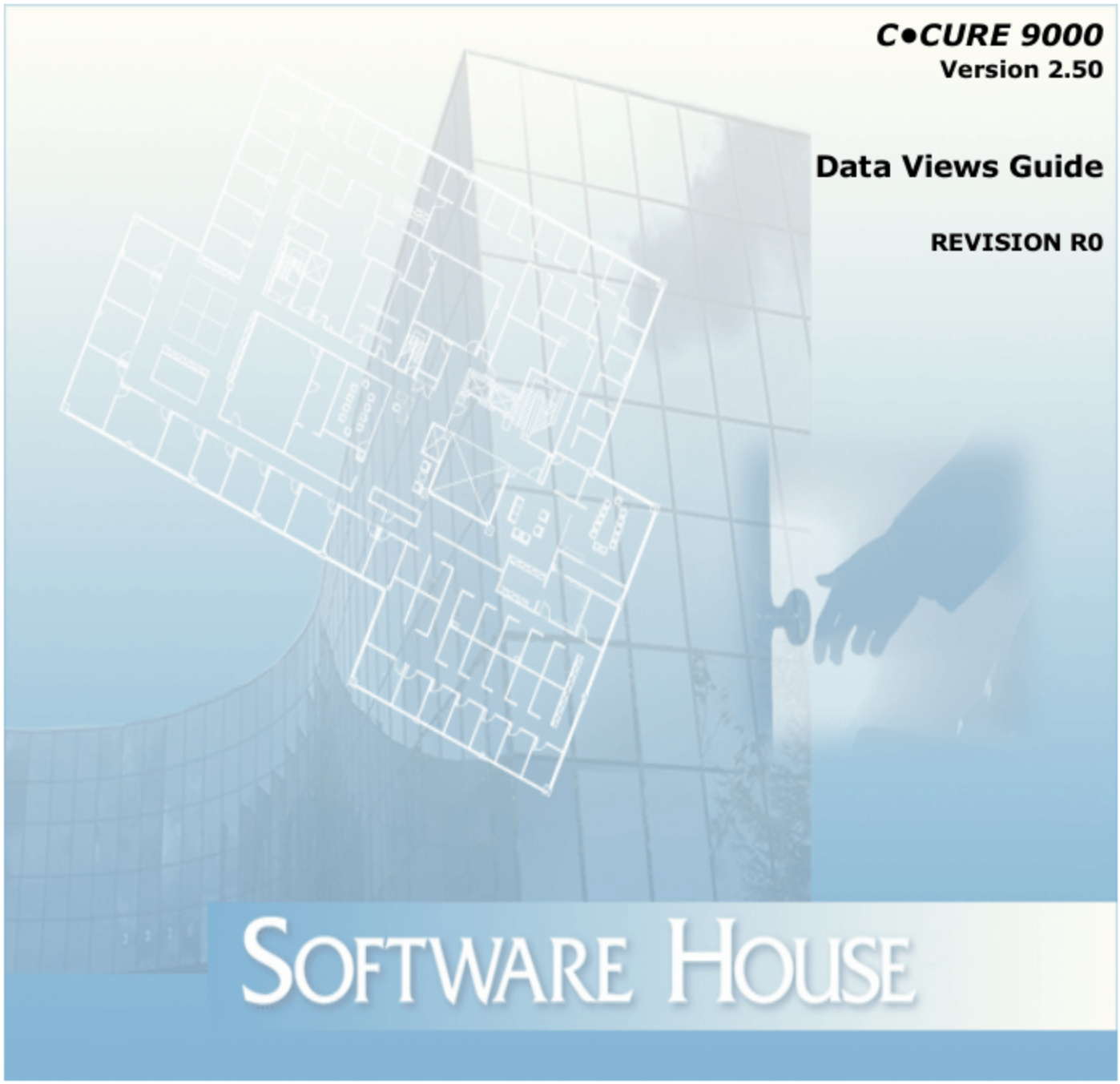
SOFTWARE HOUSE

From Tyco Security Products



UM-134 R0

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Table of Contents

Preface

This *C•CURE 9000 Data Views Guide* is for new and experienced security system users. The manual describes the software features on the C•CURE 9000 Administration Client Data Views menu and presents procedures for configuring and using them.

The manual assumes that you have already installed the C•CURE 9000 and have familiarized yourself with the basic C•CURE 9000 information provided in the *C•CURE 9000 Getting Started Guide*.

In this preface

How to Use this Manual

This manual includes the following chapters that provide information about each of the **Data Views** menu selections.

Chapter 1: The Data Views Pane

This chapter provides an overview of the Data Views pane. It provides instructions for creating, deleting, viewing a list of objects, and exporting Data Views pane objects.

Chapter 2: Application Layout

This chapter provides an overview of the Application Layout, describing how you can configure available viewers and toolbars to make up a Monitoring Station display.

Chapter 3: Dynamic Views

This chapter describes how to configure C•CURE 9000 Dynamic Views to display C•CURE 9000 objects in a List or Card view, allowing you to view, edit, group, or filter objects in the list.

Chapter 4: Maps

This chapter describes how to configure C•CURE 9000 Maps, linking access control with the floor plans of your facility and allowing you to monitor security objects in real time.

Chapter 5: Query

This chapter describes how to configure C•CURE 9000 Queries to find information about the C•CURE 9000 objects.

Chapter 6: Reporting

This chapter describes how to use the Reporting functionality in C•CURE 9000: to create and configure reports; to configure Report Forms to provide consistent report headers and footers; and to view, print, and store your Report Results.

Appendix A: Pre-defined Reports, Queries, and Views

This appendix describes the C•CURE 9000 pre-defined Reports, Queries, and Dynamic Views and the ways to use them.

Appendix B: Map Conversion

This appendix describes the process of converting Legacy Maps to the new Map format, using the Map Conversion Utility, CCureMapConverter.exe.

Finding More Information

You can access C•CURE 9000 manuals and online Help for more information about C•CURE 9000.

Manuals

C•CURE 9000 software manuals are available in Adobe PDF format on the C•CURE 9000 DVD.

You can access the manuals if you copy the appropriate PDF files from the C•CURE 9000 Installation DVD English\Manuals folder.

The available C•CURE 9000 and Software House manuals are listed in the *C•CURE 9000 Installation and Upgrade Guide,* and appear as hyperlinks in the online.pdf file on the C•CURE 9000 DVD English\Manuals folder.

These manuals are also available from the Software House Member Center website ([redacted]).

Online Help

You can access C•CURE 9000 Help by pressing F1 or clicking Help from the menu bar in the Administration/Monitoring Station applications.

Conventions

This manual uses the following text formats and symbols.

Convention	Meaning
Bold	This font indicates screen elements, and also indicates when you should take a direct action in a procedure. Bold font describes one of the following items: • A command or character to type, or • A button or option on the screen to press, or • A key on the keyboard to press • A screen element or name
blue color text	Indicates a hyperlink to a URL, or a cross-reference to a figure, table, or section in this guide.
Regular italic font	Indicates a new term.
<text>	Indicates a variable.

The following items are used to indicate important information.

NOTE Indicates a note. Notes call attention to any item of information that may be of special importance.

TIP Indicates an alternate method of performing a task.

Indicates a caution. A caution contains information essential to avoid damage to the system. A caution can pertain to hardware or software.

Indicates a warning. A warning contains information that advises users that failure to avoid a specific action could result in physical harm to the user or to the hardware.

Indicates a danger. A danger contains information that users must know to avoid death or serious injury.

Software House Customer Support Center

Telephone Technical Support

During the period of the Agreement, the following guidelines apply:

- Software House accepts service calls **only** from employees of the Systems Integrator of Record for the installation associated with the support inquiry.

Before Calling

Ensure that you:

- Are the Dealer of record for this account.
- Are certified by Software House for this product.
- Have a valid license and current Software Support Agreement (SSA) for the system.
- Have your system serial number available.
- Have your certification number available.

Hours	Normal Support Hours	Monday through Friday, 8:00 [redacted]. to 8:00 [redacted]., EST. Except holidays.
	Emergency Support Hours	24 hours/day, seven days a week, 365 days/year. Requires Enhanced SSA "7 x 24" Standby Telephone Support (emergency) provided to Certified Technicians. For all other customers, billable on time and materials basis. Minimum charges apply – See MSRP.
Phone	For telephone support contact numbers for all regions, see [redacted]	

1

The Data Views Pane

This chapter introduces the Data Views Pane in C•CURE 9000.

In this chapter

Data Views Pane Overview

The C•CURE 9000 Data Views pane provides access to objects that allow you to view and use information about security objects in a variety of ways.

- Application Layout Editor on Page 27 - allows you to create Monitoring Station layouts that are customized for your Operators. Layouts can include object viewers, the activity viewer, event viewers, the swipe and show control, and live video cameras.
- Dynamic View Editor on Page 82 - allows you to display information about C•CURE 9000 objects as lists that dynamically update as objects change. They provide a context menu that allows you to perform actions on these objects, such as delete, export, change properties, add to a group, or find in the journal.
- Map Editor on Page 111 - you can import, format, and display Maps in C•CURE 9000. You can even add dynamic icons to the Maps that represent the status of C•CURE 9000 objects such as doors, cameras, readers, and other security objects.
- Query Editor on Page 147 - allows you to search the C•CURE 9000 database to find information about C•CURE 9000 objects. You can create queries and either display the results in Dynamic Views, or incorporate the queries into Reports.
- Report Editor on Page 201 - allows you to design, run, and view reports about C•CURE 9000 objects.

Data Views Pane Tasks

- Creating a Data Views Pane Object on Page 19
- Deleting a Data Views Pane Object on Page 19
- Viewing a List of Data Views Pane Objects on Page 20
- Exporting Records on Dynamic Views to XML/CSV on Page 22
- Exporting Dynamic View Contents to Excel (.XLSX) on Page 103

Data Views Pane Tasks

You perform the following tasks in the Data Views Pane:

- Creating a Data Views Pane Object on Page 19
- Deleting a Data Views Pane Object on Page 19
- Viewing a List of Data Views Pane Objects on Page 20
- Exporting Records on Dynamic Views to XML/CSV on Page 22
- Exporting Dynamic View Contents to Excel (.XLSX) on Page 103

Creating a Data Views Pane Object

You can create a new Data Views pane object for use by C•CURE 9000 users. From the Data Views pane, you can create the following objects:

- Application Layout - a customized arrangement of C•CURE 9000 application components that can be assigned to an Operator.
- Dynamic View - display lists of objects with sorting, filtering, and grouping capability.
- Map - display Maps with icons that update to reflect object status.
- Query - create a new Query to search for objects in the C•CURE 9000 database, using filters to narrow the search.
- Report - create detailed reports about any C•CURE 9000 object, customize the appearance of reports, print reports, view reports, save reports for later printing/viewing.
- Report Form - create re-usable report header/footer layouts to give your reports a consistent look and feel.

To Create a Data Views Pane Object

1. In the Navigation Pane of the Administration Workstation, click **Data Views** to open the Data Views pane.
2. Select the type of object you wish to create from the Data Views pane drop-down list.
3. Click **New** to create a new object. The editor for the object type opens.
4. Configure the object using the tabs and fields on the object's editor. For details on configuring your object, see:
   - Configuring an Application Layout on Page 65.
   - Configuring a Dynamic View on Page 83.
   - Configuring and Saving a Map on Page 127.
   - Configuring a Query on Page 161.
   - Configuring a Report on Page 192.
5. To save your new object, click **Save and Close.**

Deleting a Data Views Pane Object

You can delete a Data Views pane object from C•CURE 9000 if it is no longer needed.

To Delete a Data Views Pane Object

1. In the Navigation Pane of the Administration Workstation, click **Data Views** to open the Data Views pane.
2. Select the type of object you wish to delete from the Data Views pane drop-down list.
3. Click  to view a list of existing objects and select the object(s) you wish to delete.
4. Right-click a selected object and choose **Delete** from the context menu.
5. Click **Yes** in the dialog box that appears to confirm that you want to delete the object(s), or **No** to cancel the deletion.

   A dialog box appears listing each of the objects you deleted, and any relevant error messages are listed. You can print this information by clicking **Print**, or email this information by clicking **Email** (to the recipient specified in the System Variable **Email Address**—see the *C•CURE 9000 System Maintenance Guide*).
6. Click **OK** to close the dialog box.

Viewing a List of Data Views Pane Objects

You can view a list of all objects of a Data Views pane type, such as Application Layouts. The list is a Dynamic View that you can sort, filter, and group.

To View a List of a Data Views Pane Object Type

1. In the Navigation Pane of the Administration Workstation, click Data Views to open the Data Views pane.
2. Select the object type you wish to view from the Data Views pane drop-down list.
3. Click  to open a Dynamic View listing all objects of that type.
4. You can sort, filter, and group items in the list. You can right-click an object in the list to open the context menu and perform any of the functions on that menu. See the Dynamic Views Overview on Page 80 for more information on using Dynamic Views.
5. If you right-click an object in a Dynamic View, a context menu appears listing the actions you can perform on that object, as described in Data Views Object Context Menu on Page 20.

Data Views Object Context Menu

When you right-click a row in a Dynamic View, a context menu appears to let you perform actions on the object in that row. Table 1 on Page 21 describes the context menu selections for a typical Dynamic View.

NOTE The Context Menu items shown here are typical. Some Data Views objects may have additional Context Menu selections that are not shown here, or they may have fewer selections available. Some menu items are not available if more than one row has been selected. Object-specific aspects of an object's context menu are described in that object's chapter.

Table 1: Data Views Object Context Menu

Menu Item	Description
Edit	If you choose this option, the view you selected is displayed in the appropriate editor. **Example:** If you are looking at a Personnel Dynamic View, and you choose **Edit** from the context menu, the Personnel Editor opens to let you edit this object.
View	If you choose this option, the view you selected is displayed in a new tab in the Content pane.
Popup View	If you choose this option, the view you selected is displayed in a new free-floating window.
View in Current Tab	If you choose this option, the view you selected replaces the Dynamic View that is currently displayed in the current tab.
Delete	Allows you to delete an object from the database if you have the appropriate Privileges. A dialog box appears asking you to confirm the deletion. Click **Yes** to perform the Deletion, or **No** to cancel the deletion. A dialog box appears listing each of the items you deleted, and any relevant error messages are listed.You can print this information by clicking **Print**, or email this information by clicking **Email** (to the recipient specified in the System Variable **Email Address** - see the *C•CURE 9000 System Maintenance Guide*)
Set property	Displays a dialog box that allows you to select a field from the object and assign a value to that field. Fields that are read-only or that you are restricted by Privileges from changing are not selectable from the dialog box. See Default Dynamic Views on Page 93 for more information.
Add to Group	Displays a dialog box that allows you to choose a Group object to add this object to. If no groups exist that match with the object selected, the dialog box is blank and you cannot perform the function.
Find in Audit Log	Opens a query that you can modify to search the database for any Audit Log records that reference this particular object in the Dynamic View list. NOTE: If there is no Audit Log information related to this object within the specified date/time range, the Dynamic View will be empty.
Export Selection	Click this menu selection to Open an Export...to XML or CSV file dialog box to export the selected object(s) to either an XML or a CSV file. This allows you to quickly and easily create XML/CSV reports on the selected data. For further information and procedures, see Default Dynamic Views on Page 93.
Find in Journal	Opens a query that you can modify to search the database for any Journal records that reference this particular object in the Dynamic View list. NOTE: If there is no Journal information related to this object, the Dynamic View will be empty.
Batch Print Badges	Available for Personnel records only if you have enabled Batch Printing of Badges. Displays the C•CURE ID Print Queue Manager.
Change Partition	Click to open a dialog box that allows you to change the Partition to which the object belongs. For information see the Partition chapter in the *C•CURE 9000 Software Configuration Guide*.
Show Association.	This menu selection is available only for the following object types on the Data Views Pane: Application Layouts, Queries, Reports, and Report Forms. Click to open a dialog box that lists Security Objects associated with the object in the Dynamic View. For more information, see "Showing Associations for an Object" in the *C•CURE 9000 Getting Started Guide*.

Exporting Records on Dynamic Views to XML/CSV

You can use the context menu selection **Export Selection** to export one or more records displayed in a Dynamic View to either an XML or a CSV file. This allows you to quickly and easily create XML/CSV reports on selected C•CURE 9000 data.

- When you export to an XML file, all available data in all columns of the Dynamic View, whether displayed or not—as well as all the child objects of the selected record(s), is exported.
- When you export to a CSV file, only data in the columns displaying in the Dynamic View is exported, and in the order displayed. This allows you to both select and arrange data fields for your report. Furthermore, exporting to a CSV file allows you to view the exported data in an Excel spreadsheet and further manipulate it for your use.

Example:

For each of your company's personnel records, out of the many Personnel fields available, you want to quickly create an Excel report that includes Last Name, First Name, Personnel Type, and whether or not the Disabled and/or Noticed Flags are set.

For information on setting up your data field columns for display, see:

- Adding or Removing Columns in a Dynamic View on Page 94
- Changing Column Order and Width in Dynamic Views on Page 95.

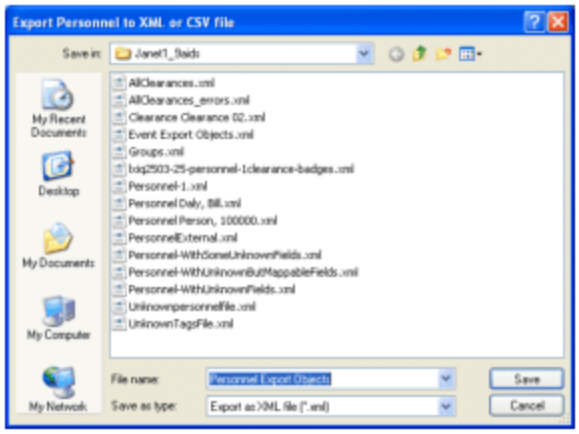
NOTE Records exported to CSV cannot be imported back to C•CURE 9000. Export to XML if you want to a file that can be re-imported.

To Export Dynamic View Records Using Export Selection

1. From the Administration Workstation **Navigation** Pane, select the function button for the class of object you want to report on—for example, **Personnel**.
2. From the drop-down menu in the Navigation toolbar, select the type of object you want to select—for example, **Personnel**.
3. Click  to open a Dynamic View listing all the objects of the desired type, **Personnel** records in this example.
4. If you are planning to export to CSV, add/remove data fields columns and change their order, as desired.
5. Click  to select one or more Record rows in the list. (Use the **CTRL** key to select multiple rows at one time.)
6. Right-click selected row(s) in the Dynamic View that you want to export.
7. Choose **Export Selection** from the context menu. An **Export...to XML or CSV file** dialog box appears with XML as the initial default export type, as shown in the example in Figure 1 on Page 23.

Once you choose a file type in the **Save as type** field, whether XML or CSV, it becomes the default the next time this dialog box opens.

Figure 1: Export...to XML or CSV File Dialog Box – Default XML File



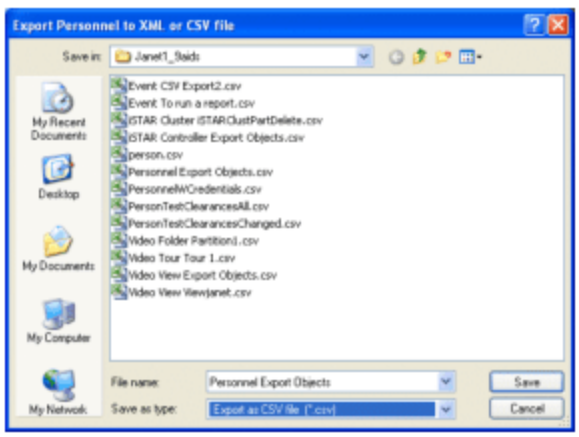
8. To export to XML leave the default **Export as XML file (*.xml)** in the **Save as type** field.

   - or -

   To export to CSV, click the down arrow to change the entry in that field to **Export as CSV file (*.csv)**.

   If you choose to export to CSV, the dialog box changes as shown in the example in Figure 2 on Page 23 to let you save to a CSV file.

Figure 2: Export to CSV File Dialog Box



9. Select a location and filename for the external exported file.

NOTE Exports generated from the Dynamic View context menu by clicking **Export Selection** are run on the client computer. Consequently, the system does not use the Default Export Directory Path—which is on the server. It opens a directory on the client, reverting to the last directory used. You can navigate to the default export server directory, if you wish.

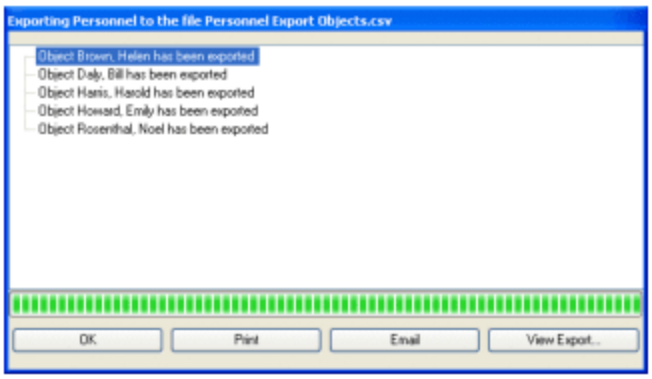
Or to avoid confusion or use the same destination folder for both client and server computers, you can use UNC (Universal Naming Convention) paths, for example: \\Computer Name\C:\Program Files (x86)\Tyco\CCURE Client\Export.

10. Click **Save**.

The progress of the export displays in the **Exporting...** dialog box, as shown in the example in Figure 3 on Page 24. A message displays in this dialog box to indicate when the export of each record is complete and to indicate when the entire export finishes.

- To cancel the export, click **Cancel** while the export is running.

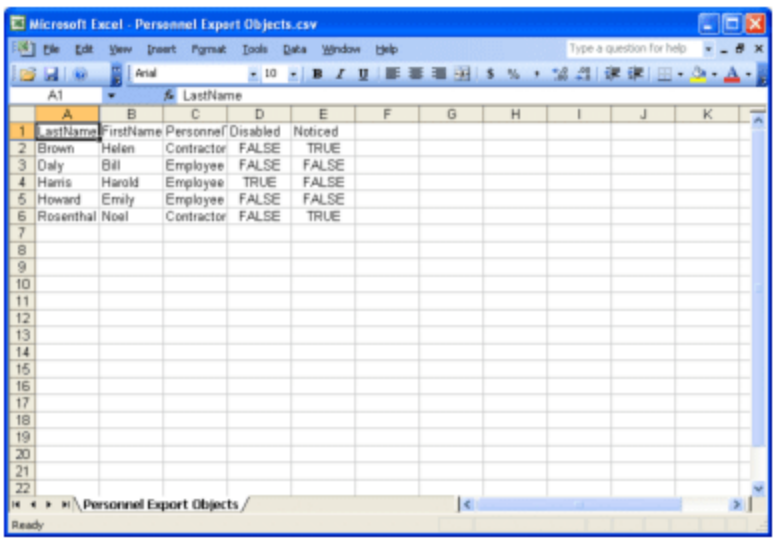
Figure 3: Exporting... Dialog Box



11. When the export is complete, do one of the following:
    - To close the **Exporting data** dialog box, click **OK**.
    - To print a copy of the information about this export, click **Print**.
      - On the standard Windows **Print** dialog box, click **OK**.
      - On the **Print Preview** dialog box that displays, click  .
    - To transmit a copy of the information about this export by email, click **Email**.
    - To view the export, click **View Export**.

    The CSV file appears in an Excel spreadsheet, as shown in the example in Figure 4 on Page 24 —if you have Microsoft Excel installed.

Figure 4: Exported CSV file in Excel Spreadsheet



2

Application Layout

This chapter explains how to configure Application Layouts.

In this chapter

Application Layout Overview

An Application Layout is an arrangement of the available viewers and toolbars that can make up a Monitoring Station display. You can chose which viewers and toolbars you want to display on the Monitoring Station, and how you want them arranged.

You can then save the layouts you design, and assign them to Operators, thereby providing each Operator with the viewers they need and controlling Operator access to viewers they do not need.

You can even assign an Operator multiple Application Layouts. The Operator can then view the Application Layouts as tabs on the Monitoring Station, and switch between tabs to perform different monitoring tasks.

You use the **Application Layout Editor** to design and save your Application Layouts.

You assign Application Layouts to Operators using the **Operator Editor Layout** tab. See the *C•CURE 9000 Software Configuration Guide* for more information.

Some of the features of the Application Layout Editor are listed in Table 2 on Page 26.

Table 2: Application Layout Features

Feature	See This Section
• Creating an Application Layout	Configuring an Application Layout on Page 65
• Creating an Assess Event Application Layout	Creating an Assess Event Layout on Page 70
• Creating a Dual Phase Acknowledgement Application Layout that includes event activity, operator intervention of event acknowledgement and event clearing.	Creating a Dual Phase Acknowledgement Layout on Page 72
• A drag-and-drop interface that lets you select and place viewers visually	Adding a Viewer/Viewer Tab to a Pane on Page 69
• Support of up to six panes to display monitoring viewers and toolbars	Adding a Pane to the Layout on Page 69
• Remove tabs from panes	Removing a Viewer/Viewer Tab from a Pane on Page 75
• Allow or restrict Operators from resizing panes or hiding/docking panes	Locking the Layout on Page 76
• Re-sizable panes so that you can shape the viewers you place on the layout	Resizing and Moving Panes in the Layout on Page 77
• Ability to auto hide a pane in any of the four window sides	Auto Hiding and Pinning Panes on Page 76
• Add tabs to panes so that multiple viewers can appear in a pane	Adding a Viewer/Viewer Tab to a Pane on Page 69
• Pre-configured layouts that are included with C•CURE 9000 and can be used as is or customized and saved under new names.	Viewing a List of Data Views Pane Objects on Page 20

Application Layout Editor

The C•CURE 9000 **Application Layout Editor**, as shown in Figure 5 on Page 28, lets you define the way the Monitoring Station client application is displayed.

The Application Layout editor has three tabs:

- Application Layout Editor General Tab on Page 27
- Application Layout Options Tab on Page 29 – this tab is available only for an Operator who has the Assess Event Privilege. See the Privilege chapter in the *C•CURE 9000 Software Configuration Guide*) for more information on Privileges.
- Application Layout View Preferences Tab on Page 31

See the following topics for more information about the Application Layout Editor.

- Application Layout Overview on Page 26
- Assess Event Application Layout on Page 37
- Dual Phase Acknowledgement Layout on Page 47
- The Explorer Bar on Page 48
- Swipe and Show Viewer on Page 55
- Activity Viewer on Page 35
- Event Viewer on Page 45
- Object Viewer on Page 54
- Application Layout Tasks on Page 65

Accessing the Application Layout Editor

You can access the Application Layout Editor from the C•CURE 9000 Data Views pane.

To Access the Application Layout Editor

1. Click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Application Layout**.
3. Click **New** to create a new Application Layout.

   - or -

   Click  to open a Dynamic View showing all Application Layout objects and double-click the Application Layout in the list that you want to edit.

   The **Application Layout Editor** opens, as shown in Figure 5 on Page 28.

Application Layout Editor General Tab

The Application Layout General tab allows you to design an Application Layout for Monitoring Station Operators. An Application Layout can be customized to display a variety of viewers that can make Video, Events, Activities, and hardware status available on one screen.

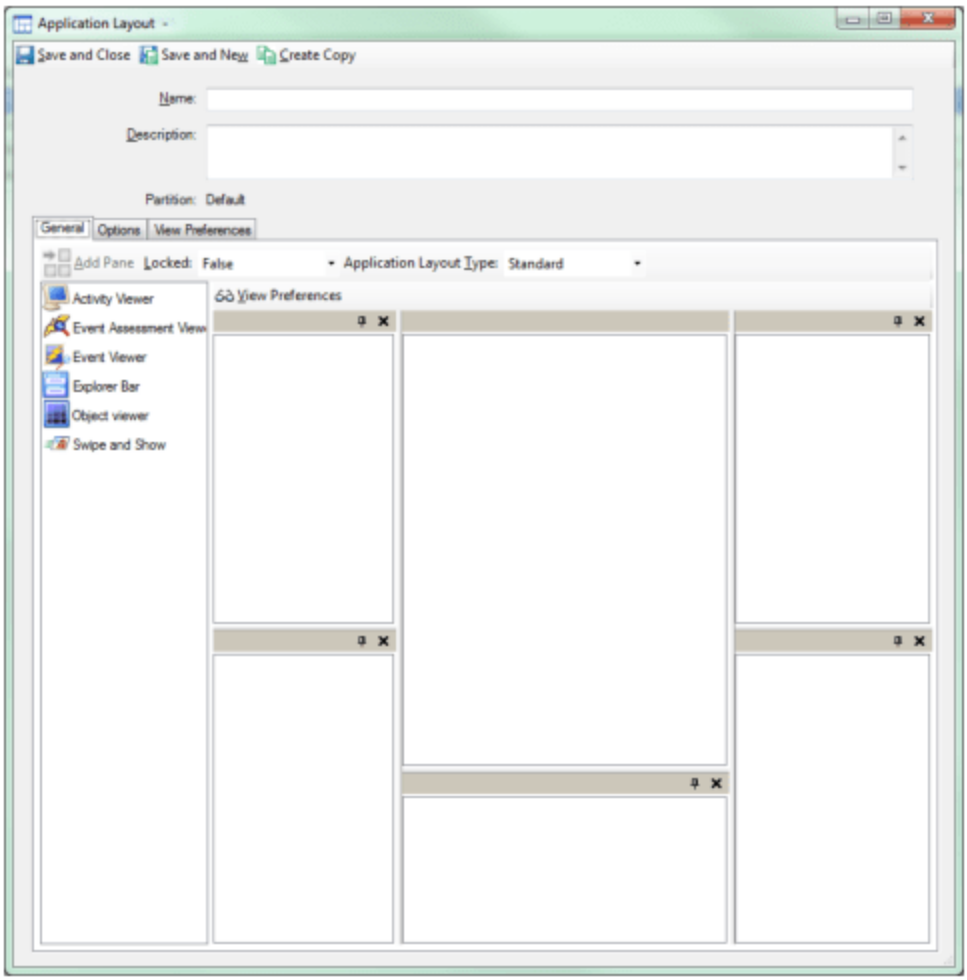
For more information about Application Layout capabilities, see Application Layout Overview on Page 26.

The Application Layout General tab allows you to create two different kinds of layouts:

- **Standard** - used to provide an Operator with a custom view for monitoring C•CURE 9000 events, activities, and objects.
- **Assess Event** - used to provide a view that gives quick access to all information about a specific event so that an Operator can manage the event quickly and accurately.

Figure 5 on Page 28 shows the Application Layout General tab.

Figure 5: Application Layout General Tab



Application Layout General Tab Definitions on Page 28 describes the buttons and fields on the Application Layout General tab.

Application Layout Tasks on Page 65 provides information about the tasks you can perform using the Application Layout editor.

Application Layout General Tab Definitions

Table 3 on Page 29 defines the Application Layout General Tab properties.

Table 3: Application Layout General Tab

Property/Button	Description
Name	The name of the Application Layout. This field is required.
Description	Type a textual description of the Application Layout that will help you distinguish it from other Application Layouts.
Partition	A read-only field displaying the name of the Partition to which this Application Layout belongs. This field is visible only if the C•CURE 9000 system is partitioned.
Add pane	If the Layout currently has fewer than six panes, you can click this button to add a pane to the Layout. panes are added in this order: **Panes in Layout Pane Added** 1 Right pane 2 Lower-Right pane 3 Left pane 4 Lower-Left pane 5 Lower-Center pane
Locked	This field setting determines whether the operator can move or hide viewers when using an Application Layout. If you set this field to **True**, the operator cannot adjust the Layout while running the Monitoring Station application. If you set this field to **False**, the operator can adjust the Layout while running the Monitoring Station application. For example, the operator could set a viewer to auto-hide, and double-click the title bar of another viewer to pop it up as a separate floating window.
View Preferences	Click to open the View Preferences dialog box to filter what you want to be shown on the layout. See Filtering Partitions and Maintenance Mode Objects on Page 97. The dialog box is not active until the Application Layout View Preferences Tab on Page 31 is configured.
Application Layout Type	Allows you to choose the type of Application Layout you want to design. If you choose **Standard**, you can create an Application Layout that you can assign to Operators so that the viewers you positioned on the Application Layout are available for Operators when using the Monitoring Station application. If you choose **Assess Event**, you can create an Application Layout that you can assign to Events so that Operators with the Assess Event Privilege can use this Application Layout to assess an Event. An Assess Event Application Layout can include viewers that are designed to display Event-specific information, such as recorded video of the event, a journal replay of the event, or a Map related to the Event location.

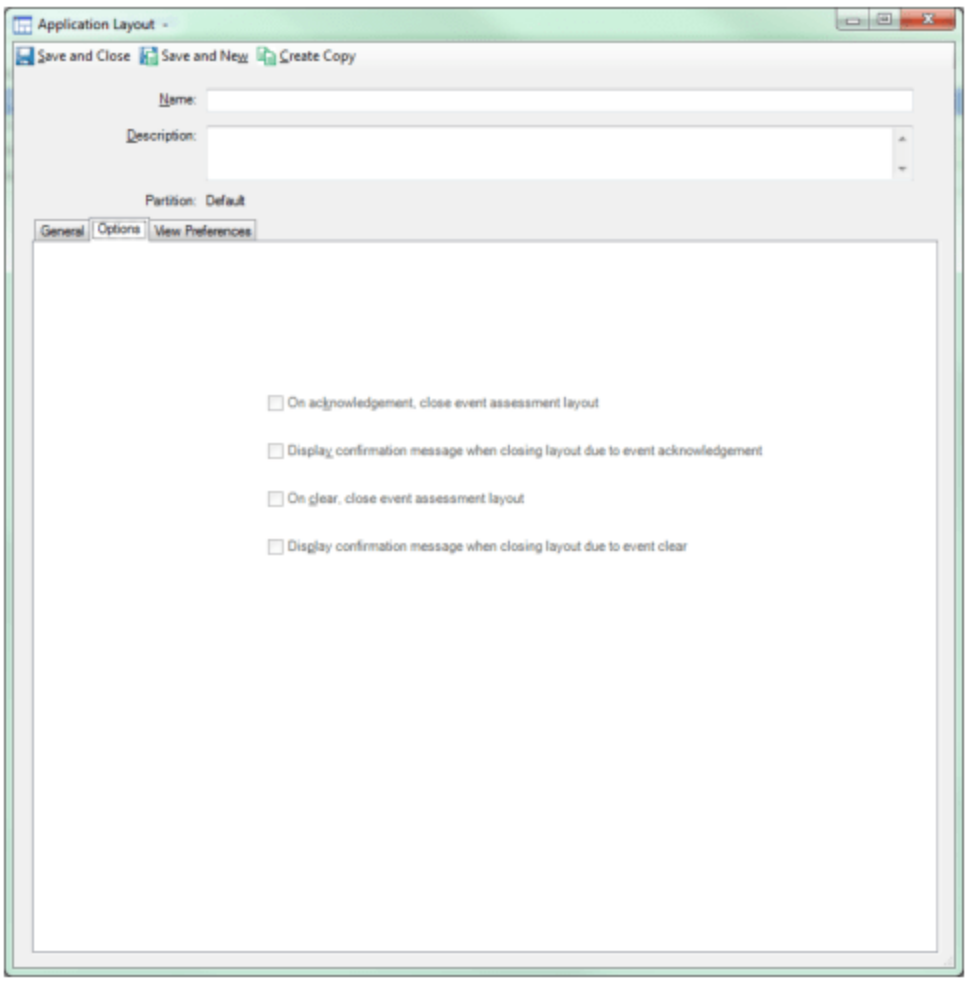
Application Layout Options Tab

The Application Layout Options tab is used to set Assess Event options for an Assess Event Application Layout. The options on this tab control what happens when an Event Assessment occurs.

- For a standard Application Layout, the selections on this is tab are unavailable.
- The Option tab is hidden for an Operator who does not have the Assess Event privilege.

Figure 6 on Page 30 shows the Application Layout Options tab. Table 4 on Page 30 for descriptions of the Application Layout Options tab.

Figure 6: Application Layout Options Tab



Application Layout Options Tab Definitions

Table 4 on Page 30 provides definitions for the fields on the Application Layout Options Tab.

Table 4: Application Layout Options Tab Definitions

Field	Description
On acknowledgement, close event assessment layout	Select this option to have the Event Assessment layout close when the Event is acknowledged. If this option is selected, the **Display confirmation message when closing layout due to event acknowledgement** option becomes available. The default value is unchecked.

Table 4: Application Layout Options Tab Definitions (continued)

Field	Description
Display confirmation message when closing layout due to event acknowledgement	Select this option to display a message box when the Event is acknowledged, asking if the Operator wants to close the Event Assessment layout. Click **Yes** to close the layout immediately. Click **No** to have the layout remain open in the monitoring station until list is closed by the user. The open layout counts towards the limit of 5 open event assessment layouts. This option is only enabled if the **On acknowledgement, close event assessment layout** option is checked. The default value is unchecked.
On clear, close event assessment layout	Select this option to have the Event Assessment layout close when the Event is cleared. If this option is selected, the **Display confirmation message when closing layout due to event clear** option becomes available. The default value is unchecked.
Display confirmation message when closing layout due to event clear	Select this option to display a message box when the Event is cleared, asking if the Operator wants to close the Event Assessment layout. Click **Yes** to close the layout immediately. Click **No** to have the layout remain open in the monitoring station until list is closed by the user. The open layout counts towards the limit of 5 open event assessment layouts. This option is only enabled if the **On clear, close event assessment layout** option is checked. The default value is unchecked.

Application Layout View Preferences Tab

The Application Layout View Preferences tab is used for the following:

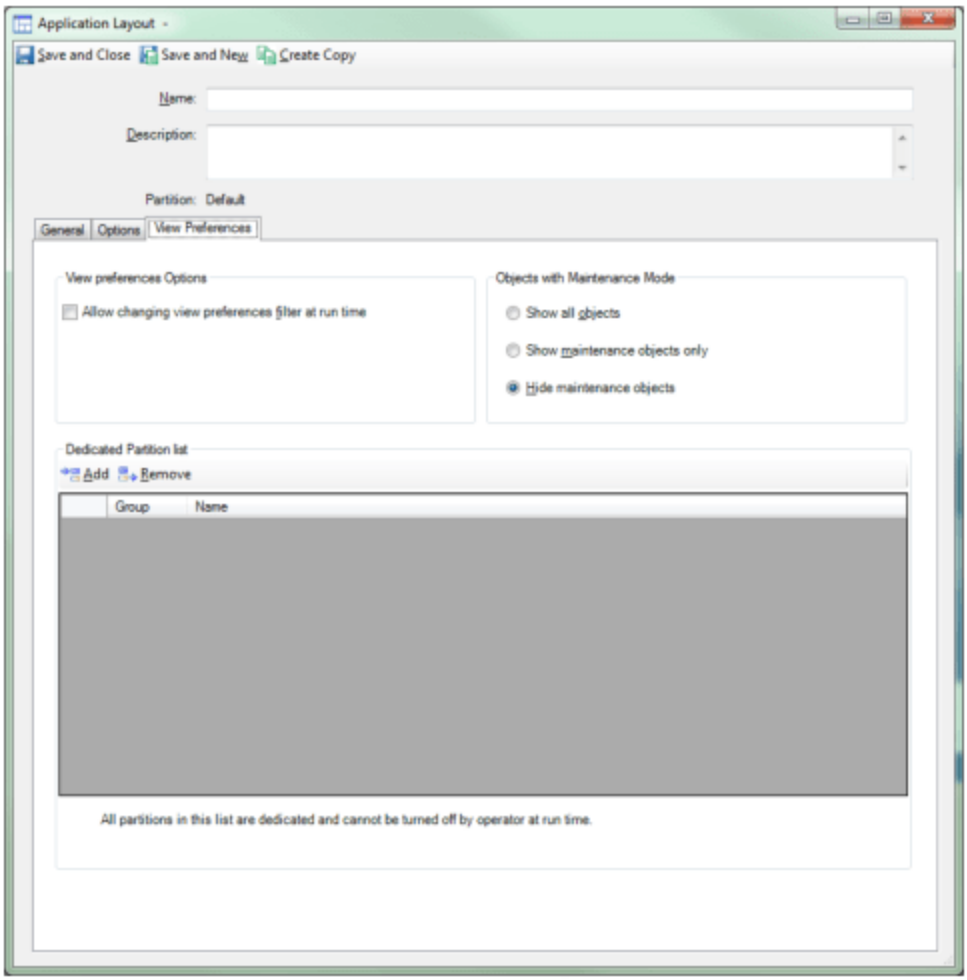
- To allow the operator to change view preferences of partitions or partition groups displayed in the Monitoring Station and the Administration Workstation Dynamic View.
- To allow the operator to change view preferences of objects tagged Maintenance Mode so they are displayed or hidden, in the Administration Workstation Dynamic View and the Monitoring Station.

  For information about Maintenance Mode, see the *C•CURE 9000 Hardware Configuration Guide*.
- This tab is not available when the Application Layout is changed from Standard to Assess Event.

The type of view preferences allowed also depends on the Operator Privileges assigned.

Figure 1 on Page 32 shows the Application Layout View Preferences tab.

Figure 1: Application Layout View Preferences Tab



Application Layout View Preferences Tab Definitions

Table 1 on Page 32 provides definitions for the fields and buttons on the Application Layout View Preferences tab.

Table 1: Application Layout View Preferences Tab Definitions

Field/Button	Description
View Preferences Options	
Allow changing view preferences filter at run time	If selected, the Monitoring Station operator is allowed to change view preferences, subject to privilege permissions, with the exception of the partitions or partition groups added to the Default Dedicated List. Partitions/partition groups in the Default Dedicated List are always visible and cannot be filtered out. The default value is unchecked, meaning that the Monitoring Station operator is not allowed to use view preferences.
Objects with Maintenance Mode	
Show all objects	If selected, all regular objects, all maintenance objects, and their activities will be visible in the Monitoring Station.

Table 1: Application Layout View Preferences Tab Definitions (continued)

Field/Button	Description
Show maintenance objects only	If selected, only objects tagged maintenance mode and their activities are visible in the Monitoring Station. The default is unselected, meaning that objects tagged as maintenance mode are not displayed in the Monitoring Station. None of these objects will be displayed in the Activity Viewer, Event Viewer, Dynamic View, Explorer Bar, or Swipe and Show.
Hide maintenance objects	If selected, all objects tagged maintenance mode and their activities are not visible in the Monitoring Station.
Default Partitions List	
Add	Click to open the Name selection dialog box to add pre-configured partitions and partition groups to the Default Dedicated list. Objects and activities belonging to these partitions will always be displayed in the Monitoring Station, and cannot be filtered out by the operator. Partitions not in the Default Dedicated list are not shown by default, however, the operator can use filtering for those not in the list if the operator privilege permissions allow them to do so. The maximum number of partitions and partition groups allowed in the Default Dedicated list is 100.
Remove	Removes an item from the Default Dedicated list. Click in a row to select it and then click **Remove**.

Application Layout Viewers

Table 5 on Page 33 defines the Application Layout Viewer icons that can be dragged onto an Application Layout.

Table 5: Application Layout Viewers

Icon	Name	Description
	Activity Viewer	The **Activity Viewer** provides a scrolling list of system activities, based on the settings specified in the Application Layout and on the operator's privileges. The operator can right-click an activity in the list to perform manual actions specified on a context menu.
	Event Assessment Viewer	The Event Assessment Viewer provides the ability to add one of several types of viewers to a layout that is intended to be used to Assess Events. See Assess Event Application Layout on Page 37 for a list of the viewer types that can be added to an Assess Event Application Layout.
	Event Viewer	The **Event Viewer** provides a scrolling list of System Events, based on the settings specified in the Application Layout and on the operator's privileges. The operator can right-click an event in the list to perform manual actions specified on a context menu. See Dual Phase Acknowledgement Layout on Page 47
	Explorer Bar	The **Explorer Bar** provides access to a configurable menu of C•CURE 9000 objects. The operator can click an item in this menu to open a Status List (a Dynamic View) for that object type. The operator can then right-click an object in the Status List to perform actions on that object within the limits imposed by the operator's privileges.

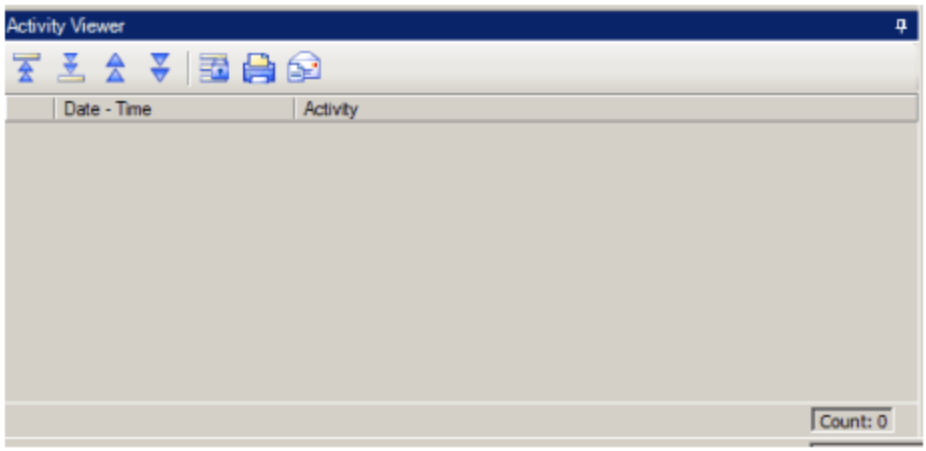
Application Layout Viewers (continued)

Icon	Name	Description
	Object Viewer	An **Object Viewer** displays an object, such as an Intellex Video Camera, Map, Report, Dynamic View in a pane. You add an **Object Viewer** to the Application Layout by dragging the **Object Viewer** icon onto the pane. You then select the object type and the specific object from the dialog box that appears.
	Swipe and Show	The **Swipe and Show Viewer** displays the Personnel Portrait and additional information about a person when they perform an activity at any door or elevator in a configurable list of doors and elevators. This allows an operator of the Monitoring Station to visually oversee activity at one or more doors or elevators by observing the picture credentials of every person who attempts to gain access.

Activity Viewer

The **Activity Viewer** provides a scrolling display of specified types of activities to the Monitoring Station. The **Activity Viewer** in the Application Layout is shown in Figure 7 on Page 35.

Figure 7: Activity Viewer



You can configure the settings shown in Table 6 on Page 35 for the **Activity Viewer**.

Activity Viewer Properties

Table 6 on Page 35 defines the fields on the **Activity Viewer** properties dialog box.

Table 6: Activity Viewer Properties Dialog Box

Property	Description
Freeze Timeout	The **Freeze timeout** button is used to stop the Event display from scrolling. If the up and down arrows or scroll bars are used, the display freezes for the period of time set here. A progress bar appears counting down the amount of time left for the Freeze timeout. The progress bar disappears, and scrolling resumes, after the period of time set expires or if the Freeze timeout is stopped manually. Selecting the Move to the top of the list and Page Up starts the Freeze timeout. Selecting Move to the bottom of the list and Page down stops Freeze timeout when you are scrolling and the scroll bar reached the end of the list The minimum default value is 30 seconds, and the maximum value is 60 seconds.
Show Toolbar	You can choose to show or hide the Activity Viewer Toolbar for this pane by selecting or clearing this check box. The default value is selected.
Operator Login	Select this option to display Operator Login messages on the **Activity Viewer**. Every time an operator logs in or logs out, a message is displayed.
Card Admitted	Select this option to display **Card Admitted** messages on the **Activity Viewer**. Every time a person is admitted, a message is displayed. To limit the **Card Admitted** messages to only the doors or elevators for which the operator has privileges, click **Edit** to change the default option.

Activity Viewer Properties Dialog Box (continued)

Property	Description
Card Rejected	Select this option to display **Card Rejected** messages on the **Activity Viewer**. Every time a person is denied access, a message is displayed. To limit the **Card Rejected** messages to only the doors or elevators for which the operator has privileges, click **Edit** to change the default option.
Log Message	Select this option to display **Log Messages** on the **Activity Viewer**. Every time an operator logs a message, the message is displayed.
Object Changed State	Select this option to display **Object State** change messages on the **Activity Viewer**. Every time an object changes state, a message is displayed.
Manual Action	Select this option to display **Manual Actions** on the **Activity Viewer**. Every time an operator performs a manual action, a message is displayed.
System Activity	Select this option to display **System Activity** messages on the **Activity Viewer**. Every time a system activity occurs, a message is displayed.
System Error	Select this option to display **System Error** messages on the **Activity Viewer**. Every time a system error occurs, a message is displayed.
Device Activity	Select this option to display **Device Activity** messages on the **Activity Viewer**. Every time a device activity occurs, a message is displayed.
Device Error	Select this option to display **Device Error** messages on the **Activity Viewer**. Every time a device error occurs, a message is displayed.
Network Video Activity	Select this option to display **Network Video Activity** messages on the **Activity Viewer**. Every time a network video activity occurs, a message is displayed.
Operator Activity	The available **Message Types** that can be displayed in the **Activity Viewer** are listed. By default, the **Activity Viewer** is set to display all these message types. You can clear the check box for any Message Type to cause it not to be displayed.
Event Assess Message	Select this option to display **Event Assess Messages** on the **Activity Viewer**. Every time an Event Assess action occurs, a message is displayed.
Double Swipe	Select this option to display **Double Swipe Activity** messages on the **Activity Viewer**. Every time a **Double Swipe Activity** occurs, a message is displayed.
Intrusion Zone Activity	Select this option to display **Intrusion Zone Activity** messages on the **Activity Viewer**. Every time an Intrusion Zone Activity occurs, a message is displayed.
Intrusion Zone Error	Select this option to display **Intrusion Zone Error** messages on the **Activity Viewer**. Every time an Intrusion Zone Error occurs, a message is displayed.
Keypad Command Activity	Select this option to display **Keypad Command Activity** messages on the **Activity Viewer**. Every time a Keypad Command Activity occurs, a message is displayed.

Assess Event Application Layout

The Assess Event Application Layout is designed to provide an Operator with all the information needed to quickly and efficiently process an Event. When an Operator selects an Event in the Event Viewer and clicks the Event Assessment button, this Application Layout is launched to provide details for that specific event, containing the viewers you have configured to assess Events.

For more information on Event Assessment, see the *C•CURE 9000 Software Configuration Guide* chapter on Events.

You drag the Event Assessment Viewer onto your Application Layout and select the Assess Action.

Figure 8 on Page 37 shows the Event Assessment Viewer Selection dialog box.

Figure 8: Event Assessment Viewer Selection Dialog Box

You can chose one of the following viewers each time you drag the Event Assessment Viewer icon to the layout:

- Assess Document – see Document Viewer on Page 38
- Find in Journal – see Find in Journal Viewer on Page 39
- Assess Live Video – see Live Video Viewer on Page 41
- Assess Map – see Assess Map Viewer on Page 40
- Assess Query – see Query Viewer on Page 42
- Assess Recorded Video – see Recorded Video Viewer on Page 42
- Assess Report – see Report Viewer on Page 43
- Event Details – see Event Details Viewer on Page 39

You should only add the viewers that correspond to the Event Assessment objects you are defining for your Events.

Example

If you do not attach any Document objects to your Events, there is no reason to add a Document Viewer to an Assess Event Application Layout.

NOTE

The following considerations apply when configuring an Assess Event Application Layout:

- The number of panes that can be configured in an Assess Event Application Layout is limited to six (the same limit as a normal Application Layout.
- An Assess Event Application Layout can contain a mixture of standard viewers and event assessment viewers (for example, a Swipe and Show viewer could be included on an Event Assessment layout.
- Live video is limited to 16 live cameras per pane. Recorded video is limited to 4 recorded videos per pane.
- Live and Recorded Video panes can only be configured for Intellex, VideoEdge, and Bosch video integrations.

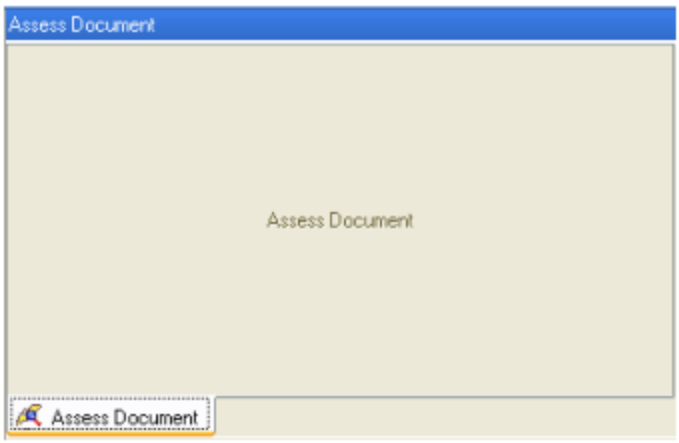
Document Viewer

The Document viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the **Assess Event** button on the Event Viewer toolbar.

When you create an Assess Events Application Layout, you can add a Document Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Assess Document**.

See Figure 9 on Page 38 for an example of the Assess Document viewer in the Application Layout editor.

Figure 9: Assess Document Viewer



See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing a Document Viewer will display the Document object that is associated with the Event (if any).

The Document viewer that can display a document such as a .PDF or .TXT file, or a URL for a web page.

The Document Viewer has controls for viewing and printing the document that are pertinent to the document type.

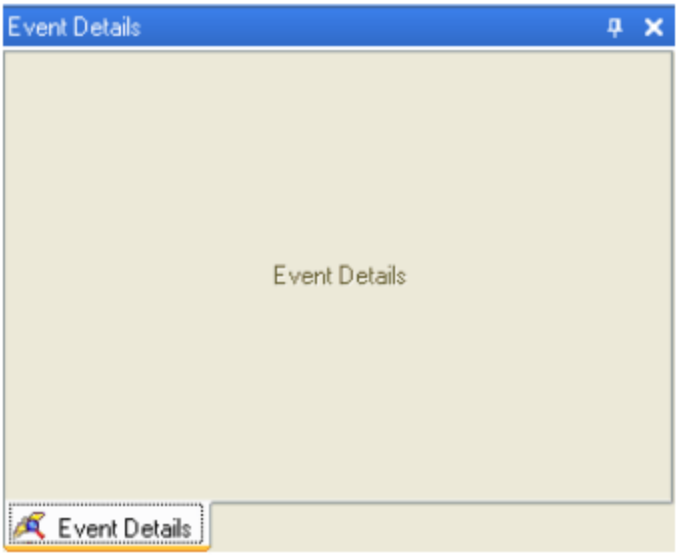
Event Details Viewer

The Event Details viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the Event Assessment button on the Event Viewer toolbar.

When you create an Assess Events Application Layout, you can add an Event Details Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Event Details**.

See Figure 10 on Page 39 for an example of the Event Details viewer in the Application Layout editor.

Figure 10: Event Details Viewer



When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing an Event Details Viewer will run and display the details of the Event.

See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

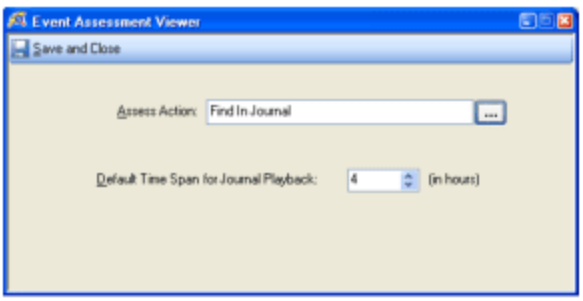
Find in Journal Viewer

The Find in Journal viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the **Assess Event** button on the Event Viewer toolbar.

When you create an Assess Events Application Layout, you can add a Find in Journal Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Find in Journal**.

When you select Find in Journal from the Event Assessment Viewer dialog box., an additional field is displayed to let you select the **Default Time Span for Journal Playback**. See Figure 11 on Page 40.

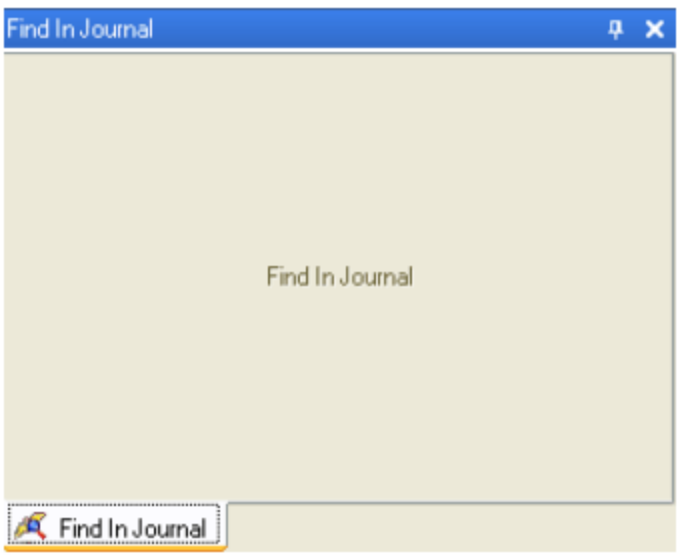
Figure 11: Event Assessment Viewer Dialog Box for Find in Journal



You can select a value from 1 to 100 hours for this selection. The default value is 4 hours.

See Figure 12 on Page 40 for an example of the Find in Journal viewer in the Application Layout editor.

Figure 12: Find in Journal Viewer



When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing a Find in Journal Viewer will display the Journal Replay that is associated with the Event. The Journal Replay is displayed in a Dynamic View.

See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

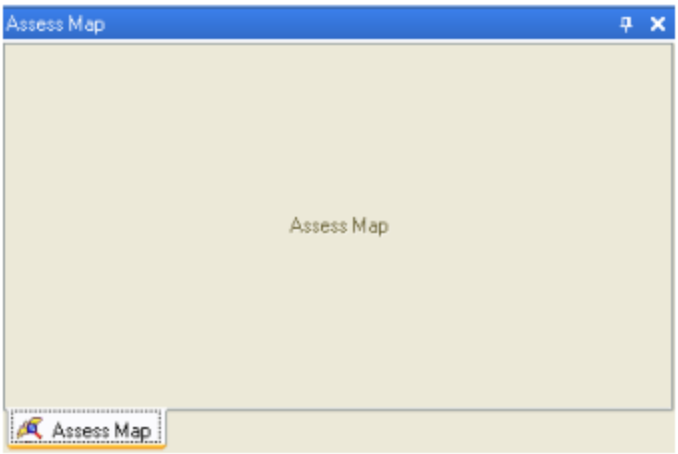
Assess Map Viewer

The Assess Map viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the **Assess Event** button on the Event Viewer toolbar.

When you create an Assess Events Application Layout you can add a Map Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Access Map**.

See Figure 13 on Page 41 for an example of the Assess Map viewer in the Application Layout editor.

Figure 13: Assess Map Viewer



When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing an Assess Map Viewer will display the Map that is configured in the Event **Map Link** field.

See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

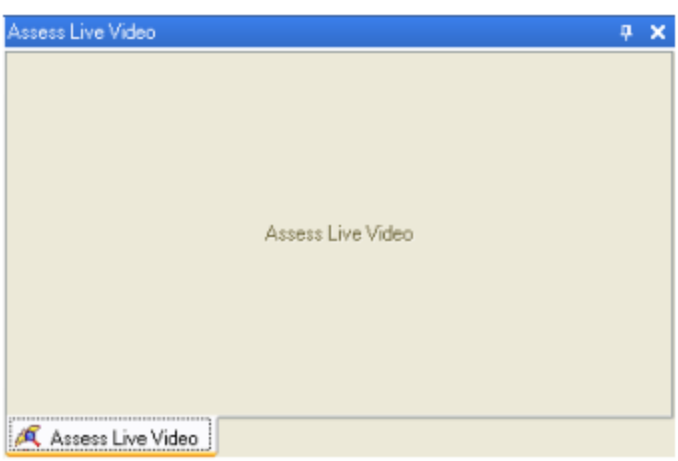
Live Video Viewer

The Live Video viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the **Assess Event** button on the Event Viewer toolbar.

When you create an Assess Events Application Layout, you can add a Live Video Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Assess Live Video**. The Live Video viewer in the Monitoring Station displays the Video View object associated with the Event.

See Figure 14 on Page 41 for an example of the Assess Live Video viewer in the Application Layout editor.

Figure 14: Assess Live Video Viewer



When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout that contains a Live Video Viewer displays the live video object that is associated with the Event (if any).

See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

Query Viewer

The Query viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the **Assess Event** button on the Event Viewer toolbar.

When you create an Assess Events Application Layout, you can add a Query Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Assess Query**.

See Figure 15 on Page 42 for an example of the Assess Query viewer in the Application Layout editor.

Figure 15: Assess Query Viewer

When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing a Query Viewer will run and display the results from the Query object that is associated with the Event (if any) in a Dynamic View.

See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

Recorded Video Viewer

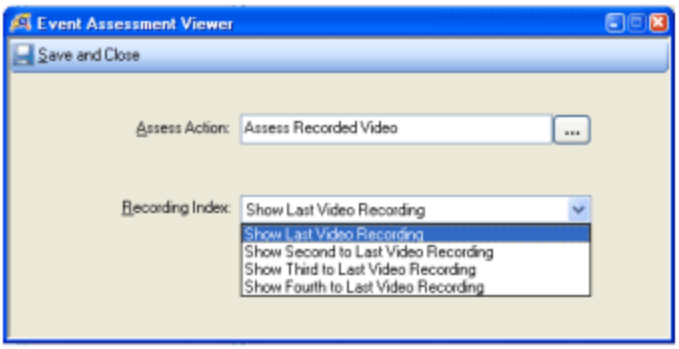
The Recorded Video viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the **Assess Event** button on the Event Viewer toolbar.

The Recorded Video Viewer supports video clips from Intellex, VideoEdge, and Bosch video integration products.

When you create an Assess Events Application Layout, you can add a Recorded Video Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Assess Recorded Video**.

When you select Access Recorded Video from the Event Assessment Viewer dialog box., an addition field is displayed: **Recording Index**. See Figure 16 on Page 43.

Figure 16: Event Assessment Viewer Dialog Box



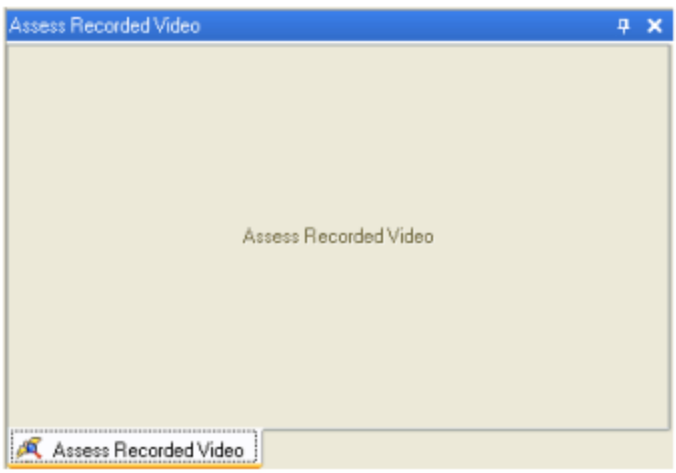
You can place up to four distinct recording viewers for a camera.

You must choose one of the following values for this field:

- Show Last Video Recording (most recent clip)
- Show second to Last Recording
- Show Third to Last Recording
- Show Fourth to Last Recording

See Figure 17 on Page 43 for an example of the Assess Recorded Video viewer in the Application Layout editor.

Figure 17: Assess Recorded Video Viewer



When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing a Recorded Video Viewer will display the recorded video object that is associated with the Event (if any).

See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

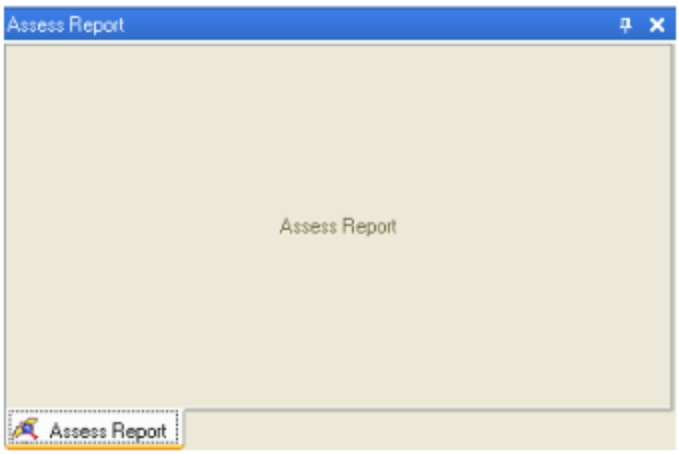
Report Viewer

The Report viewer can be added to an Assess Events Application Layout so that it is available when an Operator in the Monitoring Station presses the Event Assessment button on the Event Viewer toolbar.

When you create an Assess Events Application Layout, you can add a Report Viewer to the layout by dragging the Event Assessment Viewer icon to an Application Layout pane and selecting **Assess Report**.

See Figure 18 on Page 44 for an example of the Assess Report viewer in the Application Layout editor.

Figure 18: Assess Report Viewer



When an Operator uses the **Assess Event** button in the Monitoring Station, an Assess Event Application Layout containing a Report Viewer will run and display the results of the Report object that is associated with the Event (if any) in a Dynamic View.

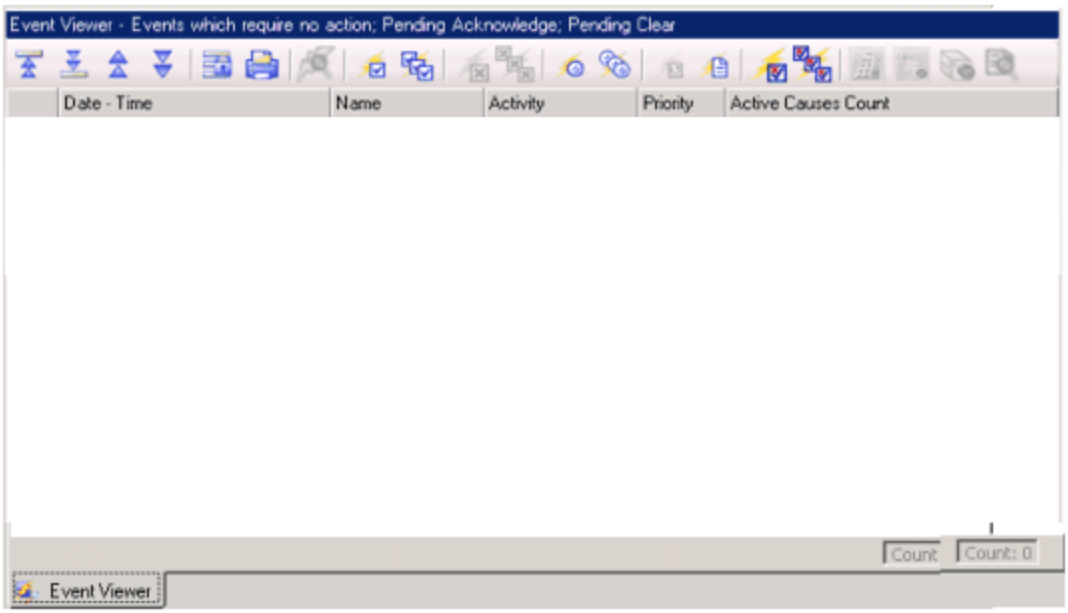
See Creating an Assess Event Layout on Page 70 for information on adding viewers to an Assess Event Application Layout.

Event Viewer

The **Event Viewer** provides a scrolling display of events to the Monitoring Station. The **Event Viewer** is added to the Application Layout by dragging the **Event Viewer** icon onto the pane. When the Event Viewer icon is dragged into a pane, the Event Viewer configuration dialog box opens. See Event Viewer Tasks on Page 66 for more information.

The **Event Viewer**, shown with all the Event Viewer configuration settings selected, is displayed in the Application Layout are shown in Figure 19 on Page 45.

Figure 19: Event Viewer



Event Viewer Properties

You can configure the settings shown in Table 7 on Page 45 for the **EventViewer**. Configuration settings for the buttons and Events that can be viewed are determined by the operator's privilege.

Table 7: Event Viewer Settings

Field	Meaning
Options	
Freeze timeout (seconds)	The **Freeze timeout** button is used to stop the Event display from scrolling. If the Freeze timeout button is pressed, the display freezes for the period of time set here. A progress bar appears counting down the amount of time left for the Freeze timeout. The progress bar disappears, and scrolling resumes, after the period of time set expires or if the Freeze timeout is stopped manually. The minimum default value is 30 seconds, and the maximum value is 60 seconds.
Show Toolbar	You can choose to show or hide the Event Viewer toolbar for this Pane by selecting or clearing this check box. The default value is selected.

Event Viewer Settings (continued)

Field	Meaning
Buttons	
Show Quick Action Buttons	If selected, the quick action buttons are displayed in the Event Viewer, and the rest of the buttons in this dialog box become available for selection. The default value is unselected. NOTE: The Event Assessment button is not a Quick Action button. The button is displayed if the Operator has the correct Assess Event Privileges.
Show Acknowledge All and Silence Buttons	If selected, the Acknowledge All and Silence All buttons are displayed on the Event Viewer toolbar. This button acknowledges all the events available. The default value is unselected.
Show Clear All	If selected, the Clear All button is displayed on the Event Viewer toolbar. The default value is unselected.
Show Acknowledge and Clear Button	If selected, the Acknowledge button and Clear button is displayed on the Event Viewer toolbar. This button acknowledges and clears the selected event. The default value is unselected.
Show Acknowledge and Clear All Button	If selected, the Acknowledge and Clear All button is displayed on the Event Viewer toolbar. This button acknowledges and clears all the events available. The default value is unselected.
Events	
Include Events Requiring No Action	If selected, the Event Viewer will include events that require no action. The default value is selected.
Include Events Pending Acknowledgment	If selected, the Event Viewer will include events pending acknowledgment. The default value is selected.
Include Events Pending Clear	If selected, the Event Viewer will include events pending clear. The default value is selected.

Dual Phase Acknowledgement Layout

An Application Layout can be configured for Dual Phase Acknowledgement to display an Acknowledgement pane and a Clearing pane in the Monitoring Station. Dual Phase Acknowledgement manages events by requiring that an event remain active after it is acknowledged until it is cleared. Events are configured individually to use Dual Phase Acknowledgement in the Event Editor.

Table 8 on Page 47 lists the Dual Phase Acknowledgement configuration sequence, and where to find the configuration procedures.

Table 8: Dual Phase Acknowledgement Configuration

Step	Action	See...
1.	Create a Dual Phase Acknowledgement Application Layout.	Create a Dual Phase Acknowledgement Application Layout on Page 72
2.	Configure Event Permissions and Privileges.	*C•CURE 9000 Software Configuration Guide* "Events" chapter
3.	Assign the Event Privileges and Application Layout to the operators.	*C•CURE 9000 Software Configuration Guide* "Events" chapter
4.	Configure an existing event, or a new event, to use Dual Phase Acknowledgement.	*C•CURE 9000 Software Configuration Guide* "Events" chapter

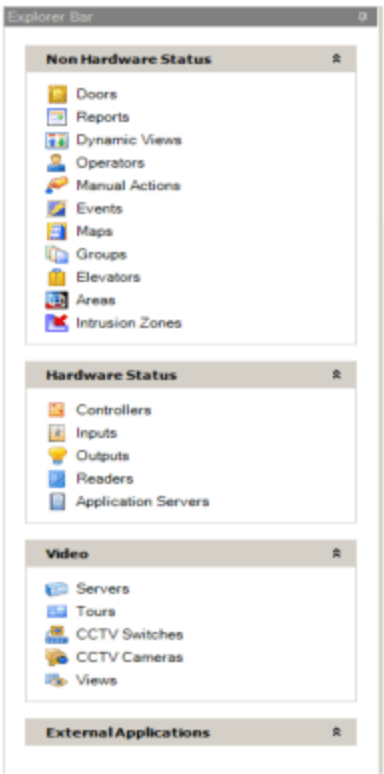
The Explorer Bar

The Explorer Bar allows a Monitoring Station Operator to view the status of objects in C•CURE 9000. When you click an item in the Explorer Bar, a Dynamic View appears listing the objects of that type and their current status. You can sort, filter, group, and print this list, and you can right-click any item in the list to view a menu of actions that you can perform on that item.

You can add items or objects to the default main categories, create new main categories, and add new items or objects to the main categories in the **Application Layout Editor**.

The Explorer Bar displayed in the Monitoring Station with the default settings is shown in Figure 20 on Page 48.

Figure 20: Explorer Bar



The items on the Explorer Bar are explained in the following sections:

- Non Hardware Status on Page 49
- Hardware Status on Page 49
- Video on Page 50
- External Applications on Page 50

See Explorer Bar Tasks on Page 50 for a list of tasks you can perform using the Explorer Bar.

Explorer Bar Properties

Table 9 on Page 49 defines the default Explorer Bar properties.

Table 9: Explorer Bar Default Properties

Property	Description
Non Hardware Status	The **Non Hardware Status** menu on the Explorer Bar gives you the ability to quickly find out the status of a security object in C•CURE 9000. Each item on the Explorer Bar, when clicked, opens a list of all objects of that type, showing their status and other pertinent information.
Hardware Status	The **Hardware Status** menu on the Explorer Bar gives you the ability to quickly learn the status of a security object in C•CURE 9000. Each item on the Explorer Bar, when clicked, opens a list of all objects of that type, showing their status and other pertinent information.
Video	The **Video Status** menu on the Explorer Bar gives you the ability to quickly learn the status of a video security object in C•CURE 9000. Each item on the Explorer Bar, when clicked, opens a list of all objects of that type, showing their status and other pertinent information.
External Applications	The Explorer Bar allows you to launch external applications. External Applications are configured for the Explorer Bar in the Application Layout by an administrator. The Monitoring Station operator can launch these applications as needed to perform tasks related to or supplementary to C•CURE 9000 Monitoring.

Non Hardware Status

When the **Explorer Bar** is added to an Application Layout, this list gives the Monitoring Station Operator access to the status of security objects in C•CURE 9000 that are considered non-hardware. Included are:

- Doors
- Reports
- Dynamic Views
- Operators
- Manual Actions
- Events
- Maps
- Groups
- Elevators
- Areas
- Intrusion Zones

Hardware Status

When the **Explorer Bar** is added to an Application Layout, this list gives the Monitoring Station Operator access to the status of hardware security objects in C•CURE 9000. Included are:

- Controllers
- Inputs
- Outputs
- Readers

Video

When the **Explorer Bar** is added to an Application Layout, this list gives the Monitoring Station Operator access to the status of Video security objects in C•CURE 9000. Included are:

- Servers
- Cameras
- Tours
- CCTV Switches
- CCTV Cameras
- IP Cameras
- Views

External Applications

This section in the **Explorer Bar** supports the addition of shortcut links to external applications. See Adding External Applications to the Explorer Bar on Page 51.

Explorer Bar Tasks

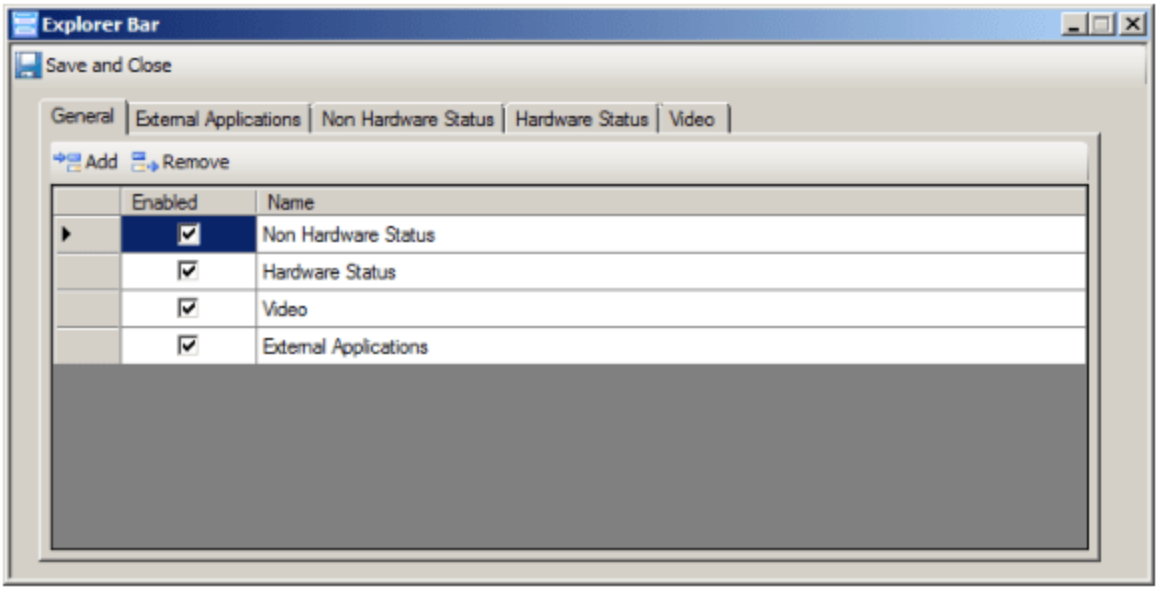
Adding the Explorer Bar to an Application Layout

When you drag the **Explorer Bar** onto a Pane in the Application Layout, you can select the items that appear on the Explorer Bar. You can also add categories to the Explorer Bar.

To Add the Explorer Bar to an Application Layout

1. Open the Application Layout to which you want to add the Explorer Bar.
2. Click the **Explorer Bar** icon and drag it to a Pane on the layout. The Explorer Bar dialog box opens (see Figure 21 on Page 51) with the default settings.

Figure 21: Explorer Bar Dialog Box



3. Enable (☑) or disable each of the items in the list. Each item that you enable will appear on the **Explorer Bar** (if the Operator has the Privileges required to access these objects).
4. Click **Save and Close**.

Adding External Applications to the Explorer Bar

You can add external applications to launch from the Explorer Bar.

To Add an External Application

1. Click the **External Applications** tab on the **Explorer Bar** dialog box.
2. Click **Add** to add an application.
3. Enter a name for the application in the **Name** field.
4. Enter the full file path for the application (for example, C:\Windows\System32\taskmgr.exe) to add the Windows Task Manager) in the **Full Path** field. Or, double-click in the Full Path field to browse to the location of the application and double-click on it to select it.
5. Enter any command line arguments necessary to launch and run the application in the **Arguments** field.
6. Repeat Step 2 through Step 5 to add other external applications.
7. Click **Save and Close**.

Removing External Applications from the Explorer Bar

To Remove an External Application

8. Click in the first column of the row for that application, then click **Remove**.
9. Click **Save and Close**.

Adding a New Category to the Explorer Bar

You can create a new main category, or add a new category to one of the main categories (External Applications, Non-Hardware Status, Hardware Status, Video) to make it easier to navigate through data.

To Add a Main Category

1. Click on the **General** tab.
2. Click **Add**.

   The **Add Category** dialog box opens.
3. Enter a Name and description (optional) for the new main category.
4. Click **Enable**.
5. Click **Save and Close**.

   The new *main category* appears as a tab in the Explorer Bar dialog box.

To Add an Item to a Main Category

1. Click on the **General** tab.
2. Click on the *main category* tab that you want to add a new item.
3. Click **Add** to open the Select Type dialog box.
4. Click on the new item.

   The new item appears in the *main category* tab list.
5. Repeat Step 3 and Step 4 until your selections are complete.
6. Ensure that your new selections are **Enabled** in the *main category* tab list.
7. Click **Save and Close**.

Deleting a Category on the Explorer Bar

To Delete a Category on the Explorer Bar

1. Click on the **General** tab.

   -or-

   Click on the *main category* tab where the category is located.
2. Click in the first column of the row that contains the category that you want to delete to select it.
3. Click **Remove**.
4. Click **Save and Close**.

Editing the Explorer Bar

To Edit the Explorer Bar

1. Open the Application Layout.

2. Right-click on the **Explorer Bar** tab in the Application Layout and select **Properties**.

The Explorer Bar dialog box opens for editing.

Object Viewer

An **Object Viewer** displays an object (such as an Intellex Video Camera, Map, Report, Dynamic View) in a Pane. You add an **Object Viewer** to the Application Layout by dragging the **Object Viewer** icon onto the pane. You then select the object type and the specific object from the dialog box that appears.

An example of the **Object Viewer** in the Application Layout (a Dynamic View type Schedules View object) is shown in Figure 7 on Page 35.

Figure 22: Object Viewer

See Adding an Object Viewer to an Application Layout on Page 70 for tasks you can perform with the Object Viewer.

Object Viewer Properties

Table 10 on Page 54 defines the fields on the **Object Viewer** properties dialog box.

Table 10: Object Viewer Properties

Property	Description
Type	Select the **Object Type** that you want to display in the Viewer.
Object	Select the actual **Object** that you want to display in the Viewer. The objects you can choose are listed, determined by the Object Type you chose in the Type field. **Examples:** If you chose **Maps** as the Type, for Object you could pick a specific Map from the displayed list of Maps. If you chose Dynamic View as the Type, for Object you could pick Personnel View or Report Results View from the displayed list.

Swipe and Show Viewer

The **Swipe and Show** Viewer monitors a configurable list of Doors, displaying a portrait or multiple portraits of personnel who present an access card at a Reader on an included **Door** or **Elevator**. You can add multiple Swipe and Show Viewers to an Application Layout, setting them up as tabs in a single pane.

Each time a person presents an access card at a Door/Elevator watched by the Swipe and Show Viewer, the portrait from his/her Personnel record displays in the viewer, with information about the attempted activity at the Door/Elevator.

A Swipe and Show Viewer can be configured to contain multiple portrait images on a screen at a time. Default view viewers can be re-sized on the Monitoring station.

For information about Swipe and Show Viewers, see:

- Swipe and Show Legacy Viewer on Page 55
- Swipe and Show Default Viewers on Page 58
- Swipe and Show Viewer Tasks on Page 59

Swipe and Show Legacy Viewer

The Legacy Swipe and Show Viewer displays a single portrait at a time. The viewer also allows an operator to give displayed persons access to all antipassback areas - if they were denied entry. The **Grace Personnel** button allows an operator to give the displayed person access to all antipassback Areas—if they would have been denied entry. (See Legacy Swipe and Show Viewer Grace Partition Tab on Page 57 for information about this tab and the 'grace all' capability.)

NOTE The fields and buttons are read-only in the Application Layout.

The **Swipe and Show** Legacy Viewer Swipe & Show tab, shown in Figure 2 on Page 56, appears in the Application Layout, and as it appears in the Monitoring Station.

Figure 2: Swipe and Show Legacy Viewer – Swipe & Show Tab

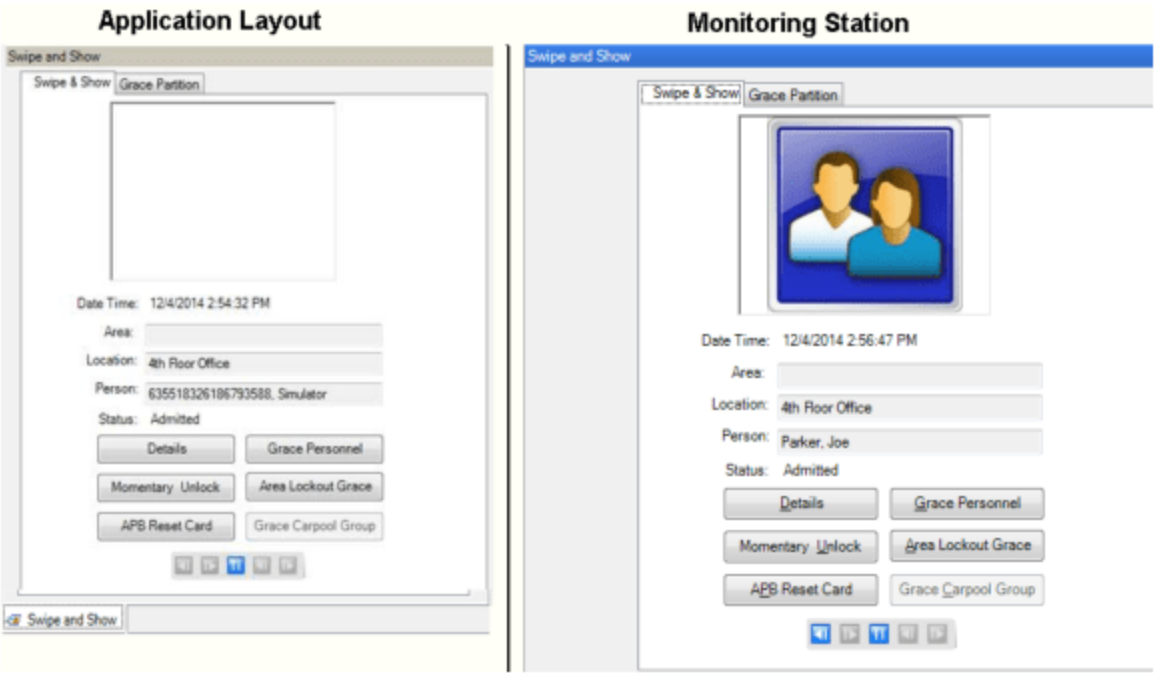


Table 2 on Page 56 provides the definitions for the Swipe and Show Legacy Viewer.

Table 2: Swipe and Show Legacy Viewer Definitions

Field/Button	Description
Portrait	This is the portrait from the Personnel record whose card was swiped at this door.
Date time	This is the Date and Time that the most recent activity occurred.
Area	This is the name of the Area to which the Door where the activity occurred is assigned.
Location	This is the name of the door or elevator where the activity occurred.
Person	This is the name on the Personnel record whose access card was swiped at this door.
Status	This message shows the status of the card swipe at this door. For example, a Status of Rejected indicates that the access attempt was rejected.
Details	This button allows the user to view the respective personnel record. This button is unavailable if the current Operator has "No Access" to the personnel record.
Momentarily Unlock	This button momentarily unlocks the respective door. This button is enabled if the current Operator is allowed to perform this action.
APB Reset Card	This button resets the iSTAR Global Antipassback owner of this person's card when that iSTAR Controller is not communicating. (The Global APB owner of a personnel card is the iSTAR Controller that makes the access decision to allow/not allow that person into the Area.)
Grace Personnel	This button allows the user to 'grace' a person denied access to an antipassback Area so they are given access.

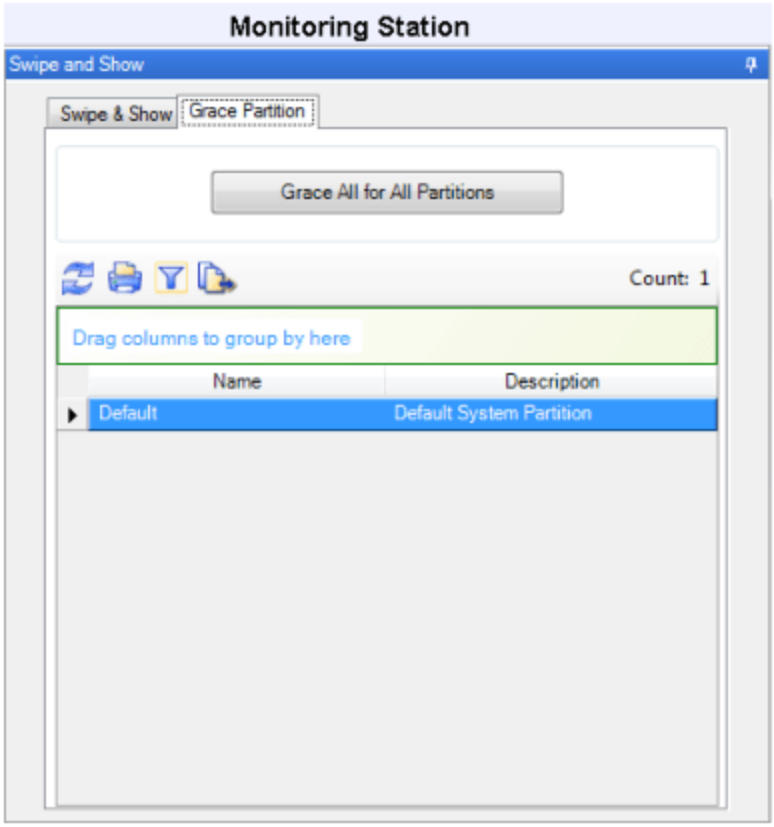
Swipe and Show Legacy Viewer Definitions (continued)

Field/Button	Description
Area Lockout Grace	This button clears all running Area Lockout timers for this person to allow him/her one-time access into all Area Lockout Target Areas that he/she is locked out of.
	These buttons, which are identified by color and tool tips, allow the user to navigate through the 1000 most-recent Personnel records whose admits/rejects display on the viewer. The buttons, from left to right, have the following functionality: Previous Item, Next Item, Pause/Resume, Previous Reject, Next Reject. Clicking Pause/Resume freezes the pane for 30 seconds. If no other button is clicked within 30 seconds (or if Resume is pressed again), the viewer resumes showing the most recent item.
Grace Carpool Group	This button performs a grace on all Personnel within a Carpool Group for antipassback for a specified time period.

Legacy Swipe and Show Viewer Grace Partition Tab

In the Monitoring Station, the Grace Partition tab displays a list of the Partitions in the system. An Operator with the appropriate permissions can select one or more Partitions to grace all Personnel in the Partition(s) at one time. The **Grace Partition** tab, as it appears in the Monitoring Station, is shown in Figure 3 on Page 57.

Figure 3: Swipe and Show Viewer – Grace Partition Tab



NOTE In an un-partitioned system, all Security Objects are in the 'Default' Partition. Consequently, clicking the **Grace All for All Partitions** graces all Personnel in the C•CURE 9000.

Swipe and Show Default Viewers

The Swipe and Show Default Viewers allow you to define the number and arrangement of Personnel images displayed on the viewer. The following limitations apply to the Default Viewer selections:

- Only 100 images can be cached.
- Historical data cannot be retrieved once the user logs out of the Monitoring Station.

Images are displayed with a border around them indicating the state of the transactions. The supported states and their respective colors are described in States and Colors on Page 58.

Table 3: States and Colors

Color	State
Green	Access Granted Used or Unused
Flashing Green	Access Granted - Noticed
Yellow	Access Denied - Wrong Time
Yellow Flashing	Access Denied - Clearance
Orange	• Access Denied - Expired • Access Denied - Disabled
Red	Access Denied - Lost
Flashing Red	Access Denied - Stolen

The Application Layout Swipe and Show Viewer Default View selections are described in Table 4 on Page 58.

Table 4: Default View Selections

View	Description
Single	A single portrait is displayed. When a new card is presented, the existing portrait is replaced.
Dual	Two portraits are displayed. When a new card is presented, the portrait that was in the second spot is replaced by the portrait that was in the first spot, and the new portrait takes the first position.
Quad	Four portraits are displayed. When a new card is presented, all existing portraits slide to the right and the new portrait takes the first position.
Horizontal	Portraits are displayed in a horizontal view. When a new card is presented, all existing portraits slide down, and the new portrait takes the top position. The last portrait is removed from the view.
Vertical	Portraits are displayed in a vertical view. When a new card is presented, all existing portraits slide down, and the new portrait takes the first position. The last portrait is removed from the view.
Carousal	Portraits are displayed in a carousel view.When a new card is presented, all existing portraits slide counter- clockwise, and the new portrait takes the first position. The last portrait is removed from the view.

Figure 4 on Page 59 shows the Swipe and Show Single viewer as it is displayed in the Application Layout and in the Monitoring Station.

Figure 4: Swipe and Show - Single Default Viewer

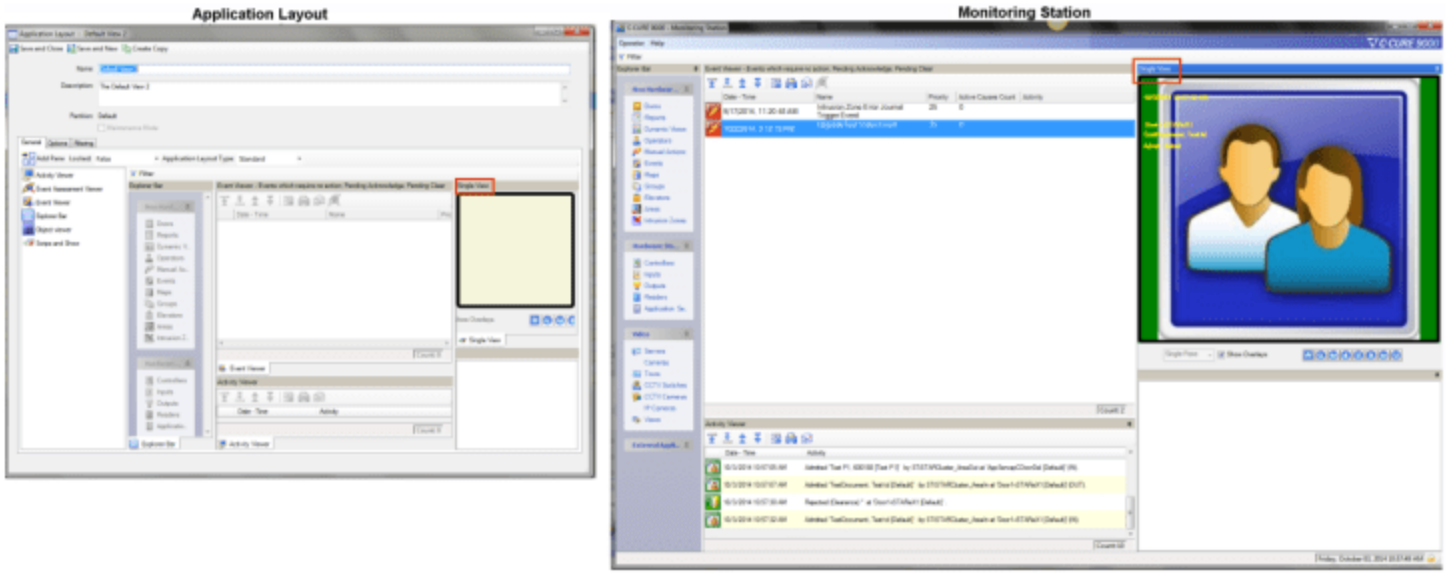


Figure 5 on Page 59 shows the Dual, Horizontal, Vertical, Carousel, and Quad viewers as they are displayed in the Application Layout and in the Monitoring Station.

Figure 5: Swipe and Show - Dual, Horizontal, Vertical, Carousel, and Quad Default Viewers

Swipe and Show Viewer Tasks

You can perform the following tasks when configuring a Swipe and Show Viewer:

- Adding a Swipe and Show Viewer to the Application Layout on Page 60.
- Configuring Doors or Elevators for a Swipe and Show Viewer on Page 61.
- Editing a Swipe and Show Viewer on Page 63
- Renaming a Swipe and Show Viewer on Page 63

Adding a Swipe and Show Viewer to the Application Layout

To use a **Swipe and Show** Viewer, you add it to the **Application Layout**, and select the doors, elevators and the activities you want it to monitor.

To Add the Swipe and Show Viewer to an Application Layout

1. Open the Application Layout to which you want to add the **Swipe and Show** Viewer.
2. Click the **Swipe and Show** icon and drag it to a pane on the layout. The **Swipe and Show** Editor dialog box, shown in Figure 23 on Page 60, opens.

Figure 23: Swipe and Show Editor Dialog Box

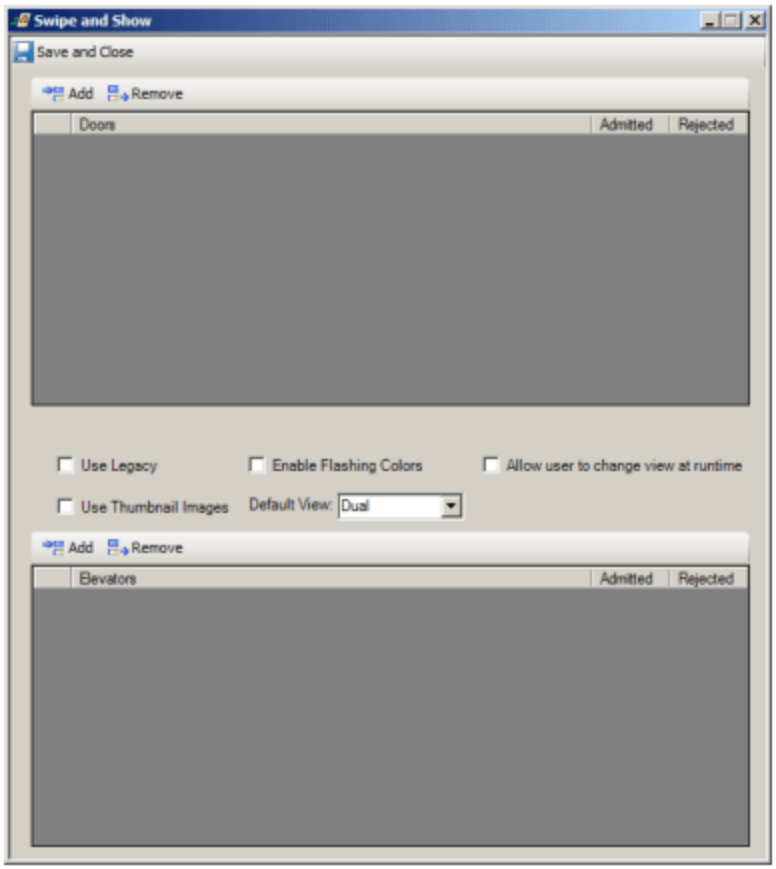


Table 11 on Page 60 provides the definitions for the fields and buttons on the Swipe and Show Editor.

Table 11: Swipe and Show Editor Dialog Box Definitions

Field / Button	Description
Use Legacy	Select to use the Legacy Swipe and Show Viewer. See Swipe and Show Legacy Viewer on Page 55. NOTE: If you use the Legacy Swipe and Show Viewer, all other selections will be grayed-out.

Swipe and Show Editor Dialog Box Definitions (continued)

<table>
<tr><th>Field / Button</th><th>Description</th></tr>
<tr><td>Enable Flashing Colors</td><td>Select to use flashing colors to indicate states. Images displayed will always have a color indicating the particular transaction.Supported states and their colors are:
<table>
<tr><th>State</th><th>Color</th></tr>
<tr><td>Access granted - used or unused</td><td>Green</td></tr>
<tr><td>Access granted - noticed</td><td>Flashing Green</td></tr>
<tr><td>Access denied - clearance</td><td>Flashing Yellow</td></tr>
<tr><td>Access denied - wrong time</td><td>Yellow</td></tr>
<tr><td>Access denied - expired</td><td>Orange</td></tr>
<tr><td>Access denied - disabled</td><td>Orange</td></tr>
<tr><td>Access denied - lost</td><td>Red</td></tr>
<tr><td>Access denied - stolen</td><td>Flashing Red</td></tr>
</table></td></tr>
<tr><td>Allow to change view at runtime</td><td>Select to allow the user to switch between the views during runtime.</td></tr>
<tr><td>Use Thumbnail Images</td><td>Select to display the smaller thumbnail image. Otherwise, the full portrait image is loaded and displayed.</td></tr>
<tr><td>Default View</td><td>Select the default Swipe and Show view to use on start up. See Swipe and Show Default Viewers on Page 58</td></tr>
<tr><td># of Images</td><td>This setting is only visible for horizontal and vertical views where the user can define how many images to see in the Swipe and Show Viewer.
Valid numbers are 2 to 10.</td></tr>
<tr><td colspan="2">Doors/Elevators</td></tr>
<tr><td>Add</td><td>Click Add in the upper pane to add a door. (To add an elevator, click Add in the lower pane.) A new row appears in the list.</td></tr>
<tr><td>Remove</td><td>To remove a door or elevator, select the row for that door or elevator and click Remove.</td></tr>
<tr><td>Admitted</td><td>Select to display all messages related to access-granted activities at this door or elevator.</td></tr>
<tr><td>Rejected</td><td>Select to display all messages related to access-denied activities at this door or elevator.</td></tr>
</table>

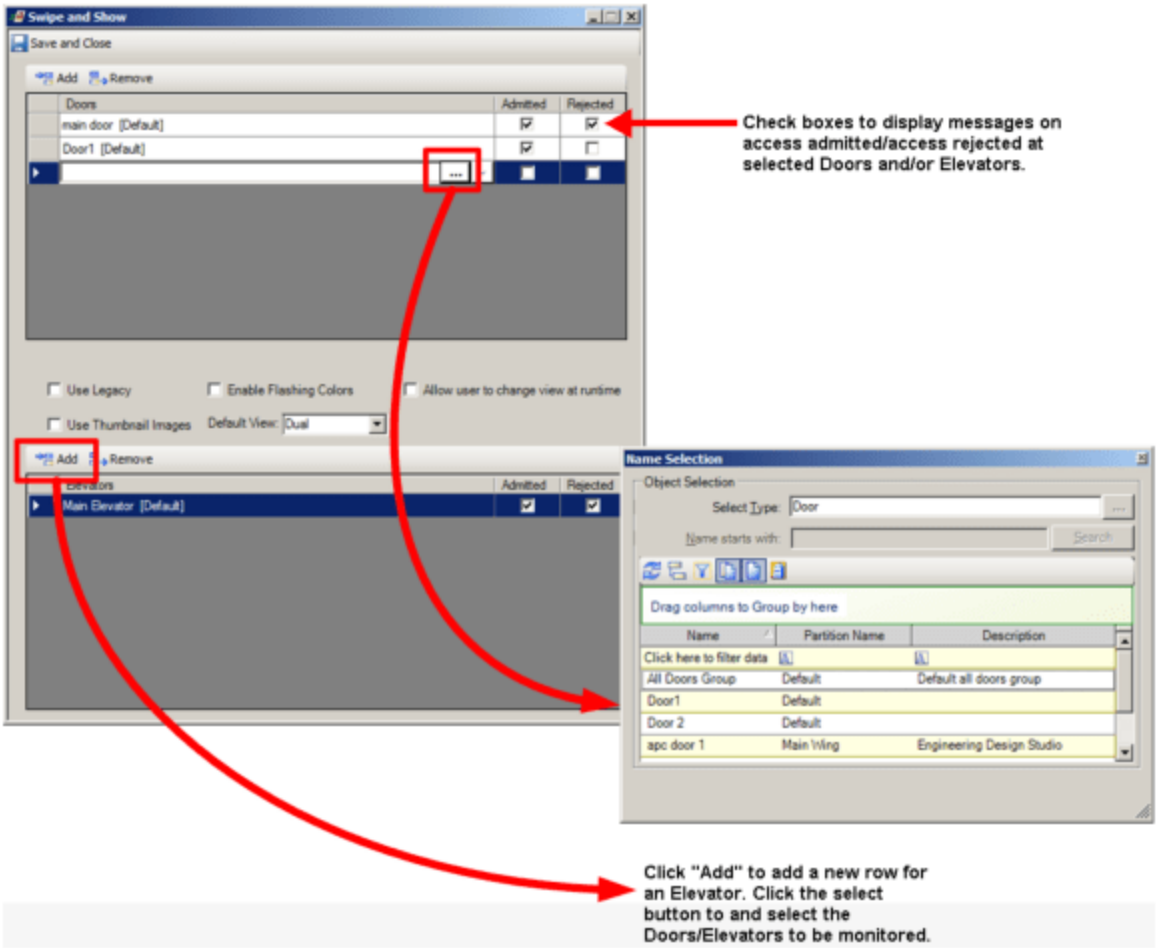
Configuring Doors or Elevators for a Swipe and Show Viewer

To configure a **Swipe and Show** Viewer, you select the doors and elevators from which the **Swipe and Show** Viewer should display activity, and the types of activities to report (Admitted and Rejected). See Figure 24 on Page 62.

To Configure Doors/Elevators for a Swipe and Show Viewer

1. Click **Add** in the upper pane to add a door. (To add an elevator, click **Add** in the lower pane.) A new row appears in the list.
2. Click the **Doors** or **Elevators** field in the new row and click [...] to select a door or elevator to monitor.
3. Select **Admitted** if you want to display all messages related to access-granted activities at this door or elevator.
4. Select **Rejected** if you want to display all messages related to access-denied activities at this door or elevator.

Figure 24: Add Doors and/or Elevators to be Monitored



5. To remove a door or elevator from the **Swipe and Show** Viewer, select the row for that door or elevator and click **Remove**.
6. Click **Save and Close** to save the configuration for the **Swipe and Show** Viewer.
7. Click **Save and Close** to save the Application Layout.

Editing a Swipe and Show Viewer

To Edit a Swipe and Show Viewer

1. Open the Application Layout containing the Swipe and Show Viewer.
2. Right-click on the **Swipe and Show** tab located at the bottom of viewer and click **Properties**.

   The Swipe and Show Editor opens.
3. Click **Save and Close** when done editing.

Renaming a Swipe and Show Viewer

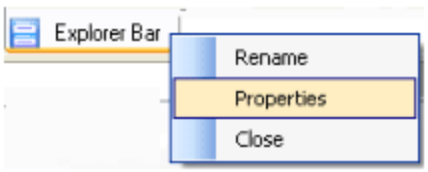
To Rename a Swipe and Show Viewer

1. Open the Application Layout containing the Swipe and Show Viewer.
2. Right-click on the **Swipe and Show** tab located at the bottom of viewer and click **Rename**.
3. Enter the new name in the **Name** field and click **OK**.

Viewer Controls

Table 12 on Page 64 defines the Application Layout Viewer Controls.

Table 12: Application Layout Viewer Controls

Icon	Name	Description
	Auto Hide	You can set a pane in the Application Layout to Auto Hide so that it closes when the mouse pointer is on another pane, displaying only a viewer name tab. When the mouse pointer hovers over the viewer name tab, the pane opens and remains open until the mouse pointer moves away again. This is similar to the Auto Hide capability you can set for the Windows XP task bar. If you click this icon, the viewer changes back to Pinned and is visible at all times.
	Pinned	Pinned is the default state for a viewer. The viewer remains visible at all times. If you click this icon, it changes to Auto Hide, and the viewer is visible only when you hover the mouse pointer over the viewer name tab.
	Close	Click this icon to remove a Viewer from the Application Layout.
	Viewer Name Tab	A Viewer Name tab displays the name of the viewer (in this example–the Personnel View, which shows a Dynamic View list of Personnel). You can change the name by right-clicking the tab and choosing Rename.
	Context Menu	The Context Menu for a pane in the Application Layout has three settings: **Rename** - Select this choice to rename the title of the viewer in this pane. **Example:** If you set up an Activity Viewer to view only operator Logins, you could rename the title of the viewer to operator Login, and this name would appear on the viewer name tab. **Properties** - Select this choice to display a dialog box that allows you to set the properties of this pane's viewer. **Close** - Select this choice to delete this viewer from the pane it is in.

Application Layout Tasks

You can perform the following task from the Application Layout Editor.

- Creating a Data Views Pane Object on Page 19
- Creating an Assess Event Layout on Page 70
- Creating a Dual Phase Acknowledgement Layout on Page 72
- Configuring an Application Layout on Page 65
- Viewing a List of Data Views Pane Objects on Page 20
- Modifying an Application Layout on Page 74
- Deleting a Data Views Pane Object on Page 19
- Adding a Pane to the Layout on Page 69
- Removing a Pane from the Layout on Page 75
- Adding a Viewer/Viewer Tab to a Pane on Page 69
- Removing a Viewer/Viewer Tab from a Pane on Page 75
- Locking the Layout on Page 76
- Unlocking the Layout on Page 76
- Auto Hiding and Pinning Panes on Page 76
- Resizing and Moving Panes in the Layout on Page 77

Configuring an Application Layout

The configuration of an Application Layout is flexible enough to support almost any monitoring requirement.

An Operator can display multiple Monitoring Station layouts in a tabbed application screen, meaning that you can design usable layouts that give each monitoring component adequate space for viewing.

Because there are so many options, it can be useful to do some planning before starting to configure Application Layouts.

- Decide on the number of Viewers and Tabs (Application Layouts) you want to give each Operator.
- Decide on the number of Panes you want to place in each Application Layout.
- Decide which Viewers you want to place in each Application Layout (remember that you can place multiple Viewers in a Pane).
- Decide on the size and arrangement of the Panes in the Layout.
- If your Operators have differing access and responsibilities, you can make separate Application Layouts for each operator, or have them use the same Layout, and restrict access using Privileges.

To Configure an Application Layout

1. Create an Application Layout. See Creating a Data Views Pane Object on Page 19.
2. To configure a Assess Event Application Layout, see Creating an Assess Event Layout on Page 70.

3. To configure a Dual Phase Acknowledgement Application Layout, see Creating a Dual Phase Acknowledgement Layout on Page 72.
4. Add Panes to the Layout. See Adding a Pane to the Layout on Page 69.
5. Add Viewers to the Panes. See Adding a Viewer/Viewer Tab to a Pane on Page 69.
6. Lock the Layout if you don't want Operators moving or changing the Layout. See Locking the Layout on Page 76.
7. Create operator privileges using the Privilege Editor for the operator. See the *C•CURE 9000 Software Configuration Guide* for more information.
8. Assign the Layout and privileges to Operators. See the *C•CURE 9000 Software Configuration Guide* for more information.

Event Viewer Tasks

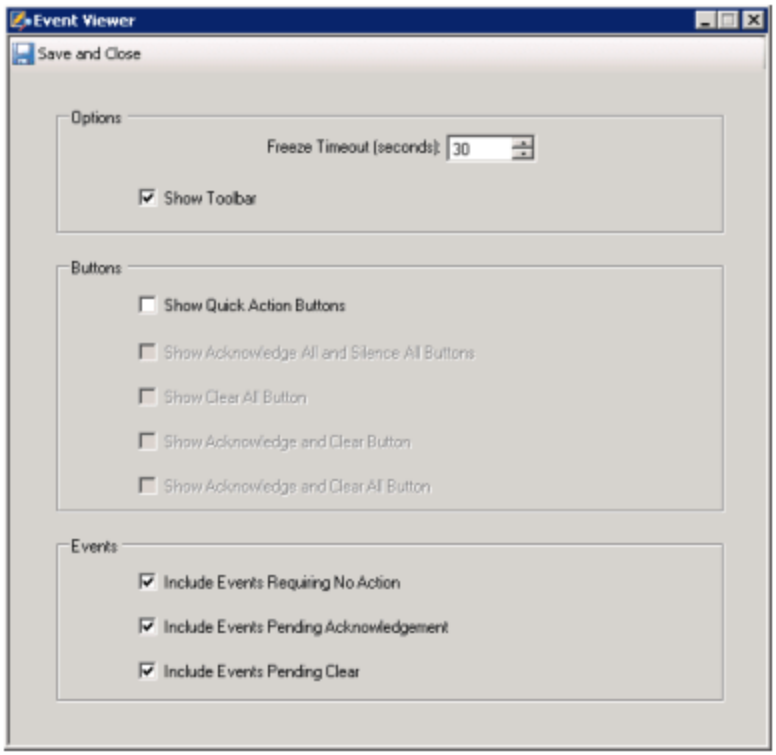
Adding an Event Viewer to the Application Layout

You can add an Event Viewer to an Application Layout, choosing to display a toolbar, buttons, and events. See Event Viewer Properties on Page 45 for descriptions of the available selections.

To Add an Event Viewer to the Application Layout

1. Open the Application Layout to which you want to add the **Event Viewer**.
2. Click the **Event Viewer** icon and drag it to a Pane on the layout. The **Event Viewer Editor** dialog box opens (see Figure 25 on Page 66.

Figure 25: Event Viewer Editor Dialog Box



3. Set the **Freeze Timeout** in seconds. This is the length of time the scrolling list of events is stopped.
4. Select or clear the **Show Toolbar** field. If you clear this option, there are no buttons displayed.
5. Select or clear the **Show Quick Action Buttons** field. If you select this option, the quick action buttons are displayed.

NOTE The **Assess Event** button is not a Quick Action button - it is displayed if the Operator has the correct Assess Event Privileges.

6. Select or clear the additional buttons you want to be available on the Toolbar.
7. Select or clear the event actions that you want in the Event Viewer.
8. Click **Save and Close** to save the configuration for the **Event Viewer**.

Activity Viewer Tasks

You can perform the following task when configuring an **Activity Viewer**.

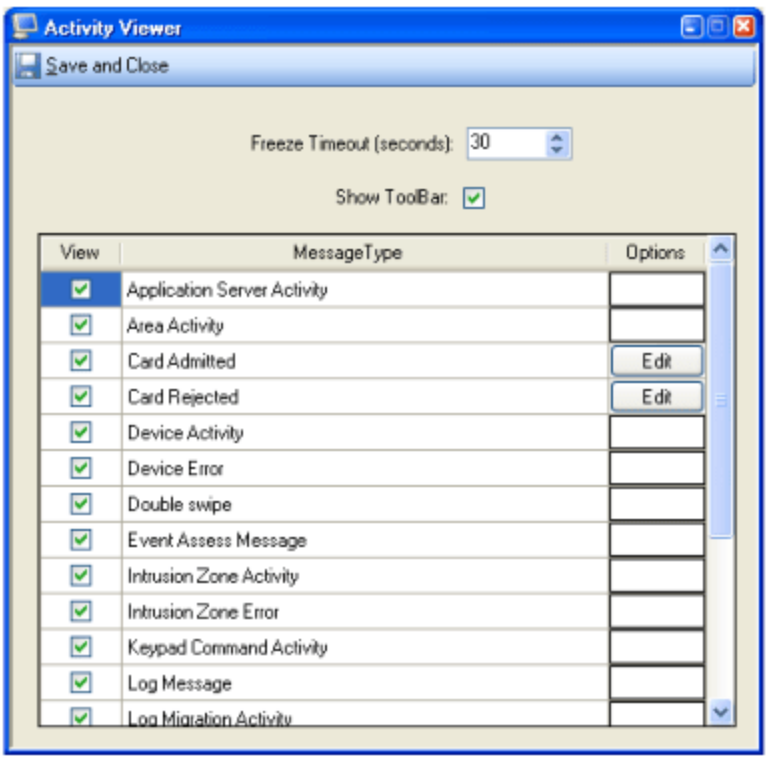
- Adding an Activity Viewer to the Application Layout on Page 67.

Adding an Activity Viewer to the Application Layout

To Add an Activity Viewer to the Application Layout

1. Open the Application Layout to which you want to add the **Activity Viewer**.
2. Click the **Activity Viewer** icon and drag it to a pane on the layout. The **Activity Viewer** dialog box opens (see Figure 26 on Page 68).

Figure 26: Activity Viewer Dialog Box



3. Set the **Freeze Timeout** in seconds. This is the length of time for to stop the scrolling list of activities by pressing the **Freeze** button, using the up and down arrows, or using the scroll bars.
4. Select or Clear the **Show ToolBar** field. If you clear this option, the toolbar buttons are not displayed.
5. Select or clear each of the items in the **Message Type** list. The **Activity Viewer** displays the Message Types that you select (if the Operator has the Privileges required to access these messages), and does not display the ones that you clear.

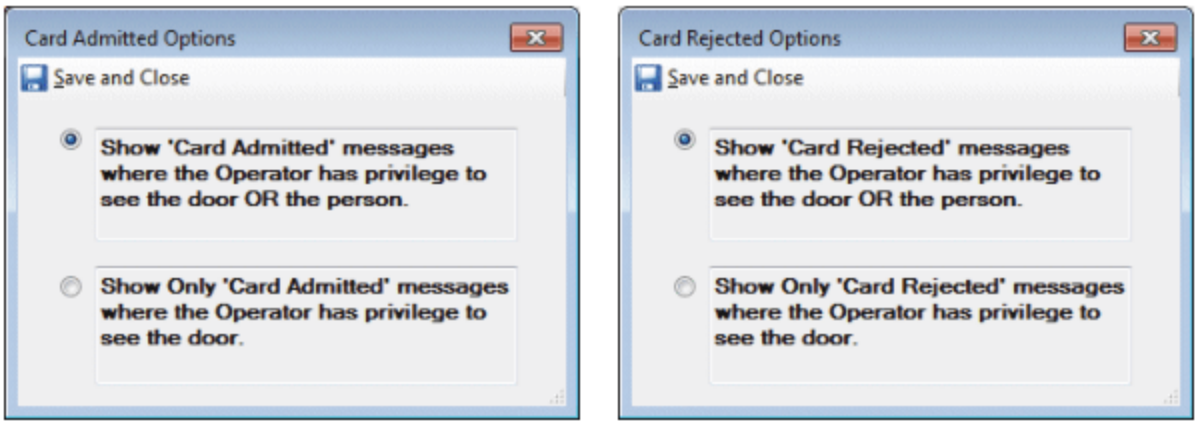
NOTE If you clear the selection for **Event Assess Message**, a Journal message does not appear when an Operator clicks the **Assess Event** button to Assess an Event.

Optionally, click **Edit** at the **Card Admitted** or **Card Rejected** items. You can choose either:

- To show card admissions or card rejections where the operator has privileges to see either the door or the person (the default).

Or

- To show card admissions or card rejections where the operator has privileges to see only the door (if you want to be more restrictive of what the Operator can see).



6. Click **Save and Close** to save your choice.
7. Click **Save and Close** to save the configuration for the **Activity Viewer**.

Adding a Pane to the Layout

If the Layout currently has fewer than six Panes, you can add a Pane to the Layout.

To Add a Pane to the Layout

1. Click **Add Pane**.
2. The Pane is added to the Layout in the next open position that is the best fit with the other Panes in the Layout.
3. You can grab the pane window bar and drag the pane to a new position in the Layout.
4. Save your changes to the Layout by clicking **Save and Close**.

Adding a Viewer/Viewer Tab to a Pane

You can add a Viewer to a Pane in the Application Layout (even a Pane that already has one or more Viewers) by dragging the Viewer to the Pane, and then configuring the settings for the Viewer. When there are already one or more Viewers in the Pane, the new Viewer is added as a tab. Each Viewer is displays with a tab at the bottom of the Pane. The Operator can click the tabs to switch between Viewers.

To Add a Tab to a Pane

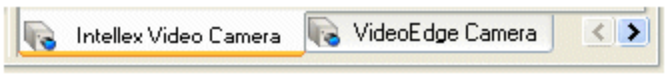
1. From the Application Layout Editor, select a Viewer from the Viewer menu and use the mouse pointer to drag the Viewer to a Pane in the Application Layout.
2. Release the mouse button to drop the Viewer in the Pane you selected. The configuration dialog box for the Viewer you selected appears.
3. Configure the settings for the Viewer.

   Example:

   If you drag an Object Viewer to the Pane, an Object Viewer configuration dialog box opens, and you can specify the type of object to view and the actual object of the type.

If you pick VideoEdge Camera as the Type, you can also select a specific VideoEdge Camera object to view in the pane if you wish.

4. Click **Save and Close** to save the configuration settings for the viewer you placed.
5. The Viewer you placed appears as an additional tab in the Pane, as shown below. Depending on the width of the Viewer Pane, you see the tab(s) and/or a horizontal scroll bar. (There are three Viewer tabs in the figure below.) You can use the scroll bar to navigate between Viewer tabs and click any of the tabs in the Pane to view their contents.



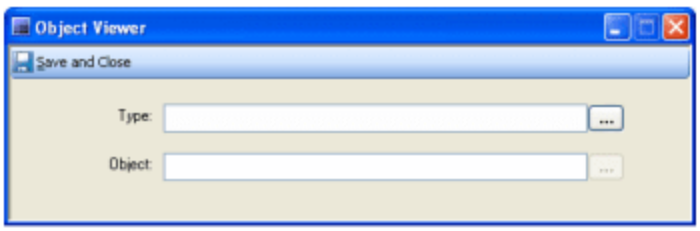
Adding an Object Viewer to an Application Layout

When you drag an **Object Viewer** onto a Pane in the Application Layout, you can configure the object that appears in the **Object Viewer**.

To Add an Object Viewer to an Application Layout

1. Open the Application Layout to which you want to add the **Object Viewer**.
2. Click the **Object Viewer** icon and drag it to a Pane on the layout. The **Object Viewer** dialog box opens (see Figure 27 on Page 70).

Figure 27: Object Viewer Dialog Box



3. Click [...] in the **Type** field to select the type of object you want to display in the viewer.

   Example:

   Dynamic View

4. Click [...] in the **Object** field to select the actual object you want to display in the viewer.

   Example:

   Schedules View

5. Click **Save and Close** to save the configuration for the **Object Viewer**.

Creating an Assess Event Layout

You can use the Application Layout editor to create a layout for Assessing Events. An Assess Event layout can be used by an Operator who has the Assess Event Privilege to evaluate and acknowledge an Event.

NOTE For an Operator to configure Event Assessment, the Operator must have the following minimum Privileges:

- Edit permission for Application Layouts.
- Edit permission for Events.
- Read and View permissions for Documents (if included in assessments)

For a C•CURE 9000 System that is upgraded to version 2.01, existing Operator Privileges will be set so that these Privileges are not enabled This means that an Operator who does not have System All Privilege will need to have these Privileges enabled in order to Assess Events.

An Assess Event layout can be designed to give the Operator access to all the information they need to correctly evaluate an Event according to your security procedures. It can provide the Operator with any of a wide range of viewers that are targeted to the objects that are directly related to the Event that just occurred. These include:

- Live video related to the Event.
- Recorded video related to the Event.
- Documents detailing event procedures, details about the building, or any other information you deem pertinent.
- A map of the vicinity of the Event.
- A Query related to the Event.
- A Journal History related to the Event.
- The Event Details.
- A Report related to the Event.

The objects displayed in these viewers are configured within the Event itself, so that the viewer contents are directly related to the Event being assessed. (see the *C•CURE 9000 Software Configuration Guide* chapter on Events for more information on configuring an Event for assessment.)

To Create an Assess Event Application Layout

1. In the Navigation Pane of the Administration Workstation, click **Data Views** to open the Data Views pane.
2. Select **Application Layout** from the Data Views pane drop-down list.
3. Click **New** to create a new Application Layout. The Application Layout Editor opens.
4. Select **Assess Event** from the **Application Layout Type** drop-down list.
5. For each type of Assess Event Viewer you want to include in the layout, drag an Event Assessment Viewer onto the layout, then use the Event Assessment Viewer dialog box to select the viewer type you want to display. See Assess Event Application Layout on Page 37 for more information.
6. Use the tools provided in the Application Layout editor to customize the appearance of your layout. See Application Layout Tasks on Page 65 for more information.
7. Use the Application Layout Options Tab on Page 29 to determine the behavior of the Assess Event Application Layout after the Event is acknowledged.
8. To save your new Application Layout, click **Save and Close.**

NOTE After you save an Application Layout as an Event Assessment Application Layout, you can only change it back to Standard if it is not being used by any Events for assessment.. If you save an Application Layout as a Standard layout, you can change it to an Assess Event layout only if it is not assigned to any Operator as a layout.

Creating a Dual Phase Acknowledgement Layout

You use the Application Layout editor to create a Dual Phase Acknowledgement Layout. A Dual Phase Acknowledgement layout can be used by an Operator who has the correct privileges and permissions to evaluate, acknowledge and/or clear an Event. The Event action may be configured for an Operator to clear an event that has been acknowledged by another Operator.

NOTE

- For an Operator to be able to respond to an Event configured for Dual Phase Acknowledgment, the Operator must have the correct Privileges and Permissions.
- Dual Phase Acknowledgement can be configured to Acknowledge and Clear Events in one Event Viewer Pane, or in two Event Viewer panes as described below. Using two panes is recommended.

The Event, Event permissions and privileges, and Operator Monitoring Station layout assignments are configured in the **Configuration** pane. See the *C•CURE 9000 Software Configuration Guide*, "Events" chapter for more information.

Create a Dual Phase Acknowledgement Application Layout

This section describes how to set up the Application Layout to use the Dual Phase Acknowledgement sample layout, and also how to create a new layout.

The sample layout contains three panes:

- Event Viewer (top pane) - contains events requiring no action, events that require Acknowledgement, and events requiring Acknowledgement and Clearing.
- Event Viewer (bottom pane) - contains events requiring clearing.
- Activity Viewer - contains all activity.

See Application Layout Viewers on Page 33 for detailed procedures and field descriptions.

To Create the Application Layout Using the Dual Phase Acknowledgement Sample Layout

NOTE The sample layout can be used as is, or it can be copied and edited.
If you use the sample layout, it is highly recommended that you create a copy instead of modifying the original layout.

1. In the Navigation Pane of the Administration Workstation, click the **Data Views** pane button.
2. Click **the Data Views** drop-down list and select **Application Layout**.
3. Click  to display a list of pre-configured application sample layouts in the Dynamic View.
4. Double-click on the **Dual phase event acknowledgement layout** sample layout.
5. Click **Create Copy**.
6. Enter a Name and Description for the layout.

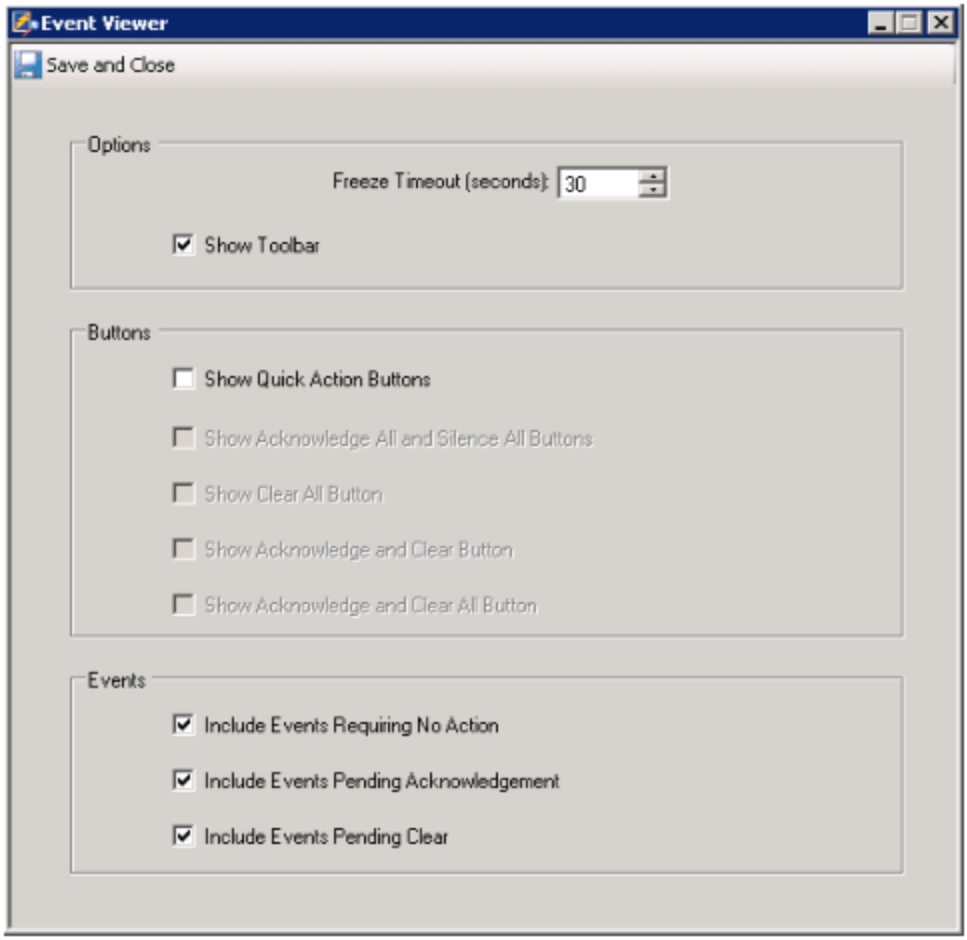
7. If desired:
   - Right-click on an Event Viewer pane tab and select **Properties** to edit the configuration. See Event Viewer on Page 45 for descriptions.
   - Right-click on the Activity Viewer pane tab and select **Properties** to edit the configuration. See Activity Viewer on Page 35.
8. Click **Save and Close**.

To Create a New Dual Phase Acknowledgement Application Layout

NOTE The Event Viewer default settings (if all the **Event** check boxes are selected) will create one pane that includes events pending acknowledgement and events pending clearing.
The procedure below describes how to create an application layout with separate panes for pending acknowledgement and pending clearing.

1. In the Navigation Pane of the Administration Workstation, click the **Data Views** pane button.
2. Click **the Data Views** drop-down list and select **Application Layout**.
3. Click  New to open the Application Layout Editor.
4. Enter a Name and Description for the Dual Phase Acknowledgement layout.
5. Drag **Event Viewer** onto the layout to display the Event Viewer Editor. The Event Viewer opens with the default settings, as shown in Figure 28 on Page 74.

Figure 28: Event Viewer Editor



6. Deselect the Events **Include Events Pending Clear** check box to create a pane for Events requiring Acknowledgement and Events that require no action.
7. Select the buttons for the Event Viewer pane. See Event Viewer Properties on Page 45 descriptions.
8. Click **Save and Close**.
9. Drag **Event Viewer** onto the layout to display the Event Viewer Editor. The Event Viewer opens with the default settings, as shown in Figure 28 on Page 74.
10. Deselect the Events **Include Events Requiring No Action** and **Include Events Pending Acknowledgement** check boxes to create a pane for Events that require Clearing.
11. Select the buttons for the Event Viewer pane. See Event Viewer Properties on Page 45 descriptions.
12. Click **Save and Close**.
13. Optional. To add other viewer types to the layout, see Application Layout Viewers on Page 33.

Modifying an Application Layout

You can modify an Application Layout for use with the C•CURE 9000 Monitoring Station.

To Modify a Application Layout

1. In the Navigation Pane of the Administration Workstation, click **Data Views** to open the Data Views pane.
2. Select **Application Layout** from the Data Views pane drop-down list.
3. Click  to view a list of existing Application Layouts and click the Application Layout you wish to modify to select it.
4. Right-click the selected Application Layout and choose **Edit** from the context menu.
5. On the Application Layout editor, you can change any of the settings for the Application Layout
6. To save your modified Application Layout, click **Save and Close.**

Removing a Pane from the Layout

You can remove a Pane that you have added to a Layout.

NOTE You cannot remove the Primary Pane from the Layout. This is the Pane that does not have a x icon in the title bar. Each Layout must contain at least one Pane.

To Remove a Pane from the Layout

1. Click the Pane title bar of the Pane you want to remove.

2. Click  on the Pane title bar, or right-click on the Pane tab and select **Close**.
3. The Pane is removed.

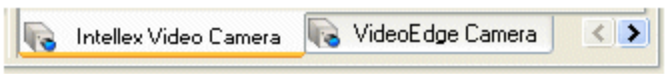
Removing a Viewer/Viewer Tab from a Pane

You can remove a Viewer that you have added to a Pane.

NOTE You can also remove a Viewer from the Layout by removing the Pane from the Layout.

To Remove a Viewer from a Pane

1. Right-click the name tab of the Viewer you want to remove.



2. Choose **Close** from the context menu that appears.
3. The tab is removed.

Locking the Layout

You can lock the Application Layout arrangement of panes so that a user cannot change the Application Layout or close any Panes. This may be desirable for security purposes, or to make sure that certain viewers, like surveillance cameras, are always visible.

You can lock the Application Layout by setting the **Locked** field in the Application Layout Editor to **True** and saving the Application Layout.

When an Operator displays a locked Application Layout, the Operator cannot move, resize, close, or auto-hide any of the Panes/Viewers.

Unlocking the Layout

You can unlock the Application Layout by setting the **Locked** field in the Application Layout Editor to **False** and saving the Application Layout.

Auto Hiding and Pinning Panes

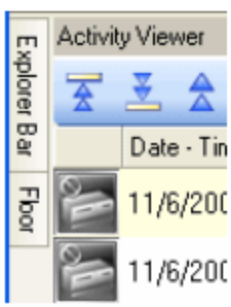
A Pane in the Application Layout can be docked to the nearest side of the Layout using the Auto Hide feature. A docked pane is visible when you select it or hover over it. The Pane hides or docks to the nearest edge when you are not using it.

Auto Hide Panes

You can set a Pane in the Application Layout to Auto Hide so that it closes when the mouse pointer is on another pane, displaying only a viewer name tab, docked to the nearest side of the screen. When the mouse pointer hovers over the viewer name tab, the Pane opens and remains open until the mouse pointer moves away again. This is similar to the Auto Hide capability you can set for the Windows XP task bar.

The Explorer Bar and Floor object viewer name tabs are shown docked to the left side of the window in Figure 29 on Page 76. Simply hovering the mouse pointer over one of these tabs opens that tab. Moving the mouse pointer away causes the tab to slide closed.

Figure 29: Docked Viewer tabs



Pinned Panes

A Pinned Pane is a pane that is not using Auto Hide, so it is always visible.

To Auto Hide a Pane

1. In the Application Editor, click  to change the Pane to docked ().
2. When you move the mouse pointer away from the Pane, the Pane will Auto Hide and a viewer name tab will be docked to the nearest edge of the Layout.

To Pin a Pane

1. In the Application Layout Editor, hover over the viewer name tab of a docked (Auto Hide) Pane to open the Pane.
2. Click  to change the Pane to Pinned ().

Resizing and Moving Panes in the Layout

You can change the size and position of Panes within the Application Layout Editor.

To Resize a Pane

1. In the Application Layout Editor, hover the mouse pointer over the border of the Pane that you want to resize.

   The mouse pointer changes to  for a vertical border or  for a horizontal border.
2. Click and hold the left mouse button and drag the border to the width you want.

To Move a Pane

1. In the Application Layout Editor, click the title bar of a Pane.
2. Drag the Pane to a new position. A shaded outline shows you where the Pane will be placed.
3. Release the mouse button to drop the Pane into a new position.
4. If you drag the Pane into a position between two Panes, the shaded outline changes to a rectangle. If you release the mouse button, it creates a floating window above the layout. You can drag and drop a viewer into this floating window.

   (You cannot, however, save the Application Layout with a pane that is floating. You need to make sure that all panes are anchored in the layout before you click **Save**.

NOTE If the Layout is locked, a Monitoring Station Operator will not be able to move or close the floating window.

3

Dynamic Views

This chapter explains how to configure and use Dynamic Views.

In this chapter

Dynamic Views Overview

Dynamic Views are used to display C•CURE 9000 objects in a List view or Card view, so that you can view, edit, group, or filter objects in the list. The search results from queries run in C•CURE 9000 are also displayed in a Dynamic View in the **Content** pane or in a popup window.

Dynamic Views display information about C•CURE 9000 objects dynamically—objects in the view can be edited, deleted, monitored, exported, and printed from the Dynamic View. The Date/Time fields display in the client computer's local time. Grouping, sorting, and filtering capabilities allow you to organize and focus on the data you need.

When you are viewing a Dynamic View and changes occur to the objects in the view, the view updates to reflect the changes.

Example:

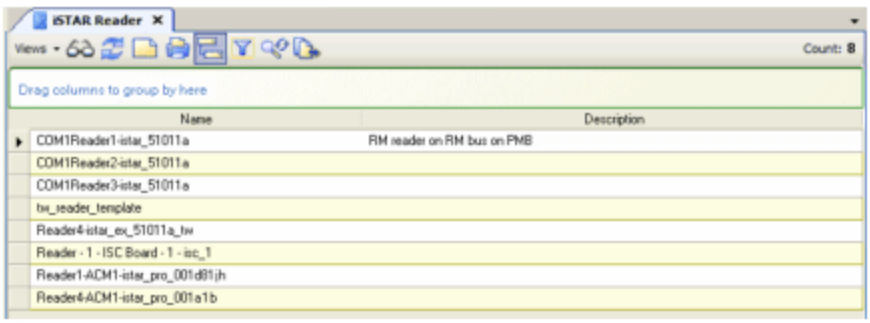
If you are viewing a list of all Personnel, and a new Personnel record is added to the database, the Dynamic View will be updated to display the new Personnel record.

The following sections provide more information on Dynamic Views.

- Dynamic View Editor on Page 82 lets you create new Dynamic Views and customize existing Dynamic Views.
- Dynamic View Editor Tasks on Page 83 provides a list of the tasks you can perform with the **Dynamic View Editor**.
- Dynamic View Editor Definitions on Page 91 provides definitions for the fields and buttons on the **Dynamic View Editor**.
- Dynamic View Viewer on Page 93 displays your Dynamic Views and lets you group, filter, and print the information displayed in the Dynamic View.
- Dynamic View Viewer Tasks on Page 94 provides a list of the tasks you can perform with Dynamic Views.
- Dynamic View Viewer Definitions on Page 105 provides definitions for the fields and buttons on the **Dynamic View Viewer**.

See Figure 30 on Page 80 for an example of a Dynamic View (a list of Readers).

Figure 30: Dynamic View



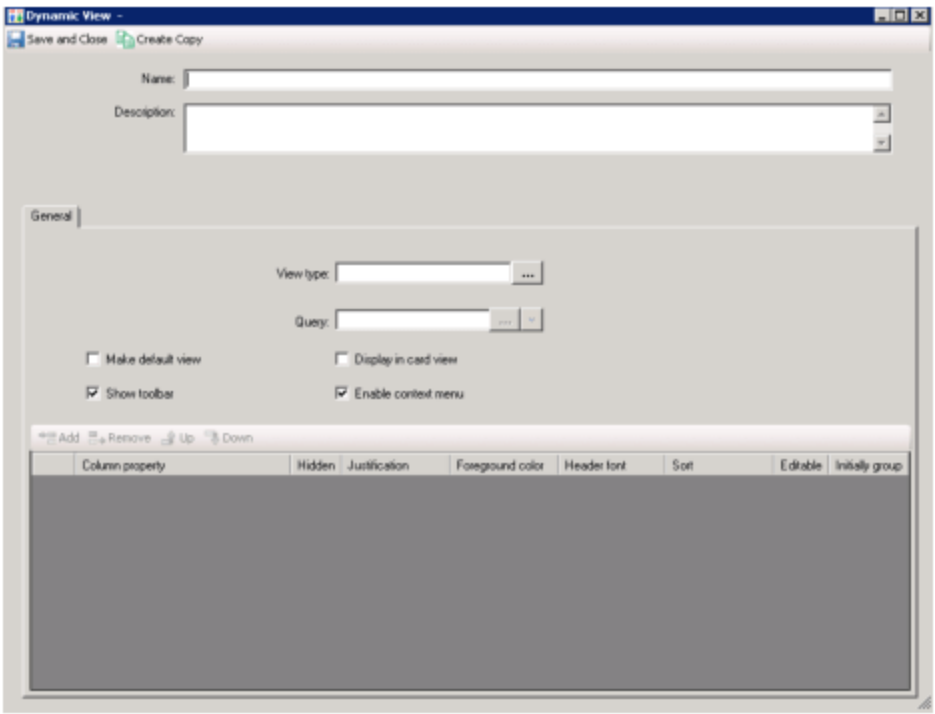
You can create Dynamic Views for every type of data object in C•CURE 9000. In addition, you can attach a query to a Dynamic View to retrieve only certain objects of a type from the database. Each object type comes with a default Dynamic View, so you can view object data dynamically without changing a thing. You can also create additional Dynamic Views customized to your needs, and then set one of the customized views as the default view for that object type.

NOTE C•CURE 9000 also includes two pre-defined Dynamic Views, numbered **SWHdv02** and **SWHdv22**, as examples of the ways in which you can customize views. You can use these "as is" or copy and customize them as you want. For detailed information, see the Overview: Pre-defined Reports, Queries, and Dynamic Views on Page 254 on pre-defined Dynamic Views.

Dynamic View Editor

The **Dynamic View Editor**, shown in Figure 31 on Page 82, lets you create customized Dynamic Views in addition to the default Dynamic Views for each object type.

Figure 31: Dynamic View Editor



The following sections provide more information on Dynamic Views.

- Dynamic Views Overview on Page 80 provides an introduction to the capabilities of Dynamic Views in C•CURE 9000.
- Dynamic View Editor Definitions on Page 91 provides definitions for the fields and buttons on the **Dynamic View Editor**.
- Dynamic View Editor Tasks on Page 83 provides a list of the tasks you can perform with the **Dynamic View Editor**.
- Dynamic View Viewer on Page 93 displays your Dynamic Views and lets you group, filter, and print the information displayed in the Dynamic View.
- Dynamic View Viewer Tasks on Page 94 provides a list of the tasks you can perform with Dynamic Views.
- Dynamic View Viewer Definitions on Page 105 provides definitions for the fields and buttons on the **Dynamic View Viewer**.

Accessing the Dynamic View Editor

You can access the Dynamic View Editor from the C•CURE 9000 **Data Views** pane.

To Access the Dynamic View Editor

1. Click the **Data Views** pane button .
2. Click the **Data Views** drop-down list and select **Dynamic View**.
3. Click **New** to create a new Dynamic View.

   - or -

   Click  to open a **Dynamic View** showing a list of all existing Dynamic View objects, right-click the Dynamic View you want to change, and click **Edit** from the context menu that appears

Dynamic View Editor Tasks

You can perform the following tasks with the Dynamic View Editor.

- Creating a Data Views Pane Object on Page 19
- Configuring a Dynamic View on Page 83
- Choosing Dynamic View Settings on Page 84
- Setting a Default View on Page 89
- Creating a Copy of a Dynamic View on Page 90

Configuring a Dynamic View

To configure a newly created Dynamic View, you open the **Dynamic View Editor** and adjust the settings for the view based on what you want the view to display, and how you want the information on the view to be shown.

Example:

You can set the view to display as a Card View (see Using Card View on Page 104).

To Configure a New Dynamic View:

1. Select **Dynamic View** from the **Data View** pane drop-down list.
2. Click **New**. The **Dynamic View Editor** opens (see Figure 31 on Page 82).
3. Type in a name for this Dynamic View in the **Name** field.
4. Type in a Description for this Dynamic View in the **Description** field.
5. To choose the display settings and columns to display for your Dynamic View, follow the steps in Choosing Dynamic View Settings on Page 84.
6. Click **Save and Close** to save the Dynamic View.

   - or -

   Alternatively, if you want to create a new Dynamic View as a copy of the existing Dynamic View, click **Create Copy**. For information, see Creating a Copy of a Dynamic View on Page 90.

Choosing Dynamic View Settings

You can choose setting in the **Dynamic View Editor** that will determine how the Dynamic View displays information about an object type, including attaching a query to filter the data retrieved from the database.

To Choose Dynamic View Settings

1. From the **Dynamic View Editor**, to set the object type that your Dynamic View displays, click ... for the **View Type** field to open a Select Type dialog box and click an object type from the list to select it.

NOTE Changing the view type of a Dynamic View clears the list of fields and detaches the Query (if any) attached to the Dynamic View.

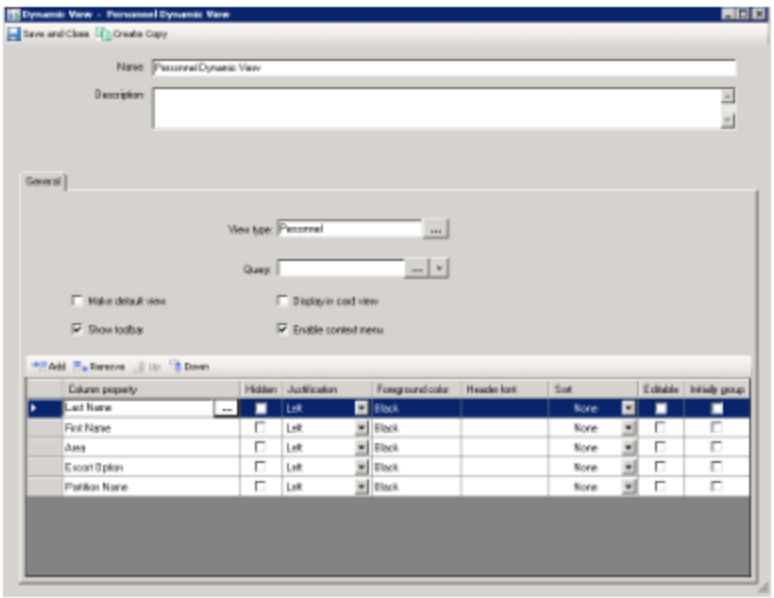
2. In the **Query** field, you can click ... to use a query object as a filter for the Dynamic View.
   - In the list of Queries that appears, select an existing query, either pre-defined or user-created, for the object type you chose in **View Type**.

   This attaches the existing Query to this Dynamic View. Any time you select this Dynamic View, the data is filtered by the parameters in this Query.
3. To make this Dynamic View the Default View for all objects of this class, select **Make default view**.
4. To make this Dynamic View display in Card View rather than as a list, select **Display in card view**.
5. To allow the user to use the Dynamic View toolbar, select **Show toolbar**.
6. To allow the user to use the commands on the context menu (Edit, Delete, etc.), select **Enable Context Menu**.
7. Use the toolbar buttons on the properties table to choose the Columns to display on your Dynamic View, and to position those columns.

   - Click to add a property to the table, which adds a column for that property to the Dynamic View. See Table 13 on Page 91 for definitions of the Dynamic View Properties.
   - Click to remove a property from the table, deleting a column for that property from the Dynamic View.
   - Click to move a property up in the table, which moves that column to the left in the Dynamic View.
   - Click to move a property down in the table, which moves that column to the right in the Dynamic View.

   Figure 32 on Page 85 shows an example of Configured Column rows.

Figure 32: Dynamic View Configured Columns



8. Click **Save and Close** to save the Dynamic View.

   - or -

   Alternatively, if you want to create a new Dynamic View as a copy of the existing Dynamic View, click **Create Copy**. For information, see Creating a Copy of a Dynamic View on Page 90.

How to Save a Dynamic View

Both the Administration Station and the Monitoring Station have a *user.config* file which stored information that the user has configured. The file has the following path:

```
[Windows Drive]:\Users\[UserName]\AppData\Local\SoftwareHouse\SoftwareHouse.NextGen.Cli_
StrongName_[Encypted Data]\2.10.0.0
```

The file contains the following:

- Information that refers to the position of screens and objects that the user configured.
- Dynamic View data and its associated columns and column widths which a user has configured.

The *user.config* file is stored locally to the client. If the user starts the application from a different computer, a different configuration set could be used.

If you want to override the default group in the Dynamic View, create a default Dynamic View for the specified object type. If you do not have privileges to see a certain Dynamic View for a particular object type, the system works as if the Dynamic View is not defined.

Adding Columns

When you add columns to a Dynamic View, C•CURE 9000 saves the column name and width information in the *user.config* file.

There are two types of Dynamic Views stored:

1. The first type has an associated key that refers to the type of object displayed in the Dynamic View. This is truly dynamic as it has not been saved to the database and is created at runtime.
2. The second type has an associated key that refers to the ObjectID of the Dynamic View found in the database table.

The *user.config* data pertaining to a Dynamic View appears in the file when the user closes the Dynamic View and\or closes the Administration Station or Monitoring Station applications that they are using to view it.

Example:

The *user.config* can contain the following data:

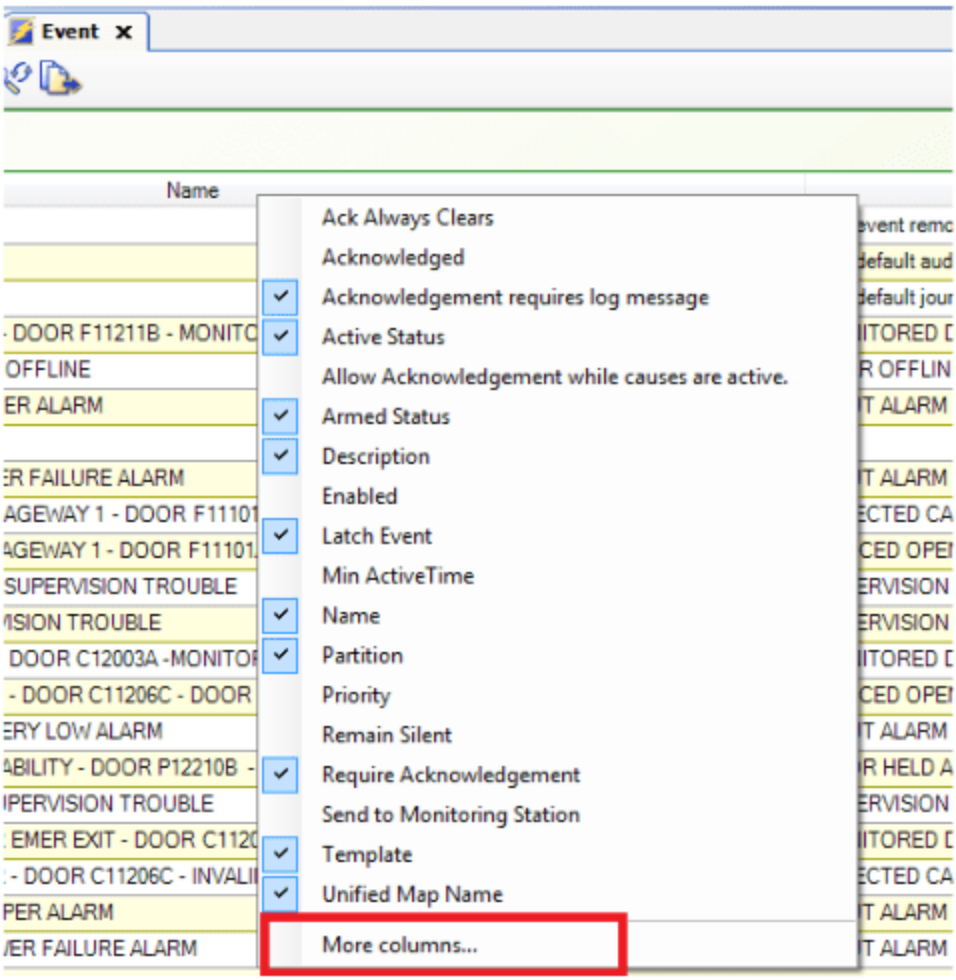
```
<configuration>
<userSettings>
<SoftwareHouse.CrossFire.Client.ClientComponents.DynamicViews.DynamicViewControl>
<DynamicViews>
<DynamicView key=”SoftwareHouse.CrossFire.Common.Objects.Operator”>
<DynamicViewColumns>
<DynamicViewColumn key="Name" width="509" type="System.String" title="Name"
editable="False" livevalue="False"/>
<DynamicViewColumn key="Description" width="347" type="System.String"
title="Description" editable="False" livevalue="False" />
<DynamicViewColumn key="WindowsPrincipal" width="116" type="System.String"
title="SelectionColumn" editable="False" livevalue="False" />
</DynamicViewColumns>
</DynamicView>
<DynamicView key="20">
<DynamicViewColumns>
<DynamicViewColumn key="PrimaryPortrait" width="102" type="System.Byte[]"
title="Primary Portrait" editable="False" livevalue="True" />
<DynamicViewColumn key="LastName" width="98" type="System.String" title="Last Name"
editable="False" livevalue="True" />
<DynamicViewColumn key="FirstName" width="98" type="System.String" title="First
Name" editable="False" livevalue="True" />
<DynamicViewColumn key="Text4" width="98" type="System.String" title="Text4"
editable="False" livevalue="True" />
<DynamicViewColumn key="Text14" width="98" type="System.String" title="Text14"
editable="False" livevalue="True" />
<DynamicViewColumn key="PersonnelType" width="102" type="….ObjectKey"
title="Personnel Type" editable="False" livevalue="True" />
</DynamicViewColumns>
</DynamicView>
</DynamicViews>
```

```
</SoftwareHouse.CrossFire.Client.ClientComponents.DynamicViews.DynamicViewControl>
</userSettings>
</configuration>
```

When you add or remove a column to the Dynamic View, the associated data in the *user.config* file changes accordingly.

While you can remove a default column from a Dynamic View, the column reappears the next time you access the Dynamic View. A **default** column can be the column which appears the first time you access a Dynamic View. You can add any additional columns that are available when you right-click on the Dynamic View column headers through the column selection menu that appears. You can either check or uncheck the list of columns or select the **More columns...** menu option and select multiple columns from the object selection control that appears (see Figure 33 on Page 87):

Figure 33: Dynamic View - Checkbox Column Selection Menu



See Setting a Default View on Page 89 for information on how to set a default view.

Default Grouping of Dynamic View Rows

The C•CURE 9000 application lets you group Dynamic Views on one or more columns. You can configure grouping in a Dynamic View object editor or at run-time for an opened Dynamic View.

Some Dynamic Views installed with C•CURE 9000 system are grouped by default to make it easier to select related objects and to make the grouping visible to new users of the system.

Default grouping is applied to the following Object Types:

- Query (see Figure 34 on Page 88)
- Report Result (see Figure 35 on Page 88)
- Reports (see Figure 36 on Page 89)
- User-Defined Fields (UDFs) (see Figure 37 on Page 89)

Figure 34: Dynamic View Default Query Grouping

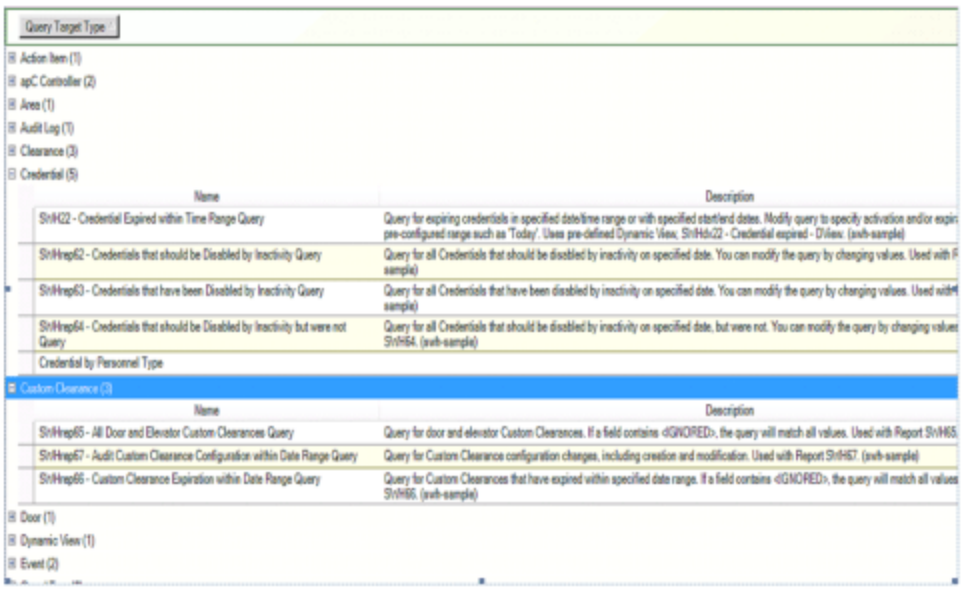


Figure 35: Dynamic View Default Report Result Grouping

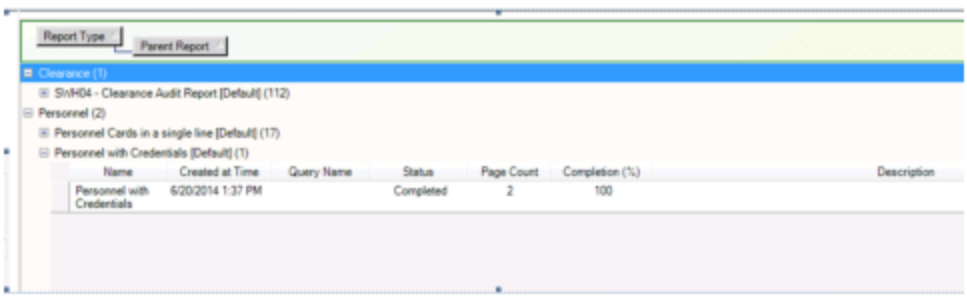


Figure 36: Dynamic View Default Reports Grouping

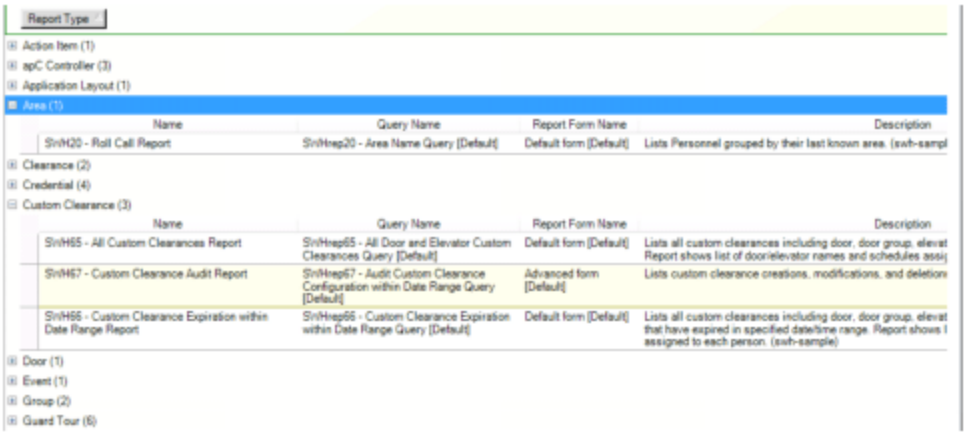
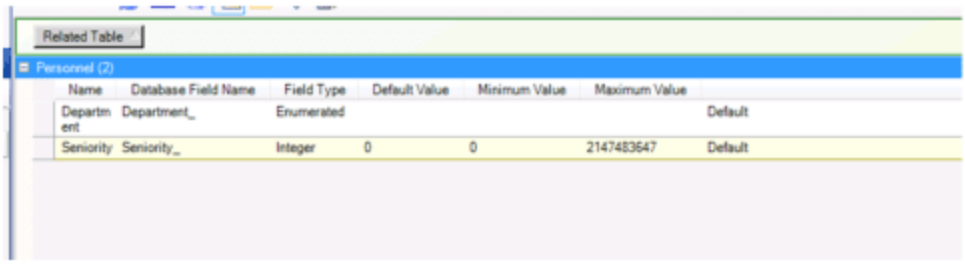


Figure 37: Dynamic Views Default UDF Grouping



Setting a Default View

Default views are views that control how the Quick Search feature displays information. When a default view is set for an object type, a Quick Search of the object type displays the default view columns in the Content pane. The default view is also used when a user runs an existing Query (from the Advanced Search pane, for example, or an Instant Query). For information, see Query Overview on Page 146.

In addition, the settings for Editing in Place for each column in the Quick Search display are governed by the **Editable** setting for that column in the default view. See Editing In Place with Dynamic Views on Page 102.

The default view initially provided for Quick Search is to display only the **Name** and **Description** fields, and to disable in-place editing.

There can only be **one** default view per object type. When you select **Make default view** while editing a Dynamic View and save that setting, that new view becomes the default view for its object type—clearing the setting in the Dynamic View that was previously the default view.

If an object type does not have a default view, the system creates a default view on the fly, displaying only Name and Description in most cases. Some object types, such as Data Imports, have more columns in their default Dynamic View.

To Set a View as the Default View

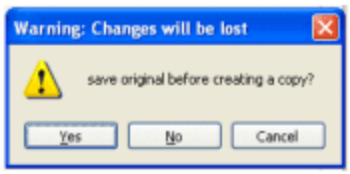
1. Configure a Dynamic View or Create a Dynamic View.
2. Set the object type for the view by choosing a View Type.
3. Add the columns you want to be displayed in the default view for this class.
4. Select **Make default view**.
5. Click **Save and Close** to save the Dynamic View settings. The view you edited is now the default view for its object type.

Creating a Copy of a Dynamic View

You can create a copy of a Dynamic View, using it as a blueprint for a new Dynamic View. Any fields configured in the existing Dynamic View are copied for the new Dynamic View—only the **Name** field is blank. (For information on copying one of the **pre-defined** Dynamic Views, see To Customize a Pre-defined Report/Query/Dynamic View on Page 269.)

To Create a Copy of a Dynamic View

1. Create/modify a Dynamic View on the **Dynamic View Editor**. For information, see:
   - Creating a Data Views Pane Object on Page 19
   - Configuring a Dynamic View on Page 83
   - Choosing Dynamic View Settings on Page 84.
2. Click **Create Copy**. The following warning message appears if the current object has been modified in the Dynamic View Editor.



   - Click **Yes** to save the existing Dynamic View and its configuration and open a copy on the **Dynamic View Editor**.
   - Click **No** to open a copy on the **Dynamic View Editor** without saving the existing Dynamic View.
   - Click **Cancel** to return to the **Dynamic View Editor** without creating a copy.

   If you clicked either **Yes** or **No**, the **Dynamic View Editor** re-appears with a copy of the Dynamic View displayed and the **Name** field blank.

NOTE If an existing Dynamic View is opened and you click **Create Copy**, the copy is created immediately.

Dynamic View Editor Definitions

The following sections provide definitions of Dynamic View editor fields and buttons.

Dynamic View Editor Fields

Table 13 on Page 91 provides definitions of the Fields on the **Dynamic View Editor**.

Table 13: Dynamic View Editor Field Definitions

Fields	Description
Name	The name of the Dynamic View. This field is required to have an entry.
Description	Type a description of your Dynamic View that will help you distinguish it from other similar Dynamic Views.
View type	Click ... to select the type of C•CURE 9000 object you wish to display in the Dynamic View.
Partition	A read-only field displaying the name of the Partition to which this Dynamic View belongs.
Query	Click ... to select a Query from a dialog box that appears. You can only select Queries based on the Object type you chose for **View type**. If you have not chosen a **View type**, or if the **View type** you chose does not have any queries defined, the **Query** dialog box will be empty.
Make default view	Select this choice to designate the Dynamic View you are editing as the default view for the selected object type. **Example:** If you are building a Dynamic View of Personnel, and you select **Make default view**, this Dynamic View will replace the current default Dynamic View for Personnel. When a user selects **Personnel** in the **Personnel** pane and clicks  , this view will open by default.
Display in card view	You can choose to make the Dynamic View open for viewing in **Card View**. If you make the toolbar available, a user can switch between **Card View** and **List View** using a button on the toolbar. If you do not select Show Toolbar, the user cannot switch from **Card View** to **List View**.
Show toolbar	You can choose to make the **Dynamic View** toolbar available or not available for this Dynamic View. If you enable the toolbar, users can to sort, filter, print, and refresh the Dynamic View, as well as view the list in **Card View**. These choices are not available if the toolbar is not visible.
Enable context menu	You can choose to make a context menu available or not available for objects in your Dynamic View. Typical choices on the context menu are **Edit**, **Delete**, and **View** (the exact choices in the context menu depend on the type of object being displayed).
Column property	Choose a property of the object type for the view. Each row in the table represents a column in the Dynamic View that corresponds to a property of the object. **Example:** If your Dynamic View lists Personnel objects, and you choose **Last Name** as a column property, then one of the columns of your Dynamic View will display the **Last Name** of each Personnel object listed in the Dynamic View.
Hidden	Select to not display this column. You can sort or group by a hidden column.

Dynamic View Editor Field Definitions (continued)

Fields	Description
Justification	Align the column text to the left, right, or center by choosing a value from the drop down list.
Foreground color	Select the color to use for text in this column from the **Windows color picker** dialog box that appears.
Header font	Select the font to use for the column header for this column.
Sort	Set the sort order of data in the column. Choices are None, Ascending, or Descending. None means that the objects are displayed in the view in the order that they are retrieved from the database.
Editable	When a column is marked as editable, you can click a cell to open the control which edits the property. When you change the value of a property this way, the change is validated and the property is updated when you click in another cell.
Initially group	Sets the property to be the primary object to group under. See Default Dynamic Views on Page 93.

Dynamic View Editor Buttons

Table 14 on Page 92 provides definitions of the Buttons on the **Dynamic View Editor**.

Table 14: Dynamic View Editor Buttons

Name	Description
Save and Close	Click when you have completed any changes to the Dynamic View and wish to save those changes. The **Dynamic View Editor** closes. (This button is not available for the Software House pre-defined Dynamic Views.)
Create Copy	Click this button when you want to create a new Dynamic View using the entries in the Dynamic View currently on the **Dynamic View Editor** as a template. If the Dynamic View is user-created and the current Object has been modified, a warning appears asking if you want to save your original before creating the copy. Click **Yes** to save the original Dynamic View, **No** to **not** save it, and **Cancel** to return to the original Dynamic View without making a copy.
Close 	Click when you want to close the **Dynamic View Editor** without saving your changes. A prompt appears so that you can choose to continue editing or close the editor. Click **OK** to close the editor without saving changes, or click **Cancel** to continue editing the Dynamic View.
Add	Click to add a row to the table, which adds a column to the Dynamic View.
Remove	Click to remove the selected row(s) from the table. Click anywhere in the row to select it. Hold down **CTRL** and click rows to select more than one row.
Up	Click to move one or more selected rows up in the table. Click anywhere in the row to select it. Hold down **CTRL** and click rows to select more than one row.
Down	Click to move one or more selected rows down in the table. Click anywhere in the row to select it. Hold down **CTRL** and click rows to select more than one row.

Dynamic View Viewer

The **Dynamic View Viewer** displays a list of the objects you configured for the Dynamic View using the **Dynamic View Editor**. The Viewer gives you a variety of sorting and filtering tools for customizing the view, as well as the ability to edit data in place in the view. There are default Dynamic Views for many objects in the C•CURE 9000 database. Consult the relevant C•CURE 9000 User Guides for information about these object types.

For more information, see:

- Default Dynamic Views on Page 93
- Dynamic View Viewer Definitions on Page 105

NOTE By system default, a Dynamic View displays a maximum of 200,000 rows. You can use a System Variable to change this number. For information, see the UI Settings section in the System Variables chapter in the *C•CURE 9000 System Maintenance Guide*.

NOTE If your C•CURE 9000 system is partitioned, each default Dynamic View displays a **Partition** column as the right-most column of the Dynamic View.

If you do not want the Partition column to display in a Dynamic View, you have to edit the Dynamic View and set the **Partition** column to 'hidden'.

Default Dynamic Views

C•CURE 9000 provides several System default Dynamic Views that you can view and use in the Dynamic View Viewer.

- Time Zone View
- Schedules View
- Holidays View
- Audit Log View
- Credentials View
- System Variables View
- Personnel View
- Reports View
- Report Results View
- Journal View
- Report Form View
- Digital Certificates View
- Event View
- Guard Tour View

You can see these Dynamic Views by opening the Dynamic View that lists them. See Viewing a List of Data Views Pane Objects on Page 20.

Default Dynamic Views for other object types are created on the fly and contain two fields only—Name and Description in most cases—until you create a customized default view for them. (Some object types, such as Data Imports, have more columns in their default Dynamic View.)

NOTE C•CURE 9000 also includes two pre-defined Dynamic Views, numbered **SWHdv02** and **SWHdv22**, as examples of the ways in which you can customize views. You can use these "as is" or copy and customize them as you want. For detailed information, see:

- Overview: Pre-defined Reports, Queries, and Dynamic Views on Page 254
- Creating a Copy of a Dynamic View on Page 90.

Dynamic View Viewer Tasks

You can perform the following tasks with the **Dynamic View Viewer**.

- Viewing a List of Data Views Pane Objects on Page 20
- Adding or Removing Columns in a Dynamic View on Page 94
- Changing Column Order and Width in Dynamic Views on Page 95
- Using Dynamic View Viewer Tabs on Page 96
- Grouping Dynamic View Information on Page 99
- Filtering Dynamic View Information Using the Filter Bar on Page 96
- Filtering Partitions and Maintenance Mode Objects on Page 97
- Retrieving the Query That Created a Dynamic View on Page 101
- Sorting Dynamic View Information on Page 101
- Printing Information from Dynamic Views on Page 101
- Editing In Place with Dynamic Views on Page 102
- Editing Records on Dynamic Views Using Set Property on Page 102
- Exporting Records on Dynamic Views to XML/CSV on Page 22
- Exporting Dynamic View Contents to Excel (.XLSX) on Page 103
- Deleting a Data Views Pane Object on Page 19
- Using Card View on Page 104

Adding or Removing Columns in a Dynamic View

You can add or remove columns in a Dynamic View to customize the view to meet your needs while you are viewing the data.

NOTE When you add or remove columns from the Dynamic View in the Viewer, you are **not** saving these changes to the View. The changes are only in effect while you have the View open. To actually change the View permanently, you need to Configure the View (see Dynamic View Editor Tasks on Page 83) and save your changes.

To Add or Remove Columns in Dynamic Views

1. Open the List of Dynamic Views. See Viewing a List of Data Views Pane Objects on Page 20.
2. Open a Dynamic View by double-clicking a particular Dynamic View in the list.
3. Right-click any column in the list.

   A context menu appears showing all fields of the object type that can display as columns in the Dynamic view. Fields currently displayed in the view are marked with a ☑.

   If the object type selected has more than 27 associated fields, the context menu lists only a few of the fields and at the bottom, a **More columns**.... button.
4. To add/remove a field as a column in the Dynamic View:
   - To add a field as a column in the Dynamic View, click a field in the list without a ☑.
   - To remove a field as a column in the Dynamic View, click a field in the list with a ☑.
5. If **More columns**... is available in the context menu, click to open a Selection list of the fields for the Object type.
   - To add a field as a column in the Dynamic View, click one or more fields in the list and then click **OK**.
   - To remove a field as a column in the Dynamic View click a field in the list with a ☑.

Changing Column Order and Width in Dynamic Views

You can change the left/right order of the columns in a Dynamic View, as well as the width of each column in the view.

NOTE When you change the order of columns for the Dynamic View in the Viewer, you are not saving these changes to the View. The changes are only in effect while you have the View open. To actually change the View permanently, you need to Configure the View (see Dynamic View Editor Tasks on Page 83) and save your changes.

To Change Column Order in Dynamic Views

1. Open the List of Dynamic Views.
2. Open a Dynamic View by double-clicking a particular Dynamic View in the list.
3. Click any column heading in the list, and drag that column to a new position. The Dynamic View columns are adjusted to the new column order you have established.

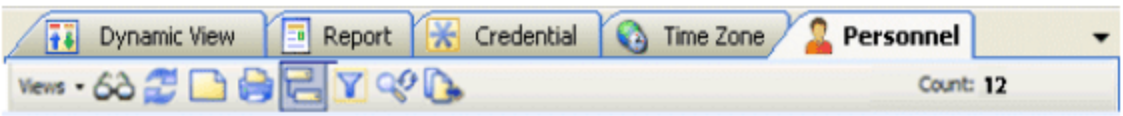
To Change Column Width in Dynamic Views

1. Open the List of Dynamic Views.
2. Open a Dynamic View by double-clicking a particular Dynamic View in the list.
3. Hover the cursor over the column headings and move the cursor to the edge of the column heading you wish to resize. The cursor changes to ⇹.
4. Drag this cursor to the left or right and release the mouse button to make the column wider or narrower.

Using Dynamic View Viewer Tabs

You can open multiple Dynamic View Viewers in a single window. Each of these viewers becomes a tab in the tab bar at the top of the window, with an object type and icon to distinguish between Viewers. See Figure 38 on Page 96.

Figure 38: Dynamic View Tabs



When you click a tab, the Dynamic View for that tab becomes visible.

To configure a Dynamic View, you open the **Dynamic View Editor** and adjust the settings for the view, based on what you want the view to display and how you want the information on the view to be shown.

Example:

You can set the view to display as a Card View (see Using Card View on Page 104).

To Use Dynamic View Tabs

1. Open the list of Dynamic Views. The **Dynamic View Viewer** opens in the content pane displaying the list of Dynamic Views.
2. Double-click a particular Dynamic View in the list. That Dynamic View opens in the content pane.
3. Now the tab bar at the top of the content pane shows two tabs, the original Dynamic View tab and the tab for the Dynamic View you just opened.
4. Click the first Dynamic View tab and the original Dynamic View opens. You can now open additional Dynamic Views, and each one will add a tab to the tab bar.

Filtering Dynamic View Information Using the Filter Bar

You can filter a Dynamic View so that it only displays the data you are interested in.

NOTE This section describes using the Filtering bar. For information about filtering partitions and showing Maintenance Mode objects in the Dynamic View, see Filtering Partitions and Maintenance Mode Objects on Page 97.

Example:

If you were viewing a Journal View, and only wanted to see Operator Login entries, you could filter the View to exclude other types of log entries.

You can apply a filter to any and every column in the View, if you desire.

NOTE When you filter columns from the Dynamic View in the Viewer, you are not saving these changes to the View. The changes are only in effect while you have the View open. To actually change the View permanently, you need to Configure the View (see Dynamic View Editor Tasks on Page 83) and save your changes.

Enabling Filtering for a Dynamic View

To filter a Dynamic View, the **Enable Filtering** button must be toggled on.

To Enable Filtering for a Dynamic View

1. Open the List of Dynamic Views.
2. Open a Dynamic View by double-clicking a Dynamic View in the list.
3. Click  to enable filtering. The filter bar appears under the column headings of the Dynamic View.

Filtering a Dynamic View

To Filter a Dynamic View

1. Open the List of Dynamic Views.
2. Open a Dynamic View by double-clicking a Dynamic View in the list.
3. Click  to enable filtering. The filter bar appears under the column headings of the Dynamic View.
4. In the column you want to filter on, click  to open a drop-down list of filter criteria. Pick a filter criteria (such as “Starts with”) from the list.
5. You can enter filter values for that column by typing or by selecting a value from a drop-down list of values.
   - Type a value into the filter bar for that column. As you type, the Dynamic View is filtered to match your criteria.
   - Click  to open a drop-down list of values that occur in the Dynamic View in this column. You can pick a value from this list to filter on.
   - Click  in a Date/Time column to open a Calendar control that lets you pick a date to filter on. You can use this date in combination with the Less than and Greater than types of filter criteria to filter on date values.
6. The Dynamic View updates to reflect the filter criteria you entered.

Clearing Filters in a Dynamic View

To Clear Filters in a Dynamic View

1. To clear filter criteria for a column, click  to the left of that column.
2. The Dynamic View updates to display the entire unfiltered list.

Filtering Partitions and Maintenance Mode Objects

The View Preferences dialog box, shown in Figure 39 on Page 98, is used to filter a Dynamic View to show only selected partitions and to view objects that are in Maintenance Mode.

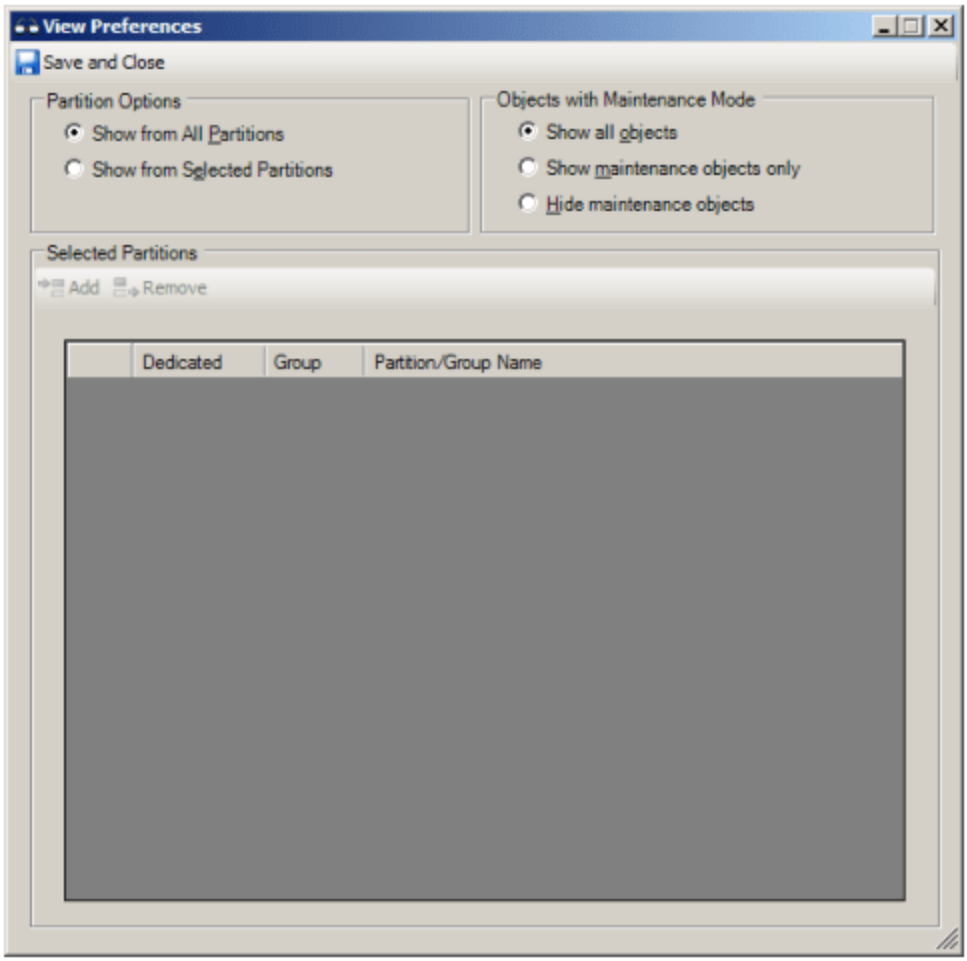
To access the View Preferences Dialog Box, click  .

The following rules apply to filtering partitions and viewing objects in Maintenance Mode:

- Partitions that were added to the Default Dedicated List during the Application Layout configuration can not be filtered out of the list view and are always visible.
- Operators must have the correct privileges assigned to them to be able to filter partitions and view objects tagged Maintenance Mode. Selections in the View Preferences dialog box are grayed out if the operator does not have the filtering privilege for partitions and/or Maintenance Mode.

  See the *C•CURE 9000 Hardware Configuration Guide* for information about using Maintenance Mode.

Figure 39: View Preferences Dialog Box (Dynamic View)



To View Preferences to Filter Partitions and/or View Objects in Maintenance Mode

1. Select an object from a Pane's drop-down menu and click to open a Dynamic View containing all the objects.
2. Click to open the View Preferences dialog box, shown in Figure 39 on Page 98. (See Table 15 on Page 99 for descriptions of the fields and buttons.)
3. Click **Save and Close**.

   The View Preferences settings are saved in the operator's configuration file.

Table 15: View Preferences Dialog Box Definitions

Button/Field	Description
Partition Options	
Show from All Partitions	If selected, no filtering is applied and all partitions are displayed in the Dynamic View. Objects tagged Maintenance are not shown.
Show from Selected Partitions	If selected, only partitions in the Selected Partitions list, including the Dedicated partitions, are displayed in the Dynamic View. Objects tagged Maintenance are not shown.
Objects with Maintenance Mode	
Show all objects	If selected, all partitions and all objects in maintenance mode are displayed.
Show maintenance objects only	If selected, objects tagged as Maintenance Mode, including the Dedicated partitions, are displayed in the Dynamic View. NOTE: Objects in Maintenance Mode are not displayed in the list view. They are only displayed in the Dynamic View
Hide maintenance objects	If selected, objects tagged as Maintenance Mode, including the Dedicated partitions, are not displayed.
Selected Partitions	
Add	Click **Add** to open the Name Selection dialog box to add pre-configured partitions to the list.
Remove	Removes partitions and partition groups from the view list. Click in the row of the partition/partition group to highlight it and click **Remove**.
Dedicated column	If a partition/partition group is checked (selected) in the Dedicated column, then that partition/partition group cannot be filtered or removed from the view list.
Group column	If shown as checked (selected), the partition was configured as a group of partitions.
Partition/Group Name column	The name assigned to the partition/partition group.

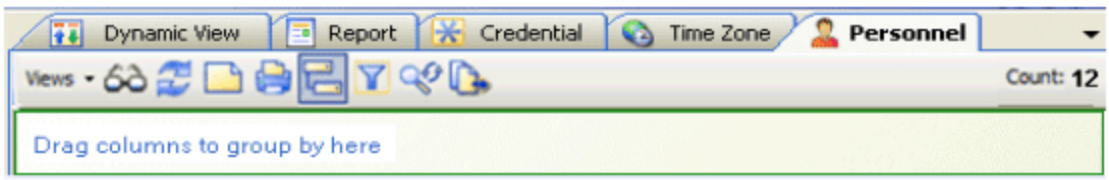
Grouping Dynamic View Information

You can change the appearance of a Dynamic View by grouping information. Groups allow you to see at a glance how many objects have the same values for a given property. You can even nest groups to further segment the data and show objects that share common values in multiple properties.

When you create a group from a column heading, each unique property value in that column becomes a group that lists that count of its group members. You can expand the group to show each member by clicking the + sign.

You create groups of data in a Dynamic view by dragging a data column heading to the **Drag Columns to Group by Here** area (see Figure 40 on Page 100).

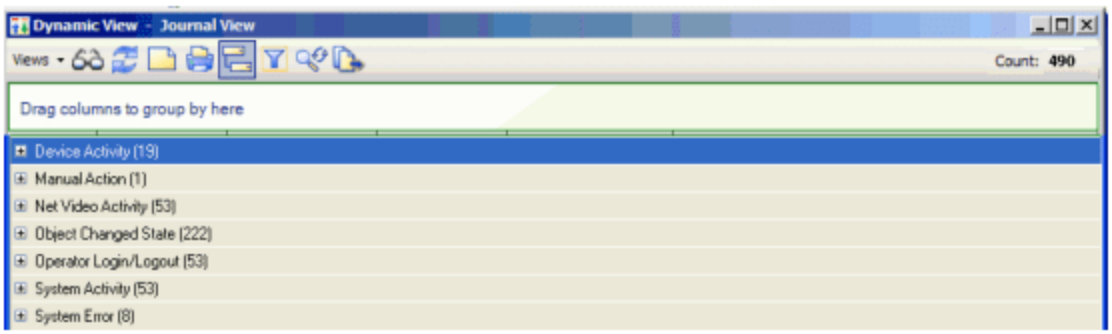
Figure 40: Grouping Dynamic View Information



Example:

If you are viewing the Journal View Dynamic View, drag the JournalLogMessageType column to the Drag Columns to Group by Here area, and at a glance you can see that there are 222 Object Changed State log entries, but only one Manual Action entry, out of 409 total messages. See Figure 41 on Page 100.

Figure 41: Grouped Dynamic View



To Group Dynamic View Information

1. Open the List of Dynamic Views.
2. Open a Dynamic View by double-clicking a Dynamic View in the list.
3. Click any column heading in the list, and drag that column to the **Drag Columns to Group by Here** area. That column heading becomes a Group Heading, and each property value in that column becomes a Group.
4. Click the ⊞ to view the members of a group.
5. Click on the Group Heading to change the direction (descending/ascending) of sorting for the groups.
6. To undo Grouping, drag a Group Heading back into the content area of the View, and the View changes the group heading back to a column heading.
7. To create nested group levels (groups of groups), drag additional column headings to the **Drag Columns to Group by Here** area.
   - If you place the column heading to the right of an existing group heading, it becomes subordinate to it (nested).
   - If you drag a column heading to the left of an existing group heading, the existing heading becomes subordinate to the new heading.

Retrieving the Query That Created a Dynamic View

You can recall the query used to create the list of objects in a Dynamic View to see the exact parameters and values that generated those particular results. You can then change the query, if you wish, and rerun it to obtain different results in the Dynamic View.

The displayed Query does not include criteria from the filtering of the Dynamic View. The Query defines the records selected from the database with the filter turned off.

For more information about querying, see Query Overview on Page 146.

To Recall a Dynamic View Query

1. On the Dynamic View, click  to recall the Query.

   The Query criteria and values used to retrieve the records for the Dynamic View appear on the Query parameters dialog box.
2. Review the query information, clicking the **Details** button as necessary.
3. Modify the query if you wish and rerun it to obtain different results.

NOTE If there was no query used to produce the list in the Dynamic View, the Query parameters dialog box will have no entries. However you can add query parameters and then run a query to limit the list of objects in the Dynamic View.

Sorting Dynamic View Information

You can sort the information displayed in a Dynamic View in one or more columns by clicking a column heading.

NOTE When you sort columns from the Dynamic View in the Viewer, you are not saving these changes to the View. The changes are only in effect while you have the View open. To actually change the View permanently, you need to Configure the View (see Dynamic View Editor Tasks on Page 83) and save your changes.

To Sort Dynamic View Information

1. Open the List of Dynamic Views.
2. Open a Dynamic View by double-clicking a Dynamic View in the list.
3. Click a column heading to sort the data in the Dynamic View alphabetically or numerically by that column. The sort direction toggles between Ascending order and Descending order .

Printing Information from Dynamic Views

You can print a C•CURE 9000 Dynamic View and filter, sort, group, add, or remove columns, or change the column order of the View prior to printing.

To Print a Dynamic View

1. Open the List of Dynamic Views.

2. Open a Dynamic View by double-clicking a Dynamic View in the list.
3. Click  and a Windows Printer dialog box opens.
4. You can select the size and orientation of the printout, set the margins, or change the printer.
5. Click **OK**. A **Print Preview** dialog box is displayed that lets you view a print preview of the view, zoom the preview, scroll through each page, and send the view to the printer.
6. Click the Printer icon to sent the Dynamic View to print.

Editing In Place with Dynamic Views

Typically, to edit data in a record listed in a Dynamic View, you would double-click the record to open the editor for that record, or right-click on the record and click **Edit** from the context menu.

However, if you have the appropriate privileges and the Dynamic View is configured to allow one or more data columns to be edited, you can edit the data directly from the Dynamic View.

Some Dynamic Views, such as the **System Variables** Dynamic View, are designed so that you can change values in editable fields by clicking in the field. If an edit box or other edit option appears, you can edit the field.

To Edit a Dynamic View Record in Place

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Dynamic View** from the **Data Views** pane drop-down list.
3. Click  to open a Dynamic View listing all Dynamic View objects.
4. Double-click a Dynamic View for the type of object you want to edit.
5. Click the field in a row in the Dynamic View that you want to edit. If the field is editable, an edit box or other edit option appears so you can add or change the value.
6. Type the new value or choose the value from a selection box for the field.
7. If you have the appropriate privileges, your changes are saved when you close the Dynamic View.

Editing Records on Dynamic Views Using Set Property

You can also use the context menu selection **Set property** to change the value of fields in one or more records displayed in a Dynamic View. When you right-click the record(s) in the Dynamic View and chose **Set property**, a dialog box appears that lets you access the editable fields for the object.

To Edit Records on a Dynamic View Using Set Property

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane and select **Dynamic View** from the pane drop-down list.
2. Click  to open a Dynamic View listing all Dynamic View objects.
3. Double-click a Dynamic View for the type of object you want to edit.

4. Select one or more rows in the list (using the **CTRL** key to select multiple rows), and right-click the selected row (s) that you want to edit.
5. Choose **Set property** from the context menu. A dialog box appears for you to select the field to edit.
6. Click ... to open a dialog box listing each of the editable fields for the object.
7. Click the field you want to edit to select it. The **Selection** dialog box closes and the name of the field you selected is inserted in the property field.
8. Edit the value for the field. If the field is text, you can type in a text value. If the field is a check box, you can select or clear the check box.
9. Click **OK** to confirm the new value. A dialog box appears to confirm that your change to the property has been made.

Exporting Dynamic View Contents to Excel (.XLSX)

You can use the Dynamic View toolbar selection **Export view contents to Excel®** to export the Dynamic View contents to an XLSX (Microsoft Office Open XML Format Spreadsheet) workbook file. This allows you to quickly and easily create a spreadsheet containing the data in a Dynamic View that you have displayed.

When you export a Dynamic View to an XLSX file, all available data in displayed columns of the Dynamic View is exported. Columns that are not included in the Dynamic View are not exported. Columns that are included in the Dynamic View, but are not visible without scrolling, are exported.

Example:

For each of your company's personnel records, out of the many Personnel fields available, you want to quickly create an Excel report that includes Last Name, First Name, Personnel Type, and whether or not the Disabled and/or Noticed Flags are set. You can add and delete Columns on an open Dynamic View, then click **Export view contents to Excel®** to save the information in the Dynamic View to a spreadsheet.

NOTE Records exported to XLSX cannot be imported back to C•CURE 9000. Export to XML (see Exporting Records on Dynamic Views to XML/CSV on Page 22) if you want to re-import the data.

To Export Dynamic View Contents to Excel

1. From the Administration Workstation **Navigation** Pane, select the function button for the class of object you want to view on—for example, **Personnel**.
2. From the drop-down menu in the Navigation toolbar, select the type of object you want to select—for example, **Personnel**.
3. Click to open a Dynamic View listing all the objects of the desired type.
4. If you are planning to export to Excel, add/remove data fields columns and change their order, as desired.
5. You can click the Dynamic View Toolbar icon to filter the records in the view. See Filtering Dynamic View Information Using the Filter Bar on Page 96 for more information.
6. Click A Windows **Save As** dialog box opens.
7. Navigate to the location where you want to save the XLS file, and type the filename you want to use.

8. Click **Save**.
9. If Windows successfully saves the file, a **View File in Excel** dialog box appears. Click **Yes** to view the file in Excel, or **No** to decline. If you choose **Yes**, but you do not have Excel on your system, an error message appears.

Using Card View

The Dynamic View Viewer provides a Card View capability that lets you view objects in the Viewer as Card Records, similar to the Address Card view in MS OFFICE Contacts.

To Enable Card View

You can view any Dynamic View as a Card View by clicking the Card View button.

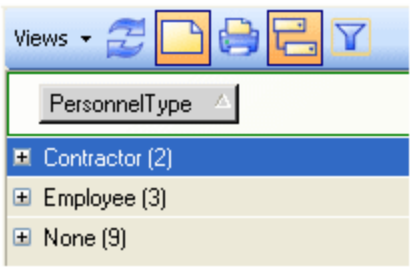
1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Dynamic View** from the Data Views pane drop-down list.
3. Click  to open a Dynamic View showing all Dynamic View objects.

Right-click on a Dynamic View in the list (for this example, choose Personnel View) and click View. The Personnel View opens.

4. Click the Card View button  . The Personnel View changes from a Dynamic List to a Card View list.
5. You can click  again to toggle back to a Dynamic View.

To Use Card View

- For each card in the list, you can click  to expand a card and view the details of the object in the Dynamic Card View.
- You can click on a field name in an expanded card and drag the field to another position in the card. Two red arrows appear to show you where the field will be positioned when you release the mouse button.
- You can print a Card View by clicking the Dynamic View Toolbar **Print** button.
- If you drag a field name (a column in Dynamic View mode) to the area of the view marked **Drag Columns to Group by Here**, the Dynamic View data is re-arranged into groups based on that field. For example, if you drag the Personnel Type field to that area, the view changes to groups made up of the Values of Personnel Type.



Dynamic View Viewer Definitions

This section provides definitions of the Fields and Buttons on the Dynamic View Viewer.

Dynamic View Toolbar

See Table 16 on Page 105 for definitions of the toolbar buttons on the Dynamic View Viewer.

Table 16: Dynamic View Toolbar Definitions

Button	Name	Description
	Views	Click the down arrow to show a list of Dynamic Views of the same object type as the view currently displayed. Click one of the views in the list, and the view in the current tab is changed to display the view you clicked. **Example:** If you had a view displayed that showed Personnel with four data columns, you could click View and display a view with 11 data columns, including columns that were not displayed in the original view.
	View Preferences	Click to open the View Preferences dialog box displaying pre-configured dedicated partitions, with an option to add non-dedicated partitions and/or objects tagged Maintenance Mode that the operator has the privilege to view. For more information, see Filtering Partitions and Maintenance Mode Objects on Page 97.
	Refresh	Click to manually refresh the current list, showing items in the list that have changed values, and new items in the list that were not included before. NOTE: Dynamic Views update automatically when values change or the list of items changes, but you can still perform an immediate update by clicking this button.
	Card View	Click to toggle **Card View**. For more information, see Default Dynamic Views on Page 93.
	Printer	Click to open a Windows Printer dialog box. You can select the size and orientation of the printout, set the margins, or change the printer. When you click OK, a Print Preview dialog box is displayed that lets you view a print preview of the view, zoom the preview, scroll through each page, and sent the view to the printer.
	Group	Click to toggle the data grouping bar. This button does not change the grouping of the data itself. When the data grouping bar is displayed, you can drag a column onto the bar to cause the data to be grouped by that property. For more information, see Default Dynamic Views on Page 93.
	Filter Bar	Click to toggle the data filtering bar. This button does not change the filtering of the data itself. When the data filtering bar is displayed, you can click the bar to set filtering criteria. Use the filter bar to enter values that will filter (narrow down) the entries (rows) in the Dynamic View. For more information, see Default Dynamic Views on Page 93.
	Recall Query	Click to display the query and parameter values used to generate this particular Dynamic View. Once the query appears on the Query Parameters dialog box, you can review the query and modify and rerun it if you wish. For more information, see Default Dynamic Views on Page 93.

Dynamic View Toolbar Definitions (continued)

Button	Name	Description
	Export view contents to Excel®	Click this button to save the contents of this Dynamic View as an .XLSX (Microsoft Office Open XML Format Spreadsheet) workbook file. A file save dialog box appears, and you can change the location and name of the file. A prompt appears to confirm that the file was saved, and asks you if you would like to view the file in Excel. If you do not have Excel, and you choose **Yes** from this dialog box, an error message is displayed, and the file is not opened. See Exporting Dynamic View Contents to Excel (.XLSX) on Page 103 for more information.
	Count	At the far right of the toolbar, the number of objects contained in the Dynamic View (the number of rows in the view) is totaled.

Dynamic View Tabs

Dynamic Views typically appear in the **Content** pane of the C•CURE 9000 Administration Client. The **Content** pane supports tabbed viewing of multiple views by displaying a tab bar at the top of the **Content** pane. The features of the Content pane tabs are shown in Table 17 on Page 106.

Table 17: Dynamic View Tabs Definitions

Feature	Name	Description
	Tab	The **Content** pane contains tabs for all open files across the top. you can click any tab and the tab contents become visible in the **Content** pane.
	Context Menu	You can right-click any tab to open the Context Menu. There are three choices on this menu. **Close** - Close the tab that is currently being displayed in the Content area. **Close All Tabs But This** - Close every tab except the tab that is currently being displayed in the Content area. **Close All Tabs** - Close every tab that is currently being displayed in the Content area.
	Open Files	Click to display a list of all open tabs, and click a tab in the list to display that tab.
	Previous/Next	Click **Previous** to scroll the display of tabs to the left, or **Next** to scroll the list of tabs to the right. These buttons are active only when there are more tabs open than can be shown on the tab bar.

Dynamic View Filter Bar

When you click the Filter button  , a filter bar appears under the column headings in the Dynamic View. You can use the filter bar to enter values that will filter (narrow down) the entries (rows) in the Dynamic View. For more information, see Default Dynamic Views on Page 93.

Table 18: Dynamic View Tabs Definitions

Feature	Name	Description
	Clear Filter Criteria	Click to clear all filter criteria that you have previously set for this column.
	Chose Filter Criteria	Click to select a filter criteria for this column. Possible values are: • Equals • Does not equal • Less than • Less than or equal to • Greater than • Greater than or equal to • Like • Matches Regular Expression • Starts with • Contains • Ends with • Does not start with • Does not end with • Does not match • Not Like
	Chose Filter Value	Click to display a list of all values for this property that exist in the Dynamic View, with any active filters in other columns applied. **Example:** If another column has a filter that causes all rows with a value of "No" to be filtered out, this list will not list any values from those filtered out rows. When you select a value from this list, the Dynamic View is filtered so that it displays only those rows that match the filter criteria for this column and the filter value you have chosen. **Example:** If the filter criteria for this column is "Equals" and you chose "No" from the Value list, the Dynamic View will display only rows where the property value in this column is "No". Additionally, this list contains: [Blanks] - displays only rows with a blank value [NonBlanks] - displays only row with a non-blank value [Custom] - creates custom criteria for this row

4

Maps

This chapter explains how to configure Maps.

In this chapter

Maps Overview

In C•CURE 9000, version 2.30, there are two types of Maps: **Legacy Maps** and **Maps**

- **Maps** - Maps created in version 2.30 are called **Maps**.
- **Legacy Maps** - Maps created in earlier versions are now called **Legacy Maps** when you upgrade to version 2.30. You can view and edit **Legacy Maps** in version 2.30, but you cannot create new Legacy Maps. For more information about Legacy Maps, see Legacy Maps on Page 113.

Converting Legacy Maps

- Current Legacy Maps will be removed from C•CURE 9000 in a future version, so you should convert your Legacy Maps to the new Map format.

The conversion process occurs in two phases.

- Phase 1 involves phasing out existing functions, including retrieving existing maps, associated icons, and vector files, and creating new map records that contain all applicable data to implement and load the maps.
- Phase 2 replaces the original maps by transferring the system relationships (links) to the newly converted maps.

Features

The C•CURE 9000 version 2.30 mapping implementation supports these features:

- Convert **Legacy Maps** to **Maps**.
- Zoom to show different portions of a map and a different magnification. The zoom feature provides the ability to zoom to 5000% (you can use the mouse wheel to zoom in and out.)
- Make the entire map viewable.
- Import a raster or vector graphic file to be the basis of your map.
- Add custom layers that contain different object icons to a Map, and you can show or hide any layers of the map.
- Import supports DWG, DXF, JPG, and PNG formats.
- Editor displays an icon status bar underneath the map that contains the coordinates as separate text boxes.
- Open a map from an icon -You can create an icon on a map and configure it to open another map in the database.
- Create a map template that can be used as the basis of other maps.
- Change the background color of a map. For example, you can use a different background color to distinguish between Maps. For example, the map showing inputs could have a green background, while the map showing outputs has a yellow background.
- Add an icon representing an object in the C•CURE 9000 database to a Map. You can also assign an action to the icon so that a user viewing the map can click the icon to perform such actions editing the object, Arming or Disarming the object.
- The maximum number of maps that you can simultaneously popup is 8.
- Export a Map graphic to JPG, while importing a graphic into a Map.

Map Editor

You can load and configure Maps to unite access control with floor plans or other building layout types that represent your facility. C•CURE 9000 allows you to load a CAD drawing and add C•CURE 9000 objects to monitor the object's state and location.

See the following topics for more information about Maps.

- Maps Overview on Page 110
- Accessing the Map Editor on Page 118
- The Map Editor Toolbar on Page 120
- Map Editor Tasks on Page 123
- Map Viewer on Page 143

Working with C•CURE 9000 Maps

The Maps feature includes two operational modes:

- **Administration mode** - allows you to configure the facility floor plans or site plans that show exterior features. This mode is accessed with the **Map Editor**. For more information, refer to The Map Editor Toolbar on Page 120.
- **Runtime mode** - allows you to monitor and interact with the configured building layouts or site plans. This mode is accessed with the context menu by selecting **View**, **Popup View** and **View in Current Tab**. For more information, refer to Map Viewer on Page 143.

The **Map Editor** lets you display your facility's floor or site plan, and place clickable icons that can open views of other objects and monitor the state of security objects.

Two types of graphic files can be imported into a map: vector files and raster files. The file types include:

- **Vector** - *.dwg , *dxf
- **Raster** - *.jpg, *.png

A vector image uses geometrical primitives such as points, lines, curves, and shapes or polygon(s), which are all based on mathematical expressions, to represent images in computer graphics.

- A vector image can be scaled without losing any details.
- A raster image is a dot matrix data structure representing a generally rectangular grid of pixels, or points of color, viewable via a monitor, paper, or other display medium. Raster images are stored in image files with varying formats.
- A raster image does not scale and the loss of detail is possible.

Converting Legacy Maps

The map conversion process is divided into two phases.

Phase 1: The first phase involves retrieving existing maps, associated icons and vector files from C•CURE 9000. Retrieving existing maps, that is, "Legacy Maps" includes loading each map, determining the location of icons; and creating a new map record that contains all applicable data for the new map tool to load the map and display the icons. The Legacy maps will be viewable, but you will be unable to edit or modify the maps in their original state.

Phase 2: The second phase involves replacing the original maps by transferring the system relationships (links) to the newly converted maps. Once the second phase is complete, the converted maps will have the same functions as their Legacy Maps precursors (pop-up for alarms and be available for additional edits, etc).

In Phase 2, you will be limited to viewing the original maps via the maps dynamic view. The original maps will still be available for linking if you want, but any links will be lost if we remove "old" maps from the system in a future release of C•CURE.

After an existing C•CURE 9000 system is upgraded to C•CURE 9000 2.30, you have the option of converting your existing maps, that is, "legacy maps" to the new maps implementation.

For more information about Map Conversion and the associated tasks, see Map Conversion on Page 276.

Legacy Maps

Legacy Maps are Map objects created prior to version 2.30 of C•CURE 9000. These Maps are currently supported, but they will be deprecated in a future version of C•CURE 9000. A conversion program is provided to facilitate the updating of these Maps to the new Map format. See Map Conversion on Page 276.

You can edit existing Legacy Maps but you cannot create new Legacy Map objects.

For more information on the Legacy Map Editor, see:

- The Legacy Map Editor Toolbar on Page 113
- Legacy Map Viewer on Page 116

The Legacy Map Editor Toolbar

The **Legacy Map Editor** Toolbar (see Figure 42 on Page 113) allows you to load an existing building floor plan and doe the following:

- Add layers to it
- Insert or add an object on the plan
- Resize the object (such as an icon representing a camera or door)
- Drag the object to its actual location in the facility
- Save the object to that position.

The **Map Editor** Toolbar buttons and functions are explained in Table 19 on Page 113.

Figure 42: Map Editor Toolbar

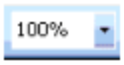
Table 19: Map Editor Toolbar

Button	Function
	**Clear** – clears the Map allowing you to start anew.
	**Load external file** – opens a Windows file selection dialog box so you can load a graphic file, such as a floor plan file, to start building a map. Two file categories exist: vector files and raster files. The file types include: • Vector - *.dxf, *.dwg, *.dwf, *.svg, *.wmf. • Raster - *.jpg, *.bmp, *.gif, *.png, *.tif. You can select the file type to load by choosing either Vector or Raster in the Files of type field on the Windows file selection dialog box.
	**Set background color** – displays a Windows color picker dialog box for you to select a color for the Map background. The color you pick displays in the box to the right of the icon.

Map Editor Toolbar (continued)

Button	Function
	**Show map layers button** – displays a layers popup. Allows the user to manage the map layers. The Map Layers popup displays the following: • **Original** tab - presents the existing layers that get imported with the selected vector file. (No layers import with raster file types. In the case of raster file types, a new layer 0 is generated automatically since at least one layer is required.) This tab allows you to determine which layers should appear in the map. De-selecting a layer hides that layer in the map. This tab includes the following three check boxes: - **Check all** – displays all layer content for all the layers. (This check box is also found on the Custom tab.) - **Uncheck all** – hides all layer content for all the layers. (This check box is also found on the Custom tab.) - **Display in Map** – displays all layer content for the selected layer. (This check box is also found on the **Custom** tab.) • **Custom** tab – Allows you to manage layers. For example, you can create an "event" layer and place all the C•CURE 9000 **Event** icons on that layer. Then you could create a "video" layer and place all cameras and tours on that layer. Both layers can be monitored simultaneously. Also, both layers can be hidden or either one displayed. This tab includes the following two buttons: - **Add layer** – add a new layer to the map. - **Remove layer** – remove a layer from the map; all icons embedded in this layer are also removed.
	**Layer Name Combo Box** – identifies the current active layer. Any C•CURE 9000 icons added to the map are embedded in this layer.
	**Show Track Window** – displays a movable box that represents the visible area of the map. You can drag the box to adjust which portion of the Map graphic is visible.
	**Show Magnify Window** – displays a zoomed region that magnifies the map area over which it is dragged.
	**Show Coordinates Window** – displays a **Map Coordinates** popup window that provides precise information for the screen pixel locations of the window, dimensions, mouse position, and the position of map icons. The **Map Coordinates** window incorporates the current zoom level, which means that some pixel values may be represented by negative numbers (since they are off-screen). Double-clicking the Icon name causes the associated icon to reveal its location by temporarily blinking. If the icon is off-screen, a message suggests the user zoom out. If the icon is under the Map Coordinates form, the form's opacity will adjust, allowing the user to see the icon blinking through the form.
	**Set X Axis** – If selected, you can move along the X - axis for zooming and shift to XY coordinates (if selected); used in conjunction with the  and  buttons.
	**Set Y Axis** – If selected, you can move along the Y-axis for zooming and Shift to XY coordinates (if selected); used in conjunction with the  and  buttons.

Map Editor Toolbar (continued)

Button	Function
	**Shift to XY coordinates** – If selected, you can Shift to XY coordinates along the selected axis (either or both); used in conjunction with the  and  buttons.
	**Zoom into map** – as long as it is held down, the map continues to zoom in until the maximum is reached.
	**Zoom Units** – select a zoom percentage ranging from 50 to 5000%.
	**Zoom out from map** – as long as it is held down, the map continues to zoom out until the maximum is reached.
	**Fit map in Window** – fits the map into existing window. The percentage is also reset to 100%.
	**Grip and move the map** – adjusts the Map mode and cursor to a "four-arrow" orientation, providing a "grip" of the map so it can be moved; the track window updates accordingly. The Grip and Select buttons are mutually exclusive.
	**Select object on the map** – adjusts the Map mode and cursor to a cross-hair orientation providing an icon selector to edit and move icons on the map. Grip and Select are mutually exclusive.
	**Draw Zoom rectangle** – draws a rectangle on the map that will zoom to full screen.
	**Show tooltips** – when selected, icon tooltips appear when the mouse is hovered over an icon.
	**Show previous map** – click this to go to the previously displayed map. This button is unavailable when the first map is active.
	**Add an object to a map** – Clicking will result in placing an icon on the map in the current layer. The object's default icon will be placed on the map.
	**Save icon** – integrates and saves the icon in the map.
	**Cancel icon** – cancels the entire operation. If you have not saved the icon, it removes the icon from the map. If you are editing an existing icon, any changes you have made since you last saved the icon are discarded.
	**Delete the icon** – removes the icon from the map.
	**Edit icon** – invokes the **Maps Icon Properties** dialog box.
	**Print map** – invokes the Windows Print dialog box allowing you to print the current Map using your default printer.

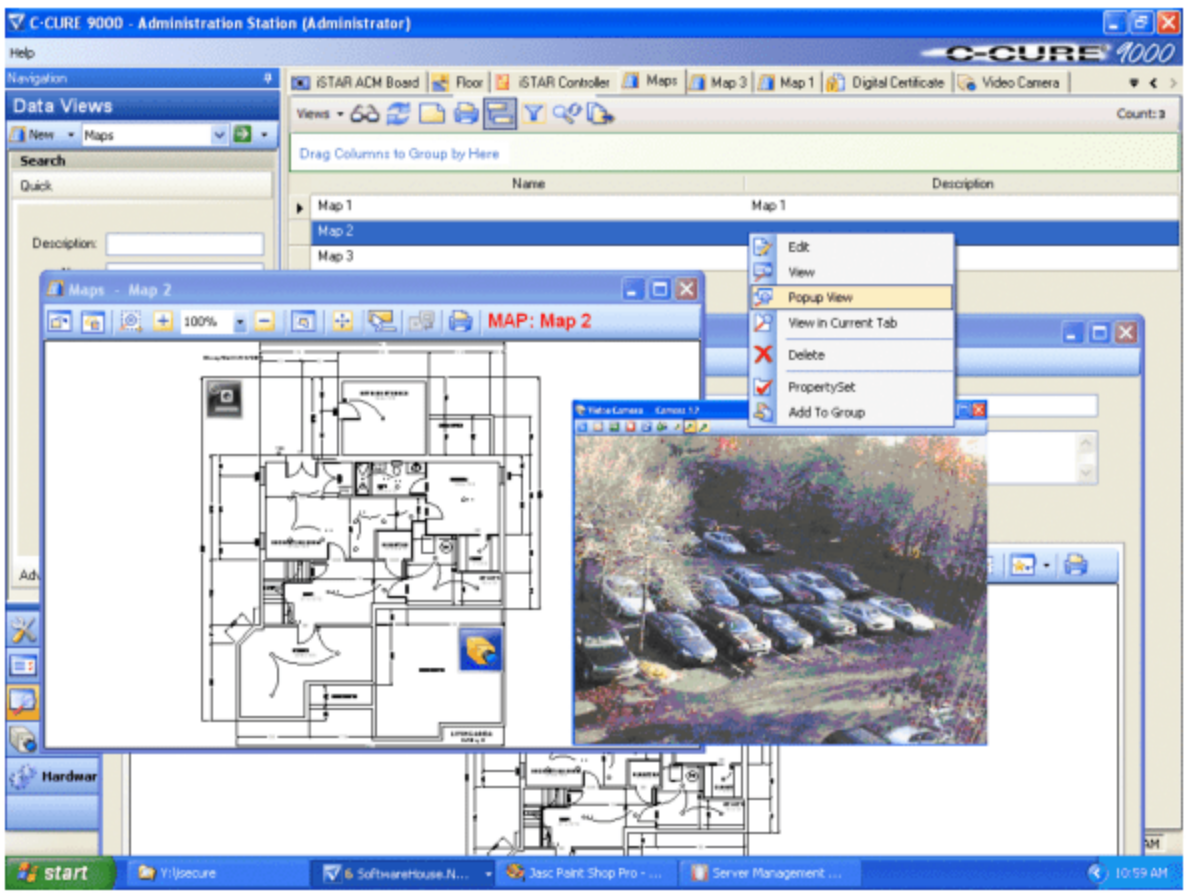
Map Editor Toolbar (continued)

Button	Function
	**Additional Buttons** – If the **Maps Editor** window is not maximized, some buttons are not displayed on the toolbar if a map is loaded. Click the arrow to display and choose one of these buttons.

Legacy Map Viewer

The **Legacy Map Viewer** allows you to view an existing Map (such as a building floor or site plan) and also view security objects represented as icons on the Map. These icons can be placed on the Map using the **Map Editor** (see Adding an Object Icon to the Map on Page 131). The Map objects can also be viewed using the context menu. The context menu is displayed when you right-click a Map row in the **Data Views** pane and also when you right-click an icon on the **Map Popup** View. See the example in Figure 43 on Page 116, where the selection of the **Popup View** of Map 2 is displayed with a subsequent **Popup View** of a security camera, both showing runtime conditions.

Figure 43: Popup Views

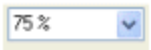


The context menus differ from one object type to another. In addition, the appearance of each context menu depends upon the setting of the **Show context menu on right-click** option configured in the **Maps Icon Properties** dialog box. You can also display a runtime popup of a camera by clicking the icon.

The **Map Viewer** Toolbar is shown below in Figure 44 on Page 117. lists the tools available in the **Map Viewer** Toolbar.

Figure 44: Map Viewer Toolbar

Map Viewer Toolbar

Button	Function
	**Show Track Window** – displays a popup that tracks movement over which it is dragged within the current map view.
	**Show Magnify Window** – displays a zoomed region that magnifies the map area over which it is dragged.
	**Draw Zoom rectangle** – draws a rectangle on the map that will zoom to full screen.
	**Zoom into map** – as long as it is held down, the map continues to zoom in until the maximum is reached.
	**Zoom out from map** – as long as it is held down, the map continues to zoom out until the maximum is reached.
	**Zoom Units** – select a zoom percentage ranging from 50 to 5000%.
	**Fit map in Window** – fits the map into existing window. The percentage is reset to 100%.
	**Grip and move the map** – adjusts the Map mode and cursor to a "four-arrow" orientation, providing a "grip" of the map so it can be moved; the track window updates accordingly. The Grip and Select buttons are mutually exclusive.
	**Show tooltips** – when selected, icon tooltips appears when the mouse is hovered over an icon.
	**Show previous map** – click this to go to the previously displayed map. This button is available when an Icon action opens another Map - you can click this button to go back to the first Map.This button is unavailable when the first map is active. **Example:** You create a Map of your campus, and add several Icons, each representing an building. You assign a left click action to each of the Icons to open a map of that building. If you open one of those Maps, the Show previous map button is active in the Map Viewer so that you can navigate back to the original Map.
	**Print map** – invokes the Windows Print dialog box allowing you to print the current Map using your default printer.

Accessing the Map Editor

You can access the **Map Editor** for both new Maps and Legacy Maps from the **C•CURE 9000 Data Views** pane.

In the **Navigation Pane** of the **Administration Workstation**, click **Data Views** to open the **Data Views** pane.

The **Map Editor** enables you to edit/view new **Maps**and view **Legacy Maps**.

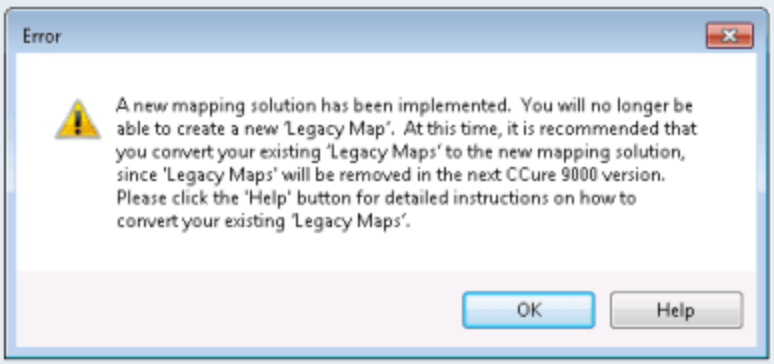
Accessing the Map Editor for Maps

To Access the Map Editor for New Maps

1. Click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Maps**.

3. Click  to open a **Dynamic View** showing all **Maps** objects.
4. Double-click on **Maps** in the list that you want to edit or view, and the **Map Editor** opens.

NOTE If you select **Maps** and click  , and the system detects that you have Legacy Maps, a message appears:

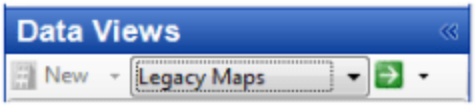


If you click the Help button, Map Conversion on Page 276 opens and provides instructions for converting your Legacy Maps to the new format.

Accessing the Map Editor for Legacy Maps

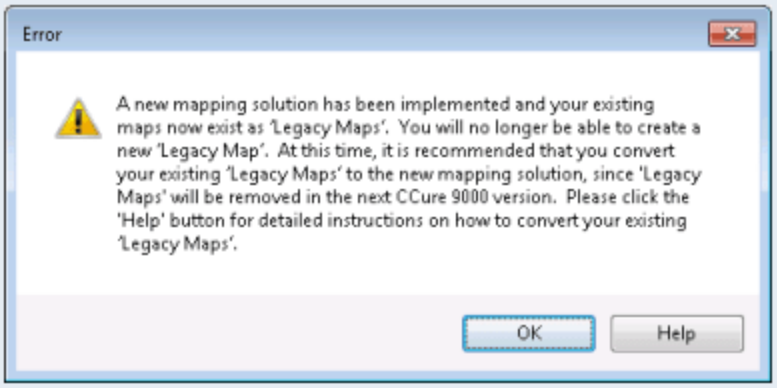
To Access the Map Editor for Legacy Maps

1. Click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Legacy Maps**.



3. Click to open a **Dynamic View** showing all **Legacy Maps** objects.
4. Double-click on **Maps** in the list that you want to view and the **Legacy Map Editor** opens.

NOTE If you click **New**, or attempt to edit a Legacy Map, a message appears:



If you click the Help button, Map Conversion on Page 276 opens and provides instructions for converting your Legacy Maps to the new format.

The Map Editor Toolbar

The **Map Editor** Toolbar (see Figure 45 on Page 120) allows you to load an existing building floor plan and do the following:

- Add layers to the plan
- Insert or add an object to the plan
- Resize the object, for example, using an icon to represent a camera or a door
- Drag the object to its actual location in the facility
- Save the object to that position.

The Map Editor Toolbar buttons and functions are described in Table 20 on Page 120.

Figure 45: Map Editor Toolbar

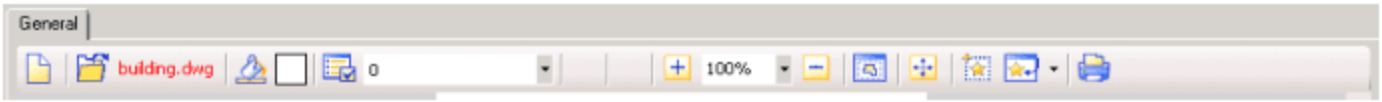
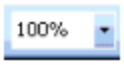


Table 20: Map Editor Toolbar

Button	Function
	**Clear** – clears the Map allowing you to start anew.
	**Load external file** – opens a Windows file selection dialog box so you can load a graphic file, such as a floor plan, to start building a map. Two file categories exist: vector files and raster files. The file types include: • Vector - ***.dwg *.dxf** • Raster - ***.jpg**, ***.png** You can select the file type to load by choosing either Vector or Raster in the **Files of Type** field on the Windows file selection dialog box.
	**Set background color** – displays a Windows color picker dialog box for you to select a color for the Map background. The color you pick displays in the box to the right of the icon.
	**Show map layers button** – displays a popup laye r that allows you to manage the map layers. The Map Layers popup displays the following: • **Custom** tab – Allows you to manage layers with vector graphics. For example, you can create an "event" layer and place all the C•CURE 9000 **Event** icons on that layer. Then you could create a "video" layer and place all cameras and tours on that layer. Both layers can be monitored simultaneously. Also, both layers can be hidden or either one displayed. This tab includes the following buttons: - **Check all** – displays all layer contents for all the layers. - **Uncheck all** – hides all layer content for all the layers. - **Add layer** – add a new layer to the map. - **Remove layer** – remove a layer from the map; all icons embedded in this layer are also removed.

Map Editor Toolbar (continued)

Button	Function
	**Layer Name Combo Box** – identifies the current active layer. Any C•CURE 9000 icons added to the map are embedded in this layer.
	**Zoom into map** – as long as this key is held down, the map continues to zoom in until the maximum is reached You can combine the zoom key and the mouse wheel.
	**Zoom Units** – select a zoom percentage from 50% to 5000%
	**Zoom out from map** – as long as this key is held down, the map continues to zoom out until the maximum is reached.
	**Fit map in Window** – fits the map into existing window. The percentage is also reset to 100%.
	**Select object on the map** – adjusts the Map mode and cursor to a cross-hair orientation providing an icon selector to edit and move icons on the map. Grip and Select buttons are mutually exclusive.
	**Add an object to a map** – Clicking will result in placing an icon on the map in the current layer. The object's default icon will be placed on the map. See Adding an Object Icon to the Map on Page 131 for more information about adding an icon. Click the dropdown arrow to the right of the icon to display a menu that allows you to Add an Icon, Add an Icon from template, and edit the Icon template library.
	**Add an icon from template** – If you have saved icons in the Icon Template Library, click this button to choose an icon to add to the map.
	**Icon Template Library** – Opens a dialog box that allows you to add icons for objects to the Icon Template Library.
	**Print map** invokes the Windows Print dialog box allowing you to print the current Map using the default printer.
	**Additional Buttons** – If the **Maps Editor** window is not maximized, some buttons are not displayed on the toolbar if a map is loaded. Click the arrow to display and choose one of these buttons.

Map Icon Status Toolbar

The **Icon Status Toolbar** appears below the Status Bar and shows the Toolbar fields as separate text boxes.

You can hover the mouse over an icon to display coordinate information in the toolbar. The values on the toolbar adjust as you an Icon around on the map.

Table 22 on Page 122 provides definitions for the fields on the **Icon Status Toolbar**.

Table 21: Icon Status Toolbar

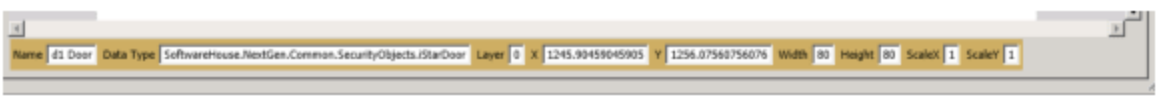


Table 22: Displaying Icon Status Bar Settings

Field	Meaning
Name	Name of the object the icon references in the system. When the user hovers the mouse over an icon, the icon status bar field displays the Name of the associated icon Example: **d1 Door**, **Event_2015-Plus**
Data Type	Underlying type of the object being referenced. When the user hovers the mouse over an icon, the icon status bar field displays the name of the associated data type. Example: **SoftwareHouse.NextGen.Common.SecurityObjects.iSTARDoor**
Layer	Number of layers , **0** indicates a single layer.
X	Exact X location in pixels.., Example: 630.86816720
Y	Exact Y location in pixels: Example: 1117.36334405145
Width	Width in pixels (80 pixels)
Height	Height in pixels (80 pixels)
Scale X	Relationship of the internal coordinate system to the pixels of the actual image along the X-axis. Height in pixels (80 pixels) Example **1**
Scale Y	Relationship of the internal coordinate system to the pixels of the actual image along the Y-axis. Example **1**

Map Editor Tasks

You can use the Map Editor to create custom Maps that show almost anything in C•CURE 9000. Typically Maps are used to show building floor plans with clickable icons that represent objects in the C•CURE 9000 database. Clicking an icon can open an object editor, view, or pop up another map.

The following sections provide instructions for some of the common tasks you can perform to configure Maps.

- Creating a Data Views Pane Object on Page 19
- Creating a Maps Template on Page 123
- Importing a Maps Graphic on Page 124
- Configuring and Saving a Map on Page 127
- Map Layers on Page 127
- Deleting a Map Layer on Page 129
- Setting the Active Map Layer on Page 129
- Showing or Hiding Map Layers on Page 130
- Changing the Map Zoom Level on Page 130
- Fitting the Map in the Window on Page 131
- Adding an Object Icon to the Map on Page 131
- Selecting an Icon on the Map on Page 138
- Editing an Icon on the Map on Page 136
- Printing a Map on Page 140
- Clearing the Map on Page 140
- Modifying a Map on Page 140
- Deleting a Data Views Pane Object on Page 19
- Opening a Map from an Icon on Page 141
- Viewing a List of Data Views Pane Objects on Page 20

Creating a Maps Template

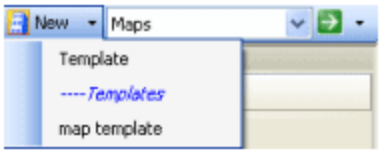
You can create a new Maps template to use as the basis of additional maps. This function is useful for creating Map templates with multiple layers. You can create and configure new maps based on the templates::

Features include:

- Showing or hiding some of the layers.
- Zoom to show a different portion of the map.
- Using a different background color to distinguish between Maps. For example, the map showing inputs only could have a green background, while the map showing outputs only has a yellow background..
- Changing the icon size.

To Create a Maps Template

1. In the **Navigation Pane** of the **Administration Workstation**, click **Data Views** to open the **Data Views** pane.
2. Select **Maps** from the **Data Views** pane drop-down list.
3. Click the down arrow on the **New** button.



4. Click **Template** to create a new Map template.
5. The **Maps Editor** opens, and you can configure the Map template by naming it and loading a raster or vector graphic file.
6. To save the new Maps template, click **Save and Close**.

Importing a Maps Graphic

You can import a raster or vector graphic file to be the basis of your Map. You can import one graphic at a time onto your map. If you import a graphic to a map that already has an imported graphic, you can replace and/or update the previously imported graphic.

NOTE You can create a map without importing a graphic file or use a drawing as a graphic template. You can add object icons to a blank layer, and you can also change the background color of the map.

Once you import a graphic, you can use the other functions on the **Maps Editor** toolbar to customize its appearance. See Configuring and Saving a Map on Page 127 for more information.

To Import a Map Graphic

1. Create a new Map. (See Creating a Data Views Pane Object on Page 19).
2. On the **Maps General** tab toolbar, click  to Load an external file. A Windows file selection dialog box opens to allow you to load a graphic map file.
3. In the **Files of type** field, select the file type to load.
   - **Vector** - *.dxf, *.dwg
   - **Raster** - *.jpg, *.png
4. Navigate to the folder in which your graphic file is located using the standard Windows navigation buttons.
5. Select the Drawing file to load from the list of files in the folder and click **Open**. Or select the map drawing file and click the **Browse** button  .
6. You can select the graphic Layers by number or name

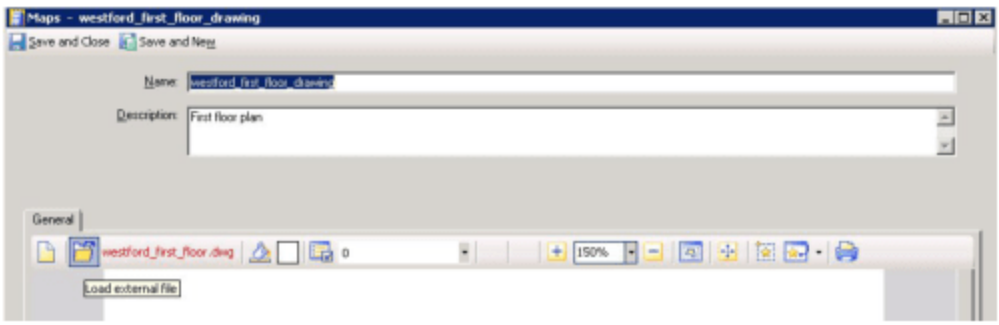
NOTE If the file you select cannot be imported correctly, an error message appears.
"File:<filename> Is not supported or file format is incorrect"
You can try importing the same file again, or re-save the file with a different file name or in a different format..

7. If an icon is still selected, right-click the icon to open the context menu. Choose **Save Icon** to save any editing you have done, or click **Cancel Icon** to discard any changes you have made.

Importing a Drawing File into C•CURE 9000

1. On the General tab, click **Load External File** to load a graphic file, such as a floor plan, to start importing a file.

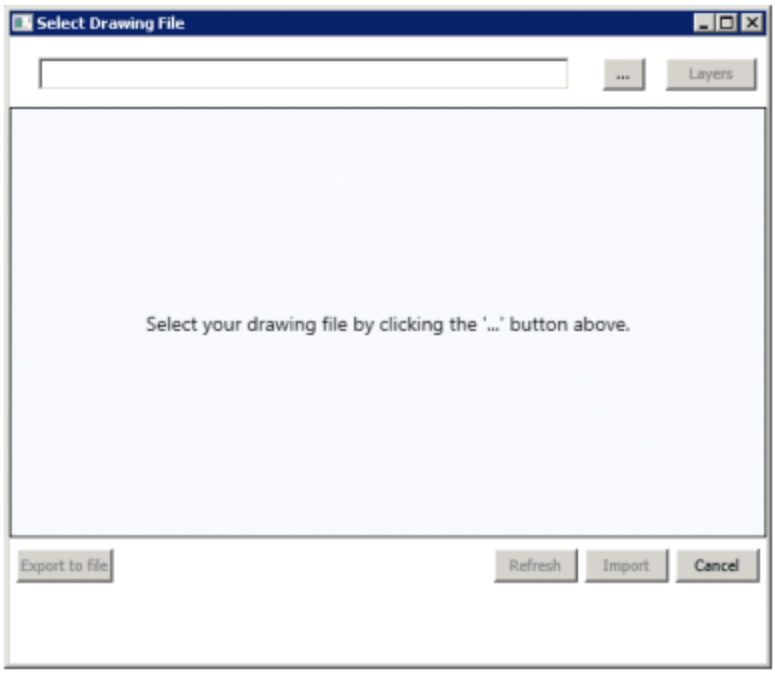
Figure 46: Drawing File



The Select Drawing File dialog box opens.

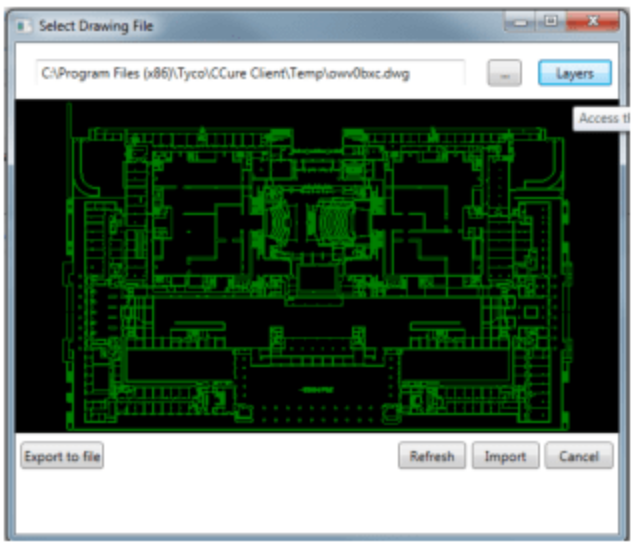
2. Click ... to select the drawing file you want to import into the C•CURE 9000 database.

Figure 47: Select Drawing File to Import



3. The system displays the graphic file you have chosen to import.

Figure 48: Displaying Vector Drawing File



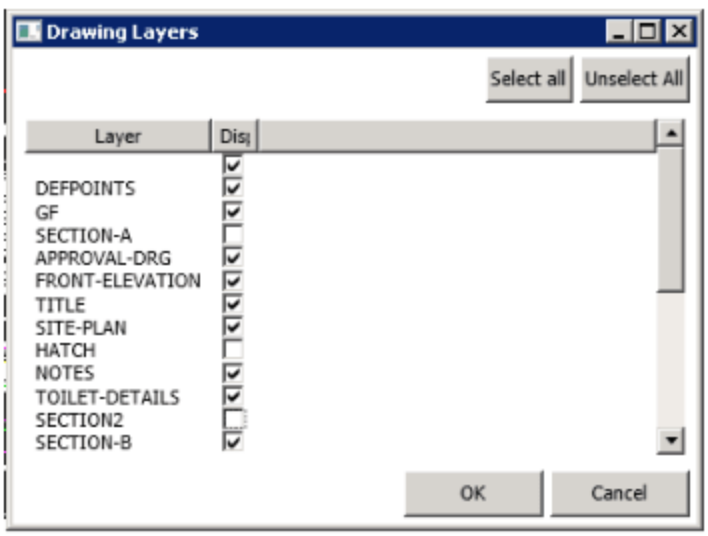
4. Click the **Layers** button to select the map layers you wish to import.

NOTE C•CURE 9000 supports existing layers in a Vector based map at the original edit time; however; once the map is imported for runtime use the original layers are lost. You can turn the original layers on or off prior to importing. Once a map has been imported into the system, you can add new layers to the map which can be manipulated in edit mode. You cannot turn layers on and off at runtime as with the C•CURE 9000.

You cannot view the layers in a raster graphic. The graphic is converted to a jpg or png image.

5. The Drawing Layers dialog box appears.
6. Pick the layer(s) you want to import by Selecting and/or Unselecting the layers.
7. Click **OK**.

Figure 49: Displaying Drawing Layers



8. Click **Import** to import the graphic.
9. The system displays the graphic file you have imported so that you can edit the map.
10. Click **Save**and **Close** to save the imported map.

Configuring and Saving a Map

To configure a Map, open it in the **Maps Editor**and adjust the settings based on what objects you want the Map to show and the functions you want the Map to perform.

You can import a graphic file to form the basis of your Map, adjust the appearance of the Map, add a name and description for the Map, and save it to the C•CURE 9000 database.

To Configure and Save a Map

1. Create a new Map (See Creating a Data Views Pane Object on Page 19).
2. In the **Map Editor**, type a **Name** and **Description** for the Map.
3. You can import a graphic file to be the basis of your Map and add icons to the Map. See To Import a Map Graphic on Page 124.
4. To select a background color for the Map, click  . A Windows **Color selection** dialog box appears, allowing you to select a background color.
5. To resize the Map to fit in the current window, click  .(**Fit map in window** button). The zoom percentage is reset to 100%.
6. To change the zoom level of the Map, see Changing the Map Zoom Level on Page 130.
7. To save your new **Map**, click **Save and Close.**

   Alternatively, if you want to save the **Map** and then create a new one, click **Save and New**. The current **Map** is saved and closed, but the **Map Editor** remains open to allow you to create a new **Map.**

Map Layers

The Map tool can select which layers to display and/or hide. For example, the tool can set the active layer that new icons are added to, can add and delete custom layers, allow loading a new file without losing items in the custom layers, and also can query the user if items in the layers should be removed.

NOTE While the new Map solution supports the existing layers in a Vector based map at the original edit time, once the map is imported for runtime use, the original layers are inaccessible. When a map has been imported for runtime use, you can add new layers to the map which can be manipulated in edit mode.

You can add layers to a Map that contains different object icons. You can show or hide any layers of the Map. If you save the Map as a Map template, you can use the Map as the basis of additional Maps that show some layers and hide others. You only need to import the graphic image, size it once, and create the layers once. These attributes are inherited by the Maps created from the template.

Adding a Layer to the Map

The original layers in a vector file are only supported when the map is being imported into the new map tool. At import time, you can click on a **Layers** button, which lists the layers specified in the vector file and allows you to include or exclude the layers from the final imported map. Once the map has been imported, your ability to edit the original layers will be unavailable.

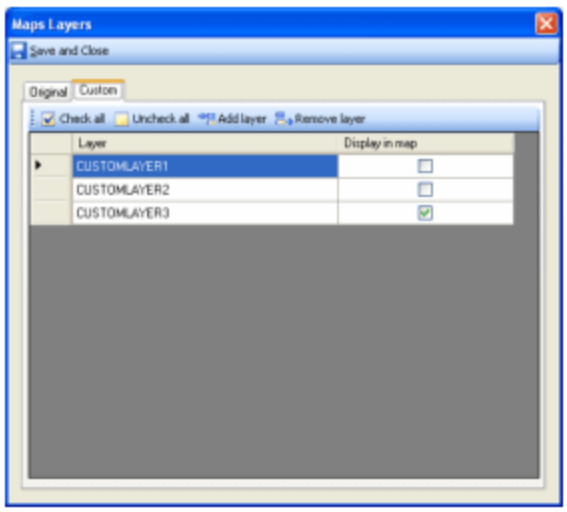
Raster file types do not allow you to import layers with raster file types. (In the case of raster file types, a new layer **0** is generated automatically because at least one layer is required.) This tab allows you to determine which layers should appear in the map. De-selecting a layer hides that layer in the map.

To Add a Layer to a Map

1. Create a new Map or Map template. See:
   - Creating a Data Views Pane Object on Page 19

   or
   - Creating a Maps Template on Page 123.
2. On the Map Editor toolbar, select  (the **Show map layers** button). The Maps Layers dialog box appears (**0** is the current layer). (see Figure 50 on Page 128). For definitions of the fields and buttons in this dialog box, see The Map Editor Toolbar on Page 120.

Figure 50: Maps Layers Dialog Box



3. Click the **Custom** tab.
4. Click **Add layer**. A new row is added to the table of layers in the Map.
5. You can click in the **Layer** field to edit the name of the layer. For example, if you plan to add **Input** icons to this layer, you could re-name it "Inputs Layer"
6. Select the check box in the **Display in map** field to have the layer visible in the Map, or clear the selection to have the layer hidden (not displayed on the Map).
7. You can click **Add layer** again to add more layers to the Map. You can remove a layer from the Map by clicking the Row Selector ▸ for the layer you want to delete, then clicking **Remove layer**.

8. Click **Save and Close** to save the layer definitions for this Map. The **Map Layers** dialog box closes.
9. To save your Map with the layers you defined, click **Save and Close** in the **Map Editor**.

   Alternatively, if you want to save the **Map** and then create a new one, click **Save and New**. The current **Map** is saved and closed, but the **Map Editor** remains open to allow you to create a new **Map**.

Deleting a Map Layer

You can delete a Custom layer from a Map by opening the Maps Layers dialog box.

To Delete a Map Layer

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. On the **Map Editor** toolbar, select  (the **Show map layers** button). The **Maps Layers** dialog box appears (see Figure 50 on Page 128).
3. Click the **Custom** tab.
4. You can remove a layer from the Map by clicking the Row Selector  for the layer you want to delete, and clicking **Remove Layer.**
5. Click **Save and Close** to save the layer changes you made. The **Map Layers** dialog box closes.
6. Click **Save and Close** in the **Map Editor** to save the Map, preserving the layer changes you made.

   Alternatively, if you want to save the **Map** and then create a new one, click **Save and New**. The current **Map** is saved and closed, but the **Map Editor** remains open to allow you to create a new **Map**.

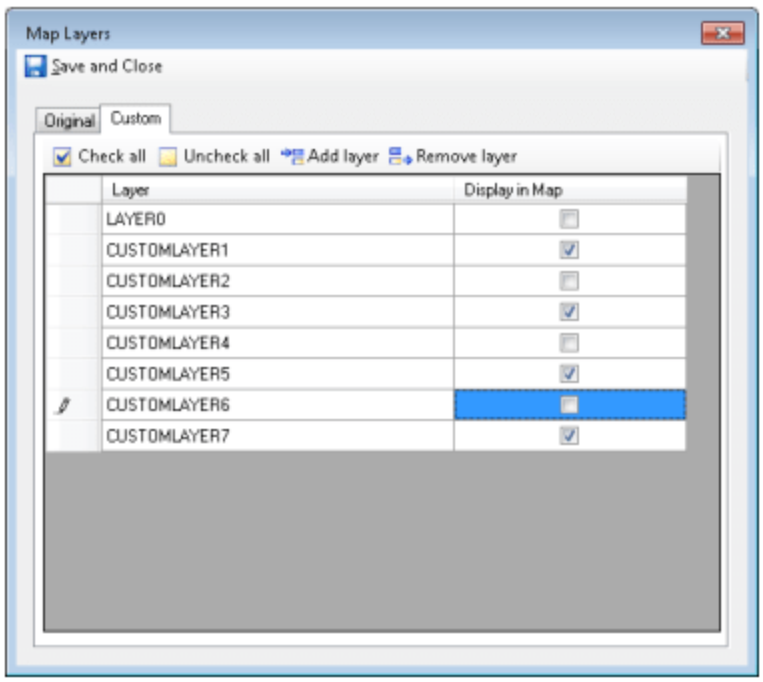
Setting the Active Map Layer

When you add icons to a Map, you can set the **Active Map Layer** to control the layers to which you are adding the icons.

To Set the Active Map Layer

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. On the **Map Editor** toolbar, click the drop-down arrow on the **Show map layers** button.
3. Click the layer in the drop-down list that you want to be active.
4. When you add an icon to the Map, the icon indicates which layer(s) are the active layers. If there is only one layer, **0** is the current layer.

Figure 51: Customizing Map Layers



Showing or Hiding Map Layers

You can use the **Map Layers** dialog box to set Map Layers that are visible when the Map is viewed.

To Show or Hide Map Layers

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. On the **Map Editor** toolbar, select  (the **Show map layers** button). The **Maps Layers** dialog box appears (see Figure 50 on Page 128).
3. On the **Original** tab or the **Custom** tab, for each layer that you want to show or hide.
   - Select the check box in the **Display in map** field to have the layer visible in the Map.
   - Clear the selection to have the layer hidden (not displayed on the Map).
4. Click **Save and Close** in the Map editor to save the layer changes you made. The **Map Layers** dialog box closes.
5. Alternatively, if you want to save the **Map** and then create a new one, click **Save and New**. The current **Map** is saved and closed, but the **Map Editor** remains open to allow you to create a new **Map**.

NOTE The software supports editing existing layers at the original edit time; however, once the map is imported for runtime use, the original layers are not available and you cannot edit them.

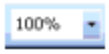
Changing the Map Zoom Level

You can change the zoom percentage of the Map by clicking the  and zoom in and zoom out buttons or using the mouse wheel.

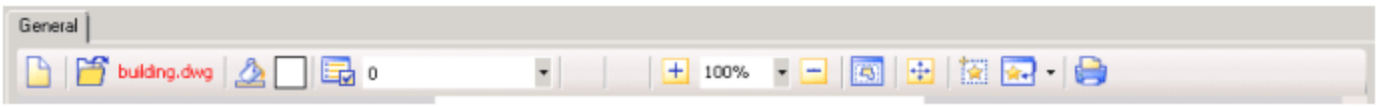
To Change the Zoom Level

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click the arrow on the **Zoom** button to select a zoom percentage ranging from 50% to 5000% You can also type a zoom level in the box and press **Enter** to select a new zoom level.

Table 23: Map Editor Toolbar

	**Zoom into map**– as long as the button is held down, the map continues to zoom in until the maximum is reached.
	**Zoom Units** – select a zoom percentage ranging from 50% to 5000% The field percentage defaults to 100%.
	**Zoom out from map** – as long as the button is held down, the map continues to zoom out until the maximum is reached.

3. If you click and hold one of these zoom buttons or click the Zoom/Pan mouse , the map will continue to zoom in or out until the maximum or minimum zoom level is reached.



4. Alternatively, you can use the mouse wheel to zoom in or zoom out.

If the icon is off-the screen, a message may recommend that the user zoom out. The system displays the icon locations, layer and scaling information. The system displays the map scaling but does not display the current mouse position or the height and width of the map in pixels (always 2000 x 2000 pixels) .

The Zoom tool has the ability to zoom a map in and out from 50% to 5000%.

Fitting the Map in the Window

You can use the **Fit map in window** button to size the Map to fit within the Map window at 100% zoom.

To Fit the Map in the Window

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click  (the **Fit map in window** button) to fit the map into the existing window and reset the zoom percentage to 100%.

Adding an Object Icon to the Map

You can add an icon representing an object in the C•CURE 9000 database to a Map. You can also assign an action to the icon so that a user viewing the map can click the icon to perform such actions as Editing the object, Setting a property of the object, Arming or Disarming the object according to the icon type and the action you assigned to the icon.

You can create an icon library where custom job specific icons can be created, stored, and used. You can configure an icon to launch another map when clicked. The tool also has the ability to print the map with the icons in their current state. See Adding an Icon to the Icon Template Library on Page 137.

You can open a map for viewing from an icon on a map; this lets you create nested maps so that you can, for example, look at a Map that displays icons for other maps in the system. You can click on any of these Map icons to view its related Map. See Opening a Map from an Icon on Page 141

You can also use the mouse to hover over an icon in view mode, and display the text or label of the C•Cure 9000 item.

Example:

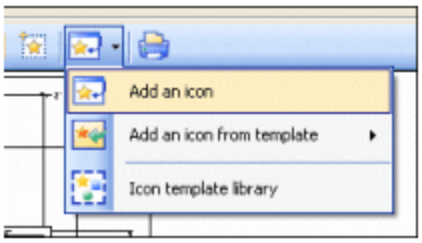
You can design a Map that represents a multi-building campus, where each building is represented by an icon that, when clicked, opens a different map that shows the building's floor plan. See Opening a Map from an Icon on Page 141.

You can also add an icon to the Map from the **Maps Icon Template Library** (a list of icons that you have previously saved). See Adding an Icon to the Icon Template Library on Page 137 for instructions for adding an icon to the library.

To Add an Object Icon to the Map

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click the arrow on  (the **Add an Icon to the Map** button). The context menu for the button appears (see Figure 52 on Page 132).

Figure 52: Add Icon Drop-down

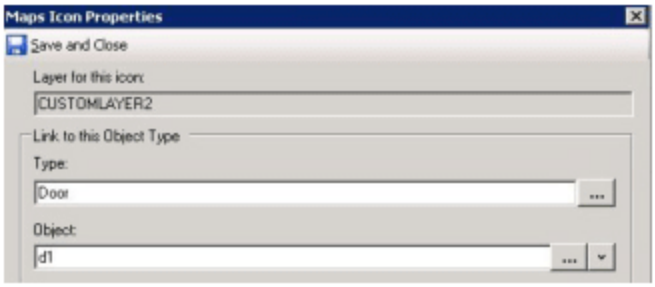


3. Click **Add an icon** to the map.. 

   – or –

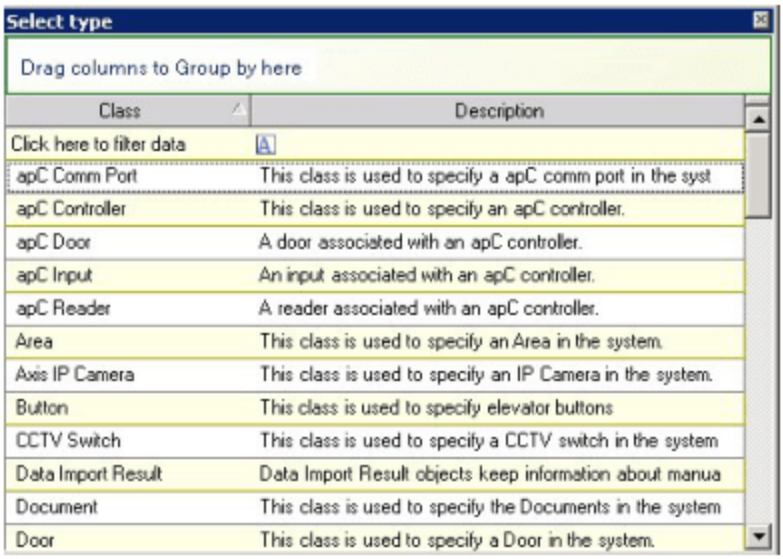
   Alternatively, click **Add an icon from template**, and then choose an icon from the drop-down list that appears. (See Adding an Icon to the Icon Template Library on Page 137 for instructions for adding an icon to the template library.)
4. A **Maps Icon Properties** dialog box appears. See Figure 53 on Page 133.

Figure 53: Map Icon Properties Dialog Box



5. Click [...] in the **Type** field to open a **Select Type** dialog box that allows you to select an icon type for the icon. Click the icon type you want to choose for the icon, for example,**Door** is used to specify a door in the system.

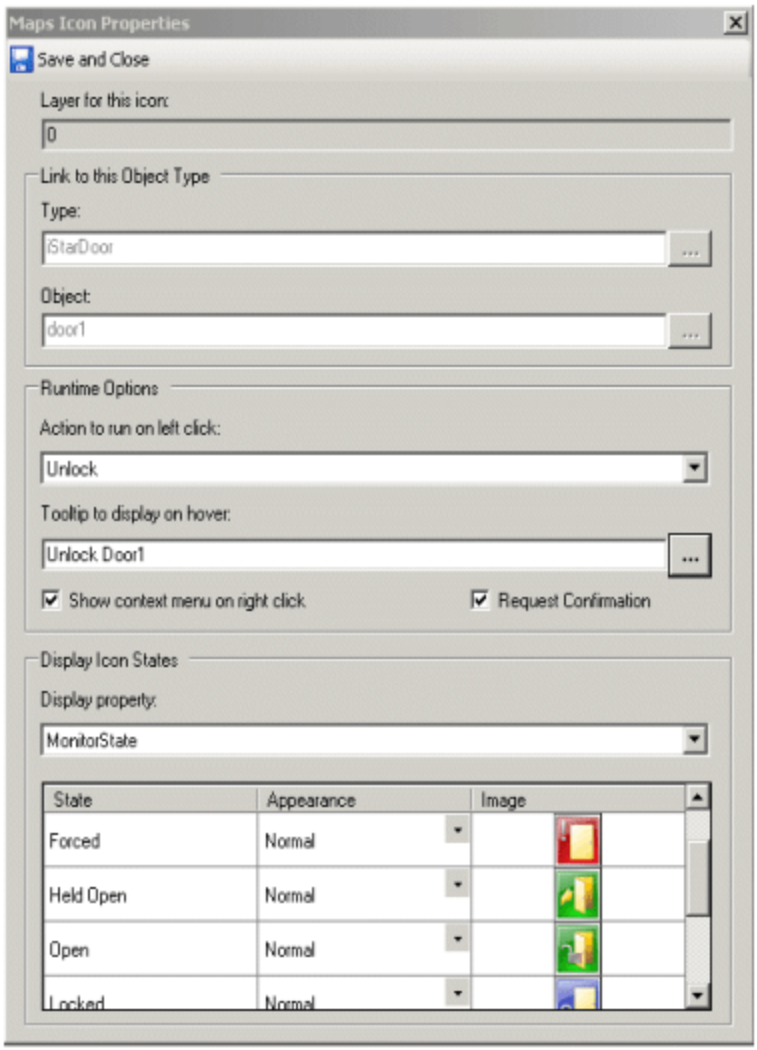
Figure 54: Map Icon Properties Dialog Box



6. Click [...] in the **Object** field to open a dialog box that allows you to select an object of the same type as the icon. Click the object you want to choose for the icon. The expanded **Maps Icon Properties** dialog box appears. See Figure 55 on Page 134.

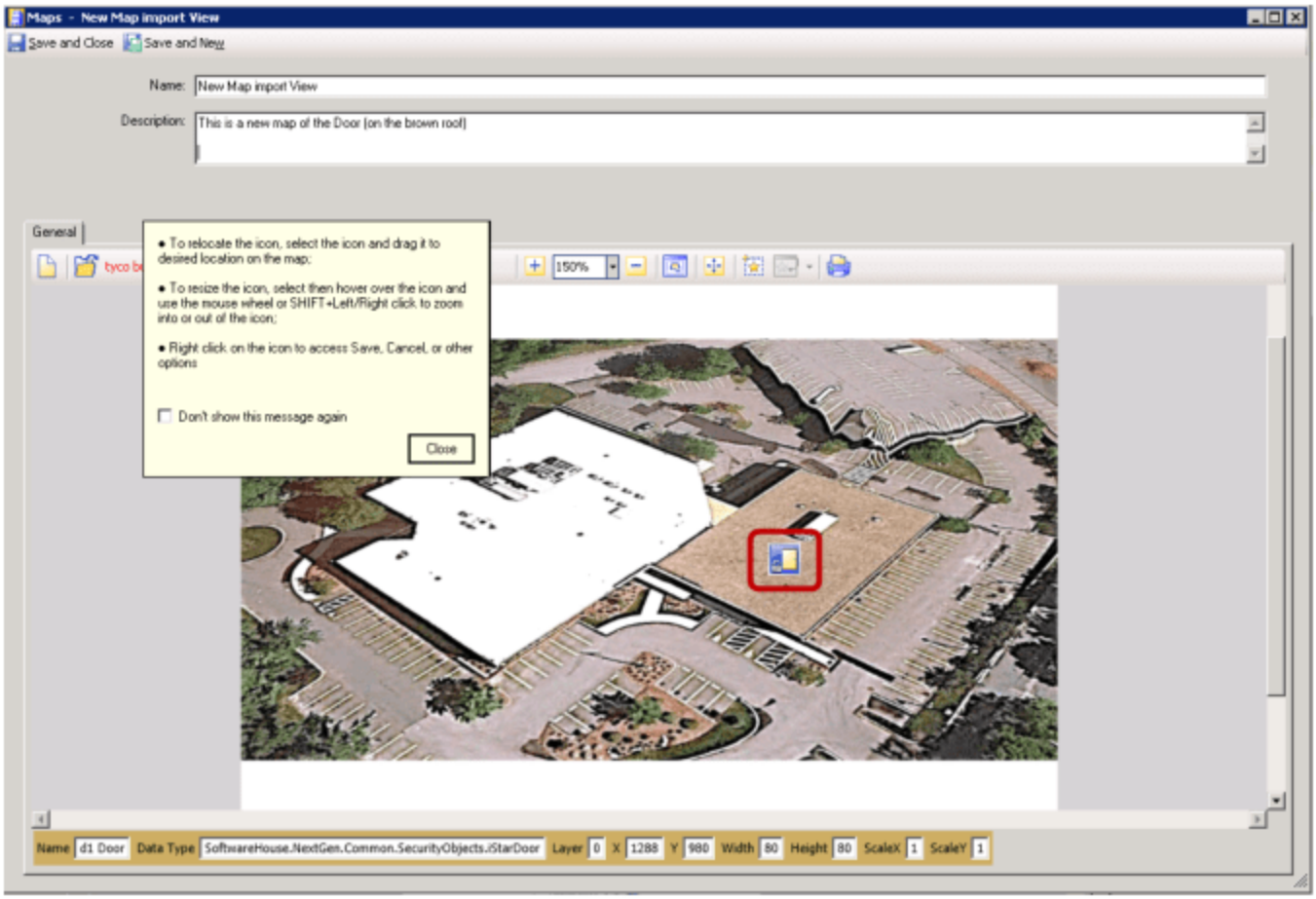
7. Select an icon on the map  .

Figure 55: Map Icon Properties Dialog Box

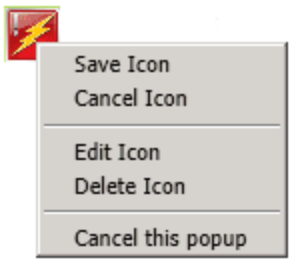


8. Click the **Action to run on left-click** drop-down arrow and select an action from the list. The actions that are available are those that are appropriate for the icon you have chosen.
9. You can type a tooltip in the **Tooltip to Display on hover** field if you want to display a tooltip message about the icon.
10. If you want the icon to have a context menu enabled for the user to perform additional actions, select **Show context menu on right-click**.
11. If you want to require the user who clicks the icon to also perform the action, select **Request Confirmation**to confirm the action. (The default is unselected.)
12. Click **Save and Close.** The icon that you configured appears on your Map.

Figure 56: Add an Icon to the Map



13. Click and drag the icon into the position you want on the Map.
14. **To resize the icon,** select the icon and use the mouse wheel, or **SHIFT+Right Mouse Key** or **SHIFT+Left Mouse Key** to zoom In and Out.
15. You can right-click the icon to save it to the Map, or perform other functions listed on the context menu (see Map Icon Context Menu on Page 139).



16. Click **Save and Close** to save the icon changes you made to the Map.
17. Alternatively, if you want to save the **Map** and then create a new one, click **Save and New**. The current **Map** is saved and closed, but the **Map Editor** remains open to allow you to create a new **Map**.

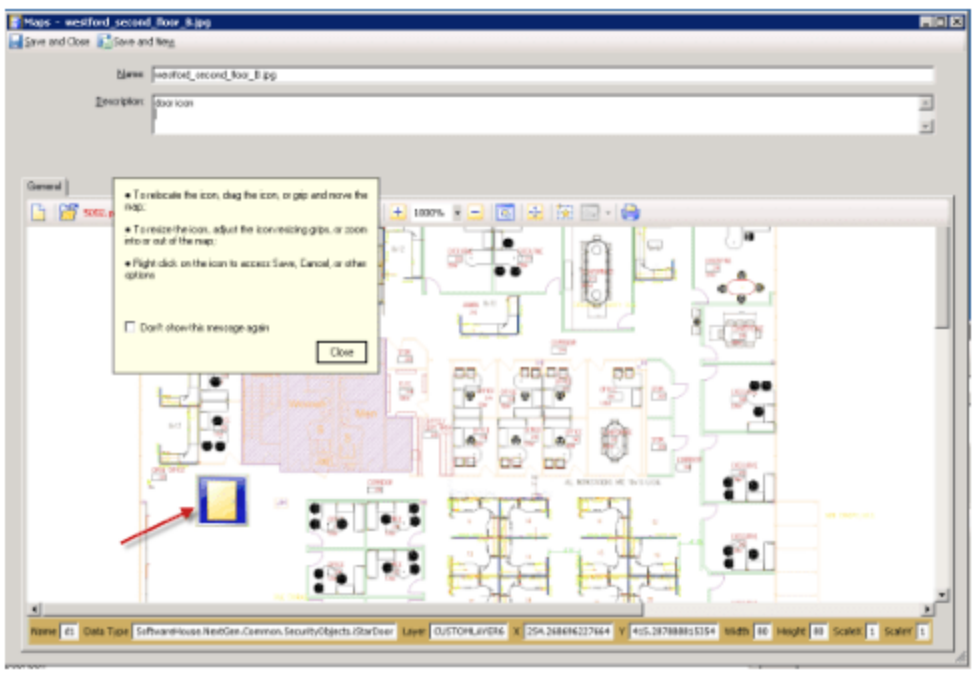
Editing an Icon on the Map

You can edit an icon that was previously placed on the Map to change its position and configuration, as long as the icon was not **Saved** in a permanent position.

To Edit a Map Icon

1. Open an existing Map or Map template .
2. Click  the **Select icon on the map** button. The cursor becomes a cross-hair.
3. Right-click the icon to select it or drag the icon to a new position on the Map, if necessary.
4. Right-click the icon and choose **Edit Icon** from the context menu to change the properties..
5. Click  in the **Object** field to open a dialog box that allows you to select an object of the same type as the icon. Click the object you want to choose for the icon.
6. The expanded **Maps Icon Properties** dialog box appears. See Figure 55 on Page 134.
7. Follow steps 5-11 in Adding an Object Icon to the Map on Page 131 to edit the icon.
8. You can edit the icon, relocate the icon, or drag the icon to a new location
9. Right-click on the door icon to **Save**, **Cancel**, or other options. Be sure to select **Save Icon** to save your changes before selecting **Cancel** or exiting the screen.

Figure 57: Map Icon Properties Dialog Box



Moving and Adjusting Icon Locations

You can move or adjust one icon at a time, that is, until you **Save** the previous icon in a fixed position. To remind you that an icon can be moved, the icon has a pale green border. You can left-click and drag the icon to a new

position. When the icon is Saved in a fixed position that you cannot move, you will be unable to adjust the icon resizing handles or move its location. The icon will be grayed-out and the icon border will be the default color.

Figure 57 on Page 136 shows map icons with various locations and magnification. When you move an icon, the system updates the icon map to reflect the precise location coordinates.

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click  (the **Select icon on the map** button). The cursor becomes a **cross-hair** .
3. Left-click an icon to select it.
4. You can left-click and drag the icon to a new position on the Map if necessary.
5. Right-click the icon and choose **Edit Icon** from the context menu.
6. The **Maps Icon Properties** dialog box appears at the bottom of the screen. See Figure 55 on Page 134. Follow steps 5-11 in Adding an Object Icon to the Map on Page 131 to edit the icon.
7. Right-click the icon and choose **Save Icon** from the context menu to save your changes.If the icon can be moved or dragged, the icon has a light green border.
8. If the icon can be moved, left-click the icon and drag it to a new position.
9. If the icon cannot be moved, it will be grayed out.

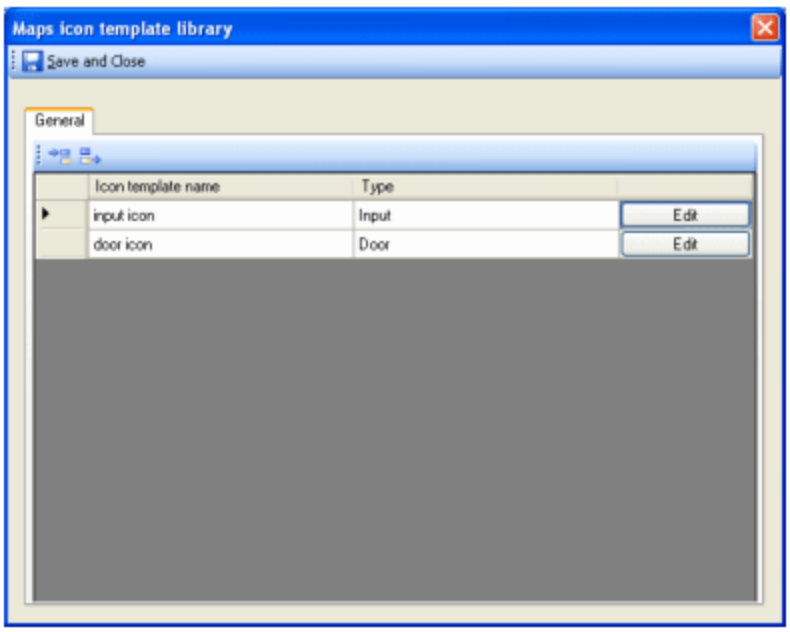
Adding an Icon to the Icon Template Library

You can define a Map icon and add it to the **Icon Template Library** so that you can re-use the icon on multiple Maps.

To Add an Icon to the Icon Template Library

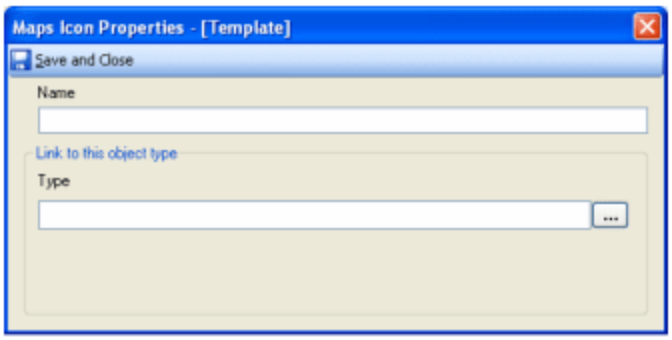
1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click the arrow on  and select **Icon template library** from the drop-down list, as shown in Figure 52 on Page 132.
3. The **Maps icon template library** dialog box [redacted] specifies the Icon template name, the Type, and the action **Edit**for example, the Icon type, for example, Input, Door, etc. See Figure 58 on Page 138.

Figure 58: Maps Icon Template Library Dialog Box



4. Click to display the **Maps Icon Properties-[Template]**dialog box. See Figure 59 on Page 138.

Figure 59: Maps Icon Properties [Template] Dialog Box



5. Select a name for the icon in the **Name** field.
6. Click ... in the **Type** field to open a **Select Type** dialog box that allows you to select an icon type for the icon.Click the icon type you want to choose for the icon.
7. The **Maps Icon Properties** dialog box appears. See Step 5 on Page 133 in Adding an Object Icon to the Map to edit the icon.
8. Click **Save and Close** to save the new icon in the **Icon template library.**

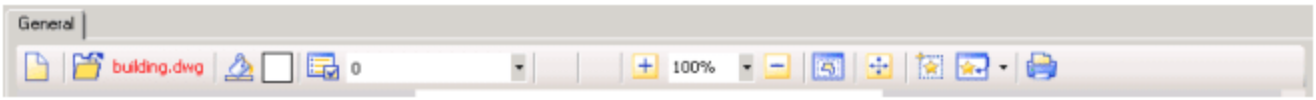
Selecting an Icon on the Map

To edit or move an icon that you have placed on the Map, you need to select it first.

To Select an Icon on the Map

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click  (the **Select object on map** button). The cursor changes to a **cross-hair.**
3. Click an icon to select it. Once the icon is selected the cursor changes to a cross-hair and you can click and drag the icon to a new position on the Map. As you move the icon, the coordinates value settings move in conjunction and display the updated values.
4. You can also right-click the icon to select a function from the context menu.
5. To exit from **Icon selection** mode, click the Select Icon  again.
6. If an icon is still selected, you must right-click the icon to open the context menu (see Table 24 on Page 139) and choose **Save Icon** to save any editing you have done, or **Cancel Icon** to discard any changes you have made. When you select **Save Icon,** you cannot make additional changes to the current icon.

Figure 60: General Maps Bar Icon



Map Icon Context Menu

This context menu appears when you right-click on a Map Icon.

Figure 61: Map Icon Context Menu

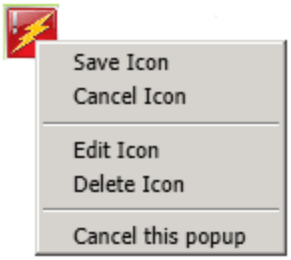


Table 24: Map Icon Context Menu Definitions

Selection	Description
Save Icon	Click this selection to save the icon on the Map. If you do not save the icon in this manner, and just save the Map, you will lose the icon.
Cancel Icon	Click this selection to cancel adding the icon to the Map, if you have not already saved the icon.
Edit Icon	Click this selection to edit the icon. The Map Icon Properties Dialog Box opens. See Figure 55 on Page 134.
Delete Icon	Click this selection to delete the Icon.
Cancel this popup	Click this selection to close the menu without choosing to save, edit, or delete the icon.

Printing a Map

You can print the Map from the **Maps Editor** menu.

To Print a Map

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click **Print** to **Print the map**.
3. The Map prints to your default printer.

Clearing the Map

If you want to start over with an existing Map object, you can clear the Map completely with one click.

To Clear the Map

1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click  to **Clear** the Map and start anew.

Modifying a Map

You can edit a Map using the following procedure:

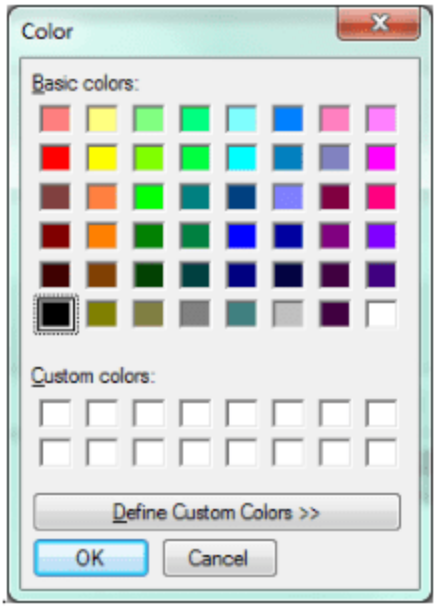
To Modify a Map

1. In the **Navigation** pane of the **Administration Workstation**, click **Data Views** to open the **Data Views** pane.
2. Select **Maps** from the **Data Views** pane drop-down list.
3. Click  to open a **Dynamic View** showing all **Map** objects.
4. Right-click the **Map** in the list that you want to modify and select **Edit** from the context menu.
5. You can edit a Map using the following procedure:

To Change the Background Color of a Map

1. In the **Navigation** pane of the **Administration Workstation**, click **Data Views** to open the **Data Views** pane.
2. Select **Maps** from the **Data Views** pane drop-down list.
3. Click  to open a **Dynamic View** showing all **Map** objects.
4. Right-click **Map** in the list that you want to modify and select **Edit** from the context menu.
5. Select options from the list to edit the map
6. You can set the background color of a Map to a default or custom-defined color equivalent to the standard Microsoft Basic Colors selection.

Figure 62: Microsoft Basic Colors



7. Click **OK**.

Opening a Map from an Icon

You can create an icon on a Map and configure it to open another Map in the C•CURE 9000 database. This ability lets you create nested maps so that you can, for example, look at a Map that shows icons for the other maps in the system, and can then click on any of these Map icons to view its related Map.

To Open a Map from an Icon

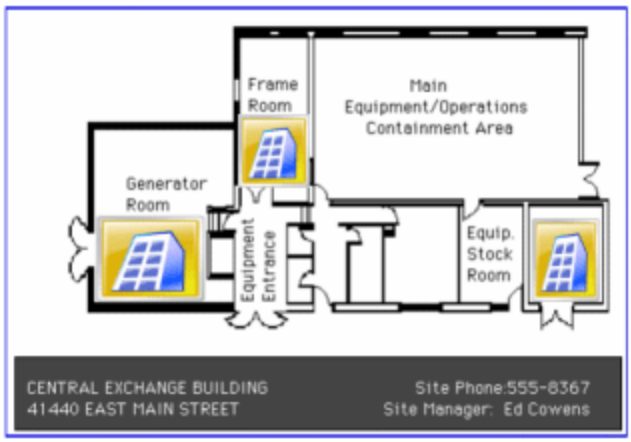
1. Open an existing Map or Map template (see Modifying a Map on Page 140).
2. Click the arrow on  (the **Add an Icon to the Map** button). The context menu for the button appears (see Figure 52 on Page 132).
3. Click **Add an icon**.
4. A **Maps Icon Properties** dialog box appears. (See Figure 53 on Page 133.)
5. Click  in the **Type** field to open a **Select Type** dialog box that allows you to select a type for the icon.
6. Choose **Maps** as the **Type** from the **Select Type** dialog box.
7. Click  in the **Object** field to open a dialog box that allows you to select an object (a Map).Click the Map that you want the icon to represent. For example, you want the expanded **Maps Icon Properties** dialog box to appear. See Figure 55 on Page 134.
8. Click the **Action to run on left-click** arrow and select an action from the list.
   - Select **Popup View** if you want the Map to open in a new window. (Choose this option if you want to use the Maps in the C•CURE 9000 Monitoring Station.) The **View** and the **View in Current Tab** options are only used with the C•CURE 9000 Administration Application content area.)

NOTE The maximum number of maps that you can simultaneously popup is 8 (eight).

- Select **View** if you want the Map to open in a new tab in the C•CURE 9000 Administration Application content area.
- Select **View in Current Tab** if you want the Map to open in the current tab in the C•CURE 9000 Administration Application content area.

9. You can type a tooltip in the **Tooltip to Display on hover** field if you want to display a tooltip message about the icon.
10. If you want the icon to have a context menu enabled to perform additional actions, select **Show context menu on right-click**.
11. If you want the user who clicks the icon to perform an action to be required to confirm the action, select **Request Confirmation**. (The default is unselected.)
12. Click **Save and Close** The Map icon that you have configured appears on your Map.
13. Click and drag the icon into the position you want on the Map.
14. Select the icon and use the mouse wheel to re-size the icon if necessary.
15. You can right-click the icon to save it to the Map, or perform other functions that appear on the context menu (see Map Icon Context Menu on Page 139 for more information). Figure 63 on Page 142 shows a Map with several **Map** icons. Note that the Map icons have been re-sized to fit the rooms on the Map.

Figure 63: Map with Map Icons



16. You can repeat Steps 2-14 to add additional icons to the Map.
17. Click **Save and Close** to save the icon changes you made.

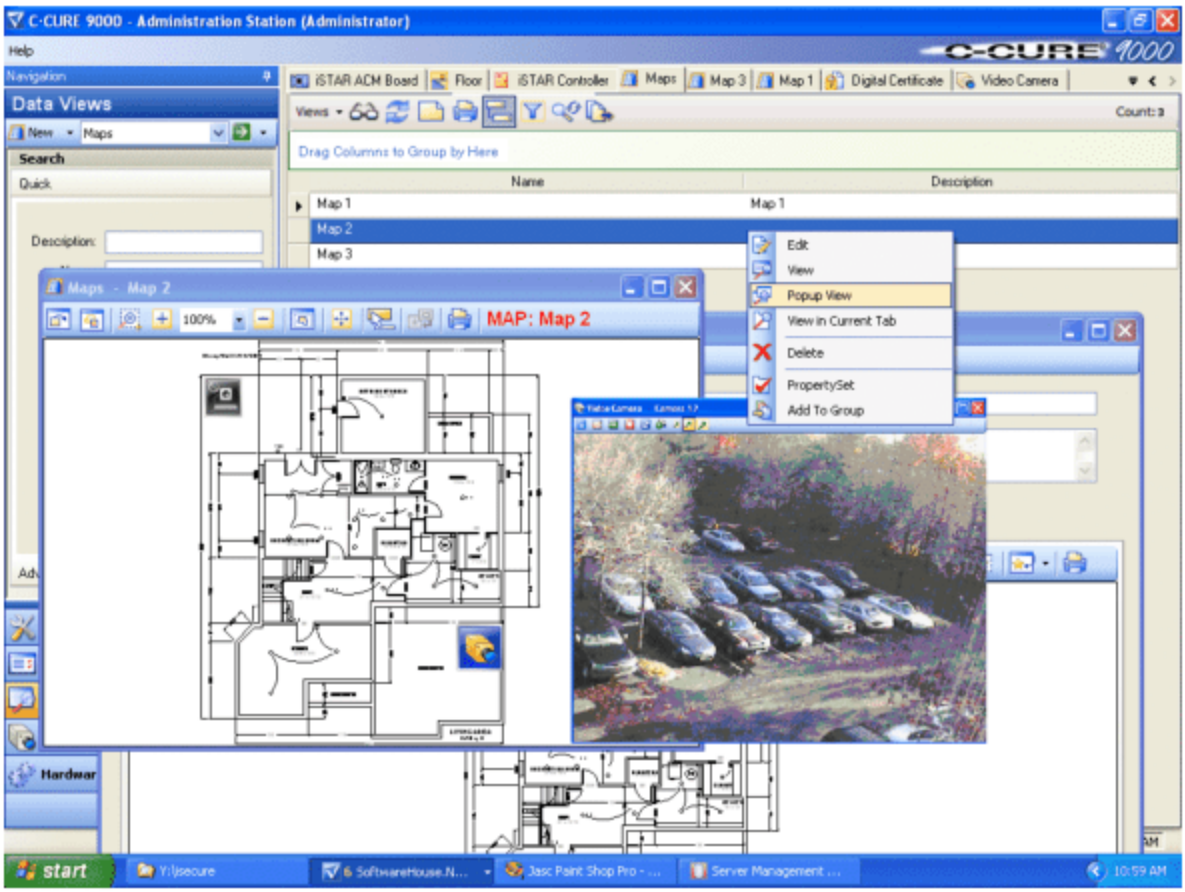
    Alternatively, if you want to save the **Map** and then create a new one, click **Save and New**. The current **Map** is saved and closed, but the **Map Editor** remains open to allow you to create a new **Map**.

Map Viewer

The **Map Viewer** allows you to view an existing Map (such as a building floor or site plan) and also view security objects represented as icons on the Map. These icons can be placed on the Map using the **Map Editor** (see Adding an Object Icon to the Map on Page 131). The Map objects can also be viewed using the context menu. The context menu is displayed when you right-click a Maps row in the **Data Views** pane and also when you right-click an icon on the **Map Popup** View.

See the example in Figure 64 on Page 143, where the selection of the **Popup View** of Map 2 is displayed with a subsequent **Popup View** of a security camera, both showing runtime conditions.

Figure 64: Map Viewer Popup Views



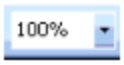
The context menus differ from one object type to another. In addition, the appearance of each context menu depends on the setting of the **Show context menu on right-click** option configured in the **Maps Icon Properties** dialog box. You can also display a runtime popup of a camera by clicking the icon.

Map Viewer Toolbar

The **Map Viewer Toolbar** displays Map Formats and Size Information Table 25 on Page 144 lists the tools available in the **Map Viewer** Toolbar.

Figure 65: .Map Viewer Toolbar

Table 25: Map Viewer Toolbar

Button	Function
	**Zoom into map** – as long as it is held down, the map continues to zoom in until the maximum size is reached.(from 50% to 5000%)
	**Zoom out from map** – as long as it is held down, the map continues to zoom out until the maximum size is reached. (from 50% to 500%)
	**Zoom Units** – select a zoom percentage ranging from 50 to 5000%.
	**Fit map in Window** – fits the map into existing window. The percentage is reset to 100%.
	**Show tooltips** – when selected, icon tooltips appear when the mouse hovers over an icon.
	**Show previous map** – click this to go to the previously displayed map. This button is available when an Icon action opens another Map - you can click this button to go back to the first Map.This button is unavailable when the first map is active. **Example:** You create a Map of your campus, and add several Icons, each representing an building. You assign a left click action to each of the Icons to open a map of that building. If you open one of those Maps, the Show previous map button is active in the Map Viewer so that you can navigate back to the original Map.
	**Print map** – invokes the Windows Print dialog box allowing you to print the current Map using the default printer.

5

Query

This chapter explains how to configure C•CURE 9000 Queries so that you can quickly and reliably find information about objects in C•CURE 9000.

In this chapter:

Query Overview

A C•CURE 9000 Query is used to search through the C•CURE 9000 database for objects, and provides the ability to enter criteria that narrow the search. The search results from a Query are displayed in a Dynamic View, in the **Content** pane or a popup window, where you can filter the search results.

C•CURE 9000 includes pre-defined Queries. Some of these Queries work with pre-defined Reports; others of the pre-defined Queries are stand-alone and included as general examples. These pre-defined Queries can be used "as is," or copied and customized to meet your specific needs. For detailed information, see the Overview: Pre-defined Reports, Queries, and Dynamic Views on Page 254 for pre-defined Queries, Reports, and Dynamic Views, as well as Creating a Copy of a Query on Page 163.

- You create and save Queries using the **Query Editor**. Your Query can include multiple query criteria that you define by choosing fields from the object type you are querying, and filters that are based on the fields you have chosen.

  Example:

  If you choose a logical field as a filter, the filter type is limited to **Equals** or **Not Equals**, and the possible values reflect the filter type.

- You can create and save a Query Template to use as the basis for other Queries.
- You can include prompts to the user running the query, allowing the user to specify values for one or more filter criteria at runtime. For more information, see Configuring a Query on Page 161, especially Step 7.
- You can also create a Query that is able to be edited at runtime "on-the fly."
- You can attach a previously built Query to a Dynamic View, Export, or Report so that the results can be controlled by the Query Editor's filters. For more information, see
  - Dynamic View Editor on Page 82
  - Report Editor on Page 201
  - Chapter 3, "Exporting Records" in the *C•CURE 9000 Software Configuration Guide*
- You can perform a Quick Search on C•CURE 9000 object types.
- You can build and save a Query for an object type and also create and run an instant query for an object type from the **Advanced Search** tab.

Query Editor

A C•CURE 9000 Query is used to define a search of the C•CURE 9000 database. The **Query Editor** lets you design and save Queries for every object type in the C•CURE 9000 database.

See the Query Overview on Page 146 for an explanation of how Queries are created and used in C•CURE 9000.

The tasks you can perform with Queries are listed in Query Tasks on Page 159.

The **Query Editor** has the following tabs:

- **General** tab – see Query Editor General Tab on Page 148.
- **Advanced** tab – see Query Editor Advanced Tab on Page 152.

The **Query Editor** has the buttons described in Table 26 on Page 147.

Table 26: Query Editor Buttons

Button	Description
Save and Close	Click this button when you have completed any changes to the Query and wish to save those changes. The Query closes. (This button is not available for the Software House pre-defined Queries.)
Save and New	Click this button when you want to create a new Query using the current entries on the **Query Editor** as a template. If the Query is user-created and has been modified in the editor, a warning appears asking whether you want to save your original before creating the copy. Click **Yes** to save the original Query, **No** to **not** save it, and **Cancel** to return to the original Query without making a copy.
	Click this button when you want to close the **Query Editor** without saving your changes. If the Query has been modified in the editor, a warning appears asking whether or not you want to save your changes before closing the editor. Click **Yes** to exit and save and **No** to exit and cancel your changes.

Accessing the Query Editor

You can access the Query Editor from the C•CURE 9000 **Data Views** pane.

To Access the Query Editor

1. Click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Query**.
3. Click **New** to create a new Query.

   - or -

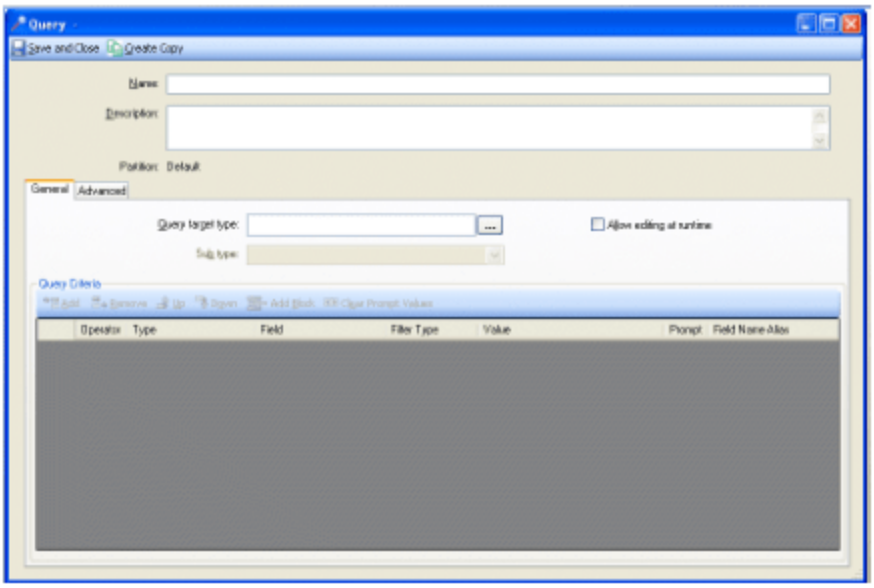
   Click  to open a Dynamic View showing all Query objects.
4. Right-click the Query in the list that you want to modify and select **Edit** from the context menu to open the **Query Editor** (See Figure 66 on Page 148).

Query Editor General Tab

The Query Editor General tab lets you define the name and type of your Query, as well as specify the criteria for the Query.

The General tab is shown in Figure 66 on Page 148 and the Advanced tab is shown in Figure 67 on Page 153.

Figure 66: Query Editor – General Tab



See the following sections for information about the fields and buttons on the top of the **Query Editor** and on the **General** tab.

- Query General Tab Definitions on Page 148
- Query General Tab Criteria Table Definitions on Page 149
- Query General Tab Buttons on Page 151.

Query General Tab Definitions

Table 27 on Page 148 describes the fields on the top of the **Query** dialog box and on the **General** Tab.

Table 27: Query General Tab Definitions

Field	Description
Name	The name of the Query. This field is required.
Description	Type a textual description of the Query that will help you distinguish it from other queries. It can be helpful to include the **Target object type** in the description.
Partition	A read-only field displaying the name of the Partition to which this Query belongs. (This field is visible only if the C•CURE 9000 system is partitioned.)

Query General Tab Definitions (continued)

Field	Description
Query target type	Choose the object type for which to search from the selection dialog box that appears when you click ... . NOTE: This field cannot be changed once the Query is saved.
Sub type	Most object types include several **Sub types** with different sets of fields. If the object type you chose has multiple **Sub types**, choose the **Sub type** on which to base your query from this drop-down list. NOTE: This field cannot be changed once the Query is saved. The *Basic Configuration* is the default **Sub type** for every object type and includes the basic information you can query on for that object. Most object types also have *Group*, *Audit Log*, and *Journal* Subtypes. **Example:** Clearance has the following four Sub types: - Basic Configuration – Clearance and Clearance item - Clearance Group – Clearance, Clearance item, and Group member - Clearance Audit Log – Clearance, Clearance item, and Audit Log - Clearance Journal – Clearance, Clearance item, and Journal A Query on the Clearance Audit Log Sub type would allow you to find all Clearances edited by a specific Operator within the specified date range; a Query on the Clearance Journal Sub type would allow you to find all messages that reference Clearances within a specified date range. NOTE: If there are **no** Clearances edited by that Operator in that date range **nor** any Journal messages referencing Clearances, the Query would respectively return **no** Clearance records. In addition, such a Query would **not** return Clearance records for Audit entries/Journal messages where Clearance was referenced only as the **secondary** object, not the **primary**. For the Group object type, the Sub type drop-down list includes, in addition to the Basic Configuration, Group Audit Log, and Group Journal, only Groups that exist in the particular C•CURE 9000 system. **Example:** If the system has groups of doors and of readers, then Door Group and Reader Group will be in the Sub Type list.
Allow editing at runtime	Lets a user modify the query "on-the-fly" at runtime without saving it. NOTE: Even a user without Edit privileges for the query's object type can change the query in the **Query Parameters** dialog box when this option is selected.
Query Criteria	The **Query Criteria** table lets you specify the filters for your Query, and whether or not a **prompt** displays for the user to adjust the filter at runtime. To narrow your Query results, you can create multiple filters and block filters that perform AND/OR operations—and in the case of block filters, AND NOT IN/OR NOT IN operations as well. For definitions of the fields in the **Query Criteria** table, see Table 28 on Page 150.

Query General Tab Criteria Table Definitions

Table 28 on Page 150 describes the fields in the **Query Criteria** Table on the **Query General** Tab. (These fields are also available from the **Query Parameters** dialog box in Edit mode, shown in Figure 73 on Page 182 and Figure 74 on Page 183.)

Table 28: Query General Tab Criteria Table Definitions

Field	Description
Operator	For every row in the table, you must choose an Operator from the drop-down list, which changes depending on the type of row: • When you click **Add** – - If this is the very first row in the Query expression – **IN** is the only available Operator. - For every row after the first row, you must choose a logical Operator that defines the relationship between the current row and the row that preceded it – available choices are **AND**, **OR** and **WITH**. - The **WITH** operator allows you to put additional conditions on a preceding **AND** or **OR** clause, so that a given record is tested for multiple conditions. See Using the WITH Operator on Page 167 for an example of **WITH** Operator usage. • When you click **Add Block** – - If this is the very first row in the Query expression, you can choose **IN** or **NOT IN**. - For every block after the first block (or row), you must choose a logical Operator to define the relationship between the new block and the block/row that preceded it – available choices are **AND**, **OR**, **AND NOT IN**, or **OR NOT IN**. **Examples:** If the first row queries for Personnel with a Last name that begins with 'B', the next row must specify if its criteria is ANDed or ORed with the first row.
Type	Select the Object Type for this Query Criteria from the Object Types related to the Query target type. **Example:** If you are defining a Personnel Query with a sub type of Basic Configuration, you can choose from Personnel, Personnel Clearance Pair, Clearance, Clearance Item, Credential, and Images, because these Object Types are child objects of Personnel. Child objects are indicated by indenting and prefixes of one or more dashes (' - ' or ' - - ' or ' - - - '). Personnel - Personnel Clearance Pair - - Clearance - - - Clearance Item
Field	Select the field for this Query Criteria from the drop-down list of Fields in the Object Type chosen.
Filter Type	This drop-down list lets you chose a filter type for this Query Criteria. The choices vary depending upon the type of field chosen for this row. **Example:** If the Field is a True/False or On/Off field, the Filter Types are Equals or Not Equals.
Value	Type in or select a Value for the field in this criteria or keep as <IGNORED>, the default, to allow the value of the field to be populated at runtime. The allowable Values depend upon the Field chosen and the Filter Type chosen. **Example:** For a True/False field, a check box is displayed in this column. For a text field, an edit box that you can type text into is displayed.
Prompt	Select this check box to have the filter criteria in this row displayed as a Query Parameter Prompt when an Operator runs the Query. The Operator can then type in a value for this field at runtime. This adds to the flexibility of the Query. NOTE: This option is selected by default. If you clear the check box, you **must** enter a value in the Value field.

Query General Tab Criteria Table Definitions (continued)

Field	Description
Field Name Alias	Type in a Value to be used at runtime instead of the actual field name. This field also allows you to create an "alias" for several rows, so that at runtime one prompt's value is used for all the fields with that alias. **Example:** In Personnel, if you wanted to query on the same values for **Date1** and **Date2** all the time, you could create two criteria rows and use a **Field Name Alias** of **Date** for both of them. Then you would only see a single row with the Field Name **Date** when the **Query Parameters** dialog box appeared. Entering the value once for **Date** would use the same value for both the **Date1** and **Date2** fields when the query was run.

Query General Tab Buttons

Table 29 on Page 151 describes the buttons on the **Query General** Tab. (These buttons are also available from the **Query Parameters** dialog box in Edit mode, shown in Figure 73 on Page 182 and Figure 74 on Page 183.)

Table 29: Query General Tab Buttons

Name	Description
Add	Click this button to add a row to the **Query Criteria** table. Each row in the table can act as a query filter. Each new row is added after the last. To add a new row after a specific existing row, click the row selector ▸ to select a row and then click **Add**..
Remove	Click this button to remove a selected row from the **Query Criteria** table. You have to click the row selector ▸ to select a row to remove. If **no** row is selected, this button is **not** available. NOTE: If the selected row is the beginning of a block, the system removes the entire block once you confirm the deletion.
Move Up	Click this button to move a filter row up in the table. The position of filter rows can affect search results. You have to click the row selector ▸ to select a row to move. If **no** row is selected, this button is **not** available.
Move Down	Click this button to move a filter row down in the table. The position of filter rows can affect search results. You have to click the row selector ▸ to select a row to move. If **no** row is selected, this button is **not** available.

Query General Tab Buttons (continued)

Name	Description
Add Block	Click this button to add a block of filter rows to the **Query Criteria** table. A Block is one or more rows whose internal relationship is resolved prior to relations with other table rows, much like a parenthetical element in a mathematical or logical expression. Without Blocks, each row is resolved in top to bottom order. For some queries, you **may not get the results you intended without using Blocks**. In addition, Blocks allow you to search the database for Security Objects that are **NOT IN** a particular subset as well as those that are, such as "Personnel who **do not** have Clearances for a specified Door". **Example of Using a Block:** If you had four rows as below (simplified for example): - **Personnel Last Name** starts with **G [single row]** - **AND [Block rows start]** **Disabled** equals ☑ OR **Logical1** equals ☑ - **[Block rows end]** - **AND NOT IN[Block rows start]** **Clearance Name** equals **mag_clear** - **[Block rows end]** The query finds **all Personnel** with **Last Name** starting with **G**, then tests those records against both conditions in the **Block filter**, and finally tests the remaining records for **not** having a **Clearance** with the **Name** of **mag_clear**. After you have added the block, click the row selector ▸ to select a row in the block and click **Add** to add more rows to the block. If your added rows are **not** correctly positioned outside or inside the block, select the row and click  or  to correct the positioning.
Clear Prompt Values	Clears out any values entered for a prompt for a criteria and returns the default value for the criteria prompt, <IGNORED> usually. NOTE: Additional query criteria that were not set as prompts (and are not displayed on the **Query Parameters Details** dialog box) do not have their values changed.

Query Editor Advanced Tab

The **Advanced** tab, shown in Figure 67 on Page 153 allows you to set the amount of time a Query can run before it times out: either the default time of five (5) minutes or a custom time between one (1) and 60 minutes.

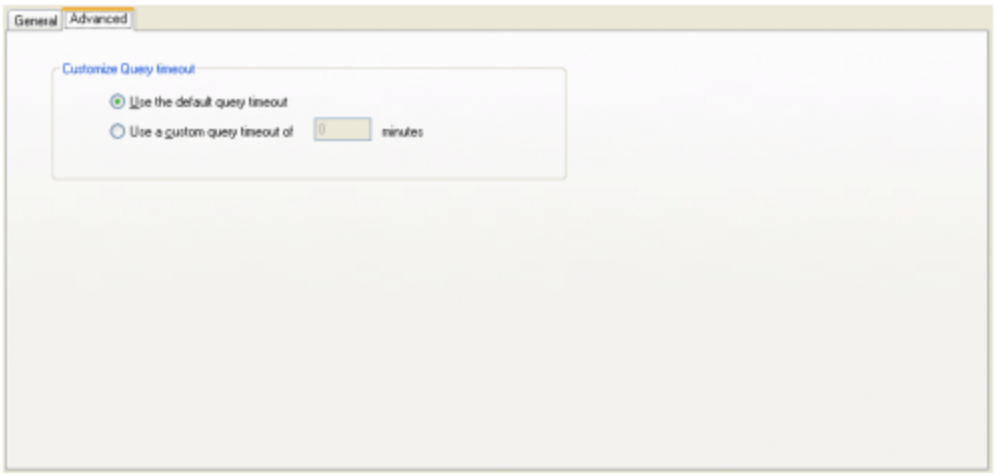
The Query functionality in C•CURE 9000 is very flexible and allows you to build complex queries on existing system data in many different ways. Basically, you can use any property of any system Object in a Query expression. Consequently, the time the server takes to run a particular query **cannot** be predicted.

If the database has accumulated a significant amount of data (a few months of activity can generate a Journal with 60 million records in it, for example), a query may run more than five minutes—the default database timeout for running SQL queries.

NOTE If a complex Query is running, **each** SQL statement executed as part of the Query will use the timeout value set on this tab. Therefore, the overall time that the Query can run on the Server may exceed the timeout value set here.

(A complex Query is one that evaluates search criteria in more than one Object Type Table. For more information, see Complex Queries on Page 172.)

Figure 67: Query Editor – Advanced Tab



Query Advanced Tab Definitions

Table 30 on Page 153 describes the fields on the **Advanced** Tab.

Table 30: Query Advanced Tab Definitions

Field	Description
Use the default query timeout	Select this option to configure the default database timeout value of five (5) minutes for this Query.
Use a custom query timeout of *nn* minutes	Select this option to configure a customized timeout value for this Query, and then enter a time value in minutes, between one (1) and 60, in the field that becomes available.

NOTE Software House recommends that you enlarge the default timeout value **only** if absolutely necessary. You should first try to redefine your Query to optimize its performance.

Example:

For string values, the Query expressions "starts with" and "equals" work more quickly than the expression "contains".

Using Wildcard Characters in Queries

C•CURE 9000 supports the use of SQL wild card characters on the **Query Editor** and the **Query Parameters** dialog box.

The wild card characters are % (per cent) and _ (underscore).

Table 31: Query Wildcard Characters

Wildcard Character	Description
% (Per Cent Symbol)	Matches any string of zero or more characters.
_ (Underscore)	Matches exactly one character.

Using Wild Card Characters

NOTE This documentation uses double quotes ("") to indicate wild card characters and match strings. Do **not** include the quote marks when you are entering wild cards and match strings.

Example:

Table 32: Examples of Wildcard Character Use

This Wildcard Character	Finds:
B_ll	Ball, bell, bill, and bull.
wh%	Who, what, why, when, where, and whistle.
[redacted]	Jon, John, Johnson, Johnsen, Johnsson.
J%	All entries that start with J.
%n	All entries that end with n.
[redacted]	Johnsson and Johansson. (Starts with Jo followed by ss followed by n.)
[redacted]	Johnsson. (Starts with Joh followed by 1 character followed by ss followed by 1 character followed by n.)
Smith%B	All Smiths with a first name that starts with B (in a field such as full name).

NOTE These wild cards cannot be used in Date fields or Numeric fields. You might have to precede the wild card characters with an F2 function key. For more information about the F2 function key, see Period Character (.) with F2 on Page 157

Using C•CURE 9000 Query Filters

- The C•CURE 9000 Standard Query filters are the following:
  - Equals
  - Not Equals

- Contains
- Starts with
- Ends with
- > (Greater than)
- => (Equal to or greater than)
- < Less than
- =< (Equal to or less than)
- In List

- **Equals** and **Not Equals** filters – Wild card characters are **not** useful with these filters.
- **In List**, **Contains**, **Starts with**, and **Ends with** filters – Wild card characters are **most** useful with these filters.
- **In List** Filter – Allows for multiple entries that are logically **OR'ed** together on one line of the Query.

NOTE The filters **Contains**, **Ends with**, **Starts with**, and **In List** are **not** case-sensitive.

Example:

"[redacted]" would return Mast, must, mist.

Contains Filter

If wild cards are used with the **Contains** filter, they define the sub-string the filter is searching for, but do not act like **Start with** or **End with** filters

Example:

"nny%ami%ez" finds Manny Ramirez, Lanny Ramirez, and Manny Ramirezdodger

Starts With Filter

Example:

- "[redacted]" would return Mast, Must, Mist, Most, Mystery, etc.
- "[redacted]" finds entries such as Mast, Must, Mist, Moist, Marist, Marxist, Mystery, etc.
- "[redacted]" finds entries such as Masterson, 'Mount St. Helen', etc.
- "[redacted]" finds 'My Mystery'.

Ends With Filter

Example:

- "[redacted] "would return Mast, 'I Must', Mist, Most, etc.
- "[redacted]" finds entries such as Mast, Must, Mist, Moist, Marist, Marxist, etc.
- "[redacted]" finds entries such as 'Mr. Masterson', 'Mount St. Helen', Mystery, etc.

In List Filter

- "A%" means starts with A.

- "%Z" means ends with Z.
- "%B%" means any string that contains B.

Example:

- "Jo%, Ko%, Lo%" finds all entries that start with Jo OR Ko OR Lo.
- "%x, %y, %z" finds all entries that end in x OR y OR z.
- "%smith%, %jones%, %john%" finds all entries that contain smith OR jones OR john.

Using Special Characters in Queries

There are certain special characters that can be useful when dealing with Queries.

Control 0 (CTRL zero)

This character is used to set a field back to the default value of **<IGNORED>** on the **Query Editor** or the **Query Parameters** dialog box.

Sometimes you may change your mind when you are building and/or executing a Query and no longer want to filter the data by a value you entered into a field. To return the field to the default **<IGNORED>**, use **CTRL 0**— which matches on all records in this field.

NOTE [Blank] or [Space] are considered to be legitimate characters. In other words, if you put a Space in a field, the Query is looking specifically for a Space. The **<IGNORED>** value indicates [NULL] meaning that everything matches.

There is a similar relationship in numerical fields. Zero (0) is not the same as **<IGNORED>**.

Period Character (.) with F2

When you are searching the Audit or Journal databases, it can be useful to use searches that contain [.door], [.input], or [.output], etc., because the general form of entries in the Audit and Journal (in the primary/secondary type fields) is –

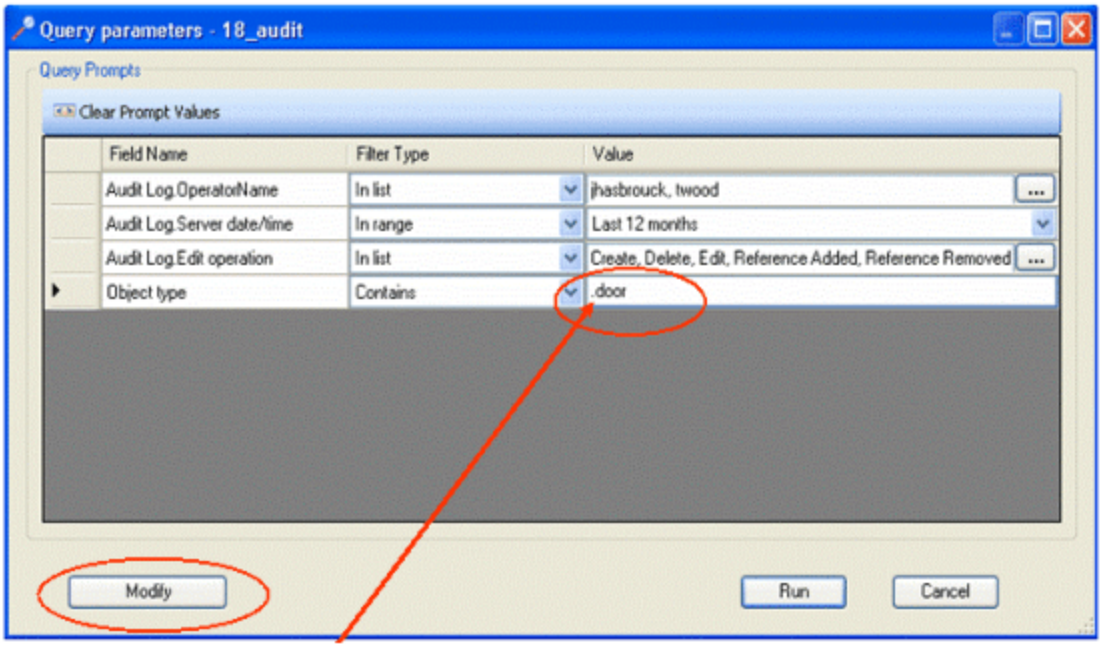
SoftwareHouse.NextGen.Common.SecurityObjects**.Object**

Example:

Figure 68 on Page 158 illustrates an Audit Query that finds the following:

All Doors that were created, deleted, or edited by operators Wood or Hasbrouck in the last twelve months. (The 'Reference Added' or 'Reference Removed' values mean any changes to the readers, inputs, or outputs that are components of the door.)

Figure 68: Use of Period Character (.) with F2 Key in a Query



You could enter the suffix '.Clearance' or '.Output' instead, to search for changes to those objects.

NOTE You can query on doors, inputs, outputs, etc., in the primary or secondary object type fields by preceding the name of the object with a period (.).
To enter the **.** (**period**) character in the field, you must first press the **F2** key.

Query Tasks

You can perform the following tasks using the **Query Editor**.

NOTE Deleting a Query affects all the other objects to which the Query is attached— Dynamic Views, Exports, and Reports.

Creating a Query

You can create a new Query to search for objects in the C•CURE 9000 database, using filters to narrow the search to the data you are looking for, and prompts to allow the user to change the filters at run-time. In addition, if you select the **Allow editing at runtime** check box, the user can modify the query "on-the-fly" at runtime.

You can create a Query in different ways:

1. Using the **Query** selection from the **Data Views** pane. See To Create a Query from Data Views on Page 160.
2. Using a Query Template to create the Query. See To Create a Query from a Query Template on Page 160.
3. Using a copy of a Pre-defined Query or other existing Query. See To Create a Copy of a Query on Page 163.
4. Using **New Query** under **Advanced Search** under any object type. See To Create a New Query from Advanced Search on Page 177.
5. Using **Instant Search** under **Advanced Search** under any object type. See To Create an Instant Query from Advanced Search on Page 178.

The first four methods launch the full **Query Editor** and allow you to save the Query object. The fifth method opens a **Query Parameters** dialog box and allows you to create a complex "one-time-only" query that you can execute immediately without saving.

You can also use **Quick Search** for simple searches on object name. See To Perform a Quick Search on Page 175.

To Create a Query from Data Views

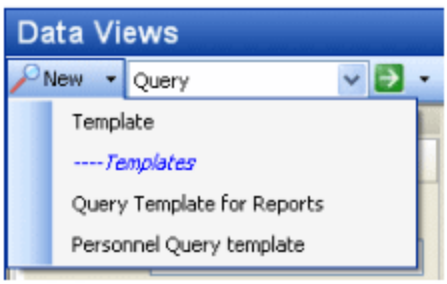
1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Query** from the **Data Views** pane drop-down list.
3. Click **New** to create a new Query. The **Query Editor** opens, and you can configure the Query.
4. To save your new Query, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new Query as a copy of the existing Query, click **Create Copy**. For information, see Creating a Copy of a Query on Page 163.

To Create a Query from a Query Template

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Query** from the **Data Views** pane drop-down list.
3. Click the arrow on **New** to display a list of query templates that you have created, as in the example in the following figure.



4. Click a template in the list. The **Query Editor** opens, and you can configure the Query (see Configuring a Query on Page 161).
5. To save your new Query, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new Query as a copy of the existing Query, click **Create Copy**. For information, see Creating a Copy of a Query on Page 163.

Creating a Query Template

You can create a Query template to use as the basis of new queries.

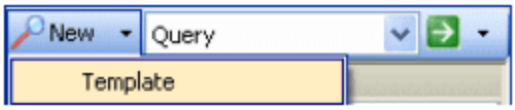
In a template, you enter field values that will have the same values for all Queries, and you can then use that template when you are creating new queries.

Example:

You could create a template for queries that search for **Personnel** objects. Then whenever you are creating a new query of the **Personnel type**, you would be able to save time by creating it from the template instead of from the default blank Query.

To Create a Query Template

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Query** from the **Data Views** pane drop-down list.
3. Click the arrow on **New** and click **Template** to create a new Query template.



The **Query Editor** opens where you can configure the Query.

4. Any fields for which you configure values become part of the template, and when you subsequently create a new Query from that template, these field values are already filled in.
5. Type the name to use for the template in the **Name** field.

Example:

"Query Template"

6. To save your new Query template, click **Save and Close**.

Configuring a Query

When you create a Query, you can choose to add one or more filters to determine which data the Query returns.

To Configure a Query

1. Create a new Query or modify an existing Query.
2. Type a **Name** and **Description** for the Query that specify what the Query is searching for and how it filters the data.

NOTE An accurate name and description are important to making it straightforward to choose the appropriate Query.You want the user who needs a Query to run or to add to a Dynamic View, Export, or Report to be able to select the correct Query quickly and easily. If you do **not** properly describe the Query and what it is searching for in these fields, the user will have to view the Query details on the Query Parameters dialog box (if the Query has prompts) or on the Query Editor itself.

3. Choose the object type for the Query from the **Query target type** drop-down list. (You **cannot** change the object type once you have saved the query.)
4. Leave Basic Configuration as the sub type for the Query or select another sub type from the **Sub type** drop-down list. (You **cannot** change the sub type once you have saved the query.)

NOTE For the Group object type, the **Sub type** drop-down list includes, in addition to the Group Audit Log and Group Journal, the additional Sub type for each kind of Group that exists in the particular C•CURE 9000 system. If the system had groups of doors, elevators, and readers, then Door Group, Elevator Group, and Reader Group will be in the **Sub Type** list.

5. Select the **Allow Editing at runtime** check box if you want users to be able to modify this query whenever they run it.

6. You can add **Query Criteria** to the query to filter the results by clicking:
   - **Add** for single rows. For detailed steps, see Using the Add Button on Page 168.

   - or -

   - **Add Block** for blocks of rows. (For some queries, you **may not get the results you intended without using Blocks**.) See Add Block on Page 152 for general information about 'Blocks' and Using the Add Block Button on Page 169 for detailed steps.

NOTE Using a block of rows is essentially equivalent to adding a parenthesis to an equation:

Example:

A*(B+C)

However, the software will **not allow you to nest** blocks:

Example:

A*(B+(C-D)).

7. Under **Prompt** in the **Query Criteria** table, you can select ☑ to have that **Query Criteria** row appear when the user runs the Query. For each row that has **Prompt** = ☑, the user can modify a value to search for when the Query runs. (For each row that has **Prompt** = ☐, you **must** specify a value in the **Value** column when configuring the Query.)
8. Click the **Advanced** tab to open and then click one of the two available options to select a query timeout for this Query configuration:
   - **Use the default query timeout** (the system default) of 5 minutes.
   - **Use custom query timeout of** *nn* **minutes**. Enter a value in minutes between one (1) and 60 in the field that becomes available.

NOTE Modify the default timeout value **only** after verifying that the Query times out and that there is **no** way to optimize its performance.

Example:

For string values, replacing the expression "contains" with the expressions "starts with" or "equals" increases the performance of the Query.

9. To save your new Query, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new Query as a copy of the existing Query, click **Create Copy**. For information, see Creating a Copy of a Query on Page 163.

Modifying a Query

You can modify a Query that you created and saved.

To Modify a Query

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Query** from the **Data Views** pane drop-down list.

3. Click  to view a list of existing Queries.
4. Click the Query you wish to modify to select it.
5. Right-click the selected Query and choose **Edit** from the context menu. The **Query Editor** opens.
6. You can change the **Name** and **Description** fields by tabbing to the field and typing over or inserting new text.

NOTE You **cannot** change the **Query target type** or **sub type**. To query on a different object type and sub type, you must create a new Query for that **Query target type/sub type**.

7. You can add **Query Criteria** by clicking **Add** or **Add Block**, picking a field to query, and setting a filter. For more details, see Adding Query Criteria to a Query on Page 163.
8. You can remove one or more **Query Criteria** rows by selecting the entire row(s), using  , and then clicking **Remove**. For more details, see Removing Query Criteria from a Query on Page 170.
9. When you are done making changes, click **Save and Close** to save the Query.

   - or -

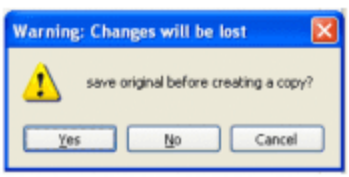
   Alternatively, if you want to create a new Query as a copy of the existing Query, click **Create Copy**. For information, see Creating a Copy of a Query on Page 163.

Creating a Copy of a Query

You can create a copy of a Query, using it as a blueprint for a new Query. Any fields configured in the existing Query are copied for the new Query—only the **Name** field is blank. (For information on copying one of the **pre-defined** Queries, see To Customize a Pre-defined Report/Query/Dynamic View on Page 269.)

To Create a Copy of a Query

1. Create/modify a Query on the **Query Editor**. (For information, see Creating a Query on Page 159 or Modifying a Query on Page 162.)
2. Click **Create Copy**. The warning message "save original before creating a copy" appears if the current Query has been modified in the editor*.



   - Click **Yes** to save the existing Query and its configuration and open a copy on the **Query Editor**.
   - Click **No** to open a copy on the **Query Editor** without saving the existing Query.
   - Click **Cancel** to return to the **Query Editor** without creating a copy.

   If you clicked either **Yes** or **No**, the **Query Editor** re-appears with a copy of the Query displayed and the **Name** field blank.

Adding Query Criteria to a Query

You can add rows to the **Query Criteria** table to add filters to your Query.

To Add Query Criteria to a Query

1. Create a new Query or modify an existing Query. See Creating a Query on Page 159 or Modifying a Query on Page 162.
2. Click **Add** to add a new row to the **Query Criteria** table with the criteria that will filter the query results. (For detailed steps, see Using the Add Button on Page 168.)

   - or -

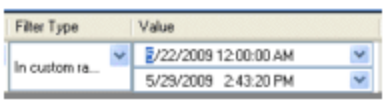
   Click **Add Block** to add a new block of rows to the **Query Criteria** table. (See Add Block on Page 152 for general information about 'Blocks' and Using the Add Block Button on Page 169 for detailed steps.)
3. Once your Query contains rows, to add a new row/block of rows after a specific existing row/block of rows, click ▸ to select the row and then click **Add** or **Add Block**
4. Choose an **Object Type** for the criteria from the drop-down list. This list contains the database tables that are related to the **Query target type** for this query.
5. Pick a **field** to query from the **Field** drop-down list of fields in the table you chose.
6. Pick a **Filter Type** for the criteria from the **Filter Type** field drop-down list. The Filter Types available depend on the type of field you choose.

   Examples:

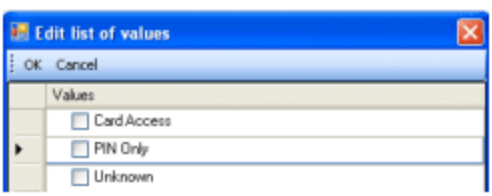
   If you choose a **True/False** field like **Active**, the **Filter Type** is limited to **Equals** or **Not Equals**.

   If you choose a **Date/Time** field like **Activation Date Time**, the **Filter Type** includes:

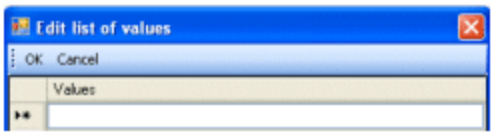
   - **In range**, which lets you select a value such as **Today**, **Yesterday**, **Last Hour**, **Last 24 hours**, **Last 7 days**, etc. from a drop-down list in the **Value** field.
   - **In custom range**, which lets you select two date values so the pair can be used as a single date/time interval value in the Query expression. (The bottom date/time specifies the maximum value in the interval and is set by default to the current date/time, while the top date/time specifies the minimum value in the interval and is set to seven days in the past.)



   If you choose an enumerated field like **Access Type** for **Credential**, the **Filter Type** includes **In list**, which lets you click ... in the **Value** field to open a dialog box, like the following, with a list of possible values. You can then click to select as many of the items as you wish and click **OK** to return your selections to the **Value** field (separated by semi-colons) in the **Query Criteria** table. The Query will then search for records that contain any one of these field values.



   If you choose any text field, the **Filter Type** also includes **In list**, which lets you click ... in the **Value** field to open a dialog box such as the following with a blank field for the entry of a text string.



When you enter text into the field, another line opens for entry. Enter as many lines of text as you wish, and click **OK** to return your multiple selections to the **Value** field (separated by semi-colons) in the **Query Criteria** table. The Query will then search for records that have any of the specified text strings as a value.

To search for a substring, enter the sign '%' as a wildcard.

Example:

"lov%" = starts with substring

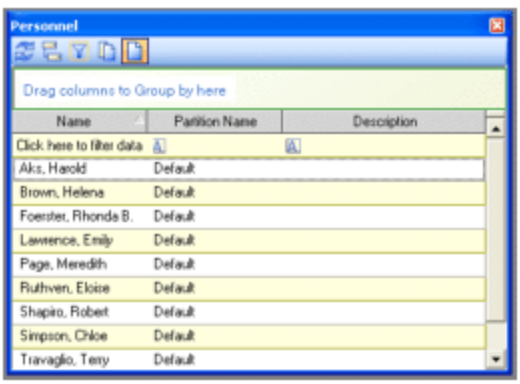
"%lov" = ends with substring

"%lov%" = contains substring

These values would find the following names respectively: "Lovsky", "Orlov", and "Orlovsky".

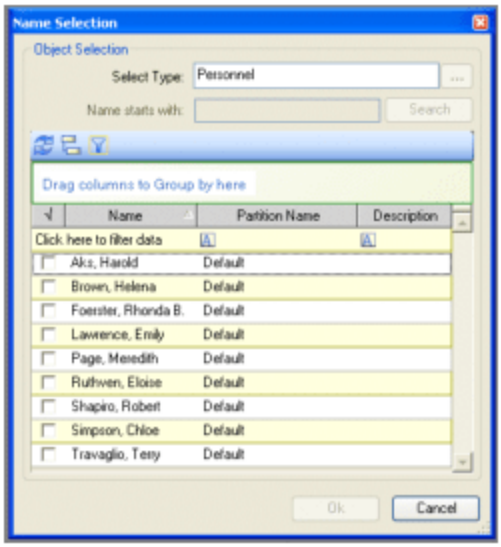
If you choose any Name field, the **Filter Type** includes:

- **Equals** or **Not Equals**, which lets you click [...] in the **Value** field to open a selection list, like the following, with a list of possible names. You can then click one of the names to return your selection to the **Value** field in the **Query Criteria** table. The Query will then search for records that contain the specified Name. (You can also type in the name without using the list.)



- **In list**, which lets you click [...] in the **Value** field to open a dialog box, like the following.

You can type a Name (or any text) in the blank field or you can click ... in the **Value** field to open a **Name selection** dialog box, like the following, which allows you to select multiple Object names at the same time.



Click in the check box(es) in the first column to select one or more rows and then click **OK** to return your multiple Name selections to the **Value** field (separated by semi-colons) in the **Query Criteria** table. The Query will then search for records that contain any one of the specified Names

Reference fields such as Personnel Type, Report Type, and Query Type work similarly to Name field. You can select a value from a list, but cannot type a value directly into the field.

NOTE

If the Object type to be displayed for selection contains more than 2500 Objects, a warning appears informing you that this could take a long time and asking if you would like to refine the search criteria.

Click **Yes** to change the search criteria for the Object Name, **No** to display all the Objects, and **Cancel** to stop the operation.

If you click Yes, the **Name Selection** dialog box appears with a blank list and the **Name starts with** field available for you to enter a letter such as "b" or "f" to narrow the search.

7. Type or select a value for the filter in the **Value** field (partially described in Step 6).

Example:

If you are querying on **Name** and choose "Starts With" as the **Filter Type**, type **Br** to find objects with a **Name** that starts with those letters.

The Default value for all field types is <IGNORED>, indicating that the system will not search on the field when the query is run.

For **True/False** fields, such as **Active** or **Enabled**, the default 'ignored' is indicated by ▣. When you click in the check box, it becomes empty ☐, indicating False (not selected); when you click again, a green check appears ☑, indicating True (selected).

NOTE A blank **Value** Field represents an empty value and will be used in the query when it runs.

Example:

To find all personnel with blank middle names, leave the **Value** Field empty.

8. If you want the query to display a prompt for this filter at runtime, so that the Operator can modify the filter information, select ☑ in the **Prompt** field.
9. You can move a **Query Criteria** row **Up** in the **Query Criteria** table by clicking the row selector ▸ and then clicking .
10. You can move a **Query Criteria** row **Down** in the **Query Criteria** table by clicking the row selector ▸ and then clicking .
11. When you are done adding **Query Criteria**, click **Save and Close** to save the Query.

Using the WITH Operator

The Query editor provides the ability to use the **WITH** Operator to specify that multiple operations are performed on the same record.

Example:

A customer wants to find all Personnel who have a specified Clearance, and with a Credential that is not expired, Lost, Stolen, or Disabled.

The Customer creates a Query written with AND statements:

Find all Personnel who have a Clearance named "Lobby"

AND Credential with Expiration Date > datetime

AND Credential Not equal Stolen

AND Credential Not equal Lost

AND Credential Not equal Disabled

As written, this query would not return the desired results, because the **AND** clauses would be evaluated separately for each Credential, not grouped to find single Credentials that are not Stolen, Lost, or Disabled.

The addition of a WITH Operator allows the creation of the intended Query, which tests each Credential for all of the conditions together, rather than each condition individually. (See Figure 69 on Page 168.)

Find all Personnel who have a Clearance named "Lobby"

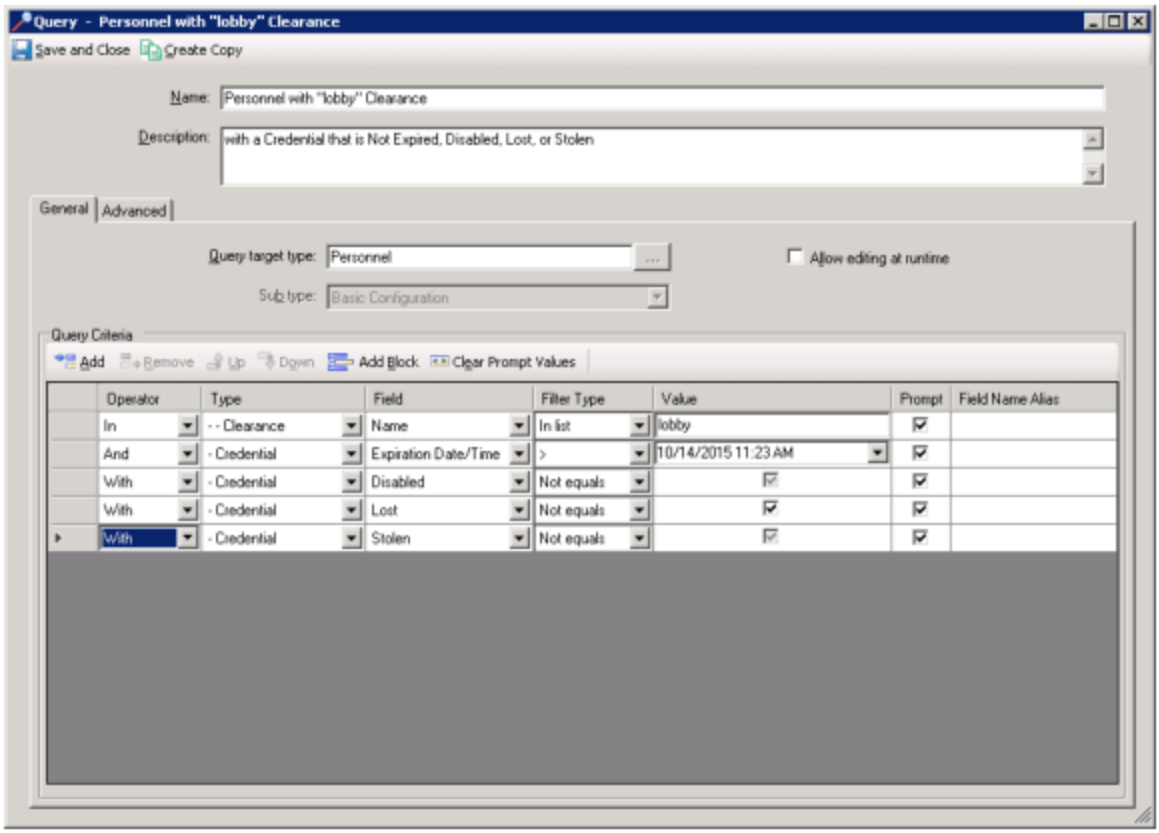
AND Credential with Expiration Date > datetime

WITH Credential Not equal Stolen

WITH Credential Not equal Lost

WITH Credential Not equal Disabled

Figure 69: Example Query Using the WITH Operator



Using Add/Add Block Buttons to Configure a Query

When you create a Query, you can use the **Add** and **Add Block** buttons to add one or more rows and/or blocks of rows to the Query Criteria table as filters for your Query. Sometimes you need to use Blocks in a Query to get your intended results.

Using the Add Button

To Use the Add Button to Configure a Query

1. Create a new Query or modify an existing Query, configuring the fields on the top of the Query Editor and on the **General** tab.
2. In the **Query Criteria** box, click **Add** to add a single row to filter the Query results.
3. For this first row you do not need to choose an Operator as the only available **Operator**—IN—is already entered in the field.
4. Click **Add** to add another row and then choose a logical **Operator** for the row— **AND**, **OR**, or **WITH** (See Using the WITH Operator on Page 167 for examples of WITH Operator useage.
5. Choose the criteria you need as filters for your query for the other fields in the table, as detailed in Adding Query Criteria to a Query on Page 163

6. Repeat the two preceding steps and/or Step 4 in the following "Using the Add Block Button" procedure in whatever combinations your Query requires.

Using the Add Block Button

Blocks allow you to create complex searches of the database and also let you search for Security Objects that are **NOT IN** a particular subset.

To Use the Add Block Button to Configure a Query

1. Create a new Query or modify an existing Query, configuring the fields on the top of the Query Editor and on the General tab.
2. In the **Query Criteria** box, click **Add Block** to add a block of rows to filter the Query results.
3. When the block row is the first row in the table, choose an Operator—**IN** or **NOT IN** are the choices.
4. Click **Add Block** to add another block of rows and then choose a logical **Operator** for the row— **AND**, **OR**, **AND NOT IN**, **OR NOT IN** .
5. Choose the criteria you need as the filters for your query for the other fields in the table, as detailed in Adding Query Criteria to a Query on Page 163
6. Repeat the two preceding steps and/or Step 4 in the preceding "Using the Add Button" procedure in whatever combinations your Query requires.

Example: Using Add Versus Add Block

In this first example, you want to define a Query for **Personnel** that finds all **Contractor** personnel whose access has been **disabled or** whose **card** has been **stolen**. The example shows how using only single rows in the Query does not return the desired results.

- If the following three conditions are resolved separately:
  - Row 1 selects **only** Personnel where **Personnel Type** = **Contractor**

    - AND -
  - Row 2 selects from the Row 1 result **only** Personnel where **Disabled** = ☑

    - OR -
  - Row 3 selects **all** Personnel with **Credential Stolen** = ☑
  - The final result shows **all** Personnel who met the criteria of **Row 1** as well as **Row 2**—all personnel who are contractors whose access is disabled—or **all** Personnel who met the criteria of **Row 3**—their credentials had been stolen. This result is **not** what you actually wanted.
- With the second and third row grouped in a block:
  - Row 1 selects **only** Personnel where **Personnel Type** = **Contractor**

    - AND -

    [Block starts]
  - Row 2 selects from the Row 1 result **only** Personnel where **Disabled** = ☑

    - OR -
  - Row 3 selects from the Row 1 result only Personnel with **Credential Stolen** = ☑

[Block ends]

- The final result shows **all** Personnel who met the criteria of **Row 1**—all the contractors, and who also **met the criteria of either Row 2 OR Row 3**—either had their access disabled or their credentials stolen. This **is** the result you wanted.

Example: Using Add Block with NOT IN

In this second example, you want to define a Query for **Personnel** that finds all **Contractor** personnel whose access has **not** been **disabled**, **or** whose **card** has **not** been **stolen**. The example shows the selection of all personnel who meet the criteria of Row 1—all Contractors (just like in the preceding example) and then uses a 'NOT IN' block to **exclude** those contractors whose credentials are either disabled or stolen from the results (unlike the preceding example).

- With the second and third row grouped in a block:
  - Row 1 selects **only** Personnel where **Personnel Type** = **Contractor**

  - AND NOT IN -

  [Block starts]
  - Row 2 selects from the Row 1 result **only** Personnel where **Disabled** = ☑

  - OR -
  - Row 3 selects from the Row 1 result only Personnel with **Credential Stolen** = ☑

  [Block ends]
- The final result shows **all** Personnel who met the criteria of **Row 1**—all the contractors, but who did **not meet** the criteria of either Row 2 OR Row 3—either did **not** have their access disabled or their credentials stolen, or both.

Removing Query Criteria from a Query

You can delete rows from the **Query Criteria** table to remove filters from your Query.

To Remove Query Criteria from a Query

1. Modify an existing Query. See Modifying a Query on Page 162.
2. Click the row selector ▸ to select one or more rows you wish to remove.
3. Click **Remove** to remove the row from the **Query Criteria** table.

NOTE If you select the row that starts a block, the entire block is removed.

4. When you are done removing **Query Criteria**, click **Save and Close** to save the Query.

Running a Query

You can run (invoke) a Query by doing any of the following:

- Double-clicking a Query displayed in a Dynamic View list of Queries.
- Double-clicking a Query displayed in a list of Queries on the **Advanced Search** pane for an object type.

- Clicking **Instant Query** on the **Advanced Search** pane for an object type. (See Defining an Instant Query from Advanced Search on Page 178.)
- Double-clicking a Dynamic View object with a Query attached.
- Running a Report which has a Query attached.
- Running an Export which has a Query attached.

To Run a Query from the Query Dynamic View

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Query** from the **Data Views** pane drop-down list.
3. Click  to open a Dynamic View listing all Query objects. (You can also click the arrow of this button to either view the list in the current tabbed view or open a new tabbed view).
4. Right-click the row of the Query you wish to run to open the context menu.
5. Choose one of the following:
   - **View** to run the Query in a new tab in the **Content** Pane
   - **Popup View** to run the Query in a floating window.
   - **View in Current Tab** to run the Query in the current **Content** Pane, replacing the Dynamic View of Queries.

   If the Query you run has user prompts available, the **Query Parameters** dialog box appears. For more information about Prompts, see Query Parameter Prompts on Page 180.

To Run a Query from the Advanced Search Pane for a Specific Object Type

1. In the **Navigation** Pane of the Administration Workstation, navigate to the object type you want to query.

   Example:

   To search for **Video Servers**, click **Video** to open the **Video** pane, then choose the object type **Video Server** from the drop-down menu.
2. Click the **Search** tab if it not already open.
3. Click **Advanced** to open the **Advanced** tab under **Search**.

   All the existing Queries for this object type are listed on the Advanced pane. (You can right-click a Query in the list to open the context menu and perform any of the functions on that menu.)
4. Double-click a Query in the list or select the Query from the list and click  to run it.

   If the Query you run has user prompts available, the **Query Parameters** dialog box appears. For more information about Prompts, see Query Parameter Prompts on Page 180.

Complex Queries

Complex Queries are Queries that evaluate search criteria in more than one Object Type table in the C•CURE 9000 database.

Example:

Suppose you want to find all Personnel who are employees and are assigned a particular Clearance named "Lobby".

Personnel and Clearance are two different object types that are related. They are stored in separate tables in the database, so your query will have to evaluate separate tables and merge the results. This is a Complex Query.

The query parameters would be:

Operator	Type	Field	Filter Type	Value
	Personnel	Personnel Type	Equals	Employee
And	Clearance	Name	Equals	Lobby

The first part of the query returns all Personnel who have "Employee" as their Personnel Type. The second part of the query returns Personnel who are assigned a Clearance called "Lobby". The query then merged these results using the AND operator. The result displayed is every Employee with the Lobby clearance.

Suppose instead that you wanted to find all Personnel who are employees OR are assigned the Lobby Clearance. In this case, some Personnel who are not employees may hold the Lobby Clearance, so the Query finds all Personnel who are employees, and all Personnel who have the Lobby Clearance, and then merges the results using the OR operator. The result will include all Personnel who are Employees, and also include all Personnel who have the Lobby Clearance. Some of the Personnel records returned will be non-Employees who have the Lobby Clearance.

The Query Editor tells you the object types you can use in a Complex Query. When you specify an target object type for the Query, and then add a row to the Query Criteria, you can only select an object type in the Type field that can be used for a Query with your Query target type and Sub Type, so it is not possible to create a Query between unrelated tables.

The way Complex Queries work is that each row in the Query Criteria table is evaluated separately, then the Operator relationships are applied to form a combined Query result. An OR Operator between two rows returns all of the results from both rows (results in both rows are returned just once). An AND Operator between two rows returns only the records that are the same in both rows.

In simple Queries (that search just one object type, such as a Personnel Query on Last Name Starts with "b"), the Query evaluates all rows together, not separately.

Example:

Row 1 of the Query finds all Personnel who are Employees. Row 2 finds all Personnel who have the Lobby Clearance.

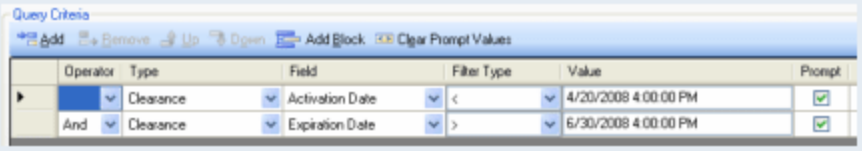
If an OR Operator was used to relate the two rows, it would return all Personnel who are Employees as well as all Personnel with the Lobby Clearance. Any Employee who also has the Lobby clearance is listed in the result only once.

If an AND Operator was used to relate the two rows, it would return all Personnel who are Employees and also have the Lobby Clearance. Employees without the Lobby Clearance are **not** included in the result, **nor** are Personnel who have the Lobby Clearance, but are **not** Employees.

NOTE Because each row is evaluated separately, some Complex Queries using the AND operator can give different results than if the rows were evaluated together in a simple Query.

Example:

Define a Personnel Query to return Personnel with Clearances that are active as of April 20 and expire as of June 30.



Then assign these two Clearances to Personnel:

Clearance 1: Active 4/ 22/ 2008, Expires 12/31/2008

Clearance 2: Active 4/1/2008, Expires 5/30/2008

The Query would return each Personnel record with these clearances in the result because each row in the complex query is evaluated separately.

If you define this same Query as a Clearance Query (a simple query), the query result does **not** include these Clearances, because **neither** Clearance is active as of April 20 AND expires as of June 30.

You can also use a Complex Query to find Credentials of Personnel based on some facet of the Personnel record or of any of the Personnel child records. See the Personnel chapter in the *C•CURE 9000 Personnel Guide* for information.

Interpreting Unexpected Results

Whenever a query does not return the results that you expected, it is useful to carefully examine the query terms you defined. You may find that the Query is **not** searching for the information you wanted it to find. You may also find that you have asked a question that the Query Editor **cannot** formulate.

Example:

You want to define a Query to find all Personnel who do not have a clearance named "Lobby".

You define a Personnel Query as:

Operator	Type	Field	Filter Type	Value
	Personnel	Personnel Type	Equals	Employee
And	Clearance	Name	Equals	Lobby

However, when you run the Query, it returns a list of Personnel, some of whom do have the Clearance named "Lobby".

Why?

The Clearance parameter is actually searching for "All Personnel who have a clearance whose Clearance name is not "Lobby".

That is different from the intended Query - Find all Personnel who do **not** have a clearance named "Lobby".

All of the Personnel found by the Query have at least one Clearance that is **not** named "Lobby". They may also have the "Lobby" clearance, but the Query as designed will **not** exclude them from the Query result.

Personnel can have multiple Clearances, and the Operators and Filters available in the Query editor do **not** provide a way to exclude one value among many.

Essentially, you **cannot** build a Query to answer the original question: Find all Personnel who do **not** have a clearance named "Lobby". You would have to create a separate query of all Personnel who do have the "Lobby" Clearance and manually compare the results of the two Queries.

Performing a Quick Search

You can perform a **Quick Search** of an object type from the **Navigation** pane for that object.

Example:

When you click **Data Views** to open the **Data Views** pane, the **Quick Search** tab is opened. (For both the **Hardware** and **Video** Functions, the **Hardware Tree/Video Tree** tabs open by default. Click the **Search** tab to open the **Quick Search** tab.) You can then pick an object type from the drop-down list and search for objects of that type without needing to create and save a Query.

NOTE Most of the **Quick Searches** for objects are for **object name** only, so if you need to search for more complicated data, such as **Hardware Inputs** that are in an **Armed** state, you need to create a Query using the **Query Editor**.

For a **Name** field search, the search performed is a 'Starts with' search.

Example:

If you type **b** in the **Name** field, you will get a list of all objects with names that start with "b", for example.

If there are additional fields in which you can enter search criteria, these fields are ANDed with the **Name** field.

Example:

Find Events whose name starts with 'b' AND Enabled = True. example.

To Perform a Quick Search

1. Click the **Navigation** pane for the object for which you want to search.

   Example:

   To search for Personnel-related objects, click **Personnel** to open the **Personnel** pane.

2. Select the object type you wish to search for from the drop-down list at the top of the pane.

   Example:

   If you are on the **Personnel** pane, you can choose from **Personnel**, **Badge Layout**, **CHUID Format**, **Clearance**, **Credential**, and so on.

3. If the **Search** tab is **not** open, click the **Search** tab to open it and if necessary click **Quick**. The **Quick Search** tab opens.

4. Depending on the object type you choose, enter search data in one or more fields.

   Typically the **Name** field is included, and some object types include other choices.

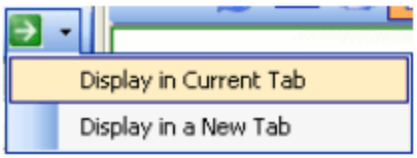
   Example:

   Images lets you select an **Image Type** (such as **Portrait**, **Signature**, **Fingerprint**, etc.) from a drop-down list.

5. When you have finished typing the data you wish to search for, click  to perform the **Quick Search**. **Quick Search** results are displayed in a Dynamic View.

6. You can perform additional new **Quick Searches** by typing different data into the fields on the **Quick Search** tab and clicking  .

7. You can choose to open the search result in the current tab in the content pane, or in a new tab by clicking the arrow on the **Start Search** button.



Defining a New Query from Advanced Search

You can create and save a new **Advanced Search** Query for an object type from the **Navigation** pane for that object.

When you click a Function button such as **Configuration**, **Data Views**, or **Personnel** to open respectively the **Configuration**, **Data Views**, or **Personnel** pane, the **Quick Search** tab is opened.

NOTE When you click either the **Hardware** or **Video** Function button, the **Hardware Tree/Video Tree** tabs respectively are open by default. Click the **Search** tab to open the **Quick Search** tab.

You can click the **Advanced Search** tab to create a new complex query or run an existing query on the object type currently selected in the drop-down menu in the Navigation pane. This is most useful if you want to perform a kind of search on an object type that a **Quick Search** cannot accomplish.

Example:

To search for **Hardware Inputs** that are in an **Armed** state, you need to create a Query, because **Quick Search** does **not** include the fields you would need to search.

To Create a New Query from Advanced Search

1. In the **Navigation** Pane of the Administration Workstation, navigate to the object type you want to query.

   Example:

   To search for **Credentials**, click **Personnel** to open the **Personnel** pane, then choose the object type **Credential** from the drop-down menu.

2. Click the **Search** tab if it not already open.
3. Click **Advanced** to open the **Advanced** tab under **Search**.
4. Click **New** to create a new Query. The **Query Editor** opens, as shown in Figure 66 on Page 148, and you can configure the Query. See Configuring a Query on Page 161 and Adding Query Criteria to a Query on Page 163.
5. To save your new Query, click **Save and Close**.

   -or -

   Alternatively, if you want to create a new Query as a copy of the existing Query, click **Create Copy**. For information, see Creating a Copy of a Query on Page 163.

   Once the Query is saved, it appears in the list on the Advanced Search pane.

Defining an Instant Query from Advanced Search

You can create and run an **Instant Query** from **Advanced Search** for an object type from the **Navigation** pane for that object. This is useful for creating complex queries on-the-fly without the requirement of saving the query. In addition, Instant Query allows you to select an existing query for the object type, modify it (if the Allow editing at runtime option was set for that Query when it was configured), and then run it.

When you click a Function button such as **Configuration**, **Data Views**, or **Personnel** to open respectively the **Configuration**, **Data Views**, or **Personnel** pane, the **Quick Search** tab is opened. You can then click the **Advanced Search** tab and **Instant Query** to create and immediately run a query for the object type currently selected in the drop-down menu in the Navigation pane.

To Create an Instant Query from Advanced Search

1. In the **Navigation** Pane of the Administration Workstation, navigate to the object type you want to query.

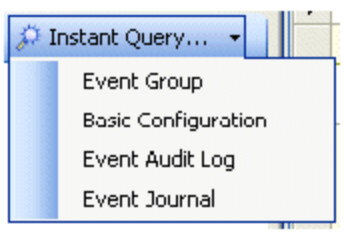
   Example:

   To search for **Video Servers**, click **Video** to open the **Video** pane, then choose the object type **Video Server** from the drop-down menu.

2. Click the **Search** tab (if it is not already open).
3. Click **Advanced** to open the **Advanced** tab under **Search**.
4. Click **Instant Query** to create an Instant Query.

NOTE The **Instant Query** button is available even if the user does not have privileges to create a Query.

You can click the down arrow next to the **Instant Query** button to select one of the query subtypes from the drop-down list. When you click **Instant Query**, the default of the Basic Configuration is automatically chosen.



The **Query Parameters** dialog box for the object type and sub type opens, as shown in Figure 70 on Page 179.

For definitions of **Query Parameters** fields and buttons, see:

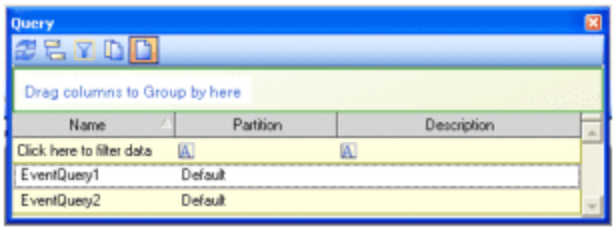
- Table 28 on Page 150
- Table 29 on Page 151

Figure 70: Query Parameters Dialog Box for Instant Query

5. Configure the Query as described in Configuring a Query on Page 161 and Adding Query Criteria to a Query on Page 163 and enter values.

   - or -

   Click ... in the Predefined Query field to select an existing Query for this object type as your Instant Query. The Query list for the object opens.



   a. Click a row to select a Query. The **Query Parameters** dialog box reappears with the selected query displayed. If the query was configured to allow editing at runtime, the button on the lower left reads **Modify** as shown in the similar **Query Parameters** dialog box in Figure 73 on Page 182. On the other hand, if the query does not allow editing, the button reads **Details**, as shown in Figure 71 on Page 180.

   b. Modify the Instant Query, if applicable, and enter values.

6. Run the Instant Query.

NOTE If you click **Run** without having configured the Query, the search returns all the objects of that type.

Query Parameter Prompts

When you run a Query that has **Prompts** enabled, or open a Dynamic View, an Export, or a Report to which a Query is attached and the *n Query* has at least one row with Prompt = ☑, the **Query Parameters** dialog box appears.

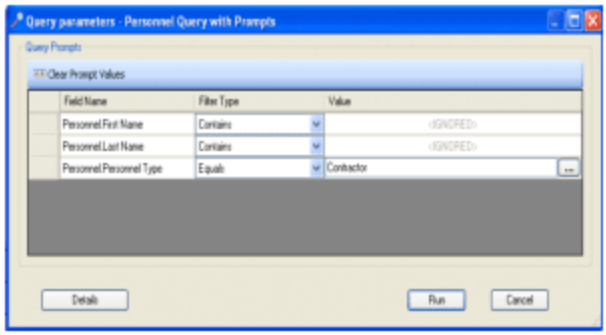
Example:

When you select the Audit Log or the Journal from Options & Tools, a Query Parameters dialog box for these functions is displayed. See the *C•CURE 9000 System Maintenance Guide* for more information.

The **Query Parameters** dialog box has a slightly different appearance and functionality depending on whether or not a user can modify the query at runtime (set when the query was created/edited).

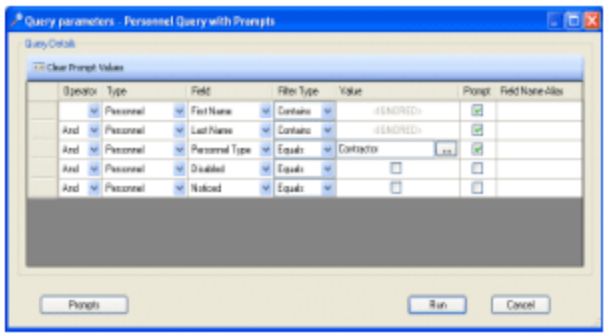
- When you run a Query with **Prompts** enabled that **cannot** be edited at runtime, a dialog box such as the example in Figure 71 on Page 180 appears.

Figure 71: Query Parameters Dialog Box for a Non-editable Query



Click **Details** to change to Query Detail mode. See Figure 72 on Page 180. All the fields that appear in the Query Criteria table in the Query Editor (see Figure 66 on Page 148 are shown. For field definitions, see Query Editor – General Tab on Page 148.

Figure 72: Query Parameters Dialog Box Details for a Non-editable Query



NOTE Query criteria that do not allow changing values at runtime (no prompts) appear on this Details mode dialog box, though they are not displayed on the Prompts mode dialog box in Figure 71 on Page 180.

You can click **Run** to run the Query as is, or you can first enter filtering data in any of the **Query Parameter rows** and then click **Run**. You can change the Filter Type as well as enter/change prompt values.

Example:

If a Query Prompt displays **PersonnelLastName** with a **Filter Type** of **Contains**, you could type **Br** and then click **Run** to find Personnel with the letters "br" in the **Last Name** field.

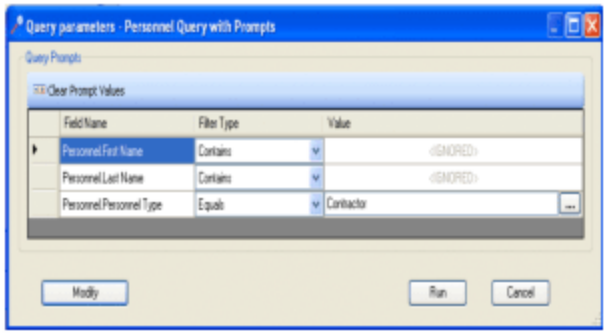
Creating a Query with prompts lets the Operator who is running the Query choose to change one or more filter values before the Query is actually run.

Example:

If your Operators often search for **Personnel** by **Last Name**, with other criteria that do not change, you could configure a **Prompt** for the **Last Name** field to allow Operators to enter different **Last Name** values before running the Query, rather than creating multiple Queries with different values for **Last Name**.

- When you run a Query with **Prompts** enabled that **can** also be edited at runtime, a dialog box such as the example in Figure 73 on Page 182 appears.

Figure 73: Query Parameters Dialog Box for an Editable Query

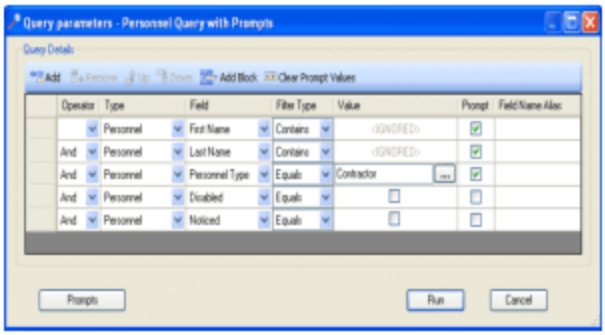


Click **Modify** to change to Query Edit mode (see Figure 74 on Page 183). All the buttons that appear in the Query Criteria table in the Query Editor (Figure 66 on Page 148) are now available, as well as all the fields.

For definitions of Query buttons and field definitions, see:

- Query General Tab Buttons on Page 151
- Query General Tab Definitions on Page 148.

Figure 74: Query Parameters Dialog Box Details for an Editable Query



You are able to modify the entire Query without saving it—adding and deleting criteria, for example—as well as simply changing the filter types or entering/changing the prompt values.

NOTE Even a user without Edit privileges for the query's object type can change the query in this Query Edit mode. In addition, entries in the Filter Type field can be changed on the **Query Parameters** dialog box shown in Figure 73 on Page 182.

When you finish making changes to the Query and/or entering filtering information, click **Run**.

6

Reporting

This chapter explains how to use the Reporting functionality provided in C•CURE 9000.

In this chapter

Reporting Overview

C•CURE 9000 Reports provide the capability to create detailed reports about any C•CURE 9000 object, to customize the appearance of reports, print reports, view reports, save reports for later printing/viewing, or convert reports to several output formats.

C•CURE 9000 also includes eighteen pre-defined Reports with related pre-defined Queries that you can use "as is," or copy and customize to meet your specific needs. For detailed information, see the Overview: Pre-defined Reports, Queries, and Dynamic Views on Page 254 for Pre-defined Reports, Queries, and Views.

Table 33 on Page 187 summarizes the Reporting tasks you can perform.

C•CURE 9000 Reports are built using the following components:

- **Report Editor** – Design report data schema and layouts and preview report formats.
- **Report Form** – Create re-usable report header/footer layouts to give your reports a consistent look and feel. (The system also provides two predefined Report Forms: Default Form and Advanced Form.)
- **Report Result** – Store and view reports that you have run.
- **Report Service** – This service on the C•CURE 9000 server executes Reports that are invoked as "Run on Server".

C•CURE 9000 Reports let you do the following:

- Create reports about any C•CURE 9000 Object
- Access and use System pre-defined Reports
- Create report templates to simplify report design
- Run reports on demand
- Save Report Results for sharing between different users of the application or for historical purposes
- Make copies of existing Reports, pre-defined and user-created
- Export reports into formats such as Portable Document Format (PDF)
- Specify a query to select and filter the records on which to report
- Specify the object types and related data fields to be included in a report
- Design a Report Form to be used as a layout for headers/footers for multiple reports
- Access and use System Pre-defined Report Forms
- Specify a design for the report layout by selecting tabular, multi-line, or free form report layouts
- Report on objects linked together with parent/child relations
- Schedule reports to run automatically on a customizable schedule
- Send exported report files to the printer or to external recipients via e-mail

NOTE C•CURE 9000 also allows you to quickly and easily create CSV reports in Excel spreadsheets by exporting data from Dynamic Views. For information and detailed procedures, see Default Dynamic Views on Page 93.

Table 33: Reporting Tasks

Task	See...
To access the Report Editor	Accessing the Report-Related Editors on Page 189
To access the Report Form Editor	Report Form Editor on Page 230
To access the Report Results Editor	Report Result Editor on Page 239
To create a Report	Creating a Report on Page 191
To create a Report template	Creating a Report Template on Page 191
To configure a Report	Configuring a Report on Page 192
To run a Report	Running a Report on Page 193
To schedule a Report	Scheduling a Report on Page 194
To save a Report	Saving a Report and its Results on Page 195
To create a copy of a Report	Creating a Copy of a Report on Page 196
To export a Report Result	Exporting a Report Result on Page 197
To view a list of Reports	Viewing a List of Reports on Page 202
To modify a Report	Modifying a Report on Page 202
To delete a Report	Deleting a Data Views Pane Object on Page 19
To choose a Report Type and Sub Type	Choosing a Report Type and Sub Type on Page 208
To use the Class Selector	Using the Class Selector on Page 208
To use the Field Selector	Using the Field Selector on Page 209
To select Report features	Selecting Report Features on Page 210
To create Sub-Reports	Creating Sub-Reports on Page 211
To add a field to the layout	Adding a Field to the Layout on Page 223
To add a header/footer to the layout	Adding a Header or Footer on Page 223
To adjust report settings	Adjusting the Report Settings on Page 224
To add a page break	Adding a Page Break on Page 224
To add a text box/picture/shape/line	Adding a Text Box, Picture, Shape, or Line on Page 225
To view a Report preview	Viewing a Report Preview on Page 228
To print a Report preview	Printing a Report Preview on Page 228

Table 33: Reporting Tasks (continued)

Task	See...
To create a Report Form	Creating a Report Form on Page 232
To create a Report Form template	Creating a Report Form Template on Page 232
To view a list of Report Forms	Viewing a List of Report Forms on Page 234
To delete a Report Form	Using a Report Form to Format a Report on Page 234
To preview a Report Form	Report Form Layout Preview Tab on Page 236
To view a Report Form	To View a Report Form on Page 237
To view a list of all/selected Report Results	Viewing a List of Report Results on Page 242
To delete a Report Result	Deleting a Report Result on Page 243
To view Report Result Information	Report Result Editor on Page 239
To view a Report or Report Result	Report/Report Result Viewers on Page 245

NOTE Creating large Reports with associated Images may cause high memory utilization on the Client station. Reports larger than available memory may cause the report to terminate. Methods of mitigating this are:

- Increasing the virtual memory size on the client station.
- Utilizing filtered queries (based on date, location, or message type) to create several smaller Reports or a more focused Report.
- Avoiding running large reports on the Server with the "Run On Server" option, to prevent the Server from running out of memory.
- Changing the Report Result Page Limit default of 2500 pages by reducing the limit. (The Report Result Page Limit entry is found under Reporting on the System Variables General Tab.)
- Software House recommends not creating a Personnel report exceeding 25k records excluding Images. If you create a large report with Images, use the Query to limit the size of the Report or an out-of-memory exception may occur.

Accessing the Report-Related Editors

You can access the three Report-related Editors from the C•CURE 9000 **Data Views** pane of the **Navigation** Pane of the Administration Workstation.

To Access the Report Editor

1. Click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Report**.
3. Click **New** to create a new Report.

   - or -

   Click  to open a **Dynamic View** showing a list of all existing **Report** objects, right-click the Report you want to change, and click **Edit** from the context menu that appears.

NOTE The eighteen C•CURE 9000 pre-defined Reports are in the list by default. Although you **cannot** modify these 'hard-coded' objects, you can create copies of them for customizing. For information, see Overview: Pre-defined Reports, Queries, and Dynamic Views on Page 254.

The **Report Editor** opens. (For examples of the editor/tabs, see Figure 80 on Page 204, Figure 82 on Page 212, and Figure 89 on Page 226.)

To Access the Report Form Editor

1. Click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Report Form**.
3. Click **New** to create a new Report Form.

   - or -

   Click  to open a **Dynamic View** showing a list of all existing **Report Form** objects and then do either of the following to the Report Form you want to change:

   - Double-click it.
   - Right-click it and click **Edit** from the context menu that appears.

NOTE The two system-supplied pre-defined Report Forms, **Default Form** and **Advanced Form**, are in the list by default.

The **Report Form Editor** opens. See Figure 90 on Page 231

To Access the Report Result Editor

1. Click the **Data Views** pane button .
2. Click the **Data Views** drop-down list and select **Report Results**.

   Click  to open a **Dynamic View** listing all existing **Report Result** objects, right-click the Report Result you want to review or change, and click **Edit** from the context menu that appears.

   The **Report Result Editor** opens displaying that Report Result. See Figure 93 on Page 239.

The Report Service

The Report Service is a separate service process that runs on the C•CURE 9000 server. The Report Service executes Reports that are **Run on Server** by an Operator, or that are configured to run as an Event Action.

Reports that are run and viewed on the Administration client or Monitoring Station application do not use the Report Service.

The Report Service must be enabled and running for it to execute **Run on Server** reports.

NOTE The Report Service is disabled by default, like other optional services, until you enable it.

- If you try to run a report on the server and the Report Service is not running, an error message appears stating that the service is not running.
- If an Event that is configured to run a Report is activated and the Report Service is not running, an error is logged to the system Event Log by the CrossFire Framework Service.
- If an error occurs during report creation of a **Run on Server** report, a description of the error is entered into the Description field of the Report Result (if a Report Result object can be created and saved in spite of the error).

You can enable and run the Report Service using the Server Configuration Application. See the *C•CURE 9000 Server Configuration Application Guide* for more information.

Basic Reporting Tasks

The primary tasks related to the generation of reports that the C•CURE 9000 Report Editors allow you to accomplish are:

Creating a Report

You can create a new Report using the **Report Editor**.

To Create a Report

1. In the **Navigation** Pane of the Administration Workstation, click the **Data Views** pane button .
2. Click the **Data Views** drop-down list and select **Report**.
3. Click **New** to create a new Report. The **Report Editor** opens. (For examples of the **Report Editor** and its tabs, see Figure 80 on Page 204, Figure 82 on Page 212, and Figure 89 on Page 226.)
4. You can now configure the Report, selecting the fields you want to report on, designing a layout for the report, and previewing the way the report will look using sample data.
5. To save your new Report, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new Report as a copy of the existing Report, click **Create Copy**. For information, see Creating a Copy of a Report on Page 196.

NOTE If you create and save a new report with its report type, subtype, and fields already selected and **Free form** as the **Layout style**, when you view it on the **Report Editor Layout Design** or **Layout Preview** tabs or run the report, it will be completely blank. The **Free form** style requires you to create the layout yourself on the **Layout Design** tab.

Creating a Report Template

You can create a Report template that can then serve as the basis of new reports of a specific type.

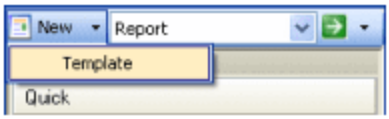
In a template you can enter field values so these fields are pre-populated for all reports, and you can then use the template when you are creating new reports.

Example:

You could create a template for all reports of a certain type, such as Personnel, that includes a set of Personnel fields. Then whenever you were creating a new report of this type, you would save time by creating the new report from the template, instead of the default blank form.

To Create a Report Template

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Report** from the **Data Views** pane drop-down list.
3. Click the down-arrow on the **New** button and click **Template** to create a new Report template. The **Report Editor**, where you can configure the Report template, opens. (For examples of the **Report Editor** and its tabs, see Figure 80 on Page 204, Figure 82 on Page 212, and Figure 89 on Page 226.)



4. Any fields for which you configure values become part of the template (including the layout); then when you subsequently create a new Report from that template, these field values are already filled in.
5. In the **Name** field, enter the name you wish to use for the template (**Report Template**, for example).
6. To save your new Report template, click **Save and Close**.

Configuring a Report

Configuring a report is the process of specifying the content of the report, creating or applying a layout to a report, and previewing the report layout to make sure you will get the results you want.

You configure a report by opening it in the **Report Editor**.

To Configure a Report

1. Open an existing report using the **Report Editor**, or create a new report.
2. Use the **Report** tab, as shown in the example in Figure 80 on Page 204, to specify the object type on which you want to report and the data fields you want to include in the report.
3. Use the **Layout Design** tab, as shown in the example in Figure 82 on Page 212, to specify the report layout (the appearance of the report, including colors, fonts, headers, and footers).
4. Use the **Layout Preview** tab, as shown in the example in Figure 89 on Page 226, to view your report layout with sample data to verify that the report will meet your needs.
5. To save your Report, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new report as a copy of the existing Report, click **Create Copy**. For information, see Creating a Copy of a Report on Page 196.

Running a Report

You can run a report from the Dynamic View list of Reports, or you can schedule a report to run once on a specified time and date, or on a recurring basis. For more information, see Scheduling a Report on Page 194.

NOTE If you are running a very large report, it is often best to use the **Run on Server** option. Sometimes a very large report can cause a client workstation to run out of memory.
In addition, avoid opening a very large report multiple times using **View**, **Popup View**, and **View in Current Tab**, because this can cause a client workstation to run out of memory or perform slowly.

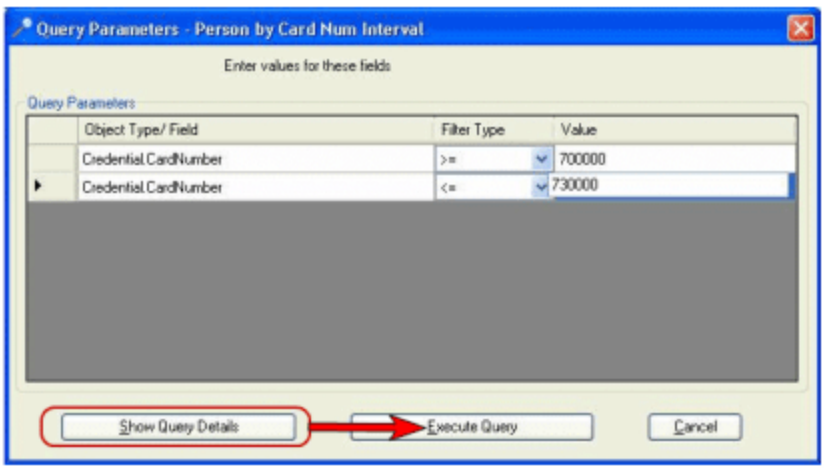
To Run a Report

1. In the Navigation Pane of the Administration Workstation, click the **Data Views** pane button.
2. Click the **Data Views** drop-down list and select **Report**.
3. Click  to open a Dynamic View listing all Reports. (You can also click the down-arrow of this button to either view the list in the current tabbed view or open a new tabbed view).
4. Right-click a Report in the list to open the Report Context menu (for information, see Table 36 on Page 202).
5. Take one of the following actions:
   - Click **View** to run the report as a new tab in the C•CURE 9000 content area.
   - Click **Popup View** to run the Report and view it in a separate popup window.
   - Click **View in Current Tab** to run the report in the current tab in the C•CURE 9000 content area (replacing the Reports Dynamic View).
   - Click **Run on Server** to start the report running in the background. The Report is run on the server by the Report Service. (If the Report Service is not running, an error message appears to tell you that the service needs to be started.) The finished report is saved and is accessible from the Report Result Dynamic View.

NOTE A system variable in the Reporting category lets you set a maximum page count limit for reports generated in your system. For information, see the System Variables chapter in the *C•CURE 9000 System Maintenance Guide*.

If the Report has an attached query **without** prompts, the query filter is applied automatically. If the Report has an attached query **with** prompts, a **Query Parameters** dialog box appears, as shown in Figure 75 on Page 194, after you click any of the preceding buttons. (For more information about queries, see Query Overview on Page 146.)

Figure 75: Query Parameters Dialog Box



6. To view all the information about the query's search criteria, click **Show Query Detail**.
7. Enter values for the parameters and then click **Execute Query** to retrieve data for the Report you are running.

   The progress of the report generation displays on the Status bar as shown in the following examples:

   Once the status bar shows the number of records being processed, a **Cancel Report** button on the top of the screen becomes available for use.

   When the report processing is completed, the report appears on the **Report Viewer**. (See Figure 95 on Page 245 for an example.) The **Cancel Report** button disappears and the **Save Result** and **Export Document** buttons become available.

Scheduling a Report

You can schedule reports for execution using C•CURE 9000 Schedules and the **Run Report** action. Reports scheduled to run based on an Event action are "Run on Server" by the Report Service.

NOTE The Report Service must be enabled and running when a Run Report action is activated; otherwise the Report cannot run, and an error is written to the system Event Log.

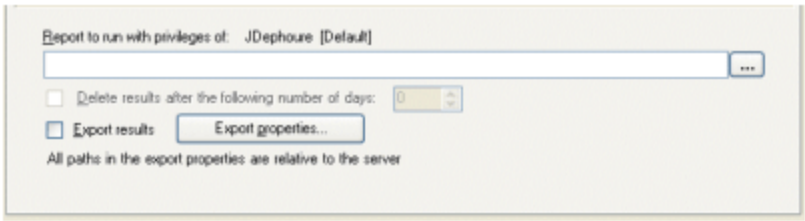
For information about creating Schedules and Events, see the relevant chapters in the *C•CURE 9000 Software Configuration Guide*.

To Schedule a Report

1. Create a Report. (For information, see Creating a Report on Page 191.)
2. Create a Schedule for running the report.
3. Create an Event.

4. Create a Run Report action in the Event.
   a. Click the **Event Action** tab.
   b. Click **Add** to add an Action.
   c. Select **Run Report** from the **Action** drop-down list. The **Report** box opens on the bottom of the screen as shown in Figure 76 on Page 195.

Figure 76: Event Action Run Report box



5. Enter information as follows
   a. In the **Report to run with privileges of: (Operator name)** field, click [...] and select the report you want to run from the list of Reports (which includes both the pre-defined Reports and user-created).

NOTE The system automatically enters the name of the Operator configuring/modifying this event (and their Partition, if relevant). This indicates that the Run Report action uses their Privilege. (The Operator name [and Partition, if existing] are logged in the Journal message recording the running of this Report at its scheduled times.)

   If the selected Report has an attached query with prompts, the Report is executed as if the Operator were running it **without** populating any prompt values.
   b. If you wish, select the **Delete results after the following number of days** option and enter the value in the box on the right.
   c. Select the **Export results** option if you wish and click the **Export Properties** button to open the **Export dialog box** and fill in and select the export parameters.

   The export action is performed after the report execution is completed.

   (For information on exporting, see the procedure in Exporting a Report Result on Page 197.

   In addition, see on Page 249.)
6. Click the **Event General** tab.
7. In the **Activate on Schedule** field, click [...] and select the Schedule you want to use to schedule the report.
8. Enable the Event by selecting the **Enabled** check box.
9. Arm the Event by selecting **Armed** in the **Default State** box.
10. Save the Event by clicking **Save and Close**.

Saving a Report and its Results

You can save a Report that you designed with the **Report Editor**. When you run a report either manually or by scheduling a report action, the output of the report can be saved as a Report Result.

To Save a Report You Have Edited

1. Create or modify a report using the **Report Editor**. (For information, see Creating a Report on Page 191 or Modifying a Report on Page 202.)
2. To save your Report, click **Save and Close**.

   - or -

   Alternatively, to create a new Report as a copy of the existing Report, click **Create Copy**. See Creating a Copy of a Report on Page 196.

To Save a Report You Have Run

1. Run a Report. (For information, see Running a Report on Page 193.)
2. If you are viewing the Report, you can click **Save Result** to save the Report output.

   The Report is saved as a Report Result. You can find the saved Report Result by Viewing a List of Report Results (see Viewing a List of Report Results on Page 242) or by right-clicking a Report in a Dynamic View and then clicking **Find Results** on the Report context menu (see Table 36 on Page 202).

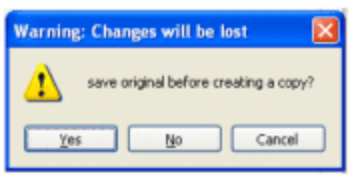
NOTE If you run the Report by clicking **Run on Server** on the Report context menu, the Report Result is automatically saved on completion.

Creating a Copy of a Report

You can create a copy of a Report, using it as a blueprint for a new Report. Any fields and/or layouts configured in the existing Report are copied for the new Report—only the **Name** field is blank. (For information on copying one of the **pre-defined** Reports, see To Customize a Pre-defined Report/Query/Dynamic View on Page 269.)

To Create a Copy of a Report

1. Create/modify a Report on the **Report Editor**. For more information, see:
   - Creating a Report on Page 191
   - Modifying a Report on Page 202
2. Click **Create Copy**. The warning message "save original before creating copy?" appears.



   - Click **Yes** to save the existing Report and its configuration and open a copy on the **Report Editor**.
   - Click **No** to open a copy on the **Report Editor** without saving the existing Report.
   - Click **Cancel** to return to the **Report Editor** without creating a copy.

   If you clicked either **Yes** or **No**, the **Report Editor** re-appears with a copy of the Report displayed and the **Name** field blank.

Exporting a Report Result

Once you have run a report or saved it as a Report Result, you can export it to a different format—any of those shown in Table 34 on Page 197—and/or e-mail, print, and save the exported report.

Table 34: Export Formats

Format	Name
PDF	Portable Document Format
MHTML	MIME HTML Format NOTE: Because MHTML is not a well-supported format in browsers and does not function well with very large Reports, Software House recommends using PDF or another Export format instead. NOTE: The MHTML file type is not supported for Printing.
RTF	Rich Text Format
TXT	Text Format
TIF	Tagged Image File Format
XLS	Microsoft Excel Spreadsheet

You can export a Report Result from the following three different places:

- Report Result List
- Report Viewer
- Report Result Viewer

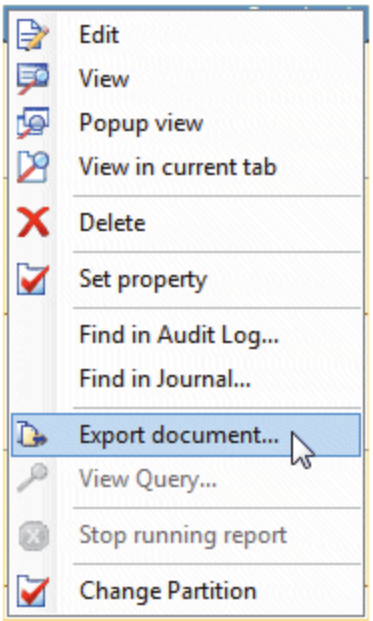
You can also export a report scheduled to run automatically on a selected schedule (see Scheduling a Report on Page 194).

To Export a Report from the Report Result List

1. In the Navigation Pane of the Administration Workstation, click the **Data Views** pane button .
2. Click the **Data Views** drop-down list and select **Report Result**.
3. Click  to open a Dynamic View listing all Report Results. (You can also click the down-arrow of this button to either view the list in the current tabbed view or open a new tabbed view).
4. Right-click the Report Result you want to export. The Report Result Context menu appears, as shown in Figure 77 on Page 198.

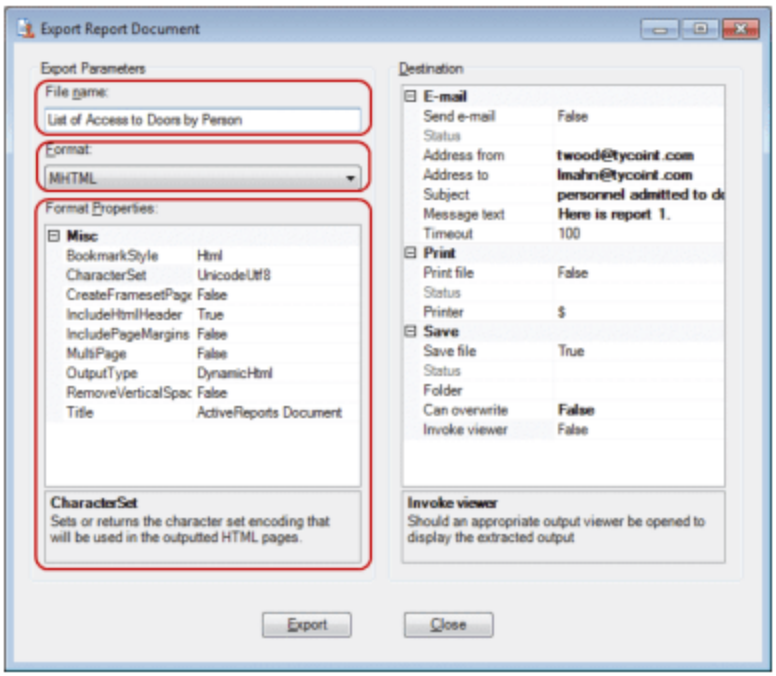
   For descriptions of the menu options, see Table 48 on Page 242.

Figure 77: Report Result Context Menu



5. Click **Export Document**. The **Export Report Document** dialog box appears, as shown in Figure 78 on Page 198. For descriptions of the fields, properties, and buttons see Export Report Document Dialog Box on Page 249.

Figure 78: Export Report Document Dialog Box



6. Type a file name for the report you want to export in the **File name** field. (By default, it is set to the name of the Report Result you selected.)
7. Select the format in which you wish to save the report from the **Format** drop-down list.

8. Set any properties you wish in the **Format Properties** sheet (the properties on this sheet change depending on the format you choose).
9. Set the destination(s) for the exported report.
   - If you want to e-mail the report, enter the **E-mail Address To** and **Address From** and any **Message Text** you want to send; change
     Send e-mail to **True**; and enter a subject for the e-mail.

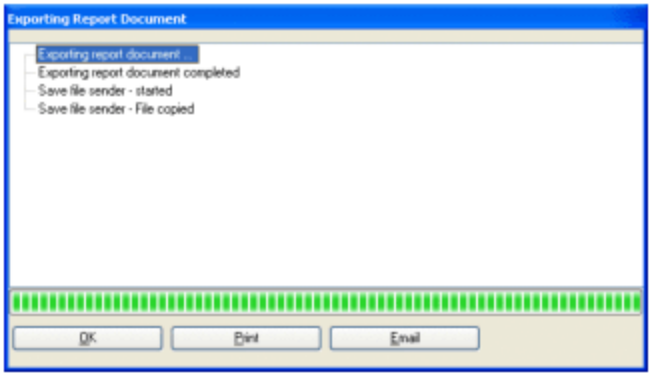
NOTE To send e-mails, you first have to set up the e-mail parameters for your entire system using the **System Variables Customer Support** category. For information, see the relevant chapter in the *C•CURE 9000 System Maintenance Guide*.

   - If you want to print the document, change **Print File** to **True** and select a printer from the drop-down list in the **Printer** field, or enter a dollar sign (**$**) to print to the default printer.
   - If you want to save the document, set **Save File** to **True** and enter a folder name, or enter a dollar sign (**$**) to save in the default user's document folder.
   - If you want to view the saved document, set **Invoke Viewer** to **True**.

NOTE Printing and/or viewing exported report documents works only if the appropriate third-party Viewer application (Adobe Reader for PDFs, for example) is installed and configured on the computer.

10. Click **Export** to perform the specified actions. A **Status** dialog box opens with progress information on the actions, as shown in Figure 79 on Page 199.

Figure 79: Exporting Report Document Status Dialog Box



11. Click the appropriate button to print or e-mail the status information.
12. Click **OK** to close the Status dialog box.
13. Click **Close** to exit the **Export Report Document** dialog box.

To Export a Report from the Report/Report Result Viewers

1. Run a Report (see Running a Report on Page 193).

   or select a Report Result to view (see Report/Report Result Viewers on Page 245).
2. On the **Report/Report Result Viewer**, click **Export Document**.

The **Export Report Document** dialog box appears, as shown in Figure 78 on Page 198. Follow Step 6 through Step 13 in To Export a Report from the Report Result List on Page 197.

Report Editor

The **Report Editor** in C•CURE 9000 lets you create reports about C•CURE 9000 objects. From the **Report Editor**, you can choose the objects and fields to include in your report, design the layout of the report, and preview that layout; you can then choose to save the report.

The following topics give more information about the Report Editor and how to use it.

- Reporting Overview on Page 186
- Report Editor Tasks on Page 202

The **Report Editor** has the following tabs:

- Report Tab on Page 204
- Report Layout Design Tab on Page 212
- Report Layout Preview Tab on Page 226

The **Report Editor** has the buttons described in Table 35.

Table 35: Report Editor Buttons

Button	Description
Save and Close	Click this button when you have completed any changes to the Report and wish to save those changes. The Report closes.
Save and New	Click this button when you want to create a new Report using the entries in the Report currently on the **Report Editor** as a template. If the Report is user-created and has been modified in the editor, a warning appears asking whether you want to save your original before creating the copy. Click **Yes** to save the original Report, **No** to **not** save it, and **Cancel** to return to the original Report without making a copy.
	Click this button when you want to close the **Report Editor** without saving your changes. A warning appears asking whether or not you want to save your changes before closing the editor. Click **Yes** to exit and save and **No** to exit and cancel your changes.

Report Editor Tasks

You can perform the following tasks from the Report Editor.

- Viewing a List of Reports on Page 202
- Modifying a Report on Page 202
- Deleting a Data Views Pane Object on Page 19

Viewing a List of Reports

You can display a list of the reports you have created by opening a Dynamic View of reports. See Viewing a List of Data Views Pane Objects on Page 20.

NOTE Double-clicking a report in the list runs the report and opens it on the **Report Viewer**, as though you clicked **View** in the Context menu.

Report List Context Menu

The context menu that opens when you right-click a report in the Report Dynamic View includes the selections described in Data Views Object Context Menu on Page 20.

In addition, there are Report-specific options described in Table 42 on Page 217.

(Double-clicking a report in the list runs the report, opening it on the **Report Viewer**, as though you clicked **View** in the Context menu.)

Table 36: Report List Right-Click Context Menu Options

Menu Selection	Description
Run on Server	Click this menu selection to run the Report on the C•CURE 9000 server and save the result as a Report Result. You can then choose **Find Results** from this menu to view a list of saved versions of this report. Once the Report has begun running, the system opens a Dynamic View that lists the running Report Result. You can close the view and let the Report run on the Server without waiting for its completion, or you can stop the running of the Report. NOTE: A system variable in the Reporting category lets you set limits on the page count of the reports generated in your C•CURE 9000 system. For information, see the System Variables chapter in the *C•CURE 9000 System Maintenance Guide*.
Find Results	Click to open a dialog box that lists all Report Results for this Report. A Report Result stores a completed report as a document, in addition to the report query and the set of report parameters used to generate that report document.

Modifying a Report

You can modify an existing report by editing it using the **Report Editor**.

To Modify a Report

1. Click **Data Views**.
2. Click the **Data Views** drop-down list and select **Report**.

3. Click  to open a **Dynamic View** showing a list of all Report objects.
4. Right-click the report you want to change and click **Edit** from the context menu that appears.
5. The **Report Editor** opens for you to edit the report.
   - Use the **Report** tab to change the object type for the report and the data fields to be included in the report.

NOTE If you change the object type, the report layout is recreated and you will lose any customized formatting you previously applied.

   - Use the **Layout Design** tab to change the format and appearance of the report data.
   - Use the **Layout Preview** tab to view your report layout with sample data to verify that the report will look the way you want when you finally run it.
6. To save your modified Report, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new report as a copy of the existing Report, click **Create Copy**. For information, see Creating a Copy of a Report on Page 196.

Report Tab

The **Report** tab, as shown in Figure 80 on Page 204, is used to define the following for the report:

- Report Schema
  - Report type—the kind (class) of C•CURE 9000 object on which the report is based.
  - Sub type—the kind of subordinate object on which the report is based. All C•CURE 9000 objects, except for the **Group** class type, have three possible Sub types: **Basic Configuration**, **Audit**, and **Journal**.
  - Data fields for the object you chose for the report.
  - Data fields for any child objects to include in a sub-report of the report.
- Report Features you can include are:
  - Report Form (if any) used to format the report.
  - Report Query (if any) used to filter the report data.
  - Layout Style of the report.

Figure 80: Report Editor Report Tab

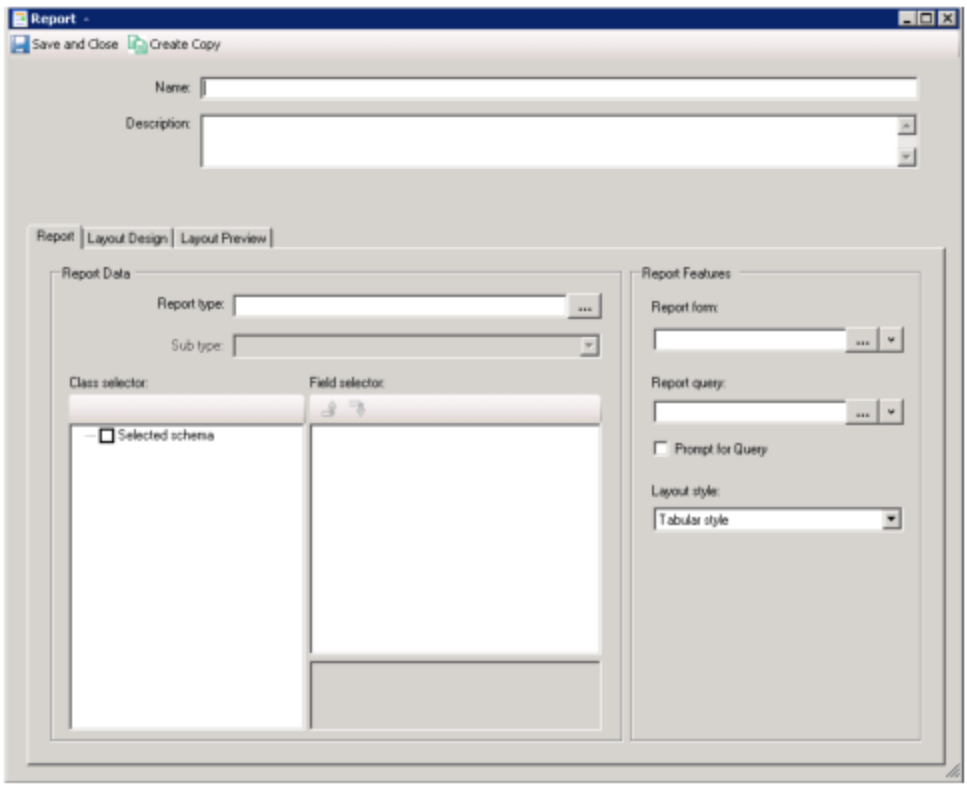
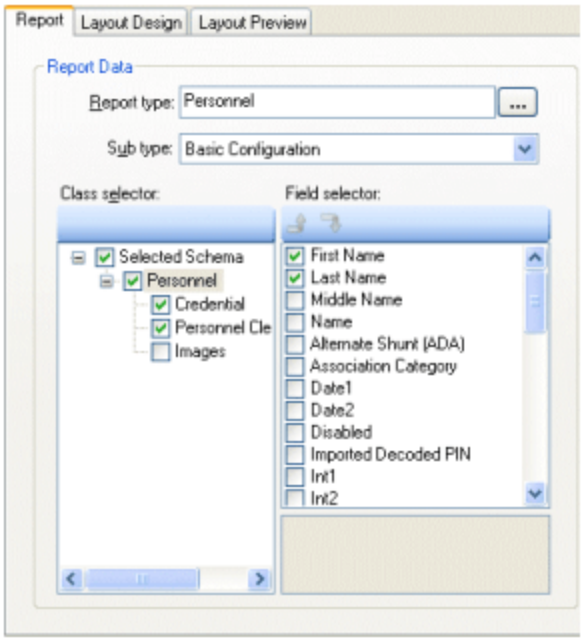


Figure 81: Report Editor Report Tab with Data Entered



Report Tab Definitions

The **Report** tab has the fields described in Table 37 on Page 205. Also see Figure 81 on Page 205 for an example of entered Report data.

Table 37: Report Editor Report Tab Fields

Fields	Description
Name	The name of the Report. This field is required.
Description	A textual description of the Report. This field is not required, but if used can make it easier to identify the specific Report you wish to edit.
Partition	A read-only field displaying the name of the Partition to which this Report belongs. (This field is visible only if the C•CURE 9000 system is partitioned.)
Report Data – See Figure 81 on Page 205 for an example with data entered	
Report Type	Select the type of object to use as the basis for your report from this drop-down list. **Example:** If you want to create a report about **Personnel**, choose the **Personnel** object type. If you want to create a report about **Doors**, choose the **Door** object type. You can choose only one object type for a report. If you change the object type after saving the report, the layout of the report changes because the fields from the previous object type no longer apply.

Report Editor Report Tab Fields (continued)

Fields	Description
Sub Type	Some object types include a **Sub type** that has a different set of fields. If the object type you chose has more than one **Sub type**, you can choose the **Sub type** on which to base your report from this drop-down list. The default **Sub type** for every object type is known as the *Basic Configuration* and includes the basic information that can be reported on for that object. **Example:** **Personnel** has three **Sub types**: **Basic Configuration**, Personnel **Audit Log**, and Personnel **Journal**. **The** Personnel **Basic Configuration** includes **Personnel** and its three child objects: **Credential, Images**, and **Personnel Clearance Pair**.
Class Selector	The **Class selector** displays a tree showing the fields available for a report for the selected class. You use both the **Class selector** and the **Field selector** to specify the fields that will appear on your report. Each branch of the tree shows a group of data fields that can be included in the report. Each branch that you select appears as a separate nested subreport in the report layout. You can click + or − to expand and contract the tree. To include every field in a group of data fields in the report, click the ☐ next to the branch (it becomes a ☑, and every field in the branch is displayed in the **Field selector** with a ☑). To select individual fields to include in the report, click the branch name, and the individual field names appear in the **Field selector** (unselected ☐). You can then click any field to select it (☑).
Field Selector	The **Field selector** displays the fields associated with the **Class selector** branch currently selected. **Example:** If your report is about **Personnel** objects and you click the branch name **Personnel** in the **Class selector**, the fields that are part of the **Personnel** record are listed in the **Field selector**. To choose a field to appear on the report, click the field name to select it and then click the name again; or click the ☐ to the left of the field name. A ☑ appears to indicate the field is selected for the report. To clear a field so it does not appear on the report, double-click the field name, and a ☐ appears to the left of the name to indicate it is no longer selected; or click the ☑ to the left of the field name. To change the order in which fields appear on the report, click a field and then click to move the field up or to move the field down.
Report Features	
Report Form	A **Report Form** is a layout design for the Headers and footers If you have designed a **Report Form** that you want to use for this report, specify that your report use that form by clicking ... and choosing a **Report Form** from the dialog box that appears. Two **predefined** Report Forms are also provided for your use (for information, see Pre-defined Report Forms on Page 230). If you do **not** choose to use a saved **Report Form**, you can use the **Report Layout Design** tab to define a custom layout for the report you are creating. In this case you can leave this field blank. You can also use both a **Report Form** and your own layout design for a report. In this case, the two are merged for the final report, as described in the note in Adding a Header or Footer on Page 223.

Report Editor Report Tab Fields (continued)

Fields	Description
Report Query	A **Report Query** is a **Query** object that you apply to your report to filter the results. You can use the Query to determine the particular data the finished report contains. (For more information about queries, see Query Overview on Page 146 in this guide.) **Example:** If you are creating a **Personnel** report and want the report result to show **only** Personnel records for **Contract Employees**, you can create a query to filter all Personnel by Employee Type = Contractor. After you save that query object, you can use it to filter your report. To specify a **Report Query**, click [...] and on the Dynamic View that appears either choose a Query from the list or click the **New** button to create a new Query.
Prompt for Query	Select this check box to have the system prompt you with a **Query Parameters** dialog box when the report is run. You can then either specify criteria values on-the fly or select a pre-existing Query of the same Object type as the Report to filter your results. If you have attached an existing Query to the report in the preceding field, when the **Query Parameters** dialog box opens, that Query is entered in the Predefined Query field. If the query is editable, you can change the criteria. You can also select another existing Query to run instead. For information on using the Query dialog box, see Query Parameter Prompts on Page 180. If there is no attached Query, the Query dialog box looks and behaves as for Instant Query. See Defining an Instant Query from Advanced Search on Page 178.
Layout Style	You can choose one of three layout styles from this drop-down box. If you choose either the **Tabular** or **Multi-line** style, the system automatically generates a design layout for the report when you save it. If you choose the **Free form** style, you have to create the layout yourself. You can also choose either the **Tabular** or **Multi-line** style and then modify it as needed (the system automatically changes the report's **Layout style** to **Free form**). **Tabular style** – If the report has **no** sub reports, a single table is formed for the top-level report data. If the report does include sub reports, the top-level report data is formatted **multi-line** while the sub reports are formatted as tables. This is the **default** layout. NOTE: If a table does not fit on a **Portrait** layout, the orientation of the report is automatically changed to **Landscape**. If the table becomes too wide for even printed **Landscape**, the report is automatically split into multiple pages while printing. (The **Layout Preview** displays the report as a single, very wide page.) **Multi-line style** – the layout for all sub-reports is formed by placing a field's label in front of its value. If too many fields are selected for the report to fit on a single line, the first field that does not fit, with its label, is automatically moved to the next line. Consequently, the report can have several lines per record. **Free form style** – No **automatic layout** is generated for the report. This layout type allows you to use the **Design Layout** tab to create a layout manually. (However, fields that are no longer selected on the **Field Selector** list will have no data when the report is run, although these fields still appear on the layout design. The layout retains the space occupied by the removed field, if any.) NOTE: If you select **Tabular** or **Multi-line** style and make any changes to the Layout Design, the editor automatically changes the **Layout Style** to **Free form** in the **Layout Style** field. Conversely, if you change the style from **Free form** to **Tabular** or **Multi-line**, any changes you made to the layout will be replaced with an automatically generated layout.

Report Tab Tasks

You use the **Report** tab to accomplish the tasks listed below, needed to configure a Report object. The procedural steps for each task are detailed in the following subsections.

- Choosing a Report Type and Sub Type on Page 208
- Using the Class Selector on Page 208
- Using the Field Selector on Page 209
- Selecting Report Features on Page 210

- Creating Sub-Reports on Page 211

Choosing a Report Type and Sub Type

A Report must have a defined C•CURE 9000 object **Report type** and **Sub type**. Both **Report type** and **Sub type** determine the data fields that can be displayed on the report. Every **Report type** has a **Basic Configuration Sub type**.

Example:

If you want a report that displays information about **Personnel**, the Report type for the report must be **Personnel**. You can then select **Basic Configuration**, **Audit log**, or **Journal** as a **Sub type**. Selecting the **Basic Configuration** would allow you to report on all Personnel fields and the fields of its sub classes—Images, Personal Clearances, and Credential.

You select the both the **Report type/Sub type** for a Report on the **Report Editor Report** tab.

To Choose a Report Type and Sub Type

1. Create or modify a report. See Creating a Report on Page 191 or Modifying a Report on Page 202.
2. In the **Report type** field, click ... to display a list of classes.
3. Click a **Class** in the list to select a **Report type** for your report.
4. In the **Sub type** field, click the down-arrow to display a list of the **Sub types** for the Class you selected for your **Report type**.
5. Click a **Sub type** in the list to select it for your Report.

NOTE If you change the **Report type/Sub type** for a report, a dialog box appears asking you to confirm the change. If you click **OK**, any fields you previously selected from a **different Report type/Sub type** are removed from the report and the report's layout is changed accordingly. If you click **Cancel**, your **Report type/Sub type** selections are unchanged, and the fields and layout for your report are not affected.

Using the Class Selector

The **Class selector** allows you to choose the class and sub-classes for your report, and also to quickly select or clear the fields to include in your report.

The **Class selector** displays a tree showing the **Report type** you have chosen for your report, as well as any sub-classes related to the selected type.

Example:

If you chose a Report type of **Personnel**, the **Class Selector** displays the Personnel class and the sub-classes related to Personnel—Credential, Images, and Personnel Clearance Pair.

If you click ☐ to select (☑) the class or sub-class branches of the tree, you cause all the fields of that class or sub-class to appear selected in the **Field selector**, as well as all fields in its sub-classes (if there are any).

If you click the class or sub-class name in the tree, you cause all fields of that class or sub-class to appear in the **Field selector**, but none of them are selected. You can then select (☑) individual fields to appear in the report.

NOTE Once you select a field for a class or sub-class in the **Field selector**, the **Selected Schema**, class, and any sub-class(es) higher in the **Class selector** hierarchy appear selected in the tree, with ☑ next to their name.

To Use the Class Selector

1. Create or modify a report. See Creating a Report on Page 191 or Modifying a Report on Page 202.
2. Choose a **Class type** for your report.
3. In the **Class selector** tree:
   - Select (☑) a class or sub-class to select all fields of that class and all its sub-classes.
   - Click a class or sub-class name to display all the fields in that class or sub-class. You can then double-click individual fields in each class to select (☑) them for inclusion in the report.

Using the Field Selector

The **Field selector** is blank until you choose a **Report type** for the report and then use the **Class selector** to add fields to the Report.

To Use the Field Selector

1. From the **Report** tab, choose a **Report type**.
2. From the **Class Selector**, click the Class name; the fields for that class appear in the **Field Selector**.
3. In the **Field Selector**, choose the fields you want to appear in your report—either by clicking to select the field name and then clicking the name again, or by clicking ☐ to the left of the field name. A ☑ appears in the check box.

NOTE When a field is highlighted, field information displays at the bottom of the **Field selector**.

4. To change the order in which fields appear on the report, click a field and then click  to move the field up or  to move the field down.

NOTE The names of Report column headings that use Customer Fields do not automatically update if the Customer Field Label is changed after the Report is saved.

To correct this:

- If the Report's Layout style is **Free form style**, change the column headings manually.
- If the Report's Layout style is either **Tabular style** or **Multi-line style**, not **Free form style**:
  1. Open the Report.
  2. Edit something on the Report tab and undo it (for example, select an additional field and then clear it, or change the **Layout style** from **Tabular style** to **Multi-line style** and back).
  3. **Save and Close** the Report.

Selecting Report Features

You can select one or more of the following:

Report form – to apply a layout design for report and page headers/footers to one or more Reports to give them a consistent appearance.

Report query – to filter the data to be included in the report.

Layout style – to apply an overall style of layout for the report.

To Select a Report Form

1. From the **Report** tab **Report form** field, click to display a list of Report forms.
2. Click [...] to open a list of Report forms.
3. Click a Report Form in the list to select a Report form for your report.

   The layout of the Report form is merged with any layout you created with the **Report Layout Design** tab and already applied to your Report (as described in the note in Adding a Header or Footer on Page 223).

To Select a Report Query

1. From the **Report** tab **Report query** field, click to display a list of available queries.
2. Click [...] to open a list of Report queries.

NOTE If you select a query before you select a **Report type**, the list displays all the queries in the system. In this case, selecting a query also selects the appropriate **Report type**.

On the other hand, if a **Report type** has already been selected, the system displays only queries for the selected type.

3. Click a query in the list to select a **Report query** for your report.
4. Select the **Prompt for Query** check box if you want the **Query Parameters** dialog box to open when the report is run.
   - If you have attached an existing Query to the report in the preceding field, when the Query Parameters dialog box opens, that Query is entered in the **Predefined Query** field. If the query is editable, you can change the criteria. You can also select another existing Query to run instead.
   - If there is no attached Query, the dialog box looks and behaves as for 'Instant Query'. You can then either specify criteria values on-the-fly or select a pre-existing report of the same Object type as the Report to filter the Report results.

To Select a Layout Style

- From the **Report** tab **Layout style** field, select a Layout style from the drop-down list.

TIP If you choose either the **Tabular** or **Multi-line** style, the system automatically generates a design layout for the report when you save it. If you choose the **Free form** style, you have to create the layout yourself on the **Report Editor Layout Design** tab.
You can, however, choose the **Tabular** or **Multi-line** styles and modify them for your needs. The system then changes the **Layout style** to **Free form**, as described in the following note.

NOTE If you use the **Layout Design** tab to modify the report layout, C•CURE 9000 changes the **Layout style** to **Free form** style. If you then modify the report layout further and, in addition, change the layout style back to **Tabular** or **Multi-line**, a message warns you that your layout changes will be lost.

Creating Sub-Reports

Some C•CURE 9000 objects, such as Personnel, have parent/child relationships with other C•CURE 9000 objects.

Example:

A Personnel record contains a list (called a *collection*) of **Clearances** (a separate C•CURE 9000 object) assigned to that person. That collection of **Clearances** has a **child** relationship to the **parent Personnel record**.

C•CURE 9000 lets you report on such complex data relationships by designing and creating sub-reports within a report. Using the **Report Editor**, you simply pick the parent/child objects from a tree structure and pick the fields from each object on which you want to report; The system automatically generates a layout that includes sub-reports for the objects you chose.

Example:

To Create a Report Listing All Personnel in the Database and Each of Their Assigned Clearances:

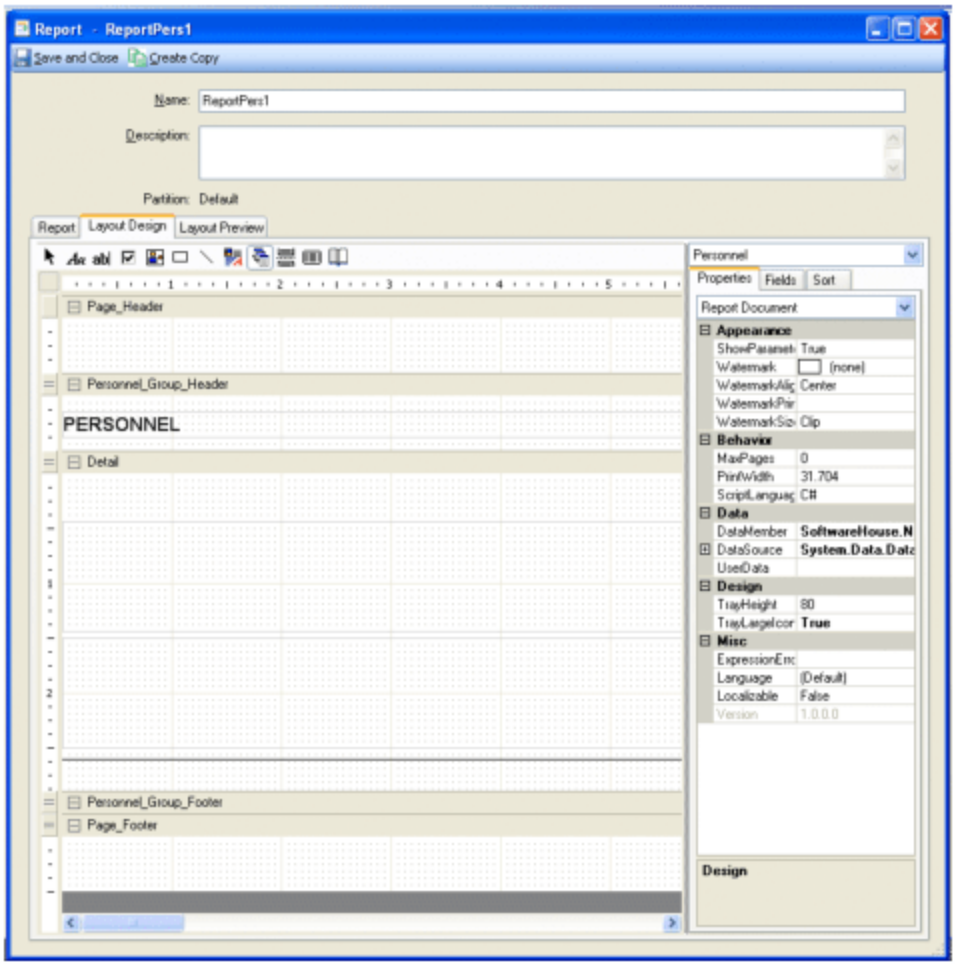
1. Create a new report
   a. Choose the Person's **First** and **Last Name** and **Personnel Type** from the **Personnel** fields.
   b. Select **Personnel Clearance Pair** as a child object.
   c. Select the **Clearance Name** field.
2. Run the report. The resulting report lists each **person** by name and personnel type, and under each person is a list of **assigned clearances**.

NOTE If you choose **Free-form** as the layout style, the system no longer creates Sub-reports on the **Layout Design** tab automatically. In this case, you have to create Sub-reports manually, using the **SubReport** button on the Layout Design Toolbar. (For information, see Table 38 on Page 212.)

Report Layout Design Tab

The **Layout Design** tab, as shown in Figure 82 on Page 212, allows you to make advanced report layout adjustments to the formatting and appearance of your report.

Figure 82: Report Editor Report Layout Design Tab



Report Editor Layout Design Tab Toolbar Definitions

The toolbar on the Layout Design tab has the buttons described in Table 38 on Page 212.

Table 38: Report Editor Layout Design Tab Toolbar Buttons

Icon	Meaning	Description
	Pointer	Use this button to select objects on the Layout Design grid.
	Label	To add a label to the report, click this button and then click and drag on the layout grid. You can use the **Layout Design Fields Properties** tab to format the label. If you assign a field to the label, the field data is displayed; otherwise, the text that you enter in the Text property is displayed.

Report Editor Layout Design Tab Toolbar Buttons (continued)

Icon	Meaning	Description
	Textbox	To insert a text box on the report, click this button and then click and drag on the layout grid. You can use the **Layout Design Fields Properties** tab to format the text box and assign a data field to it. Use the **Data Field** property to link the control to data in the database.
	Checkbox	To add a check box to the report, click this button and then click and drag on the layout grid. You can use the **Layout Design Fields Properties** tab to format the check box, and you can assign a boolean data field to it. (The check box then reflects the boolean value of the field you assign.) Use the **Data Field** property to link the control to data in the database.
	Picture	To add a picture to the report, click this button and then click and drag on the layout grid. You can use the **Layout Design Fields Properties** tab to choose the picture to insert, as well as a colored background or border. (This is useful, if you want to put a corporate logo in the report header.) Use the **Data Field** property to link the control to data in the database, or use the **Image** property to insert an external image into the layout. NOTE: Including **Picture** controls in the **Detail** area enlarges the size of the Report Result significantly.
	Shape	To draw a shape on the report, click this button and then click on the layout grid. You can use the **Layout Design Fields Properties** tab to format the shape, choosing Rectangle, Ellipse, or RoundRect (a rectangle with rounded corners), for example.
	Line	To draw a line on the report, click this button and then click on the layout grid. You can use the **Layout Design Fields Properties** tab to format the line.
	Rich Textbox	Use this button to add a text box to the report. The text box can contain a data field from the report's object type, or it can contain a reference to an RTF (Rich Text Format) or HTML file. (The RTF or HTML file is embedded in the report.) Use the **Data Field** property to link the control to data in the database, or right-click the **Rich Textbox** control and click **Load file** to embed an external document.
	SubReport	Click this button and draw a rectangle in the Detail section of the layout grid to open a **SubReport** dialog box. It lets you select an additional (child) table for the object type chosen for your report. NOTE: You only need to do this, to create a Sub-report manually, if you chose the **Free-form** layout style for the report on the Report Editor Report tab. If you chose the **Tabular** or **Multi-line** style, the Sub-report layout is created automatically.  **Example:** Personnel has three child tables: Images, Credential, and Personnel Clearance Pair. You can choose one of these tables to add to the report as a Sub-report. When you add a Sub-report to your report, the Sub-report is added to the **Class selector** drop-down list and you can click it from the list to display the SubReports layout. NOTE: Cancelling out of the **SubReport** dialog box prevents creation of a new Sub-report.
	Page Break	To create a manual page break in the report at a particular position, click this button and then click and drag the pointer on the layout grid to the appropriate place in the design layout.

Report Editor Layout Design Tab Toolbar Buttons (continued)

Icon	Meaning	Description
	Barcode	To add a bar code to the report, click this button and then click and drag on the layout grid. You can use the **Layout Design Fields Properties** tab to assign a data field to the bar code and specify the bar code format to be used, as well as whether or not to display a bar code caption.
	Report Settings	Use this button to open the **Report Settings** dialog box, shown in Figure 85 on Page 219, where you can choose options related to the page setup, printer settings, styles, and global settings for your report. (For descriptions of these setting options, see Table 43 on Page 220.

Report Editor Layout Design Tab Grid Definitions

The Layout Design Grid has the sections shown in Table 39 on Page 214, some of which do not appear unless you add them using the Right-click menu. You can add graphical objects and data fields to each of these sections of the report using the Layout Design Toolbar buttons shown in Table 38 on Page 212.

Table 39: Report Editor Layout Design Tab Grid Sections

Sections	Description
ReportHeader	This section, if added, appears first in the report above the page header. Set the **NewPage** property to **After** if you want the Report Header to be on a separate page.
PageHeader	The page header appears at the top of every report page, by default. In a **Tabular** style report, by default, the page header contains labels for each of the fields you have chosen to be in your report—**if** a single top-level table is selected. In a **Multi-line** style report, the page header is empty. (The labels for each of the fields you have chosen to be in your report are in the Detail section, rather than in the page header.) This is also true for the **Tabular style** report **if** it contains Sub-reports.
GroupHeader	A Group Header (if added) appears at the beginning of each group of data that you define in the report. NOTE: Adding a Group Header might require selecting a field to group on from the **Data Field** property on the **Properties** tab (**Data** section).
Detail	The Detail section contains the fields that you have designated as appearing in this report. In a **Multi-line** style report, the labels for each of the fields are included in the Detail section rather than in the page header.
GroupFooter	A Group Footer (if added) appears at the end of each group of data that you define in the report.
PageFooter	The page footer appears at the bottom of every report page by default.
ReportFooter	This section, if added, appears last in the report below the page footer for the final page. Set the **NewPage** property to **Before** if you want the Report Header to be on a separate page.

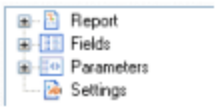
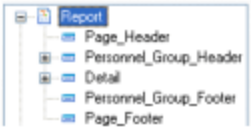
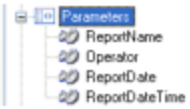
Report Editor Layout Design Tab Properties Sheet Definitions

The Layout Design Properties Sheet lets you modify the properties of objects on the Layout Design Grid. The properties sheet has the fields and tabs shown in Table 40.

Table 40: Report Editor Layout Design Tab Properties Sheet Fields/Tabs

Fields/Tabs	Description
Class Selector Drop-down List	This drop-down list on the **Layout Design** tab, shown in the example below, shows the available Report and SubReport layouts used as parts of the Report layout. Each item in the list is a Report or SubReport layout that was selected on the **Report** tab.  When you select an item in the drop-down list, the layout for that Report or SubReport is loaded into the Layout Design Grid. It also changes the list of available properties in the **Properties** tab and **Fields** tab so it shows the properties related to that Report or SubReport. To be invoked, each SubReport layout must be linked to a SubReport control on a parent report layout. (For details, see the SubReport Icon description in Table 38 on Page 212.) Double-clicking a rectangle of a SubReport control in the Layout Design Grid of a parent report is equivalent to selecting the linked SubReport layout in this drop-down list.
Properties Tab	The **Properties** tab on the right contains a grid control that allows you to modify the properties of an object currently selected on the layout. The tab has a drop-down list attached to the top of the properties grid that contains all elements placed on the layout. Selecting an item in this list selects the related control in the designer area. Clicking a control on the layout changes the selection in this list. NOTE: Each Report section has its own properties as well.

Report Editor Layout Design Tab Properties Sheet Fields/Tabs (continued)

Fields/Tabs	Description
Fields Tab	The **Fields** tab provides a list of all the fields that have been selected on the **Report** tab. The **Fields** tab has three sections: the **Report Contents** section, the **Fields** section, and the **Parameters** section.  The **Report Contents** section includes an expandable tree and provides an **alternative** way to select sections, fields, and other controls for the report layout.  The **Fields** section lists all the fields selected for the report from the **Report** tab. For each field, by default, there is a label in the **PageHeader** or **Detail** section and an actual field value in the **Detail** section. This is also reflected in the report layout grid, which shows the actual arrangement of the labels and fields as they would appear on a printed report.  You can select a field from the **Fields** list and drag it onto the layout area with the mouse. It creates a new control on the layout linked to the dropped field. Only the fields of the object selected on the **Report** tab are available on the **Fields** list. The Parameters section includes some pre-defined elements, such as Report Name and Operator, that are assigned when the Report is generated. 
Sort Tab	The **Sort** tab allows you to add sorting criteria to the report: identifying fields to sort on and setting the sort order for these fields. NOTE: Only fields selected on the **Report** tab can be sorted, but these fields do **not** have to appear on the **Layout Design** tab. **Example:** If you want the output for a Personnel report to be sorted by Last Name in ascending order: 1. Click **Add**. 2. Select a **Field** from the drop-down list (in this case, LastName), and then select a **Sort Order**, Ascend order, in this case. - To add additional Sort fields, click **Add** again. - To delete a Sort field, click the row selector and then click **Remove**. - To move a field up in the soft order, click **Up**. - To move a field down in the sort order, click **Down**.

Report Editor Layout Design Tab Context Menu Definitions

The Right-click context menu lets you add and remove report layout features, such as headers and footers, to the report. The selections on the menu depend on the item that you selected in the Report Layout grid.

If you select a report element such as a header or footer, the selections described in Table 41 on Page 217 appear on the menu.

Table 41: Report Editor Layout Design Tab Context Menu Options

Menu Selection	Description
Insert>Insert Report Header/Footer	Inserts a Report Header and Footer into the Report Layout. You can then add objects and formatting to the header and footer. (This selection is unavailable if the report already has a Report Header/Footer.)
Insert>Insert Page Header/Footer	Inserts a Page Header and Footer into the Report Layout. You can then add objects and formatting to the header and footer. (This selection is unavailable if the report already has a Page Header/Footer.)
Insert>Insert Group Header/Footer	Inserts a Group Header and Footer into the Report Layout. You can then add objects and formatting to the header and footer. (You can add more than one Group header and footer to a report.)
Reorder Groups	Opens the **Group Order** dialog box where you can change the order of the Groups in the report. (See Figure 83 on Page 218.)
Paste	Pastes the contents of the paste buffer onto the report layout.
Delete	Deletes the selected object from the report layout.

If you select a Report object such as a field, label, or graphical element, the additional selections described in Table 42 on Page 217 appear on the menu.

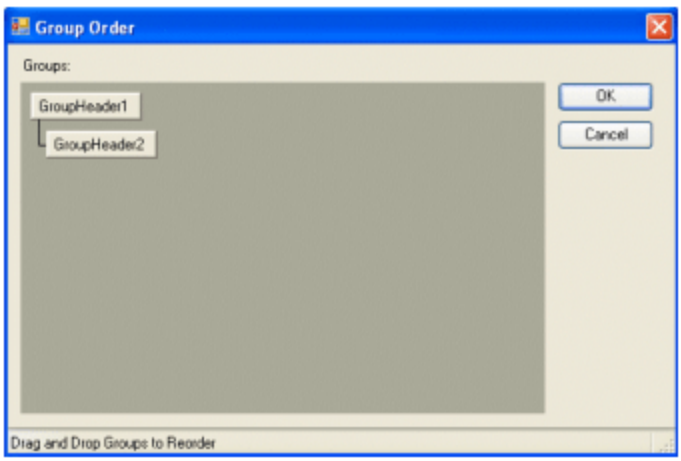
Table 42: Report Editor Layout Design Tab Context Menu Additional Options

Menu Selection	Description
Cut	Cuts the selected object from the report layout and saves it in the paste buffer.
Copy	Copies the selected object from the report layout and saves it in the paste buffer.
Bring to Front	Moves the selected object in front of other objects.
Send to Back	Moves the selected object behind other objects.
Format Border	Opens the **Format Border** dialog box where you can change the formatting of the object's border. (See Figure 84 on Page 218.)
Properties	Switches to the **Properties** tab.

Group Order Dialog Box

If you select **Reorder Groups** from the Right-click context menu, this dialog box, shown in Figure 83 on Page 218, appears. It displays the Groups you created on the Report Layout and allows you to change the order in which the groups appear in the report by clicking and dragging any group(s).

Figure 83: Group Order Dialog Box

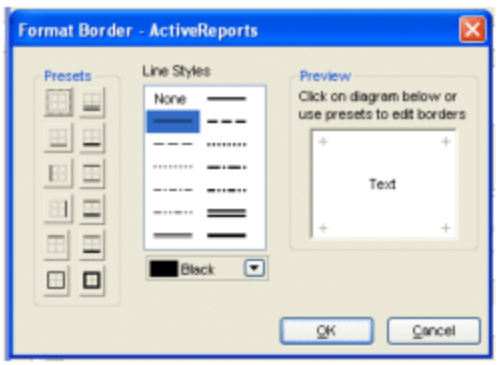


Once you are satisfied with the arrangement of the Groups, click **OK** to make the changes. Or you can click **Cancel** to discard any changes you have made.

Format Border Dialog Box

If you select **Format Border** from the Right-click context menu, this dialog box, shown in Figure 84 on Page 218, appears. It includes a variety of preset borders and line styles that you can choose. You can also choose a line color from a drop-down color list.

Figure 84: Format Border Dialog Box



A **Preview** area shows you the borders that are currently applied.

To Use a Preset Border:

- Select a color for the border and then click one of the preset borders. That border is applied to the **Preview**.

To Use a Custom Line Style:

1. Select a color for the line style and then click one of the custom line styles.
2. Click the border in the **Preview** to which you want to apply the line style.

   The line style you select is applied to the Preview border that you clicked.

Report Page Settings

The **Report Page Settings** dialog box, shown in Figure 85 on Page 219, Figure 86 on Page 219, Figure 87 on Page 220, and Figure 88 on Page 220 lets you specify four types of settings for your report, as described in Table 43 on Page 220.

Figure 85: Report Page Settings Dialog Box – Page Setup

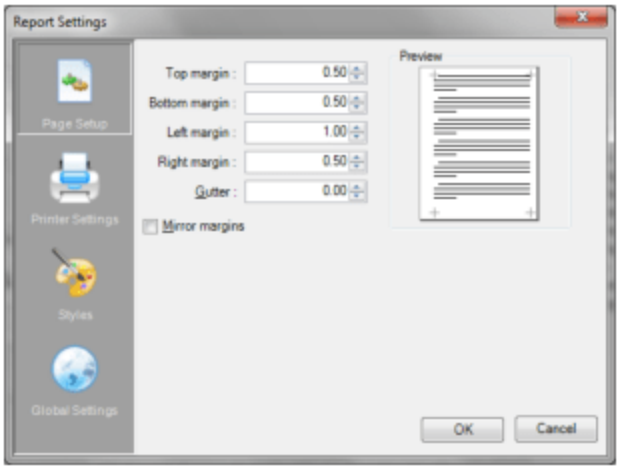


Figure 86: Report Page Settings Dialog Box – Printer Settings

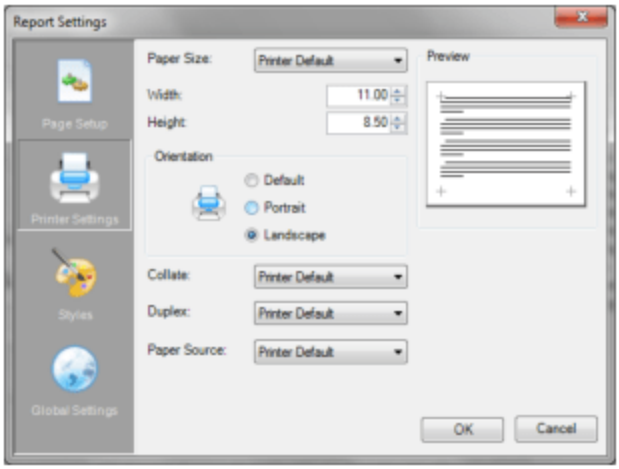


Figure 87: Report Page Settings Dialog Box – Styles

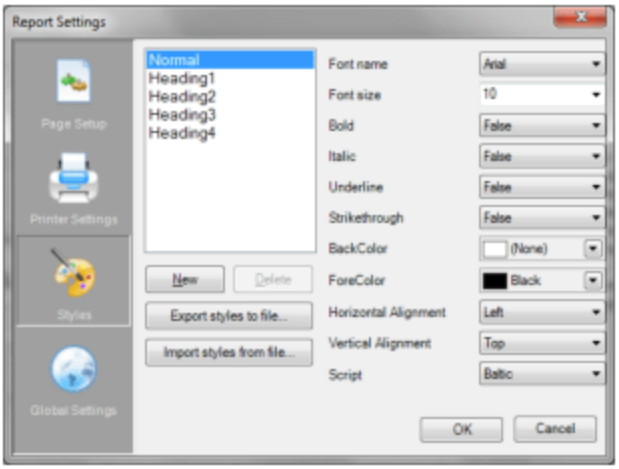


Figure 88: Report Page Settings Dialog Box – Global Settings

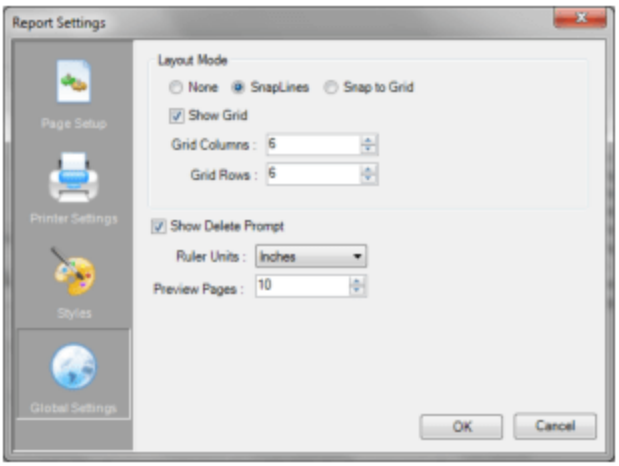


Table 43: Report Page Settings Dialog Box Fields

Fields	Description
Page Setup settings – control the report margins (For each setting, the **Preview** picture to the right changes to show the settings visually)	
Top Margin	Adjust by scrolling up or down through the numeric values or by typing in a number.
Bottom Margin	
Left Margin	
Right Margin	
Gutter	

Report Page Settings Dialog Box Fields (continued)

Fields	Description
Mirror Margins	The right and left margins and the gutter can be set to be mirrored on successive pages. The first page has a right gutter and margin, while the second page has a left gutter and margin of the same width.
Printer settings – control printer parameters: page orientation, duplex printing, paper source	
Paper Size	Choose a paper size from this drop-down list.
Width	Adjust the width of the paper for some paper size selections. Use the up/down arrows, or type in a value. Some paper sizes (such as **Letter** and **Legal**) do not allow the width to be adjusted.
Height	Adjust the height of the paper for some paper size selections. Use the up/down arrows, or type in a value. Some paper sizes (such as **Letter** and **Legal**) do not allow the height to be adjusted.
Orientation	Select **Default**, **Portrait**, or **Landscape** for the paper orientation. The **Preview** picture changes to match your selection. NOTE: Creating a **Tabular** report layout for a Report with a significant number of selected fields automatically changes the page orientation to **Landscape**. In this case, you must use **Free form** layout to force **Portrait** page orientation.
Collate	Choose **Printer Default**, **Collate**, or **Don't Collate** to determine how the printer handles collating the report. Typically, multiple copies of a collated report print in order 1,2,3...1,2,3, whereas a non-collated report prints 1,1,2,2,3,3.
Duplex	Choose **Printer Default**, **Simplex**, **Horizontal**, or **Vertical** to determine how the printer handles duplex (two-sided) printing. This setting has no effect if the printer does not support duplex printing.
Paper Source	Choose a value for Paper Source from the list. Not all printers can support every paper source in the list. See your printer manual for more information on the paper sources your printer supports.
Styles settings – let you format the report text for data and headings	
Text Style	Click a text style to select it. The **values** of the text style settings to the right of this list change to reflect the style you choose. The default text styles are **Normal**, **Heading1**, **Heading2**, **Heading3**, and **Heading4**. NOTE: To apply the Styles, select a field on the layout and change its property Class Name on the **Properties** Sheet (**Data** Section) to the valid style name **Example:** Select **Last Name** and enter **Normal** for the Class Name.
New	Click this button to create a new text style. A **Create New Style** dialog box appears to let you enter a name for the style, and to optionally choose another style on which to base the new style. Click **OK** and the new style is added to the list of text styles.
Export styles to file	You can save your Styles settings to a reportsettings file, and then import those style settings into other reports. This makes it easier to set up custom styles and use them in multiple reports. To use this feature, customize your style settings (font, color, size, etc.) then click **Export styles to file**. Type a file name in the **Save As** dialog box that appears and click **Save**.
Import styles from file	You can import Style settings that you have saved using **Export styles to file**. This allows you to define custom style settings once and use them for multiple reports. Click **Import styles from file**, select a reportstyle file from the Open dialog box that appears, and click **Open**. Importing styles from a file overwrites whatever style setting are currently selected.
Delete	Click this button to delete a text style from the list of text styles. You cannot delete the **Normal** style.
Font Name	Use this drop-down list to set the font for text.

Report Page Settings Dialog Box Fields (continued)

Fields	Description
Font Size	Use this drop-down list to set the size for text. You can choose a value from the list or type in a value.
Bold	Select this check box to display text with the **bold** property, or clear this checkbox to turn off **bold**.
Italic	Select this check box to display text with the **italic** property, or clear this checkbox to turn off **italic**.
Underline	Select this check box to display text with the **underline** property, or clear this checkbox to turn off **underline**.
Strikethrough	Select this check box to display text with the **strikethrough** property, or clear this checkbox to turn off **strikethrough**.
BackColor	Use this drop-down box to set the color for the background of objects. (You can change the color for individual object background by using the object's properties tab.)
ForeColor	Use this drop-down box to set the color for the text in objects. (You can change the color for individual text objects by using the object's properties tab.)
Horizontal Alignment	Use this drop-down list to decide whether you want text within an object to be aligned to **Left**, **Center**, **Right**, or **Justify**.
Vertical Alignment	Use this drop-down list to decide whether you want text within an object to be aligned to the **Top**, **Middle**, or **Bottom** edge.
Script	Use this drop-down list to set the script type for the text: **Cyrillic**, **Arabic**, **Hebrew**, **Vietnamese**, **Central European**, **Greek**, **Baltic**, **Turkish**, or **Western**.
Global settings – control the report layout grid size and usage	
Layout Mode	You can select a layout mode for your reports that determines how controls are placed on the report in the report designer. **Snaplines** – (the default setting) allow you to glide your controls freely instead of snapping to a grid. Blue horizontal and vertical lines appear to help you align your control with other controls or section edges. **Snap to Grid** – causes controls that you move to 'snap' to the report grid - align to the nearest gridpoint. **None** – allows you to freely move your controls, but does not provide any alignment adjustments.
Show Grid	Select this check box to display a grid on the **Report Layout Design** tab. Clear this check box display the **Report Layout Design** tab without a grid.
Show Delete Prompt	Select this check box to have a warning prompt appear when you try to delete a parameter or calculated field from the **Report Explorer** Fields tab.
Grid Columns	Click the up or down arrows (or type in a number) to set the number of grid columns between 1 and 100.
Grid Rows	Click the up or down arrows (or type in a number) to set the number of grid rows between 1 and 100.
Ruler Units	Use this drop-down list to choose between displaying the **Report Layout Design** grid in **Inches** or **Centimeters**.
Preview Pages	This parameter is not used by C•CURE 9000.

Report Layout Design Tab Tasks

You configure a layout for a Report object on the **Report Layout Design** tab, shown in Figure 82 on Page 212, by performing the listed tasks:

- Adding a Field to the Layout on Page 223
- Adding a Header or Footer on Page 223
- Adjusting the Report Settings on Page 224
- Adding a Page Break on Page 224
- Adding a Text Box, Picture, Shape, or Line on Page 225

NOTE If you are creating a new report with report type, subtype, and fields already selected and **Free form** as the **Layout style**, when you view it on the **Layout Design** tab, the report will be blank. The **Free form** style requires you to create the layout yourself.

Adding a Field to the Layout

You can add a field to a Report Layout—controlling many aspects of its final appearance (color, size, etc.)—and also create a label for the field.

To Add a Field to the Layout

1. On the **Report Layout Design** tab, click the **Properties** sheet **Fields** tab.
2. To place a field on the Layout Design Grid, select a field in the **Fields** list and drag and drop it in the Grid Detail section.To re-position it, select and drag or use the up/down/left/right arrow keys.

NOTE Only fields selected on the **Report Editor Report** tab appear in the **Fields** list.

3. To change the field's appearance, color, size, etc. in the report, click the **Properties** tab.
4. To add a label to the page header to match the field you added.
   a. Click  to move the mouse pointer to the Layout Design Grid. The pointer changes to a crosshair (+).
   b. Drag the pointer to create a box for the label.
   c. Select the label and use the **Properties** tab to match the label to the field you added by selecting the **Field** from the drop-down list for the DataField property. That field name will print on the label in the report.

Adding a Header or Footer

You can add three levels of headers and footers to a report. The Header and Footer are added as a pair. You can then add objects such as lines, graphics, text boxes, and fields to the Header or Footer.

- Report Header and Footer
- Page Header and Footer
- Group Headers and Footers (you can have multiple groups in a report)

NOTE If you use a Report Form for your report (for information, see Report Form Editor on Page 230), the headers/footers from the selected Report Form are merged with the headers/footers you choose on the **Layout Design** tab.

In this merge, the Report Form header displays above the Layout Design header as **one header** in the final report. The converse applies to the footers: the Report Form footer displays below the Layout Design footer as **one footer** in the final report.

To Add a Header or Footer to the Layout

1. On the **Report Layout Design** tab, right-click in the Layout Design Grid.
2. Use the Insert selection on the context menu to add a header and footer pair at any level.
   - Insert>Insert Report Header/Footer
   - Insert>Insert Page Header/Footer
   - Insert>Insert Group Header/Footer
3. To add objects from the toolbar or the fields list to the Header or Footer for the report, page, or group, click the field or button and place the object in the Header or Footer area on the grid.

Adjusting the Report Settings

You can change the Report settings for Page Setup, Printer Settings, Styles, and Global Settings by clicking the Toolbar **Report Settings** button  .

To Adjust the Report Settings

1. On the **Report Layout Design** tab, click  in the **Layout Design** Toolbar or double-click **Settings** on the **Fields** tab.
2. The **Report Settings** dialog box, shown in Report Form Layout Design Tab on Page 231, appears. Click:
   - **Page Setup** to adjust the report margins and gutter.
   - **Printer Settings** to set paper size, page orientation, paper source, and other printer settings.
   - **Styles** to modify the font and color characteristics of text and headings in the report.
   - **Global Settings** to specify the design grid size and visibility.

   For more information on the options available, see Report Page Settings on Page 219.

NOTE Each Sub Report has its own report settings, but some settings from the top-level Report can override those settings.

Adding a Page Break

To Add a Page Break

1. On the **Report Layout Design** tab, click  in the Layout Design Toolbar.

2. Move the pointer to the Layout Design Grid. The pointer changes to a crosshair (+).
3. Drag the pointer to create a box for the Page Break.
4. Select the Page Break object and use the **Properties** tab to change any settings as needed.

Adding a Text Box, Picture, Shape, or Line

To Add a Text Box, Picture, Shape, or Line

1. On the **Report** tab **Report Layout Design** tab, click one of the following buttons in the **Layout Design** Toolbar.
   -  to add a label.
   -  to add a Text box.
   -  to add a Check box.
   -  to add a Picture.
   -  to add a Shape (rectangle, ellipse, or rounded rectangle).
   -  to add a Line.
   -  to add a Rich Text box.
   -  to add a SubReport.
   -  to add a Barcode.
2. Move the pointer to the Layout Design Grid. The pointer changes to a crosshair (+).
3. Drag the pointer to create a box for the object.
4. Select the object and use the **Properties** tab to change any settings for fields from each object on which you want to report; C•CURE 9000 Reports then automatically generates a layout that includes sub-reports for the objects you have chosen.

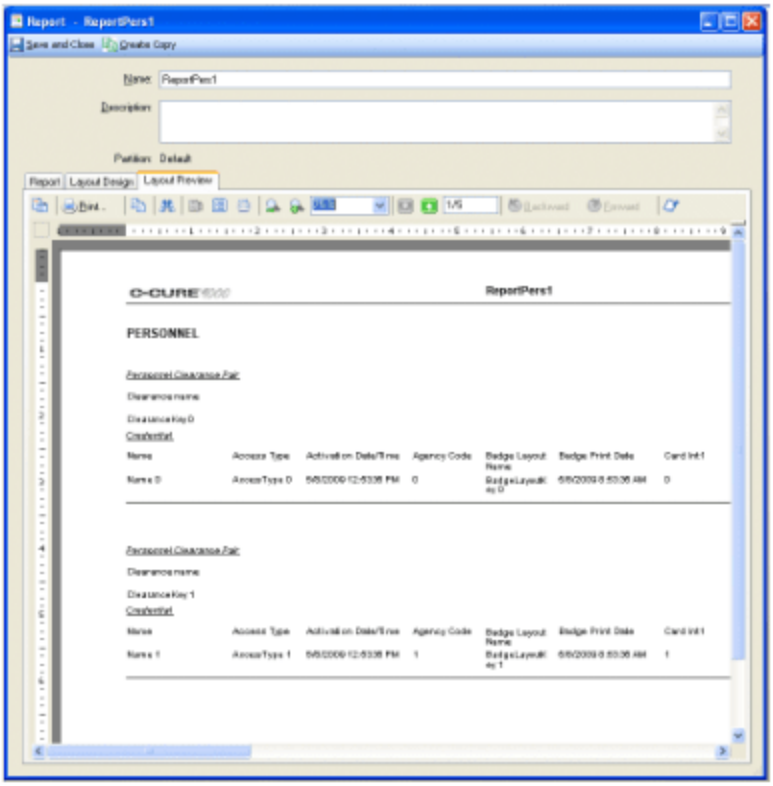
TIP Most of the controls have a **Data Field** property for linking the control's value with data retrieved from the database. The property allows you to select a field name from a list of available fields on this report.

Report Layout Preview Tab

The **Report Layout Preview** tab, as shown in Figure 89 on Page 226, gives you a visual approximation of the way your actual report will appear, based on sample data representing your schema and the report layout you chose.

NOTE If you are creating a new report with report type, subtype, and fields already selected and the **Layout style**, **Free form**, when you view it on the **Layout Design** tab, the report will be blank. The **Free form** style requires you to create the layout yourself on the **Report Layout Design** tab.

Figure 89: Report Editor Report Layout Preview Tab

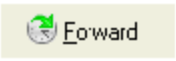


The sample data in the report preview shows you where the actual data will be positioned when you run the report. The buttons on the **Layout Preview** Toolbar, shown in Table 44 on Page 227, let you browse through the report preview, print it, search it, and copy data from it. Use these icons to examine the report and determine if the layout is formatting it as you expected. In that way, when you run the report, you will get the results you want.

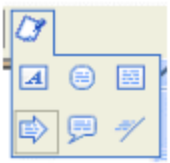
By default, the **Layout Preview** of the report opens at 100% zoom, but you can change the magnification. (The example in Figure 89 on Page 226 is displayed at 65%.) If you double-click the body of the report, the view shifts to a thumbnail view.

You can also open a Table of Contents pane by clicking  and view either a Table of Contents or a Thumbnail in this pane.

Table 44: Report Editor Layout Preview Tab Toolbar Buttons

Icon	Meaning	Description
	Table of Contents	Click this button to open either a pane with a **Table of Contents** tab that lists the sections of the report or a **Thumbnail View** tab that shows a reduced size image of the report pages. Click either tab to toggle the view.
	Print	Click this button to print a copy of the **Report Layout Preview** with the sample data as it is displayed on screen. This allows you to check your printed output for the desired result.
	Copy	Click this button to copy the content of the **Report Layout Preview** into the clipboard. You can then paste the content into another application, such as Word or Notepad.
	Find	Click this button to open a **Windows find** dialog box to search through the preview data for a text string.
	Single Page View	Click this button to return to a Single Page View after clicking either Multiple Page View or Continuous Scroll. (The tab opens in Single Page View initially, by default.)
	Multiple Page View	Click this button to choose how many pages to view in the **Layout Preview** tab at a time. A sub-menu opens to allow you to chose from page views from 1x1 to 2x3.
	Continuous Scroll	Click this button to view the report as one continuous document, using the scroll bar or Page Up/Down keys to navigate the report. While page breaks in the report are visible, you can scroll past them (which you cannot do in single page view). The Current Page control is updated as you scroll through the report.
	Zoom Out	Click this button to zoom out (make the zoom percentage lower). The percentage becomes 10% less each time you click the button. (The minimum view is 10%.)
	Zoom In	Click this button to zoom in (make the zoom percentage higher). The percentage becomes 50% more each time you click the button. (The maximum view is 800%.)
	Zoom Percentage	Choose a value from the drop-down box or type in a percentage to zoom the preview in or out. (The minimum value is [redacted] the maximum value is 800%. Two special values, **Page Width** and **Whole Page**, allow you to calculate the scale based on the current page size.)
	Previous Page Next Page	Click these buttons to navigate to the next or previous pages of a multiple-page report.
	Current Page	Shows the current page being displayed in a multiple-page report preview. Change the number in the box and press **Enter** to move to the specified page of the report.
	Backward	Click to go backward one page in the historical list of previewed pages.
	Forward	Click to go forward one page in the historical list of previewed pages.

Report Editor Layout Preview Tab Toolbar Buttons (continued)

Icon	Meaning	Description
	Annotation	Click to add a note to the Report. The available note types display:  Text, Circle, Rectangle, Arrow, Balloon, and Line annotation. (Annotations added to the **Layout Preview** tab are not saved. They are saved **only** on the **Report Viewer**. See Report/Report Result Viewers on Page 245.

Report Layout Preview Tab Tasks

- Viewing a Report Preview on Page 228
- Printing a Report Preview on Page 228

Viewing a Report Preview

You can view a report preview from either the **Report Editor Layout Preview** tab, shown in Figure 89 on Page 226, or the **Report Form Editor Layout Preview** tab, shown in Figure 91 on Page 236.

A report preview uses sample data to show how your report will appear when you finally run it. The sample data represents the schema and format you have chosen for your report.

To View a Report Preview

1. From the **Report Editor** or the **Report Form Editor**, click the **Layout Preview** tab.
2. A preview of your report appears with sample data (such as FirstName 0, FirstName 1 if your schema includes the FirstName field) showing you how the report information will appear in your report format.
3. The **Layout Preview** Toolbar provides access to the report preview, letting you print and copy data, scroll through, search, and zoom your report. See Table 44 on Page 227 for more information.

You can also return to the **Layout Design** tab,or **Report** tab,, make changes, and then click the **Layout Preview** tab again to see how the changes affected your report format.

Printing a Report Preview

You can print a report preview from either the **Report Editor Layout Preview** tab or the **Report Form Editor Layout Preview** tab.

A report preview uses sample data to show how your report will appear when you finally run it. The sample data represents the schema and format you have chosen for your report.

To Print a Report Preview

1. From the **Report Editor** or the **Report Form Editor**, click the **Layout Preview** tab.
2. A preview of your report appears with sample data (such as FirstName 0, FirstName 1 if your schema includes the FirstName field) showing you how the report information will appear in your report format.
3. Click **Print** on the **Layout Preview** Toolbar to print a copy of the report.

Report Form Editor

The **Report Form Editor** in C•CURE 9000 lets you create Report Forms to use with C•CURE 9000 Report objects.

A Report Form is a placeholder for a report layout with report header/footer and page header/footer information and predefined paragraph styles. You can design a Report Form and use it with multiple reports so your reports have a consistent appearance.

A Report Form can be used with any Report object. The Report Form's layout parameters are appended to a report's layout to form the final output that you can display or print. This allows you to change the look and feel of an existing report, without editing the report layout itself, by electing to run it with a different Report Form.

Styles defined by a Report Form override the styles of the same name defined in the Reports. Consequently, using different forms with the same Report can potentially modify the size, color, font, and other attributes of the labels and fields in the generated Report Result.

Two predefined Report Forms are also provided for your use (for information, see Pre-defined Report Forms).

The **Report Form Editor** has the following tabs:

- Report Form Layout Design Tab on Page 231
- Report Form Layout Preview Tab on Page 236

See Report Form Layout Design Tab Tasks on Page 235 for a list of the tasks you can perform with the Report Form Editor.

Pre-defined Report Forms

C•CURE 9000 provides two pre-defined Report Forms for your use: the **Default form** and the **Advanced form**. Both forms include:

- Page Headers that print the C•CURE 9000 logo in the upper left of the report page and the Report Name in the upper right.
- Page footers that print the date of the report, the name of the operator who ran the report, and the page number across the bottom of each report page.

The only difference between them is as follows:

- In the **Default** form, the page numbers simply display as Page 1,2, 3,....n.
- In the **Advanced** form, the page numbers display as Page 1 of x, 2 of x,...n of x (where x = the total number of pages in the report).

NOTE Using the **Advanced** form slows report execution since the total page count has to be calculated in the beginning.

You can use these system-supplied Report Forms to format your reports as you would use any Report Form you created yourself. You can create copies of the form with the **Create Copy** button and then edit them, but you cannot delete the original pre-defined form. For more information, see Creating a Copy of a Report Form on Page 233.

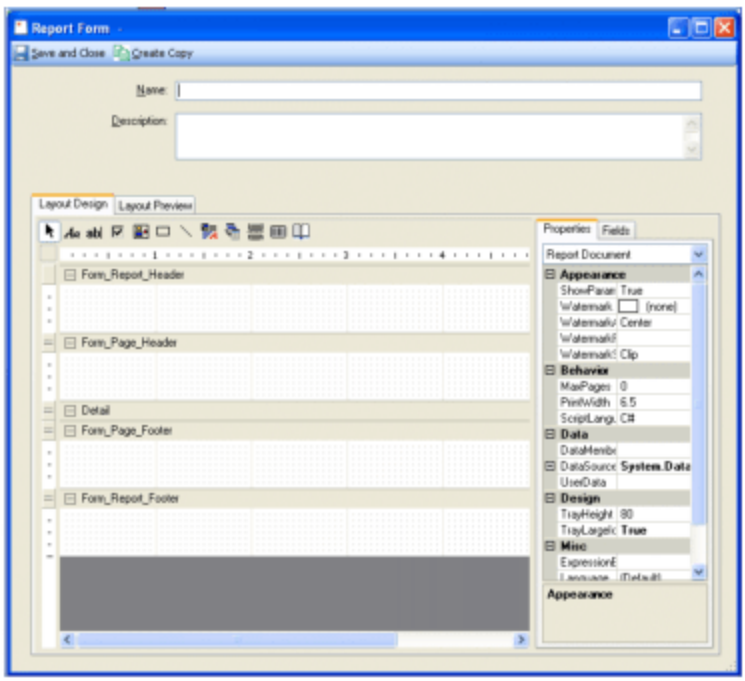
You access the predefined Report Forms from the Dynamic View list of Report Forms. For more information, see Viewing a List of Report Forms on Page 234.

Report Form Layout Design Tab

The **Report Form Layout Design** tab, as shown in Figure 90 on Page 231, lets you create the layout for your Report Form.

The **Report Form Layout Design** tab is similar to the **Report Editor Layout Design** tab, except that you cannot add fields for an object. Instead, a Report Form is used only to define the overall layout of the headers/footers for a report. The Report Form can then be applied to multiple reports to give them a uniform appearance, regardless of the object data appearing in the report.

Figure 90: Report Form Editor Layout Design Tab



Report Form Layout Design Tab Definitions

The **Report Form Editor** fields/buttons are fundamentally the same as the **Report Editor** fields/buttons for the **Report Layout Design** and **Report Layout Preview** tabs. For detailed information see the following:

- Report Editor Layout Design Tab Toolbar Definitions on Page 212
- Report Editor Layout Design Tab Grid Definitions on Page 214
- Report Editor Layout Design Tab Properties Sheet Definitions on Page 214
- Report Editor Layout Design Tab Context Menu Definitions on Page 217

Report Form Editor Tasks

Creating a Report Form

You can create a new Report Form using the **Report Form Editor**.

You can also use either of the two system-supplied pre-defined report forms, accessed from the Report Form Dynamic View list, with the **Create Copy** button as the basis for your Report Forms. For information, see Creating a Copy of a Report Form on Page 233.

To Create a Report Form

1. In the **Navigation** Pane of the Administration Workstation, click the **Data Views** pane button .
2. Click the **Data Views** drop-down list and select **Report Form**.
3. Click **New** to create a new Report form.

   The **Report Form Editor** opens. (For examples of the **Report Form Editor** and its tabs, see Figure 90 on Page 231 and Figure 91 on Page 236.)
4. You can now configure the Report Form, designing a layout for the report
5. To save your new Report Form, click **Save and Close**.

   - or -

   Alternatively, if you want to create a new Report Form as a copy of the existing Report Form, click **Create Copy**. For information, see Creating a Copy of a Report Form on Page 233.

Creating a Report Form Template

You can create a Report Form template that can then serve as the basis of new Report Forms.

In a template, you can enter values so they are the same for all Report Forms, and you can then use the template when you are creating new Report Forms.

Example:

You could create a template for all Report Forms for reports of a certain type that includes the same corporate logo, headers, and footers. Then whenever you were creating a new report of this type, you would save time by creating the new report from the Report Form template, instead of the default blank Report Form.

To Create a Report Form Template

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.

2. Select **Report Form** from the **Data View** pane drop-down list.
3. To create a new Report Form template, click the down-arrow on the **New** button and click **Template**.

   The **Report Form Editor**, where you can configure the Report Form, opens.
4. In the **Name** field, enter the name you wish to use for the template ("Report Template", for example).
5. To save your new Report Form template, click **Save and Close**.

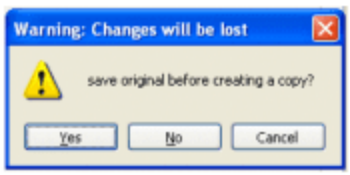
Creating a Copy of a Report Form

You can create a copy of a Report Form, using it as a blueprint for a new Report Form. Any values configured in the existing Report Form are copied for the new Report Form—only the **Name** field is blank.

You can also use either the system-supplied pre-defined **Default form** or **Advanced form** on the Report Form Dynamic View list as the basis of a copy of a Report Form.

To Create a Copy of a Report Form

1. Create/modify a Report Form on the **Report Form Editor**. (For information, see Creating a Report Form on Page 232.)
2. Click **Create Copy**. The warning message "save original before creating a copy?" appears if the Report Form was modified in the editor.



   - Click **Yes** to save the existing Report Form and open a copy on the **Report Form Editor**.
   - Click **No** to open a copy on the **Report Form Editor** without saving the existing Report Form.
   - Click **Cancel** to return to the **Report Form Editor** without creating a copy.

   If you clicked either **Yes** or **No**, the **Report Form Editor** re-appears with a copy of the Report Form displayed and the **Name** field blank.
3. Modify the Report Form to your liking and then click **Save and Close**.

To Create a Copy of a Pre-defined Report Form

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Report Form** from the **Data Views** pane drop-down list.
3. Click  to open a Dynamic View listing all Report Forms. (You can also click the down-arrow of this button to either view the list in the current tabbed view or open a new tabbed view).
4. Right-click either of the pre-defined report forms, the **Default form** or the **Advanced form**, and click **Edit** from the context menu that appears.

   The **Report Form Editor** opens with the pre-defined form.
5. Click **Create Copy**.

The **Report Form Editor** re-appears with a copy of the pre-defined form displayed and the **Name** field blank.

6. Modify the Report Form to your liking and then click **Save and Close.**

Viewing a List of Report Forms

You can display a list of the Report Forms you have created by opening a Dynamic View of Report Forms. See Viewing a List of Data Views Pane Objects on Page 20.

The list also includes the two system-supplied pre-defined Report Forms: **Default** form and **Advanced** form.

Report Form List Context Menu

The context menu that opens when you right-click a Report Form in the Report Form Dynamic View includes the selections described in Data Views Object Context Menu on Page 20.

(Double-clicking a Report Form in the list opens it on the **Report Form Editor**, as though you clicked **Edit** in the Context menu.)

Using a Report Form to Format a Report

You can use a Report Form as the layout design for one or more Reports to give your Reports a consistent appearance.

To Use a Report Form

1. Create or modify a report using the **Report Editor**. (For information, see Creating a Report on Page 191 or Modifying a Report on Page 202.)
2. In the **Report** tab **Report Features** area, click [...] to select a Report Form from the dialog box that appears.
3. Click the **Layout Preview** tab to preview the Report with the Report Form applied it.
4. To save your Report with the Report Form, click **Save and Close**.

   - or -

   Create Copy.

Report Form Layout Design Tab Tasks

You use the **Report Form Layout Design** tab to perform the tasks in the following list and configure a layout for a **Report Form** object. Since the tasks are similar to those performed on the **Report Editor Layout Design** tab, with the exception of adding fields for an object, refer to the appropriate listed sections:

- Adding a Field to the Layout on Page 223.
- Adding a Header or Footer on Page 223.
- Adjusting the Report Settings on Page 224.
- Adding a Page Break on Page 224.
- Adding a Text Box, Picture, Shape, or Line on Page 225.

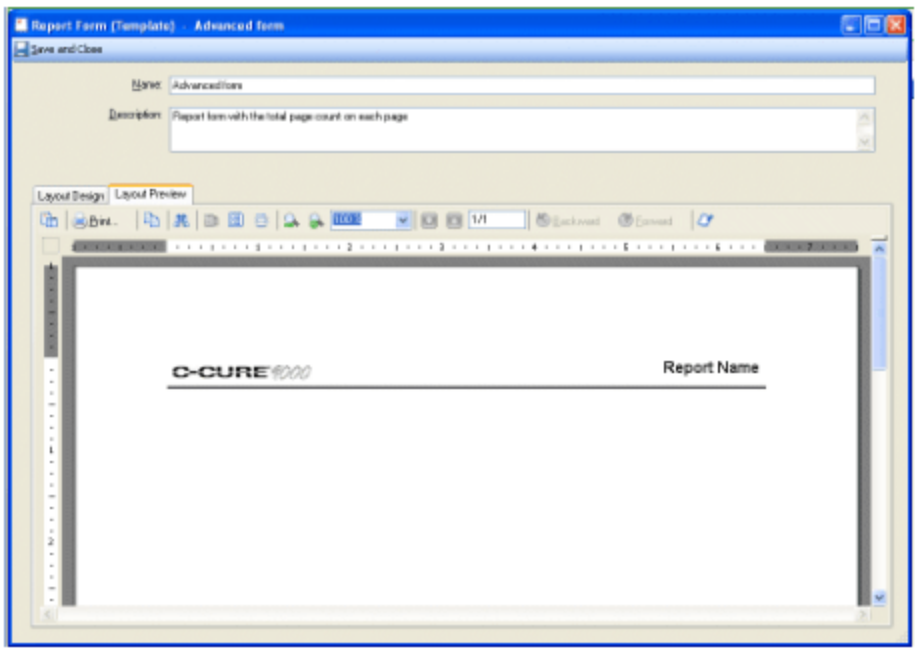
Report Form Layout Preview Tab

Use the **Report Form Layout Preview** tab (see Figure 91 on Page 236) to view a visual example of a Report Form's appearance, based on your report form design.

The **Report Form Layout Preview** tab is similar to the **Report Editor Layout Preview** tab, except you cannot view an object's fields. (A Report Form only defines the overall layout of a reports headers/footers. You can then apply the form to multiple reports to give them a uniform appearance, regardless of the object data in the report.)

For information, especially for definitions of the screen elements, see the Report Layout Preview Tab on Page 226 and Table 44 on Page 227.

Figure 91: -Report Form Editor Preview Tab

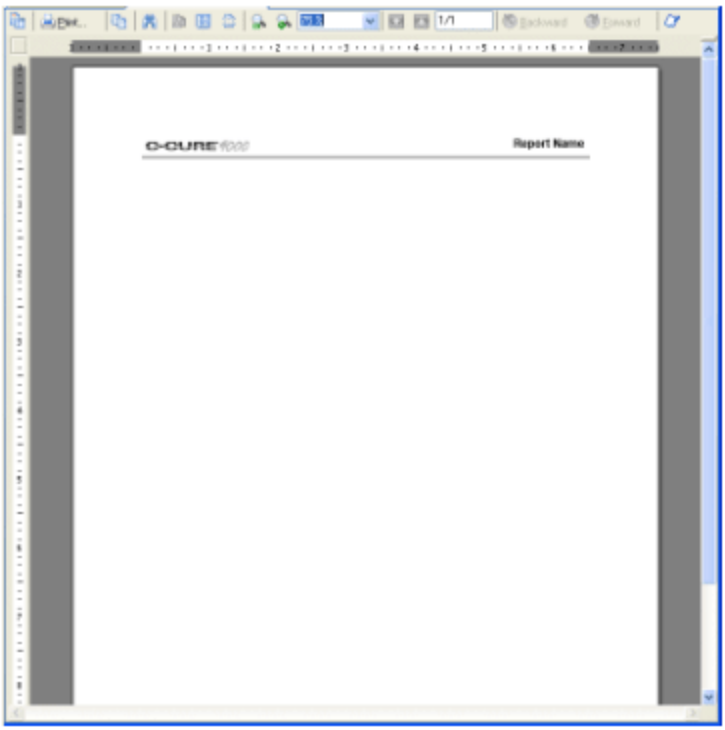


Report Form Viewer

The **Report Form Viewer** is used to view and print Report Forms.

You can view a Report Form by selecting a Report Form from a Dynamic View list of Report Forms and then opening it in the **Report Form Viewer**, shown in Figure 92 on Page 237.

Figure 92: Report Form Viewer



To View a Report Form

1. In the **Navigation** Pane of the Administration Workstation, click **Data Views** to open the **Data Views** pane.
2. Select **Report Form** from the **Data Views** pane drop-down list.
3. Click to open a Dynamic View listing all Report Forms. (You can also click the down-arrow of this button to either view the list in the current tabbed view or to open a new tabbed view).
4. Right-click a Report Form in the list to open the Report Form Context menu.
5. Take one of the following actions:
   - Click **View** to view the Report Form in a new tab in the Content Area.
   - Click **Popup View** to view the Report Form in a separate popup window.
   - Click **View in Current Tab** to view the Report Form in the current Content Area (replacing the dynamic view list of Report Forms).

For information, especially for definitions of the screen elements, see the Report Layout Preview Tab on Page 226 and Table 44 on Page 227.

Report Result Overview

A Report Result is used to store a completed report as a document and includes both the report query and the set of report parameters used to generate the completed report.

You create a Report Result by running a Report. When a report is run, you can save the generated view as a new Report Result object. You can then keep the report result as long as it is needed, and delete it when it is no longer useful.

A Report Result is also generated when a Report is executed by a scheduled action. (In this case, the action can be configured to delete the Report Result automatically after a specified period of time.)

When a Report is run on the server (whether manually or automatically), the finished report is added to the list of Report Results. You can view this list as a Dynamic view. You can then use the Report Result Context menu, as shown in Figure 77 on Page 198, to edit, view, delete, or export the Report Result. (For descriptions of the menu options, see Viewing a List of Report Results on Page 242.)

Report Result Editor

The **Report Result Editor** lets you view information about the report, such as when it was run, and what Query (if any) was used to generate the report.

The Report Editor has the following tabs

- Report Result Result Tab on Page 239
- Report Result Query Tab on Page 240

The **Report Result Editor** has the buttons described in Table 45 on Page 239.

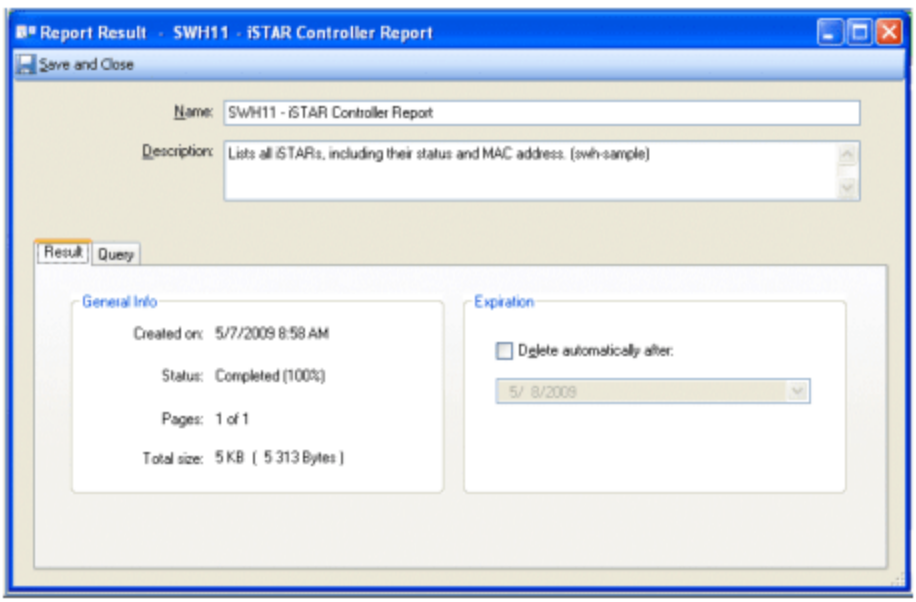
Table 45: Report Result Editor Buttons

Button	Description
Save and Close	Click this button when you have completed any changes to the Report Result and wish to save those changes. The Report Result closes.
	Click this button when you want to close the Report Result Editor without saving your changes. A warning appears asking whether or not you want to save your changes before closing the editor. Click **Yes** to exit and save and **No** to exit and cancel your changes.

Report Result Result Tab

The **Report Result Result** tab, as shown in Figure 93 on Page 239, gives you the information about the Report Result described in Table 46.

Figure 93: Report Result Editor Result Tab



The **Report Result Result** tab has the fields described in Table 46.

Table 46: Report Result Editor Result Tab Fields

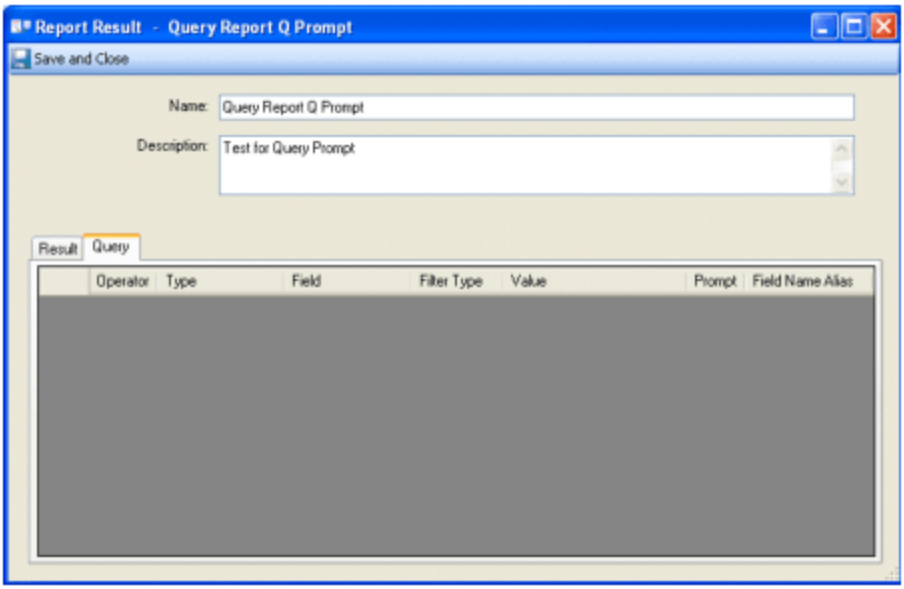
Fields	Description
Name	The name of the Report.
Description	A textual description of the Report. This field is not required, but if used can make it easier to identify the specific Report Result you wish to edit.
General Info	
Created on	The date on which the Report that created this Report Result was run. (A read-only, system-supplied value.)
Status	State of Report Result: Completed, Canceled, Failed. NOTE: A Report result stopped because it reached the maximum page count limit set in the Reporting System Variable will have a status of **Canceled**. For information, see the System Variables chapter in the *C•CURE 9000 System Maintenance Guide*.
Pages	The actual number of pages in the Report Result, represented by two numbers: • If Report status is **Completed**, the two numbers are the same. **Example:** 10 of 10 or 15 of 15 • If Report status is **Canceled**, the two numbers are different: the first number indicates the number of Report pages that actually completed before the Report was canceled, while the second number is an estimate of what the total page count would be if the Report had completed. **Example:** 4 of 10 or 15 of 25
Total size	Size of entire Report Result in MB or KB, and also in Bytes.
Expiration	
Delete automatically after	The Date (if any) after which the Report Result can be deleted by C•CURE 9000. To set a date, select the **Delete automatically after** check box, and click the drop-down arrow to open a Calendar to choose a date. NOTE: By default, the 'obsolete' Report Result will be deleted through a pre-configured Event "Remove Report Results," that is triggered around 2:15 [redacted] by the pre-configured Schedule, "Nightly."

Report Result Query Tab

The **Report Result Query** tab, as shown in Figure 94 on Page 241, lets you examine the Query used to create a Report Result. When you are viewing a saved report, understanding the parameters used to generate it provides valuable information. Looking at the Query that was used allows you to see which data would be included in the report and which data would be filtered out and not included in the report.

The Query is presented as a table with rows representing the filtering performed by the Query, as described in Table 47 on Page 241. (The Query rows are read-only.)

Figure 94: Report Result Editor Query Tab



The **Report Result Query** tab has the fields described in Table 47 on Page 241.

Table 47: Report Result Editor Query Tab Fields

Column	Description
Operator	The Logical Operator for the row (Blank, AND, OR).
Type	The Object Type for the report (such as Personnel).
Field	The Field being queried for by this row. This is a field that is a property of the Object Type.
Filter Type	The Filter Type for the Query row (depends on the type of field).
Value	The Value being tested for by the Query row.
Prompt	Whether or not a Prompt is displayed for Operator input.
Field Name Alias	A Value used at runtime instead of the actual field name. This field allows the creation of an "alias" for several rows, so that at runtime one prompt's value is used for all the fields with that alias. **Example:** In Personnel, if you wanted to query on the same values for **Date1** and **Date2** all the time, you could create two criteria rows and use a **Field Name Alias** of **Date** for both of them. Then you would only see a single row with the Field Name **Date** when the **Query Parameters** dialog box appeared. Entering the value once for **Date** would use the same value for both the **Date1** and **Date2** fields when the query was run. See the Tips about using an alias and the examples in some of the figures in Chapter 5, "Historical Tracking of System Activity" in the *C•CURE 9000 System Maintenance Guide*.

For more information about queries, see Query Overview on Page 146.

Report Result Tasks

Viewing a List of Report Results

You can display a list of the reports you have created by opening a Dynamic View of reports. See Viewing a List of Data Views Pane Objects on Page 20.

Report Result List Context Menu

The context menu that opens when you right-click a Report Result in the Report Result Dynamic View includes the selections described in Data Views Object Context Menu on Page 20.

In addition, there are Report Result-specific options described in Table 42 on Page 217.

Table 48: Report Result List Right-Click Context Menu Options

Menu Selection	Description
Export Document	Click this button to export the Report Result to another format. For more information, see Exporting a Report Result on Page 197 and Export Report Document Dialog Box on Page 249.
View Query	Click this button to open a Query **Parameters** dialog box that displays the Query used to generate this report. This dialog box has two views: **Prompts** and **Details**. **Prompts** shows any Query prompts displayed when the Query was run and the parameters typed in by the Operator running the report. **Details** shows the entire Query: both the parameters displayed for Operator input and those executed without user intervention. NOTE: This option is **not** available if the Report Result was created without using a query.
Stop Running Report	Click this menu selection to stop the report (available only if the report you selected is still running on the C•CURE 9000 server). If a report is stopped before completion, it receives a status of **Cancelled**. However, you can still view the pages created before the report stopped.

Deleting a Report Result

There are three ways you can delete a Report Result:

- Manually Delete a Report Result from the list of Report Results. See Deleting a Data Views Pane Object on Page 19.
- Setting a Delete after date
- Setting a Delete after Number of Days Action for a report generated by an Event

Setting a Delete After Date for a Report Result

To Set a Delete After Date for a Report Result

1. Open a list of Report Results.
2. Select the Report Result you wish to delete.
3. Right-click the Report Result to open the context menu and click **Edit**.
4. Select the **Delete after** check box. The date field for **Delete after** becomes active.
5. Click the down-arrow to open a **Calendar** control and pick a date from the Calendar as the **Delete after** date.

   The **Remove Report Results** Event, if not disabled, takes place on the night of the **Delete after** date and deletes the Report Result.

NOTE The Remove Report Results Event is pre-configured by the system installation, but can be modified by Operators.

Setting a Delete After Number of Days Action

If you have an Event that generates a report, you can configure the Event so the Report Result is deleted a specified number of days after the Report Result is created.

To Set a Delete After Number of Days Action

1. Edit the Event that has the Run Report action defined.
2. On the **Event Action** tab, select the **Delete results after the following number of days** checkbox.
3. Type in a number of days or use the up/down arrows to set the number of days.

   Once the Event creates the Report Result, the Report Result is deleted by the **Remove Report Results** event after the specified number of days has passed (if the **Remove Report Results** event has not been disabled).

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4. Select the **Delete after** check box. The date field for **Delete after** becomes active.
5. Click the down-arrow to open a **Calendar** control and pick a date from the Calendar as the **Delete after** date.

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   Once the Event creates the Report Result, the Report Result is deleted by the **Remove Report Results** event after the specified number of days has passed (if the **Remove Report Results** event has not been disabled).

Report/Report Result Viewers

You can view the Report Result in two ways—on the **Report Viewer** or **Report Result Viewer**, two similar screens with a noteworthy difference: the **Viewer** toolbar icons are the same on both, but the **Viewer** buttons are not.

- **Report Viewer** – Select a Report from a Dynamic View list of **Reports** (see Viewing a List of Reports on Page 202) and run the report by clicking **View**, **Popup view**, **View in Current Tab**, or **Run on Server**, which opens it in the **Report Viewer**.
- **Report Result Viewer** – Select a Report Result from a Dynamic View list of **Report Results** (seeViewing a List of Report Results on Page 242 on Page 242) and open it by clicking **View**, **Popup view**, or **View in Current Tab**, which opens it (the saved version of the report—a **Report Result**) in the **Report Result Viewer**.

NOTE If the Report has an attached query without prompts, the query filter is applied automatically.
If the Report/Report Result has an attached query with prompts, a Query Parameters dialog box appears, as shown in Figure 75 on Page 194 after you click one of the preceding buttons. (For more information about queries, see Query Overview on Page 146 in this guide.)

Figure 95: Report Viewer

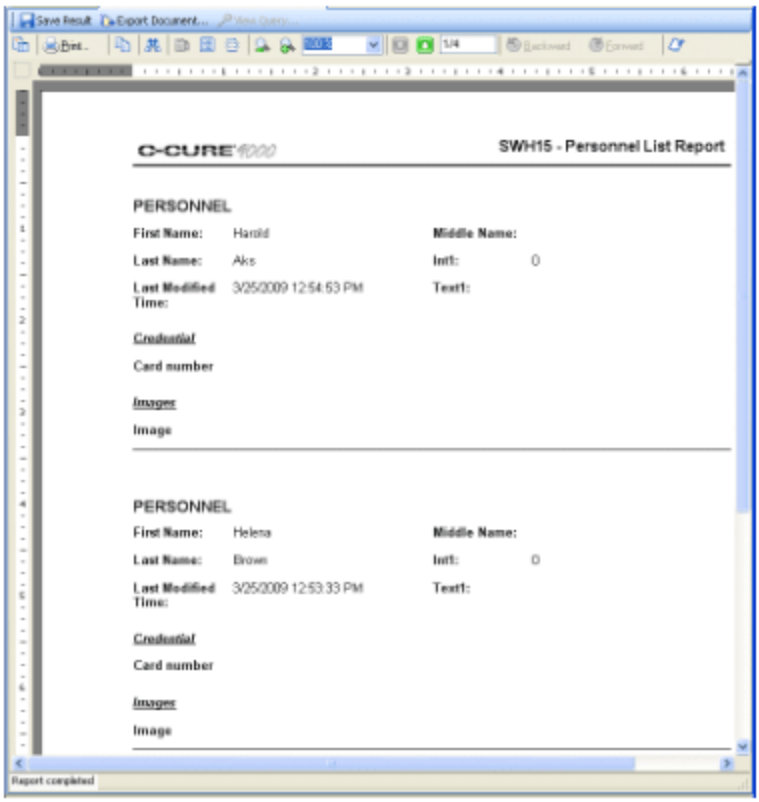
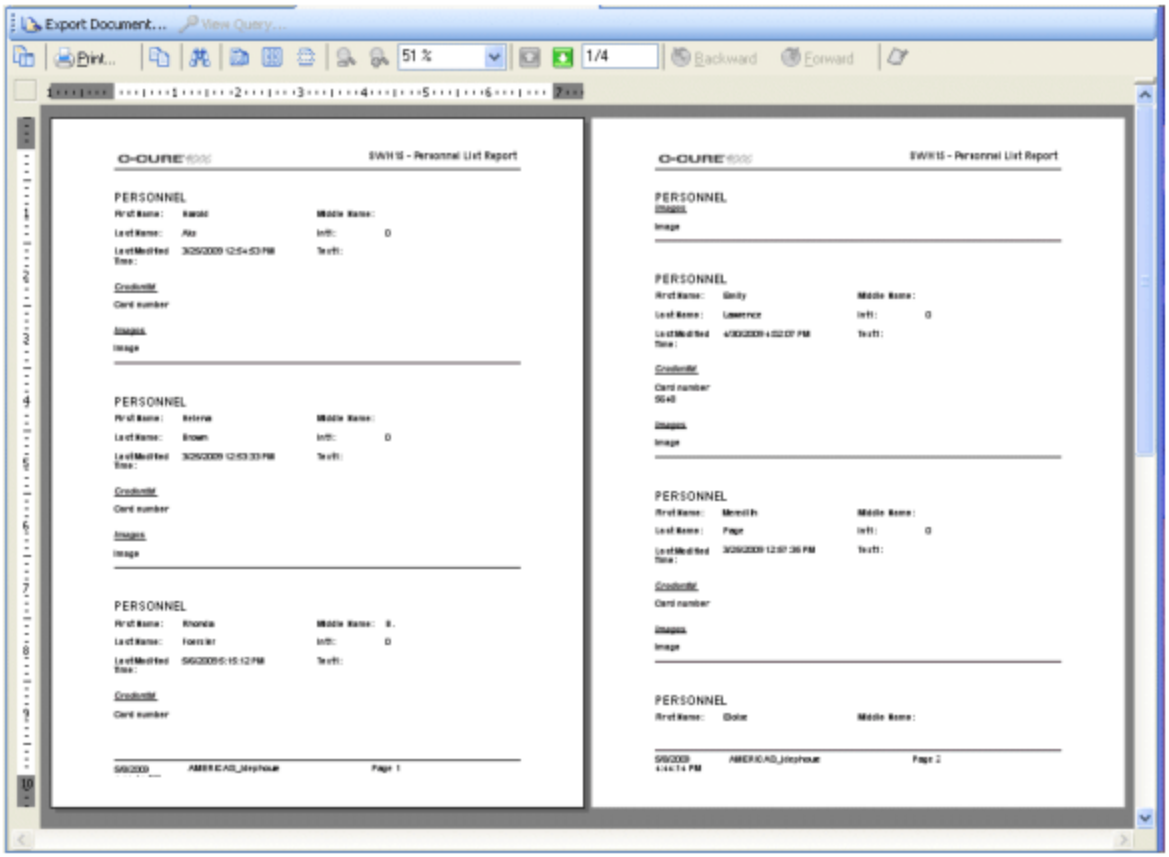


Figure 96: Report Result Viewer



The **Report/Report Result Viewers** have the buttons described in Table 49 on Page 246.

Table 49: Report Viewer Buttons

Button	Description
Save Result	**Report Viewer only**: Click this button when you are viewing the Report to save the output as a Report Result.
Export Document	**Both Report Viewer and Report Result Viewer**: Click this button to export the Report or Report Result to another format. For more information, see: • Exporting a Report Result on Page 197 • Export Report Document Dialog Box on Page 249

Report Viewer Buttons (continued)

Button	Description
View Query	**Both Report Viewer and Report Result Viewer**: Click this button when you are viewing the Report or Report Result to open a **Query Parameters** dialog box that displays the Query used to generate this report. This dialog box has two views: **Parameters** and **Advanced**. **Parameters** – shows any Query prompts displayed when the Query was run, and the parameters typed in by the user running the report. **Advanced** – shows the entire Query: • Parameters displayed for user input. • Parameters executed without user intervention.

From the **Report/Report Result Viewers**, you can use the buttons on the **Viewer** Toolbar, shown in Table 50, to browse through the completed report, print it, search it, and copy data from it.

By default, the view of the report opens at 100% zoom, but you can change the magnification.

- The example in Figure 95 on Page 245 is displayed at 100%
- The example in Figure 96 on Page 246 is displayed at 51% in Multiple Page View 1x2 Pages.)

If you double-click the body of the report, the view shifts to a thumbnail view.

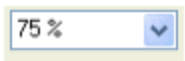
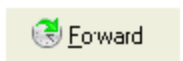
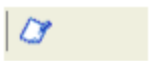
You can also open a **Table of Contents** pane by clicking  and view either a **Table of Contents** or a **Thumbnail** in this pane.

Report/Report Result Viewer Toolbar Definitions

Table 50: Report/Report Result Viewer Toolbar Buttons

Icon	Meaning	Description
	Table of Contents	Click this button to open either a pane with a **Table of Contents** tab that lists the sections of the report or a **Thumbnail View** tab that shows a reduced size image of the report pages. Click either tab to toggle the view.
	Print	Click this button to print a copy of the Report Result.
	Copy	Click this button to copy the content of the Report Result into the clipboard. You can then paste the content into another application, such as Word or Notepad.
	Find	Click this button to open a **Windows find** dialog box to search through the Report Result for a text string.
	Single Page View	Click this button to return to a Single Page View after clicking either Multiple Page View or Continuous Scroll. (The tab opens in Single Page View initially, by default.)

Report/Report Result Viewer Toolbar Buttons (continued)

Icon	Meaning	Description
	Multiple Page View	Click this button to choose how many pages to view at a time in the Report Result. A sub-menu opens to allow you to chose from page views from 1x1 to 2x3.
	Continuous Scroll	Click this button to view the Report Result as one continuous document, using the scroll bar or Page Up/Down keys to navigate. While page breaks are visible, you can scroll past them (which you cannot do in single page view). The Current Page control is updated as you scroll through the report.
	Zoom Out	Click this button to zoom out (make the zoom percentage lower). The percentage becomes 10% less each time you click the button. (The minimum view is 10%.)
	Zoom In	Click this button to zoom in (make the zoom percentage higher). The percentage becomes 50% more each time you click the button. (The maximum view is 800%.)
	Zoom Value	Choose a value from the drop-down box or type in a percentage to zoom the Report Result in or out. (The minimum value is [redacted] the maximum value is 800%. Two special values, **Page Width** and **Whole Page**, allow you to calculate the scale based on the current page size.)
	Previous Page Next Page	Click these buttons to navigate to the next or previous pages of a multiple-page Report Result.
	Page Index	Shows the current page being displayed in a multiple-page Report Result. Changing the number in the box moves to the specified page of the report.
	Backward	Click to go backward one page in the historical list of Report Result pages.
	Forward	Click to go forward one page in the historical list of Report Result pages.
	Annotation	Click to add a note to the Report. The available note types display:  Text, Circle, Rectangle, Arrow, Balloon, and Line annotation. To apply annotations: • Select one of the icons and drag it wherever on the Report page in the Viewer. To modify annotation text or other attributes: • Right-click one of the created annotation objects and select Properties from the context menu. NOTE: You can **only** save annotations placed on a Report displayed on the **Report Viewer**.

Exporting a Report Result

You can export a report result displayed on the **Report/Report Result Viewer** to a variety of different formats, as well as e-mail, print, and save the report in the exported format. For detailed information and procedures, see the

following:

- Export Report Document Dialog Box on Page 249
- Exporting a Report Result on Page 197
- To Export a Report from the Report/Report Result Viewers on Page 199)

NOTE To send e-mails, you first have to set up the e-mail parameters for your entire system using the **System Variables Customer Support** category. For information, see the relevant chapter in the *C•CURE 9000 System Maintenance Guide*.

Export Report Document Dialog Box

The **Export Report Document** dialog box (see Figure 78 on Page 198) lets you export a Report Result to the formats shown in on Page 249, as well as e-mail, print, and save the exported document.

Once you click the **Close** button, the system saves the values you entered in this dialog box on the local computer for future use.

NOTE Check boxes in reports do not display correctly after a report is exported to Excel, RTF, HTML or Text format. If the report is meant to be exported into one of these formats, it is important to use **Textbox** controls for representation of Boolean fields (check boxes) on the report's layout (**Textbox** controls are used by default when Reports are created). Once the text box is linked with the Boolean field, it will print the values "True" or "False" correctly in the exported report for any format. **Checkbox** controls (if placed on the layout manually) work correctly only if the report result is exported to PDF or TIF format. See Report Editor Layout Design Tab Toolbar Definitions on Page 212.

The Export Report Document dialog box has the fields, properties, and buttons described in Table 51 on Page 249.

Table 51: Export Report Document Dialog Box Fields/Properties

Field/Property/Button	Description
Export Parameters	
File Name	The file name for the report that you want to export—required.
Format (Because MHTML is not a well-supported format in browsers, and does not function well with very large Reports, Software House recommends using PDF or another Export format instead.)	The format in which you want to save the exported report, selected from the drop-down list—required.
Buttons	
Export button	Click to perform the export actions you specify in this dialog box. An **Exporting Report Document Status** dialog box (see Figure 79 on Page 199) displays progress information. • Click the relevant button to **print** and/or **e-mail** the status information or click **OK** to close the status dialog box.
Close button	Click to close the **Export Report Document** dialog box.

Field/Property/Button	Description
Format Properties	
The properties on this Properties Sheet change depending on the format you choose in the **Format** field. As you select a property, a box at the bottom of the property sheet gives you information about the effect of the possible values you can choose from a drop-down list. **Example:** If you chose PDF in the **Format** field and then select the **Security** property in the **ActiveReports** Property Sheet that appears, the information box reads as follows: **Security** Returns a PdfSecurity object for initializing document encryption and security.	
Destination	
E-mail **As you select an E-mail section property, a box at the bottom gives you information about the effect of the value you chose from a drop-down list or entered yourself.** **Example:** If you select the **Send e-mail** property, the information box reads as follows: **Send e-mail** Should be set to true if the report is to be e-mailed. NOTE: To send e-mails, you first have to set up the e-mail parameters for your entire system using the **System Variables Customer Support** category. For information, see the relevant chapter in the *C•CURE 9000 System Maintenance Guide*.	
Send e-mail	Select **True** or **False** from the drop-down list to e-mail or not e-mail the Report. Default is **False**.
Status	Status of Send. A Read-only, system-supplied value.
Address From	Enter sender.
Address To	Enter recipient.
Subject	Enter e-mail subject.
Message Text	Enter e-mail message: 1. Click the **down-arrow**. A message box appears with directions. 2. Press **Enter** and type your text. 3. Press **Ctrl+Enter**. The message text appears in the property sheet.
Print As you select a **Print** section property, a box at the bottom gives you information about the effect of the possible value you chose from a drop-down list. **Example:** If you select the **Print File** property, the information box reads as follows: **Print File** Should be set to true if the report is to be sent to the printer. NOTE: The MHTML file type is not supported for **Print**.	

Field/Property/Button	Description
Print File	Select **True** or **False** from the drop-down list to print or not print the Report. Default is **False**.
Status	Status of Send. A Read-only, system-supplied value.
Printer	Select Printer: 1. Click the **down-arrow**. 2. Select a printer from the drop-down list. - or - Select **$** (dollar sign) to print to the default printer. Either the selected printer path or **$** displays in the **Value** column.
Save As you select a **Save** Section property, a box at the bottom gives you information about the effect of the possible value you chose from a drop-down list. **Example:** If you select the **Invoke Viewer** property, the information box reads as follows: **Invoke Viewer** Should an appropriate Output Viewer be opened to display the Extracted Output.	
Save File	Select **True** or **False** from the drop-down list. Default is **True**.
Status	Status of Send. A Read-only, system-supplied value.
Folder	Select local folder in which to save information: 1. Enter **$** (dollar sign) to save in the default user's document folder. - or - Click ... . A **Browse for Folder** dialog box appears. - Select a folder. - or - - Click **Make New Folder** and type a folder name. 2. Click **OK**. Either **$** or the folder and path display in the **Value** column.
Can Overwrite	Select **True** or **False** from the drop-down list to overwrite or **not** overwrite an existing report file. Default is **True**.
Invoke Viewer	Select **True** or **False** from the drop-down list to display or **not** display the Report output on a viewer. Default is **False**.

A

Appendix A Pre-defined Reports, Queries, and Views

This appendix describes the pre-defined Reports, Queries, and Dynamic Views included with C•CURE 9000 and the ways that you can use them.

In this appendix

Overview: Pre-defined Reports, Queries, and Dynamic Views

Pre-defined Reports, Queries, and Dynamic Views come with C•CURE 9000.

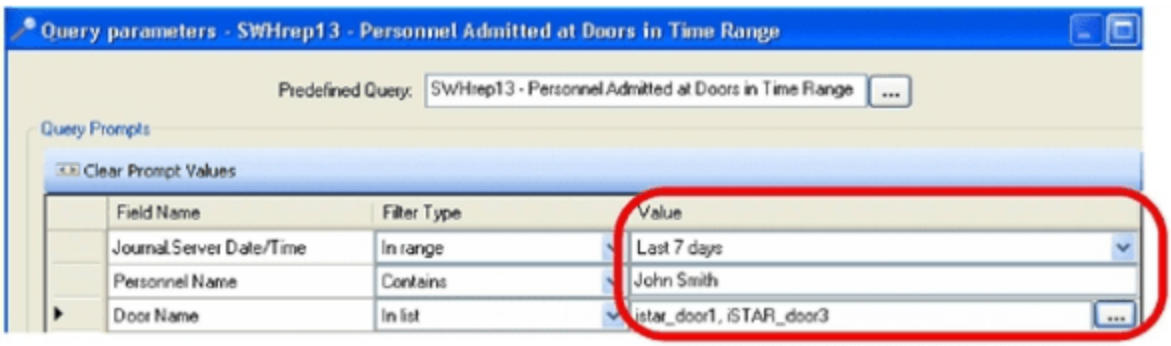
- Many of the included pre-defined Reports can fulfill your needs "out of the box." You can also use the *Create Copy* functionality and make minor adjustments to customize any of these Reports to fit particular requirements you have.
- Some of the included pre-defined Queries are associated with a particular Report. Other pre-defined Queries are stand-alone and included as general examples.
- Two pre-defined Dynamic Views are also included as general models.

Most of the included pre-defined Report Queries return **all** possibilities, but you can narrow the results when the Query is prompted.

Example:

The Report that shows Door accesses shows all accesses, by all Personnel, at all Doors, through the entire Journal. However, when the Query is prompted, you can input the following to filter the results:

Figure 97: Query Prompts



See the following information:

- Pre-defined Reports on Page 255
- Pre-defined Queries on Page 262
- Pre-defined Dynamic Views on Page 268
- Using the Pre-defined Reports, Queries, and Dynamic Views on Page 269
- Example of Using a Pre-defined Report on Page 270

Pre-defined Reports

There are 52 pre-defined Reports in the following logical categories:

- apC Controller Report (1)
- Area Reports (9)
- Clearance Reports (2)
- Custom Clearance Reports (3)
- Credential Reports (4)
- Door Reports (3)
- Guard Tour Reports (13)
- Input Report (1)
- ISC Controller Report (1)
- iSTAR Controller Report (1)
- Operator Report (1)
- Personnel Reports (6)
- Reader Report (1)
- Query Report (1)
- Time Zone Reports (5)

NOTE The official 'Report Types' of theses pre-defined Reports may differ from the general categories listed above. The actual system **Report Type** references only one target security object of the Report.

Example:

The **Report Type** given in the system for the two Reports "SWH70 ApC Input Groups with Time Zones" and "SWH71 ApC Door Groups with Time Zones" is **Group**, whereas they are categorized above as **Time Zone** reports.

The Reports (numbered from **SWH01** to **SWH16**, **SWH20** to **SWH22**, **SWH40**, **SWH41**, **SWH50** to **SWH55**, **SWH62** to **SWH67**, **SWH70** to **SWH74**, **SWH99**, and **SWH101** to **SWH124**) are displayed in the Report Dynamic View with their descriptions and related Queries, as shown in Table 52 on Page 256.

- The Description field indicates the type of security information each Report returns and includes the notation, **(swh-sample)**.
- The Query Name field indicates the pre-defined Query used with the Report, if there is one. The Queries used with the Reports are named SWHrepxx.

NOTE SWH07 and SWH08 use special scripting in the Report to display Door Forced and Door Held situations from the historical Journal. They are valid only with an English language Journal.

Table 52: List of C•CURE 9000 Pre-defined Reports

Report Name	Query Name	Description
SWH01 - All Clearances Report	SWHrep01 - All Door and Elevator Clearances [Default: <Partition Name>]	Lists all clearances including door, door group, elevator, and elevator group clearances. Report shows list of door/elevator names and schedules assigned to each clearance. (swh-sample)
SWH02 - All Doors Report	SWHrep02 - All Doors In System [Default: <Partition Name>]	Lists all doors in the system, including apC, ISC, and iSTAR doors. (swh-sample)
SWH03 - apC Report		Lists all apC panels including their address, type, port, and status. (swh-sample)
SWH04 - Clearance Audit Report	SWHrep04 - Audit Clearance Configuration within Date Range [Default: <Partition Name>]	Lists all clearance creations, modifications and deletions from the Audit log. (swh-sample)
SWH05 - Door Access Flat Report (Admit or Reject) Report	SWHrep0506 - Cardholders admitted or rejected at a specified door in a date range [Default: <Partition Name>]	Lists all admits and rejects at a specified door by a specified person. If door or person is **not** specified, it lists all doors and all cardholders. This version produces a flat report. (swh-sample)
SWH0SWH06 - Door Access Report (Admit or Reject)	SWHrep0506 - Cardholders admitted or rejected at a specified door in a date range [Default: <Partition Name>]	Lists all admits and rejects at a specified door by a specified person for specified date/time range. If door, person, or date range is **not** specified, it lists all cardholders at all doors. (swh-sample)
SWH07 - Door Forced Report	SWHrep0708 - Door State Changed [Default: <Partition Name>]	Works with 'Door State Changed' query to list door forced journal entries. It hides records without the words"door forced," so this report only works with an English language journal. (swh-sample)
SWH08 - Door Held Report	SWHrep0708 - Door State Changed [Default: <Partition Name>]	Works with 'Door State Changed' query to list door held journal entries. It hides records without the word 'door held', so this report only works with an English language journal. (swh-sample)
SWH09 - Input Status Report		Lists inputs in the system including their status, type, and controller. (swh-sample)
SWH10 - ISC Controller Report		Lists all ISC controllers in the system including their IP address and online status. Also, lists boards mounted in the controller including their type and slot number. (swh-sample)

Table 52: List of C•CURE 9000 Pre-defined Reports (continued)

Report Name	Query Name	Description
SWH11 - iSTAR Controller Report		Lists all iSTARs including their status and MAC address. (swh-sample)
SWH12 - Operator Shift Activity Report	SWHrep12 - Operator Shift Activity within Date Range [Default: <Partition Name>]	Lists Operator logins and logouts during a specified date/time range. (swh-sample)
SWH13 - Personnel Admitted at Doors Report	SWHrep13 - Personnel Admitted at Doors in Time Range [Default: <Partition Name>]	Lists all cardholders admitted at all doors. Change query to list a specified door or cardholder. (swh-sample)
SWH14 - Personnel Credential Expired Report	SWHrep14 - Personnel Credential Expired within Date Range [Default: <Partition Name>]	Lists all personnel credentials that have expired or will expire in specified date/time range. (swh-sample)
SWH15 - Personnel List Report		Lists all personnel with name, credential, and images, etc. (swh-sample)
SWH16 - Reader Status Report		Lists readers in the system including their state, controller, and direction. (swh-sample)
SWH20 - Roll Call Report	SWHrep20 - Area Name [Default: <Partition Name>]	Lists personnel grouped by their last known area . (swh-sample)
SWH21 - Carpool Area Roll Call Report	SWHrep21 - Carpool Area [Default: <Partition Name>]	Lists personnel grouped by their last known carpool area . (swh-sample)
SWH22 - Carpool Group Report	SWHrep20 - Carpool Group [Default: <Partition Name>]	Lists all personnel members for a specified carpool group. (swh-sample)
SWH40 - Door Access by Time period Report	SWHrep40 - Door Access by Time period [Default: <Partition Name>]	Lists personnel with active clearances for the specified doors during the specified date/time range—the Activation and Expiration dates for the Clearances themselves. Run the report, enter the door(s) you want to report on, and then enter Activation and Expiration dates for clearances. (swh-sample)

Table 52: List of C•CURE 9000 Pre-defined Reports (continued)

Report Name	Query Name	Description
SWH41 - First and Last Card Read Report	SWHrep41 - First and Last Card Read [Default: <Partition Name>]	Lists First and Last Admitted Card Reads at specified door/doors for each day within the specified date/time range—grouped by selected personnel records. Report is listed by Personnel Name with columns for the Date, First Read, Last Read, Read Count for the defined period of time, duration from the first and last read for each day, and a total duration. Total duration is from first and last read by day and does not account for time in/out of special areas. (swh-sample)
SWH50 - Visitors and Escorts Rejected by Time Report	SWHrep50 - Visitors and Escorts Rejected Query [Default: <Partition Name>]	Lists Visitor and Escort Reject journal messages for last 24 hours, sorted by time. Can be modified when run to change both date/time range specified and Escort Options specified. Can be filtered by Person, Door, Area, and Reject reason. (swh-sample)
SWH51 - Visitors and Escorts Admitted by Time Report	SWHrep5153 - Visitors and Escorts Admitted Query [Default: <Partition Name>]	Lists Visitor and Escort Admitted journal messages for last 24 hours, sorted by time. Can be modified when run to change both both date/time range specified and Escort Options specified. Can be filtered by Person, Door, and Area. (swh-sample)
SWH52 - Escorts Admitted and Rejected by Door Report	SWHrep52 - Escorts Admitted and Rejected Query [Default: <Partition Name>]	Lists Escort Admitted and Rejected journal messages for last 24 hours, grouped by Door name. Can be modified when run to change both date/time range specified and Escort Options specified. Can be filtered by Person, Door, Area and Reject reason. (swh-sample)
SWH53 - Visitors and Escorts Admitted by Door Report	SWHrep5153 - Visitors and Escorts Admitted Query [Default: <Partition Name>]	Lists Visitor and Escort Admitted journal messages for last 24 hours grouped by Door name. Can be modified when run to change both date/time range specified and Escort Options specified. Can be filtered by Person, Door, and Area. (swh-sample)
SWH54 - Visitors and Escorts Rejected by Person Report	SWHrep54 - Visitors and Escorts Rejected - Personnel Journal Query [Default: <Partition Name>]	Lists Visitor and Escort Rejected journal messages for last 24 hours grouped by Person's name. Can be modified when run to change both date/time range specified and Escort Options specified. Can be filtered by Person, Door, and Area. (swh-sample)
SWH55 - Escorts Admitted and Rejected by Person Report	SWHrep55 - Escorts Admitted and Rejected - Personnel Journal Query [Default: <Partition Name>]	Lists Escort Admitted and Rejected journal messages for last 24 hours. Grouped by Person's name. Can be modified when run to change both date/time range specified and Escort Options specified. Results can be filtered by Area or Personnel name. (swh-sample)
SWH62 - Credentials that Should be Disabled by Inactivity Report	SWHrep62 - Credentials that Should be Disabled by Inactivity [Default: <Partition Name>]	Lists all credentials that **should be** Disabled by Inactivity on specified date. Can be modified when run to change the date specified. (swh-sample)

Table 52: List of C•CURE 9000 Pre-defined Reports (continued)

Report Name	Query Name	Description
SWH63 - Credentials that have been Disabled by Inactivity Report	SWHrep63 - Credentials that have been Disabled by Inactivity [Default: <Partition Name>]	Lists all credentials that **have been** Disabled by Inactivity on specified date. Can be modified when run to change the date specified . (swh-sample)
SWH64 - Credentials that Should be Disabled by Inactivity but were not Report	SWHrep64 - Credentials that Should be Disabled by Inactivity but weren't [Default: <Partition Name>]	Lists all credentials that should be Disabled by Inactivity on a specified date, but were not. This can be modified when run to change the date specified . (swh-sample)
SWH65 - All Custom Clearances Report	SWHrep65 - All Door and Elevator Custom Clearances [Default: <Partition Name>]	Lists all custom clearances including door, door group, elevator, and elevator group custom clearances. Report shows list of door/elevator names and schedules assigned to each person. (swh-sample)
SWH66 - Custom Clearance Expiration within Date Range Report	SWHrep66 - Custom Clearance Expiration within Date Range [Default: <Partition Name>]	Lists all custom clearances including door, door group, elevator, and elevator group custom clearances that have expired in specified date/time range. Report shows list of door/elevator names and schedules assigned to each person. (swh-sample)
SWH67 - Custom Clearance Audit Report	SWHrep67 - Audit Custom Clearance Configuration within Date Range [Default: <Partition Name>]	Lists custom clearance creations and modifications from the Audit Log. (swh-sample)
SWH70 - apC Input Groups with Time Zones Report		Lists apC Input Groups with 'Time Zone Name' field displayed for all group members. (swh-sample)
SWH71 - apC Door Groups with Time Zones Report		Lists apC Door Groups with 'Time Zone Name' field displayed for all group members. (swh-sample)
SWH72 - apC Time Zone Mismatch Actions Report	SWHrep72 - apC Time Zone Mismatch Actions [Default: <Partition Name>]	Lists apC Controllers whose Time Zone is different from Time Zone of Event Action for Controller. (swh-sample)

Table 52: List of C•CURE 9000 Pre-defined Reports (continued)

Report Name	Query Name	Description
SWH73 - apC Online Only Actions Report	SWHrep73 - apC Online Only Actions [Default: <Partition Name>]	Lists apC Controllers with Actions performed only when apC Controller is online, for following reasons: Actions are in different Time Zone from Controller. Actions are activated by one Controller but modify item on another controller. Configuration is invalid. (swh-sample)
SWH74 - Actions with Time Zone Mismatch Report	SWHrep74 -Actions with Time Zone Mismatch Query [Default: <Partition Name>]	Lists Actions whose Time Zone is different from Time Zone of Target Object. The Report lists both Source Object Time Zone and Target Object Time Zone. (swh-sample)
SWH99 - Find A Special Word in Query Description Report	SWH29 - Queries Description [Default: <Partition Name>]	Lists queries with "swh-sample" signature in description.
SWH101 - Guard Tour Configuration	SWHrep101 - Guard Tour Configuration [Default: <Partition Name>]	Lists all configuration data for a Guard Tour in the system, including Guard Tour Stops. (swh-sample)
SWH102 - Personnel Defined as Guards	SWHrep102 - Personnel Defined as Guards [Default: <Partition Name>]	Lists all Personnel in the system who can perform Guard Tours. (swh-sample)
SWH104 - Guard Tours Assigned to a Guard		Lists, by Personnel, all Guard Tours assigned to Guards. (swh-sample)
SWH105 - All Elevators Associated with Guard Tours	SWHrep105 - All Elevators Assigned to Guard Tour Stops [Default: <Partition Name>]	Lists all Elevators assigned to Guard Tours. (swh-sample)
SWH106 - Guard Tour Events	SWHrep106 - Guard Tour Events [Default: <Partition Name>]	Lists all Events that operate on Guard Tours. (swh-sample)
SWH107 - All Doors Associated with Guard Tours	SWHrep107 - All Doors Assigned to Guard Tour Stops [Default: <Partition Name>]	Lists all Doors assigned to Guard Tours. (swh-sample)

Table 52: List of C•CURE 9000 Pre-defined Reports (continued)

Report Name	Query Name	Description
SWH108 - All Inputs Associated with Guard Tours	SWHrep108 - All Inputs Assigned to Guard Tour Stops [Default: <Partition Name>]	Lists all Inputs assigned to Guard Tours. (swh-sample)
SWH109 - Guard Tours Completed without Errors	SWHrep109 - Guard Tours Completed without Errors [Default: <Partition Name>]	Lists all Guard Tour Completed without Errors Journal Messages. (swh-sample)
SWH116 - Guard Tour Status by Date/Time	SWHrep116 - Guard Tour Status by Date/Time [Default: <Partition Name>]	Lists all Guard Tour Status Journal Messages during specified Date/Time Range. (swh-sample)
SWH119 - Guard Tours Completed with Errors	SWHrep119 - Guard Tours Completed with Errors [Default: <Partition Name>]	Lists all Guard Tour Completed with Errors Journal Messages. (swh-sample)
SWH120 - Canceled Guard Tours	SWHrep120 - Canceled Guard Tours [Default: <Partition Name>]	Lists all Guard Tour Canceled Journal Messages. (swh-sample)
SWH122 - Guard Tours with Current Status: Activated/Resumed	SWHrep122 - Active Guard Tours [Default: <Partition Name>]	Lists all Guard Tours with a Current Status of Activated or Resumed. (swh-sample)
SWH124 - Guard Tour Schedules	SWHrep124 - Guard Tour Schedules [Default: <Partition Name>]	Lists configuration data for all Guard Tour Schedules in the system. (swh-sample)

Pre-defined Queries

There are thirty-nine pre-defined Queries associated with specific Reports in the following logical categories:

- Area Type (8)
- Clearance Type (2)
- Credential Type (3)
- Custom Clearance Type (3)
- Door Type (2)
- Guard Tour (12)
- Operator Type (1)
- Personnel Type (5)
- Time Zone Type (3)

These Queries (numbered from **SWHrep01** to **SWHrep14**, **SWHrep20** to **SWHrep22 SWHrep40**, **SWHrep41**, **SWHrep50** to **SWHrep55**, **SWHrep62** to **SWHrep67**, **SWHrep72** to **SWHrep74**, and **SWHrep101** to **SWHrep124**) are displayed in the filtered Query Dynamic View with their Query Target Type and description, as shown in Table 53 on Page 263.

- The Description field indicates the type of security information each Query returns, names the pre-defined Report that the Query is used with, and includes the notation, **(swh-sample)**.

NOTE

Query SWHrep0506 is used with Reports SWH05 and SWH06.
Query SWHrep0708 is used with Reports SWH07 and SWH08.
Query SWHrep5153 is used with Reports SWH51 and SWH53.

In addition, there are sixteen pre-defined stand-alone Queries of the following types, included as general examples:

- Clearance Target Type (1)
- Credential Target Type (2)
- Dynamic View (1)
- Personnel Target Type (10)
- Query Target Type (1)
- Report Target Type (1)

These Queries (numbered from **SWH20** to **SWH34**, are displayed in the filtered Query Dynamic View with their Query Target Type and description, as shown in Table 54 on Page 266. (**SWH01** is a stand-alone Query for Enterprise Architecture systems only.)

- The Description field indicates the type of security information each Query returns and includes the notation, **(swh-sample)**.

NOTE

There are also two unnumbered pre-defined stand-alone Queries:

- Journal Default Query – default journal log query object.
- Audit Default Query – default audit log query object.

Table 53: List of C•CURE 9000 Pre-defined Queries used with Pre-defined Reports

Query Name	Query Target Type	Description
SWHrep01 - All Door and Elevator Clearances Query	Clearance	Query for door and elevator Clearances. If a field contains <IGNORED>, the query will match all values. Used with Report SWH01. (swh-sample)
SWHrep02 - All Doors in System Query	Door	Query for doors whose names are in the list. Enter name in the value column. If a field contains <IGNORED>, the query will match all values. Used with Report SWH02. Uses the pre-defined Dynamic View, SWHdv02 - All Doors - DView. (swh-sample)
SWHrep04 - Audit Clearance Configuration within Date Range Query	Clearance	Query for clearance configuration changes, including creation, modification, and deletion. Used with Report SWH04. (swh-sample)
SWHrep0506 - Cardholders admitted or rejected at a specified door in a date range Query	Personnel	Query for cardholders admitted or rejected at specified door in specified date/time range. Enter person name, door name, date range or start/end time. If person, door, or date/time range is **not** specified, the query returns all cardholder admissions/rejections at all doors. Used with Report SWH05 and SWH06. (swh-sample)
SWHrep0708 - Door State Changed Query	Journal (Door)	Query for journal door state changes in specified date/time range. Used with Report SWH07 and SWH08. (swh-sample)
SWHrep12 - Operator Shift Activity within Date Range Query	Operator	Query for operator logins/logouts in specified date/time range. Used with Report SWH12. (swh-sample)
SWHrep13 - Personnel Admitted at Doors in Time Range Query	Journal (Personnel)	Query for cardholders admitted at specified door in specified date/time range. Enter person name, door name, date range or start/end time. If person, door, or date range is **not** specified, the query returns all cardholder admissions at all doors. Used with Report SWH13. (swh-sample)
SWHrep14 - Personnel Credential Expired within Date Range Query	Personnel	Query for all personnel credentials that have expired or will expire in specified date/time range. Used with Report SWH14. (swh-sample)
SWHrep20 - Area Name Query	Area	Query for all Area names and/or Area Group names. Used with Report SWH20. (swh-sample)
SWHrep21 - Carpool Area Query	Area (Carpool)	Query for all Carpool Areas. Used with Report SWH21. (swh-sample)
SWHrep22 - Carpool Group Query	Area (Carpool)	Query for all Carpool Groups. Used with Report SWH22. (swh-sample)
SWHrep40 - Door Access by Time Period Query	Personnel	Query for Personnel with access to (active clearances for) specified door in specified date/time range. Used with Report SWH40. (swh-sample)
SWHrep41 - First and Last Card Read Query	Personnel	Query for Personnel who were admitted/ rejected at specified door in specified date/time range. Used with Report SWH41. (swh-sample)
SWHrep50 - Visitors and Escorts Rejected Query	Journal (Area)	Query for Card Rejected journal messages for Unescorted Visitors, Escorted Visitors, and Escorts. This query may be copied and edited to filter Escort Options differently: by Person, Door, Area, or Reject reason. Used with Report SWH50. (swh-sample)

Table 53: List of C•CURE 9000 Pre-defined Queries used with Pre-defined Reports (continued)

Query Name	Query Target Type	Description
SWHrep5153 - Visitors and Escorts Admitted Query	Journal (Area)	Query for Card Admitted journal messages for Unescorted Visitors, Escorted Visitors, and Escorts. This query may be copied and edited to filter Escort Options differently: by Person, Door, Area, or Reject reason. Used with Reports SWH51 and SWH53. (swh-sample)
SWHrep52 - Escorts Admitted and Rejected Query	Journal (Area)	Query for Card Admitted and Card Rejected journal messages for Escorts. This query may be copied and edited to filter Escort Options differently: by Person, Door, Area, or Reject reason. Used with Report SWH52. (swh-sample)
SWHrep54 - Visitors and Escorts Rejected - Personnel Journal Query	Personnel (Area)	Query for Card Rejected journal messages for Unescorted Visitors, Escorted Visitors, and Escorts grouped by Person. This query may be copied and edited to filter Escort Options differently: by Person, Door, Area, or Reject reason. Used with Report SWH54. (swh-sample)
SWHrep55 - Escorts Admitted and Rejected - Personnel Journal Query	Personnel (Area)	Query for reporting on Card Admitted and Card Rejected journal messages for Escorts grouped by Person. This query may be copied and edited to filter the Escort Options differently: by Person, Door, Area, or Reject reason. Used with Report SWH55. (swh-sample)
SWHrep62 - Credentials that should be Disabled by Inactivity Query	Credential	Query for all Credentials that should be disabled by inactivity on specified date. You can modify the query by changing values. Used with Report SWH62. (swh-sample)
SWHrep63 - Credentials that have been Disabled by Inactivity Query	Credential	Query for all Credentials that have been disabled by inactivity on specified date. You can modify the query by changing values. Used with Report SWH63. (swh-sample)
SWHrep64 - Credentials that should be Disabled by Inactivity but Were Not Query	Credential	Query for all Credentials that should be disabled by inactivity on specified date, but were not. You can modify the query by changing values. Used with Report SWH64. (swh-sample)
SWHrep65 - All Door and Elevator Custom Clearances Query	Custom Clearance	Query for door and elevator Custom Clearances. If a field contains <IGNORED>, the query will match all values. Used with Report SWH65. (swh-sample)
SWHrep66 - Custom Clearance Expiration within Date Range Query	Custom Clearance	Query for Custom Clearances that have expired within specified date range. If a field contains <IGNORED>, the query will match all values. Used with Report SWH66. (swh-sample)
SWHrep67 - Audit Custom Clearance Configuration within Date Range Query	Custom Clearance	Query for Custom Clearance configuration changes, including creation and modification. Used with Report SWH67. (swh-sample)
SWHrep72 - apC Time Zone Mismatch Actions Query	apC Controller (Time Zone)	Query for apC Controllers and their actions that have 'Online Only Reason' set to 'TimeZoneMismatch'. Used with Report SWH72. (swh-sample)
SWHrep73 - apC Online Only Actions Query	apC Controller (Time Zone)	Query for apC Controllers and their actions that have 'Online Only Reason' set to 'True'. Used with Report SWH73. (swh-sample)

Table 53: List of C•CURE 9000 Pre-defined Queries used with Pre-defined Reports (continued)

Query Name	Query Target Type	Description
SWHrep74 - Actions with Time Zone Mismatch Query	Action Item (Time Zone)	Query for apC Controllers and their actions that have Time Zone Mismatch. Used with Report SWH74. (swh-sample)
SWHrep101 - Guard Tour Configuration Query	Guard Tour	Query for Guard Tours in the system with all configuration information including Tour Stops. Used with Report SWH101. (swh-sample)
SWHrep102 - Personnel Defined as Guards Query	Guard Tour	Query for all Personnel in the system who can perform Guard Tours. Used with Report SWH102. (swh-sample)
SWHrep105 -All Elevators Assigned to Guard Tour Stops Query	Guard Tour	Query for all Elevators assigned to Guard Tour Stops. Used with Report SWH105. (swh-sample)
SWHrep106 - Guard Tour Events Query	Guard Tour	Query for all Events that operate on Guard Tours. Used with Report SWH106. (swh-sample)
SWHrep107 -All Doors Assigned to Guard Tour Stops Query	Guard Tour	Query for all Doors assigned to Guard Tour Stops. Used with Report SWH107. (swh-sample)
SWHrep108 -All Inputs Assigned to Guard Tour Stops Query	Guard Tour	Query for all Inputs assigned to Guard Tour Stops. Used with Report SWH108. (swh-sample)
SWHrep109 - Guard Tours Completed without Errors Query	Guard Tour	Query for Guard Tour completed without errors Journal messages in specified Date/Time range. Used with Report SWH109. (swh-sample)
SWHrep116 - Guard Tour Status by Date/Time Query	Guard Tour	Query for Guard Tour Status Journal messages in specified Date/Time range. Used with Report SWH116. (swh-sample)
SWHrep119 - Guard Tours Completed with Errors Query	Guard Tour	Query for Guard Tour completed with errors Journal messages in specified Date/Time range. Used with Report SWH119. (swh-sample)
SWHrep120 - Canceled Guard Tours Query	Guard Tour	Query for Guard Tour Canceled Journal messages in specified Date/Time range. Used with Report SWH120. (swh-sample)
SWHrep122 - Active Guard Tours Query	Guard Tour	Query for Active Guard Tours. Used with Report SWH122. (swh-sample)
SWHrep124 - Guard Tour Schedules Query	Guard Tour	Query for Scheduled Guard Tours. Used with Report SWH124. (swh-sample)

Table 54: List of C•CURE 9000 Pre-defined Stand-alone Queries

Query Name	Query Target Type	Description
SWH01 - MAS Credentials with Duplicate CHUID Query (**Only** for Enterprise Architecture systems)	Credential	Query for all credentials that have duplicate CHUID values. Set the check box 'Is Conflict' to 'True' to show the duplicate records that cause conflicts while replicating from MAS to SAS servers or keep it undefined to see all duplicate records. (swh-sample)
SWH20 - All Door Clearance Query	Clearance	Query for clearance access to specified door. Modify the query to specify door name. (swh-sample)
SWH21 - Card Number Search Query	Personnel (Credential)	Query for specified credential number(s) or in specified number range. (swh-sample)
SWH22 - Credential Expired within Time Range Query	Credential	Query for expiring credentials in specified date/time range or with specified start/end dates. Modify query to specify activation and/or expiration date/times or specify pre-configured range such as 'Today'. Uses pre-defined Dynamic View, SWHdv22 - Credential expired - DView. (swh-sample)
SWH23 - Dynamic Views Query	Dynamic View	Query for Dynamic Views with value 'swh-sample' in their description field. (swh-sample)
SWH24 - Personnel by Name and Clearance Query	Personnel	Query for personnel with specified clearance(s) . If value contains <IGNORED>, query matches all values. (swh-sample)
SWH25 - Personnel by Last Name Query	Personnel	Query for Personnel by last names. Tip: Use string "s%" to search for last names starting with "S". It is possible to put two or more values in edit form. (swh-sample)
SWH26 - Personnel Clearance Expired or Expires within Date/Time Range Query	Personnel	Query for personnel whose clearance will expire in next 30 days. You can modify query by changing values—for example, specifying expiration date/time range and Personnel types, such as contractor. (swh-sample)
SWH27 - Personnel Text Query	Personnel	Query for personnel with specified 'Text4 ' value. (swh-sample)
SWH28 - Personnel with Recently Printed Badges Query	Personnel	Query for personnel with badges printed in specified date/time range. (swh-sample)
SWH29 - Queries Description Query	Query	Query for Queries with value 'swh-sample' in description field. (swh-sample)
SWH30 - Reports Description Query	Report	Query for Reports with value 'swh-sample' in description field. (swh-sample)
SWH31 - Personnel Lacking Specified Clearance Query	Personnel	Query for personnel who do **not** have specified clearance. (swh-sample)

Table 54: List of C•CURE 9000 Pre-defined Stand-alone Queries (continued)

Query Name	Query Target Type	Description
SWH32 - Personnel Inactivity for Specific Time Period Query	Personnel	Query for personnel **without** admit/reject record in journal in specified date/time range. (swh-sample)
SWH33 - Personnel Not in a Group Query	Personnel	Query for personnel who are **not** members of specified group. (swh-sample)
SWH34 - Personnel Who Do NOT Have a Lost, Stolen, or Disabled Card Query	Personnel	Query for personnel whose credential is **not** lost, stolen, or disabled— including personnel without any credentials at all. (swh-sample)

Pre-defined Dynamic Views

There are two pre-defined Dynamic Views that are provided as examples of the ways in which you can customize Dynamic Views to fit your particular needs:

- By defining which fields are displayed.
- By changing color, left-right justification, etc.

These Dynamic Views, numbered **SWHdv02** and **SWHdv22**, are displayed in the filtered Dynamic View with their description, as shown in Table 55 on Page 268.

- The Description field indicates the type of security information each Dynamic View returns and include the notation, **(swh-sample)**.

Table 55: List of C•CURE 9000 Pre-defined Dynamic Views

Name	Description
SWHdv02 -All Doors - DView	Used with SWHrep02 All Doors in System Query to find door names, partition, and controllers they are part of, etc. (swh-sample)
SWHdv22 - Credential expired - DView	Used with SHW22 Credential Expired within Time Range Query to find credentials that will expire or become expired in specified date/time range. Query results display name of personnel whose credential is involved, card number, and credential activation/expiration dates. (swh-sample)

Using the Pre-defined Reports, Queries, and Dynamic Views

You can use the Reports, Queries, and Dynamic Views that are provided with C•CURE 9000 'as is' to obtain a variety of basic information about your security system. You can also use them as models for ways to use the Report, Query, and Dynamic View functionality.

Furthermore, although these pre-defined objects are 'hard-coded' and cannot themselves be modified, a **Create Copy** button allows you to customize any of the pre-defined Reports, Queries, or Dynamic Views to suit your needs.

To Customize a Pre-defined Report/Query/Dynamic View

1. Click the **Data Views** pane button .
2. Click the **Data Views** drop-down list and select **Report**, **Query**, or **Dynamic View**.
3. Click  to open a Dynamic View showing all Report/Query/Dynamic View objects.
4. Select the pre-defined Report/Query/Dynamic View you want to customize for your use, right-click, and select **Edit** from the context menu.

   The editor for the object you chose opens with the selected pre-defined Report/Query/Dynamic View, respectively, displayed.

   - **Report Editor** (see Figure 80 on Page 204
   - **Query Editor** (see Figure 66 on Page 148
   - **Dynamic View Editor** (see Figure 31 on Page 82

   (You can make changes at this point if you wish, or wait until you've made the copy.)
5. Click **Create Copy**. The respective Editor reappears with a copy of the Report/Query/Dynamic View with the **Name** field blank (and any changes you may already have made included).
6. Modify the Report/Query/Dynamic View to your liking and then click Save **Result.**

For more information about Reports, Queries, and Dynamic Views, see:

- Reporting Overview on Page 186,
- Query Overview on Page 146
- Dynamic Views Overview on Page 80.

Example of Using a Pre-defined Report

SWH06 is a Door Access Report that uses **SWHrep0506** as its Query.

To Run this Report

1. In the Report Dynamic View, select the Report and do either of the following, as shown in Figure 98 on Page 270:

Figure 98: SWH06 Door Access Report

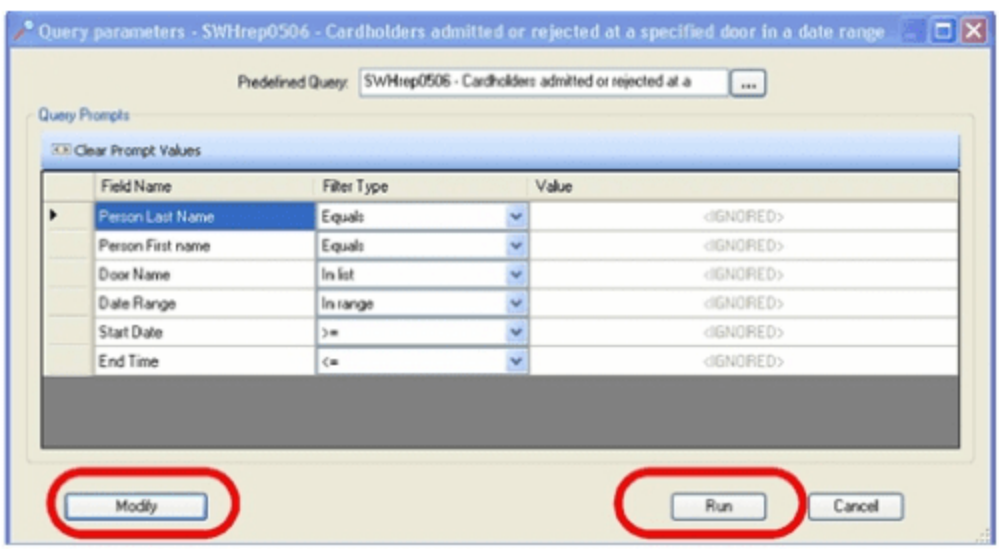
- Double-click it.

  - or -

- Right-click to open the context menu and select one of the following:
  - View
  - Popup View
  - View in current tab

The **SWHrep0506** Query opens as shown in Figure 99 on Page 270.

Figure 99: SWH06 Query Prompt



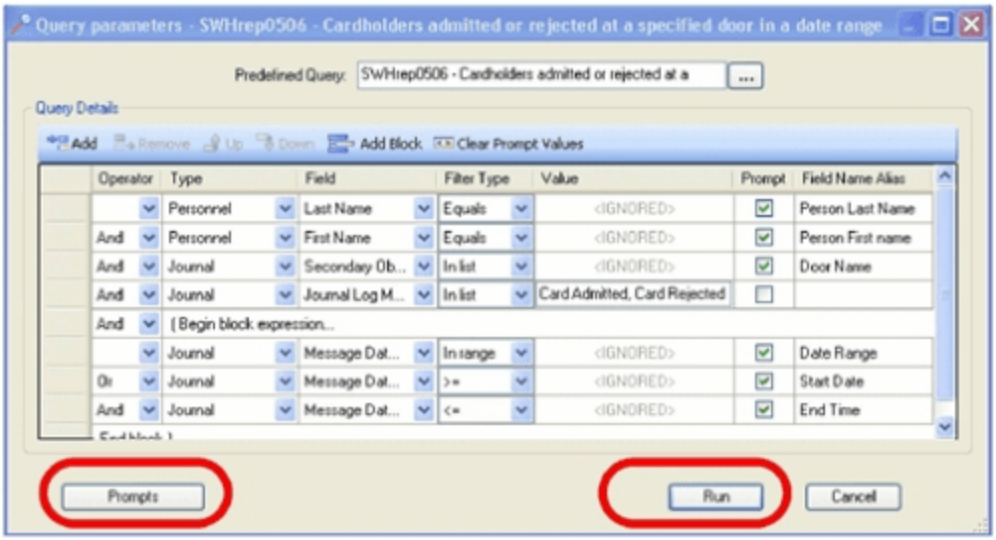
2. Click **Run** to have the Report show all admits and rejects at all doors in the entire journal.

   - or -

   Click **Modify** (or **Details**) to display the actual Query structure, as shown in Figure 100 on Page 271.

NOTE If the Query can be edited, the button is **Modify**; if the Query can only be viewed, the button is **Details**.

Figure 100: SWH06 Query Structure



The pre-defined Query, shown in both Figure 99 on Page 270 and Figure 100 on Page 271, asks for (All last names) AND (All First Names) AND (All Doors) AND (Admits or Rejects) AND (Date in Range OR Date between Start and End)

3. Click **Prompts** to return to the **Query Prompts** dialog box (Figure 99 on Page 270) or click **Run** to execute the Report from this **Query Details** dialog box.

   The Query returns all admits and rejects of all personnel at all doors in the Report Result, one page of which is shown in the example in Figure 101 on Page 272.

Figure 101: SWH06 – Door Access Report with All Records

C•CURE 9000

SWH06 - Door Access Report (Admit or Reject)

PERSONNEL

Journal

Cardholder Name	Door Name	Journal Log Message Type	Message Text	Message Date/Time
Barthgate, Andy	apc_door1	Card Rejected	'apc_door1' (IN). Rejected (Clearance) 'Barthgate, Andy' (Card: 10486007) at 'apc_door1' (IN).	11/24/2008 2:44:49 PM
Barthgate, Andy	apc_door1	Card Rejected	Rejected (Clearance) 'Barthgate, Andy' (Card: 10486007) at 'apc_door1' (IN).	11/24/2008 3:12:22 PM

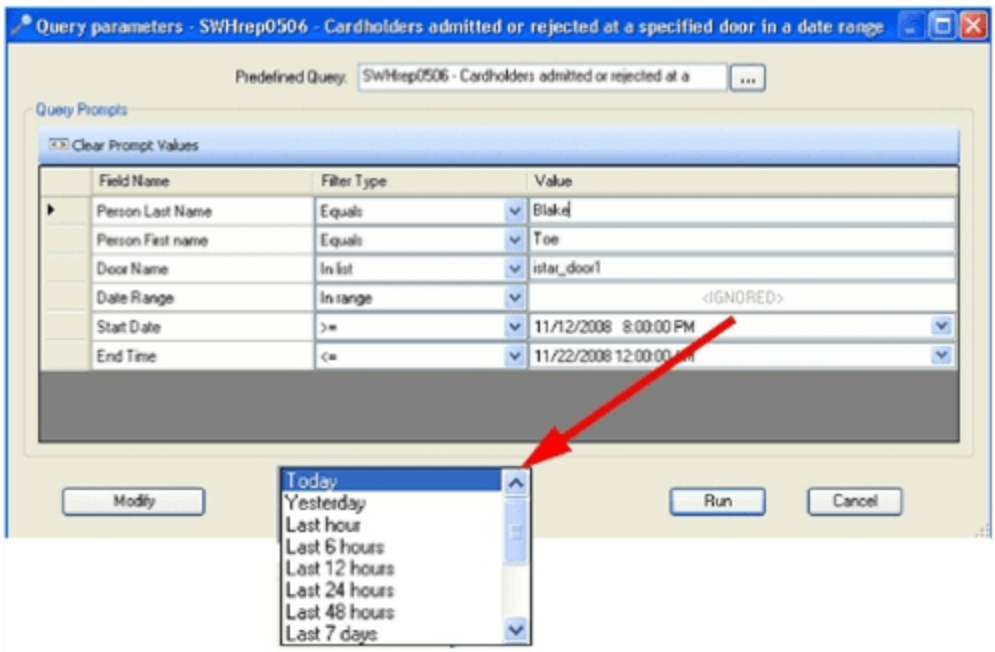
Text1: Boston

Journal

Cardholder Name	Door Name	Journal Log Message Type	Message Text	Message Date/Time
Blake, Toe	istar_door1	Card Admitted	Admitted 'Blake, Toe' (Card: 16337753) at 'istar_door1' (IN) ([Unused]).	11/14/2008 11:46:41 AM
Blake, Toe	apc_door1	Card Rejected	Rejected (Clearance) 'Blake, Toe' (Card: 16337753) at 'apc_door1' (IN).	11/14/2008 11:46:47 AM
Blake, Toe	istar_door1	Card Admitted	Admitted 'Blake, Toe' (Card: 16337753) at 'istar_door1' (IN)	11/21/2008 1:53:52 PM

The example in Figure 102 on Page 272 shows how you can narrow the search criteria for the Report when the Query prompts you.

Figure 102: SWH06 Query for Specific Person at Specific Door



This Query has been narrowed to a specific person at a specific door between the dates of November 12th and November 22nd. (Date Range could have also been used for ranges such as 'Last 7 days', etc.

The Report Result for this Query is shown in the example in Figure 103 on Page 273.

Figure 103: SWH06 – Door Access Report with Narrowed Search

C-CURE 9000

SWH06 - Door Access Report (Admit or Reject)

PERSONNEL

Text1: Boston

Journal

Cardholder Name	Door Name	Journal Log Message Type	Message Text	Message Date/Time
Blake, Toe	istar_door1	Card Admitted	Admitted 'Blake, Toe' (Card: 16337753) at 'istar_door1' (IN) ([Unused]).	11/14/2008 11:46:41 AM
Blake, Toe	istar_door1	Card Admitted	Admitted 'Blake, Toe' (Card: 16337753) at 'istar_door1' (IN) ([Unused]).	11/21/2008 1:53:52 PM
Blake, Toe	istar_door1	Card Admitted	Admitted 'Blake, Toe' (Card: 16337753) at 'istar_door1' (OUT) ([Unused]).	11/21/2008 1:54:44 PM

For further information on Reports, Queries, and Dynamic Views see the relevant chapters in this Guide.

B

Appendix B: Map Conversion

This appendix describes the Map Conversion process.

Map Conversion

This section describes the steps to convert Legacy maps to the new format.

NOTE If you are using an Administration Station on a remote client to connect to your C•CURE 9000 server, you need to edit the configuration file for the map converter to point to the C•CURE 9000 server. See Map Conversion Using a Remote Client on Page 276 for more information.

Map Conversion Using a Remote Client

If your C•CURE 9000 Administration Station is a client to a remote C•CURE 9000 server, you need to edit the Map Converter configuration file (CCureMapConverter.exe.config) to point to the remote server.

By default, the configuration file expects the C•CURE 9000 server to be the local system - if your server is on the same system as the Administration Station, you do not need to make any changes in the configuration file.

To Configure Map Conversion for a Remote Client

1. Navigate to your client's installation directory (typically C:\Program Files x86\Tyco\CCURE Client).
2. Edit the file "CCureMapConverter.exe.config" in Notepad.
3. Find the <client> section of the file.
4. Substitute the system name of your C•CURE 9000 server for "localhost" in the "ClientSession" and "ClientStream" sections of the file, as highlighted below.

```
<client>

  <endpoint name="ClientSession"
  address="net.tcp://localhost:8999/CrossFire/IClientSession"
  binding="netTcpBinding" bindingConfiguration="ServiceBinding"
  contract="SoftwareHouse.CrossFire.Common.ClientInterfaceLayer.IClientSession">

  </endpoint>

  <endpoint name="ClientStream"
  address="net.tcp://localhost:8997/CrossFire/IClientStream" binding="netTcpBinding"
  bindingConfiguration="StreamBinding"
  contract="SoftwareHouse.CrossFire.Common.ClientInterfaceLayer.IClientStream">

  </endpoint>
</client>
```

Example:

```
<endpoint name="ClientSession"
address="net.tcp://
yourccure9000servername:8999/CrossFire/IClientSession"
binding="netTcpBinding" bindingConfiguration="ServiceBinding"
contract="SoftwareHouse.CrossFire.Common.ClientInterfaceLayer.IClientSes
sion">

</endpoint>
```

Converting Legacy Maps to the New Maps Format

You can use the C•CURE 9000 Map Converter program to convert Legacy Maps to the new Maps format.

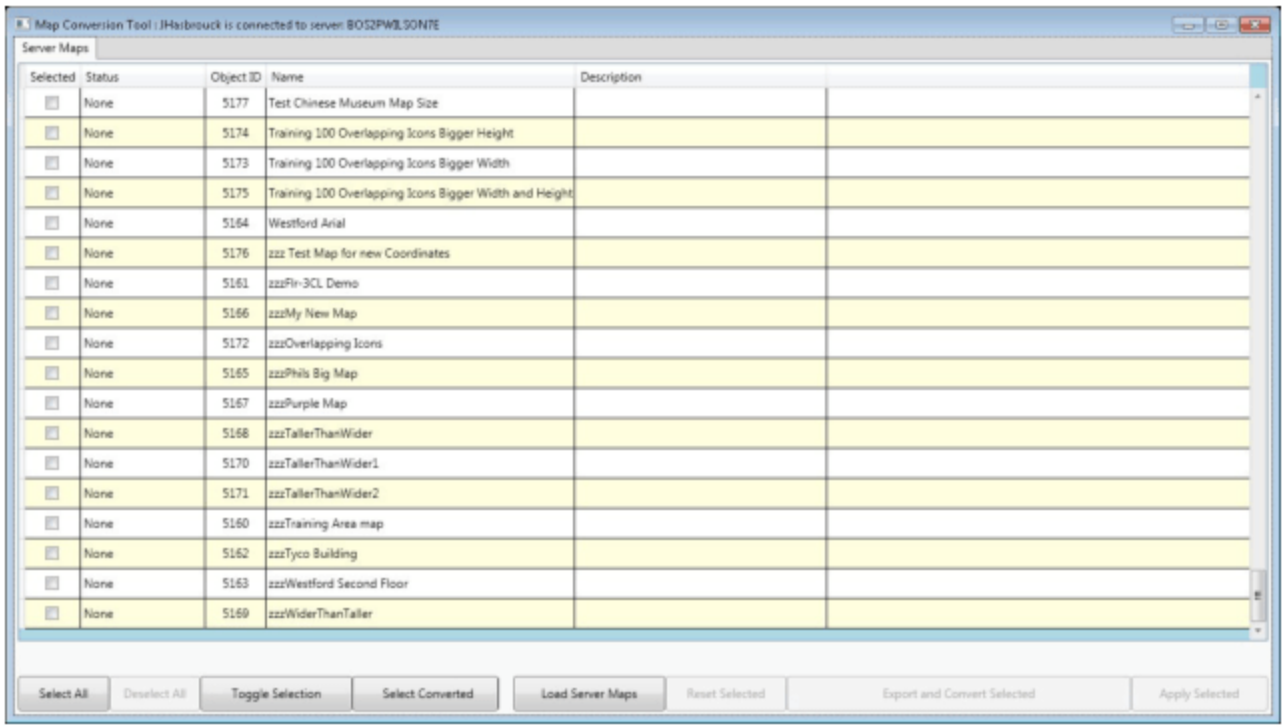
To Convert Legacy Maps

1. Run the **Map Converter (CCureMapConverter.exe)** program, located in the **C:\Program Files (x86)\Tyco\CCure Client** directory.

NOTE Right-click **CCMapConverter.exe** to "Run as administrator."

2. Click the **Load Server Maps** button. A list of Legacy maps in the system displays on the screen.

Figure 104: Converting Legacy Maps.

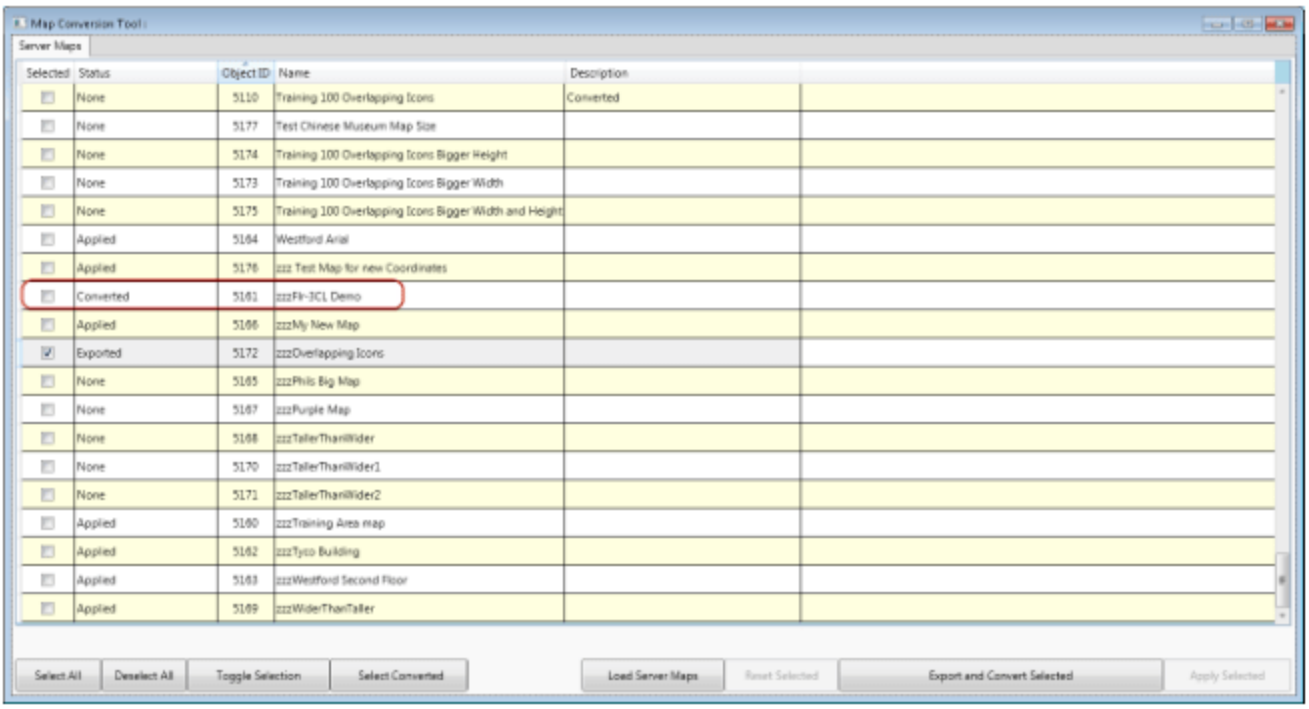


3. Click in the **Selected** column to select the check-box next to each map you want to convert. (Choose maps whose Status is **None**; which means that these maps have **not** been converted.)

NOTE All maps that you convert at the **same time** must have the **same status**

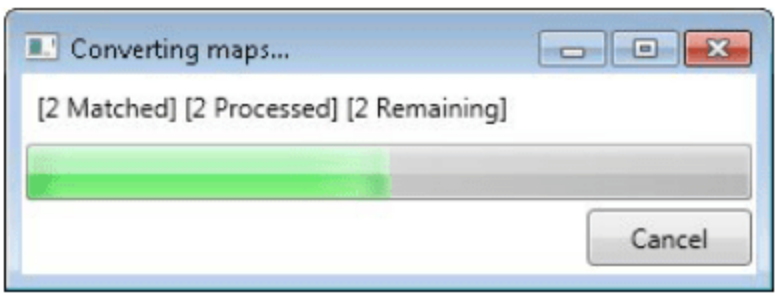
4. Select **Export and Convert Selected** to begin the conversion.

Figure 105: Export and Convert Selected



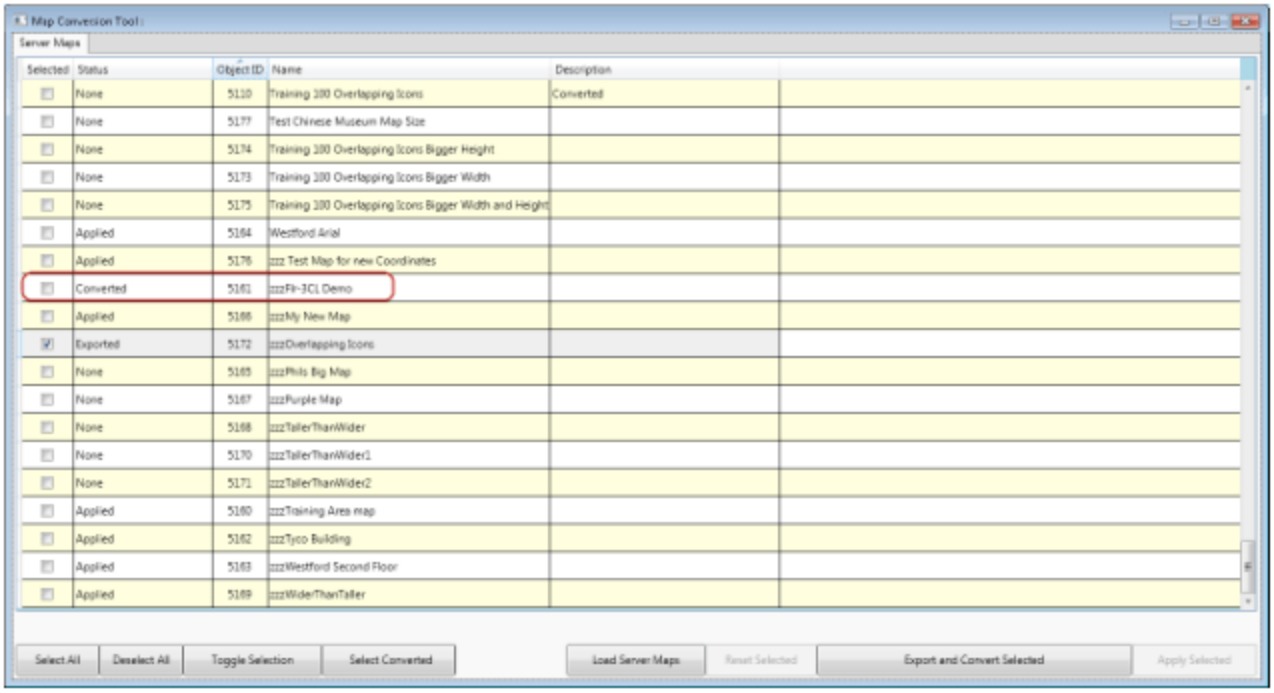
5. The **Status** of the maps changes during the conversion and a progress bar displays the progress.

Figure 106: Progress of Map Status Changes

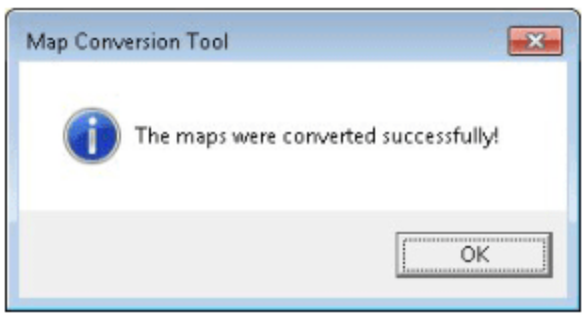


6. When conversion completes for the selected objects, the **Status** column changes to **Converted**.

Figure 107: Screen with Converted Maps



The Map Conversion Tool message box reports that the Maps were converted successfully.



7. Click **OK**.

You can view and edit the converted maps from the **Administration** workstation. See Accessing the Map Editor on Page 118.

You can make changes to the converted map if needed, before applying Links. See To Apply Links to Converted Maps on Page 279.

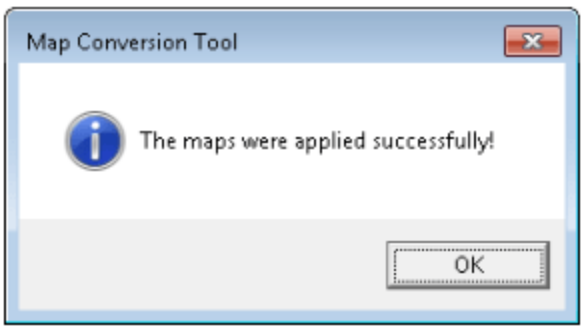
To Apply Links to Converted Maps

After converting the maps, you can use the **CCureMapConverter.exe** to add the links from the Legacy maps to the new maps.

1. Select the maps where you want to apply links.
2. Click **Apply Selected** to link objects on the new maps.

CCureMapConverter.exe adds the links from the Legacy maps to the new maps

3. If the linking is successful, the Status field changes to **Applied** to indicate that the objects referencing the map have been successfully updated to point to the newly created Map.



4. Click **OK**.
5. You can view and edit the converted maps from the **Administration** workstation. See Accessing the Map Editor on Page 118.

Troubleshooting Map Conversion

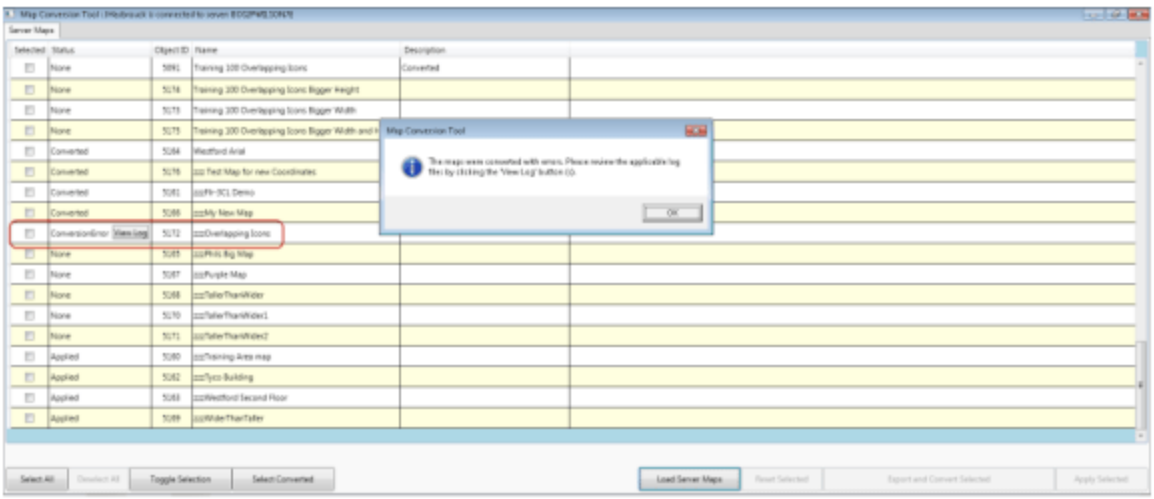
This section describes steps to troubleshoot conversion problems.

View Log

If there are problems converting a Map, you can view a log that details the conversion steps and provides information about any errors.

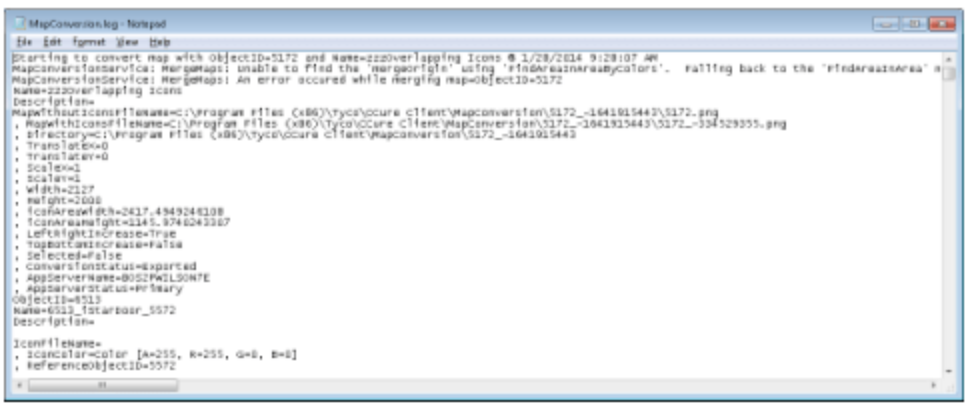
1. **View Log** - If you receive a **View Log** message that the maps were converted with errors, click **OK** to close the message box.

Figure 108: Map Converted with Errors - Click View Log



2. Click **View Log** to review the applicable log files with information about the error or problem. .

Figure 109: View Map Conversion Log

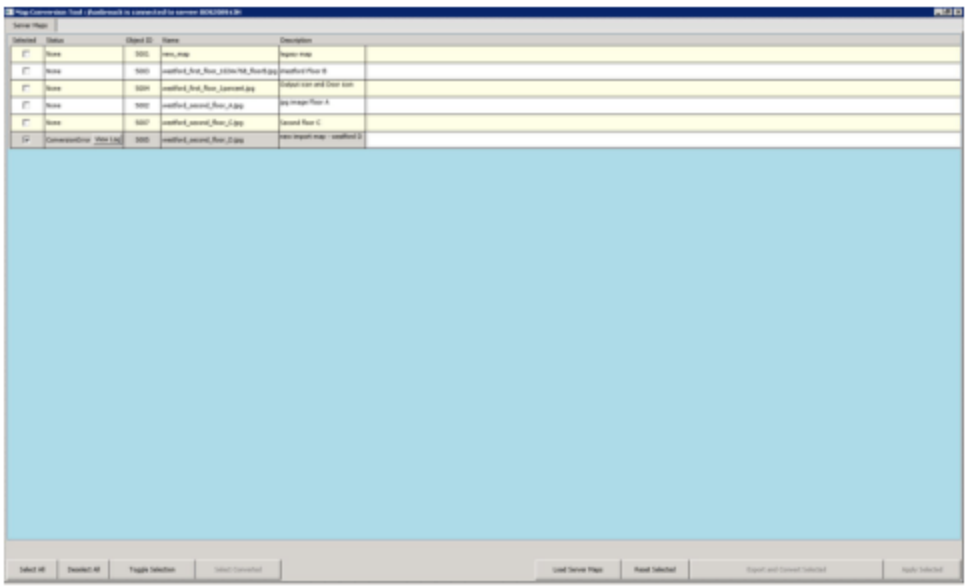


Reset Selected

1. Click **Reset Selected** to reset the **Status** of a map back to its previous "good" state. For example, if during conversion a map fails with a 'Status' of **Error_Converting**, clicking the **Reset Selected** button resets the status

back to **Exported** status so you can reattempt the conversion.

2. You can restart the conversion process by clicking **Export and Convert Selected**.



Map Conversion Definitions

This section lists Map Conversion Definitions.

Table 56: Server Map Columns

Server Maps	Description
Selected	The **Selected** column contains a check box for each selected map in the **Server Maps** tab.
Status	Displays the status of each map in the Map Converter Server Maps list. If a map fails during conversion, clicking the 'Reset Selected' button resets the status back to the 'Exported' status so users can reattempt the conversion process. See Map Status on Page 284.
Object ID	This column displays the C•CURE 9000 ObjectID of each map row in the Map Converter Server Maps list. In the Map Conversion directory, each Map has a working folder name in the format "Map ObjectID_Map Name"
Name	This column displays the C•CURE 9000 Map Name of each map row in the Map Converter Server Maps list. In the Map Conversion directory, each Map has a working folder name in the format "Map ObjectID_Map Name"
Description	Contains user defined terms and descriptions.

Table 57: Button /Field Definitions

Button/Field	Description
Select All	Selects all maps listed in the 'Server Maps' tab. The Selected column contains a check mark for each selected map.
Deselect All	Deselects any maps that are currently selected in the 'Server Maps' tab.
Toggle Selection	Selects all maps in the 'Server Maps' tab that are not currently selected while deselecting the maps that are currently selected.
Select Converted	Selects all maps in the 'Server Maps' tab that currently have a 'Status' of Converted.
Load Server Maps	Loads all existing legacy maps from the connected server to the 'Server Maps' tab.
Reset Selected	Resets the 'Status' of a map back to its previous "good" state. Example: if during conversion a map fails with a 'Status' of 'Error_Converting', clicking the 'Reset Selected' button resets the status back to 'Exported' status so you can reattempt the conversion process.
Export and Convert Selected	Causes each selected map in the 'Server Maps' tab to be exported from the currently connected server and then converted. The maps are exported to the 'Map Conversion' directory located in the same directory as the conversion tool.
Apply Selected	Causes each selected map with a 'Status' of 'Converted' to be 'Applied'. Applied is the process by which each of the previously converted maps and any references to them are updated so they point to the newly converted map.

Map Status

Map Status messages are useful for tracking the progress of conversion processing. These status messages appear during the map conversion process in the **Status** column of the Map Converter program.

NOTE The system displays the processing progress, and the status of the maps changes during conversion. Choose maps whose status is **None** (not converted). All maps that you convert at the same time must have the same status.

Table 58: Map Status

Status	Description
None	The Legacy map has **not** been converted.
Error_Applying	Indicates that the objects referencing the Legacy Map have not all been applied to the new Map.
Error_Converting	Map was exported to the hard drive but does not appear in the Admin Maps dynamic view. Possible reasons: • Map was previously converted. Trying to reconvert the map, but it hasn't been removed from the database. • Map with the same name was already created. • Network Issue that interrupted the connection between map converter and server during the conversion process. • The converter may have run out of memory due to the map being too large. Under these circumstances,you will see an 'OutOfMemory' error in the applicable log file (see View Log on Page 281 for more information). If you are running the conversion on a 32 bit system, you should try the conversion on a 64 bit system, that has more memory.
Exporting	Indicates that the status is valid while the maps are being exported from the database.
Exported	Indicates that the status is valid once the maps have been successfully exported.
Converting	Indicates that the status is valid while the maps are being converted to the new database tables.
Converted	Indicates that the status is valid once the maps have been successfully converted.
Applying	The status is displayed while the objects referencing Legacy maps are updated to reference the newly created maps.
Applied	The status is displayed once the objects referencing the maps have been successfully updated to point to the newly created map.
Error_Exporting	The status is displayed if an error occurred while the maps were being exported from the database. This status can occur if: • There is limited space on the current hard drive. You can edit the 'CCureMapConverter.exe.config' file that can be found in the same directory as the 'CCureMapConverter.exe' application, and change the 'CCureMapConversionDirectory' **appSetting** so that it points to a directory that is located on a hard drive that has more space. • The map is too large to export. Under these circumstances, you will often see a 'GDI' error or an 'OutOfMemory' error in the applicable log file. There is no solution for this error. You will need to recreate the map by re-importing the original map graphic and manually recreating the icons, using the legacy map as a model.

Index

D

N

O

P

Q

R

S

T

U

V

W

X

Z