



IGSS

Interactive Graphical SCADA System

Quick Start Guide V14

Introduction

This guide is intended to get you up and running as system designer, creating your own IGSS SCADA projects with the IGSS FREE50 single user license - or a purchased license as fast as possible.

www.igss.com

Life Is On

Schneider
Electric

IGSS

Interactive Graphical SCADA System

Quick Start Guide



Quick Start Guide

Introduction

This guide is intended to get you up and running as system designer, creating your own IGSS SCADA projects with the IGSS FREE50 single user license – or a purchased license for more objects and/or users - as fast as possible.

The guide provides a quick route through the typical workflow. Numerous additional options are available as well.

For more detailed documentation on how to use IGSS and its many features, please refer to the help files in the IGSS system or at www.igss.com > Support > Help and Manuals and > Downloads > Training Materials.

Contents

Quick Start Guide.....	2
Introduction	2
Contents	2
A. Installing and updating the IGSS system	3
B. Set up a new IGSS Project	11
C. Create a process diagram in the Design module, Definition.....	19
D. Create your first process component	21
E. Calculating the number of objects in a project	27
F. Running the project	28
G. Help and Support.....	30

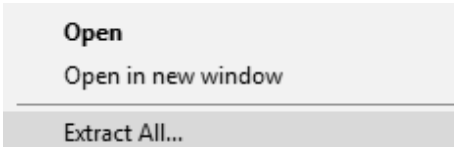
A. Installing and updating the IGSS system

- 1) Download the **IGSS FREE50 software package** from www.igss.com.

 IGSSv14.zip

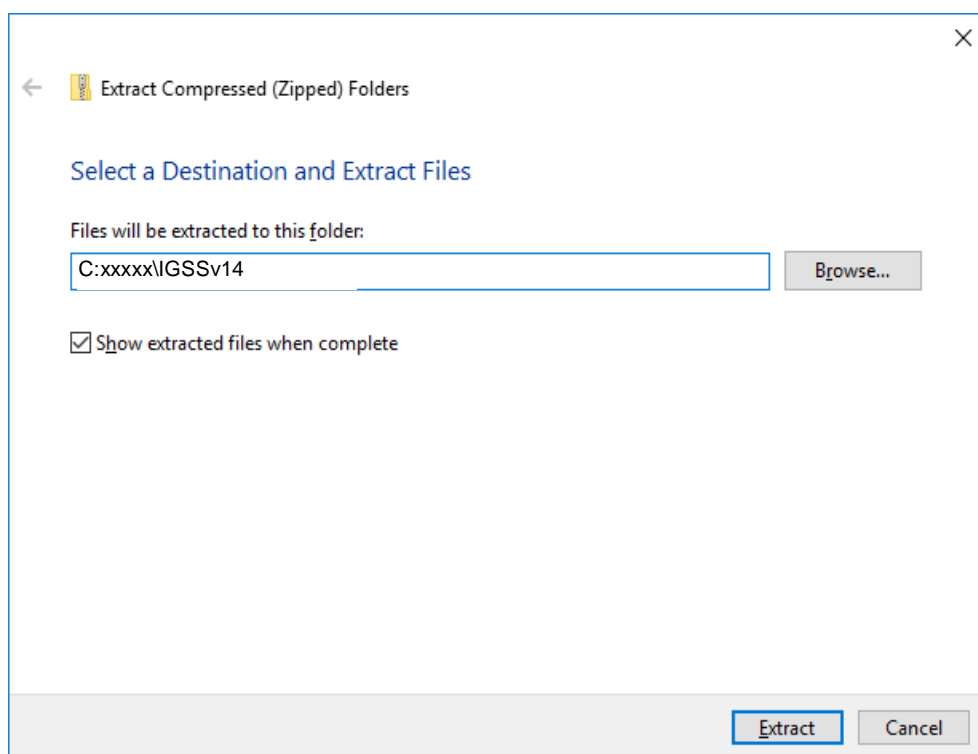
Locate the IGSS V14 zip-folder with the installation files in the **Downloads folder** on your pc.

Right-click the zip-file, and select **Extract All...**



Open
Open in new window
Extract All...

Browse to the folder, where you want to store the extracted installation files.



- 2) Open the extracted folder and double-click the **Setup.exe** file.

Name	Date modified	Type	Size
FrameWorks	08-05-2018 16:31	File folder	
IGSS	08-05-2018 16:31	File folder	
InstallerUpd	08-05-2018 16:31	File folder	
OPC	08-05-2018 16:31	File folder	
VBAcore	08-05-2018 16:31	File folder	
VCredist	08-05-2018 16:31	File folder	
VSTO	08-05-2018 16:31	File folder	
setup	08-05-2018 16:31	Application	537 KB

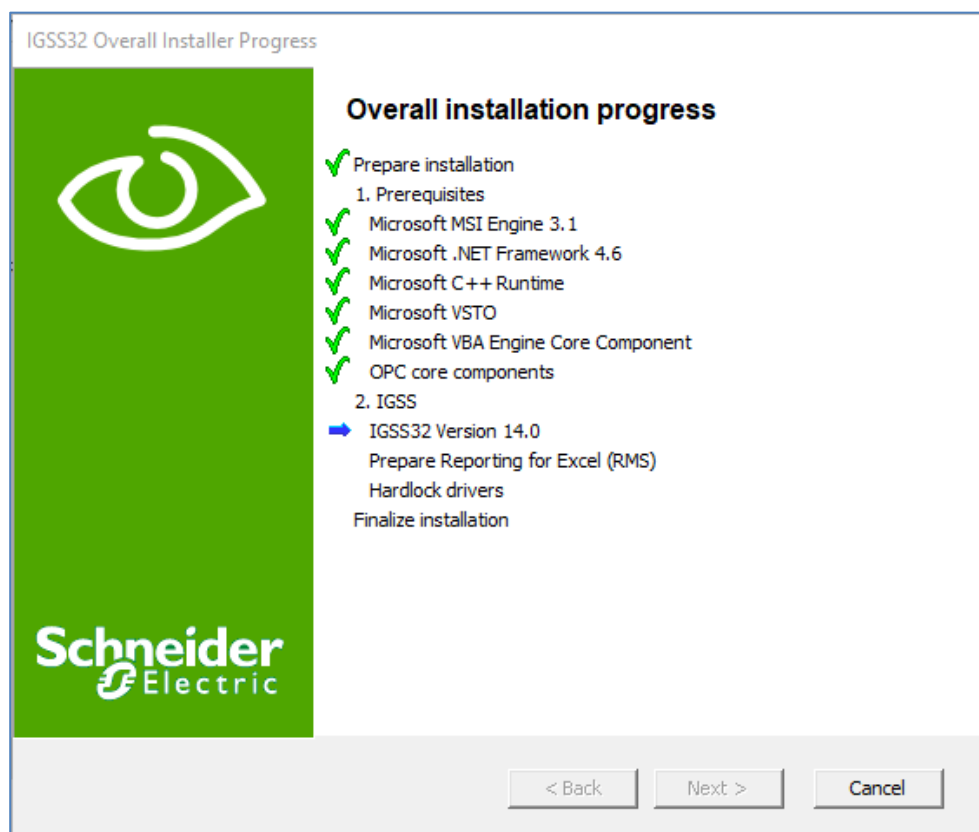
Schneider Electric A/S

IGSS SCADA Software * Schneider Electric Denmark A/S * Lautrupvang 1 * DK-2750 Ballerup * Denmark
Phone: +45 88 30 20 00 * E-mail: DK-IGSS-support@schneider-electric.com * www.igss.com

- 3) When you are asked “Do you want this app to make changes to your device?”, click **Yes** to install IGSS. The **IGSS V14 Installer Progress** window now appears. Click **Next**.

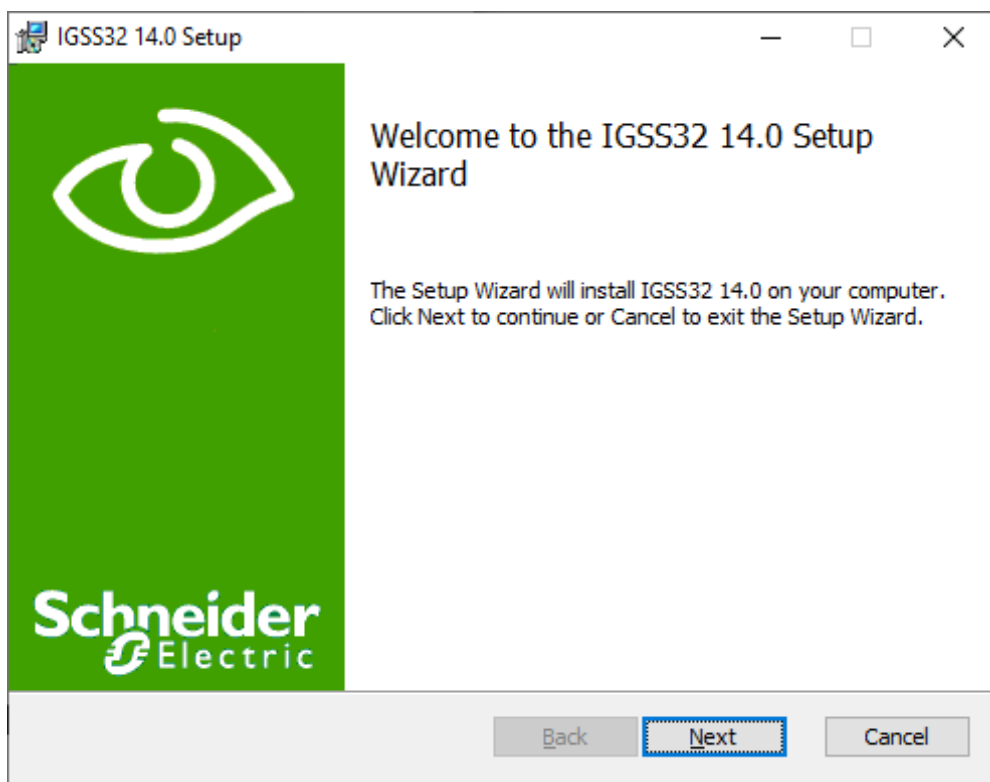


In this window you can follow the installation progress:

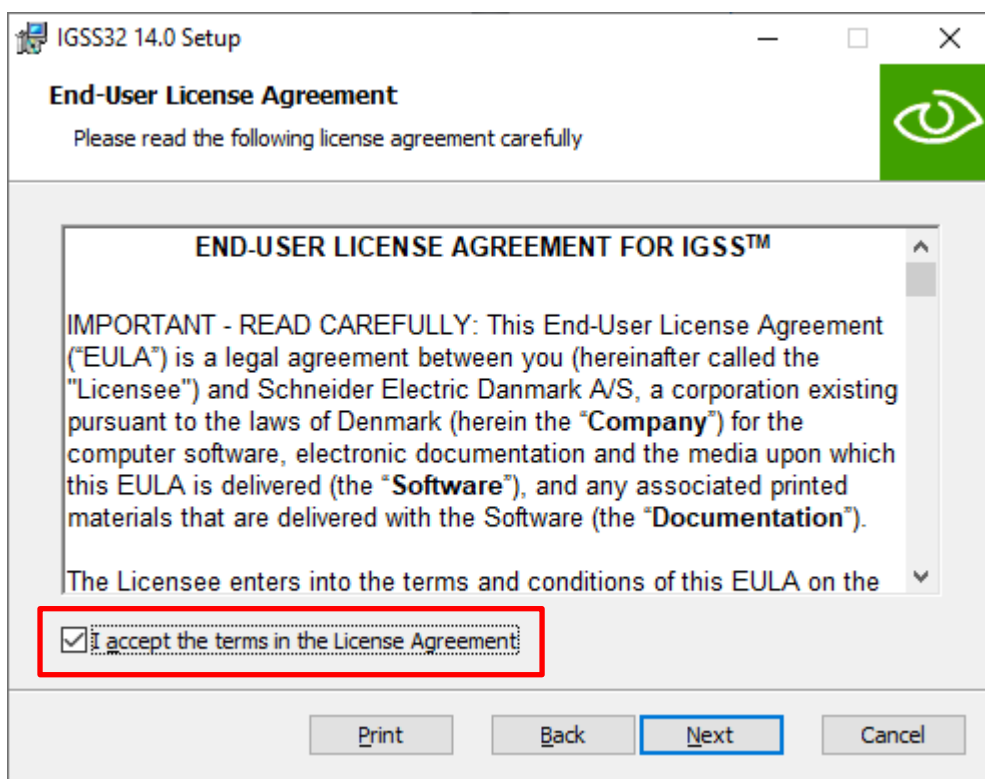


Schneider Electric A/S

- 4) Click **Next** when the **Install Wizard** opens.

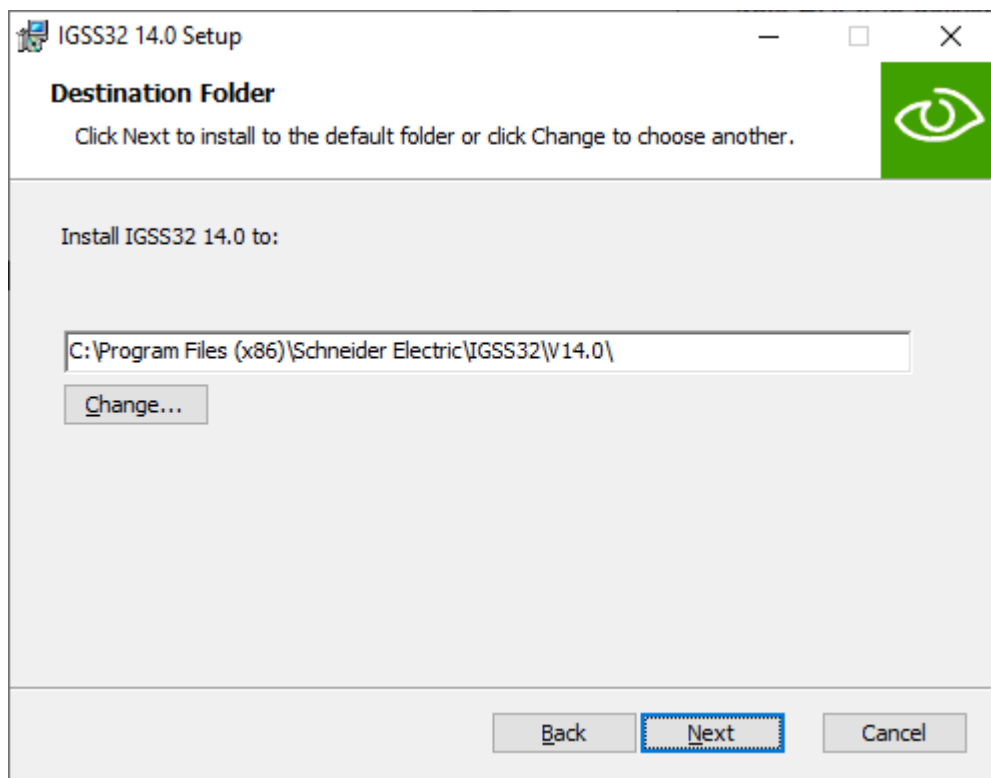


- 5) Select the **I accept the terms in the License Agreement** check box and click **Next**.

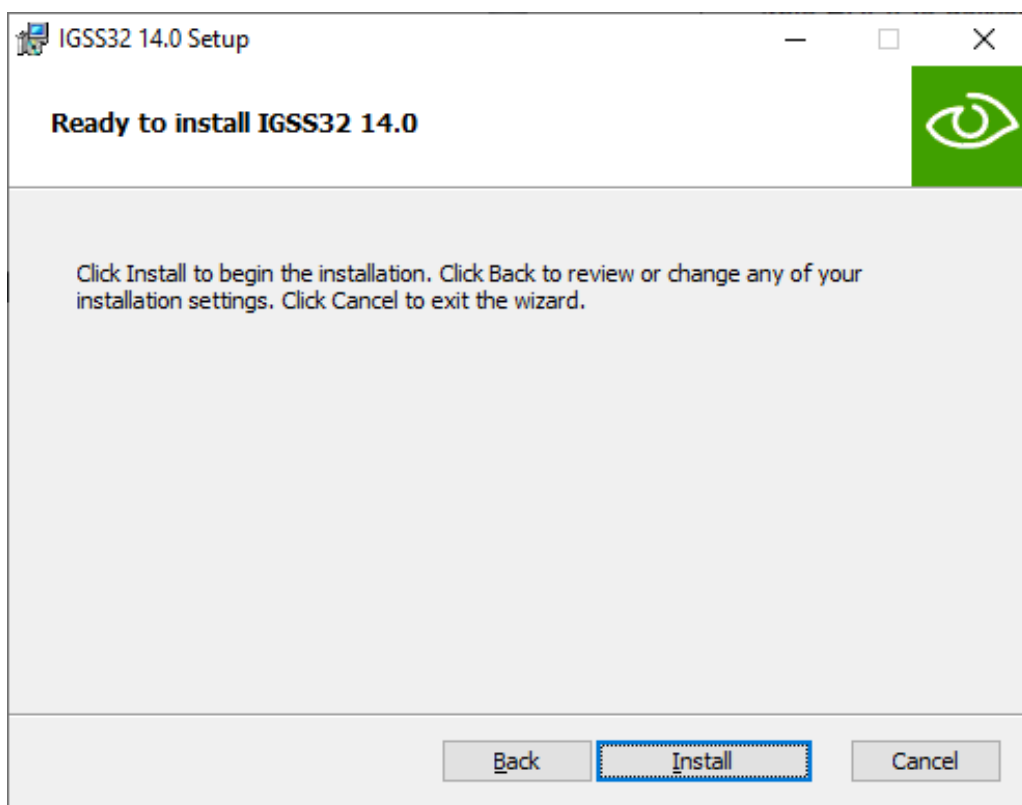


Schneider Electric A/S

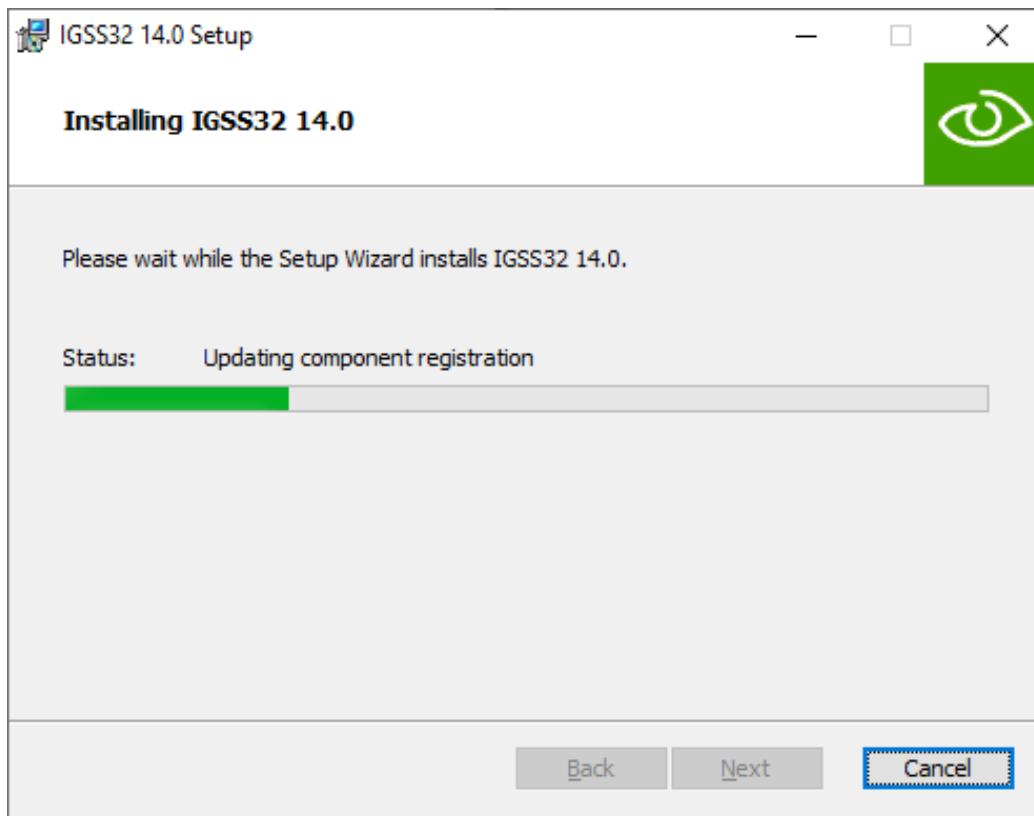
6) Select the destination folder, and click **Next**.



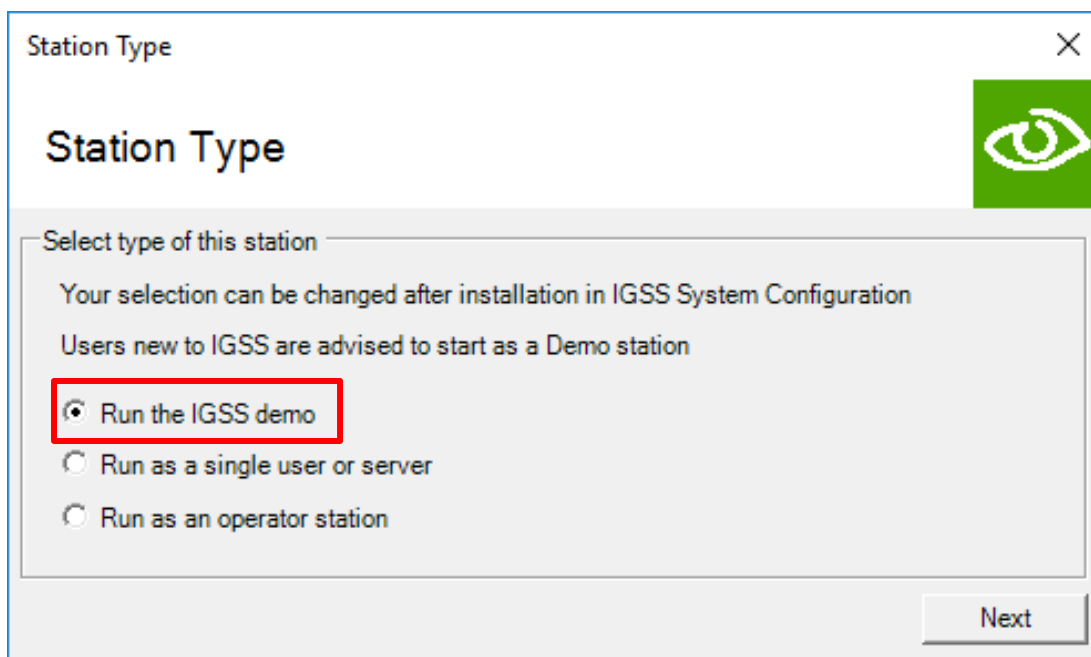
Click **Install** to begin the installation process.



Schneider Electric A/S

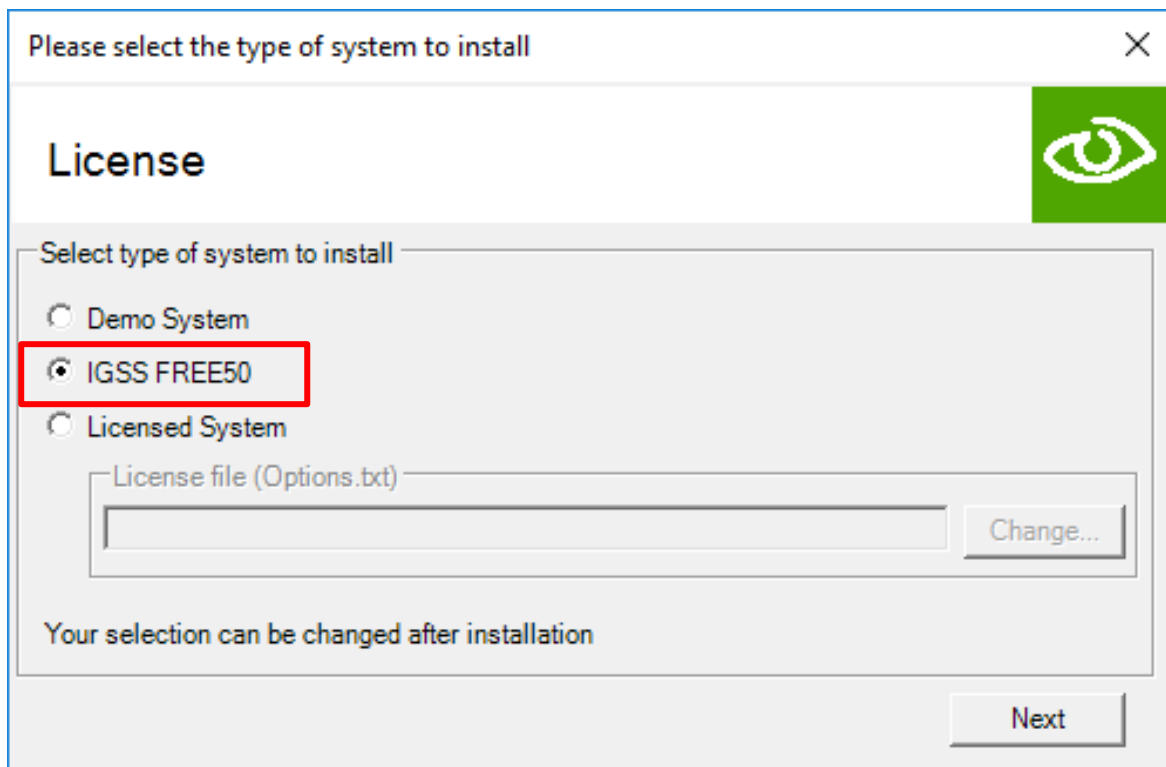


7) In Station Type, select **Run the IGSS demo**.

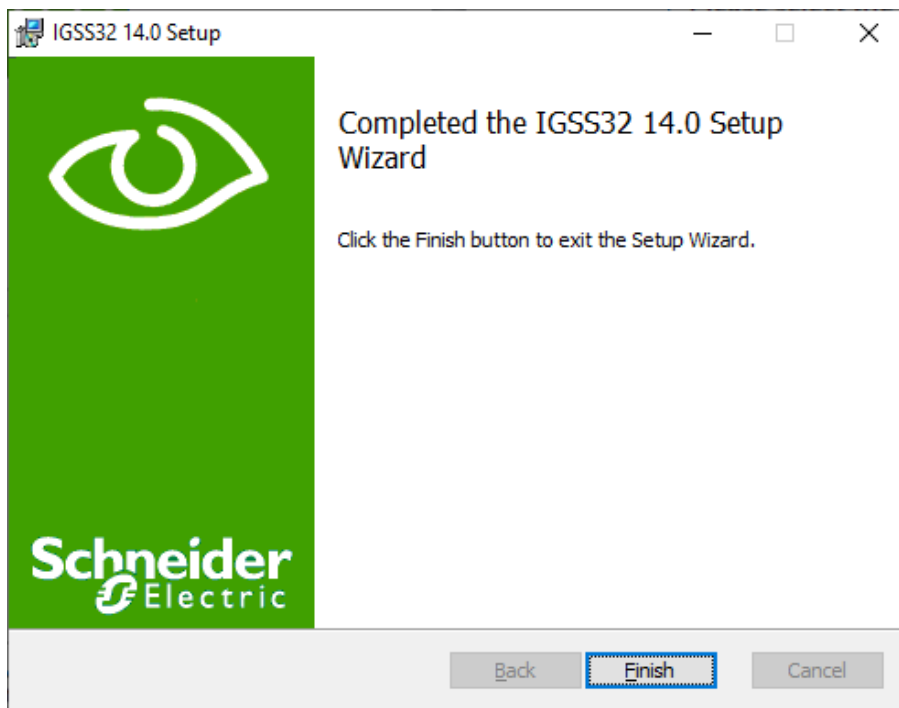


Schneider Electric A/S

- 8) Under License, select **IGSS FREE50** and click **Next**.



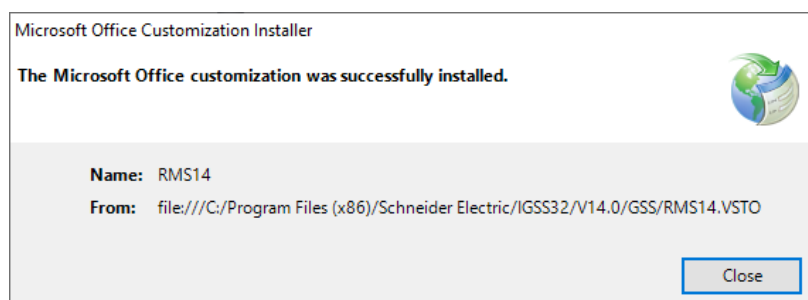
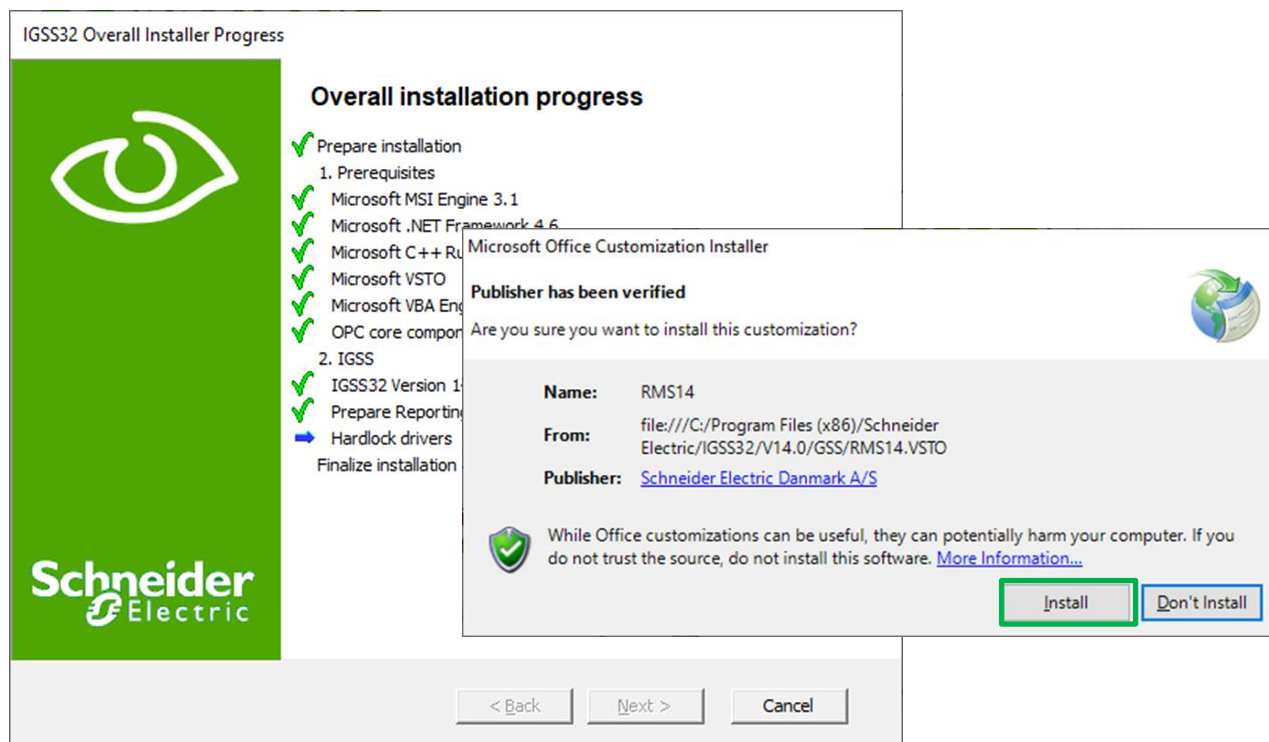
- 9) Click **Finish**.



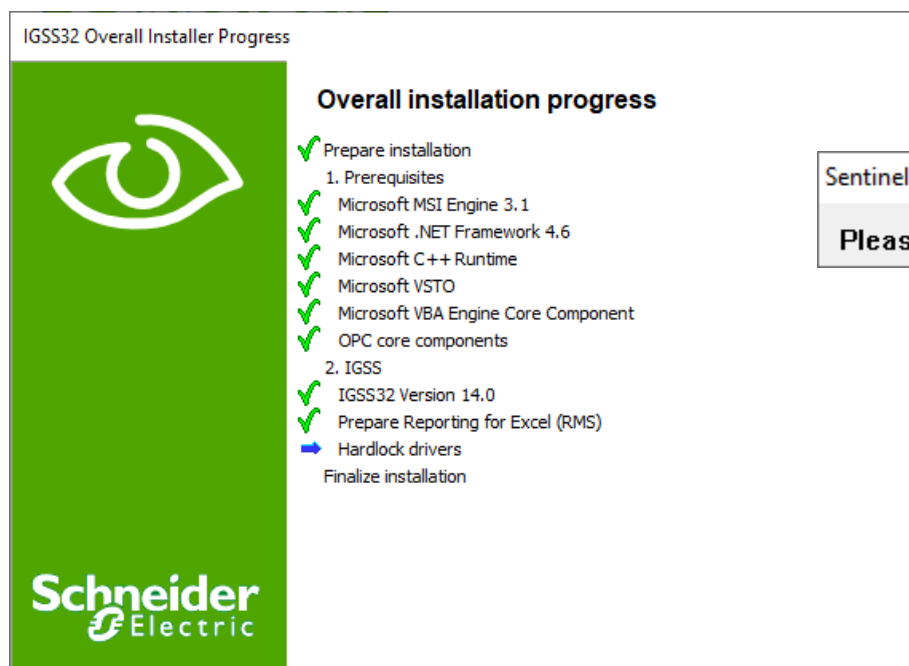
Schneider Electric A/S

IGSS SCADA Software * Schneider Electric Denmark A/S * Lautrupvang 1 * DK-2750 Ballerup * Denmark
Phone: +45 88 30 20 00 * E-mail: DK-IGSS-support@schneider-electric.com * www.igss.com

- 10) Next, if your Microsoft Office is version 2007 or newer, the installer will Prepare Reporting for Excel (RMS), the report management system in IGSS. If you want to use this, click **Install** and **close** the window that appears when installation has finished. If not, click Don't install.



When the installation of the Sentinel Run-time Environment (handles software license keys) is completed, click **OK**.

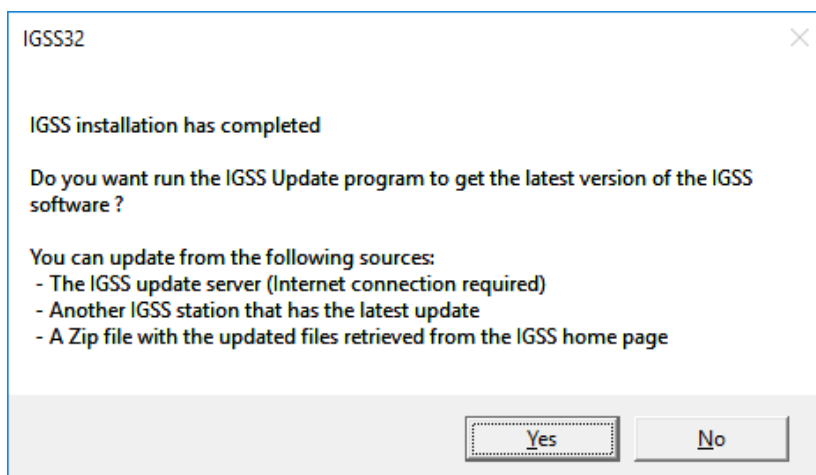


Sentinel Run-time Environment Install...

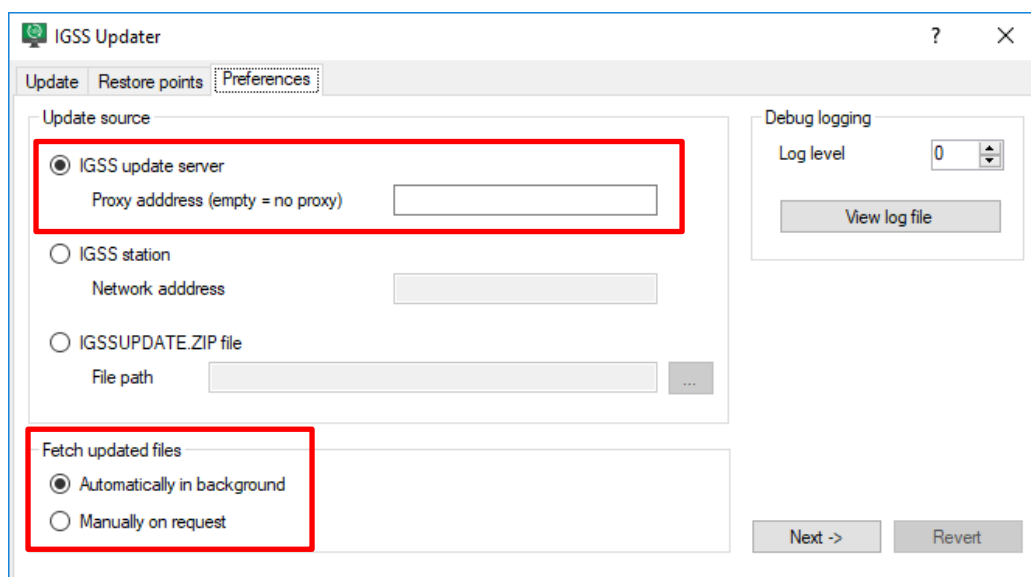
Please wait ..

Schneider Electric A/S

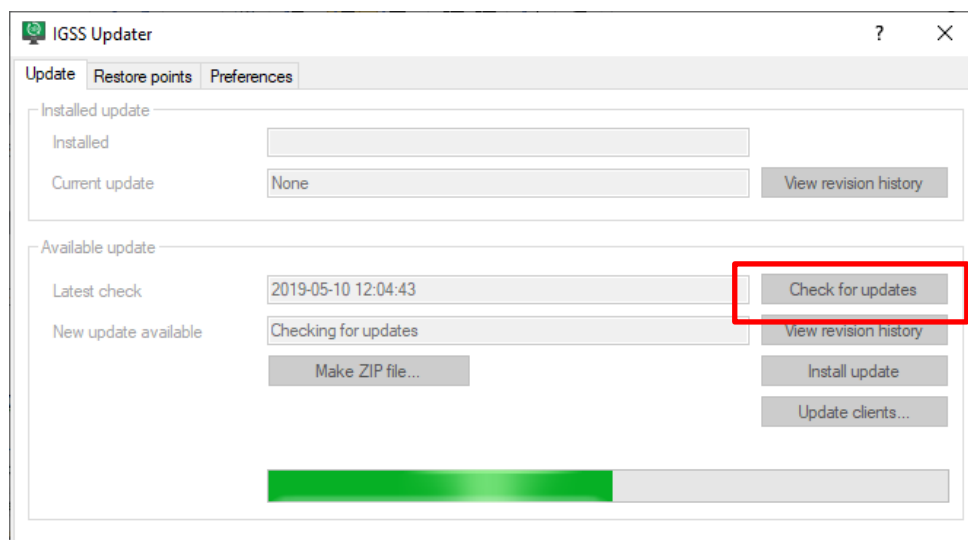
- 11) The installation of the IGSS SCADA FREE50 system has now completed.
When asked to run the IGSS Update program, click **Yes** if you are connected to the internet.



- 12) Select **IGSS Update server**, **automatic** (recommended) or **manual** (facilities in operation) at Fetch updated files and click **Next**.

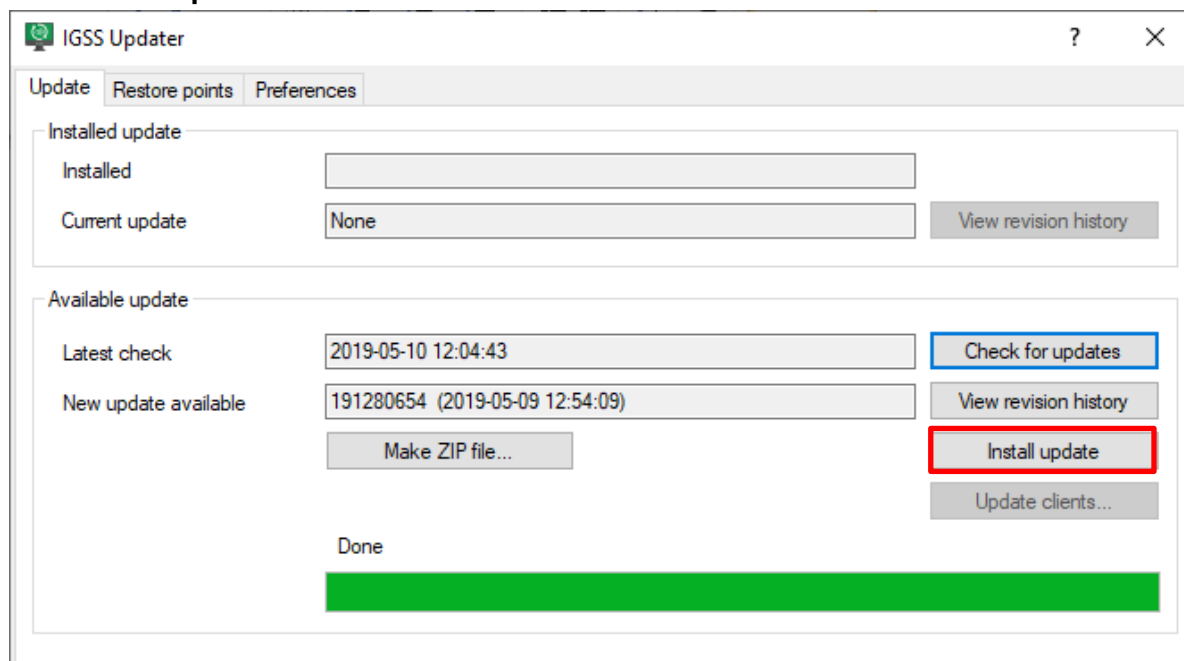


- 13) Click **Check for updates**.

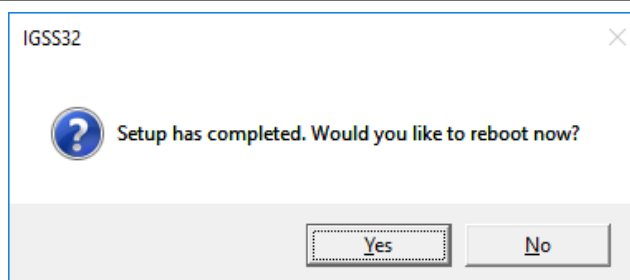


Schneider Electric A/S

14) Click **Install update** and **Yes** to continue.



15) When the status bar at the bottom is completely green, click the X to close the IGSS Updater window. The setup of IGSS FREE50 is now completed. Click **yes** to reboot your pc.



You can now start IGSS and begin building your first project as described in section B.

B. Set up a new IGSS Project

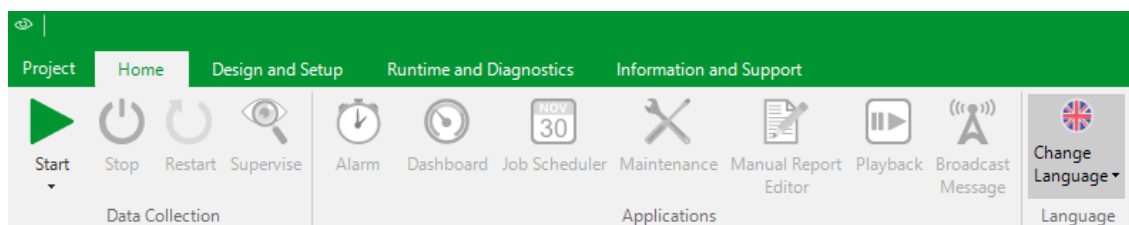
1) Press your Windows Start button, search for **IGSS** and click the green icon to open IGSS.



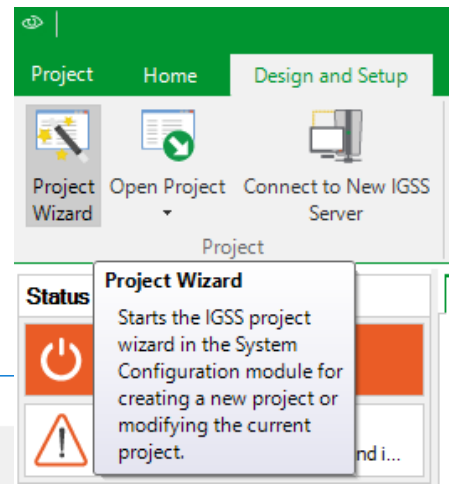
Tip - Language:

IGSS will open in the language you have selected for your keyboard (if that language is supported by IGSS. If not, it will open in English.

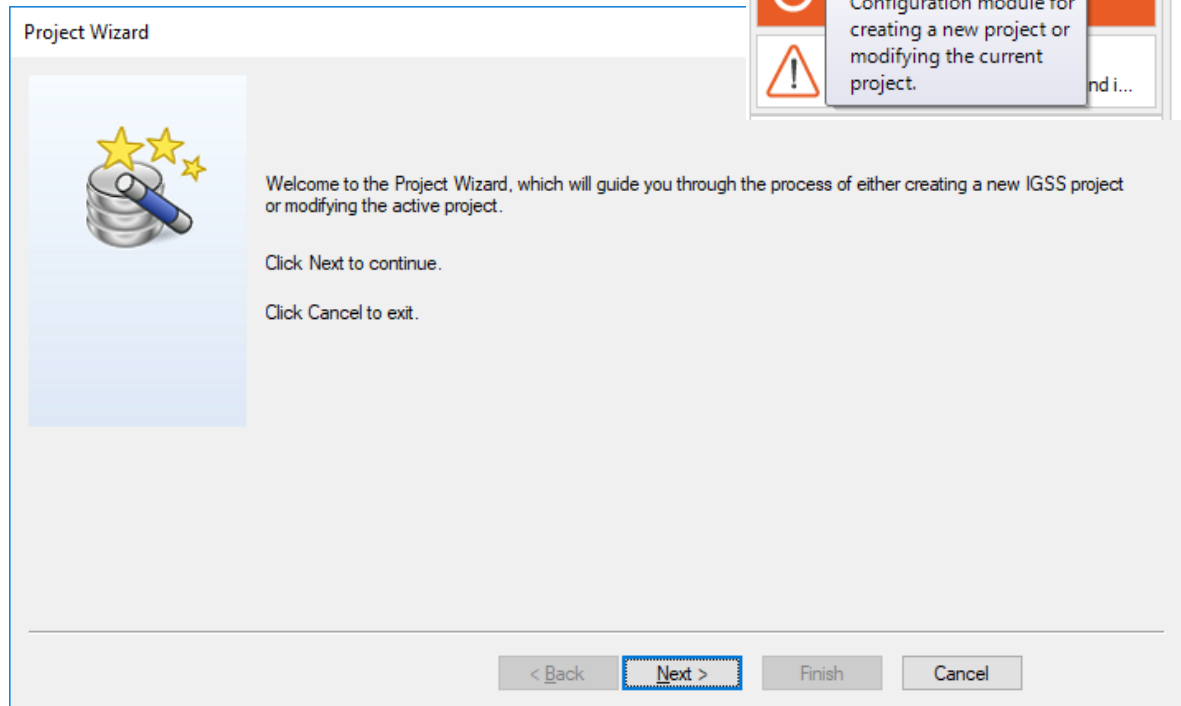
You can at any time switch to one of the other supported languages in IGSS Master's Change language tab.



- 2) In IGSS Master, select the **Design and Setup** tab and click the **Project Wizard** button.

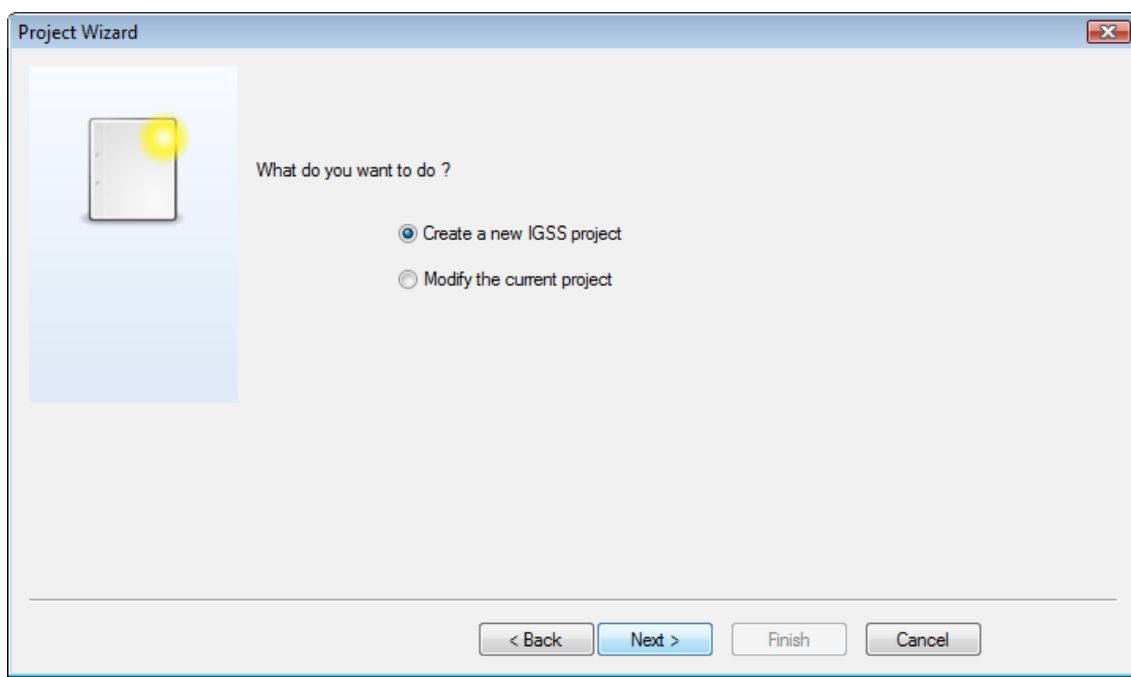


- 3) Click **Next** in the Project Wizard.

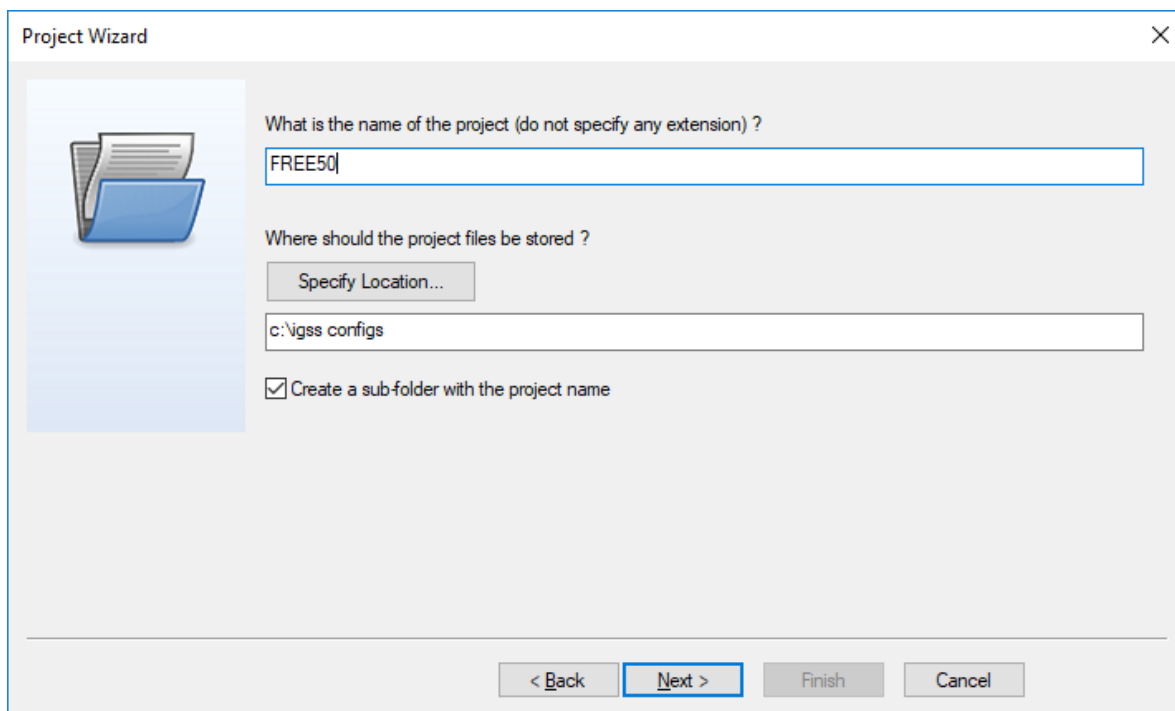


Select **Create a new IGSS project**.

- 4) Give your project a name and specify a location.



Select the **Create a sub-folder with the project name** box and click **Next**.



Project Wizard

What is the name of the project (do not specify any extension) ?

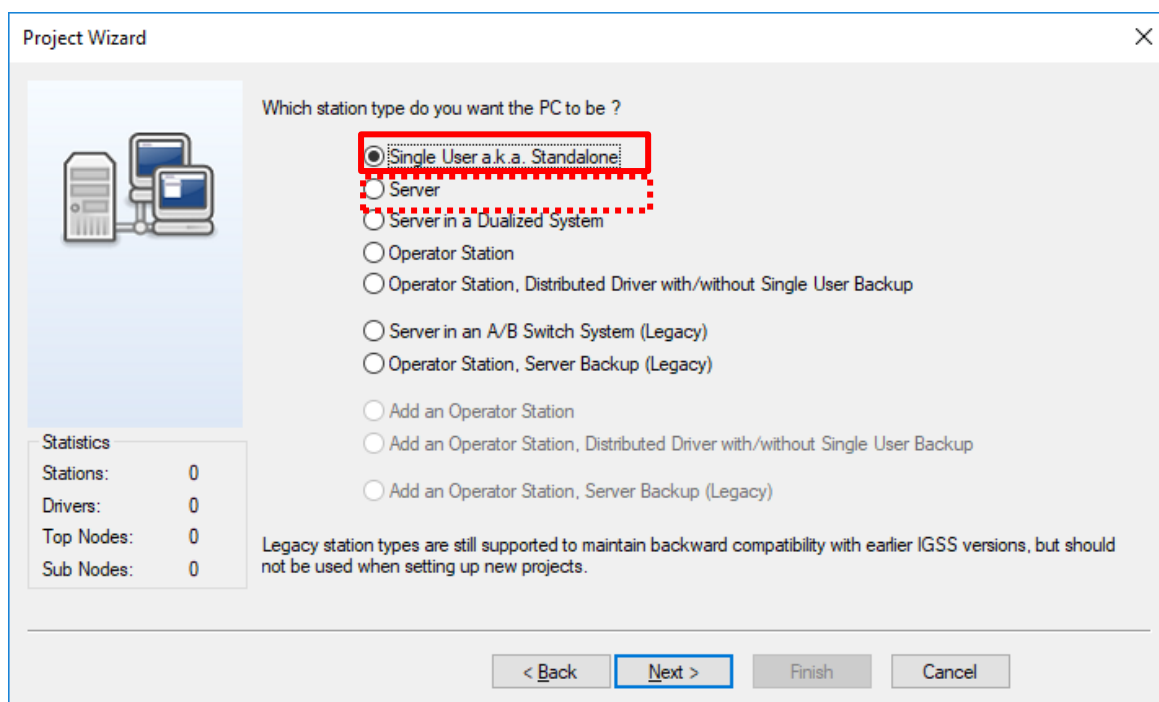
Where should the project files be stored ?

☒ Create a sub-folder with the project name

< Back **Next >** Finish Cancel

- 5) Select the station type **Single User a.k.a. Standalone** for the FREE50 single user license and click **Next**.

NB! If you have purchased a license for > 1 user/station, select “**Server**”, add Operator station(s) and insert IP address(es) under “Station” in System Configuration (item 9 later).



Project Wizard

Which station type do you want the PC to be ?

☒ Single User a.k.a. Standalone
☐ Server
☐ Server in a Dualized System
☐ Operator Station
☐ Operator Station, Distributed Driver with/without Single User Backup
☐ Server in an A/B Switch System (Legacy)
☐ Operator Station, Server Backup (Legacy)
☐ Add an Operator Station
☐ Add an Operator Station, Distributed Driver with/without Single User Backup
☐ Add an Operator Station, Server Backup (Legacy)

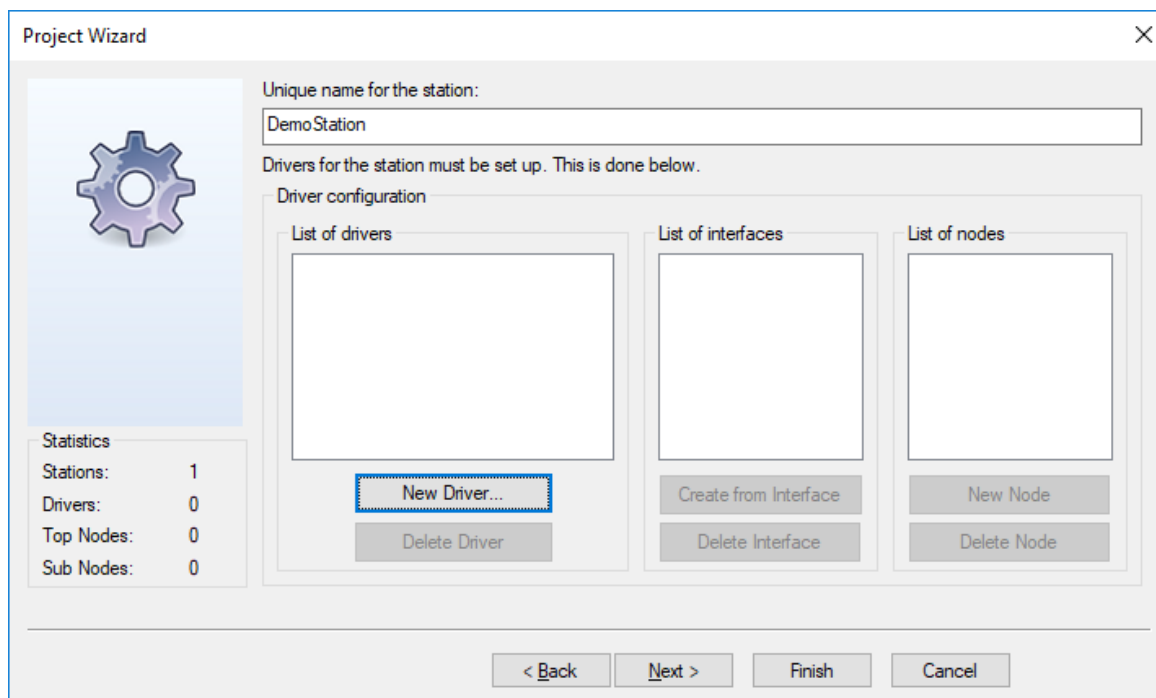
Statistics
 Stations: 0
 Drivers: 0
 Top Nodes: 0
 Sub Nodes: 0

Legacy station types are still supported to maintain backward compatibility with earlier IGSS versions, but should not be used when setting up new projects.

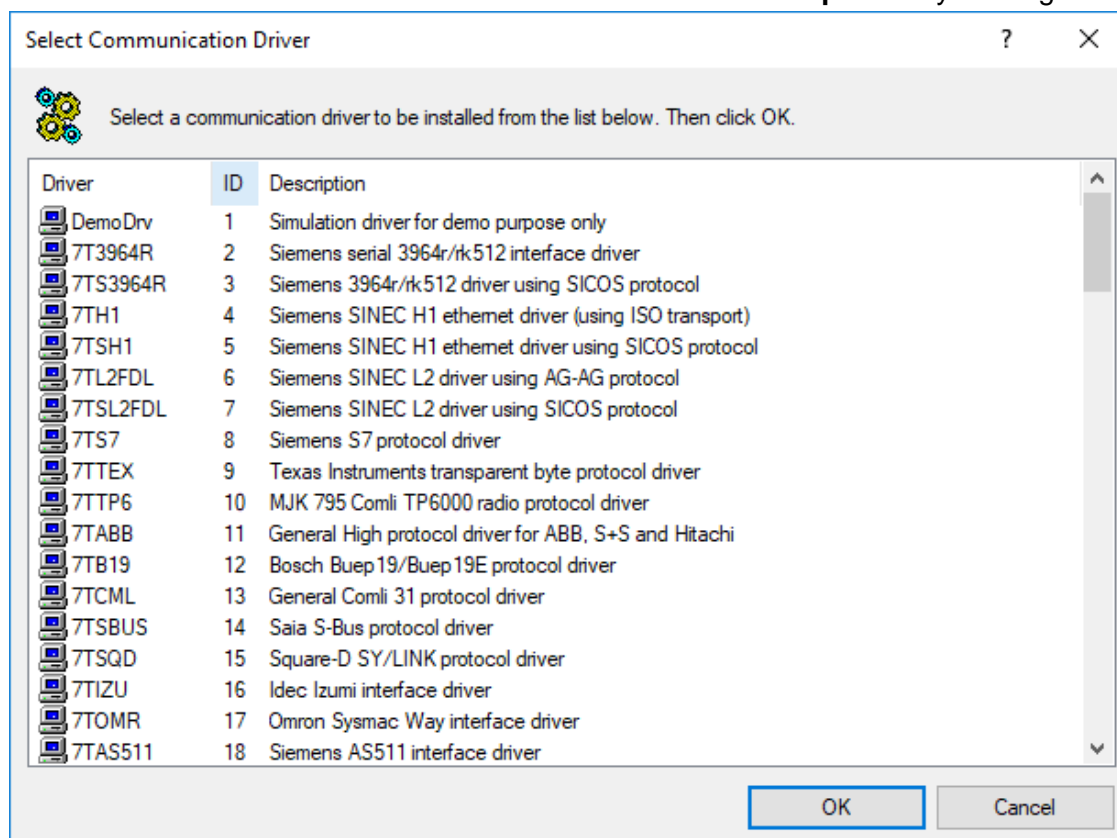
< Back **Next >** Finish Cancel

Schneider Electric A/S

- 6) Enter a unique name for the IGSS station (in the example we use "DemoStation") and set up drivers for this station as specified below:

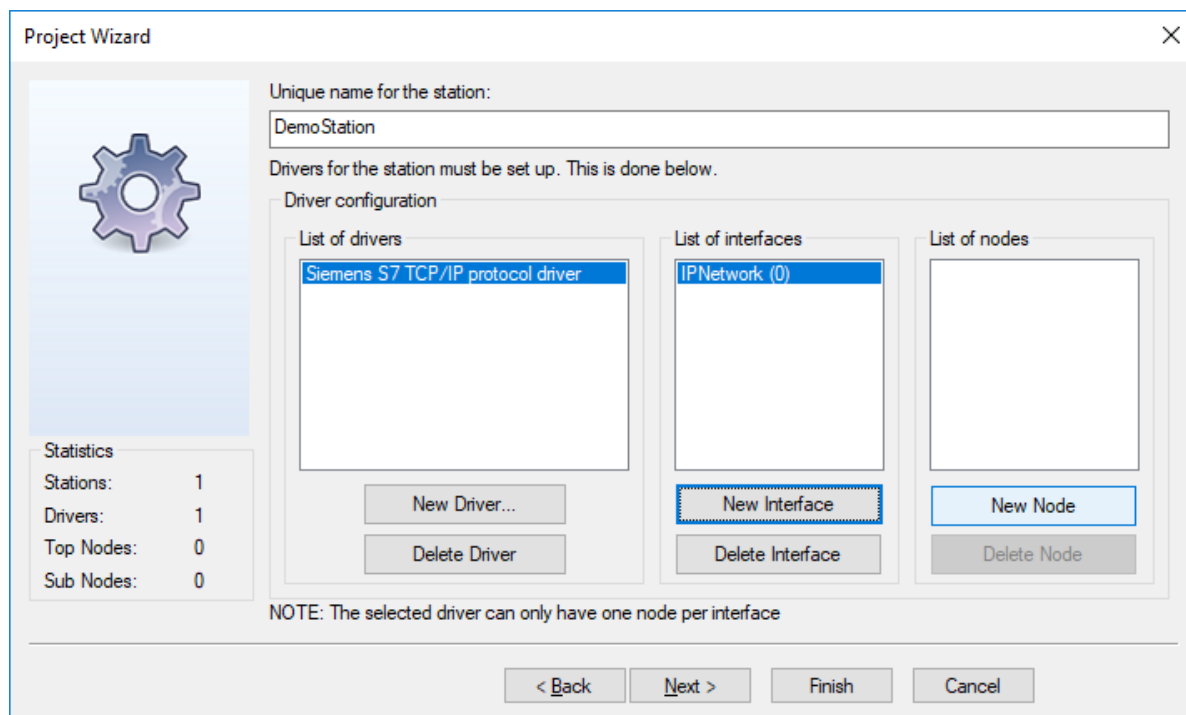


- a) Click **New Driver** and select the relevant driver from the list. **Tip!** Sort by clicking a header.

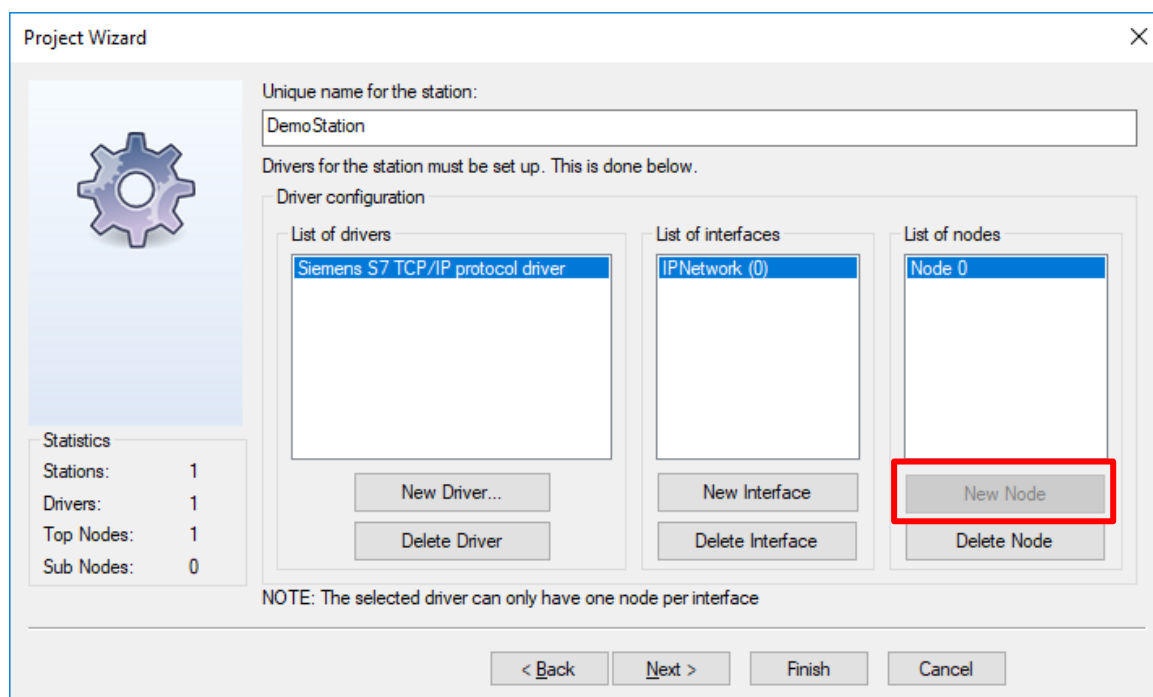


- b) Click **New Interface** to specify the interface for the connection (COM port, modem or radio) the selected driver uses to reach the PLC (IP Network in below example).

Schneider Electric A/S



- c) Click **New Node** for each PLC you want to set up. A node corresponds to a physical PLC and is the unique identifier of the PLC.

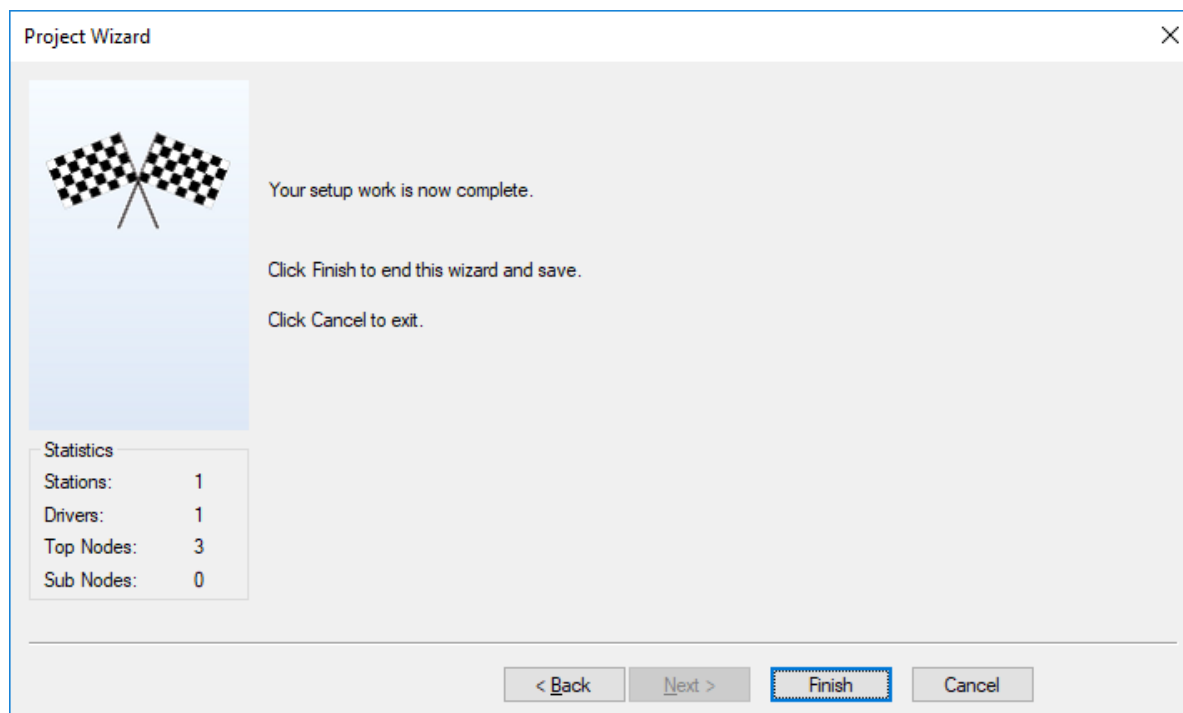


Software and hardware requirements for all PLC drivers supported by IGSS are described at <http://www.igss.com/overview/PLC-drivers-supported.aspx>.

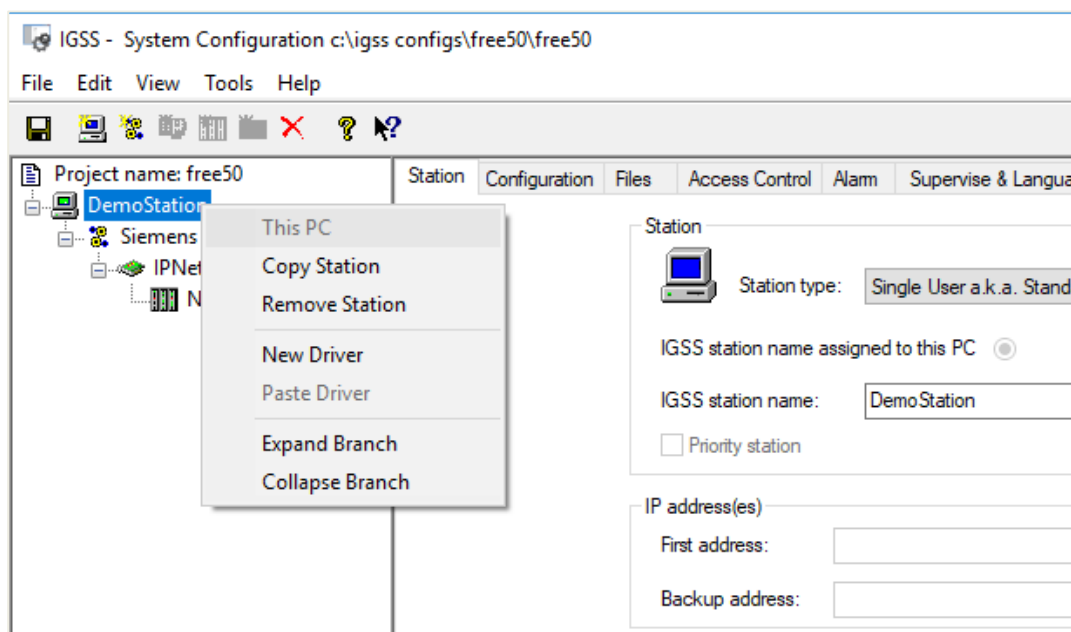
- 7) The initial setup is now completed. Click **Finish**. The **System Configuration** form opens.

Schneider Electric A/S

IGSS SCADA Software * Schneider Electric Denmark A/S * Lautrupvang 1 * DK-2750 Ballerup * Denmark
Phone: +45 88 30 20 00 * E-mail: DK-IGSS-support@schneider-electric.com * www.igss.com



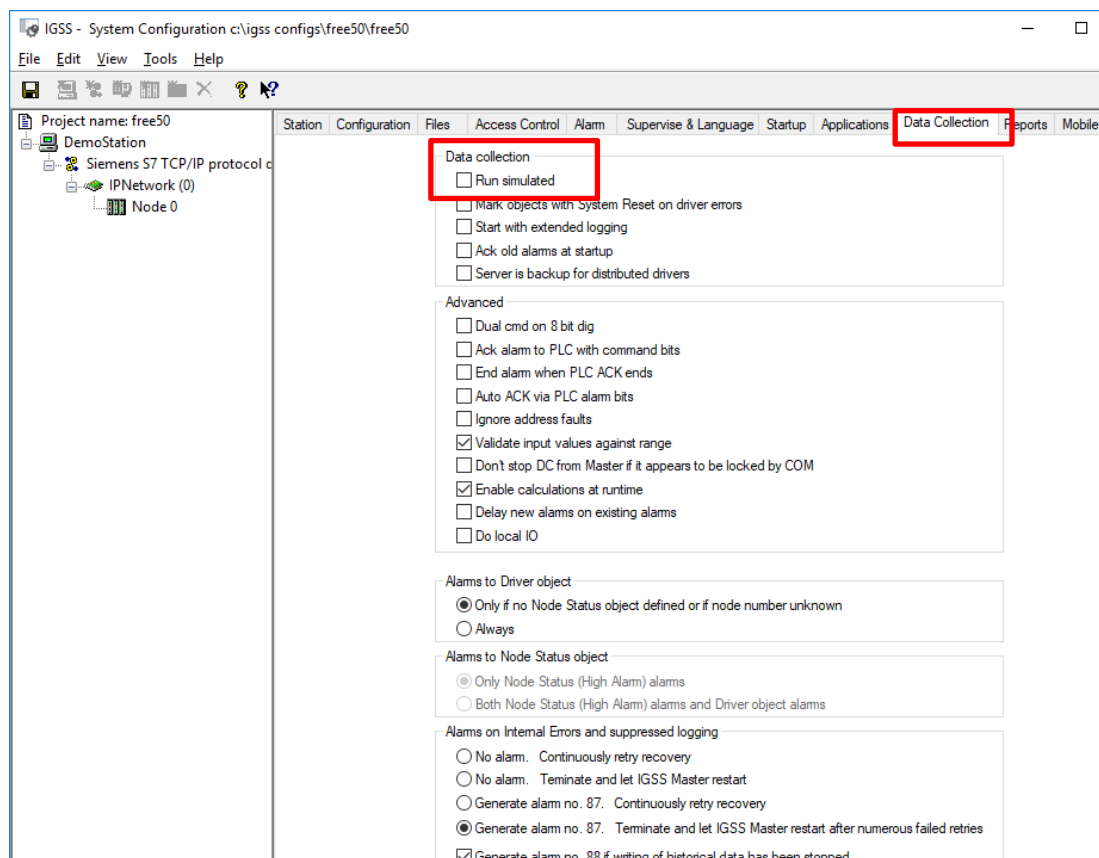
- 8) In **System Configuration**, select your IGSS Server (example “DemoStation”) in the tree view. The computer icon should turn green. If not, right-click the icon and select **This PC**.



NB! If you have purchased a license for > 1 user/station, you must specify the IP address for the primary IGSS Server in the System Configuration form’s “Station” tab.

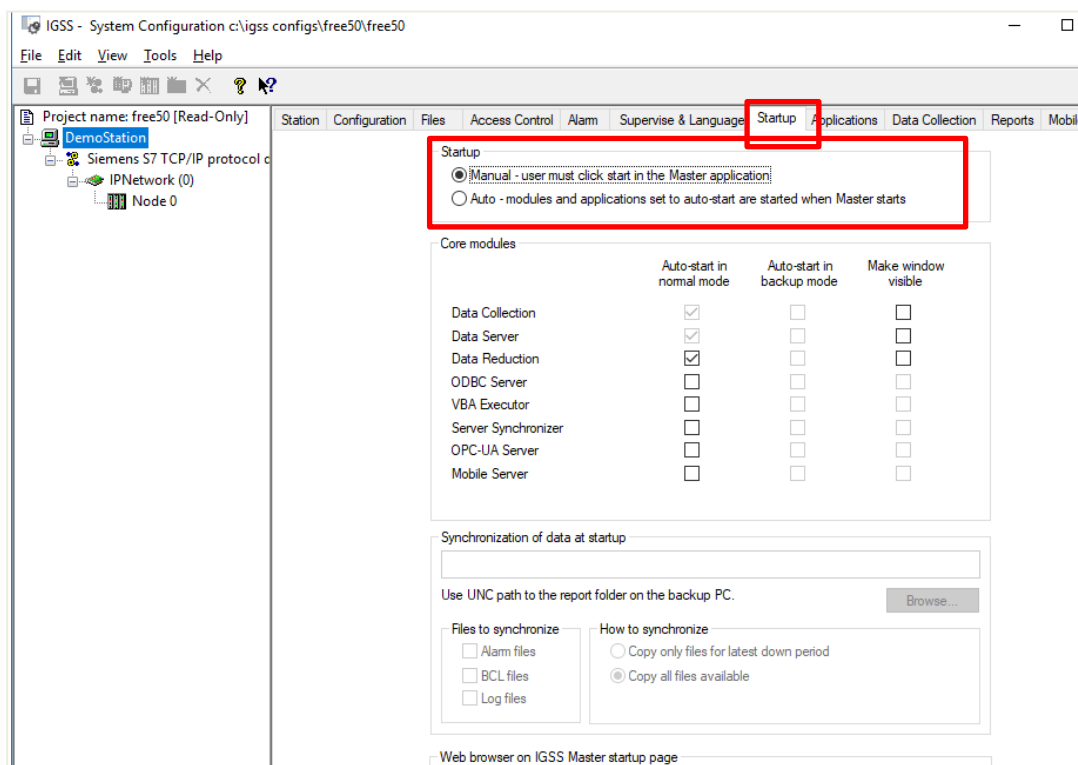
- 9) Select the **Data Collection** tab. If you want to communicate with a real PLC, make sure that **Run simulated** is **NOT** selected.

Schneider Electric A/S



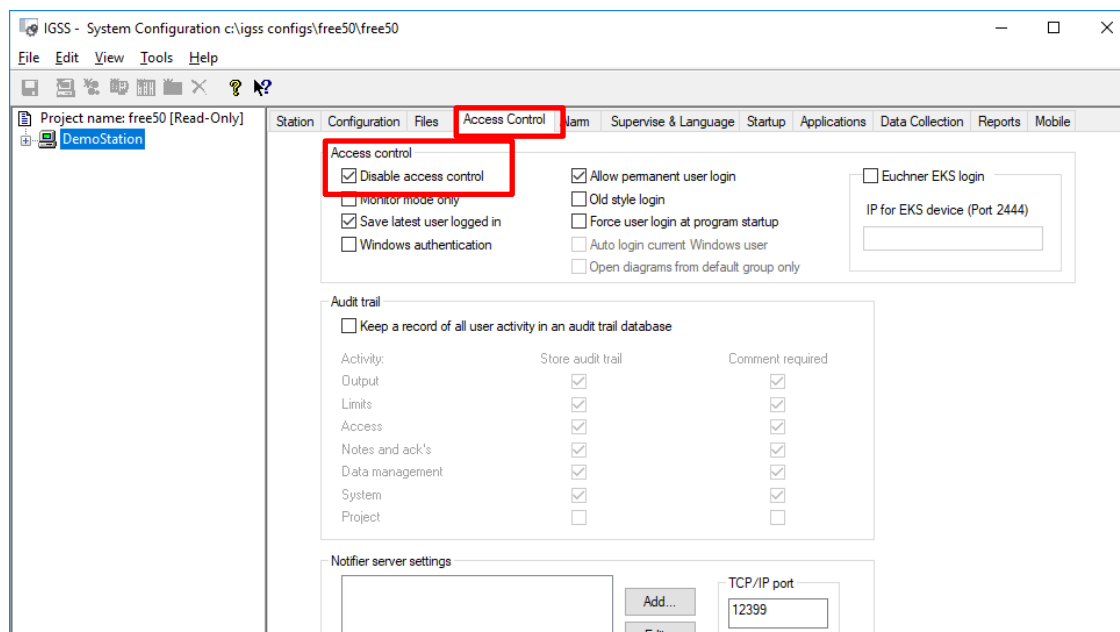
10) In the **Startup** tab, select the **Startup** mode for the selected core modules:

- **Manual** is recommended during the design phase
- **Auto** is recommended when you mainly use IGSS in operation for supervision.



11) Under **Access Control**, it is recommended to select **Disable access control** during design. Deselect when the project is put into operation if access control is needed.

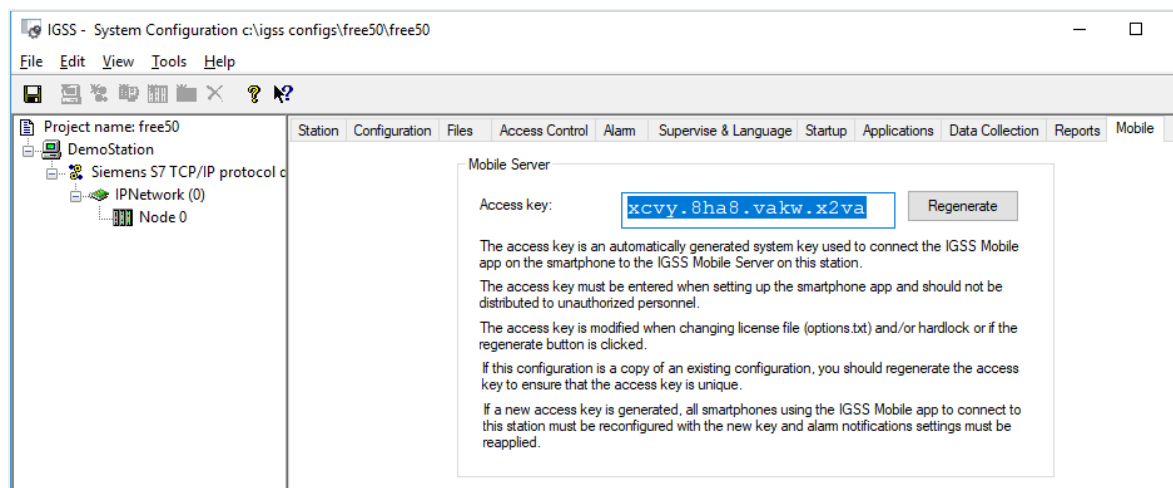
Schneider Electric A/S



IGSS System Configuration offers numerous options to set up e.g. scan intervals for new data, access control, alarm settings, user interface settings, IGSS applications, reports etc. For a quick start, you can use the default settings and come back to adjust these, if needed.

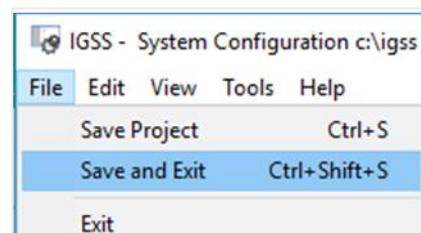
- 12) **Mobile app** - If you have purchased a license for > 50 objects and/or > 1 user, and operators are going to use the IGSS SCADA system to supervise an installation via mobile devices such as smart phone or tablet, go to the **Mobile** tab and copy or regenerate an access key to connect the IGSS Mobile app to the IGSS Mobile server.

NB! The IGSS Mobile app does not work for FREE50 free edition.



- 13) In the **File** menu, click **Save and Exit**.

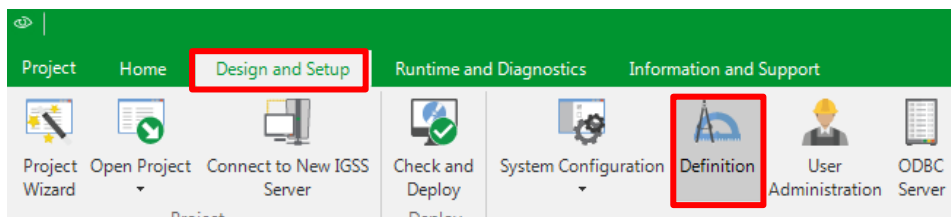
You have now completed the System configuration and can begin creating your first process diagram.



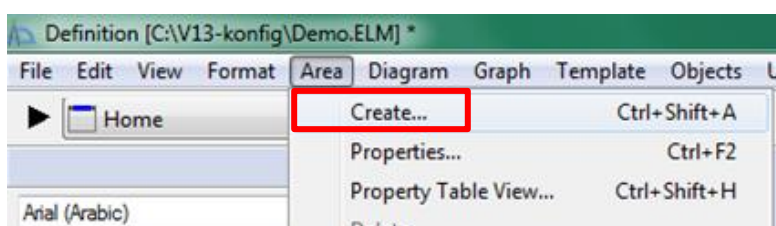
Schneider Electric A/S

C. Create a process diagram in the Design module, Definition

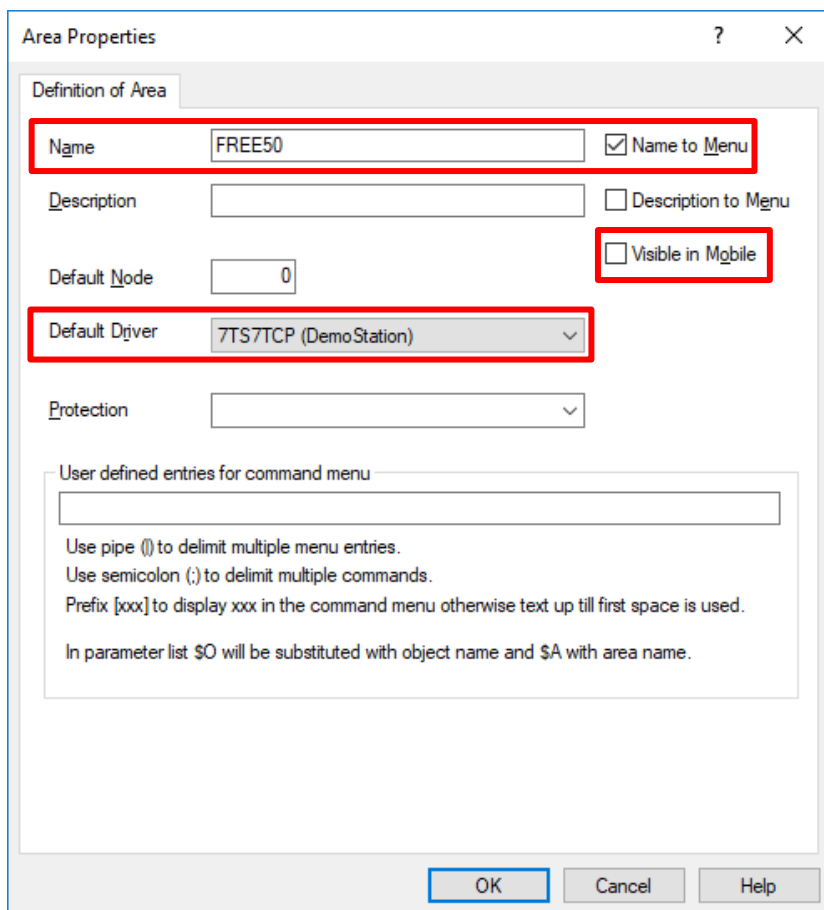
- 1) In **IGSS Master**, select the **Design and Setup** tab, and click the **Definition** icon.



- 2) In the **Definition** module's **Area** menu, select **Create**.

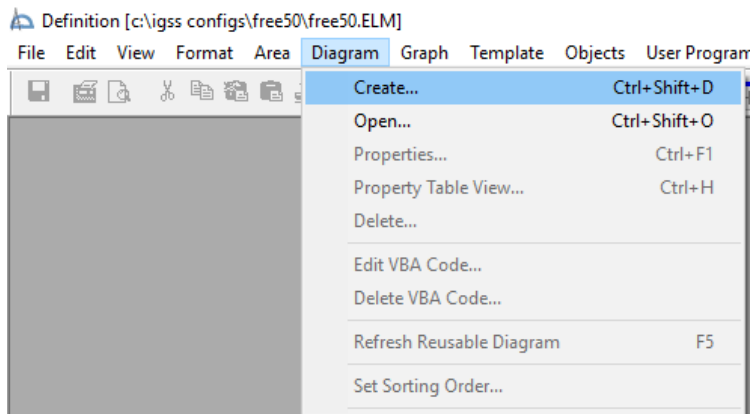


- 3) Define an area **name** (do **NOT** use spaces in the name). Keep **Name to menu**, select the **Default driver** you want to use for this area and click **OK**.
If relevant and if you have bought an IGSS license you can also select **Visible in Mobile** (does not work with the FREE50 free edition).



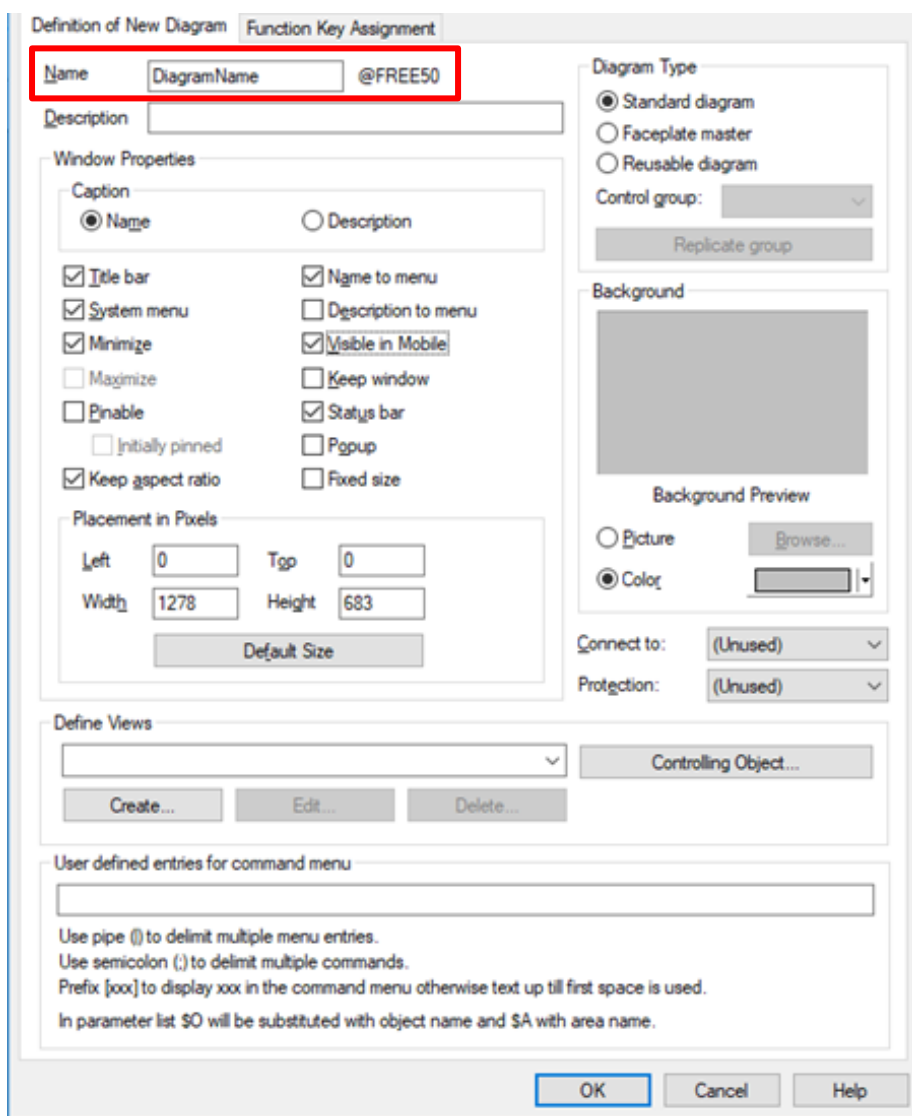
Schneider Electric A/S

- 4) In the **Diagram** menu, select **Create**.



- 5) Define a diagram name, select the check boxes shown below and, if relevant, adjust diagram size (Placement in pixels) and select **Visible in mobile** (not for FREE50 edition) and click **OK**.

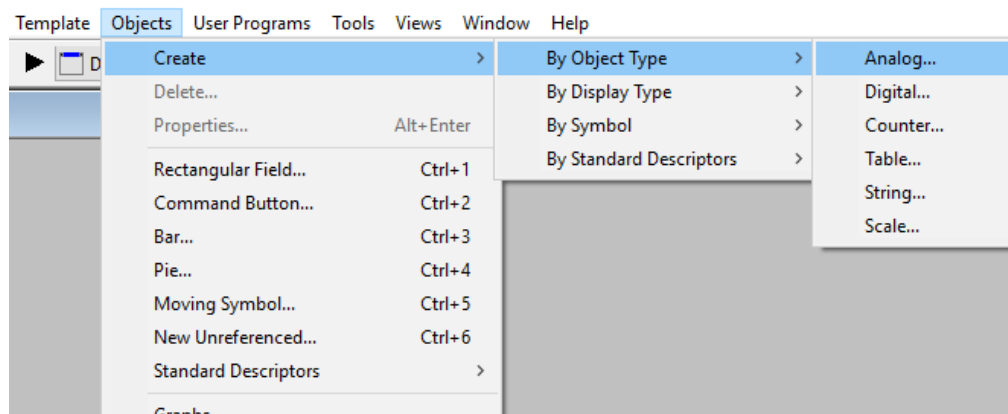
Tip: You can change background color or use a picture as background for your diagram.



Schneider Electric A/S

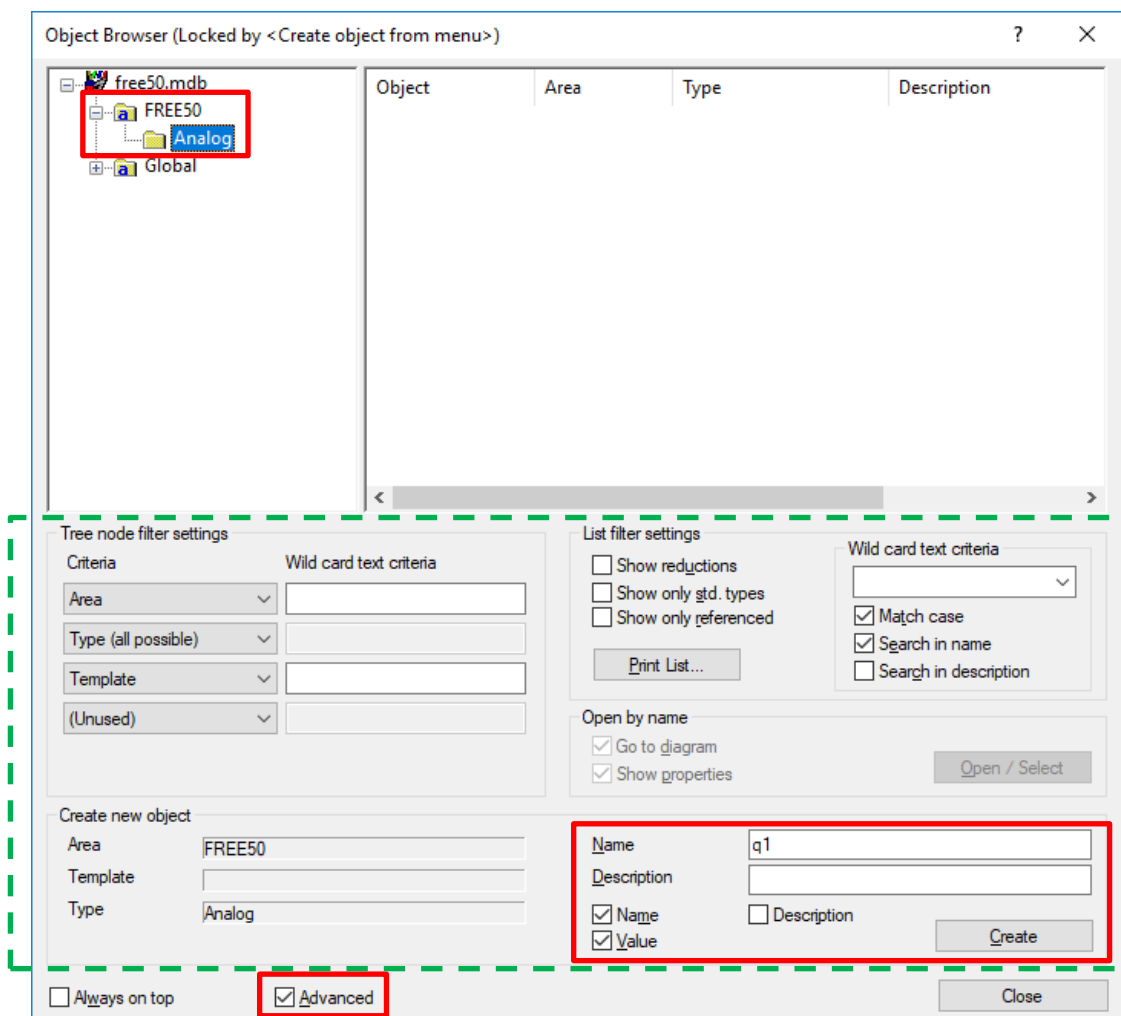
D. Create your first process component

- 1) Let's begin by creating an *analog* object e.g. a flow meter called **q1**. In the top menu of the **Definition** module, click **Objects > Create > By Object Type > Analog....**

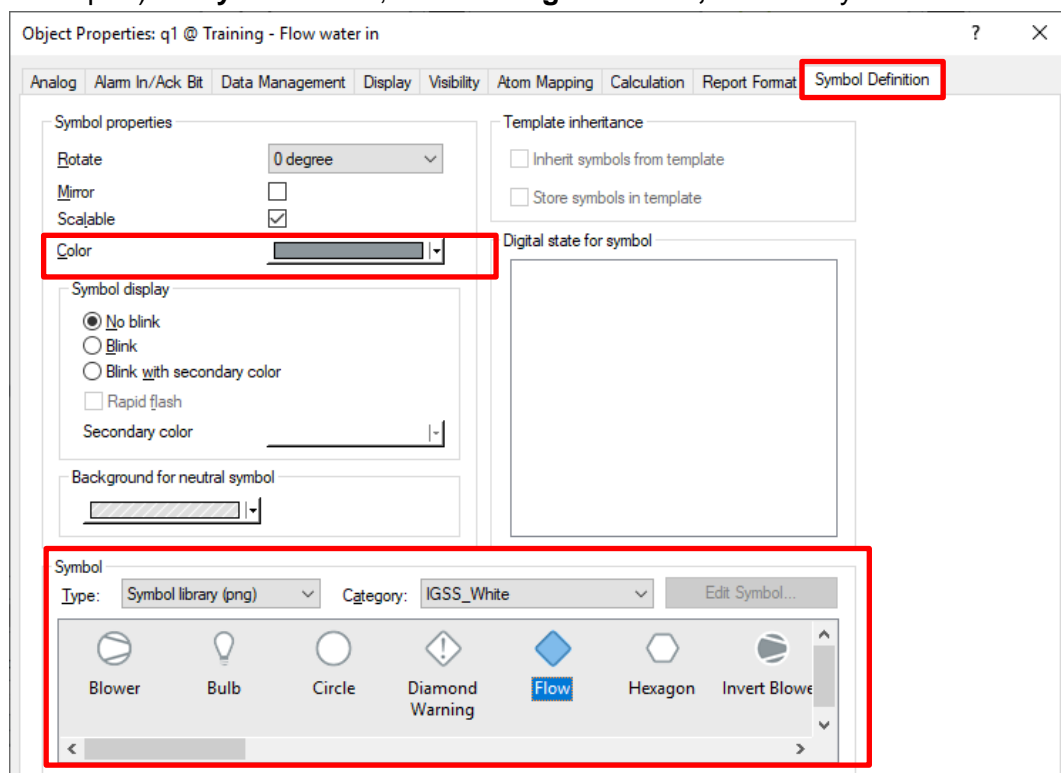


Tip: You can also right-click in the diagram and select **Create > New > Analog elements**.

- 2) In the **Object browser**, select the **Advanced** box to unfold the form. Enter "**q1**" in the **Name** field and description eventual. Click **Create** to open the **q1 Object properties form**.

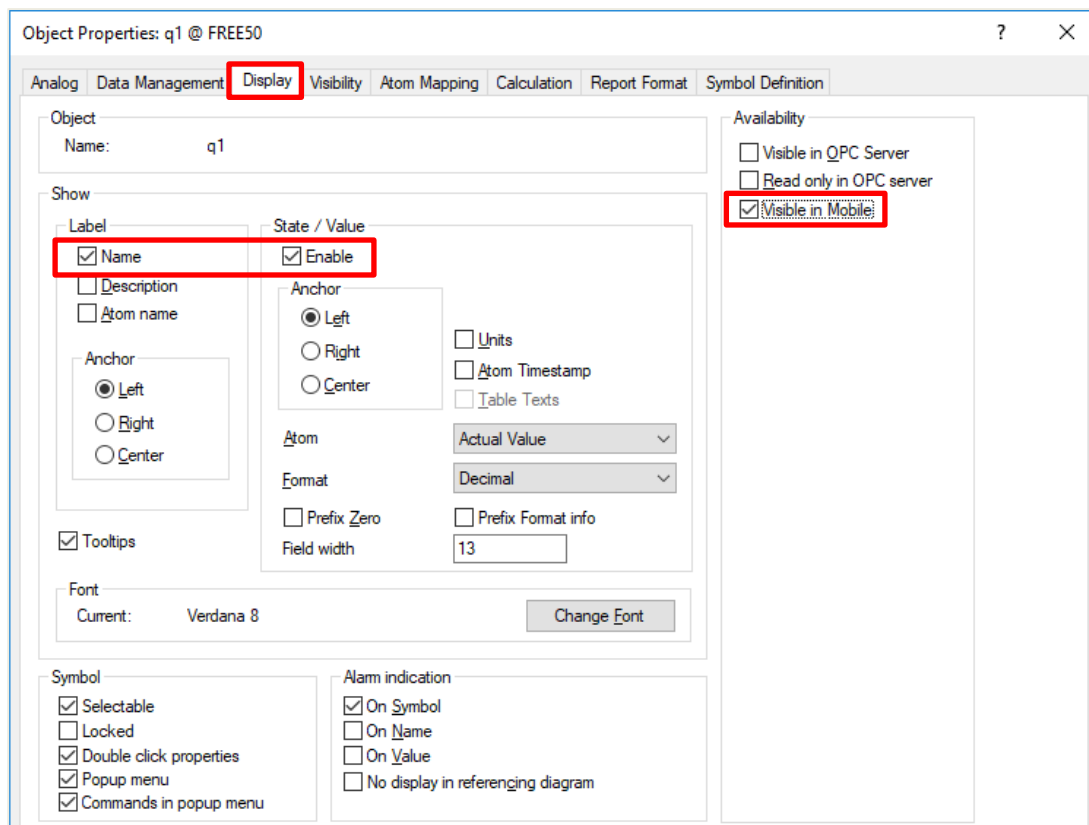


- 3) In the Object properties form's **Symbol Definition** tab you can add a symbol (a physical descriptor). In **Symbol table**, click **Analog Elements**, select a symbol and a color.



NB! Do **NOT** click OK yet – there are more actions the other tabs in the form. If you click OK and close the form, just right-click the object and select **Properties** to open it again.

- 4) In the **Display** tab, select the **Name** and **Enable** check boxes and, if relevant, **Visible in Mobile** (not for FREE50 free edition).



Schneider Electric A/S

- 5) Click the **Atom Mapping** tab to enable the alarm atoms* needed to define alarm limits for your object. Set check mark at the relevant atoms e.g. **Actual Value** (recommended), **High Alarm** and **Low Limit**. (*IGSS name for a tag or an I/O point for data transfer).

Mark the Actual value atom and set up the relevant atom (PLC node) properties:

- Under **I/O mode**, select "in"
- Under **PLC Node for object**: Check that the **driver**, you specified earlier is selected. If not, select it from the dropdown list.
- Set up the PLC Address info according to the actual PLC configuration.

Set up atom properties for the other selected atoms according to the actual PLC.

- 6) Go back to the **Analog** tab. Enter **Decimal**, **Max.** and **Min.** values, select boxes and enter values for **High alarm** and **Low alarm** (and other atoms you may have selected above).

To be able to select **units** for measurements (e.g. m³/h), you first have to set these up in **Definition > Edit > Measurements ...**

Schneider Electric A/S

- 7) Go back to the **Atom Mapping** tab and set up the **alarm details** (mandatory) for the selected atoms. Mark each atom - one at a time - and click **New** under **Alarm Details**.

Object Properties: q1 @ FREE50

Atom Mapping

Atom

- ☒ High Alarm
- ☐ High Limit
- ☒ Actual Value
- ☐ Set Point
- ☒ Low Limit
- ☐ Low Alarm
- ☐ Alarm-In
- ☐ Alarm-Out
- ☐ High Scale
- ☐ Low Scale
- ☐ Free Value 1
- ☐ Free Value 2
- ☐ Free Value 3
- ☐ Free Value 4
- ☐ Free Value 5
- ☐ Free Value 6

I/O mode: local

Display name:

PLC Node for object: q1

Driver:

Node:

PLC Address for High Alarm atom:

Data Group: 0

Word Offset: 0

Bit Offset: 0

External Type:

Use numeric +/- to scroll to next/previous atom

Alarm Details

101 : High alarm on flow

New Edit Delete

For each alarm, enter text, priority, colors and evt. instruction. Keep/change alarm no and click **OK**.

Edit Alarm

Alarm number: 101 Priority: 5

Alarm text: High alarm on flow

Alarm color: ☒ Blink

Acknowledged color: ☒ Blink

Ended color: ☒ Blink

Sound: ☒ No sound ☐ Beep ☐ Use wav file ☐ Repeat

Instructions:

Copy from:

Use as: ☒ Alarm ☐ Event

☐ To Notifier ☐ To PLC ☐ To print ☐ Auto acknowledge

Help OK Cancel

Schneider Electric A/S

- 8) Go to the **Data management** tab and select the relevant **Scan interval** for the process component (IGSS object). How often do you want to read the process value from the PLC?

You can also select **Base interval** (time interval between data reduction for the object), what and how much you want to **log** plus **Data reduction method** (values and log data can be viewed in IGSS graphs and form the data basis of IGSS standard reports).

Object Properties: q1 @ FREE50

Analogue **Data Management** Display Visibility Atom Mapping Calculation Report Format Symbol Definition

Scan interval
☒ 2000
☐ 5000
☐ 10000
☐ 30000
☐ None
 In milliseconds.

Logging
☐ > 1%
☐ > 2%
☐ > 5%
☐ > 10%
☒ All changes
☐ All values
☐ None
☐ % relative change
☐ % of full scale
☐ Log outgoing commands
☐ Log to printer
☐ Log to SQL Database

Base interval
☐ 2
☒ 10
☐ 5
☐ 30
☐ None
 In mins.

Data reduction
☒ Average
☐ Minimum
☐ Maximum
☐ Sum
☐ Actual
☐ Change
☐ Difference

Transfer to history
☒ Reduced value
☐ Actual total value
☐ Idealized total value
☐ None
 For each data reduction method

Protection
 (Unused)

Safe commands
 (None)

Scale as
 (Unused)

Connect to
 (Unused)

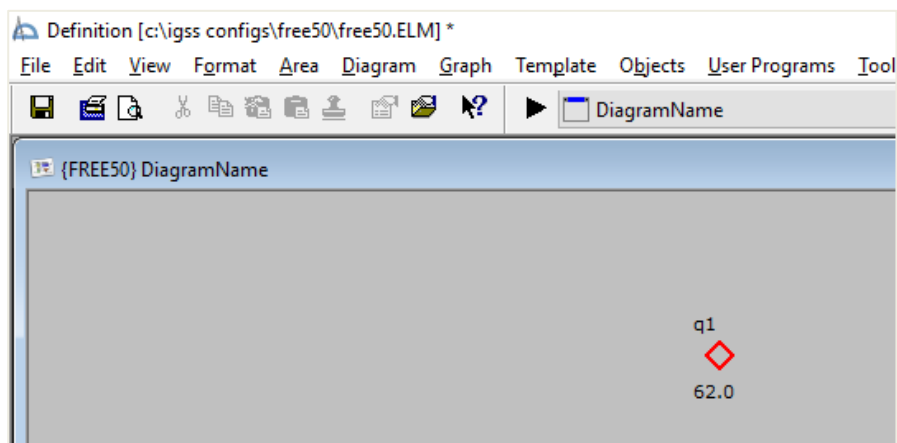
Alarm delay ☐ 0 sec.

User defined entries for command menu
 Use pipe (|) to delimit multiple menu entries.
 Use semicolon (;) to delimit multiple commands.
 Prefix [xxx] to display xxx in the command menu otherwise text up till first space is used.
 In parameter list \$O will be substituted with object name and \$A with area name.

Delete Object

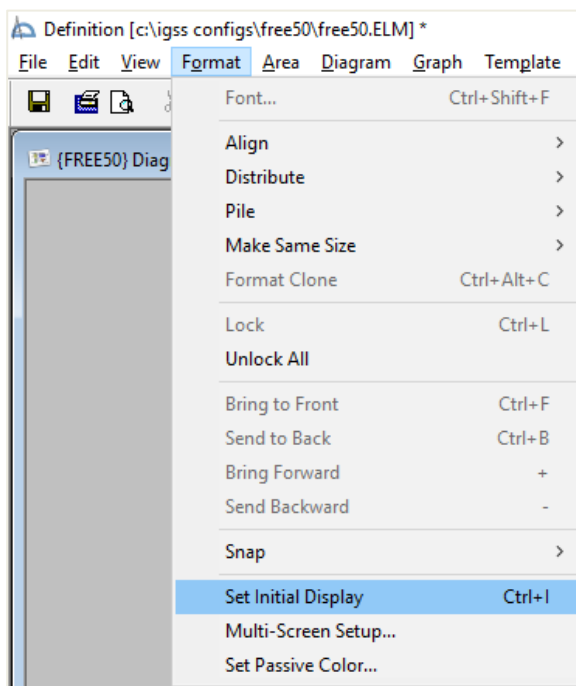
OK Cancel Help

- 9) Click **OK**. The q1 analog object (flow meter) will now appear in your mimic diagram. **Tip:** You can change font type and size for text, align several objects etc. in the **Format** menu.

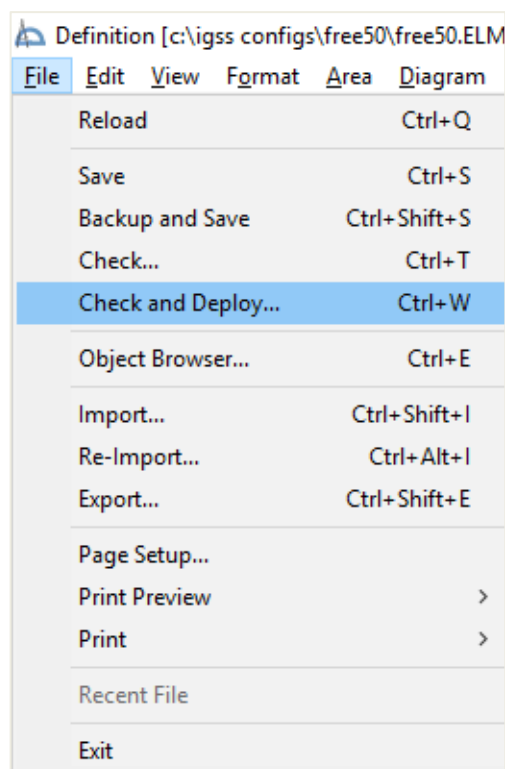


Schneider Electric A/S

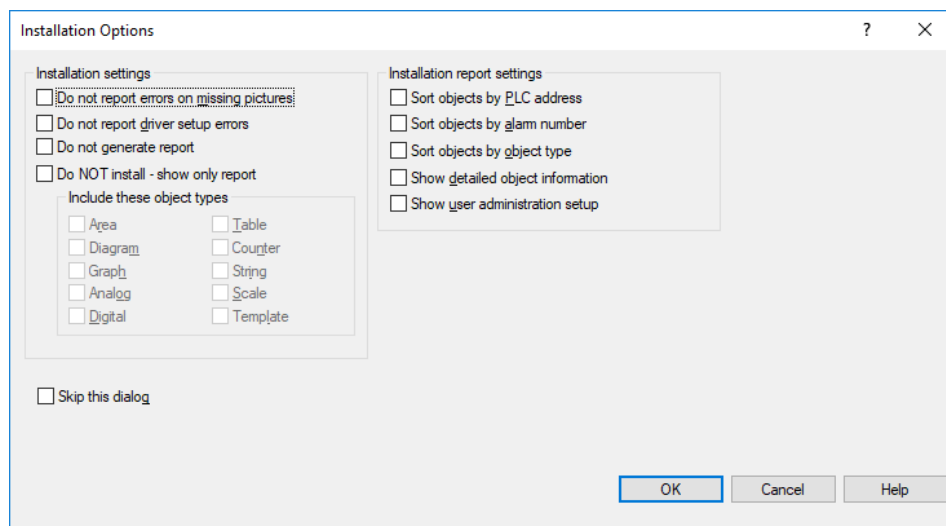
10) In the **Format** menu, select **Set Initial Display** to set this diagram as your startup picture.



11) Click **File** and select **Check and Deploy** to put the diagram into operation for supervision.



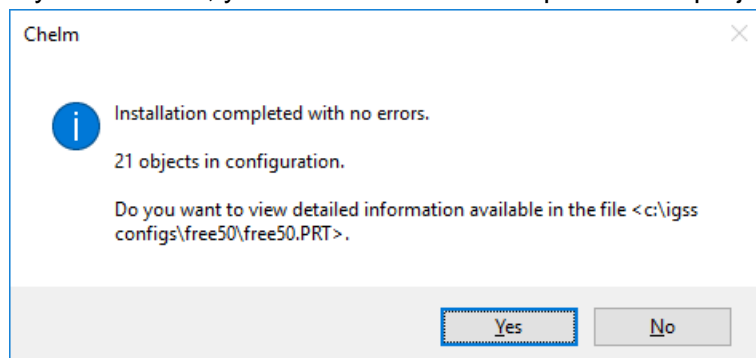
12) The **Installation Options** dialog box appears. Click **OK**.



Schneider Electric A/S

13) An installation status message appears. Click **No**.

If you click **Yes**, you will see a detailed report for the project.



NOTE: As you can see, there are already 21 objects in the project. This is because IGSS comes with a number of predefined objects for different system purposes. The predefined objects are included for free, that is, an IGSS license will include extra 15 objects = in total 65 objects. Click here to read more about ["Objects in IGSS"](#).

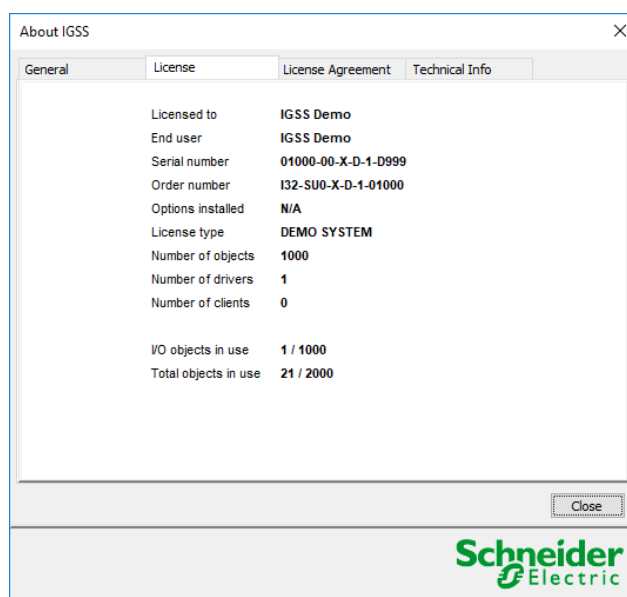
E. Calculating the number of objects in a project

As opposed to most other HMI/SCADA systems, IGSS only counts the number of objects used e.g. pumps, valves, motors, flow meters, etc.) as basis for license costs - not the number of tags. One object may contain up to 10 I/O points or data tags (atoms). As an example, an analog object can include the following atoms: High Alarm, High Limit, Current Value, Set Point, Low Limit, Low Alarm, Alarm-In, Alarm-Out.

For further information about object types and how to calculate the number of objects, see ["Objects in IGSS"](#) at www.igss.com.

For information about license types and prices based on the number of objects, kindly refer to www.igss.com > Product info > License Prices, where you can also find a calculation example.

You can see the number of objects you've purchased and the number of objects currently used in the project in the **Definition** module under **"Help > About Definition"**. If you need > the 50 objects in the FREE50 free edition and want to buy a license, go to www.igss.com > Contact > Sales.

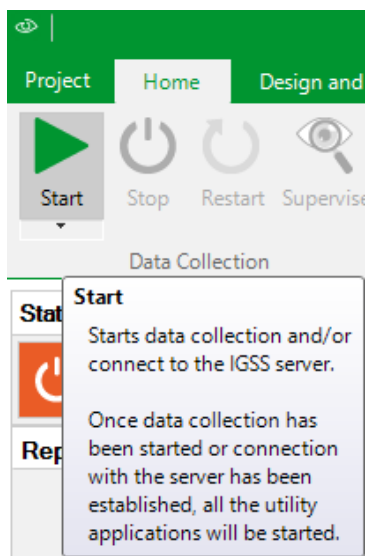


Schneider Electric A/S

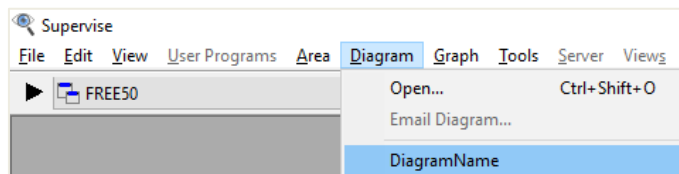
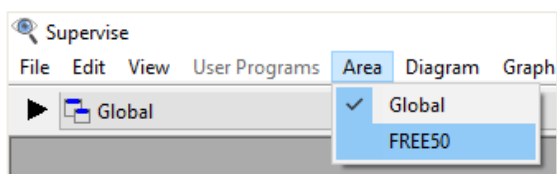
IGSS SCADA Software * Schneider Electric Denmark A/S * Lautrupvang 1 * DK-2750 Ballerup * Denmark
Phone: +45 88 30 20 00 * E-mail: DK-IGSS-support@schneider-electric.com * www.igss.com

F. Running the project

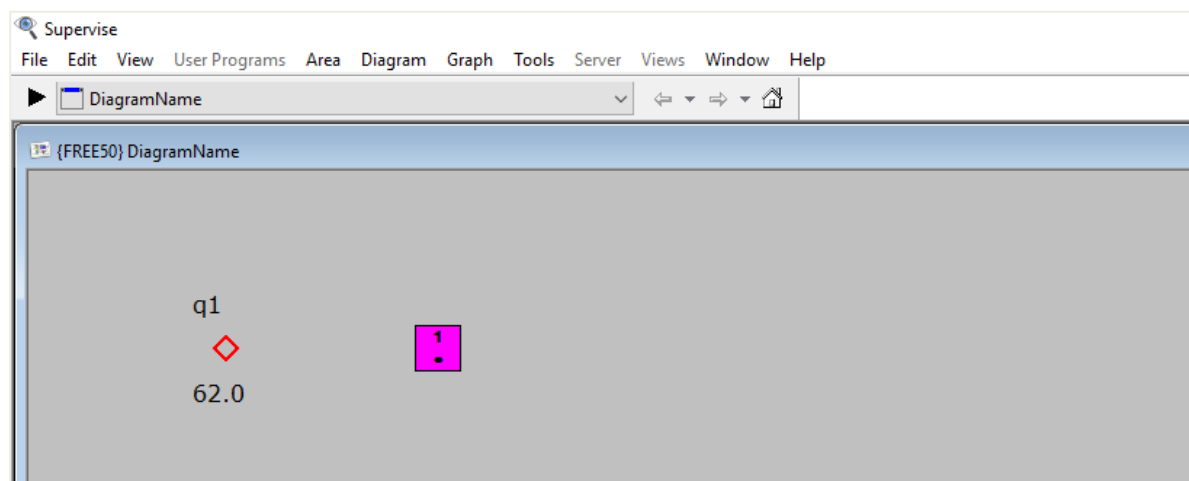
- 1) In the **IGSS Master** module, under the **Home** tab, click the **Start** button.



- 2) The startup diagram appears in the **Supervise** module. If not, first select the relevant area, and then the diagram.



The alarm icon appears (colored box) immediately when you start up. In this case, there is 1 alarm. When alarms occur, the color of the alarm icon changes to the color of the most critical alarm. Double-click the alarm icon to view the active alarms.



Congratulations! You have created your first IGSS project and brought it online.

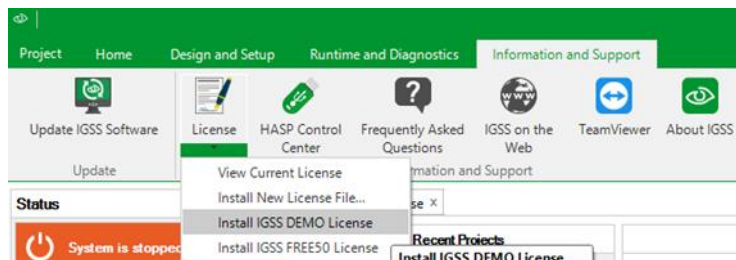
Schneider Electric A/S

You can now continue populating your diagram with more objects, templates, visual descriptors like tanks, pipes, navigation buttons, access control, trend graphs, reports, maintenance jobs and much more. For inspiration and more guidance on how to do this, see:

- **Help manuals** at www.igss.com > Support > Help and Manuals
- **Exercises** used in IGSS Workshops at www.igss.com > Download > Training Materials, or
- **Sign up** for one of our workshops at www.igss.com > Training > IGSS Workshops

You can also find inspiration on how to design IGSS diagrams in **the IGSS Demo project**. For this you need to switch from IGSS FREE50 to the free **IGSS DEMO license**. This allow you to:

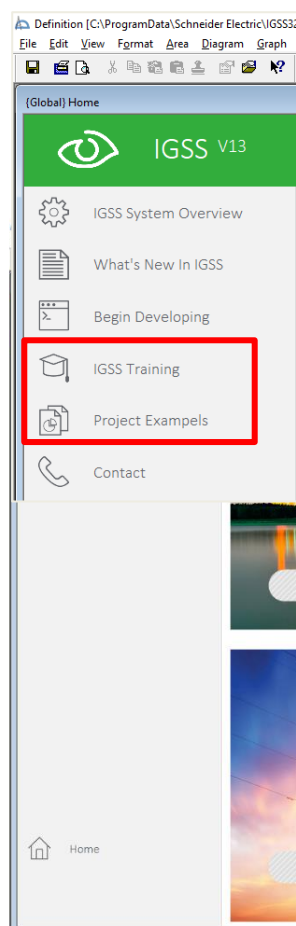
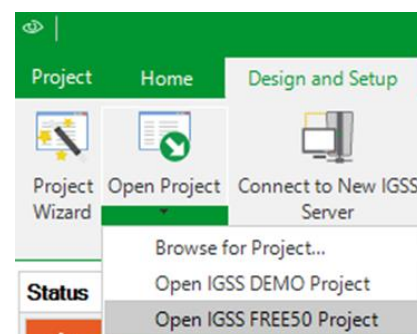
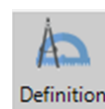
- View a pre-configured IGSS project incl. diagrams from different industries
- Build a new project from scratch and test it with real PLC data
- Collect real data for one hour
- Define up to 1,000 objects in an IGSS project
- Use one of the numerous PLC drivers supported



In **IGSS Master** go to **Information and Support > License > Install IGSS Demo license**.

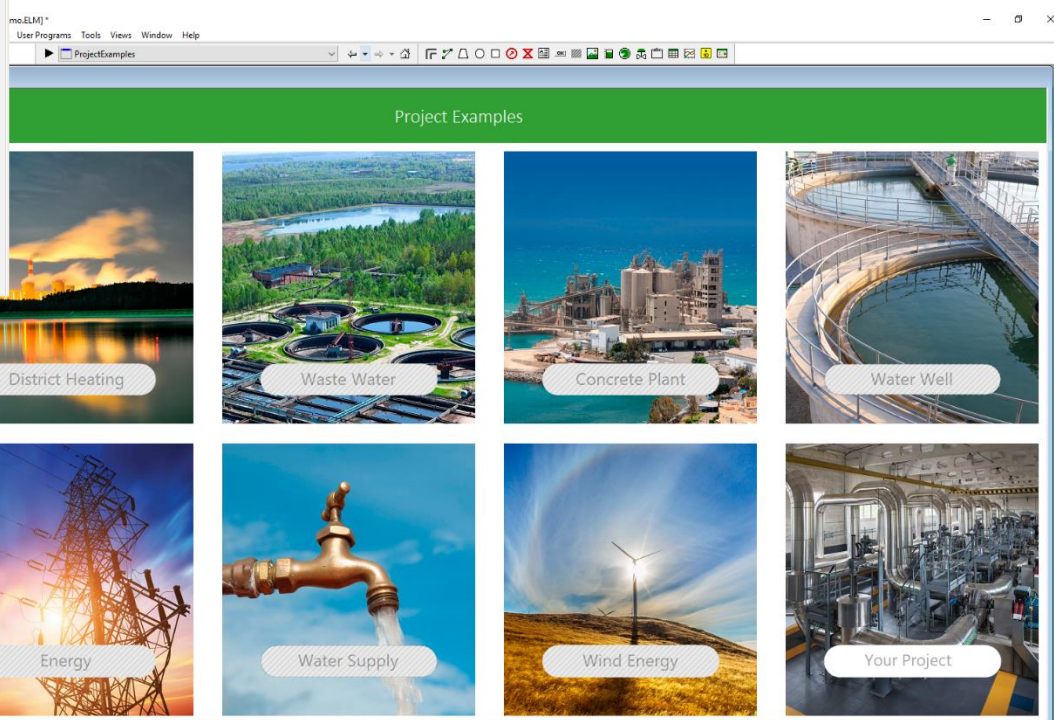
In the Demo project, click the **Definition** icon.

In the left menu, select **IGSS Training** or **Project examples**.



To return to the FREE50 free license & project:

In **IGSS Master**, go to **Design and Setup > Open Project > Open IGSS Demo project**.



Schneider Electric A/S

G. Help and Support

Schneider Electric hopes that the IGSS FREE50 license will give you a good picture of the capabilities of the IGSS SCADA system.

We recommend that you explore the comprehensive IGSS help system for further details.

Should you have technical questions re. FREE50, e-mail support is available to some extent. Send an e-mail to DK-IGSS-support@schneider-electric.com with "IGSS FREE50" in the **Subject** field.

For sales-related questions, do not hesitate to contact the sales manager for your region at www.igss.com > Contact > Sales.