



Maintenance User Guide
IGSS Version 12.0

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Chapter 1: Introduction to IGSS Maintenance

1.1 What is IGSS Maintenance ?

Purpose

The purposes of this program are:

- to ensure that regular maintenance is performed on the process components to avoid unnecessary downtime
- to ensure that the process components have an optimal lifetime through regular maintenance

Use

Two types of users utilize this program:

This type of user ...	will typically ...
System designer ¹	<ul style="list-style-type: none"> ■ create maintenance jobs ■ provide maintenance instructions to the operator ■ attach alarm texts to the maintenance jobs ■ customize the maintenance list ■ control user access to protected functions in the Maintenance module
Operator ¹	<ul style="list-style-type: none"> ■ acknowledge maintenance alarms (either in the maintenance list or the alarm list) ■ View maintenance instructions and perform the related maintenance on the process components ■ complete the maintenance alarm ■ write a maintenance note, if something unusual occurs while performing maintenance

The maintenance database (Mntdb.mdb)

When you create or edit maintenance jobs, the related information is written into the maintenance database, Mntdb.mdb. This file is located in the **report folder** for the active configuration. The maintenance information can also be saved in an SQL Server. For further details, refer to the **System Configuration** help file.

¹The system designer is the person who builds an image of the monitored process and makes sure that data can be received from and sent to the process components. The system designer is typically a highly skilled engineer who uses a number of IGSS programs to build the configuration that the operators will later use when monitoring and controlling the plant. The system designer's main program is the Definition program.

¹The operator is the person who monitors and controls the monitored process. He will typically only use the Supervise and Alarm programs. These two programs are designed to make the monitoring task very easy and straightforward for the operator.

For further details about the database, refer to the [Interface Help](#) file.

1.2 Key features and benefits

Introduction

This topic gives you an overview of the most important features in the Maintenance module. The features are divided into two groups representing the main user types: system designer and operator.

System designer tasks

The system designer will typically use the following functions. For more detailed information, click the individual features:

This feature ...	allows the system designer to ...
Create and edit maintenance jobs	specify a maintenance interval for a specific process component, for example, a pump to ensure regular maintenance.
Provide operator instructions	attach maintenance instructions to the maintenance job. The instructions may be text, a file (video clip, Word document, etc.) or a Help file. The operator will use these instructions to perform the maintenance job.
Attach alarm texts	attach alarm texts to a maintenance job so that the maintenance alarm appears in the alarm list. Thus, the maintenance alarm will appear both in the maintenance list and the alarm list.
View the job status	view up-to-date information on each maintenance job, including the time for latest measurement, latest acknowledge time, latest completion time, etc. The operator can, of course, also view this information.
Create filters	create user-defined filters that the operator can apply during supervision. A filter is a condition or a set of conditions to be applied to the maintenance list. You may, for example, only want to show the active maintenance alarms for a specific area of the IGSS configuration.
Customize the list	define the column sequence in the maintenance list, which columns to be shown and their titles.
Control user access	control user access to protected functions in the program. This requires that the proper rights are defined in the User Administration form. The following functions can be protected: <ul style="list-style-type: none"> ▪ create and edit maintenance jobs ▪ protect filters ▪ acknowledge maintenance alarms

Operator tasks

The operator will typically use the following functions:

This feature ...	allows the operator to ...
Acknowledge maintenance alarms	acknowledge maintenance alarms either in the maintenance or alarm list
View maintenance instructions	view the maintenance instructions provided by the system designer. This may be a textual description, a video clip, a Help topic, etc.
Complete maintenance alarms	complete maintenance alarms, once the related maintenance job is performed. On completion, a new maintenance interval is begun.
Apply filters	use filters to limit the number of maintenance alarms shown in the list. The filters are normally defined by the system designer.

1.3 Maintenance User Interface

Maintenance User Interface

Before you start using the Maintenance module, we recommend that you spend a few minutes getting familiar with the user interface.

The picture below shows the user interface elements of the Maintenance form.

Maintenance - All Jobs

Job Handler Configuration

Acknowledge Complete Restart Refresh List Print Open Job Note View Description Find in Supervise

Maintenance Job View Job Documents Search

View Filters

Maintenance Jobs Due

- All Maintenance Jobs
 - Maintenance jobs in Area: Cases
 - Maintenance jobs in Area: Global
 - Maintenance jobs that are periodical

Job Name	Job Type	Started	Value	Progress	Due In	due after	Area Name	Alarm No.
Boiler Ash Hop...	Periodical	20-07-2010 08:31:28	5,9 min...	29,7%	14 minu...	20 minutes	Cases	
Shredder - conf...	Periodical	20-07-2010 08:31:32	5,9 min...	100,0%	Now	5 minutes	Cases	
CoffeeBlend job	Used time	20-07-2010 08:31:24	5,7 min...	57,3%	4 minutes	10 minutes a...	Training	
Level in pump ...	Counter	20-07-2010 08:16:12	0 reach...	0,0%	-	2 reached	Training	

Elements in the Maintenance interface

Here is a short description of each element in the user interface. These will also be explained more thoroughly later in the help file.

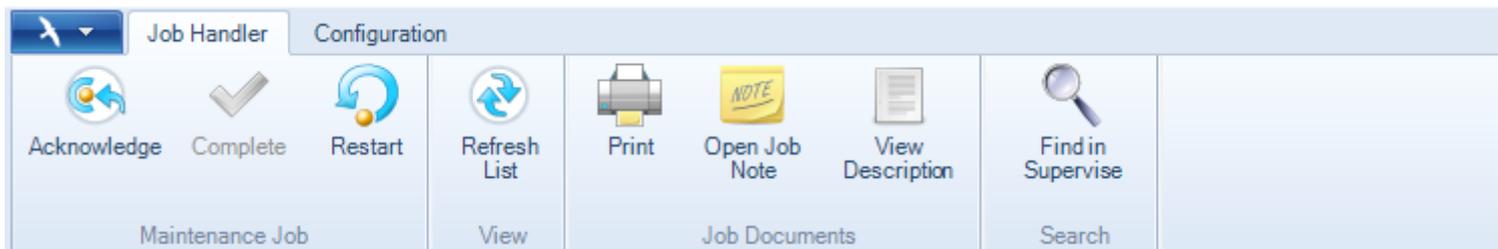
#	Element	Description
1	Application button ¹	<p>The application button lets you create a new Maintenance job. Click "Creating maintenance jobs" on page 9 to see how to create a Maintenance job.</p> <p>Also general print and print setup are available.</p> 
2	Ribbon ¹	<p>There are two context sensitive Ribbons:</p> <p>The "Job Handler Ribbon" on page 5 lets you acknowledge, complete, and restart maintenance jobs and more. In short, handling of jobs.</p> <p>The Configuration Ribbon lets you create and edit maintenance jobs and filters. You can also view information about the jobs and format the maintenance list containing the jobs.</p>
3	Filtered views	<p>View filters gives you an overview of the different filters you got. There are two main categories: Maintenance Jobs Due and All Maintenance Job</p> <p>Maintenance Jobs Due shows all the active maintenance alarms, that is, the ones</p>

¹The Application button, nicknamed "doughnut", is located in the upper left corner of the module's window. Click the button to access the application 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 button is a new term introduced with the .NET platform and used in, for example, the Microsoft Office 2007 package.

¹The 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.

#	Element	Description
		<p>that have not been completed yet.</p> <p>All Maintenance Jobs shows you all the jobs, that is, maintenance jobs which have been created but are not in alarm and all maintenance alarms which have been completed.</p> <p>When you define a filter, it will belong to one of the two main groups. You must then click the + sign to view the filters. In the example, filters have been defined in both groups. To apply a filter, simply click its name.</p>
4	Job View	<p>There will here be displayed the jobs, the filter you have chosen allows.</p> <p>You can choose the columns you want to display and also change the order of them.</p>
5	Text field	This text field can display either a note or a description of the job.
6	Status Bar	This bar displays the last measured time.

Job Handler Ribbon

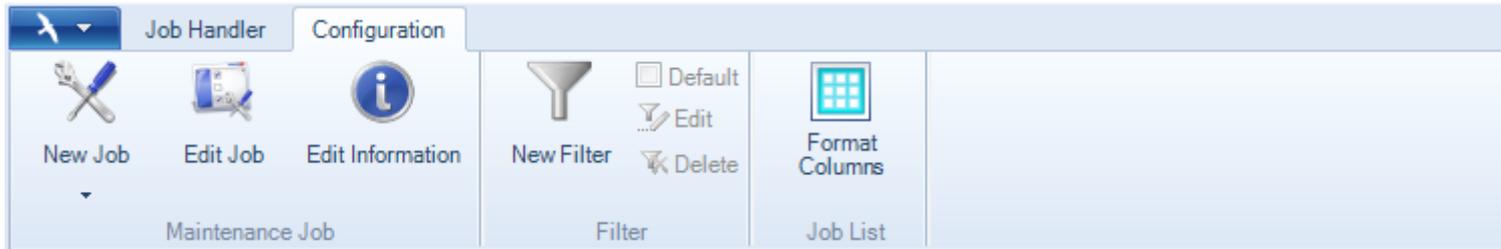


Field Help

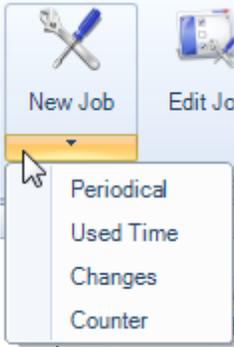
Fields	Description
Acknowledge	Acknowledge the selected job.
Complete	Complete the selected job. The job will disappear from the Maintenance Jobs Due list.
Restart	Restart the selected job.
Refresh List	Refresh the list if you made a change which does not appear in the list.
Print	Make a print of your selected job(s) and then select what you want in the print: job list data, job description and job notes.
Open Job Note	Opens the Note text for the selected job.
View Description	Displays the description of the job if there is any.

Fields	Description
Find in Supervise	Finds the associated object in Supervise and displays it.

Configuration Ribbon



Field Help

Field	Description
New Job	<p>Allows you to create a new maintenance job. This is a two-step procedure: first you select the relevant process component (IGSS object), then you define the maintenance job by specifying the type of the job (periodical, used time, changes, counter), and providing operator instructions, etc. You can also select type of job first, from the drop down menu shown.</p>  <p>Click here for more info on creating maintenance jobs</p>
Edit Job	<p>Allows you to change almost everything in the selected job: the name, the alarm fired when the job is due, the maintenance interval.</p> <p>Its also possible to attach some files to the job if you didn't done it when you created the job.</p>
Edit Information	Allows to edit the attached files of the job.
New Filter	<p>Create a new filter. Give it a name and enter some conditions.</p> <p>You can customize your conditions with the condition editor.</p>
Default	Set the selected filter as default. It means that this filter will be applied

Field	Description
	when you start maintenance.
Edit	Edit the selected filter.
Delete	Delete selected filter.
Format Columns	Allows you to choose the columns you want to display and in which order.

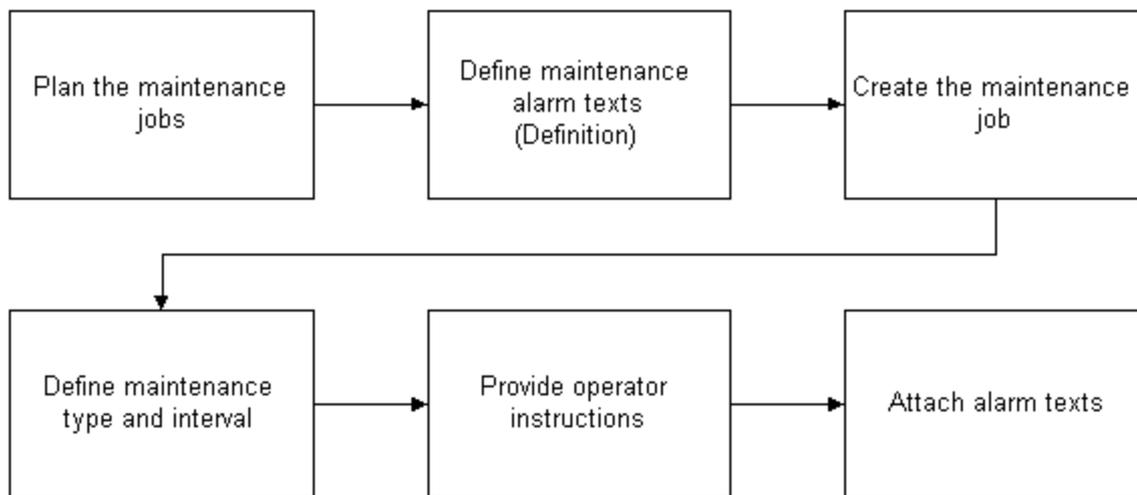
Chapter 2: Workflow in Maintenance

2.1 Overview: the complete workflow

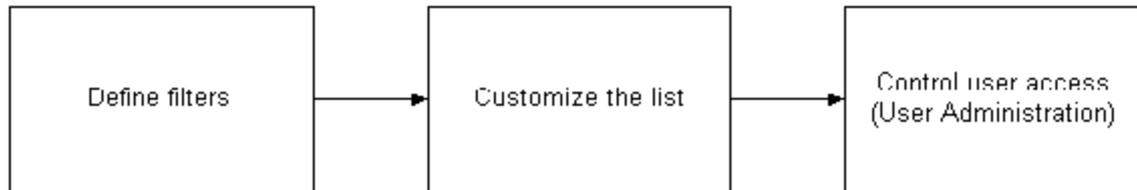
The flowcharts below show the complete life cycle of a maintenance job.

The system designer creates and maintains the job and the operator handles the maintenance alarms.

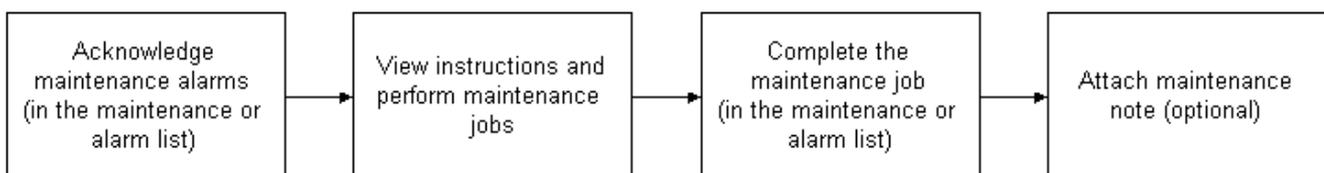
System designer tasks



Optional tasks



Operator tasks



Chapter 3: System Designer Tasks

3.1 Overview

Creating maintenance jobs

The system designer creates the maintenance job. The job definition contains a maintenance interval for a specific process component, for example, a pump. The job also contains maintenance instructions for the operator.

When the specified maintenance interval expires, the operator will get an alarm to make sure that the requested maintenance is performed in due time. The operator will then acknowledge the alarm, perform the actual maintenance job and then complete the alarm. Once completed, a new maintenance interval is started.

Creating a maintenance job

You can create a maintenance job for the analog, digital and counter IGSS object types, defining maintenance job types depending on the IGSS object selected. Some maintenance job types can only be applied to certain IGSS object types.

When you create a maintenance job you must first select the relevant process component (IGSS object) and define the maintenance job type (periodical, used time, changes, counter).

You can select the object first and define the job type afterwards, or define the job type first and then select the object afterwards.

Once the job type has been defined and the object selected, you must define the job specific parameters, for example providing operator instructions or setting in the **New <Job type> Job** form.

Identical job types on the same object with the same alarm number

While you can create maintenance jobs of the same job type on the same object and assign them the same alarm number, it will not be possible to differentiate between the maintenance jobs when they are triggered in the **Active Alarms** form. You must open the Maintenance form in order to determine which maintenance job is active.

If IGSS User Administration is enabled, the current user must have the **Can Define** right to create maintenance jobs.

The New Job form

The contents and fields of this form depend on which job type you selected. For example, if you chose a Periodical job, the form title will be named **New Periodical Job**.

The **New <Job Type> Job** form is used to define the job specific parameters for that maintenance job.

You can have more than one job of each type (periodical, used time, changes or counter) applied to one object.

See Also

Used Time maintenance

Counter maintenance

Periodical Maintenance

Changes maintenance

Attaching alarm texts

If you attach an alarm number and alarm text to a maintenance job, an alarm will be triggered in the **Alarm List** form when the maintenance job is due. The maintenance alarm in the **Alarm List** form will be marked with a maintenance icon, indicating that the alarm originated from a maintenance job.

When you acknowledge the maintenance alarm in the **Alarm List** form, the maintenance job in the **Maintenance** form will automatically be acknowledged as well.

There are several good reasons why you should attach an alarm text to a maintenance job:

- the alarm will be visible in the alarm list and directly on the process diagrams
- the operator can handle maintenance alarms either from the maintenance list or the alarm list
- the color used in the maintenance list and alarm list will reflect the colours defined for the alarm text (alarm and acknowledge colours)

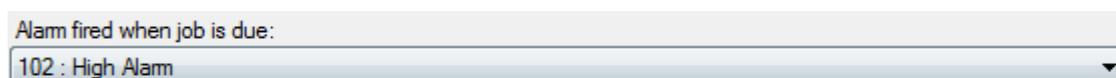
STEP 1: Create the alarm text in Definition

Before you start creating maintenance jobs, it is recommended to create the new maintenance-related alarm texts first. This is done in Definition by selecting **Edit** → **Alarm Texts** and then clicking **New**.

- It is not possible to create or edit alarm texts from Maintenance.

STEP 2: Attach the alarm text in Maintenance

Once an alarm text is defined in Definition, you can attach it to a maintenance job simply by selecting it in the **Alarm Text** drop-down list in the **New Job** dialogue.



Alarm fired when job is due:
102 : High Alarm

How the operator handles alarms

When the specified maintenance interval expires, an alarm will occur in the maintenance list and in the alarm list. The operator then acknowledges the alarm and performs the maintenance job as described in the operator instructions. When the maintenance is done, he will complete the alarm in the maintenance list.

Providing operator instructions

Purpose

To make sure that a maintenance job is performed correctly and consistently by the plant operators, you must supply precise and adequate step-by-step instructions.

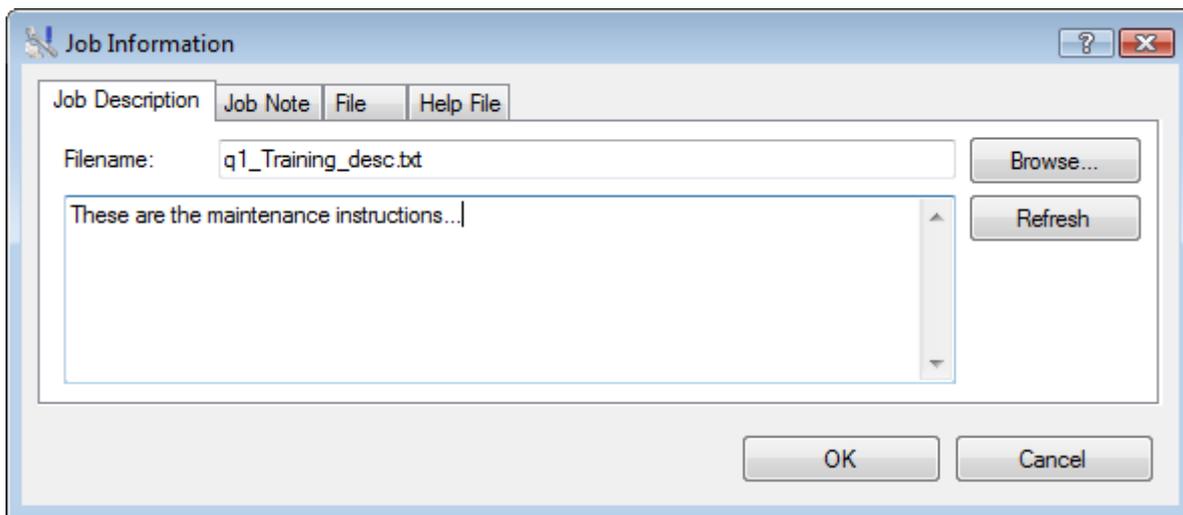
How to present instructions

There are three ways to present maintenance instructions as follows:

- Write a detailed maintenance instruction yourself (**Job Description** tab)
- Attach a file that describes or shows the maintenance instructions. This could be an electronic manual from the component manufacturer, a video file showing the instructions, etc. (**File** tab)
- Attach a Help topic that describes the maintenance instructions (**Help File** tab)

The Maintenance Information dialogue

The figure below shows the **Job Information** dialogue. Click on any of the four tabs for further information.



Viewing the job status

Purpose

Once you have created a maintenance job, you may want to view its status from time to time. You will then get details about the latest alarm time, latest acknowledgement time, etc.

Accessible to both system designer and operator

You have an overview of the job status with the list of all the different columns displayed all the time at the bottom of **Maintenance**.

You have the possibility to customize the columns you want to be displayed, by clicking on **Format Columns** under the **Configuration** tab.

For further details about the customization go to "Customizing the list" on page 13

Job Name	Object Name	Job Type	Started	Activated	Acknowledged	Completed	Value	Progress	Due In	Interval	Area Name	Alarm No.	Alarm Text	Object Description	Rec
CS.R05.M.124...	CS.R05.M.124...	Used time	01/11/2010 02...				0,5 hou...	52,3%	28 minu...	1 hours active	Cases			Net pump 2 man/...	28
CS.R03.M.12x...	CS.R03.M.12x...	Periodical	31/10/2010 19...	31/10/2010 19...			449,4 m...	100,0%	Now	1 minutes	Cases			Net pumps, flow ...	27
p1 job	p1	Changes	31/10/2010 18...				0 chan...	0,0%	-	1 changes	Training			Pump water	26
Max. værdi an...	p1	Used time	18/10/2010 15...	19/10/2010 09...			477,3 m...	100,0%	Now	2 minutes act...	Training	3042	Højt Højt tryk	Pump water	25
calibrate flow m...	q1	Periodical	18/10/2010 15...	18/10/2010 15...	19/10/2010 09...		19422...	100,0%	Now	2 minutes	Training	4888	Høj alarm, tempe...	Flow water in	24
replace pump	p1	Periodical	01/10/2010 13...		01/10/2010 13...		0 minutes	100,0%	Now	2 minutes	Training	2009	Fejl på Udstyr	Pump water	22
Calibrate flow ...	q1	Periodical	29/09/2010 15...	29/09/2010 16...			46773...	100,0%	Now	2 minutes	Training	2009	Fejl på Udstyr	Flow water in	19
CS.M.124 - Pu...	CS.M.124	Used time	15/07/2010 08...				0 hours ...	0,0%	-	15000 hours ...	Cases			Net pump 2	18
CS.MV.201 - V...	CS.MV.201	Changes	13/07/2010 10...	13/07/2010 10...			71769 ...	100,0%	Now	50000 chang...	Cases			Motor valve for n...	16
CS.MV.202 - V...	CS.MV.202	Changes	13/07/2010 10...				2 chan...	0,0%	276794...	50000 chang...	Cases			Motor valve for n...	15
CS.M.121 - An...	CS.M.121	Periodical	02/07/2010 10...	12/07/2010 10...	12/07/2010 10...	27/10/2010 14...	0,7 wee...	1,3%	359,4 d...	52 weeks	Cases			Net pump 1	7

Creating filters

Purpose

By defining filters you can obtain the following advantages:

- allow the operator to select what he wants to view in the maintenance list by clicking the name of the filter
(for example, all maintenance alarms in a specific area of the configuration.)
- limit the maintenance list to show only those maintenance jobs that fulfil certain conditions (for example, all maintenance alarms acknowledged yesterday).

How to define filters

You can define a new filter by selecting one of the two sections in the tree view (**Maintenance Jobs Due** or **All Maintenance Jobs**) and clicking the **New Filter** button to open the **Filter Setup** form.

Give the filter a descriptive name and add the conditions you want the filter to apply to the list.

Protecting filters

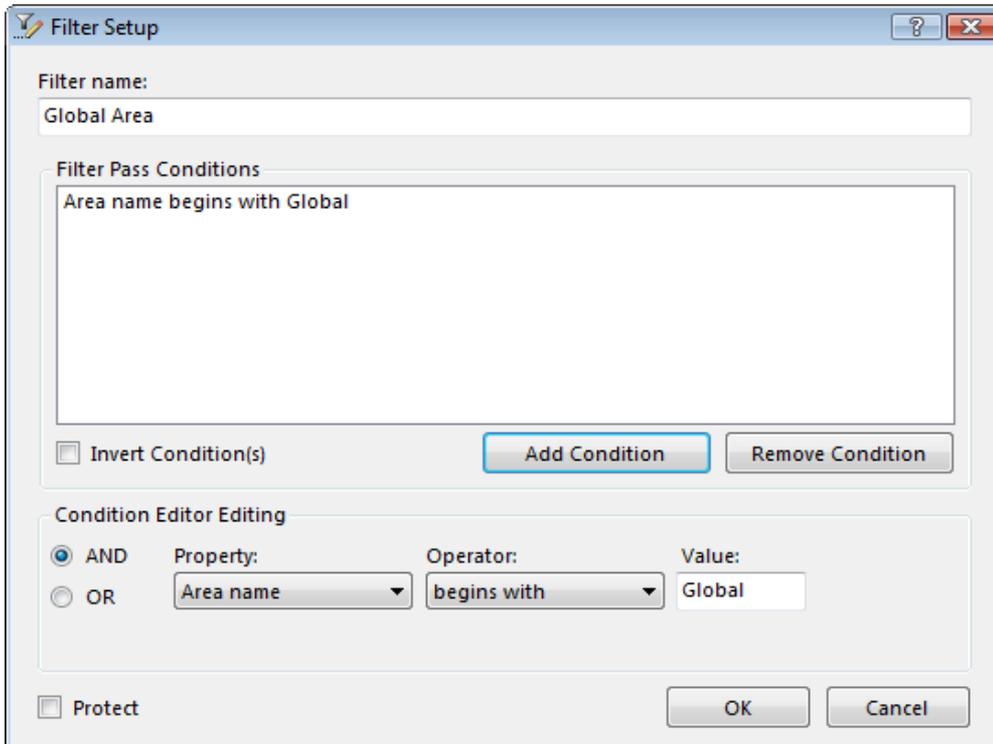
You can protect a filter from unauthorized use by checking the **Protect** box. When enabled, the rights of the current user will be checked and he can only edit the filter, if he has the **Can use system commands** user right in his profile (user group).

To enable the protection, you must define the relevant user groups, rights and users in the **User Administration** module. Open the User Administration Help file for further information.

The Filter Setup dialogue

The figure below shows the above dialogue.

- For an explanation of the individual items in the dialogue, click the  in the upper right hand corner of the dialogue, then click the item you want information about.



Customizing the list

Purpose

You may want to customize the maintenance list for the following reasons:

- You want to change the column sequence to show the columns that are most important for you first
- You want to change the sort order to show the most important maintenance alarms first

Maintenance includes two functions for these purposes as described below.

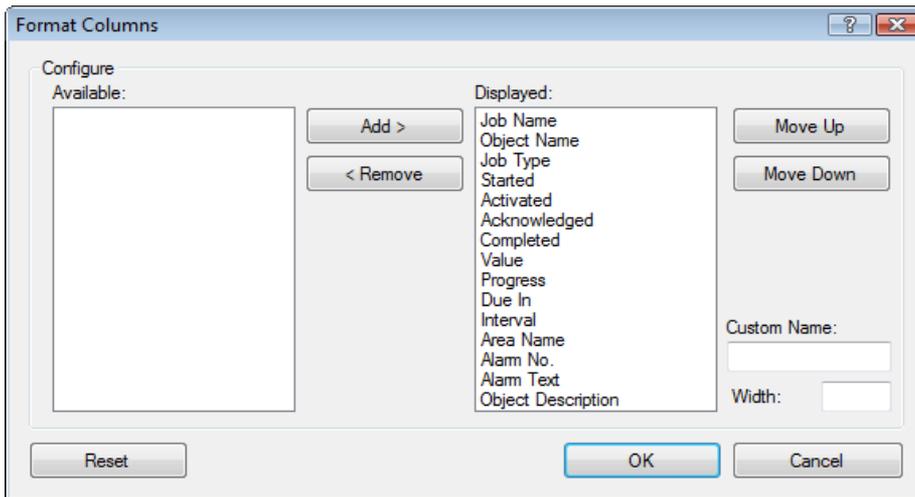
Changing the column sequence, column names, etc.



To customize the list, click the  button under **Configuration**, to open the **Format Columns** dialogue shown below. In this dialogue, you decide exactly which columns to show, their order and even their names.



For an explanation of the individual items in the dialogue, click the  in the upper right hand corner of the dialogue, then click the item you want information about.



Changing the sort order

To change the order of the columns, you just have to click on the **Move Up** and **Move Down** buttons.

Controlling user access

You can use the IGSS User Administration module to set up user rights in order to protect key functionality and functions in Maintenance from unauthorized use.

You can increase the security by using the IGSS Object Level Protection scheme to further increase the Maintenance module's user permissions.

The protection only works, if you have defined the relevant user groups, rights and users in the User Administration module and set up Object Level Protection for the affected objects.

User Administration setup

You can set up the IGSS User Administration module to improve general Maintenance module security for the following functions:

To use this function ...	you must have this right (defined in User Administration) ...
Define, edit and delete maintenance jobs	Can edit maintenance jobs (typically system designer)
Edit Maintenance job description and maintenance job note entries	Can edit maintenance jobs (typically system designer)

To use this function ...	you must have this right (defined in User Administration) ...
	Note: This setting is disabled by default and must be enabled in the Registry settings of the local machine.
Edit protected maintenance filters	<p>Can use system commands (typically system designer)</p> <p>The Protect check box on the Filter Setup form must be selected for each filter which is to be protected.</p>

Object Level Protection

In addition to improving the general Maintenance module security, you can also provide an added layer of security by using the Object Level Protection, specifying for each object the following Maintenance functions:

To use this function ...	select this Object Level Protection security level
Can acknowledge maintenance alarms in the Active Alarms form or in the Maintenance form.	Can acknowledge alarms (typically operators)
Can register maintenance jobs as complete	Can acknowledge alarms (typically operators)

Example of security roles

The example below illustrates how user rights and object level protection security levels can be assigned to various operator roles in the Maintenance module:

This user group ...	has the following User rights ...
Administrator	<ul style="list-style-type: none"> • Can define • Can edit Maintenance jobs • Can administer • Can use system commands
System Designer	<ul style="list-style-type: none"> • Can define • Can edit Maintenance jobs • Can use system commands
Operator	<ul style="list-style-type: none"> • Can acknowledge alarms (Object Level Protection security option)

Once everything is set up properly, the rights of the user who is currently logged in will be checked. If a user tries to perform an operation that he is not entitled to do, the **Temporary Login** dialogue appears allowing another user with the necessary right to log in.

See Also

"Enable user rights management for job notes" on page 24

"Enable mandatory Complete notes" on page 25

"Create a new filter" on page 21

3.2 How To...

Create and Edit Maintenance Jobs

Create a new maintenance job

Maintenance jobs can be created analog, digital and counter objects, although some maintenance job types can only be created for specific object types, for example Used time jobs can only be created for digital objects .

When you create a new maintenance job, you can choose between:

- Creating a maintenance job for a new object
- Creating a maintenance job based on an existing object
- Creating a maintenance job based on an existing job

If user administration is enabled, you must have the **Can define** right to create a maintenance job. If you do not have this right, the **Temporary Login** dialogue appears.

Creating a maintenance job for a new object

1. Click on the **New Job** button to open the **Object Selection for Maintenance job** form¹.
2. In the **Job Type** group, select the type of maintenance job you want to create:
 - Periodical (analog, digital or counter objects)
 - Counter (analog or counter objects)

- Used Time (digital objects)
 - Changes (digital objects)
3. In the **Objects** list, select the Indicator object for the Maintenance job.

If necessary, use the filter to find the object you want.
 4. Click the **OK** button to select the object and open the **New <Jobtype> Job** form where you can set up the parameters of the new maintenance job.

The job type is displayed in the <JobType> placeholder in the form title.

¹ You can also select the drop-down list in the **New Job** button and select the job type directly

See Also

"Creating a Maintenance Job based on an existing object" on page 17

"Creating a Maintenance job based on an existing job" on page 18

"Creating maintenance jobs" on page 9

Creating a Maintenance Job based on an existing object

When you create an maintenance job based on an existing object, you can create a new identical job type for the same object or create a different job type for the same object.

You cannot change the Indicator object but can change the Maintenance object and other job type specific parameters.

You should change the job title in order to differentiate between maintenance jobs in the job list.

Create an identical job type for the same object

1. Select an existing job in the job list of the **Maintenance** form.
2. Click the **New Job on same object** button in the **Maintenance** form ribbon to open the **New <Jobtype> Job** form.
3. In the **New <Jobtype> Job** form, you can:
 - Change the job title in the **Title** field
 - Change the Maintenance object by clicking the **Change** button and selecting a new maintenance object.

- Change the maintenance job descriptions, job notes and add or remove any attached job files or help files in the **Job Description, Job Note, Files/Folder** and **Help File** tab pages.
 - Change any job type specific parameters, for example defining a new periodic interval for Periodical job types or defining a counter limit for Counter job types
4. Click the **OK** button to save the job parameters and create the new job.

Create a different job type for the same object

1. Select an existing job in the job list of the **Maintenance** form.
2. In the drop down list for the **New Job on same object** button in the **Maintenance** form ribbon, select the job type you want to create.
3. The **New <Jobtype> Job** form opens where the selected job type is displayed in the <JobType> placeholder in the form title..
4. In the **New <Jobtype> Job** form, you can:
 - Change the job title in the **Title** field
 - Change the Maintenance object by clicking the **Change** button and selecting a new maintenance object.
 - Define or Change the maintenance job descriptions, job notes and add or remove any attached job files or help files in the **Job Description, Job Note, Files/Folder** and **Help File** tab pages.
 - Define any job type specific parameters , for example defining a new periodic interval for Periodical job types or defining a counter limit for Counter job types
5. Click the **OK** button to save the job parameters and create the new job.

See Also

"Creating maintenance jobs" on page 9

"Creating a Maintenance job based on an existing job" on page 18

Creating a Maintenance job based on an existing job

When you create a maintenance job based on an existing job, you can create a new identical job type for the same object or for different objects.

You can change the job parameters and the Indicator and Maintenance objects, but cannot change the job type.



You should change the job title in order to differentiate between maintenance jobs in the job list.

Create a maintenance job based on an existing job

1. Select an existing job in the job list of the **Maintenance** form.
2. Click the **New Job as clone** button in the **Maintenance** form ribbon to open the **New <Jobtype> Job** form.
3. In the **New <Jobtype> Job** form, you can:
 - Change the job title in the **Title** field
 - Change the Indicator object by clicking the **Change** button by the **Indicator object** field and selecting a new indicator object.
 - Change the Maintenance object by clicking the **Change** button by the **Maintenance object** field and selecting a new maintenance object.
 - Change the Maintenance job descriptions, job notes and add or remove any attached job files or help files in the **Job Description, Job Note, Files/Folder** and **Help File** tab pages.
 - Change any job parameters, for example defining a new periodic interval for Periodical job types or defining a counter limit for Counter job types
4. Click the **OK** button to save the job parameters and create the new job.

See Also

"Creating maintenance jobs" on page 9

"Creating a Maintenance Job based on an existing object" on page 17

Edit maintenance jobs

If user administration is enabled, you must have the **Can define** right to edit maintenance jobs. If you do not have this right, the **Temporary Login** dialogue will appear.

1. Select the maintenance job you want to edit in the maintenance list.



2. Click .
3. Change the properties, as required.
4. Click **OK**.



To delete a maintenance job, right-click on the job you want to delete and click **delete**.

Delete maintenance jobs

If user administration is enabled, you must have the **Can define** right to delete maintenance jobs. If you do not have this right, the **Temporary Login** dialogue will appear.

1. Select the maintenance job you want to delete in the maintenance list.
2. Right-click on the job you want to delete and click **delete**.

View the job status

You can gain a quick overview of the status of the maintenance jobs by looking at the **Value, Progress** and **Due In** columns in the Job List in the **Job Handler** form.

- The **Value** column displays the interval or changes which the maintenance job is measured in. If the maintenance job is overdue, the display color will be red. Otherwise the display color of the **value** column is blue.
- The **Progress** column displays the status of the present maintenance job and presents an estimate of how much of the maintenance job remains until it is due. The progress bar is green if the maintenance job is less 90% due. If the maintenance job is more than 90% due, the progress bar will be brown and if the maintenance job is overdue, the progress bar will be red.
- You can gain overview when the maintenance job is due in the **Due In** column. Maintenance jobs that are due shortly can sometimes be completed prior to their scheduled start if the plant is large or if it makes sense to collect all maintenance jobs for one section or piece of machinery.
- You can see if a job has been acknowledged or completed if there are dates in the **Acknowledged** and **Completed** columns.

Click the **Find in Supervise** button to open the diagram and go directly to the object in the maintenance job list to gain an overview of the status of the controlling object. The **Supervise** module must be started in order to be able to open the diagram.

Create and Edit Filters

Create a new filter

1. Select the section in which you want to create a filter (**Maintenance Jobs Due** or **All Maintenance Jobs**).
2. Click the **New Filter** button to open the **Filter Setup** form.
3. In the **Filter name** box, type a descriptive name for the filter.
4. In the **Condition Editor** group, select the first condition you want to use and click **Add**. For example, area name begins with "G".
5. Repeat step 4 for all the conditions you want to use. For each condition, you can specify whether it is an **And** or **Or** condition.
6. If necessary, check **Protect** to protect the filter from unauthorized use.

A protected Maintenance filter will require a user to have the **Can use system commands** user right defined in the **User Administration** module in order to edit the filter.

7. Click **OK**.

You can negate all filter conditions by checking the **Not** box. For example, to show all maintenance jobs that do not belong to the **Global** area, create a filter where area name is exactly **Global** and then negate the expression.

See Also

"Delete a filter" on page 22

"Edit a filter" on page 21

"Filter Setup Form" on page 48

Edit a filter

1. Select the name of the filter you want to edit in the tree view.
2. Right-click on the filter you want to edit and click **Edit Filter** or click the **Edit** button in the **Filter** group.
3. Do one of the following:
 - To create a new condition, define it in the **Condition Edition** group and click **Add**.

- To change a condition, select that condition in the list, then edit the properties in the **Condition Edition** group and click **Change** to apply the changes.

3. When you are satisfied with the filter, click **OK**.

If the filter is protected, you must have the **Can use System Commands** right to edit the filter. User rights are defined in the **User Administration** module.

See Also

"Create a new filter" on page 21

"Delete a filter" on page 22

Delete a filter

A protected Maintenance filter will require a user to have the **Can use system commands** user right defined in the **User Administration** module in order to delete the filter.

1. Select the name of the filter you want to delete in the tree view.
2. Right-click on the filter and click **Delete Filter** or click the **Delete** button in the **Filter** group.

See Also

"Create a new filter" on page 21

"Edit a filter" on page 21

Customize the List

Customize the list format

If you want to adjust the columns in the maintenance job list, change the column sequence, rename columns and remove or add columns to the list, use the following procedure:

In the **Configuration** tab, click the **Format Columns** button to open the **Format Columns** form.

- To change the column sequence, select the name of the column you want to move and click the **Move Up** or **Move Down** buttons to adjust the placement of the selected column.

- To remove a column from the job list, select the column in the **Displayed** pane and click the **<Remove** button. The selected column is removed from the **Display** pane and appears in the **Available** pane.
- To change a column name, select the column and enter the new name in the **Custom Name** field.
- To set an exact column width, select the column and enter an exact width in pixels in the **Width** field.
- To reinstate a column that has been removed, select the column in the **Available** pane and click the **Add>** button.

Tips

- To return to the default column sequence and names, click the **Reset** button.

Change the sort order

To change the sort order of the maintenance job list, right-click the column headers. By clicking in the column headers, you can toggle between ascending or descending sorting.

The sort order will automatically be reset when the **Maintenance** form is closed.

Control User Access

Define user rights

If you want to protect certain functions in the Maintenance module, you must define the relevant user groups and user rights in the **User Administration** module in the IGSS Master

For more information regarding User Administration, see the **User Administration** online help found in the **Help** pane of the IGSS Master.

See Also

"Controlling user access" on page 14

Change display mode for the Maintenance Job Form

There are two display modes which can be applied to the **Maintenance** form:

- Basic
- Advanced

The **Maintenance** form is by default started in Advanced mode, where an operator or system designer can create, edit and delete new maintenance jobs as well as create, edit and delete filters by using the buttons on the **Configuration** tab.

You can change the default start mode of the **Maintenance** form to Basic. Displaying the **Maintenance** form in Basic mode will remove the **Configuration** tab from the form.

The following functions will not be accessible when the Basic mode is enabled:

- Create new maintenance jobs
- Edit existing maintenance jobs
- Delete maintenance jobs
- Create new filters
- Set existing filters as defaults
- Edit existing filters
- Delete filters
- Edit maintenance job information
- Format and change columns of the **Maintenance** form

To set display mode to Basic

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.
2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32, right-click on the **SimpleMode** key and select **Modify**.
3. In the **Value Data** field of the **Edit String** form, enter the value "0" and click the **OK** button to save.
4. Click **File > Exit** to exit the **Registry Editor** form and save the registry values.

To set display mode to Advanced

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.
2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32, right-click on the **SimpleMode** key and select **Modify**.
3. In the **Value Data** field of the **Edit String** form, enter the value "1" and click the **OK** button to save.
4. Click **File > Exit** to exit the **Registry Editor** form and save the registry values.

Enable user rights management for job notes

Users are by default permitted to create and edit Maintenance job note entries as well as editing the Maintenance job description.

If you have enabled user rights management for your IGSS installation and you are using the User Administration functionality to manage user rights for the **Maintenance** module, you can connect user access to job notes and job descriptions to the **Can edit Maintenance jobs** user right by enabling the **ReqEditPwd** Windows registry key setting for the local machine.

The **ReqEditPwd** Windows registry key is disabled by default.

To enable the ReqEditPwd registry key

1. Click **Start** and type "Regedit.exe" in the search field of the Windows Start menu to open the **Registry Editor** form on the local machine.
2. In the left pane of the **Registry Editor** form, click HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32_HKLM.
3. In the right pane, right-click the **ReqEditPwd** registry key and select **Modify** to open the **Edit DWORD Value** form.
4. In the **Value data** field, enter "1".
5. Click the **OK** button to close the **Edit String** form
6. Close the **Registry Editor** form to save the new registry setting.

To disable the ReqEditPwd registry key

1. Click **Start** and type "Regedit.exe" in the search field of the Windows Start menu to open the **Registry Editor** form on the local machine.
2. In the left pane of the **Registry Editor** form, click HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32_HKLM.
3. In the right pane, right-click the **ReqEditPwd** registry key and select **Modify** to open the **Edit DWORD Value** form.
4. In the **Value data** field, enter "0".
5. Click the **OK** button to close the **Edit String** form
6. Close the **Registry Editor** form to save the new registry setting.

See Also

"Controlling user access" on page 14

"Enable mandatory Complete notes" on page 25

Enable mandatory Complete notes

The system designer can enable mandatory Complete notes for the Maintenance module.

When mandatory Complete notes are enabled, the user is prompted to provide a note whenever the user completes a maintenance job (selects a maintenance job and clicks the **Complete** button)

To enable mandatory Complete notes

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.
2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32, right-click on the **Requires Complete Note** key and select **Modify**.
3. In the **Value Data** field of the **Edit String** form, enter the value "1" and click the **OK** button to save.
4. Click **File > Exit** to exit the **Registry Editor** form and save the registry values.

To disable mandatory Complete notes

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.
2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32, right-click on the **Requires Complete Note** key and select **Modify**.
3. In the **Value Data** field of the **Edit String** form, enter the value "0" and click the **OK** button to save.
4. Click **File > Exit** to exit the **Registry Editor** form and save the registry values.

Set up default Pending percent

You can use the command line interface to print a list of maintenance jobs that are nearly due from the **Job scheduler** or by using a Windows command prompt. The command line parameter that is used to do this is the -soon parameter.

The -soon parameter only includes active jobs that are considered to be nearly due.

A job is considered to be nearly due if the maintenance job progress percent is equal to or above the value defined in the **Maintenance pending at...** field of the **Maintenance job** form. The default value being 95 percent, but you can change the default value

To change the default Pending percent

1. Open the **Registry Editor** form on the local machine. Click **Start** and type "Regedit.exe" in the search field of the **Windows Start** menu.
2. In the **Settings** folder in HKEY_CURRENT_USER\Software\Schneider Electric\IGSS32\V12.00.00\Mnt32, right-click on the **DefaultSoonPercent** key and select **Modify**.
3. In the **Edit String** form, select the **Decimal** option.
4. In the **Value Data** field of the **Edit String** form, select the **Decimal** option and enter the required new default value and click the **OK** button to save.

5. Click **File > Exit** to exit the **Registry Editor** form and save the registry values.

See Also

"Maintenance: CommandLineInterface" on page 33

Chapter 4: Operator Tasks

4.1 Create Maintenance Job

Create a Maintenance Job in Supervise

An operator can create a maintenance job from an object in Supervise by right-clicking the object in the process diagram and selecting **New Maintenance Job**.

If the Maintenance module is not already running, it will be started and the **Select Job type and Indicator object** form will be opened.

The object selected in the Process diagram is the Maintenance object and the operator can select another object to be the Indicator object in the **Select Job type and Indicator object** form.

See Also

New/Edit Maintenance Job

4.2 Handle Maintenance Jobs

Acknowledge maintenance jobs

To acknowledge a Maintenance jobs, select the job you want to acknowledge in the maintenance list in the **Job Handler** tab of the **Maintenance** form and click on the **Acknowledge** button.

If there are multiple Maintenance jobs you want to acknowledge, you can select all the jobs and click on the **Acknowledge** button

Tips

- You can also right-click in the list and select **Acknowledge**.

View maintenance instructions

If a maintenance job contains additional instructions, the View Job file or View job Help buttons will be displayed in the **Job documents** group in the **Job Handler** tab.

1. In the **Job Handler** tab, select the maintenance job for which you want to view instructions.
2. Click the **Open Job Note** button in the **Job Documents** ribbon to open the **Note** pane in the right side of the screen.
3. In the **Note** Pane, write the note to the active Maintenance job.

4. Close the **Note** pane by clicking the [X] in the upper-right hand corner. A note icon will appear on the maintenance job in the job list.
5. If a job description or job file has been attached to the Maintenance job, a **View Description** button and/or the **view job file** button will be accessible in the **Job Handler** tab.

Tips

- You may want to print the instructions to have them at hand when you perform the physical maintenance on the process component.

Complete maintenance jobs

Only maintenance jobs that have been acknowledged can be registered as completed.

To register a maintenance job as completed, select the job in the maintenance list in the **Job Handler** tab of the **Maintenance** form and click the **Complete** button.

If there are multiple Maintenance jobs that are completed, you can select all the jobs and then click on the **Complete** button.

The selected maintenance job will become red to indicate that it has been completed. Once completed, a new maintenance job is often initiated, depending on the maintenance job parameters.

Tips

- You can also right-click on the maintenance job in the list and select **Complete**.

Attach maintenance notes

Job notes can be used to document your work and progress on the maintenance job, to document unusual occurrences or special situations or if you deviate from the maintenance job instructions. You can edit job notes from within IGSS but since job notes are saved as text files on the local machine, you can edit the job notes without starting IGSS by using a text editor .

You can attach notes to the maintenance jobs in the job list.

1. In the **Job Handler** tab of the **Maintenance** form, select the maintenance job to which you want to attach a note.
2. Click the **Open job note** button. The job note text field appears on the right side of the Maintenance form
3. Write the maintenance note in the text field at the bottom of the **Note** tab.
4. Click the **Add note** button to create the note.

Tips

- It is recommended to include your initials and the current date before the note itself. This will make it much easier to track notes for a maintenance job.

Print the maintenance list

1. Select the **Application menu** > **Print** or click the **Print** button in the **job handler** tab. The **Print jobs** dialog appears.
2. In the **Print jobs** dialog, decide what you want to print by checking the checkboxes:
 - Include **job list data**
 - Include **job descriptions**
 - Include **job notes**
3. In the **Print** dialog, select the print quality, number of copies, etc. Use the **print setup** to customize your print.
4. Click the **Print** button to start the print job.

Tips

- If you want to print to another printer, select the appropriate printer in the **Print** dialogue. In the setup dialogue, you can also change the paper size and orientation (**Portrait** or **Landscape**).

View the job status

You can gain a quick overview of the status of the maintenance jobs by looking at the **Value**, **Progress** and **Due In** columns in the Job List in the **Job Handler** form.

- The **Value** column displays the interval or changes which the maintenance job is measured in. If the maintenance job is overdue, the display color will be red. Otherwise the display color of the **value** column is blue.
- The **Progress** column displays the status of the present maintenance job and presents an estimate of how much of the maintenance job remains until it is due. The progress bar is green if the maintenance job is less 90% due. If the maintenance job is more than 90% due, the progress bar will be brown and if the maintenance job is overdue, the progress bar will be red.
- You can gain overview when the maintenance job is due in the **Due In** column. Maintenance jobs that are due shortly can sometimes be completed prior to their scheduled start if the plat is large or if it makes sense to collect all maintenance jobs for one section or piece of machinery.
- You can see if a job has been acknowledged or completed if there are dates in the **Acknowledged** and **Completed** columns.

Click the **Find in Supervise** button to open the diagram and go directly to the object in the maintenance job list to gain an overview of the status of the controlling object. The **Supervise** module must be started in order to be able to open the diagram.

Handling maintenance alarms

When a maintenance alarm occurs, two things happen:

- the alarm is shown in the **Active Maintenance Objects** section in the maintenance list and
- the alarm is shown in the **All Active Alarms** section of the alarm list (provided that an alarm text was attached to the maintenance job)

The operator can handle the maintenance alarm as follows:

Acknowledge the alarm

To acknowledge an alarm, select the alarm in either the Maintenance job list or the **Active Alarms** form and click the **Acknowledge** button

View maintenance instructions and perform the job

Before you perform the maintenance, select the maintenance job, and click the **Info** button to view the instructions.

Dependent on what kind of instruction the system designer has provided, you will find it on the **Job Description, Link** or **Help file** tab.

You may want to print the instructions to bring them with you, when you perform the physical maintenance job.

Complete the job

When the maintenance job is done, select the alarm in the list and click the **Complete** button.

Attach a maintenance note (Optional)

If necessary, you can attach a note to a maintenance job, writing any necessary information relevant to the maintenance job.

Select the job and click the **Note** button. On the **Job Note** tab, you can write the note in the text field and click the **Add Note** button.

See Also

"Acknowledge maintenance jobs" on page 28

"Apply a filter" on page 32

"Attach maintenance notes" on page 29

"Complete maintenance jobs" on page 29

"Print the maintenance list" on page 30

"View maintenance instructions" on page 28

"View the job status" on page 30

4.3 Apply Filters

Apply a filter

Some filters may be protected. In that case, you must have the **Can use system commands** right in order to use them.

1. In the tree view, click the + sign beside the section (**Active Maintenance Objects** or **All Maintenance Objects**) that holds the filter you want to use.
2. Click the name of the filter.

Result: The maintenance list will now show all maintenance objects that fulfil the filter conditions.

Chapter 4: Command Line Interface

4.4 Maintenance: CommandLineInterface

Using the command line interface you can automatically print maintenance job lists either directly from a Windows command prompt or from the **Job Scheduler** program with a fixed interval or activated on an event in IGSS.

Each maintenance job is printed on its own page, but you can print an overview of the maintenance jobs which displays all the maintenance jobs on one page or more, depending in the number of maintenance jobs.

Syntax conventions

The following symbols are used:

Symbol	Description
Bold	Required Parameter
<placeholder>	Placeholder for a variable parameter.
(Pipe symbol)	Separates required parameters. You must use at least one of these parameters in the syntax and you may use two or more of them. NOTE: To separate these parameters, put a space between them.
[parameter]	Optional parameter that you may include in the command line.

Syntax

Use the following syntax (separate parameters with a space):

Maintenance.exe -print -active -descriptions -notes -area -soon

Parameter	Description
-print	The maintenance jobs are to be sent to the default printer installed on the local machine.
-active	Only the active maintenance jobs are to be processed.
-descriptions	Include job descriptions in the list of maintenance jobs.
-notes	Include job notes in the list of maintenance jobs.
-area	Only process maintenance jobs that affect objects created in the defined area.

Parameter	Description
-soon	<p>Only include the active jobs that are considered to be nearly due.</p> <p>A job is considered to be nearly due if the maintenance job progress percent is equal to or above the value defined in the Maintenance pending at... field of the Maintenance job form.</p>
-simple	<p>Create an overview of the maintenance job list on one page or more if there are many maintenance jobs.</p> <p>Maintenance job descriptions and job notes will not be included in the overview and the -descriptions and - notes parameters will be ignored if used.</p>

Job Scheduler example

This example prints all active maintenance jobs for objects in the North area.

Program Path: C:\Program Files\Schneider Electric\IGSS32\V12.0 \ GSS \ Maintenance.exe

Parameters: -active -Area North

Working Folder: -

Command Prompt Example

This example prints all active maintenance jobs for objects in the North area, but also includes any notes and job descriptions to the print output.

Maintenance -active - area North -descriptions - notes

Chapter 4: Form Help

4.5 Maintenance Form

Use this form to:

- Create and edit maintenance jobs
- Manage existing maintenance jobs
- Acknowledge, Re-start and Complete maintenance jobs
- Print maintenance job lists
- Create and edit maintenance job filters
- Change the appearance of the Maintenance job list

The Maintenance form is used by the System Designer and Operator both.

Preconditions

None.

Where do I find it?

In the **IGSS Master** > **Home** tab > **Maintenance** button or **IGSS Master** > **Design and Setup** tab > **Maintenance** button.

Button Description

Button	Tab and group	Description
Acknowledge	Job Handler > Maintenance Job	Click this button to acknowledge a Maintenance job.
Complete	Job Handler > Maintenance Job	Click this button to register an acknowledged Maintenance job as being completed.
Restart	Job Handler > Maintenance Job	Click this button to re-start an ongoing Maintenance job.
Refresh List	Job Handler > View	Click this button to refresh the maintenance job list. The maintenance job list is not refreshed as rapidly as the Alarm list. Clicking this button re-loads the maintenance job list to display all new changes to the list.
Print	Job Handler > Job Docu-	Click this button to send the Maintenance job list to the local machine's default printer.

Button	Tab and group	Description
	ments	
Open Job Note	Job Handler > Job Documents	Click this button to create, read or edit notes on the selected Maintenance job.
Open Job Help	Job Handler > Job Documents	Click this button to open the help file associated with the selected Maintenance job.
Open Job File	Job Handler > Job Documents	Click this button to open the file associated with the selected Maintenance job.
View Description	Job Handler > Job Documents	Click this button to open the job description defined for the selected Maintenance job.
Find in Supervise	Job Handler > Search	Click this button to locate the Indicator object of the selected maintenance job in the Supervise module . The Supervise module must be started in order to locate the Indicator object.
New Job	Configuration > Maintenance Job	Click this button to create a new maintenance job. Click the drop-down button to define the maintenance job type when you create a new maintenance job.
New Job on same Object	Configuration > Maintenance Job	This button is only accessible if you have selected a job in the job list. Click this button to create a new Maintenance job based on Indicator Object ¹ and Maintenance object of the selected job list. You can create different Maintenancejobs types (Periodical, Used time, Counter or Changes) depending on the Indicator object, but you cannot change the Indicator Object or Maintenance object. Click the drop-down button to define the maintenance job type when you create a new maintenance job.
New Job as Clone	Configuration > Maintenance Job	This button is only accessible if you have selected a job in the job list. Click this button to create a copy of the selected maintenance job, creating a new maintenance job of the same type. You can change the Indicator Object or Maintenance objects but cannot change the maintenance job type.
Edit Job	Configuration > Maintenance Job	Click this button to edit the parameters of the selected maintenance job.

¹The object whose values are used to trigger and track the maintenance job.

Button	Tab and group	Description
Edit Inform-ation	Configuration > Maintenance Job	Click this button to edit the maintenance job description for the selected maintenance job.
New Filter	Configuration > Filter	Click this button to open the Filter setup form to create a new filter. You must select a filter in the View filters area of the Maintenance form > Configuration tab before clicking the New Filter button.
Default	Configuration > Filter	Select this checkbox to set the selected filter as a default filter. A default filter will be run first when opening the Maintenance form
Edit	Configuration > Filter	Click this button to open the open the Filter setup form to edit the selected filter
Delete	Configuration > Filter	Click this button to delete the selected filter
Format Columns	Configuration > Job List	Click this button to open the Format Columns form to modify the columns displayed in the Maintenance form. You can change the name, width and sort order of the columns as well as remove or add columns to the maintenance job list display.

Field and Button Description

Field name	Description
Job name	The title of the maintenance job.
Object Name	The name of the Indicator object used to track maintenance progress.
Job Type	The maintenance job type: <ul style="list-style-type: none"> • Periodic • User Time • Changes • Counter
Started	The date the maintenance job was created.
Activated	The date the maintenance job was activated. An active maintenance job is a maintenance job where work is pending
Acknowledged	The date the maintenance job was acknowledged.
Completed	The date the maintenance job was registered as being completed.

Field name	Description
Value	The present value of the interval used to track the progress of the maintenance job. The interval itself will depend on the maintenance job type - for example the interval for a periodic maintenance job set for every week will be weeks.
Progress	The progress of the maintenance job measured as a percent of the elapsed interval time compared to the
Due In	When the maintenance job is expected to be due in.
Interval	The defined interval for the maintenance job.
Area Name	The name of the area where the Indicator object is placed.
Alarm No.	The alarm number of the alarm defined for the selected maintenance job.
Alarm Text	The alarm text of the alarm defined for the selected maintenance job.
Object Description	The Indicator object description as it is defined for the Indicator object in the Definition module.
Job Object	The Maintenance object name.
First column	The first column of the job list does not have a title. If the job contains a job description, the first column will display a blue information icon.
Second column	The second column of the job list does not have a title. If the job contains a job note, the second column will display a yellow note icon.
Third column	The third column of the job list does not have a title. If the job is linked to another maintenance job, the third column will display a colored marker. The maintenance job that is linked to will also display the same colored marker in the third column, enabling quick overview of any linked maintenance jobs in the job list.

4.6 The New / Edit Periodical Job Form

Use this form to create a new periodical job for an analog, digital or counter object in the IGSS configuration.

You can also use this form to edit an existing periodical job in the Maintenance form. When used to edit an existing Maintenance job, the form title will change to **Edit Periodical Job (Job title)**.

Preconditions

If you utilize user administration, the current user must have the **Can Define** right to create maintenance jobs.

Where do I find it?

In the **Maintenance** form > **Configuration** tab > **Maintenance Job** group, click the **New Job** button to open the **Select Maintenance job type and Indicator object** form.

In the **Select Job Type and Indicator Object** form, select the **Periodical** option and then select the Indicator object you want to create the maintenance job for. Click the **OK** button to open the **New Periodical Job** form.

You can also click the drop down menu in the **New Job** button and directly select the type of job you want to create.

Field Help

Field name	Description
Title	Type a meaningful name to describe the maintenance job. The job title will be displayed in the Job Name column in the Maintenance list.
Use Alarm Text	Click this button to copy the alarm text title to the Job Title field. This is very useful if you want the operator to see the same title in both the Maintenance List and in the Alarm List .
Indicator Object	The object whose values are used to trigger the maintenance job. In many cases, the Indicator object will be identical with the Maintenance object. The Indicator object is defined when you create the Maintenance job. You cannot change the Indicator object or the Maintenance object once the maintenance job has been created. Delete the Maintenance job and create a new job if you have to make changes to the Indicator or Maintenance objects.
Maintenance Object	The object on which the actual maintenance is to be performed. The Maintenance object is defined when you create the maintenance job and is by default identical to the Indicator object.
Change (button)	Click this button to open the Job Object for Maintenance Job form where you can select a new Maintenance object for the job. This button is only enabled in the New Periodical Job form.
Periodical Interval	Define the periodical interval by typing the appropriate number in the first box and then selecting the time unit in the drop-down list.

Field name	Description
	<p>Note: When the maintenance interval expires, a maintenance alarm will appear in the Active Maintenance Jobs section of the maintenance list and, if you have attached an alarm text, an alarm appears in the Active Alarms section of the alarm list.</p>
First Activation	Define when the periodical interval set up for maintenance is to start. You can define a start date and time.
Alarm fired when job is due	<p>Select the alarm text that you want to show in the alarm list, when the specified service interval has expired.</p> <p>It is recommended to attach alarm texts to all maintenance jobs to ensure that the operator will see the maintenance alarm immediately in the alarm list. If no alarm text is attached, the maintenance alarm will only occur in the maintenance list. Another advantage is that you can attach a sound to an alarm text to indicate the alarm's seriousness to the operator.</p>
Link Maintenance job	<p>Link the Maintenance job an existing maintenance job in the Maintenanceform.</p> <p>If you acknowledge, restart or complete a linked Maintenance jobs, you can chose to acknowledge, restart or complete the Maintenance job that is linked to as well.</p>
Maintenance pending at...	<p>Set the progress percent which will define when the Maintenance job is considered to be nearly due.</p> <p>You can use the maintenance pending to print a list of Maintenance jobs that will be due in the near future by using command line parameters.</p> <p>The default value is 95.</p>
Attach files to the job	<p>In this section there is four tabs: Job Description, Job Note, File/Folder and Help File.</p> <p>You can here supply with some information to the job by attaching files to it. In the Job Description tab you can for example attach a text file with a description for the operator.</p> <p>Depending on what kind of file you want to attach, you should use the appropriate tab.</p> <p>If you have attached a description to the job, the View Description button will appear under the Job Handler tab in the Job Documents ribbon.</p>

See Also

4.7 The New / Edit Used Time Job Form

Use this form to create a new User Time job for a digital object in the IGSS configuration.

You can also use this form to edit an existing User Time job in the Maintenance form. When used to edit an existing Maintenance job, the form title will change to **Edit Used Time Job (Job title)**.

Preconditions

If you utilize user administration, the current user must have the **Can Define** right to create maintenance jobs.

Where do I find it?

In the **Maintenance** form > **Configuration** tab > **Maintenance Job** group, click the **New Job** button to open the **Select Maintenance job type and Indicator object** form.

In the **Select Job Type and Indicator Object** form, select the **Used Time** option and then select the Indicator object you want to create the maintenance job for. Click the **OK** button to open the **New Used Time Job** form.

You can also click the drop down menu in the **New Job** button and directly select the type of job you want to create.

Field Help

Field name	Description
Title	Type a meaningful name to describe the maintenance job. The job title will be displayed in the Job Name column in the Maintenance list.
Use Alarm Text	Click this button to copy the alarm text title to the Job Title field. This is very useful if you want the operator to see the same title in both the Maintenance List and in the Alarm List .
Indicator Object	The object whose values are used to trigger the maintenance job. In many cases, the Indicator object will be identical with the Maintenance object. The Indicator object is defined when you create the maintenance job. You cannot change the Indicator object or the Maintenance object once the maintenance job has been created. Delete the Maintenance job and create a new job if you have to make changes to the Indicator or Maintenance objects.
Maintenance Object	The object on which the actual maintenance is to be performed.

Field name	Description
	The Maintenance object is defined when you create the maintenance job and is by default identical to the Indicator object.
Change (button)	<p>Click this button to open the Job Object for Maintenance Job form where you can select a new Maintenance object for the job.</p> <p>This button is only enabled in the New Used Time Job form.</p>
Job due after	<p>Define the maintenance interval for the first time you want maintenance on this object. Type the appropriate number in the first box and then select the time unit in the drop-down list.</p> <p>When the maintenance interval expires, a maintenance alarm will appear in the Maintenance Jobs due section of the maintenance list and, if you have attached an alarm text, an alarm appears in the Active Alarms section of the alarm list.</p> <div data-bbox="483 831 1473 1122" style="border: 1px solid gray; padding: 10px; margin: 10px 0;"> <p>Tip: You may want to have a shorter maintenance interval the first time you maintain a new process component and then use the same interval for the subsequent times. This is simply done by defining the first interval as described above and then selecting the new interval in the Add to limit box. For example, you might want to check a pump after 10 hours of operation and then only every 30 hours after the first check.</p> </div>
Reset accumulated value	Select this option to reset the current accumulated value to 0 when the operator completes a maintenance alarm on this object.
Next job after	Select this option if you want to add a specific interval to the current accumulated value, and offset the next job. Type this interval in the box to the right.
States	Select the digital states that you want this maintenance interval to apply to.
Alarm fired when job is due	<p>Select the alarm text that you want to show in the alarm list, when the specified service interval has expired.</p> <div data-bbox="483 1554 1473 1809" style="border: 1px solid gray; padding: 10px; margin: 10px 0;"> <p>It is recommended to attach alarm texts to all maintenance jobs to ensure that the operator will see the maintenance alarm immediately in the alarm list. If no alarm text is attached, the maintenance alarm will only occur in the maintenance list. Another advantage is that you can attach a sound to an alarm text to indicate the alarm's seriousness to the operator.</p> </div>

See Also

4.8 The New / Edit Changes Job Form

Use this form to create a new Changes job for a digital object in the IGSS configuration.

You can also use this form to edit an existing Changes job in the Maintenance form. When used to edit an existing Maintenance job, the form title will change to **Edit Changes Job (Job title)**.

Preconditions

If you utilize user administration, the current user must have the **Can Define** right to create maintenance jobs.

Where do I find it?

In the **Maintenance** form > **Configuration** tab > **Maintenance Job** group, click the **New Job** button to open the **Select Maintenance job type and Indicator object** form.

In the **Select Job Type and Indicator Object** form, select the **Changes** option and then select the Indicator object you want to create the maintenance job for. Click the **OK** button to open the **New Periodical Job** form.

You can also click the drop down menu in the **New Job** button and directly select the type of job you want to create.

Field Help

Field name	Description
Title	Type a meaningful name to describe the maintenance job. The job title will be displayed in the Job Name column in the Maintenance list.
Use Alarm Text	Click this button to copy the alarm text title to the Job Title field. This is very useful if you want the operator to see the same title in both the Maintenance List and in the Alarm List .
Indicator Object	The object whose values are used to trigger the maintenance job. In many cases, the Indicator object will be identical with the Maintenance object. The Indicator object is defined when you create the maintenance job. You cannot change the Indicator object or the Maintenance object once the maintenance job has been created. Delete the Maintenance job and create a new job if you have to make changes to the Indicator or Maintenance objects.
Maintenance Object	The object on which the actual maintenance is to be performed. The Maintenance object is defined when you create the maintenance job and is by default identical to the Indicator object.
Change (button)	Click this button to open the Job Object for Maintenance Job form where

Field name	Description
	<p>you can select a new Maintenance object for the job.</p> <p>This button is only enabled in the New Changes Job form.</p>
Job due after	<p>Type the number of state changes you will allow before maintenance must be performed on this process component. The states that you want to count are specified by clicking Select States and then choosing the relevant states. You may, for example, only want to count the number of times that the pump entered the On state.</p> <p>When the maintenance interval expires, a maintenance alarm will appear in the Maintenance Jobs Due section of the maintenance list and, if you have attached an alarm text, an alarm appears in the Active Alarms section of the alarm list.</p>
Reset accumulated value	<p>Select this option to reset the current accumulated value to 0 when the operator completes a maintenance alarm on this object.</p>
Next job after	<p>Select this option if you want to add a specific number of changes to the current accumulated number of changes. Type this number in the box to the right.</p>
Count on state change to (0)	<p>Change the count on state change to (0).</p>
Alarm fired when job is due	<p>Select the alarm text that you want to show in the alarm list, when the specified service interval has expired.</p> <div style="border: 1px solid gray; padding: 10px; margin: 10px 0;"> <p>It is recommended to attach alarm texts to all maintenance jobs to ensure that the operator will see the maintenance alarm immediately in the alarm list. If no alarm text is attached, the maintenance alarm will only occur in the maintenance list. Another advantage is that you can attach a sound to an alarm text to indicate the alarm's seriousness to the operator.</p> </div>
Link Maintenance job	<p>Link the Maintenance job an existing maintenance job in the Maintenanceform. If you acknowledge, restart or complete a linked Maintenance jobs, you can chose to acknowledge, restart or complete the Maintenance job that is linked to as well.</p>
Maintenance pending at...	<p>Set the progress percent which will define when the Maintenance job is considered to be nearly due.</p> <p>You can use the maintenance pending to print a list of Maintenance jobs that will be due in the near future by using command line parameters.</p> <p>The default value is 95.</p>
Attach files to the job	<p>In this section there is four tabs: Job Description, Job Note, File/Folder and Help File.</p>

Field name	Description
	<p>You can here supply with some information to the job by attaching files to it. In the Job Description tab you can for example attach a text file with a description for the operator.</p> <p>Depending on what kind of file you want to attach, you should use the appropriate tab.</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>If you have attached a description to the job, the View Description button will appear under the Job Handler tab in the Job Documents ribbon.</p> </div>

See Also

4.9 The New / Edit Counter Job Form

Use this form to create a new Counter job for an analog or counter object in the configuration.

You can also use this form to edit an existing Counter job in the form. When used to edit an existing job, the form title will change to **Edit Counter Job (Job title)**.

Preconditions

If you utilize user administration, the current user must have the **Can Define** right to create maintenance jobs.

Where do I find it?

In the Maintenance form > **Configuration** tab > **Maintenance Job** group, click the **New Job** button to open the **Select job type and Indicator object** form.

In the **Select Job Type and Indicator Object** form, select the **Counter** option and then select the Indicator object you want to create the maintenance job for. Click the **OK** button to open the **New Used Time Job** form.

You can also click the drop down menu in the **New Job** button and directly select the type of job you want to create

Field Help

Field name	Description
Title	Type a meaningful name to describe the maintenance job. The job title will be displayed in the Job Name column in the Maintenance list.

Field name	Description
Use Alarm Text	<p>Click this button to copy the alarm text title to the Job Title field.</p> <p>This is very useful if you want the operator to see the same title in both the Maintenance List and in the Alarm List.</p>
Indicator Object	<p>The object whose values are used to trigger the maintenance job. In many cases, the Indicator object will be identical with the Maintenance object.</p> <p>The Indicator object is defined when you create the maintenance job. You cannot change the Indicator object or the Maintenance object once the maintenance job has been created. Delete the Maintenance job and create a new job if you have to make changes to the Indicator or Maintenance objects.</p>
Maintenance Object	<p>The object on which the actual maintenance is to be performed.</p> <p>The Maintenance object is defined when you create the maintenance job and is by default identical to the Indicator object.</p>
Change (button)	<p>Click this button to open the Job Object for Maintenance Job form where you can select a new Maintenance object for the job.</p> <p>This button is only enabled in the New Counter Job form.</p>
Job due when value reaches	<p>Type the count you will allow the counter object to reach before maintenance must be performed.</p> <p>When the maintenance interval expires, a maintenance alarm will appear in the Maintenance Jobs Due section of the maintenance list and, if you have attached an alarm text, an alarm appears in the Active Alarms section of the alarm list.</p>
Reset value	<p>Select this option to reset the accumulated value to 0 when the operator completes an alarm on this object.</p>
Increase reached value with	<p>Type the value you want to add to the service interval when the maintenance should be done the second time and subsequently.</p> <p>This allows you to define a short first service interval and subsequently a longer interval. This is useful for new process components where you typically want to perform maintenance quickly to verify that the component is running as expected.</p>
Alarm fired when job is due	<p>Select the alarm text that you want to show in the alarm list, when the specified service interval has expired.</p> <div style="border: 1px solid gray; padding: 10px; margin-top: 10px;"> <p>It is recommended to attach alarm texts to all maintenance jobs to ensure that the operator will see the maintenance alarm immediately in the alarm list. If no alarm text is attached, the maintenance alarm will only occur in the maintenance list. Another advantage is that you can attach a sound to an alarm text to indicate the alarm's seriousness to the operator.</p> </div>

Field name	Description
Link Maintenance job	Link the Maintenance job an existing maintenance job in the Maintenanceform. If you acknowledge, restart or complete a linked Maintenance jobs, you can chose to acknowledge, restart or complete the Maintenance job that is linked to as well.
Maintenance pending at...	<p>Set the progress percent which will define when the Maintenance job is considered to be nearly due.</p> <p>You can use the maintenance pending to print a list of Maintenance jobs that will be due in the near future by using command line parameters.</p> <p>The default value is 95.</p>
Attach files to the job	<p>In this section there is four tabs: Job Description, Job Note, File/Folder and Help File.</p> <p>You can here supply with some information to the job by attaching files to it. In the Job Description tab you can for example attach a text file with a description for the operator.</p> <p>Depending on what kind of file you want to attach, you should use the appropriate tab.</p> <div data-bbox="485 1048 1474 1193" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>If you have attached a description to the job, the View Description button will appear under the Job Handler tab in the Job Documents ribbon.</p> </div>

See Also

4.10 Filter Setup Form

Overview

This form allows you to set up filters that limit the maintenance list to show only those maintenance jobs that fulfil certain conditions.

Preconditions

You have to select one of the two sections in the tree view (**Maintenance Jobs Due** or **All Maintenance Jobs**). The new filter will then appear in the tree view as a subsection.

Where do I find it?

Click the **New Filter** button to open the **Filter Setup** form.

Field Help

Field name	Description
Filter name	<p>Give the filter a descriptive name. When you later want to apply this filter, you simply click its name in the tree view.</p> <p>Tip: It is recommended to use short, descriptive names for the filters so that the operator will immediately recognize its function. For example, you may want to create a filter which only shows all maintenance jobs which are more than 80 %</p>

Field name	Description
	<p>fulfilled. In that case, the name could be Percent > 80.</p>
Filter Pass Conditions	<p>Shows the filter pass condition(s) defined for this filter.</p> <p>To add a new filter condition, define its properties in the Condition Editor group, then click Add.</p> <p>To change a filter condition, select it in the Filter Pass Conditions list, then edit the necessary properties in the Condition Editor group, then click Change.</p>
Invert Condition (s)	<p>Check this box to negate the filter condition(s) shown in the Filter Pass Conditions list.</p> <p>Note: You may want to view the maintenance jobs for all objects except a specific type of process component, for example, all pumps. In that case, specify that you want all objects starting with p in the filter and then check the Invert Condition box to show all objects except the pumps in the maintenance list.</p>
Add Condition	<p>Adds the condition you defined in the Condition Editor group to the Filter Pass Conditions list.</p>
Remove Condition	<p>Deletes the selected condition in the Filter Pass Conditions list. Note that you can delete each condition individually. You need not delete the whole expression.</p>
And	<p>Select this option if you want this condition as well as other And conditions to be fulfilled. This is typically used to create a "narrow" filter, for example, show all objects starting with p that belongs to the Process A area.</p>
Or	<p>Select this option if you want this condition or other conditions to be fulfilled. This is typically used to create an either/or filter. You may, for example, want to show all maintenance jobs which use either the Used Time or Changes type of maintenance. This is done by combining the two conditions as Or conditions. In this case, select Maintenance Type is exactly Used Time and Mnt Type is exactly Changes.</p>
Property	<p>Select the property in the drop-down list that you want to create a condition for. The list of properties include most of the columns you see in the maintenance list. When you have selected the appropriate property, use the Operator and Value boxes to specify the exact condition. When you are satisfied with the condition, click Add.</p>
Operator	<p>Select the operator you want to apply to the selected property. The choices depend on the selected property as they are different for text columns, date/time columns and value columns. When you have selected the appropriate operator, select the Value that the operator must conform with.</p> <p>Example: To show all objects in the Global area, select is exactly in the Operator list, then type Global in the Value box.</p>
Value	<p>Type the value you want the condition to conform to or select an item in the drop-down</p>

Field name	Description
	<p>list.</p> <p>Example: To show all objects using the Used Time maintenance type, select Mnt Type in the Condition list, then select Used Time in the Value list.</p>
Protect	<p>Check this box to protect this filter. To make the protection work, you must define users and user rights in the User Administration application.</p> <p>Note: Only users with the Can System Commands right will be allowed to use this filter. If an unauthorised user tries to apply it, the Temporary Login dialogue will appear. This will allow another user with the necessary right to log in.</p>

4.11 Format Columns form

Overview

You may want to customize the maintenance list for the following reasons:

- You want to change the column sequence to show the columns that are most important for you first
- You want to change the sort order to show the most important maintenance alarms first

Where do I find it?

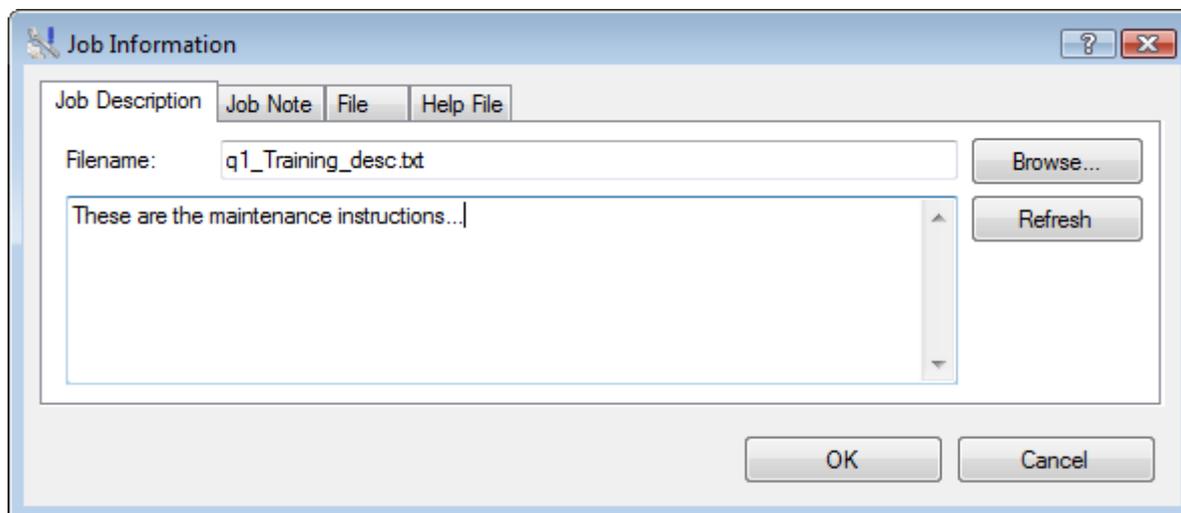


Click the **Format Columns** button under the **Configuration** tab in the **Job List** ribbon, to open the **Format Columns** form. In this form, you decide exactly which columns to show, their order and even their names.

Field Help

Field name	Description
Move Up	Moves the selected column one position up in the list. Remember that the first column name is the primary sorting key.
Move Down	Moves the selected column one position down in the list. Remember that the first column name is the primary sorting key.
Add >	Select a column name and click add to move it to the Displayed ones.
Remove <	Select a column name and click remove to remove it from the Displayed ones and put it in the Available ones.
Custom Name	Change the name of a column to a name of your choice.
Width	Customize the size of the column (in pixels).
Reset	Restore the default names and widths of the columns.

4.12 Job Information Form



Overview

To make sure that a maintenance job is performed correctly and consistently by the plant operators, you must supply precise and adequate step-by-step instructions.

You can also supply maintenance instructions in the form of an electronic file (a video clip, an electronic manual, etc.) or as a Help file.

Preconditions

You have to click on the job you want to edit before you can click on the Edit Information button.

Where do I find it?

Click the **Edit Button** button on the **Configuration** tab in the **Maintenance Job** ribbon, to open the **Job Information** form.

Field Help

You can hereunder find the field help for the different job informations:

Job Description

Field name	Description
Filename	Type the file name for the file that will contain the job description that you type in the box below. There are no file name requirements, but it is recommend to use the same extension to easily recognize maintenance job description files. This extension could be *.job . The file will be placed in the report folder defined for the active configuration. You can use any editor to edit the file, but operators must press the Refresh button to update the contents on the Job Description tab.
Refresh	Updates the job description with the contents of the file specified in the Filename box. This file is placed in the report folder defined for the active configuration.
Browse	Click here if you already have a text file containing the maintenance job description or job note. This is useful if you want to reuse existing job descriptions for different maintenance jobs.

Job Note

Field name	Description
Filename	Type the file name for the file that will contain the job note that the operators will type in the box below. There are no file name requirements, but it is recommend to use the same extension to easily recognize maintenance job note files. This extension could be *.not . The file will be placed in the report folder defined for the active configuration. You can use any editor to edit the file, but operators must press the Refresh button to update the contents on the Job Note tab.
Refresh	Updates the job note with the contents of the file specified in the Filename box. This file is placed in the report folder defined for the active configuration.
Browse	Click here if you already have a text file containing the maintenance job description or job note. This is useful if you want to reuse existing job descriptions for different maintenance jobs.

File/Folder

Field name	Description
Location	Type the path and filename of the file that contains maintenance instructions. This file could be a video clip (*.avi), an electronic manual (for example, in *.pdf format), etc. You can also use the Browse button to find the relevant file.
Select file	Click this to find the file that contains maintenance instructions which will help the operator perform the maintenance job.
Select folder	Click this to find the folder that contains maintenance instructions which will help the operator perform the maintenance job.
View	Click here to view the file you have selected in the associated program. For example if it's a .txt file, notepad will startup and display the file.

Help File

Field name	Description
Help File	Type the path and filename of the Help file (*.hlp; *.chm) that contains maintenance instructions for this job. You can also use the Browse button to find the file.
Browse	Click this to find the Help file (*.hlp; *.chm) that contains maintenance instructions for this job.
Index	Type the exact topic ID of the topic you want to show. Use your Help authoring tool to find the topic ID.
View	Click this to view the Help file. If you have specified an ID in the Index box, this Help topic will be shown.

4.13 Object Selection for Maintenance Job Form

Object Selection for Maintenance Job

Job Type

Periodical Used Time Changes Counter

Online

Object	Description	Area	Type
AGS-14A	Augur screw to boiler 14A	Cases	Digital
AGS-14B	Augur screw to boiler 14B	Cases	Digital
AGS-14C	Augur screw to boiler 14C	Cases	Digital
AGS-14D	Augur screw to boiler 14D	Cases	Digital
AM-MODE	Auto-Manual Mode	Cases	Digital
AT1822	Turbidity :	Cases	Analog
AT1823	Flow rate :	Cases	Analog
AT1824	pH :	Cases	Analog
AT6153	pH:	Cases	Analog
BAHC	Boiler Ash Hopper Conveyor	Cases	Digital
Brush_filter_1	Bristle filter :	Cases	Digital
Brushfilter	Bristle filter:	Cases	Digital
BSTAT	Boiler Status	Cases	Digital
CDP-1	Chemical Dosing Pump No:1	Cases	Digital
CDP-2	Chemical Dosing Pump No:2	Cases	Digital

No filter Negate filter

OK Cancel

Overview

This dialog box allows you to choose the type of maintenance job you want to create for a selected object.

Where do I find it?



Click on the New Job button  in the Maintenance Job ribbon under the configuration tab.

Field Help

Field name	Description
Periodical	Check this box to create a periodical maintenance job for the selected object.
Used Time	Check this box to create a maintenance job based on used time for the selected object.
Changes	Check this box to create a maintenance job based on the number of state changes for the selected object.
Counter	Check this box to create a counter-based maintenance job for the selected

Field name	Description
	object.
Filter	Select a filter in the drop-down and then write what it should correspond to in the text field.
Negate filter	If you check this checkbox, the filter you chose will be negated.

Chapter 5: Reference and Lookup

5.1 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: <ul style="list-style-type: none"> • 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.

5.2 Conventions in this Manual

The following typographical conventions are used:

Convention	Description	Example
User interface element	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	If you disregard the System

¹Universal 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.

Convention	Description	Example
	task. In some cases, disregarding a warning may result in undesirable functionality or loss of data.	alarm, you may risk loss of data in the LOG and BCL files.

5.3 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 6: 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.

I

Indicator Object

The object whose values are used to trigger and track the maintenance job.

M

Maintenance Object

The object on which the actual maintenance is to be performed.

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.