EPSi™ 16.3

Reporting Manager
User Guide

Item number: EP10117A
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Chapter 1

EPSi solutions

The following image outlines the modules associated with the EPSi™ suite of applications. Data is obtained from source applications and then loaded into the EPSi applications using the Data Loader and Data Studio applications. The Security application controls user access to each module.

Figure 1: Overview of EPSi applications
Chapter 2

Reporting Manager

Reporting Manager is a comprehensive, enterprise reporting system.

Reporting Manager provides anytime online access to critical management information from anywhere in your organization. Its centralized data analytic strategy spans all EPSi integrated performance management solutions to assimilate operational, financial and clinical data in a comprehensive presentation format. Reporting Manager enables you to track key performance indicators for faster, better decision-making.

Accessing Reporting Manager

Reporting Manager provides online access to data across the enterprise.

You can use your intranet to access Reporting Manager, which eliminates the implementation process. Reporting Manager provides multiple levels of security. The report administrator can select standard report formats to assign to users based on user-defined roles or by individual user. The report administrator can also design and distribute custom reports. Security rights are assigned in the Security application by module and by facility and cost center. Users can only see data from their assigned cost centers to protect confidential data.

Reporting Manager is a database system and users access the database directly to have immediate access to data as it is loaded into the application.

To access Reporting Manager from the EPSi Portal, select the application launcher and click Reporting Applications.

Report administrators

The designated report administrator can select from any of the hundreds of standard report formats to assign to users based on user-defined roles or by individual user. The report administrator can also design custom reports and distribute them to users.

The report administrator can do the following:

> Assign reports to users.
> Assign access rights to users at facility and cost center levels.
> Design and distribute custom reports by role or by user.
Report formats

Reporting Manager provides immediate access to a comprehensive decision support database that contains payroll, productivity, general ledger, cost accounting, and patient clinical and financial information. Select a standard report format or customize a report.

**Payroll**

- Pay period or monthly formats for dollars, hours, and full-time employees (FTEs)
- Variance reports at any level of detail
- Productivity reports (comparing actual, target, and benchmark productivity)

**General Ledger**

- Consolidated income statements
- Departmental operating statements
- Variance month year-to-date (YTD) comparing 2 or 3 years
- Subledger detail including A/P, materials management, and journal entries
- Key operating indicator reports

**Capital Budgeting**

- Project summary
- Project detail
- Project analysis
- Cash flow
- Return on investment
- Actual and budgeted expenditures

**Cost Accounting**

- Overhead allocation analysis
- Trial balance
- RVU analysis
- Complete detailed cost analysis
Product Line Analysis

- Service line cost analysis
- Service line profit and loss statements
- Managed care reimbursement audit reports
- Payment analysis (actual vs. expected)
- Utilization analysis
- Treatment profile analysis

System Audit reports

- Archive request history
- Data delete audit logs
- Task history report
- User login history
Chapter 3

Report types

Standard reports

When you first open Reporting Manager from the application launcher, the Standard Reports pane is displayed.

Standard Reports contains over 350 preconfigured reports. Select a report from the various preconfigured standard reports. You can use Search at the top of the Standard Reports pane to quickly search for a report.

Figure 2: Standard Reports

Access to the standard reports depend on your module security rights as well as permission rights to each individual report. There is a report administrator option available in the Security module that grants users access to all standard reports. See the EPSi Security User Guide for more information about assigning user security rights.

EPSi might update standard reports periodically, so you cannot save changes directly to any standard reports. You must start with a standard report, update the report, and save it as a distributed report or in My Reports.

Using standard reports

Standard reports include several formatting options and control over content and display. Columns are prebuilt with additional options to customize headings, adjust column widths, select font and
size, adjust margins, set the default page orientation, and perform other general formatting. Sorting is also available on many of the standard reports.

The toolbar across the top of Reporting Manager enables you to control report qualities and is available for all of the input listings, payments, utilization, profit and loss, patient, and physician standard reports.

Depending on the report selected, various tabs are displayed to control report properties, patient search and product line searches, columns and general formatting, sort options, subtotal options, ranking options, a results filter capability, and summary tab. You have flexibility in selecting additional columns on many reports as well as various subtotal options.

Related information
Select and open a standard report on page 13

Distributed reports

The Distributed Reports pane contains reports that are distributed to you by a report administrator.

The report administrator can distribute reports across the organization by user-defined roles or by user. Your access rights determine the cost centers and data that you can view. The report administrator can update the distributed reports each month or as necessary. By using distributed reports, report administrators can ensure that they are not overwriting any saved custom reports that are displayed in My Reports.

The reports in Distributed Reports are organized in a user-defined hierarchy of folders.

Figure 3: Distributed Reports

Related information
Select and open a standard report on page 13
My Reports

My Reports contains reports that the current user saves and reports that are shared by another user.

You can schedule My Reports to run as often as daily, or as infrequently as once a year. You can also run My Reports on demand. The reports in My Reports are organized in a user-defined hierarchy of folders.

Report administrators can view other users’ My Reports, which enables them to help users troubleshoot their reports. To view another user’s My Reports, an administrator can select the user in User in the My Reports pane.

Note: When report administrators are viewing another users’ My Reports, Save is disabled, which prevents an administrator from changing another user’s report. A report administrator can use Save As to save the other user’s report as a report in his or her own My Reports.

Figure 4: My Reports

Related information
Select and open a standard report on page 13
Chapter 4

Working with EPSi reports

Select and open a standard report

1. In the EPSi Portal, click the application launcher and select Reporting Applications > Reporting. The Standard Reports pane is displayed.
2. Do 1 of the following to locate the report.
   > In the Search Report Name box, enter the name of the report you want to open.
   > Under Standard Hierarchy, click the arrow next to a folder to expand and view the contents. Continue to expand the hierarchy until the report you want to open is displayed.
3. Click the name of the report. The report is displayed in Reporting Manager.

Related information
- Reporting toolbar on page 13
- Page Layout toolbar on page 14

Reporting toolbar

The Reporting toolbar is displayed when you open a report.

![Figure 5: Reporting toolbar](image)

Report Administration

Click Report Administration to access important reporting functions.

Note: This option is only available for report administrators.
Save

Click **Save** to save a report after making changes (not available for standard reports).

Save As

Click **Save As** to save a copy of a report with a new name.

Reset

Click **Reset** to clear any changes you make to a report and revert to the last saved version of the report.

Run

Click **Run** after you configure a report to generate the results.

Cube

Click **Cube** to run the report as a cube.

**Page Layout toolbar**

The **Page Layout** toolbar is displayed when you open a report.

![Page Layout toolbar](image)

**Figure 6: Page Layout toolbar**

**Note:** The **Page Layout** toolbar is not available for reports that require custom formatting to create the report template.

Margins

Click **Margins** to adjust the margins of the report. In **Custom Margins**, use the up and down arrows to specify the size in inches of each margin.

Orientation

Click **Orientation** to select either a portrait or landscape orientation for the report.
Size

Click Size to modify the size of the report. You can select Legal (8.5 x 14 inches) or Letter (8.5 x 11 inches), or select Custom Size to create additional page sizes.

Default Fonts

Click Default Fonts to set fonts for various sections of each report. In Default Section Fonts, you can adjust the font family, font size, text decoration, and text alignment for each section.

- Column Heading: The text above each column.
- Group Header: The header text for each subtotal.
- Detail/Body: The main data in the report.
- Group Footer: The footer text for each subtotal.
- Group Footer Detail: The subtotal data.
- Grand Total: The grand total footer text.
- Grand Total Detail: The grand total data.
- Report Summary: The data on the summary page of the report.

Click a report section to select the font. You can select Use Global Default Section Fonts to use the default fonts configured in Report Administration > Font Configuration > Global Default Section Fonts.

Note: Default Fonts only sets the default for the report. Font types can be overridden on the Columns and Subtotals tab in each report.

Header/Footer Format

Click Header/Footer Format to set the header and footer formats for the report. Available options include None, Allscripts Template Landscape, or Allscripts Template Portrait. By default, the header and footer are predefined based on the default page orientation used in the report.

You can build custom header and footer formats using Microsoft® SQL Server® Report Builder by clicking New. You must have security permissions on the SQL server to use this functionality.

Saving a report

There are 2 save options available in the Reporting toolbar: Save and Save As.

Use Save to save the report in its current location in the reporting hierarchy.

Use Save As when at least 1 of the following conditions is met.
You are saving changes to a standard report. You must save standard reports in **My Reports** or as a distributed report.

- You are sharing or distributing a report with other users.
- You are scheduling a report to run in the future.
- You are modifying the report in the Microsoft® SQL Server® Report Builder.

**Save a report in My Reports**

Use **Save As > My Reports** to share the report with other users and to schedule your report to run on a regular basis.

1. In the Reporting Manager report hierarchy, select a report.
2. In the **Reporting** toolbar, select **Save As > My Reports**. **Save As My Report** opens.

3. Select the folder in the report hierarchy to save the report in.
4. For **Report Name**, enter a name for the report to be displayed in the report hierarchy.
5. (Optional) Select Create Custom Format to make the report available to be edited in Microsoft® SQL Server® Report Builder.

6. (Optional) Select Run Report Immediately. If Run Report Immediately is selected when the report is shared with other users, the other users cannot make any changes to the report format, only run the report. This option is useful for users who are unfamiliar with report setup.

7. (Optional) Select Export To Table to save the results of the report in a database table instead of generating a standard report.

8. If you select Export To Table, for Table Name enter a name of the table where the results of the report will be stored. The name entered for Table Name is used as the database table name. The table is stored in the EPSi working database, as defined in Data Dictionary.

9. Select settings for Output Type and Schedule Group to schedule the report to run regularly. Output types vary between reports. The following output types are available: Report, Comma Separated Value File (CSV), Cube, Drilldown Report, and Database Table. Schedule Group determines how often and when the report is refreshed.

10. To share the report with other users, click Share This Report.
    a) For Role, select the user role or select All Users.
    b) Under Users Filtered by Role, select the users and click to move them to Users Selected for Sharing.

11. Click OK to save the report.

Related information
My Reports on page 12
Assign reports to schedule groups on page 108

Save a report as a distributed report

Use Save As > Distributed Reports to share the report with other users and to schedule the report to run on a regular basis.

1. In the Reporting Manager report hierarchy, select a report.
2. In the Reporting toolbar, select Save As > Distributed Reports. Save As Distributed Report opens.
3. Select **Distributed Reports**.
4. Select the folder in the report hierarchy to save the report in.
5. For **Report Name**, enter a name for the report which is displayed in the report hierarchy.
6. (Optional) Select **Create Custom Format** to make the report available to be edited in the SQL Report Builder.
7. (Optional) Select **Run Report Immediately**.
   If **Run Report Immediately** is selected when the report is shared with other users, other users cannot make any changes to the report format, only run the report. This option is useful for users who are unfamiliar with report setup.
8. (Optional) Select **Export To Table** to save the results of the report in a database table instead of generating a standard report.
9. If you select **Export To Table**, for **Table Name** enter a name of the table where the results of the report will be stored.
   The name entered for **Table Name** is used as the database table name. The table is stored in the EPSi working database, as defined in Data Dictionary.
10. (Optional) To share the report with other users select **By Role** or **By User**.
11. (Optional) If you selected to share the report, under Unassigned, select the users and click ➡️ to move them to Assigned.

Reports are typically distributed by role because there are fewer roles than users, making the assignment quicker. After a user is assigned to a role, he or she automatically gets access to the reports that are distributed to that role.

12. Select the settings for Set all output type and Set all schedule group to schedule the report to run regularly.

These settings specify the output type and schedule group for all users or roles that are assigned to the report. Output types vary between reports. The following output types are available: Report, Comma Separated Value File (CSV), Cube, Drilldown Report, and Database Table. Schedule Group determines how often and when the report is refreshed.

13. (Optional) Click Add New Scheduled Group to add a new schedule group.

14. Click OK to save the report.

---

**Emailing a report**

In Reporting Manager, you can select an output type of Email to send the report in an email message.

Before you can email a report, you must configure the server with the applicable email accounts. Refer to "Configuring the server to email reports" for more information.

The output type option of Email is available in the following places in Reporting Manager:

- Selecting Save As > Distributed Reports for Set All output type list.
- Selecting Save As > My Reports for Set All output type.
- In Report Administration > Assign/Schedule Reports > Schedule Group Assignment for Output Type.

When a report with an output type of Email is run, an email message is automatically generated with a PDF file of the report attached to the message.

The recipients of the email are determined by the report assignments. The users who are assigned to the report will receive the email. The application identifies the user's email based on their user ID. The user ID is linked to an email address when the user information is set up in the Security application (in User Information).

If the report is assigned to a role instead of specific users, the application uses the information from Assign Users To Roles in the Security application to identify the user IDs and linked email addresses.
The sender email and display name is configured in Microsoft SQL Server Management Server®.

Related information
Configuring the server to email reports on page 20

Configuring the server to email reports

In Reporting Manager, you can select an output type of Email to send the report in an email message. You must first set up your server with an email account.

Before you begin
Create an EPSi™ email account in the domain, for example epsiinfo@yourorganization.com.

Note: This must be set up on your exchange server by a member of the IT department.

1. Open Microsoft SQL Server Management Server® (Start > All Programs > Microsoft SQL Server > SQL Server Management Studio).
2. In the main EPSi™ database, open the email account table (T_EMAIL_ACCOUNT).
3. Enter the following information.
   > EmailAccountID: This field is automatically populated by the application.
   > SMTPServer: Enter your organization's SMTP server name.
   > Account: Enter the EPSi™ email address that you created, for example, epsiinfo@yourorganization.com.
   > FromEmail: Enter the complete email address for the account.
   > FromDisplayName: Enter the name that you want to be displayed for emails sent from this account, for example EPSI Info.

Results of this task
The account is automatically saved.
Create report folders

You can create personal folders in the distributed reports hierarchy to design and edit the structure according to the user’s preference.

The My Reports folder structure is unique for each user. The distributed reports structure is shared for all users.

1. In the Reporting Manager report hierarchy, right-click a folder.
2. Click Add/Rename Tree Node. Add/Rename Tree Node opens.
3. For Tree Node Name, enter a name for the folder.
4. Edit report and folder names by right-clicking the item and selecting Rename.
5. (Optional) Move reports or folders in the report hierarchy by dragging and dropping them in a new location.
6. Click OK. The new folder is displayed under the selected level in the report hierarchy.

Viewing and exporting a report

Click Run in the Reporting toolbar to run a report. After running a report, it is displayed in a window using a standard Microsoft® Report Viewer. You can change pages, export the report, and print the report.

The default report viewer can be updated at an organization level or at an individual level. You can make the organizational update in the Reporting Manager Control Panel. This setting can be overridden at a user level in the Users tab of the Security application.

Export options include comma delimited (CSV), Microsoft® Excel®, PDF, and Microsoft® Word.

Export report data to a database table

You can export reports to a database table using the Export tab.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Export tab.

![Figure 7: Export tab](image)

3. For **Table Name**, enter a name for the database table the results of the report will be stored. If the table name does not exist, a new table is created.

4. Click **Export To**.
5. Click **Database Table**.
   
   The report is exported. After the export is complete, a window opens to notify you that the report was successfully exported.

---

**Related information**

* Select and open a standard report on page 13

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**Export report data to a comma-separated value file**

You can export reports to a comma-separated value (CSV) file using the Export tab.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Export tab.

![Figure 8: Export tab](image)

3. Click **Export To**.
4. Click **Comma Separated Value File (CSV)**.
   
   After the export is complete, a window opens asking if you want to **Open**, **Save**, or **Save As**.

5. Select an action.
Drilldown reports

Drilldown is available in 2 general ledger reports — Profit and Loss report and Variance Report with Thresholds. Both reports are in the **Profit and Loss** folder under **General Ledger Reports**.

It is best practice to select a year on the **Search** or **Template Columns** tabs when running a drilldown report to decrease the amount of time the report takes to run.

Selections you make on the **Subtotal** tab do not affect the drilldown report. Drilldowns are subtotaled by facility, cost center, and subaccount.

> After you click **Drilldown**, the drilldown report is displayed as a separate tab in the EPSi Portal.

> You can filter drilldown reports by division. Select a division in **Division View**. You can also filter drilldown reports for a specific facility, division level, and cost center. Make these selections using the **Division Hierarchy** and **Facility Hierarchy**.

> Each detail row in a drilldown report is displayed in blue text. The blue text indicates that you can view more detailed data about that row. After clicking a detail row from the drilldown home
page, you can view detailed data by cost center or by subaccount. The heading at the top of
the grid indicates which row was selected from the original report. You can switch between the
cost center and subaccount views by selecting the corresponding option. If you select a detail
cost center or subaccount, another window opens displaying the detailed subaccount information
for the original row of the report selected and for a specific cost center.

> After you select a subaccount, Sub Ledger Detail opens. By default, accounts payable data
is displayed.

> Multiple years of data are available to view. The list of Years is determined by the Display in
Variance setting in on the Year / Account Category Options tab of the General Ledger
Control Panel.

> The subledger detail data displayed can be displayed for 1 month, an entire year, or a selected
month range. Use Month to determine which months are displayed.

> The subledger data can also be filtered by additional fields in the grid by using Filter By and
Value. Select the field to filter and manually enter the value to filter.

> Select Journal Entry in A/P Type to view journal entry data. Select Materials Management
in A/P Type to view materials management data.

> You can sort the drilldown data based on any data column in the report. To sort a drilldown
report in ascending order, click a column heading. Click the column heading again to sort the
data in descending order.

> Export the drilldown reports to Microsoft® Excel® by clicking the Excel® icon in the top right
corner of the report. A window opens confirming you want to export to Excel®. Click OK and
enter a name for the report file.

Using Boolean logic

Boolean logic is available throughout Reporting Manager.

When to use And

Use And to indicate that all the data in between the conditions of the statement should be included
in the mapping.

```plaintext
([SubAccount])>=5100
And
[SubAccount]<=5160)
```
And is also used when indicating that the mapping should include a certain cost center and subaccount.

```plaintext
{([SubAccount])}>=5100
And
[SubAccount]<={5160}
And
[Cost Center]=602
```

When a range of subaccounts or cost centers are specified, you must use parenthesis to separate the field's range from other fields.

**When to use Or**

Use Or when specifying several of the same fields that are not in a range.

```plaintext
[SubAccount]=5130
Or
[SubAccount]=5150
Or
[SubAccount]=5100
Or
[SubAccount]=5110
```

When you specify a cost center, use parenthesis to separate the different fields.

```plaintext
[SubAccount]=5130
Or
[SubAccount]=5150
Or
[SubAccount]=5100
Or
[SubAccount]=5110
And
[CostCenter]=602
```

You can also use Or to specify several ranges in the same field.

```plaintext
{([SubAccount])}>=5211
And
[SubAccount]<=5250
Or
{([SubAccount]>=5100
And
[SubAccount]<=-5120
```

**Wildcard searches**

EPSi enables you to perform wildcard searches. A wildcard search designates a certain character in a code to be a specific value. When selecting the operator, select **Begins With**.

Below are several examples of when wildcard searches are useful.
Character list

> %: Any number of characters
> _ : A single character
> [*]: Not
> [A-Z]: Range
> [ABC]: Set
> [%_^…]: Literal for reserved characters

ICD-10 procedure codes

> Robotic Assist (“8” is the first character & “C” is the sixth): 8____C
> Computer Assist (“8” is the first character & “B” is the sixth): 8____B
> Robotic or Computer (“8” is the first character & “B” or “C” is the sixth): 8____[BC]
> CAT Scans (‘B’ is the first character & “2” is the third character): B_2
> CAT Scans of Brain (‘B’ is the first character, “2” is the third character & “0” is the fourth character): B_20
> High Osmolar Contrast (“B” is the first character & “0” is the fifth): B___0
> Not High Osmolar (“B” is the first character & “0” is not the fifth): B___[^0]
> Not High or Low Osmolar (“B” is the first character & “0” and “1” are not the sixth): B____[^01]

ICD-10 diagnosis codes

> Codes with an extension of A-L (Seventh character is “A-L”): ______[A-L]
> Codes with an A Extension (‘A’ is the seventh character): ______A

MS DRG and Primary ICD9 Diagnosis reports

There are several reports preconfigured by EPSi that are available in Reporting Manager. The reports directly correspond to the MS DRG and Primary ICD-9 Diagnosis product lines in Product Line Analysis.

You can view all of the reports in the EPSi Portal in the report or cube format. You can also add them to dashboards. The following reports are available.

> EPSi - Cases and Financials by MS DRG Service Line
> EPSi - Cases and Financials by Primary ICD9 Diagnosis Service Line
> EPSi - ICD9 Dx Service Line Cost by Cost Category
> EPSi - MS DRG Service Line Cost by Cost Category
> EPSi - MS DRG Service Line Profit and Loss (Actual)
> EPSi - MS DRG Service Line Profit and Loss (Expected)
> EPSi - Primary ICD9 Dx Service Line Profit and Loss (Actual)
> **EPSi - Primary ICD9 Dx Service Line Profit and Loss (Expected)**

The cases and financials reports contain data regarding cases, charges, and costs based on the service line. They are subtotaled by product.

The cost category reports are cost reports that contain inpatient and outpatient data regarding the product line, summary cost category, and total direct and indirect cost.

The profit and loss reports contain data regarding cases, charges, actual payments, direct and indirect cost, gross margin, net profit, and margin percent for both actual and expected payments.
Chapter 5

Reporting Manager tabs

The tabs that are displayed across the top of the Reporting Manager window depend on the report that you select from the report hierarchy. Even if a tab is available for a module, it might not be used for each report in the module.

<table>
<thead>
<tr>
<th>Tab</th>
<th>Modules that use the tab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties</td>
<td>All modules</td>
</tr>
<tr>
<td>Search</td>
<td>All modules</td>
</tr>
<tr>
<td>Columns</td>
<td>All modules</td>
</tr>
<tr>
<td>Template Columns</td>
<td>General Ledger, Payroll, and Product Line Analysis</td>
</tr>
<tr>
<td>Template Lines</td>
<td>General Ledger, Payroll, and Product Line Analysis</td>
</tr>
<tr>
<td>Sort</td>
<td>All modules</td>
</tr>
<tr>
<td>Subtotal</td>
<td>All modules</td>
</tr>
<tr>
<td>Results Filter</td>
<td>General Ledger, Payroll, and Product Line Analysis</td>
</tr>
<tr>
<td>Ranking</td>
<td>All modules</td>
</tr>
<tr>
<td>Summary</td>
<td>All modules</td>
</tr>
<tr>
<td>Division</td>
<td>General Ledger, Payroll, Productivity, Capital</td>
</tr>
<tr>
<td>Patient Search</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td>Product Line</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td>Patient Event Tab</td>
<td>Product Line Analysis</td>
</tr>
</tbody>
</table>
Properties tab

Use the Properties tab to define whether the report includes inpatient data, outpatient data, inhouse patients, if the report is admission or discharged date based, and the time period.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Type</td>
<td>This property is available in General Ledger Variance reports to select the type of general ledger accounts (revenue, expenses, or deductions) to use in the report.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Activity Costing</td>
</tr>
<tr>
<td>Begin Month</td>
<td>The first month used in the report.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Productivity</td>
</tr>
<tr>
<td>Begin Pay Period</td>
<td>The first pay period used in the report.</td>
<td>Payroll module</td>
</tr>
<tr>
<td>Bypass Patient Population Build</td>
<td>This property is available in several Product Line Analysis reports. It can be used to improve performance times in certain reports. By default, this property is set to True. If the date range specified for the report is wide, and the Patient Search qualifications are restrictive, it is best practice to set this property to True. If your report can benefit from qualifying patients based on an initial date range (from Report Properties) and the date range can prefilter the patients, then set this property to False. Try experimenting with this property to determine which way the report runs faster to achieve optimal performance. This property does not affect the results of the report.</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td>Contract Model</td>
<td>This property is used in the Explanation of Benefits (EOB) report to select the contract model the report runs against.</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td>Cost Scenario</td>
<td>This property is used in the Cost Analysis reports to determine the cost scenario to use for the report.</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td>Current Cash Flow Year</td>
<td>This property is used in the Cash Flow Template report to determine the year that contains the current year’s balance sheet data.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td>Current General Ledger Year</td>
<td>This property is used in the Cash Flow Template report to determine the year that contains the current year’s general ledger data.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Module</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Default Year</td>
<td>This property is used in the Profit and Loss report to determine which year will be displayed, by default, in a drilldown report. This property is only used if Show Years is set to True.</td>
<td>General Ledger module</td>
</tr>
</tbody>
</table>
| End Date                 | This property is used on several Product Line Analysis reports to determine the last date used to qualify patients. The date is based on the patient’s admission date or discharge date depending on the date type selected in the patient date type property.  
<p>|                          | You can set the End Date as a relative date by selecting a token on the Relative Dating tab.                                                                                                                | Product Line Analysis      |
| End Month                | The last month used in the report.                                                                                                                                                                           | General Ledger module      |
|                          | You can set the End Month as a relative date by selecting a token on the Relative Dating tab.                                                                                                                  | Payroll module Productivity|
| End Pay Period           | The last pay period used in the report.                                                                                                                                                                      | Payroll module             |
|                          | You can set the End Pay Period as a relative date by selecting a token on the Relative Dating tab.                                                                                                                                 |
| EOB Template             | This property is used in the Explanation of Benefits report to select the template to use in the report.                                                                                                     | Product Line Analysis      |
| Include In-House Patients| This property is used in Product Line Analysis reports to determine if patients without a discharge data qualify for the report.                                                                            | Product Line Analysis      |
| Include Inpatient Data   | This property is used in Product Line Analysis reports to determine if patients with an inpatient patient type qualify for the report.                                                                   | Product Line Analysis      |
| Include Outpatient Data  | This property is used in Product Line Analysis reports to determine if patients with an outpatient patient type qualify for the report.                                                                  | Product Line Analysis      |
| Include Summary Page     | This property is available on most reports and is used to determine if a report summary page is included in a report.                                                                                           | All modules                |
| Include Patient Archive Data | This property is used in Product Line Analysis to determine if the data from the patient archive is included in the report.                                                                               | Product Line Analysis      |</p>
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Month % Variance</strong></td>
<td>This property is available in <strong>General Ledger Variance</strong> reports and is used to limit the results of a report to include only records that exceed the percentage variance entered for the month.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Patient Date Type</strong></td>
<td>This property is used on several <strong>Product Line Analysis</strong> reports to determine if patients qualify for the report based on a discharge date range or an admission date range.</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td><strong>Physician</strong></td>
<td>This property is used on the <strong>Patient Physician Profile</strong> report to determine the physician to use in the report.</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td><strong>Previous Cash Flow Year</strong></td>
<td>This property is used in the <strong>Cash Flow Template</strong> report to determine the year that contains the last year’s balance sheet data.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Recalculate % of Total Columns</strong></td>
<td>This property is used to determine when % of Total columns are calculated if the <strong>Ranking</strong> or <strong>Results Filter</strong> tabs are used in a report. If ranking or results filters are used in a report, the % of Total columns can be calculated before (<strong>FALSE</strong>) or after (<strong>TRUE</strong>) the filtered results are removed from the report.</td>
<td>General Ledger module Payroll module Product Line Analysis</td>
</tr>
<tr>
<td><strong>Show Years Drop Down</strong></td>
<td>This property is used in the <strong>Profit and Loss</strong> report to determine if <strong>Year</strong> is displayed when the report is run as a drilldown report. This option enables you to switch between viewing multiple years in the drilldown report.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Start Date</strong></td>
<td>This property is used on several <strong>Product Line Analysis</strong> reports to determine the first date that qualifies patients. The date is based on the patient’s admission date or discharge date, depending on which date type is selected in the patient date type property. You can set the <strong>Start Date</strong> as a relative date by selecting a token on the <strong>Relative Dating</strong> tab.</td>
<td>Product Line Analysis</td>
</tr>
<tr>
<td><strong>Suppress Zero Value Rows</strong></td>
<td>This property can be used to suppress the display of rows that contain a value of zero in all aggregated, numeric columns.</td>
<td>All modules</td>
</tr>
</tbody>
</table>

**Note:** This property does not apply to numeric columns with an aggregation set to **NONE**.
### Property Description Module

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variance $ Threshold</strong></td>
<td>This property is available in certain General Ledger Variance reports. It limits the results of a report to include only records that exceed the dollar amount variance entered.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Variance % Threshold</strong></td>
<td>This property is available in certain General Ledger Variance reports. It limits the results of a report to include only records that exceed the percentage variance entered.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Variance Option</strong> (Use And or Or)**</td>
<td>This property is available in certain General Ledger Variance reports. It determines if only 1 (OR) or both (AND) of the Variance $ and Variance % properties need to be met for a record to be displayed in the report.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Variance Stat Threshold</strong></td>
<td>This property is available in certain Statistic Variance reports. It limits the results of a report to include only records that exceed the statistic value variance entered.</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Variance Threshold Type</strong></td>
<td>This property is available in certain General Ledger Variance reports. It is used to determine if the report uses the variance thresholds set up in General Ledger Control Panel. You can select to use the thresholds from the General Ledger Control Panel (D) or to set up thresholds for each individual report (T).</td>
<td>General Ledger module</td>
</tr>
<tr>
<td><strong>Year to Date % Variance</strong></td>
<td>This property is available in General Ledger Variance reports. It limits the results of a report to include only records that exceed the percentage variance entered for the entire year.</td>
<td>General Ledger module</td>
</tr>
</tbody>
</table>

**Related information**

Reporting Manager tabs on page 28

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**Add criteria to a report using the Search tab**

The Search tab enables you to filter the data that is contained in a report. Each report has different fields that qualify the data.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Search tab.
3. For **Field**, select a field. The field options are different for each report.

4. For **Operator**, select the operator.

5. Click the **Lookup Value**, **Enter Value**, or **Field** tabs to select the values to use to filter the report. If the field you selected is date, month, or pay period related, the **Relative Dating** tab is also enabled. Relative dating enables you to report on a date range relative to the current date rather than a specific range.

6. Select or enter the value, or click the **Relative Dating** tab, if applicable.
   a) On the **Relative Dating** tab, select the date option. The options displayed depend on the type of field. For example, date fields options include current day, week, month, quarter, or year. Pay period options refer to the pay period set up in the control panel (**Report Administration > Control Panel**).
   b) Select + or - and a value. For example, if you select **Current Month -1**, the report will include information for last month.

7. Select **And** or **Or** to determine how multiple lines of criteria are related.

8. Click **Add**. The filter is displayed in the editable grid. You can add additional criteria to further filter the report.

9. (Optional) For **Group Before** and **Group After** in the grid, add parentheses to group the report criteria.

10. (Optional) Edit the **AndOR**, **Operator**, and **Display Value** columns as necessary.

11. (Optional) Click **Validate** to ensure the report search criteria is entered correctly.

12. Click **Remove** to delete criteria.

13. Click **Clear** to remove all rows in the grid.

14. Click **Save** to save the search criteria for the report.
Set up the Division tab for General Ledger and Payroll reports

Use the Division tab to filter general ledger and payroll reports by divisions that are created in the Division Hierarchy table in Enterprise Analyst (General Ledger or Payroll). The division hierarchy can group cost centers together for reporting purposes.

1. In the Reporting Manager report hierarchy, select a general ledger or payroll report.
2. Click the Division tab.
3. For Division View, select the division.
4. Select the division levels in the hierarchy to include in the report. After you select the division levels, they are available to add to a report on the Columns and Subtotal tabs.
   If the division hierarchy is updated in Enterprise Analyst, the updates are reflected on the Division tab in Reporting Manager. If a new level is added in Enterprise Analyst to the level that is selected on the Division tab, the new level is automatically selected to include in the report.
5. Click Save.

Columns tab

The Columns tab enables you to determine the data that is displayed in the columns of a report.

There are several options that can be used to add columns to a report including adding predefined columns or standard fields, adding custom columns, adding computed or conditional computed columns, and adding columns by using a predefined format.

Add predefined columns to a report

On the Columns tab, a list of predefined columns is displayed under Available Fields. The list displays columns that were built in Report Administration > Column Designer and are based
on the module of the selected report. For example, all general ledger custom columns are displayed on the G/L Custom Column report.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Columns tab.
   The predefined columns are displayed on the Predefined Columns tab under Available Fields.

Figure 10: Columns tab - Predefined Columns

3. (Optional) Click View in the Definition column to view more information about the column. View Global Custom Column opens. The criteria used to build the column is displayed, including the fields and the aggregation. Click OK to close View Global Custom Column.
4. Double-click a column name in the Predefined Columns tab, or select a column and click Add To Selected to add it to a report.
5. Click Save to save the report.

Add fields to a report

On the Reporting Manager Columns tab, there is a list of fields displayed under Available Fields. The list displays all standard EPSi fields including alphanumeric, date, date, time, numeric, and fields from the Data Extender module.

Fields are displayed based on the module of the selected report. For example, all general ledger fields are displayed on the G/L Custom Column report.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Columns tab.
3. Under **Available Fields**, click the **Fields** tab.

![Figure 11: Columns tab - Fields](image)

4. Double-click a field in the **Fields** tab, or select a field and click **Add To Selected** to add it to a report.

   **Note:** You cannot use a field as both a column and a subtotal on the same report. If a field is used as a column, it is not displayed on the list of available fields in the **Subtotal** tab. If a field is used as a subtotal, it is not displayed in the list of available fields on the **Columns** tab.

5. Click **Save** to save the report.

### Add custom columns to a report

On the Reporting Manager **Columns** tab, use **Add Custom Column** to add custom columns to a report.

The difference between adding predefined columns and using **Add Custom Column** is that columns created using **Add Custom Column** can only be used in the specific report in which the column was created. Predefined columns can be used in all reports that have the **Columns** or the **Template Columns** tab.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the **Columns** tab.
3. Click **Add Custom Column**.
   
   **Add/Edit Custom Column** opens.
4. For Data Type, select the column data type.
5. For Heading, enter the column heading.
6. For Aggregation, select the column aggregation method.
7. On the Criteria Selection tab, select the column criteria and click Add.
   The available fields depend on the data type.
   If the field you selected is date, month, or pay period related, the Relative Dating tab is enabled. Relative dating enables you to report on a date range relative to the current date rather than a specific range.
8. (Optional) Click the Relative Dating tab.
   a) Select the date option.
      The options displayed depend on the type of field.
      For example, date field options include current day, week, month, quarter, or year. Pay period options refer to the pay period set up in the control panel (Report Administration > Control Panel).
b) Select + or - and a value.
   For example, if you select Current Month -1, the report will include information for last month.

9. For payroll monthly and payroll pay period data types, select a value for Period Range.
10. On the Field Selection tab, select the fields to use in the column and click Add.
    Available fields depend on the data type and aggregation method.

11. Click OK to return to Reporting Manager.
    The new custom column is displayed in the grid under Selected Fields.

12. Click Save to save the report.

Add computed columns to a report

In the Columns tab, use Add Computed Column to create columns that are calculated based on data in other columns in the report.

Before you begin
Before adding computed columns, you must add the other columns that you are using to calculate the value of the computed column.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Columns tab.
3. Click Add Computed Column.
   Add/Edit Computed Column opens.
4. For **Heading**, enter the column heading.

5. Under **Field Information**, define the calculation. You can write formulas using fields and values.

6. For **Field**, select the column in the report to calculate.

7. For **Value** enter the values in the formula.

8. Under **Operator**, select to add, subtract, multiple, or divide. When you are using alphanumerical fields in calculation, you are only able to select add.

9. Click **OK** to return to Reporting Manager. The new computed column is displayed in the grid under **Selected Fields**.

10. Click **Save** to save the report.
Add conditional computed columns to a report

On the Reporting Manager **Columns** tab, use **Add Conditional Computed Column** to create columns based on certain conditions.

**Before you begin**
Before adding conditional computed columns, you must add the other columns that you are using to calculate the value of the conditional computed column.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the **Columns** tab.
3. Click **Add Conditional Computed Column**. **Conditional Computed Column** opens.

4. For **Heading**, enter a name for the column.
5. Click **Add** to define the column.
   A row for sequence 1 is added to the grid and **Default** is selected. A default condition must be created when you are building a conditional computed column. This condition is only used if none of the other conditions are met. In order to guarantee the default condition will return results, the **Criteria Selection** tab is disabled.

6. On the **Field Selection** tab, to add the default condition, enter field and value criteria to indicate what the application should do if none of the conditions are met.

7. Click **Add**.
   A row for sequence 2 is added to the grid.

8. Enter criteria on the **Criteria Selection** and **Field Selection** tabs to build sequence 2.
   The information on the **Criteria Selection** tab is used to enter the **If** part of the if/then statement. The information on the **Field Selection** tab is used to enter the **Then** part of the if/then statement.

9. (Optional) Use the arrows to change the sequence order.

   **Note:** The sequence order is important. The application processes the sequences in order until 1 of the conditions is met. After a condition is met, it uses that condition to generate the data on the report. Additional conditions are ignored. If none of the conditions are met, the default condition is used. The sequence order of the default condition does not matter. It is only used if all other conditions are not met.

10. Click **OK**.
Conditional computed column example

1. A user adds 4 columns to the **Payroll Pay Period Custom Column** report: **Cost Center** (a field), **Overtime Hours** (a custom column), **Total FTE Hours** (a custom column) and **Overtime Percentage** (a computed column).

   ![Figure 12: Columns tab](image)

2. The user adds a conditional computed column by clicking **Add Conditional Computed Column**. The user adds a default condition is added to return the text **N/A** on the report if none of the other conditions are met.

   ![Figure 13: Conditional Computed Column](image)
3. The user adds sequence 2 to the report and specifies criteria to find rows where the **Overtime Percentage** column is \( \leq 0.10 \) (10%).

![Figure 14: Conditional Computed Column](image)

4. The user sets the criteria for sequence 2 to indicate the report should display the word **ACCEPTABLE** if the criteria selection is met.

![Figure 15: Conditional Computed Column](image)

5. The user clicks **Add** again to create the third sequence and adds criteria to that sequence to find all rows where the value in the **Overtime Percentage** column is greater than 0.10 (10%).

![Figure 16: Conditional Computed Column](image)
6. The user specifies criteria for sequence 3 to indicate the report should display the word **UNACCEPTABLE** if the criteria selection is not met.

![Conditional Computed Column](image)

**Figure 17: Conditional Computed Column**

7. After all the conditions are entered, the user clicks **OK** to add the column to the report and runs the report.

![Report example](image)

**Figure 18: Report example**

### Add indicator icons to reports

Indicators display an image in a specified color to identify data that meet certain conditions. You can add indicator icons to reports that have conditional computed columns available.

1. In Reporting Manager on the **Columns** tab, click **Add Indicator**. **Add/Edit Indicator** opens.

2. For **Heading**, enter a name for the column.

3. Click **Add**. A row for sequence 1 is added to the grid and **Default** is selected.
A default condition must be created. This condition is used if none of the other conditions are met.

4. Click **Add**.
   A row for sequence 2 is added to the grid.

5. For **Icon**, select the indicator icon.
6. For **Color**, select the color of the icon to display.
7. Enter the criteria on the **Criteria Selection** tab to build sequence 2.
   If the data meets the conditions you define, the indicator that you selected will display with the data on the report.

8. Repeat steps 4 through 7 to define other criteria and indicators.

9. Use the arrows to change the sequence order.
   The sequence order is important. The application processes the sequences in order until 1 of the conditions is met. After a condition is met, the application uses that condition to generate the data on the report. Additional conditions are ignored. If none of the conditions are met, the default condition is used. The sequence order of the default condition does not matter. It is used only if all other conditions are not met.
10. Click OK.

Add percent of total columns to a report

Use Add % of Total to add percent of total columns or running total columns to a report. A % of Total column is calculated by taking the data in 1 row and dividing it by a subtotal value. A running total adds detail data across rows in a report. This option is only available for select reports.

Before you begin
To add a percent of total columns, you must have a subtotal selected in the Subtotal tab and a numeric type column selected in the Columns tab.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Columns tab.
3. Click Add % of Total.
   Add/Edit Total Column opens.

4. Select if you want to add a % of Total column or a Running Total column.
5. For Heading, enter a name for the column.
6. For Column Basis, select the column basis.
   For % of Total, this is the column that contains the data to use as the numerator in the calculation. For Running Total, this is the data that is added together to calculate the running total.
7. For Group Basis, select the subtotal field.
   For % of Total, this is the subtotal field to use as the denominator in the calculation. For Running Total, the total starts over for each subtotal value for the field you select.
8. Click **OK**.

**Add a predefined format to a GL/Payroll/PLA report**

You can add a predefined format to a report to quickly add columns to custom column and template reports. This option is available for general ledger, payroll, Product Line Analysis, and productivity reports.

1. In Reporting Manager, select a custom column or template report from the report hierarchy.
2. Click the **Columns** tab.
3. Click **Add Predefined Format**. **Add Predefined Format** opens.
4. For **Predefined Format**, select the format to use.
5. Click **OK**.
6. If you select **Month/YTD** or **Quarterly/YTD**, a window opens where you must select the months and years to use in the report.
7. If you select an encounter format, a window opens where you must move the fields to use from **Unselected** to **Selected** and select the sequences to use.
8. Click **OK**.

**Add a time series column to a report**

Add and configure a time series column on the **Time Series** tab. This option is available for general ledger, payroll, Product Line Analysis, and productivity reports.

**Before you begin**

The report administrator must select **Is Time Series Allowed** on the **Definition** tab.

1. In the Reporting Manager report hierarchy, select a custom column report.
2. Click the **Time Series** tab.
3. Select **Use Time Series** to add a time series column.
Time Series Qualification in the Selected Fields grid is automatically populated with the default qualifier.

4. For Time Series, select the time series type. The available types depend on the report.

5. For # Periods, select the number of periods to include.

6. For Current Period, do 1 of the following.
   > Select the current period using the Relative Dating tab.
   > Enter a value on the Enter Value tab.
   > Select a value on the Lookup Value tab.
Relative dating enables you to report on a date range relative to the current date rather than a specific range.
   a) If you are using the Relative Dating tab, select the date option.
   b) Select + or - and a value.

7. For Default Time Series Qualification, select a time series qualification value for each aggregated row.

   Default Time Series Qualification displays the default time series qualifier. All columns with an aggregation other than NONE or USE CALC are displayed in the grid and must have a qualifier assigned. This field is used to indicate how each aggregated column is related to the time series.
For example, if a column is added to the report for Enc – Total Charges and the time series is set for monthly, the application needs to determine the date to pull the charges for. Encounter-level fields can use any date field from the encounter. Secondary level fields can use any date field from the secondary level or any date field from the encounter level.

8. (Optional) Click Apply to apply the selected qualifier to every row in the Selected Fields grid.
9. Click Save to save the report.

What to do next
If you need to remove the time series column from the report, clear Use Time Series.

Columns in the Selected Fields grid

After you add columns to a report, they are displayed in the Selected Fields grid on the Columns tab. You can edit or update items in the grid after adding columns.

Figure 19: Selected Fields

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View/Edit</td>
<td>View or edit a column definition. You can add additional criteria to most editable columns.</td>
</tr>
<tr>
<td>Col #</td>
<td>The order the columns are displayed in the report. You can modify the order using the arrows to the right of the grid.</td>
</tr>
<tr>
<td>Heading</td>
<td>The column heading that is displayed on the report. You can edit this field directly in the grid. You can also set the Heading Font</td>
</tr>
<tr>
<td>Width</td>
<td>The column width when the report is viewed in a report viewer. The width does not matter if the report is exported to a comma-separated file, a database table, a cube, or a drilldown report.</td>
</tr>
<tr>
<td>Data Format</td>
<td>Format the row in the report. Available formats include numeric, currency, percentage, and various date options.</td>
</tr>
</tbody>
</table>
### Columns tab

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Show Desc</strong></td>
<td>Determine whether a description is displayed with the results of the row. For example, if a row is set up for physician and <strong>Show Desc</strong> is not selected, the row only displays the physician ID. When <strong>Show Desc</strong> is selected, the physician name is also displayed in the report.</td>
</tr>
<tr>
<td><strong>Show Desc Only</strong></td>
<td>Determines whether the detail data is displayed with the description. For example, if <strong>Show Desc</strong> is selected and <strong>Show Desc Only</strong> is also selected for physician, the row only displays the physician name. It does not display the physician ID.</td>
</tr>
</tbody>
</table>
| **Aggregation** | You must set the aggregation for each column in a report. The aggregation determines how records are combined or totaled when multiple records qualify for a row in a report. Aggregation options for numeric columns are:  
  > None  
  > Average  
  > Count All  
  > Maximum  
  > Minimum  
  > Sum  
  > Count distinct  
  > Standard deviation all  
  > Standard deviation distinct  
  > Variance all  
  > Variance distinct  

  The only aggregation options available for alphanumeric and dates fields are none, count all, maximum, minimum, and count distinct. |
| **Subtotal Aggregation** | If a report is subtotaled by at least 1 field, you must set the subtotal aggregation for each column. The subtotal aggregation determines how records are combined or totaled when multiple records are used to calculate a subtotal. The aggregation and subtotal aggregation are typically the same for each individual column, but they do not have to be the same.  
  To modify a subtotal aggregation, the report must have the applicable subtotals identified on the **Subtotal** tab. After you add subtotals to the report, you can change the subtotal aggregation from the default aggregation by clicking **Edit** in the **Subtotal Aggregation** column.  

  **Note:** Columns with an aggregation set to **NONE** cannot be edited in the **Subtotal Aggregation** column. |
### Columns tab

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body Font</strong></td>
<td>Determine the font for a row. By default, each row has the same font.</td>
</tr>
<tr>
<td><strong>Visible</strong></td>
<td>Use this option to hide a column or make a column visible in a report.</td>
</tr>
<tr>
<td><strong>Patient Search</strong></td>
<td>Perform patient searches at the column level in a report. This is helpful for comparisons and to set columns to only contain information for certain patient populations.</td>
</tr>
<tr>
<td><strong>Apply Filter to Secondary Tables</strong></td>
<td>Use this option to apply the search to detail tables. <strong>Note:</strong> This option is not available for encounter level columns.</td>
</tr>
<tr>
<td><strong>Time Series Qualification</strong></td>
<td>If a time series is included in a Product Line Analysis report, select a time series qualifier for all of the aggregated rows in the grid.</td>
</tr>
</tbody>
</table>

### Aggregation options

The example below demonstrates the functionality of aggregation options.

A charge level report with 5 columns is created: **Patient Account, Service Date, Activity Code, Number of Units, and Detail Total Charges**. No subtotals are included in the report.

**Figure 20: Selected Fields**

![Selected Fields Table]

The following image shows the output for the report when it is run for a specific patient account (000005486520) and a specific activity code (00006920). This patient has the same activity code...
8 days in a row. Each record has a unique service date and the results are displayed on separate rows.

**Figure 21: Report example**

<table>
<thead>
<tr>
<th>Patient Account</th>
<th>Service Date</th>
<th>Activity Code</th>
<th>Number of Units</th>
<th>Detail Total Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>000005486520</td>
<td>10/18/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/19/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/20/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/21/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/22/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/23/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/24/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/25/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
</tbody>
</table>

The service date column is removed from the report and the aggregation for both number of units and detail total charge is set to **Sum**.

**Figure 22: Selected Fields**

<table>
<thead>
<tr>
<th>Col #</th>
<th>Heading</th>
<th>Heading</th>
<th>Width</th>
<th>Data Format</th>
<th>Show Desc</th>
<th>Aggregation</th>
<th>Subtotal Aggregation</th>
<th>Body</th>
<th>Visible</th>
<th>Patient Search</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit 1</td>
<td>Activity Code (Count All)</td>
<td>Version</td>
<td>1</td>
<td>Create</td>
<td></td>
<td>COUNT ALL</td>
<td>Edit</td>
<td></td>
<td></td>
<td>Act Code</td>
</tr>
<tr>
<td>Edit 2</td>
<td>Activity Code (Count Dist)</td>
<td>Version</td>
<td>1</td>
<td>Create</td>
<td></td>
<td>COUNT DISTINCT</td>
<td>Edit</td>
<td></td>
<td></td>
<td>Act Code</td>
</tr>
<tr>
<td>Edit 3</td>
<td>Number of Units</td>
<td>Version</td>
<td>1</td>
<td>12,345</td>
<td></td>
<td>SUM</td>
<td>Edit</td>
<td></td>
<td></td>
<td>Act Code</td>
</tr>
<tr>
<td>Edit 4</td>
<td>Detail Total Charge</td>
<td>Version</td>
<td>1</td>
<td>$12,345.01</td>
<td></td>
<td>SUM</td>
<td>Edit</td>
<td></td>
<td></td>
<td>Act Code</td>
</tr>
</tbody>
</table>

When the report is processed, only 1 row of results is displayed because the patient account and activity code are the same for each record. The aggregation for the number of units and detail total charges are set to sum, so the application adds the 8 detail records together and displays only the summarized results.

**Figure 23: Report example**

<table>
<thead>
<tr>
<th>Activity Code (Count All)</th>
<th>Activity Code (Count Distinct)</th>
<th>Number of Units</th>
<th>Detail Total Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>1</td>
<td>$5,464.00</td>
</tr>
<tr>
<td>Total Patient Account</td>
<td>8</td>
<td>1</td>
<td>$5,464.00</td>
</tr>
</tbody>
</table>
Count all and count distinct

You can count any type of field in EPSi, including alphanumeric, date, date/time and numeric. There are 2 aggregation options for counting fields — COUNT ALL and COUNT DISTINCT.

COUNT ALL and COUNT DISTINCT are available in the Aggregation column on the Columns tab. When you use COUNT ALL, the application counts all instances of that field at the detail level. Duplicate entries for a field are counted every time the field is encountered.

When you use COUNT DISTINCT, the application counts all instances of that field at the detail level. Duplicate entries are counted only once.

Count all and count distinct example

The following examples display the difference between COUNT ALL and COUNT DISTINCT.

In this example, a report is created for 1 patient account. The fields included in the report are Patient Account, Service Date, Activity Code, Number of Units, and Detail Total Charges.

Figure 24: Selected Fields

<table>
<thead>
<tr>
<th>Heading</th>
<th>Headi</th>
<th>Width</th>
<th>Data Format</th>
<th>Show Desc</th>
<th>Aggregation</th>
<th>Subtotal Aggregation</th>
<th>Body</th>
<th>Visible</th>
<th>Perl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Account</td>
<td>Verda</td>
<td>1</td>
<td>Create</td>
<td>NONE</td>
<td>Edit</td>
<td>Verdar</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Service Date</td>
<td>Verda</td>
<td>1</td>
<td>10/20/2011</td>
<td>NONE</td>
<td>Edit</td>
<td>Verdar</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Activity Code</td>
<td>Verda</td>
<td>1</td>
<td>Create</td>
<td>NONE</td>
<td>Edit</td>
<td>Verdar</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Number of Units</td>
<td>Verda</td>
<td>1</td>
<td>12,345</td>
<td>SUM</td>
<td>Edit</td>
<td>Verdar</td>
<td>✔</td>
<td>✔</td>
<td>Act</td>
</tr>
<tr>
<td>Detail Total Charge</td>
<td>Verda</td>
<td>1</td>
<td>$12,345.01</td>
<td>SUM</td>
<td>Edit</td>
<td>Verdar</td>
<td>✔</td>
<td>✔</td>
<td>Act</td>
</tr>
</tbody>
</table>
The following image shows the report generated for patient account 000005486520. It displays the same activity code for 8 consecutive days.

**Figure 25: Report example**

<table>
<thead>
<tr>
<th>Patient Account</th>
<th>Service Date</th>
<th>Activity Code</th>
<th>Number of Units</th>
<th>Detail Total Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>000005486520</td>
<td>10/18/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/19/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/20/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/21/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/22/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/23/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/24/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
<tr>
<td>000005486520</td>
<td>10/25/2006</td>
<td>00006920</td>
<td>1</td>
<td>$683.00</td>
</tr>
</tbody>
</table>

The **Service Date** and **Patient Account** columns are removed and another column is added for **Activity Code**. This column is already listed once in the report; so now it is listed twice. The aggregation is changed to **COUNT ALL** for the first column and **COUNT DISTINCT** for the second column. The headings are also changed to differentiate each column.

**Figure 26: Selected Fields**

On the **Subtotal** tab, patient account is added as a subtotal.

When the report is generated, the count all activity code shows count of 8, and the count distinct activity code has a count of 1. There are 8 detail records that qualify for the report. However, because the service date line is removed, the data is now aggregated onto 1 row. In this example,
the activity code for each of the 8 records was 00006920. **COUNT ALL** tracks each instance regardless of the activity code, while **COUNT DISTINCT** adds the unique activity codes.

**Figure 27: Report example**

<table>
<thead>
<tr>
<th>Activity Code (Count All)</th>
<th>Activity Code (Count Distinct)</th>
<th>Number Of Units</th>
<th>Detail Total Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Account 000005486520</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Total Patient Account 000005486520</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

**Count distinct example for subtotal levels in reports and cubes**

In this example, patient counts are displayed by patient, activity code, and revenue center. The total distinct count of patients for the revenue center is 6 and patient account 000548766408 had both activity codes 00012203 and 00012204. Because 6 different patients had activity in that department, the correct count of patients is 6. However, in previous releases, the application would have provided a count of 7 for the revenue center because patient 000548766408 would have been counted twice. Now, the accurate **COUNT DISTINCT** case counts are generated for all subtotal levels within reports and cubes.
Statistical variability of data

You can select and change the aggregation method of custom columns in the Aggregation column on the Columns tab of the report. Two statistical methods that illustrate the variability or dispersion of data from the mean or average are standard deviation and variance.

Standard deviation (referred to as STDEV on the report) illustrates how much variation or dispersion there is in the values from the average. The lower the standard deviation, the closer the data points will be to the mean. It is the square root of the average of the squared variances of each point from the mean.

Variance (referred to as VAR on the report) is defined as the measure of the amount of variation of the values within the selected population or variable. It is the average of the sum of the squared variances of each point from the mean.

In the Column tab in the custom column report, the aggregation method can be changed for selected columns. These methods can also be selected when creating the custom column.

Standard deviation and variance methods can be broken down by ALL or DISTINCT. The ALL method of aggregation includes every value of the selected variable in the population of selected data. DISTINCT methods only include unique values of the selected variable. Any duplicates of the same value are removed from the calculation.

The following example report illustrates the 4 aggregate functions to determine the variability of length of stay among all inpatients sorted by final DRG.

Figure 28: Report example

<table>
<thead>
<tr>
<th>STDEV and VAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOS - STDEV ALL</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Enc - Final DRG001</td>
</tr>
<tr>
<td>Enc - Final DRG002</td>
</tr>
<tr>
<td>Enc - Final DRG007</td>
</tr>
<tr>
<td>Enc - Final DRG008</td>
</tr>
<tr>
<td>Enc - Final DRG009</td>
</tr>
</tbody>
</table>
Subtotal aggregation options

The following example demonstrates when it is useful to have a different aggregation and subtotal aggregation for the same column when you create a report.

Example

1. Create a report that includes data from the encounter, charge, and payment levels with 8 columns:
   - Charge - Payment/Charge Xref (hidden)
   - Act Pay - Payment/Charge Xref (hidden)
   - Charge - Service Date
   - Charge - Revenue Center
   - Charge - Activity Code/CPT-HCPCS
   - Act Pay - Payor Plan Code
   - Charge - Total Charge
   - Act Pay - Payment Amount

2. Set the aggregation for Charge - Total Charge and Act Pay - Payment Amount to SUM.

3. Set the subtotal aggregation for Charge - Total Charge to SUM for the Enc – Facility subtotal level and to MAX for the Enc – Patient Account subtotal level.
4. Set the subtotal aggregation for Act Pay - Payment Amount to SUM for the Enc - Facility subtotal level and MAX for the Enc - Patient Account subtotal level.

5. The report is subtotaled by Enc - Facility and Enc - Patient Account.

6. Add 2 results filters to the report to only have charges and payments with non-null, matching cross reference values display.

7. This report is designed to display all of the payments linked to a particular charge for the same patient account. One individual charge can have multiple payments. In the following example,
there are 3 payments for the same charge for the first patient and there are 2 payments for the same charge for the second patient.

Setting the aggregation for Charges – Total Charge to MAX at the Enc - Patient Account level prevents the same charge from being counted more than once per patient account.

Setting the aggregation for Charges – Total Charge to SUM at the Enc – Facility level enables the charges to be aggregated correctly across patients at the facility level.

Sort a report

Based on the columns in a report, different sorting options are available using the Sort tab.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Sort tab.
3. Under Available columns to sort, select the columns and click ➡ to move them to Columns that will be sorted.
4. Use the up and down arrows to modify the sort order.
5. Under Sort Direction, select Ascending or Descending to sort the data in the column.
6. Click Save to save the report.
Time Series tab

Time series use the current period to determine the most current (or last) point within a period of time. If you view this data in a graph, the current period would be the data point furthest to the right. The current period can be set as a relative date or a fixed date.

You can add a time series column to a report to use the report and its aggregated columns in MPV Administrator measure groups. Only 1 time series column can be added per report.

**Note:** MPV Administrator functions, including time series columns, must be purchased separately from other modules. Contact EPSi Support for more information.

Time series columns are available on the following reports:

- **General Ledger Custom Column**: Monthly or quarterly
- **Payroll Daily Custom Column**: Daily, weekly, monthly, quarterly, yearly
- **Payroll Pay Period Custom Column**: Pay period
- **Payroll Monthly Custom Column**: Monthly
- **Payroll Quarterly Custom Column**: Quarterly
- **Product Line Custom Column**: Daily, weekly, monthly, quarterly, yearly

Add a time series column to a report

Add and configure a time series column on the **Time Series** tab. This option is available for general ledger, payroll, Product Line Analysis, and productivity reports.

**Before you begin**
The report administrator must select **Is Time Series Allowed** on the **Definition** tab.

1. In the Reporting Manager report hierarchy, select a custom column report.
2. Click the **Time Series** tab.
3. Select **Use Time Series** to add a time series column.
Time Series Qualification in the Selected Fields grid is automatically populated with the default qualifier.

4. For Time Series, select the time series type. The available types depend on the report.

5. For # Periods, select the number of periods to include.

6. For Current Period, do 1 of the following.
   > Select the current period using the Relative Dating tab.
   > Enter a value on the Enter Value tab.
   > Select a value on the Lookup Value tab.
   Relative dating enables you to report on a date range relative to the current date rather than a specific range.
   a) If you are using the Relative Dating tab, select the date option.
   b) Select + or - and a value.

7. For Default Time Series Qualification, select a time series qualification value for each aggregated row.
   Default Time Series Qualification displays the default time series qualifier. All columns with an aggregation other than NONE or USE CALC are displayed in the grid and must have a qualifier assigned. This field is used to indicate how each aggregated column is related to the time series.
For example, if a column is added to the report for Enc – Total Charges and the time series is set for monthly, the application needs to determine the date to pull the charges for. Encounter-level fields can use any date field from the encounter. Secondary level fields can use any date field from the secondary level or any date field from the encounter level.

8. (Optional) Click **Apply** to apply the selected qualifier to every row in the **Selected Fields** grid.
9. Click **Save** to save the report.

**What to do next**
If you need to remove the time series column from the report, clear **Use Time Series**.

**Set up the Template Lines tab**

Use the **Template Lines** tab in template reports to determine the template, or row, format that a report uses. Templates are created in **Report Administration > Template Designer**.

1. In the Reporting Manager report hierarchy, select a template report.
   Payroll, General Ledger, Productivity, and Product Line Analysis have standard template reports. Payroll has template reports for daily, pay period, and monthly.

2. Click the **Template Lines** tab.
3. For **Report Template**, select the template to use.
4. Edit the information in the columns as necessary.

**Seq**

The sequence or order the template rows are displayed in the report.

**Description**

The name of the row displayed in the report.

**Line Type**

The type of row. Row options include **Heading, Detail, Total, Enterprise Total, Facility Total**, and **Blank Row**.

**Line Level**

The type of data used for all **Detail** rows.

**Indent Level**

The indent spacing used on the report.
Aggregation

The aggregation used for each row in the report. Available aggregations include **COUNT ALL**, **COUNT DISTINCT**, **MIN**, **MAX**, and **SUM**.

Show Detail

You can set this option to display detailed information that is used to calculate a row. If you select **Show Detail**, you must select a **Detail Field**.

Detail Field

If you select **Show Detail**, select **Detail Field** to display detailed information about the breakout of a detailed row. For example, if the row on the report is **Expense**, the detail field can be set to **Cost Center**. Instead of just displaying 1 row for expense, the report displays a separate row for each cost center’s expenses.

Show Desc

Determines whether a description is displayed with the results of the row. For example, if you do not select **Show Desc** and a row is set up for physician, the row only displays the physician ID. If you select **Show Desc**, the physician name is also displayed in the report.

Show Total Bar

Select this option to display a total bar on the report.

Hide Line

Select this option to hide a line in a report.

Use Row Calc

Select this option to have the application calculate the row based on the row definitions instead of the column definition.

Line Divisor

Enter a value to divide each row in the report. By default, it is always set to 1.

Data Format

Format the row in the report. Available formats include numeric, currency, percentage, and date.
Body Font

Determine the font for a row. By default, each row has the same font.

5. Click **Save** to save the report.

**Template Columns tab**

The **Template Columns** tab is available in general ledger, payroll, and Product Line Analysis template reports and enables you to configure the column format. The columns you add in the **Template Columns** tab only affect the criteria that is applied to each column. The field used in the report is determined by row in the **Template Lines** tab.

On the **Template Columns** tab, you can add columns by selecting a predefined column, creating a computed column, creating a conditional computed column, adding a new template column or using a predefined format.

![Figure 29: Template Columns tab](image)

> Click **Add Template Column** to add columns to a template report. The difference between creating columns with **Add Template Column** and creating columns in **Report Administration > Column Designer** is that the columns created using **Add Template Column** can only be used in the specific report you are in. You can use the columns built in the column designer in other reports.

When you click **Add Template Column, Add/Edit Template Column** opens. You must enter a heading and select the criteria that used to filter the column. The list of available options depends on the type of report.

> Click **Add Indicator** to add an indicator to the report. Indicators display an image in a specified color to identify data that meet certain conditions.
> Click **Add Predefined Format** to add a predefined format to the report.

**Note:** You can use relative dating to define the **Ending Month** and **Ending Quarter** properties in **Add Predefined Format**.

Each template report contains a **Line Description** column, which displays the line headings for each row defined on the **Template Line** tab of the report. You cannot remove this column from the report.

### Set up the Subtotal tab for reports

The **Subtotal** tab determines the fields that the report is grouped by. A subtotal is not required on most reports. The list of available options varies between reports.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the **Subtotal** tab.

![Figure 30: Subtotal tab](image)

**Note:** **Hide Group Footer** and **Group Footer** are not displayed for template reports.

3. Under **Available Fields**, select the fields to use as subtotals in the report and click ![to move them to Subtotal Fields](image).

**Note:** A field cannot be used as both a column and a subtotal on the same report. If a field is used as a column, it is not displayed on the list of available fields in the **Subtotal** tab.

4. (Optional) Use the up and down arrows to change the order the subtotals are displayed in the report.

5. Select **Include Grand Total Row** to create a grand total for the report. This is not available on all reports.

6. Select **Hide Report Detail** to hide detail rows and only display subtotal values on the report.
7. Use the **Group Footer Label Width** to set the indent of the detail rows in the report.
8. Edit any other columns as necessary.
9. Click **Save** to save the report.

### Related information
- [Reporting Manager tabs](#) on page 28

## Subtotal columns

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal Column</td>
<td>The field that is used as the subtotal.</td>
</tr>
<tr>
<td>Heading</td>
<td>The description of the subtotal field that is displayed on the report. You</td>
</tr>
<tr>
<td></td>
<td>can modify the headings on most reports.</td>
</tr>
<tr>
<td>Show Desc</td>
<td>Determines whether a description is displayed with the results of the row.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> This option is only available for specific reports.</td>
</tr>
<tr>
<td>Show Desc Only</td>
<td>Determines whether the detail data is displayed with the description.</td>
</tr>
<tr>
<td>Page Break After</td>
<td>Select this option to create a page break after every new subtotal value.</td>
</tr>
<tr>
<td>Hide Group Header</td>
<td>Select this option to hide the subtotal headers.</td>
</tr>
<tr>
<td>Group Header</td>
<td>Determines the font of the report’s subtotal headers.</td>
</tr>
<tr>
<td>Hide Group Footer</td>
<td>Select this option to hide the subtotal footers.</td>
</tr>
<tr>
<td></td>
<td>This option is not available in template reports.</td>
</tr>
<tr>
<td>Group Footer</td>
<td>Determines the font of the report’s subtotal footers.</td>
</tr>
<tr>
<td></td>
<td>This option is not available in template reports.</td>
</tr>
</tbody>
</table>
Set up the Results Filter tab for reports

You can use the Results Filter tab to filter the data to display in a report. Results Filter enables you to filter results based on a computed value.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Results Filter tab.
3. Select and add the criteria to filter the report results.
   Only data that meets the additional filter criteria is displayed on the report results.
4. Click Save to save the report.

Related information
Reporting Manager tabs on page 28

Results filter examples

Report without a results filter
The following report is a Payroll Custom Column report that includes 4 columns: Cost Center (a field), Overtime Hours (a custom column), Total FTE Hours (a custom column), and Overtime Percentage (a computed column). The report is subtotaled by facility. The report is run without
attaching a results filter. Several rows (cost centers) are displayed on the report with an overtime percentage less than 5%.

**Figure 31: Report example - without a results filter**

<table>
<thead>
<tr>
<th>Cost Center</th>
<th>Overtime Hours</th>
<th>Total FTE Hours</th>
<th>Overtime Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSi Hospital System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>601010 - Patient Care Services</td>
<td>0</td>
<td>2,285</td>
<td>0.00%</td>
</tr>
<tr>
<td>601020 - Womens Services Division</td>
<td>122</td>
<td>18,195</td>
<td>0.67%</td>
</tr>
<tr>
<td>601040 - First Heart</td>
<td>8</td>
<td>1,529</td>
<td>0.51%</td>
</tr>
<tr>
<td>601060 - Patient Response Center</td>
<td>169</td>
<td>36,151</td>
<td>0.47%</td>
</tr>
<tr>
<td>601110 - Medical Service Line</td>
<td>54</td>
<td>21,829</td>
<td>0.25%</td>
</tr>
<tr>
<td>601130 - CV Service Administration</td>
<td>0</td>
<td>19,244</td>
<td>0.00%</td>
</tr>
<tr>
<td>601140 - Surgical Service Line</td>
<td>7</td>
<td>29,394</td>
<td>0.02%</td>
</tr>
<tr>
<td>601200 - Staffing Office</td>
<td>585</td>
<td>28,658</td>
<td>2.04%</td>
</tr>
<tr>
<td>601210 - Float Pool-Womens &amp; Children</td>
<td>0</td>
<td>780</td>
<td>0.00%</td>
</tr>
<tr>
<td>601250 - Central Transport</td>
<td>431</td>
<td>27,613</td>
<td>1.56%</td>
</tr>
<tr>
<td>601260 - Pediatric Transport</td>
<td>358</td>
<td>1,491</td>
<td>24.04%</td>
</tr>
<tr>
<td>602010 - 4 N W - Med/Surg</td>
<td>1,616</td>
<td>64,152</td>
<td>2.52%</td>
</tr>
<tr>
<td>602020 - 2 East - Internal Med / Renal</td>
<td>5,274</td>
<td>72,712</td>
<td>7.25%</td>
</tr>
<tr>
<td>602030 - 7 East - Main</td>
<td>3,417</td>
<td>74,125</td>
<td>4.61%</td>
</tr>
</tbody>
</table>

**Report with a results filter**

A results filter is added to the report so that only cost centers with a percent of salaries expense and total expense greater than or equal to 5% are displayed on the report. After re-running the report all rows (cost centers) on the report have an overtime percent greater than or equal to 5%.

**Figure 32: Report example - with a results filter**

<table>
<thead>
<tr>
<th>Cost Center</th>
<th>Overtime Hours</th>
<th>Total FTE Hours</th>
<th>Overtime Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSi Hospital System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>601260 - Pediatric Transport</td>
<td>358</td>
<td>1,491</td>
<td>24.04%</td>
</tr>
<tr>
<td>602020 - 2 East - Internal Med / Renal</td>
<td>5,274</td>
<td>72,712</td>
<td>7.25%</td>
</tr>
<tr>
<td>603030 - 4 North - Surgical Unit</td>
<td>10</td>
<td>11</td>
<td>94.65%</td>
</tr>
<tr>
<td>621200 - Surgery - Women</td>
<td>9</td>
<td>10</td>
<td>90.81%</td>
</tr>
<tr>
<td>623100 - Emergency Department</td>
<td>10,927</td>
<td>176,473</td>
<td>6.19%</td>
</tr>
<tr>
<td>632200 - Hemodialysis</td>
<td>1,220</td>
<td>19,649</td>
<td>6.21%</td>
</tr>
<tr>
<td>820000 - Food Service</td>
<td>6,736</td>
<td>74,964</td>
<td>8.99%</td>
</tr>
<tr>
<td>821000 - Plant Operations</td>
<td>7,590</td>
<td>102,718</td>
<td>7.39%</td>
</tr>
<tr>
<td>821700 - Safety &amp; Security</td>
<td>2,426</td>
<td>38,658</td>
<td>6.27%</td>
</tr>
<tr>
<td>821800 - Parking Garages</td>
<td>477</td>
<td>5,603</td>
<td>8.51%</td>
</tr>
<tr>
<td>822200 - Radiological Biomed</td>
<td>1,178</td>
<td>10,841</td>
<td>10.86%</td>
</tr>
</tbody>
</table>
Set up the Ranking tab for reports

Use the Ranking tab to limit the display of data in a report to only a certain number or certain percentage of records.

1. In the Reporting Manager report hierarchy, select a report.
2. Click the Ranking tab.
   All subtotal fields and non-aggregated columns are listed.
3. Select Perform Rank next to the fields to rank.
4. In the Select column, select the rank on the top or bottom records.
5. In the Number column, enter a value for the number of records to return in the report for this field level.
6. In the Type column, select if the value you entered in Number corresponds to the number of records, or the percent of records.
7. In the Based On column, select the data filter.
   All aggregated columns are displayed.
8. (Optional) Select Group Remaining Items to group the records that do not qualify to display in the report in 1 row.
9. If you select Group Remaining Items, enter a description of the items in Remaining Items Description.
10. Click Save to save the report.

Related information
Reporting Manager tabs on page 28

Ranking example

The following report is a Payroll Custom Column report that includes 4 columns: Cost Center (a field), Overtime Hours (a custom column), Total Full-Time Employee (FTE) Hours (a custom column), and Overtime Percentage (a computed column). Sorting was added to the report to sort the results in descending order based on the overtime percentage column. The report was subtotaled by facility. The report was set up to only display the top 5 cost centers per facility based on overtime percentage. A sixth record is added per facility to display all other departments. After
running the report the top 5 records are displayed, plus there is 1 additional row to show all other
departments.

Figure 33: Report example

<table>
<thead>
<tr>
<th>Cost Center</th>
<th>Overtime Hours</th>
<th>Total FTE Hours</th>
<th>Overtime Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>- EPSi Hospital System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>603030 - 4 North - Surgical Unit</td>
<td>10</td>
<td>11</td>
<td>94.65%</td>
</tr>
<tr>
<td>621200 - Surgery - Women</td>
<td>9</td>
<td>10</td>
<td>90.81%</td>
</tr>
<tr>
<td>830200 - ICare Training</td>
<td>3</td>
<td>8</td>
<td>37.92%</td>
</tr>
<tr>
<td>601260 - Pediatric Transport</td>
<td>358</td>
<td>1,491</td>
<td>24.04%</td>
</tr>
<tr>
<td>822200 - Radiological Blended</td>
<td>1,178</td>
<td>10,841</td>
<td>10.86%</td>
</tr>
<tr>
<td>- 1 - All Other Departments</td>
<td>122,194</td>
<td>4,810,497</td>
<td>2.54%</td>
</tr>
<tr>
<td>1000 - EPSi Hospital System</td>
<td>123,752</td>
<td>4,822,857</td>
<td>2.57%</td>
</tr>
</tbody>
</table>

Summary tab

The **Summary** tab in Reporting Manager provides a high-level overview of the options you select
on each of the other tabs.

In **Report Description**, you can enter a description of the report, containing up to 255 characters.
The description is displayed as a tooltip in the EPSi Portal, and will be printed on the report when
the **Include Summary Page** property is set to either **Front of Report** or **End of report**.

If the report contains a time series column, the time series information is displayed here.

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**Related information**

* Reporting Manager tabs on page 28

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**Filter patients for Product Line Analysis reports using the Patient Search tab**

The **Patient Search** tab enables you to filter the patients that qualify for a Product Line Analysis
report. You can create a report for patients by searching across many records of patient detail for
values that occur in a specific encounter.

You can perform multiple patient searches in a report, which eliminates the need to use external
lists and list groups. You can qualify patient populations using **And/Or** search criteria for fields
such as revenue center, diagnosis, and procedure codes or other fields that can be present multiple times in the same patient record.

1. Select a Product Line Analysis report from the report hierarchy.
2. Click the Patient Search tab.
3. (Optional) To use a previously saved search, click Shared and select a search.
   a) In Find Shared Patient Search, select the criteria and click Search. You can search by the name of the search, by the user who created or modified the search, or by other reports that the search is used in.
   b) To view the details of a shared search, select the search and click View.
      Tip: When viewing the search details, you can click Copy to create a copy of the search and modify the criteria.
   c) In Find Shared Patient Search under Available Patient Search, select 1 or more searches to use and click the arrow to move them to Selected Patient Search.
   d) Click OK.
4. To define patient criteria, click Add. Add/Edit Patient Search opens.
5. For **Patient Search Name**, enter a patient search name.

6. Select **Shared** to save the criteria as a shared search.

   ❙ **Note:** Only report administrators can select **Shared**.

7. Define the criteria to include and exclude.
   If the field you selected is date, month, or pay period related, the **Relative Dating** tab is also enabled. Relative dating enables you to report on a date range relative to the current date rather than a specific range.

8. Click the **Relative Dating** tab, if applicable.
   a) On the **Relative Dating** tab, select the date option.
      The options displayed depend on the type of field. For example, date fields options include current day, week, month, quarter, or year. Pay period options refer to the pay period set up in the control panel (**Report Administration > Control Panel**).
   
   b) Select + or - and a value.
For example, if you select Current Month -1, the report will include information for last month.

9. Click OK.
10. On the Patient Search tab, click Add To Report. Repeat steps 3 through 7 to add multiple patient searches to a report.

Related information
Using Boolean logic on page 24
Create a saved search using the Patient Search Designer on page 101

Set up the Product Line tab for Product Line Analysis reports

Use the Product Line tab when setting up Product Line Analysis reports to filter reports based on product lines. Product lines are created in Product Line Hierarchy using Product Line Administrator. The product line hierarchy can group data together for reporting purposes.

1. In the Reporting Manager report hierarchy, select a Product Line Analysis report.
2. Click the Product Line tab.
3. For Product Line, select a product line.
4. For Product View, select a product view.
5. Select the levels in the hierarchy to include in the report. After you select the levels, the product line fields are available to add to the report on the Columns and Subtotal tabs.
6. Click Save to save the report.

Set up the Patient Event tab for the Phase of Care report

The Patient Event tab is available in the Phase of Care report. Using this tab, you can qualify patients based on an event and when the event occurred. This report is designed to provide an analysis on charges and costs before an event, on the same day as the event, and after the event.

1. In the Reporting Manager report hierarchy, select the Phase of Care report (Product Line Analysis Reports > Patient > Phase Of Care).
2. Click the Patient Event tab.
3. For Field, select the field the event is based on.
4. For Days Before and Days After, select the pre-event and post-event time frames.
5. Click **Run** to run the report.

**Figure 34: Report example**

**Phase Of Care**

![Report Example](image)

Using Data Extender fields in Reporting Manager

Data Extender fields are available in the **Patient Search**, **Column**, and **Subtotal** tabs in Reporting Manager. The fields are only available if Data Extender is fully configured.

Data Extender fields are brought into Reporting Manager from an external database provided that a license for the EPSi Data Extender module has been purchased. These fields are mapped to fields in the main EPSi™ database.

Data Extender fields have a suffix of **(EXT)**.

To use Data Extender fields as a column, find and select them on the **Columns** tab under **Field**. To use Data Extender fields as a subtotal, find and select them in **Available Fields** in the **Subtotal** tab. To use Data Extender fields in a patient search, search for the field name in **Field**. You can add them to the search by selecting an operator and a lookup value, a manually entered value, or another field.

**Note:** In Data Extender, a new database must be created on the EPSi server and the tables in that database must be mapped to the main EPSi database’s tables. Creating the new database should be done by a database administrator.
Format and edit a report using Microsoft SQL Server Report Builder

Microsoft® SQL Server® Report Builder provides advanced formatting options, such as editing headers and footers or adding a graph to represent the data.

Before you begin
You must have security permissions to the Microsoft® SQL Server® Report Builder to use this functionality.

1. In the Reporting Manager report hierarchy, select a report.
2. Select Save As > My Reports.
   Save As My Report opens.
3. Select Create Custom Format.
4. Under My Reports, select a folder in the hierarchy to save the report in.
5. Click OK.
   Application Run opens.
6. Click Run.
   Downloading Report Builder opens. When the download completes, Microsoft® SQL Server® Report Builder opens. You can edit the header and footer settings, add graphs, tables, indicators, color schemes or a company logo to reports.

Note:
Microsoft® SQL Server® Report Builder is a Microsoft® product. For further information about the use and support of Microsoft® SQL Server® Report Builder, go to http://www.microsoft.com

What to do next
After you edit and format the report using Microsoft® SQL Server® Report Builder, run the report in Reporting Manager. The new output is displayed in Report Viewer.
Chapter 6

Cube Viewer

Several reports, including all custom column reports, can generate cubes. After setting up each of the tabs in the report, click Cube in the Reporting Manager toolbar to generate a cube. EPSI Cube Viewer displays the selected data as both a chart and a drilldown grid.

EPSI Cube Viewer enables you to view cubes and charts on mobile devices. The viewer uses your existing reports to provide advanced data visualization capabilities.

When you initially access the cube viewer, the graph and grid are displayed. The default graph type is a data chart and the default grid type is a pivot grid. The top dimension is displayed in both the graph and grid and all other dimensions are collapsed.

Figure 35: EPSI Cube Viewer window
General layout features

- The chart title, or cube name, is displayed in the top left.
- Under the title are breadcrumbs that enable you to quickly switch between data levels.
- The legend displays on the right side of the window.
- The default font style and size is predefined (Verdana font, size 10).
- Use the arrows (↑) to expand or collapse the configuration settings pane, chart, and grid. You can also drag the slider to adjust the portion of the graph or grid that you are viewing.

![Figure 36: Configuration settings pane](image)

- Click **Print** to print the chart, grid, or both as they are displayed in the cube viewer.
- The pane on the right-hand side of the cube viewer displays all of the configuration settings that you can use to customize the appearance of the chart and grid.
  - Click **Save** to save your current configuration settings. The next time you open the cube, your settings will be displayed as you saved them.
    - Administrators can save the cube as a distributed cube, or in **My Cubes**. Non-administrators can only save the cube in **My Cubes**. If saving is not available, the button is not displayed.
  - Click **Preview** to apply the configuration settings to the chart or grid.
  - Click **Cancel** to discard any unsaved changes.

Chart layout

The top pane of the cube viewer displays the data in a chart, or graph. The chart format depends on your selections in **Chart Settings**.

- You can point to any graph item to view a tooltip containing details about the data in the chart.
Use the buttons in the corner of the chart to zoom in or out on the chart, or focus on a specific part of the chart.

**Note:** These options are only available if Show Zoom is selected in Chart Settings.

Click any graph item to drill down to the next dimension. Use the breadcrumbs to return to the previous view.

**Grid layout**
The bottom pane displays the drilldown or pivot grid. The grid format depends on your selections in Grid Settings.

- You can expand the column size manually, by dragging the columns, or using Grid Settings.
- When viewing a pivot grid, click to view more data. Click to view less data. In drilldown grids, you can click the links to view more data.
- You can change the order that the data is displayed in the columns in Configuration > Data Selector > Measures.
- You can change the order the dimensions are displayed in the rows in Configuration > Data Selector > Rows.

**Mobile login for Cube Viewer**
You can access the Mobile Dashboard on your mobile device to view cubes.

In Mobile Login, enter your user name and password and click Login. The Mobile Dashboard is displayed.

For Dashboard, select the dashboard that contains the measures that you want to view. You can select Set Default to have the current dashboard always be displayed when you access Mobile Dashboard.

Clicking any item in the Measure column opens the corresponding cube.
Click **Go to Cubes** to view **Distributed Cubes** and **My Cubes**. You can select folders from the left-hand pane to drill down to into any existing subfolders.

**Figure 37: Distributed Cubes**

![Distributed Cubes](image)

Click any cube listed in blue text to open the report in the EPSi Cube Viewer.

**Note:** Cubes with a red exclamation point next to them (_Delete_ ) have encountered an error. Cubes with a green circle next to them (_) are ready to run.
Data Selector

You can select the measures and dimensions that are displayed in the chart and grid using **Data Selector** in EPSi Cube Viewer. Use **Data Selector** to add a dimension as a column, filter, or row. You can add, remove, or change the order of any items in each box.

**Figure 38: Data Selector in EPSi Cube Viewer**

- **Use Filters** to exclude dimensions from the data that is displayed. The values selected in Filters are excluded.
  - Click ‹ to open a list of items you can include or exclude from the cube.
- **Use Rows** to determine the data to display in each row of the grid.
- **Use Columns** to determine the data to display in each column of the grid.
- **Use Measures** to determine the measures to display.
Chart Settings

You can use Chart Settings in EPSI Cube Viewer to configure the type of chart to display and how the chart is displayed using the advanced settings.

You can select different chart types for each dimension, or level, in the measure which enables you to have more flexibility when viewing the data. The dimensions are displayed as a list under Chart Settings with Data Chart selected as the default chart type. Click each dimension and configure the chart settings.

There are several settings that apply to a few different chart types. You can click Advanced Settings to set up how specific dimensions are displayed.

Show Legend

Select to display the color-coded legend and select where it is located in relation to the chart.
Show Zoom

Select to display the zoom tool in the chart.

Select Display Type

Select to display a chart, a grid, or both. You can select this for each drilldown level.

Chart Type

Select the chart type.

Chart Types

- **Bubble Chart**: Displays 3 dimensional data. Each entity is plotted as a bubble that displays the value of the measures using the position of the bubble on the X and Y axes and the radius size of the bubble.
- **Bullet Chart**: Displays the comparison between values in a linear bar. The horizontal bar displays the actual value and the vertical line through the bar displays the target value.
- **Data Chart**: Enables you to view multiple chart types for each measure, such as area, column, line, spline, spline area, step area, step line, waterfall, and point types.
- **Pie Chart**: A circular chart divided into sections that represent numerical proportions. The arc length of each section is proportional to the quantity it represents.
- **Radial Gauge Chart**: A type of arc similar to a car speedometer that displays an actual value, identified by a needle pointing to the value, and a target value. You have the option to turn off the target value.
- **Scatter Chart**: A type of mathematical diagram using Cartesian coordinates to display values for 2 variables of a set of data.
- **Sparkline Chart**: Enables you to view target and trend lines for measures.
- **Stacked Chart**: Displays the relationship of individual items to the whole, comparing the contribution of each value to a total across categories.

Advanced chart settings

Click **Advanced Settings** to configure how the chart displays. The chart type that you select determines available advanced settings.

The following sections explain the advanced chart settings available for each chart type.
**Bubble Chart**

**X-Axis Measure**

Select the measure to be displayed on the X axis.

**Y-Axis Measure**

Select the measure to be displayed on the Y axis.

**Z-Axis Measure**

Select the measure to use to determine the radius of the bubble.

**X-Axis Title**

Select the text size and color for the title of the X axis. You can also adjust the angle at which the title is displayed.

**X-Axis Label**

Select the text size and color for the labels along the X axis. You can also adjust the angle at which the labels are displayed.

**Left Y-Axis Title**

Enter a title for the left Y axis. You can also select the text size and color, and angle at which the title is displayed.

**Left Y-Axis Label**

Select the text size and color for the labels along the left Y axis. You can also adjust the angle at which the labels are displayed.

**Bullet Chart**

**Actual Value**

Select the measure to use as the actual value and select the color to use to display the value.

**Target**

Select to display the target as a **Measure** or define the target as a **Static** value.
Target Value

Select or enter the target value and select the color to use to display the value.

Target Title

Select **Default** to use the default title (*Measure Name* vs. *Target*), or select **Custom** to enter a title.

Minimum Range

Enter a value to display a minimum in the chart.

Maximum Range

Enter a value to display as the maximum in the chart.

Interval

Enter a value to override the default calculated interval and view more or less data point labels.

Chart Background Color

Select the color of the chart background.

Ranges

Click + to add 1 or more ranges of values to distinguish a group of values.

Data Chart settings

**X-Axis Title**

Select the text size and color for the title of the X axis. You can also adjust the angle at which the title is displayed.

**X-Axis Interval**

Use the interval setting to override the default calculated interval and view more or less axis labels.
X-Axis Label

Select the text size and color for the labels along the X axis. You can also adjust the angle at which the labels are displayed.

Left Y-Axis Title

Enter a title for the left Y axis. You can also select the text size and color and adjust the angle at which the title is displayed.

Left Y-Axis Label

Select the text size and color for the labels along the left Y axis. You can also adjust the angle at which the labels are displayed.

Measure for formatting left Y-Axis labels

Select the measure to use to determine the format of the label. For example, if you select a measure that contains a dollar sign ($), the dollar sign is also added to the axis labels.

Right Y-Axis Title

Enter a title for the right Y axis. You can also select the text size and color and adjust the angle at which the title is displayed.

Right Y-Axis Label

Select the text size and color for the labels along the right Y axis. You can also adjust the angle at which the labels are displayed.

Measure for formatting right Y-Axis labels

Select the measure to use to determine the format of the label. For example, if you select a measure that contains a dollar sign ($), the dollar sign is also added to the axis labels.

Transpose Chart

Select this option to switch the position of the dimension and the measure.

Measure

Under Measure, select how each measure is displayed.

> Area
Chart Settings

> Column
> Line
> Spline
> Spline Area
> Step Area
> Step Line
> Waterfall
> Point

Select the box under **Right Y-Axis** to display the measure on the right Y axis.

**Threshold Line/Range**

Select to configure a threshold value and to display the value in the chart.

**Pie Chart settings**

**Measures**

Select the measures to be displayed.

**Start Angle**

Adjust the start angle to rotate the chart and the labels.

**Radius**

Adjust the radius of the pie chart.

**Label Extent**

Adjust the distance of the label from the chart.

**Other Category Threshold Type**

Select to set the threshold as a number value or a percentage value.

**Other Category Threshold**

Optionally, enter a threshold to contain everything below that value in an **Other** category in the chart.
Label Position

Select where the label is displayed in relation to the chart.

Leader Line

Select the type of line to connect the label to the chart.

> Straight
> Arc
> Spline

Radial Gauge Chart

Actual Value

The actual value that is identified by the needle.

Show Target

Select to display the target value.

Target

Select if the target value is a measure or a static value.

Target Value

If you selected Measure, select the measure to use as the target value. If you selected Static, enter the value to use as the target.

Chart Title

Select to use the default title, or select Custom and enter a title.

Minimum Range

The minimum value for the radial, or bullet. If you set the minimum value to 5, that is the lowest value in the chart.

Refer to the Bullet Chart settings section for information about the other Radial Gauge Chart settings.
Scatter Chart settings

Scatter Chart Type

Select the type of scatter chart to use.

- Scatter
- Scatter Line
- Scatter Spline
- Bubble Chart

Refer to the Data Chart section for information about the other Scatter Chart settings.

Sparkline Chart

Sparkline Chart Type

Select the type of sparkline chart to use.

- Area
- Column
- Line
- Win-Loss

Measures

Select the measure to display in the chart.

Sparkline Chart Brush

Select the color of the chart.

Show Y-Axis Label

Select to display the Y-Axis label.

Show Trend Line

Select to show the trend line which displays the directional trend of the data points.

Trend Line Type

Select the type of trend line.
Chart Settings

Brush
Select the color of the trend line.

Thickness
Adjust the thickness of the trend line.

Show Normal Range
Select to show the normal range, which is a horizontal strip that defines the normal, or expected values.

Brush
Select the color of the normal range.

Minimum Range and Maximum Range
Enter the minimum and maximum values to display a normal value range in the chart.

Show Markers
Select to show markers, which highlight individual data points such as high, low, first and last points in the chart. If you select to show markers, select the colors and size.

Show High and Low Markers
Select to display high and low markers, which highlight the high and low points of the chart. If you select to show markers, select the colors and size.

Show First and Last Markers
Select to display first and last markers, which highlight the first and last points on the chart. If you select to show markers, select the colors and size.

Refer to the Data Chart section above for information about the other Sparkline Chart settings.

Stacked Chart

Stacked Chart Types
Select the stacked chart type.
Invert Axis

Select to invert the X and Y axis. Refer to the Data Chart section above for information about the other Stacked Chart settings.

Grid Settings

You can use Grid Settings in EPSI Cube Viewer to configure how the grid displays. You can display the grid either as a drilldown or a pivot grid.

Figure 39: EPSI Cube Viewer - Grid Settings

Grid Mode

Select the grid format.

> **Drilldown**: View 1 dimension at a time.
> **Pivot**: View multiple dimensions at a time.

Default Column Width

Enter the width of the grid columns.
Default Dimension Width

Enter the width of the dimension columns.

Default Indentation

When in pivot mode, enter an indentation value to view different dimension levels more clearly.

Column Sorting

Select a measure in the grid that you want to sort.

Sort Direction

Select the sort option: Ascending or Descending.

Conditional Formatting

Click Conditional Formatting + to apply a customized format to data in the grid, according to conditions that you specify. You can configure the conditions for each dimension in the grid.

Apply conditional formatting to a grid

Use conditional formatting in Grid Settings in the EPSI Cube Viewer to add a customized format to data in the grid that meets specified conditions. You can expand each dimension in the grid to apply a format. Conditional formatting applies a format, such as a text color or highlight, to values in the grid to distinguish different conditions.

1. Open a cube in the EPSI Cube Viewer.
2. Expand the configuration settings pane and click Grid Settings.
3. Click Conditional Formatting.
4. Select the dimension from the list. The Conditional Formatting section is displayed.
5. Click the plus sign (+) to add formatting.
6. Select the measure from the first drop-down list.
7. Select the operator.
   >  <
   >  >
   >  =
   >  <>
Apply conditional formatting to a grid

8. In the box, enter a numeric value.
9. Select a text size.
10. Select **Bold**, **Italic**, or both.
11. Select a text color.
12. Select a text highlighting color.
   A preview displays how the text will look in the grid.

**Figure 40: Conditional formatting settings**

13. Click ‏ to add another format.
14. Repeat steps 4 through 10.
15. Use the up and down arrows to adjust the order of the conditions.
16. Click **Preview**.
17. Click **Save**.
Chapter 7

Report Administration

You can access important reporting functions in Report Administration.

- Create custom report templates.
- Create custom report columns.
- Create saved patient searches to use in reports.
- Assign report access.
- Schedule reports to run on a user-defined time frame and frequency.
- View the report queue.
- View report history.
- Configure report viewing and sharing options.
- Create and define global default fonts.

Report Control Panel

The Report Control Panel in Report Administration enables you to change some setup options for Reporting Manager.

Options tab

- The Default Report Directory specifies where the reports are stored in the database.
- The Month and Pay Period Information sets the default month and pay period to use when the @CurrentPanelMonth@ or @CurrentPanelPayPeriod@ tokens are selected for a report.

Viewer Options tab

- For Viewer Types, select the programs to use to view the report.
- For Temporary Output Folder, select the folder where the temporary report is stored while the report is being viewed. Do not change this option without contacting your IT department.
- Use Temporary File Delete Options to control when the application deletes temporary files from temporary folders. Do not change this option without contacting your IT department.
My Report Sharing tab

Use the My Report Sharing tab to specify the users who can and cannot share reports with other users.

My Report Scheduling tab

Use the My Report Scheduling tab to specify the users who can and cannot schedule reports to run at specified times.

Report Design

Report Design in Report Administration enables you to develop a custom report that is not displayed in any of the standard reports.

The report design options are Template Designer, Column Designer, and Patient Search Designer.

Create a new template using Template Designer

Template Designer in Report Administration enables you to design a template, or rows in a report, to accommodate both profit and loss reports and any report that is not automatically displayed in the standard reports section.

You can use the template designer with a custom column report to customize a whole report. Both Template and Custom Column are displayed in the report title.

1. In the Reporting Manager pane on the left-hand side of the window, select Report Administration > Report Design > Template Designer.

2. Click New Template.

New Template opens.
3. For **Report Template**, enter a template name.

4. For **Data Source**, select the module that the new template applies to.

5. Click **OK**.

6. To add lines, click **Add Line** from the ribbon.
   New lines are added to the bottom of the template and indent 1 level further than the line that is highlighted when you click **Add Line**. All lines are displayed as you enter them and are labeled **Heading** by default until you define them. You can drag lines to change their position in the template.

7. To define the lines, double-click a line or select a line and click **Edit Line**. **Edit Template Line** opens.

8. Complete the line information and click **OK**.

9. Use **Delete Line** and **Copy Line** to continue adding or removing lines from the template.

10. Click **Save** to save the template.
Define template lines

When creating a template using Template Designer, you can define the individual lines in the template by adding a description, and defining the line types and levels.

Before you begin
Create a template and add the necessary lines.

1. In Reporting Manager, select Report Administration > Report Design > Template Designer.
2. For Data Source, select the module that contains the template you are editing.
3. For Report Template, select the template that you want to define lines for.
4. To define the lines, double-click a line or select a line and click Edit Line. Edit Template Line opens.

5. For Description, enter the name that is displayed as the name of the row.
6. For Line Type, select the line type.
> **Heading**: The line is a header in the report.
> **Detail**: Define the data contained in the row in the **Field Selections** tab.
> **Total**: Total rows that are already defined in the report. Lines can be added, subtracted, multiplied, or divided by other lines or by a defined value.
> **Blank line**: No data is displayed in this line. Use this option to add space in the report.
> **Facility Total**: Bypasses security and enables all users to view totals for a specified facility.
> **Enterprise Total**: Bypasses security for the line item and enables all users to view the total for the entire organization.

7. For **Line Level**, select the line level to define where the data is from. Available line level options depend on the template type. The line level provides the options that are available in the **Criteria Selection** tab.

   > **Data Extender Entity**: Pulls data levels from Data Extender.
   > **General Ledger**: Enables the user to use general ledger (G/L) data to define this row.
   > **General Ledger-Adjustment**: Pulls data from any adjustments that were set up.
   > **General Ledger-Allocations**: The data is extracted from any allocations that are in the application.
   > **General Ledger-Balance Sheet**: Enables the user to use any balance sheet data to define this row.
   > **General Ledger-Reclass**: Enables the user to use any re-classed data in the application.
   > **General Ledger-Statistic**: Gives the option to define this row as a statistic.

8. (Optional) Select **Show Detail** to select a level of detail to view.

   **Note**: When running a drilldown report, **Show Detail** only works if the **Detail** selected is **Sub Account**. Other **Detail** fields are not be displayed in drilldown reports.

The data that defines the line shows at the most detailed level.

9. Select any other applicable options.

   > **Show Total Bar**: Displays a line representing that the row totals other rows on the report. Available only if **Total** is selected for line type.
   > **Hide Line in Report**: Hides the line in the report. This functionality is mainly used when you are defining a line to be used in a calculation and do not need to see the line.
   > **Use Row Calculation for Computed Column**: Applies the row calculation or formula to any computed columns that are used to create the report.
   > **Line Divisor**: Divides the row by the number that you enter. For example, if you enter 1,000, the row would be divided by 1,000. Instead of viewing reports in millions of dollars there is an option to view reports in thousands of dollars.
> **Show Detail Description**: The report includes the description for the detail that is selected.
> **Variance Calculation**: Defines whether variances are based on year 2 minus year 1 or year 1 minus year 2.
> **Variance Divisor**: Defines whether the variances are calculated by dividing by year 1 or year 2. This is only available when the data source is general ledger.

10. Click the **Criteria Selection** tab and use Boolean logic to determine the data that is displayed for the row. Depending on the line level selected, the options you can choose from when filtering data in this section can differ.
   
   If the field you selected is date, month, or pay period related, the **Relative Dating** tab is enabled. Relative dating enables you to report on a date range relative to the current date rather than a specific range.

11. (Optional) Click the **Relative Dating** tab.
   
   a) Select the date option. The options displayed depend on the type of field.
      
      For example, date field options include current day, week, month, quarter, or year. Pay period options refer to the pay period set up in the control panel (Report Administration > Control Panel).

   b) Select + or - and a value.
      
      For example, if you select **Current Month -1**, the report will include information for last month.

12. Click the **Field Selection** tab to determine what the calculation will be and what type of data will be displayed, then click **Add**.

13. Click the **Total Selection** tab to use Boolean logic to set up a total row. You can add, subtract, multiply, or divide other previously defined rows in this report to create the total line. You can also add, subtract, multiply, or divide a value in this total line using the **Field** option and filling in the number that needs to be in the total.

   After you define all rows in the template, it is displayed as a selection option from template reports tab depending on the report that is selected from the standard reports table.

14. Click **OK**.

15. Click **Save** to save the template.

---

**Related information**

Using Boolean logic on page 24
Add a new column using Column Designer

Using **Column Designer**, you can design a column to accommodate a report that is not automatically displayed in the standard reports section.

These columns are used in any standard report that has custom column in the description of the standard report. The columns can be used with a custom template to design a fully customized report.

Computed columns are set up when you create the report. It is not necessary to design a total column or computed column when designing specific reports.

1. In Reporting Manager, select **Report Administration > Report Design > Column Designer**.
2. Click **Add Custom Column** in the toolbar.
   
   **Add/Edit Column Designer** opens.
3. For **Data Source**, select the data source to define the modules that the column extracts the data from. Payroll columns can be defined as daily, monthly, or at the pay period level.

4. For **Data Type**, select the data type to further define the data source.

5. Select **Public Flag** to enable any user that designs report to use this column. If you do not select **Public Flag**, you are the only user who can use the column in a report.

6. For **Column Name**, enter a name for the column.

7. For **Heading**, enter a description to be displayed at the top of the report.

8. For **Aggregation**, select the aggregate function to determine how the application totals the data in the column.

9. On the **Criteria Selection** tab, use Boolean logic to determine the data that is displayed for the column.
Depending on the data type selected, the available options when filtering data in this section vary.

If the field you selected is date, month, or pay period related, the Relative Dating tab is enabled. Relative dating enables you to report on a date range relative to the current date rather than a specific range.

10. (Optional) Click the Relative Dating tab.
    a) Select the date option.
       The options displayed depend on the type of field.
       For example, date field options include current day, week, month, quarter, or year. Pay period options refer to the pay period set up in the control panel (Report Administration > Control Panel).
    b) Select + or - and a value.
       For example, if you select Current Month -1, the report will include information for last month.

11. On the Field Selection tab, determine the calculation and what type of data is displayed in the column, then click Apply.

12. Click OK.
    After you define the column, it is displayed as a selection option in the Custom Columns tab depending on the report.

---

Related information
Using Boolean logic on page 24

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Create a saved search using the Patient Search Designer

You can create and save a patient search using the Patient Search Designer to reuse when you are building a report. This option enables you to enter search criteria only 1 time to use in multiple reports.

Before you begin
You must be a report administrator and have security tree view rights to access the Patient Search Designer.

2. Click Add Patient Search.
   Add/Edit Patient Search opens.
3. For **Patient Search Name**, enter a patient search name.

4. Define the criteria to include and exclude using the **Lookup Value**, **Enter Value**, and **Field** tabs.
   If the field that you selected is date, month, or pay period related, the **Relative Dating** tab is also enabled. Relative dating enables you to report on a date range relative to the current date rather than a specific range.

5. Click the **Relative Dating** tab, if applicable.
   a) On the **Relative Dating** tab, select the date option.
      The options displayed depend on the type of field. For example, date field options include current day, week, month, quarter, or year. Pay period options refer to the pay period set up in the control panel (**Report Administration > Control Panel**).

   b) Select + or - and a value.
      For example, if you select **Current Month -1**, the report will include information for last month.
6. (Optional) Apply a predefined population.

7. Click OK.
The search is displayed in the Patient Search Designer grid. The grid displays information about the search such as who created the search, when it was created, when it was modified and by who, and also the number of reports that the search is used in.

8. To delete a saved search, select the search and click Delete Patient Search.
   
   **Note:** You cannot delete a saved search if it is used in a report.

9. To copy a saved search, select the search and click Copy Patient Search.
   
   **Note:** When you copy a search, the name of the search is also copied. You must rename the search before saving. Patient search names must be unique.

10. To edit a saved search, click the name of the search in the Patient Search Description column.

**What to do next**
Use the saved search when creating a report by clicking Shared on the Patient Search tab.

**Assigning and scheduling reports**

Using Assign/Schedule Reports in Report Administration, you can distribute reports, edit the schedule time of a distributed report, and make changes to distributed report assignments.

**Distribute Custom Reports**

Assign a report to be distributed to users or roles. Move the report name from Available to Assigned.
Assign Reports

Assign either standard or distributed reports to users by role or by individual user. Select the module that contains the report and whether it is a standard or distributed report. You can then assign users by moving them from Unassigned to Assigned.

Delete My/Distributed Reports

Delete distributed reports. Select either the custom report or the distributed report from the list of reports and click Delete. The report is no longer available to the users that it was distributed to.

Report Schedule Groups

The report schedule group displays all of the different schedule groups that have been created. Schedule groups are lists of reports that are run together at the specified time. You can add new groups, edit current groups, or delete a schedule group.

Report Schedule Group Assignment

Determine which reports are assigned to each schedule group. Select the schedule group at the top of the page and move the applicable report from Unassigned to Assigned to add the report to the schedule group.

Report Queue

View the reports that are currently running in the application.

Report History

View a list of reports that were run. Any reports that were run with errors are displayed in red text.

Related information
Add a schedule group on page 106

Assign reports to users

You can assign standard or distributed reports to users by role or by individual user.

1. In the Reporting Manager pane on the left-hand side of the window, select Report Administration > Assign/Schedule Reports > Assign Reports.
Assigning and scheduling reports

The **Assign Reports** tab is displayed.

2. Select **Standard Reports** or **Distributed Reports** in the reporting pane.
3. Select **Report Hierarchy View** or **Report List View** to change the report display.
4. Select the reports to assign.
5. Select how to assign the reports, **By Role** or **By User**.
6. Select the roles or users to assign to the report.
7. Click **Save**.

**What to do next**
You can view report assignments on the **Assignment Summary** tab.

---

**Unassign reports from users**

You can unassign reports so that users can no longer access them.

1. In the Reporting Manager pane on the left-hand side of the window, select **Report Administration > Assign/Schedule Reports > Assign Reports**.
2. Click the **Unassign Reports** tab.
3. Use the options to filter the reports.
   - **System Module**
   - **Report Type**
   - **Report Name**
> Assigned by User/Role
> User Name/Role Name

4. Click **Search**.
5. Select the reports to unassign.
6. Click **Save**.

**Related information**
Assigning and scheduling reports on page 103

## Delete my reports and distributed reports

1. In the Reporting Manager pane on the left-hand side of the window, select **Report Administration > Assign/Schedule Reports > Delete My/Distributed Reports**.
2. Select the type of report to delete, **My Reports** or **Distributed Reports**.
3. Use the options to filter the reports.
   > **System Module**
   > **Report Name**
   > **User**
   > **Report Currently Scheduled**
4. Click **Search**.
5. Select the reports to delete.
6. Click **Delete Reports**.

## Add a schedule group

Use schedule groups to group reports together so that they run on the same frequency. Assigning reports to the groups is completed in **Schedule Group Assignments**.

1. In the Reporting Manager pane on the left-hand side of the window, select **Report Administration > Assign/Schedule Reports > Schedule Groups**.
2. Click **Add**.
   **Schedule Group** opens.
3. For **Schedule Group**, enter a name for the schedule group.

4. Select **Show Schedule groups when allowing users to schedule reports** to enable users to assign reports to this schedule reports when using **Save As**.

5. Under **Occurs**, select whether the schedule group runs **Daily**, **Weekly**, or **Monthly**.

6. Select the frequency.
   - If you select **Daily**, select the day the schedule group runs.
   - If you select **Weekly**, select the week and days of the week the schedule group runs.
   - If you select **Monthly**, select the month and day of the month the schedule group runs.

7. Under **Daily Frequency**, select the time of day the group refreshes.

8. Under **Duration**, select the start and end dates that the schedule group runs.

9. Click **OK**.
   The new schedule group is displayed in the grid.

**What to do next**
Assign reports to the schedule group in **Schedule Group Assignment**.
Assign reports to schedule groups

Assign the reports to run according to the schedule configured for the schedule group.

1. In the Reporting Manager pane on the left-hand side of the window, select Report Administration > Assign/Schedule Reports > Schedule Group Assignment.

2. For Schedule Group, select the schedule group to assign the report to.

3. Under Report Type, select to assign Distributed Reports or My Reports.

4. For Output Type, select the output format.
   - Comma Separated Value File (CSV)
   - Cube
   - Database Table
   - Drilldown
   - Report

5. For System, select the report type based on the application.

6. Select Users or Roles to assign the reports by users or by roles.

7. Under Report(s) Not in Group, select the reports to assign and click to move them to Report(s) in Group.

8. Click Save.
Report Queue

You can use the **Report Queue** *(Report Administration > Assign/Schedule Reports > Report Queue)* to view the scheduled reports that are currently running and the scheduled reports that are waiting to be run.

You can filter the reports to determine the information that is displayed. The following information is displayed:

- Report Type
- Report Path
- Report Name
- Output Type
- Report Status
- Submit Time
- Submitted By
- Assign by User/Role
- User Name/Role Name
- Scheduled Time
- Execution Start Time

Report History

You can use **Report History** *(Report Administration > Assign/Schedule Reports > Report History)* to view the history and status of scheduled reports that were previously run.

Use the filters to specify your criteria, and click **Search**. You can click the **View Error** link to view any errors that occurred when the report was run.
Add an EOB template

You can create a template for the EOB (explanation of benefits) report in EOB Template (Report Administration > EOB Template).

1. In the Reporting Manager pane on the left-hand side of the window, select Report Administration > EOB Template.
2. Click Add.
   Add EOB Template opens.
3. Enter a name for the template in EOB Template Name.
4. Click OK.
5. In the grid, double-click the EOB Template Name you just added, or select it and click Edit to add or edit information.
   Edit EOB Template opens.
6. Select the Token, or field, to add to the header.
7. Click Insert.
8. Select Footer to add tokens to the footer.
9. Click Ok.

Default font settings

Configure the default settings that are inherited by all reports in Report Administration > Font Configuration > Global Default Section Fonts.

Settings include header information such as company logo, default fonts, bold, italics, or other text properties for any field on the report.

Select any row in the grid and click Edit to change the default settings.

Settings can also be defined in various areas of Reporting Manager.
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