

Atlas

User manual



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Augusti 2012

Revision: 1.0.1

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Preface

This manual is written for both **Atlas for Atlantis** (SCADA) and **Atlas in Avalon** (PLC).

These two versions are basically identical, but certain functions described may not be available in each version.

In these cases, the differences are clearly defined either in the title or text.

Getting started with Atlas

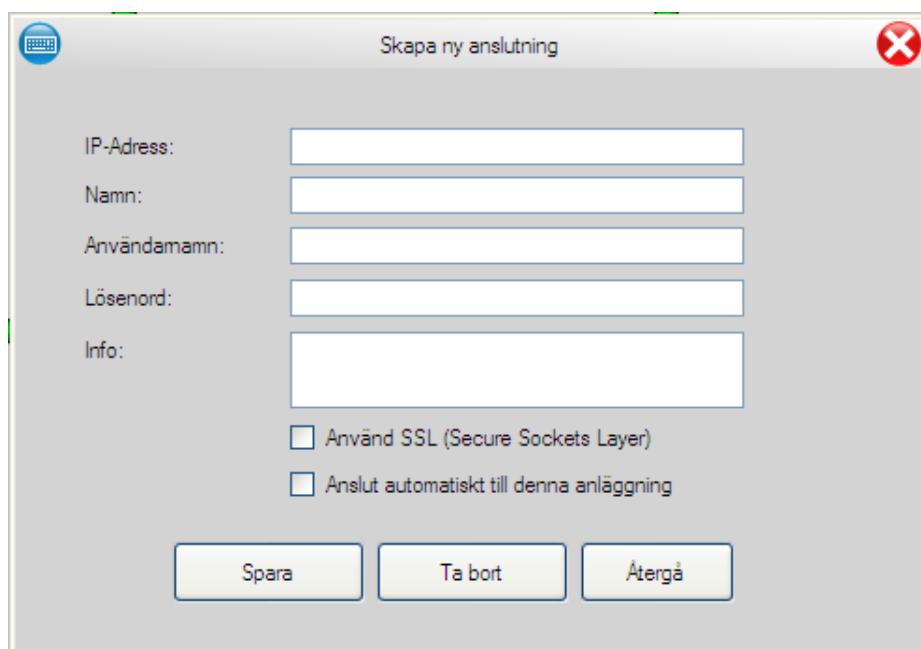
Starting Atlas from another computer

Start your web browser and enter the address

<http://xxx.xxx.xxx.xxx/AtlasWebstart/> (where xxx.xxx.xxx.xxx is the IP address of the server).

Enter your username and password. Click **Starta Atlas här** on the web page that opens to install and start Atlas on the computer.

A log in dialog will be shown the first time Atlas is started.



See [Edit an existing site](#) for field descriptions.

A shortcut to Atlas is created in **Program/Larmia Control AB**.

Connections and Menus

Add, connect to or disconnect from a site

Click the site button to show a graphical summary of all the added sites.

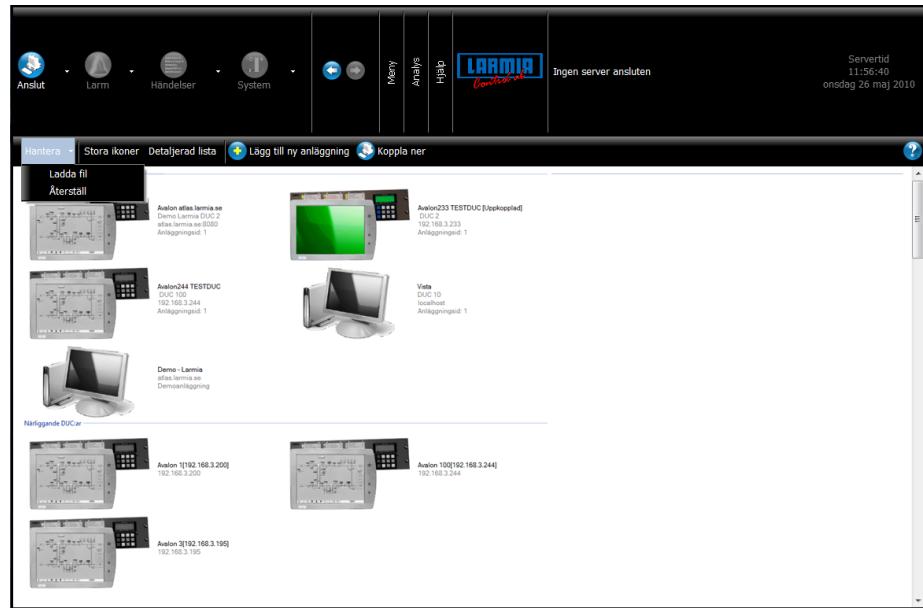


Site summary

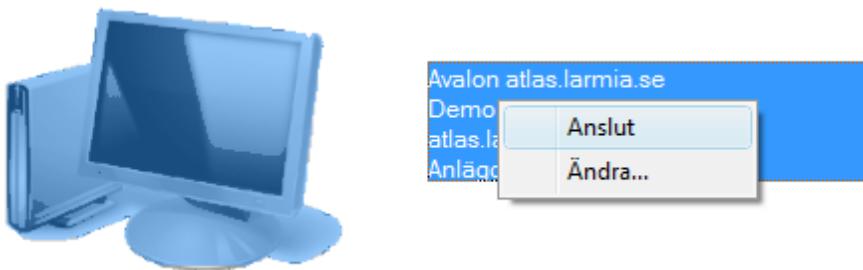
Click on a site to connect, edit or disconnect from the site.

Icon	Description
Green icon	Connected site
PC icon	Main Computer site
PLC icon	Avalon site

All the nearby PLC:s will be shown when connecting directly to an Avalon PLC (all the PLC:s on the same network).



Connect to a site



Select a site and click **Anslut**. If you're already connected to an Avalon PLC you can also connect to the other PLC:s at the site.

Disconnect from a site

Select **Koppla ner anläggning** to disconnect from a site select.

Add a new site

Select **Lägg till ny anläggning** in the menu to add a new site.

Edit an existing site

Click **Ändra...** to open the edit dialog.

The dialog box is titled 'Skapa ny anslutning' (Create new connection). It contains fields for 'IP-Adress:' (IP Address), 'Namn:' (Name), 'Användamann:' (User), 'Lösenord:' (Password), and 'Info:' (Info). At the bottom are two checkboxes: 'Använd SSL (Secure Sockets Layer)' and 'Anslut automatiskt till denna anläggning' (Automatically connect to this site). The buttons at the bottom are 'Spara' (Save), 'Ta bort' (Delete), and 'Återgå' (Cancel).

Enter the following data:

Field	Translation	Description.
IP-Adress	IP address	IP address or DNS name. When the standard port 80 is not used for connecting to the server, the port number must be entered here (e.g. 192.168.1.10: 8080)
Namn	Name	Optional name for the site.
Användarnamn	Username	Username for logging in to the web server.
Lösenord	Password	Password for logging in to the web server. <i>Please note that the password should be at least 10 characters or longer and contain both upper and lower case letters and numbers!</i>
Info	-	Optional information text.
Använd SSL	Use SSL	Check if using SSL (secure communication).
Automatisk inloggning	Log in automatically	If checked, Atlas will automatically connect to the site upon start.

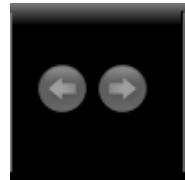
Atlas Menues

Main menu



Icon	Translation	Description
Inloggning	Log in/out	-
Larm	Alarm	Shows the alarm list, containing all alarms, for the site.
Händelser	Events	Shows the event list for the site.
System	-	Shows all the groups of the site

History



Use the forward/backward arrows to navigate between previous lists.

Meny



Icon	Translation	Description
Växla	Toggle	Show/hide the site navigator treeview.
Tid och Styr	Time and control	Shows all PLC:s in the system, and for each PLC you can navigate to its conditions, time schedules, regulators and layouts.
Behörighet	Permissions	Handles system permissions.
Inställningar	Settings	Client settings. Colors, fonts etc.
Sök	Search	Opens the search window.
Övervakare	Watcher	Opens the watcher window.
Fånga	Capture	Captures the current screen and saves to file.

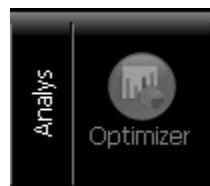
Avalon menu

Only shown when connected to an Avalon PLC.



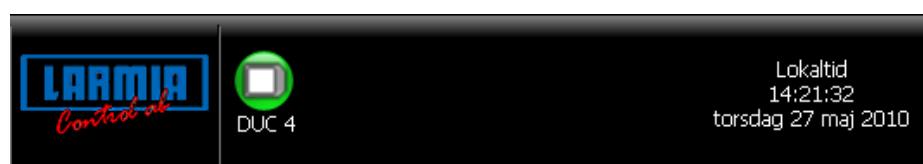
Icon	Translation	Description
Disposition	Layout	Shows the PLC layout, including addressing information if using the Carbon I/O system
Ändra ID	Set ID	Sets the ID number of the PLC.
Uppdatera	Update	Updates the PLC with the latest control program.
Inställningar	Settings	Avalon specific settings. Set I/O system (920 or Carbon), set IP address etc.
Larm Admin	Alarm admin	Configure the alarm handling.
Utforskaren	Explorer	Starts the explorer (password required).

Optimizer



A link to the Optimizer report view.

The clock menu



Icon	Translation	Description
Larmia logo	-	Displays the version of the Atlas client.
DUC X	Site icon (PLCx)	Edit or connect to sites.
Klocka	Clock	Opens the clock dialog. In Avalon PLC:s you can also set the clock from this dialog.

The help menu



Icon	Translation	Description
Kom igång	Getting started	Opens the "Gettings started" document.
Online	-	Opens the online help.
Tangentbord	Keyboard	Opens the Atlas virtual keyboard

Log in/out

Click the key icon to log in/out.



The screenshot shows a standard Windows-style log in/out dialog box. At the top left is a small icon of a keyboard with a key highlighted. The title bar says "Logga in/ut". On the right is a red "X" button. The main area contains the message "Användaren Larmia är inloggad." Below this, there are two input fields: "Användarnamn:" with "Larmia" typed into it, and "Lösenord:" with an empty password field. At the bottom are two buttons: "Logga in" (highlighted in blue) and "Logga ut".

Log in

Enter/select username (**Användarnamn**) and password (**Lösenord**) and click **Logga in**.

Log out

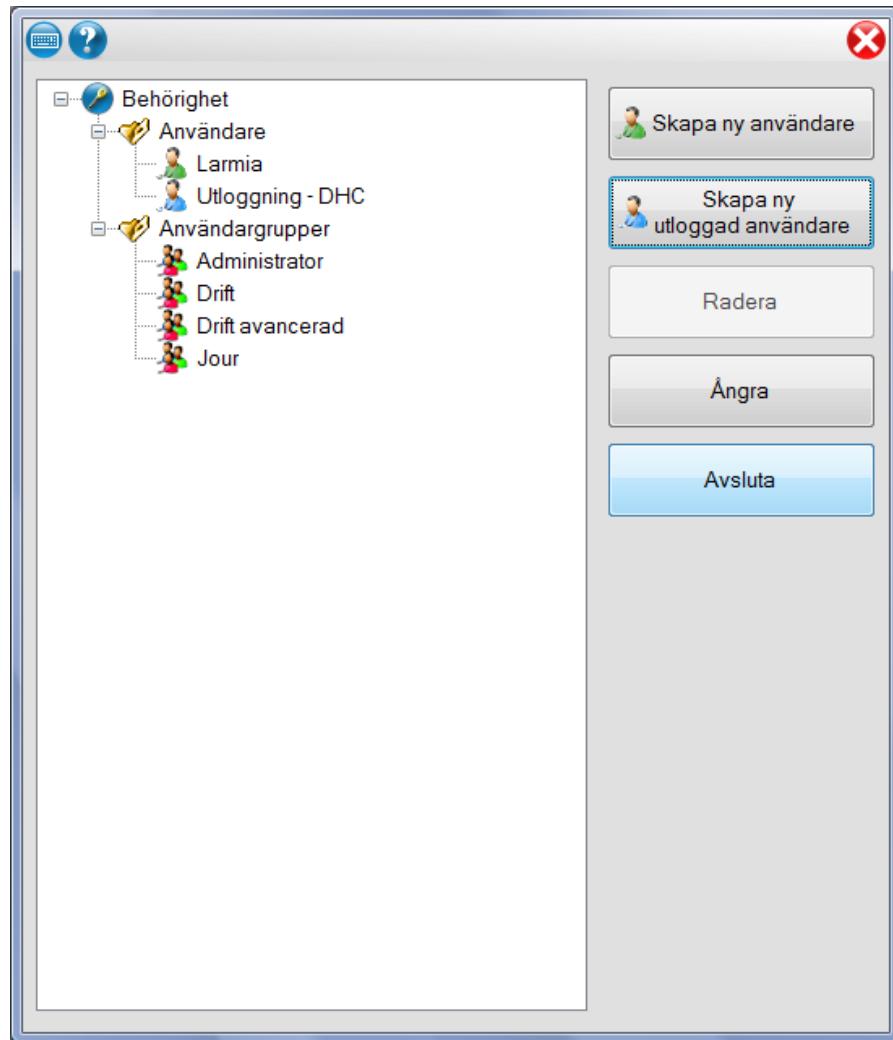
Click **Logga ut** to log out. If a [Logged Out user](#) exists in the system, it will automatically log in.

See [Permissions](#) for more information.

Permissions

Create users and user groups

Open the permission dialog by clicking **Meny -> Behörighet** in the main menu.



Users

The dialog box is titled "Användare". It contains the following fields:

- Förnamn: admin
- Efternamn:
- Beskrivning:
- E- Post:
- Telefonnummer:
- Mobilnummer:
- Kvitteringssignatur:
- Lösenord: ****
- Bekräfta lösenord: ****

Användargrupper

Medlem i	Ej medlem i
Administrator	Drift Drift avancerad Jour

Buttons at the bottom:

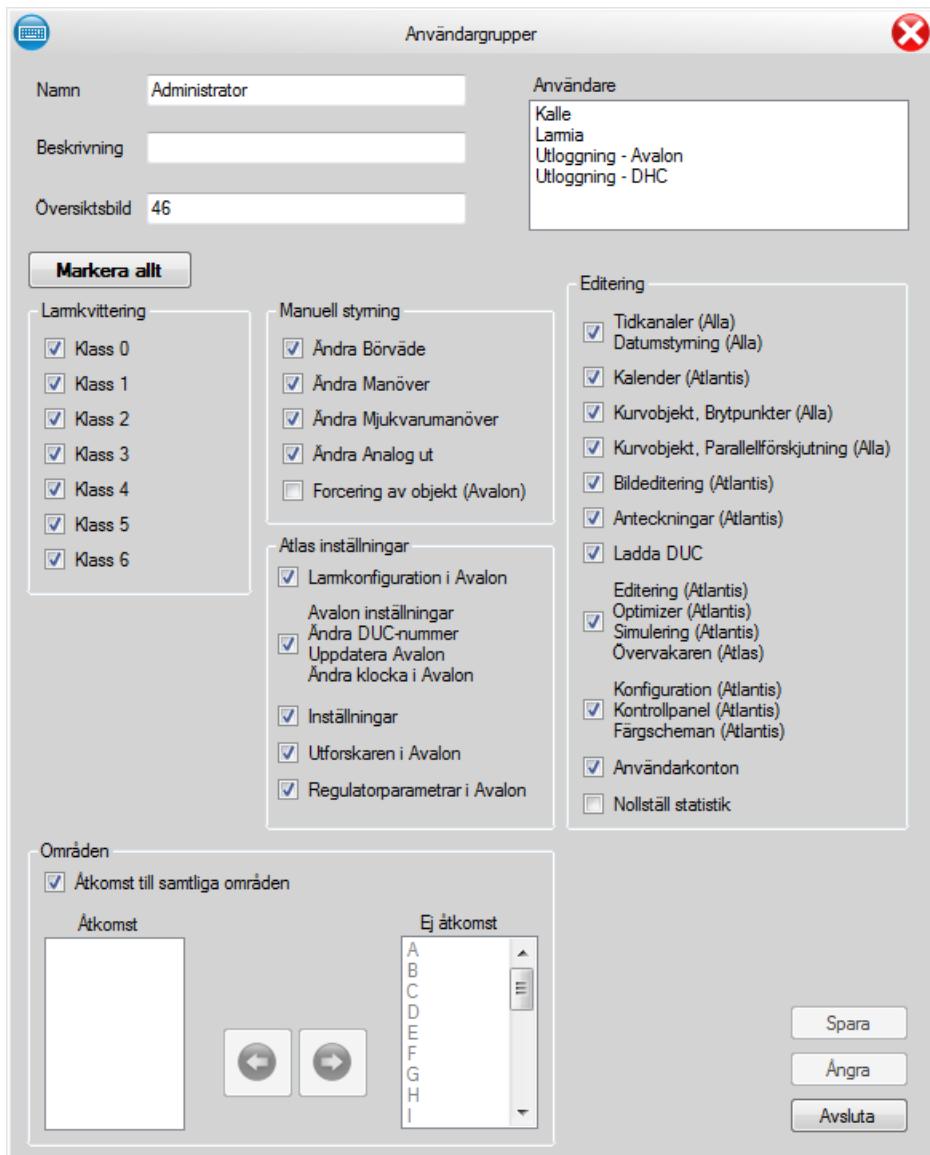
- Spara
- Ångra
- Avsluta

Enter data about the user. First name, last name, password and user group are mandatory.

Click **Spara** to save, **Ångra** to cancel or **Avsluta** to exit the dialog.

Field	Translation
Förnamn	First name
Efternamn	Last name
Beskrivning	Description
E-Post	Email
Telefonnummer	Phone number
Mobilnummer	Cell phone number
Kvitteringssignatur	Acknowledgement signature
Lösenord	Password
Bekräfta lösenord	Confirm password
Användargrupper	User groups
Medlem i	Member of
Ej medlem i	Not member of

User groups

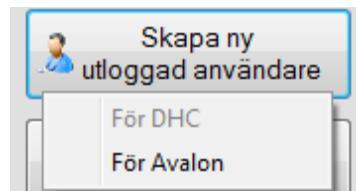


This dialog sets the permissions of a user group. It is possible to restrict users to certain groups by selecting the accessible areas for that user. You can also assign which summary image to display when a user from a certain user group logs in.

Field	Translation
Namn	Name
Beskrivning	Description
Översiktsbild	Summary image
Användare	User
Markera allt	Select all
Larmkvittering	Alarm acknowledgement
Klass X	Class X
Manuell styrning	Manual control
Ändra börvärde	Change setpoint

Ändra manöver	Change maneuver
Ändra mjukvarumanöver	Change software maneuver
Ändra Analog ut	Change Analog Out
Forcering av objekt (Avalon)	Override object (Avalon)
Atlas inställningar	Atlas settings
Larmkonfiguration i Avalon	Alarm configuration in Avalon
Avalon inställningar	Avalon settings
Ändra DUC-nummer	Change PLC number (ID)
Uppdatera Avalon	Update Avalon
Ändra klockan i Avalon	Set the clock in Avalon
Inställningar	Settings
Utforskaren i Avalon	The Explorer in Avalon
Regulatorparametrar i Avalon	Regulator parameters in Avalon
Editering	Editing/programming
Tidkanaler (Alla)	Time schedules (All)
Datumstyrning (Alla)	Date schedules (All)
Kalender (Atlantis)	Calendar (Atlantis)
Kurvobjekt, Brytpunkter (Alla)	Curve objects, Breakpoints (All)
Kurvobjekt, Parallelförflyttning (Alla)	Curve objects, Parallel displacement/offset (All)
Bildeditering (Atlantis)	Image editing (Atlantis)
Anteckningar (Atlantis)	Notes (Atlantis)
Ladda DUC	Load PLC
Editering (Atlantis)	Editing (Atlantis)
Optimizer (Atlantis)	Optimizer (Atlantis)
Simulering (Atlantis)	Simulation (Atlantis)
Övervakaren (Atlas)	The watcher (Atlas)
Konfiguration (Atlantis)	Configuration (Atlantis)
Kontrollpanel (Atlantis)	Control panel (Atlantis)
Färgscheman (Atlantis)	Color schemes (Atlantis)
Användarkonton	User accounts
Nollställ statistik	Reset statistics
Områden	Areas
Åtkomst till samtliga områden	Access to all areas
Åtkomst	Access
Ej åtkomst	No access

The Logged Out user



A Logged Out user is basically a regular user. The exceptions are that you can only assign its user group and that the user is automatically logged in when Atlas logs another user out.

There are two types of Logged Out users; one for the Main Computer and another for the Avalon PLC:s. Atlas will perform a “total log out” (i.e. no access at all) if there aren’t any Logged Out users configured.

The settings for automatic log out are accessible from **Meny -> Inställningar -> Huvudinställningar -> Automatisk utloggning**.

Group display



Show the group list by clicking **System- > Textvisning**.

The group list also shows all PLC:s, and for each PLC you can navigate to its conditions, time schedules, regulators and layouts.

Image mode

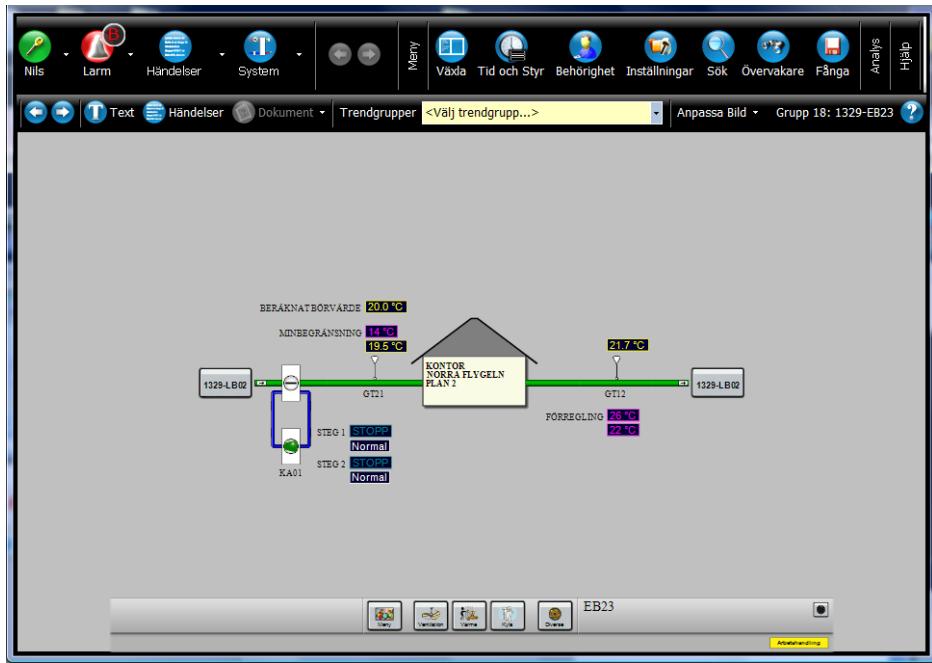
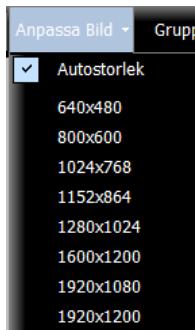


Image mode is used to represent a group by displaying a process image containing dynamic texts and symbols. Click on a text or symbol to display more information about an object.

Click **Text** to show the group in text mode.

Adjusting size



The default setting in Atlas is to automatically autosize the displayed images (labeled **Autostorlek**).

However, sometimes Atlas fails to recognize the optimal size of an image because they are drawn in different resolutions. If the image is not displayed correctly when using the autosize feature you can adjust the size manually.

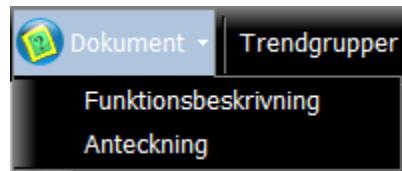
This setting is saved automatically.

Text mode

The screenshot shows a software interface with a dark theme. At the top, there is a toolbar with icons for Nils, Larm, Händelser, System, Meny, Växla, Tid och Styr, Behörighet, Inställningar, Sök, Övervakare, and Få. Below the toolbar, there is a header bar with buttons for Bild, Händelser, Dokument, Trendgrupper, and a search field <Välj trendgrupp...>. The main area displays a table with columns: Objektnamn, Status, Läge, and Larmklass. The table lists various objects with their status and properties. For example, EB23-KA01 KYLMASKIN STEG 1 is listed as STOPP, AUTO:FRÅN. The table also includes rows for temperature values like 21.7 °C and 19.5 °C, and for alarm limits like 20.0 °C and 22 °C.

The text mode shows a list of all the objects in a group.

If there are documents linked to the selected group they will be shown in the **Dokument** menu.



The text mode lets you select different fields (object properties) to represent the different columns by clicking on the arrow button for the specific column. There are different fields available to choose from depending on the type of list currently shown (alarm list, event list, group list etc.). The table below shows all available properties from the group view:

Property	Translation
Gruppnamn	Group name
Objektnamn	Object name
Status	-
Läge	Mode
Larmklass	Alarm class
Sorteringsnummer	Sorting number
Adress	Address
Typ	Type
Anläggningsnummer	Site number
Lysdiod	LED
Objektnummer	Object number
Till text	On text
Från text	Off text
Fördräjning	Delay

Objektnamn	Status	Läge	Larmklass	
				Gruppnamn
				Objektnamn
				Status
				Läge
				Larmklass
				Sorteringsnummer
				Adress
				Typ
				Anläggningsnummer
				Lysdiod
				Objektnummer
				Till text
				Från text
				Fördräjning
AGGREGATSTART	START	AUTO:TILL		
CP01 CIRKULATIONSPUMP	STOPP	MAN:TILL		
TF01 FRÄNLUFTSFLÄKT	START(DRIFT)	AUTO:N93 Klass:B		
FF01 FRÄNLUFTSFLÄKT	START(DRIFT)	AUTO:N93 Klass:B		
ST23A-B SPÄÄLSTÄLLDON	STÄNG	MAN:TILL		
ST24A-C BRANDSPJÄLL	STÄNG	MAN:TILL		
FF01 FRÄNLUFTSFLÄKT	DRIFT			
TF01 TILLUFTSFLÄKT	DRIFT			
ST23A-B SPÄÄLSTÄLLDON	ÖPPET			
S001 SERVICEOMKOPPLARE	AUTO			
ST24A-C BRANDSPJÄLL_IÖ	EJ ÖPPET			
ST24A-C BRANDSPJÄLL_IS	STÄNGT			
NATTKYLÄ	FRÄN			
KYLÄTERVINNING	FRÄN			
GT11 TILLUFTSGIVARE	34.0 °C			
GT41 MÄTGIVARE TILLUFT EFT. VX	17.8 °C			
GT42 MÄTGIVARE FRÄNLUF FOR.VX	21.8 °C			

This type of view is very useful when you need to find all calibrated objects in an Avalon PLC.

Open the search window (labeled **Sök**) and search for all analog in objects and then select the **Kalibrering** property for one of the columns.

You can also sort the list by a specific field by clicking on the column header.

Objektnamn	Status
AGGREGATSTART	START
CP01 CIRKULATIONSPUMP	STOPP
DYGNNSMEDELTEMPERATUR	11.7 °C
DYGNNSMEDELTEMPERATUR BÖRVÄRDE	10 °C
DYGNNSMEDELTEMPERATUR FÖDR.	1.0 dag
FF01 FRÄNLUFTSFLÄKT	DRIFT
FF01 FRÄNLUFTSFLÄKT	START(DRIFT)
FRYSVAKTÅTERSTÄLLNING	Normal
GP41 BÖRVÄRDE DRIFTIND.	50 Pa
GP41 BÖRVÄRDE LÄGT TRYCK	100 Pa
GP41 LÄGT TRYCK	Normal
GP41 MÄTGIVARE TRYCK TILLUFT	1000 Pa
GP42 BÖRVÄRDE DRIFTIND.	50 Pa
GP42 BÖRVÄRDE LÄGT TRYCK	100 Pa
GP42 LÄGT TRYCK	Normal

Alarm list

Prioritet	Larmklass	Gruppnamn	Objektnamn	Status	Senaste larm
1	Klass:A	13 LARM SYS	LARM NC	LARM	2010-04-20 10:12:58
2	Klass:A	LB01	FRYSSKYDD	LARM	
3	Klass:A	KOM KONTROLL	KONTROLL	LARM	
4	Klass:B	10 ANALOGIN SYS	ANALOG IN BS	45.0 °C(#)	2010-04-20 10:12:02
5	Klass:B	10 ANALOGIN SYS	ANALOG IN <>	45.0 °C(<>)	2010-04-20 10:12:56
6	Klass:B	10 ANALOGIN SYS	ANALOG IN HÖG LÄG =	45.0 °C(HÖG)	2010-04-20 10:12:56
7	Klass:B	29 DDCOM S71 R70	DDKOM 70	DDOM	2010-04-30 11:58:14
8	Klass:D	10 ANALOGIN SYS	ANALOG IN HÖG	45.0 °C(HÖG1)	2010-04-20 10:12:56
9	Klass:D	PC	AIN HÖG	1 °C(HÖG1)	
10	Klass:0	28 DDCOM S70 R71	MAN-LARM 71	LARM	

Click the alarm icon (labeled **Larm**) to show a list of all existing alarms in the system.

The list is updated dynamically and the alarms are sorted by priority. The alarm list button dynamically displays the highest alarm class of all unacknowledged alarms in the list. This function provides a quick overview of when new alarms occur, and what priority they are.

The alarm list can also show all objects that are in manual mode by clicking the **Manuella** button. There are also lists for Object Errors (**Objektfel**) and Overridden Objects (**Forcerade**).

Using alarm class filters

Enable the alarm class filter by selecting **Meny -> Inställningar -> Lista (Larm) -> Aktivera larmklassfilter**.

Seven checkboxes will be displayed in the alarm list when the alarm class filter is enabled. Select the individual alarm classes to display them in the alarm list, filtering out the unselected classes.



Events

The screenshot shows the Larmia Control AB software interface. At the top, there is a menu bar with icons for Dåne, Alarm, Händelser, System, Meny, Analys, Help, and a logo for Larmia Control AB. To the right of the logo, it says "Demo Larmia" and shows the server time as "09:10:05 onsdag 5 maj 2010". Below the menu is a toolbar with buttons for Datum, Sida, and a search field containing "Händelslista Systemet: Demo Larmia". The main area is a table titled "Händelslista Systemet: Demo Larmia" with columns: Datum, Gruppnamn, Objektnamn, Händelse, and Larmklass. The table lists numerous events from April 16, 2010, to April 29, 2010, such as "DUCINFO GIVARFEL DUC2 Normal Klass:B". To the right of the table is a filter panel titled "Filtrering" with checkboxes for "Visa allt" and various categories: Larmklasser (Alla, A, B, C, D, E, F, O), Larmstatus (Aktiverat, Återgått, Kvitterat), and Övrigt (Manövrar, Indikering, Login, Manuell, Andrad data, DUC data). At the bottom right of the filter panel is a "Filtrera" button.

Click **Händelser** in the main menu to show the event list.

The event list shows all events in chronological order, with the most recent event at the bottom of the list.

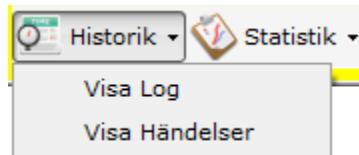
The filter menu to the right can be used to, for example, only display alarm events. Select the type of events you are interested of and click **Filtrera**.

Use the arrows to browse between pages or dates in the event list.

To only see events from a specific group: navigate to the group and select **Händelser** from the group menu.

To only see events from a specific object: select the object and select **Historik -> Visa Händelser** in the object dialog.

Trends



Visualizing objects using trend charts provides an easy and comprehensive view over the events and regulations the object is involved in.

It also provides a fast and easy way to troubleshoot the regulation as it is possible to zoom in/out on different times.

In Atlas there are two ways of displaying trend charts for objects:

- Single trend charts containing the data from one object.
- Trend groups containing the data from multiple objects.

Click **Historik** -> **Visa log** in the object dialog to display the trend chart for a single object.

The trend chart visualizes how the value of an object has oscillated during the time period indicated by the time axis (X-axis). The range of the time axis is displayed at the bottom of the chart, with gridlines for each tick.

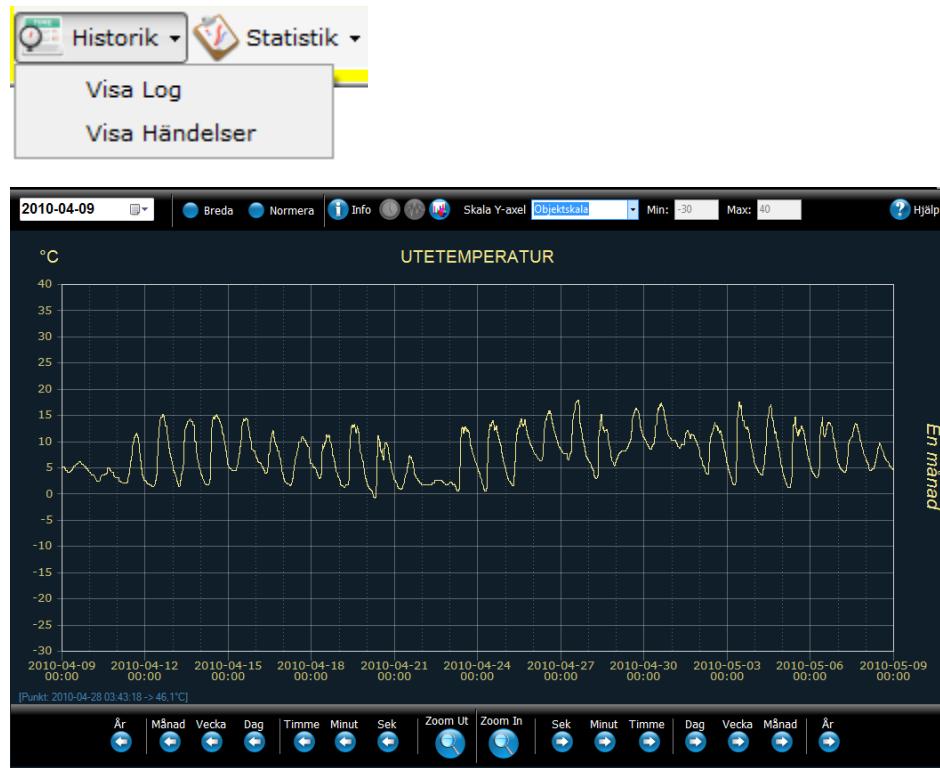
The value range of the object is displayed to the left of the chart and the value at the current cursor position is displayed at the bottom left. The cursor value is a great help when having difficulties reading a precise value using only the grid.

The chart area sometimes displays a white rectangle, indicating what time interval to show when zooming in.

This zoom mode has fixed intervals:

- 10 seconds
- 10 minutes
- One hour
- One day
- One week
- One month
- One year

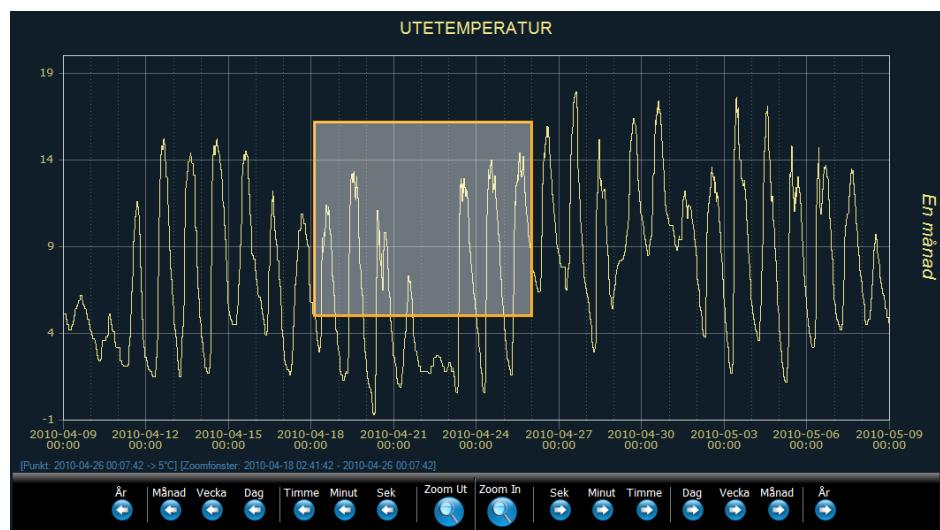
Use the **Zoom Ut** (Zoom out) and **Zoom In** buttons to change the date interval.



Manual zoom

Use the manual zoom feature to for more precise date intervals.

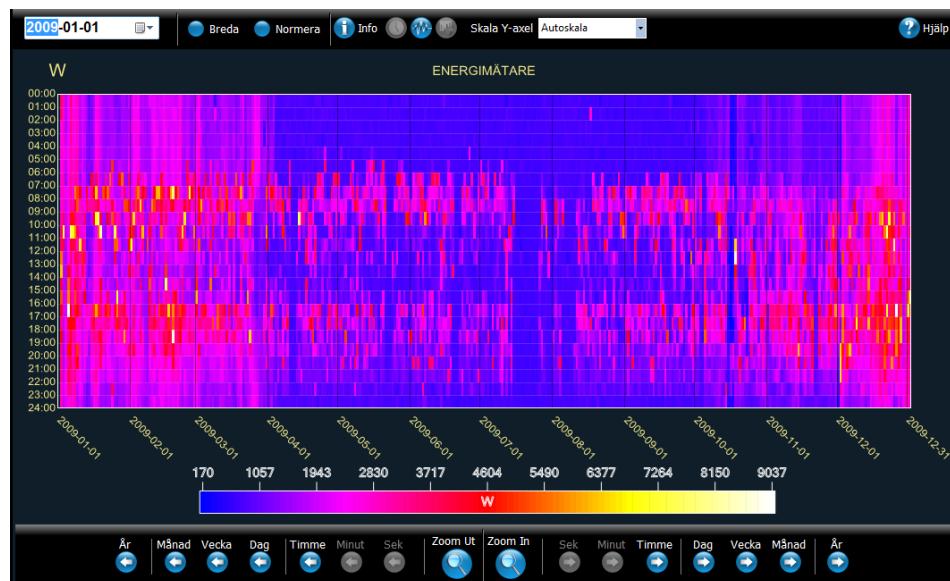
Select a starting position and drag a rectangle as shown in the image below.



Gradient chart

Not available in Avalon PLC:s.

Shows color-coded trend data.

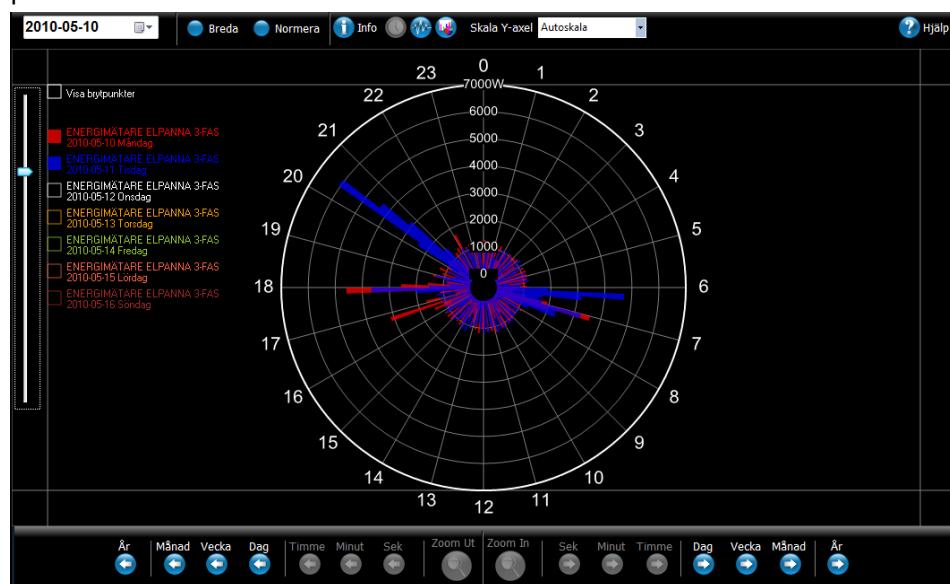


Clock chart for pulse objects

Displays pulse values as a clock.

The maximum trend representation/resolution for one object is one week.

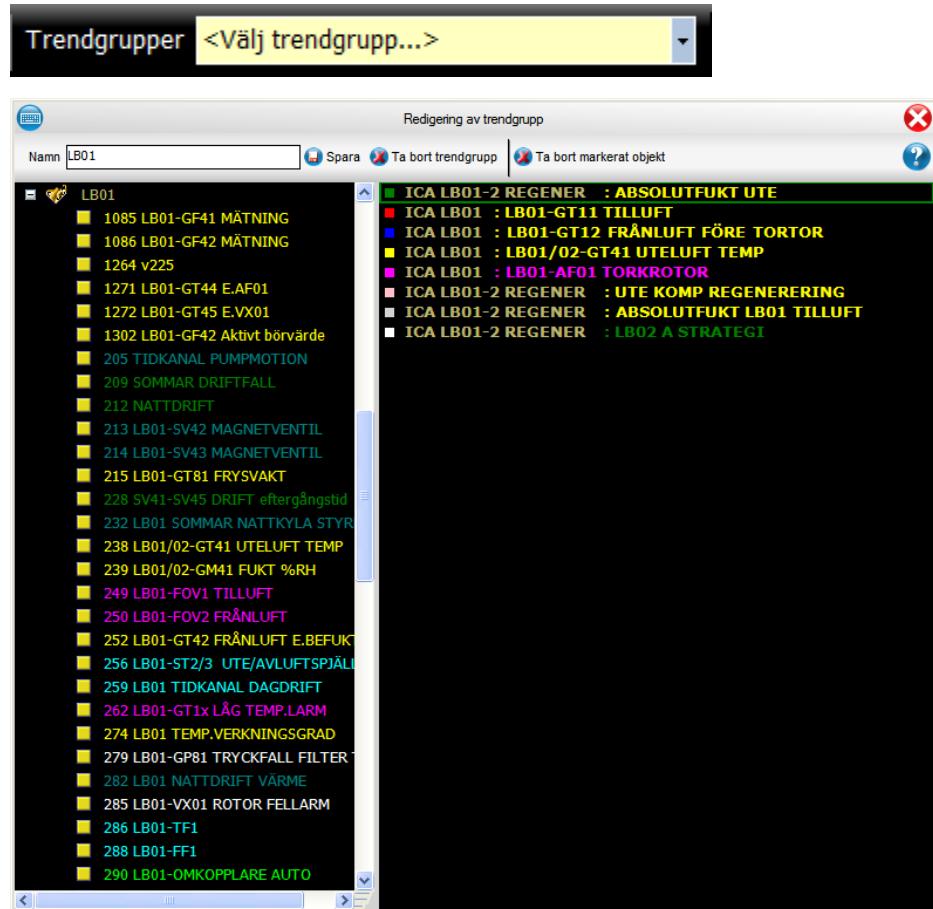
For multiple objects (trend groups) only daily representation/resolution is possible.



Trend groups

A trend group is a collection of object displayed in the same trend chart.
Trend groups are stored under each system group.

Create a new trend group by first entering/selecting the desired system group and then selecting <Lägg till ny...> (Add new) in the listbox labeled <Välj trendgrupp...> (Select trend group).



Add an object by clicking on it in the list to the left.

Remove an object by selecting it in the list to the right and then click(ing) **Ta bort markerat objekt** (Remove selected object).

Click **Ta bort trendgrupp** (Remove trend group) to remove the entire trend group.

Click **Spara** to save the trend group.

Show trend group charts by selecting a group in the <Välj trendgrupp...> (Select trend group) listbox.

Analog in



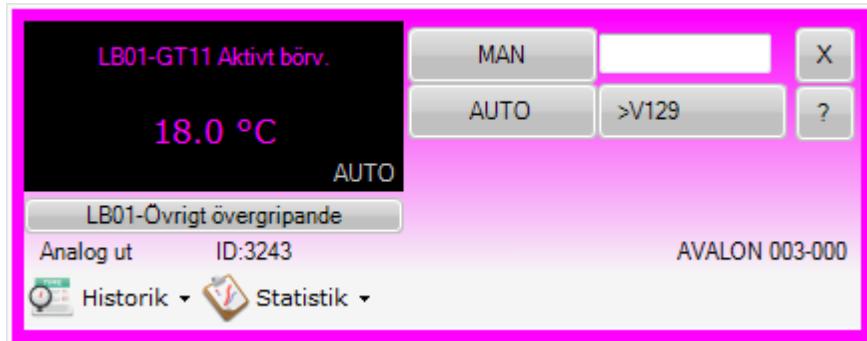
Analog in objects represent measured temperatures, pressure, moisture etc.
Analog in objects can also have alarm limits such as high or low limits.

The object is displayed with different colors depending on its current alarm status:

Status	Color
Normal	Solid yellow
Unacknowledged active alarm	Blinking red and yellow
Acknowledged alarm	Solid red
Unacknowledged cancelled alarm	Blinking yellow and gray

The trend chart for an object can be displayed by clicking **Historik -> Visa Log**.

Analog out/Setpoints



Analog out objects represent control valves, actuators, frequency converters etc. This object type can also be used as setpoints, limit values etc.

When the object is in auto mode it is controlled by its programmed function, but the object can also be put in manual control (the automatic controlling is then disengaged).

Set a manual value by entering a value in the text field and clicking **MAN**.

Return the object to Auto Mode by clicking **AUTO**.

The button to the right of the **AUTO** button displays the function that controls the object in auto mode.

The trend chart for an object can be displayed by clicking **Historik -> Visa Log**.

Click **Historik -> Händelser** to show the event list for the object.

Indication



Indication objects represent operation modes, pump statuses and occupancy sensors etc.

Click **Historik -> Händelser** to show the event list for the object.

Maneuver



Maneuver objects represent fan control, pump control, the overall control for entire units etc.

When the object is in auto mode it is controlled by its programmed function, but the object can also be put in manual control (the automatic controlling is then disengaged).

Set a manual value by clicking **TILL** (On) eller **FRÅN** (Off). The button text may vary depending on the programmed function of the maneuver object.

Click **AUTO** to return to Auto Mode.

The button to the right of the **AUTO** button displays the function that controls the object in auto mode.

Click **Historik** -> **Händelser** to show the event list for the object.

Alarm



Alarm objects display the current alarm status.

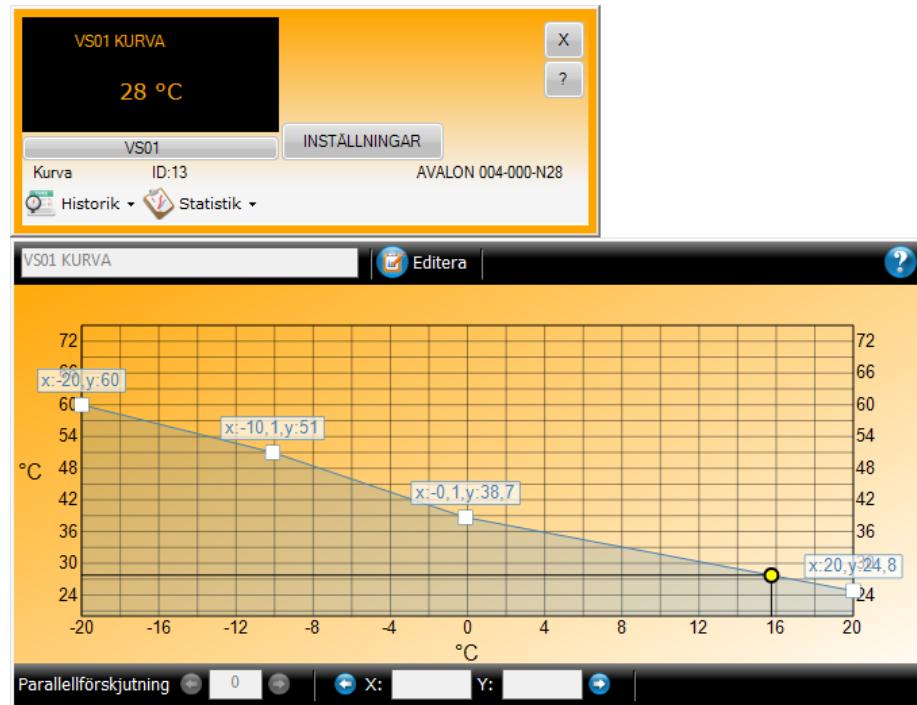
The object is displayed with different colors depending on its status:

Status	Color
Normal	Solid white
Unacknowledged active alarm	Blinking red and white
Acknowledged alarm	Solid red
Unacknowledged cancelled alarm	Blinking red and gray

An acknowledge button (**KVITTERA**) is shown if the alarm object is unacknowledged.

Click **Historik -> Händelser** to show the event list for the object.

Curve



Curve objects are used to calculate the relationship to another object according to a given curve.

Click **Editera** to enter edit mode. Adjust the curve by dragging the breakpoints or by selecting a breakpoint and entering a value.

The curve can be parallel displaced (parallel offset) by entering the desired value in the **Parallelfförskjutning** textbox.

The yellow circle indicates the current value.

Save the new settings by clicking **Spara**.

The changes will automatically be uploaded to the Main Computer when a curve object is edited in an Avalon PLC.

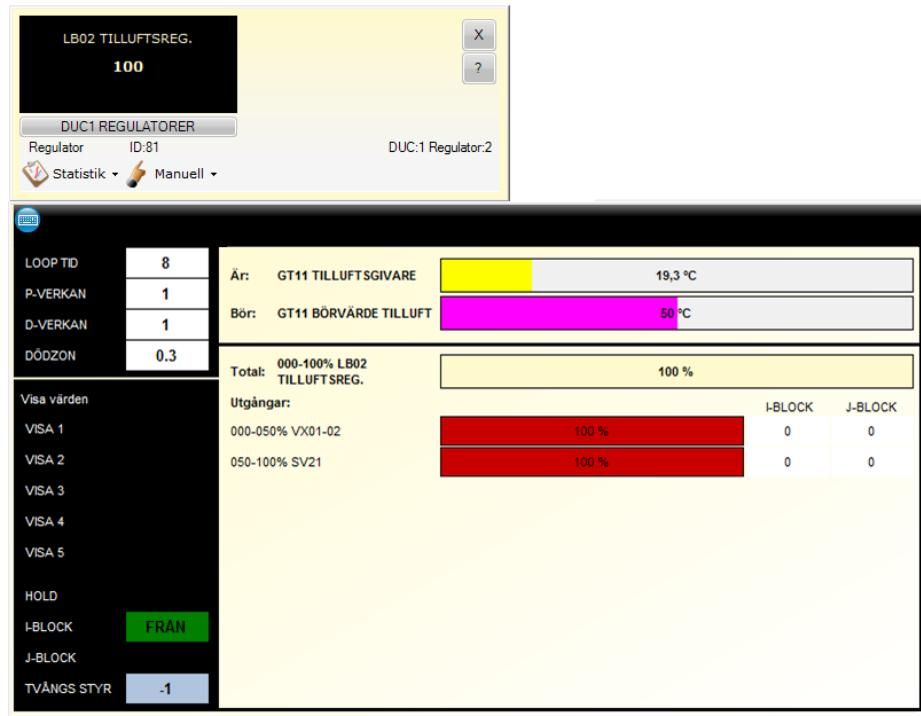
Pulse



Pulse objects represent consumption values from water or energy meters etc.

The trend chart for an object can be displayed by clicking **Historik -> Visa Log**.

Regulator

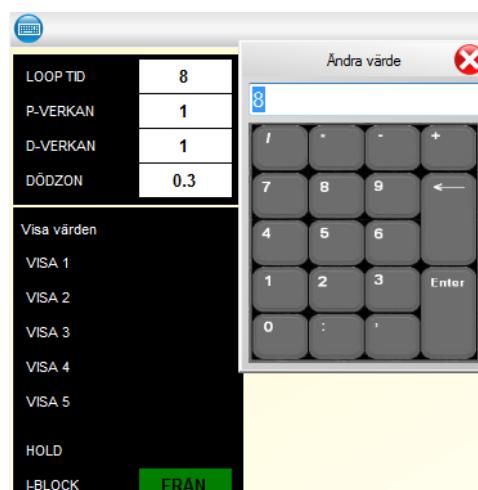


This dialog displays the current status of the regulator, the actual value, the setpoint and the regulator outputs. Heating stages are shown in red and cooling stages are shown in blue.

Change the setpoint by clicking the setpoint bar (labeled **Bör:**).

You can also adjust the regulator parameters by clicking on a parameter and entering the new value. Click **Enter** to save the parameters.

Parameter	Translation
LOOP TID	Loop time
P-VERKAN	P-band
D-VERKAN	D-band
DÖDZON	Deadband



Time schedules and date schedules

Time schedules

A time schedule contains a weekly program for, for example, when to run an air handling unit. Time schedules can be displayed in normal mode or edit mode.



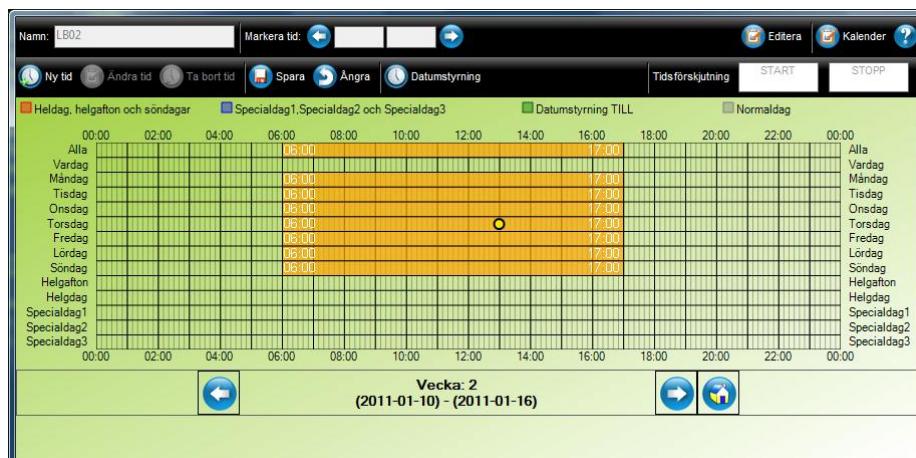
The weekly program for the time schedule is shown in normal mode. The different times are color-coded depending on the day type (normal day, eve, holiday or special day).

Browse between weeks using the arrow buttons.

The current time is shown as a yellow circle.

Click **Editera** to access the edit mode.

Edit mode

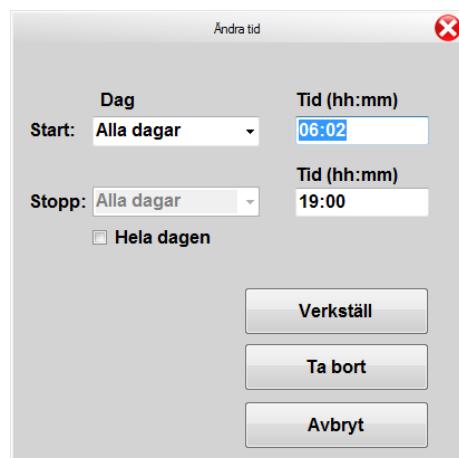


The edit mode is used to add, remove or edit times in the time schedule.

Click **Spara** to save the time schedule. If the time schedule is located in a PLC you will be prompted whether to reload the PLC now or later.

Edit a time by dragging its time field or by selecting a time and clicking **Ändra tid**.

Edit/Add time



I detta fönster skriver man in en start och en stopp tid på hur tidkanalen skall gå.

For example:

The time schedule is intended to run from Monday 00:00 to Wednesday 13:00.

Select **Måndag** (Monday) as start day and enter 00:00 in the time field.

Select **Onsdag** (Wednesday) as stop day and enter 13:00 in the time field.

Select **Hela dagen** (All day) to run the time schedule for the entire selected start day (no stop day or stop time can then be selected).

Click **Verkställ** to add the new time schedule.

Date schedules

This function is only available in Avalon PLC:s.

It is also possible to add special date schedules during certain days in the time schedules.

Click **Datumstyrning** when in edit mode for the time schedules to access the date schedules.

The top screenshot shows a list of existing date schedules. The columns are labeled 'Starttid' (Start time), 'Stopptid' (Stop time), 'Status' (Status), and 'Utgång' (Output). There are two entries: one from May 25 at 14:23 to 18:23 with status 'TILL' and output '0'; another from May 27 at 14:23 to 20:23 with status 'TILL' and output '0'. The bottom screenshot is a dialog box titled 'Ändra datumstyming' (Change date schedule). It has fields for 'Start datum:' (May 27, 14:23:00) and 'Stop datum:' (May 27, 20:23:00). It includes radio buttons for 'Tidkanal TILL' (Time channel ON) and 'Tidkanal FRÅN' (Time channel OFF). A 'Värde:' (Value) field contains '0'. At the bottom are buttons for 'Spara' (Save), 'Ta bort' (Delete), and 'Avbryt' (Cancel).

Click **Lägg till...** to add a new schedule. In the next dialog you enter the start date (and time) and the stop date (and time) for the schedule. You also specify whether the connected time schedule is to be on (**TILL**) or off (**FRÅN**) during the selected period.

Use the value field (**Värde**) to output a specific value instead. The value can then be connected to, for example, a setpoint used by a regulator to customize the control for a specific date.

Exporting the date schedule list

It is possible to export all date schedules to another time schedule in the same PLC.

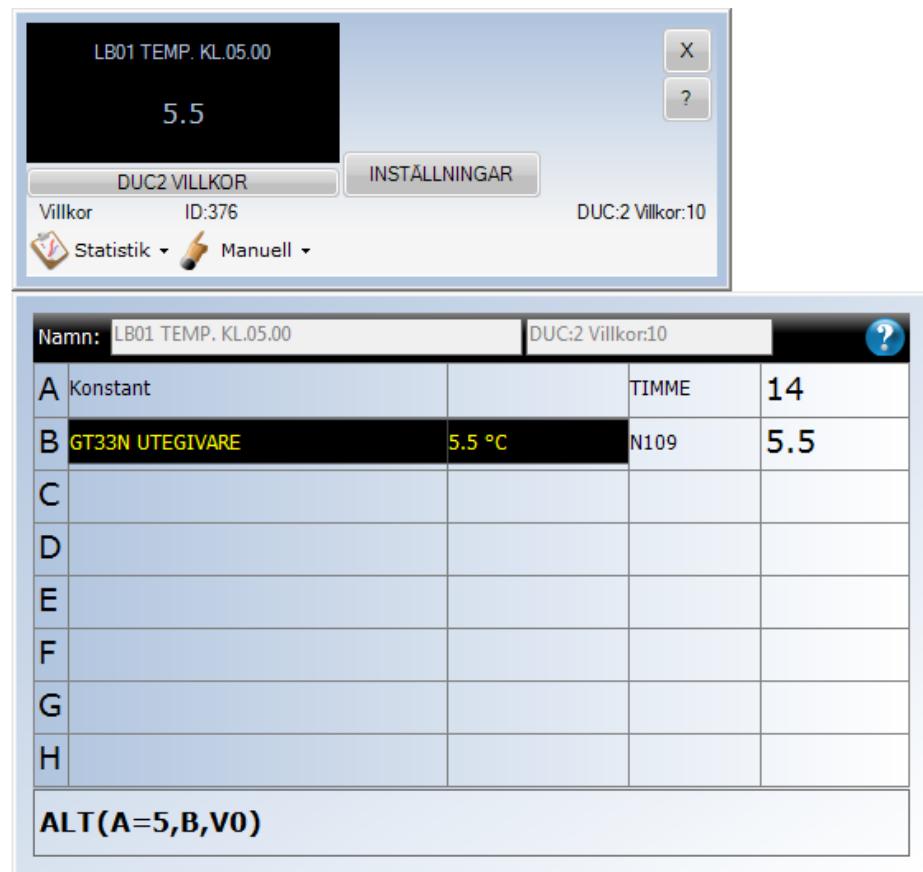
Starttid	Stopptid	Status	Utgång
2008-10-05 12:00	2008-10-05 13:00	TILL	21
2008-10-10 07:00	2008-10-10 12:00	TILL	20

Kanal	Tidkanal
1	MOTION PUMPAR
5	MOTION PUMPAR
8	MOTION PUMPAR
11	MOTION PUMPAR
2	TF01_NATT
3	LB01_TC01
6	LB02_TC01
9	LB03_TC01
12	LB04_TC01
4	MOTION BRANDSPJÄLL
7	MOTION BRANDSPJÄLL
10	MOTION SPJÄLL
13	eee

Markera den tidkanal som
datumstymningskanalen
skall exportera till Tryck på Exportera.

Lägg till... Öppna lista Exportera Tillbaka

Conditions

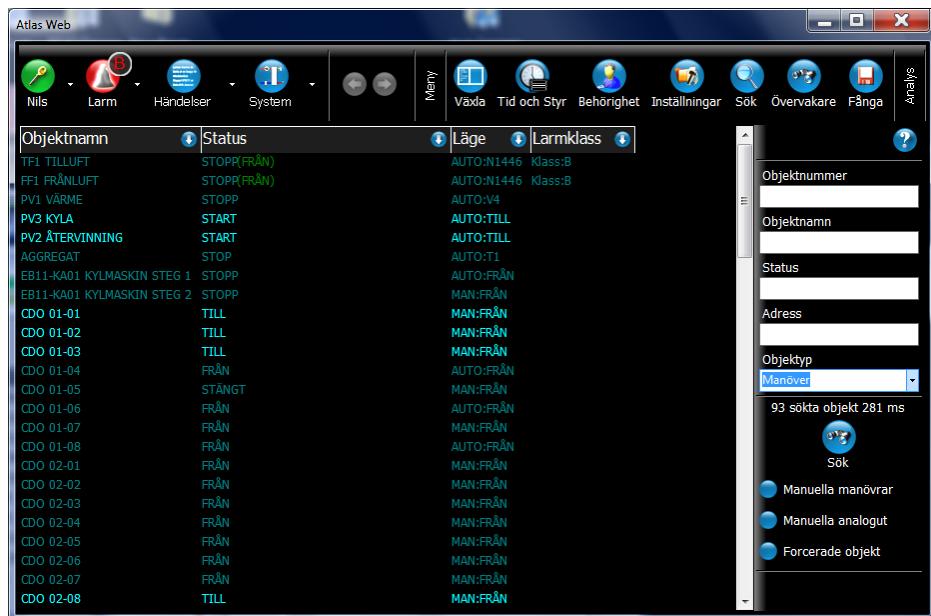


This dialog shows a condition including its inputs and expression.

Values that cannot be calculated are shown as N/A.

The output/result of a condition can only be shown when presenting conditions in an Avalon PLC or Main Computer.

Search



Use the search window to search for parts of the system, for example finding all temperature sensors.

Enter the search text and click **Sök**. The different search alternatives can be combined.

The number of search results and the search time will be shown after a search is completed.

The list will not be automatically updated if it contains more than 1000 objects.

Field	Translation	Description
Objektnummer	Object number	Search for an object with a specific object number.
Objektnamn	Object name	Search using a part of the object name.
Status	Status	Search for objects with a specific status.
Adress	Address	Search using a part of the address.
Objekttyp	Object type	Search for objects of a specific type (analog in, curve etc.).
Manuella lägen	Objects in manual mode	Find objects in manual mode.
Forcerade objekt	Overridden objects	Find overridden objects.

Overriding

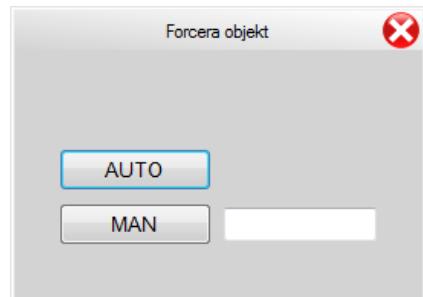
Overriding object is only possible in Avalon PLC:s.

Overriding can be useful when commissioning, as it lets you test different modes of operation. It can also be useful to override faulty sensors.

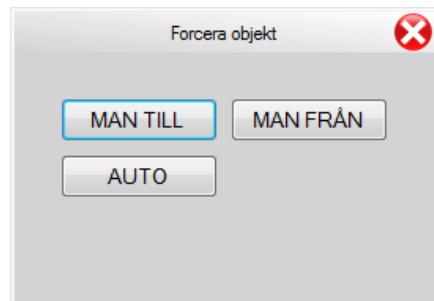
Select **Manuell -> Forcering** to open the override dialog.



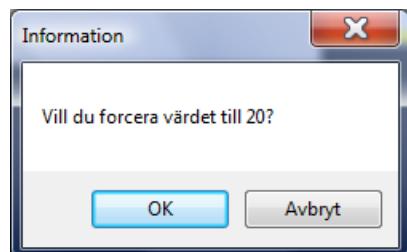
The override dialog for analog in objects, conditions, curves and regulators:



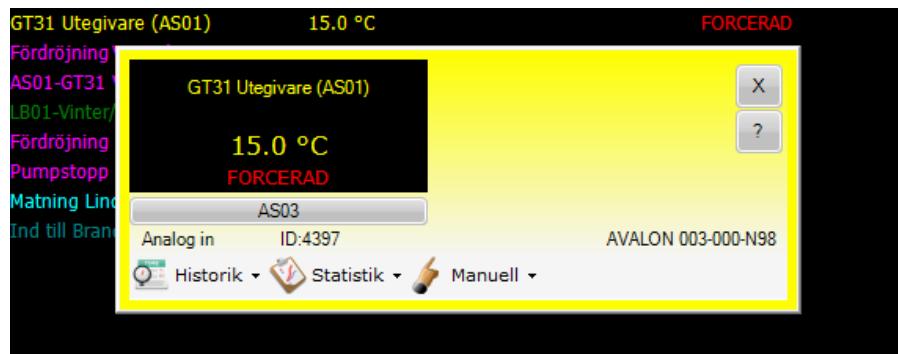
The override dialog for alarms, indications and time schedules:



You will be prompted to confirm the overriding action. Click **OK** to override or **Avbryt** to cancel.



Overridden objects are marked with the text **FORCERAD** in red.



The alarm list has a function for showing all overridden objects.

See [Alarm list](#) for more information.

Statistics

Displays the statistics for objects.

Reset the statistics by opening the statistics window and then clicking **Nollställ statistik** (Reset statistics).

Available statistics for alarm-capable objects (alarms, analog in and maneuver):

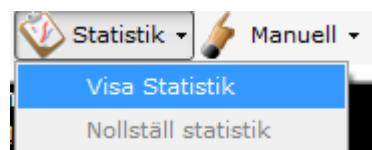
Field	Translation
Senaste larm	Latest alarm
Senaste återgång	Latest alarm cancellation
Total larmtid	Total alarm time
Antal larm	Number of alarms

Available statistics for runtime objects (maneuver, indication and time schedules):

Field	Translation
Senaste tillslag	Latest switch on
Senaste frånslag	Latest switch off
Drifttid	Total runtime
Antal tillslag	Number of switches

Available statistics for analog objects (analog in, analog out, curve and pulse):

Field	Translation
Medelvärde	Mean value
Förbrukning	Consumption





Calibration

Calibration can only be performed on Pulse and Analog In objects that are connected through hardware to a/an Avalon PLC.



Open the object window and click **Manuell** > **Kalibrering**.



Enter the calibration value and click **Enter**.

Time and control

Display modes

Click **Meny -> Tid och Styr** to display the PLC summary.

The summary displays all the PLC:s in the system, the Main Computer, conditions and time schedules.



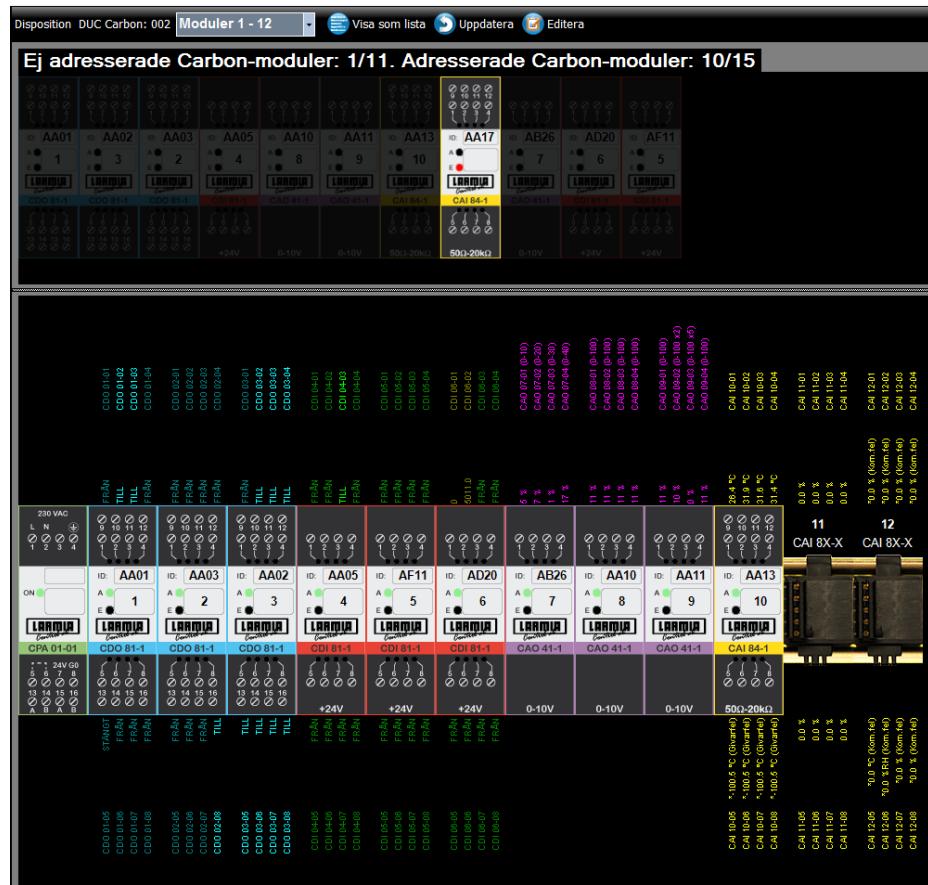
Click on a PLC or Main Computer and select one of the following options:



Option	Translation	Description
Visa DUC-disposition	Show PLC layout	Displays a layout image of the PLC with all inputs and outputs. PLEASE NOTE! The PLC layout is also used for addressing modules if the PLC is an Avalon with the Carbon module system. When viewing an Avalon with Carbon from the Main Computer, the layout is simulated after editing is completed.
Visa regulatorer	Show regulators	Show all regulators.
Visa tidkanaler	Show time schedules	Show all time schedules.
Visa villkor	Show conditions	Show all conditions.

Module presentation

Carbon modules



Open this dialog by clicking **DUCx** (where **x** is the PLC number) in the group list or by clicking the **Tid och Styr** button. Display the group list by clicking the **System** button.

Click **Editera** to display all unaddressed modules (not having a Modbus ID).

To program the address into a module, simply drag the module onto the correct position on the DIN rail.

PLEASE NOTE! Perform a thorough check to ascertain that all modules are correctly placed. Compare the ID of the physical module with the ID on the screen.

The LED on the Carbon module can be in one of the following states:

LED	Description
Solid red	Not addressed.
Blinking red	Addressed but not communicating.
Blinking green	Communication OK. PLEASE NOTE! When using only a few modules, the blinking frequency is very high and the LED may appear as solid green.

Check that no module is solid red or blinking red after being deployed.

You can check that all objects are connected to the hardware by showing the alarm list and clicking **Objektfel**.

This list shows all objects with communication errors or sensor errors.



Click **Visa som lista** to show addressing information. The list displays addressing and communication information for each module.

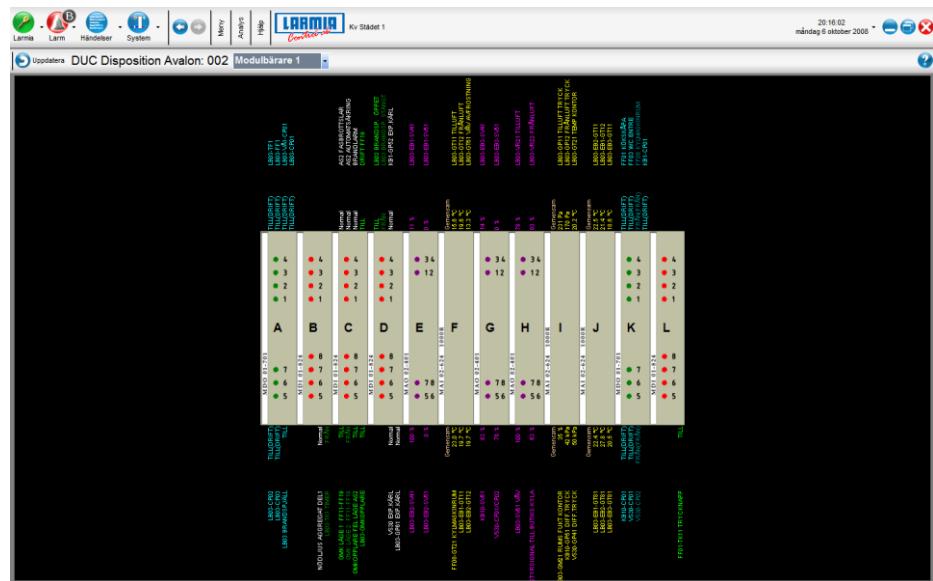
Field	Translation	Description
Modbus-ID	Modbus ID	The address of the module. The address must be unique. Several modules with the same ID will result in a conflict.
Modul-ID	Module ID	The same ID as presented on the sticker on the frontside of the physical module. PLEASE NOTE! Make sure to place each Module ID on its correct place when addressing.
Modul	Module	The type of module.
Meddelanden	Messages	The number of messages sent to/received from an Avalon.
Inget Svar	No answer	The number of times the Avalon has tried to establish contact with the module but without getting an answer.
Undantagsfel	Exceptions (errors)	Avalon is communicating with the module but there are errors (wrong module type at the wrong location etc.).

Statistik DUC Carbon: 002 Moduler 1 - 12 Visa Disp. Uppdatera

Ej adresserade Carbon-moduler: 1/11. Adresserade Carbon-moduler: 10/15

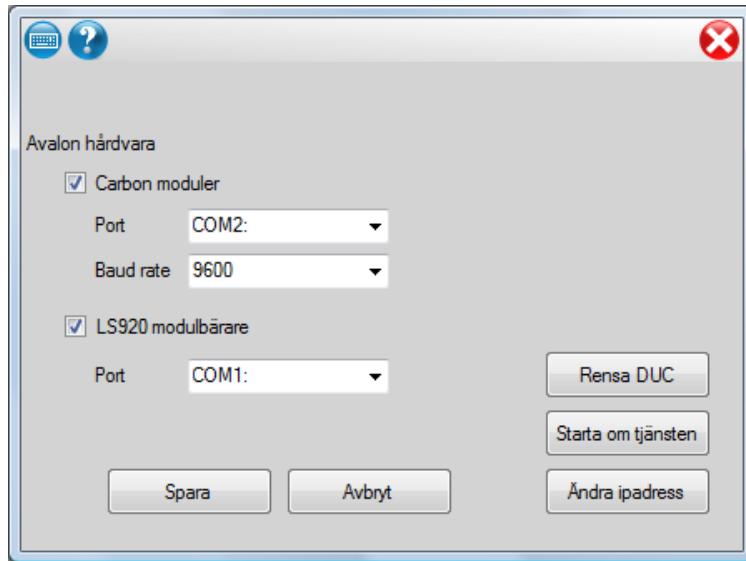
Modbus-ID	Modul-ID	Modul-Typ	Meddelanden	Inget Svar	Undantagsfel
1	AA01	CDO 81-X	23634	64	0
3	AA02	CDO 81-X	2278	102	0
2	AA03	CDO 81-X	2283	99	0
4	AA05	CDI 81-X	23580	102	0
8	AA10	CAO 41-X	14805	175	0
9	AA11	CAO 41-X	12946	195	0
10	AA13	CAI 84-X	23502	197	0
0	AA17	CAI 82-X	23499	201	0
7	AB26	CAO 41-X	23665	166	0
6	AD20	CDI 81-X	23537	160	0
5	AF11	CDI 81-X	23541	155	0

LS920 modules



If the PLC is a LS920 or an Avalon with the LS920 module system, the view will display all used modules.

Avalon - Settings



Use the Avalon Settings dialog to select the hardware system connected to the PLC.

Select **Carbon** or **LS920** and the specific COM port used. Click **Spara** to save the settings.

Clear the PLC

Click **Rensa DUC** to erase the editing (program), images and history in the PLC.

Change IP address

Ändra ipadress

Nätverkskort 1:
[00000012] Realtek RTL8168C(P)/8111C(P) PCI-E Gigabit Ethernet NIC

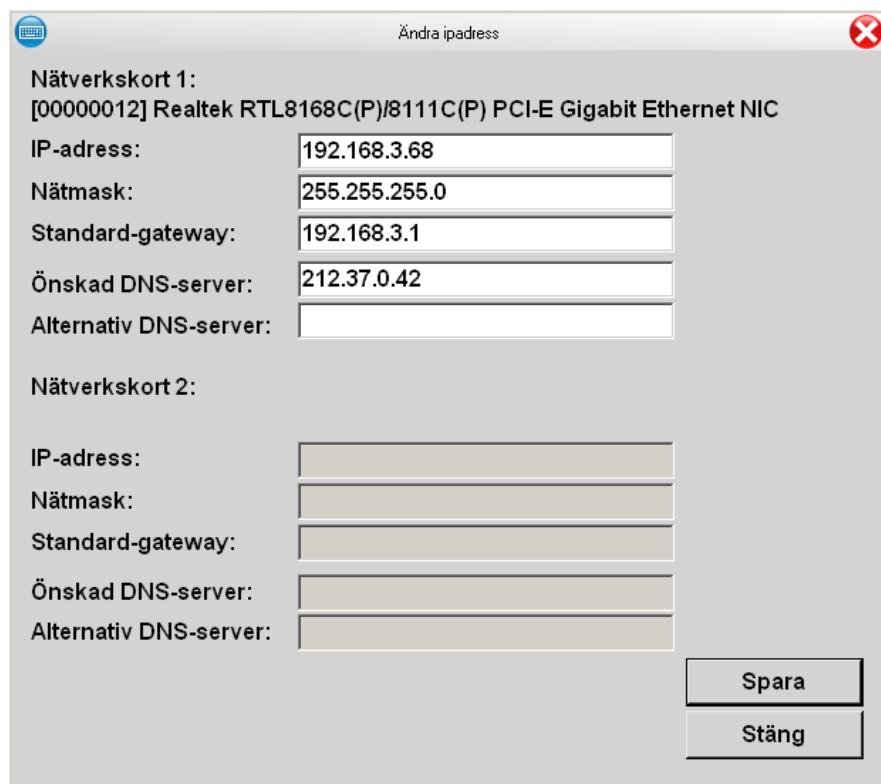
IP-adress:	192.168.3.68
Nätmask:	255.255.255.0
Standard-gateway:	192.168.3.1
Önskad DNS-server:	212.37.0.42
Alternativ DNS-server:	

Nätverkskort 2:

IP-adress:	
Nätmask:	
Standard-gateway:	
Önskad DNS-server:	
Alternativ DNS-server:	

Spara

Stäng



Click **Ändra ipadress** to change the IP address of the Avalon PLC.

PLEASE NOTE! The Avalon will be restarted when the settings are saved
(after clicking **Spara**).

Settings



Users

Field	Translation	Description
Dölj inloggningssnamm	Hide the login name	Hides the login name in the login dialog.

Image mode

Field	Translation	Description
Textstorlek i %	Text size in %	A global setting of the text size in the image mode.
Visar manuella lägen		Mark all objects in manual mode in the image mode.

Troubleshooting/debugging

Field	Translation	Description
Visa detaljerad information	Show detailed information	Show detailed debug information in the watcher window.
Visa felmeddelanden	Show error messages	Show error messages from the server in the watcher window.

Main settings

Field	Translation	Description
Automatisk utloggning	Automatic logout	Automatically logs out after the set time.
Klientmiljö	Client environment	PC or Avalon. Changes the graphical layout depending on the selected environment.
Kontroller i minnet	Controls in memory	The number of graphical control to retain in memory. Use the arrows in the main menu to browse forward or backward.
Lägg till Demo	Add Demo site	Adds the Larmia Demo site to the site menu.
Spinner position	Spinner position	Change the position of the spinner (the busy indicator).
Visa grupp som bild	Show group as image	Select false to force text mode when displaying groups.
Visa hjälpmenyn vid start	Show help menu on start	Show the help menu when disconnecting from a site.
Visa systemfönster	Show system window	When selected, the group display is always shown in the main window.
Översiktbild	Summary image	Displays a summary image when clicking the System button or logging in. This setting has a higher priority than the selected summary image for a user when connecting to an Avalon PLC.

Alarm

Field	Translation	Description
Aktivera blink	Enable blinking	Enables blinking on unacknowledged alarms.
Aktivera extratext	Enable extra text	Displays extra text information (if it exists) for active alarms.
Larmljud	Alarm sound	Activate the alarm sound when alarms are activated.
Visa grupp vid larm	Show group at active alarm.	Automatically displays the group of the active alarm object.
Visa objekt vid larm	Show object at active alarm.	Automatically displays the active alarm object.

List (All)

Field	Translation	Description
Font lista	Font for lists	The font used in all lists.
Font rubrik	Font for headings	The font used for all column headings.
Skuggning	Drop shadow	Apply drop shadows on texts.

List (Events)

Field	Translation	Description
Toningsfärg(start)	Gradient color (start)	The start color of the gradient background.
Toningsfärg(stop p)	Gradient color (end)	The end color of the gradient background.
Typ av toning	Gradient type	Select the type of background gradient.
Uppdateringstid	Update interval	Set the update interval for the list.

List (Alarms)

Field	Translation	Description
Aktivera larmklassfilter	Enable alarm class filter	Enables the alarm class filters.
Toningsfärg(start)	Gradient color (start)	The start color of the gradient background.
Toningsfärg(stop p)	Gradient color (end)	The end color of the gradient background.
Typ av toning	Gradient type	Select the type of background gradient.

List (Objects)

Field	Translation	Description
Toningsfärg(start)	Gradient color (start)	The start color of the gradient background.
Toningsfärg(stop p)	Gradient color (end)	The end color of the gradient background.
Typ av toning	Gradient type	Select the type of background gradient.

Menu

Field	Translation	Description
ButtonChecked Highlight	-	Select the highlight color when a button is checked.
ButtonPressed Highlight	-	Select the highlight color when a button is pressed.
ButtonSelected Border	-	Select the border color for buttons.
ButtonSelected Highlight	-	Select the highlight color when a button is selected.
Drop-down-meny storlek	Drop-down menu size	Select the width of the drop-down menu.
Egen färg	Custom color	Select a custom color for the menu.
Font	-	Select the font for the menu.
Färg1 [uppe]	Color 1 [top]	Select the top color of the main menu gradient background.
Färg2 [mitten]	Color 2 [center]	Select the center color of the main menu gradient background.
Färg3 [nere]	Color 3 [bottom]	Select the bottom color of the main menu gradient background.
Menyplacering	Menu placement	Select the placement of the main menu.
Textfärg	Text color	Select the text color for main menu texts.
Tjocklek på huvudmenyn	Main menu height/thickness	Selects the height/thickness of the main menu.

Object colors

Field	Translation	Description
Analogin	Analog in	-
Analogut	Analog out	-
Användare inloggad	User logged in	-
Användare utloggad	User logged out	-
Grupp	Group	-
Indikering från	Indication OFF	-
Indikering till	Indication ON	-
Kurva	Curve	-
Larm	Alarm	-
Larm Kvitt	Acknowledged alarm	-
Larm normal	Normal alarm	-
Manöver från	Maneuver OFF	-
Manöver till	Maneuver ON	-
Puls	Pulse	-
Regulator	Regulator	-
Tidkanal	Time schedule	-
Villkor	Condition	-

Screen saver

Field	Translation	Description
Aktivera	Enable	Select if the screensaver is enabled.
Text	Text	Cutom text to display when the screensaver is activated.
Textfärg	Text color	The text color of the custom text.

System window

Field	Translation	Description
Bakgrundsfärg	Background color	Select the background color of the system window.
Extra information	Extra information	If true , the group number is displayed together with the group name.
Font	Font	Select the font used in the system window.
Textfärg	Text color	Select the text color for the system window.

Trends

Field	Translation	Description
Bakgrundsfärg diagramyta	Chart area background color	Select the background color of the chart area.
Kurvfärg	Trend color	The line color of the plotted trend.
Rutnätsfärg	Grid color	The color of the grid.
Skalning Y-axel(max)	Y-axis range (max)	The maximum value of the Y-axis.
Skalning Y-axel(min)	Y-axis range (min)	The minimum value of the Y-axis.
Toningsfärg (start) rityta	Chart area gradient color (start)	The start color of the gradient background.
Toningsfärg (stopp) rityta	Chart area gradient color (end)	The end color of the gradient background.

Clock

Click the clock icon to show the clock dialog.

Use this dialog to set the time at the server (only when connected to an Avalon PLC) and set the time that is presented in the client.

Set the time at the server by selecting one of the fields and change the value using the up/down arrows.

Click **Spara tid** to set/save the time in the server.

