Audit Trail User Guide
IGSS Version 12.0

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Chapter 1: The IGSS Audit Trail

1.1 What is the Audit Trail module?

In **SCADA**[1] systems, it is crucial to be able to monitor all actions performed in the process of the industrial plant. When set up correctly, the Audit Trail module records all actions performed by the IGSS system operators.

What is recorded

The Audit Trail module can easily be customized to record any of the following operator actions:

- Acknowledgement of process alarms

- Commands send to the process PLCs

- Operators login or logout

- Changes in data collection settings

- Operator notes written - for example alarm notes or maintenance notes

- Changes in analog alarm limits

- System start/stop

- Broadcast messages to IGSS stations

Viewing and filtering the Audit Trail

The recorded audit trails are shown in a list in the Audit Trail form. Filtering in this list is flexible and can be performed on many different system parameters. This is useful to track certain operator actions and detect any irregularities in the process control. Below is listed some of the information available for each record of an audit trail:

- Operator - which operator has performed the action

- IGSS Object - which object is influenced

- IGSS Operator station - from where has the action been performed

- Action Type - what has been done

- Approved by - which second person has approved the action

The Audit Trail form

Here's an example where numerous user and system actions have been recorded:

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[1]Supervisory Control & Data Acquisition

1.2 Audit Trail Types and subtypes

User and system actions to be stored in the Audit Trail database are divided into Audit Trail types. Each type has several sub-types further defining the stored user action.

The Audit Trail types are:

Output

User operations that affect outgoing values of object for example sending commands for Digital objects and changing set points or present values for Analog, Table or Counter objects.

The Output Audit Trail type contains 5 subtypes:

Sub Type	Description
Command	When a user sends a command to a digital object.
Set Point	When a user updates a set point on an analog object.
Table	When a user updates a value in a table object.
String	When a user updates a text on a string object.
Process Value	When a user updates the process value (actual value) of an analog object.

Limits

User operations that affect the alarm limits of an object.

The Limits Audit Trail type contains12 subtypes:

Sub Type	Description
High Alarm	When a user updates the High Alarm limit on an object.
Low Alarm	When a user updates the Low Alarm limit on an object.
High Limit	When a user updates the High Limit on an object.
Low Limit	When a user updates the Low Limit on an object.
High Scale	When a user updates the High Scale limit on an object.
Low Scale	When a user updates the Low Scale limit on an object.
Free Value 1	When a user updates the Free Value 1 **atom** on an object.
Free Value 2	When a user updates the Free Value 2 atom on an object.
Free Value 3	When a user updates the Free Value 3 atom on an object.
Free Value 4	When a user updates the Free Value 4 atom on an object.
Free Value 5	When a user updates the Free Value 5 atom on an object.
Free Value 6	When a user updates the Free Value 6 atom on an object.

Access

User operations that affect user log in and log out of the system.

The Access Audit Trail type contains 2 subtypes:

Sub Type	Description
LogIn	When a user logs into the IGSS configuration.
LogOut	When a user logs out of the IGSS configuration.

Notes

User and system operations that affect creation and updating object and alarm notes

The Notes and Ack Audit Trail type contains 6 subtypes:

Sub Type	Description
Object	When a user creates or updates an object note.
Alarm	When a user creates or updates an alarm note.
End	When a user terminates an object note.
Ack	When a user acknowledges an alarm or object note
User	When a user creates a note on an Audit Trail record
Broadcast Sent	When a user sends a Broadcast message using the **Broadcast** form in the **Supervise** module > **Tools** menu > **Send Broadcast**.

Alarms

User and system operations that affect the active alarms

The Alarm Audit Trail type contains 6 subtypes:

Sub Type	Description
Acknowledge	When the user acknowledges an alarm
Inhibit	When a user inhibits an alarm in any way.
Revoke	When a user removes an alarm inhibition, reinstating the alarm
Remove	When a user removes an alarm from the Active Alarm form.
Hide	When a user hides an alarm in the Active Alarm form
Unhide	When a user reveals a hidden alarm (removing the hidden status)

Data Management

User and system operations that affect data logging and data collection in the configuration.

The Data Management Audit Trail type contains 11 subtypes:

Sub Type	Description
Log in stopped	The user stops data logging of inbound values in the **Data Collection Control** form in the **Supervise** module or for the individual object on the **Data Collection & Logging** tab in the **Object**

Sub Type	Description
	Properties form.
Log in started	The user start data logging of inbound values in the **Data Collection Control** form in the **Supervise** module or for the individual object on the **Data Collection & Logging** tab in the **Object Properties** form.
Log out stopped	The user start data logging of outbound values for the individual object on the **Data Collection & Logging** tab in the **Object Properties** form.
Log out started	The user stops data logging of outbound values for the individual object on the **Data Collection & Logging** tab in the **Object Properties** form.
Log print started	The user starts data print of values for the individual object on the **Data Collection & Logging** tab in the **Object Properties** form.
Log print stopped	The user stops data print of values for the individual object on the **Data Collection & Logging tab** in the **Object Properties** form.
Scanning started	The user starts data collection of values in the **Data Collection Control** form in the **Supervise** module or for the individual object on the **Data Collection & Logging** tab in the **Object Properties** form.
Scanning stopped	The user stops data collection of values in the **Data Collection Control** form in the **Supervise** module or for the individual object on the **Data Collection & Logging** tab in the **Object Properties** form.
Extended logging started	The user starts extended data logging in the **Data Collection Control** form in the **Supervise** module.
Extended logging stopped	The user stops extended data logging in the **Data Collection Control** form in the **Supervise** module.
Manual scan	The user performs a manual scanning in the **Data Collection Control** form in the **Supervise** module.

System

User operations that affect system start and stop, including automated system start and stop.

The System Audit Trail type contains 11 subtypes

Sub Type	Description
Start	The user starts the **Supervise** module from the **IGSS Master > Home** tab > **Data Collection** group > **Start** button. If the **Restart** button is clicked, the configuration will first be stopped and then started automatically.
Stop	The user stops the **Supervise** module from the **IGSS Master** > **Home** tab > **Data Collection** group > **Stop** button. If the **Restart** button is clicked, the configuration will first be stopped and then started automatically.
SW Update	The user runs the **IGSS Software Updater** from the **IGSS Master** > **Information and Support** tab > **Update IGSS software** button. The button is only accessible if the IGSS Master runs in Design mode.
Kill App	The user closes a core or normal application by clicking the **Kill** button in the **Detailed Status** pane in the **IGSS Master** workspace. The Detailed Status is displayed by clicking the **Detailed status** button found in the **IGSS Master** > **Runtime and Diagnostics** tab.
Launch app	The user launches a core or normal application by clicking the **Launch** button in the **Detailed Status** pane in the **IGSS Master** workspace. The Detailed Status is displayed by clicking the **Detailed status** button in the **IGSS Master** > **Runtime and Diagnostics** tab.
Report	The user edits an Operator Report by clicking the **Operator Report format** in the **Supervise** module > **Tools** menu.
Event	The user creates, edits or deletes an event by clicking Events in the **Supervise** module > **Tools** menu.
Single User	The user restarts the station as a Single-User backup station in the **Data Collection Control** form in the **Supervise** module.
Restart	The user restarts all stations in the **Data Collection Control** form in the **Supervise** module.
Spool files deleted	The user deletes the spool files logging in the **Data Collection Control** form in the **Supervise** module.

Sub Type	Description
Design Mode	The user selects the **Design Mode** option in the **Application** menu of the **IGSS Master**.

Chapter 2: Setting up the Audit Trail

2.1 Setting up the SQL Server for Audit Trail

> If you have a full SQL Server, it will provide all the functionality you need without any limitations. The free version, SQL Server Express, has a max. limit of 4 GB per database.

Install and set up the SQL Server

1. Start by installing the SQL Server on the IGSS Server or on another PC in the IGSS network.

   - SQL Server Express 2008 and Management Tools can be downloaded from this link: http://www.microsoft.com/express/Database/
   - SQL Server Express 2005 and its Management Studio is included on the IGSS installation disc.

2. If you're using SQL Server Express, it is recommended to create a new server name, instead of accepting the default name, SQLEXPRESS. For example, you could call it "IGSS".

   > When you create a new SQL Server name, you obtain two advantages:
   > - If you have other applications dependent on SQL Server Express, they will not conflict in the default server, SQLEXPRESS.
   > - You have the full 4 GB of data available, as only IGSS data will be saved in this server.

3. During installation, remember to enable both authentication types, if required.

   a. Windows Authentication (can only be used, if you're in a domain/workgroup)

   b. SQL Server Authentication (necessary if you're not in a domain/workgroup)

4. Start the **SQL Server Configuration Manager** from the Windows Start menu under **SQL Server 2008 > Configuration Tools**.
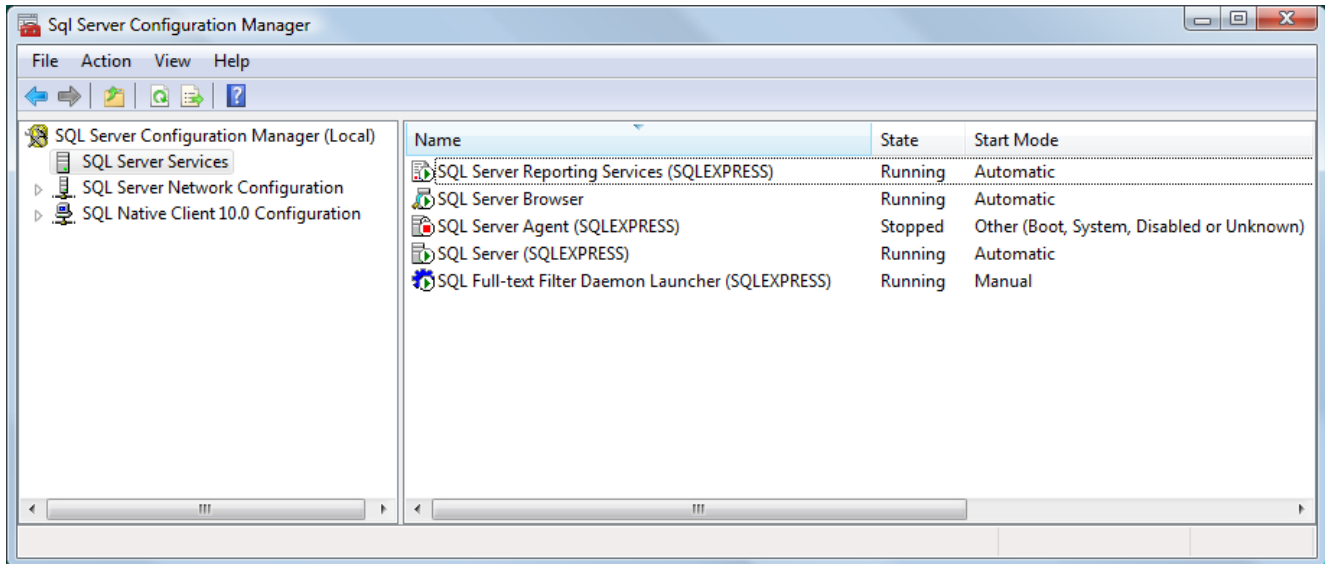
5. Make sure that that **SQL Server** and **SQL Server Browser** are started.

6. Make sure that following protocols are enabled, both for the **Native client** and **SQL Server** .
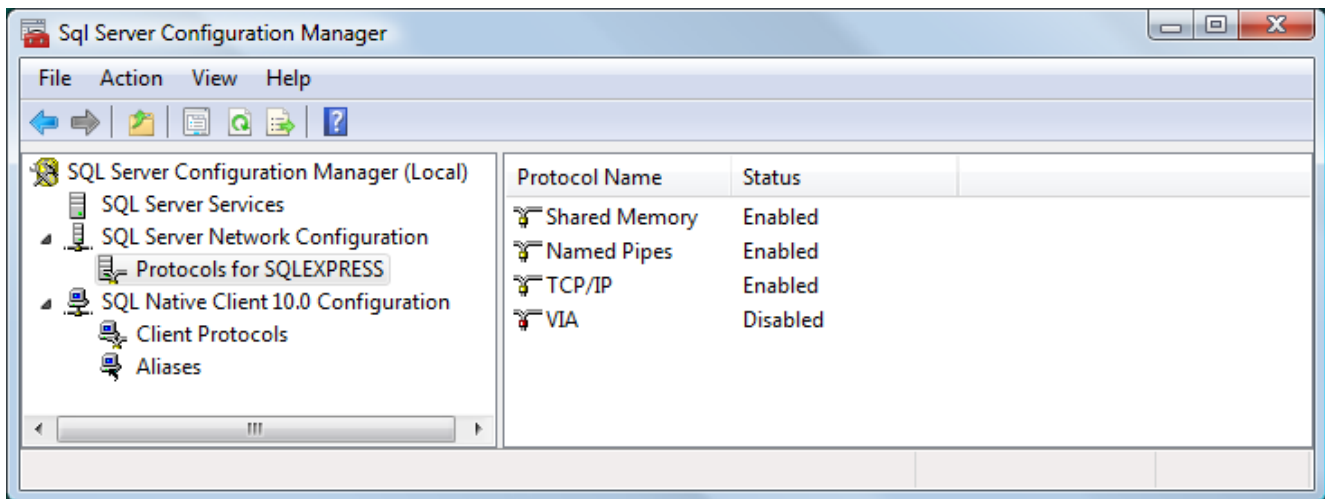
7. Close the **SQL server Configuration Manager.**

Run the Audit Trail script

1. Start the **Microsoft SQL Server Management Studio**.

2. Do the following:

   - Under **Server type**, select **Database Engine**.

   - Under **Server name**, select the correct server name (see Note above).

   - Under **Authentication**, select **Windows Authentication** or **SQL Server Authentication**, as required.
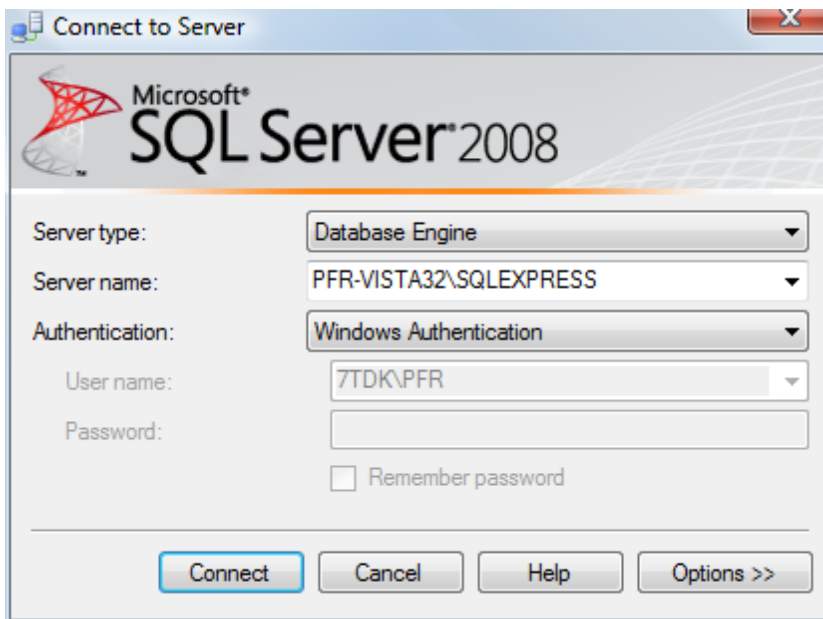
3. In the **File** menu, choose **Open** -> **File**. Browse to the **[IGSS installation path]\SQL** folder. Default path is C:\Program Files\Schneider Electric\IGSS32\V12.0\SQL.

4. Open the script named **audittraildb.sql**.
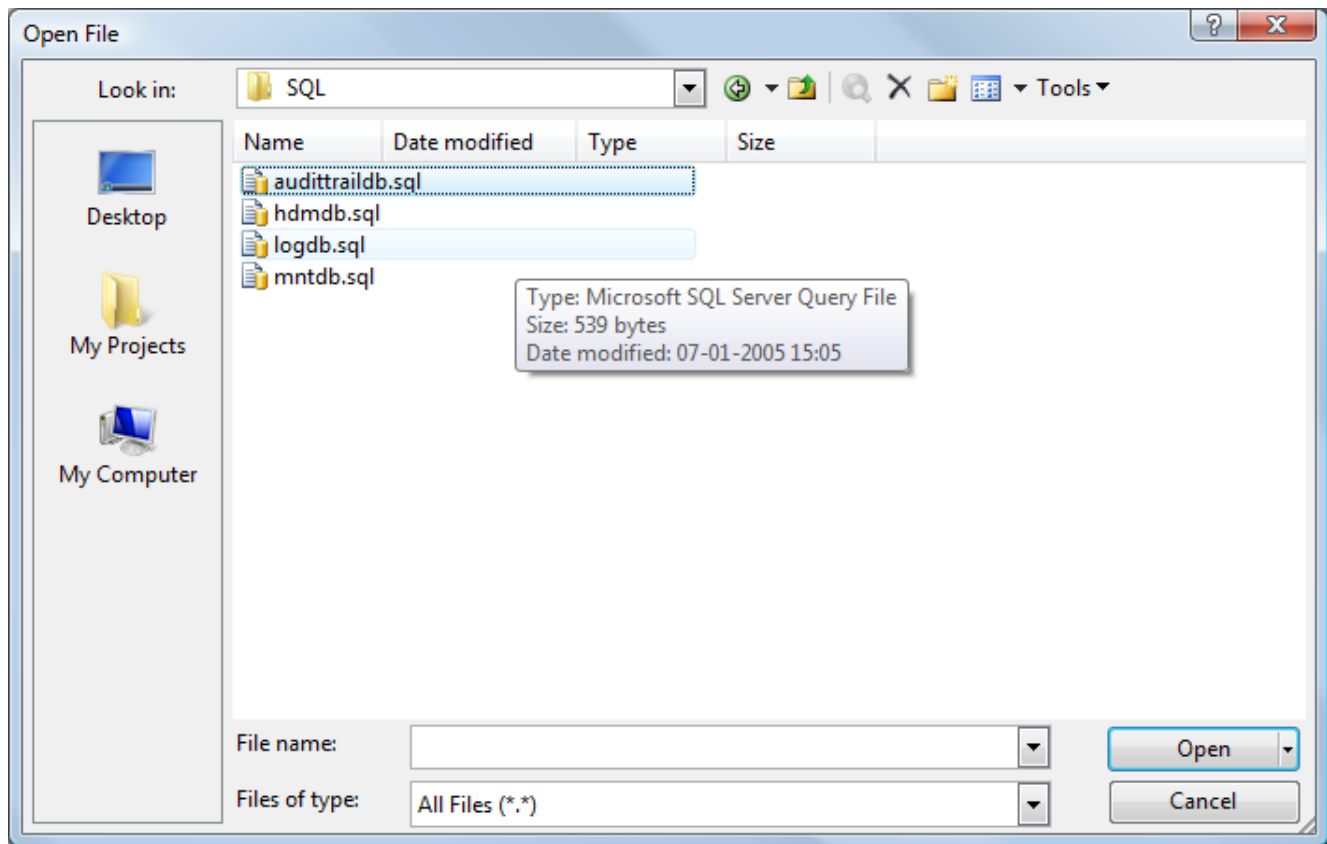
5. Press the **Execute!** button in the toolbar.

6. Under **Messages**, there should be 1 line saying **(1 Row(s) affected)**. If there are more lines, an error has occurred. Troubleshoot the error and repeat this step, once fixed.

7. If you have an operator station which is not in the same domain / workgroup as the SQL Server, you <u>must</u> configure an SQL Server Authentication account.

8. In the **Object Explorer** tree view, unfold the **Security** branch, right-click on **Logins** and select **New Login**.

Object Explorer

Connect ▾

☐ PFR-VISTA32\SQLEXPRESS (SQL Server 10.0.1600 - 7TDK\PFR)
  ☐ Databases
  ☐ Security
    ☐ Logins
      New Login...   ogin##
      Filter   ▸   in##
      Start PowerShell
      Reports   ▸   RVICE
      Refresh   ESS
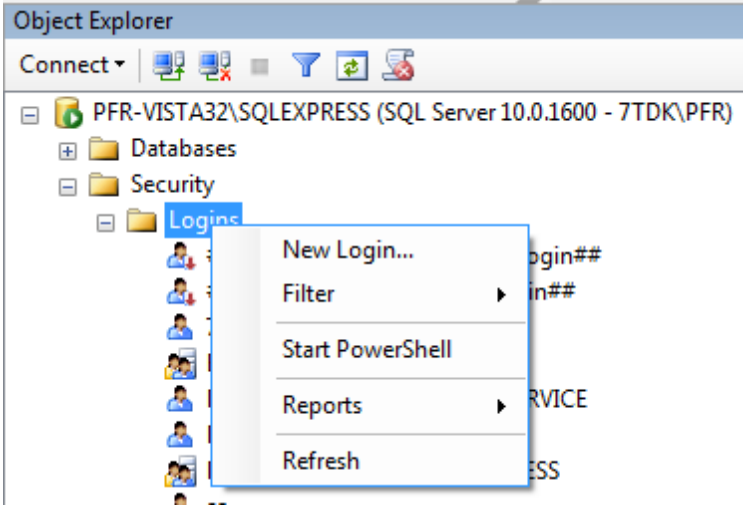
9. In this particular case I have created an account called **sql**, with the password **sql**.
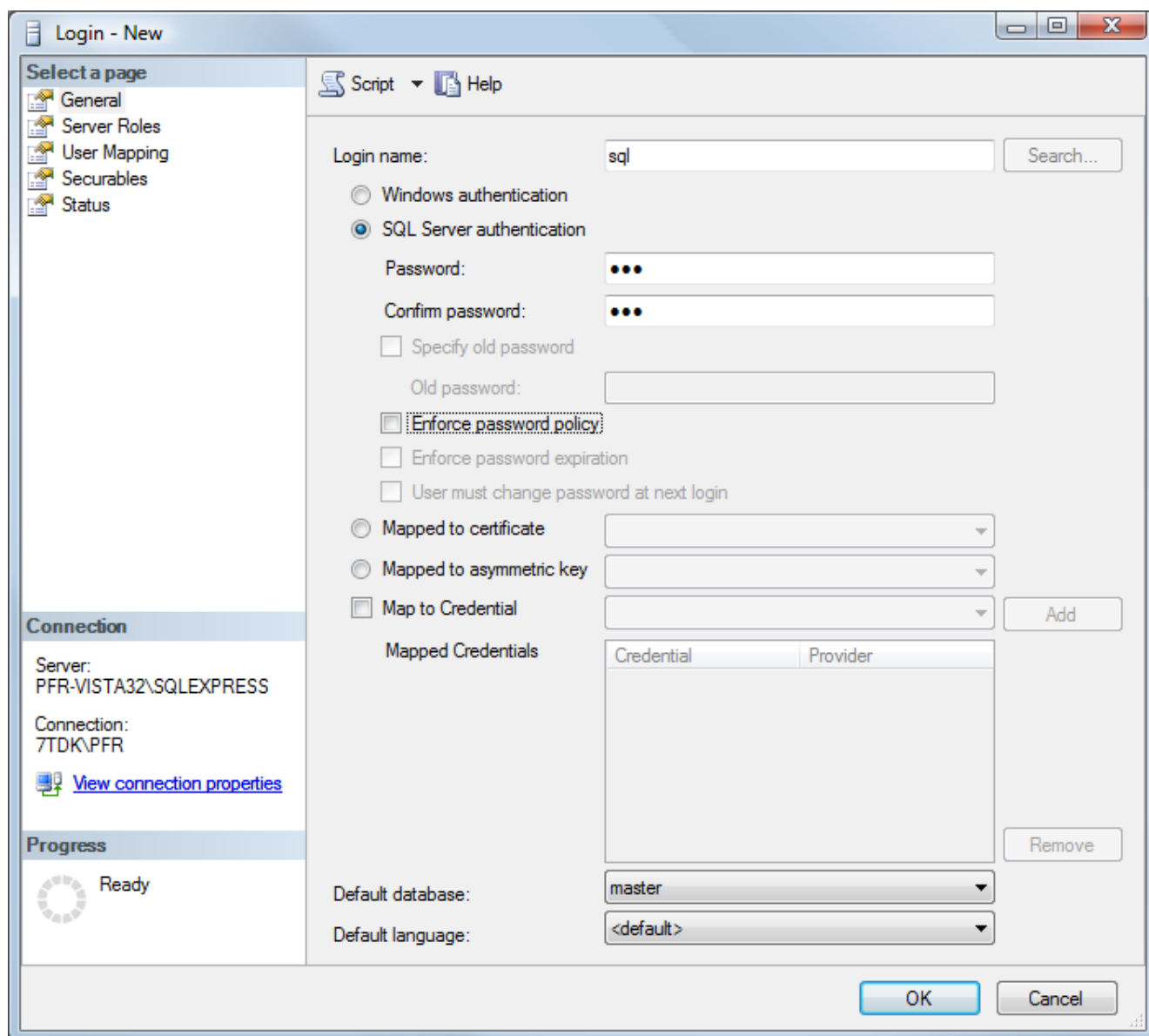
10. On the **General** page, I have selected default database **AUDITTRAIL** and for this purpose I have also selected that my **sql** user is a **sysadmin** under the **Server Roles** page.
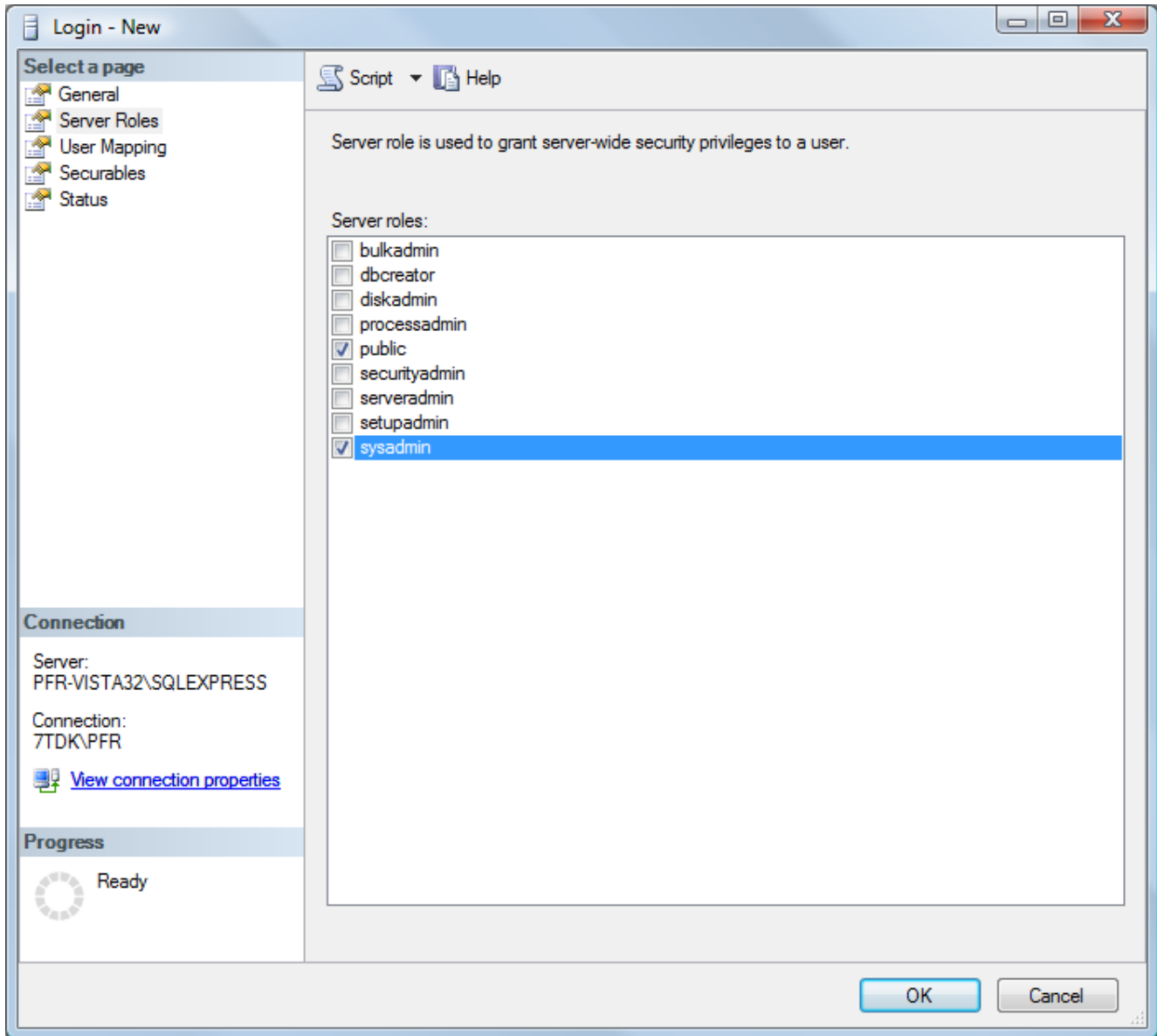
11. Close the Microsoft SQL Server Management Studio.

Set up Audit Trail in System Configuration

1. In the **IGSS Master**, click the **System Configuration** button in the **Design and Setup** tab to open the **System Configuration** form.

2. In the left pane of the **System Configuration** form, select the IGSS server or single user station.

> No setup is necessary on the operator station in System Configuration. The only requirement for the operator station is that it must have read/write access to the SQL Server.

3. On the **Files** tab, under **Audit Trail**, click the **SQL Settings** button.

4. In the **SQL Server Settings** form, select the check box **Write audit trail value to SQL Server** and click the **Database Setup** button.

5. In the **Data Link Properties** dialog box, select the **SQL Server Native Client 10.0** data source. If the SQL Server Native Client 10.0 is not present, select **Microsoft OLE DB Provider for ODBC Drivers** instead. You cannot use the **SQL Server Native Client 11.0** for IGSS. For 64-bit machines, use the ODBCad32.exe driver in C:\Windows\SysWOW64 instead of the default ODBC driver for 64-bit machines as IGSS.[1]

6. Click the **Next >> .**button.

7. On the **Connection** tab, do the following:

   Step 1: Select the SQL Server in the drop-down list.

   > In a real multiuser system, we recommend that you use the actual IP address, for example, 192.168.0.1.

   Step 2: Set user access to **Use Windows NT integrated security** or **Use a specific user name and password**, if you're using SQL Server Authentication. Enter the user name and password and remember to select **Allow saving password**.

   Step 3: Under **Select the database on the server**, select the **AUDITTRAIL** database.

   Step 4: Click **Test Connection** to test that the connection is working. If successful, then click **OK**.
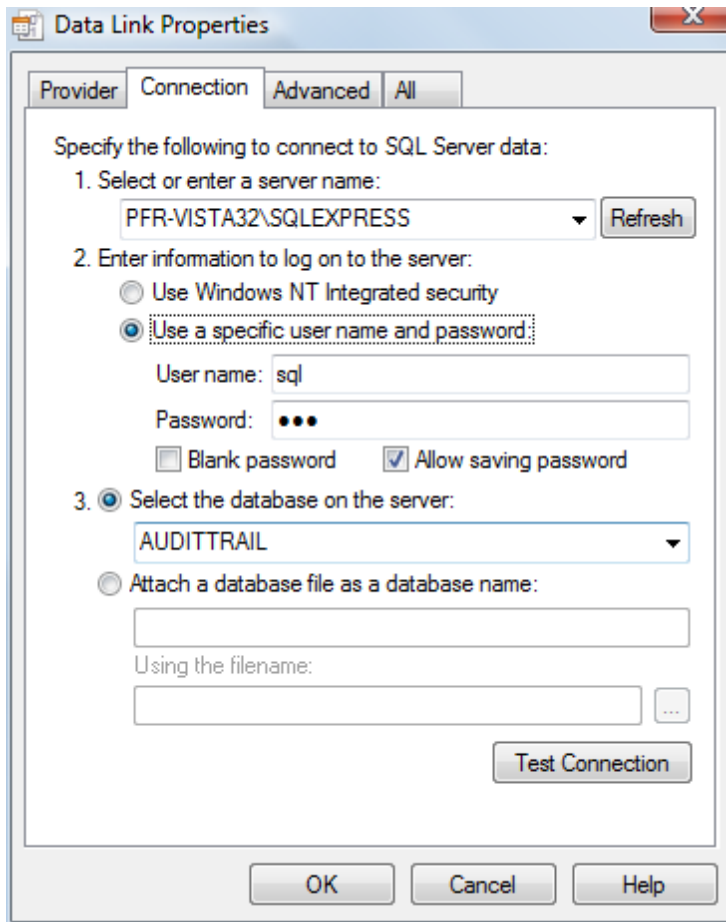
8. Verify that the **SQL Server Settings** dialog box has these settings and click **OK**.
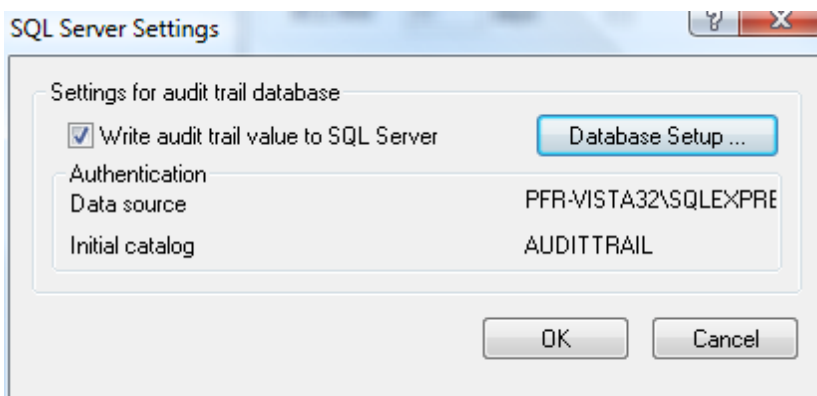
9. Finally, click the **Access Control** tab.

10. Enable the audit trail by selecting the **Keep a record of all user activity in an audit trail database** check box.

   Then select the activities you want to store in the audit trail database. Select the **Comment required check box**, if you want to force the user to enter a comment for this type of operation.

   In the **Keep audit trail for** field, write 0 (zero) to keep records forever or write a specific number of days.
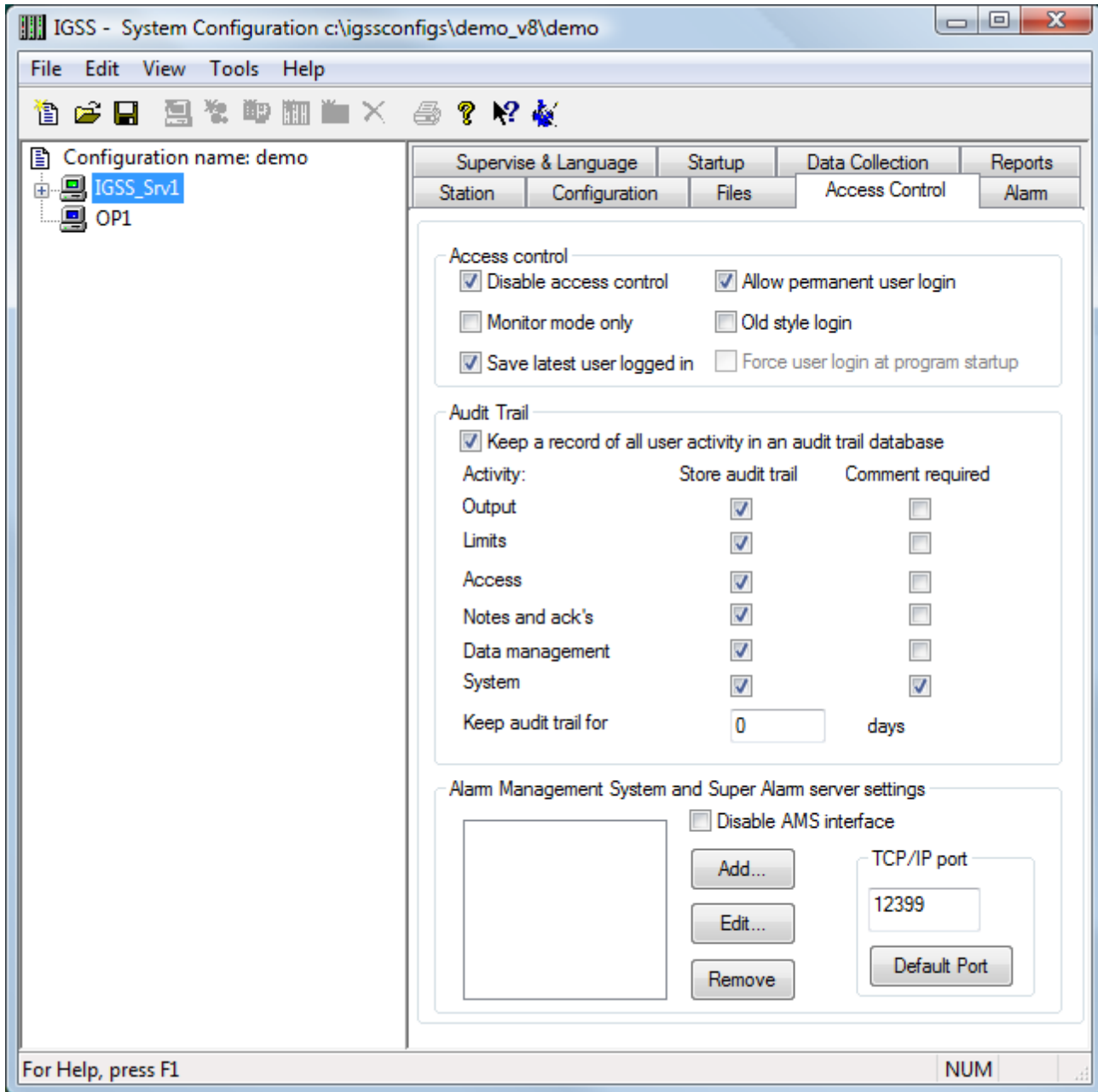
User administration and Audit Trail

Audit Trail really only makes sense, if you have users logged in. This will allow you to record exactly what happened and who did it.

Therefore, we recommend that you do the following before starting the audit trail:

1. Define the relevant users and user groups in the **User Administration** module.

2. Clear the check box **Disable access control** on the tab above in the **System Configuration** form.

3. Make sure that users are logged in permanently, while they are using IGSS. If a user is only temporarily logged in, he will be prompted for his user name and password, every time an action is recorded in Audit Trail.

[1] The ODBCad32.exe file found in C:\Windows\SysWOW64 is used to run 32-bit applications (such as IGSS) on a 64-bit Windows operating system while the default ODBCad32.exe file found in Control Panel > Administrative Tools > Data Sources (ODBC) is used to run 64-bit applications on a 64-bit Windows operating system.

2.2 Auto-starting the Audit Trail

Once you've set up the SQL Server for the Audit Trail, you will probably want to automatically start the module every time the user starts the IGSS configuration.

To auto-start the Audit Trail:

1. Open the **System Configuration** form.

2. Select the relevant IGSS station.

3. Click the **Startup** tab.

4. Under **Auto start**, select the **Audit Trail** check box.

5. Repeat steps 2-4 for all the stations where you want Audit Trail to start automatically.

6. In the **File** menu, select **Save and Exit**.

With the auto start option enabled, the Audit Trail module will now be started with the configuration and closed when the configuration is stopped.

Chapter 2: Audit Trail form help

2.3 The Audit Trail Form

Use the Audit Trail form to view all recorded system and user actions in the current view period specified in the **Home** ribbon.

You can add notes to the Audit Trail records if you want to provide for additional explanations for a record.

You can also create Audit Trail views, saving the Audit Trail filter criteria and restoring the view for quick display of common Audit Trailfilter settings.

Preconditions

The Audit Trail button will only be accessible if the Audit Trail module has been set up correctly for storing data in the Microsoft SQL Server.

Where do I find it?

Click the **IGSS Master** > **Home** tab > **Audit Trail** button.

The Application button

Click the **Application** button to:

- Print the Audit Trail records displayed in the list

- Define page set up when printing the Audit Trail records

- Preview the print before printing

- Export the Audit Trail records displayed in the list as a CSV (Comma-separated) file for analysis in 3rd party applications such as Microsoft Excel.

The Home Ribbon

The Home ribbon contain functions for displaying Audit Trail data in the form.

Field	Group Name	Description
Add Note	Note	Allows you to add an operator note. The note will not be tied to any specific object in the configuration, but is a general operator note. You must be logged in to have access to this function. The button is not active, if you are

Field	Group Name	Description
		not logged in.
Refresh	Contents	Performs a manual update of the Action list based on the current filter settings.
Freeze	Contents	While this check box is selected, the automatic update of the Action list is disabled.
View Period	Period	Select the type of period you want to show. Selecting **Start and end time**, **Start time and time span** or **End time and time span** will open the relevant time options in the **View** tab. Selecting any of the other options will disable all other time options, as these are pre-defined periods.
Show **UTC**[1]	Period	Shows all time stamps in the universal time format, UTC. This is the raw time format used in the IGSS databases.
Start Date	Period	Click the drop-down arrow to browse through the calendar to find the date. Or type the date in the format DD-MM-YYYY.
Start Time	Period	Type the time in the format HH:MM:SS. Or use the up/down arrows to change the time.
Span	Period	Enter the time span for the data period. Time span can be combined with either start time or end time.
End Date	Period	Click the drop-down arrow to browse through the calendar to find the date. Or type the date in the format DD-MM-YYYY.
End Time	Period	Type the time in the format HH:MM:SS. Or use the up/down arrows to change the time.
Now	Period	When checked, the view period will end at the current date and time.
Type	Filter	Select the action types you want to view in the Action list. The possible action types are: - (All) - Output - Limits

[1]Universal Time Coordinated (formerly Greenwich Mean Time), used as the basis for calculating time in most parts of the world. IGSS uses this time format internally in the database. You can switch between UTC and local time by enabling or disabling the "UTC" field in various dialog boxes in the system.

Field	Group Name	Description
		• Access • Notes • Alarms • System • Data
Area	Filter	Filter the list by area. The drop-down list shows the areas of the current configuration.
Object	Filter	Filter the Action list by object. Type the name of the object directly in the list or click the three dots (...) beside the field to choose a specific object in the configuration. To filter by multiple objects, you can filter the list using wildcards, For example, writing "q*" will list all objects starting with the character q.
Station name	Filter	Filter the Action list by IGSS station. Filter the Action list by user. Choose the relevant user in the list. Users are defined in the **User Administration** module.
User name	Filter	Filter the Action list by user. Choose the relevant user in the list. Users are defined in the **User Administration** module.
Approved by	Filter	Filter the list by approving user. An approving user is a user that has approved sending of a safe command.
Save as View	Views	If you want to save a specific filter setup, click this button. You must specify the filter to be used . Click the drop-down arrow to open the options menu. The options are: • **Update Selected View** will update the current view with the current filter settings. • **Delete Selected View** will remove the filter. • **Make Default** will make this view the default view.
Saved Views	Views	This list shows the saved views. Choose the relevant view.

Field Help

Field	Description
Date	The timestamp of the system or user action. By default, time is given in local machine time. You can select the **Show UTC** check box in the Audit Trail ribbon to display all time stamps in UTC time.
Type	The following Audit Trail action types are used: • Output: Commands sent by the user to the PLC. • Limits: Alarm limits changed by the user. • Access: User logs in and log out of the system. • Notes and Acks: Used for object notes, alarm notes as well as alarm actions, such as acknowledgment and ending of alarms. • System: Used for system start and stop (automatic or user-activated). • Data: Used for operations concerning data logging and data collection.
Subtype	Each Audit Trail action type consists of several subtypes which further detail the user action . See the link below for a detailed list of the Audit Trail subtypes. Example: For the **Access** type, you will see **Login** and **Logout**.
Station	The name of the station where the action was taken, either by the system or by the user.
User	The name of the user currently logged in.
Area	For object operations only. The name of the area in which the object resides.
Object	For object operations only. The name of the manipulated object.
Atom	For object operations only. The **atom** of the object which was manipulated.
Value	The value which was sent to the PLC, for example, alarm limits, set points, etc.
String	The entire value string. For analog objects, the unit will be displayed as shown in the picture above. For digital objects, the command name will be shown (whereas the Value field shows the com-

| Field	Description
	mand number).
Note	A detailed explanation of the system or user action.
Comments	User notes or comments concerning the Audit Trail record.
Approved by	This field is used with the **Confirm 2 Users** safe command only.
	It shows the name of the user approving that the safe command will be sent.

See Also

Chapter 3: Using the Audit Trail

3.1 Choosing the view period

To get you up-and-running with the Audit Trail as fast as possible, we have developed a series of examples based on the IGSS Demo Configuration.

If you start with this topic, you can move through the examples step-by-step as if you were operating a real plant.

> Precondition: The Audit Trail module must have been set up for saving data in the IGSS SQL Server, before you can perform this procedure.

1. If the IGSS Demo Configuration is not activated, open the **System Configuration** form.

2. In the **File** menu, select **Open Demo Configuration** and then select **File** and **Save and Exit**.

3. In the **IGSS Master** > **Home** tab, click the **Start** button. The IGSS Demo Configuration will now be automatically started.

4. In the **IGSS Master** > **Home** tab, click the **Login** button.

5. Log in as the administrator user: User name = admin and Password = admin.

6. Let's do some user actions to get some information into the Audit Trail.
   Click the **Customer Cases** button, then click the **District Heating** graphic.

7. Click the motor symbol in the upper left corner of the mimic diagram.
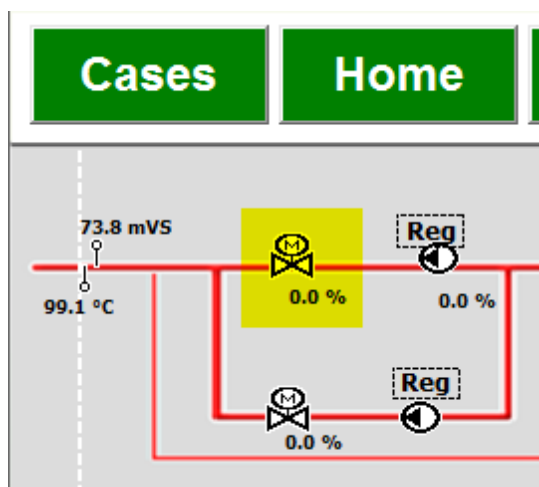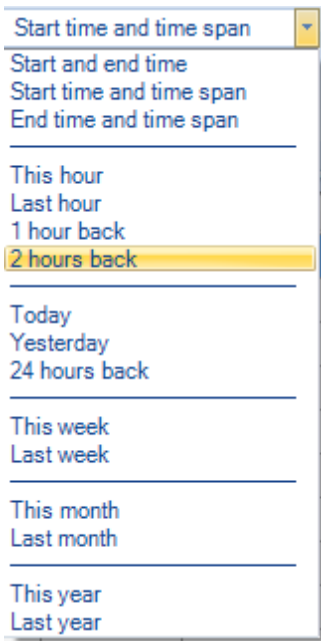

8. In the command menu, select the first command named **Auto**.

9. Repeat step 6, only this time sending the command **Manual**.

10. Repeat for the commands, **Manual close** and **Manual open**. The Audit Trail should now look like this.

Date	Type	Subtype	Station	User	Area	Object	Atom	Value	String	Note	Comments ▼	Approved by
27-07-2009 18:04:06	Output	Command	DemoStation	admin	Cases	CS.MV.202	0	2	Manual Close	Command sent		
27-07-2009 18:04:08	Output	Command	DemoStation	admin	Cases	CS.MV.202	0	3	Manual Open	Command sent		
27-07-2009 18:04:01	Output	Command	DemoStation	admin	Cases	CS.MV.202	0	0	Auto	Command sent		
27-07-2009 18:04:05	Output	Command	DemoStation	admin	Cases	CS.MV.202	0	1	Manual	Command sent		

11. Click the **Stop** button in the IGSS Master > Home tab to stop the system.

12. Start it again by hitting the **Start** button.

13. Let's change the view period. In the **Period** drop-down list, choose **2 hours back**.

Start time and time span	▼
Start and end time	
Start time and time span	
End time and time span	
This hour	
Last hour	
1 hour back	
2 hours back	
Today	
Yesterday	
24 hours back	
This week	
Last week	
This month	
Last month	
This year	
Last year	

14. Now we have the right view period and some actions in the Action list. Let's continue with "Filtering the Audit Trail" on page 26.

3.2 Filtering the Audit Trail

We are now ready to filter the Action list.

1. In the Home ribbon under Filter, do the following:

   - Under Type, select System.

   We are now seeing the system stop and start actions.

Date	Type	Subtype	Station	User	Area	Object	Atom	Value	String	Note
27-07-2009 18:14:52	System	Start	DemoStation							System started by user
27-07-2009 18:14:49	System	Stop	DemoStation	admin						System stopped by user

2. Change the **Type** filter back to (All).

3. Under **User name**, select the **admin** user.

   The Action list should now look like this.

 | Date | Type | Subtype | Station | User | Area | Object | Atom | Value | String | Note |
   |---|---|---|---|---|---|---|---|---|---|---|
   | 27-07-2009 18:04:08 | Output | Command | DemoStation | admin | Cases | CS.MV.202 | 0 | 3 | Manual Open | Command sent |
   | 27-07-2009 18:04:06 | Output | Command | DemoStation | admin | Cases | CS.MV.202 | 0 | 2 | Manual Close | Command sent |
   | 27-07-2009 18:04:05 | Output | Command | DemoStation | admin | Cases | CS.MV.202 | 0 | 1 | Manual | Command sent |
   | 27-07-2009 18:04:01 | Output | Command | DemoStation | admin | Cases | CS.MV.202 | 0 | 0 | Auto | Command sent |

4. As the next step we want to learn how we're "Saving and applying views" on page 27

3.3 Saving and applying views

A View in the Audit Trail is a saved filter. You can save as many views as you need.

1. Our current filter shows all actions taken by the admin user. Let's save it as a view.

2. Click the **Save as View** button.

3. Type the view name Admin user (All) and click **OK**.
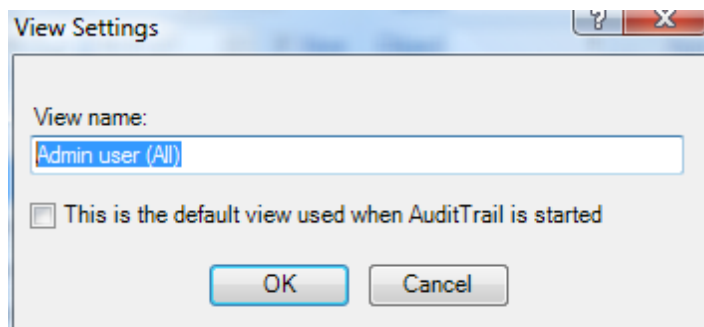
4. The next step is learning how we're "Adding a user note" on page 28

3.4 Adding a user note

A user note is a general note to the other users of the system. A user note is not tied to any specific object.

> The user must be logged into the system in order to create a user note.

1. Click the **Add Note** icon.

2. Enter this text in the note field:
   Call the service technicians. We need to maintain those pumps now.

Audit Note

Specify a note for the audit trail database:

Call the service technicians. We need to maintain those pumps now.

[OK]   [Cancel]
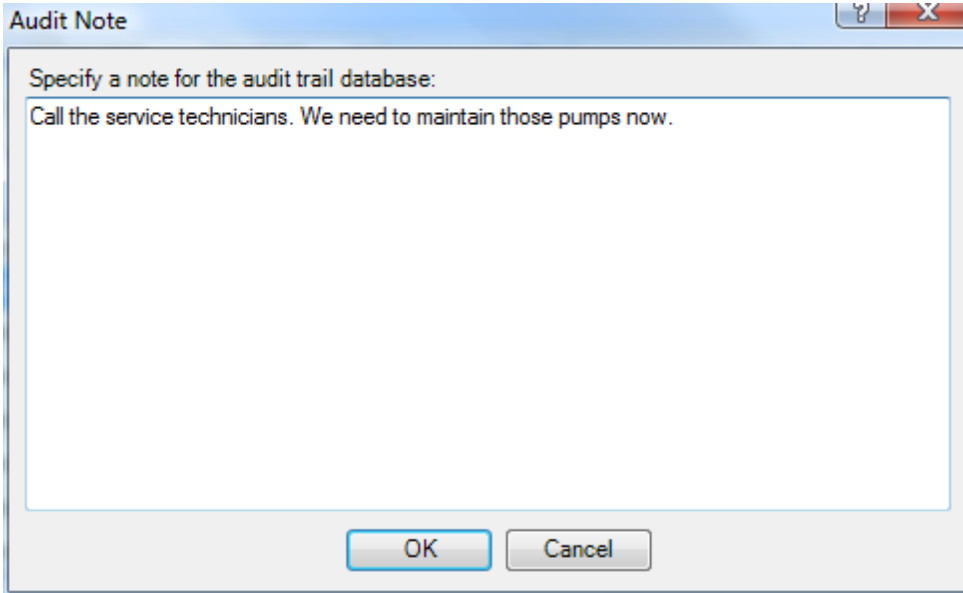
3. Click **OK**. The user note now appears in the Action list. Notice that the note text itself is shown in the **Comments** field.

4. The next step is optional, but useful if you are using the IGSS Dashboard module.
   You will learn how to "Presenting Audit Trail information in the IGSS Dashboard" on page 29

3.5 Presenting Audit Trail information in the IGSS Dashboard
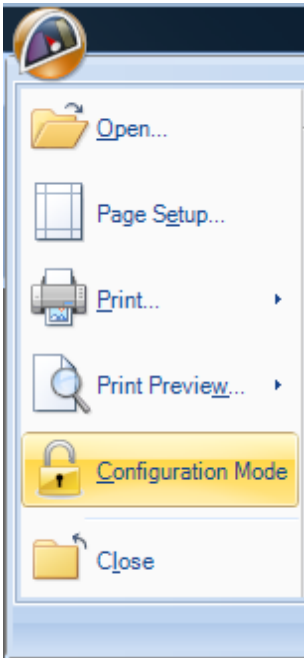
If you want to show Audit Trail information in your dashboard(s), you can insert an Audit Trail widget.

1. In the IGSS Start menu, click the Dashboard icon. The default dashboard named Pump Station appears.
   We will add the Audit Trail widget to this dashboard.

DashBoard
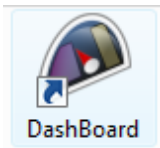
2. Click the Application button in the upper left corner of the window.

3. Select Configuration Mode.

4. On the **Configuration** tab under **Insert Widget**, click the Audit Trail icon.

5. Resize the widget and put it at the center of the screen. Notice that you can add user notes and activate views just the same, as if you were in the Audit Trail module.

6. On the **Audit Trail** tab under **Columns Visible When Minimized**, select the **Area**, **Object** and **Atom** check boxes.

> Remember to explain to the end user that by clicking the Maximize button of the widget, he will be able view all information fields. As you can see, all fields are enabled under **Columns Visible When Maximized**.

You have successfully completed the series of Audit Trail examples.

Chapter 4: Reference and Lookup

4.1 Conventions in this Manual

The following typographical conventions are used:

Convention	Description	Example
User inter-face ele-ment	When referring to labels and names in the user interface.	The **Data Management** tab.
User input	When the user has to type specific data in IGSS	Type the following description: Incoming flow in Tank 2
Module name	When referring to a module in IGSS	Open the **Definition** module.
Note	A note emphasizes or supplements important points of the main text. A note provides information that may apply only in special cases.	By default, the timestamp is in universal time format, **UTC**[1]. This can be changed in the Driver Log Filters dialog box.
Tip	A tip suggests alternative methods that may not be obvious in the user interface. A tip also helps the user in working more effectively with IGSS. A tip is not essential to the basic understanding of the text.	Alternative to this simple find function, you can also filter on text in the messages in Driver Log Filters dialog box.
Warning	A warning is an important note that is essential for the completion of a task. In some cases, disregarding a warning may result in undesirable functionality or loss of data.	If you disregard the System alarm, you may risk loss of data in the **LOG** and **BCL** files.

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[1]Universal Time Coordinated (formerly Greenwich Mean Time), used as the basis for calculating time in most parts of the world. IGSS uses this time format internally in the database. You can switch between UTC and local time by enabling or disabling the "UTC" field in various dialog boxes in the system.

4.2 Getting Help in IGSS

IGSS comes with a comprehensive help system designed to help both system designers and operators to get started with IGSS as quickly as possible.

Documentation overview

The IGSS documentation includes the following items:

Documentation item	Description
Getting Started	An introduction to IGSS and its most fundamental terms and features. Getting Started is intended to get you up and running as fast as possible. The manual provides a system and architecture overview followed by a number of real-life use cases you can go through before building your first real IGSS project. The manual is available in Adobe Acrobat format (.pdf).
Module help	For each module there is a help file with the same name as the module itself, for example, Def.chm for the Definition module. The help file is invoked by clicking the in the upper right corner of the module. The Table of Contents will then allow you to browse through the topics.
Form and Dialog help'	For each Form or dialog there is a help topic with the following standard information: • Overview • Preconditions • Where do I find it? • Field help Form help is invoked by clicking the help button in the upper right hand corner of the dialog box or located in the Table of Contents of the individual help file.
Thematic help	IGSS also provides thematic help. When there is a special theme that requires special attention from the user, a dedicated help file is provided. Examples include "Driver-Specific Help" and "Database Administration Help".

Where are the help files located?

The IGSS help files are located in the appropriate language folder in the installation path of IGSS, by default C:\Program Files\Schneider Electric\IGSS32\V12.0. The help files are available in English at release time.

The paths to the help files are:

Language	Path
English	[IGSS InstallPath]\ENG
Danish	[IGSS InstallPath]\DAN
German	[IGSS InstallPath]\DEU

Translated help files

Selected help files have been translated into Danish. If you require help files in your language, please contact Schneider Electric.

Help updates

The help files are continuously updated and improved. Check regularly with the IGSS Update in the IGSS Master.

4.3 Version Information (IGSS Help System)

© Schneider Electric, IGSS Version 12.0

The IGSS help files are based on software build number 10305 (initial release)

English help files

To update the help files, click the **Update IGSS Software** button on the **Information and Support** tab in the **IGSS Master**. There must be a connection from the PC to the Internet. Every time **IGSS Update** is run, IGSS help files as well as IGSS system files will automatically be updated on the PC from the web server at Schneider Electric.

You select the languages you want to update in the **Tools** menu of the **IGSS Update** form.

If you are not able to update the IGSS system directly via the Internet, the alternative is to download the updates from the Schneider Electric website as zip files. These can then be transferred onto a CD or USB memory stick, which is then the medium used to update on site.

> After updating your IGSS installation , the build numbers in various IGSS modules may change to a higher number. This signifies that the module in question has been updated with newer files. Build numbers consist of four digits, where the first digit represents the year and the last three represent the day number in the year in question. The build number can be seen in the **About** dialog box which can be activated from the **Help** menu.

An example:

Build number = 10305
16 = the year 2016
305 = The 305th day of the year

Chapter 5: Glossary

A

Application menu

The Application menu is the first ribbon in the IGSS Master module. Click the icon to drop down the menu. The menu contains items that were typically found in the File menu in previous versions of IGSS. In most modules, an "Options" item allows the user to define global module settings. The Application menu was introduced in the Microsoft Office 2010 package. It replaces the Application button (nicknamed Doughnut) which was introduced in IGSS V7 and V8.

D

descriptor

A descriptor is the graphical display of an object. IGSS includes many types of descriptors including: - Built-in standard symbols - Animated symbols (Symbol Factory library) - Graphics and animation - Drawing symbols - Windows controls - ActiveX controls An IGSS object can be represented with different descriptors on different diagrams.

R

Ribbon

The Ribbon is a new term/element in the Microsoft universe. The Ribbon replaces the well-known toolbars in applications. The Ribbon provides quick access to the most commonly used functions in the application. The Ribbon is divided into logical groups (the tabs) and each tab is divided into sections (the blocks in the tab). The Ribbon is context-sensitive which means that only relevant functions are accessible dependent on the current user action.

S

SCADA

Supervisory Control & Data Acquisition

U

UTC

Universal Time Coordinated (formerly Greenwich Mean Time), used as the basis for calculating time in most parts of the world. IGSS uses this time format internally in the database. You can switch between UTC and local time by enabling or disabling the "UTC" field in various dialog boxes in the system.