Honeywell

Experion PKS
Troubleshooting Guide

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EPDOC-X243-en-431A	431	0	February 2015

Disclaimer

Contents

1 About this guide

This guide describes how to diagnose and correct faults associated with Experion PKS.

Revision history

Revision	Date	Description
A	February 2015	Initial release of document.

How to use this guide

For information about	Go to
Isolating and identifying specific symptoms.	“Isolating problems” on page 11
How to fix common problems.	“Fixing common problems” on page 21
Experion PKS log files and entries.	“Understanding log entries” on page 117
Getting further assistance.	“Getting further assistance” on page 145

2 Isolating problems

The following steps can help you to isolate and identify specific symptoms.

Task	Go to	Done?
Start by asking a list of questions and checks. These will often help you focus on the underlying cause of the problem.	“Initial checks” on page 12	
If you are unable to identify the cause of a problem, use the initial diagnostics to isolate symptoms.	“Initial diagnostics” on page 14	
If you already experience specific symptoms	“Fixing common problems” on page 21	
If you have an alarm	See the *System Alarms Reference*.	
If, after extensive investigation, you cannot isolate the problem and need support	“Getting further assistance” on page 145	

Related topics

“Initial checks” on page 12
“Initial diagnostics” on page 14

2.1 Initial checks

This section contains topics to help you focus on the underlying cause of a problem by asking a series of questions and completing a series of checks.

If these questions or checks do not help you isolate a problem, see “Initial diagnostics” on page 14.

Related topics

“Ask yourself” on page 12
“Check the following” on page 12

2.1.1 Ask yourself

You can often get a better understanding of a problem by asking the following questions.

Question	Yes/no?
Has someone changed the password for the Windows MNGR account on any computer or service? The Windows MNGR account is used by most Experion services and applications to communicate with each other. If the password is changed without using the password utility, you may experience problems, like DCOM communication failures.	
Has the system been modified recently? Even a seemingly minor change to one subsystem may affect another, apparently unrelated, subsystem.	
Are all locations affected, or just some? If only some locations are affected, the problem is probably related to the controllers, Stations or network associated with that location.	
Is the performance gradually getting worse? The problem may be maintenance-related. For example, the server's hard disk may be filling with history and event archives, or it may be becoming progressively more fragmented.	
Has the server restarted or failed over and resolved this issue in the past? If so, memory leakage may be slowly degrading performance, or a task may have gone into a loop.	
Are other applications also having problems? If so, the server may be overloaded, or the operating system or network may not be correctly tuned.	

2.1.2 Check the following

You can often get a better understanding of a problem by performing the following basic checks.

Check	Go to	Done?
If you have recently modified your system, check that you have performed the appropriate post-modification tasks.	“Post-modification checklist” on page 136	
Check the **System Status** display for any system component-related system alarms.	See the “Calling up the System Status display” topic in *Operator's Guide*. “Tips for using the System Status display” on page 138	
Use the Windows Event Viewer to check for application or system errors.	“Viewing the Windows event logs” on page 14	

Check	Go to	Done?
Check whether there is anything unusual about the following system counters:		
• Server Sync Queue Availability statistics on the **Redundant server advanced** display	See the “Checking the status of redundant servers” topic in *Server and Client Configuration Guide*.	
• Number of events/hour on **Event Archiving** display	See the “Using Event Archiving” topic in *Operator's Guide*.	
• CEE performance and loading statistics on the **CEE detail** display	See the “Calling up the System Status display” topic in *Operator's Guide*.	
• DSA connection and subscription statistics on the **DSA Status** display	See the “Calling up the System Status display” topic in *Operator's Guide*.	
Check the server's performance.	“Checking the server's performance” on page 18	
Check whether there is enough free space on the server's hard disk (the recommended minimum is 15%). If there is not enough free space, move old history and event archive files to another drive or other media.	“Monitoring free disk space for the server” on page 144	
Check for excessive file fragmentation on the server's hard disk.	“Checking a hard disk's file fragmentation” on page 18	
Check the scanning load if you have controllers other than Process Controllers.	“Checking the scanning load” on page 15	
Check that any virus scanning software is correctly configured for use with Experion.	See the *Network and Security Planning Guide*.	
If you have an ESM Server installed, use the Diagnostic Studio Analysis Tools. These tools examine Experion network configuration parameters and Experion security settings, and will correct detected problems, where possible.	See the *Diagnostic Studio User's Guide*.	

2.2 Initial diagnostics

The following topics help you to isolate symptoms.

Related topics

2.2.1 Viewing the server log

The server log is the main log for Experion server.

To view the log on the Experion server

- Choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion PKS Server Log**.

To view the log on a Console Station

- Choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Console Station** > **Diagnostic Tools** > **Experion PKS Console Station Log**.

2.2.2 Viewing the Windows event logs

You use the Windows Event Viewer to see the Windows event logs. The logs contain information about program, security, and system events on the computer.

To view the Windows event log

1 Do one of the following:

Option	Description
Windows Server 2008	• In the Windows **Control Panel** classic view, double-click **Administrative Tools**.
Windows 7	• In the Windows **Control Panel** large or small icon view, click **Administrative Tools**.

2 Double-click **Event Viewer**.
The **Event Viewer** window is displayed.

3 Expand the **Event Viewer** item in the left pane.

4 To see an items events, click the item in the left pane. For example, if you want to see application events, click **Application**.

2.2.3 Checking the CPU load

You use the Windows Performance Monitor to check the CPU load of servers and Console Stations.

The Windows Performance Monitor also gathers information about other aspects of system performance such as free memory. See the help for more details.

To check the CPU load

1 Do one of the following:

Option	Description
Windows Server 2008	• In the Windows **Control Panel** classic view, double-click **Administrative Tools**. • Double-click **Reliability and Performance Monitor**. The **Reliability and Performance Monitor** window is displayed.
Windows 7	• In the Windows **Control Panel** large or small icon view, click **Administrative Tools**. • Double-click **Performance Monitor**. The **Performance Monitor** window is displayed.

2 Click on **Performance Monitor** in the left pane.

3 Click  to open the **Add Counters** dialog box.

4 Click the **Select counters from Computer** option.

5 Type the name of the computer you want to monitor.

6 Click **Select counters from list**, make sure **Processor** is selected as the **Performance object** and click **% Processor Time**.

7 Click **Add**.

8 Click **OK**.

2.2.4 Checking the scanning load

The **Channel Scanning Statistics** display shows scanning statistics, and indicates whether any channels are overloaded.

When troubleshooting scanning problems, you should also check

- The scan period specified for each parameter of a particular point, including auxiliary parameters (These are shown on the **Scanning** tab of the point detail display.)
- Whether there are any free format reports or custom applications that request a scan point special (A scan point special is a forced scan. Excessive use of scan point special can result in a heavy scanning load.)

To check the scanning load

1 Choose **Configure > System Hardware > SCADA Controllers** to call up the **SCADA Controllers** display.

2 Double-click the required channel in the Location Pane to display the **Channel Detail** display.

3 Click the **Channel Scanning Statistics** link to call up the **Scanning Statistics** display. This contains the following three sections:

- Channels
- Scanning scheduling

- System sinewave

2.2.5 Channels

This section contains channel-based statistics that enable the scan load on individual channels to be analyzed.

Property	Description
Channel	Shows the channel number and name.
Status	Shows the channel service status (for example, **OK** for 'in service', **DISABLED** for 'out of service').
Overload Status	Indicates an overload if the channel is unable to process all its requests or the channel cannot do the work it was requested to do in the time specified.
Daq and Cnt	These columns list the number of data acquisition requests outstanding and control requests outstanding for each channel. The two figures should usually be on or near zero. If either of these figures increase to a number over 100 and do not decrease, the channel cannot process all of its scan load. This will lead to a scan overload that will be indicated in the **Overload Status** column. At the bottom of the acquisition and control columns are figures that refer to the number of queue entries available to the server in order to perform each action. These should always be greater than zero. Lower down in the list of channels, there might be non-zero numbers associated with unimplemented channels. You can ignore the figures for unimplemented channels.
Deferred, Immediate, & Configuration	Used by Honeywell for diagnostic purposes.

2.2.6 Scanning scheduling

Property	
Scan units	The number of milliseconds specified for the basic scanning unit. The default is 500 ms (that is, 0.5 second) and should only be altered by Honeywell.
Period	Lists the scan periods configured on your system. Periods are shown in number of scan units.
Clock	If the value is 0 or greater, it indicates that the period is idle. When the clock is negative, that period is carrying out scanning. Taking the 60 period as an example, if there were only 2 requests on the period, then one would be processed at -1, and the other at -31, at which time the 'clock' would go to 29. The more scan packets per period, the closer the clock will get to counting between 0 and -period.
Cycles Behind	Indicates that the length of time since the last scan is greater than the scan period. Cycles behind is only valid while the current cycle is behind. When the next cycle starts, this entry will be reset to zero.
Requests Lost	The number of lost requests. A lost request is when an entry cannot be queued into the data acquisition or control queue because of an overload condition. **Note:** The server should be *0* cycles behind and should not have discarded (lost) any requests.

Property	
Scan Table Pointers	These three columns analyze the contents of the table that holds all scan entries. This table is built during point building and can be viewed using the **lisscn** utility. Within the table, scan periods have been entered consecutively and within each scan period there is an entry for each scan packet for that period. This information is used by Honeywell. • **first** = the table record which is the first for that period. • **number** = the number of records belonging to that period. The number of scan packets per period. • **current** = the record within that period that was last processed.

2.2.7 System sinewave

The System Sinewave is a useful indicator of the system scanning load. If the Sinewave is not smooth, or has missing or repeated values, this indicates the system may be overloaded.

If you are logged on to Station with *mngr* security level, you can set the low and high values and the period.

Tip
It is a good idea to set up a trend for the system sinewave and collect fast history so that you can monitor for any irregularities over longer periods. See “Setting up a trend for the system sinewave” on page 141.

2.2.8 Checking the password for the Windows mngr account

Although Windows security prevents you from discovering the password for the Windows *mngr* account, you can check whether a password is correct by attempting to log on as *mngr* using that password.

The Windows *mngr* account is used by most Experion services and applications to communicate with each other. For example, if the password is changed on the server, applications on client computers will no longer be able to connect to the server because they will continue to use the old password.

This means that the password *must* be the same:

- On all Experion computers
- For all services that run under the *mngr* account

If you suspect that not all services use the same password, see the topic titled "Changing service account passwords" in the *System Administration Guide*.

2.2.9 Checking which services are running

The Services window shows the status of all services, including Experion services.

Experion services run under the Windows *mngr* account.

To check which services are running

1 Do one of the following:

Option	Description
Windows Server 2008	• In the Windows **Control Panel** classic view, double-click **Administrative Tools**.
Windows 7	• In the Windows **Control Panel** large or small icon view, click **Administrative Tools**.

2 Double-click **Services**.
The **Services** window is displayed.

2.2.10 Recording Station and channel communications activity

You can use the *trace* utility to record communication activity for Stations and channels. You can also use the Diagnostic Framework to record communication activity as well as log entries.

2.2.11 Checking which points are configured for a controller

You can check which points are configured for a controller (other than a Process Controller).

> **Attention**
> You cannot use this technique for user scan task controllers, system interfaces or point servers.

To check which points are configured for a controller

1. Choose **Configure** > **System Hardware** > **SCADA Controllers** to call up the **SCADA Controllers** display.
2. Click **View Points** opposite a controller to see the points configured for that controller.

2.2.12 Checking a hard disk's file fragmentation

You use the **filfrag** command-line utility to check the degree of fragmentation of files used by Experion.

If you run it with no arguments when the database is loaded, it reports on all files known to your system. You can run this utility while the system is running.

Alternatively, if you specify a filename, (`filfrag filename`), it reports on the specified file.

To run filfrag

1. On the primary server, choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion Command Prompt** to open the Experion Command Prompt window.

   > **Attention**
   > To run Experion commands, you must be a member of the Product Administrators group. If you want to do engineering tasks, you must be a member of the Local Engineers group.
   >
   > You must run Experion commands from the Experion command prompt and not the standard Windows command prompt, otherwise you will not see the output from the command and the command will fail.

2. Type `filfrag` and press ENTER.

2.2.13 Checking the server's performance

You use the Performance Monitor to monitor a server's performance. See 'Monitoring Performance' in the chapter 'Tuning system performance' in the *System Administration Guide* .

2.2.14 Checking for events in the Events databases

To check all events in the Events database

1. Start the Diagnostic Framework.
2. Run the Basic Events Test.
3. If any failures are shown, investigate the cause of the failure. Otherwise, contact your local Honeywell Technical Assistance Center.

2.2.15 Checking whether the Event database and Event data table exists

To check whether the Events database exists

1 Choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion Command Prompt** to open the Experion Command Prompt window.

> **Attention**
> To run Experion commands, you must be a member of the Product Administrators group. If you want to do engineering tasks, you must be a member of the Local Engineers group.
>
> You must run Experion commands from the Experion command prompt and not the standard Windows command prompt, otherwise you will not see the output from the command and the command will fail.

2 Run the following command from the command line to verify the existence of the Event table:

```
sqlcmd -E -d EMSEvents -Q "select name from sysobjects where name = 'Events'"
```

3 Verify that one row is returned by the command.
For example:

```
C:\>sqlcmd -E -d EMSEvents -Q "select name from sysobjects where name = 'Events'"
name
------------------------------------------------------------------------------
Events

(1 rows affected)

C:\>
```

2.2.16 Checking whether events are going into the current Events table

To check whether events are going into the current Events table

1 Choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion Command Prompt** to open the Experion Command Prompt window.

> **Attention**
> To run Experion commands, you must be a member of the Product Administrators group. If you want to do engineering tasks, you must be a member of the Local Engineers group.
>
> You must run Experion commands from the Experion command prompt and not the standard Windows command prompt, otherwise you will not see the output from the command and the command will fail.

2 Run the following command from the command line to determine the number of events in the data table:

```
sqlcmd -E -d EMSEvents -Q "select count(*) from Events"
```

3 Record the number returned by the command.
For example:

```
C:\>sqlcmd -E -d EMSEvents -Q "select count(*) from Events"

-----------
      7277

(1 rows affected)
```

In this example, there are 7277 events in the Events table.

4 Wait until the system receives at least one event.

5 Wait another 30 seconds before again running the command specified above. (There can be a delay of up to 30 seconds between the time an event is received by the server and the time it is inserted into the database.)

6 Check that the new number is greater than the initial number you recorded.

2.2.17 Checking the status of the Event backup and restore jobs

To check the current status of the Event jobs

1 Choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion Command Prompt** to open the Experion Command Prompt window.

> **Attention**
> To run Experion commands, you must be a member of the Product Administrators group. If you want to do engineering tasks, you must be a member of the Local Engineers group.
>
> You must run Experion commands from the Experion command prompt and not the standard Windows command prompt, otherwise you will not see the output from the command and the command will fail.

2 Run the following command from the command line to view the ConfigProperty values:

```
sqlcmd -E -d EMSEvents -Q "select ConfigProperty,value from EventConfig where ConfigProperty
like '%RetCode'"
```

3 If there are any “value” entries returned, verify that these values are 0 (zero); a value that is not zero indicates an error.

2.2.18 Monitoring system health

System Health Monitoring focuses on the health of computers and network devices in an Experion PKS system. The System Health Monitor uses the Windows Event log and the System Event Server (SES) to provide useful information concerning system problems and pending system failures.

> **Tip**
> The System Health Monitoring service starts automatically, you do not need to configure the service to start. Additionally, the System Health Monitoring makes use of System Health Rules File(s) which you do not need to configure. If you have a need to modify or create a new rule, refer to the System Administration Guide.

3 Fixing common problems

This section describes how to fix common problems. Problems are grouped based on usage, for example, problems you can experience when operating, configuring, or performing system administration tasks on Experion.

Related topics

“Operations” on page 22
“Configuration” on page 74
“System administration” on page 103

3.1 Operations

The following topics contain troubleshooting for common problems that you may experience while operating an Experion system.

Related topics

3.1.1 A display opens in an existing tab instead of a new tab

You are using tabbed displays in either single- or multi-window Station (SafeView) and you want to open a display in a new tab but it opens in an existing tab.

Diagnostic check

Was the display that you wanted to open in a new tab, already open in an existing tab? If so, the system is working as intended.

Cause

Station prevents you from opening multiple copies of the same display.

Diagnostic check

Was the display that you wanted to open in a new tab an Equipment display and you already had another Equipment display open? If so, the system is working as intended.

Cause

Station prevents you from opening more than one Equipment display.

3.1.2 Alarm and Event DSA report cannot be displayed

Cause

The Alarm and Event DSA Report cannot be displayed until the Crystal Reports Viewer control has successfully installed.

Solution

For each user on the system, perform one of the following actions:

1. Open *\\ServerName\Report\rpt.00x.htm* in Internet Explorer; or,
2. Disable the *KreepyKrawly* by adding **KreepyKrawlyCycle=0** to the .stn file. After running the report, remove the entry from the .stn file.

Tip
This action only needs to be performed once for each user.

3.1.3 Alarm and Event report does not include all alarms or events

When you run an Alarm and Event report, it is either empty or some alarms/events are missing.

Diagnostic check

If you use Event Archiving, check whether the date and time specified in the report conflict with your Event Archiving configuration settings, in particular, the **Keep events online for** setting.

Cause

The date and time specified in the report conflict with the period for which events are kept online. (Alarms and events older than this period will not appear in a report unless they have been restored.)

Solution

Correct any conflicts, or restore the required alarms and events.

Diagnostic check

If the report was generated from a summary display, check whether a filter has been applied to the display.

Cause

A filter has been applied to the display and only those alarms or events displayed are sent to the report.

Solution

Either remove the filter or apply an appropriate filter.

Diagnostic check

Identify your scope of responsibility.

Cause

Only alarms for assets that have been assigned to your operator account or Station can be displayed in an alarm report.

Solution

For more information about assignable assets, see “About scope of responsibility” in the *Server and Client Configuration Guide*

Diagnostic check

Check whether the Event database (EMSEvents) and tables exist.

Cause

The Event Archiving process has failed.

Solution

Stop and start the Event Archiving task.

Diagnostic check

Check whether the alarms and events you expected to see in the report appear in the Event Summary.

Cause

The Event Archiving process has failed.

Solution

Stop and start the Event Archiving task.

3.1.4 Alarm and Event report does not fit on the page

The Alarm and Event report does not fit on the page when exported to the Microsoft Word *.doc* format.

Diagnostic check

Check the page orientation of the report. The page orientation must be Landscape in order for the report to fit on the page.

Cause

The page orientation is Portrait, resulting in some report columns being printed outside of the report document area.

Solution

Change the page orientation of the report from **Portrait** to **Landscape**.

3.1.5 Alarm or Event Summary displays do not show any alarms or events

In certain circumstances, **Alarm Summary** and **Event Summary** displays may not display any alarms or events. The issue can occur in different forms depending on how the user is connecting to the server. For example, events and alarms will not show on their respective displays, and errors occur when you try to apply filters and other options.

Diagnostic check

Are you connecting to the Experion server via the Station over http paths? To check the http paths:

1. In Station, choose **File** > **Connection Properties**.
2. Click the **Display** tab.
3. Check if the display paths are prefixed with *http* (instead of *\\server* or *C:\ProgramData\Honeywell\Experion PKS*).

Cause

The Userdata persistence option is not enabled.

Solution

Enable the Userdata persistence option for the Internet. To do this in Internet Explorer:

1. Choose **Tools** > **Internet Options**.
2. Click the **Security** tab.
3. Click the **Internet** icon and then click **Custom Level**.
4. Scroll to the **Userdata persistence** option and select **Enable**.
5. Click **OK** to close the dialog boxes.

Diagnostic check

Is the server listed as a trusted site? To check in Internet Explorer:

1. Choose **Tools** > **Internet Options**.
2. Click the **Security** tab.
3. Click the **Trusted sites** icon and then click **Sites**.

Cause

The Userdata persistence option is not enabled.

Solution

Enable the Userdata persistence option for the Internet and for Trusted Sites. To do this in Internet Explorer:

1. Choose **Tools** > **Internet Options**.
2. Click the **Security** tab.
3. Click the **Internet** icon and then click **Custom Level**.
4. Scroll to the **Userdata persistence** option and select **Enable**.
5. Click **OK**.
6. Click the **Trusted sites** icon and then click **Custom Level**.
7. Scroll to the **Userdata persistence** option and select **Enable**.
8. Click **OK** to close the dialog boxes.

Diagnostic check

Is the server on a local intranet?

Cause

The Userdata persistence option is not enabled on the client computer.

Solution

Enable the Userdata persistence option for the local intranet on the client computer. To do this in Internet Explorer:

1. Choose **Tools** > **Internet Options**.
2. Click the **Security** tab.
3. Click the **Local intranet** icon and then click **Custom Level**.
4. Scroll to the **Userdata persistence** option and select **Enable**.
5. Click **OK** to close the dialog boxes.

Diagnostic check

Are you connecting to the server via E-Server?

Cause

The Userdata persistence option is not enabled.

Solution

In this case, the server is usually a trusted site, so enable the Userdata persistence options for both Internet and Trusted Sites.

Enable the Userdata persistence option for the Internet and for Trusted Sites. To do this in Internet Explorer:

1. Choose **Tools** > **Internet Options**.
2. Click the **Security** tab.
3. Click the **Internet** icon and then click **Custom Level**.
4. Scroll to the **Userdata persistence** option and select **Enable**.
5. Click **OK**.
6. Click the **Trusted sites** icon and then click **Custom Level**.
7. Scroll to the **Userdata persistence** option and select **Enable**.
8. Click **OK** to close the dialog boxes.

3.1.6 Alarm paging email is not being received

You have configured alarm paging for email, but the recipient is not receiving email.

Diagnostic check

Check the server log for the following error:

```
The message could not be sent to the SMTP server.
The transport error code was 0x800ccc15.
The server response was not available.
```

Cause

Your antivirus software is blocking email.

For example, McAfee antivirus software has the option **Prevent mass mailing worms from sending E-mail**, which blocks email being sent from the Alarm paging system.

Solution

Consult with your IT department before changing any options in the antivirus software.

3.1.7 Alarm state for Equipment on a custom display is different to that seen on Equipment displays

On a Console Station with console acknowledgement, the alarm state of an equipment item on a custom display may sometimes be different to the state shown on the Equipment Summary or the Equipment Detail display.

Diagnostic check

Check whether:

- Console acknowledgement is configured
- There are assets shared between consoles
- Some alarms on the equipment have been acknowledged or shelved in another console
- The alarms are not acknowledged or shelved in the console to which the Console Station belongs

Cause

The Equipment Summary and Equipment Detail displays are redirected to the cluster server when viewed on a Console Station. Therefore, the Equipment displays will show the alarm state of the equipment as seen on the server, without incorporating any console acknowledgement.

Solution

Disable console acknowledgement. The alarm state of equipment on the Equipment displays and any custom displays will now match.

Do not use console acknowledgement when working with equipment displays.

3.1.8 Alarm suppression data is missing from the Suppression Status display

The Suppression Status display does not show any suppression groups at all, or suppression groups that you would expect to see are missing from the display.

Diagnostic check

The Alarm Suppression tab shows an error message indicating that this option is not licensed.

Cause

Server clusters that are not licensed for Dynamic Alarm Suppression cannot suppress alarms and do not show any information about suppression groups on the Suppression Status display.

Solution

If the server cluster is not licensed for Dynamic Alarm Suppression, the only solution is to acquire a license if you want alarm suppression functionality on this server cluster.

Diagnostic check

The Suppression Status display looks like it is trying to load but there is a generic error message indicating that errors have occurred on the page.

Cause

To view data on displays like the Suppression Status display or on the alarm tracker pane in the Alarm Summary, users must be logged on as a member of one of the following Windows groups on the Experion server or Console Station to which their Station is connected: `Local Ack View Only Users`, `Local View Only Users`, `Local Operators`, `Local Engineers`, `Local Supervisors`, or `Product Administrators`.

Solution

If your Windows logon is the problem:

1. Check that you are a member of one of the Windows groups listed above and have logged on using the appropriate account.
2. Log on to Windows again with the appropriate account before opening the Suppression Status display.

Diagnostic check

If alarm suppression groups shown in the Suppression Status display but alarm suppression groups that you would expect to be included on the Suppression Status display are missing, check that the configuration data for those groups been loaded to the server cluster to which you are connected.

Cause

The server cluster to which you are currently connected to may have been disconnected when the missing alarm suppression configuration data was loaded from Configuration Studio.

Solution

1. Note the version of the suppression group configuration that is running on the current server cluster (the version details are shown at the top of the Suppression Status display).
2. In Configuration Studio, open the Configure alarm suppression task and hover over the icon representing the system configuration (this is the icon at the top of the list of alarm suppression groups in the left-hand pane) to see a ToolTip that shows the runtime version information.
3. If this runtime version is more recent than the version on the server cluster to which you are connected, and if you have the requisite logon privileges (engineer or manager), you can load this latest version to system servers. For more information about how to do this, see “Loading alarm suppression groups” in the *Server and Client Configuration Guide*.

3.1.9 Alarms appear to be missing from the Alarm Summary

Alarms appear to be missing from the Alarm Summary.

Diagnostic check

- Is a **View** filter currently applied to the Alarm Summary?

  Is the current view **(all alarms)**? If not, the Alarm Summary is only showing the subset of alarms indicated in the **View** label.
- Have filters been applied to any of the columns in the Alarm Summary?

  Are the words **(Filter applied)** shown beside the **Clear All Filters** button at the top of the Alarm Summary? If so, the Alarm Summary may not be showing all alarms. You can find out which filters are applied by hovering over the **(Filter applied)** text to display a ToolTip containing that information.
- If the Alarm Tracker pane is open in the Alarm Summary, do the alarm tracks contain alarms that are not shown in the alarm table of the Alarm Summary display?

Cause

When a view or column filter is applied:

- The Alarm Summary excludes alarms that do not match the view or column filter criteria.
- An Alarm Tracker pane may contain alarms that are not shown in the alarm table of the Alarm Summary display.

Solution

- If the view is currently filtered, go to the **View** drop-down list and choose **(all alarms)**.
- If a column filter has been applied, click the **Clear All Filters** button.

Diagnostic check

Has the alarm been shelved?

The **Shelved alarms** summary line at the bottom of the Alarm Summary shows whether any alarms are currently shelved and how many of those shelved alarms are shown in the current display.

To see which alarms are currently shelved, choose the **(shelved alarms)** view.

Cause

Operators can use the **Shelve** action to temporarily remove alarms relating to known problems from the Alarm Summary. This helps them to focus on new or more important alarms.

Solution

None. The system is working as intended.

If necessary, you can unshelve the alarm.

Diagnostic check

Is the alarm currently suppressed?

The **Suppressed alarms** summary line at the bottom of the Alarm Summary shows whether any alarms are currently suppressed and how many of those suppressed alarms are shown in the current display.

To see which alarms are currently suppressed, choose the **(suppressed alarms)** view.

Tip
To see if any alarm suppression groups have been activated, you can also look in the Event Summary which records event details whenever an alarm suppression group is activated (or deactivated) and alarms are suppressed (or unsuppressed).

Cause

If an alarm has been configured to be suppressed when a suppression group is activated, that alarm is removed from (or prevented from being included in) the default view of the Alarm Summary while the suppression group is active.

Solution

None. The system is working as intended.

If necessary, and if you have supervisor (or higher) privileges, you can use the **Suppression Status** display to disable the alarm suppression group. For information on calling up this display, see the steps in the following diagnostic check.

Attention
Before changing the settings of an alarm suppression group, carefully consider the potential consequences: enabling a suppression group may inadvertently hide important alarms, and disabling a suppression group may result in an alarm burst.

Diagnostic check

Does the alarm belong to an active alarm suppression group that is configured with a deactivation delay?

To view the configuration settings for an alarm suppression group:

1. Go to the main Station menu bar and choose **Configure** > **Alarm & Event Management** > **Alarms**.
2. Click the **Alarm Suppression** tab to go to the **Suppression Status** display.
3. Locate the alarm suppression group in the list of suppression groups and click on it to display the suppression status and other information for that group.

   Tip
   Use the filtering options on the Suppression Status display to locate the suppression group of interest.
4. Click the **Configuration** tab at the bottom of the display to display the configuration settings for the group.

Tip
To see if any alarm suppression groups have been activated, you can also look in the Event Summary which records event details whenever an alarm suppression group is activated (or deactivated) and alarms are suppressed (or unsuppressed).

Cause

Alarm suppression groups can be configured with a "deactivation delay" to ensure that alarms that were previously suppressed do not immediately appear in the Alarm Summary as soon as the suppression group is deactivated. By providing a time buffer for alarms that may be related to an alarm burst to return to normal, this deactivation delay helps to prevent alarms from returning to the Alarm Summary prematurely.

Solution

None. The system is working as intended.

On the other hand, if the deactivation delay period is too long, and you have engineer privileges, you can change this configuration setting in Configuration Studio. For more information, see "Configuring alarm suppression groups" in the *Server and Client Configuration Guide*.

Diagnostic check

Does the alarm belong to an alarm suppression group that has been activated and is configured to suppress even those alarms that were in the Alarm Summary before the suppression group was activated?

To view the configuration settings for an alarm suppression group:

1. Go to the main Station menu bar and choose **Configure** > **Alarm & Event Management** > **Alarms**.
2. Click the **Alarm Suppression** tab to go to the **Suppression Status** display.
3. Locate the alarm suppression group in the list of suppression groups and click on it to display the suppression status and other information for that group.
4. Click the **Configuration** tab at the bottom of the display to display the configuration settings for the group.

Tip
To see if any alarm suppression groups have been activated, you can also look in the Event Summary which records event details whenever an alarm suppression group is activated (or deactivated) and alarms are suppressed (or unsuppressed).

Cause

When you configure an alarm suppression group, you can choose to have alarms suppressed even if those alarms were in the Alarm Summary before the suppression group was activated. You might want to do this if you know that alarms that became active within a certain period of time before a suppression is activated are directly related that suppression.

Solution

None. The system is working as intended.

Alternatively, if this configuration setting needs to be changed, and you have engineer privileges, you can change the configuration settings for this group in Configuration Studio. For more information, see "Configuring alarm suppression groups" in the *Server and Client Configuration Guide*.

3.1.10 Alarms are missing from the Alarm Tracker pane

If alarms are missing from the Alarm Tracker pane, this could be for a number of reasons, including:

- The log in you used
- Display or alarm tracker configuration issues

- Filtering issues

> **Tip**
> Conversely, if the Alarm Tracker pane contains alarms that are not listed in the alarm table, this might be because a filter is currently applied on the Alarm Summary. To find out which filters are applied, hover over the **(Filter applied)** text at the top of the alarm table to display a ToolTip that shows which filters are applied.

Diagnostic check

The Alarm Tracker pane does not show any alarms.

Cause

This could be because of one (or both) of the following reasons:

- You may have used the wrong log in or you are not a member of the appropriate Windows group.

  To see alarms in the Alarm Tracker pane, users must be logged on as a member of one of the following Windows groups on the Experion server or Console Station to which their Station is connected: `Local Ack View Only Users`, `Local View Only Users`, `Local Operators`, `Local Engineers`, `Local Supervisors`, or `Product Administrators`.
- The Alarm Tracker pane does not include any of the assets (or alarm groups) within your scope of responsibility (SOR).

Solution

- Check that you are a member of one of the Windows groups listed above and have logged on using the appropriate account.
- If you have engineering or manager privileges you can view and change the configuration of this alarm tracker, as necessary. Otherwise, refer this problem to an engineer or manager.

Diagnostic check

The Alarm Tracker pane contains alarms but one or more alarms that you would expect to see are missing. For example, some alarms might be listed in the alarm table but not included in the Alarm Tracker pane.

Cause

Alarms may be missing from the Alarm Tracker pane because the asset (or alarm group) to which they belong:

- Has not been included in the configuration of the alarm tracker that has been assigned to you.
- Is not within the SOR of the operator signon that you used (or the SOR of the Station, Console, or Console Station that you are logged on to).

> **Tip**
> Alarms might also be missing from the Alarm Tracker pane because they have been shelved or suppressed.

Solution

This works as intended. If necessary, and if you have the appropriate authority, you can change the assets (or alarm groups) included in the Alarm Tracker pane that has been assigned to you.

Diagnostic check

Alarms that were previously shown in the Alarm Tracker pane are now missing.

Cause

- Alarms may be temporarily out of sight on an alarm tracker because they are no longer inside the time period currently on view in the Alarm Tracker pane.

A « button in the column immediately to the right of the asset (or alarm group) name indicates that there is at least one alarm in that alarm track that is not visible in the current time frame. Hover over the button to display a ToolTip that indicates the number of alarms out of view and the most important alarm state of the alarms not in view.

- If part of the Alarm Tracker pane is shaded over and shows no alarms in the shaded area, this means that there are currently more than 1,000 alarm icons to be displayed. This shaded area will hide older alarms, leaving more recent alarms (no more than 1000 alarm icons) in the non-shaded area.
- An alarm that was previously visible may be temporarily not visible because other alarm icons are displayed on top of that alarm. This might happen, for example, when the alarm icon moves from the “real time area” of the alarm tracker to the historical area, or when you change the time period shown in the historical area.

Solution

- If an alarm track shows the « button, you can show alarms that are not currently visible by doing one of the following:
  - Move the slider bar under the assets list to show a longer historical time period in the Alarm Tracker pane.
  - Click the « button to change the time frame of the Alarm Tracker pane to one that shows the alarms that were previously hidden in that track.

  Tip
  If the button is “grayed out” «, this means that the alarms that are not currently visible in the alarm track are older than 12 hours and cannot be displayed. Note, however, that the ToolTip for this button shows information about the most important alarm state of the alarms currently out of view.
- If part of the Alarm Tracker pane is shaded, you can clear the shading by zooming in to display a shorter time period in the historical part of the Alarm Tracker pane.

  Alternatively, if enough alarms have returned to normal and have been acknowledged (and there are now no more than 1,000 alarms in the current time period displayed in the Alarm Tracker pane), using Station’s **Refresh** button should also clear the shaded area.
- To see information about alarms that are currently hidden by other alarm icons, click to select the alarm cluster to which the alarm belongs. This filters the alarm table to list all the alarms in the cluster, and makes it easier to locate and view details of the alarm that you are interested in.

3.1.11 Alarms are unexpectedly included in the Alarm Summary

The Alarm Summary includes alarms that you do not expect to see.

Diagnostic check

- Is the **(suppressed alarms)** or **(shelved alarms)** view currently applied to the Alarm Summary?
- Is the alarm icon column currently filtered for **Suppressed**, **Shelved** or **Not Hidden**?

Cause

Suppressed or shelved alarms (or both) may be included if you have chosen a view or applied a filter that includes suppressed or shelved alarms (or both).

Solution

To clear the current filters, click **Clear All Filters**.

Alternatively, depending on which filter or view is currently applied:

- Use the **All Alarm States** filter for the alarm icon column.
- Apply the **(all alarms)** view.

Diagnostic check

Was the alarm previously shelved? And if so, has the shelving period expired?

Cause

Alarms can only be shelved for a limited period.

Solution

None. The system is working as intended.

If necessary, you can shelve the alarm again.

Diagnostic check

Is this alarm supposed to be suppressed by an alarm suppression group that is currently active? If so:

- Review the configuration settings for the alarm suppression group to which the alarm belongs to make sure the group is correctly configured.
- Review the configuration settings to see if the suppression group has been configured to keep the first alarm that triggered the suppression in the default view of the Alarm Summary, and if this is the case, check whether this alarm is the first to activate the suppression group.
- Check whether an alarm that can activate the suppression has become questionable.
- Check the **Suppression Status** display on Station to see if the alarm suppression group has been disabled on this cluster.

Cause

- The alarm suppression group may not be correctly configured.
- Alarm suppression groups can be configured so that the first alarm to activate the suppression is not suppressed.
- When the alarm conditions that activate a suppression group become questionable (this can happen, for example, when the server or controller that “owns” the activating alarm has gone offline) any previously suppressed alarms in that group are unsuppressed after a specified period.
- Someone may have used the **Suppression Status** display on Station to change the enabled/disabled configuration settings for the suppression group to which this alarm belongs.

Solution

- If the alarm suppression group is not correctly configured, and you have the necessary privileges, make the necessary corrections to the suppression group configuration in Configuration Studio and load the updated configuration data to your system servers.
- If the alarm suppression group has been configured to “not suppress” the first alarm that activates the suppression, and this was the first alarm to do so, then the system is working as intended.
- If alarms that can activate a suppression group have become questionable, the system is working as intended. Check the status of alarms that can activate the alarm suppression group to which this alarm belongs to see if any of them have become questionable.
- If the alarm suppression group has been disabled, the system is working as intended. If you have supervisor (or engineer) privileges, you can enable the suppression group, if necessary.

> **Attention**
> Before changing the settings of an alarm suppression group, carefully consider the potential consequences: enabling a suppression group may inadvertently hide important alarms, and disabling a suppression group may result in an alarm burst.

Diagnostic check

Does the alarm belong to an alarm suppression group that has not been downloaded to one or more system servers?

More specifically use Configuration Studio to check the following:

- Does the alarm belong to a group whose status is **Released**?
- Does the alarm belong to a group whose status is **In progress**?

Cause

There are a number of reasons why the configuration for an alarm suppression group has not been loaded to all servers.

Solution

Use Configuration Studio to load the alarm suppression group configuration and make sure that the suppression group is included in the load and that the load to all system servers is successful.

- If the alarm belongs to a group whose status is **Released** (showing that the group has been loaded to at least one server), use the **Load** action to view the version status of the servers to check that all the servers are up-to-date. If not, just load existing configuration to the server.
- If the group belongs to a group whose status is **In progress**, you may need to be approve and then load the group after ensuring that the group is validated for correctness and that the workflow for approving alarm suppression groups at your plant has been followed.

3.1.12 An x appears in a trend

When you view a trend, there is an 'x' at set intervals instead of the plot line being a continuous line.

Diagnostic check

On the **History** tab of the point detail display, check whether the point is configured to collect the type of history specified in the trend.

Cause

The history interval configured for the trend is different to the history being collected for the point parameter. As a result, the data is interpolated.

Solution

If you do not want to see interpolated data, make sure the history interval you specify for the trend matches the history being collected for the point.

Diagnostic check

If the trend includes fast history for remote points, check whether the fast history interval is the same for all servers.

Cause

The fast history rate is not the same for all servers. As a result, the data is interpolated.

Solution

If you do not want to see interpolated data, change the fast history rate so that it is the same on all servers. See “Configuring fast history collection rates” in the *Server and Client Configuration Guide*.

Note that if you change the fast history rate, you will not be able to retrieve fast history values that were collected before the rate was changed.

3.1.13 A report does not contain all the data

When you run a report, some data is missing.

Diagnostic check

Check the report criteria to make sure that the information being requested actually exists.

Cause

The information being requested does not exist.

Solution

Correct the report criteria.

Diagnostic check

If the data is from a remote server, check whether the remote server has failed.

Cause

The remote server has failed.

Solution

For further diagnosis, see “Remote DSA server shows failed status” on page 110.

3.1.14 A report is not being printed

The report is not being printed.

Diagnostic check

If the report was requested by an operator, call up the **Report Configuration** display, click the **Definition** tab and check whether an appropriate printer is specified in the **Destination** property (**Reporting on Request** section). See “Configuring reports” in the *Server and Client Configuration Guide*.

Cause

No printer (or the wrong printer) has been specified for reporting on request.

Solution

Specify an appropriate printer for the report.

If necessary, define a report printer for the Station. See “Flex Station Configuration Display” in the *Server and Client Configuration Guide*.

Diagnostic check

If the report was requested automatically (for example, by Station, a script or by an algorithm such as Algo 70), call up the **Report Configuration** display, click the **Definition** tab and check whether an appropriate printer is specified in the **Destination** property (**Periodic Reporting** section). See “Configuring reports” in the *Server and Client Configuration Guide*.

Cause

No printer (or the wrong printer) has been specified for periodic reporting.

Solution

Specify an appropriate printer for the report.

Diagnostic check

On the **Station Configuration** display, check whether the printer is defined as the report printer.

Cause

If you manually requested a report from a Station, the printer is not defined as the report printer for that Station.

Solution

Define the printer as the report printer. See “Flex Station Configuration Display” in the *Server and Client Configuration Guide*.

Diagnostic check

If the printer is connected directly to the network, check whether the Windows *mngr* account exists for that printer's print queue.

Cause

The Windows *mngr* account does not exist for the printer.

Solution

Add the account.

Diagnostic check

If the printer is connected to a remote computer (on which Station has not been loaded), check whether the Windows *mngr* account exists on that computer.

Cause

The Windows *mngr* account does not exist on that computer.

Solution

Add the account. (In practice, it may be easier to install Station, so that all the account details are correct.)

Diagnostic check

Check whether anyone has changed the Windows *mngr* password.

Cause

The password for the Windows *mngr* account has been changed without following the correct procedure.

Solution

Change the name using the correct procedure. See “Changing service account passwords” in the *System Administration Guide*.

3.1.15 Cannot add any more tabbed displays in Station

You are using tabbed displays in either single- or multi-window Station (SafeView) and you have added a number of tabbed displays but the button to add tabs (and the shortcut menu option for opening a display in a new tab) has disappeared.

Diagnostic check

Is the available screen area already filled with tabs? If so, you have probably reached the maximum number of tabbed displays that you can open. The system is working as intended.

Cause

Station only allows you to add as many tabs as can be seen. Once the available screen area has been filled with tabs the option to add more tabs is not available.

Solution

Use existing tabs to navigate to new displays or close any tabs you are not using. When you close one or more tabs, the button to add more tabs reappears.

3.1.16 Cannot add comments to the Alarm Summary

On a Console Station, you cannot add comments to the Alarm Summary, and the following message appears in the Message Zone:

```
Comments can not be added when the server is unavailable
```

Diagnostic check

Check the status of the Console Station on the **Status Detail** display. Ensure that Point redirection component is operational.

Cause

The server is unavailable. (Note that if you have a redundant system, a failover may be taking place.)

Solution

Make sure that the primary server is running. Ensure the network connection between this Console Station and the server is operational.

3.1.17 Cannot archive or restore events

Archiving and restoring is continually failing.

Diagnostic check

Check that *<data folder>\Honeywell\Experion PKS\Server\Data\Evtarch\Temp* exists.

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

Cause

The folder does not exist.

Solution

Create it.

Diagnostic check

Check that the SQLAgent service is running. See “Checking which services are running” on page 17.

Cause

The service has stopped.

Solution

Start the service. See “Starting a service” on page 140.

Diagnostic check

If you have specified a folder to archive to, check that the folder exists.

Cause

The folder does not exist, or the folder's name has been incorrectly specified.

Solution

Create the folder, or correct the name of the specified folder.

3.1.18 Cannot call up a custom display

You cannot call up a custom display.

If you cannot call up system displays, such as the Alarm Summary and point detail displays, see “Cannot call up system displays” on page 42.

Diagnostic check

If you use locations, check whether:

- The display you are attempting to call up is restricted to specific locations.
- You have access to those locations.
- The Station you are using has access to those locations.

You must open the display using HMIWeb Display Builder (or Display Builder if it is a DSP display) to check its location call up restrictions.

You will have to get your supervisor to check your access rights unless you have the required privileges.

Cause

You or the Station you are using is not allowed to call up the display.

Solution

Change your/Station's access rights, or update the display so that you/Station can call it up.

Diagnostic check

Check whether the folder which contains the display is listed on the **Display** tab of the **Connection Properties** dialog box.

Cause

The folder is not listed. (When searching for a display, Station only searches folders listed on this tab.)

Solution

Add the folder to the list.

The default folder for custom displays is *<data folder>\Honeywell\Experion PKS\Client\Abstract*.

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select

the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

Diagnostic check

If you use file replication to manage displays, check whether you can call up the display on another Station.

Cause

File replication is not correctly set up on the server or the problem computer.

Solution

1. Correct the file replication setup on the server.
2. Correct the file replication setup on the problem computer.

Diagnostic check

Check whether an eServer is being used to call up the display.

Cause

There is a problem with the eServer configuration.

Solution

For further diagnosis, see “Cannot call up a display using eServer Standard Access” on page 41.

Diagnostic check

If custom displays are stored on a file server, check whether the file server is off line.

Cause

The file server if off line.

Solution

Get the file server back on line.

3.1.19 Cannot call up a display using eServer Premium Access

You are having problems calling up a display when using eServer Premium Access.

Diagnostic check

- eServer Premium Access starts up, but you do not get a log in request, and no data is displayed.
- Calling up a page (for example, **`page://11`** to call up the System Menu display) results in the error message: “The page cannot be displayed.”

Cause

Enable third-party browser extensions has not been enabled in Internet Explorer's **Internet Options**.

Solution

1. In Internet Explorer, choose **Tools** and click **Internet Options**.
2. Click the **Advanced** tab.
3. In the **Browsing** section, enable the **Enable third-party browser extensions** setting.

Diagnostic check

You can start up eServer Premium Access but cannot call up Experion displays (*HMIWeb* or *dsp* pages).

Cause

The server location of eServer displays has not been specified in the *station.ini* file.

Solution

Add the name of all servers on which eServer displays are located to the *[URLstoProcess]* section of the *station.ini* file. For more information, see “station.ini” in the “Customizing Stations” section of the *Server and Client Configuration Guide*.

3.1.20 Cannot call up a display using eServer Standard Access

You cannot call up a display through your Web browser, such as Internet Explorer, when using eServer Standard Access.

Diagnostic check

On the eServer, check the link status to the Experion server.

Cause

Multicasting on one of the switches or firewall between the eServer and Experion server is set on.

Solution

Turn off multicasting in the DSA configurations on the eServer. For more information about multicasting, see the documentation from the manufacturer of your switch.

Diagnostic check

On the eServer, check whether the display is stored in any of the following folders:

- *<install folder>\Honeywell\Experion PKS\Client\System\R431\eServer*, where *<install folder>* is the location where Experion is installed.
- *<data folder>\Honeywell\Experion PKS\Client\Abstract*, where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*.
- Any other folder where you store custom displays.

Cause

The display is not stored in an appropriate folder.

When the eServer receives a request from a Web browser for a display, the Station used by the eServer to render displays only searches folders specified for that Station. (This Station is on the same computer as the eServer.)

Solution

Copy the display to a specified folder.

Diagnostic check

1. Restart the eServer computer to ensure that the background Station used for Standard Access has closed.
2. On the eServer computer, start Station and connect using the *StandardAccess.stn* setup file.

   This file is located in *<install folder>\Honeywell\Experion PKS\Client\System\R431\eServer*, where *<install folder>* is the location where Experion is installed.
3. Check whether you can call up the display in Station.

4. Be sure to close this Station before attempting to connect any eServer Standard Access clients.

Cause

There is a problem with the display (assuming that it is stored in one of Station's display folders).

Solution

Fix the display using HMIWeb Display Builder.

3.1.21 Cannot call up system displays

Station cannot call up any system display, such as the Alarm Summary, the Configuration Menu and point detail displays.

Diagnostic check

Check whether the folder that contains system displays is listed on the **Display** tab.

The default folder for system displays is *<data folder>\Honeywell\Experion PKS\Client\MenusAndToolbars*, where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*.

Cause

The folder is not listed. (When searching for a display, Station only searches folders listed on this tab.)

Solution

Add the folder to the list.

Diagnostic check

On the server, check whether the folder that contains system displays is listed on the Experion Configuration Panel.

The default folder for system displays is *<data folder>\Honeywell\Experion PKS\Client\MenusAndToolbars*, where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*.

Cause

The folder is not listed.

Solution

Add the folder to the list.

Diagnostic check

On the Console Station, check whether the folder that contains system displays is listed on the Experion PKS Configuration Panel.

The default folder for system displays is *<data folder>\Honeywell\Experion PKS\Client\MenusAndToolbars*, where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*.

Cause

The folder is not listed.

Solution

Add the folder to the list.

3.1.22 Cannot call up the Event Summary or SOE Summary

On a Console Station, you cannot call up the Event Summary or Sequence of Events (SOE) Summary, and the following message appears in the Message Zone:

```
The xxx summary is not viewable
on this Station when the Server is unavailable
```

Diagnostic check

Check the status of the Console Station on the **Status Detail** display. Ensure that the File redirection component is operational.

Cause

The server is unavailable. (Note that if you have a redundant system, a failover may be taking place.)

Solution

Make sure that the primary server is running. Ensure the network connection between this Console Station and the server is operational.

3.1.23 Cannot call up trend display

You requested a Trend display by entering a Trend number in the Station message zone and there is an error message indicating that the trend display could not be found.

Diagnostic check

The trend number that you tried to call up was between 2901 and 3000.

Cause

By default, Experion uses trend records from 2901 – 3000 to store alarm tracker configuration data. These records are therefore not available for trend displays.

Solution

None. This works as intended.

3.1.24 Cannot close the last tabbed display

You are using tabbed displays in either single- or multi-window Station (SafeView) but you cannot close the last tabbed display.

Diagnostic check

Is only one tabbed display open and the Close button not available?

Cause

When tabbed browsing is enabled you must always have at least one tab open.

Solution

None. The system is working as intended.

3.1.25 Cannot find a point

You cannot find a point you are certain exists. You have used the search function, but it is missing from the search results.

Diagnostic check

If you use assignable assets to define scope of responsibility, check whether your operator account or the Station you are using has been assigned the asset containing the point.

Cause

Your operator account or the Station you are using has not been assigned the asset containing the point.

Solution

Arrange assignment of the asset containing the point to your operator account, or log on to another Station that has been assigned the asset.

Diagnostic check

If the point is remote, check whether the remote server has failed. See “Calling up the System Status display” in the *Operator's Guide*.

Cause

The remote server has failed.

Solution

For further diagnosis, see “Remote DSA server shows failed status” on page 110.

Diagnostic check

If the point is a process point, check whether the associated Process Controller has failed. See “Calling up the System Status display” in the *Operator's Guide*.

Cause

The Process Controller has failed or there is a communications problem.

Solution

- Check that the controller is powered up and in running mode.
- If a communications problem is suspected, see “Server cannot communicate with CDA server” on page 99.

For further diagnosis, see the *C200/C200E Controller Troubleshooting and Maintenance Guide*.

Diagnostic check

If the point is a flexible point, search for the point using its full point name. (Do not use wildcards.)

Cause

A wildcard search for a flexible point will only find the point if it has previously been called up.

Solution

Specify the full point name unless you know that the point has previously been called up.

Diagnostic check

If the point is a flexible point, check whether the system interface/point server has failed. See “Calling up the System Status display” in the *Operator's Guide*.

Cause

The system/interface point server has failed.

Solution

For further diagnosis, see “System interface/point server has failed” on page 100.

Diagnostic check

If the point is a standard point, check whether the associated controller/channel has failed. See “Calling up the System Status display” in the *Operator's Guide*.

Cause

The controller or its channel has failed.

Solution

- Check that the controller is powered up and in running mode.
- Check the communications link using the utility associated with the utility.

See the associated interface reference for further information.

3.1.26 Cannot log on to computer

You cannot log on to a computer.

(If you can log on to the computer but cannot log on to Station, see “Cannot log on to Station” on page 45.)

Cause

You do not have a Windows account/password that gives you access to the computer.

Solution

Get your supervisor to add an appropriate Windows account computer.

Diagnostic check

If your system uses the High Security Policy, check whether your Windows account belongs to an appropriate group. (In practice, this may have to be done by a security administrator.)

Cause

Your account does not belong to an appropriate group.

Solution

Add your account to an appropriate group.

3.1.27 Cannot log on to Station

You cannot log on to Station. (If you cannot log on to the computer, see “Cannot log on to computer” on page 45.)

Diagnostic check

Check whether your Station operator account password has expired, for example, you may be required to change your password every month.

Cause

Your password has expired.

Solution

Get your supervisor to reset the password.

Diagnostic check

If you have an integrated account, check whether your Windows account and operator ID are identical and have been correctly configured.

You will have to get your supervisor to do this unless you have the required privileges.

Cause

Your integrated account is not set up correctly.

Solution

Set up the account.

3.1.28 Changing the print orientation has not changed the way a report prints

The print orientation of a report cannot be changed, even though you have changed the print orientation on your printer.

Cause

The print orientation for each report type is fixed and cannot be changed. Changing the print orientation for the printer has no effect on how a report is printed.

3.1.29 Clicking the Next display in tab button in a SafeView window opens the display in a different SafeView window

Diagnostic check

You have clicked the **Next display in tab** button in a SafeView window but the display opens in a different SafeView window.

Cause

Tabs only manage displays intended for the SafeView window where the tabbed window is located. If the SafeView workspace you are using has a rule that detail pages always appear in the top right then every detail display will appear in the top right even if you press the **Next display in tab** button.

Solution

Check your SafeView workspace to see which SafeView window manages that display, and if necessary change the workspace configuration.

3.1.30 Commands to process devices are not working

You cannot control a process . For example, you entered a new SP value but nothing changes.

Diagnostic check

Double-click a control item (such as an alphanumeric) to call up the point detail display, and check whether you can see the point's details.

Cause

There is something wrong with the point.

Solution

For further diagnosis, see “Cannot find a point” on page 44.

3.1.31 Computer shows as offline

In the System Management display, online computers show as offline (red); or in the Network tree in the Experion System Status display, connected computers show as bad (red X).

Diagnostic check

Is the multicast address for the computer correct?

Cause

The multicast address for the computer is incorrect or not set.

Solution

Check the multicast address for the computer and fix it if incorrect.

Diagnostic check

Is the binding order of the network connections correct?

Cause

The binding order of the network connections is incorrect.

Solution

1 Do one of the following:

Option	Description
Windows Server 2008	• In the Windows **Control Panel** classic view, double-click **Network Connections**.
Windows 7	• In the Windows **Control Panel** large or small icon view, click **Network and Sharing Center**. • Click **Change adapter settings**.

2 Select **Advanced** > **Advanced Settings**.
The **Advanced Settings** window is displayed.

3 In the **Connections** box:

If you are…	…then
Using FTE	Ensure the yellow connection is first followed by the green connection.
Dual or single non-FTE Ethernet	Ensure the primary network connection is first in the list.

For more information, see “Network performance” in the *System Administration Guide*.

3.1.32 Data is missing from a trend

When you configure a trend, data is missing or there are gaps in the plot from one or more points in the trend.

Diagnostic check

If the point is remote, check whether the remote server has failed. See “Calling up the System Status display” in the *Operator's Guide*.

Cause

The remote server has failed.

Solution

For further diagnosis, see “Remote DSA server shows failed status” on page 110.

Diagnostic check

If the trend includes PHD tags, call up the PHD Point server status display and check the status of the PHD point server.

Cause

Data is not available from the PHD point server because it has failed.

Solution

Restart the PHD point server service.

Diagnostic check

Check whether the trend includes PHD tags.

Cause

The PHD point server measures the time it takes to read a single PHD tag and then estimates the time required to read all of the PHD tags on the trend. If this time exceeds the HistoryTimeout value, then the request is canceled and no data is returned.

Solution

Reduce the number of PHD tags in your trend.

Diagnostic check

Check whether the trend has PHD tags.

Cause

The PHD point server checks all data returned from PHD and determines if the values are below the minimum confidence value. If the values are below the confidence value, then the data is not plotted on the trend. This situation is more likely to occur when you are using average intervals in your trend.

Solution

Change the interval from an average to a snapshot.

3.1.33 Display data is not being updated

Display data is not being updated.

Diagnostic check

Double-click an item that is not being updated (such as an alphanumeric) to call up the point detail display, and check whether you can see the point's details.

Cause

There is something wrong with the point.

Solution

For further diagnosis, see “Cannot find a point” on page 44.

3.1.34 Display is corrupted or distorted

The display is corrupted or distorted. For example, some process values appear but some or all of the background is missing.

Diagnostic check

If you store displays locally and do not use file replication, check whether the display is identical on both the Station computer and the server.

Cause

The Station computer and server have different versions of the display.

Solution

Replace whichever file is obsolete with the correct version.

Diagnostic check

If you use file replication to manage displays, check whether you can call up the display on another Station.

Cause

File replication is not correctly set up on the server or the problem computer.

Solution

1. Correct the file replication setup on the server. See “Configuring replications on the source Experion server” in the *Server and Client Configuration Guide*.
2. Correct the file replication setup on the problem computer. See “Preparing client computer(s) to receive replicated files” in the *Server and Client Configuration Guide*.

3.1.35 Display values are shown as inverse gray

On a Console Station, some or all values in a display are shown as inverse gray.

Cause

The Console Station has lost contact with the server with which the inverse gray values are associated, because either the server or network connection has failed.

If the display also contains values that not shown in inverse gray, it means that they belong to 'direct access' points (such as process points) to which the Console Station still has direct access.

Solution

For further diagnosis, see “Virus on system, or concern that virus protection may not be adequate” on page 116 or “Network performance is slow” on page 107.

3.1.36 Displays are slow to call up

When you call up the display, the callup time is noticeably longer than for other displays.

Diagnostic check

If the display is an HMIWeb display (*.htm), use the Display Performance Analysis tool to check whether the display's performance is satisfactory.

Cause

The display's performance has not been optimized.

Solution

Optimize the display's performance.

Diagnostic check

Is your anti-virus software optimized for Station displays?

Cause

If a node has anti-virus software installed, such as McAfee VirusScan, the default settings may result in poor display call up performance.

Solution

Change the settings of the anti-virus software to optimize the performance for Station display call up.

For more information, see the *Anti-virus Software Guidelines* available on the Honeywell Process Solutions website.

Diagnostic check

Does the display contain any trends?

Cause

The trend(s) are based on a trend object, which because of its complexity, can place a considerable processing load on the computer and result in poor display performance.

Solution

Consider replacing the trend object with a basic trend object (a simplified trend).

For performance reasons, we recommend that you use a basic trend object in preference to a trend object unless you need to give operators substantial control over what appears in the trend. If you do use a trend object, we strongly recommend that you do not include more than one instance in any display.

Diagnostic check

Check whether the Station is configured for High Color (16-bit).

Cause

Station is configured for 24-bit color, which increases the call-up time. This is particularly significant for displays that contain trends.

Solution

If the display does contain a trend, consider replacing the trend object with a basic trend object (a simplified trend).

For performance reasons, we recommend that you use a basic trend object in preference to a trend object unless you need to give operators substantial control over what appears in the trend. If you do use a trend object, we strongly recommend that you do not include more than one instance in any display.

In addition, review the example display performance improvements in “Example: Improving the performance of an existing display” in the *HMIWeb Display Building Guide*.

Diagnostic check

Check whether there are any point-related errors in the server log when the display is called up.

Cause

The display contains invalid point/parameter names.

Solution

Correct the names.

Diagnostic check

Check whether the display is stored in a subfolder in one of the folders listed in the **Displays** tab of **Station's Connection Properties** dialog box.

Cause

The display is in a subfolder, which degrades callup performance.

Solution

Either add the subfolder to the list of folders, or move the display to one of the listed folders.

You can improve Station's callup performance by listing all the folders that contain displays and by clearing the **Search subdirectories for shapes** option.

Diagnostic check

Have you recently upgraded to a new release of Experion?

Cause

The displays have not been migrated to the new release.

Solution

Follow the display migration guidelines in the relevant migration guide.

Diagnostic check

Station displays the message 'Invalid references in display. See log for details'.

Cause

References to non-existent points/parameters in display files will significantly slow display call-up.

Solution

Check the log files to find the invalid point parameter references:

- Console Station: **All Programs** > **Honeywell Experion PKS** > **Console Station** > **Diagnostic Tools** > **Experion PKS Server Log**
- Flex Station: **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion PKS Server Log**.

Once the non-existent point/parameters have been identified, open the display in HMIWeb Builder and look through the property pages of your objects for the invalid names. Check both the Data and the Custom Properties tabs.

Diagnostic check

High steady state CPU usage.

Cause

Fast display refresh rates can impose load on both the HMI and underlying data subsystem (LCN, CEE, and so on), particularly in multi-screen configurations.

Solution

Ensure the display refresh rates are set appropriately. Refresh rates for individual displays can be set using the **Display refresh rate** in the HMIWeb display properties. If high CPU usage rates are observed, lowering the refresh rates of your displays can reduce the system load and improve display call-up times. Note, that this value can only be used to make the display refresh rate slower then the default the default Station refresh rate, not faster.

Diagnostic check

Slow page call-up.

Cause

Displays are stored on a network drive and called up over the network.

Solution

Store your displays on each Station machine and manage deployment using the File Replication Service in Experion PKS.

Diagnostic check

Slow call-up of pages displaying TPS data

Cause

The Flex Station is getting the data via an Experion PKS server.

Solution

Connect the station directly to an Experion Server-TPS (ESVT) to get the TPS data.

3.1.37 EFM data collection failed

Diagnostic check

An alarm stating `Log collection failed for log type: <log type>` appears on the meter and the status of the meter is `Error`.

Cause

Log definitions in the meter template do not match those on the physical meter.

Solution

Try one or more of the following solutions:

- On the **Configuration Log** tab of the meter template, where the source of a data point is either *Controller* or *Parameter*, correct any invalid values.
- On the **Interval Log**, **Daily Log**, **Alarm and Event Log**, **Configuration Record Log**, **Ultrasonic Log**, **Composition Log**, and **Gas Quality Log** tabs of the meter template, compare the log configuration with that on the physical meter. That is, the values in the **Order**, **Offset** (if available), and **Data Type** columns.

Diagnostic check

On the **Main** tab of the meter template, verify the values in the **Archive**, **Module**, **Type**, **Number**, **Register**, **Pointer**, and **Rollover** fields.

Cause

Incorrect entries in the **Archive**, **Module**, **Type**, **Number**, **Register**, **Pointer**, or **Rollover** fields.

Solution

Enter correct values in the fields. See the controller's interface reference guide for the values specific to that controller and flow computer.

Diagnostic check

Check the meter's **Meter Detail** display or faceplate for the following messages:

- **Channel inactive**
- **Controller inactive**

Cause

The channel and/or controller is disabled.

Solution

Enable the channel and/or controller.

3.1.38 EFM data export failed

Diagnostic check

1. Check if the required logs for an export were collected, and have a **Last Collected** date/time that is close to the time of the export.

   If the export status LED is **Retrying**, then sufficient logs have not have been collected.

2. Check if the export status LED is marked as **Failed** on the Meter's Status display.
3. Check if a system alarm has been raised for a meter's data export.
4. Check if there is an issue with the export location by viewing the EFM Configuration display and checking the export location status fields.

Cause

1. See the cause in “EFM data collection failed” on page 53.
2. Check the server log, looking for error messages from *efmmngr.exe*.
3. Check the server log, looking for error messages from *efmmngr.exe*.
4. Check the export location.

Solution

1. See the solution in “EFM data collection failed” on page 53.
2. Do the following:
   a. Enable the EFMDATAEXPORT debug level at 40 on *efmmngr.exe*.
   b. Click **Export latest collected data** on the meter's status display.
   c. Wait for the export status to change to either **Success** or **Failure**, then return the debug level to its default value of 10.

      If **Success**, the problem is solved.

      If **Failed**, then take a screen capture of the meter status display, get a dump of the EFM configuration from the primary server using the command **`efmdmp -c config.xml`**, capture a DCT package, and forward all of these through to your Honeywell Technical Assistance Center (TAC).
3. Do the following:
   a. Enable the EFMDATAEXPORT debug level at 40 on *efmmngr.exe*.
   b. Click **Export latest collected data** on the meter's status display.
   c. Wait for the export status to change to either **Success** or **Failure**, then return the debug level to its default value of 10.

      If **Success**, the problem is solved.

      If **Failed**, then take a screen capture of the meter status display, get a dump of the EFM configuration from the primary server using the command **`efmdmp -c config.xml`**, capture a DCT package, and forward all of these through to your Honeywell Technical Assistance Center (TAC).
4. Resolve the issue with the export location based on the status message.

Fix data collection errors. For more information, see “EFM data collection failed” on page 53. Once collection errors are fixed, perform a manual collection of the data.

Diagnostic check

Check that the destination node to where the data is being written has appropriate share setting and write permissions.

Cause

Incorrect share or write permissions on the destination node prevent the data being written.

Solution

Fix data share or write permission errors. For more information about EFM shares and permissions, see “About Electronic Flow Measurement (EFM)” in the *Server and Client Configuration Guide*.

3.1.39 EFM data export not outputting some fields for CFX

Diagnostic check

Check server log file at time of export for details of possible problems.

Perform a `efmdmp -c config.xml` command.

Cause

1. Data type mismatch between device and CFX may mean that resolution of the data will be lost, in such cases data will not be output.
2. Some CFX fields are overloaded where two or more fields may map to the same physical location in the file, in which case the last field specified will overwrite previous entries.

Solution

1. Ensure data types are suitable.
2. Ensure that only one of the overloaded fields is used.

3.1.40 Equipment Detail display contains a different view than expected

Diagnostic check

Has your Equipment been configured correctly and completely?

Cause

The Equipment Template for each Equipment can define multiple views, and will contain a default view. If no default view is specified, the tabular view of the Equipment Detail display appears.

3.1.41 Equipment display does not contain a banner

Diagnostic check

Are you viewing the detail display for a single equipment item?

Cause

A banner will only appear when it has been configured for the equipment in the Equipment Template.

Solution

Check whether a banner has been configured in the Equipment Template.

Diagnostic check

Are you viewing the Equipment Summary with an Asset filter applied?

Cause

If more than one summary equipment item has been created for this asset, a banner will not be shown when the asset filter is applied. Instead, the summary equipment items will be listed in a standard equipment table.

Solution

Remove the extra summary equipment for this asset. To do this:

1. Make a list of the equipment listed in the equipment table.
2. Decide which item will be the summary equipment for this asset.
3. Re-assign the remainder of the equipment to other assets.

Cause

A summary equipment item may not have been created for this asset, or may not be correctly configured in the Equipment Template.

Solution

Either:

1. Create a summary equipment item for this asset if you would like to display summary information and a banner; or
2. Ensure that the equipment is correctly configured as a summary equipment item in the Equipment Template.

3.1.42 Equipment Summary display does not show any equipment

Diagnostic check

Are you logged on with the correct security level?

Cause

You can only view equipment within your scope of responsibility.

Solution

Log in as the correct Operator, or with the correct security level.

Diagnostic check

Have you applied an asset and/or an equipment filter?

Cause

Only equipment meeting the filters applied will be displayed. There may not be any equipment that matches the combination of filters you have applied.

Solution

Check the asset and/or equipment filter and clear one or both.

3.1.43 Event Archiving Status LED is red

The Event Archiving Status LED on the **Operations** tab of the **Event Archiving** display is red.

Cause

The Event Archiving process has failed.

Solution

Stop and then re-start the Event Archiving task.

3.1.44 History navigation in tabbed displays does not work consistently

You are using tabbed displays on either single- or multi-window Station (SafeView) and you are using the backward or forward button to navigate through Station display history.

Diagnostic check

Does the display sometimes open in the current tab and sometimes in a new tab?

Cause

If you go forward or backward to a display that is already contained in an existing tab, the focus is moved to that tab. If the display does not already exist in a tab, then the display opens in the current tab.

Solution

None. The system is working as intended.

3.1.45 HMIWeb Display text is truncated when printed

Printing an HMIWeb display may result in truncated data in a textbox field. This will occur when the data in the textbox extends to the full length of the textbox.

This issue applies to the Station HMIWeb Display Builder and HMI Web Browser environments.

Diagnostic check

Text in a HMIWeb Display textbox is truncated in both print preview and when printed.

Cause

The rendering of the print textbox size does not exactly match the rendering of the screen textbox size, due to the behavior of the underlying web browser print engine.

Solution

In HMIWeb Display Builder:

1. Increase the length of the textbox slightly, usually by only a few pixels. For instructions, see “Resizing objects”.
2. Perform a test print with sample data loaded to confirm the textbox's length is adequate for all textbox data to be printed.

3.1.46 Inconsistent date and time for alarms on Alarm Summary on Console Stations

The **Date & Time** entry for an alarm on a Console Station Alarm Summary is not the same as the **Date & Time** for that alarm on other Console Stations.

Cause

If an alarm was previously suppressed but is still active after the suppression group is no longer active, the alarm is returned to the default view of the Alarm Summary. If the **Treat unsuppressed alarms as new alarms** option is enabled in the Server Wide Settings for your system, the **Date & Time** value for that alarm is shown with an asterisk to indicate that this is when the alarm was unsuppressed, not when it was first active.

There may be a discrepancy between the displayed “unsuppressed time” on Console Stations in your system if:

- A Console Station is disconnected from the source of the alarm that activated an alarm suppression group (for example, if it is a DSA or SCADA alarm), and

- The alarm suppression group becomes inactive while the Console Station was disconnected.

The reason for this discrepancy is that the displayed time reflects when that particular Console Station reconnected and determined that the alarm that triggered the suppression group has returned to normal.

Solution

None. The system is working as intended.

Note that the **Host Time** for that alarm is not affected and is displayed consistently between Console Stations after the connection is restored.

3.1.47 Lost contact with Experion server

A Console Station has lost contact with the Experion server and the following alarm appears in the Alarm Summary:

```
CStnxx: Server is not available
```

In addition, a red or yellow LED is displayed in the Status Bar of the Console Station.

Diagnostic check

Check the status of the Console Station on the **Status Detail** display. View the full node status by clicking the arrow next to **Show details** label, and check that all components are OK.

Cause

The Console Station can lose contact with the server because of:

- Network failure
- Hardware failure on the server
- A failover is taking place (if you have a redundant system)

Solution

In the case of a network failure, check that the network connection between the server and the Console Station is operational.

3.1.48 Lost contact with a Console Station

The server has lost contact with a Console Station and the following alarm appears in the Alarm Summary:

```
Console Station is not available
```

Diagnostic check

On another Station, check the status of the Console Station on the **Status Detail** display. View the full node status by clicking the arrow next to **Show details** label and check that all components are OK.

Cause

The server can lose contact with a Console Station because of:

- Network failure
- Hardware failure on the Console Station

Solution

In the case of a network failure, check that the network connection between the server and the Console Station is operational.

3.1.49 Messages are cleared from the Message Summary when they are acknowledged

You want messages to remain on the Message Summary after they have been acknowledged, so that operators have to manually clear all messages but messages are cleared from the Message Summary after they have been acknowledged.

Diagnostic check

Is the **Message clear required** option enabled in the Server Wide Settings display?

Cause

If the **Message clear required** option is not enabled in your Experion system, messages are automatically removed from the Message Summary after they have been acknowledged (or in the case of confirmable messages, after they have been acknowledged and confirmed).

Solution

If you want messages to remain on the Message Summary after they are acknowledged (or in the case of confirmable messages, after they have been acknowledged and confirmed) so that operators have to manually clear messages, enable the **Message clear required** option in the Server Wide Settings display.

3.1.50 Messages are not removed from the Message Summary

Messages remain on the Message Summary after they have been acknowledged (or in the case of confirmable messages, after they have been acknowledged and confirmed).

Diagnostic check

Is the **Message clear required** option enabled on the Alarm/Event tab in the Server Wide Settings display?

Cause

If the **Message clear required** option is enabled in your Experion system, messages remain on the Message Summary after they have been acknowledged (or in the case of confirmable messages, after they have been acknowledged and confirmed). When this option is enabled, operators need to manually clear messages to remove them from the Message Summary by right-clicking on the message and choosing **Clear Message**.

Attention

Because the message clearing state is not part of the OPC Alarm and Event standard, you should not enable message clearing if you want to manage messages via OPC. If you enable message clearing, informational messages that have been acknowledged via a third party OPC client will remain on the Message Summary. Similarly, confirmable messages remain on the Message Summary even after they have been acknowledged and confirmed.

Solution

To have messages removed from the Message Summary as soon as they are acknowledged (or in the case of confirmable messages, after they have been acknowledged and confirmed), disable the **Message clear required** option in the Server Wide Settings display.

3.1.51 Network tree faceplates and/or detail displays show no data or invalid data

When you view the status pane or detail display for a computer or FTE device in the Network tree, some values are missing or are shown in inverse video.

Diagnostic check

Check that the System Performance Server (SPS) is running.

Cause

The SPS is not running.

Solution

1. Start the SPS.
2. If SPS does not start, use the **Windows Services & DCOM Servers Log on** tool to ensure that the SPS account and password information is correct.
3. Install the Workstation Security package if it was not previously installed.

Diagnostic check

Check whether Experion has a good connection to the System Performance Server (SPS). In Station, choose **View** > **System Status** > **System Management Servers**.

Cause

The SPS is running but the Experion server is getting an error when trying to connect to it.

Solution

1. Install the Workstation Security package if it was not previously installed.
2. Ensure that the Windows account that SPS is running under is a member of the Honeywell Administrators group.

3.1.52 No alarms are seen under the Network tree on the System Status display

No alarms are seen under the Network tree on the System Status display even though some are expected. For example, an FTE cable was disconnected but no alarm was shown in the System Status display.

Diagnostic check

Check that the System Event Server (SES) has been installed and configured as per the guidelines in “System Status Network tree” in the *Server and Client Planning Guide*.

Cause

The SES is not installed or its scope has not been configured correctly.

Solution

Refer to “Identifying a network topology” in the *Server and Client Planning Guide*. This explains where the SES should be installed for a particular topology.

Diagnostic check

Check that the System Event Server (SES) is running.

Cause

The SES is not running.

Solution

1. Start the SES.

2. If SES does not start, use the **Windows Services & DCOM Servers Log on** tool to ensure that the SES account and password information is correct.
3. Install the Workstation Security package if it was not previously installed.

Diagnostic check

Check whether Experion has a good connection to the System Event Server (SES). In Station, choose **View** > **System Status** > **System Management Servers**.

Cause

The SES is running but the Experion server is getting an error when trying to connect to it.

Solution

1. Install the Workstation Security package if it was not previously installed.
2. Ensure that the Windows account that SES is running under is a member of the Honeywell Administrators group.

Diagnostic check

Check that the DSA connection to the Experion server that has the System Event Server (SES) running on it has the **Alarms and Data Subscriptions** setting set to **Enable both Alarm and Data**.

Cause

A remote Experion DSA server is not getting SES alarms because the alarm connection to the Experion server hosting the SES has been disabled.

Solution

On the remote Experion server, find the DSA connection to the Experion server that the SES is running on. For this DSA connection, set the **Alarms and Data Subscriptions** setting to **Enable both Alarm and Data**.

3.1.53 One or more objects do not appear on a display

When you call up a custom display, one or more objects do not appear on the display.

Diagnostic check

Open the display in HMIWeb Display Builder and check for any linked shapes on the display. Check the path to the shape file.

Cause

The path to the linked shape files is an absolute path and the shape file does not exist on the Station computer. The shape file cannot be found when the display is called up in Station.

Solution

Change the path the shape file to be a relative path.

3.1.54 One or more objects in the display have disappeared

One or more objects (that were previously in the display) have disappeared.

Diagnostic check

Open the display in HMIWeb Display Builder and analyze the display using the Display Performance Analysis tool to check if the object count exceeds the recommended limits.

Cause

The limit for object counts has been exceeded. Station cannot load all of the objects and therefore some of the objects have 'disappeared'.

Solution

Reduce the number of objects on the display and use the Display Performance Analysis tool to make sure the object count limits are not exceeded.

Diagnostic check

Check the status of the point bound to the missing object.

Cause

The missing object is a shape sequence for which the **Use first shape for bad value** option is not selected, and the point to which it is bound cannot be found (because, for example, it is remote and the remote server has failed).

Solution

1. Update the shape sequence to include a 'bad value' shape and select the **Use first shape for bad value** option. Note that:
   - The bad value shape must be the first object in the shape sequence.
   - You have to update each display that uses the shape if it is embedded (as opposed to being linked to the display).
2. Check why the point cannot be found.

3.1.55 Question mark icons in the Alarm Summary (questionable alarms)

In the **Alarm Summary** display, icons contain question marks. These are known as questionable alarms.

Diagnostic check

Check the connection status of system interface to the device.

1. Open the **System Interfaces** display.
2. Click the **Alias** of the system interface to the device.
3. Click the **Status** tab.
4. In the Notifications group, check the connection status and the last error message.

Cause

The communication link with the point or device is broken.

Solution

If it is an OPC system interface, see “DSA subscriber cannot connect to publisher” on page 90 for further diagnostics.

Otherwise, check the connection between the Experion server and the device.

Cause

The configuration of the system interface is incorrect.

Solution

Check the configuration of the system interface. Correct if necessary.

If it is an OPC system interface, see “DSA subscriber cannot connect to publisher” on page 90 for further diagnosis.

3.1.56 Red cross appears in Procedure List control

The toolkit ProcedureListControl can only be bound to supported point types (SCM and RCM).

Diagnostic check

In HMIWeb, check the type of point of the items set in the Procedure List property.

Cause

The control has been bound to a non-supported point, such as a *Master Recipe*.

Solution

Bind the point to one of the supported points —SCM/RCM.

3.1.57 Red dashes/question marks appear in a display

A display contains red dashes instead of a value.

Red dashes indicate that the server cannot find the associated parameter.

Diagnostic check

If the display is new, open the display in HMIWeb Display Builder (or Display Builder if it is a DSP display) and check that the object displaying the dashes is linked to the correct point/parameter.

Cause

The point/parameter address is incorrect.

Solution

Correct the point/parameter address.

Diagnostic check

Click and do a search to check whether the point still exists.

Cause

The point has been deleted.

Solution

Update the display.

Diagnostic check

If you have called up a point detail display for a remote DSA SCADA point that resides on an older release server, the point detail display may show some elements with red dashes.

Cause

The point detail display on the newer release server contains SCADA parameters that do not exist on the older release server.

Solution

None. The system is working as intended.

3.1.58 Red or yellow LED displayed in Status Bar

A red or yellow LED is displayed in the Status Bar of a Console Station. In addition, the following alarm appears in the Alarm Summary:

```
Server is not available
```

A red LED indicates that the Console Station has lost contact with the server. A yellow LED indicates that it is synchronizing with the server. The LED disappears when synchronization has been achieved.

Diagnostic check

Check the status of the Console Station on the **Status Detail** display. View the full node status by clicking the arrow next to **Show details** label, and check that all components are OK.

Cause

The Console Station can lose contact with the server because of:

- Network failure
- Hardware failure on the server
- A failover is taking place (if you have a redundant system)

Solution

In the case of a network failure, check that the network connection between the server and the Console Station is operational.

3.1.59 Red question marks appear in a display

A display contains red question marks instead of a value.

Red question marks generally indicate that the server is unable to determine the value.

Diagnostic check

If, the object (typically a trend) is configured to display history, check the point detail display's **History** tab to see whether the required history type is being collected.

Note that in the case of the PV parameter, you should collect fast history. You can still have a trend displaying history data if the point's PV is not configured to be collected in fast history, but you will not be able to view fast history ranges for that point.

Cause

The required history type is not being collected.

Solution

Configure the point to collect the required history.

3.1.60 Repeats of the same alarm are seen under the Network tree on the System Status display

Each alarm that is seen in the Network tree is repeated one or more times. All alarms were generated for the same problem at the same time.

Diagnostic check

Check that the System Event Server (SES) has been installed and configured as per the guidelines in "System Status Network tree" in the *Server and Client Planning Guide*.

Cause

The SES is installed in too many places or its scope has not been configured correctly.

Solution

Refer to "Identifying a network topology" in the *Server and Client Planning Guide*. This explains where the SES should be installed for a particular topology.

3.1.61 Restore failed error message received when restoring archived events

You received the following message in the Station message zone:

```
Restore failed. Please remove existing restored
archives before retrying restore.
```

Cause

An existing archive has been detected that contains data that overlaps with the archive you are trying to restore.

Solution

Remove the existing restored archive and try to restore the new archive.

3.1.62 Runtime error on a custom display

When you call-up a custom display you created using HMIWeb Display Builder, the following error message appears:

```
A Runtime Error has occurred.
Do you wish to Debug?

Line: [nn]
Error: Unspecified error.
```

Diagnostic check

Open the display using HMIWeb Display Builder and check if any objects contain Script Data.

Cause

A shape on the display has Script Data that uses a custom parameter name, which is the same name (in full or in part) as the name of a shape (or an element on that shape) on the display.

For example, you created a shape named `State` and on that object's Script Data tab, you created a custom parameter named `State1AlarmPrioriry`.

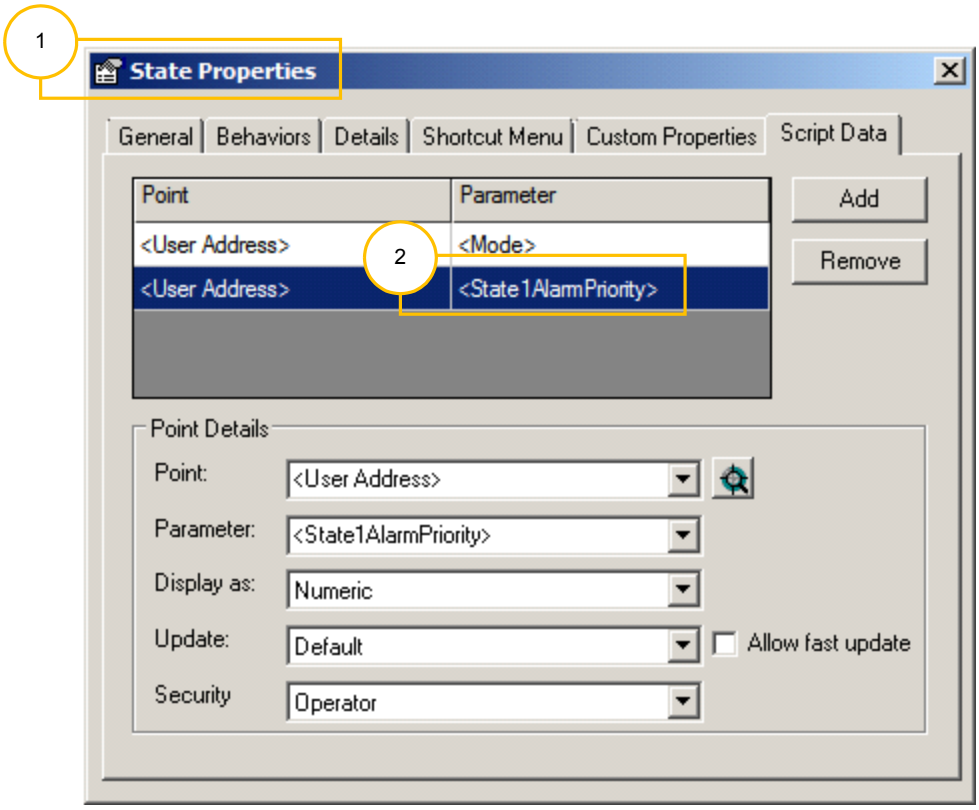

Figure 1: HMIWeb properties

Item	Description
1	Shape object named `State`
2	Custom parameter named `State1AlarmPriority`

At runtime, Experion replaces all occurrences of the shape named `State` with `shape001_State` and all occurrences of the parameter named `State1AlarmPriority` with `shape001_State1AlarmPriority`, causing the display to malfunction.

Solution

Do one of the following.

- Rename the Script Data parameter to another name.
- When writing scripts, enclose the duplicate portion of the parameter name using curly braces and exclamation marks, `{! !}`. In the example above, `State1AlarmPriority` would become `{! State!}1AlarmPriority`.

3.1.63 SafeBrowse application error

When running Station you navigate between various Station displays and you receive a SafeBrowse application error and Station stops operating correctly.

Diagnostic check

If you are running Microsoft Visual Studio 6.0, check the version of the *`Msvbvm60.dll`*.

Cause

There are known issues with Version 6.0.96.90 of the *Msvbvm60.dll*.

Solution

Install the Microsoft Update for KB823746: http://support.microsoft.com/default.aspx/kb/823746.

3.1.64 SCADA Controllers display does not contain the expected list of controllers

Diagnostic check

Are you logged on with the correct security level?

Cause

You can only view controllers within your scope of responsibility.

Solution

Log in as the correct Operator, or with the correct security level.

Diagnostic check

Do you have any filters applied on the SCADA Controllers display?

Cause

Only controllers meeting the filters applied will be displayed. There may not be any controllers that matches the filter(s) you have applied.

Solution

Clear any applied filters and refresh the display.

Diagnostic check

Are you using an earlier release than R430 and not all of the controllers in your scope of responsibility are appearing in the tree on the SCADA Controllers display?

Cause

Only R430 or later servers support channels and controllers over DSA, so the system is working as designed.

3.1.65 Static Station busy

When you start Station (or try to connect to another server), the following message appears:

```
STATIC Station busy.
```

Diagnostic check

Use another Station to check whether problem Station is configured as a static Station, and check whether the station number is used by another Station

Cause

Two Stations have been built with the same Station number, or a Station (using a particular setup file) has been started twice.

Solution

Assign a free number. If necessary, use Quick Builder to configure another static Station using a free number.

3.1.66 Station does not connect

When you start Station (or try to connect to another server) the following message appears:

```
Unable to Connect. Attempt to reconnect
```

Diagnostic check

Check whether the server name is correct.

Cause

The server's name is incorrect.

Solution

Correct the name.

Diagnostic check

Use another Station to check whether the problem Station is configured as a rotary Station.

Cause

Station is configured as a rotary Station, but all rotary connections are currently being used.

Solution

Try again later, or ask someone using a rotary connection to log off.

Diagnostic check

If you have a redundant server, check whether the backup is running as primary.

Cause

The Station setup files are not correctly configured on the backup server.

Solution

Configure the setup files on the backup.

Diagnostic check

Ping the server and check with the system administrator to find out if ICMP traffic has been disabled.

Cause

If ICMP has been disabled, Station will not be able to connect because it cannot ping the server.

Solution

The station.ini file needs to use the DisablePingRequest setting.

3.1.67 Stations do not reconnect after a redundant server failover

Stations do not connect to the new primary server after a failover.

Cause

Station has not be correctly configured for redundancy. For example, a *stn* file may be missing or it may contain incorrect server addresses.

Solution

Correct the configuration.

3.1.68 Suppressed audible annunciations do not sound after suppression period ends

When the suppression period for audible annunciations ends, suppressed alarms do not sound.

Cause

When the suppression period ends, the audible annunciation of alarms that were suppressed during the suppression period will continue to remain suppressed. Re-annunciated alarms will also continue to remain suppressed. Only new alarms will sound.

3.1.69 System alarms missing from System Status display

When you configure the scope of responsibility for a user (or Station), you use the **Assignment** tab to specify which System Components (as well as assets and Network Tree nodes) can be accessed by that user (or Station).

Diagnostic check

Has the relevant server whose alarms are missing from the display been assigned to the user (or Station)?

Cause

The user (or Station) has not been assigned to the relevant server in the System Components tree.

Solution

Go to the **Assignment** tab of the operator (or Station) configuration display, click the server whose alarms you want displayed, and select the type of access that the user (or Station) is supposed to have (**Full access**, **View and acknowledge** or **View only**).

3.1.70 Tabs do not appear in some or any of my SafeView windows

Tabbed displays are not available from any (or some) SafeView windows in multi-window Station.

Diagnostic check

If tabbed displays are not available at all in multi-window Station, check that tabbed displays have been enabled on the **General** tab of the **Server Wide Settings** display.

If tabbed displays are available in some SafeView windows but not others, check the SafeView workspace configuration file to see if tabbed displays have been enabled for any SafeView placeholder that is supposed to use tabbed displays.

Cause

Tabbed displays are only available if tabbed displays are enabled on the **Server Wide Settings** display (**General** tab).

For multi-window Station, tabbed displays must also be enabled in the SafeView workspace configuration for each placeholder that needs to use tabbed displays.

Solution

Ensure that tabbed displays are enabled on the **General** tab of the **Server Wide Settings** display in Station and in the SafeView configuration for each workspace that needs to use tabbed displays.

3.1.71 The Clear Message action is not available on the Message Summary

The **Clear Message** action is not available on the Message Summary popup menu.

Diagnostic check

What is the **Minimum security level required** setting for **Full page acknowledgement or clear** on the Alarm/ Event tab in the Server Wide Settings display?

Cause

The **Clear Message** action is only available if the operator's security level is equal to or greater than the **Minimum security level required** setting for **Full page acknowledgement or clear**.

Solution

If an operator needs to be able to use the **Clear Message** action, you can either change the **Minimum security level required** setting on the Server Wide Settings display or else change the operator's security level.

3.1.72 The printer does not give expected results

You have printed a display from Station however the printout does not show all the expected data. (Note that you cannot change the print orientation of a report. See “Changing the print orientation has not changed the way a report prints” on page 46).

Cause

The printout from a Station does not fit across A4 paper.

Cause

The orientation has been set up to Portrait mode instead of Landscape.

Solution

1. Call up the Property page of the Station printer.
2. On the **General** tab, select **Printing Preferences** and change the Orientation setting to **Landscape**.

Diagnostic check

The printout from a Station display truncates textbox data.

Cause

The textbox width is too narrow.

Solution

1. Increase the length of the textbox slightly (usually only by a few pixels) in HMIWeb Display Builder.
2. Perform a test print to confirm.

3.1.73 The printer does not print anything

An Experion system printer is not printing anything.

Diagnostic check

Check whether the printer is listed on the **Printer Summary** display.

Cause

The printer has not been configured.

Solution

Define the printer in Configuration Studio .

Diagnostic check

Check whether the printer is specified as the report or alarm/event printer for the Station. See “Flex Station Configuration Display” in the *Server and Client Configuration Guide.*

Cause

The printer is not specified as a printer for that Station.

Solution

Define it as a printer for that Station. See “Flex Station Configuration Display” in the *Server and Client Configuration Guide.*

Diagnostic check

If you are trying to print a report, call up the **Report Configuration** display for the report, click the **Definition** tab and check whether the printer is specified in the **Destination** properties. See “Configuring reports” in the *Server and Client Configuration Guide.*

Cause

The printer is not specified as the printer for that report.

Solution

Define it as the printer for that report. See “Configuring reports” in the *Server and Client Configuration Guide.*

Diagnostic check

Check that the printer's status on the **Printer Summary** display is OK.

Cause

There is something wrong with the report that you are attempting to print.

Solution

For further diagnosis, see “A report is not being printed” on page 36.

3.1.74 The same message requires clearing on one server but not on another server connected with DSA

The following scenario can occur in a DSA system if one server has enabled message clearing and the other has not:

- A message is received and is shown on a local Station and a Station connected to a remote DSA machine.
- When the message is acknowledged (or in the case of confirmable messages, acknowledged and confirmed), the message remains in the Message Summary on the local Station.

- If the same action is carried out on the other Station the message disappears from the Message Summary.

Diagnostic check

Is the setting of the **Message clear required** option on the Alarm/Event tab on the Server Wide Settings the same on both servers?

Cause

The **Message clear required** option is a server wide setting. It applies to all messages received by that server even if they came from another server over DSA.

Solution

Go to the Alarm/Event tab on the Server Wide Settings display for each server and ensure that the setting for the **Message clear required** option is the same on both servers.

3.1.75 TPS messages are removed from Native Window after they are acknowledged and confirmed in Experion

Before Experion R400, TPS messages had to be separately cleared from Native Window even after being acknowledged (or acknowledged and confirmed) in Experion. From Experion R400 onwards, if the **Message clear required** option is not enabled in Experion, TPS messages are removed from Native Window after they are acknowledged (or acknowledged and confirmed) in Experion.

Diagnostic check

Is the **Message clear required** option enabled on the Alarm/Event tab in the Server Wide Settings display?

Cause

If the **Message clear required** option is not enabled in your Experion system, messages in the Experion Message Summary and in Native Window will be removed after they have been acknowledged in Experion (or in the case of confirmable messages, after they have been acknowledged and confirmed).

Solution

To have messages remain in the Message Summary in both Experion and Native Window after they are acknowledged (or in the case of confirmable messages, after they have been acknowledged and confirmed), enable the **Message clear required** option in the Server Wide Settings display.

3.1.76 Unable to view the Alarm Tracker

The Alarm Tracker returns the message `Connection Lost. Reconnection Failed. Reload the alarm summary`. Refreshing the display does not fix the problem, and the Station Log contains the message `Failed to communicate with CSID, may be clock skew`.

Diagnostic check

Check that the console stations, flex stations and servers all have the same date and time.

Cause

The time on the console stations, flex stations and servers are different.

Solution

Synchronize the date and time of the Flex and Console Stations with the server. For more information, see 'Setting up time synchronization' in the *Supplementary Installation Tasks Guide*

3.1.77 When I start Station there is a blank tab but no display

Diagnostic check

You have just started up Station and you only see an empty tab but no display.

Cause

If your system uses tabbed displays but no startup display has been configured for this Station then the first tab is blank until you open a display.

Solution

Open a display directly from Station.

Alternatively, if you do not want Station to start up with an empty tab, define a startup display for this Station.

3.2 Configuration

The following topics contain troubleshooting for common problems that you may experience while configuring an Experion system.

If you have problems with a Process Controller, see the *Control Hardware Troubleshooting and Maintenance Guide*.

Related topics

3.2.1 Alarm icons are missing from tabbed displays in Station

You are using tabbed displays in either single- or multi-window Station and the tab of a point detail or custom display is not showing an alarm icon.

Diagnostic check

Is there an alarm group associated with the display and are any of the points in the alarm group either unacknowledged, active or disabled?

- If not, the system is working as intended.
- If so, refer to the other diagnostic checks below.

Diagnostic check

If it is a custom display, are any alarms in the alarm group associated with the display either unacknowledged, active or disabled?

If not, the system is working as intended. Alarm icons are only displayed if an alarm on that display (or in the alarm group associated with that display) is activated.

If so, then refer to the other diagnostic checks below.

Diagnostic check

If an alarm icon is missing from the tab of a custom display, has that display been associated with an alarm group?

Cause

The tab of a custom display only shows an alarm icon if all of the following conditions are met:

- The display is associated with an alarm group.
- The alarm group exists on the server.
- An alarm in that alarm group is either unacknowledged, active or disabled.

Solution

To associate a custom display with an alarm group:

1. In HMIWeb Display Builder, go to the **Page Details – Alarm Group** properties of the custom display.
2. Enable the **Associate with an alarm group** option.
3. Either use the default alarm group name or specify the name of an existing alarm group.
4. Check that the alarm group exists on the server. If it doesn’t, create the alarm group use Enterprise Model Builder to create the alarm group and download it to the server.

Diagnostic check

If alarms are missing from the tabs of one or more custom displays, and those displays are associated with an alarm group, does the alarm group exist on the server?

Cause

The display tab of a custom display does not show an alarm icon unless the alarm group associated with that display exists on the server.

Solution

If the name of the alarm group was incorrectly specified, correct the entry for the alarm group name on the Associations tab of the display's Display Properties.

If the alarm group does not exist on the server, create it in Enterprise Model Builder and download it to the server.

3.2.2 A Migrate to EMDB dialog box appears in Configuration studio

In Configuration Studio, a **Migrate to EMDB** dialog box appears either when you connect to your Experion system or when you are configuring your Network tree.

Cause

There is an inconsistency between the Network tree configuration on at least one of your Experion servers and the Network tree configuration in the EMDB.

Solution

If you migrate, the Network tree configuration in the EMDB is updated with the Network tree configuration from your Experion server.

If you choose not to migrate, the next time you load your Network tree from Configuration Studio, the Network tree on your Experion server will be updated from the configuration in the EMDB.

3.2.3 Archive failed - Invalid archive directory

When arching events, a the following message appears in the Message Zone:

```
Archive failed - Cannot access specified directory
```

The message can occur especially when archiving to another computer across the network.

Diagnostic check

Go to the Event Archiving Configuration page and check that an archive folder is specified.

Check that the specified archive folder exists.

Cause

The archive folder is not specified or does not exist.

Solution

Specify or create the archive folder.

Diagnostic check

Check that the specified archive folder allows the MNGR account to write to it.

Cause

The MNGR account cannot write to the specified folder.

Solution

Allow the MNGR account to write to the specified folder.

3.2.4 Audible annunciations suppressed on one station are not suppressed on other stations

When an operator suppresses audible annunciations on one station, another station on a different console still annunciates.

Cause

Experion is configured to silence an alarm on a single station only, or on all stations in a console. Audible annunciation suppression uses the same scope used to silence alarms.

Solution

Specify alarm settings for all Stations in your system.

1. In the Configuration Explorer in Configuration Studio, click **Alarms and Event Management**.
2. Click the **Configure alarm processing** task.
3. On the **Alarm Processing** tab, select **All stations** in the **Silence action and audible suppression apply to** area.

3.2.5 Blocks and conditions are missing from the drop-down lists when configuring target and trigger alarms in alarm suppression groups

Diagnostic check

You are configuring alarm suppression groups, and when you type a point name in the **Suppression Triggers** or **Suppression Targets** section, no blocks or conditions are shown in the **Block** and **Condition** drop-down lists.

Cause

The servers where this information is located may not be running.

Solution

1. Check that all the system server nodes are online.
2. Close the Alarm Suppression display in Configuration Studio and reopen it.

3.2.6 Cannot add a computer to the Network tree in Configuration Studio because it is not in the list

When you try to add a computer to the Network tree in Configuration Studio, a dialog is displayed listing all available computers on the network. The computer that you want to add is not in this tree or the tree does not reflect recent organizational changes.

Diagnostic check

If using a domain, check on the domain controller that the computer has been added to the correct domain and/or organizational unit (OU).

Cause

The computer wasn't added to the correct domain or Organizational Unit (OU). The remote configuration service may not have picked up the Active Directory changes yet. (The Active Directory is polled every 10 minutes.)

Solution

On the domain controller, add the computer and move it to the correct Organizational Unit (OU). Wait 10 minutes after making Active Directory organizational changes or adding computers for the Remote Configuration Service to poll for the change.

Diagnostic check

Workgroup computers are discovered using Microsoft Windows browsing. Choose **Start** > **Network Connections** > **My Network Places** > **Entire Network** > **Microsoft Windows Network** > **[My Workgroup]** to browse the workgroup. Ensure that the expected computers are displayed in the browse list.

Cause

If computers are missing from the Windows browse tree, the missing computer(s) may be turned off. There is a Windows Browse mastership problem, a network communication issue blocking browse broadcasts, or File and Print Sharing for Microsoft Networks is not enabled on the primary network interface of the missing computer(s) or the local computer. If the computers appear in the Browse tree, the remote configuration service may not have picked up the new computer from the Browse list yet. (The Browse list is polled every 10 minutes.)

Solution

1. Turn on the computer.
2. Verify that **File and Print Sharing for Microsoft Networks** is enabled on the primary network interface of all computers. Verify that Internet Protocol (TCP/IP) settings are correct for your network.
3. Restart the missing computer(s).

Diagnostic check

Open a Command window and use the following command(s) to verify that the host IP address can be resolved.

```
ping [host name]
```

If using DNS:

```
nslookup [host name]
```

Cause

Hosts file or Lmhosts file is incorrect. DNS registration is not correctly setup on the Network Interfaces.

Solution

1. Ensure that correct host file entries exist for the desired computer(s) in the *C:\WINDOWS\System32\drivers\etc* directory.
2. Verify the DNS server address and interface DNS registration is setup correctly.

Tip
If your system has an ESM Server, you can use the Diagnostic Studio Host File Analysis tool to analyze this problem. For more information about this tool, see the *Diagnostic Studio User's Guide*.

3.2.7 Cannot add an FTE device to the Network tree in Configuration Studio because it is not in the list

When you try to add an FTE device to the Network tree in Configuration Studio, a dialog is displayed listing all available FTE devices on the network. The FTE device that you want to add is not in this list.

Diagnostic check

Ensure that the server hosting SES that has been selected has the FTE device that you want to add within its multicast scope.

Cause

The FTE device is turned off.

Solution

Turn on the FTE device.

3.2.8 Cannot add an integrated account

You cannot add an integrated account within Experion.

Diagnostic check

Check that the user's Windows account exists.

Cause

The Windows account does not exist. (With integrated accounts, the Windows account must be created before you can define the user in Experion.)

Solution

Create the Windows account.

Diagnostic check

Check that the Experion PKS Server Operator Management service is running.

Cause

The service has stopped running.

Solution

Start the service.

Diagnostic check

Check that the Windows account running the Experion PKS Server Operator Management service has adequate rights.

Cause

The Experion PKS Server Operator Management service is running under a Windows account with insufficient rights.

Solution

Select a Windows account to run the service that has adequate rights.

3.2.9 Cannot configure a trend display

You want to configure a Trend display for a trend number between 2901 and 3000 but you cannot select a Trend from the **Type** drop-down list.

Diagnostic check

The Station message zone displays an error message indicating that you cannot change the trend type of an alarm tracker.

Cause

By default, Experion uses trend records from 2901 – 3000 to store alarm tracker configuration data. These records are therefore not available for trend displays.

When migrating from a previous release, engineers can specify an alternative trend range if they want to keep trend numbers 2901 to 3000 for trend displays instead of alarm trackers. If trend displays are found in the 2901 – 3000 range during the migration, and the engineer does not specify an alternative range, Experion prompts you to choose an alternative trend number when you first attempt to configure an alarm tracker for the server cluster you are logged on to.

Solution

None. This works as intended.

3.2.10 Cannot create or edit a suppression group

You cannot create or edit an alarm suppression group in Configuration Studio.

Diagnostic check

You have logged on to Configuration Studio, connected to the system and opened the **Alarm Suppression** display, but the **Add** and **Edit** toolbar buttons are shown as “grayed out”.

Cause

You have read-only access to suppression group configuration data. You can only create or edit alarm suppression groups if you are logged on with engineer (or manager) privileges.

Solution

Close Configuration Studio and log on again with engineer (or manager) privileges.

Diagnostic check

You have logged on to Configuration Studio, connected to the system and opened the **Alarm Suppression** display, but when you perform a configuration task (for example, edit, save, or load), a message is displayed informing you that you cannot connect to the DAS configuration service on the master server. All data and actions on the **Alarm Suppression** display then become read-only.

Cause

You cannot edit suppression groups if the server that stores the primary configuration database is not available. In a redundant server system the primary configuration database is on the B server. While the B server is not running, the A server provides read-only access to suppression group configuration data.

Solution

1. Use the **Start-Stop** tool to start the B server (and Experion).
2. Exit Configuration Studio and then connect to Configuration Studio again.

Diagnostic check

When you try to edit a suppression group, a message warns you that user X is currently editing the suppression group and offers you the option of closing the other user's editing session so that you can edit the group.

Cause

You cannot make changes to a group that another user is editing unless you end the other user's editing session for that particular group.

Solution

Choose:

- **Yes** — to end the other user's editing session. Any unsaved changes made by the other user are lost.

  When the other user subsequently tries to save their changes to the group, they are notified that the editing session for that group has been taken over by another user and are prompted to save their changes to a file. For more information, see the topic "Exporting and importing suppression group configuration data".
- **No** — to cancel your attempt to edit this group and wait until the other user finishes their editing before you try again to edit group.

3.2.11 Cannot create or save EFM data on popup dialogs

Diagnostic check

When creating or editing in a popup dialog, the **Create** or **Apply** button is disabled.

Cause

Configuration settings on the popup dialog are invalid. (Invalid fields are highlighted in yellow.)

Solution

Fix the error(s). To help you, the title bar of the popup dialog shows the number of errors and warnings.

3.2.12 Cannot download from Configuration Studio to a server

The download fails when you attempt to download from Configuration Studio to a server or you cannot see the server name.

Diagnostic check

Check whether the operator account you used to log on to Configuration Studio has the *engr* or *mngr* security level.

Cause

Your operator account does not have *engr* or *mngr* security level.

Solution

Obtain an integrated account with an appropriate security level.

Diagnostic check

The server name that you want to download assets, alarm groups, server definitions, or the Network tree to is not displayed in the list of servers.

Cause

The server has not been added to the system using Configuration Studio.

Solution

In Configuration Studio, add the server to the system and then load the system configuration (server definitions within the system model) to all servers in the system.

Cause

The system configuration containing the server definition has not been downloaded to all servers in the system.

Solution

In Configuration Studio, load the system configuration (server definitions within the system model) to all servers in the system.

Cause

The server that you want to download to is defined as external.

Solution

Servers that are defined as external are not displayed in the list of servers that you can download to.

3.2.13 Cannot import suppression group data from file

When you try to import alarm suppression group configuration data into Configuration Studio from an external source file such as a Microsoft Excel spreadsheet, you get an error message indicating that groups could not be imported.

Diagnostic check

If no groups can be imported, check that the primary configuration database is online.

Cause

- You cannot import alarm suppression group configuration data into Configuration Studio when the primary configuration database is unavailable.
- If the primary database goes offline but becomes available again, the alarm suppression group configuration data cannot be modified until you reconnect to the system.

Solution

If the primary database is currently offline, wait for it to come online again.

When the primary database is online:

1. If you have not closed the **Alarm Suppression** display in Configuration Studio since the database went offline, close it now and then reopen it.
2. Retry importing the data from the external source.

Diagnostic check

If only some groups cannot be imported, check to see if those alarm suppression groups are currently locked by you or by another user.

Cause

You can only import alarm suppression group configuration data into Configuration Studio if the group is new or if existing groups is unlocked and available for editing.

Solution

Choose from the following alternatives:

- Proceed with the import, ignoring the groups that cannot be imported.
- Wait for the alarm suppression group to become available for editing and try again.
- Unlock the affected group(s), and try again.

  Note that if another user is currently editing the group, their unsaved changes are lost if you end their editing session.

Diagnostic check

If only some groups cannot be imported, check to see if those alarm suppression groups are currently marked for deletion.

Cause

You cannot import alarm suppression group configuration data into Configuration Studio if a group with the same name is currently marked for deletion in Configuration Studio.

Solution

None. This works as intended. If you want to import that group into Configuration Studio, you have to first do one of the following:

- Undo the deletion.
- Load the deleted group so that it is no longer marked for deletion.

Diagnostic check

Are you logged on to Configuration Studio using an account with engineer (or manager) privileges?

Cause

If you are using an account that does not have engineer (or manager) privileges, you can view configuration details but cannot modify alarm suppression group configuration data or import data.

Solution

Log on again, using an account with engineer (or manager) privileges.

3.2.14 Cannot load suppression group data to system servers

You are trying to load alarm suppression group configuration data to system servers but you cannot load:

- The data to some system servers, or
- One or more groups to system servers.

Diagnostic check

Servers are missing from the list of servers in the **Load** dialog box.

Cause

One or more of the system servers may be offline.

Solution

You can either:

- Load the configuration data to the servers that are online, and then load to the other servers when they are available again, or
- Cancel the load, wait for the servers to become available, and then retry loading the data.

Diagnostic check

Servers listed in the **Load** dialog box are “grayed” out and unchecked. Check the following:

- Are the servers licensed for Dynamic Alarm Suppression (DAS)?
- Are the servers currently undergoing on process migration (OPM)?

Cause

You cannot load to servers that are not licensed for DAS or servers that are currently undergoing OPM.

Solution

- If any of the servers that you want to run alarm suppression on are not licensed for DAS, you need to acquire a license for that server.
- If the server you are trying to download to is currently undergoing OPM, wait for the OPM to complete before trying to load to that server again.

Diagnostic check

There is an error message indicating that it was not possible to load to one or more servers and the primary configuration database is offline.

Cause

You cannot load alarm suppression configuration data if the primary configuration database on the system server goes offline. Note that in a redundant server system, the primary configuration database is on the B server.

Solution

If you are prompted to export your data, accept the prompt and save the file to an appropriate location.

If you are not prompted, choose **File** > **Export** on the main menu bar of the **Alarm Suppression** display to save your configuration data to an external file (for example, a *.csv* file that you can import into Microsoft Excel).

Diagnostic check

If there is an error message indicating that it was not possible to load one or more groups to the specified servers, check that these groups are not currently being edited by another user.

Cause

You cannot load the configuration data for a suppression group that has been approved for release if the group is currently being edited.

Solution

Choose from the following alternatives:

- Go ahead with the load, ignoring the groups that cannot be loaded.
- Wait for the alarm suppression group to become available for editing and try again.
- For groups that have been approved for release, but are being edited by someone else, you can override the other person’s editing session by selecting the group and choosing **Finish editing**.

When you choose **Finish editing**, the user who was editing the group until that point cannot save any unsaved changes to the suppression group configuration database. However, that user can choose to save their changes to a *.csv* or *.xml* file that they can later import back into Configuration Studio, if necessary.

3.2.15 Cannot locate EFM meter template

Diagnostic check

Meter templates do not appear in the meter dialog in Quick Builder. Meter templates do not appear in the Quick Builder library.

Cause

Meter templates are not yet defined.

Solution

Define a new meter template, or import and customize a meter template. A sample template (*Sample_EFM_Items.efmdb.xml*) is located on the Experion server at *<data folder>\Honeywell\Experion PKS \client\user\efm*.

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

3.2.16 Cannot run a utility on a Console Station

On a Console Station, you cannot run a utility, and the following message appears:

```
xxx: This utility is unavailable
on a Console Station
```

Cause

The utility is not available on a Console Station. Some utilities are disabled on Console Stations to prevent unintended changes to the database.

Solution

Run the utility on the server.

3.2.17 Cannot save a suppression group

You have been editing an alarm suppression group in Configuration Studio but cannot save your changes.

Diagnostic check

Is there an error message indicating that someone else is currently editing the group?

Cause

Another user has either:

- Taken over your editing rights to make changes to the group, or
- Closed your editing session so that they can upload approved changes to the system's servers.

Solution

1. If you do not mind losing your changes, click the Refresh button , and when you are prompted to save the changes, click **No**.

   If you do not want to lose your changes and you are prompted to export your data, accept the prompt and save the file to an appropriate format and location. If there is no prompt, choose **File** > **Export** on the main menu bar of the **Alarm Suppression** display to save your configuration data to an external file such as a *.csv* file that you can then import into Microsoft Excel spreadsheet.
2. After reconciling any changes that might have been made by the other user who took over your editing rights, import the suppression group data from the external file, save your changes, and if appropriate, approve the changes for release to the system's servers.

Diagnostic check

Is the primary configuration database offline or has the server failed over?

Cause

You cannot save alarm suppression groups if the primary configuration database is not available.

Solution

1. If you are prompted to export your data, accept the prompt and save the file to an appropriate format and location.

   If there is no prompt, choose **File** > **Export** on the main menu bar of the **Alarm Suppression** display to save your configuration data to an external file such as a *.csv* file that you can then import into Microsoft Excel spreadsheet.
2. When the primary database is online again:
   a. Close the **Alarm Suppression** display and then reopen it.
   b. Import the data that you saved to the external location.

3.2.18 Cannot save .stb files to the Program Files folder

With the introduction of operating systems that support 64-bit versions of Windows, Microsoft changed the security model so that most users cannot write to the *\Program Files* and *\Program Files (x86)* folders. Only users with administrator privileges can write to these folders.

Microsoft created a new folder, titled *\ProgramData*, that stores users' customized files, such as Experion *.stb* files.

Diagnostic check

Check which operating system you are running.

Cause

You are running a 64-bit version of Windows and your user account does not have administrator privileges.

Solution

Save the *.stb* file to *<data folder>\Honeywell\Experion PKS\Client\MenusAndToolbars*, where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*.

3.2.19 Cannot see customized .stb files

Customized *.stb* files do not appear in Station.

Diagnostic check

Check that the files appear in the *<data folder>\Honeywell\Experion PKS\Client\MenusAndToolbars* folder.

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

Cause

The *.stb* file is not stored in the correct folder.

Solution

Save or move the *.stb* file to the *<data folder>\Honeywell\Experion PKS\Client\MenusAndToolbars* folder.

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

Cause

The *.stb* file is stored in the correct folder, but the Station connection properties do not point to the *.stb* file.

Solution

Configure the Station connection properties to point to the customized *.stb* file. For more information, see "Configuring setup files" in the *Server and Client Configuration Guide*.

3.2.20 Cannot view alarm help

Diagnostic check

Is alarm help configured correctly? Review configuration settings in Configuration Studio.

Cause

The **ACM control system name** or the **ACM server name** is incorrect.

Solution

Type the correct system name or server name.

Diagnostic check

Is Experion PKS connected to the Alarm Configuration Manager (ACM) server? Check the logs.

Cause

The connection to the ACM server failed.

Solution

Restore the connection.

Diagnostic check

Is the operator's flex station, console, or console station connected to the Experion PKS server?

Cause

The connection to the Experion PKS server failed.

Solution

Restore the connection.

3.2.21 Configuration Studio cannot call up a system display

You get an error message when you attempt to call up a system display on a Configuration Studio client.

Cause

You have more than four instances of Configuration Studio open and have tried to call up a system display on more than four of those clients.

Solution

Reduce the number of connections to system displays on the Configuration Studio clients and try again.

3.2.22 Configuration Studio cannot connect to an Experion server

You get the following message when you attempt to connect to an Experion server in Configuration Studio:

```
Logon attempt failed. Make sure you are configured
as an operator on the server xxx or choose
a different set of logon credentials.
```

Cause

You are trying to connect to the non-primary redundant server.

Solution

Connect to the primary server in a redundant pair.

3.2.23 Console Station cannot synchronize with server

The Console Station is not able to synchronize with either a non-redundant server, or with a redundant server pair.

Cause

The network connection(s) between the Console Station and the server may have a configuration problem.

Solution

Verify that the network is operational. For network checking tasks, see “Station does not connect” on page 68, and “Cannot start Console Station” on page 104.

Check that the network performance is within acceptable limits. See “Monitoring performance” in the *System Administration Guide*.

Verify that the Console Station has been configured properly. See “Console Stations and consoles” in the *Server and Client Configuration Guide*.

Cause

The server is using a naming convention of that required for a redundant server (for example 'ServerNameA') but is not actually part of a redundant system.

Solution

If the server is not part of a redundant system, rename the server using a naming system that cannot be confused with redundancy.

For more information, see “Configuring and monitoring a redundant server system” in the *Server and Client Configuration Guide*.

Cause

The backup redundant server is not configured properly.

Solution

Build the data links on the redundant servers. See “Defining the data links between redundant servers” in the *Server and Client Configuration Guide*.

Check the backup server status on the System Status display. See “Calling up the System Status display” in the *Operator's Guide*. Set the backup server status to system running.

Cause

The backup redundant server is unavailable.

Solution

Check the backup server status on the System Status display. See “Calling up the System Status display” in the *Operator's Guide*. Set the backup server status to system running.

For more information, see “Lost contact with Experion server” on page 58.

3.2.24 Controller items are shown under 'Not Loaded' on the System Status Display

There are some controller items that are configured correctly in Control Builder but are shown on the System Status Display Location Pane under **System Components** > **Server** > **Controllers** > **Not Loaded**.

Diagnostic check

Check that you have downloaded the controller items in Control Builder.

Cause

The controller items were built under **Not Loaded** because the Experion server received an alarm for the controller item before the item had been downloaded to the server. There could have been an error downloading to the Experion server when the item was initially loaded.

Solution

In Control Builder on the **Monitoring** tab, select the items that are shown in the **Not Loaded** group and select **Load Server Points…**. You do not have to reload the items to the controller; you only need to download them to the Experion server.

3.2.25 Controller items in Control Builder do not match the System Status display

Cause

There was an error downloading to the Experion server when the item was originally added or changed in Control Builder.

Solution

On the Monitoring tab in Control Builder, select the items that do not match the System Status display and click **Load Server Points**. You do not have to reload the items to the controller; you only need to download them to the Experion server.

3.2.26 Download icons for the Network tree do not disappear after a download from Configuration Studio

After you have downloaded your Network tree the icons in the Network tree in Configuration Studio do not disappear even though the download completed without errors.

Diagnostic check

Check that all servers to which you are downloading are available.

Solution

Click the Refresh task in Configuration Studio.

3.2.27 Downloading from Quick Builder to the server produces errors

Quick Builder reports problems when you attempt to download a project to the server.

If the download fails completely, see “Cannot download from Configuration Studio to a server” on page 81.

Diagnostic check

Check Quick Builder's log files.

Cause

There are various causes. For example, you attempted to download an unlicensed item.

Solution

Correct the errors reported in the log files and download the project again.

3.2.28 DSA subscriber cannot connect to publisher

Diagnostic check

DSA servers cannot connect (or disconnect and never reconnect) and the **DSA Status** display indicates `Server Blocked`.

Cause

If you are using a router instead of a switch, you have not changed the default DSA configuration setting of multicast to unicast. (Routers typically only support unicast, not multicast.)

Solution

In the **Distributed Server Summary** display, disable the **Multicasting** setting.

Cause

You have DNS/Name resolution issues because you do not have the same *`hosts`* file on each node or the *`hosts`* files do not have entries for all Experion nodes (or both).

Solution

Ensure all Experion nodes within a DSA must have a copy of the same *hosts* file that includes entries for all Experion nodes in the DSA system.

Diagnostic check

DSA servers cannot connect and the **DSA Status** display indicates `Access Denied`.

Cause

If you are using *DSA Advanced Security*, the passwords of the local Windows accounts used for the connection must be the same across the publisher and the subscribers.

Solution

Ensure the passwords match on all computers.

Cause

If you are using *DSA Advanced Security*, the subscriber may not be configured correctly.

Solution

Ensure that the local Windows accounts used for the connection to the publisher is defined in the *Advanced security* section of the **Configuration** tab for the distributed server of interest.

For more information, see "Configuring servers to subscribe to events, data and alarms" in the *Server and Client Configuration Guide*.

Diagnostic check

DSA servers cannot connect and the **DSA Status** display indicates `Advanced Security Error`.

Cause

If you are using *DSA Advanced Security*, the operator type of the Windows account on the publisher must be set to **Automated System**.

Solution

Ensure the operator type of the Windows account on the publisher is **Automated System**.

For more information, see "Adding a DSA Advanced Security account to Experion on the publisher" in the *Server and Client Configuration Guide*.

Diagnostic check

DSA servers cannot connect and the **DSA Status** display indicates `Advanced Security Error`.

Cause

DSA is not configured in *both* directions between the two servers.

Solution

- DSA must be configured in *both* directions between the two servers. However, if DSA is not required in one of the directions, it can be left disabled, thus not adding to the DSA license count.
- The same *DSA Advanced Security* account—with the same password—must be specified for the DSA connections between the two servers.

Diagnostic check

DSA connects successfully, but some or all points and alarms cannot be viewed on subscriber.

Cause

If you are using *DSA Advanced Security*, the *Scope of Responsibility (SOR)* on the publisher may not be configured correctly.

Solution

Ensure that the local Windows accounts used for the connection on the publisher has been assigned a scope of responsibility.

For more information, see “Adding a DSA Advanced Security account to Experion on the publisher” in the *Server and Client Configuration Guide*.

Diagnostic check

DSA connects successfully, but some or all events cannot be viewed on subscriber. A message is displayed at the bottom of the Event Summary stating “Displaying Local Events only”, and an alarm is generated indicating a communications loss.

Cause

There is a connection issue or a server time out between the client and the global events server.

Solution

On the **DSA Status** display, check the connection status between the client and the global events server.

Diagnostic check

DSA connects successfully and while you cannot not view events from a particular server, you can see other system wide events. No message text appears at the bottom of the Event Summary, but an alarm is generated indicating a communications loss.

Cause

There is a network issue between server and “client” for event snapshots, or between the server and the global events server for live events.

Solution

On the **DSA Status** display, check the connection status for the server that has suffered the communications loss.

3.2.29 EFM components not available in Quick Builder

Diagnostic check

In Quick Builder, the **Add Items** dialog does not show any EFM components. Additionally, EFM components do not appear in the Quick Builder library.

Cause

EFM components are not loaded into the project.

Solution

Add EFM components to the project using the **Component Manager**. For more information, see “Specifying the components to configure” in the *Quick Builder User’s Guide*.

3.2.30 EFM configuration logs not being collected

Diagnostic check

On the meter's controller, check to see if *Dynamic Scanning* is enabled.

Cause

Dynamic Scanning is not enabled on the meter's controller. It must be enabled in order to collect configuration log data.

Solution

Enable *Dynamic Scanning* on the meter's controller. The setting appears in Quick Builder on the controller's **Main** tab.

3.2.31 EFM download errors

Diagnostic check

When editing meters, meter templates, schedules, and data export formats in Quick Builder, highlighted fields appear.

Cause

The highlighted field contains invalid information.

Solution

Fix the error.

Diagnostic check

The server detects configuration errors. Locate the file *efmsvr.out* and check the log for errors.

Cause

One or more configuration errors prevent the download to occur. For example, a controller is configured incorrectly.

Solution

Fix the error(s).

Diagnostic check

1. In Station, click **Configure** > **Server License Details**. The **Server License Details** display appears.
2. Click the **Interfaces** tab.
3. Check that the interface you have configured is licensed for EFM.

   If licensed, a green disc appears in the **E** column next to the appropriate interface.

Cause

EFM is not licensed for the interface you have configured.

Solution

Contact your local Honeywell representative.

3.2.32 OPC client cannot connect to the OPC server

An “access denied” error message is raised when an OPC client attempts to connect to an OPC server.

Diagnostic check

Check whether someone has recently changed the password for the Windows *mngr* account.

Cause

The password for the Windows *mngr* account has been changed without following the correct procedure.

Solution

Change the name using the correct procedure. See “Changing service account passwords” in the *System Administration Guide*.

Diagnostic check

Check whether someone has recently changed the name of the remote server.

Cause

The name has been changed without following the correct procedure.

Solution

Follow the instructions in “Changing computer names” in the *Supplementary Installation Tasks Guide*.

3.2.33 OPC clients take a long time to start up

OPC clients are very slow to start up.

Diagnostic check

Check the time taken for good data to be received via the scan task after a failover.

Cause

A large OPC Integrator configuration combined with a large OPC scan task configuration creates extra load on the Experion OPC server during startup. This extra load can cause delays to the startup operation of both OPC clients.

Solution

Set a startup delay for the Honeywell Server OPC Integrator . This setting will postpone the group startup operations for the specified period.

The default setting for the start delay is zero. To change this value, use the following procedure:

1. Open the registry editor
2. Open the *HKLM\Software\Wow6432Node\Honeywell\Experion PKS Server* key
3. Open the *OPCIStartDelay DWORD* value
4. Enter a value in milliseconds (decimal)
5. Restart the Honeywell Server OPC Integrator service to pick up the registry change.

To determine an appropriate startup delay for the Honeywell Server OPC Integrator , an estimate of the scan task startup time should be obtained. This may then be fine tuned as appropriate.

3.2.34 OPC has stopped transferring data

An OPC server/client pair that was working has suddenly stopped transferring data.

Diagnostic check

Check whether a third-party OPC application has just been installed on either the OPC server or OPC client computer.

Cause

The third-party OPC installation installed earlier versions of some OPC .dll files which are not compatible with the OPC server/client that has just failed. (Unfortunately, some third-party installations do not check the versions of OPC .dll files before overwriting them.)

Solution

Re-install the OPC server/client that failed, so that the required .dll versions are re-installed.

3.2.35 OPC Integrator is not transferring data

OPC is not transferring some/all data.

Diagnostic check

Check whether the group is enabled. For more information, see “Checking the status of OPC Integrator groups” in the *Server and Client Configuration Guide*.

Cause

The associated group is not enabled.

Solution

Enable the group.

Diagnostic check

Check the server log for events which indicate whether the destination point is in the wrong mode or the value is out of range.

Cause

Writes to the destination item are failing because the destination point is incorrectly configured. For example, the point is in the wrong mode, or the values are out of range.

Solution

Correct the point's configuration.

Diagnostic check

Check the server log for events which indicate whether the quality of the source point is bad or uncertain, or if it is an invalid (VT_EMPTY) data type.

Note that you may need to raise the paranoid levels to view these events.

Cause

OPC Integrator does not write source points of bad or uncertain quality to the destination point, unless bad value substitution has been turned on. Likewise, it does not write values of an invalid data type.

Solution

Correct the points configuration, or determine what has caused the source point to be of bad or uncertain quality.

Diagnostic check

Check the item details tab of the system status display for error information on each point. The **Error Information** area shows a conversion error for one or more destination items.

Cause

When transferring Boolean values, you must ensure that the source and destination point parameters have the same type. Native Boolean values cannot be written to non-Boolean point parameters.

Solution

Enable the **Convert Booleans** option for the group. This will convert Boolean values such that they can be written to non-Boolean point parameters. (It will force the conversion of source values of TRUE to a value of 1, if the destination item is a numeric data type.)

3.2.36 OPC Integrator configuration settings have been lost

The OPC Integrator configuration settings have been lost.

Cause

If you have OPC Integrator , you forgot to click **Commit** when you last changed the configuration.

Solution

Re-enter the configuration and click **Commit**. See “Configuring OPC groups”.

Cause

If you have OPC Integrator Data Transfer and redundant servers, the OPC Integrator Data Transfer server failed over from primary to backup without the database being first synchronized.

Solution

Manually fail over to the server with the configuration and synchronize databases. See “Manually failing over a redundant server system”.

3.2.37 OPC server is not responding

When you try to disable an OPC Integrator group, you get a Server not responding error.

Diagnostic check

Check the server log for errors in the form 'request time out after x msec'.

Cause

Your OPC Integrator configuration contains several groups that are communicating with the same OPC server that is not responding.

In this case, the Honeywell Server OPC Integrator service will time out any calls made to this OPC server after the specified time-out setting in the registry.

The time-out setting may be too high which can cause extended delays while all groups are attempting to communicate. For example, a server has failed and 20 groups attempt to shut down and restart in sequence. If the time-out setting is set at 15 seconds it could take 5 minutes for this operation to complete, meanwhile no other requests are being serviced.

Solution

Reducing the time-out setting in the registry will reduce the delay experienced in this situation.

Note that the time-out setting applies to all OPC calls including writes, so the time-out must be set such that all write operations are given sufficient time to complete. The required write time is dependant on the number of items being written and the underlying data source being written to at the destination server.

To change the time-out setting, use the following procedure:

1. Open the registry editor
2. Open the *HKLM\Software\Wow6432Node\Honeywell\Experion PKS Server* key
3. Open the *OPCIOPCTimeout DWORD* value
4. Enter a value in milliseconds (decimal)
5. Restart the Honeywell Server OPC Integrator service to pick up the registry change.

3.2.38 OPC System Interface is not transferring data

Diagnostic check

Call up the **System Interface** display and check the status of the OPC system interface.

Cause

The OPC client cannot connect to the OPC server.

Solution

In the **System Interface** display, click the Alias name and then click the **Status** tab to review the connection status. If a non-zero Last Error value is displayed, you can review details about this error number. For more information, see “Displaying details about an error message on the server” on page 143.

For additional diagnostic checks, see “OPC client cannot connect to the OPC server” on page 94.

Diagnostic check

OPC system interface connection to OPC server is OK.

Cause

DCOM not configured correctly.

Solution

Check the DCOM settings on the third-party OPC server. For more information, see “Configuring DCOM on a third-party OPC server” in the “Setting up a third-party OPC client or server” section of the *Supplementary Installation Tasks Guide* (SITG).

3.2.39 Quick Builder cannot display non-scanned parameters from a remote OPC server

You use Quick Builder to configure non-scanned parameters that connect to a remote OPC server and cannot see any parameters.

Diagnostic check

Check the following settings for your Windows user account:

1. The account exists on both the local machine and the remote OPC server.
2. The passwords match on both machines.
3. The account is a member of the *Product Administrators* group on the remote OPC server.

Cause

Your Windows user account cannot connect to the remote OPC server in order to read the parameters.

If your Windows account does not exist or does not have sufficient privileges on the remote OPC server, you will not be able to select parameters from the list of parameters stored on the server.

Solution

Correct the relevant problem.

3.2.40 Red icon appears next to a Network tree item

A red icon appears next to a Network tree item in Configuration Explorer indicating a view discrepancy between the EMDB and the Active Directory.

Diagnostic check

On the computer on which the system interface/point server is loaded, check that the system interface/point server services are running.

Cause

The services are not running.

Solution

Start the services.

Diagnostic check

Determine if changes were made to the Active Directory structure in terms of moving a computer to a workgroup, domain, or Organizational Unit. If a computer has been moved, it appears in the **Computer Selection** dialog (**Configuration Explorer** > **Network** > **Computer Tasks** > **Add/Remove Computers**) with its new location's check box cleared and previous location's check box selected.

Cause

The Computer Selection dialog used in the Network tree configuration shows only the latest Active Directory view. Active Directory does not update immediately when computers are moved between domains or organizational units.

Solution

Remove the item from the Network tree in Configuration Studio

Cause

A computer has been moved between domains or Organization Units.

Solution

Restart the computer that has been moved.

Cause

A computer has been moved from a domain to a workgroup.

Solution

Manually remove the computer from the Active Directory structure in the domain controller.

3.2.41 Server cannot communicate with CDA server

The Experion server cannot communicate with the CDA server. (Only applicable if you have Process Controllers.)

Diagnostic check

Check that the following CDA server services are running:

- Experion PKS Control Data Access
- Experion PKS System Repository
- Experion PKS GCL Name Server

Cause

One or more CDA server services has failed.

Solution

Restore communications with the CDA server.

3.2.42 Server cannot write to a Modbus controller

The server cannot write date to a Modbus controller. This may happen if the Modbus controller does not support function code 06.

Diagnostic check

Check if the Modbus controller supports function code 06.

Cause

If the Modbus controller does not support function code 06, the server may not be able to write data to the controller. Normally the Modbus interface uses function code 6 for writing data to registers within Modbus devices. Some devices, however, do not support function code 6.

Solution

For controllers that do not support function code 6, function code 16 must be used instead. For such devices, you need to define the controller in a *hdwb1d* file, using the *MODUSEFN16* keyword. For example, a Modbus controller might be defined in a *hdwb1d* file as:

```
DEF RTU01.001 4 ID=1 NAME=CONMOD1
IP=127.0.0.1 MARG=25 FAIL=50 OFFSET=0
```

To make the controller use function code 16, add the *MODUSEFN16* keyword as follows:

```
DEF RTU01.001 4 ID=1 NAME=CONMOD1
IP=127.0.0.1 MARG=25 FAIL=50 OFFSET=0
MODUSEFN16
```

For information about using *hdwb1d* files to define controllers, see 'Controller connections' in the section 'Hardware build reference' in the *Hardware and Point Build Reference*.

3.2.43 Suppress audible annunciations button does not animate

Under normal circumstances, the **Suppress audible annunciations** button on the Alarm Summary animates in these situations:

- When you click the button and it cycles through its various states.
- Ten seconds prior to the end of the suppression period, the button begins to flash.

Cause

Internet configuration options are preventing animations in webpages.

Solution

1. Open Internet Explorer.
2. Choose **Tools** > **Internet Options**.
   The **Internet Options** dialog box opens.
3. On the **Advanced** tab, select the **Play animations in webpages** check box.
4. Click **OK**.

3.2.44 System display tasks are grayed out in Configuration Explorer

Cause

You are connected to a server that is on a different release of Experion. Therefore, incompatible tasks are disabled.

Solution

Connect to this server from a client that is on the same release of Experion. Alternatively, use the server to connect directly to the localhost.

3.2.45 System interface/point server has failed

The status of the system interface/point server on the System Interfaces Status Summary display is shown as failed.

Diagnostic check

On the computer on which the system interface/point server is loaded, check that the system interface/point server services are running.

Cause

The services are not running.

Solution

Start the services.

3.2.46 The Network tree in Configuration Studio doesn't match the Network tree in Station

The Network tree in Configuration Studio doesn't match the Network tree in Station. For example, when you call up the System Status Display or Network tree, Network Tree container items are displayed (Computers, Domain or Workgroup, Organizational Unit, Devices, or FTE Community item types), but contained items

(Computer, Switch, Control Firewall, FTE Device) may be missing, incomplete, or displayed with a question mark.

Diagnostic check

Check that you have downloaded the Network tree to all servers in your system.

Cause

The Network tree in Configuration Studio has not been downloaded.

Solution

Download the Network tree to all servers in your system.

Diagnostic check

Determine if the server not displaying network items is a remote Experion server.

Cause

The DSA connection is not enabled to the remote Experion server that is running System Event Server. The DSA alarm connection, when enabled, discovers the Network tree points from the remote system and inserts them into the Network tree.

Solution

The DSA connection needs to be enabled to the remote Experion server that has the System Event Server that is exposing the network items you wish to display.

For instructions on enabling alarm and data subscriptions on each Experion server, see “Configuring servers to subscribe to events, data and alarms” in the *Server and Client Configuration Guide*.

3.2.47 The Network tree is missing in Configuration Studio

When you start Configuration Studio and connect to a system, the Network tree is not shown for the system.

Diagnostic check

Verify that the Honeywell Computers and Network Equipment Provider is installed.

1. In the Windows **Control Panel** large or small icon view, click **Programs and Features**.
   The **Uninstall or change a program** window is displayed.
2. Examine the list of installed programs for the *Honeywell Computers and Network Equipment Provider* item.

Cause

The Honeywell Computers and Network Equipment Provider package is not installed.

Solution

Install the Honeywell Computers and Network Equipment Provider package from the Application DVD (*\Packages\Cane* folder).

3.2.48 There is a controller item in the Station System Status tree that is not in Control Builder

There is a controller item in the Station System Status tree that is not in Control Builder.

Cause

There was an error downloading to the Experion server when the item was originally deleted from Control Builder.

Solution

Manually delete the controller item from the Experion server:

1. Create a text file called *del.pnt* with the following line, replacing *ITEMNAME* with the name of the controller item that is to be deleted.
2. *DEL ITEMNAME*
3. Run:
4. *pntbld del.pnt*

3.3 System administration

The following topics contain troubleshooting for common problems that may require system administration of an Experion system.

Related topics

"Cannot connect to the database using ODBC" on page 103
"Cannot start Console Station" on page 104
"Cannot synchronize tags between PHD and an Experion server" on page 105
"File replication on a backup server is not receiving files" on page 105
"File replication on a server is only receiving files" on page 106
"Files are not being replicated" on page 106
"History recovery only recovers the last 7 days" on page 107
"Network performance is slow" on page 107
"Performance Monitor does not report Experion performance counters" on page 108
"PHD cannot collect history after servers have failed over" on page 108
"PHD cannot collect history from the Experion server" on page 108
"PHD does not collect history as expected" on page 109
"PHD has stopped collecting history" on page 109
"PHD system interface/point server has failed" on page 110
"Remote DSA server shows failed status" on page 110
"SCADA values do not update for more than a minute" on page 112
"Server does not start" on page 112
"Server has failed" on page 113
"Server is slow" on page 113
"Some history is missing" on page 115
"Synchronization with redundant servers has been lost" on page 115
"Tag synchronization with PHD has been lost" on page 116
"Virus on system, or concern that virus protection may not be adequate" on page 116

3.3.1 Cannot connect to the database using ODBC

The following error message appears when you attempt to connect to the database:

```
The system could not connect you to the database. Check your operator ID and password and try again
```

Diagnostic check

Check whether the operator ID/password used by the ODBC driver are correct by attempting to log on to Station using that ID.

(The ODBC driver uses an operator ID/password to connect to the server database. This means that the driver will not be able to connect if it uses an incorrect operator ID or password.)

Cause

The operator ID/password used by the ODBC driver are incorrect.

Solution

Specify a valid operator ID/password for the ODBC driver.

If necessary, create a new operator ID.

3.3.2 Cannot start Console Station

You get the following message when you attempt to start it for the first time:

```
Unable to connect. Requested Station does not exist.
```

Diagnostic check

On another Station, call up the **Console Station Configuration Summary** display and check that the Console Station has been correctly defined.

Cause

The configuration is not correct.

Solution

Correct the configuration of the Console Station.

Diagnostic check

Check that the server name has been correctly defined on the Console Station.

Cause

When you install Console Station, you identify the base name of the server that the Console Station connects to. The server name has changed, or you entered an incorrect server name during the Console Station installation.

Solution

Follow the instructions for changing Experion server names on Console Station. For more information, see "Moving a Console Station from one Experion cluster to another checklist" in *Supplementary Installation Tasks Guide*.

Diagnostic check

Check that the network connection between the Console Station and the server is operational by pinging the server from the Console Station.

Cause

The network connection is not operational.

Solution

Resolve any network problems.

Diagnostic check

Check that the *hosts* file on both the server and the Console Station has been properly configured. In particular, check that the files contain entries for all nodes in the cluster on every computer.

Cause

The *hosts* file does not contain the correct node entries.

Solution

Verify the *hosts* file using the Analysis Tools. For more information, see the *Diagnostic Studio User's Guide*.

Diagnostic check

Check that the date and time on the Console Station and the server are the same.

Cause

The time on the Console Station is different to the server.

Solution

Synchronize the date and time of the Console Station with the server. For more information, see “Setting up time synchronization” in the *Supplementary Installation Tasks Guide*.

Diagnostic check

Check that password for the Windows *mngr* account on the server and the Console Station are the same. Do this by logging on to both computers as *mngr* using the same password.

Cause

The password is incorrect on the Console Station.

Solution

Change the password. For more information, see “Changing service account passwords" in the *System Administration Guide*.

3.3.3 Cannot synchronize tags between PHD and an Experion server

Diagnostic check

The PHD Tag Explorer utility shows that no tags have been built on the Experion Link.

Cause

The correct access permissions for the tag synchronization components have not been set up.

Solution

Ensure that the account under which the Uniformance Tag Synchronization component runs exists on the Experion server and has the same password. The account and password used for the tag synchronization component on PHD and Experion need to be the same.

3.3.4 File replication on a backup server is not receiving files

The backup server in a redundant system is not receiving files.

Diagnostic check

Check whether the redundant servers are synchronized.

Cause

The servers are not synchronized. Files are only replicated to the backup server while the servers are synchronized.

Solution

Synchronize the servers.

Diagnostic check

Check whether file replication is correctly configured on the backup server.

Cause

The configuration is not correct on the backup server.

Solution

Correct the configuration.

Diagnostic check

Check whether the replication name for the network share is the same on both servers.

Cause

The two servers are using different replication names.

Solution

Correct the name.

3.3.5 File replication on a server is only receiving files

The server computer, which is supposed to be configured as both a source and a destination for file replication, is receiving files but not sending them.

Diagnostic check

Check whether the server is configured as a destination server. See “Configuring replications on the source Experion server” in the *Server and Client Configuration Guide*.

Cause

The server is not configured as a destination server.

Solution

Correct the configuration.

Diagnostic check

Check whether the replication name is the same on both the source and destination servers.

Cause

The replication name is not the same on both the source and destination servers.

Solution

Correct the configuration.

3.3.6 Files are not being replicated

The **File Replication** display indicates that the replication has completed. However, on the destination computer, the files do not appear or are not the same as the files on the source server.

Diagnostic check

Check whether the replication name is the same on both the source and destination servers.

Cause

The replication name is not the same on both source and destination servers.

Solution

Correct the configuration.

Diagnostic check

Check whether file replication is correctly configured on the destination computer.

Cause

The configuration is not correct on the destination computer.

Solution

Correct the configuration.

Diagnostic check

Check whether anyone has recently changed the password for the Windows *mngr* account.

Cause

The source and destination computers use a different password for the Windows *mngr* account. (It must be the same on all computers.)

Solution

Change the password using the correct procedure.

3.3.7 History recovery only recovers the last 7 days

Diagnostic check

Use the PHD Process Trend utility to view the recovered history data.

Cause

PHD has a default setting of 7 days for the maximum recovery period.

Solution

Configure the maximum recovery period in PHD for the required setting.

3.3.8 Network performance is slow

The overall performance of the network is slow, and sometimes there is an intermittent or complete loss of communication.

Cause

There are several causes related to network optimization.

Solution

Optimize the network.

For further troubleshooting, see the following topics:

- If you use FTE, see “Troubleshooting FTE” in the *Fault Tolerant Ethernet Installation and Service Guide*.
- If you have an FTE Bridge, see “Troubleshooting” in the *Fault Tolerant Ethernet Bridge Implementation Guide*.

3.3.9 Performance Monitor does not report Experion performance counters

You cannot view Experion performance counters in the Performance Monitor.

Diagnostic check

In 64-bit operating systems, Performance Monitor comes in two versions: a 32-bit version, and a 64-bit version.

Check that you are running the 32-bit version of the Performance Monitor. Use Task Manager to check that the process *mmc.exe* is the 32-bit version (*mmc.exe *32*).

Cause

You are running the 64-bit version of Performance Monitor. Experion performance counters appear only in the 32-bit version of Performance Monitor.

Solution

Start the 32-bit version of the Performance Monitor. For more information, see the topic “Configuring the Performance Monitor” in the *System Administration Guide*.

3.3.10 PHD cannot collect history after servers have failed over

Diagnostic check

Use the PHDMAN utility on the PHD server and examine the data queues for Experion tags.

Cause

RDM has not been configured correctly on the PHD Server.

Solution

Configure RDM on the PHD server, ensuring that the server HOSTNAME for the Experion link references the RDM progid.

3.3.11 PHD cannot collect history from the Experion server

Diagnostic check

Use the PHDMAN utility on the PHD server and examine the data queues for Experion tags.

Cause

The correct access permissions for history collection components have not been set up.

Solution

Consult the PHD documentation for enabling access for the history collection components.

3.3.12 PHD does not collect history as expected

The scan frequency of a point in PHD is not what you expected.

Diagnostic check

1. Check PHD history collection settings for the point using one of the following methods:
   a. Run the Point Attribute Report to highlight inconsistent PHD collection configurations.

      Select **PHDCollect** as the attribute, and select the **Show only points that have inconsistent PHD collection configurations** check box.

      The report will contain point parameters that have:

      - Two or more history parameters defined as *OVERRIDE*.

        This results in a conflict whereby multiple history parameters (for example, *HISTFAST* and *HISTSLOW*) are configured for collection by PHD. However, PHD will collect history assignment at only one rate, according to the PHD collection rule. See the topic titled "PHD collection rule" in the *Hardware and Point Build Reference* for information.
      - At least one—but not all—history parameters are defined as *DISABLE*.

        The intent of the *Disable* option is to exclude the entire point parameter from PHD collection. To do this, you define *all* history parameters (*HISTFAST*, *HISTSLOW*, and *HISTEXTD*; or *HISTEXCP*) to *Disable*. However, it is possible to define *DISABLE* to just one history parameter. When you do, PHD will collect history assignment according to the PHD collection rule. See the topic titled "PHD collection rule" in the *Hardware and Point Build Reference* for information.

        If your intention is to disable PHD collection for a point parameter, be sure to define *all* history parameters to *Disable*.

      If the results of this do not solve your issue, try running the report again, but this time clear the **Show only points that have inconsistent PHD collection configurations** check box. The new report will contain all point parameters that have PHD history assignments.
   b. In Quick Builder, display the History tab for the point.
   c. In Control Builder, display the Server History tab for the point.
   d. Run the *bckbld* utility. Look for the point's *PHDCOLLECT* setting for the *HISTFAST*, *HISTSLOW*, *HISTEXTD*, and *HISTEXCP* parameters.
2. Check to see if the **Do not send fast history data to PHD** check box is selected on the **PHD Server Configuration** display (*sysCfgPHD.htm*).

Cause

The PHD history settings for the point are configured so that a history other than the one you expected is being collected (for example, *HISTFAST*). PHD history is collected according to the PHD collection rule. See the topic titled "PHD collection rule" in the *Hardware and Point Build Reference* for information.

Solution

Update the PHD history settings for the point.

3.3.13 PHD has stopped collecting history

Diagnostic check

Use the PHDMAN utility on the PHD server and examine the data queues for Experion tags.

Cause

The PHD server and Experion server cannot communicate with each other.

Solution

Check the health of the network.

3.3.14 PHD system interface/point server has failed

The status of the PHD system interface/point server on the **System Interfaces Status Summary** display is shown as failed.

Diagnostic check

On the PHD node, check that the PHD point server service is running.

Cause

The service is not running.

Solution

Start the PHD point server service.

Diagnostic check

Call up the **PHD Server System Status** display. Check the status of the PHD Server by checking that the status of Network Link and Data is OK.

Cause

The server cannot communicate with the PHD node.

Solution

Check that the network connection between the server and the PHD node is operational.

Cause

The server can communicate to the PHD node (network link is green) but the PHD point server service is not responding.

Solution

Call up the **PHD Server System Status** display. If a non-zero **Last Error** value is displayed, you can review details about this error number. For more information, see “Displaying details about an error message on the server” on page 143.

Cause

The configuration for the associated PHD node is incorrect.

Solution

Call up the **PHD Server Configuration** display. Check that the network name of the PHD server is correct. Check that the **This server connects to the PHD server** option is selected.

3.3.15 Remote DSA server shows failed status

The status of a remote server on the **Distributed Servers** display is shown as Failed.

Diagnostic check

Check whether someone has recently changed the password for the Windows *mngr* account.

Cause

The password for the Windows *mngr* account has been changed without following the correct procedure.

Solution

Change the password using the correct procedure. See the topic titled "Changing service account passwords" in the *System Administration Guide*.

Diagnostic check

If there is a firewall between the client node and the DSA server, check whether the TCP ports 50001 through to 50004 and UDP port 2911 have been opened in the firewall.

Cause

The ports required for DSA communications have not been opened in the firewall.

Solution

Reconfigure the firewall to open TCP ports 50001 through to 50004 and UDP port 2911. For a list of network ports and services used by Experion, see “Network ports used by Experion” on page 134.

Diagnostic check

If there is a firewall between the client node and the DSA server, check the server log file for the RPC error message 'The endpoint is a duplicate'.

Cause

One of the DSA services cannot use a port due to a conflict.

Solution

Make the necessary changes in the services file to overcome the port conflicts.

To do this:

- On the primary Experion server, open the services files in Notepad and edit the port numbers directly, then save and close Notepad.
  - gdaremdata 50001/tcp: #TCP port that this DSA data server listens on
  - gdadatasink 50002/tcp: #TCP port that this DSA data callback server listens on
  - gdarpcnotsrv 50003/tcp: #TCP port that this DSA notifications server listens on
  - gdarpcnotcli 50004/tcp: #TCP port that this DSA notifications callback server listens on
- Fail over the servers and repeat the above step on the new primary.
- Fail over the servers again. The server will now be using the newly specified DSA ports and subscribing servers will connect using the new ports.
- Repeat on other DSA servers in the system if required.

Diagnostic check

If there is a firewall between the client node and the DSA server, and if the DSA link is not working, check to see if the firewall (or router) supports multicast or if multicast has been disabled in the firewall (or router).

Cause

Multicast has been disabled or is not supported in the firewall (or router).

Solution

Call up the **Configuration** display for the DSA server and deselect 'Link Supports Multicast Traffic'.

3.3.16 SCADA values do not update for more than a minute

SCADA values do not update for a minute or more after a server failover or a restart. You may also see flat lines in trends.

Cause

Scanx.exe takes more than a minute to start after a failover or restart, causing a delay in SCADA values being updated.

Solution

Enable Windows defragmentation. This can be scheduled to run regularly, or can be performed as a one-time operation. If a regular defragmentation is scheduled, nominate a time when the system is likely to be quiet. Defragmentation can take a large amount of time to complete, especially if the disk has not been defragmented recently.

3.3.17 Server does not start

The Experion server does not start when you attempt to manually start it, or when you restart the computer.

Diagnostic check

Check whether someone has recently changed the name of the server.

Cause

The name has been changed without following the correct procedure.

Solution

Follow the instructions in the "Changing computer names" section of the *Supplementary Installation Tasks Guide*.

Diagnostic check

Check whether someone has recently changed the Windows *mngr* password.

Cause

The password has been changed without following the correct procedure

Solution

Change the password using the correct procedure. See the topic titled "Changing service account passwords" in the *System Administration Guide*.

Diagnostic check

Check that the Windows system environment variable *%Path%* contains the following entry:

<install folder>\Honeywell\Experion PKS\Server\Run

Where *<install folder>* is the location where Experion is installed.

Cause

%Path% has been corrupted or changed. This can happen, for example, when a new application is installed on the server.

Solution

Add the entry to *%Path%*.

3.3.18 Server has failed

The Experion server has suffered a critical failure, such as a corrupted hard disk.

Cause

The server has suffered a critical failure.

Solution

Replace/rebuild the server and restore the software components and database.

3.3.19 Server is slow

The Experion server is slower than it used to be.

Diagnostic check

Check whether the hard disk is more than 85% full.

Cause

Event archive and history files are filling up the hard disk, which progressively reduces the server's performance.

Solution

Move the (older) files to another hard disk or to a backup medium such as CD.

Develop a maintenance schedule that prevents this from happening again.

Diagnostic check

Check whether the server's hard disk is badly fragmented. See “Checking a hard disk's file fragmentation” on page 18.

Cause

The hard disk is badly fragmented, which reduces the server's performance.

Solution

Defragment the hard disk. For more information, see “Checking a hard disk's file fragmentation” on page 18.

Diagnostic check

Check whether network drives are listed in the Windows system environment variable path.

To view system variables:

1 Do one of the following:

Option	Description
Windows Server 2008	• In the Windows **Control Panel** classic view, double-click **System**.
Windows 7	• In the Windows **Control Panel** large or small icon view, click **System**. • Click **Advanced system settings**.

The **System Properties** dialog box appears.

2 Click the **Advanced** tab, then click **Environment Variables** to display the environment settings for the system and user variables.

3 Under **System Variables**, scroll-down to the *Path* variable, and then double-click it.

4 In the **Edit System Variable** dialog box, scroll through the **Variable** name and identify if any network paths are listed.

Cause

A network drive is defined within system variables and is causing poor system performance.

Solution

Remove network drive paths from the system variable *Path* and add them to the user variable *Path*.

Attention

Be very careful to only move network paths from the system variable *Path* to the user variable *Path*. You may need to selectively edit them out. Leave all system and local path entries (for example, *%systemroot%* or *C:\Program Files (x86)\Honeywell\Experion PKS\Server\Run*) in the system variable *Path*.

Diagnostic check

Check whether the system has recently been changed, for example, more controllers have been added or more licensed options have been purchased.

Cause

The server needs tuning. (It should be retuned whenever significant changes are made to the system.)

Solution

Tune the server's performance. For more information, see “Tuning system performance” in the *System Administration Guide*.

Diagnostic check

Check whether the server's memory usage is satisfactory. see “Viewing memory usage” in the *System Administration Guide*.

Cause

The server's memory usage is not optimized.

Solution

Optimize the memory usage. see “Optimizing the server's memory usage” in the *System Administration Guide*.

Diagnostic check

If you have controllers other than Process Controllers, check whether the scanning subsystem is overloaded. See “Checking the scanning load” on page 15.

Cause

The scanning subsystem is overloaded.

Solution

Optimize the scanning load. See “Optimizing the scanning load” in the *System Administration Guide*.

Diagnostic check

Use the Windows Task Manager to check whether any process is using excessive CPU or memory resources.

Cause

A particular subsystem or application overloading the computer.

Solution

Discuss the issue with TAC. If the problem relates to an application that is not associated with Experion, move it to another computer.

3.3.20 Some history is missing

Diagnostic check

Did the Experion fail over?

Cause

PHD does not collect history during a failover.

If the failover was manual, the gap in history collection will be approximately 15-20 seconds. If the failover was caused by a power failure, the gap will be approximately 30-45 seconds.

3.3.21 Synchronization with redundant servers has been lost

Redundant Experion servers are no longer synchronized.

Diagnostic check

Check the synchronization status on the **Server Redundancy Status** display.

Cause

The server databases are not synchronized.

Solution

Synchronize the databases. See “Synchronizing the server databases” in the *Server and Client Configuration Guide*

Diagnostic check

Check the status of the communication link on the **Server Redundancy Status** display.

Cause

There is no communication between the servers.

Solution

- Check the cables.
- Ping the connections.

Diagnostic check

Check whether the date and time are identical on both servers.

Cause

Synchronization has been lost because the date and time on the two servers are not identical.

Solution

Synchronize the date and time. See “Setting up time synchronization” in the *Supplementary Installation Tasks Guide*.

Diagnostic check

If you have Process Controllers, check the synchronization status of the engineering repository.

Cause

The engineering repositories are not synchronized.

Solution

Synchronize the databases. See “Synchronizing the Engineering Repository database” in the *Server and Client Configuration Guide*.

3.3.22 Tag synchronization with PHD has been lost

Diagnostic check

View the PHD Server System Status page to see the current tag synchronization status.

Cause

The PHD server and Experion server cannot communicate with each other.

Solution

Check the health of the network.

3.3.23 Virus on system, or concern that virus protection may not be adequate

The Experion server or Console Station has been infected by a virus.

Cause

The computer is infected by a virus.

Solution

Any computer that is infected by a virus is in an unknown state and may contain hidden programs that allow unauthorized access. Consequently, you need to remove the computer from the network.

If you have virus protection software installed, ensure that you have up-to-date virus definitions on this computer and all other computers in your system. If the virus protection software is unable to remove the virus but can identify the virus name, check with the manufacturer of the virus protection software for specific instructions or tools for removing the virus.

If you are unable to remove the virus, you need to reformat the hard disk and restore the software components and database.

4 Understanding log entries

The following topics describe the Experion logs.

Related topics

4.1 Experion server logs

In general, it is recommended that you only refer to these logs in consultation with your Honeywell representative.

The following topics describe the Experion server logs.

4.1.1 Server log

The Experion server main log.

Location: *<data folder>\Honeywell\Experion PKS\Server\data\log.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

Notes

- When the current log, *log.txt*, reaches its maximum size, it is saved with the following new name: *logYyyyyMmmDddHhhMmmSss.txt*. For example, the log saved on 23 October 2011, at 8:38:47 am, would be renamed *logY2011M10D23H08M38S47.txt*. The old logs are stored in the *<data folder>\Honeywell\Experion PKS\Server\data\logfiles* folder.

  Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.
- Server log entries are prefixed with the date and time.

Example log entry: Server process that does not have an LRN

```
(0xC0) svc_filwrt.c,v:1910: stopping daemons
to synchronize databases
```

Part	Description
(0xC0)	The PID of the process generating this message.
svc_filwrt.c,v	The source filename from which the message originated.
1910	The line number within the source module.
stopping daemons to synchronize databases	The description.

Example log entry: Server process that has an LRN

```
[305] opcscn.exe:opcread.cpp,v:298:
RTU 5: value read 0.000000, err 0
```

Part	Description
[305]	The LRN of the process generating the message.
opcscn.exe	The executable name of the process.

Part	Description
opcread.cpp,v	The source code filename from which the message originated.
298	The line number within the source module.
RTU 5: value read 0.000000, err 0	The description.

Example log entry: Distributed System process

```
(437 112) gdadata.cpp,v:312: GdaData 4c1d90 started
```

Part	Description
437	The PID of the process generating this message.
112	The Thread ID of the thread in the process generating the message.
Gdadata.cpp,v	The source code filename from which the message originated.
312	The line number within the source module.
GdaData 4c1d90 started	The description.

Example log entry: Non-specific process

```
DAQMNGR: task request error 0802 on lrn 205
```

Part	Description
DAQMGR	The executable name of the process.
task request error 0802 on lrn 205	The description.

4.1.2 Action log

The Experion "action log" is a separate log for engineering actions, such as pntblds.

Location: *<data folder>\Honeywell\Experion PKS\Server\Data\actionlog.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.1.3 Setup logs

There are several log files created during installations and upgrades.

Locations:

<data folder>\Honeywell\Install

<data folder>\Honeywell\Experion PKS\Install\HwInstallSequencerExperion PKS.log

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

These detailed log files may be requested by your local Honeywell Technical Assistance Center (TAC) if you require further assistance.

4.1.4 Event database update log

Only applicable in a redundant system. Exists on the backup computer.

Location: *<install folder>\Honeywell\Experion PKS\Server\Sqlrep\UpdateResultsx.txt*

Where *<install folder>* is the location where Experion is installed.

4.1.5 Event database synchronization log

Only applicable in a redundant system. Exists on the backup computer.

Location: *<install folder>\Honeywell\Experion PKS\Server\Sqlrep\SynchResultsx.txt*

Where *<install folder>* is the location where Experion is installed.

4.2 Console Station logs

In general, it is recommended that you only refer to these logs in consultation with your Honeywell representative.

The following topics describe the Console Station logs.

Related topics

“Console Station log” on page 121
“Console Station action log” on page 121
“Console Station setup logs” on page 121

4.2.1 Console Station log

The Console Station's main log. The structure of the entries are the same as the server log.

Location: *<data folder>\Honeywell\Experion PKS\Server\Data\log.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

Notes

- When the current log, *log.txt*, reaches its maximum size, it is saved with the following new name: *logYyyyyMmmDddHhhMmm.txt*. For example, the log saved on 23 October 2001, at 8:38am, would be renamed *logY2001M10D23H08M38.txt*. The old logs are stored in the *server\logfiles* folder.

4.2.2 Console Station action log

The Console Station's 'action log' is a separate log for engineering actions, such as pntblds.

Location: *<data folder>\Honeywell\Experion PKS\Server\Data\actionlog.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.2.3 Console Station setup logs

These are created during installation.

Location: *C:\setup.log*. If the Windows operating system is installed in a different location, browse to that folder.

4.3 Microsoft SQL server log

Location: *C:\Program Files (x86)\Microsoft SQL Server\MSSQL.1\MSSQL\Log\ERRORLOG*

4.4 Event archiving logs

The following topics describe the event archiving logs.

Related topics

“EMS maintenance log” on page 123
“Event archiving backup log” on page 123
“Event archiving restore log” on page 123

4.4.1 EMS maintenance log

Location: *<data folder>\Honeywell\Experion PKS\Server\Data\Evtarch\Backup\EMSMaintenanceSQLLog.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.4.2 Event archiving backup log

Location: *<data folder>\Honeywell\Experion PKS\Server\Data\Evtarch\Backup\EMSBackuplog.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.4.3 Event archiving restore log

Location: *<data folder>\Honeywell\Experion PKS\Server\Data\Evtarch\Backup\EMSRestorelog.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.5 FTE log

Only applicable if you use FTE (Fault Tolerant Ethernet).

This log details FTE activity.

For more information about troubleshooting FTE network performance, see the *Fault Tolerant Ethernet Installation and Service Guide*.

Location: *<data folder>\Honeywell\ProductConfig\FTE\FTENodeList.log*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.6 Station log

Station has its own log, which contains Station-related error messages.

Location: *<data folder>\Honeywell\HMIWebLog*.log*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

In general, it is recommended that you only refer to this log in consultation with your Honeywell representative.

4.7 Configuration Studio logs

Configuration Studio creates an error log named *Configuration Studio.log*.

Location: *<data folder>\Honeywell\Configuration Studio Logs*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

In general, it is recommended that you only refer to these logs in consultation with your Honeywell representative.

4.8 Quick Builder logs

Quick Builder creates various logs when uploading and downloading.

Location: *<data folder>\Honeywell\Quick Builder\LogFiles*.log*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

In general, it is recommended that you only refer to these logs in consultation with your Honeywell representative.

4.9 Control Builder log

The Control Builder log file contains any errors when downloading process control strategies from Configuration Studio.

- **Location:** *<data folder>\Honeywell\Experion PKS\ErrLog_n.txt* where *n* = 1 is the most recent log.

  Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

When downloading the process control strategy, Configuration Studio may log any errors related to the enterprise model in the Enterprise Model Builder log.

In addition, Control Builder configuration and output files are stored in the following location:

- **Location:** *<data folder>\Honeywell\Experion PKS\Temp*

  Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

In general, it is recommended that you only refer to these files in consultation with your Honeywell representative.

4.10 Enterprise Model Builder log

The Enterprise Model Builder log file contains any errors when downloading the enterprise model from Configuration Studio.

- **Location:** *<data folder>\Honeywell\Experion PKS\Temp\EMB\ServerName.log*

  Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

In addition, during the download Enterprise Model Builder configuration and output files are stored in the following location:

- **Location:** *<data folder>\Honeywell\Experion PKS\Temp\EMB*

  Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

In general, it is recommended that you only refer to these files in consultation with your Honeywell representative.

4.11 Error handling log

Location: *<data folder>\Honeywell\Experion PKS\ErrLog_x.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

4.12 PHD point server log

The PHD point server log contains error messages.

Location: *<data folder>\Honeywell\Experion PKS\LogFiles\logps.txt*

Where *<data folder>* is the location where Experion data is stored. For default installations, *<data folder>* is *C:\ProgramData*. The *C:\ProgramData* folder is a system folder, which means that it is only visible if you select the **Show hidden files, folders, and drives** option button in the **Folder Options** dialog box. To change this setting in Windows Explorer, click **Organize** > **Folder and search options**, and then click the **View** tab.

5 Reference topics

This section includes reference topics that are referenced by other troubleshooting topics.

Related topics

5.1 Network ports used by Experion

Experion uses the following network ports.

UDP ports

Port number	Description	Process
67 and 68	Used by Engineering Tools.	*comms_changer.exe*
123	Network Time Protocol. Used by Windows Time and the following components: • NTP source and Windows domain controller. • Windows domain controller and Experion nodes. • Experion server and C300, FIM4, and PGM.	
135–139, and 445	File replication (Windows file sharing).	
319 and 320	IEEE-1588 precision time on level 1 and level 2 networks.	
12321	Used for embedded charts. Required for DSA through firewall support.	
2909	Configuration Studio.	*hsc_serversniffer.exe*
2911	Used to monitor DSA server status and stand-alone point servers.	*ms_linkd.exe*
6000	Series 9000.	
50000	Read port for NIF Server (Network API).	*nifd.exe*
50001	Write port for NIF Server (Network API).	*nifd.exe*
51000	Redundancy.	*dual_pswd.exe*
51001	Redundancy.	*dual_link.exe*
51967	System Management SRP multicast port.	
55000 + channel number	Controller interfaces (Allen-Bradley).	
55100 + channel number	Controller interfaces with dual channels (Allen-Bradley).	

TCP ports

Port number	Description	Process
21	SQLServer Replication (FTP).	
80	HMIWeb Browser HTTP for eServer client.	
135–139, and 445	File replication (Windows file sharing).	
502	Modbus/TCP port. Only used on level 1 and level 2 networks.	
1433	MS SQL Server Replication (Control). Used for embedded charts. Required for DSA through firewall support.	
2909	Configuration Studio.	*hsc_serversniffer.exe*
2910	Used by client products such as Quick Builder and HMIWeb Display Builder.	*confd.exe*

Port number	Description	Process
3456	Used by the System Management SRP point to point listener. This is port is used on demand, for a limited time, while a remote node synchronizes.	
4979	Used by AppSight BlackBox.	*wrapper_appsight.exe*
20222	Experion ODBC driver.	*hscodbcn.exe*
40209	Station.	*CSID.exe*
44818	Ethernet/IP port. Only used on level 1 and level 2 networks.	
50000	Station.	*ripsd.exe*
50001	In R431 this port is used by a client node to request display data from a DSA server.	*gdserver.exe*
50002	In R431 this port is used by the DSA server to send requested display data to the client node.	*gdamngr.exe*
50003	In R431 this port is used by a client node to request DSA notifications from a DSA server.	*gdanotsrv.exe*
50004	In R431 this port is used by a DSA server to send DSA notifications to the client node.	*gdanotcli.exe*
5016 and 5017	Used by the ESM Update Manager server (*serverhost.exe*) and agent (*agenthost.exe*). The server and agent both run on the ESM Server node (there is only one ESM Server in a system). The agent runs on every Experion node.	*serverhost.exe* and *agenthost.exe*
51004	Redundancy.	*dual_flmgr.exe*
51010	Redundancy.	*dual_onsrv.exe* *dual_oncl t.exe*
55550, 55556, 55557, 55563	Used for embedded charts. Required for DSA through firewall support.	
55566, 55568, 55576, 55577	Used by Engineering Tools.	*comms_changer.exe*
55636	SQL Express 2008 R2, which is used by ESM.	

Recommended terminal server TCP ports

For information on the recommended TCP port numbers for terminal servers (for example, the Systech RCS/3282) refer to the manufacturer's documentation.

Port numbers used by RPC connections (applicable to DSA systems with pre-3xx nodes)

RPC dynamically binds to TCP ports at run time. The range of port numbers RPC can use is from 1024 to 65535.

Port numbers used by DCOM connections (applicable to OPC servers and clients)

DCOM dynamically assigns, at run time, one TCP port and one UDP port to each executable process serving DCOM objects on a computer. The range of port numbers DCOM can use is from 1024 to 65535.

Note that the Windows operating system has configuration settings for both RPC and DCOM to limit the range of TCP port numbers used. This configuration may be required for customers who have implemented firewalls on their network.

5.2 Post-modification checklist

Every time you make a change to your system (even if the change is seemingly minor), you should perform the appropriate post-modification tasks, as specified in the following table

Task	Done?
If you have upgraded an existing application (including Experion) or added a new application, defragment the server's hard disk. For more information, see “Defragmenting the hard disk” in the *System Administration Guide*.	
Back up your system. This includes creating an image of the server's hard disk. For more information, see the *Backup and Restore Guide*.	

5.3 Using the System Status display

The **System Status** display is used to monitor the status of the various components that form your Experion system. This display is useful for troubleshooting faults in your Experion system. From a single display, you can see all the components of your Experion system and identify where alarms are occurring.

There are several parts of the **System Status** display to help you identify faults in your system:

- The Location pane
- The Status pane
- The Results pane

5.3.1 The Location pane

The Location pane on the **System Status** display contains two trees, the Network tree and the System Components tree. The Network tree can be customized; you choose which nodes you want to appear in the Network tree. The System Components tree contains items for all your servers, Stations, channels, controllers, printers, and so on. This tree is automatically configured.

The trees are organized in a hierarchy. You expand items to show items nested beneath. In the System Components tree, the top level item is the Experion system. This item expands to show all the Experion servers that form the system. Each server item expands to show the Stations, controllers, printers, consoles or Console Stations, and system interfaces that are connected to the server. These items in turn expand to show the individual items.

There is a status icon for each item in the trees which helps identify the state of the item so you can identify where problems are occurring. If there are alarms associated with an item, the number of alarms is also provided with the icon.

Selecting an item in the trees acts as a filter for the alarms listed in the Results pane.

5.3.2 The Status pane

The Status pane shows more detailed status information about an item you have selected in the Location pane. The following list provides an example of the type of information available in the Status pane:

- Performance information, such as CPU utilization
- Firmware version information
- The synchronization status of redundant servers
- Channel and controller statistics for SCADA controllers

5.3.3 The Results pane

The Results pane lists any alarms for the item you have selected in the Location pane. If no item is selected in the Location pane, all system alarms are displayed in the Results pane.

The information for each alarm is the same information you see on the process Alarm Summary.

5.3.4 The Details pane

The Details pane shows the details of the currently selected alarm. If no alarm is selected the Details pane is empty.

Tip

To show or hide the Details pane click the Details pane icon .

5.3.5 Tips for using the System Status display

This section provides a general procedure for effectively using the **System Status** display for troubleshooting.

1. In Station, choose **View** > **System Status** to open the **System Status** display. The **System** box in the Status Bar flashes, indicating there is a system alarm. Double-click the **System** box.
   The **System Status** display appears.
2. Open the **Location** pane if it is closed and dock it.
3. Open the **Status** pane if it is closed and dock it.
   You can also open or close the **View Configuration**, **Details** and **Column Organizer** panes by clicking on their respective buttons.
4. Expand the trees to find the item showing a failed or marginal status.
5. Select the item.
6. View the **Status** pane for more information about the item.
   The **Status** pane should provide enough information to help find the cause of the fault.
7. View the **Results** pane for all alarms associated with the item.
   The list of alarms in the results pane should provide details of when the fault occurred.

5.4 Restoring communications with the CDA server

If you use Process Controllers, you might encounter the following CDA Comms alarm: 'the server has lost communication with the CDA Server'. This alarm indicates that the server is unable to communicate with the CDA Server process.

To restore communications with the CDA server

1 Check the following services:
   - Experion PKS Control Data Access
   - Experion PKS System Repository
   - Experion PKS GCL Name Server
2 Start or restart any services that are not running.

5.5 Starting a service

To start a service

1. Log on to the computer using an account with administrator privileges.
2. Do one of the following:

Option	Description
Windows Server 2008	• In the Windows **Control Panel** classic view, double-click **Administrative Tools**.
Windows 7	• In the Windows **Control Panel** large or small icon view, click **Administrative Tools**.

3. Double-click **Services**.
   The **Services** window opens. The Status column shows the status of each service.
4. Right-click the service you want to start and choose **Start**.

5.6 Setting up a trend for the system sinewave

If you create trend for the *system sinewave*, you can obtain a good indication of scanning subsystem's 'health' over time. A sinewave that is not smooth, or has missing or repeated values, indicates an overloaded scanning subsystem. (The *system sinewave* is an inbuilt point, whose source address is `F:8 R:1 W:114 B:0 W:15`.)

The following procedure summarizes the major steps involved in creating a trend for the system sinewave.

To configure the point and set up the trend

1 Using Quick Builder, add and configure a user scan task channel and controller. (See Quick Builder's help for details.)

2 Add an analog point.

3 Click the ellipsis button ... to the right of **PV Source Address** to open the **Address Builder** dialog box and specify the address as follows:

Property	Setting
Address Type	*File*
File	*8*
Record	*1*
Word	*114*
Bit	*0*
Width	*16*
Format	*INT2*
Controller Name	Select the user scan task controller

4 Click **OK** to return to the **Main** tab.

5 Set these other properties on the **Main** tab as follows:

Property	Setting
PV Scan Period	The fast history interval specified for your server. (The default interval is *5* seconds.)
Engineering Units	*EU*
100% Range Value	*10000*
0% Range Value	*0*

6 Click the **History** tab and select **Fast History** for the PV.

7 Download the controller, channel and point to the server.

8 In Station, create a multi-plot trend that shows the point's fast history. (See Station Help for details.)

5.7 Stopping and starting the Event Archiving task

This procedure stops and then starts the Event Archiving task (LRN 68).

To stop and start the task

1 Type the following to stop the task:
```
dt 68
```
2 Type the following to start the task:
```
ct 68 15 -efn evarch
```

5.8 Displaying details about an error message on the server

This topic describes how to view additional information about error messages on a server.

To view details about an error message

1 On the server, choose **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Experion Command Prompt** to open the Experion Command Prompt window.

> **Attention**
> To run Experion commands, you must be a member of the Product Administrators group. If you want to do engineering tasks, you must be a member of the Local Engineers group.
>
> You must run Experion commands from the Experion command prompt and not the standard Windows command prompt, otherwise you will not see the output from the command and the command will fail.

2 Type `display` followed by the error number.
For example:

```
display 0x80042323
```

5.9 Monitoring free disk space for the server

Experion database files have a fixed maximum number of records. They do not continue to increase in size once the maximum number of records has been reached.

Event Archiving can, however, use a significant amount of free disk space. For details, see “Configuring event archiving”.

It is important to monitor the amount of free disk space, because insufficient disk space degrades system performance. For example, if the server is used as a file server for custom displays, your hard disk space requirements will be greater, and the amount of free disk space should be checked regularly.

For best performance it is recommended that more than 15% of the available disk space be free.

To check the amount of free disk space

- In Windows Explorer, select the disk you want to check, right-click and choose **Properties**.
  The figures indicate the amount of free disk space and the total size of the disk.

6 Getting further assistance

These topics describe other troubleshooting sources, and how to get further troubleshooting assistance.

Related topics

6.1 Other troubleshooting sources

Experion is a complex product that contains many major subsystems. This guide focuses on problems related to the servers and client subsystem. The following table lists other documents and sections that contain troubleshooting information for other subsystems.

To troubleshoot the following subsystem	See the following topic
Workstation nodes used in Experion and TPN	"Troubleshooting" section in the *Planning, Installation and Service Guide* for the relevant platform.
Troubleshooting ES-Ts and ESVTs	"Troubleshooting ES-T and ESVT" section in the *Integrated Experion-TPS User's Guide*
FTE Bridges	"Troubleshooting" section in the *Fault Tolerant Ethernet Bridge Implementation Guide*
FTE nodes	"Introduction" section in the *Fault Tolerant Ethernet Installation and Service Guide*
ACE nodes	"Troubleshooting and Maintenance" section in the *Application Control Environment User's Guide*
Error codes generated from DeviceNet Interface Board	"Troubleshooting DeviceNet Status Failures" section in the *DeviceNet Interface Implementation Guide*
Error messages generated by the Parameter Definition Editor	"Error Messages" section in the *Parameter Definition Editor Reference*
QVCS	"QVCS Troubleshooting" section in the *Qualification and Version Control User's Guide*
Sequential Control	"SCM/RCM Troubleshooting" section in the *Sequential Control User's Guide*
SafeView configuration errors	"Appendix D - SafeView Error Messages" section in the *SafeView User's Guide*
Controllers other than the Process Controller, for example, the *ASEA Interface Reference*. Most of these references contain an interface-specific troubleshooting section.	Interface reference documentation
Error codes generated from within Control Builder	*Control Builder Error Codes Reference*
Custom Algorithm Blocks (CABs) and Custom Data Blocks (CDBs)	"CAB and CDB troubleshooting and maintenance" section in the *Custom Algorithm Block and Custom Data Block User's Guide*
TDC 3000 Hiway problems	• "TDC error codes" section in the *Honeywell TDC 3000 Data Hiway Interface Reference* • "Troubleshooting" section in the *Honeywell TDC 3000 Data Hiway Interface Reference*
Error messages in the server log specific to server scripting	"Server scripting error messages" section in the *Server Scripting Reference*
Experion's *TPS Integration* option	*Integrated Experion-TPS User's Guide*
Process Controllers	• "C300 Controller Troubleshooting" section in the *C300 Controller User's Guide* • "Series C FIM Troubleshooting" section in the *Series C Fieldbus Interface Module User's Guide*

6.2 Guidelines for requesting support

If you cannot resolve a problem using this guide, you can request support from your Honeywell Technical Assistance Center.

When requesting support, please supply as many relevant details as possible, including:

- **Short summary of the problem**
- **Product name, point release and any patches installed**.
- **Recent changes** (such as upgrades/service packs) to Windows or other applications.
- **Subsystem and its version/build** if the problem relates to a particular subsystem, such as Station or Quick Builder.

  If the problem relates to 'Display Builder', please specify whether it is HMIWeb Display Builder (for HMIWeb displays) or Display Builder (for DSP displays).
- **Operating system, variant and service pack**, for example, 'Windows Server 2008 Server, R2.'
- **Instructions on how to reproduce the problem**. If the problem is reproducible, please supply step-by-step instructions; the more detailed the steps, the better.
- **Diagnostic package which contains the relevant logs**.

Example

This is a good description of a problem.

```
Overview: HMIWeb Display Builder does not correctly render objects if certain regional settings,
such as Danish or German, are selected.
Product:Experion, R431
Subsystem: HMIWeb Display Builder, Version 6.0.140.715

Operating system: Windows 7.
Steps to reproduce the problem:
1. Use Control Panel to change language setting to 'Danish'.
2. Launch HMIWeb Display Builder.
3. Draw two rectangles and leave the last rectangle selected.
4. With the rectangle tool still selected, click the zoom combo box and select 150%.
5. Click the line tool on the toolbar and draw a line.
The line is not visibly drawn. But if you zoom out you will see that the line has been drawn
somewhere else in the display.
```

6.3 Creating a diagnostic package for TAC

You use the Diagnostic Capture tool to create a diagnostic package, which your Honeywell Technical Assistance Center (TAC) uses for detailed analysis of your problem. The package contains both trace data and log entries for servers and Console Stations.

You only need to perform this procedure if a Honeywell representative has specifically requested you to do so.

CAUTION
Before creating a package, discuss the problem with TAC so that they can advise on appropriate debug levels (paranoid levels) and the type of information that needs to be collected. Setting high debug levels and collecting data over long periods can adversely affect system performance.

To set up the debug levels and create a diagnostic package

1 Choose one of the following.

Option	Description
Experion server	Click **Start** > **All Programs** > **Honeywell Experion PKS** > **Server** > **Diagnostic Tools** > **Diagnostic Capture Tool**.
Console Station	Click **Start** > **All Programs** > **Honeywell Experion PKS** > **Console Station** > **Diagnostic Tools** > **Diagnostic Capture Tool**.

2 Click **Advanced**.
The **Server Log File**, **Server Communications Trace**, and **Package Options** tabs appear.

3 Click the **Server Log File** tab.

4 Click **Adjust Debug Level**.
The **Select an item to adjust its debug level** tree appears.

5 Expand the tree to locate and click the item you want to debug.

6 Move the slider to the required debug level.
The debug level (shown in brackets next to the debug item in the tree) changes as you move the slider.

If you have previously changed the debug level and want to restore the default debug level, click **Restore Default**.

7 To hide the **Select an item to adjust its debug level** tree, click **Adjust Debug Level**.

8 Click the **Server Communications Trace** tab.

9 Click the Station or channel you want to trace.

10 Click **Start Trace**.

11 If possible, reproduce the communication problem.

12 After you are able to reproduce the problem, click **Stop Trace** to stop the trace.

13 Click **Save Diagnostic Package**.

14 In the **Diagnostic Capture Tool** message, click **Yes** to save the diagnostic package.

15 Either accept the default filename and folder or specify another location, and then click **Save**.
It may take several minutes to create the package

7 Notices

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7.1 Documentation feedback

You can find the most up-to-date documents on the Honeywell Process Solutions support website at:

http://www.honeywellprocess.com/support

If you have comments about Honeywell Process Solutions documentation, send your feedback to:

hpsdocs@honeywell.com

Use this email address to provide feedback, or to report errors and omissions in the documentation. For immediate help with a technical problem, contact your local Honeywell Process Solutions Customer Contact Center (CCC) or Honeywell Technical Assistance Center (TAC) listed in the “Support and other contacts” section of this document.

7.2 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 Process Solutions Customer Contact Center (CCC) or Honeywell Technical Assistance Center (TAC) listed in the “Support and other contacts” section of this document.

7.3 Support

For support, contact your local Honeywell Process Solutions Customer Contact Center (CCC). To find your local CCC visit the website, https://www.honeywellprocess.com/en-US/contact-us/customer-support-contacts/Pages/default.aspx.

7.4 Training classes

Honeywell holds technical training classes on Experion PKS. These classes are taught by experts in the field of process control systems. For more information about these classes, contact your Honeywell representative, or see http://www.automationcollege.com.

Index