Honeywell

Experion LX
Configuration Studio Overview Guide

Release 110

Honeywell

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Contents

Getting started with Configuration Studio

Configuration Studio provides a central location for the tools necessary to configure, check status, and access information for your Experion system. This allows you to manage all aspects of your system configuration including, but not limited to, hardware configuration, history, OPC, control strategies, controllers, and even field devices.

In Configuration Studio, you are provided with a customized list of tasks that you are required to complete to configure your system. When you click a task, the appropriate tool is launched so that you can complete the task.

The method for navigating Configuration Studio is based around Windows Explorer functionality. For example, double-click to expand folders or click the +- icons to expand or collapse a folder.

Configuration Studio is installed as part of the Experion installation process.

Starting Configuration Studio

Prerequisites

You must have an Experion operator account on the Experion server to which you want connection.

> **!** **Attention**
> If this is a new installation, use the default operator account `mngr`.

To start Configuration Studio

1   Choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Configuration Studio**.
     Configuration Studio appears, displaying the **Connect** dialog box.

2   In the list of servers, click the specific server that you want to connect to and then click **Connect**.

Results

• Configuration Explorer is populated with a tree of items that you can configure for your server.

Connecting to servers located across subnets

When using Configuration Studio to connect to a server through a router that has multicast traffic blocked, the **Local Targets** tab of the **Connect** dialog box will not list the server names belonging to the remote subnet. This is sometimes the case within Level 2 and Level 3 environments and frequently between L4 and L2/L3 environments. This will always happen when multicast traffic is blocked by the router or firewall.

In this situation, it is still possible to connect to servers located in other subnets by typing in the server name.

To connect to servers located in other subnets

1   Start Configuration Studio and display the **Connect** dialog box.

2   Click the **Other Targets** tab.

3   Using the **Target Type** drop down box, select type of subnet to which you want to connect.

4   In the **Target Name** text box, type the computer name of server to which you want to connect.
     Alternatively, you can specify the IP address of the server.

5   Click **Connect**.

Layout of the Configuration Studio window

The following figure is an example of the Configuration Studio window.
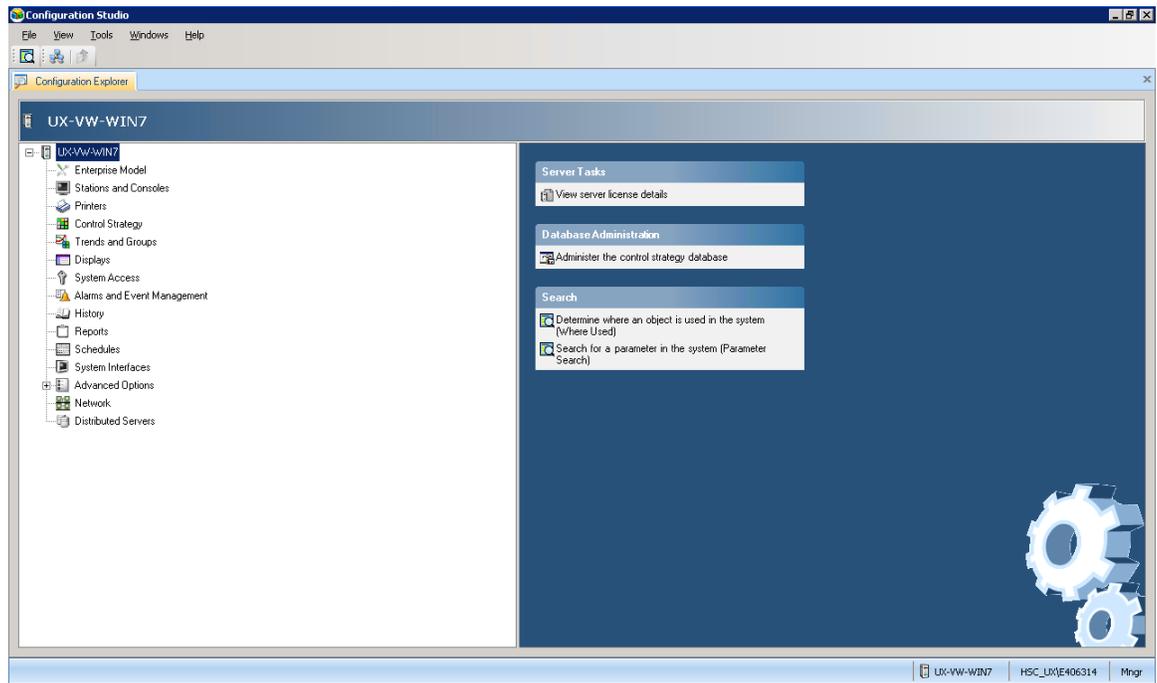
Figure 1: Configuration Studio

The Configuration Studio window contains the following components:

- Configuration Explorer is the first tab displayed.
- Toolbars and menus appear at the top.
- Configuration applications or displays that are integrated with Configuration Studio are displayed as additional tabs when starting a task.
- The status bar at the bottom of the screen. When you connect to an Experion server, the status bar displays the name of the server, user name, and the related security level.

Configuration Explorer

Configuration Explorer is displayed as a tab within the Configuration Studio window. Use Configuration Explorer to navigate through the configuration tasks for your system.

Configuration Explorer tab	
Configuration Explorer tree	Task list
	Status bar
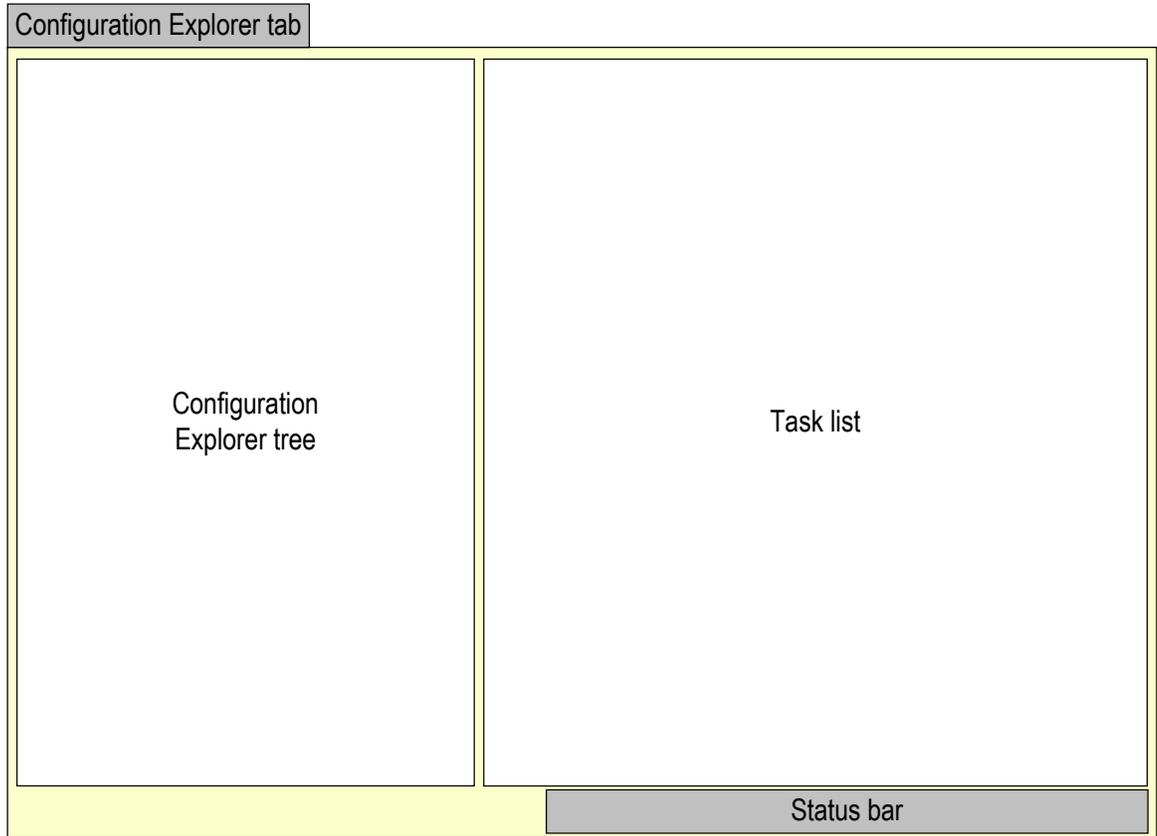
Figure 2: Configuration Explorer layout

The Configuration Explorer tree lists all the items that you can configure in your system. These items are determined by the license details of the Experion server to which you are connected.

When you select an item in the Configuration Explorer tree, the Task list displays the configuration tasks applicable for the selected item. Click on the task name to start a specific task.

> **Attention**
> Tasks are enabled or disabled based on the version of Experion the target server is running.

The status bar displays the server name of the target that you are connected to, your user name, and your security level. It also displays the server's online or offline status with an icon next to the server name.

Configuration tools

If a task requires a tool, such as Control Builder or Quick Builder, the appropriate tool is launched automatically. If a task requires a system display, then the appropriate display is called up as a separate tab within the Configuration Studio window.

Toolbars

The toolbar provides quick access to commonly used commands. The toolbar is dynamic; some buttons are added or removed, depending on the commands available for the tab displayed in the application.

Figure 3: Configuration Studio toolbar

Button	Description
	Connect to. Connects to an Experion server on the network.
	Back. Jump back a page.
	Forward. Jump forward a page.
	Up. Navigate to the node above in the Configuration Explorer tree.
	Refresh. Refresh the current page
	Configuration Explorer. Shows the Configuration Explorer tab.

Performing configuration tasks

To perform most configuration tasks

1   Connect to the server that you need to configure.

2   On the Configuration Explorer tab, click the item in the Configuration Explorer tree to configure.
    The Task list displays the applicable configuration tasks for the item you selected.

    For more help about the tasks available, press F1.

3   Click the configuration task.
    The associated display is shown as a separate tab or the appropriate configuration tool is launched.

4   Complete the configuration task as required.

5   Repeat the above steps until you have configured your system as required.

Switching servers in Configuration Studio after an Experion server failover

Attention

This task only applies if Configuration Studio is connected to a redundant server. You must connect to one of the redundant servers; you cannot connect to a system to complete this task.

If an Experion server failover occurs, you need to switch the Configuration Studio connection to the backup server. After a server failover, the server status in Configuration Studio will be no connection. You can switch to the backup server using the **Server Connection Status** dialog box.

To switch servers in Configuration Studio after an Experion server failover

1   Click on the server name in the status bar.
    The **Server Connection Status** dialog box appears.
2   If a backup server is available, click **Switch to Backup** to connect to the backup server.
    Wait for the server connection status to change to Connected.

Results

After switching to the backup server, all Configuration Studio tasks will be performed on the backup server.

Changing user account while connected to a server

You can switch user accounts directly from Configuration Studio.

To change user accounts

1   Click on the user name in the status bar.
    A logon dialog appears.
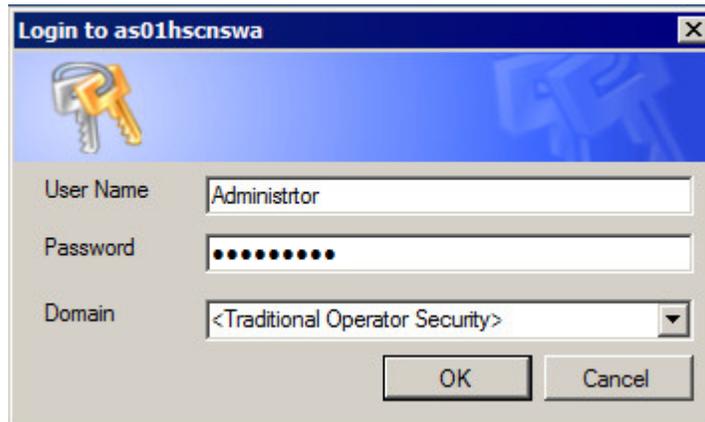
2   Enter a User Name and Password for the account to which you want to switch. Click **OK**.
    The new user name and the related security level will appear in the status bar.

> ❗ **Attention**
> Any open tools (tasks opened prior to changing the credential), such as Quick Builder, will continue to use the old credential until they are closed and reopened.

Configuration tasks help

These topics describe each of the configuration tasks.

Related topics

Server

Related topics

Server Tasks

Configure server properties

You configure servers in Configuration Studio.

You can configure the following:

- The name.
- The detailed description.
- If this server is external to the system.
- The network type connecting the server within the system.
- If this server is a redundant server.
- System wide event configuration.

Remove this server from the system

You remove servers from a system in Configuration Studio.

After deleting the server, you will need to reload the server configurations onto each server in the system.

View server license details

You view the server license details from the Server Licensing Details display in Configuration Studio.

Database Administration

Administer the control strategy database

You administer the control strategy database using the DbAdmin tool in Configuration Studio. Note that the DbAdmin task will only be displayed for the server on which you are physically running Configuration Studio. No other DbAdmins will be displayed.

With DbAdmin you can perform the following administration tasks:

- Display and clear locks left in the database after an abnormal termination of Control Builder.
- Check the consistency of the database.
- Reorganize data and index pages, and update statistics of the database.
- Create a backup of the current database.
- Expand the size of the database.
- Restore a backup of the database.

If you have redundant servers, you can also do the following:

- Recover a primary or secondary database.
- Synchronize databases for replication.

Search

Determine where an object is used in the system (Where Used)

You search for where objects are used in the system using the Search utility in Configuration Studio. This search tracks where a given entity (point, parameter, and display shapes) is used within the system.

Using the search utility, you can define the search criteria by entering name(s) of entities and then start the search.

The results of the search returns any instances of the entities existing in the database based on the search criteria.

Searches can also be conducted to find where parameters are used in selected customer-defined HMIWeb displays. The utility searches the display files for selected parameter instances and returns results based on the search criteria.

For example, searching to find where a point 'CM_1' is used in a system. The results could indicate the point 'CM_1' is used in another point 'CM_2' as a connection, is used in 'Display_1' as a reference and is used in 'Alarm_101' as a group item.

For more information about how to conduct where used searches, see the *Search Utility User's Guide*.

Search for a parameter in the system (Parameter Search)

You search for a parameter name or value in the system using the Search utility in Configuration Studio.

This search type allows you to enter a parameter name or value in the search criteria and then have the Search utility return all instances of that parameter defined in the database.

For example, this query can be used to list all the points whose PV is greater than a pre-defined value (PV > 75) or it could be used to list parameters whose value lies between a range of values (PV > 50 and PV < 75). This is useful in scenarios where the user wants to search for all EEs in 'run' state, PV compliance to a set point, or determine the number of EEs for a particular execution cycle time.

For more information about how to conduct parameter searches, see the *Search Utility User's Guide*.

Online data search

You can start an Online Data Search from Configuration Studio.

For more information about how to conduct searches, see the *Search Utility User's Guide*.

Enterprise Model

An Enterprise Model is a framework that includes a set of specialized models, such as the asset and system models, each of which represents one aspect of your system.

Related topics

"Build Assets" on page 16
"Build Alarm Groups" on page 16

Build Assets

You can build assets using the **Build Assets** task in the tasks list of the Configuration Explorer.

An asset model forms the core of an enterprise model: it is a hierarchical representation of your assets. An asset represents a particular physical item, such as a piece of plant equipment, a production line or a building. For more information on building assets, see *Station Configuration Guide*.

Build Alarm Groups

You can build alarm groups using the **Build Alarm Groups** task in the tasks list of the Configuration Explorer.

Alarm groups provide a means to monitor a group of assets and/or points that are otherwise unrelated to one another in the asset model. For more information, see "Alarm groups" in the "Alarms and events" section of the *Station Planning Guide*.

Stations

Related topics

Build Flex Stations

You build Flex Stations using Quick Builder in Configuration Studio.

For each Flex Station you can specify:

- The name of the Flex Station.
- The connection type.
- The security type.

After you build and download your Flex Stations, there are further configuration settings you can specify for each Flex Station.

Configure Flex Stations

You configure Flex Stations from the Flex Station Configuration Summary display in Configuration Studio, where all Flex Stations are listed.

For each Flex Station you can configure:

- Associated Stations.
- Startup/Idle timeout action.
- Printer Assignment. You can assign printers only after you have built and configured them (to build and configure a printer, click Printers in the Configuration Explorer tree).
- Audible Alarm/Station Failure Alarm.
- Asset assignment.

To configure a Flex Station, click the Flex Station name in the Configuration Summary display. The Flex Station Configuration display opens for the selected Flex Station.

For more information about configuring Flex Stations, see "Flex Station Configuration Display" in the "Customizing Stations" section of the *Station Configuration Guide*.

Configure Console Stations

You configure Console Stations from the Console Station Configuration Summary display in Configuration Studio.

For each Console Station you:

- Add the network name of the Console Station.
- Specify the number of Console Extension Stations.
- Set operator-based security.
- Specify update rates.
- Specify startup/idle timeout action.

- Specify audible alarm/Station failure alarms.
- Specify printer assignment.
- Assign assets.
- Specify associated points with operator keyboard LED.

To configure a Console Station click an empty row on the Console Station Configuration Summary display. The Console Station Configuration display appears.

For more information about configuring Console Stations, see the 'Configuring Console Stations' section in the *Station Configuration Guide*.

Configure server-wide Station settings

You configure settings for all Stations that are defined on a server from the Server Wide Settings display in Configuration Studio.

For all Stations, you can configure settings including:

- Startup page
- Timeouts
- Operator actions
- Faceplate options
- Alarm colors
- Security options including the minimum level required to enable/disable hardware
- Summary display settings such as alarm summary options, event summary options, and minimum security level restrictions
- Operator keyboard LED settings

For more information about server-wide settings, see "Server wide settings" in the "Customizing Stations" section of the *Station Configuration Guide*.

Printers

Related topics

Build printers

You build printers using Quick Builder in Configuration Studio.

For each printer you can specify:

- The name of the printer, as defined in Windows.
- The character set for printing alarms/events.

Configure printers

You configure printer settings from the Printers display in Configuration Studio, which lists all printers built using Quick Builder.

For each printer you can:

- Enable and disable the printer
- Specify the font size for reports
- Specify alarm and event setup

Control Strategy

Related topics

Process Control

Configure process control strategies

You configure process control strategies using Control Builder in Configuration Studio.

You use Control Builder to configure Process Controllers, which can handle control requirements, such as continuous processes, batch processes, discrete operations, and machine control needs.

A control strategy is an organized approach to define a specific process using detailed information to:

- Create control modules in an associated controlled environment.
- Configure function blocks to enable control applications.
- Run in a control software infrastructure.

Administer the control strategy database

You administer the control strategy database using the DbAdmin tool in Configuration Studio. Note that the DbAdmin task will only be displayed for the server on which you are physically running Configuration Studio. No other DbAdmins will be displayed.

With DbAdmin you can perform the following administration tasks:

- Display and clear locks left in the database after an abnormal termination of Control Builder.
- Check the consistency of the database.
- Reorganize data and index pages, and update statistics of the database.
- Create a backup of the current database.
- Expand the size of the database.
- Restore a backup of the database.

If you have redundant servers, you can also do the following:

- Recover a primary or secondary database.
- Synchronize databases for replication.

SCADA Control

Build channels

You build SCADA channels using Quick Builder in Configuration Studio.

Channels are the communications link between controllers and the Experion server. There is a specific reference guide for each controller type that describes the settings applicable to your controller type.

For more information about building channels, see the *Quick Builder Guide* and the controller reference for your controller type.

Build controllers

You build SCADA controllers using Quick Builder in Configuration Studio.

Controllers are devices used to monitor and control processes and items of field equipment. A controller is linked to the Experion server by a channel. There is a specific reference guide for each controller type that describes the settings applicable to your controller type.

For more information about building controllers, see the *Quick Builder Guide* and the controller reference for your controller type.

Build points

You build standard (SCADA) points using Quick Builder in Configuration Studio.

Experion uses points to store information about field values or devices, for example, the state of a pump, a temperature sensor, or the process variable of a control loop.

For more information about points and point parameters, see the 'Understanding and configuring points' section in the *Station Configuration Guide*. For more information about building standard points in Quick Builder, see the *Quick Builder Guide*.

Trends and Groups

Related topics

Configure trends

You configure trends from the Trends display. You can also add a point to a trend when you build the point in Quick Builder or Control Builder.

A trend displays historical data for point parameters that are being collected.

To configure a new trend, click an empty row on the Trend Configuration Summary display. The Trend Configuration display appears.

For more information about configuring trends, see the 'Configuring groups and trends' section in the *Station Configuration Guide*.

Configure groups

You configure groups from the Groups display. You can also add a point to a group when you build the point in Quick Builder or Control Builder.

A group display enables you to view point data for up to eight points on a single display. A group display can contain a mixture of point types.

To configure a new group, click an empty row on the Group Configuration Summary display. The Group Configuration display appears.

For more information about configuring groups, see the 'Configuring groups and trends' section in the *Station Configuration Guide*.

Displays

Related topics

Create new Normal display

You create standard displays using HMIWeb Display Builder in Configuration Studio.

Create new Popup display

You create popup displays using HMIWeb Display Builder in Configuration Studio.

A popup is a secondary window that appears when a user clicks the object to which it is attached.

Create new Dynamic Shape display

You create dynamic shapes using HMIWeb Display Builder in Configuration Studio.

A dynamic shape is a 'custom object' used in displays to present complex dynamic data.

Create new Shape Sequence display

You create shape sequences using HMIWeb Display Builder in Configuration Studio.

A shape sequence is a 'custom object' that is used in displays as either a status indicator or as an animation.

Edit existing displays

You edit standard displays, popup displays, dynamic displays, and shape sequences using HMIWeb Display Builder in Configuration Studio.

System Access

Related topics

"Operator Security" on page 24
"Profiles" on page 24

Operator Security

> **❗ Attention**
>
> Some displays may be unavailable to you in Configuration Studio as they are not configuration pages. If you attempt to view one of these pages, a warning dialog box will display. You can use Station to access pages which are not available in Configuration Studio.

Configure operators and Windows group accounts

You configure operator and Windows group accounts from the Operators display in Configuration Studio.

You can add new operator accounts, or you can modify, delete, or disable existing operator accounts.

If you use integrated security and you use Windows groups, you can create group accounts. By using a Windows group account on the Experion server, you can configure one account in Station for every Windows group, which enables members of the Windows group to log on to Station.

To enable integrated security, see the "*Administer operator signon*" task.

Administer operator signon

You configure passwords and integrated security from the Operators display in Configuration Studio.

The password settings include:

- Password expiry period.
- Password validation period.
- Operator configuration security level.
- Number of failed logins before lockout.
- Lockout time.

Configure server-wide system access settings

You configure server-wide system access settings in the Server Wide Settings display in Configuration Studio.

The server-wide system access settings include:

- The level of operator security required to enable or disable hardware items.
- Operator and Station asset assignment required for all assets.
- User name and password required for downloading control strategies.

Profiles

A profile consists of an asset list, containing one or more assets, and a time period. If you are using operator-based security, profiles provide:

- Additional security, through the ability to assign assets only for specified times.
- A method of giving an operator additional access at specified times. For example, after hours monitoring from a central location.

- A quick way of assigning assets to operators.

For more information about profiles, see the 'Configuring security and access' section of the *Station Configuration Guide*.

Configure profiles

You configure profiles from the Profiles display in Configuration Studio.

To configure a profile, you must have already defined one or more asset lists and one or more time periods. In a profile, you can define up to 16 pairs of an asset list associated with a time period.

Configure asset lists

You configure asset lists from the Assets List display in Configuration Studio.

You define an asset list by giving it an intuitive name and then selecting the assets to include in the asset list.

Configure time periods

You configure asset time periods from the Time Periods display in Configuration Studio.

You define an asset time period by giving it an intuitive name, selecting the days, and then the start and stop time for the period. You also identify the asset that must be assigned to operators to give them permission to change this time period.

Alarm and Event Management

The Alarm and Event Management tasks in Configuration Studio enable you to configure the way in which alarms and events are displayed and managed.

Related topics

"Configure alarm processing" on page 26
"Configure alarm and alert notification settings" on page 26
"Configure event archiving" on page 26
"Configure alarm appearance" on page 27
"Server-wide alarm and event options" on page 27

Configure alarm processing

The **Configure alarm processing** task in Configuration Studio calls up the Alarm Processing display.

You can use this display to configure settings such as:

- The enabling of alarms on server-wide basis
- Page acknowledge and page clear settings for IKB and OEP keyboards
- The annunciation and silencing of alarms on Station
- How unanswered alarms are to be dealt with
- How alarms and messages are to be acknowledged
- Automatic message acknowledgement for confirmable messages.
- How the priority of unacknowledged alarms is to be handled

For more detailed information about using the settings on the Alarm Processing display, see the topic "Alarm Processing tab" in the *Station Configuration Guide*.

Configure alarm and alert notification settings

The **Configure alarm and alert notification settings** task in Configuration Studio calls up the Alarm and Alert Paging display.

It is important to configure alarm and alert notification in the correct sequence. For example, a recipient must be set up before they can be nominated to receive messages.

The configuration sequence is as follows:

- Configure communication settings. This varies according to the alarm paging recipient.
- Configure and enable each recipient to be used with the system.
- Nominate the alarms and alerts to be sent, the recipient they are to be sent to, and any escalation.

Configure event archiving

The **Configure event archiving** in Configuration Studio calls up the Event Archiving display.

To configure event archiving, you identify the following:

- The period of time events are kept online before being deleted.
- The time of day to archive events on a daily, weekly, or monthly basis.
- Automatic archiving or to raise an alarm when archiving is due.

Configure alarm appearance

The **Configure alarm appearance** task in Configuration Studio calls up the Alarm Appearance display.

Experion has predefined colors for alarms in the alarm summary, the status bar indicators, and off-scan points. If these colors are not suitable for your site, you can use the Alarm Appearance display to customize these colors.

For more detailed information about using the settings on the Alarm Appearance display, see the topic "Alarm Appearance tab" in the *Station Configuration Guide.*

Server-wide alarm and event options

The **Server-wide alarm and event options** task in Configuration Studio calls up the Summary Displays display.

You can use this display to configure alarm and event related options such as:

- The display of system alarms in the Alarm Summary display for process alarms
- Settings for the alarm line
- Event summary settings
- Alarm, Alert, Event, SOE, and Message summary restrictions
- Timeouts for event queries and event archiving
- Persistence
- Date and time formats
- The enabling of ToolTips

For more detailed information about the Summary Displays display, see the topic "Summary Displays tab, server wide settings" in the *Station Configuration Guide*.

History

The History options in Configuration Studio call up history collection displays that you can use to:

- Define standard, extended, fast, or exception history collection rates and gating points (that is, the conditions under which data is collected).
- Configure archiving for point parameters.

Note that you can also define history collection rates and gating points for point parameters when you configure your control strategy in Configuration Studio, using:

- Control Builder for process points (use the Server History tab).
- Quick Builder for status, analog, or accumulator points on other types of controllers (use the History tab).

> **Attention**
> Any changes that you make using either Control Builder or Quick Builder will overwrite configuration changes made via the History Collection displays unless you upload those changes before you next download to the server from Control Builder or Quick Builder.

Related topics

Standard history collection

Standard History stores snapshots and averages at regular intervals—called standard history intervals.

You can set a maximum of 8 collection rates for snapshots, choosing from the following defaults: 1, 2, 5, 10, and 30 minutes. Standard history averages are based on the standard collection rates. There are 4 default collection rates for averages: 6-minute, 1-hour, 8-hour, and 24-hour averages.

To assign standard history collection to point parameters you can use the Standard History Collection display in Configuration Studio. You can also assign history collection to point parameters in Control Builder and Quick Builder.

Extended history collection

Extended History stores 1-, 8-, and 24-hour snapshots.

To assign extended history collection to point parameters you can use the Extended History Collection display in Configuration Studio. You can also assign history collection to point parameters in Control Builder and Quick Builder.

Fast history collection

Fast History stores snapshots of a point parameter at short regular intervals.

You can choose from a maximum of 8 collection rates: 5 default rates (5, 10, 15, 20, and 30 seconds) and 3 additional rates that you can define on the server.

To assign standard history collection to point parameters you can use the Fast History Collection display in Configuration Studio. You can also assign history collection to point parameters in Control Builder and Quick Builder.

Exception history collection

Exception history collects parameter values at a specified rate configured for that parameter but only stores them if the value or quality of the parameter has changed since it was last stored for that parameter. Exception history only supports string values. The default collection rates for exception history are:

- 5, 10, 15, 30, and 60 seconds
- 5, 10, 15, 30, and 60 minutes
- 2, 4, 6, 8, 12, and 24 hours

You configure exception history collections from the Exception History Collection display in Configuration Studio.

Note that you can assign exception history collection for SCADA point parameters in Quick Builder. However, you cannot assign exception history collection for Process Control points in Control Builder.

Configure history archiving

You configure history archiving from the History Archiving display in Configuration Studio.

From the History Archiving display you can:

- Enable history archiving for each history type.
- Check the time of the last archive.
- Force an archive to be run.

Reports

Related topics

Define reports

You define reports from the Reports display in Configuration Studio.

When you define a report, you can configure the following:

- The report type.
- A unique name for the report.
- A report title to be shown on the report output and summary display.
- Identify an application program to be requested after the report is complete.
- The report destination.
- Enable Reporting on Request.
- Enable Periodic Reporting.
- Assign security so that only operators or Stations with a specific asset assigned can view or request the report.

For more information about reports, see the 'Configuring reports' section of the *Station Configuration Guide*.

Server-wide report settings

You define server-wide report settings from the Server-Wide Report Configuration display.

Field widths

For reports that output event information, you can set the field sizes for certain fields in the report, on a server-wide basis. These settings do not apply to some report types. The field sizes you can configure are:

- Time
- Source
- Description
- Value
- Operator
- Condition

Report timeout

The report timeout setting allows you to define the maximum time a report is allowed to run. This setting does not apply to some report types.

Schedules

Related topics

Configure point control schedules

You configure point control schedules from the Schedules display in Configuration Studio.

You can set the following attributes for each schedule:

- The time and date of the point control.
- The point and point parameter to be controlled.
- The value to control the point parameter to.
- The schedule action.

The schedule action can be one-shot, daily, work day, weekend, holiday, or a day of the week.

For more information about point control schedules, see the 'Configuring schedules' section of the *Station Configuration Guide*.

Configure holidays

You configure holidays from the Schedules display in Configuration Studio.

In the Schedules display you identify the date of each holiday.

Configure shifts

You configure shifts from the Schedules display in Configuration Studio.

In the Schedules display you identify the start time and length of your work shifts.

System Interfaces

Related topics

Configure system interfaces

You configure system interfaces from the System Interfaces display in Configuration Studio.

System interfaces are high-level Experion interfaces to exchange data with other applications or subsystems without the need to separately define points.

In the System Interfaces display you can configure interfaces such as OPC and others.

For more information about the OPC interface, see the 'Configuring OPC' section in the *Station Configuration Guide*.

View distributed servers

You view distributed servers from the Distributed Servers display in Configuration Studio. To add or remove a distributed server, see the "Server Tasks" on page 14 task.

View redundant server configuration

Clicking this task opens the **Redundant server advanced** display in Configuration Studio, where you can view redundant server configuration information. To configure redundant servers, you first need to add the redundant servers to the system.

For more information about configuring server redundancy, see the 'Configuring and monitoring a redundant server system' section of the *Station Configuration Guide*.

Applications

Related topics

"Configure SCADA recipes" on page 33

Configure SCADA recipes

You configure recipes from the Recipes display in Configuration Studio.

Recipes are a simple way of downloading pre-configured values to multiple point parameters. These pre-configured values are known as ingredients.

In the Recipes display you can configure the recipe name, scale factor, and unit type the recipe can be downloaded to.

You also configure the ingredients, which includes the following:

- The point ID.
- The point parameter to be loaded.
- A description of the ingredient.
- The usual value for the ingredient.
- The minimum value for the ingredient.
- The maximum value for the ingredient.
- The value to be loaded.

Acronyms

An acronym describes the meaning of a parameter's state (or integer value). For example, the acronyms 'Stopped' and 'Running' are more meaningful in displays than the raw parameter values '0' and '1'.

Related topics

"Configure system acronyms" on page 34
"Configure user acronyms" on page 34

Configure system acronyms

You configure system acronyms from the Acronyms display in Configuration Studio.

System acronyms are supplied with Experion. You can customize these acronyms to suit your requirements, for example, you can use phrases suited to your organization, or translate them to another language.

Configure user acronyms

You configure user acronyms from the Acronyms display in Configuration Studio.

If the system acronyms are not sufficient for your requirements, you can create your own acronyms.

Application Development

Related topics

Application point lists

You define application point lists from the Applications display in Configuration Studio.

Point lists are defined by applications that need to simultaneously read or write to several point parameters. Applications do this by making calls to application programming library routines GETLST and GIVLST.

In the Applications display, you can configure and modify the point IDs and parameters within the point lists.

System sinewave

You configure the system sinewave from the Applications display in Configuration Studio.

Task timers

You view task timers from the Applications display in Configuration Studio.

Task timers are started by applications making a call to the application programming library routine TMSTRT.

In the Applications display, you can view applications that have started a task timer.

Watchdog timers

You view watchdog timers from the Applications display in Configuration Studio.

Watchdog timers are started by applications making a call to the application programming library routine WDSTRT. Your application periodically resets the countdown timer by making a call to the application programming library routine WDON.

In the Applications display you can view applications that have started watchdog timer, the action set on failure, and the current timer.

User-defined data formats

You configure user-defined data formats from the **User-defined Data Formats** display in Configuration Studio.

Data formats convert field values to scaled or unscaled values that are more useful, or meaningful, for operators or other applications.

In the **User-defined Data Formats** display, you can create and modify both scaled and unscaled data formats. For scaled data formats, you identify the minimum and maximum field values and the corresponding minimum and maximum converted values. For unscaled data formats, you set the minimum and maximum values and node values that define the conversion curve.

For more information about user-defined data formats, see the section titled "About user-defined data formats" in the *Station Configuration Guide*.

Server Scripting

Related topics

Configure script engines

You configure script engines from the Script Engines display in Configuration Studio.

When you write a script, the server initially assigns it to an automatic script engine. In the Script Engines display, you can re-assign scripts to a manual script engine for testing or server performance reasons. You can also view the status of each script engine.

For more information, see the *Server Scripting Reference*.

Configure server scripts

You configure server scripts from the Server Scripting - Server, Periodic, and Library Scripts display in Configuration Studio.

In the Server Scripting - Server, Periodic, and Library Scripts display, you can write server, library, and periodic scripts.

For more information, see the *Server Scripting Reference*.

View point scripts

You view point scripts from the Server Scripting - Point Script display in Configuration Studio.

You write and modify scripts for flexible points in Control Builder and Quick Builder.

For more information, see the *Server Scripting Reference*.

File Replication

Related topics

Configure file replication

You configure file replication from the File Replication display in Configuration Studio.

The File Replication display shows a list of files that have been set up for replication. You can modify, delete, or configure new replications.

Files can be manually replicated, scheduled to run at a specific time, or automatically replicated whenever file changes occur.

Network

Related topics

"Switch Configuration" on page 38

Switch Configuration

Adding switch configuration in Configuration Studio

The switch configuration can be added in Configuration Studio to view the alarms and other notifications for all the switches configured. You can add the required switch configuration and also edit or delete the same.

For more about switch configuration, refer to the *Fault Tolerant Ethernet Overview and Implementation Guide*.

Distributed Servers

Related topics

"Configure DSA" on page 39

Configure DSA

DSA enables multiple Experion servers to share data, alarms, and history without the need for duplicate configuration on any server. This is the preferred method for transferring data between servers in large systems.

For more information in configuring DSA, see "Configuring Distributed System Architecture" section in the *Station Configuration Guide*

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How to report a security vulnerability

For the purpose of submission, a security vulnerability is defined as a software defect or weakness that can be exploited to reduce the operational or security capabilities of the software.

Honeywell investigates all reports of security vulnerabilities affecting Honeywell products and services.

To report a potential security vulnerability against any Honeywell product, please follow the instructions at:

https://honeywell.com/pages/vulnerabilityreporting.aspx

Submit the requested information to Honeywell using one of the following methods:

- Send an email to security@honeywell.com.

  or

- Contact your local Honeywell Technical Assistance Center (TAC) listed in the "Support and other contacts" section of this document.

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