



# What's New

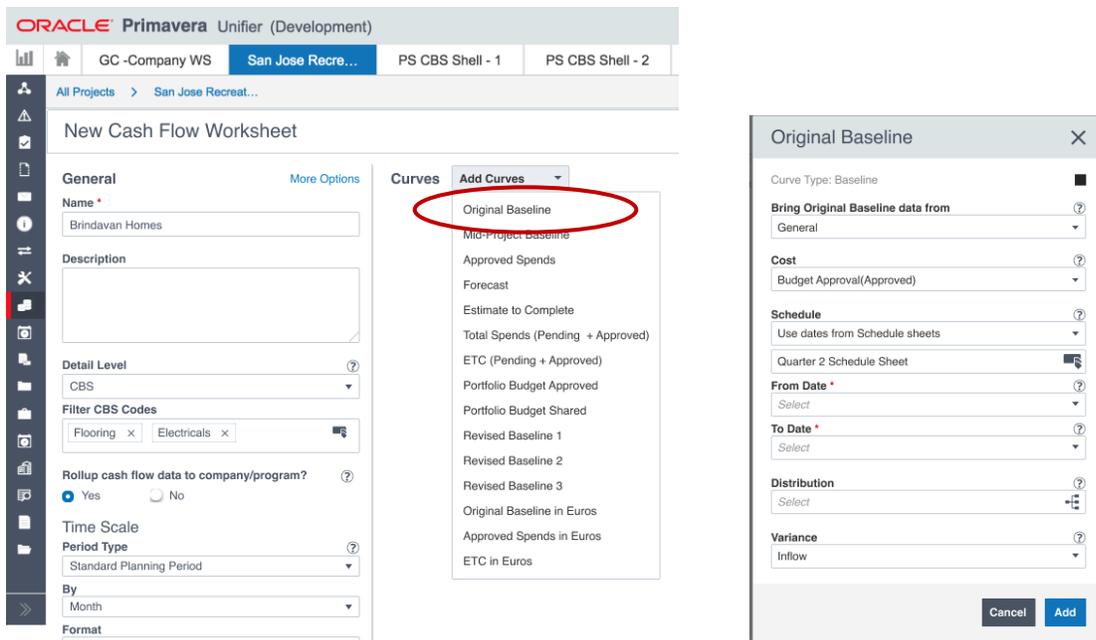
## New Features in Primavera Unifier 20

### Features introduced in 20.12



#### Cash Flow Upgrades

**Easier Creation of Cash Flow Curves:** When creating a new cash flow worksheet, select a Detail Level in the General section to enable an option to Add Curves in the main section of that window. Depending on the curve chosen, additional options will follow.



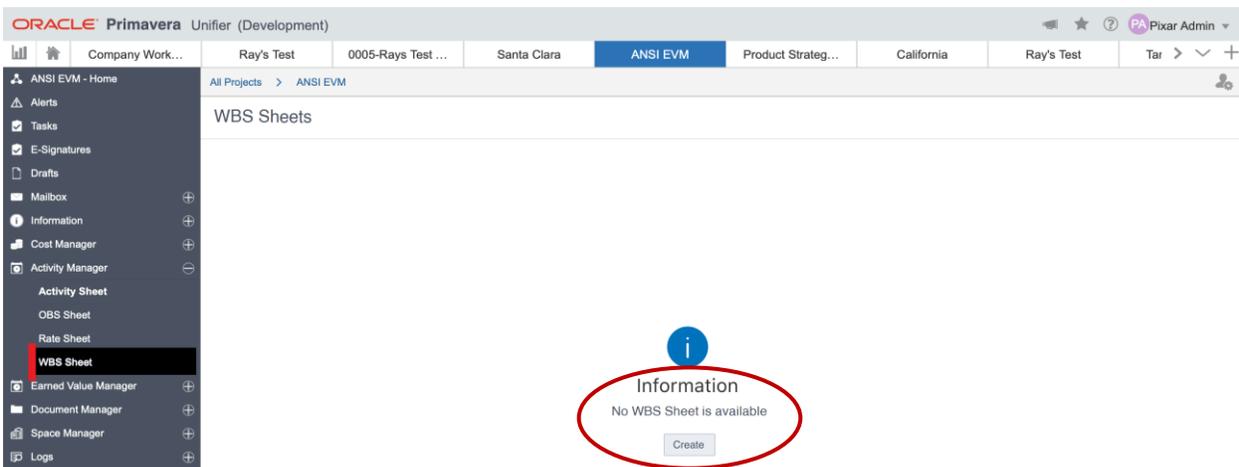
**Cash Flow Analysis:** Track baseline, forecast, and spends in Cash Flow using Activity Sheet data per CBS code at either the activity level or the resource level. The Baseline curve pulls the Planned, Remaining, and At Completion costs from either the Cost or Activity sheets; forecast curves draw from the Activity Sheet. Finally, Spends curves can draw from the Activity Sheet and the Cost Sheet column or a P6 Summary Sheet.

**Cash Flow Visualization:** The Cash Flow Project Overview provides a visualization of key information, snapshot changes, and system snapshots for faster understanding of project financial conditions.



## WBS Sheets Support Manual Creation

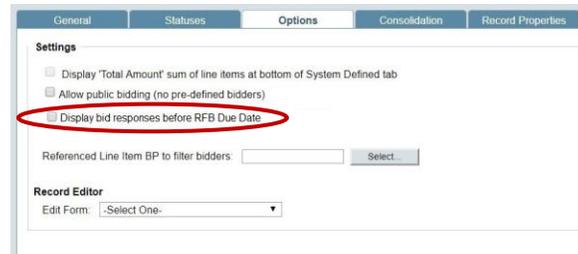
Create and maintain a Work Breakdown Structure sheet in Unifier without using an external application such as P6. Activities created in the new custom activity sheets are associated with the WBS. The manual WBS sheet allows you to define the Work Breakdown Structure for the entire project. View rolled-up costs and define custom attributes for additional formulas in CPI and SPI calculations. Capture actuals incurred from business processes using the WBS Picker, assign Control Account Managers using the OBS picker, and create variance analysis reports.



## Bid Management Improvements

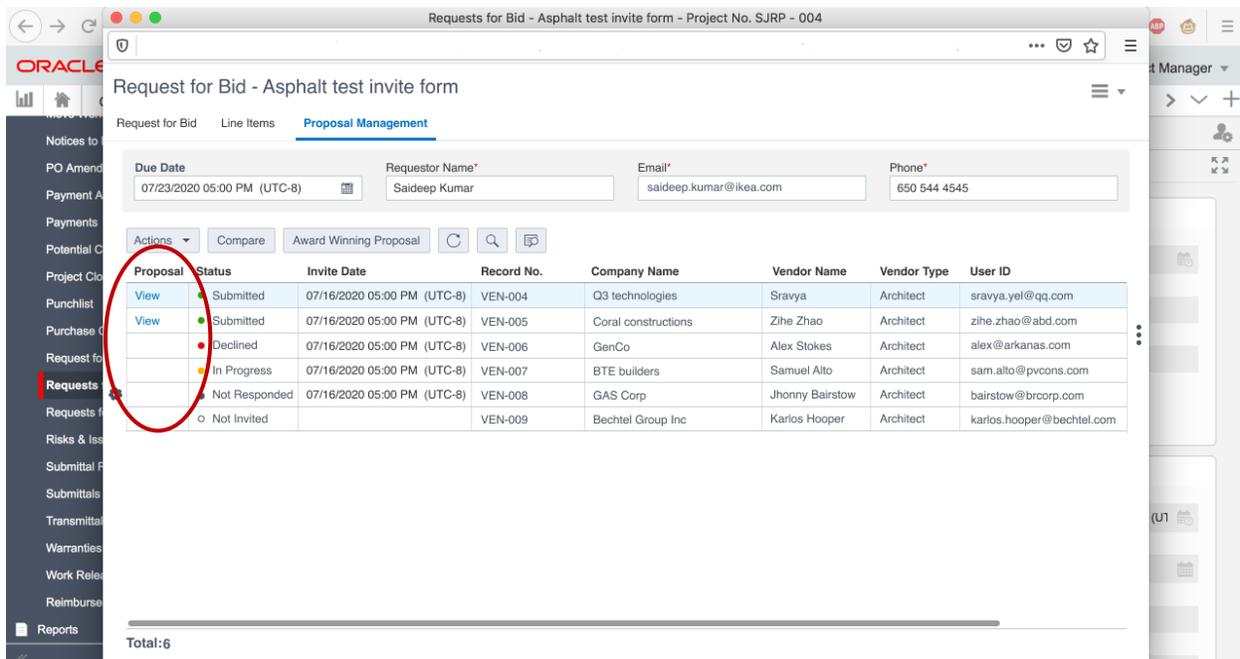
**uMail After Bids Close:** For private bidding processes only, Unifier now permits uMail communication with bidders even after the bid is finalized. The requester can send email from the Proposal Management tab even after the Bid process is finalized -- but only until the record is terminated.

**Bid Visibility while Bidding is Open:** When setting up an RFB process, an administrator can check Display bid responses before RFB Due Date.



The screenshot shows the 'Settings' tab for a Request for Bid (RFB) process. The 'Display bid responses before RFB Due Date' checkbox is checked and highlighted with a red circle. Other settings include 'Display Total Amount' (unchecked), 'Allow public bidding' (unchecked), and a 'Referenced Line Item BP to filter bidders' field with a 'Select' button. The 'Record Editor' section shows 'Edit Form' set to 'Select One'.

View incoming bids when they are submitted via the Proposal Management Tab and then click on View in the Proposal column.



The screenshot shows the 'Request for Bid - Asphalt test invite form' interface. The 'Proposal Management' tab is active, displaying a table of submitted bids. The 'View' button in the 'Proposal' column is highlighted with a red circle. The table includes columns for Proposal, Status, Invite Date, Record No., Company Name, Vendor Name, Vendor Type, and User ID.

Proposal	Status	Invite Date	Record No.	Company Name	Vendor Name	Vendor Type	User ID
<a href="#">View</a>	Submitted	07/16/2020 05:00 PM (UTC-8)	VEN-004	Q3 technologies	Sravya	Architect	sravya.yel@qq.com
<a href="#">View</a>	Submitted	07/16/2020 05:00 PM (UTC-8)	VEN-005	Coral constructions	Zihe Zhao	Architect	zihe.zhao@abd.com
	Declined	07/16/2020 05:00 PM (UTC-8)	VEN-006	GenCo	Alex Stokes	Architect	alex@arkanas.com
	In Progress	07/16/2020 05:00 PM (UTC-8)	VEN-007	BTE builders	Samuel Alto	Architect	sam.alto@pvcons.com
	Not Responded	07/16/2020 05:00 PM (UTC-8)	VEN-008	GAS Corp	Jhonny Bairstow	Architect	bairstow@brcorp.com
	Not Invited		VEN-009	Bechtel Group Inc	Karlos Hooper	Architect	karios.hooper@bechtel.com

Total: 6

**RFBs Support Pre-Selecting Bidders:** An administrator can now specify a pre-approved list of bidders by checking the option to Use Master Vendor list filtered at project level. When this is implemented, a user can add vendors from that list to a RFB process; the user cannot add vendors to that list.

**New RFB Comparison Sheet:** Compare bids using the redesigned Bid Comparison Sheet. Within the Proposal Management tab, you can select multiple submitted bids and then click the Compare button to see side-by-side comparisons of Upper Forms and Detail Forms.

Compare - RFB-001: Lumber for Cafeteria Building

Attachments Only  Star Vendors Only Compare with Coral Construction

Upper Form	Detail Form	Analysis
<b>Coral Construction</b> <b>\$9,70,000.00</b> \$ 0.00 (0.00%) ★	<b>C&amp;G Construction</b> <b>\$9,90,000.00</b> \$ 20,000.00 + 2.06% ★	<b>Abids Construction</b> <b>\$9,90,000.00</b> \$ 5,000.00 (0.50%) ☆
<b>C&amp;T Construction</b> <b>\$10,30,000.00</b> \$ 30,000.00 + 3.00% ★	<b>GK Construction</b> <b>\$10,50,000.00</b> \$ 30,000.00 ★	<b>GK Construction</b> <b>\$10,50,000.00</b> \$ 30,000.00 ★
<b>Certification</b> American Institute of Constructors (AIC)	<b>Certification</b> Construction Manager Certification Ins...	<b>Certification</b> Green Business Certification Inc. (GBCI)
<b>Insurance</b> Builder's risk insurance	<b>Insurance</b> Contractor General Liability Insurance	<b>Insurance</b> Commercial Auto Insurance
<b>Warranty</b> 5 Years	<b>Warranty</b> 7 Years	<b>Warranty</b> No Warranty
<b>PM Comments</b> Least Quote, Reliable Contractor, Shortlisted	<b>PM Comments</b> Price High, Reliable Contractor, Shortlisted	<b>PM Comments</b> Least Quote, Reliable Contractor, Shortlisted
<b>Order Delivery Date</b> 5/5/2020	<b>Order Delivery Date</b> 5/15/2020	<b>Order Delivery Date</b> 5/15/2020
<b>Attachments</b> Company_Profile.pdf Material_Specification_Document.pdf Completed_Project_Details.pdf	<b>Attachments</b> Company_Profile.pdf Material_Specification_Document.pdf Completed_Project_Details.pdf	<b>Attachments</b> Company_Profile.pdf Material_Specification_Document.pdf Completed_Project_Details.pdf

Upper Forms comparison above; Detail Forms comparison below

Compare - RFB-001: Lumber for Cafeteria Building

Show Star Vendors Only Compare with Coral Construction

Upper Form	Detail Form	Analysis										
View: Default												
Short Description	Coral Construction			C&G Construction			C&T Construction			GK Constructions		
	Unit Price	Amount	Variance	Unit Price	Amount	Variance	Unit Price	Amount	Variance	Unit Price	Amount	Variance
1 Structure Steel	\$ 3200.00	\$ 16,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	(\$ 1,000.00)	\$ 3400.00	\$ 17,000.00	\$ 1,000.00	\$ 3400.00	\$ 17,000.00	\$ 1,000.00
2 Mobilization & Demobilization	\$ 2500.00	\$ 12,500.00	\$ 0.00	\$ 5200.00	\$ 26,000.00	\$ 13,500.00	\$ 5200.00	\$ 26,000.00	\$ 13,500.00	\$ 5000.00	\$ 25,000.00	\$ 12,500.00
3 Sinage	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3200.00	\$ 16,000.00	\$ 1,000.00	\$ 3600.00	\$ 18,000.00	\$ 3,000.00	\$ 4000.00	\$ 20,000.00	\$ 5,000.00
4 Landscaping	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 4000.00	\$ 20,000.00	\$ 5,000.00	\$ 4000.00	\$ 20,000.00	\$ 5,000.00	\$ 4200.00	\$ 21,000.00	\$ 6,000.00
5 Concrete	\$ 1800.00	\$ 9,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	\$ 6,000.00	\$ 3000.00	\$ 15,000.00	\$ 6,000.00	\$ 3400.00	\$ 17,000.00	\$ 8,000.00
6 Masonry	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3200.00	\$ 16,000.00	\$ 1,000.00	\$ 3200.00	\$ 16,000.00	\$ 1,000.00	\$ 3400.00	\$ 17,000.00	\$ 2,000.00
7 Structure Steel	\$ 3200.00	\$ 16,000.00	\$ 0.00	\$ 2000.00	\$ 10,000.00	(\$ 6,000.00)	\$ 3400.00	\$ 17,000.00	\$ 1,000.00	\$ 3400.00	\$ 17,000.00	\$ 1,000.00
8 Electrical Work	\$ 2800.00	\$ 14,000.00	\$ 0.00	\$ 3400.00	\$ 17,000.00	\$ 3,000.00	\$ 3400.00	\$ 17,000.00	\$ 3,000.00	\$ 3200.00	\$ 16,000.00	\$ 2,000.00
9 Doors & Windows	\$ 1800.00	\$ 9,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	\$ 6,000.00	\$ 3000.00	\$ 15,000.00	\$ 6,000.00	\$ 3000.00	\$ 15,000.00	\$ 6,000.00
10 Finishes	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 2200.00	\$ 12,000.00	(\$ 3,000.00)	\$ 3200.00	\$ 16,000.00	\$ 1,000.00	\$ 3000.00	\$ 15,000.00	\$ 0.00
11 Miscellaneous	\$ 3200.00	\$ 16,000.00	\$ 0.00	\$ 3400.00	\$ 17,000.00	\$ 1,000.00	\$ 2000.00	\$ 10,000.00	(\$ 6,000.00)	\$ 3400.00	\$ 17,000.00	\$ 1,000.00
12 Contracting Requiremets	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 4000.00	\$ 20,000.00	\$ 5,000.00	\$ 3000.00	\$ 18,000.00	\$ 3,000.00
13 Doors & Windows	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3800.00	\$ 19,000.00	\$ 4,000.00	\$ 3000.00	\$ 18,000.00	\$ 3,000.00
14 Tiles	\$ 12000.00	\$ 60,000.00	\$ 0.00	\$ 15,000.00	\$ 75,000.00	\$ 15,000.00	\$ 20000.00	\$ 85,000.00	\$ 25,000.00	\$ 18000.00	\$ 90,000.00	\$ 30,000.00
15 Electrical Work	\$ 9200.00	\$ 46,000.00	\$ 0.00	\$ 8000.00	\$ 40,000.00	(\$ 6,000.00)	\$ 12000.00	\$ 60,000.00	\$ 14,000.00	\$ 3000.00	\$ 55,000.00	\$ 9,000.00
16 Concrete	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3200.00	\$ 16,000.00	\$ 1,000.00	\$ 3400.00	\$ 17,000.00	\$ 1,000.00	\$ 3600.00	\$ 18,000.00	\$ 3,000.00
17 Landscaping	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3000.00	\$ 15,000.00	\$ 0.00	\$ 3000.00	\$ 19,000.00	\$ 4,000.00
18 Sinage	\$ 3200.00	\$ 16,000.00	\$ 0.00	\$ 2800.00	\$ 14,000.00	(\$ 2,000.00)	\$ 3000.00	\$ 15,000.00	\$ 1,000.00	\$ 3000.00	\$ 15,000.00	\$ 1,000.00
<b>Total</b>		<b>\$9,70,000.00</b>	<b>\$ 0.00</b>		<b>\$9,90,000.00</b>	<b>\$ 20,000.00</b>		<b>\$10,30,000.00</b>	<b>\$ 30,000.00</b>		<b>\$10,50,000.00</b>	<b>\$ 50,000.00</b>

Total : 60

## Portfolio Manager Upgrades

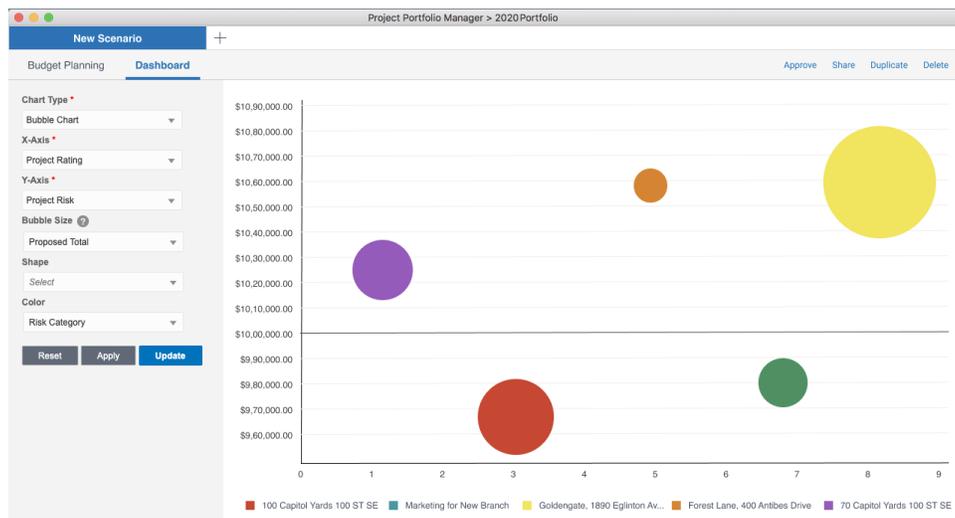
The new Portfolio Manager Worksheet supports all functions and actions that were available in Classic View.

**Gantt View Available:** The Portfolio Manager also supports a Gantt View, helping the portfolio planner visualize how capital is used over time and adjust schedules to obtain a better combination of projects within schedules and targets.

New Scenario						Dashboard				
Budget Planning						Approve	Share	Duplicate	Delete	
Project No.	Project Name	Start Date	Start Date	Current Project Total	Proposed Total	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020
1	Prj-001	100 Capitol Yards 100 ST SE	01/01/2020	01/01/2022	\$10,000,000.00	\$10,000,000.00				
2	Prj-009	Marketing for New Branch	01/01/2020	01/01/2024	\$ 6,000,000.00	\$ 6,000,000.00				
3	Prj-003	Aalto 63, 1065 Second Avenue	01/01/2020	01/01/2024	\$ 10,000,000.00	\$ 10,000,000.00				
4	Prj-005	Forest Lane, 300 Antibes Drive	01/01/2020	01/01/2023	\$ 4,000,000.00	\$ 4,000,000.00				
5	Prj-008	Lilli Midtown, 783 Peachtree...	01/01/2020	01/01/2024	\$ 8,000,000.00	\$ 8,000,000.00				
6	Prj-014	Goldengate, 1890 Eglinton Av...	01/01/2020	01/01/2023	\$ 7,000,000.00	\$ 7,000,000.00				
7	Prj-010	Lilli Midtown, 693 Peachtree...	01/01/2020	01/01/2023	\$ 5,000,000.00	\$ 5,000,000.00				
8	Prj-004	Brampton Towers, 85 Charo...	01/01/2020	01/01/2022	\$ 3,000,000.00	\$ 3,000,000.00				
9	Prj-002	Jazz 167 Church Street	01/01/2020	01/01/2024	\$ 5,000,000.00	\$ 5,000,000.00				
10	Prj-013	Brampton Towers, 95 Charo...	01/01/2020	01/01/2024	\$ 6,000,000.00	\$ 6,000,000.00				
11	Prj-007	Forest Lane, 400 Antibes Drive	01/01/2020	01/01/2023	\$ 7,000,000.00	\$ 7,000,000.00				
12	Prj-006	Goldengate, 1790 Eglinton Av...	01/01/2020	01/01/2024	\$ 6,000,000.00	\$ 6,000,000.00				
13	Prj-011	Serenity, 101 S. Huntington Ave	01/01/2020	01/01/2023	\$ 3,000,000.00	\$ 3,000,000.00				
14	Prj-012	70 Capitol Yards 100 ST SE	01/01/2020	01/01/2023	\$ 4,000,000.00	\$ 4,000,000.00				
<b>Total</b>				<b>\$ 84,000,000.00</b>	<b>\$ 84,000,000.00</b>	<b>\$14,500,000.00</b>	<b>\$22,000,000.00</b>	<b>\$17,790,000.00</b>	<b>\$9,000,000.00</b>	<b>\$0.00</b>
<b>Target</b>				<b>\$ 80,000,000.00</b>	<b>\$ 80,000,000.00</b>	<b>\$12,000,000.00</b>	<b>\$20,000,000.00</b>	<b>\$18,000,000.00</b>	<b>\$10,000,000.00</b>	<b>\$0.00</b>
<b>Difference</b>				<b>(\$ 4,000,000.00)</b>	<b>(\$ 4,000,000.00)</b>	<b>(\$2,500,000.00)</b>	<b>(\$2,000,000.00)</b>	<b>\$210,000.00</b>	<b>\$1,000,000.00</b>	<b>\$0.00</b>

Total:14

**User-Configurable Dashboard:** The Portfolio Manager now has a user-configurable Dashboard view, allowing planners to see visual representations of relationships such as Risk vs. Benefit and Investment vs. ROI.



## Activity Sheet Improvements

**Manually Add Activities & Gantt Chart View:** The Activity Manager now enables manual Activity Sheet creation to create and maintain project schedules entirely within Unifier. Use one or more manual Activity Sheets to track progress throughout the project life cycle. Within the Activity Sheet log, a manually created Activity Sheet displays Custom as Source Type.

The screenshot shows the Oracle Primavera Unifier interface. The top navigation bar includes the Oracle Primavera logo and the text 'Unifier (Development)'. Below the navigation bar, there are several tabs: 'Company Work...', 'Ray's Test', '0005-Rays Test ...', 'Santa Clara', 'ANSI EVM' (selected), 'Product Strateg...', 'California', 'Ray's Test', and 'Tar > v +'. On the left, a sidebar menu lists various options, with 'Activity Sheet' highlighted. The main content area is titled 'Activity Sheets' and contains a table with the following data:

Name	Description	Source Type	Status	Last Updated On	Creation Date	Created by
System Activity Sheet	Activity Sheet created via P6 Integration	P6	Active	08/06/2020	07/20/2020	Company administrator
Project Schedule for Renovation	Schedules for the renovation project	Custom	Active	08/06/2020	07/20/2020	SJ Project Manager
EV Charging installation	EV Charging equipment installation	Custom	Inactive	08/06/2020	07/20/2020	SJ Project Manager

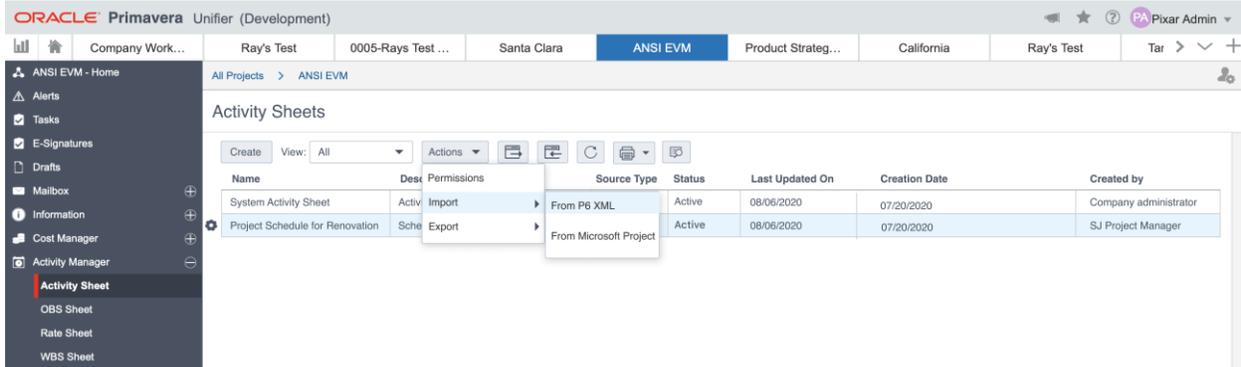
View Manual Activity Sheets in Gantt chart form, including the WBS and major milestones. Update activity start dates, end dates, and durations within the Gantt chart view.

The screenshot shows the Oracle Primavera Unifier interface in Gantt chart view. The top navigation bar is the same as in the previous screenshot. The main content area is titled 'Project Schedule for Renovation' and shows a Gantt chart for the project. The chart displays activities as horizontal bars with start and end dates. The activities are listed in a table on the left:

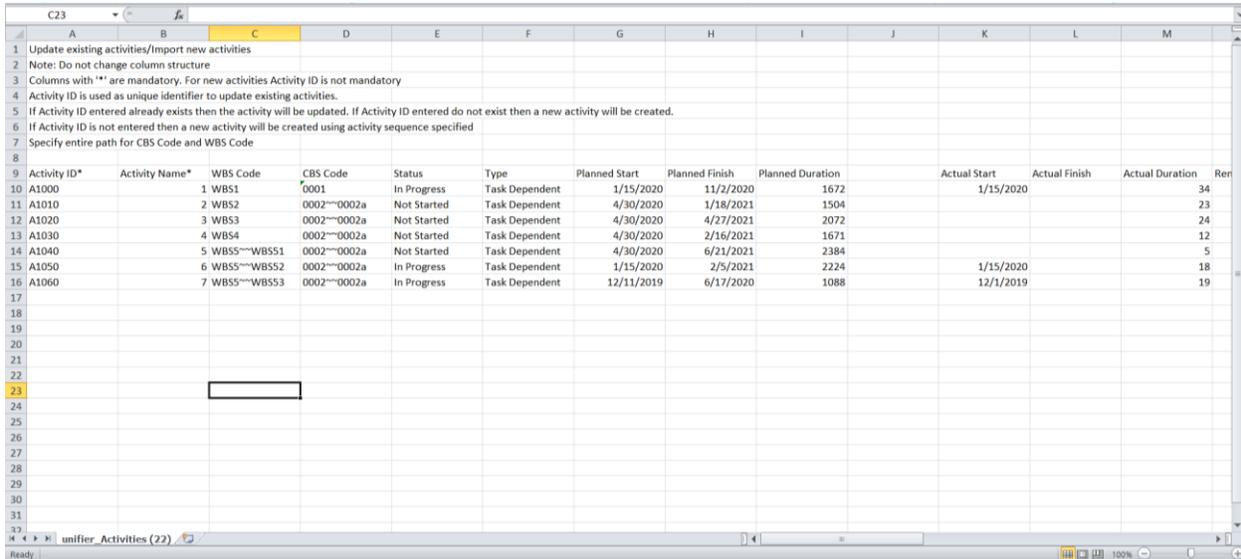
Activity ID *	Activity Name *	Start	Finish	Cost Code
1	A1000 PRINCE Palace	02-13-2019	10-22-2019	
2	A1010 Initiating a Project (IP)	02-13-2019	05-23-2019	
3	A1030 Garage Door	02-24-2019	03-03-2019	
4	A1040 Lawn Preparation	03-04-2019	03-15-2019	
5	A1050 Top Floor	02-24-2019	03-18-2019	
6	A1060 Carpet Preparation	02-24-2019	03-08-2019	
7	A1070 Carpet Fixing	03-09-2019	03-18-2019	
8	A1080 Room 1	02-28-2019	03-27-2019	
9	A1090 Room 1 Coloring	02-28-2019	03-13-2019	
10	A1100 Room 1 Decoration	03-13-2019	03-25-2019	
11	A1110 Complete Room 1	03-27-2019	03-27-2019	
12	A1120 Room 2	02-28-2019	05-23-2019	
13	A1140 Room 2 Coloring	02-28-2019	03-13-2019	
14	A1150 Meeting Room	03-16-2019	04-23-2019	
15	A1160 Furniture	03-16-2019	03-26-2019	
16	A1170 Projector	03-27-2019	04-01-2019	
17	A1180 Left Window	04-02-2019	04-12-2019	
18	A1190 Right Window	04-13-2019	04-23-2019	
19	A1200 Room 3	04-24-2019	05-23-2019	

The Gantt chart shows the activities as horizontal bars with dependencies. The chart is titled 'Project Schedule for Renovation' and shows the project start date as 01/02/2020 and the project finish date as 12/31/2020. The chart is displayed in 'Gantt' view, and the data date is 01-Mar-2019.

**P6, MPP, and CSV Import/Export:** Project schedules that are created or maintained in Unifier P6 or Microsoft Project can be imported as XML or MPP files into a manual Activity Sheet, including dependencies and assignments. Supported objects include Activity Sheet properties, Activity Sheets, WBS Sheets, and Master Rate Sheets. Use imported data to create a new Activity Sheet, or it can be brought into an existing Activity Sheet. An Activity Sheet can also be exported to XML for use in other applications.



Activity Sheets can also be modified via CSV. Import and update activities and activity details. In addition, CBS codes and WBS hierarchies can be added or updated for activities in a sheet. Field changes that are made via CSV will be displayed in the Activity Sheet's Audit Log.



## IP Filtering Policy for REST WebServices

Allow specific IP address filtering for REST WebServices. In the Company Properties window, the Security tab, use the new IP Filtering Policy to enter one or more IPv4 or IPv6 addresses using semicolons as separators, with optional CIDR notation to denote IP ranges. Enter up to 1,000 characters in either field.

The screenshot shows a web browser window titled "Edit Company - Mozilla Firefox" with the "Security" tab selected. The "IP Filtering Policy" section is circled in red. It contains the following elements:

- File Security Policy**: Size Limit per File in MB: 5000
- File Upload Restrictions**:
  - Allow File Extensions: [input field]
  - Block File Extensions: [input field]
- Cost Sheet Restrictions Policy**:
  - Override column restrictions
  - Checking this box will allow user to view / edit a cost sheet column if any of the restricted groups or the individual user is allowed to view / edit the column.
- User Attributes Policy**:
  - Hide User Profile
  - Checking this box will hide the basic information of the user associated with the field.
- IP Filtering Policy** (highlighted):
  - Allow IP Addresses for REST WebServices
  - IPv4: [input field]
  - IPv6: [input field]
- Password/Login Policy**:
  - Minimum overall character(s): 3
  - Maximum overall character(s): [input field]
  - Minimum numeric character(s): [input field]

Buttons for "OK" and "Cancel" are located at the bottom of the window.

## Features introduced in 20.11



### Bid Management Upgrades

The Request For Bid process is redesigned for better usability. The Invite button is removed from its original place in the menu, replaced by a new tab: Proposal Management. The tab is displayed when the bid package reaches the point of sending bid invitations. It provides access to essential functions related to managing an active RFB process, including communicating with bidders individually or as a group; examining vendor details; viewing the status of bids; comparing competing bids; and awarding the bid.

Requests for Bid Send Save ☰

Request for Bid | Line Items | Winning Contract | **Proposal Management**

Due Date: 10/27/2020 06:45 PM | Requestor Name: SJ Project Manager | Email: | Phone: |

Compare | Award | Actions | Refresh | Print

Proposal	Status	Invite Date	First Name	Last Name	Company	User Id
<a href="#">View</a>	● Submitted	10/27/2020 06:32 P...	Sravya	Yellapragada	Product De...	
	○ Not Responded	10/27/2020 06:32 P...	Soujanya	t	Design	
	○ Not Responded	10/27/2020 06:32 P...	Seetha	Bhat	Design & Org	
<a href="#">View</a>	● Submitted	10/27/2020 06:32 P...	saideep	V	Superman	
<a href="#">View</a>	● Submitted	10/27/2020 06:32 P...	Naresh	Peddinti	Naresh Ped...	

Within the Status column of the Proposal Management tab, a requestor can see which bidders have opened or viewed a bid invitation before the due date, providing a clue on how many bid responses are expected from bid invitations that were issued. When bidders view the BP record linked in an email, Unifier reports that the bidder has viewed the invitation.

Status indicators include Submitted, Awarded, Viewed, Not Responded, Not Invited, Accepted, and Declined.

## Advanced Formulas in uDesigner

uDesigner formulas are upgraded to provide greater complexity. A new button, Advanced Formula, is added to the Elements Properties screen. Select a data element that permits formula definition and then click Advanced Formula. The new screen provides pickers for elements and functions with an editable formula definition field, error checking and immediate validation results. For users, formulas are evaluated at runtime wherever they are placed.

The screenshot shows the 'Elements Properties' dialog box with a table of data elements. The 'Advanced Formula' button is circled in red.

Element Label	Element Name	Data Definition	Access	Block	Data Entry	Reverse Populate
Address 2	ugenAddress2TXT120	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
Address 3	ugenAddress3TXT120	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
Email	uveEmailTB120	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
Fax	uveFaxTB16	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
Vendor ID	uveVendorIDTB16	SYS Short Description Te	Read-Only	DM Publication	Auto-Populate	
Zip/Postal Code	ugenZipCodeTXT16	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
City	ugenCityTXT50	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
Vendor Name	uveVendorNameTB50	SYS Short Description Te	Read-Only	Vendor Informati	Auto-Populate	
Contract Balance	uconContractBalanceCA	Currency Amount	Read-Only	Contract Summar	Formula	
Original Contract Amount	uconOriginalContractAmtC	Currency Amount	Read-Only	Contract Summar	Formula	
Project Currency Amount	ugenProjectCurrAmountC	Currency Amount	Read-Only	general	Formula	
Revised Contract Amount	uconRevisedContractAmtC	Currency Amount	Read-Only	Contract Summar	Formula	
Meeting Minutes Contracts	meeting_minutes_contra	BP Creator	Editable	Contract Informat	Manual	
Vendor	ugenVendorBP	BP Picker	Editable(Requirec	Vendor Informati	Manual	
Contract Type	upoContractTypePD	Contract Type PD	Editable(Requirec	Contract Informat	Manual	
Amount	amount	Currency Amount	Read-Only	general	Manual	
Change Order Total Amount	sss_ttl_ChangeOrderTot	Currency Amount	Read-Only	Change Order b/c	Manual	
Transaction Currency	currencyid	Currency Picker	Editable	general	Manual	
Expiry Date	upoExpiryDateDOP	Date Only Picker	Editable	Contract Informat	Manual	

Buttons at the bottom: Manual, Formula, **Advanced Formula**, Trigger, Elements, Auto-Populate, Reverse Auto-Populate, Reset, Add Note, Mobile, Hyperlink, Close.

The screenshot shows the 'Advanced Formula for Upper\_Limit\_Amount' dialog box. The title is 'Advanced Formula for Upper\_Limit\_Amount - Upper Limit is less than'. The dialog has a 'Definition' section with dropdown menus for Numeric Data Elements, String Data Elements, Date Data Elements, Numeric Functions, String Functions, and Date Functions. There is a 'Time Zone' dropdown set to '(UTC-08:00) Pacific Time (US & Ca...'. A large text area is provided for the 'Formula Definition \*'. Below the text area are 'Error Check' and 'Validation Results' sections. A 'Close' button is at the bottom right.

## Features introduced in 20.10



### New Partner User Type – Contractor

Create a new kind of Partner User – Contractor, which can access only those parts of Unifier needed to carry out day-to-day activities. The Home and Project/Shell tabs are visible to a Contractor User, but not the Analytics, Company Workspace, and Standard Projects tabs.

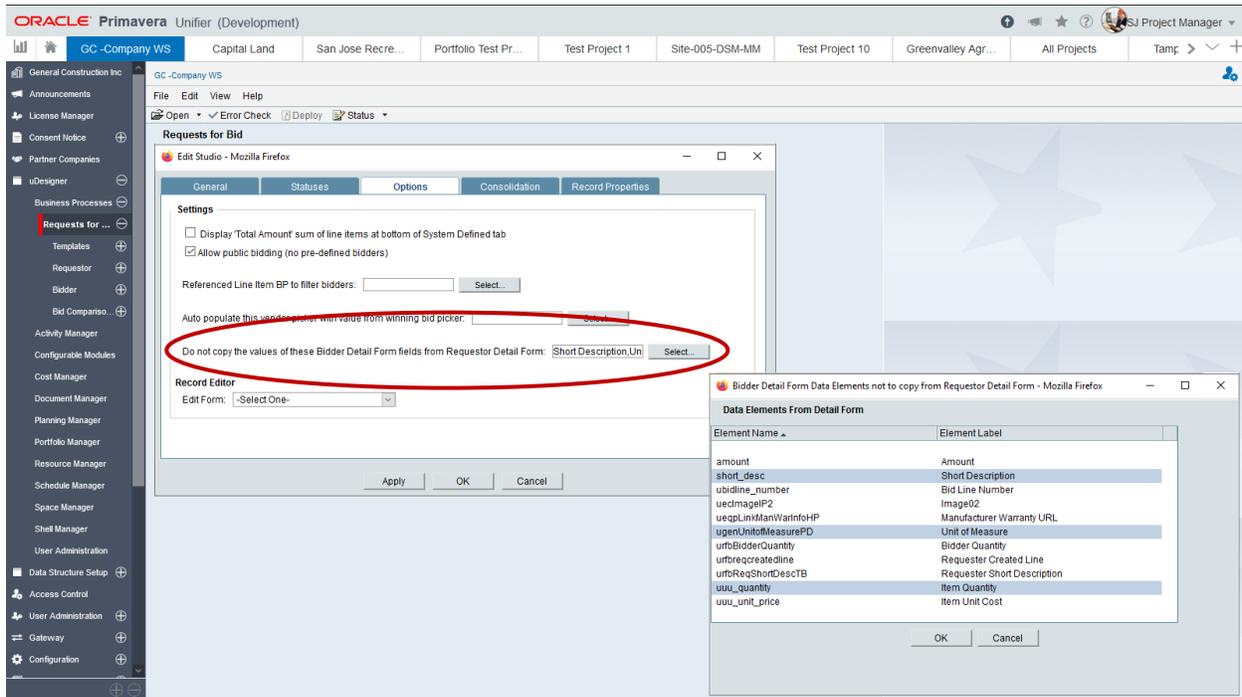
The screenshot displays the Oracle Primavera Unifier (Development) interface. The top navigation bar includes the Oracle logo, the application name 'Primavera Unifier (Development)', and the user name 'Bob the Builder'. Below the navigation bar, there are several tabs for different projects: 'Tampines Mall', 'All Projects', 'San Jose Recre...', 'PS CBS Shell - 5', 'PS CBS Shell - 1', 'BUILDING-01', 'Test Project 5', 'SITE-00', and 'SITE-00'. The 'Tampines Mall' tab is selected. The main content area shows a 'Tasks' list with columns for Origin, Business Process, Record Number, Title, Record Due, From, and Sent for. The list contains 15 rows of tasks, all originating from 'Tampines Mall' and primarily categorized as 'Preventive Work Orders'. The 'Sent for' column shows 'Initiation' for most tasks and 'Approval' for one task (BC-0004). The bottom of the interface shows 'Total: 2390', 'Page 1 of 3', and 'Display 1000 Per Page'.

	Origin	Business Process	Record Number	Title	Record Due	From	Sent for
①	Tampines Mall	Preventive Work Orders	PWO-2073	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2072	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2071	Related Job Plan		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2070			SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2069	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2068	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2067	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2066	Related Job Plan		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2065	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2064	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2063	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2062	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2061	test		SJ Project Manag...	Initiation
①	Tampines Mall	Budget Changes-FM	BC-0004	1		SJ Project Manag...	Approval
①	Tampines Mall	Preventive Work Orders	PWO-2060	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2059	test		SJ Project Manag...	Initiation
①	Tampines Mall	Preventive Work Orders	PWO-2058	Issues in the docu...		SJ Project Manag...	Initiation

The Contractor User has access to Home, Mail, Document Manager, and all logs with business processes that the user is permitted to run. A Contract User cannot act a proxy for another kind of user, but other users can act as a proxy for the Contractor User. A company administrator can assign the Contractor User to act as a proxy for other Contractor Users.

## Multiple Improvements for Bid Management

**Send Line Items to Bidders:** The creator of the bid requester is able to choose whether line item values are sent out to bidders. For example, a requester might specify quantities or units of measure for specific line items. If these values are sent out in a bid package, bidders cannot modify them.



**Add Winning Bid Documents to the Bid Record:** A bid requester can add winning bid documents to the bid record and access those documents after they have been added.

There are two options:

- Add all record attachment of the winning bid to Requestor's Record Attachments.
- Add only line items attachments from the winning bid to the Line Items of <Winning Bid Tab Name>.

When the first of those options is checked, documents are available in the Attachments tab of the details pane, where the usual options are available: Review, AutoVue Review, Download, Revise, and Remove.

These will be categorized as Unpublished Attachments until the RFB moves to the next step and the documents are published to the Document Manager.

Winning bid documents are included in Audits; the audit log reports the event as: Attachment via winning bid selection.

## Code Based Sheet / Code & Record Sheet Redesign

The Code Based CMx Sheet is redesigned and supports all actions formerly available in classic view. The embedded sheet uses standard add row, add column, and view controls. The menu provides additional controls.

	Building System Code	FCA Manager Name *		Estimated Placement Cost (C
11	B-20-10	Exterior Walls		\$0.00
12	B-20-20	Exterior Windows		\$0.00
13	B-20-30	Exterior doors		\$0.00
14	B-30-10	Roof Coverings		\$0.00
15	B-30-20	Roof Openings		\$0.00
16	C-10-10	Partitions		\$0.00
17	C-10-20	Interior Doors		\$0.00
18	C-10-30	Fittings	\$2,500.00	\$10,000.00
19	C-20-10	Stair Construction	\$0.00	\$0.00
20	C-20-20	Stair Finishes	\$0.00	\$0.00
21	C-30-10	Wall Finishes	\$0.00	\$0.00
22	C-30-20	Floor Finishes	\$1,000.00	\$0.00
23	C-30-30	Ceiling Finishes	\$0.00	\$0.00
24	D-10-10	Elevators & Lifts	\$0.00	\$0.00

Code and Record sheets are redesigned to work as embedded sheets with all functionality that was provided in classic view.

### Line Item: Track Last Updated Date

Line items have a new field that allows you to track the last time the line item was updated. This is particularly useful when a line item is updated from a web service or mobile app. It is also helpful when an external system requests data from Unifier and only needs line items that have been modified since a given date. The read-only system Data Element **uuu\_li\_last\_update\_date** captures the date and time that a line item was added or updated.

### Auto-Publishing Data Elements Recognize Record Numbers

When automatically publishing documents or business process record information to the Document Manager, the **uu\_dm\_publish\_path** and **uuu\_record\_info** data elements now honor a record number that is provided as part of a formula in the creation step of a workflow-type BP.

## Features introduced in 20.9

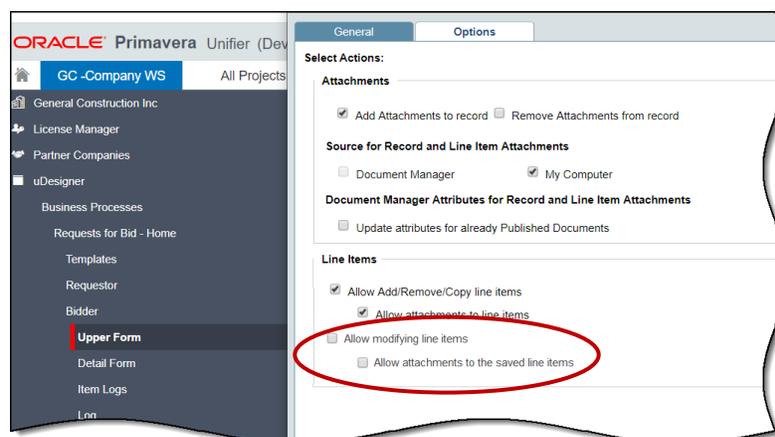


### Multiple Improvements to RFB Processes

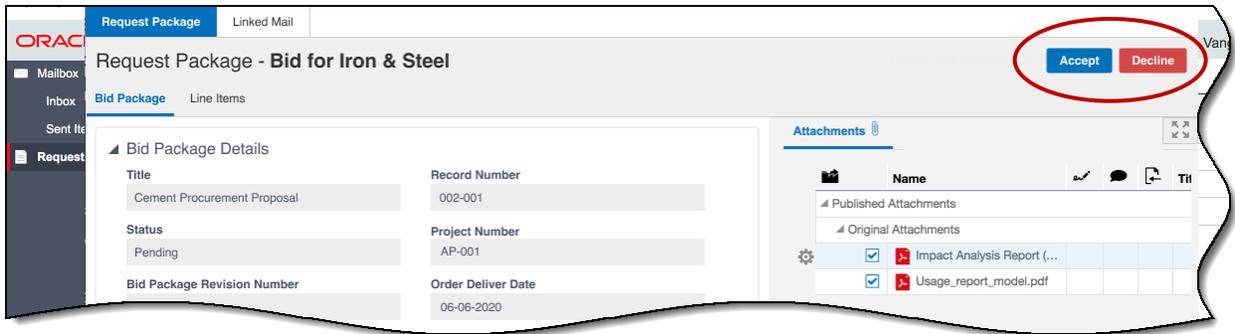
**Export and import bidder line items:** The bid creation and revision process has been streamlined through the use of CSV files. Previously, creating or modifying bids might involve editing hundreds of line items. New this month, Unifier allows bidders or tenders to export bid line items, update fields, add attachments, and re-import the lines into the bid request.

	A	B	C	D	E	F	G	H	I	J	K	L
1	Update existing Line Items /Import new Line Items											
2	Note: Do not change column structure. Columns with "*" are required. Read-only column values are ignored during import.											
3	Read-only columns: Requestor Short Description, Item Quantity											
4	Line Number is used as unique identifier to update existing line items.											
5	Enter new line item data starting with 'D' as first column and Line Number should be left blank.											
6	If Line Number entered already exists then associated line item will be updated. If Line Number entered does not exist then an error will be thrown.											
7	If Line Number is not entered then new line item will be created with unique number.											
8	Do not enter symbols, such as currency or digit grouping, in the numeric fields.											
9	Enter a negative numeric value using these formats only: -123456.99 or -123456,99.											
10	Enter the attachment names separated by ';' in the next available column after the last data element present for Line Item.											
11												
12	D	Line Number	Requestor Sh	Short Descript	Item Unit	Cos	Bid Quantity*	Item Quantity	Unit of Meas	Amount		
13	D	1		Interior Doors		5	100	80	each	4000	InteriorDoor1.jpg; InteriorDoor2.jpg	
14	D	2		Floor Mount f		5	100	100	each	5000		
15	D	3		Frame Lights		400	30	20	each	8000		
16	D	4		Insulated Ceili		40	100	600	Sqft	24000		
17	D	5		Sliding Window		200	8	5	each	1000	NewSliding Window.jpg	
18												

In uDesigner, bidder upper form properties now have a new option to Allow attachments to the saved line items. This will be set automatically for existing bidder upper forms, depending on the status of other settings in the Options tab.

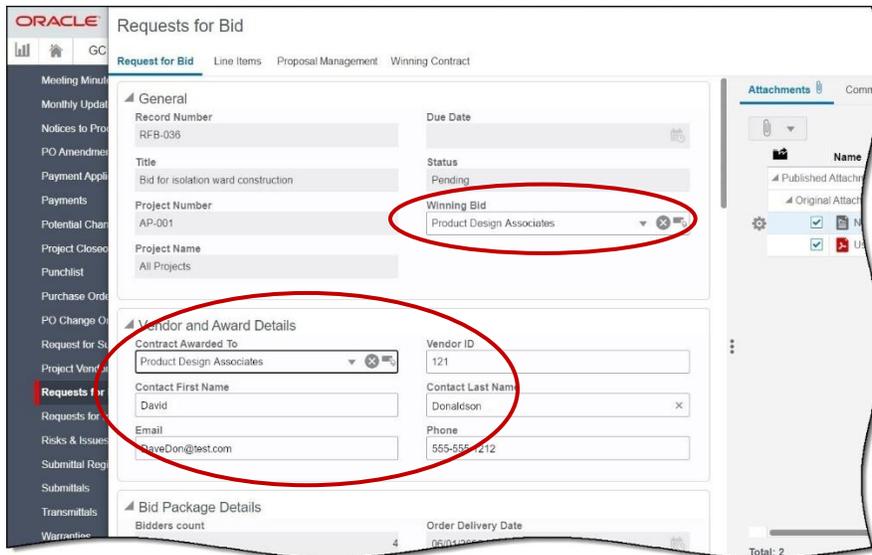


**Bidders can decline an RFB:** In previous versions of Unifier, bidders could respond to a private request for bid by submitting a bid or leaving the invitation unanswered. With this enhancement, bidders can explicitly decline a bid invitation – and undo that decline action prior to the RFB due date.

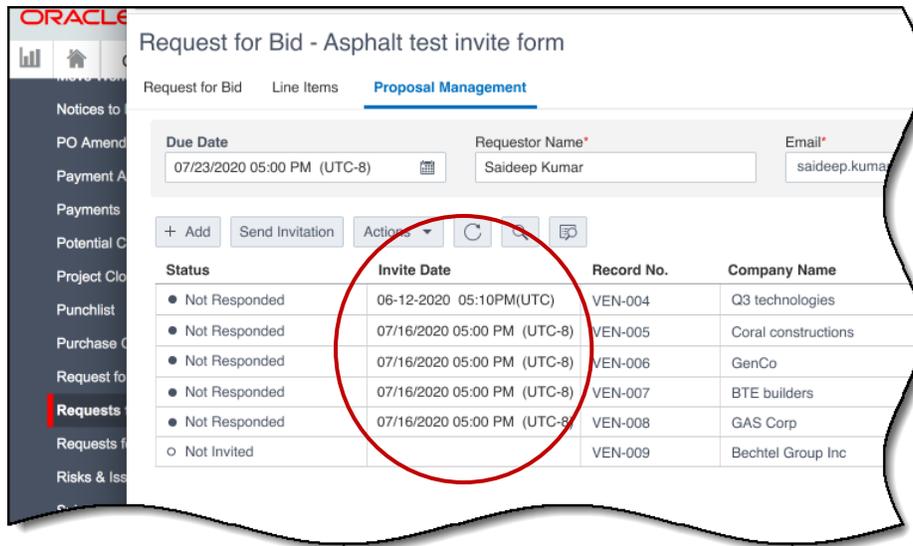


Bidders will be able to decline bids for pre-20.9 RFBs as well. Note that this functionality is *not* applicable to public bidding processes.

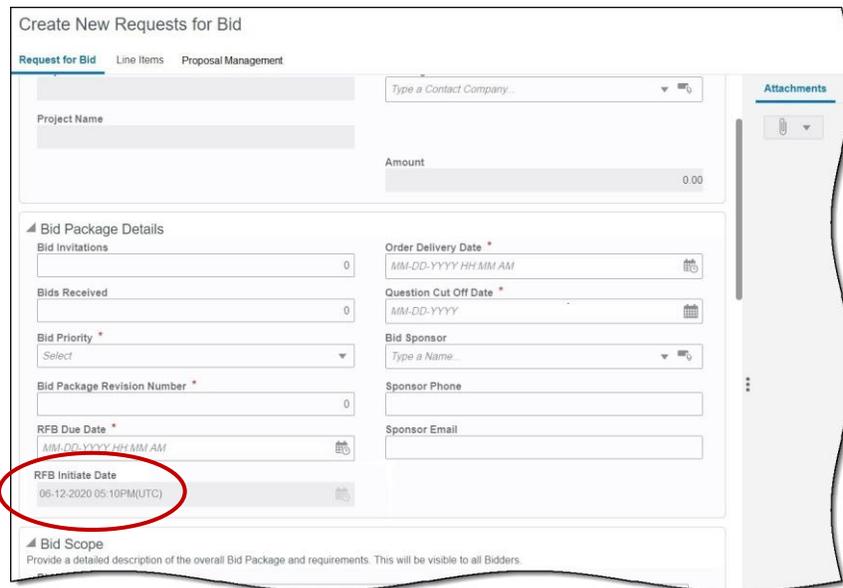
**Populate a picker on the upper form with the winning bidder:** When the winning bid is selected in an RFB business process -- if there is a BP picker or a BP data picker to the defined Vendor BP -- then it will be populated with a reference to the winning bidder. This requires some configuration in uDesigner by an administrator or an analyst. The functionality does not affect existing winning bids, since it is triggered by selecting a winning bid of a current RFB process.



**RFB to capture date and time that the first invitation is sent:** A date field can now be included on Request for Bid business processes, allowing the requester to determine when the RFB invitation was sent and how many days bidders had to submit their bids.



This feature uses a new system-level Date type Data Element called *uuu\_rfb\_initiate\_date*, which can be enabled on a requestor's upper form. On the date that the first invitation to an RFB is issued, this value is automatically set by the system. It is visible in the Invite Date column for Vendors, and it can be added to an upper form visible to the requestor.



## Additional Bidder Portal improvements:

- The company name is displayed at the top of the browser window.
- For all views in the bidder portal, Submission Status and Due In columns are mandatory.
- One of the system-defined views in the Bidder Portal is Due in < 3 days, allowing users to prioritize RFBs.
- Navigation between Requestor's Bid Package, Linked Mail, and Bidder Proposal screens is facilitated through the use of tabs for easier access.
- Submission Status and Action buttons are more visible than before.
- A Linked BP record can be opened from the mailbox for quicker access.

## Configuration Package Enhancement: Import of Custom User Attributes, Including Pickers

Starting in this version of Unifier, administrators can package custom user attributes that are pickers -- without including the user attribute design. When you import a package with custom user attributes that does *not* include user attribute design, the Import User Attributes window is displayed. Click Continue to then add the required data elements into the destination user attribute design.

The screenshot shows the 'Import User Attributes' dialog box. The dialog contains a table with the following data:

Data Element	Data Definition	Data Type	Input Type
empEmployeeID	SYS Short Description Text250	String	Text Box
empEmployeeManager	SYS Short Description Text250	String	Text Box
empContractType	Contract_Type_PullDown	String	Pull-down Menu
Discipline	Discipline	String	Pull-down Menu
Approver	YES NO PULLDOWN	Integer	Pull-down Menu
Salary	Currency Amount	Float	Currency
Space_Data_Picker1	Usable Spaces DP	Integer	Data Picker

The 'Continue' button at the bottom right of the dialog is circled in red.

## Features introduced in 20.8

See the [video version on YouTube](#).

### Spotlight

#### Rich Text Data Element of Unlimited Size

This month's Spotlight is **SYS Rich Text**, a new basic data definition, which allows you to create a rich text field data element of unlimited size. Previously, text fields were limited to 4,000 characters – about 800 words – with no formatting options. The new SYS Rich Text data type provides unlimited size and editing options -- including standard styles, text decoration, lists, indents, alignment, hyperlinks, tables, images, and vertical text positioning.



#### Email Limit on Embedded Images

Starting in this version of Unifier, there is an upload limit of one image per email, and that image must be smaller than 1 MB in size. Additional images or larger images should be added as attachments rather than embedding in the email.

#### Cost Sheet Log and Work Sheet at Company Level Templates Upgraded

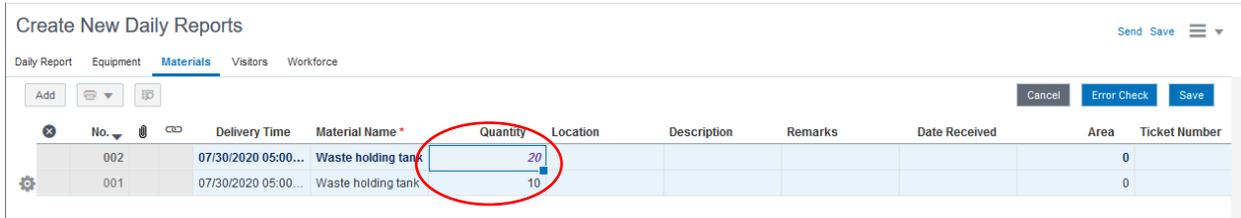
Cost Sheets and Work Sheets existing at company level templates are now displayed with the new user interface.

#### Grid Support in Document Type without Folder BPs

Create line items within the grid view in this document-type BP. The grid support enables you to enforce form-level validations when importing attachments. This feature is *not* available when importing documents using the Form view.

## Line Item Grids

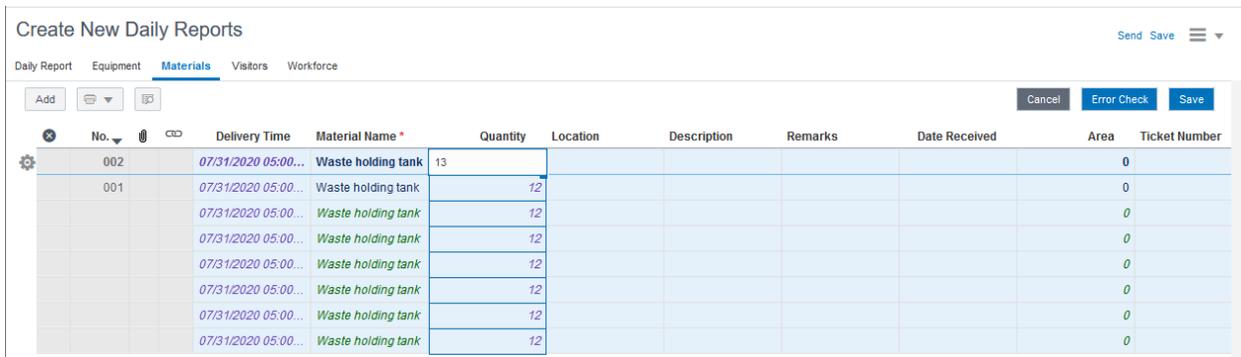
**Bulk Copying:** Line item grids now enable bulk copying and editing of cell values. Cells can be selected and moved using drag and drop functionality, with the blue square at the lower-right corner of a cell denoting the handle. This behavior is similar to that of a spreadsheet.



The screenshot shows the 'Create New Daily Reports' interface with the 'Materials' tab selected. A table displays two rows of material data. The 'Quantity' cell for the second row (002) is circled in red, highlighting the blue square handle at its bottom-right corner.

No.	Delivery Time	Material Name *	Quantity	Location	Description	Remarks	Date Received	Area	Ticket Number
002	07/30/2020 05:00...	Waste holding tank	20					0	
001	07/30/2020 05:00...	Waste holding tank	10					0	

You can also select multiple cells – using the Ctrl or Shift key – and edit them simultaneously by holding the Shift key down and double-clicking the desired field.



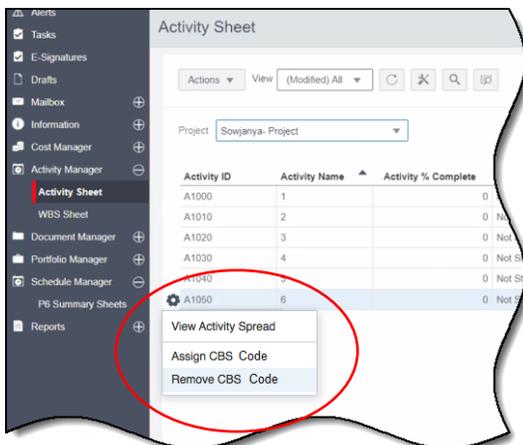
The screenshot shows the 'Create New Daily Reports' interface with the 'Materials' tab selected. A table displays multiple rows of material data. The 'Quantity' column for several rows is highlighted in blue, indicating that multiple cells are selected.

No.	Delivery Time	Material Name *	Quantity	Location	Description	Remarks	Date Received	Area	Ticket Number
002	07/31/2020 05:00...	Waste holding tank	13					0	
001	07/31/2020 05:00...	Waste holding tank	12					0	
	07/31/2020 05:00...	Waste holding tank	12					0	
	07/31/2020 05:00...	Waste holding tank	12					0	
	07/31/2020 05:00...	Waste holding tank	12					0	
	07/31/2020 05:00...	Waste holding tank	12					0	
	07/31/2020 05:00...	Waste holding tank	12					0	

**Search Functionality:** When a grid is in View Only mode, search functionality is still provided, based on Find parameters specified in uDesigner.

## Assign CBS Codes in Activity Sheets

Assign/remove Activity Sheet cost codes and remove assigned activities and roles from the activity sheet via the Context menu or Actions menu, including Activity Sheets created via Gateway from a Primavera Cloud Project.



## Change to Generic Cost Manager (CMO) Sheet Redesign

The Generic Cost Manager sheet is redesigned and displays in the new user interface.

	Building System Code	Building System Name	Estimated Deficiency	Estimated Replacement Code	FCI (Current)	YR1 Projected Maintenance	YR2 Projected Maintenance	YR3 Projected Maintenance
1	A-10-10	Standard Foundation	\$60,000.00	\$50,000.00	83.33%	\$60,000.00	\$50,000.00	\$60,000.00
2	A-10-20	Special Foundation	\$30,000.00	\$10,000.00	22.12%	\$80,000.00	\$50,000.00	\$60,000.00
3	A-10-30	Slab on Grade	\$10,000.00	\$80,000.00	0%	\$60,000.00	\$50,000.00	\$60,000.00
4	A-20-10	Basement Excavations	\$50,000.00	\$70,000.00	55.55%	\$60,000.00	\$50,000.00	\$60,000.00
5	A-20-20	Basement Walls	\$40,000.00	\$30,000.00	25.00%	\$60,000.00	\$50,000.00	\$60,000.00
6	B-10-10	Standard Foundation	\$20,000.00	\$20,000.00	83.33%	\$60,000.00	\$50,000.00	\$60,000.00
7	B-10-20	XXX	\$80,000.00	\$40,000.00	0%	\$60,000.00	\$50,000.00	\$60,000.00
8	B-10-30	Standard Foundation	\$70,000.00	\$60,000.00	80.00%	\$60,000.00	\$50,000.00	\$60,000.00
		<b>Total</b>	<b>\$400,000.00</b>	<b>\$400,000.00</b>	<b>70.00%</b>	<b>\$480,000.00</b>	<b>\$480,000.00</b>	<b>\$480,000.00</b>
		<b>Average</b>	<b>\$30,000.00</b>	<b>\$30,000.00</b>	<b>35.00%</b>	<b>\$60,000.00</b>	<b>\$60,000.00</b>	<b>\$60,000.00</b>

## Pay App SOVs and Summary Pay App SOVs

Open a business process record without first going to the BP log in both the Pay App SOV Log and the Summary Pay App SOV Log. You can also view sheets in the Standard view, just as with Cost Sheets.

## Configuration Package Upgrades

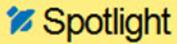
Export a package without bundling user-attribute design even though packaged components have references to custom user attributes. The exported package will have custom user attributes without the associate user attribute design. In addition, you can now import template components into an existing environment so that new BPs are added and existing components updated. In previous versions, when a configuration package containing user attributes was imported into another environment, the package import caused an error if the user attribute design in the destination did not match the source.

## Integration: Send Updated Activity Data from Unifier to Oracle Primavera Cloud

In configuration package management node, create an add-on component list that includes components of a selected shell template like BP setups, access control, and UDRs that do not depend on the shell attribute design. In prior versions, you could import a configuration package consisting of components from source shell template into an existing shell template in the destination.

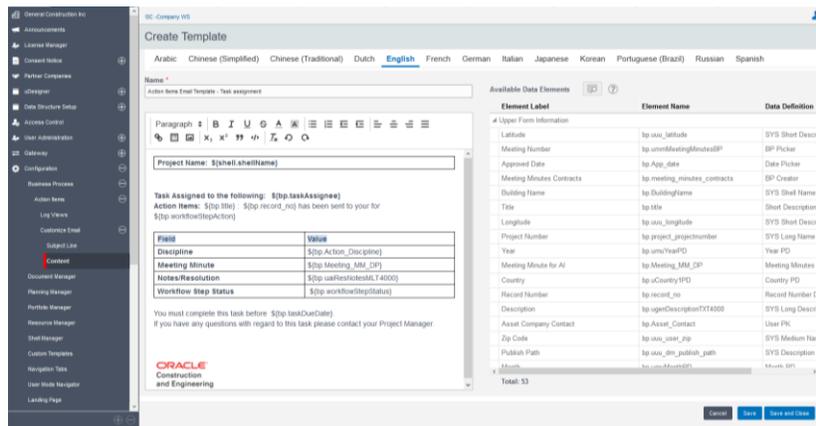
## Features introduced in 20.7

See the video at [https://youtu.be/11J\\_QUeR5M8](https://youtu.be/11J_QUeR5M8)

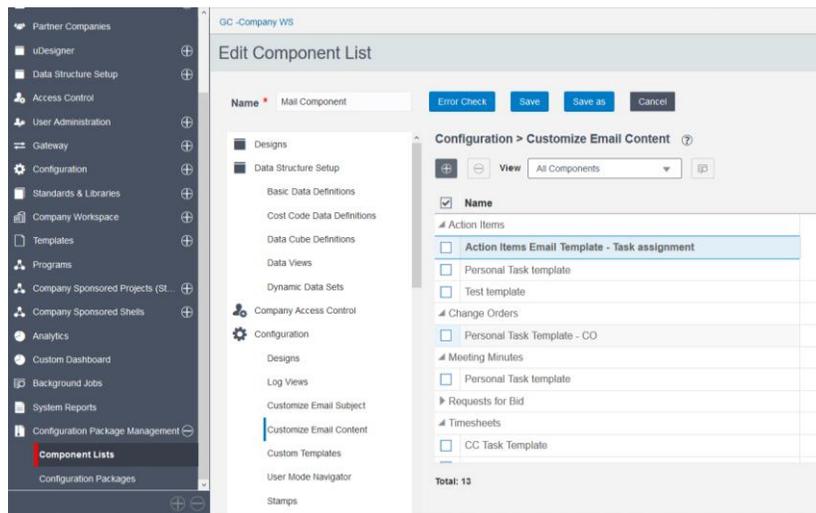


### Customized Email Templates for Workflow Business Processes

Last month, it became possible to configure a custom email template for each trigger type under workflow-type business processes.



Now, those customized email templates can be bundled in configuration packages, allowing Administrators to avoid duplication of work between multiple Unifier servers.



## Line Item Grid Changes

In View mode, the grid is paginated, enabling you to page through the list and specify up to 10,000 line items per page. In Edit mode, buttons for Cancel, Error Check, or Save actions are moved to the upper-right corner of the grid area. Also, the lower-left corner of the grid shows the number of lines that are new and deleted.

Daily Reports

Send Save

Daily Report **Equipment** Materials Visitors Workforce

Add

Cancel Error Check Save

No.	Line Item Status *	Equipment Used	Image 1	Description	Model	Serial Number	Type *
	Open						
558	Open	G71C000GV110 G30209095...	Toshiba Charger...	Equipment from C...		T004628YURS	Tractor
557	Open			Equipment from C...			Tractor
556	Open			Equipment from C...			Tractor
555	Open			Equipment from C...			Tractor
554	Open			Equipment from C...			Tractor
553	Open			Equipment from C...			Tractor
552	Open			Equipment from C...			Tractor
551	Open			Equipment from C...			Tractor
550	Open			Equipment from C...			Tractor
549	Open			Equipment from C...			Tractor
548	Open			Equipment from C...			Tractor
547	Open			Equipment from C...			Tractor
546	Open			Equipment from C...			Tractor
545	Open			Equipment from C...			Tractor
544	Open			Equipment from C...			Tractor

New: 1 Deleted: 0

## New UI for Generic Cost Manager Log and Sheet

The Generic Cost Manager Sheet now supports a new log and the sheet has been modernized using the new UI framework.

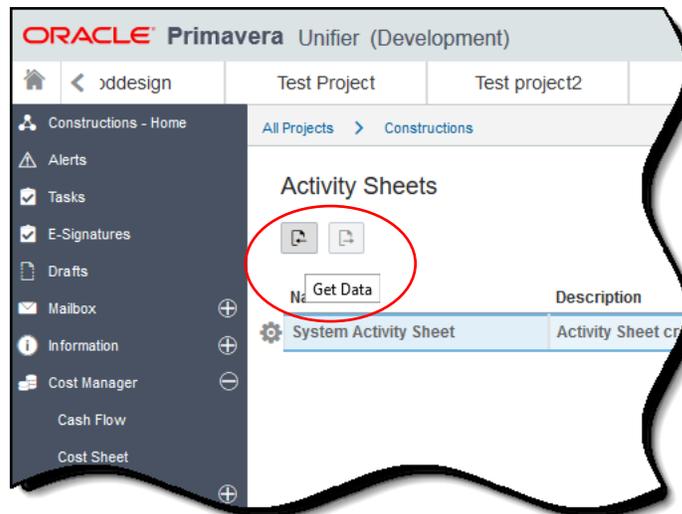
The screenshot shows the 'Generic Cost Manager' interface. The table displays the following data:

	Account Code	Account Name	Annual Budget (Pending)	Generic Cost Manager 16	Annual Budget (Approved)	Budget Changes (Approved)	Bud Trans (Approv)
1	Expenses		\$0.00	\$0.00	\$0.00	\$0.00	
2	Expenses-5000		\$0.00	\$0.00	\$0.00	\$0.00	
3	Expenses-500...	Advertising Expense	\$0.00	\$0.00	\$0.00	\$0.00	
4	Expenses-5300		\$0.00	\$0.00	\$0.00	\$0.00	
5	Expenses-530...	Commissions & Fees	\$0.00	\$0.00	\$0.00	\$0.00	
6	Expenses-5400		\$0.00	\$0.00	\$0.00	\$0.00	
7	Expenses-540...	Insurance	\$0.00	\$0.00	\$0.00	\$0.00	
8	Expenses-5600		\$0.00	\$0.00	\$0.00	\$0.00	
9	Expenses-560...	Landscape Maintenance	\$0.00	\$0.00	\$0.00	\$0.00	
10	Expenses-5700		\$0.00	\$0.00	\$0.00	\$0.00	
11	Expenses-570...	Management Fees	\$0.00	\$0.00	\$0.00	\$0.00	
12	Expenses-5800		\$0.00	\$0.00	\$0.00	\$0.00	
	Total		\$0.00	\$0.00	\$0.00	\$0.00	
	Average		\$0.00	\$0.00	\$0.00	\$0.00	

### Integration Enhancements: Unifier, Primavera Cloud, and P6

Activity sheets now support Oracle Primavera Cloud Schedule Activities. With this enhancement, you can bring activity and schedule data from Oracle Primavera Cloud into the Unifier Activity Sheet.

Previous versions of Unifier could retrieve CBS codes from a P6 Project when *creating* a Unifier Activity, but updating the CBS Code assignments in P6 later would not affect the codes that Unifier had already imported. With this enhancement, you can receive the latest CBS codes using the **Get Data** function on a Unifier Activity Sheet.



The Unifier Activity Sheet can also link directly to an Oracle Primavera Cloud or P6 project. The P6 link is configured on the Company Properties screen, and enables a hyperlink on the Unifier Activity Sheet. Click that hyperlink and Unifier will open a new browser tab with the

corresponding P6 project opened.

## Features introduced in 20.6

See the highlights video at <https://youtu.be/gLCHztUZ7hw>



### Cost Manager Work Sheets – Now in Standard View

Work Sheets in Cost Manager have been upgraded to the Standard interface: Header, Toolbar, and Grid.

The screenshot shows the Primavera Unifier interface for a Cost Manager Work Sheet. The title bar indicates 'ORACLE Primavera Unifier (Development)' and the user is 'SJ Project Manager'. The breadcrumb trail shows 'All Projects > San Jose Recreation...'. The main title is 'Work Sheet: Worksheet for SJ Project changed' with a currency of 'United States Dollar (USD)'. A toolbar above the grid includes 'View', 'Default', and various icons for actions like print, refresh, and zoom. The grid displays a table with columns for 'Cost Code', 'Code Name', and three numerical columns (1, 2, 3). The table includes a 'Total' row at the bottom.

	Cost Code	Code Name	1	2	3
1	00000	Division 0 — Contract...	\$69.00	\$30.00	\$99.00
2	01700	Execution Requirem...	\$23.00	\$30.00	\$53.00
3	17100	Equipment	\$46.00	\$0.00	\$46.00
4	01600	Product Requirem...	\$0.00	\$0.00	\$0.00
5	01000	Division 1 — General ...	\$0.00	\$0.00	\$0.00
6	01100	Summary	\$0.00	\$0.00	\$0.00
7	01300	Administrative Requirem...	\$0.00	\$0.00	\$0.00
8	01400	Quality Requirem...	\$0.00	\$0.00	\$0.00
9	01500	Temporary Facilities & C...	\$0.00	\$0.00	\$0.00
10	01200	Price & Payment Proced...	\$0.00	\$0.00	\$0.00
11	01800	Facility Operation	\$0.00	\$0.00	\$0.00
12	01900	Facility Decommissioning	\$0.00	\$0.00	\$0.00
13	18000	Interiors	\$0.00	\$0.00	\$0.00
14	18100	Material	\$0.00	\$0.00	\$0.00
15	18200	Labor	\$0.00	\$0.00	\$0.00
16	00500	Agreement	\$0.00	\$0.00	\$0.00
	Total		\$69.00	\$30.00	\$99.00

Total: 242

The Cost Manager Work Sheet in Standard view

## Line Item Data Picker – Group Names and Totals now Visible

In previous versions of Unifier, you could pick line items from a group – but couldn't see the group name when viewing source line items. Unifier will now display the group name.

Daily Reports - Line item(s)

View

Short Description	Type	Equipment Type	Acquired
▲ Equipment			
Back Hoe loaders	Back Hoe loaders		
Excavators in East ...	Excavators in East Wing	Heavy equipment	
▲ Materials			
Dippers in East wing	Dippers in East wing		
Back Hoe loaders in ...	Back Hoe loaders in Ea...		
Dippers in North Park	Dippers in North Park		
Excavators	Excavators	Heavy equipment	

An additional enhancement to line item groups is the ability to display group totals in the line item log whenever line items are grouped. In uDesigner, navigate to a Business Process – such as Contracts – and click on Properties. Select the Options tab and check the box to Display line item group total amount. This will display the total amount of all items in a group beside the group name.

Contracts

Contract [Line Items](#) Change Orders Payment Applications

View Currency Transaction Currency

No.	Cost Code	Code Name	Item Unit Cost
▲ Group1 Amount: \$136.00			
004	01200	Price & Payment Proced...	\$2.00
003	01700	Execution Requiremnts	\$2.00
▲ Not Grouped Amount: \$108,204.00			
<input type="button" value="Gear"/>	020	16500	Lighting \$500.00
	019	16500	Lighting \$2,000.00
	018	16500	Lighting \$500.00
	017	16500	Lighting \$2,000.00
	002	01700	Execution Requiremnts \$2.00
	001	01700	Execution Requiremnts \$4.00

Create or delete groups in the Actions menu of a line item log. Select one or more items in a log and right-click or click on the gear icon to add line items to a group. Line items that are not grouped are listed under the Not Grouped node.

This option is found in upper form properties for cost and line item type business processes except in SPA and classic Payment BPs.

## New Rich Text Editor for Email

The email composer – and the text editors used for the Consent Notice, the Portal Landing Page, and others – have a more modern look that is easier to navigate.

## Configure Maximum Outgoing Email Size

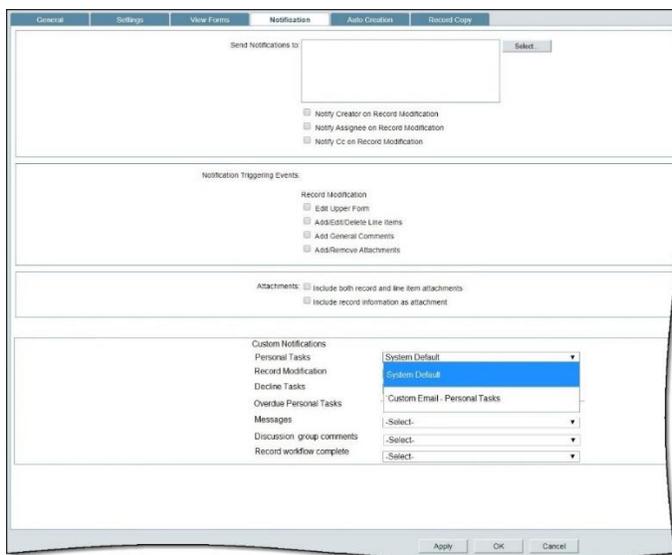
Administrators can now specify maximum size of an outgoing email from Unifier to be the same as the size allowed in their company's email server. Previously, an over-sized email sent from Unifier could be rejected from the recipient's email server without notification. When an email exceeds the maximum allowed size, Unifier truncates all attachments and automatically appends a custom-defined message to the recipient that they can log in to Unifier to see the truncated attachments. For OCI SaaS customers, the maximum size of an outgoing email from Unifier defaults to 10mB.

Navigate to the Company Properties page, click Open, and select the Outgoing Emails tab. If the Maximum Size field is left blank or set to zero, Unifier will use the outgoing email server's maximum size limit.

Note that this does not eliminate the possibility of problems at the recipient's side: If Unifier attempts to send a 10 megabyte file to a recipient who can only accept emails smaller than 5 megabytes, the message will again bounce without notifying the intended recipient.

## Customize Email Content / Body

Configure, view, and edit custom email templates for each trigger type in a workflow BP. With this enhancement, administrators can customize the email body sent to assignees and CC users. Email templates use a rich text editor and can use a wide range of data elements for tracking tasks, record workflow completion, and record notification.



## Unifier Analytics – Choose Tracking History of Data Element Changes

Administrators can now select whether to track the change history of the values of facts and dimensions of business processes enabled for analytics. With this enhancement, there will be a reduction in space consumed as well as time taken for data to be extracted, transformed, and loaded (ETL) from Unifier database into the Primavera Data Warehouse for Analytics.

### **Import/Export of Columns in Cost Sheet Data Views**

Import data directly into a Cost Sheet column rather than flipping between views. Also, copy or export data from columns.

### **Cost Sheet – Budget Distribution Screen**

The standard interface is enhanced to enable Budget Distribution activities within the Standard UI Cost Sheet.

### **E-Signature for Self-Sign on all BP Record Attachments**

In previous versions of Unifier, electronic signatures were only available within Document Manager and attachments in business process records using DocuSign or Adobe Sign. Now, users can self-sign attachments directly from a business process record.

This functionality requires that both the company and project (or shell) be enabled for e-signatures.

### **User Attributes at Shell Level**

Administrators can now define and modify user attributes at the shell level. This is specifically helpful for customers who have resources that fill different roles on different projects and need to be able to override company-level settings. For example, a project manager might be an Administrator in one project but a regular user in another project. Contact information can also be specific to certain projects or shells, allowing users to keep multiple project information streams from overlapping. In previous versions, user attributes could only be specified at the company level.

### **Changes to Portfolio Manager Logs**

The Portfolio Manager Log has been redesigned to behave like other logs in standard view. The new interface has a toolbar followed by a grid view containing Portfolio sheets.

### **Activity Sheet Supports Spreads for Non-EVM Users**

The CBS Shell Properties window now has an Integration tab for non-EVM users, allowing them to map a P6 project to a Unifier shell. Use the Get Data option to create an Activity Sheet – or update an existing Activity Sheet – with the most recent spread data from P6. Note that synchronizing Activity and Resource assignment spread data requires that customers have an Enterprise edition of Oracle DB and a license for DB partition.

### **SOV Sheets – General Spends SOV Sheets Redesign**

Open the base business process record associated with an SOV directly from the SOV log. You can also create SOV sheet views and use the Standard view – like Cost Sheet.

## **Analytics Dashboard Portlets to Support Parameters**

In this version of Unifier, users setting up the Analytics and Portlet blocks in Unifier Dashboards have the ability to pass URL parameters to Analytics – Oracle Business Intelligence (OBIEE). The user will no longer need to create individual Dashboards for each project in OBIEE; a single dashboard can be created in OBIEE and – based on URL parameters – display information in a Unifier Portlet or Analytics block.

## **Multiple Role Rates and Dates from P6**

Unifier can receive multiple role rates from P6 using Get Data in Master Rate Sheet. This allows the standard rate for a given role to vary according to dates, enabling more flexibility in resource contracts that may have variable rates according to time on project or specific date ranges – without having to create multiple versions of a resource.

## **Variable Unit Costs in Line Item Consolidation and Auto-Creation**

SPA-type contract business processes are upgraded with new features.

Previously, you could create costed line items of Variable Unit Cost type in SPA types of business processes. With this release, when line items are consolidated from a generic non-SPA cost type business process record into a SPA BP record, costed line items will be created. These line items of the variable unit cost will have quantity, unit cost, and amount copied from the source line item along with cost code information.

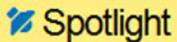
In addition, auto-creation functionality has been enhanced to enable auto-creation of SPA-type business process records with variable unit cost line items from a generic cost business process. Once again, summary lines typically will not show unit price, but cost breakdowns will include the unit price. However, if fields are missing when Cost Business Processes are auto-created, the record will not be committed and will remain in the creation step.

## Announcement

In Unifier 20.6 the option to view a Cost Sheet in Classic View will be removed.

## Features introduced in 20.4

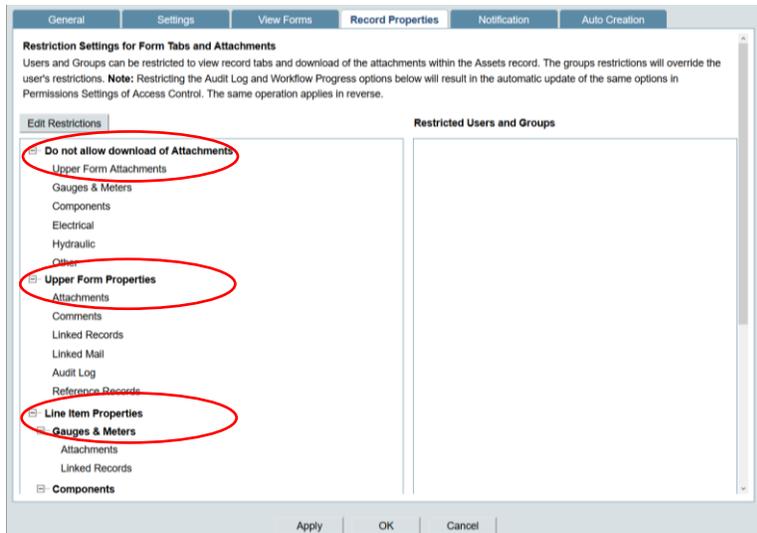
(See the video version at <https://youtu.be/5ELMLHyvsLg> .)



### 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.

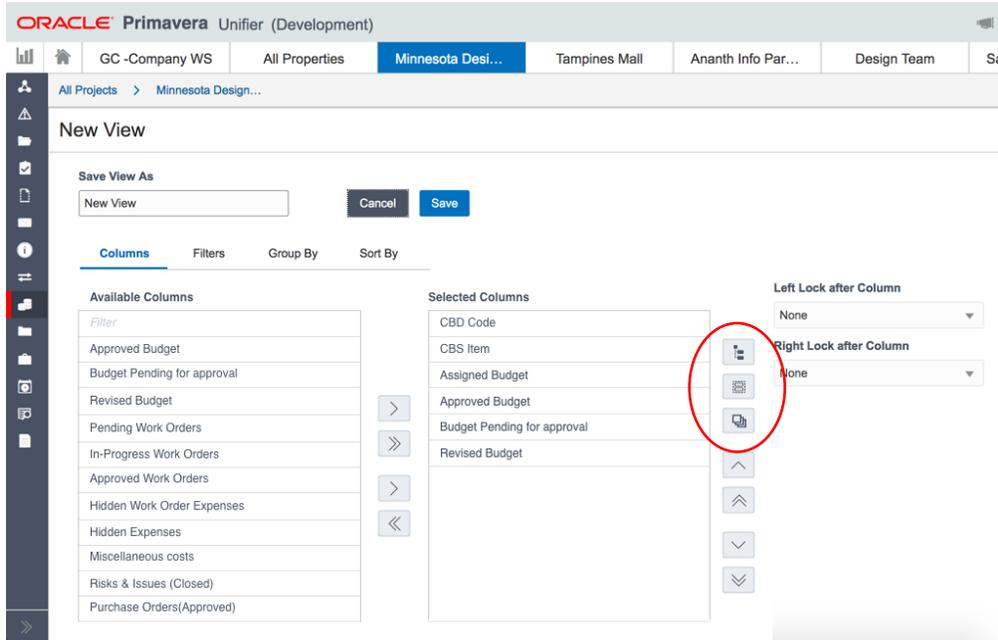
## Shell Attributes Support View Forms

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

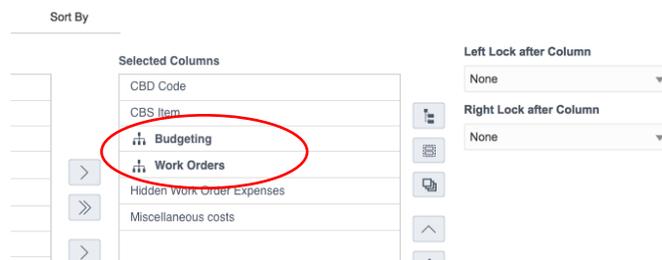
## Cost Sheet UI/UX – Column Grouping

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
EC00515-1		\$32,814.46	11		56	474	\$0.00	31521	\$
D&E	Design and Engin...	\$18,000.00	7				\$0.00	5162	
Ex-Finish	Exterior Finishes	\$14,814.46	1			4	\$0.00	13723	
Brick	Brick	\$8,800.00	1				\$0.00	7728	
Roof	Roof	\$5,717.46	0			63	\$0.00	5183	
Win	Doors and Windows	\$72.00	0			6	\$0.00	812	
Found	Foundation	\$0.00	3			0	\$0.00	7188	
Structure	Structure	\$0.00	0			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.

Save View As  
New View [ ] [Cancel] [Save]

Columns Filters Group By Sort By

Search Parameters

WBS Code: contains [ ] WBS Name: contains [ ]  
WBS Type: contains [ ] 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 [ ] [Cancel] [Save]

Columns Filters Group By Sort By

Group By: EVA - Planned Cost Order: Ascending

Save View As  
New View [ ] [Cancel] [Save]

Columns Filters Group By Sort By

Sort By: None Order: Ascending

## Features introduced in 20.3

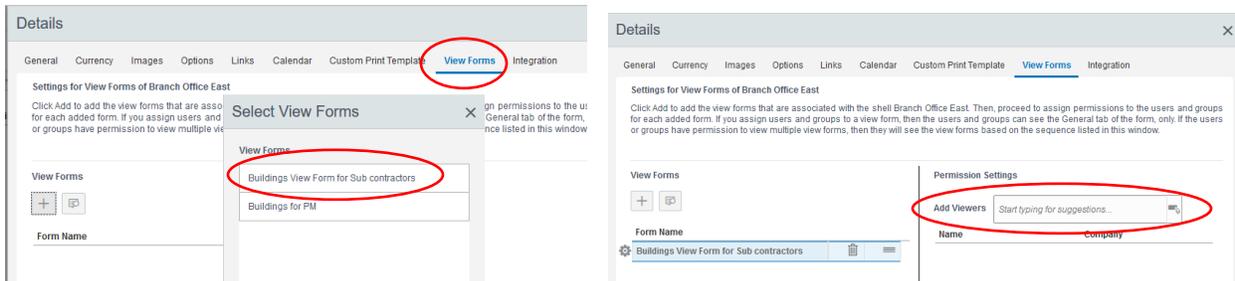
(See the video version at <https://youtu.be/-pt1nXNPYBQ> .)



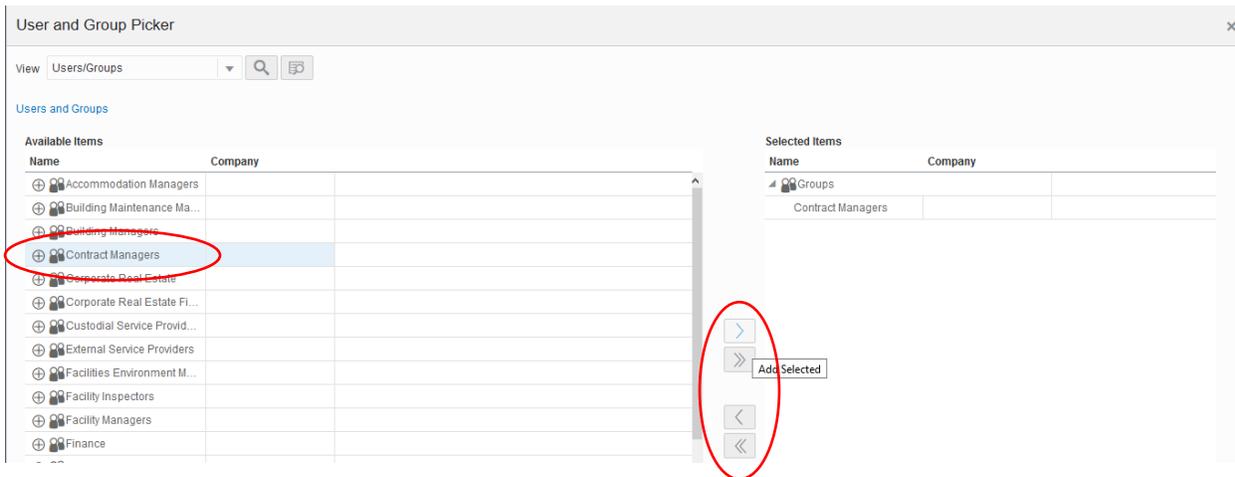
### Shell attributes to support multiple view forms

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.

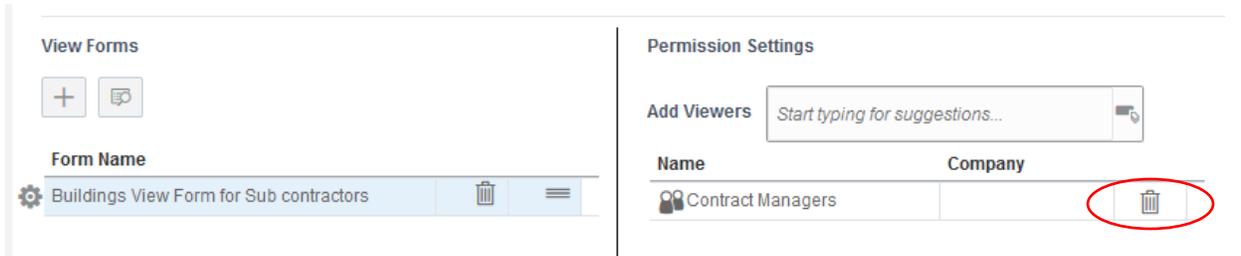
If there is already more than one form in your shell attributes, click on the View Forms tab. Select one of the forms and click Add Viewers.



Add users or 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.

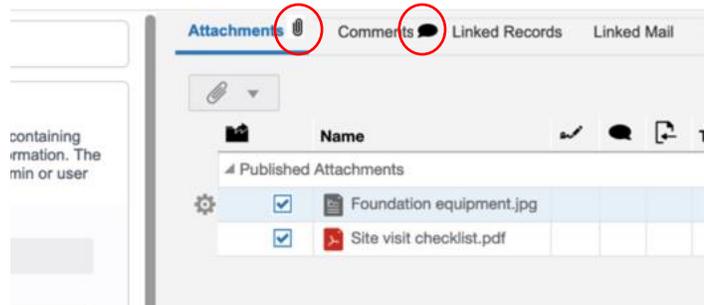
#### Create New Daily Reports

General **Workforce**

No.	Contractor Name	Short Description *	Work Performed	Building in suburbs?	Project Managers	App
001	ABC Consultants	Work done by AB...	Work done by AB...	<input checked="" type="checkbox"/>	0	
002	ABC Consultants	Work done by AB...	Work done by AB...	<input type="checkbox"/>	0	

### 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

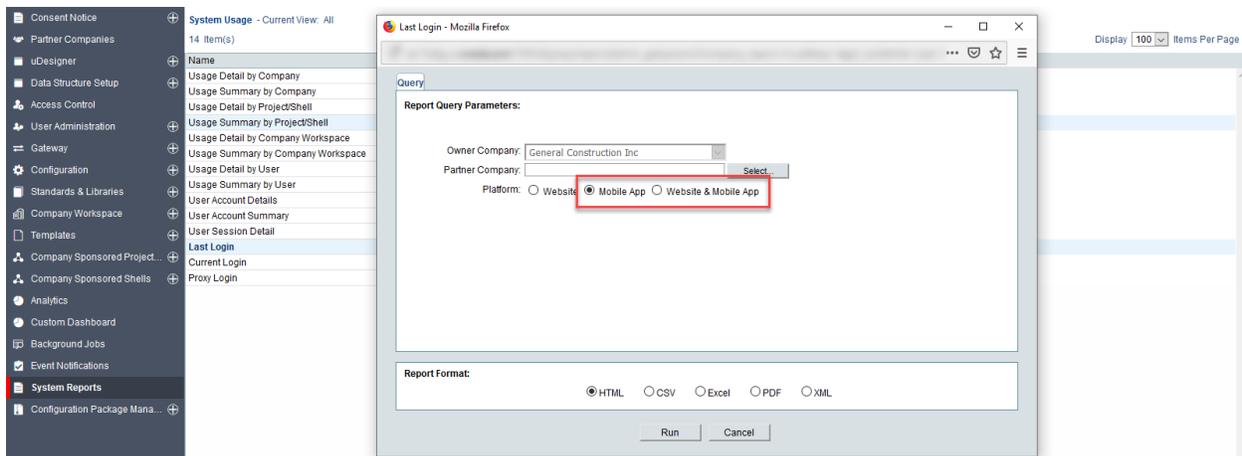
Starting with this version of Unifier, clicking on a log in the Navigator will show a list of log records but unlike previous versions, Unifier will NOT automatically display the details of the first record. To see details, you must select a log first, resulting in a performance boost when first opening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

## Features introduced in 20.2



## 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

Not applicable.

Features introduced in 20.1

### 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.

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