



# Trimble Unity Construct - Reports

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# Reports

The e-Builder Reports module allows you to view reports on all aspects of your projects in e-Builder. Reports are lists, summaries, and analysis of your data, which you can display, print, export or save. It enables any e-Builder user to report on any of the e-Builder modules that they have access to. Matrix reports can be configured to include a broad range of metrics, such as: cash flow analysis, project status information, schedule variance, and more.

## Typical Job Functions Using the Reports Module

e-Builder supports the different team members that are involved in the project. All users will be able to report on the Projects that they have access to. The information that is displayed in the report is limited based on the users permissions in each of the other modules in e-Builder.

All team members can take advantage of the reports module.

### Executive

As an executive, you will use the e-Builder reports module to stay on top of the progress associated with all of your projects or your program. You will easily monitor your status on multiple projects. You will also review historical statistics and past project performance to determine what you should do on future projects. You can also standardize the information you will measure, such as key performance indicators and/or milestones, to ensure you are looking at critical information in a consistent manner across your program. No need to log in to e-Builder either; using the report subscription function you will receive program-level reports directly in your email inbox at certain predefined times.

### Project Manager

As the project manager, you will use the e-Builder reports module to summarize or aggregate your critical project information to quickly address issues before they become timely or costly. That means you will have complete control and access to the critical project information from start to finish.

You will manage by exception so you can instantly see when something slips. You can also drill into the detail as needed right from the report. You will use the reporting engine to analyze project performance. You will also be able to quickly identify and prevent bottlenecks, summarize projections and use this information to make informed decisions.

If you have many team members executing your plan you will access your resource reports that will help you gain an understanding on the tasks you are managing that are not complete, tasks that are slipping, or even tasks that are starting soon. Or, for example, during construction, you might want to generate an RFI, meeting minutes, or submittal log report to see which items are open, what are the latest comments, and who's court they are in.

The bottom line is that you will spend less time mining or managing the data. The e-Builder reports module will do that for you. You can then spend time where it's needed - managing the project to ensure it completes on time and within scope and budget.

### Project Participant

As a team member, you will use the e-Builder reports module to quickly gain access to your work reports. You will need to know which tasks are starting soon, which are in progress, which are running late, and so forth. You may need to access a meeting minutes report that detail out the items that you are responsible to complete. Maybe you need to reconcile the invoice or commitment data you entered in the cost module within a project. Or, need to access a few key documents from a set of folders you are responsible to manage.

No matter the work responsibility, the reports module can allow you to easily create and manage reports that are important specifically for you so that at the end of the day you are spending less time trying to find project information and more time on getting the work done.

## Using Report Folders

Report folders are used to organize and display saved reports.

### To add a new report folder

**Note:** Only e-Builder Administrators will be able to add report folders.

1. Open the Reports page.
2. Click the **Add New Folder** link. The Add Report Folder page displays.
3. In the **Folder Name** field, enter the name of the new report folder.
4. Move any saved reports from the **Unfiled Reports** folder into the new folder by selecting the report names and using the arrow buttons (optional) to move the report.
5. Click **Save**. The new report folder is added.

### To edit report folders

**Note:** Only e-Builder Administrators will be able to edit report folders.

1. Open the Reports page.
2. To edit a report folder or its contents, select its name from the **Folder** drop down list.
3. Click the **Edit** hyperlink beside the Folder field. The Edit Report Folder page displays.
4. You can perform the following actions in this page:
  - Edit the name of the folder in the Folder Name field.
  - Add or remove reports from the folder using the arrow buttons.
  - Delete the folder by clicking **Delete**.
5. When finished, click **Save** to retain the changes.

### To delete a report folder

1. Open the Reports page.
2. To delete a report folder or its contents, select its name from the **Folder** drop down list.
3. Click the **Edit** hyperlink beside the Folder field. The Edit Report Folder page displays.
4. Click **Delete**. You will be asked to confirm your selection.
5. Click **Yes, Delete the Report Folder** to proceed.

**Note:** Any Reports saved in a deleted folder will automatically be moved into the Unfiled Reports folder.

### To change the order of the report folders

**Note:** Only an e-Builder Administrator will be able to reorder the report folders.

1. Open the Reports page.
2. To change the order of the report folders, click **Reorder Folders**.
3. In the Reorder Report Folders page, click the name of a report folder and click the top, up, down, or bottom button to change the order they are listed in. The top button moves the folder to the top of the list, while the bottom button makes it the last report in the list, and the up or down buttons move the folder up or down one place from its current order.
4. When finished, click the **Save** button to save your changes.  
—Or—  
To cancel the process click the **Cancel** button.

### To access the Reports page

1. On the top navigation tabs, click the **Reports** tab. The Reports page displays a list of report folders containing reports.

**Note:** Not all users may see the same reports in each folder. e-Builder administrators can assign reports to specific user groups.

2. To view the contents of a single folder, select the name of the folder from the **Folder** drop down list.

**Tip:** By default, the drop down list will display all report folders. You can also access other report folders by scrolling down the page.

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From the Reports page, you can:

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## Use the Report Wizard

From the Report Wizard, you can perform the following actions:

### Add New Reports

The Add Report button on the Reports page opens up the Report Wizard. For more details on this function, see Adding Reports.

### Email Reports

After running a report, you can send the report results by email. For more details on this function, see Email Reports.

### Export Reports

The Export button on the Report Wizard page executes the same action as the Export link listed next to the name of any saved report. For more details on this function, see Exporting Reports.

### Delete Reports

Individual users can delete their personal reports but only Trimble Unity Construct Administrators can delete account level reports. For more details on this function, see Delete Reports.

### Print View Reports

The Print View button performs a similar function to the Export button in that it also sends the results of your report into MS Excel. The print view is a snapshot of the page that maintains any groupings and totals that are on your report.

### Save Reports

The Save As button allows you to save a report in e-Builder. When you have fully configured your report to present the data that is required in the correct format, you can save the report for future use.

**Note:** Only e-Builder Administrators (or those users that have permissions granted by the administrators) are able to save reports for other users. All other users will only be able to save reports in their personal reports folder. Administrators can refer to Manage Permissions to learn how to give non-administrator users the permission to save reports for others.

### Add New Reports

All Trimble Unity Construct users can create their own custom reports using the Report Wizard.

#### To add a new report

1. Open the Reports page.
2. Click **Add Report**. The Report Wizard page is displayed and guide you through the following sequence of steps.

**Note:** These page overviews are comprehensive of what is available, however you can skip customizable steps 2- 7 to execute the report quicker with the standard report defaults, as step 1 is the only required step.

- i. Select the type of data for the report
- ii. Select the report type
- iii. Select columns
- iv. Select aggregate functions
- v. Configure columns
- vi. Select grouping
- vii. Specify filter criteria

#### To jump to a particular step in the Report Wizard

At any time in the process of creating a report, you have the option to skip or jump to an upcoming or previous step in the Report Wizard. To do this, select the name of the step from the **Jump to step** drop down list.

## Select the Type of Data

The first step of the Report Wizard allows you to select the type of data to report on.

**Note:** e-Builder reporting is permission based, so the list of reports available for an individual to select from are driven by the roles and permissions set by the administrator.

e-Builder Administrators will also be able to set a report to display the results that a specific user has permission to see.

### Tip

An e-Builder Administrator can utilize the Run As User option to generate a report on all projects without adding users to additional projects. The Administrator could run the report as if run by him/ her. This would be useful for executives who require program-level reporting and do not have access to every project in e-Builder.

## Types of Data for Reports

The types of data for reports available are:

### Administrative Reports

The Administrative Reports option enables the e-Builder administrator(s) to report on user and project information to help manage their account.

The types of administrative reports that can be run are as follows:

- **Role Membership:** Report on the account roles for the users on the account. For example, report on the users in the architect role to verify that all new architects have been added to it.
- **Project Membership:** Report on which projects each user has been added to. For example, report on the membership of a new project to verify that all appropriate users have been added to it.
- **User Details:** Report on any of the user information fields. For example, a list of users located in a specified city or state or number of times they have logged in.
- **Project Activity:** Report on high level project usage information. For example, report on how many files have been saved on all projects to verify that users are storing their information in the e-Builder documents module.
- **Audit Log:** Report on activity that has transpired within the Administrative Tools. For example, report on when an administrator added a new user to the account.
- **Form Type Permissions:** Report on the form type permissions of each account role. For example, report on the account roles that have permission to fill out an action Item.

### Bidding Reports

The Bidding Reports option enables you to report on data in the Bidding module of e-Builder.

**Note:** If your account is not using set up to use the Bidding module, you will not see it listed as an option.

The types of bidding reports that can be run are as follows:

- **Project Bidding Summary:** A high-level overview of the status of the bids on your projects. For example, you could print a summary report showing the numbers of invited bidders, their respective

statuses, and responses for each of your projects.

- **Bidders:** Report on the companies or contacts that have either submitted or just been invited to bid. For example, you could run a report of all companies, their contact information, a summary column showing the details of their bidding, and other pertinent information.
- **Bid Coverage:** Report on your bid coverage for a project, listed by construction code. For example, you could run a report that shows how many bidders were invited and how many accepted the invitation to bid for MEP work. If you configured color coding for each of your columns in the invited bidder details for the project bid, it will also carry forward and be shown in the report output.

## Contact Reports

The Contact Reports option enables you to report on data in the Contacts module of e-Builder.

The types of contact reports that can be run are as follows:

- **Companies:** Report on the companies listed in your contacts database. For example, a list of your vendors that qualify as diversity suppliers.
- **Contacts:** Report on the contacts stored in your contacts database. For example, a list of all of your primary contacts with each of your vendors.

## Cost Reports

The Cost Reports option enables you to report on data in the Cost module of e-Builder. The cost module allows the widest variety of report types.

The types of cost reports that can be run are as follows:

- **Project Cost Summary:** Report on Budget Cost Summary data for one or more projects. For example, a report showing the Total Budget, Commitments, and Actual Costs on each project in a capital program.
- **Budget Line Item:** Report on Cost information for each line item in the budget. For example, report on how much money is left to spend on Construction on all 5 of your active projects.
- **Budget Changes:** Report on the changes to a budget. For example, a Project Manager can see a list of all of their budget changes and the reason why each change was made.
- **Budget Change Items:** Report on budget changes for each line item in the budget. For example, a list of the budget changes for each line item in the budget on all new construction projects.
- **Budget Planning Summary:** Report on budgets while they are in the draft status. For example, a list of projects with budgets in draft status that have been submitted for approval
- **Budget Planning By Line Item:** Report on budgets at the line item detail level while they are in the draft status. For example, a Project Manager can report on how much he has budgeted for design fees on each of his projects before he approves the budgets.
- **Commitments:** Report on commitments for one or more projects. For example, prior to negotiating a new contract with a vendor, run a report on how much is committed with that vendor on all projects.
- **Commitment Items:** Report on the details of commitment items. For example, report on the breakdown by budget line item of all contracts with the General Contractor or Architect on a project.



- **Commitment Changes:** Report on any changes to commitments. For example, a Project Manager can report on all pending commitment changes to see what the impact would be if each of the associated change orders were approved.
- **Commitment Change Items:** Report on the changes to commitments at the commitment item level. For example, a detailed list of the impact on each commitment item of the change orders on a project.
- **Actual Costs:** Report on the invoices for one or more projects. For example, a report of the invoices approved by month during the course of a project.
- **Actual Cost Items:** Report on the details invoice items. For example, a report showing the contracts on a project and the detailed breakdown of how much has been paid on each one.
- **Items Pending Approval:** Report on the draft items that are awaiting approval. For example, a list of all of the commitments that need to be approved by the Project Manager.
- **Funding Sources:** Report on the status of the funding sources for one or more projects. For example, show how much has been used from each funding source and what the remaining balance is.
- **Funding Source Transactions:** Report on the individual transactions involving the funding sources. For example, a report showing all of the transactions on the funding source.
- **Budget Funding:** Report on the funding source allocations assigned to each budget line item. For example, a matrix report showing all the funding sources and their budget line item allocation amounts, grouped by account code and description.
- **Commitment Funding:** Report on the funding source allocations assigned to each commitment line item. For example, a matrix report showing all the funding sources and their commitment line item allocation amounts, grouped by account code and description.
- **Actual Cost Funding:** Report on the funding source allocations assigned to each invoice line item. For example, a matrix report showing all the funding sources and their invoice line item allocation amounts, grouped by account code and description.
- **Cash Flow:** Report on the expected cash outflows in previous or future months for one or more projects. For example, a Program Manager can report on the expected cash flow in the coming 12 months in order to plan when to borrow the necessary funds.
- **Cash Flow Details:** Report at the budget line item level on expected cash outflows. For example, a report that shows how much money is expected to be spent in 6 months on both design and construction.

### Tip

There is overlap in the reporting options on many of the report types. Because of this you may be able to use more than one type of cost report to provide you with the data that you need.

- In the e-Builder database, all the currency values are stored up to four decimal places but only two are viewable on the Cost View, which may lead to rounding differences. This means that if you filter on an exact decimal amount looking at data via the Cost View, you may not get the correct results.

## Calendar Reports

The Calendar Reports option enables you to report on meetings and events recorded in the Calendar module of e-Builder.

The types of calendar reports that can be run are as follows:

- **Events:** Report on calendar events that you have access to view in e-Builder. For example, a list of meetings that you created on a specific project.
- **Attendees:** Report on who attended calendar events. For example, report on the number of times each member of your team attended the weekly status meeting.

### Combined Reports

The Combined Reports option enables you to report on data in both the Schedule and Cost modules of e-Builder in the same report.

**Note:** If your account is not using both the Cost & Schedule modules, then you will not see it listed as an option.

The columns available for selection in the subsequent steps will include both Schedule and Cost fields.

The types of combined reports that can be run are as follows:

- **Project Cost and Schedule:** Report on the high level Cost and/ or Schedule information on some or all of your projects. For example, a program wide executive status report that shows the starting dates and budgets for each project.

### Document Reports

The Document Reports option enables you to report on data in the Documents module of e-Builder.

The types of document reports that can be run are as follows:

- **Document Usage:** Report on the number of files and folders being used on a project (or for multiple projects) and the amount data being stored. The number of files includes the number of versions for a file. For example, if you are using File A and File B but you recently uploaded a new version for File B, the total number of files will be 3. Project Managers might run this report to review how many documents have been stored for a given project.
- **Document Log:** Report on the number of individual files (excludes versions of the same file) that are uploaded into the documents area of any project. For example, a list of all files added to the Schematic Design folder during the week that they were due for submission.
- **Progress Photo:** Report on progress photos and display thumbnail images of the photos. For example, a report showing Aerials uploaded in the past 2 weeks.
- **Progress Photo Image:** Display images of the photos stored in a progress photos folder. This report would be used to see larger sized images of a specified set of progress photos. For example, to complete a close out package for a project the Project Manager may want to run a full Progress Photo report of all documented images from start to finish.

### Forms/ Workflow Reports

The Forms/ Workflow Reports option enables you to report on data in the Forms module of e-Builder.

**Note:** If your account is not using the Forms module, then you will not see it listed as an option.

The types of form reports that can be run are as follows:

- **Forms Summary:** Report on all form types filled out on one or many projects. For example, a summary of all outstanding Change Orders and Action Items on projects in the Southeast region.
- **Form Log:** Report on the custom fields created for a specific form type. For example, create an RFI log which shows the information requested field and the response for all RFIs on a project.

## Process Reports

The Process Reports option enables you to report on data in the Process module of e-Builder.

**Note:** If your account is not using the Process module, then you will not see it listed as an option.

The types of process reports that can be run are as follows:

- **Process Summary:** Report on all process types filled out on one or many projects. For example, a list of all outstanding Change Orders and Action Items on projects in the Southeast region.
- **Process Log:** Report on the custom data fields created for a specific form type. For example, create an RFI log which shows the information requested field and the response for all RFIs on a project.

## Schedule Reports

The Schedule Reports option enables you to report on data in the Schedule module of e-Builder.

The types of Schedule reports that can be run are as follows:

- **Schedules and Tasks:** Report on overall schedule and on individual tasks that compose the schedule for one or more projects. For example, a report showing all tasks on a project that are scheduled to finish 5 days or more behind schedule. This type of report can generate a Gantt Chart.
- **Schedules:** Report on overall schedule and master tasks in the schedule for one or more projects. For example, a report listing the start and finish date and each of the key master tasks included in the schedule for one or more projects.

**Note:** Master tasks are critical dates or milestones that are common across more than one project. To enable true program level reporting that meets the needs of an executive, e-Builder requires tasks to be flagged program-wide. The Administration Tools section will cover how to configure master tasks in e-Builder.

## Time Tracking Reports

The Time Tracking Reports option enables you to report on data in the Time Tracking module of e-Builder.

The following Time Tracking report can be run:

- **Time Sheet Details:** Report on the time sheet details like the creation date, entry dates, hours and activity codes.

### To select the type of data for the report

1. Open **Reports**.
2. Click **Add Report**. The Report Wizard displays.

3. From the drop-down list, select the type of report. A list of report type subsections are displayed below the drop-down list. The options vary based on the modules in use on your account.
4. Click on a report type subsection to select it. A preview of the report and a description are displayed on the right.
5. To set up the report to run as a particular user:
  - i. Click **Lookup** in the Run As User field. The Lookup window displays.
  - ii. Search for a particular user by entering or selecting values in one or more of the following filters:
    - First Name
    - Last Name
    - Username
    - Company
    - User custom field
    - Contact custom field
  - iii. Click **Filter**. The usernames matching the filter criteria are displayed.
  - iv. Select the check box beside the username you wish to choose and click **Insert Selected** to add the name to the Run As User field.

**Note:** Populate the **Run As User** field to run the report in that user's context. Leave this field blank to run the report in logged in user's context.
6. Click **Next** to proceed to Step 2 in the Report Wizard.

### Select the Type of Report

In Step 2 of the Report Wizard, you can select the type of report to use.

The following types of reports are available:

#### Tabular reports

Tabular reports provide a simple listing of data, with no subtotals. Reports for a single project with one set of data can be run as tabular reports.

**Tip:** Use this type for reports such as document logs, and contact lists.

#### Summary reports

Summary reports provide the option to sort and subtotal the data. This is the most commonly used report type.

Reports for multiple projects with different attributes can be run as summary reports.

#### Matrix reports

Matrix reports summarize data in a grid by grouping data in both rows and columns. This report type is most commonly used for reports rich in numerical data.

**Note:** Always use this report type when running a Cash Flow or Cash Flow Details report.

Use this type of report to sort by two dimensions on a report. For example, a report can be grouped by both project name and year.

#### To select the type of report

1. In Step 2 of the Report Wizard, select the radio button beside the type of report you wish to use.
2. Click **Next** to proceed to the next step of the Report Wizard. See Report Wizard for more details.

—Or—

Click **Run Report** to run your report with no additional configuration, thus skipping the rest of the steps in the Report Wizard.

#### Select Columns

In Step 3 of the Report Wizard, you can select the columns to be included in your report. You can select the data you wish to include in your report. Each piece of data will be a column in your report. This page will include all the possible reportable data types associated with the type of report you are running, including, but not limited to project information, custom fields and more.

Different sections containing data fields, which pertain to the report data you selected in Step 1, will be available for selection in this step.

#### Example

For a Process Summary report, you will see sections containing data related to Project Information, Project Custom fields, Process Information, Process Custom fields).

#### Use the Multivalued Field option

e-Builder also allows you to split the rows on the report when there is more than one value, for any multiple pick list custom field, multiple check box form field, or multiple pick list process data field. The report will display the results on separate lines instead of displaying them on one line.

#### Example

When the **Return row for each multivalued field value** check box is selected, if the result for a multivalued field is regions Eastern, Northern, and Southern, they will be displayed in the report this way:

Regions
Eastern Division
Northern Division
Southern Division

Instead of this way:

Regions
Eastern Division, Northern Division, Southern Division

## Use the Formula Builder

In addition to the fields listed on the Select Columns page you can add your own formula columns. A formula column will allow you to perform mathematical functions on the data in one or more columns.

The Formula Builder gives you a way to have report columns automatically populate with data. Both standard and unique data can be included by creating a formula using existing project information stored in e-Builder.

Formulas can range in complexity. The most straightforward formulas might include functions that automatically insert the current date and time into a report column. More complex formulas might include mathematical operations that provide the average square footage of X-ray rooms or school gyms. Another example might be the sum of the current contract values on all commitment and commitment changes.

Setting up these data fields is optional, but they can reduce the time it takes you to fill-out data fields and make information readily available without having to search through the system for it.

**Note:** Alphanumeric fields such as an address and strictly alphabetical fields such as the project names, cannot be combined with mathematical operators (+/\*) to build a formula, otherwise an error will occur. When using mathematical operators, only numeric fields can be used.

**Tip:** Use a formula column with a Cost column divided by a budget custom field for Square Feet to calculate the cost per square foot on a project.

## Functions

Functions are predefined expressions that allow you to input data to complete assignment expressions. The following options are available:

Field	Description
<b>Now()</b>	Returns current date and time in GMT: <ol style="list-style-type: none"> <li>1. Select this function.</li> <li>2. Click <b>Insert</b>.</li> <li>3. Select a field from the <b>Assign to Field</b> drop-down arrow.</li> <li>4. Click <b>Save</b>.</li> </ol>
<b>Today()</b>	Returns current date and time in your time zone (The run as user): <ol style="list-style-type: none"> <li>1. Select this function.</li> <li>2. Click <b>Insert</b>.</li> <li>3. Select a field from the <b>Assign to Field</b> drop-down arrow.</li> <li>4. Click <b>Save</b>.</li> </ol>
<b>MinDate (value1,</b>	Minimum date (applies to date fields only): Returns the smaller of two specified date values. <i>Value1</i> is the first of the two numeric values to compare. <i>Value2</i> is the second of the two

Field	Description																				
<b>value2)</b>	numeric values to compare.																				
<b>MaxDate (value1, value2)</b>	Maximum date (applies to date fields only): Returns the larger of two specified numeric values. <i>Value1</i> is the first of the two numeric values to compare. <i>Value2</i> is the second of the two numeric values to compare.																				
<b>DateDiff (datepart, start, end)</b>	<p>Returns a value for the difference between a start and end date.</p> <p>The <i>datepart</i>, <i>start</i> and <i>end</i> parameters should be enclosed with double quotes if you are not using data fields, as outlined in the steps below.</p> <p><i>Start</i> and <i>end</i> are expressions that should be resolved to a date, using any valid date formats, such yyyy-mm-dd, mm/dd/yyyy, etc.</p> <p>The table below lists all valid <i>datepart</i> arguments and the abbreviations that can be used to replace them.</p> <p><b>datepart</b></p> <table> <tr> <th>datepart</th><th>Abbreviations</th></tr> <tr> <td>year</td><td>yy, yyyy</td></tr> <tr> <td>quarter</td><td>qq, q</td></tr> <tr> <td>month</td><td>mm, m</td></tr> <tr> <td>dayofyear</td><td>dy, y</td></tr> <tr> <td>day</td><td>dd, d</td></tr> <tr> <td>week</td><td>wk, ww</td></tr> <tr> <td>hour</td><td>hh</td></tr> <tr> <td>minute</td><td>mi, n</td></tr> <tr> <td>second</td><td>ss, s</td></tr> </table> <ol style="list-style-type: none"> <li>1. Select the <b>DateDiff(datepart, start, end)</b> function and click <b>Insert</b>. The function displays as <b>DateDiff( , , )</b>.</li> <li>2. Place your cursor before the first comma.</li> <li>3. Enter double quotes + [valid datepart or abbreviation] + double quotes. So far, the formula should look similar to: <b>DateDiff("year", , )</b></li> </ol>	datepart	Abbreviations	year	yy, yyyy	quarter	qq, q	month	mm, m	dayofyear	dy, y	day	dd, d	week	wk, ww	hour	hh	minute	mi, n	second	ss, s
datepart	Abbreviations																				
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hour	hh																				
minute	mi, n																				
second	ss, s																				

Field	Description										
	<p>4. Place your cursor before the second comma.</p> <p>5. To enter a data field, click the <b>Select Field</b> drop-down arrow and make a selection.</p> <p>—Or—</p> <p>To enter a date, enter the [Date (value) function located in the Functions drop-down menu].</p> <p><b>Note:</b> For the (value) enter the end date value. For information on the [Date (value)] function, see Date(value) below.</p> <p>6. Place your cursor after the second comma.</p> <p>7. To enter a data field, click the <b>Select Field</b> drop-down arrow and make a selection.</p> <p>—Or—</p> <p>To enter a date, enter the [Date (value) function located in the Functions drop-down menu].</p> <p><b>Note:</b> For the (value) enter the end date value. For information on the [Date (value)] function, see Date(value) below.</p> <p>8. Click <b>Done</b>.</p>										
<b>DateAdd</b> <b>(datepart,</b> <b>number,</b> <b>date)</b>	<p>Returns a date with the given amount added to it.</p> <p>The <i>datepart</i>, <i>number</i> and <i>date</i> parameters should be enclosed with double quotes if you are not using data fields, as outlined in the steps below.</p> <p><i>Number</i> is an expression that can be resolved to an integer that is added to a <i>datepart</i> of <i>date</i>. If you specify a value with a decimal fraction, the fraction is truncated and not rounded.</p> <p><i>Date</i> is an expression that should be resolved to a date, using any valid date formats, such yyyy-mm-dd, mm/dd/yyyy, etc.</p> <p>The table below lists all valid <i>datepart</i> arguments and the abbreviations that can be used to replace them.</p> <p><b>datepart</b></p> <table><tr><th>datepart</th><th>Abbreviations</th></tr><tr><td>year</td><td>yy, yyyy</td></tr><tr><td>quarter</td><td>qq, q</td></tr><tr><td>month</td><td>mm, m</td></tr><tr><td>dayofyear</td><td>dy, y</td></tr></table>	datepart	Abbreviations	year	yy, yyyy	quarter	qq, q	month	mm, m	dayofyear	dy, y
datepart	Abbreviations										
year	yy, yyyy										
quarter	qq, q										
month	mm, m										
dayofyear	dy, y										



Field	Description												
	<table> <tr> <th>datepart</th><th>Abbreviations</th></tr> <tr> <td>day</td><td>dd, d</td></tr> <tr> <td>week</td><td>wk, ww</td></tr> <tr> <td>hour</td><td>hh</td></tr> <tr> <td>minute</td><td>mi, n</td></tr> <tr> <td>second</td><td>ss, s</td></tr> </table> <ol style="list-style-type: none"> <li>1. Select the <b>DateAdd(datepart, number, end)</b> function and click <b>Insert</b>. The function displays as <b>DateAdd( , , )</b>.</li> <li>2. Place your cursor before the first comma.</li> <li>3. Enter double quotes + [valid datepart or abbreviation] + double quotes. So far, the formula should look similar to: <b>DateAdd( year , , )</b>.</li> <li>4. Place your cursor before the second comma. <ol style="list-style-type: none"> <li>1. To enter a data field, click the <b>Select Field</b> drop-down arrow and make a selection. —Or— Enter a numeric value.</li> <li>2. Place your cursor after the second comma.</li> <li>3. To enter a data field, click the <b>Select Field</b> drop-down arrow and make a selection. —Or— To enter a date, enter the [Date (value) function located in the Functions drop-down menu].</li> </ol> <p><b>Note:</b> For the (value) enter the end date value. For information on the [Date (value)] function, see Date(value) below.</p> </li> <li>4. Click <b>Done</b>.</li> </ol>	datepart	Abbreviations	day	dd, d	week	wk, ww	hour	hh	minute	mi, n	second	ss, s
datepart	Abbreviations												
day	dd, d												
week	wk, ww												
hour	hh												
minute	mi, n												
second	ss, s												
<b>Date (value)</b>	<p>Allows you to convert a date in string form to a date type. <i>Value</i> is the string value.</p> <p>Examples:</p> <table> <tr> <th>Formula</th><th>Sample Output</th></tr> <tr> <td>Date("12.10.2013")</td><td>12.10.2013</td></tr> </table>	Formula	Sample Output	Date("12.10.2013")	12.10.2013								
Formula	Sample Output												
Date("12.10.2013")	12.10.2013												

Field	Description	
	Formula	Sample Output
	Date("12-10-2013")	12.10.2013
	Date("12/10/2013")	12.10.2013
	IIFDate( 1 > 2, Date("12.10.2013"), Date("12.12.2013"))	12.10.2013
	MaxDate(Date("12.10.2013"), Date("12.12.2013"))	12.10.2013
<b>IsNullDate(date)</b>	Allows you to determine whether or not a value exists for this date field. If it does, then it will be factored into the formula.	
<b>IsNullString(value)</b>	Allows you to determine whether or not a value exists for this string field. If it does, then it will be factored into the formula.	
<b>Remove-WhiteSpace(value)</b>	Returns the given value with extra spaces removed. This function removes both leading and trailing spaces from the text as well as converting blocks of multiple spaces within the text into a single space character. (e.g. the text becomes the text'). Value is the text to remove extra spaces from.	
<b>Trim(value)</b>	Removes white space from the beginning and end of the given value. (Value) is the text to strip preceding and following white space from.	
<b>Find (similar to VB Instr)</b>	Finds a string within a string & returns the character number where the search string is found.	
<b>Left (source value, length number)</b>	Use to find a specified number of characters from the left (beginning) of a string.	
<b>Mid (source value, start position number, length number)</b>	Returns the middle x characters of a string, starting at position y within the string.	

Field	Description
<b>Right</b> (source value, length number)	Returns a specified number of characters from the right (end) of a string.
<b>Substitute</b> (source value, search value, substitution value)	Changes characters within a string.
<b>Replace</b> (source value, start position number, length):	Used to replace characters within a text.
<b>Rev</b> (source value)	Returns a reversed string. For example, REV(Luke) returns ekuL.
<b>Len</b> (source value)	Returns the length of the inputted variable
<b>IIFString</b> (Condition, true string, false string)	<p>If and only if (applies to text fields only):</p> <p>Evaluates the given <i>condition</i> and returns the text for <i>true string</i> if the evaluation succeeds or the text for <i>false string</i> if the evaluation fails.</p> <p><i>Condition</i>: Boolean expression used to determine which text to return.</p> <p><i>True String</i>: If condition evaluates success then this text value is returned.</p> <p><i>False string</i>: If condition evaluates failure then this text value is returned.</p>
1. Select this function.	

Field	Description
	<ol style="list-style-type: none"> <li>Click <b>Insert</b>.</li> <li>Place your cursor before the first comma, enter the condition by selecting a data field from the <b>Select Field</b> drop-down arrow, and then click <b>Insert</b>.</li> <li>Place your cursor before the second comma. To use a data field for the "if true value", make a selection from the <b>Select Field</b> drop-down menu and click <b>Insert</b>. —Or— To enter your own value, enter double quotes + [true string value] + double quotes.</li> <li>Place your cursor after the second comma. To use a data field for the "if false value", make a selection from the <b>Select Field</b> drop-down menu and click <b>Insert</b>. —Or— To enter your own value, enter double quotes + [false string value] + double quotes.</li> <li>Click <b>Done</b>.</li> </ol>
<b>IIFNumber (Condition, true string, false string)</b>	<p>If and only if (applies to number fields only):</p> <p>Evaluates the given <i>condition</i> and returns the number in <i>true number</i> if the evaluation succeeds or the number in <i>false number</i> if the evaluation fails.</p> <p><i>Condition</i>: Boolean expression used to determine which number to return.</p> <p><i>True String</i>: If condition evaluates success then this number value is returned.</p> <p><i>False string</i>: If condition evaluates failure then this number value is returned.</p> <ol style="list-style-type: none"> <li>Select this function.</li> <li>Click <b>Insert</b>.</li> <li>Place your cursor before the first comma, enter the condition by selecting a data field from the <b>Select Field</b> drop-down arrow (e.g. Contract Sum), and then click <b>Insert</b>.</li> <li>Place your cursor before the second comma. To use a data field for the "if true value", make a selection from the <b>Select Field</b> drop-down menu and click <b>Insert</b>. —Or— To enter your own value, enter double quotes + [true number value] + double quotes.</li> <li>Place your cursor after the second comma. To use a data field for the "if false value", make a selection from the <b>Select Field</b> drop-down menu and click <b>Insert</b>. —Or— To enter your own value, enter double quotes + [false number value] + double quotes.</li> <li>Click <b>Done</b>.</li> </ol>

Field	Description
<b>IIFDate</b> <b>(Condition, true string, false string)</b>	<p>If and only if (applies to date fields only):</p> <p>Evaluates the given <i>condition</i> and returns the date in <i>true date</i> if the evaluation succeeds or the date in <i>false date</i> if the evaluation fails.</p> <p><i>Condition</i>: Boolean expression used to determine which date to return.</p> <p><i>True String</i>: If <i>condition</i> evaluates success then this date value is returned.</p> <p><i>False string</i>: If <i>condition</i> evaluates failure then this date value is returned.</p> <ol style="list-style-type: none"> <li>1. Select this function.</li> <li>2. Click <b>Insert</b>.</li> <li>3. Place your cursor before the first comma, enter the condition by selecting a data field from the <b>Select Field</b> drop-down arrow (e.g. Contract Sum), and then click <b>Insert</b>.</li> <li>4. Place your cursor before the second comma. <p>To use a data field for the "if true value", make a selection from the <b>Select Field</b> drop-down menu and click <b>Insert</b>.</p> <p>—Or—</p> <p>To enter your own value, enter double quotes + [true string value] + double quotes.</p> </li> <li>5. Place your cursor after the second comma. <p>To use a data field for the "if false value", make a selection from the <b>Select Field</b> drop-down menu and click <b>Insert</b>.</p> <p>—Or—</p> <p>To enter your own value, enter double quotes + [false string value] + double quotes.</p> </li> <li>6. Click <b>Done</b>.</li> </ol>
<b>MinNumber</b> <b>(value1, value2)</b>	<p>Minimum number: Returns the smaller of two specified numeric values. <i>Value1</i> is the first of the two numeric values to compare. <i>Value2</i> is the second of the two numeric values to compare.</p>
<b>MaxNumber</b> <b>(value1, value2)</b>	<p>Maximum number: Returns the larger of two specified numeric values. <i>Value1</i> is the first of the two numeric values to compare. <i>Value2</i> is the second of the two numeric values to compare.</p>
<b>IsInList</b> <b>(list, value)</b>	<p>Returns true if a value is contained in either (1) the selected values of a Multi Pick List Custom Field column, or (2) the values in a comma delimited string. IsInList() must be used as part of a condition in formulas like IIFString, IIFNumber, or IIFDate.</p> <p><i>List</i> is a Multi Pick List Custom Field column, or comma delimited string.</p>

Field	Description						
	<p><i>Value</i> is the value to search for.</p> <p>Examples:</p> <table> <tr> <th>Formula</th><th>Sample Output</th></tr> <tr> <td>IIFString(IsInList({CustomProject.ProjectMPLCustomField}, 2), 2 was in the list, 2 was not in the list)</td><td>2 was in the list</td></tr> <tr> <td>IIFString(IsInList("one, two, three", "two"), "two is in the list", "two is not in the list")</td><td>two is in the list</td></tr> </table>	Formula	Sample Output	IIFString(IsInList({CustomProject.ProjectMPLCustomField}, 2), 2 was in the list, 2 was not in the list)	2 was in the list	IIFString(IsInList("one, two, three", "two"), "two is in the list", "two is not in the list")	two is in the list
Formula	Sample Output						
IIFString(IsInList({CustomProject.ProjectMPLCustomField}, 2), 2 was in the list, 2 was not in the list)	2 was in the list						
IIFString(IsInList("one, two, three", "two"), "two is in the list", "two is not in the list")	two is in the list						
<b>Str (value)</b>	<p>Converts a value to a string. This function gives you the ability to output a string or empty value. <i>Value</i> is the value you want to convert to a string. conversion of date diff..works best for string or number</p> <table> <tr> <th>Formula</th><th>Sample Output</th></tr> <tr> <td>Str(1+2)</td><td>3</td></tr> <tr> <td>IIFString (1&gt;2, "", Str(DateDiff("d", Today (), {Portals.CreateDate})))</td><td>5</td></tr> </table>	Formula	Sample Output	Str(1+2)	3	IIFString (1>2, "", Str(DateDiff("d", Today (), {Portals.CreateDate})))	5
Formula	Sample Output						
Str(1+2)	3						
IIFString (1>2, "", Str(DateDiff("d", Today (), {Portals.CreateDate})))	5						
<b>Done</b>	Click to save the formula. If the expression is invalid, an error message displays for you to make necessary corrections.						
<b>Cancel</b>	Click to cancel the operation and close this window.						

#### To select columns to include in your report

1. In step 3 of the Report Wizard, select the check boxes for the data you wish to include as columns in your report.

**Note:** The columns listed will vary based on the type of data selected in Step 1 of the Report Wizard.

**Tip:** Some of the columns will already be selected when you arrive at this step. To add or remove columns from the report, select or clear the check box next to the name of the column. To add or remove all of the columns in one section click the **Select All** or **Deselect All** link corresponding with the name of that section.

2. To add formula columns, click **Add New Formula Column**. The Formula Builder popup displays where you can define the formula name and format.

### To add formula columns

- i. In the Formula Builder window, enter a name for the formula column in the **Label** field. This is a required field.
- ii. From the **Decimal Places** drop down list, select a preferred decimal placement for integer values.
- iii. In the **Use Parentheses for Negative Values** field, choose one of the following options:
  - **Yes**: Select this option to use parentheses around negative values. This is the default selection.
  - **No**: Select this option if you do not want negative values to be denoted by parentheses or distinguished at all.
- iv. Within the **Formula** section, choose a field name from the **Select Field** drop-down list then click **Insert**.

**Note:** The selections in this drop-down arrow will also vary depending on the fields configured. Moreover, if the workflow is for a cost-related process, it will contain many more fields, specific to cost.

- v. From the **Operators** section, click on the operator you wish to add.

**Tip:** Operators are used to build formulas between data fields. Alphanumeric fields such as an address and strictly alphabetical fields such as the project names, cannot be combined with mathematical operators (+, -, /, \*) to build a formula, otherwise an error will occur. When using mathematical operators, only numeric fields can be used.

- vi. From the **Functions** drop-down list, choose the mathematical function to use and click **Insert**. The selections are displayed in the formula preview section.
  - vii. Continue this process until the formula value is fully defined.
  - viii. Click **Done**. Any errors in the formula are displayed below the preview section, if present. If there are no errors, the formula column is added to the Report Wizard.
  - ix. Select the check box next to the newly added formula column label to add it as a column to the report.
3. Select the **Return row for each multivalued field** value check box to display the values of a data type which may have multiple values into separate columns.
  4. Click **Next** to proceed to Step 4 in the Report Wizard.

### Select Aggregate Functions

In Step 4 of the Report Wizard you can select the aggregate functions to include in your report.

### Columns

The Standard Summary Fields section will always display the Record Count row, along with the Sum check box to indicate that all columns will have a total count and it can only use the Sum aggregate function.

This section will also list out all the columns you selected to include in the report in step 3 of the Report Wizard. Each row will have check boxes within the column that is applicable for that item, and you can select all the aggregate functions you wish to have applied.

### Example

If you wish to sum up a report column by Largest Value and Smallest Value then you would select both check boxes for that report column.

### Aggregate Functions

The following aggregate functions are available:

- **Sum Summary:** The Sum aggregate function totals the values of the column that it is selected for. It will be available on every report type for the Record Count column. Using the sum field on the record count column will provide a total for the number of records returned on the report. When available, select this check box to have the report column in context totaled by summing up all the values of that column.

The sum option will also be available for other columns that have numeric values, such as Budget or Actual Cost columns.

- **Average Summary:** The Average aggregate function takes an average of the values of the column that it is selected for. It will also return the average of any columns that are grouped (see below).

The average option will be available for columns that have numeric values, such as Budget or Actual Cost columns. When available, select this check box to have the report column in context totaled by averaging all the values of that column.



- **Largest Value Summary:** The Largest Value aggregate function returns the largest value from the column that it is selected for. It will also return the largest value from any columns that are grouped. When available, select this check box to have the report column in context totaled via listing the largest value within that column.

The largest value option will be available for columns that have numeric values, such as Budget or Actual Cost columns.

The Largest Value result will be displayed as Max.

- **Smallest Value Summary:** The Smallest Value aggregate function returns the smallest value from the column that it is selected for. It will also return the smallest value from any columns that are grouped. When available, select this check box to have the report column in context totaled by listing the smallest value within that column.

The smallest value option will be available for columns that have numeric values, such as Budget or Actual Cost columns.

The Smallest Value result will be displayed as Min.

- **% Total Function:** When available, select this check box to have the report column in context totaled via percentages. The % Total aggregate function provides information on the percentage of the total for items on a report that are grouped. For example if the first group in the report has 10 and the total is 100, then the % total will display 10%. It will always add to 100% in the Grand Totals row located at the bottom of the report.

#### Tip

If you are using a Tabular report then the % Total function will not provide any value, as it will only display the 100% indicator at the bottom of the report.

The % Total option will be available for columns that have numeric values, such as custom fields that are of type integer or decimal and Budget or Actual Cost fields, to name a few.

- **Match:** If all rows within a particular report column have the same value then you can select the **Match** check box to have that value appear in the report column's total row.

#### To select aggregate functions to include in the report

1. In Step 4 of the Report Wizard, select the check box corresponding to the aggregate function(s) you want to use.
2. Click **Next** to proceed to the next step of the Report Wizard.

#### Configure Columns

Step 5 of the Report Wizard allows you to configure the report columns so that you can customize how the report will look once it has been run. They will be displayed from left to right when the report is run. To move a column, click the name of the column in the middle box, and click either the top, up, down, or bottom buttons.

**Note:** The columns listed will vary based on the columns selected in Step 3 of the Report Wizard.

#### To configure columns for the report

1. In Step 5 of the Report Wizard, select one or more of the following column configuration settings:
  - **Column Order:** All columns that were selected in Step 3 of the Report Wizard will appear in the Column Order section. Click a report column and use the directional arrows to rearrange the order of the column. Do the same with the other report columns to customize the order in which the columns will display.
  - **Sort Order:** Select a report column from the Sort Order drop down list and all the report columns included in this report will display. Click a report column, then click the Ascending radio button if you wish to have the column's contents arranged in ascending order; or click the Descending radio button if you wish to have it in the descending order. If not defined then the column will be appear in ascending order.
  - **Set Column Widths:** Hover over the column headers within the Set Column Widths section to see the column width arrow that allows the user to adjust the report column widths. Once you see the column width arrow beside a column, click it and drag to the right to make that report column wider, or to the left to make report column narrower.
  - **Set Column Highlights:** You can set column highlights whenever integer, decimal or currency fields are selected as report columns. First, define the column to highlight and the reference column; then define the low range, low-mid threshold, mid-range, mid-high threshold, and high range colors to be used.
  - **Logo:** Select a logo from the drop down list to add it to the report. A preview of the logo is displayed to the right.
2. Click **Next** to proceed to Step 6 in the Report Wizard.

### Select Grouping

In step 6 of the Report Wizard, you can select columns to group your report by.

Example: If you wish to have all your project data grouped by the country pertaining to the project, then select this and see all rows for each country grouped together within the report.

**Note:** If you have selected a Tabular report (defined in step 2 of the Report Wizard) then step 6 of the Reports Wizard will be the Specify Filter step, as the grouping option is not available for this type of report. If you have selected either a Summary or Matrix report in Step 2 of the Report Wizard, then Step 6 of the Report Wizard allows you to configure row groupings so that your report rows are grouped together via the summary information specified.

### Grouping for Summary Reports

If you selected a summary report in Step 2 of the Report Wizard, you can select one or two fields to summarize the information by.

#### To select the row grouping for a summary report

1. Select the appropriate field from the **Summarize Information By** drop-down list under Select Row Grouping. The options are dependent upon what type of data is being reported on (Step 1 of the Report Wizard).

2. Select an option from the **Sort Order** drop down list to display the results in either the ascending or descending order.
3. From the **Group Dates by** drop down list, select from the following options:
  - Date
  - Week
  - Month
  - Quarter
  - Year
  - Fiscal Quarter
  - Fiscal Year

**Note:** The Group Dates By field is enabled when you select a date field in the Summarize Information By field.

4. Repeat the previous steps in the **and then By** field to summarize the data by a secondary grouping method. When two row groupings are selected, the report will first summarize the data by the top selection and then by the second.

**e-Builder** Setup | Help | Logout  
Home Dashboards Projects Forms Documents Calendar Contacts Cost Schedule **Reports** Logged in user: Paul Planning

Reports > Add Report

**Report Wizard** Step 6 of 7  
Jump to step: Select Grouping

Step 6: Select columns to group your report by

Select Row Grouping:  
Summarize Information By: Project Name  
Sort Order: Ascending  
Group Dates by: Day

and then By: Start Date  
Sort Order: Ascending  
Group Dates by: Month

Run Report Print View Export Save As Previous Next Cancel

**e-Builder** Setup | Help | Logout  
Home Dashboards Projects Forms Documents Calendar Contacts Cost Schedule **Reports** Logged in user: Paul Planning

Reports > Report Results

**Report Results**

Ad Hoc Report Hide Details Print View Export Edit Save As

Filter By: None

Project Name	Finish Date	Finish Variance	Schedule Manager	Start Date
<b>Project Type: Cap Maint.</b>				
Create Date: 03.01.2007				
Chiller Replacement	07.09.2008	0h late	Service, Anthony	10.01.2007
<b>Project Type: New</b>				
Create Date: 08.01.2006				
CNC Machine Tools Installation	01.16.2008	4d late	Scheduler, Sam	08.01.2006
Create Date: 03.01.2007				
B3 Production Plant	08.21.2008	0h late	Nobil, Jeremy	02.01.2006
Crane Install	07.16.2008	8h late	Admin, Ally	01.30.2007
<b>Project Type: Remodel</b>				
Create Date: 08.01.2006				
Generating Station Redevelopment	12.12.2007	0h late	Scheduler, Sam	07.03.2006
Water Reactor Replacement	11.30.2007	0h late	Scheduler, Sam	04.14.2006
Workshop 2nd Bay Overhaul	08.08.2007	11d late	Scheduler, Sam	09.01.2006
Create Date: 03.01.2007				
Enclose Storage Area	09.18.2008	0h late	Amirault, Candace	02.01.2007
IT Finance and OS Remodel	04.24.2008	0h late	Antevy, Jon	07.02.2007
Line 34 - New Conveyor	10.29.2007	0h late	Service, Anthony	09.01.2006
Main Process Building	08.31.2009	0h late	Service, Anthony	05.01.2007
Office and Admin Remodel	08.04.2008	6.40w early	Service, Anthony	06.01.2006
Office Area Update	10.27.2008	0h late	Brown, Silas	02.01.2007
PKG A - Line Upgrade	04.20.2007	19.20w early	Nobil, Jeremy	10.06.2006
Storage Area 2B	12.18.2007	0h late	Service, Anthony	08.01.2007
Create Date: 04.01.2007				
B7 Production Plant Renovation	01.22.2009	0h late	Callia, Dan	05.01.2007

Hide Details Print View Export Edit Save As

- Click **Next** to proceed to Step 7 in the Report Wizard.

## Grouping for Matrix Reports

If you selected a Matrix report in Step 2 of the Report Wizard, you will be able to group both rows and columns on your report.

For details on summarizing the rows, see Grouping for Summary Reports.

### To select the column grouping for a matrix report

- To select a column to summarize the information by, select the appropriate field from the **Summarize Information By** drop down list under Select Column Grouping. The options are dependent upon what type of data is being reported on (Step 1 of the Report Wizard).
- Select an option from the **Sort Order** drop down list to display the results in either the ascending or descending order.
- From the **Group Dates by** drop down list, select from the following options:
  - Date
  - Week
  - Month
  - Quarter
  - Year
  - Fiscal Quarter
  - Fiscal Year

**Note:** The Group Dates By field is enabled when you select a date field in the Summarize Information By field.

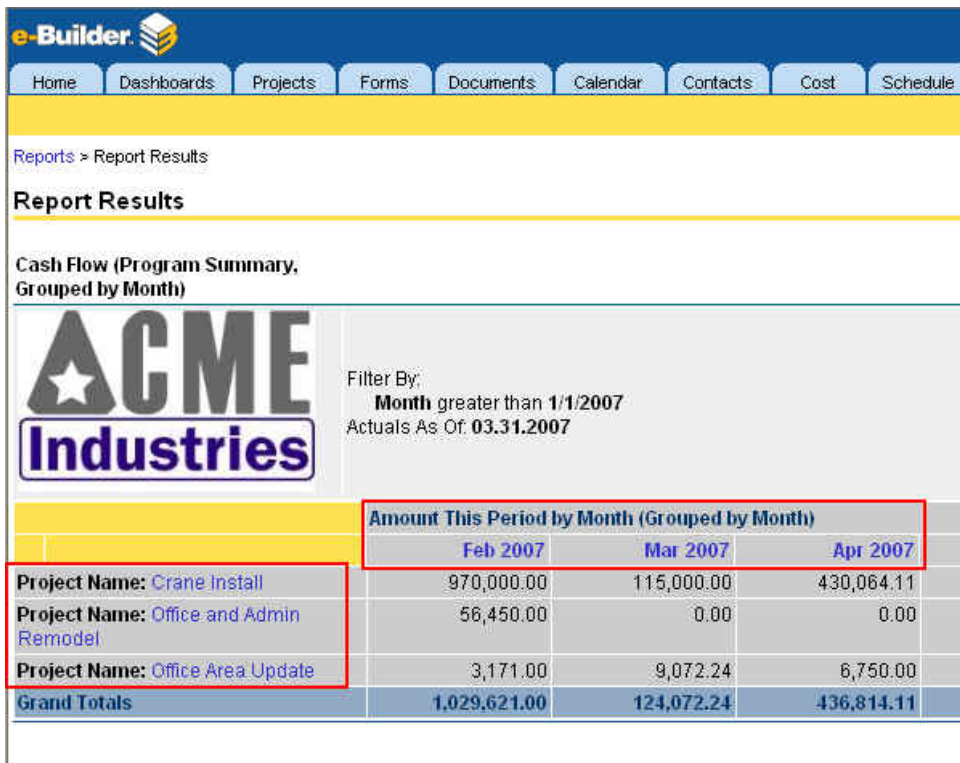
- Click **Next** to proceed to Step 7 of the Report Wizard.

The screenshot displays the 'Report Wizard' interface at Step 6 of 7. The main heading is 'Step 6: Select columns to group your report by'. Below this, there are three sections for configuration:

- Select Row Grouping:** Includes 'Summarize Information By' (set to 'Project Name'), 'Sort Order' (set to 'Ascending'), and 'Group Dates by' (set to 'Day').
- and then By:** Includes a dropdown menu, 'Sort Order' (set to 'Ascending'), and 'Group Dates by' (set to 'Day').
- Select Column Grouping:** This section is highlighted with a red box. It includes 'Summarize Information By' (set to 'Month'), 'Sort Order' (set to 'Ascending'), and 'Group Dates by' (set to 'Month').

At the bottom, there are buttons for 'Run Report', 'Print View', 'Export', and 'Save As', along with 'Previous', 'Next', and 'Cancel' navigation buttons. The top of the interface shows the 'e-Builder' logo and a navigation menu with options like Home, Dashboards, Projects, Forms, Documents, Calendar, Contacts, Cost, Schedule, and Reports. The user is logged in as 'Paul Planning'.

The report output will summarize the data into summary rows and columns, as shown below.



**e-Builder**

Home Dashboards Projects Forms Documents Calendar Contacts Cost Schedule

Reports > Report Results

**Report Results**

Cash Flow (Program Summary, Grouped by Month)

**ACME Industries**

Filter By: **Month** greater than 1/1/2007  
Actuals As Of: 03.31.2007

	Amount This Period by Month (Grouped by Month)		
	Feb 2007	Mar 2007	Apr 2007
Project Name: Crane Install	970,000.00	115,000.00	430,064.11
Project Name: Office and Admin Remodel	56,450.00	0.00	0.00
Project Name: Office Area Update	3,171.00	9,072.24	6,750.00
<b>Grand Totals</b>	<b>1,029,621.00</b>	<b>124,072.24</b>	<b>436,814.11</b>

### Tip

When running a cash flow report, the Matrix report type must be used.

### Specify Filter Criteria

You can specify filter criteria for the report in the last step of the Report Wizard.

Step 7 of the Report Wizard allows you to customize what filtered data should be displayed within this particular report. You can zoom into really specific data filters that will expose certain values without having to search through the product. Or you can limit your filtering, in which case, more data will be returned based on what data was selected to be included in the report, specified in other steps of the wizard.

**Note:** This is step 6 when using a Tabular report, and step 7 when using a Summary or Matrix report.

### Standard Date Filter

In this section, there is a drop-down for selecting the date fields available for just this report type (a subset of the fields in the full filter below). When the dates are entered, then only data that falls within that date range, for the selected column, will appear in the report.

The Duration drop-down includes a Custom selection, along with other selections for Fiscal Year, Fiscal Quarter, Calendar Year, Calendar Quarter, Month, and Weekday. When an option is chosen, the user is shown what the corresponding dates would be as of the current moment. Custom is the default (no start or end date are populated).

These standard filter values are saved with the report's definition.

Report Wizard

Step 6 of 6

Jump to step: Specify Filter

Standard Date Filter

Columns: Actual Finish Date

Duration: Custom

Dates: Start Date: End Date: Clear

Step 6: Specify filter criteria for this report

Previous Cancel

Search in: All Tasks

Project Filter: ☐ Must select a project while running the report

Search Rule #1:

Search Rule #2:

Search Rule #3:

Search Rule #4:

Search Rule #5:

and

and

and

and

Note: In column 3, you can enter multiple items separated by commas (e.g. FL, GA searches for FL or GA) and you can place quotes around data that includes commas (e.g. "10,000" searches for 10,000). For yes/no or on/off fields, "1" equals yes or on, and "0" equals no or off.

Run Report Print View Export Save Save As Previous Cancel

To specify the standard date filter

1. From the **Columns** drop down list, select the date column you wish to filter the report by.

2. From the **Duration** drop down list, select a time duration for the report. The **Dates** fields are automatically populated with the corresponding dates, as of the current moment.

Tip: The Duration drop-down includes a Custom option, along with other options for Fiscal Year, Fiscal Quarter, Calendar Year, Calendar Quarter, Month, and Weekday. The default selection for this field is the Custom option (no start or end dates are populated). The selection in this field will omit data that doesn't match this date duration filter within the column specified above.

3. In the **Dates** field, click the date picker and select dates from the **Start Date** and **End Date** date pickers to change the automatically populated dates.

Tip: To remove the selection, click the **Clear** hyperlink. The Start and End Date fields will be cleared.

Filter Criteria

The Specify Filter step allows you to create and use up to five search rules in your report. With these search rules, the results of the report can be limited to show only a specific sub-set of the data that you have access to. For example, this is useful in cases where it is not necessary to include all projects on a report. Additionally, you are also able to use the same single project report for any project.

Note: To limit the report results to only one project, select the **Must select a project while running the report** check box in the filter criteria section. If this check box is selected, you will be prompted to select a project each time the report is run. When a Project Filter is enabled and a project is selected, the currency amounts in reports are displayed in the Project Currency if the multi-currency feature has been enabled for the account.

To create search rules

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1. Select the field name to use for the filter from the first drop down list beside **Search Rule #1**. The second drop down list is enabled.

**Note:** The options available in this field are based on the type of data included in the report.

2. From the second drop down list beside **Search Rule #1**, select the modifier condition of the filter.

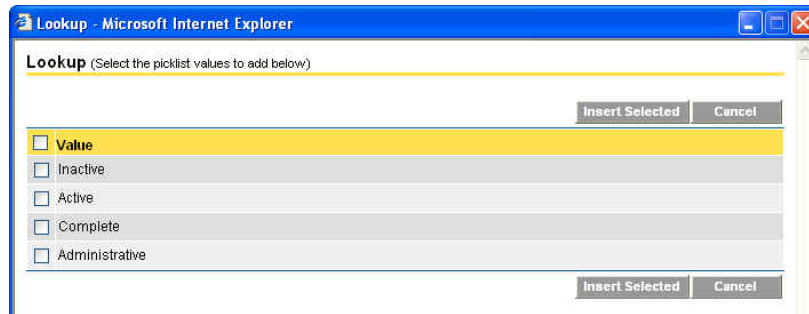
**Tip**

If you select a date field in the previous step, then there will be more options in this drop down list.

3. In the last field, enter the desired value for use in the filter.

**Tip**

- For some fields, a Lookup button is available. The lookup button will prompt you to select from the options that are available as filters for the selected field. Click **Lookup** and a new window displays with options that can be selected. Select the check box(es) next to the appropriate selections and click the Insert Selected button to add the option(s) to the report. The Lookup window will then close and the specify filter page will reflect the selections that you have made.



- You can enter specific values so that data outside of those values do not appear in your report. You can enter multiple items separated by commas. For example, FL, GA searches for FL or GA. You can place quotes around data that includes commas. For example, "10,000" searches for 10,000. For yes/ no or on/ off fields, "1" equals yes or one and "0" equals no or off.

4. Repeat the previous steps to define the other four search rules.

**Note:** The more search rules entered, the more zoomed in/ filtered the report data will become.

5. Click **Save As** to save the report.
6. Click **Run Report** to display the results of the report.

## Save Reports

You can save reports that you create with the Report Wizard.

The types of reports are:

- **Personal reports:** Reports that are saved for use at the individual level.
- **Account-level reports:** Reports that are saved for use at an account-level.

**Note:** Only Trimble Unity Construct Administrators (or those users the administrators grant the permission) are able to save reports for other users. All other users will only be able to save reports in their personal reports folder. Administrators can refer to Manage Permissions to learn how to give non-administrator users the permission to save reports to others.

### To save a new report

1. In the Report Wizard, click **Save As**. The Save Report (As) page displays.
2. Complete the required fields (marked with an \*):
  - **Report Name\*:** Enter a name for the report.
  - **Report Description:** Enter a description of the report.
  - **Report Permissions:** Specify the report access permissions in this field. The following options are available:
    - **This report is available only to me:** Select this option to save the report as a personal report which is not available to other users.
    - **This report is available to all users:** Select this option to make the report available to all users. This option is available only for Administrators.
    - **This report is available to the following roles:** Select this option to make the report available to users with specific user roles. Select the user roles from the All Roles section and click the Add button to add them to the Roles With Access section. This option is available only for Administrators.
  - **Report Folder\*:** Select a folder for the report. The Report Folder drop down list will become active if you make the report available to all users or to specified roles. If you chose to make the report a personal one, the Report Folder field is inactive and the report will be saved in your Personal Reports folder.
3. Click **Save** to simply save the report without executing.  
—Or—  
Click **Save and Run Report** to execute the report while saving it.

### To modify and save an existing report under a new name

1. Open **Reports**.
2. On the Reports page, click the **Edit** link next to the name of the report you want to edit. The Report Wizard displays.
3. Make modifications to the report as needed.
4. Click **Save As**. The Save Report (As) page displays.
5. Click **Save** to confirm the changes to the report.  
—Or—  
Click **Save and Run Report** to retain the changes and run the report immediately.



## Run Reports

From the Report Wizard page you can run the report and view the results at any time. This is also useful in setting up any new report as it will allow you to verify that the report meets your needs.

To run an existing report in e-Builder click its name. The results of the report will then be displayed on the screen.

### To run a report

1. Open **Reports**.
2. On the Reports page, click the **Edit** link next to the name of the report you want to edit. The Report Wizard displays.
3. Click **Run Report**. The Report Results page displays.

### To re-run a report

1. Open **Reports**.
2. On the Reports page, click the name of the report you want to run again. The Report Results page displays.
3. Click **Re-Run Report**. The Report Results page displays after the report is run again.

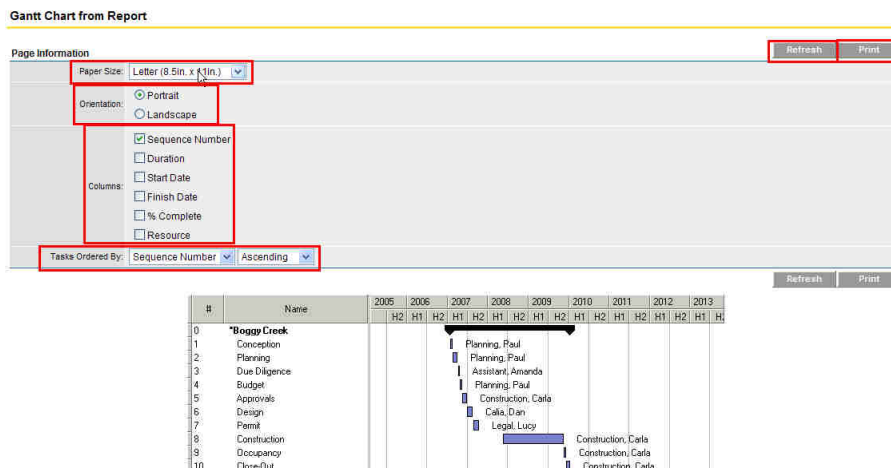
### To view the Gantt Chart - printable report

A project's Gantt chart can be printed from within the Reports module.

**Note:** Only the Schedules and Tasks type of report can generate a Gantt Chart.

1. Open **Reports**.
2. On the Reports page, click the **Edit** link next to the name of the report you want to edit. The Report Wizard displays.
3. Click **Run Report**. The Report Results page displays.
4. To graphically view your schedule, click **Gantt Chart**. The Gantt Chart from Report window displays.

You will now be able to adjust the paper size and page layout of the print out. Add columns and order the tasks. Clicking the Refresh button will update the chart with any adjustments that you have made. The Print button will send the chart to your local printer.



## Edit Reports

You may find it easier to modify an existing report to achieve the necessary output than it is to create a new report. Both account level and your personal reports can be modified and saved for later use.

You can even share a report with other team members after editing it.

### To edit an existing report

1. Open **Reports**.
2. On the Reports page, click the **Edit** link next to the name of the report you want to edit. The Report Wizard displays.
3. Make modifications to the report as needed.
4. Click **Save** to retain the changes. The Save Report page displays.

**Note:** The Save button is available only to e-Builder Administrators who can edit and save an account level report.

5. Click **Save** to confirm the changes to the report.

—Or—

Click **Save and Run Report** to retain the changes and run the report immediately.

**Note:** A report can also be edited after it has been run. From the Report results page, click **Edit** to return to the Report Wizard and modify the report. See Run a Report for more details.

### To share a report with team members

1. Open the Reports page.
2. Locate the report you want to share and click the **Edit** link for that report.
3. Make any necessary changes to the report, and then click **Save As**. The Save Report (As) page displays.
4. In the **Report Permissions** section, choose one of the sharing options:
  - **This report is available to all users:** If you chose to share the report with all users, click **Save** to retain your changes.

- **This report is available to the following roles:** If you chose to share the report with select roles, select the role(s) from the **All Roles** field and then click **Add**. The role(s) are added to the Roles With Access field.
5. From the **Report Folder** drop down list, select a folder for the report.
  6. Click **Save**.

## Import Reports

e-Builder allows you to import report files in the .xml format.

### To import a report

1. Open the Reports page.
2. Click **Import Reports**.  
The Import Reports - Select Import File page is displayed.
3. Click **Choose File** to browse for and select an import file.
4. Click **Open** to add the file to the Import Reports page.
5. Click **Next**.

The Import Reports - Review page is displayed.

6. Review the report that will be imported and click **Import**.

The report is added to the Reports main page and an import confirmation message is displayed.

## Export Reports

You can export the results of a report from Trimble Unity Construct into MS Excel for your convenience.

**Note:** The exported file will not include any row groupings, column groupings, or totals. It only includes the data from the report.

### To export a report

1. Open the Reports page.
2. To export a report, click the **Export** link next to the name of the report.
3. In the dialog box that is displayed, select the radio button for the output format you wish to use. The following options are available:
  - **Excel Data Export:** Select this option to export the report in the Microsoft Excel Worksheet (.xlsx) format.
  - **CSV Data Export:** Select this option to export the report in the Microsoft Excel Comma Separated Values (.csv) format.
  - **Tab Delimited Text:** Select this option to export the report in the Text Document (.txt) format.
4. Click **Export**. A file download window will then open that will prompt you to open or save the export file.

## Email Reports

After running a report, you can send the report results by email.

**Note:**

- There is a limit of 500 rows (users emailed to), for system speed and efficiency.
- The emailed file will not include any row groupings, column groupings, or totals. It only includes the data from the report. It will be sent as a MS Excel file.

**To email a report**

1. Open the Reports page.
2. To email a report, click the name of the report. The Report Results page is displayed.
3. Click **Send**. The Send Report window displays.
4. Complete all required fields (marked with an \*):
  - **To\***: Enter one or more email addresses in this field or click Lookup to search for and select users or contacts within Trimble Unity Construct.
  - **Subject\***: Enter a subject for the email message.
  - **Message**: Enter an optional message for the recipient.
5. Click **Send**.

## Copy User Reports

As an Administrator, you can filter down and copy existing custom reports created by another e-Builder user and make it available to all other users in the Reports module.

**To copy existing reports by another user**

1. Open the **Reports** page.
2. On the Reports page, click **Copy User Reports**. The Copy User Reports page is displayed.
3. In the Filter Users section, use one or more of the following filter criteria to filter your search for a user:
  - First Name: Enter the first name of the user.
  - Username:
  - Role:
  - Custom Fields:
  - Last Name:
  - Company:
4. In the Users section, click on a user's name to see the list of reports for that user.

## Delete Reports

Only e-Builder administrators can delete account level reports. Other users can delete their personal reports.

**Warning:** Once a report is deleted, it cannot be recovered.

**To delete a report**

1. Open **Reports**.
2. On the Reports page, click the **Delete** link next to the name of the report you want to edit. The Confirm Deletion page is displayed.
3. Click **Delete** to confirm the deletion. The report is deleted.  
—Or—  
Click **Cancel** to return to the Reports page.

## Report Subscriptions

You can subscribe to any report that is saved.

When you subscribe to a report, the report is run automatically and the results are sent to you via e-mail at a specified (recurring or non-recurring) time and date. See Report Subscriptions for more details.