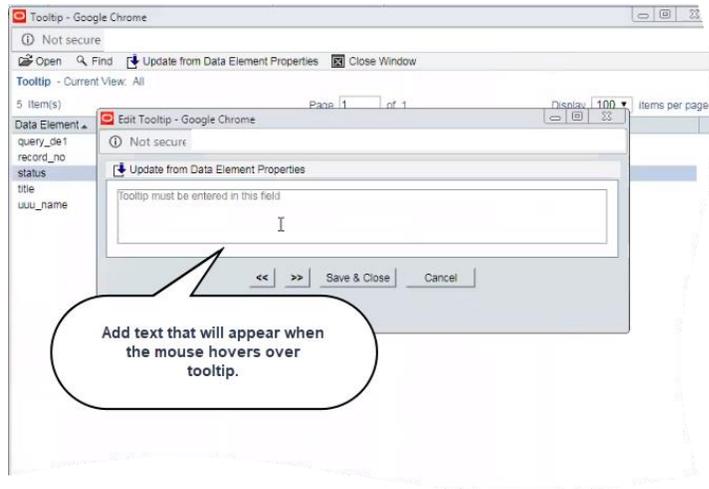
User interface enhancements:

- **The Summary node in the Company Workspace is now the Summary tab.** Access the summary tab from the company workspace page. Organize data blocks in tiles and access tasks, notifications, and mail. Users now have the option to add multiple tabs to their company workspace dashboard.
- **Configurable Manager & Space Manager Logs are improved.** Code-based log, Code & Record, and Levels sheet log is updated with improved user interface at the company, shell, and project levels.
- **Shell landing page and Document Manager now support rolling images.** Upload multiple images to shell dashboards and see rolling images in the Image block. In the shell dashboard, click Details and select Images. Add multiple images to create a rolling display in the Summary tab of a shell dashboard. By default, images will rollover every two seconds in the image block.
- **Upload images from the Document Manager** and see rolling images in the Image block.
- **Calendar enabled in business processes.** Mini-calendar is displayed next to the Quick Entry calendar. Select years and months, irrespective of the selected view. Set time zone to display current time and day in Day and Week view.

Features introduced in 19.2



Tooltip text for data elements in business processes: View or modify system-defined tooltip text for data elements on a form. Add mouse-hover tooltips – such as mandatory text or explanation blurbs -- for data elements in upper forms and detail forms in a business process.



Assets

Asset Details Gauges & Meters Components Meter Readings

▲ **General**
General information of the Asset will be included in this section.

Asset ID	Serial Number
AT-0080	S-5815-1002
Asset Name * ?	Title
1st floor Conference Room - PLS 5815	1st floor Cor
Asset Type * ?	Date of Pur
Conference Room	12/02/2010
Model	Purchase Pr
Video-enabled conference room	

Hover mouse over Tooltip.

Define format for query based data element: In a business process form, view all types of values in the Query Based Data Element -- such as currency, record counts, and sum of all change orders. Also, choose to display currency symbols at the data element level.

Modify Data Element - Google Chrome

localhost:7001/bp/sys/custom/element/edit?copy=0&view=designer&id=3416...

Spelling...

Modify Data Element:

Data Element Name: QBDE_amt_1 *

Data Definition Source: SYS Numeric Query Based *

Form Label: QBDE Amount 1 *

Description: Query Based DE where currency symbol may be hidden

Tooltip:

Hide Currency Symbol in Cost type Business Process

OK Cancel

Mark the check box to hide the currency symbol in cost-type business processes.

Select languages: Select the languages that are operational in your company. Display different languages at the company level and choose a default language. Change status of a language between active and inactive, and select default display. In company workspace, select the internalization node and set default language and status.

Company Work...

Languages Columns

Languages:

Column	Language	Status	Default
1	Chinese (Simplified)	Inactive	<input type="checkbox"/>
2	Chinese (Traditional)	Inactive	<input type="checkbox"/>
3	Dutch	Inactive	<input type="checkbox"/>
4	English	Active	<input type="checkbox"/>
5	French	Inactive	<input type="checkbox"/>
6	German	Active	<input type="checkbox"/>
7	Italian	Inactive	<input type="checkbox"/>
8	Japanese	Inactive	<input type="checkbox"/>
9	Korean	Inactive	<input type="checkbox"/>
10	Portuguese (Brazil)	Inactive	<input type="checkbox"/>
11	Russian	Active	<input type="checkbox"/>
12	Spanish	Inactive	<input type="checkbox"/>

Click the Status box to select active or inactive, making the language selection visible in the application.

Other Enhancements

Update non-workflow BP permissions via integration: Update permissions of non-workflow records in bulk via web services. The Non-Workflow Business Process Permissions is now available for the Business Process Permissions, with Update and Get options.

Increase number of tabs in line item-type business processes: Business process forms can support up to 15 tabs to better accommodate data entry for multiple line items. Create up to 15 detail tabs, which includes the original 8 detail tabs and any query-based detail tabs.

Earned Value Enhancements:

- Assign rate sheet for actual costs: Choose a rate sheet to assign to the actual cost when assigning rates in the Activity Sheet.
- Organization Breakdown Structure: Maintain an organizational structure similar to the resource and role structures in the Master Rate Sheet. Maintain a hierarchy and define a form in uDesigner that captures all the necessary data.
- Units in graphs: The WBS and CBS can now capture units. Graphs can be switched between costs and units.

Interface and usability enhancements:

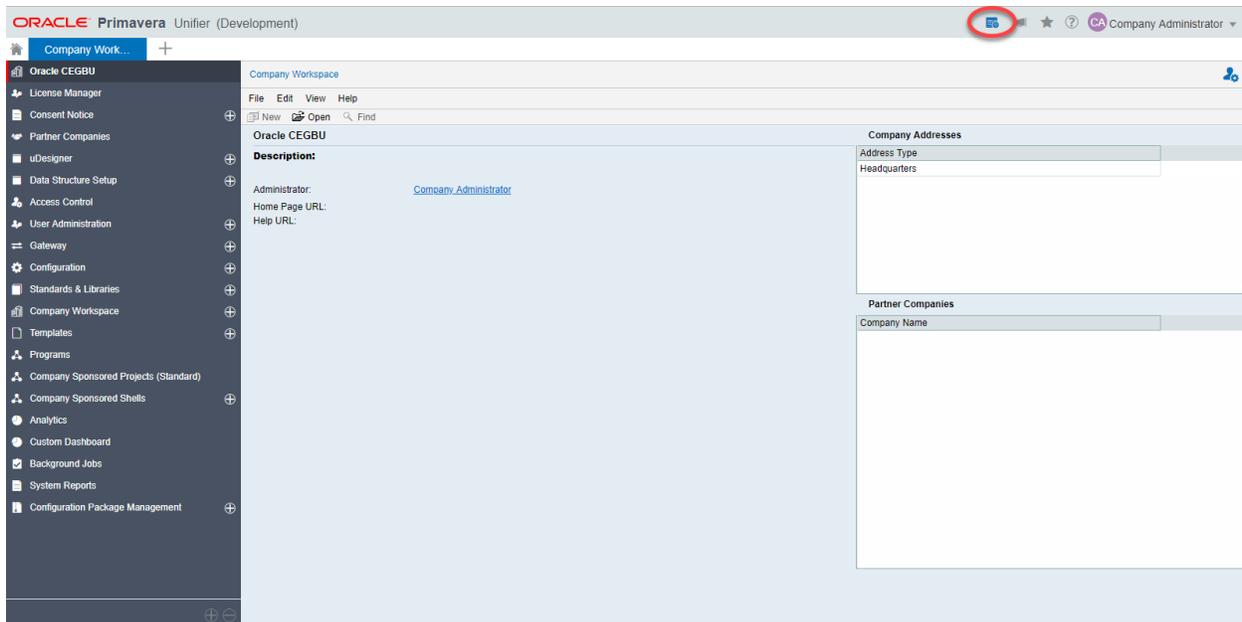
- Planning Sheet log: Planning Manager Sheet log layout now displays planning sheets in log.
- Calendar-enabled business processes: The Quick Entry Calendar is available for the Space Manager. In the calendar, view confirmed, tentative, extended, and clashing events. Next to the Quick Entry Calendar, use the mini-calendar to search through years and months relative to your selection. In the Day and Week View, see the current time in preferred time zone. You can also see upcoming events.
- Space and Level Attribute: In the Space Manager, view the Space attributes and Level attributes through an enhanced user interface, which provides minimized popups and better visibility of data.
- User/Group Picker: Choose between three different views in the picker user view, group view, and user/group view.

Features introduced in 19.1

Spotlight

A new user interface is now displayed in some Unifier modules, including Project/Shell cost sheet, worksheet, and work package logs. Click the icon at the top of the screen to toggle between the new (Standard) view and the previous (Classic) view.

- Business process record forms are updated for better visibility of data and access to information.
- Collapse or expand the left navigation to have a better visibility of content on the right pane.
- The new user interface of the BP form enables you to view the total amount associated with the line items that are filtered based on search parameters.
- The new user interface in Planning Manager, Classes in Code, and Record-Based Configurable Manager enables you to view attribute forms with minimized popup screens and better visibility of data.



Click icon at top of screen to switch to new view.

DocuSign and Adobe Sign can now be integrated with Unifier. Assign DocuSign or Adobe Sign to individual shells. Send Document Manager documents -- or documents attached to a business process record -- for review and electronic signatures to Unifier or non-Unifier users.

Other Enhancements

Select a 24-hour time format in User Preferences.

Open records when data is displayed in drillable blocks on dashboards in a Shell landing page.

Generate the Earned Value Analysis graph based on financial periods – weekly, monthly, and yearly.

In a text-type business process, view responses from other users who acted on the record. View a complete list of comments available to you while working on the record.

When a file is attached to a BP from Document Manager, republish the file back to DM using the publish path indicated on the BP form.

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Oracle Primavera Unifier What's New

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