

# MITS Discover User Guide

For MITS Discover version 10.0

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# **Welcome to MITS Discover**

## **Before You Begin**

### Audience

The purpose of this document is to provide a comprehensive guide to the features and functionality of MITS Discover browser client for the purposes of creating, modifying, and working with reports.

Many of the features of MITS Discover are controlled by security settings or licensing and will only be available if you have the appropriate permissions or license edition. If you have questions about security settings, see your MITS administrator. If you have questions about MITS Discover licensing, contact your MITS provider.

### Requirements

Here's what you will need in order to use MITS Discover:

#### **Web Browser**

The MITS Discover user interface is accessed using a standard Web browser, so it is expected that the user has access to and knows how to use a Web browser.

The following Web browsers have been verified as compatible for use with this version of MITS Discover:

- Windows® Internet Explorer® version 11
- Mozilla® Firefox® versions 36
- Google Chrome™ version 41
- Apple® Safari® version 7.1 (Mac OS X)
- Mobile Safari on iOS devices including iPad® (1<sup>st</sup> generation not supported) and iPhone®

**NOTE:** Some issues not affecting core functionality may be experienced on iOS devices.

#### **MITS Discover URL**

MITS Discover is accessed through a URL which is typed into the address bar of your Web browser. This URL will be provided by your MITS administrator.

**NOTE:** While it is possible to configure the system so that it is accessible from any supported, internet-connected browser, MITS Discover access is typically confined to a corporate network. As such, you may need to be connected to a specific network (either directly or through a VPN) in order to access MITS Discover.

### **Login ID and Password**

Each MITS Discover user will be assigned a unique login ID and password for the purpose of logging in to MITS Discover. This information will be provided by your MITS administrator.

### Conventions

Throughout this document, the following conventions are used:

- Variable, user-specific data in commands and examples will be encompassed by two sets of angle brackets. The angle brackets, as well as the characters contained within, should be replaced with the pertinent information as explained in the paragraph(s) that precede or follow the command or example.  
Example: <<Variable>>
- Code and program samples will appear in a plain, mono-spaced font.  
Example: `Code Sample`

## **What's New in MITS Discover Version 10**

### Features

- **Drag and Drop Dashboard Editing**  
In previous versions of MITS Discover creating or modifying dashboards and scorecards required an understanding of HTML as well as MITS' own coding language. With the new drag and drop dashboard editor, any user with the appropriate rights can add, move, and modify elements of any scorecard or dashboard without ever knowing any code.
- **Column Selecting**  
A new column selection tool makes it easier than ever to add columns to a report or modify the ones that are already in use. Simply begin typing keywords from a column header and MITS Discover returns a list of all columns with those keywords. The more keywords entered, the more refined the results list becomes.
- **Chart Objects for Dashboards**  
Making chart objects for dashboards is now possible directly from a chart and not just a report.

### Things to be Aware of When Upgrading from 7.x or prior

- Many of the administration-related security permissions have been merged into a permission simply named ADMIN. If you had configured users to have access to specific administration functions (only the scheduler, only the security user manager, etc.), these users will now have full administration access.
- The practice of "nesting" security templates (or including a security template in another security template) is no longer supported. Any existing nested templates will be "flattened" during the upgrade process, fully preserving the existing security functionality for your users. As an example: Prior to the upgrade, USER1 includes TEMPLATE1 and TEMPLATE1 includes TEMPLATE2. After the upgrade, USER1 will include both



TEMPLATE1 and TEMPLATE2, and TEMPLATE2 will no longer be included in TEMPLATE1.

## **Getting Started**

MITS Discover provides an easy-to-use, browser-based, Online Analytical Processing (OLAP) environment.

The MITS Discover Hypercube Application is a special database designed specifically to maintain interlinked historical data in a hierarchical manner, providing rapid answers to OLAP inquiries and exploration.

Start your MITS Discover experience by navigating your Web browser to the URL where MITS Discover is being hosted. If you don't have the URL, contact your MITS administrator.

### Logging In

Once you have established a connection to MITS Discover, the first thing that appears is the MITS Discover Welcome Screen. This screen allows you to log in to MITS Discover. It also provides version and edition information.

Enter your MITS Discover User ID and Password to begin. This information will be provided by your MITS Discover administrator.

The screenshot shows the MITS Discover web interface. At the top left is the 'mitsdiscover' logo, and at the top right is a 'Help' link. Below the header is a grey bar. The main content area has the heading 'Welcome to MITS Discover'. Underneath is a login form with two input fields: 'User ID' and 'Password'. Below these fields is a 'Submit' button with a blue icon.

**NOTE:** If you receive a notification that your password has expired, follow the on-screen prompts to reset it.

## **Settings**

Clicking Settings in the upper right corner of the page next to your username will allow you to change some of the settings for your user account.

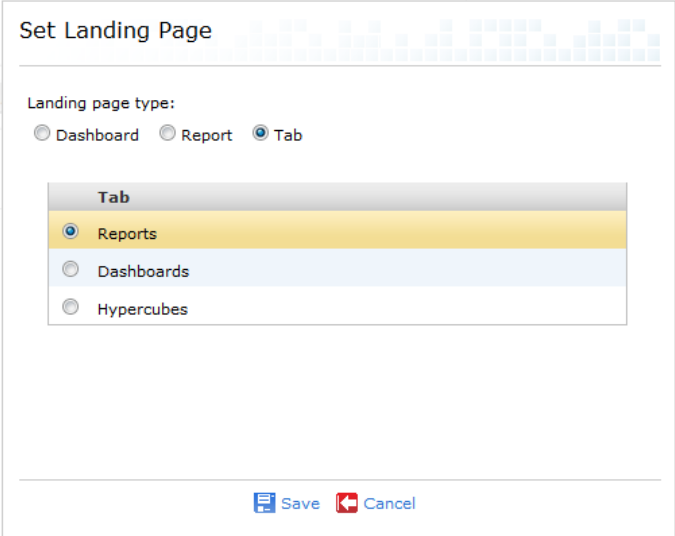
### Change Password

Clicking Change Password will allow you to set a new password.

### Change Landing Page

Clicking Change Landing Page will allow you to configure the page that is displayed when you first log in to MITS Discover. You can select an existing saved report, a full screen dashboard, or one of the main tabs as your landing page.

1. Select Dashboard, Report, or Tab to set the type of page to display.
  - Dashboard: select the Library and the specific Dashboard to display. If the selected dashboard requires a prompt value, select the Specify Prompt Values check box. (You will be asked for these values upon clicking Next)
  - Report: select the Library and the specific report to display
  - Tab: select the desired tab (Reports, Dashboards, or Hypercubes).
2. Click Save.



## **Help**

Clicking **Help** in the upper right corner of the page next to your username will allow you to access the following helpful resources:

### User Guide

Selecting **User Guide** will allow you to view a PDF of this user guide for reference.

### Training

Selecting **Training** will take you to the training section of the MITS website ([www.mits.com/training](http://www.mits.com/training)), which shows the current list of training sessions available and allows you to register for any of those sessions. There is also a link provided for each type of training allowing you to view a pre-recorded session at your convenience.

**NOTE:** You will be asked for a login to view the recorded sessions. If you do not have a login, check with our support group at [support@mits.com](mailto:support@mits.com) or 888-700-6487.

### Open a Support Case

Selecting **Open a Support Case** will allow you to submit a support case.

1. Identify whether this is a new or existing case and provide the existing case number if you have it available.
2. Fill in the requested fields and click **Ok** to submit this information to the MITS Support team.



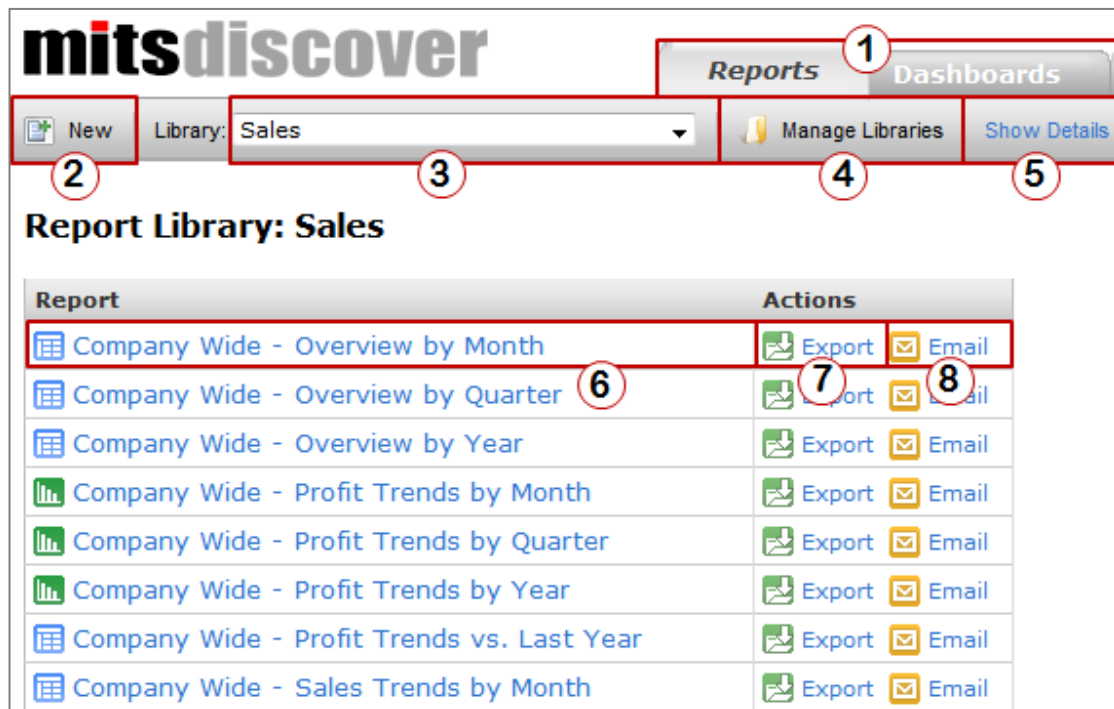
The screenshot shows a web form titled "Open a new support case:". The form contains the following fields and sections:

- Four input fields for "Your name:", "Your email address:", "Confirm email address:", and "Your phone number (optional):".
- A text input field for "Email subject:".
- A large text area for "Describe the issue, including what you were doing and any error messages:".
- A dropdown menu for "Did this work before?" with "Don't know" selected.
- A text input field for "What, if anything, has changed since then? (optional):".
- Another dropdown menu for "Are other users having the same issue?" with "Don't know" selected.
- A text input field for "Additional information pertaining to this issue (optional):".
- At the bottom, there are three buttons: "Back", "Ok", and "Cancel".



## The Reports Tab

### Introduction

All included and user-saved reports are listed on the Reports Tab. The components of this page are described below.



**NOTE:** The icon to the left of each report name indicates the style of that report, as follows:

-  Report
-  Chart

1. **Navigation Tabs:** The *Reports* tab is for creating, viewing, and modifying reports. The *Dashboards* tab is for viewing dashboards and scorecards for the (optional) MITS Dashboard add-in product. The *Hypercubes* tab is for viewing the status of your Hypercube applications as well as scheduling Hypercube build jobs. The *Administration* tab is for general administration tasks such as creating users, defining credentials for the email services feature, and configuring build job notification messages.

**NOTE:** The presence of each tab is controlled by licensing. In addition, access to each of these tabs is controllable on a per-user basis via user security.

2. **New:** Click here to create a new report. For a detailed explanation of report creation steps and options, see ***Creating Your First Report***.
3. **Library:** Select a report library from this drop-down menu to view a list of the reports that

are stored within that library. You can find more information about report libraries in the **Report Libraries** section.

4. **Manage Libraries:** Click this link to add or remove existing report and dashboard libraries.
5. **Show/Hide Details:** Click this link to show or hide additional details about each report, such as the build date range and information about report scheduling.
6. **Report Listing:** Click a report title to display that report.
7. **Export:** Click here to display the export options menu for the corresponding report. This allows you to quickly export the report to one of a number of different file formats including Microsoft Excel and PDF.
8. **Email:** Click here to display the email options menu for a report. This allows you to immediately send the corresponding report as an email attachment or configure a scheduled email.

**NOTE:** If this button does not appear, your system has either not been configured to support the emailing of reports, or your security settings are preventing you from sending emails from within MITS Discover. Please contact your MITS Discover administrator for assistance.

## Report Libraries

A *report library* is simply a place where reports are stored. Every MITS Discover system comes with a generic report library named COMMON. If user security has been enabled and initialized, each user will also receive a personal report library. Your system may have also come with pre-installed reports that are already organized into a series of report libraries.

**NOTE:** User-specific report libraries are automatically created the first time a user attempts to save a report.

## Creating Your First Report

MITS Discover report data is retrieved from pre-configured MITS Discover Hypercube Applications.

**NOTE:** You must have at least one populated Hypercube Application available on your system to continue.

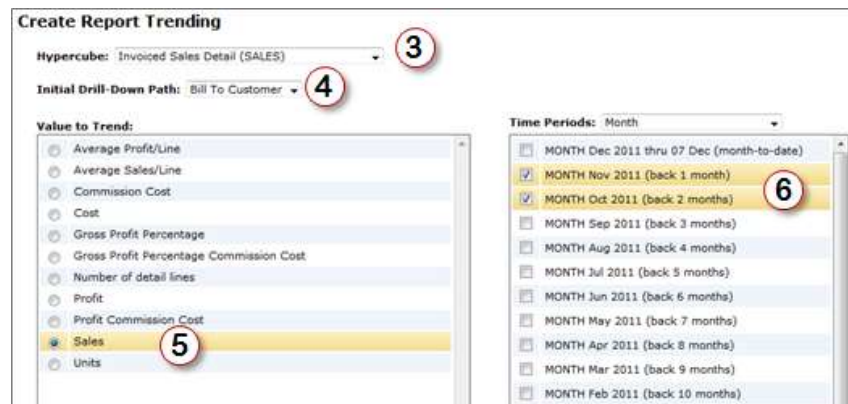
1. To begin, log in to MITS Discover and click the **New** button directly under the MITS Discover logo in the upper left corner of the main report selection page, then select **Report**.



2. The next step involves selecting the type of report to create. There are a number of options available, but for this example we will select *Trending*. This report type will show the difference and percent of change between two or more time periods for a specified value.



3. Once you have selected the report type, a page similar to the one shown here will appear. Start by selecting a Hypercube application. We have selected **Sales** for this example.



4. Next, select the Initial Drill-Down Path identifier, if desired. (This can always be changed after the report has been created.) For this example, **Bill To Customer** has been selected.

- Choose the value that you would like to see in your report. We have selected **Sales** for this example. This selection will be combined with each of the time periods you select to create the columns for your report.
- Select a time period group (month, year, etc.) from the **Time Periods** drop-down menu to filter the list of available time periods, and then select the check boxes next to the time periods you want to compare. In this example, we have selected the time periods **Month Nov 2011** and **Month Oct 2011**. These selections will be combined with our **Value to Trend** selection of **Sales**, which means that our report results will be based on two columns: *Sales for Month Nov 2011* and *Sales for month Oct 2011*.
- Finally, click ☒ OK to view the report.

As you can see here, the *Trending* report type produces a report that includes the *difference* and *trend* (percent-of-change) between the two time periods for the selected value, as well as the two columns that were used to generate those values (for reference purposes):

SALES Product Group	DIFFERENCE SALES MONTH Oct 2011 SALES MONTH Nov 2011	TREND SALES MONTH Oct 2011 SALES MONTH Nov 2011	SALES MONTH Nov 2011	SALES MONTH Oct 2011
SALES:	150,362	+16.4%	1,064,568	914,206
Acehotware	0		0	0
Bamlatdox	119,725	+157.5%	195,725	76,001
Baseity	-5	-100.0%	0	5
Bigla	0		0	0
Bluehigh	-67,448	-98.7%	888	68,336
Cancare	1,816		1,816	0
Canedexon	2,548	+510.3%	3,048	499
Canephase	-2,695	-50.8%	2,615	5,309
Canlux	-19	-100.0%	0	19
Carelax	-5,188	-32.5%	10,762	15,949
Citybase	4,060	+1540.2%	3,796	-264

## Report Types

When creating a new report, you are given the option to select from six report types which are explained below. The resulting report may be exactly what you need...but if it isn't, the flexibility of MITS Discover allows you to fully modify any report. This means that any report can be used as a starting point to meet your more complex reporting needs. You can add, remove, and re-order the columns, modify the drill-down path, apply sorting and/or filtering, and more; all without the need to learn a complex query language.

## Custom

A custom report can be configured however you like. You can specify the initial drill-down path as well as the exact columns you want to include in your report.

Here is an example of a basic report showing sales dollars by warehouse for 2002, 2003, 2004, and 2005. (We will refer back to the values on this report as we discuss the other report types.)

Sales History by Warehouse				
SALESDEMO Warehouse	SALES YEAR 2005 thru Jan 21	SALES YEAR 2004	SALES YEAR 2003	SALES YEAR 2002 from Sep 01
SALESDEMO:	318,446	3,925,840	3,823,303	642,370
BOISE BRANCH	11,884	269,058	245,442	140,704
PORTLAND BRANCH	134,643	1,403,856	1,210,672	114,510
SEATTLE BRANCH	106,979	1,202,623	1,375,778	248,381
SPOKANE BRANCH	64,939	1,050,302	991,411	138,776

## Trending

As described in the **Creating Your First Report** example above, a *Trending* report provides a quick comparison of a specified metric over two or more time periods.

This is an example of a simple trending report. It shows the comparison of total sales broken down by warehouse between year 2003 and year 2004 as a dollar amount and a trend percentage. The originally selected columns are included for reference, and no filters are applied.

Sales Trending by Warehouse				
SALESDEMO Warehouse	DIFFERENCE SALES YEAR 2003 SALES YEAR 2004	TREND SALES YEAR 2003 SALES YEAR 2004	SALES YEAR 2004	SALES YEAR 2003
SALESDEMO:	102,537	+2.7%	3,925,840	3,823,303
BOISE BRANCH	23,616	+9.6%	269,058	245,442
PORTLAND BRANCH	193,185	+16.0%	1,403,856	1,210,672
SEATTLE BRANCH	-173,155	-12.6%	1,202,623	1,375,778
SPOKANE BRANCH	58,891	+5.9%	1,050,302	991,411

If more than two time periods are selected, there will be one *difference* and one *trend* column generated for each pair of selected time periods. For example, if we had also included year 2002 when selecting the time periods for the report above, the columns in the resulting report would be: *Sales for 2004, Difference between 2003 and 2004, Trend between 2003 and 2004, Sales for 2003, Difference between 2002 and 2003, Trend between 2002 and 2003, and Sales for 2002.*

## Trending Upward Overall

The *Trending Upward Overall* report type allows you to quickly retrieve a list of related identifier values which have shown an increase in a defined metric over two selected time periods.



This example shows a *Trending Upward Overall* report by warehouse comparing sales amounts from year 2003 and year 2004. It includes the *difference* and *trend* between the sales values for year 2003 and 2004, as well as the base *Sales for 2004* and *Sales for*

### Sales Trending Upward Overall by Warehouse

SALESDEMO Warehouse	DIFFERENCE SALES YEAR 2003 SALES YEAR 2004 1=	TREND SALES YEAR 2003 SALES YEAR 2004	SALES YEAR 2004	SALES YEAR 2003
SALESDEMO:	102,537	+2.7%	3,925,840	3,823,303
PORTLAND BRANCH	193,185	+16.0%	1,403,856	1,210,672
SPOKANE BRANCH	58,891	+5.9%	1,050,302	991,411
BOISE BRANCH	23,616	+9.6%	269,058	245,442

2003 columns for reference purposes. Additionally, a filter is applied to show only those rows which have had an increase in sales between 2003 and 2004.

If you compare this example with the report from the *Trending* example above, you will notice that the sales for the Seattle warehouse were down \$173,155 in 2004 when compared to the sales for 2003. For this reason, the Seattle warehouse does not appear in this report.

If more than two time periods are selected, the difference and trend values will be calculated based on the oldest and newest time periods only. For example, if we had included year 2002 in the above report, the columns in the resulting report would have been: *Difference between 2002 and 2004*, *Trend between 2002 and 2004*, *Sales for 2004*, *Sales for 2003*, and *Sales for 2002*. The year 2003 column would appear in the final report for reference purposes, but the 2003 values would have had no effect on the values in the difference and trend columns; therefore, the addition of this time period would not change the filtering.

### Trending Upward Consistently

The *Trending Upward Consistently* report type provides the ability to create a report which includes the identifier rows that have shown a consistent increase for a defined metric over two or more selected time periods. Any identifier row that shows a decrease between any of the selected time periods is filtered out of the final display.

The example below shows a *Trending Upward Consistently* report by warehouse comparing sales amounts from years 2002, 2003, and 2004. It includes the *difference* and *trend* between the sales values for 2002 and 2004, as well as the base *Sales for 2004*, *Sales for 2003*, and *Sales for 2002* columns for reference purposes. Additionally, a filter is applied to show only those rows which have had an increase in sales between 2002 and 2003 and then again between 2003 and 2004.

### Sales Trending Upward Consistently by Warehouse

SALESDemo Warehouse	DIFFERENCE SALES YEAR 2002 from Sep 01 SALES YEAR 2004 1=	TREND SALES YEAR 2002 from Sep 01 SALES YEAR 2004	SALES YEAR 2004	SALES YEAR 2003	SALES YEAR 2002 from Sep 01
SALESDemo:	3,283,470	+511.1%	3,925,840	3,823,303	642,370
PORTLAND BRANCH	1,289,347	+1126.0%	1,403,856	1,210,672	114,510
SPOKANE BRANCH	911,526	+656.8%	1,050,302	991,411	138,776
BOISE BRANCH	128,355	+91.2%	269,058	245,442	140,704

If you compare this example with the report from the *Sales History by Warehouse* example (under the **Custom** report type), you will notice that while the sales for the Seattle warehouse were up \$1,127,397 between years 2002 and 2003, they were down \$173,155 between years 2003 and 2004. For this reason, the Seattle warehouse does not appear in this report.

If only two time periods are selected, the resulting report is no different than if the *Trending Upward Overall* report type had been created with the same time periods. If more than two time periods are selected, the difference and trend values displayed in the report will be calculated from the oldest time period and the newest time period, but the filter will take each time period combination into account from oldest to newest as described above.

#### Trending Downward Overall

The *Trending Downward Overall* report type allows you to quickly retrieve a list of related identifier values which have shown a decrease in a defined metric over two selected time periods.

### Sales Trending Downward Overall by Warehouse

SALESDemo Warehouse	DIFFERENCE SALES YEAR 2003 SALES YEAR 2004 1=	TREND SALES YEAR 2003 SALES YEAR 2004	SALES YEAR 2004	SALES YEAR 2003
SALESDemo:	102,537	+2.7%	3,925,840	3,823,303
SEATTLE BRANCH	-173,155	-12.6%	1,202,623	1,375,778

This example shows a *Trending Downward Overall* report by warehouse comparing sales amounts from year 2003 and year 2004. It includes the *difference* and *trend* between the sales values for year 2003 and 2004, as well as the base *Sales for 2004* and *Sales for 2003* columns for reference purposes. Additionally, a filter is applied to show only those rows which have had a decrease in sales between 2003 and 2004.

If you compare this example with the report from the *Trending* example above, you will notice that the sales for the Seattle warehouse is the only warehouse that showed a decrease in sales between 2003 and 2004. For this reason, all warehouses except Seattle have been automatically removed from this report.

If more than two time periods are selected, the difference and trend values will be calculated

based on the oldest and newest time periods only. For example, if we had included year 2002 in the above report, the columns in the resulting report would have been: *Difference between 2002 and 2004*, *Trend between 2002 and 2004*, *Sales for 2004*, *Sales for 2003*, and *Sales for 2002*. The year 2003 column would appear in the final report for reference purposes, but the 2003 values would have had no effect on the values in the difference and trend columns; therefore, the addition of this time period would not change the filtering.

### Trending Downward Consistently

The *Trending Downward Consistently* report type provides the ability to create a report which includes the identifier rows that have shown a consistent decrease for a defined metric over two or more selected time periods. Any identifier row that shows an increase between any of the selected time periods is filtered out of the final display.


Sales Trending Downward Consistently by Warehouse					
SALESDEMO Warehouse	***** DIFFERENCE SALES YEAR 2002 from Sep 01 SALES YEAR 2004 1=	***** TREND SALES YEAR 2002 from Sep 01 SALES YEAR 2004	***** SALES YEAR 2004	***** SALES YEAR 2003	***** SALES YEAR 2002 from Sep 01
SALESDEMO:	3,283,470	+511.1%	3,925,840	3,823,303	642,370

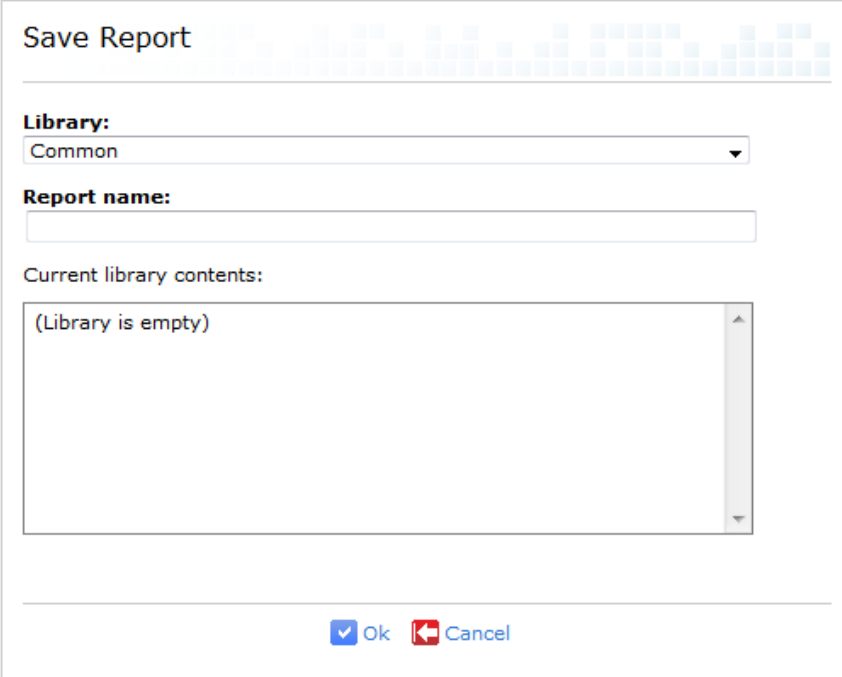
This example shows a *Trending Downward Consistently* report by warehouse comparing sales amounts from years 2002, 2003, and 2004. It includes the *difference* and *trend* between the sales values for 2002 and 2004, as well as the base *Sales for 2004*, *Sales for 2003*, and *Sales for 2002* columns for reference purposes. Additionally, a filter is applied to show only those rows which have had a decrease in sales between 2002 and 2003 and then again between 2003 and 2004.

As you can see in the example above, all four warehouses have been filtered out of the final report. Boise, Portland, and Spokane do not appear because the sales for these warehouses showed an increase between 2002 and 2003 and then again between 2003 and 2004. Seattle showed a decrease in sales between 2003 and 2004, but an increase between 2002 and 2003. In order to be included on this report, a single warehouse would have needed to show a decrease in sales between 2002 and 2003 and then again between 2003 and 2004.

If only two time periods are selected, the resulting report is no different than if the *Trending Downward Overall* report type had been created with the same time periods. If more than two time periods are selected, the difference and trend values displayed in the report will be calculated from the oldest time period and the newest time period, but the filter will take each time period combination into account from oldest to newest as described above.

## Saving a Report

You can save the currently displayed report at any time by clicking the  Save button in the report tool bar. A page similar to the image below will appear.



The 'Save Report' dialog box features a title bar with a decorative pattern. It contains a 'Library:' dropdown menu with 'Common' selected. Below it is a 'Report name:' text input field. A section labeled 'Current library contents:' contains a list box showing '(Library is empty)'. At the bottom, there are 'Ok' and 'Cancel' buttons with corresponding icons.

1. Select a report library from the **Library** drop-down menu.
2. If you want to replace an existing report, select the report that will be replaced in the **Current library contents** box.
3. If you would prefer to save this report as a new report, enter a new name in the **Report name** box.

**WARNING:** Be sure to type a name that is unique within the currently selected report library. If you type a report name that already exists in the currently selected report library, the original report will be overwritten with your new report.

4. Click **Ok** to save the report.

## Report Display Layout

The following example illustrates a report. Each area is described in the list that follows.

**Locations - Return on Assets**

INVENTORY Location	Demand Periods Avg OHV AS OF Mon Oct 31	12 Demand Periods Profit AS OF Mon Oct 31	12 Demand Periods Sales AS OF Mon Oct 31	GP Pct AS OF Mon Oct 31
INVENTORY	2,798,629	4,651,965	13,123,624	35.4%
Warehouse	703,863	1,789,263	3,912,742	45.7%
Warehouse 4	566,174	710,777	2,461,310	28.9%
Warehouse 1	313,004	340,742	1,124,026	30.3%
Warehouse 2	294,670	540,559	1,611,417	33.5%
Warehouse 6	288,501	393,648	1,264,178	31.1%
Warehouse 3	220,291	387,748	1,154,294	33.6%
Warehouse 15	160,556	221,464	760,511	29.1%

- Report Tool Bar:** Controls interactions with the report.
- Navigation Tool Bar:** Used to navigate multi-page reports. It appears at both the top and the bottom of the report display. The top navigation tool bar also includes shortcuts to frequently used display modifiers.
- Report Title:** The report title will not show up until the report has been saved.
- Current Drill-Down Path:** Displays the names of the identifiers represented in the current report's drill-down path.
- Column Heading Area:** Each column heading describes the contents of the column's cells. The headings can also be clicked to open the **Column Options** menu.
- Identifier Values:** Identifiers are the people, places, and things that make up the horizontal rows of a report. The list of identifier values in the current drill-down path appears in the left most column of the main report display. These links are used for deeper exploration of the data in this report.
- Column Grid:** Each column displays accumulated information directly from a Hypercube or related information from supporting data files.
- Cell:** The intersection between a column header and a specific identifier value. Clicking the contents of a cell that is displayed as a link will display detailed source transaction information for that value. See the section titled **Detail Display** for more information.

## Exploring Your Data

There are a number of ways to modify the display of a MITS Discover report, but the most powerful is the expand ability. This is also known as “*drilling down*”. This feature allows you to get a more detailed breakdown of the information displayed in almost any report row.

### Expanding a Report

1. Click the identifier description you wish to expand from the left most column of your report. A menu will appear, listing the identifiers that are available for expansion at that drill- down level.

**Profit by Region - Last 4 Quarters**

SALESDemo Region	PROFIT QUARTER 2005 Q4	PROFIT QUARTER 2005 Q3	PROFIT QUARTER 2005 Q2	PROFIT QUARTER 2005 Q1
SALESDemo:	88,833	91,153	193,877	154,436
Eastern Region	25,813	26,458	95,194	30,308
Western Region	63,020	64,695	98,683	124,128

Prev Product Line ▶  
Warehouse ▶

2. Point to one of the identifiers and a submenu will appear showing the expansion options.

**Profit by Region - Last 4 Quarters**

SALESDemo Region	PROFIT QUARTER 2005 Q4	PROFIT QUARTER 2005 Q3	PROFIT QUARTER 2005 Q2	PROFIT QUARTER 2005 Q1
SALESDemo:	88,833	91,153	193,877	154,436
Eastern Region	25,813	26,458	95,194	30,308
Western Region	63,020	64,695	98,683	124,128

Prev Product Line ▶  
Warehouse ▶

- Expand
- Expand by Specific Values
- Expand All Rows
- Expand All Rows by Specific Values

3. Select one of the four expansion options (described in more detail on the pages that follow) to complete the expansion.



**Expand**



This type of expansion will expand the single identifier value you originally clicked to show the individual values that make up that identifier. In the example below, the *Western Region* value has been expanded by the *Warehouse* identifier to show the two warehouses that reside in the Western region: *PORTLAND* and *SEATTLE*.

Profit by Region - Last 4 Quarters				
SALESDemo Region Warehouse	PROFIT QUARTER 2005 Q4	PROFIT QUARTER 2005 Q3	PROFIT QUARTER 2005 Q2	PROFIT QUARTER 2005 Q1
SALESDemo:	88,833	91,153	193,877	154,436
Western Region	63,020	64,695	98,683	124,128
PORTLAND BRANCH	29,895	36,707	71,012	24,693
SEATTLE BRANCH	33,125	27,988	27,670	99,435

**Expand by Specific Values**


The second type of exploration allows you to expand an identifier value while selecting only those sub-values you would like to see. Click the identifier value you would like to expand, point to the identifier you would like to expand by, and then click **Expand by Specific Values**. A page similar to the following will appear:


1. A search box has been provided to filter the descriptions so that you can quickly find the identifiers you are looking for.
2. **Advanced Options** allows you to customize how the search box will filter the descriptions (such as Containing, Not Containing, Beginning With, Not Beginning With).


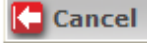
- When you locate an identifier value you want to include, select the check box next to the desired value in the **Available Descriptions** box.
- To change the order of the items in the **Currently Selected Descriptions** box, drag and drop the items until they appear in the desired order. To remove an entry, double-click on the unwanted value within the **Currently Selected Descriptions** box or clear the check box of the unwanted value within the **Available Descriptions** box. If you are manually entering IDs, remove the line containing the unwanted value.
- If you want to clear the entire **Currently Selected Descriptions** box, click the  **Remove All Selected Identifiers** button.
- A list of identifier values can be typed or pasted into the ID box by clicking  **Manually Enter IDs** and then typing in or copying and pasting the desired IDs into the **Currently Selected Descriptions** box.


Enter IDs (not descriptions) one per line.

ARC  
BET  
CMA

 Remove All Identifiers

 Switch Back To Original Mode

 Ok  Cancel

- Click the  **Ok** button. The expanded report will show only the values specified:

**Profit by Warehouse - Last 4 Quarters**

SALESDemo Warehouse Product Line	PROFIT QUARTER 2004 Q4	PROFIT QUARTER 2004 Q3	PROFIT QUARTER 2004 Q2	PROFIT QUARTER 2004 Q1
SALESDemo:	101,219	90,976	86,160	192,044
BOISE BRANCH	7,195	5,795	7,013	2,966
ARCTIC GLOVE COMPANY INC	29	0	0	0
BETCO CORPORATION	101	605	0	0
CHEM METHODS	2,396	0	2,429	0

**Expand All Rows** This exploration type will expand not only the identifier value that was clicked, but also the other identifier values on that level.


In the example shown here, the *Region* identifier has been expanded by the *Warehouse* identifier. As you can see, both regions were expanded to show the warehouses within those regions.

**Profit by Region - Last 4 Quarters**

SALESDemo Region Warehouse	PROFIT QUARTER 2005 Q4	PROFIT QUARTER 2005 Q3	PROFIT QUARTER 2005 Q2	PROFIT QUARTER 2005 Q1
SALESDemo:	88,833	91,153	193,877	154,436
Eastern Region	25,813	26,458	95,194	30,308
BOISE BRANCH	5,332	3,399	7,309	6,432
SPOKANE BRANCH	20,481	23,059	87,885	23,876
Western Region	63,020	64,695	98,683	124,128
PORTLAND BRANCH	29,895	36,707	71,012	24,693
SEATTLE BRANCH	33,125	27,988	27,670	99,435



**Expand All Rows by Specific Values**

This is a combination of the Expand by Specific Values and Expand All Rows exploration types. When you select this exploration type, the **Lookup** page will appear, similar to the one shown previously. Your exploration should be prepared in the same way you would set up an "Expand by Specific Values" exploration, but when you click the  **Ok** button, all of the identifiers of the current level will be expanded by the selected values.

**"Drill Across" to a Dashboard or Scorecard**

**NOTE:** This feature requires the optional MITS Dashboard add-on and at least one prompting, full screen dashboard. For more information about MITS Dashboard, including custom-designed prompting full screen dashboards made to your specifications, contact your MITS provider.

If your MITS Discover system has been licensed to allow for the use of the MITS Dashboard product, your user account has sufficient privileges, and you have at least one prompting full-screen dashboard, you may see one or more additional options in the *expand* menu, as outlined in this example.

SALESDEMO Warehouse Sales Rep Customer	SALES YEAR 2005 thru Jan 21	SALES YEAR 2004
SALESDEMO:	318,446	3,925,840
PORTLAND BRANCH	134,643	1,403,856
BOB DONIS	38,312	208,456
21 CSG/SSF	0	0
A & S ENTERPRISES	33,313	7,424
Product	0	2,500
Customer Scorecard	0	2,447
A-1 BLDG MAINTENANCE	0	0
ACCRA MEG INC	0	0

These menu options notify you that a prompting full screen dashboard or scorecard related to the selected identifier is available. Selecting this option takes you directly to the dashboard as though the selected identifier value had been entered for the prompt. This is called *drilling across*.

In this example, a customer scorecard has been defined on this system to show information related to one specific customer.

Selecting the **Customer Scorecard** option in the report above displays the customer scorecard, as outlined below:



## Detail Display

The Detail Display feature of MITS Discover provides a detailed list of the transactions that contributed to the value in certain report cells.

**NOTE:** The availability of this feature is dependent on the configuration of each individual Hypercube application. Speak with your MITS Discover administrator if the Detail Display feature is not available in your Hypercube Application.

If the Detail Display feature is available for a specific column cell, the column values will be displayed as links. The Detail Display screen can be accessed for any of these column cells by clicking the link. When the link is clicked, a Detail Display screen similar to the one below will appear.

The screenshot shows a 'SALES YEAR 2005 thru Jan 21' report. It lists various sales figures, with the value '7,789' highlighted in a red box, indicating it is a clickable link for further detail.

Invoice#	Line#	Trans Date	Warehouse	Sales Rep	Qty Ship	Product	Extended Price	Extended Cost	Customer
1526231	1	12-04-2011	4	TJJ	72	4361	2,225.52	2,005.20	83399
1510461	10	12-04-2011	3	TJJ	180	4361	5,563.80	5,013.00	15225

**NOTE:** This feature is not available in the "Lite" edition of MITS Discover.

## Report Modification and Manipulation

As previously mentioned, a MITS Discover report can be manipulated in a number of different ways to meet your reporting needs. This flexibility allows you to customize each report as desired.

### Sorting

Reports can be sorted in either ascending or descending order based on the values in any available column.

**NOTE:** Sorting is only applied to the lowest identifier level in a report. To perform a multi-level sort, apply sorting before drilling down.

1. Click the  **Modify** button on the main report tool bar.

2. Select  **Column Sorting** to access the **Column Sorting** page.


3. Select the columns you want to use for sorting.

A search box is provided above the Available Columns list to make finding the desired column easier. Begin typing the name of a column and the list of available columns will filter to only display columns containing those words.

4. Specify a sorting direction (*Ascending* or *Descending*) for each selected column.

5. If you have specified more than one sort column, drag columns up and down in the list to specify the order in which sorts should occur.

The first column in the list will be used for the initial sort, the second column in the list will define the second sort, etc.


6. Click  **Ok** to apply the sorting to the report.

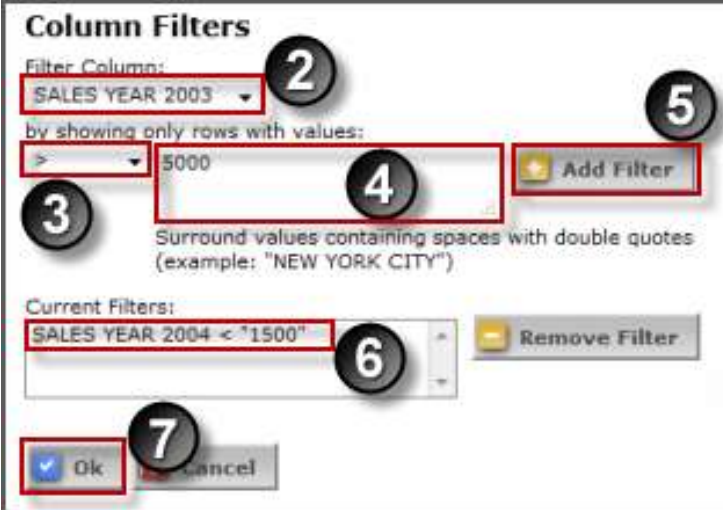


**NOTE:** Report sorting can also be accomplished by clicking on a column heading in a report and selecting a sorting direction, but you cannot use this method to specify multi-level sorts.

## Filtering

Use Column Filters to limit the report results to ranges or specific values based on the contents of a particular column.




1. Open the **Column Filters** page by clicking the  **Modify** button on the report tool bar and selecting **Column Filters**. You can also access column filters from the column menu by selecting **Column Filters** or by clicking **No Column Filters/Column Filters Used** in the upper navigation tool bar.



The screenshot shows the 'Column Filters' dialog box. It has a title bar 'Column Filters'. Below the title, there is a section 'Filter Column:' with a dropdown menu showing 'SALES YEAR 2003' (callout 2). Below this is a section 'by showing only rows with values:' with a dropdown menu showing '>' (callout 3) and a text input field containing '5000' (callout 4). To the right of the input field is an 'Add Filter' button (callout 5). Below this is a section 'Current Filters:' with a list box containing 'SALES YEAR 2004 < \*1500' (callout 6). To the right of the list box is a 'Remove Filter' button. At the bottom of the dialog are 'Ok' and 'Cancel' buttons (callout 7). A note below the input field says 'Surround values containing spaces with double quotes (example: "NEW YORK CITY")'.



2. Select the column to which the filter will be applied.
3. Select the arithmetic operator (>, <=, etc.) that will be used for the filter.
4. Enter the desired filter value.

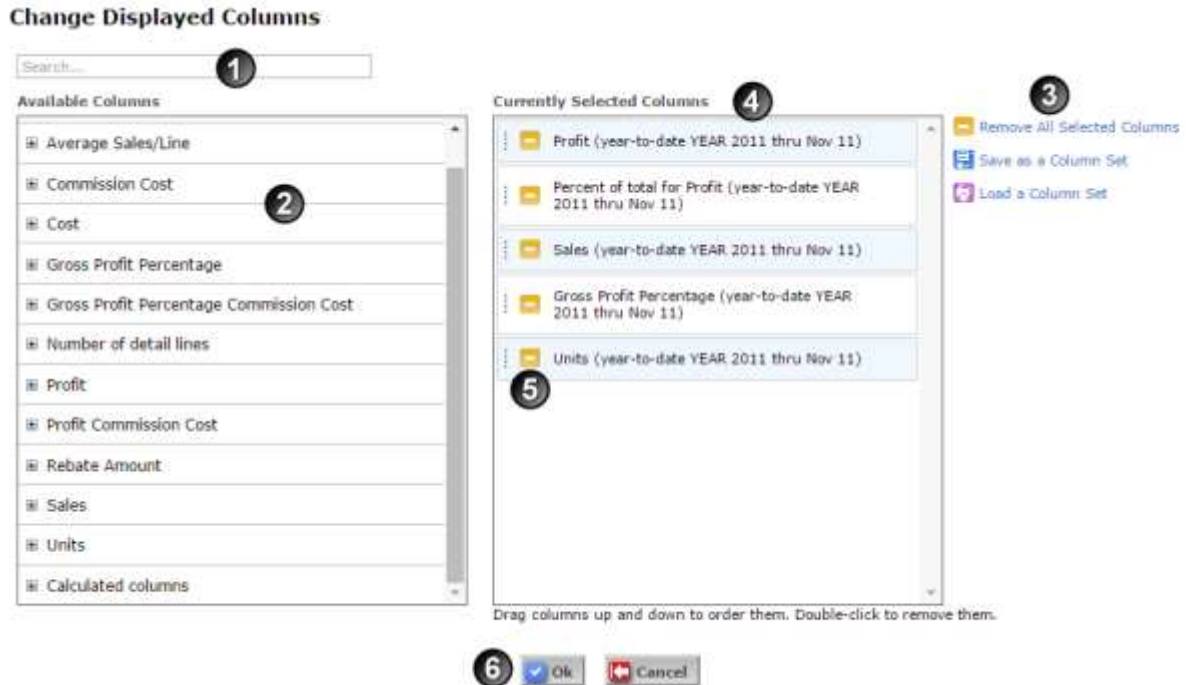
**NOTE:** Surround values that include spaces with double-quotes.




5. Click the  **Add Filter** button to add the filter to the **Current Filters** box. Add additional filters if desired.
6. Verify the filters to be applied in the Current Filters list. To remove a filter from the **Current Filters** list, select the filter, and then click  **Remove Filter**.
7. Click  **Ok** to apply the filters in the **Current Filters** list to your report.

**NOTE:** You can also access the **Column Filters** page from the upper navigation tool bar or the **Column Options** menu.

## Adding/Removing Columns

You can add or remove report columns at any time. The easiest method is to access the **Modify Displayed Columns** screen by clicking the  **Modify** button on the Report tool bar and selecting  **Displayed Columns**. A page similar to the following will appear:



1. In the Search box begin typing the name or keywords for the desired column. The list of Available Columns will filter down as more keywords are added to the search box.
2. Additional columns can be added to your report by selecting them in the **Available Columns** box. Expand a column group to show the columns available in that column group.
3. If you want to clear the **Currently Selected Columns** list, click the  **Remove All Selected Columns** link. To save the currently selected columns as a column set for quick recall later, click **Save as a Column Set**. Click Load a Column Set to retrieve a previously saved column set. (Column sets are discussed in more detail in the **Column Sets** section.)
4. The currently selected columns can be reordered by dragging them to the desired location. (Remember that top to bottom in the list will be left to right in the report.)
5. Remove a column from the **Currently Selected Columns** list by clicking the  icon.
6. Click  **Ok** to display the modified report.

You can also insert a column from the **Column Options** menu by clicking either **Insert Column Before** or **Insert Column After**. Select a column group to see a list of the columns in that column group, and then click a column to insert that column.

## Column Repositioning

1. The handle at the top of a column indicates that the column can be repositioned.
2. The column's heading will change color when you start to drag it.
3. An arrow will appear above the column headings to show where the column will appear when the mouse button is released.

**Profit by Warehouse**

SALESDemo Warehouse	PROFIT QUARTER 2004 Q4	PROFIT QUARTER 2004 Q3	PROFIT QUARTER 2004 Q2	PROFIT QUARTER 2004 Q1
SALESDemo:	101,219	90,976	86,160	192,044
BOISE BRANCH	7,195	5,795	7,013	2,966
PORTLAND BRANCH	29,226	39,967	32,408	63,470
SEATTLE BRANCH	32,005	28,862	23,218	38,962
SPOKANE BRANCH	32,793	16,353	23,521	86,646

Navigation: Previous Next Return to top of Page

## Column Sets

The Column Sets feature provides the ability to save and load a group or “set” of frequently used columns. This speeds column management by allowing users to swap out the columns of a report without needing to remove and add columns manually.

### To Create a Column Set:

1. In any report, click **Modify** in the main tool bar and select **Displayed Columns**.
2. Using the instructions under *Adding/Removing Columns*, select the columns for your column set, place them in the order you would like them to appear, and then click **Save as a Column Set**.
3. On the Save Column Set page, provide a name for your column set. Alternately, you can replace an existing column set by selecting it from the **Existing Column Sets** list.
4. Click **Save** to save the column set.

**Save Column Set**

Existing Column Sets:




- Cost - Back 6 Months
- Profit - Back 6 Months
- Profit Margin - Back 6 Months
- Sales - Back 6 months
- Units Sold - Back 6 Months

Column Set Name:





Save Cancel

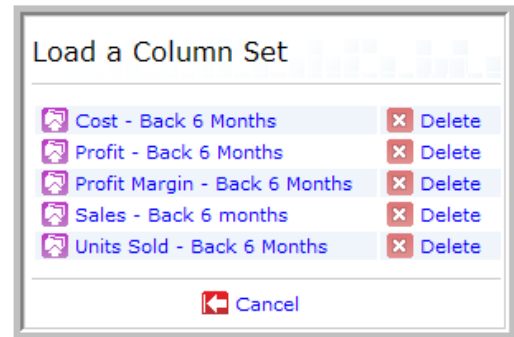


**To Load an Existing Column Set:**

1. In any report, click  **Modify** in the main tool bar and select  **Displayed Columns**.
2. Click  Load a Column Set.
3. Select the column set you want to load. All of the columns in your current report will be removed and replaced with the columns in the selected column set.

**To Delete an Existing Column Set**

1. In any report, click  **Modify** in the main tool bar and select  **Displayed Columns**.
2. Click  **Load a Column Set**.
3. Click  **Delete** next to the column set you want to delete.



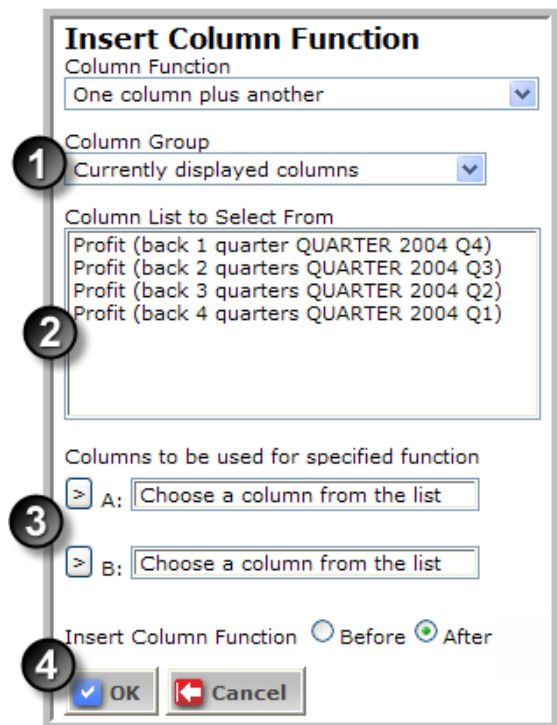
**WARNING:** A deleted column set cannot be recovered!



## Column Functions

Column Functions are columns populated with the results of a function (usually arithmetic) performed on one or more existing columns. When you click a column heading and select **Insert Column Function**, You will see a screen similar to the one displayed here. Some of the default column functions available are:

- Add two columns
- Subtract one column from another
- Multiply two columns
- Divide one column by another
- Average of two columns
- Trend from one column to another
- Percent of total for a column

After the column function has been selected from the **Column Function** drop-down box, a window similar to the one shown here will appear.

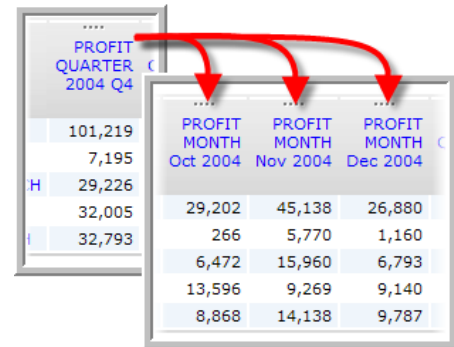


1. Select a column group from the **Column Group** drop-down list. The columns in that column group will be displayed in the **Column List to Select From** box.
2. Select one of the columns you would like to use in your column function.
3. Click the  button next to the appropriate field to add that column to the function. Repeat these steps to insert the other column(s) for the function as required.
4. Select whether you would like the new column inserted *Before* (to the left of) or *After* (to the right of) the column you originally clicked to access this screen.
5. Click the  **Ok** button to add the column function to your report.

Once a column function has been defined, it will become available in the Modify Displayed Columns list for insertion in future reports. *One column plus another* columns will appear under the **Add** column group, *One column divided by another* columns will appear under the **Divide** column group, etc.

### Expanding Columns

Expanding a column causes a column that is based on a specific range of time (e.g. *year*) to be replaced with the columns that are based on the next smaller span (e.g. *quarter*) within that time span. For example, expanding a quarter-based column will cause that single column to be replaced with the three month-based columns from within that year. In this same way, expanding a year-based column will cause it to be replaced with the quarter-based columns that made up that year.



	PROFIT QUARTER 2004 Q4
	101,219
	7,195
H	29,226
	32,005
I	32,793

	PROFIT MONTH Oct 2004	PROFIT MONTH Nov 2004	PROFIT MONTH Dec 2004
	29,202	45,138	26,880
	266	5,770	1,160
	6,472	15,960	6,793
	13,596	9,269	9,140
	8,868	14,138	9,787

### Column Maintenance

Column Maintenance allows users to create, modify, and delete column definitions. This feature requires an understanding of expressions used in column creation and is beyond the scope of this document. It is, however, treated in detail in the MITS Discover technical document titled *MITS Discover Expressions*. This and other MITS technical documents are available from your MITS Discover support provider.

### Viewing Additional Column Information

Some columns will include additional column information that describes how the column data is derived or where the data is being read from. If additional information is available for a particular column, there will be an **Additional Column Info** option in the column menu for that column which will expand to display this information.



## Column Breaks

Adding a column break (**Break on value** under **Column Breaks** in the column menu) to a sorted column inserts a line break and a subtotal at each point where the values in that column change. **Summarize on value** takes this a step further by suppressing the details, replacing the report results with a single, totaled line for each unique column value. These options are explained on the following page.

### Break on Value

1. This report includes a column which displays the STATE for each customer.

SALESDemo Product Line Customer	CUSTOMER STATE	PROFIT QUARTER 2005 Q4
SALESDemo:		88,833
ARCTIC GLOVE COMPANY INC		159
ACME SERVICES	WA	0
EASTSIDE JEEP EAGLE	WA	0
EL TORO II RESTAURANT INC	OR	0
ENTRE COMPUTER CENTER	WA	0
HAY ELECTRIC INCORPORATED	OR	159
MCCHORD AFB WA	WA	0

2. First, the report was sorted by the CUSTOMER STATE column in ascending order, putting the two Oregon customers at the top of the list and moving the four Washington customers to the bottom:

SALESDemo Product Line Customer	CUSTOMER STATE	PROFIT QUARTER 2005 Q4
SALESDemo:		88,833
ARCTIC GLOVE COMPANY INC		159
EL TORO II RESTAURANT INC	OR	0
HAY ELECTRIC INCORPORATED	OR	159
EASTSIDE JEEP EAGLE	WA	0
MCCHORD AFB WA	WA	0
ACME SERVICES	WA	0
ENTRE COMPUTER CENTER	WA	0

3. After adding a break to the CUSTOMER STATE column, a bottom total and a blank line appear between each set of unique values in the column.

SALESDemo Product Line Customer		CUSTOMER STATE	PROFIT QUARTER 2005 Q4
SALESDemo:			88,833
ARCTIC GLOVE COMPANY INC			159
EL TORO II RESTAURANT INC	+	OR	0
HAY ELECTRIC INCORPORATED	+	OR	159
Total for "OR"	=		159
EASTSIDE JEEP EAGLE	+	WA	0
MCCHORD AFB WA	+	WA	0
ACME SERVICES	+	WA	0
ENTRE COMPUTER CENTER	+	WA	0
Total for "WA"	=		0
Total ARCTIC GLOVE COMPANY INC	==		159
Grand total	===		159

**Summarize on Value**

The *Summarize on Value* feature builds on the *Break on Value* feature by summarizing the totals for each of the unique column values.


As you can see, the individual customer names have been hidden. In their place, one row for each CUSTOMER STATE appears with a total for any numeric columns that exist in the report.

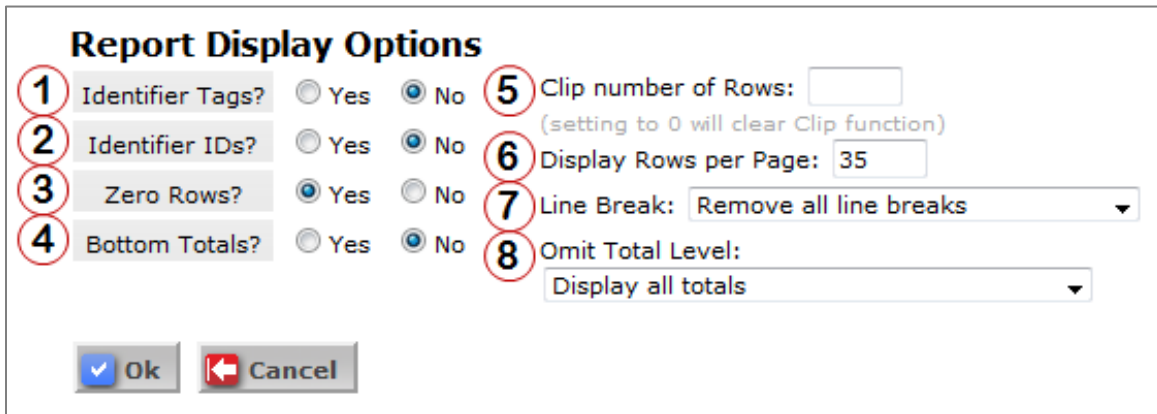
SALESDEMO Product Line Customer	CUSTOMER STATE	PROFIT QUARTER 2005 Q4
SALESDEMO:		88,833
ARCTIC GLOVE COMPANY INC		159
	= ID	0
	= OR	159
	= WA	0
Total ARCTIC GLOVE COMPANY INC	==	159
Grand total	===	159

**Remove Breaks and Summarization**

To remove a column break or summarization, select "Turn breaks off" from the Column Breaks sub-menu of the column menu.

## Customizing the Report Display

There are a number of display modifiers available which can be used to affect the content and appearance of your reports. To access these options, click the  **Display** button in the Report tool bar. A page similar to the following will appear:



The dialog box titled "Report Display Options" contains the following controls:

- 1** Identifier Tags? ☐ Yes ☒ No
- 2** Identifier IDs? ☐ Yes ☒ No
- 3** Zero Rows? ☒ Yes ☐ No
- 4** Bottom Totals? ☐ Yes ☒ No
- 5** Clip number of Rows:  (setting to 0 will clear Clip function)
- 6** Display Rows per Page:
- 7** Line Break:
- 8** Omit Total Level:

At the bottom are "Ok" and "Cancel" buttons.

- 1. Identifier Tags** - You can show or hide the tags displayed to the left of each identifier. The tag is an abbreviation of the identifier name. This option toggles those abbreviations on and off.
- 2. Identifier IDs** - You can show or hide the item IDs displayed to the right of each identifier. The ID is usually the code representing the key to the identifier in the operational master file. This option toggles the IDs on and off.
- 3. Zero Rows** - You can show or hide data rows in the grid area that contain only zeros. Normally, rows containing only zeros are visible, but you can omit them from the grid if desired.
- 4. Bottom Totals** - The Bottom Totals feature can be toggled on or off using this option. Bottom totals differ from top totals in that they only include the values for rows currently displayed in the report; so applying a filter or using Expand by Specific Values will affect the bottom totals, whereas the top totals will always show the full total for a specific column regardless of what filters have been applied to the level(s) below it.
- 5. Clip Number of Rows** - This feature provides a way to limit the amount of data the server returns. By specifying a "clip level," you are limiting the number of rows that will be returned by the server. A common use of this feature would be to first sort a report by the Sales Year-to-date column, drill down to a Sales Rep identifier, then set the clip level to 10 in order to show your top 10 sales reps year-to-date. To turn this feature off, set the Clip number of rows to 0. You can also specify a clip level from the Navigation Tool Bar.

6. **Display Rows per Page** - The number of rows that are displayed for each page of a report can be modified in this box. This setting only affects the number of rows displayed on each "page" of the report (for pagination purposes), whereas the Clip Number of Rows feature (above) affects the actual number of rows returned for the report. The default is 30 and the maximum is 1000. Be aware that setting this too high can cause your report requests to take longer to process. You can also modify this setting from the Navigation Tool Bar.

**NOTE:** The Display Rows per Page feature is different from the other settings on this page as it is a user-specific setting. This means that it will apply to all reports viewed by this user on this computer. The other settings on this page are saved with the report definition, so they will be applied for any user that views this report on any computer.

7. **Line Break** - Line Break is a feature used to add a blank line between levels of identifiers. Selecting a level to apply a line break will add a line between identifiers on the specified level.
8. **Omit Total Level** - The Omit Total Level feature is used to prevent the display of the grand total lines in the grid. This is useful when you would like to print or export a report but do not want the totals of the higher levels to appear.


Click ☒ **Ok** to accept the changes and return to the report.


## **Exporting Dashboards and Reports**

MITIS Discover includes the ability to export dashboard and report data to other formats. Dashboards can be exported to PDF format. Reports can be exported to PDF, Microsoft Excel, Comma Separated Values (CSV), and tab-delimited (TXT) formats.

### Exporting Dashboards


There are two ways to export a dashboard:


The first method is accessed from the dashboard listing on the **Dashboards** tab. Click  **Export** next to the dashboard you want to export and then select **Export to PDF**. If your dashboard is configured for prompting, you will be prompted to select and/or enter the required dashboard values.

As an alternative, if you are already viewing the dashboard you want to export, simply click  **Export to PDF** in the tool bar.

### Exporting Reports

There two ways to export a report:

The first method is accessed from the report listing on the **Reports** tab by clicking  **Export** next to the report you want to export.

The second method is accessed from within a report by clicking  **Export** in the tool bar.

After clicking **Export**, select one of the following options from the menu:

1. **Export to Microsoft Excel:** Exports the selected report directly to a Microsoft Excel file
2. **Export to PDF:** Exports the selected report directly to a PDF file
3. **Advanced Exporting Options:** Opens the advanced exporting configuration page. See the next section for additional information.

## Advanced Exporting Options

There are a number of advanced exporting options available for further modifying the formatting of your export.

1. Determine the number of rows to export. Selecting **All Rows** will export all rows of the report, or you can specify the number of rows to export by selecting the second radio button and typing a number into the box.
2. If you want a *normalized* export, select the **Repeat drill down path (normalize)** radio button. A normalized export creates an individual column for each identifier level in the drill-down path. For example, a non-normalized ("Don't repeat drill down path") export will place all identifiers in a single column as they are in the report display. A normalized ("Repeat drill down path") export will place the top level identifier values in one column. The identifier values for each subsequent drill-down level will then appear in additional, separate columns.

**Exporting Profit by Warehouse**

**Rows**

1 ☒ All Rows ☐ The First  Rows

**Drill Down Path**

2 ☒ Don't repeat drill down path ☐ Repeat drill down path (normalize)

**Format**

3 ☒ MS Excel (XLS) ☐ Comma Separated Values (CSV) ☐ Tab Delimited Text (TXT) ☐ Adobe PDF (PDF)

**NOTE:** The **Normalized Export** option is not available when exporting to PDF.

3. Select the export format (XLS, CSV, TXT, or PDF)
4. When exporting to PDF, the following additional options are available:

- **Header** - Short Text entry, placed at the top of each page of the PDF file. Defaults to the report name.
- **Footer** - Short text entry, placed at the bottom of each page of the PDF file. Defaults to "MITS Discover."
- **Orientation** - Landscape (horizontal) or Portrait (vertical)
- **Fonts** - Arial, Courier New, Times New Roman
- **Font Size** - 6, 8, 10, 12, 14, 16

☒ Adobe PDF (PDF)

4 **Header**

**Footer**

**Page Orientation**  
☒ Landscape ☐ Portrait

**Font**  **Font Size**

5. Click the ☒ **Ok** button to complete the export.

## **Emailing Dashboards, Reports, and Charts**



- The email features of MITS Discover provide the ability to:
- Instantly send the results of a dashboard, report, or chart to one or more specified email addresses
- Configure an email schedule that will automatically send the view to one or more specified email addresses on a daily, weekly, or monthly basis
- Specify a "run-as" user for each email recipient, which will cause the data security for that user to be applied prior to generating the email (the availability of this specific feature is based on security settings)

### Prerequisites

- In order to send email from within MITS Discover, the following statements must be true:
- You have a "Standard" or "Premium" edition license for MITS Discover (this feature is not available in the "Lite" edition of MITS Discover)
- Your MITS Discover system has been configured to interact with your organization's email server.
- For more information, please see the section titled ***Configure Email Server***.
- Your MITS Discover user account has been configured to allow for the sending emails
- To email dashboards, you will also need a license for the optional MITS Dashboard add-on product and at least one full screen dashboard
- If any of these things are not true, the email buttons and options will not appear and you will be unable to use this feature. If you have questions, please contact your MITS administrator.

### Report/Chart Emails

#### **Send Now**

1. There are two ways to send a MITS Discover email immediately. The first is from the Reports tab by clicking  **Email** in the **Actions** column next to the report you want to send in an email and selecting **Send Now**. The second is to simply click the  **Email** button in the Report or Chart tool bar while viewing any report. Both methods will cause a screen similar to the one shown here.



**Emailing Report**

Enter multiple email addresses separated by spaces or commas or on new lines.

**Email Addresses:**


**Subject:**  
Get To: Customers - Margin Lowest to Highest

**Message:**


 

2. Enter one or more email addresses in the **Email Addresses** box.

**NOTE:** Separate multiple email addresses with a space or a comma. You can also place them on separate lines within the **Email Addresses** box.

3. Modify the subject in the **Subject** box, if desired. (This box defaults to the report/chart heading.)
4. Add text for the body of the email message, if desired, to the **Message** box.
5. Click  **Next**.


If you have been granted administrative email privileges and you have initiated this email from the report listing on the

**Reports** tab (rather than by clicking  **Email** in the tool bar from within a report), you will be asked to select a "Run-As" user for each recipient email address specified. (If this screen does not appear, skip to step 6.) This screen allows you to specify the MITS Discover user account that the report will be run as for security purposes. This provides two significant capabilities:

- If you want the received report to follow the defined MITS Discover security model for a given user, select that user ID from the "Run-as User" drop-down menu.
- If you have a report that includes information which a specific MITS Discover user would not normally be able to see due to the security settings on their user account, you can choose to have the report run as a different user prior to sending the email. This will allow them to see this information without giving them full access to the data within MITS Discover.


**WARNING:** Be VERY aware of the MITS Discover security settings when selecting "run-as" user accounts, as this could allow the recipient to see potentially sensitive data that they would not normally be able to see. If there is any question about what the resulting report will look like, try sending the email to yourself first.


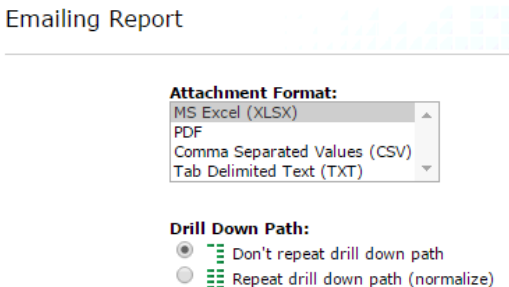
**NOTE:** When emailing a saved report, the list of run-as users will be limited to those users who have at least *read* access to the report library where that report is saved. To send the report to a user who does not appear in the list, save the report to a library that the user can access.

Once you have selected the desired "run-as" user, click  **Next**. A screen similar to the one pictured here will appear.

6. Select the desired format for the resulting email attachment. There are four options:
  - MS Excel (XLS)
  - PDF (PDF)
  - Comma Separated Values (CSV)
  - Tab Delimited Text (TXT)


For XLS, CSV, or TXT, select whether the drill-down path elements should be repeated (aka "normalized") or not repeated. For PDF, modify the header, footer, page orientation, font, and font size, as desired.

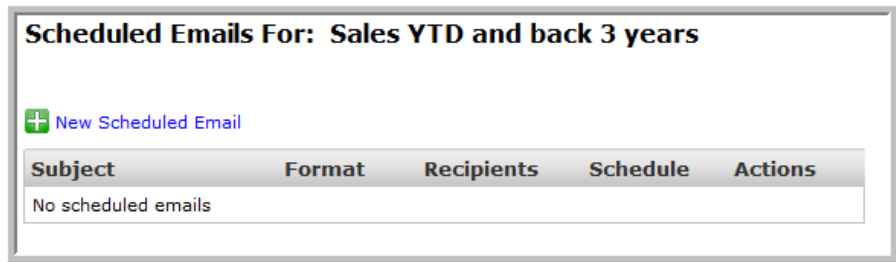
7. Click  **Send**. The currently displayed report will be exported to the selected format using the options specified, attached to an email, and sent to the specified email addresses.







**Schedule for Later**


1. Starting from the main report menu page, click  **Email** in the **Actions** column next to the report you want to send in an email and select **Scheduling**. A screen similar to the one above will appear.



2. Click  **New Scheduled Email**. A screen similar to the one pictured here will appear.
3. Enter one or more email addresses in the **Email Addresses** box.



**NOTE:** Separate multiple email addresses with a space or a comma. You can also place them on separate lines within the **Email Addresses** box.

4. Modify the subject in the **Subject** box, if desired. (This box defaults to the report heading.)
5. Add text for the body of the email message, if desired, to the **Message** box. Click .
6. If you have been granted administrative email privileges, you will be asked to select a "Run-As" user for each recipient email address specified. (If this screen does not appear, skip to step 7.) This screen allows you to specify the MITS Discover user account that the report will be run as for security purposes. This provides two significant capabilities:



- If you want the received report to follow the defined MITS Discover security model for a given user, select that user ID from the "Run-as User" drop-down menu.
- If you have a report that includes information which a specific MITS Discover user would not normally be able to see due to the security settings on their user account, you can choose to have the report run as a different user prior to sending the email. This will allow them to see this information without giving them full access to the data within MITS Discover.

**WARNING:** Be VERY aware of the MITS Discover security settings when selecting "run-as" user accounts as this feature could allow the recipient to see potentially sensitive data that they would not normally be able to see when logged into MITS Discover with their own user account. If there is any question about what the resulting report will look like, try sending the email to yourself first.



**NOTE:** When emailing a saved report, the list of run-as users will be limited to those users who have at least *read* access to the report library where that report is saved. To send the report to a user who does not appear in the list, save the report to a library that the user can access.

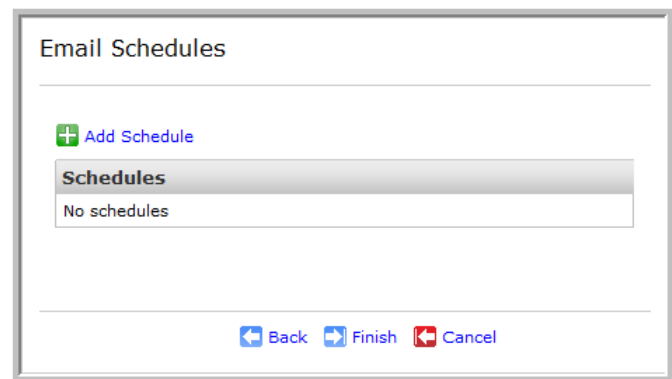
Once you have selected the desired "run-as" users, click  **Next**.

7. A screen similar to the one pictured here will appear.
8. Select the desired format for the resulting email attachment. There are four options:

- MS Excel (XLS)
- PDF (PDF)
- Comma Separated Values (CSV)
- Tab Delimited Text (TXT) For XLS, CSV, or TXT, select whether the drill-down path elements should be repeated (aka "normalized") or not repeated. For PDF, modify the header, footer, page orientation, font, and font size, as desired.



9. Click  **Next**. A screen similar to the one pictured here will appear.
10. Click  **Add Schedule** to define a new schedule event. This will determine how often this email will be sent.






**NOTE:** It is important to remember that a scheduled email will execute the report at the moment the email is sent; so the data received by the recipient could be different than what you see in the system now, especially if a Hypercube build occurs between the time you configure the scheduled email and the time the email is received. For this reason, you should always be aware of your Hypercube build schedules as you decide when to have scheduled emails delivered.

11. From the Type drop-down menu, select Daily, Weekly, or Monthly.
  - If *Daily* is selected, you can choose to have an email sent once per day or every hour.
  - With *Weekly* schedules, select the time (as with the *Daily* schedule type), as well as the day of the week you want the emails to be sent. You can also choose to have the emails sent only on the weekdays (Monday through Friday) or only on the weekends (Saturday and Sunday).
  - For *Monthly* schedules, you select the time (as with the *Daily* schedule type), as well as the day

and month you want the emails to be sent. You can even choose to have the emails sent on the first weekday, last weekday, or last calendar day of the month.


**NOTE:** If the specified day of the month (31, etc.) does not exist in a given month, the scheduled email will not be sent that month.

12. Click  **Add** . You will be taken back to the Email Schedules screen and your newly defined schedule will be listed. To add another schedule for this same report, click  **Add Schedule** and repeat step 11.
13. When you have defined all of the desired schedules for this report, click  **Finish** .

**NOTE:** When defining your email schedules, remember that the system will need to execute the entire report prior to sending the email and adjust your schedule accordingly. For example, if a report is configured for 2:00 but the report takes an hour to run, the email will not be received until 3:00.



## Dashboard Emails

**Send Now**

1. To send a MITS Dashboard email, start at the **Dashboards** tab. In the Actions column for the dashboard you would like to email, click  **Email** and select **Send Now**. A screen similar to the one pictured here will appear.
2. Enter one or more email addresses in the **Email Addresses** box.




**NOTE:** Separate multiple email addresses with a space or a comma. You can also place them on separate lines within the **Email Addresses** box.

3. Modify the subject in the **Subject** box, if desired. (This box defaults to the dashboard name.)
4. Add text for the body of the email message to the **Message** box if desired. Click  **Next**. (If this option does not appear, click  **Send**. Your email has been sent, so there is no need to proceed to the next step.)
5. If you have been granted administrative email privileges, you will be asked to select a "Run-As" user for each recipient email address specified. This screen allows you to specify the MITS Discover user account that the dashboard will be run as for security purposes. This provides two significant capabilities:

- If you want the received dashboard to follow the defined MITS Discover security model for a given user, select that user ID from the "Run-as User" drop-down menu.
- If you have a dashboard that includes information which a specific MITS Discover user would not normally be able to see due to the security settings on their user account, you can choose to have the dashboard run as a different user prior to sending the email. This will allow them to see this information without giving them full access to the data within MITS Discover.



**WARNING:** Be VERY aware of the MITS Discover security settings when selecting "run-as" use accounts, as this could allow the recipient to see potentially sensitive data that they would not normally be able to see. If there is any question about what the resulting report will look like, send the email to yourself first.

- If the dashboard has been configured with *prompting*, you will be asked to enter or select values for the prompt(s). (If the prompt is a text entry box rather than a drop-down list, you can click the **Find Values** link to search for specific values.) If multiple users have been selected to receive the dashboard email, you will be allowed to enter prompt values for each individual user in turn. If a user is restricted to only one value, they will be skipped in this process, as no choices would be available to be made.
- Click  **Send**. The recipient will receive an email with an attached PDF depicting the contents of the selected dashboard at the time the email was generated.



Enter Dashboard Values


Warehouse:

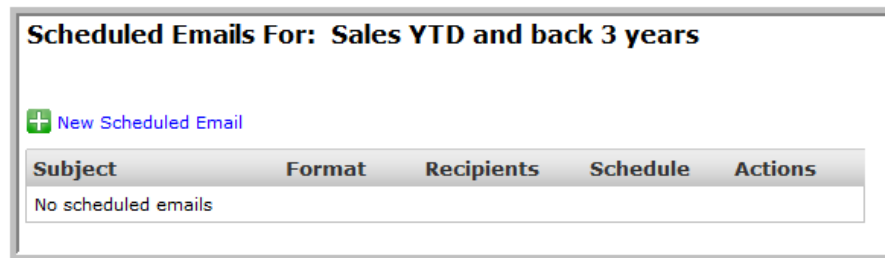
Product Lines:

Product:


  

### Schedule for Later




- Starting from the **Dashboards** tab, click  **Email** in the **Actions** column next to the dashboard you want to send in an email and select **Scheduling**. A screen similar to the one below will appear:



**Scheduled Emails For: Sales YTD and back 3 years**

 [New Scheduled Email](#)

Subject	Format	Recipients	Schedule	Actions
No scheduled emails				

- Click  [New Scheduled Email](#). The **Email Content** screen will appear.
  - Enter one or more email addresses in the **Email Addresses** box.
- NOTE:** Separate multiple email addresses with a space or a comma. You can also place them on separate lines within the **Email Addresses** box.
- Modify the subject in the **Subject** box, if desired.
  - Add text for the body of the email message, if desired, to the **Message** box. Click  **Next**. (If this option does not appear, click  **Send**. Your email has been sent, so there is no need to proceed to the next step.)

- If you have been granted administrative email privileges, you will be asked to select a "Run-As" user for each recipient email address specified. This screen allows you to specify the MITS Discover user that the dashboard will be run as for security purposes. This provides two significant capabilities:



Emailing Report

Email	Run-as User
bod@mits.com	ADMIN
dri@mits.com	ADMIN
ceo@mits.com	ADMIN

Note: Users who do not have permission to view the library are not listed.



  

- If you want the received dashboard to follow the defined MITS Discover security model for a given user, select that user ID from the "Run-as User" drop-down menu.
- If you have a dashboard that includes information which a specific MITS Discover user would not

normally be able to see due to the security settings on their user account, you can choose to have the dashboard run as a different user prior to sending the email. This will allow them to see this information without giving them full access to the data within MITS Discover.

**WARNING:** Be VERY aware of the MITS Discover security settings when selecting "run-as" user accounts, as this could allow the recipient to see potentially sensitive data that they would not normally be able to see. If there is any question about what the resulting dashboard will look like, send the email to yourself first.




- If the dashboard has been configured with *prompting*, you will be asked to enter or select values for the prompt(s).

7. Click  **Next**.
8. Click  **Add Schedule** to define a new schedule event. This will determine how often this email will be sent.

**NOTE:** It is important to remember that a scheduled email will execute the dashboard at the moment the email is sent. This means that data received by the recipient could be different than what you see in the system now, especially if a Hypercube build process occurs between the time you configure the scheduled email and the time the email is received. For this reason, you should always be aware of your Hypercube build schedules as you create scheduled emails.

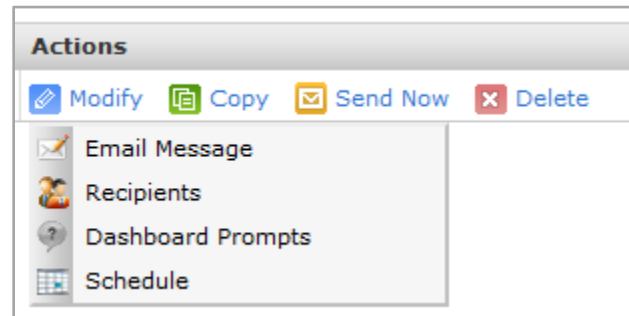
9. From the Type drop-down menu, select *Daily*, *Weekly*, or *Monthly*.
  - If *Daily* is selected, you can choose to have an email sent once per day or every hour.
  - With *Weekly* schedules, you select the time (as with the *Daily* schedule type), as well as the day of the week you want the emails to be sent. Alternately, you can also choose to have the emails sent only on the weekdays (Monday through Friday) or only on the weekends (Saturday and Sunday).
  - For *Monthly* schedules, you select the time (as with the *Daily* schedule type), as well as the day and month you want the emails to be sent. You can even choose to have the emails sent on the first weekday, last weekday, or last calendar day of the month.

**NOTE:** If the selected day of the month does not exist in a given month, the scheduled email will not be sent that month. For example, if an email is scheduled to be sent on the 31st, that email will not be sent in February, April, June, etc.

10. Click  **Add**. You will be taken back to the Email Schedules screen, but your newly defined schedule will be listed. To add another schedule for this same dashboard, click  **Add Schedule** and repeat step 9.
11. When you have defined all of the desired schedules for this dashboard, click  **Finish**.

### Modify Scheduled Dashboard Emails

Selecting **Modify** from the Scheduled Emails listing allows you to edit the message, recipients, dashboard prompts, and schedule.





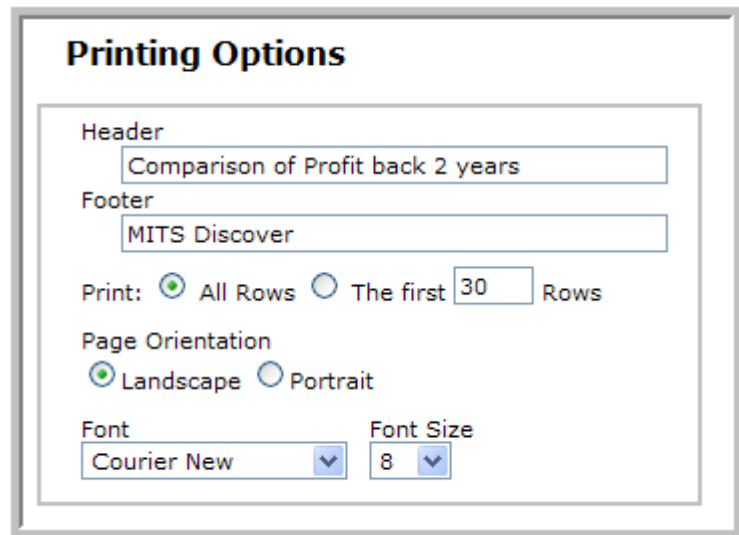
Selecting **Dashboard Prompts** will display a list of the current recipients and, for each, user, their currently selected run-as user setting and prompt values. Checking the box next to a user and clicking on **Next** allows you to modify the prompt values for the user or users.



## Printing a Report

When printing a report, you can choose to print the entire report or just the content in the currently displayed rows.

1. Click the  **Print** button in the tool bar of a report.
2. Select whether you want to print the entire report or only the currently displayed rows. The *Print currently displayed rows* option uses your browser's print engine. The *Print entire Report* option will export the report to a PDF file allowing you to print it from there.
3. If you selected "Print entire Report", you will be taken to an options screen. Modify the options you want to change and click  *Print*.




The image shows a 'Printing Options' dialog box with the following fields and controls:

- Header:** A text input field containing 'Comparison of Profit back 2 years'.
- Footer:** A text input field containing 'MITS Discover'.
- Print:** Two radio buttons. The first is labeled 'All Rows' and is selected. The second is labeled 'The first 30 Rows'.
- Page Orientation:** Two radio buttons. The first is labeled 'Landscape' and is selected. The second is labeled 'Portrait'.
- Font:** A dropdown menu showing 'Courier New'.
- Font Size:** A dropdown menu showing '8'.

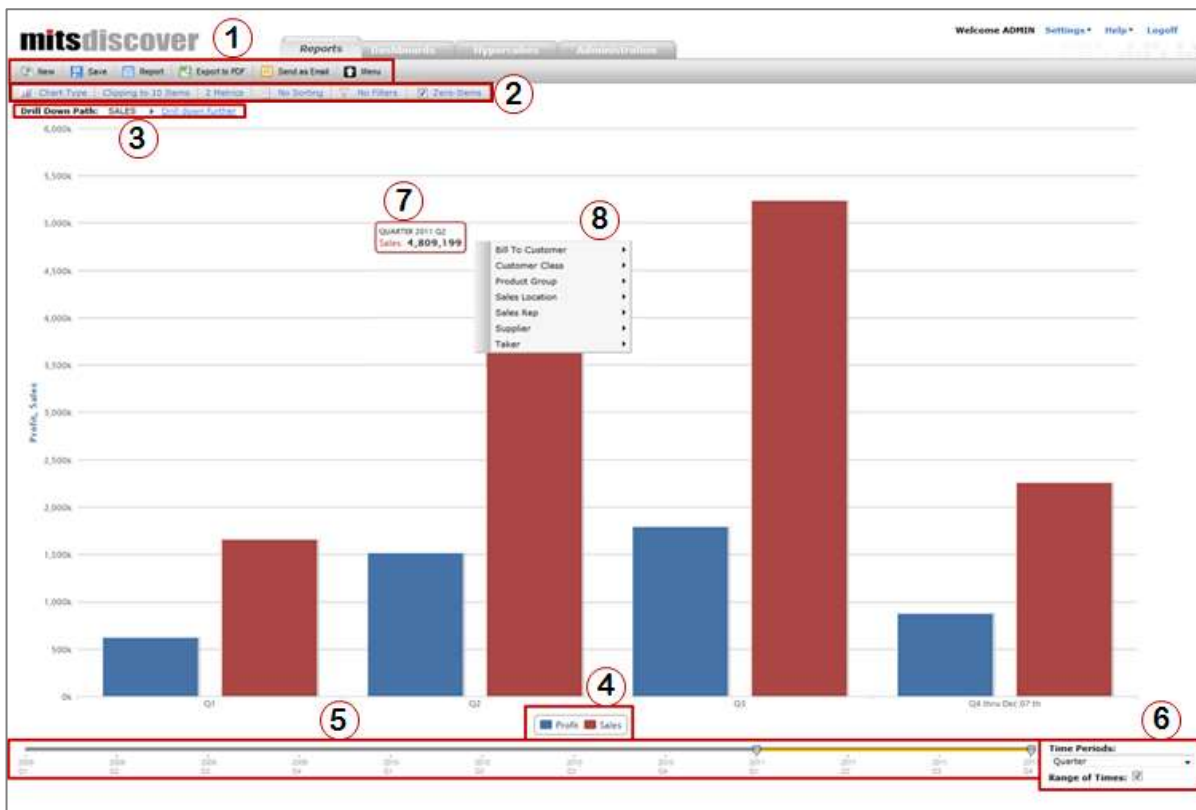


## Charting

The charting feature of MITS Discover allows you to graphically view your hypercube data and provides an interactive way to dynamically navigate and display this data. You can also easily switch back and forth between a grid or chart style of report. No matter which report style you choose, you can navigate through the data using functions such as drilling down or drilling across.

To view a chart, click the  **Chart** button in the tool bar of a report you'd like to view as a chart. You may be asked which report metrics you'd like to display in the chart. Keep in mind the following:

- Multiple times, metrics, and items can be charted, but not all at once in the same chart—at least one of these will need to be narrowed down to 1 selection. For example, you could chart sales and profit for multiple warehouses, but would need to select a single time period. Alternatively, you could chart sales and profit across multiple time periods, but would need to select a single warehouse.
- When creating a chart from a report, you may be asked to make a selection of specific metrics or to narrow down the metrics currently shown in the report to constrain to the charting rule shown above. The currently applied sorting and filtering will remain in the displayed chart.
- Only columns that are derived from column templates, use eons (date ranges), and do not return strings can be charted. This means that any custom columns you create, such as calculated columns, are not able to be included in a chart.



## Chart Menu


**New**

Allows you to create a new Report, Chart, or Dashboard Object.

**Report** – See the *Creating Your First Report* section for more information.

**Chart** – This will present you with pull-down menus from which to select the hypercube and initial drill-down path for the chart. You can then select the checkbox next to any metric(s) you'd like included in the chart.

**Dashboard Object** – This will allow you to create different objects based on the current report that can be used on new and existing dashboards.

Clicking  **OK** will display the chart.



**Create Chart**

**Hypercube:** Invoiced Sales Detail (SALES) ▼

**Initial Drill-Down Path:** Sales Location ▼

**Metrics:**

<input checked="" type="checkbox"/>	Average Profit/Line
<input checked="" type="checkbox"/>	Average Sales/Line
<input type="checkbox"/>	Commission Cost
<input type="checkbox"/>	Cost
<input type="checkbox"/>	Gross Profit Percentage
<input type="checkbox"/>	Gross Profit Percentage Commission Cost
<input type="checkbox"/>	Number of detail lines
<input type="checkbox"/>	Profit
<input type="checkbox"/>	Profit Commission Cost
<input type="checkbox"/>	Sales

 **OK**  **Cancel**

**Save**

Save the chart so you can access it later from the Reports tab.

You will be asked to provide the chart title and library in which you'd like to save it.

**Report**

Takes you to a grid style report view of the data currently being represented in the chart.

**Export to PDF**

Saves the current chart as a PDF.

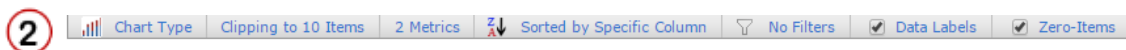
**Send as Email**

Send the chart as an attached PDF in an email to one or more recipients. See the *Report/Chart Email* section for more information on this function.

**Menu**

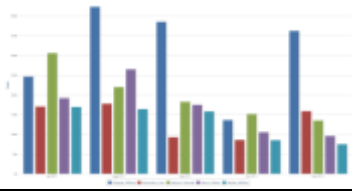
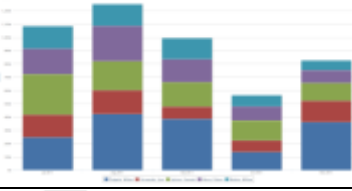
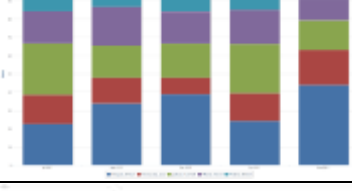
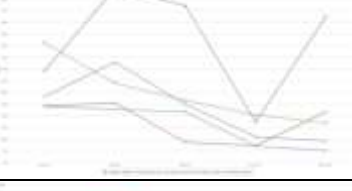
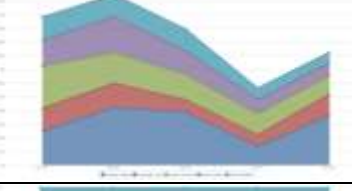
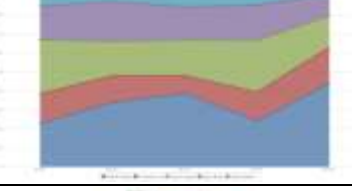

Takes you back to the Reports tab view.

## Chart Options



**Chart Type**

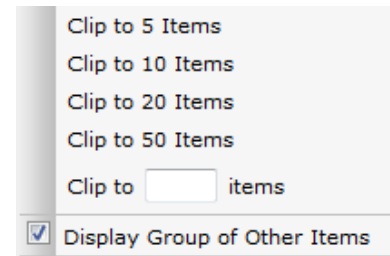
Allows you to select from a variety of chart types, depending on the specific data you're charting, with the following possible options:

Type:	Useful for:	Example:
<b>Bar</b>	comparing data of the same type	
<b>Stacked Bar</b>	comparing how a given section of data compares to other sections in relation to the whole category	
<b>Stacked Bar by Percentage</b>	showing how the relationship between parts compares to other parts of data across a category	
<b>Line</b>	finding trends over a given time	
<b>Stacked Area</b>	finding trends over a given time	
<b>Stacked Area by Percentage</b>	showing how the relationship between parts change over time	
<b>Pie</b>	comparing how a piece of data compares to other pieces in relation to the whole  <b>NOTE:</b> The pie chart will be presented as an option when there is one time period and one metric.	

### Clipping

Allows you to select a maximum number of items to display in the chart, based on the currently selected filtering and sorting. You can choose from any of the pre-defined clip options or enter your own number.

The **Display Group of Other Items** check box allows you to control whether or not the Other listing will show up as the last item on the chart. This listing groups together items that meet the sorting and filtering criteria of the chart, but are not included as separate items due to their placement in the item order or to the clipping setting. This is always shown in gray on the chart.

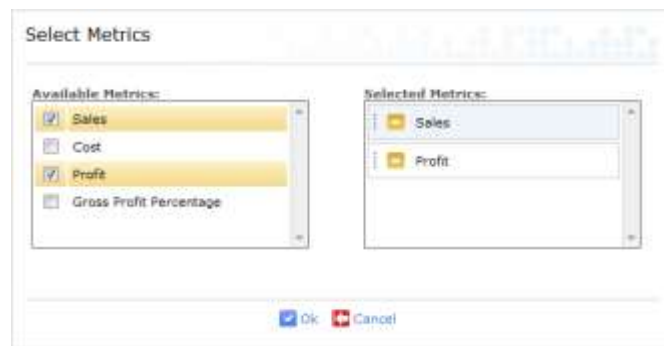


Clip to 5 Items  
 Clip to 10 Items  
 Clip to 20 Items  
 Clip to 50 Items  
 Clip to  items  
☒ Display Group of Other Items

### Metrics

Select the specific metrics being displayed on the current chart.

Checking metrics on the left column will add them to the right column and include them in the chart once you click ☒ **Ok**. These can also be ordered by dragging them up or down in the right column.



Select Metrics

Available Metrics:

- ☒ Sales
- ☐ Cost
- ☒ Profit
- ☐ Gross Profit Percentage

Selected Metrics:

- ☒ Sales
- ☒ Profit

☒ Ok ☐ Cancel

### Sorting

Control the sorting mechanics for the current chart, thereby ordering the displayed metrics to your preference.

- **Sort by metric**

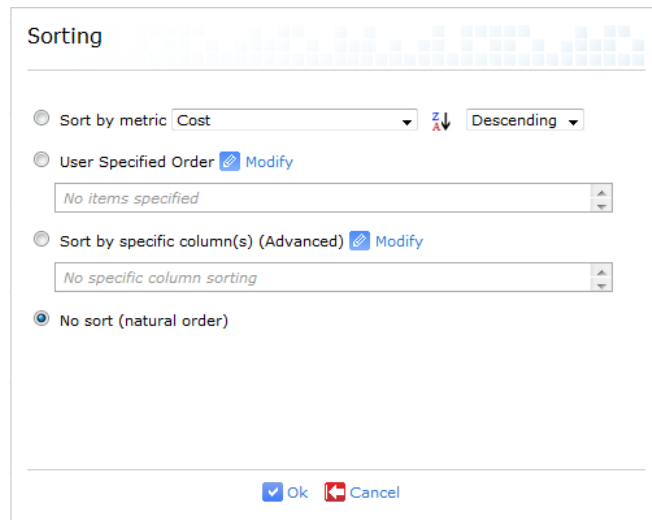
Using this option, you can select a metric and the sort order by which to organize the data in the chart. Sorting is done by adding together the values for all the columns on the selected metric.

- **User Specified Order**

With this option, you can select **Modify** to pick from a list of displayed metrics by checking them in the left column. You can then drag the metrics up or down in the right column to place them in the specific order you'd like them displayed in the chart.

- **Sort by specific column(s)**

With this option, you can select **Modify** to pick from a list of columns—a metric and a time period—by checking them in the left column. These include columns that may or may not be currently in the chart. You can then drag them up or down in the right column to place them in a specific order.



Sorting

☐ Sort by metric Cost ☒ Descending

☐ User Specified Order ☒ Modify  
 No items specified

☐ Sort by specific column(s) (Advanced) ☒ Modify  
 No specific column sorting

☒ No sort (natural order)

☒ Ok ☐ Cancel

- **No sort**

This option places the metrics in their default sort order, which is often alphabetic.

### Data Labels

Marking this checkbox turns on the display of the value of each data point on the chart. Removing the mark in the checkbox will remove those labels.

### Filters

Place one or more filters to control what data appears in the chart.

Clicking **+ Add** will allow you to select a column on which to place a filter. You can then define the filter by selecting the operator and providing a value.

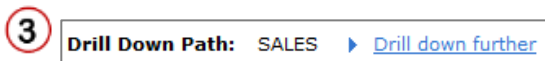
In the example image, a filter has been applied to only show data for 2010 sales above 300 units.



### Zero-Items

Control whether items with all values of 0 will display in the chart. If this box is checked, items with all values of 0 will be shown in the chart. If it is unchecked, these items will be hidden. This is similar to the Zero Rows option when viewing a grid style report. See the *Customizing the Report Display* section for a description of this.

Current Drill Down Path

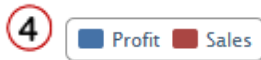


Displays the current hierarchy and level of detail displayed in the chart.

By clicking on **Drill down further**, you will be presented with a screen to select the level in the hierarchy you'd like to view, as well as the option to customize the items shown. You can select the top items or a custom list of items using the radio button under the **Select Item(s)** heading.



## Interactive Legend



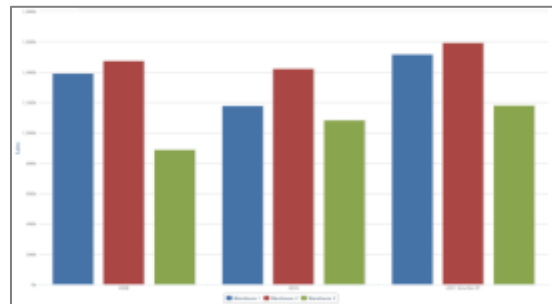
Shows the current series being displayed in the chart. The legend is interactive and will allow you to modify the chart by clicking on one or more of these series.

**Adding/Removing Items**

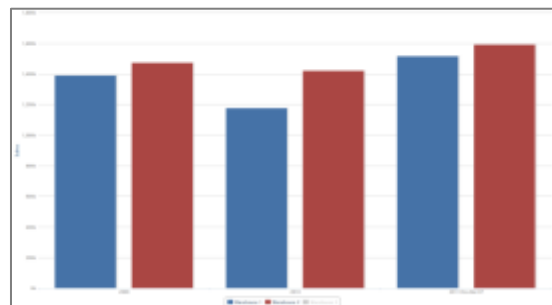
Clicking on items in the legend allows you to modify which items show up in the chart. By clicking an item in the legend, it will become grayed out and that item will be dynamically removed from the chart. Clicking the entry in the legend again will cause it to be added back into the chart.

**Example:**

In the chart to the right, 3 warehouses are being displayed, with the following legend:



Clicking on Warehouse 3 in the legend grays out this entry and dynamically changes the chart to the one on the right, showing the following legend:



Clicking Warehouse 3 again in the legend will place it back in the chart.

### Date Range Selection Slider



If you have selected to chart items across a range of times (see the *Date Selection Options* section below), you can set a specific range by using the sliders to assign a start and end date.



If you have not selected to chart across a range of times, you can use the date selection slider to choose the single time period to show in the displayed chart.



### Date Selection Options

6

**Time Periods:**  
 Quarter ▼  
**Range of Times:** ☒

#### Time Periods

This pull-down menu allows you to choose from the available time periods to select which period to use in the displayed chart and date selection slider.

#### Range of Times

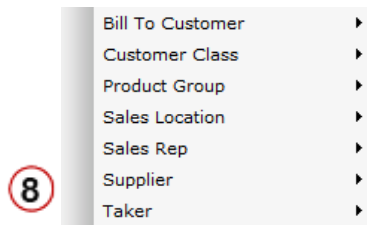
This checkbox allows you to enable or disable the selection of a range of dates across which to display data in the chart. If it is checked, you can select a range of dates. If it is unchecked, you can select a single time period. See the *Date Range Selection Slider* section above for more details.

### Value Display



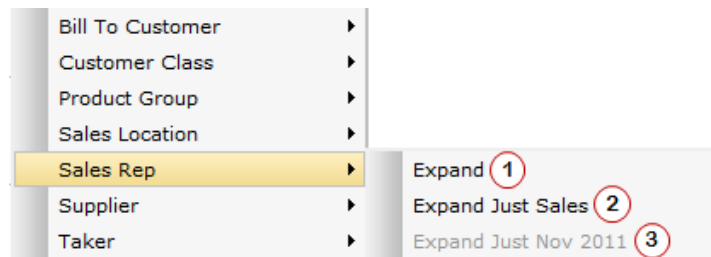
By hovering your mouse pointer over an item (bar, line point, etc.), you can see the specific value of that item in the pop-up window that is displayed, as well as additional info regarding the type of data being represented.

## Drill-Down Selection



Clicking on a data point in the chart will bring up a menu of drill-down options from which you can select. In this way, you can select what level of data you'd like to view in the chart.

Hovering over an item in the menu brings up the following options:



1

This option will expand the items in the chart by the identifier being selected. In the example image shown, this would show sales reps as individual items in the chart.

**NOTE:** This option will be grayed out if there are multiple metrics and multiple time periods shown in the chart.

2

This option will expand by the selected identifier, but narrow to just a specific metric. In the example image, this would show sales by sales rep information in the chart.

**NOTE:** This option will be grayed out if there is only one metric displayed on the chart.

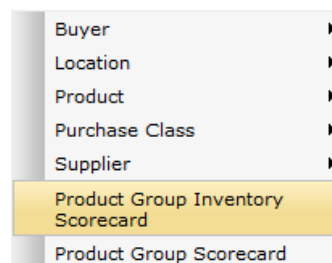
3

This option will expand by the selected identifier, but narrow to just a specific time period. In the example image, this would show sales reps' sales for November 2011.

**NOTE:** This option will be grayed out if there is only one time period displayed on the chart.

## Drill Across

When hovering over a chart item, you may also be presented with additional menu options such as the **Product Group Inventory Scorecard** showing in the image to the right.



Clicking on one of these scorecard options will take you directly to the scorecard overview display for that item. See *The Dashboards Tab* section for more detailed information about scorecards.



## **The Dashboards Tab**

### **Dashboards**

Dashboards in MITS Discover provide a way to group and present information from reports and charts in a concise and meaningful way. They allow for the display of information from different Hypercubes so a viewer of a dashboard can quickly get an overview of the performance of a sales rep, a customer, or any other identifier from the available Hypercubes.

Dashboards are an optional component of MITS Discover. If you don't see the Dashboards tab in MITS Discover check with your company's MITS administrator to be sure you have permission to see the dashboards. If you do not have permission, this tab will not display. Should your company not have the dashboards module installed and would like to upgrade, contact [support@mits.com](mailto:support@mits.com) for assistance.

### **Permissions**

Not all dashboards or scorecards will be available to all users. In addition, some portions or features of dashboards or scorecards may also be unavailable to some users. Your company's MITS Discover administrator manages what type of information is available to any given user. If there is a dashboard or scorecard (or a portion there of) that is not available to you, check with your MITS Discover administrator. They should be able to make it available to you or explain why it is not.

## Dashboard Library Overview

The screenshot shows the 'mitsdiscover' interface with the 'Dashboards' tab selected. The interface includes a top navigation bar with 'Reports', 'Dashboards' (selected), and 'Hypercubes'. Below this is a toolbar with a 'New' button (2), a 'Library' dropdown menu (3) set to 'All Dashboards', and a 'Manage Libraries' button (4). The main content area is titled 'All Dashboards' and contains a table listing various dashboards. The table has columns for 'Dashboard', 'Library', 'Scheduled Emails', and 'Actions'. The 'Actions' column contains icons for 'Modify' (7), 'Export' (8), 'Email' (9), and 'Delete' (10). The table lists 10 dashboards, including 'Bill To Scorecard', 'Buyer Pay-To Vendor Scorecard', 'Executive Dashboard', and 'Pay-To Vendor Scorecard'. Numbered callouts 1 through 10 highlight specific UI elements: 1 points to the 'Dashboards' tab, 2 to the 'New' button, 3 to the 'Library' dropdown, 4 to the 'Manage Libraries' button, 5 to the dashboard list, 6 to a dashboard name, 7 to the 'Modify' button, 8 to the 'Export' button, 9 to the 'Email' button, and 10 to the 'Delete' button.

Dashboard	Library	Scheduled Emails	Actions
Bill To Scorecard	Customer Scorecards		Modify Export Email Delete
Bill To Status Scorecard	Customer Scorecards		Modify Export Email Delete
Buyer Pay-To Vendor Scorecard	Buyer Scorecards		Modify Export Email Delete
Buyer Scorecard	Buyer Scorecards		Modify Export Email Delete
Division Expense Trends Scorecard	Division Scorecards		Modify Export Email Delete
Division Profit And Loss Scorecard	Division Scorecards		Modify Export Email Delete
Executive Dashboard	Executive Dashboards		Modify Export Email Delete
Expense Trends Dashboard	General Ledger Dashboards		Modify Export Email Delete
Pay-To Vendor Scorecard	Vendor Scorecards		Modify Export Email Delete

1. Click the **Dashboards** tab to view the dashboard listing page pictured above.
2. Use the New button to create new dashboards.
3. The library dropdown menu filters the list of dashboards by library, making it easier to navigate within a large collection of dashboards.
4. Manage Libraries is a shortcut to the Dashboard Library management tool under the Administration tab. More information about that is covered in the Administration section later in this document.
5. This list shows the available dashboards in the current library. The icon indicates a full screen dashboard and the indicates a sidebar dashboard.
6. Click a dashboard name to view that dashboard.
7. The **Modify** button opens the dashboard editing mode.
8. Click the **Export** button to save the results of the selected dashboard as a PDF file.
9. Click the **Email** button to send the selected dashboard results as a PDF file attached to an email.
10. Remove a dashboard by clicking the **Delete** button. A deleted dashboard cannot be recovered.

## Dashboard Types

There are three types of dashboards available in MITS Discover.



The first type is a full screen dashboard. A dashboard is an overview of information from one or more hypercube. It can be a mix of reports, charts, and other data elements. MITS Discover comes with some preconfigured dashboards to get you started. One example of a full screen dashboard is the Executive Dashboard, shown here.

The second type is a scorecard. A scorecard is very much like a full screen dashboard except that it prompts for a specific identifier to use prior generating the scorecard. A common scorecard that is often used in MITS Discover is the Sales Rep scorecard. When opened, there is a prompt like the one shown here to select a specific Sales Rep. The data used to populate the scorecard is based on the specific Sales Rep that was selected at the prompt.

Both full screen dashboards and scorecards can be identified in the library view on the dashboards tab by this icon:



The third type of dashboard is a sidebar dashboard. This type of dashboard is similar to a full screen dashboard in that it does not prompt the user for input. However it differs by displaying along the left side of the window instead of taking up the full screen. A sidebar dashboard will persist while navigating elsewhere in Discover, meaning that reports and other dashboards can be run and displayed in the main section of the browser window while the sidebar dashboard is still visible to the left.

Sidebar dashboards can be identified in the library view on the dashboards tab by this icon:

## Viewing Dashboards

Click the dashboard's title in the available list to view any dashboard. If the dashboard is a scorecard, a prompt may be displayed so the specific identifier can be selected.

Across the top is a tool bar with options to export the dashboard to PDF, send the dashboard as an email, and return to the dashboard library.

The body of the page will display the dashboard itself. Any dashboard object's title that is blue text is clickable. Clicking a dashboard object's title will leave the dashboard and take the user to the report used to populate that dashboard object.


The same is true of any other blue text on a dashboard. If the text is a number, the user will be taken to report that was used to generate the number. If the text is an identifier with a scorecard, clicking the link will offer the scorecard to the user if such a scorecard exists.

Across the bottom of the dashboard is a list of each Hypercube that is represented in the dashboard and the last time those cubes were updated.

## Viewing Scorecards

Viewing scorecards is very much the same as viewing dashboards. Select the scorecard from the list of available items on the dashboard tab by clicking on the title. While a dashboard will launch immediately, in most cases a scorecard will require the user to make a selection first. This selection narrows the scope of the scorecard so the user sees only information related to that selection.

If a user is limited by permissions to only see certain identifiers, this prompt may not be displayed.

To select a different prompt when viewing a scorecard, click the  **Modify Prompt Values** button in the tool bar.

Also across the top is a tool bar with options to export the dashboard to PDF, send the dashboard as an email, and return to the dashboard library.

## **Creating Dashboards**

Clicking New from the menu of the Dashboards tab allows for the creation of a new full screen or sidebar dashboard or a scorecard. The first part of this section will cover full screen dashboards and scorecards. The second part will cover sidebar dashboards.

Selecting a full screen dashboard from the New dashboard button will bring up the New Full Screen Dashboard tool. Choose the number of columns that the dashboard will use. You may choose between two, three, and four columns.

Next select the hypercube that contains the majority of information to be displayed by this dashboard. This is the hypercube that will be used to determine if a user has access to the dashboard based on their hypercube restrictions.

Lastly, if this is to be a scorecard, (where the user is prompted to select a value prior to viewing the dashboard) select the identifier that to be used.

Click Next to advance to the next screen.

From here select the library where the dashboard will be saved and give the dashboard a name. Click Save and Continue and the empty dashboard will be created in the library.

After creating the dashboard, one last screen is presented to provide basic instructions on creating dashboard objects that can be used to populate the new dashboard. Clicking Ok on this screen will return you to the dashboard library listing where the new dashboard will be listed.

From this screen, clicking on the Modify link will open the dashboard modify tool, but before this tool is of any use there must first be dashboard objects on the dashboard.

## **Creating Dashboard Objects**

Dashboard objects are reports, parts of reports, charts, or other elements created from a report that appear on dashboards and scorecards. Creating dashboard objects is done with the dashboard object creation tool found by clicking the New button inside any report.

To create a dashboard object, open a report that will be the basis of the object. Click on New in the tool bar and select Dashboard Object.

There are five different types of object to select from when creating an object from within a report. Those are listed below. If the dashboard object is created from within a chart, only the chart type dashboard object can be selected. To create any other dashboard object type from within a chart, click on the Report link in the menu bar to be taken to the underlying report that generated the chart. From there click New and select Dashboard Object to have the full list of object types available. Don't forget to save the dashboard each time after adding a new object.

## Dashboard Object Types

- **Cell** - This allows for the selection of a single cell from the report that can then be augmented with text labels. Select Cell, click next, and select the dashboard where this new object should be displayed. Click Go To Dashboard to generate the object and place it on the dashboard.
- **Chart** - This allows for the creation of a new chart based on the current report. Select Chart, click Next, and choose the options for the chart. Click Go To Dashboard to generate the object and place it on the dashboard.
- **Grid** - A grid object is a way to get a whole report into a dashboard as an object. Use care when selecting this option with large reports. Consider limiting the number of columns and using clipping to limit the number of rows so the report is not too large or unnecessarily detailed for the dashboard. The option for Display Lowest Level tells MITS Discover how many levels of the drill down path to display, starting at the bottom of the report and accounting up. If the report has five levels of drill down in the path but the number three is entered as the Display Lowest Level, only the bottom three levels of the drill down path will be displayed on dashboard object. Click Go To Dashboard to generate the object and place it on the dashboard.
- **Speedometer** - With a speedometer dashboard object, a single cell is selected from the report. This is the metric that will be used to control the needle on the speedometer. Setting the value ranges for each color of the speedometer controls the size of each color on the final object. There are also options for changing the order of the colors as well as setting the size of the object. Click Go To Dashboard to generate the object and place it on the dashboard.
- **Stoplight** - The stoplight works in a similar manner to the speedometer object. But rather than showing the whole scale and were on that scale the metric in question is, a stoplight simply shows a colored dot to indicate the metric's placement within the scale. Making a stoplight is almost the same as making a speedometer. Select stoplight from the object type, select a cell to use as the metric, and set the options for color and range. Click Go To Dashboard to generate the object and place it on the dashboard.

## Other Dashboard Items

In addition to the dashboard objects, there are two other visible items that can be added to a dashboard. The first is a horizontal line. This can be useful for breaking up sections to make the dashboard more readable. There are no configurable options for a horizontal line.




The second is a section box. This is generally used to contain and group other objects together. After being added to the dashboard, the title of the section can be modified by clicking on the pencil icon while hovering over the title bar of the section.

## **Modifying Dashboards**

All dashboards can be edited using two different methods, one visual and one code based. Both can be accessed by clicking the Modify link for a dashboard on the Dashboard tab. This will open the visual editor. The dashboard editor can also be opened by clicking on the Modify Dashboard link in the menu bar when viewing a dashboard.

If you wish to use the code-based editor, there is a Manual Edit button in the tool bar when modifying a dashboard. For more information on the code used to manually generate a dashboard, refer to the help documents Advanced Dashboard Guide, ***Creating MWML Statements*** available from your MITS support provider.

Using the visual dashboard editor is a matter of hovering the mouse over the dashboard object to be edited and selecting an action. With the mouse over the dashboard object, icons of available actions will display.

-  **Delete** - This removes the item from the dashboard. This action cannot be undone. However, if you navigate away from the dashboard without saving the changes, the deleted element will return when the dashboard is opened again.
-  **Copy** - Clicking this button adds a copy of the dashboard object to the dashboard in the upper left corner. That new object can be moved and edited independent of the original.
-  **Edit** - The edit button will present additional options for modifying the object that may not have been shown when the dashboard object was first created. When creating an object, Discover makes some assumptions that can later be adjusted with this edit tool.
- **Move** – A four-way arrow cursor appears when hovering over a moveable dashboard object. Clicking the mouse button at that point allows the dashboard object to be dragged to a new location. Releasing the mouse button drops the dashboard object in place at its new location.

Sections created by the Section tool can be moved and all of the containing dashboard objects will move with it. Horizontal lines can also be moved in this manner.

When a dashboard object is being moved, a shadow version of the object is shown for visual reference and other elements of the dashboard will move to make room for the dashboard object as it is moved about.

## **Generated Path Dashboards**

Generated Path Dashboards are a type of dashboard that swap in a user's security restrictions and allows them to view the dashboard with their security automatically applied. This means that different users may see different data displayed when viewing the same dashboard.









Dashboards that are modified in this way will indicate at the top of the dashboard which identifiers have been added, as well as any pre-existing identifiers (see image below). Clicking on these identifiers will allow you to modify the selected drill-down prompt.


Sales Representative: Anne Andrews (1) ▶ Product: 14 PL1 SG1 PRODUCT (14)

## **Filtered Dashboards**

If a Generated Path Dashboard will not work within the security restrictions of the user trying to access it or if the syntax is incorrect (such as more than one {PROMPT.SEQUENCE} tag), and if that user has permission to modify dashboards, the dashboard will be placed at the bottom of the Dashboards page in the Filtered Dashboards section. Clicking Show Filtered Dashboards will display the list of Generated Path Dashboards that are not currently able to be displayed (see image below).

[Hide Filtered Dashboards](#)

Dashboard	Actions	
 C Modified	 Modify  Delete	
 Sr C Modified	 Modify  Delete	

Hovering over the  icon will display more information regarding why the dashboard cannot currently be displayed. This information can potentially help you modify the dashboard in a way that allows it to be displayed and therefore moved from the Filtered Dashboards section back to the main Dashboards list.



## The Hypercubes Tab

### Managing Your Hypercubes

The *Hypercubes* tab provides an interface for creating and scheduling build jobs as well as viewing the current status of your Hypercubes.

The screenshot shows the MITS Discover web interface. At the top, there are tabs for 'Reports', 'Dashboard', and 'Hypercubes' (highlighted with a red box and callout 1). Below the tabs, there is a 'New Scheduled Build Job' button (callout 2) and an 'Auto-Refresh' checkbox set to '5 secs' (callout 3). The main content area is divided into two sections. The first section, 'Scheduled Build Jobs' (callout 4), contains a table with columns 'Job Name', 'Schedule', 'Status', and 'Actions'. It lists two jobs: 'INVENTORY' and 'SALES', both scheduled for '1st of October at midnight'. The second section, 'Status of all Hypercubes' (callout 5), shows the status as of '12/01/2011 at 03:45 PM' and contains a table with columns 'Name', 'Status', and 'Build Range'. It lists two hypercubes: 'INVENTORY' and 'INVENTORY.HIST', both with 'Data Complete' status.

Job Name	Schedule	Status	Actions
INVENTORY	1st of October at midnight	Started 12/01/2011 at 10:35 AM (4m 5s)	Run Job Now Modify Delete
SALES	1st of October at midnight	Started 11/22/2011 at 04:09 PM (21m 3s)	Run Job Now Modify Delete

Name	Status	Build Range
INVENTORY	Data Complete	12/01/2011-12/01/2011
INVENTORY.HIST	Data Complete	08/30/2011-10/30/2011

1. Select the **Hypercubes** tab to view, create, and manage scheduled build jobs and to view the status of your Hypercubes.
2. Click the **New Scheduled Build Job** button to create a new scheduled build job. You will find instructions in the section titled *Creating a New Build Job*.
3. Selecting the **Auto-Refresh** check box will cause the status information on this tab to automatically refresh at the specified interval.
4. The **Scheduled Build Jobs** section shows information about the jobs that have been created and provides the ability to interact with those jobs. More information about this section can be found under **Scheduled Build Jobs**.
5. The **Status** section displays the current status of each Hypercube on your system. More information about this section can be found under **Hypercube Status Information**.

**NOTE:** Your display may differ due to the fact that much of the functionality and information on this tab is controlled by user security. If you require additional access, speak with your MITS Discover administrator.

## Scheduled Build Jobs

MIT S Discover Hypercubes are populated by *build jobs*. These jobs are usually run after business hours (overnight or on the weekend). The Hypercube build scheduler allows you to configure one or more build jobs and schedule them to occur as needed automatically.

If your user account has been configured to allow access to build scheduling, you will find a section at the top of the **Hypercubes** tab labeled *Scheduled Build Jobs*. This is where your build jobs will appear.

Scheduled Build Jobs			
Job Name	Schedule	Status	Actions
INVENTORY	Every day at 3 AM	Started 12/01/2011 at 10:35 AM (4m 5s)	Run Job Now  Modify  Delete
SALES	Mon/Wed/Fri at midnight	Started 11/22/2011 at 04:09 PM (21m 3s)	Run Job Now  Modify  Delete

### Creating a New Build Job – Standard Cube Builder Service

To create a new build job, start by navigating to the **Hypercubes** tab and clicking the **New Scheduled Build** Job button in the main MIT S Discover tool bar.

**NOTE:** These build job creation steps do not give you access to all of the available job configuration options. Additional options are described in the section titled **Advanced Build Job Configuration**.

### Choose Job Schedule

The first step is to specify when the job(s) should run.

1. Specify whether the job should run daily, weekly, or monthly. If the job is to be run weekly, select the check box(es) next to the day(s) you want the job to run. If the job is to be run monthly, select the day of the month and the month the job should run.
2. Define the start time.
3. Define the stop time, or select **When Finished** to allow the build job to run to completion.
4. Click **Next**.

**NOTE:** You can also configure yearly jobs using the *Monthly* schedule type. Select a specific day from the **Day** drop-down menu (instead of the default *Every Day of the Month*) and a specific month from the **Month** drop-down menu (instead of the default *Every Month*).

**Define Task**

In this step, you will specify the actual jobs that will be run. There are two **Task**

**Types:** *Hypercube Build* and *TCL Commands*.

- If selecting the *Hypercube Build* option, you will also need to select the specific Hypercube in the pull-down menu next to it.
- If *TCL Commands* is selected, specify a list of commands to be run at the scheduled time.

**WARNING:** This is an advanced feature which should only be used under the direction of a MITS Support technician.

The screenshot shows a window titled "Define Task". Inside, under "Task Type:", there are two radio buttons. The first is "Hypercube Build" and is selected, with a pull-down menu next to it showing "AR". The second is "TCL Commands". At the bottom of the window, there are three buttons: "Back", "Next", and "Cancel".

Take note of the following when working with the *TCL Commands* feature:

- The list of commands will be executed from within the MITS.SYSTEM operational database account as a paragraph.
- If your list of commands includes a manually defined Hypercube build job, there are additional steps that will need to be taken after the scheduled build job has been defined. These additional steps are described in the section titled **Configuration Page**.

### **Build Type**

Here you will select the type of build service to use. The *MITS Cube Builder Service* is a type of build that greatly enhances build speed performance in many situations. This option will only be available, however, if your Hypercubes use prefix files. If it is unavailable, a note will appear under this option, as shown below. If you have questions about making this available, please contact your MITS Discover support provider to discuss the possible options.

If the *MITS Cube Builder Service* is available and is your desired build type, see the ***Creating a New Build Job – MITS Cube Builder Service*** section further down in these directions.

### Build Type for AR

Build hypercube using:

☐ **MITS Cube Builder Service**

The MITS Cube Builder cannot be used for AR because it does not use prefix files.

☒ **MITS.MAKER.BUILD**

The traditional way of doing cube builds that supports full builds as well as Index Date Routines and Dynamic Change Update.

☐ **MITS.LOAD**

An alternative way of doing cube builds that supports Index Date Routines and Dynamic Change Update. MITS.LOAD is sometimes faster than MITS.MAKER.BUILD, but is sometimes slower. Trying this option is recommended if MITS Cube Builder Service cannot be used, and MITS.MAKER.BUILD is not fast enough.

[Back](#) [Next](#) [Cancel](#)

## **Build Options**

Here you can select the following advanced build options:

- **B - Skip Wrapup:** The transformation phase of the build process will run and then halt prior to entering the build wrap- up phase. (Be aware that the data in your Hypercube may not be viewable and/or accurate until a build wrap-up has been run.)
- **U - Dynamic Changes Only (Redos/Undos/Todos):** This option activates an advanced, alternate Hypercube build mode and should only be used under the direction of a MITS Support technician.
- **W - Wrapup Only:** The transformation phase of the build process will be skipped, proceeding directly to the build wrap-up phase. (Be aware that no new data will be added to your Hypercube during this process.)



**NOTE:** If you need to use an advanced build option that is not listed here, the build job should be specified using the *TCL Commands* option in the initial **Define Task** step. Contact your MITS Discover support provider for more information.

## **Job Name and Description**

Specify a descriptive name and an optional description for this build job, and then click **Finish**.

## Creating a New Build Job – MITS Cube Builder Service

To create a new build job, start by navigating to the **Hypercubes** tab and clicking the **New Scheduled Build** Job button in the main MITS Discover tool bar.

**NOTE:** These build job creation steps do not give you access to all of the available job configuration options. Additional options are described in the section titled **Advanced Build Job Configuration**.

### Choose Job Schedule

The first step is to specify when the job(s) should run.

1. Specify whether the job should run daily, weekly, or monthly. If the job is to be run weekly, select the day(s) you want the job to run. If the job is to be run monthly, select the day of the month and the month the job should run.
2. Define the start time.
3. Define the stop time, or select **When Finished** to allow the build job to run to completion.
4. Click **Next**.

**NOTE:** You can also configure yearly jobs using the *Monthly* schedule type. Select a specific day from the **Day** drop-down menu (instead of the default *Every Day of the Month*) and a specific month from the **Month** drop-down menu (instead of the default *Every Month*).

### Define Task

In this step, you will specify the actual jobs that will be run. There are two **Task Types**: *Hypercube Build* and *TCL Commands*.

- If selecting the *Hypercube Build* option, you will also need to select the specific Hypercube in the pull-down menu next to it.
- If *TCL Commands* is selected, specify a list of commands to be run at the scheduled time.

**WARNING:** This is an advanced feature which should only be used under the direction of a MITS Support technician.

Take note of the following when working with the *TCL Commands* feature:

- The list of commands will be executed from within the MITS.SYSTEM operational database

account as a paragraph.

- If your list of commands includes a manually defined Hypercube build job, there are additional steps that will need to be taken after the scheduled build job has been defined. These additional steps are described in the section titled **Configuration Page**.

### **Build Type**

Here you will select the type of build service to use. The *MITS Cube Builder Service* is a type of build that greatly enhances build speed performance in many situations. This option will only be available, however, if your Hypercubes use prefix files.

Build Type for AR

Build hypercube using:

☒
**MITS Cube Builder Service**

This is the fastest way to do full builds of Hypercubes, but it only does full builds. If you are using Index Date Routines or Dynamic Change Update, it will likely be faster to use a different build type. Also, if this type of build is stopped before it completes, none of the data it had processed will be available.

☐
**MITS.MAKER.BUILD**

The traditional way of doing cube builds that supports full builds as well as Index Date Routines and Dynamic Change Update.

☐
**MITS.LOAD**

An alternative way of doing cube builds that supports Index Date Routines and Dynamic Change Update. MITS.LOAD is sometimes faster than MITS.MAKER.BUILD, but is sometimes slower. Trying this option is recommended if MITS Cube Builder Service cannot be used, and MITS.MAKER.BUILD is not fast enough.

Back

Next

Cancel

### Build Options

Here you can select to disable two advanced build options. Keep in mind that these options are enabled by default and under most circumstances, it is advised that you keep both these options checked.

**NOTE:** If you need to use an advanced build option that is not listed here, the build job should be specified using the *TCL Commands* option in the initial **Define Task** step. Contact your MITS Discover support provider for more information.



### Job Name and Description

Specify a descriptive name and an optional description for this build job, and then click **Finish**.

Any build jobs set up using the MITS Cube Builder will show up with a special icon (📦) next to it in the **Scheduled Build Jobs** section of the **Hypercubes** tab. You can see an example of this below:

[Reports](#)
[Dashboards](#)
[Hyp](#)

[+ New Scheduled Build Job](#)
☒ Auto-Refresh
 5 secs

Warning: Build notifications have not been configured. Notifications are strongly recommended so that an ad

### Scheduled Build Jobs


Job Name	Schedule	Status	Actions
AR	Every day at 1 AM	No Job History Available	<a href="#">Run Job Now</a> <a href="#">Modify</a> <a href="#">Delete</a>

### Status of all Hypercubes (as of 07/16/2014 at 02:47 PM)

Name	Status	Build Range
AR	No Data	07/16/2014 at 02:45 PM



## Run a Defined Job Immediately

To execute a scheduled build job, click  **Run Job Now** in the Actions column for that job. The status will automatically refresh based on the *Auto-Refresh* setting in the Hypercubes tab tool bar.

To view the status for a currently running job, click the *Running...* link in the **Last Status** column and select *View Build Details*. For more information about build job status, see the section titled *Build Job Information* below.

## Delete a Scheduled Build Job

To delete a scheduled build job, click  **Delete** in the **Actions** column for that job.

**WARNING:** Deleted build jobs cannot be recovered!

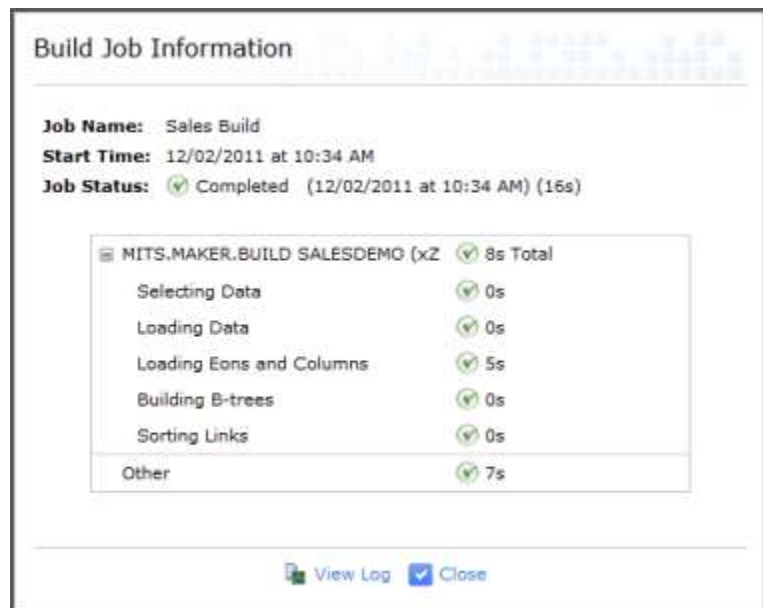
## Build Job Information

The **Build Job Information** screen shows a detailed breakdown of each step in the build process. It includes durations for each build task (broken down by phase) as well as a total job duration.

### Currently Running Job Status

To view build job information for a currently running job, click on the word *Running...* in the **Last Status** column and select **View Build Details** from the menu. This display will automatically update as the job progresses.

Additionally, you can view the log file for the currently running job by clicking the **View Log** link at the bottom of the **Build Job Information** screen.



**NOTE:** The Build Job Information screen is also available for previously run jobs as described in the next section.

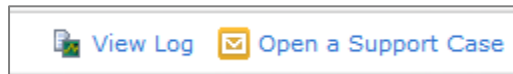
## Viewing Historical Build Job Information

There is a **Job History** page for each defined build job which shows status and completion information for the last 50 times the job was run. This page can be accessed by clicking the **Status** entry for a scheduled build job and selecting **Job History**. The following tasks are available from the **Actions** column of this page:

- Clicking **View Details** will show the *Build Job Information* screen for that build job instance.
- The **View Log** link will display the build log from that job instance.
- If there were critical errors or non-critical warnings that occurred, you can click **View Warnings** or **View Error** to see more information. Additionally, you can submit a support ticket by clicking on **Open a Support Case** at the bottom of a build error screen, as shown below:

Start Time	Status	Actions
12/02/2011 at 10:42 AM (2m 3s)	Build Error	<a href="#">View Details</a> <a href="#">View Log</a> <a href="#">View Error</a>
12/02/2011 at 03:00 AM (2m 18s)	Build Error	<a href="#">View Details</a> <a href="#">View Log</a> <a href="#">View Error</a>
12/01/2011 at 10:35 AM (4m 5s)	Completed	<a href="#">View Details</a> <a href="#">View Log</a>
11/18/2011 at 08:14 AM (1m 32s)	Completed	<a href="#">View Details</a> <a href="#">View Log</a>
11/15/2011 at 03:32 PM (1m 25s)	Completed	<a href="#">View Details</a> <a href="#">View Log</a> <a href="#">View Warnings</a>
11/15/2011 at 03:31 PM (0s)	Build Error	<a href="#">View Details</a> <a href="#">View Log</a> <a href="#">View Error</a>
11/10/2011 at 03:20 PM (30s)	Completed	<a href="#">View Details</a> <a href="#">View Log</a>
11/10/2011 at 03:16 PM (30s)	Completed	<a href="#">View Details</a> <a href="#">View Log</a>

[Refresh](#)




## Build Logs

The MITS Discover build scheduler keeps a log of the build job output for every job, and the 50 most recent build logs are kept for each job.

The build logs can be accessed for both currently running jobs and historical jobs. You will find a **View Log** option on the **Build Job Information** screen and on the **Job History** page.

You can download any log file in a ".zip" format from the **Job Output Log** page by clicking the **Download Log File** button in the tool bar.

## **Advanced Build Job Configuration**

The  **Modify** menu in the **Actions** column includes four options: *Configuration*, *Job Tasks*, *Job Scheduling*, and *Disable/Enable Job*. Each of these options is described below.

### Configuration Page

The build job name or description can be modified on this page.

#### **Additional Steps for TCL Command-Based Build Job Tasks**

You may find one or more check boxes near the bottom of this page (one for each Hypercube on your system) as shown here. If the selected build job includes a "TCL command" task which executes a build job for one of your Hypercubes, select the check box for that Hypercube here.

Multiple Hypercubes can be selected as appropriate for each build job.

Hypercubes built by this job using TCL tasks:

- ☐ INVENTORY
- ☐ INVENTORY.CURRENT
- ☐ SALES

This configuration step allows the system to enforce an important concurrency check which prevents multiple builds from running on a single Hypercube at the same time. Additionally, if you have one or more Hypercubes that rely upon external data source extractions, this check box will ensure that the extractions are run as a part of the build job.

### Job Tasks Page

The **Job Tasks** page provides a number of additional build job configuration options which allow you to create more complex build jobs than you would normally be able to create using only the *New Scheduled Build Job* procedure. On this page you can:

- Modify an existing job task
- Add tasks to an existing scheduled build job, thus creating a single build job that performs multiple tasks
- Remove tasks from an existing scheduled build job
- Change the order in which the tasks for a scheduled build job are run

**NOTE:** If you add or remove a TCL command task that includes a manually specified Hypercube build command, be sure to select or clear the check box for that Hypercube as appropriate on the **Configuration** page. This is described in more detail under **Configuration Page** above.

## Job Scheduling Page

The **Job Scheduling** page allows you to modify the schedule for a previously defined build job. This page includes the same options and abilities as the **Choose Job Schedule** screen that appears when creating a new scheduled build job.

### Disable/Enable a Build Job

If you need to temporarily prevent a build job from running, use the Disable Build Job feature. To temporarily disable a scheduled build job, click  **Modify** in the Actions column for that job and select Disable Job.



To reactivate a previously disabled build job, click  **Modify** in the Actions column for that job and select Enable Job.

## Hypercube Status Information

The lower section of the **Hypercubes** tab displays current status information about each of the Hypercubes that reside in your MITS Discover system. This display provides a quick and easy method to check on the build status and date range of a Hypercube. You can see information such as:

- Hypercube Name
- Current Status
- Current Date Range

### Status of all Hypercubes

Name	Status	Build Range
In Account: MITS.DEMO		
 SALESDEMO	Data Complete	09/01/2002-01/21/2005
 SALESTOT	Unknown	09/01/2002-01/21/2005

**NOTE:** If the user does not have access to view a given Hypercube, that Hypercube will not appear.

Below is a chart showing possible hypercube statuses and their description:

Status	Description
Data Complete	All the data that was available at the time of the cube build has been built into the cube.
Data Partially Loaded	The cube build did not finish loading all the data available because the build process reached the stop time or was manually stopped by someone.
No Data	The cube is empty and has not been built, either because it is new or was purged.
Columns Not Loaded	Since the cube was created or last purged, all cube builds have skipped the wrapup, which is required to generate the columns. The data in the cube cannot be accessed until a wrapup is run to generate the columns.
Wrapup Needed	The last cube build added data to the cube but skipped the wrapup. Data for new dates may have been added to the cube that cannot be viewed until a wrapup runs to generate columns for those new dates.
Not Usable	The last build crashed and the cube is likely in a bad state.

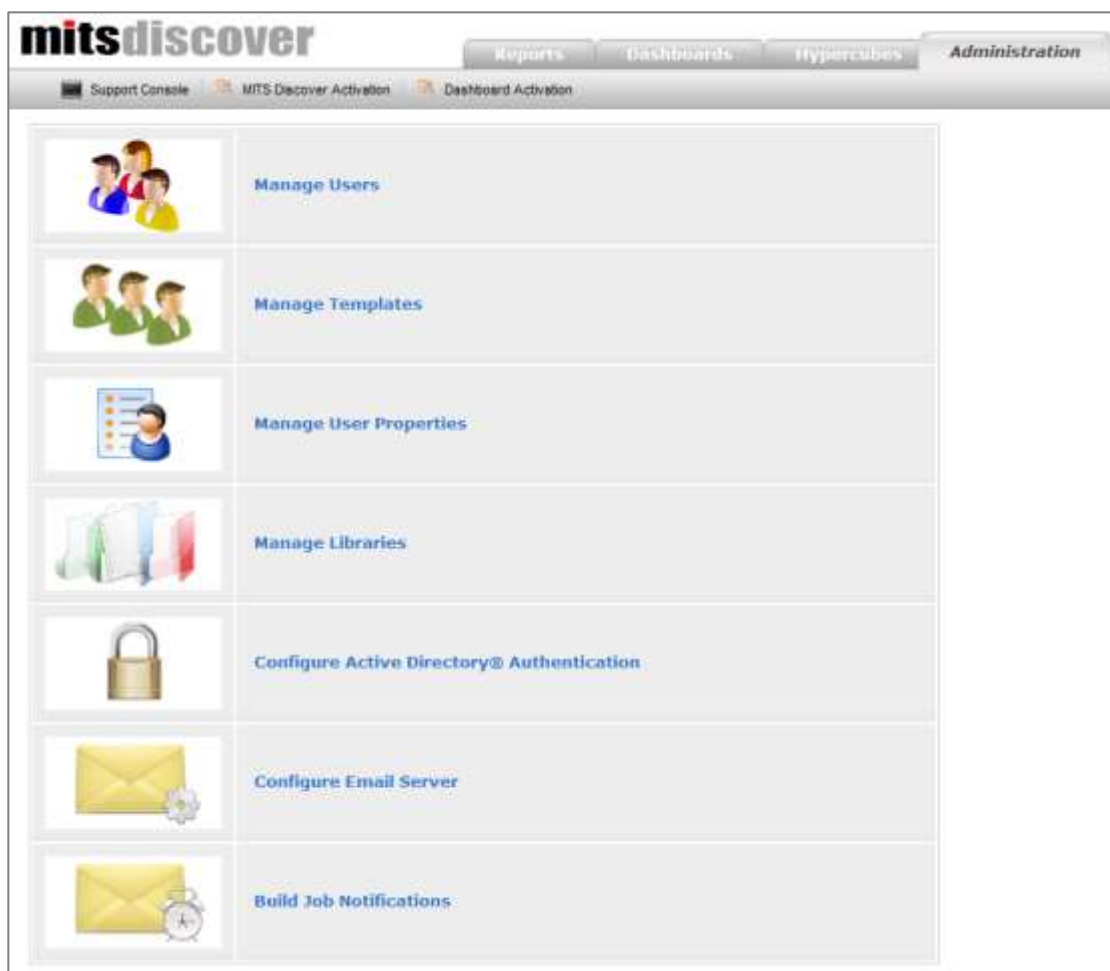
## **Build Job Notifications**

If your system has been configured with email capabilities, your MITS Discover administrator also has the ability to configure build job notification emails that will automatically send an email to one or more specified email addresses when a build job completes or fails. For more information about this feature, see the ***Build Job Notifications*** section or speak to your MITS Discover administrator.

# The Administration Tab

## Introduction

The **Administration** tab of MITS Discover provides access to eight important administrative tasks: user management, template management, user properties management, library management, Active Directory authentication configuration, email server configuration, build job notification configuration, and the Support Console.



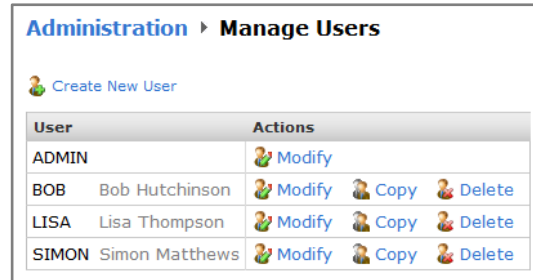
**NOTE:** Access to the items on this tab is controlled by user security. If you need to access something on this tab but are unable to do so, please contact your MITS Discover administrator.

## Manage Users

The Manage Users page allows you as the MITS Discover administrator to create, delete, and modify user accounts that provide MITS Discover access to your users.

### Create a New User

1. Click **Create New User**.
2. Specify a username, which will be used as the login name to access MITS Discover.



**WARNING:** If your system came with pre-configured security templates, there may be guidelines that you will need to follow when selecting a username in order for security to be applied correctly. For example, a sales rep security template may require the sales rep's username to be the same as their sales rep ID in your operational system. If you have questions about this, please contact your MITS provider.

3. Specify the password that will be used to log in to MITS Discover. (Users can change their password after logging in by clicking on their username at the top of the MITS Discover page.) Be aware that passwords are case-sensitive and cannot contain spaces or the following characters:
  - tilde (~)
  - comma (,)
  - semicolon (;)
  - thorn (þ)
  - percent sign (%)
  - single quote (')
  - double quotes (")
  - slash (\)
  - left parenthesis (
4. (Optional) Specify the first and last name of the user.
5. Click **Next**.
6. Select the check box next to the security template that should be applied for this user. For more information about security templates, contact your MITS provider.
7. Click **Finish**.



## Delete a User

To delete a user, navigate to the **Administration** tab, select **Manage Users**, and then click **Delete** next to their username. Deleting a user does not delete their personal library.

**WARNING:** A deleted user cannot be recovered!

## Copy a User's Account

To copy a user account, navigate to the **Administration** tab, select **Manage Users**, and then click **Copy** next to their username. You will be prompted to enter the name and password for the new account, which will retain the same properties as the account you are copying, but with the new login credentials you entered.

## Change a User's Password

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username and select **Change Password**.
3. Type the new password. Verify it by typing it again.
4. Click **Save**.

**NOTE:** A user can change their own password at any time by logging in to MITS Discover and clicking **Change Password** from the **Settings** menu.

## Change a User's Assigned Security Templates

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Select **Templates** from the list on the left side of the page.
4. Modify the templates as desired.
5. Click **Ok** or **Apply**.



### **View the Source of Each Assigned Permission**

Each user's effective permissions are often the product of one or more security templates. Permissions can also be directly assigned to a user.

When viewing *System Permissions*, *Hypercubes*, *Report Libraries*, or *Dashboard Libraries* for a given user, one or more buttons will appear near the bottom of the page. Click on a button to highlight the permissions that have been assigned by that object.

## Change a User's User Property Values

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.

3. Select **User Property Values** from the list on the left side of the page.
4. Modify the value(s) as desired.
  - Add a value by entering a new value in the **Add a value** field and clicking on the  icon.
  - Remove an existing value by clicking the  icon next to the value you want to remove.
5. Click **Ok** or **Apply**.

#### Change a User's System Permissions

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Select **System Permissions** from the list on the left side of the page.
4. Check the boxes under **Basic** and/or **Advanced** to set user access as desired. (See below for descriptions of these settings.)
5. Click **Ok** or **Apply**.

The following table describes the available permissions:

## MITS Discover Security Permissions

Permission	Description
Email	Gives the user the ability to send emails and set up scheduled emails from within MITS Discover.
Export	Allows the user to export MITS Discover data.
Column Set Maintenance	Allows the user to view, modify, or delete column set definitions using the Column Set Maintenance feature of MITS Discover.
Manually Modify Full screen Dashboards	Allows the user to modify full screen dashboards through a basic text interface, if they have write access to any dashboard libraries.
Administration	Gives the user the ability to administer permissions of other users, to schedule build jobs, manage report and dashboard libraries, and activate the product.
Email Admin	Allows the user to change the email server configuration settings and modify scheduled emails that have been configured by other users.
MitsMaker	Allows the user to log in to the MitsMaker product. MitsMaker must be licensed for MitsMaker to be used.
Column Maintenance	Allows the user to create, modify, add, or delete column definitions using the Column Maintenance feature of MITS Discover.

### Change a User's Access to Hypercubes

There are several ways to limit MITS Discover Hypercube access. You can add limitations based on a specific accumulator or identifier, or you can even grant or deny access to an entire Hypercube.


#### **Grant Access to a Hypercube**

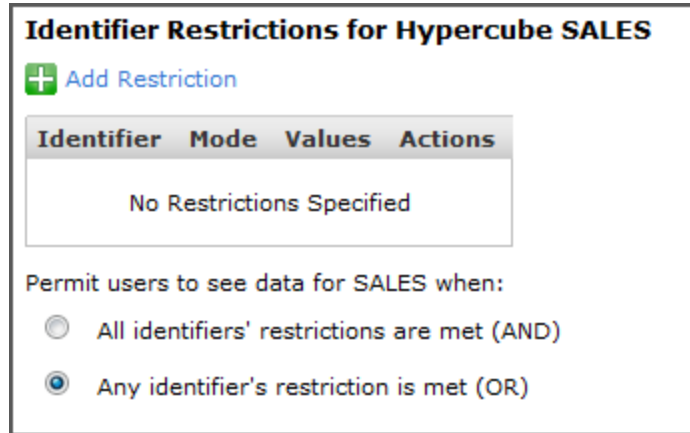
1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Select **Hypercubes** from the list on the left side of the page.
4. Check the boxes next to each hypercube to grant permissions as desired.
5. Click the hyper linked text under the **Identifier Restrictions** or **Accumulator Restrictions** to view or modify specific data restrictions for the user. Click **Ok** or **Apply** to save these restrictions. For more information, see ***Identifier Restrictions and Accumulator Restrictions*** below.
6. Click **Ok** or **Apply**.

#### **Identifier Restrictions**

Identifier restrictions provide the ability to control row-level access to the data in your Hypercubes.

Each identifier restriction is specific to a particular Hypercube. The restrictions begin by asserting control at the top level of the Hypercube by forcing the use of the restricted identifier(s) at the highest level of the drill-down path in any report viewed by the user for that Hypercube. These restrictions also cause the top-level totals to be masked for that user.

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Select **Hypercubes** from the list on the left side of the page.
4. Select the link in the *Identifier Restrictions* column for the appropriate Hypercube. The **Identifier Restrictions** page will appear, which is pictured here.
5. Click **Add Restriction**.
6. Select the identifier to restrict.
7. Select the appropriate option from the **Show rows with values** menu:
  - If you will be specifying the values to *allow*, select **equal to the selected values (Allow)**.
  - If you will be specifying the values to *restrict*, select **not equal to the selected values (Deny)**.
8. Enter the first value to allow or restrict into the **Add Value** text box and click the  button to add that value to the list. Add additional values as necessary in this same way. To search for the value(s) to add, click the **Find Values** link. If you have a list of the values that need to be entered, click the Bulk Modify Values link, which will allow you to paste in a list of identifier IDs.
9. Click **Ok**.
10. If more than one restriction has been specified, select the appropriate option under Permit users to see Hypercube data. The AND option will allow the user to drill down by any restricted identifier, but numbers will only begin to appear after all identifier restrictions have been satisfied. For example, if a user has restrictions on two different identifiers, the report numbers will not begin to populate until the drill-down path includes both identifiers. The OR option treats multiple identifier restrictions separately from one another.



**WARNING:** The OR option is not recommended for use as it could provide a user with unexpected data results. For example, consider a user that has two restrictions: one limits them to viewing only one SALES REP and the other limits them to seeing one WAREHOUSE.

If the AND option is selected, the numeric data will not appear in a report until the drill-down path includes both WAREHOUSE and SALES REP - regardless of which one appears first.

If the OR option is selected, the restriction will (in this example) work properly when SALES REP is the top-level identifier; however, if WAREHOUSE is the top-level identifier, they will still be able to drill down to the SALES REP identifier and view ALL sales reps - not just the single sales rep to which they have been restricted.

### Accumulator Restrictions

Accumulator restrictions provide the ability to dictate column-level access. It is important to note that this is done by defining restrictions on the base accumulators within the Hypercubes rather than the columns themselves. For example, if your Hypercube includes columns for sales, cost, and profit, quite often the profit column will be calculated on-the-fly from the values in the sales and cost columns. In this situation, restricting a user's ability to see the cost accumulator would restrict their ability to see the cost columns AND the profit columns.

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Select **Hypercubes** from the list on the left side of the page.
4. Select the link in the *Accumulator Restrictions* column for the appropriate Hypercube. The **Accumulator Restrictions** page will appear, which is pictured here.
5. Select the check box next to the accumulators you want to restrict. For information about which accumulators affect which columns, speak to your MITS Discover Hypercube Designer or contact your MITS support provider.

Accumulator Restrictions	
Accumulator	Deny
COMM.COST	<input type="checkbox"/>
COUNT	<input type="checkbox"/>
EXT.COST	<input type="checkbox"/>
EXT.PRICE	<input type="checkbox"/>
QUANTITY	<input type="checkbox"/>

#### Change a User's Access to Libraries

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Select **Report Libraries** or **Dashboard Libraries** from the list on the left side of the page.
4. Check the **Read** and/or **Write** boxes next to each library to grant permissions as desired.
5. Click **Ok** or **Apply**.

## Change a User's Landing Page

The landing page settings allow you to specify the page a user sees when they first log in to MITS Discover. You can select an existing saved report, a full screen dashboard, or one of the main tabs.

1. On the **Administration** tab, select **Manage Users**.
2. Click **Modify** next to their username.
3. Click **Change Landing page**.
4. Select **Dashboard**, **Report**, or **Tab** to set the type of screen to display.
  - **Dashboard:** select the **Library** and specific **Dashboard** to display; check the **Specify Prompt Values** box if you wish to select specific values for the dashboard (you will be asked for these values upon clicking **Next**)
  - **Report:** select the **Library** and specific **Report** to display
  - **Tab:** select **Reports**, **Dashboards**, or **Hypercubes** tab to show upon login
5. Click **Save**.

**Set Landing Page**

Landing page type:

☐ Dashboard
 ☐ Report
 ☒ Tab

☒ Reports
 ☐ Dashboards
 ☐ Hypercubes

Save Cancel

**NOTE:** The options shown when configuring a user's landing page and the data presented to them on their landing page will be constrained by their user security settings. The landing page for the Admin user cannot be modified and will always default to the Hypercubes tab.

## Manage Templates

Templates are a way of defining roles to simplify security. Templates can be configured with access to data and given various restrictions, just like users. Users can then be assigned to one or more templates, causing the user to inherit all the data access and restrictions from their assigned templates.

















Access security template management functions by navigating to the **Administration** tab and selecting **Manage Templates**.

### Create a Template

1. Select **Create New Template**.
2. Enter a name and optional description for the template.
3. Click **Finish**.

### Modify a Template

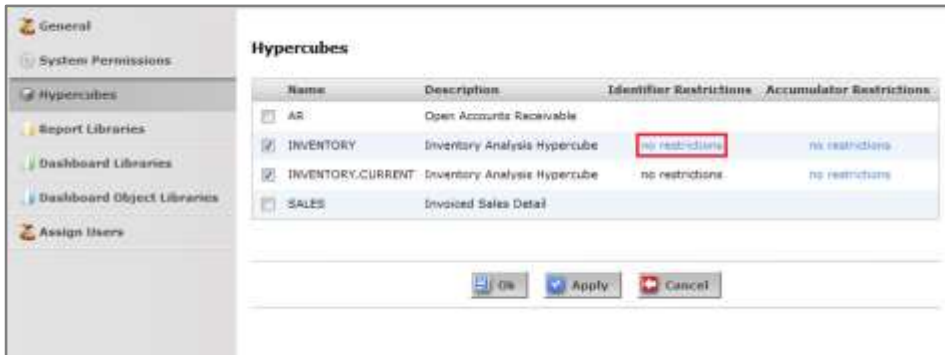
1. Click **Modify** next to the template you wish to change.
2. Select menu options on the left side of the page and change values as desired.
3. Click **Ok** or **Apply**.

Administration ▸ Manage Templates	
 <a href="#">Create New Template</a>	
Templates	Actions
DEFAULT.BUYER	 <a href="#">Modify</a>  <a href="#">Copy</a>  <a href="#">Delete</a>
DEFAULT.EXECUTIVE	 <a href="#">Modify</a>  <a href="#">Copy</a>  <a href="#">Delete</a>
DEFAULT.INVENTORY.MANAGER	 <a href="#">Modify</a>  <a href="#">Copy</a>  <a href="#">Delete</a>
DEFAULT.SALESREP	 <a href="#">Modify</a>  <a href="#">Copy</a>  <a href="#">Delete</a>
DEFAULT.SALESREP.NOCOST	 <a href="#">Modify</a>  <a href="#">Copy</a>  <a href="#">Delete</a>

## Using User Properties to Set Restrictions for a Template

Security is configured for templates the same as for users, with one exception: templates can have Identifier Restrictions that get the restricted value from a User Property. See the ***Manage User Properties*** section for more information about User Properties.

To set up an Identifier Restriction using a User Property:



1. Select **Hypercubes** from the left side of the page.
2. Click **no restrictions** next to the appropriate hypercube. (This may be labelled differently if one or more restrictions have already been created for this hypercube.)
3. Click **Add Restriction**.



4. Select the identifier to restrict.
5. Select **equal to user property (Allow)**.
6. Select the user property you want to use from the **User Property** menu.
7. Click **OK**.

**NOTE:** Users assigned to the template who do not have a value for the User Property will not be able to log in until a value is assigned.



### Copy a Template

1. Click **Copy** next to the template you wish to change.
2. Enter a new template name and optional description.
3. Click **Finish**.

### Delete a Template

1. Click Delete next to the template you wish to remove.
2. Confirm you want to delete the template by clicking **OK**.

## **Manage User Properties**










What are User Properties?

User Properties are custom user fields you create to simplify setting up security for new or existing users. They are used in conjunction with User Templates. The template defines a role, such as sales rep or branch manager, and the User Property defines a field that must be specified for MITS users in that role, such as the sales rep's ID or the branches being managed.

A common scenario in which user properties are useful is when you want to restrict sales reps to only see their own customers and sales. To accomplish this with user properties, you would do the following steps:


- Add a new User Property, perhaps named SALES\_REP\_ID. Later, this will be the name of a field where you can enter the sales rep ID for a particular user. When a User Property is first added, it will show up in the list of all User Properties, but will not have any effect until you configure a user template with a restriction using that User Property.
- Once the User Property has been added, you will create and edit a User Template for the sales rep role, or edit the existing template if one already exists. In the management page for the template, you would find the Hypercube containing sales data, and create an Identifier Restriction on the sales rep identifier. When creating that restriction, you would choose for the restriction to show rows with values "equal to user property (Allow)" and then select the SALES\_REP\_ID from the list of User Properties. In this situation, the User Property represents a placeholder, where the restricted value will be specified later on each individual sales rep user.
- Lastly, whenever you create a MITS Discover user who is a sales rep, you would select the sales rep template, and MITS Discover will prompt you to enter the sales rep ID for that user. Whenever that user logs in, the data they see will be restricted using the sales rep ID that you entered.

Access User Property management functions by navigating to the **Administration** tab and selecting **Manage User Properties**.

User Property	Templates Using This User Property	Actions
BUYER_ID	 DEFAULT.BUYER	 Assign Values  Delete
SALES_REP_ID	 DEFAULT.SALESREP	 Assign Values  Delete
TAKER_ID	 DEFAULT.TAKER	 Assign Values  Delete



Here you will see a list of any existing User Properties that have been created and the template(s) using each property.

### Create a User Property

1. Select  [Create New User Property](#).
2. Enter a name for the User Property.
3. Click **OK**.



### Add or Remove User Property Values

1. Click **Assign Values** next to the User Property you wish to modify.
2. Add or remove values for any user in the list.
  - Add a value by entering a new value in the **Add a value** field and clicking on the  icon.
  - Remove an existing value by clicking the  icon next to the value you want to remove.
3. Click **Ok** or **Apply**.

### Delete a User Property

1. Click **Delete** next to the User Property you wish to remove.
2. A warning message will appear. Click **OK** to confirm removal of this property or click **Cancel** to cancel this action.

## Manage Libraries

This section of the Administration tab allows you to create and modify libraries for reports and dashboards. You can access these functions by navigating to the **Administration** tab, selecting **Manage Libraries**, and selecting **Report Libraries** or **Dashboard Libraries**.

































### Add New Library

1. Select **Add new library**.
2. Enter a name for the new library.
3. Click **Ok**.

### Assign Users

1. Click **Assign Users** next to the library you wish to assign.
2. Select the appropriate check boxes to give **Read** and/or **Write** access to specific users.
3. Click **Ok** or **Apply**.

Actions		
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates
 Delete	 Assign Users	 Assign Templates

### Assign Templates

1. Click **Assign Templates** next to the library you wish to assign.
2. Select the appropriate check boxes to give **Read** and/or **Write** access to specific user templates.
3. Click **Ok** or **Apply**.

### Delete Libraries

1. Click **Delete** next to the library you wish to remove.
2. Confirm you want to delete the library by clicking **OK**.

**NOTE:** You may find some libraries in this list that have the **Delete** option greyed out. These libraries are system-generated and cannot be deleted.

## **Configure Active Directory® Authentication**

Active Directory Authentication allows users' login credentials for MITS Discover to be verified against your Active Directory service so they do not need a separate user name and password for MITS Discover. You can access these configuration options by navigating to the **Administration** tab and selecting **Configure Active Directory Authentication**.

Enable Active Directory® Authentication

1. Select the checkbox next to **Active Directory Authentication Enabled**.

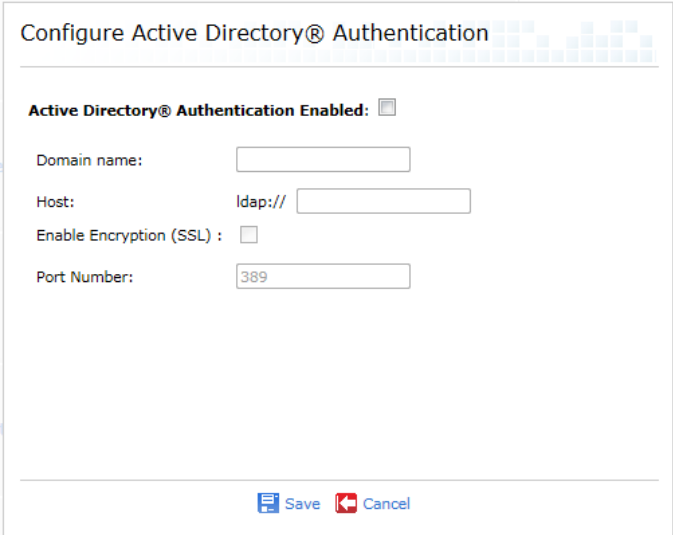
**NOTE:** All users other than "ADMIN" will be required to log in using their Active Directory credentials. Please ensure that MITS users exist for each Active Directory® user that should be allowed to log in. Also, please ensure the ADMIN password is secure.

2. Enter your network domain in the **Domain name** field.

**NOTE:** You can verify the domain to be entered by right-clicking the **Computer** icon on the desktop or in the **Start** menu, selecting **Properties**, then looking for the **Domain** entry. You should enter this information exactly as it is shown.

3. Enter your Active Directory server name in the **Host** field.
4. Check the **Enable Encryption (SSL)** box if your Active Directory service is configured with SSL and you wish to use that option.

**NOTE:** If you check the Enable Encryption (SSL) box and your Active Directory service is not configured with SSL, MITS Discover will be unable to communicate with the service.



5. Enter the port number in the **Port Number** field. In most cases, you will want to leave this at the default setting.
6. You can test these settings by selecting **Test User Authentication** at the bottom of this window. This will provide you a prompt to enter a user name and password to validate against your Active Directory® service.
7. Click **Save**.



The screenshot shows a window titled "Test User Authentication". Inside, there are three labeled input fields: "Domain name" (containing the text "domain"), "User name", and "Password". At the bottom of the window, there are two buttons: a green "Test" button and a red "Back" button.

#### Disable Active Directory® Authentication

1. Uncheck the checkbox next to **Active Directory® Authentication Enabled**.

**NOTE:** All users other than "ADMIN" will have their passwords restored to the password they used before Active Directory authentication was enabled. Users created after Active Directory was enabled will be unable to login until an administrator resets their passwords. These users will be marked as needing assistance on the user management page. Please ensure the ADMIN password is secure.

2. Click **Save**.

## **Configure Email Server**

The email features of MITS Discover provide the ability to instantly send the results of a report to one or more specified email addresses. You can also set up an email schedule that will automatically send the report results to one or more specified email addresses on a daily, weekly, or monthly basis.

The email features will only be available to your users after the email features of MITS Discover have been enabled and the users have been granted permission to use these features. For more information or for assistance, please contact your MITS Discover support provider.

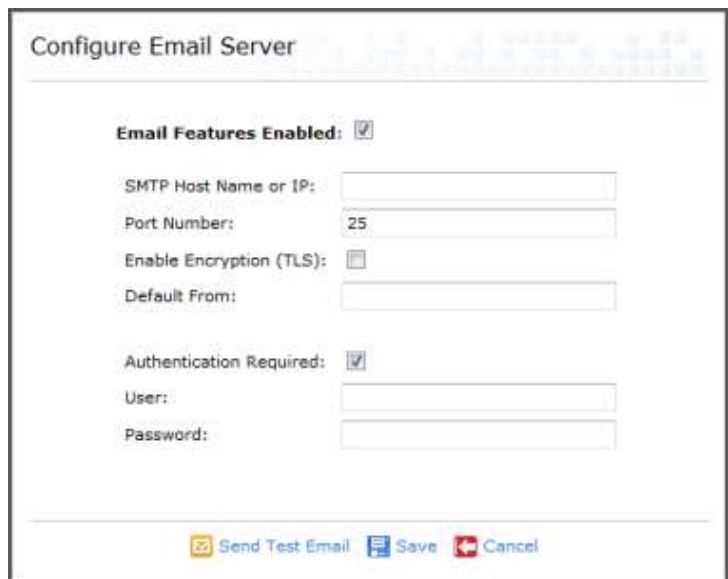
### Enabling the Email Features of MITS Discover



1. On the **Administration** tab, click **Configure Email Server**. A window similar to the one pictured here will appear.

2. Enable the email features by selecting the **Email Features Enabled** check box.

3. In the **SMTP Host or IP** box, enter the DNS name or IP address of your SMTP email server.

4. If your email server uses a port other than port 25 for email, change the number in the **Port** box.



5. If your email server requires TLS encryption, select the **Enable Encryption (TLS)** check box.
6. In the **Default From** box, enter the email address that should appear in the FROM field of the emails that are sent from within MITS Discover. Keep in mind that some email servers will not allow a custom entry in the FROM field.
7. If your email server requires authentication, select the **Authentication Required** check box and enter the username and password for your email server.
8. Click  **Send Test Email**. You will be prompted for an email address that the test email should be sent to, and you will be given the opportunity to set the subject and message body for the test email. When the test message is received, the email features have been successfully enabled. If the test message is not delivered, check your settings and try again.
9. Click  **Save**.

## **Build Job Notifications**

There may be times when you want to receive an email notification when a build job completes. The *Build Job Notifications* feature provides this capability and more.

Before using this feature, you must configure the email feature which allows MITS Discover to communicate with your email server. For instructions, see ***Configure Email Server***.


1. On the **Administration** tab, click **Build Job Notifications**.

2. Enter one or more email addresses in the **Email Addresses** box. These are the email addresses that will receive the notifications. Multiple email addresses can be separated by a space, a comma, or a new line within the **Email Addresses** box.

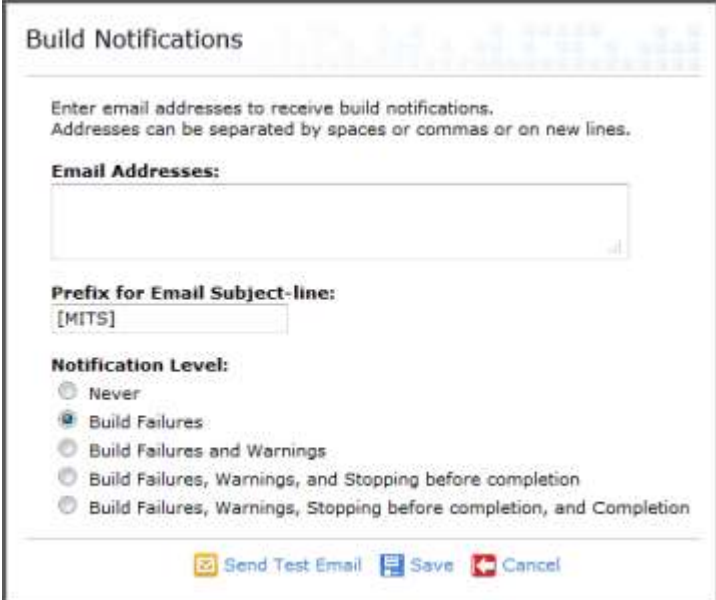
3. If desired, enter a prefix that will appear prior to the email subject line. (This can be especially useful if you will be defining a rule in your email client to automatically move these messages to a folder outside of your email inbox.)

4. Select the desired notification level:

- **Never:** No notifications will be sent. This can be useful for temporarily disabling these notifications.
- **Build Failures:** Notifications will only be sent when a build fails.
- **Build Failures and Warnings:** Notifications will be sent when a build job fails and also when a build job finishes with one or more warnings.
- **Build Failures, Warnings, and Stopping before completion:** Notifications will be sent when a build job fails, when a build job finishes with one or more warnings, and when a build job has been configured to stop at a particular time and that time was reached before the build job was complete.
- **Build Failures, Warnings, Stopping before completion, and Completion:** Notifications will be sent every time a build job finishes whether successful or not.

5. If desired, click  **Send Test Email** to send a test email to the addresses specified in the **Email Addresses** box.

6. Click  **Save**.





## **Support Console**

The Support Console provides advanced support options for troubleshooting and can be accessed by selecting **Support Console** from the main tool bar of the **Administration** page.

### Email Logging

Checking the **Enable Email Logging** box will create additional log information to assist with troubleshooting of email issues. This additional information will be included in the zipped log files that can be downloaded (see **Download Logs** below). You may be directed by your support provider to enable this option.

### Preserve Phantom Logs

Checking the **Preserve Phantom Logs from Hypercube Builds** box will keep any phantom log files produced from being automatically deleted.

### Enable Usage Information Collection

Checking this allows MITS Discover to send information to MITS about user and hypercube activity. Please contact [support@mits.com](mailto:support@mits.com) for additional information.

### Download Logs

Selecting **Download Zipped Logs** will initiate the download of a compressed archive of log files. Your support provider may ask you to send these logs to assist in troubleshooting various issues.

A user log file, called `tomcat-mitsdiscover-recent-users.log`, is included in the set of downloaded log files. This file maintains a list of user logins which include the user name and a time/date stamp.

### Hypercube Status

Selecting **Override Hypercube Status** will allow you to force a status for a hypercube. This is not recommended unless directed by a MITS support technician.

### Professional Services Tools

This link is intended for use only by MITS Professional Services representatives.

## **License Activation**

MITS Discover licensing controls the use of certain features. Each properly activated MITS Discover installation is licensed as Lite, Standard, or Premium.

The Lite Edition provides an affordable alternative for small businesses, but is feature-limited. In the MITS Discover User Guide and the MitsMaker Reference Guide, features that are limited or non-existent in the Lite Edition will be noted.

Licensing for MITS Discover (and the optional MITS Dashboard component) normally occurs when MITS Discover is first installed (and again when an upgrade takes place).

If you have problems with MITS Discover activation, please contact your MITS support provider.

### MITS Discover Activation

From the **Administration** tab, click **MITS Discover Activation** at the top of the screen. The following fields will be shown:

- **Current Activation Status:** Displays the current state of activation for MITS Discover.
- **Company Name:** Enter your organization or company name.
- **License Serial Number:** Enter your license serial number for MITS Discover. The license serial number is assigned specifically to your organization.
- **System Signature:** The system signature is a code that is specific to the computer where the MITS Discover database accounts are installed.
- **Installation Key:** The installation key is generated based on your *license serial number* and *system signature*. Clicking the **Get Installation Key** link will take you to the MITS web page where you can choose a method of product activation and generate installation key.

## Dashboard Activation

From the **Administration** tab, click **Dashboard Activation** at the top of the screen. The following fields will be shown:

- **Current Activation Status:** Displays the current state of activation for MITS Discover.
- **Company Name:** Enter your organization or company name.
- **License Serial Number:** Enter your license serial number for MITS Discover. The license serial number is assigned specifically to your organization.
- **System Signature:** The system signature is a code that is specific to the computer where the MITS Discover database accounts are installed.
- **Installation Key:** The installation key is generated based on your *license serial number* and *system signature*. Clicking the **Get Installation Key** link will take you to the MITS web page where you can choose a method of product activation and generate installation key.

**NOTE:** Dashboards cannot be permanently licensed until MITS Discover has been permanently licensed.

## Appendix A: Understanding MQL



### What is MQL?

MQL is an acronym, which is short for *MITS Query Language*. Unique to MITS Discover, this language is similar in style to the PICK access language and is used to formulate data mining and report output. This simple query language is used to create all of the reports in MITS Discover.

The MQL statement is the only thing that is stored by MITS Discover when a report is saved. This means that no graphical components are required to recreate a report. The MQL statement includes all of the information about the current exploration, columns, sorting, filtering, and formatting. If your MITS administrator has granted you the proper permissions, you can modify this command manually to create specific displays quickly.

### Accessing the MQL Statement in MITS Discover

To access a report's MQL statement:

1. Click the  **Modify** button from the report's main tool bar.
2. Select **MQL** from the list to open the **Modifying MQL** dialog.
3. The MQL statement can be modified as desired, following the correct syntax as provided below.
4. Click the  **Execute** button to run the code and generate the report.

## Understanding MQL Statements

MQL (or flash) statements comprise one of the two components stored by MITS when a report is saved (the other being the report description). Each flash statement holds all of the necessary information about the current exploration, currently displayed columns, sorting, filtering, formatting, etc.

You can manually modify a flash statement to create specific displays quickly, and you can also make manual modifications to a flash statement that allow you to create custom reports that cannot be created using the standard tools and wizards provided in the MITS Discover browser client.

### Breaking Down a Flash Statement

```
FLASH <appName> [identifiers] [columns] HEADING
"[heading]" FLASH SALESDEMO R W COST.Y COST.Y-1
HEADING "2Y Cost R by W"
```

Token	Description	Example
FLASH	All MQL statements start with the word FLASH.	FLASH
<appName>	The name of the Hypercube that will be queried.	SALESDEMO
[identifiers]	Establishes the report's exploration (or drill- down) path. The identifier abbreviation is used here. Identifier values related to the "Expand" and "Expand by specific values" exploration types are also displayed here. In this example, the drill-down path would be REGION (R) by WAREHOUSE (W) using an "Expand All Rows" exploration type.	R W
[columns]	The column IDs of the columns displayed in the report. Column sorting and filtering are also displayed here. In this example, the columns that will be displayed are Cost (year-to-date) and Cost (back 1 year).	COST.Y COST.Y-1
HEADING "[heading]"	The heading that will be displayed at the top of the report.	2Y COST R BY W

## Working with Identifiers in a Flash Statement

In this example, 'W' is the abbreviation for the WAREHOUSE identifier. This example signifies an initial exploration by warehouse.

```
FLASH SALESDEMO W
```

### **Specifying Identifier Values for Exploration**

Explicit IDs can be specified using the WITH keyword. The following example will drill-down into warehouse 4 by the SALES REP identifier:

```
FLASH SALESDEMO WITH W = "4" SR
```

Continuing with that example, the next example will drill-down under sales representative Bob Donis by the CUSTOMER identifier:

```
FLASH SALESDEMO WITH W = "4" WITH SR = "BOD" C
```

The WITH keyword can also be used in conjunction with the NOT modifier as shown in the following statement. In this example, the resulting report would explore all of the customers under all of the sales reps in warehouse 4, but would NOT display sales reps HOUSE1 or HOUSE2.

```
FLASH SALESDEMO WITH W = "4" WITH SR NOT "HOUSE1" "HOUSE2" C
```

## Working with Columns in a Flash Statement

The flash statement below would display the "Sales (year-to-date)" column and the "Profit (back 1 quarter)" column, including the values for all of the warehouses.

```
FLASH SALESDEMO W SALES.Y PROFIT.Q-1
```

### **Specifying Sorting**

By default, the rows of any report are sorted by identifier description. You can instruct MITS Discover to sort the report by the values in a specific column using the BY or BY-DSND modifiers.

The following flash statement will display sales dollars year-to-date for all warehouses, but instead of sorting by the (default) warehouse description the report will be sorted by the values in the SALES.Y column in descending order:

```
FLASH SALESDEMO W SALES.Y BY-DSND SALES.Y
```

A flash statement can include any number of column sorts or filters using common relational operators. The following flash statement is important to note because it performs actions beyond what can be

executed in the MITS Discover browser client:

```
FLASH SALESDEMO SR BY SALES.M C BY-DSND SALES.M SALES.Y
```

In this example, the list of sales reps will be displayed with an “Expand All” exploration by customer. The sales reps will be sorted in **ascending** order based on their corresponding values in the SALES.M column and the customers under those sales reps will be sorted in **descending** order based on their corresponding values in the SALES.M column. However, notice that the SALES.M column is not displayed - the SALES.Y column is displayed instead. This example shows that you can perform sorting and filtering based on a column that is not displayed in the report. For this reason it is a good idea to keep an eye on your MQL statement as there may be sorting or filtering in place that is based on columns that are not visible.

### **MQL Language Reference**

<b>Command</b>	<b>Intended Use</b>
BOTTOM-TOTALS	Adds bottom totals to the current report
BREAK-ON <columnID>	Summarizes the totals by the values in a column. For example, BREAK-ON C!STATE would add totals in each column for each unique state in the C!STATE column.
BY <columnID>	Sorts the display in ascending order by the specified column.
BY-DSND <columnID>	Sorts the current report display in descending order by the specified column.
CLIP <#>	Restricts the viewable number of rows returned for the lowest identifier in the current drill-down path.
FLASH	The first word of every MQL statement. When used alone in character mode MITS, the flash statement for the current report will be displayed.
HEADING "<heading>"	Specifies the heading that will be displayed at the top of the report.
IDS	Displays the identifier IDs
LINE-BREAK <identAbbr>	Inserts a blank row between horizontal rows for the specified identifier.
NOGRAND <#>	Suppresses the display of totals down to the specified exploration level.
NOIDS	Hides the identifier IDs in each identifier row.
NOTAGS	Hides the identifier abbreviations in each identifier row.
NOZEROS	Removes all horizontal rows that have a ZERO in every column.
WITH	Used to request specific identifiers or column range values for filtering purposes.