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Introduction
About Informer

Informer is a web-based reporting utility that provides quick and easy access to data stored in Multivalued or SQL-based databases. The Informer interface is written using modern Web 2.0 technology that allows for drag-and-drop and other functionality used in other cutting-edge web applications. Being web-based, Informer can provide fast and secure access to data anywhere, anytime, with a few clicks of the mouse. Informer also connects SQL and Multivalue databases seamlessly, providing a single point of access to reports across multiple systems.
The User Interface
In This Chapter
In this chapter, we will:

- Log into Informer
- Review the Main Landing Page

Logging In To Informer
As with most computer applications, Informer requires users to authenticate themselves through the use of a username and password. This combination can either be linked to a network account that is used to access other applications, or it can be a separate username and password just for Informer. Your Informer or system administrator should provide you with the appropriate credentials to log in.

The Login Page

If you key your ID or password incorrectly, you will receive an error message:
Main Landing Page
After logging in, you will be taken to the main landing page. There are four sections on this page: the banner, the navigation bar, the reports listing, and report filters. We will discuss each of these in this section.

Banner
The banner at the top of the page allows you to change your password, view the documentation page on the Entrinsik website, and access different sections of Informer. The banner is always visible while in Informer.

Security can be used to control what you see in the banner. This is what a banner might look like for an administrator:

A regular user might see a banner like the one.
Notice the Power User in this case does not have access to the Mappings, Security, or Admin tabs. This is controlled through user and group security. Security will be covered in the administrative portion of the training.

**Navigation Bar**
The navigation bar shows the chain of screens that have been accessed. Each screen is a link that can be clicked to quickly go to that screen.

Another term for the links in the navigation bar is “breadcrumbs”.

As the user progresses through the screens, the chain is updated. Here the user is viewing the report results for the Tuition Balance by Term report.

Using the links, you can migrate back to the report template for Tuition Balance by Term report, or go back to the Reports Home page.
**Report Listing**

The report listing shows the reports to which you have access.

<table>
<thead>
<tr>
<th>Report Title</th>
<th>Options</th>
<th>Favorite</th>
<th>Created By</th>
<th>Last Executed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Employee List</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>Yesterday</td>
</tr>
<tr>
<td>Course Listing</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>6/8/10</td>
</tr>
<tr>
<td>Employee List</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>6/7/10</td>
</tr>
<tr>
<td>GL Activity Report</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>5/28/10</td>
</tr>
<tr>
<td>Instructor list</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>6/7/10</td>
</tr>
<tr>
<td>Residential Maps</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>5/28/10</td>
</tr>
<tr>
<td>Session Register</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>5/28/10</td>
</tr>
<tr>
<td>Student GPAs</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>6/7/10</td>
</tr>
<tr>
<td>Tuition Balance by Term</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>6/7/10</td>
</tr>
<tr>
<td>Tuition Report for Live Excel</td>
<td><img src="image" alt="Launch" /> <img src="image" alt="Details" /></td>
<td><img src="image" alt="Star" /></td>
<td>informer Administrator</td>
<td>5/28/10</td>
</tr>
</tbody>
</table>

Clicking on the report title or the Details link takes you to the report template. Clicking Launch will execute the report. The Favorites column shows whether a report has been flagged as a favorite. To flag a report as a favorite, click on the star.

The listing also shows who created the report and the last time it was executed.
Finding Your Reports
If you know part or all of a report title, you can quickly search for it by typing in the Search Reports box. As you type, Informer will begin to narrow the list of reports to those matching what you have typed.

Report Filters
Report filters allow a user to narrow down the list of reports shown in the report listing.

Reports can be filtered by:
- Set: Allows you to view reports you have flagged as favorites.
- Datasource: This will show reports using the selected datasource.
- Tag: When reports are created, tags can be added to help organize reports.
Launching Reports
In This Chapter
In this chapter, we will:

- Launch a report
- Adjust the report results
- Export the report results
- Archive the report
- Perform analytics on report results
- Create charts from report results

Launching a Report
There are two simple methods for launching an existing report. The first method is to click on the launch link in the Reports Listing.

The second method is using the Data tab on the Report Template page. Click on the report title to go to the Report Template page. Then click on the Data tab.
Some reports may require you to enter some criteria in order to filter the results properly. You will be asked for the runtime parameters before the report is launched. If you want Informer to ignore the case of the text you enter, check the box by "Ignore case".

Informer will generate the report and display the results.
Below the report results, Informer lists the number of records returned, the number of pages in the report, along with paging controls.

The page slider can be used to quickly page through the report. Click on the slider button and move the mouse to the right or left to flip through the report several pages at a time. You can also use the Previous and Next links to page through the results one page at a time, or use the First and Last to jump to the first page or the last page of the report. To display all the records on one page, click “Display All”. To switch back to a paged view, click “Display Paged”.

Adjusting the Report Results

Once you have the report displayed, you can change the results by:

- Changing the sort order
- Reordering the columns
- Grouping the results

Change the Sort Order

To change the order in which the report is sorted, click on the column header that you want to sort by.

In this example, we change the sort order to Student Name by clicking on the Student Name column header.
Notice the arrow that appears next to the Student Name heading. This means the report is sorted in ascending order by Student Name. To change the sort order to descending, click on the Student Name heading again.

The arrow is now pointing down, indicating that the results are listed in descending order.

You can choose more than one column to use in sorting by pressing the Ctrl (Control) key on your keyboard while clicking the additional column headers. For example, if you wanted the above report to be sorted by Student Name and Term, click the Student Name column, press and hold the Ctrl key, and then click Term.

Clicking the column header a third time while holding the Ctrl key will remove the sort from that column.

**Reordering the Columns**

You can change the order that the columns appear in the report simply by dragging the column header to the new location.
Grouping the Results

You can group data by dragging the column header to the Grouping area. To group our report by term, drag the Term column heading to the block that says “Drag columns here to group”.

Informer will group the report by term.
In order to see the detail within a group, click on the plus sign by the group. Informer will expand the group to show the detail.

If there are more than 10 records in the group, use the paging controls to navigate through the remaining records.

To collapse the group, click the minus sign beside the group.
You can change the order of the group by clicking on the grouped field.

If you wish to remove the grouping from the report, click on the ✗ icon beside the group.
Exporting the Report

Once the report is generated, you may need the output in some other form, such as an Excel spreadsheet or a PDF document. Informer will export to the following formats:

- Excel CSV file
- PDF
- Webpage (HTML)
- Delimited text with customized delimiter
- Tab-delimited text
- XML
- Live Excel spreadsheet

The most commonly used formats are Excel and PDF, which we will cover in this training. For the other formats, refer to the Informer user’s guide for details on their settings.

To export the report, click the Export Results link in the report results window.
Next, choose the format to which to export the report.

Choose the appropriate settings for the spreadsheet:

- To remove the column headings, uncheck the “Show Column Headers” box.
- To maintain the original formatting of dates in the report, uncheck the “Format dates for recognition in Excel” option. Leave this checked to convert the dates to a format recognized by Excel.
- For fields that are multivalued (U2 datasources only), choose how the values should be listed.
  - List one value per row – multivalues are exploded into separate rows in the Excel report.
  - List by new line – multivalues are listed in a single cell.
  - List by comma – Multivalues are listed in a single cell, separated by commas.

Click the Download Now button to download the spreadsheet.
Choose the appropriate settings for the PDF document:

- To remove the column headings, uncheck the “Show Column Headers” box.
- PDF Templates allow you to specify how you want the PDF formatted, such as margins, default headings, font settings, watermarks, etc. Templates are discussed in the administrative portion of the training session.
- To change the font settings, select the font name and size to be used in the report.
- Informer can automatically adjust the page orientation depending on the amount of data listed in the report, or you can specify landscape or portrait layout.
- Adjust the page size and margins to the appropriate values.
- To force a page break before each new group in the document, leave the “Page Break in Groups” checked. Uncheck this option to remove the page break.

Click the Download Now button to download the PDF document.

**Live Excel**

A Live Excel allows you to generate Informer reports from within Excel. You do not need to have access to Informer in order to access a Live Excel spreadsheet once it has been created. The report is run in Informer as the user who created the Live Excel file. Each time you access the Live Excel spreadsheet, the data on the report can be refreshed. It will also prompt you for any parameters required by the report when first opened.
When you click on the Live Excel export link, you will be prompted to save or open the file.

Click Open to start Excel. Depending on your security settings, you may see a warning window appear.

Click Enable to allow the data connection to be established.

If the report was set up to prompt the user for parameters, Excel will ask for the parameters as well. Regardless of whether they were required in Informer, you are always required to enter a value for parameters in Excel.
Excel will generate the report and populate the worksheet with the data.

![Image of Excel screen showing parameter value entry]

If you want to use the same value each time you open the Live Excel spreadsheet, check the box for “Use this value/reference for future refreshes”. You will no longer be prompted for the parameter.

Excel will generate the report and populate the worksheet with the data.

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Term</th>
<th>Address</th>
<th>Home Number</th>
<th>Amount Due</th>
<th>Amount Paid</th>
<th>Balance</th>
<th>2/3 Remaining</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>Term 1</td>
<td>Address 1</td>
<td>Home Number 1</td>
<td>Amount Due 1</td>
<td>Amount Paid 1</td>
<td>Balance 1</td>
<td>2/3 Remaining 1</td>
<td>Difference 1</td>
</tr>
<tr>
<td>Student 2</td>
<td>Term 2</td>
<td>Address 2</td>
<td>Home Number 2</td>
<td>Amount Due 2</td>
<td>Amount Paid 2</td>
<td>Balance 2</td>
<td>2/3 Remaining 2</td>
<td>Difference 2</td>
</tr>
</tbody>
</table>

You can save the spreadsheet for later use. If the data on the report has changed, you can either re-open the spreadsheet, or with the spreadsheet open, click on the Data tab and choose Refresh All.
Archiving

Archiving allows you to create a snapshot of a report at that moment in time. The report results are stored on the Informer server. Access to the archives, as well as what data can be viewed on the archived report, is controlled by group and user security settings. Any security set on the report does not automatically carry over to the archive. Archives maintain their access security apart from the original report.

Creating an Archive

To create an archive of a report, click on the Archive link while viewing the report results.

Informer will create an archive of the report, which can be accessed from the Archives tab on the Informer landing page.

The archives listing will display all the archives to which you have access, as well as the date the archive was created, the person who created it, the number of records on the report, and the size of the archive file. To view an archive, click on the appropriate archive title.
Depending on the level of security you have been given for archives, you can share, export, or delete the archive.

You can also perform analytics and charting on the archived report. These features are covered later in the training guide.

Sharing an Archive
To specify who can view the archive, click on the Permissions link.

You must have Full Control access to all archives or the specific archive in order to set permissions.
Access can be given to individual users or to groups of users. Permissions control what the user or group can do with the archive.

- Full control – the user or group has full access and control over the archive. This includes setting or modifying access permissions, viewing, exporting and deleting the archive.
- View – the user or group can view the archived report results.
- Export to a different format – the user or group can export the archive report results to any of the export formats.
- Delete – the user or group can delete the archived report results.

To add a user or group to the list, start typing the user or group name in the input box. Informer’s auto-complete feature will start listing users and groups that contain what you type. Click on the user or group name to add them to the list.

Or, click the ellipsis next to the input box to open the search window. Enter the search parameters, choose whether you want to search for Users, Groups, or both, and click the Search button. Informer will list the users and/or groups that match your criteria. Double-click the name you wish to add to the list. Click the Close button on the search window to return to the permissions window, or you can search for and add additional users or groups.
To change the default permission, click the Yes/No next to the appropriate access. In this example we have explicitly denied access to export the archive reports, while retaining the default permission to view and delete the archive.

![Permission Table]

The padlock indicates that the default permission has been overridden.

For a more detailed explanation of security and permission settings, see the Security section of the training manual.

Click the Save button to save the permission settings, or click Cancel to undo any changes.
Analytics

The analytics feature of Informer allows you to summarize and aggregate the data on your report in a pivot table like format. This tool becomes especially useful when you need to create summaries of data in a very large report. The analytics data can be sorted, arranged, exported, and archived like any other report.

To access the analytics page, click on the Analytics tab while viewing report results or an archived report.

On the left side of the analytics panel is the list of fields used on the report, regardless of whether they are visible or hidden. Numeric fields can be aggregated into totals, averages, minimums and maximums.
To add a column to the report, click the checkbox next to the field. Informer will list the unique values from the column. In Error! reference source not found. we have selected the State column, and in the analytics panel, Informer has listed the unique State codes from the report.

To add an aggregate value, click the checkbox next to the appropriate function. In our example, we want the total and average of the Balance field for each state.

To export the analytic report, click on Export Analytics link.

*Fields that are hidden on the report will not export, even though they are available in the analytics panel.*
Charting works in much the same way as analytics, except the output is in chart form instead of report form.

The default chart shows a total count of the records on the report. To choose the field that will be used on the X-axis of the report, click the checkbox by the appropriate field. Then, in the Value dropdown, choose the field and aggregate function to be used for the Y-axis.
Informer provides for 3 different chart formats: bar, pie, and line.

By default, Informer will display the top 10 values in the chart. To adjust this setting, change the number of values to display, or change the dropdown from Top to either All or Bottom.
You can save the chart image in PNG format for use in publications or websites. Click Capture Image to create an image of the chart.

Click on the Download Image button to save the file. Once you have finished downloading the image, click the Close button.
Creating Reports
In This Chapter
In this chapter, we will:

- Create a new report

Creating a New Report
To start a new report, click on the New Report icon on the Informer landing page.

Name (Required): Give the report a name.

Mapping (Required): Specify the datasource and file mapping to be used in the report. Which file you choose depends largely on the report you are writing. As a general rule, it is most efficient to choose the file that has most of the data being used on the report.

Description (Optional): You can enter a detailed description of the report which will show up under the report title in the report listing.

PDF Template (Optional): This setting allows you to specify the default PDF Template that will be used when exporting the report to PDF.
**Tags (Optional):** Tags provide a means to organize your reports and allow users to filter the reports they see in their report listing. You can enter an existing tag, or you can create a new tag. As you type, Informer will auto-suggest existing tag values based on what you have typed. Select an existing tag, or key a new tag name and click Add Tag.

![Image of tag selection](image)

Informer will list existing tags that match what you have typed. You can select an existing tag or enter a new tag.

Click the Next button to continue to the Report Details screen.

**Report Details**

![Image of report details](image)

The Report Details screen is where you specify the limiting criteria (filters) for the data to be used on the report and define the report layout. You can also manage the tags assigned to the report and specify who has access to the report.

**Filters**

Filters allow you to place limiting criteria on the data in the table. For example, your report should only list active employees, or you only want students who registered for the fall semester.

**A Bit About Logic**

*Note: if you are familiar with programming logic and conditional statements, you can skip this section.*

Most of the time, report criteria is fairly simple. It may be a single condition:

- Birthday equals 10/01/1963
- Last name equals Smith
- Sales greater than or equal to $1,000.00

Or it can be a combination of conditions:

Birthday equals 10/01/1963 and Last Name equals Smith

Notice the ‘and’ that joins the conditions. This means that both conditions must be true in order for the entire condition to be true. So, in this example, only people with a last name of Smith who have a birthday on 10/01/1963 would be included.

Change the ‘and’ to ‘or’, and it changes the outcome.

Birthday equals 10/01/1963 or Last Name equals Smith

‘Or’ means that only one of the conditions have to be true in order for the entire condition to be true. So you would get anyone whose birthday is on 10/01/1963, along with everyone whose last name is Smith.

An easier way to think through complex logic is to use truth tables.

<table>
<thead>
<tr>
<th>AND</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>False</td>
<td>False</td>
<td>False</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OR</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>True</td>
<td>True</td>
</tr>
<tr>
<td>False</td>
<td>True</td>
<td>False</td>
</tr>
</tbody>
</table>

Let’s use our ‘and’ example first. This is our record:

<table>
<thead>
<tr>
<th>Birthday</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/01/1963</td>
<td>Smith</td>
</tr>
</tbody>
</table>

The table will list our conditions at the top, and then whether the field value meets the condition (True) or not (False).

<table>
<thead>
<tr>
<th>Birthday = 10/01/1963 and Last Name = Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
</tr>
</tbody>
</table>

Since we used ‘and’ to join our conditions, and both conditions are True, the entire condition evaluates to True.
Let’s now assume our record to be:

<table>
<thead>
<tr>
<th>Birthday</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/01/1963</td>
<td>Jones</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birthday = 10/01/1963</th>
<th>Last Name = Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>False</td>
</tr>
</tbody>
</table>

Because one of the conditions is False, the entire condition is False.

Now let’s look at the ‘or’ condition.

<table>
<thead>
<tr>
<th>Birthday</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/01/1963</td>
<td>Smith</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birthday = 10/01/1963</th>
<th>Last Name = Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>True</td>
</tr>
</tbody>
</table>

‘Or’ requires only one condition to be true in order for the entire condition to be true. So in this example, both of the conditions evaluate to True; therefore, the entire condition is true.

If we change our record again:

<table>
<thead>
<tr>
<th>Birthday</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/01/1963</td>
<td>Jones</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birthday = 10/01/1963</th>
<th>Last Name = Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>False</td>
</tr>
</tbody>
</table>

This would still evaluate to True, because at least one of the conditions is True. In order for the entire condition to be False, both of the conditions would have to be False.

<table>
<thead>
<tr>
<th>Birthday</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/2/1923</td>
<td>Jones</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birthday = 10/01/1963</th>
<th>Last Name = Smith</th>
</tr>
</thead>
<tbody>
<tr>
<td>False</td>
<td>False</td>
</tr>
</tbody>
</table>

Because both conditions are false, the entire condition is False.

When using multiple conditions, the left-most condition is evaluated first, the next condition second, and so on. There may be times when combining more than two conditions with ‘and’ and ‘or’ you do not get the expected results.
Let’s add first name to our database and condition

<table>
<thead>
<tr>
<th>Birthday</th>
<th>Last Name</th>
<th>First Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/31/1980</td>
<td>Smith</td>
<td>John</td>
</tr>
</tbody>
</table>

Birthday = 10/01/1963 and Last Name = Smith or First Name = John

<table>
<thead>
<tr>
<th>Birthday = 10/01/1963</th>
<th>and</th>
<th>Last Name = Smith</th>
<th>or</th>
<th>First Name = John</th>
</tr>
</thead>
<tbody>
<tr>
<td>False</td>
<td>and</td>
<td>True</td>
<td>or</td>
<td>True</td>
</tr>
</tbody>
</table>

In this example we want anyone with a birthday of 10/01/1963, as well as anyone with the last name of Smith or a first name of John. Evaluating the conditions from left to right, this would result in a True condition, even though the birthday is not 10/01/1963.

To fix this, we could move the ‘or’ condition to the front so it is evaluated first, but there will be times when you are using a more complex set of conditions and will not necessarily be able to reorder them. It would be better to say that we want to evaluate the ‘or’ condition first before the ‘and’ condition without reordering our statement. To do that, we would use parenthetical grouping.

Parenthetical grouping means placing parenthesis around the conditions to force them to be evaluated first. It is the same principle that you learned in algebra where the mathematical operation inside the parenthesis is performed first. So in our example, our condition would be

Birthday = 10/01/1963 and (Last Name = Smith or First Name = John)

The conditions in the parenthesis would be evaluated first and then that result would be combined with Birthday using ‘and’. Given our example above, the entire condition would be False.

False and (True or True)
= False and True
= False
Adding Filters to Reports

From the report overview, click on the filter link. The Edit Criteria screen appears.

Criteria types allow you to specify the kind of criteria you wish to apply. The options vary depending on whether you are using a U2 or SQL datasource.
Simple Condition: This is a single condition. Example: color = red

Compound Condition: A compound condition is used to start a new parenthetically grouped set of simple conditions.

Select/Returning: (U2 only). This option allows you to select items in one file and return the keys to another file.

TCL/ECL Block: (U2 only). This allows you to enter any valid TCL/ECL command that returns a list of keys. Example: SELECT PERSON or GET.LIST MYLIST

SQL Where Clause: (SQL only). Any valid SQL Where clause (not including the WHERE). Example: color = red.

GET.LIST: (U2 only). Allows you to retrieve a previously saved list of keys.

Key List: (U2 Only). Allows you to enter the key values.

To add a criteria type to your report, click on the criteria type or click-and-drag the criteria type onto the area marked “Drag conditions here”.
**Simple Conditions**

A simple condition is a comparison of a field against a value. The value can either be a fixed literal value, something the person running the report enters, or another field.

- **Property**: The field to be used in the comparison. This can be any mapped field in the file used for the report, or in any file to which the primary file is linked.

- **Condition**: Select the appropriate condition operator. Each property type (text, numeric, and date) has its own set of condition operators.

When you’re finished adding conditions, be sure to click Save and Close!
**Value**: The value to which you are comparing the property. Value can be a literal, a prompted value, value entered by the person running the report, or another property.

- **Literal values**: these can either be constant free-text, or you can use special reserved keywords to refer to certain literal values. There are two types of keywords: date-specific and user-specific.

  Examples of date-specific keywords are TODAY, WEEK_BEGIN, QTR_BEGIN, YEAR_AGO. For a list of date-specific keywords, see the Appendix in the Informer user guide.

  User-specific keywords can be referenced using the syntax `{user.keyword}`. Examples of user-specific keywords are firstName, lastName, email. You can also create user-defined fields and assign values to individual users. Refer to the Administrative section of this training manual for instructions on how to set up and use user-defined fields.

  If the property is a text-type property, a checkbox for “Ignore Case” will be next to the input field for value. Check this box to make the value comparison case insensitive.
You can also enter a list of values, separated by commas, to compare against. For example, if you wanted the 2010SP, 2010SU and 2010FA semesters, you could enter 2010SP,2010SU,2010FA. This creates an implied OR condition. Be careful when using a list of values in a negative condition (does not match, does not contain, etc.). This will cause unexpected results.

- Prompt: the user running the report is asked to provide the value(s) when the report is launched. As with literal values, free-text can be used as well as reserved keywords and value lists. If you want to change the prompt text, enter it in the “Enter custom prompt” field. You can also specify that users are required to provide a value by clicking the checkbox next to “Require value”.

![New Condition dialog box](image)

![Prompt example](image)
- Property: used to compare the property against another property. For example, if you wanted a list of students whose first name is the same as their instructor:

**Compound Conditions**

Compound conditions are parenthetical groupings of simple conditions. Borrowing from our earlier example, we may want a report of students for a specific term who have a first name of John or a last name of Smith.

First, choose a simple condition for the term:

We can then add the condition for a specific term.

Now add a compound condition.
This starts a new grouping of simple conditions. To start adding conditions, click on Simple condition. We can now add the condition for first name.
To add another condition, click on Simple Condition.

Notice that Informer defaults the compound conditions to “or”. If we wanted to change the “or” to “and”, simply click on the link “At least one” and choose “All”. Or, to negate the conditions, choose “None”. The same can be done to the outer condition, where Informer defaults to “and”.

The same can be done on the outer condition.
Fields
Now that we have specified the conditions for the report, we need to add data to the report.

From the reports overview page, click the Columns link.

The Edit Columns screen appears.

- Adds columns to the report.
- Adds calculated columns.
- Adds aggregate functions (sum, average, etc.).
**Adding Fields**

Click “Add Fields” to place data columns on the report.

You can then choose any of the fields from the primary file, or from any file to which the primary file is linked.

To add a field to the report, double-click the field name, or drag the field onto the report.

In this example, we have added Student’s ID, first and last name, and GPA.

You can rearrange the order in which the columns are displayed by dragging the column heading to the appropriate slot.
Changing Column Settings

You can change the way a column is displayed by using the Column Display Editor. These changes apply only to the current report. They do not permanently change the settings for the column. Click the column heading to display the column in the editor.

**Column Display Editor**

<table>
<thead>
<tr>
<th>OK</th>
<th>Apply</th>
<th>Cancel</th>
<th>Remove</th>
</tr>
</thead>
</table>

- **Column Header**: Edit this text to change the header displayed above the column on the report.
- **Alias**: This is the name used to reference the field in calculated columns. This should not be changed.
- **Property**: The field or column in the database where the data is pulled.
- **Alignment**: Changes the justification of the data on the report.
- **Format**: Changes the style of the column on the report. You can bold, italicize, or underline the data, as well as add any cascading style sheet (CSS) code to format the data.
- **Hidden**: Removes the column from the report row, but the column is still available for use in sorting or calculated columns.
- **Show in row body**: Displays the data below the report row.
If the field is numeric, there are additional formatting options available:

### Column Display Editor

<table>
<thead>
<tr>
<th>Option</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column Header</td>
<td>GPA</td>
</tr>
<tr>
<td>Alias</td>
<td>GPA</td>
</tr>
<tr>
<td>Property</td>
<td>GPA</td>
</tr>
<tr>
<td>Alignment</td>
<td>Right</td>
</tr>
<tr>
<td>Format</td>
<td></td>
</tr>
<tr>
<td>Style</td>
<td></td>
</tr>
<tr>
<td>Number Format</td>
<td></td>
</tr>
<tr>
<td>Decimal Places</td>
<td>0</td>
</tr>
<tr>
<td>Use 1000 Separator</td>
<td></td>
</tr>
<tr>
<td>Currency</td>
<td>None</td>
</tr>
<tr>
<td>Negative Numbers</td>
<td>-1234.10</td>
</tr>
</tbody>
</table>

**Decimal Places**: Controls the number of decimal places to display.

**Use 1000 Separator**: Displays the default separator (comma for U.S.).

**Currency**: Specify the currency symbol to use.

**Negative Numbers**: Specify how negative numbers are to be displayed.
GPA should be 2 decimal places, so we’ll adjust the formatting accordingly.

Adding Calculations
Informer 4 introduced the ability to create calculated columns. This provides you, the report writer, with the flexibility of performing calculations and advanced functions without involving IT. There are two types of calculated columns: Template and Script. Template calculated columns are written in Java Server Template Language (JSTL). Scripted calculated columns are written in Javascript. Almost the entire Javascript language is available, with the exception of the Document Object Model (or DOM).
To add a calculated column, click Add Calculations.

You refer to the column names using their aliases. You don’t have to remember the alias names. You can simply drag the column header onto the Expression area, and Informer will add the alias for you.
If we wanted to concatenate the first and last name together, you could use either Template or Script.

Template Code:
\${STUDENT_assoc_PERSON_assoc_NAME_FIRST} \${STUDENT_assoc_PERSON_assoc_NAME_LAST}

Script Code:
STUDENT_assoc_PERSON_assoc_NAME_FIRST + " " + STUDENT_assoc_PERSON_assoc_NAME_LAST;

Because you have almost all of Javascript at your fingertips, you can refer to methods and properties:
STUDENT_assoc_PERSON_assoc_NAME_FIRST.length - returns the length of first name.
STUDENT_assoc_PERSON_assoc_NAME_FIRST.substr(0,1) – returns the first character of first name.


**Adding Functions**

You can add aggregate functions to the report to provide aggregate values such as count, minimum, maximum, average, and total for any numeric, monetary, or date (Min and Max only) column on the report. To add an aggregate function, click Add Functions, and then select the appropriate function and property.
Sorts

As seen earlier, you can change the sort order of the report on the fly by clicking the column heading while viewing the report. You can also specify the initial sort order by going into Sorts from the report definition.

Be careful when adding sorts. Specifying the sort order here will cause the database server to perform the sorting. It may be faster to leave the report unsorted and then sort the results when they are returned to the browser.
Groups

You can group your data by any field on the report. Click on the Groups link to add or change groups.

- **Choose the field to group on**
- **Choose the sort order for the group**
- **You can also add aggregate functions to the group.**

When the report is run, the groups can be expanded by clicking on the plus sign.
Normalizing

For U2 datasources, you can normalize multivalued data, which will explode the multivalues out into their own rows. Choose the fields on which to normalize.