

Aurora for Windows Embedded

WINDOWS EMBEDDED DEVICE MANAGEMENT SOFTWARE

Introduction

Aurora for Windows Embedded device management software is an administrative tool based on open Internet standards. The management console enables the administrator to remotely monitor, update, control and configure Windows XP Embedded thin client devices.

This manual illustrates how to use the management software to deploy, configure, and administer remote windows embedded devices. It is intended as a reference guide for system administrators.

Features

- Centralized management of XPe devices.
- Stores device and other settings in a centralized SQL 2000/2005 database or SQL 2005 Express.
- Centrally apply system hot fixes, application snap-in's, application updates, firmware reloads to single or multiple XPe devices.
- Clone settings from a configured XPe device and apply to single or multiple target XPe devices.
- Join remote XPe devices to the Active Directory.
- Remotely change local Administrator and User account passwords.
- Remote control or shadow XPe devices.
- Wake up, restart or shutdown remote XPe devices.
- Organize XPe devices on LAN/WAN environments into logical groups.
- Automatically group devices specified by subnet range.
- Manage XPe devices in a WAN environment and devices which are behind a NAT firewall.
- Schedule tasks that need to be executed on the XPe devices.
- User-friendly graphical user interface.
- Easy licensing module which allows to add-on install license packs as and when new devices are installed on the network.

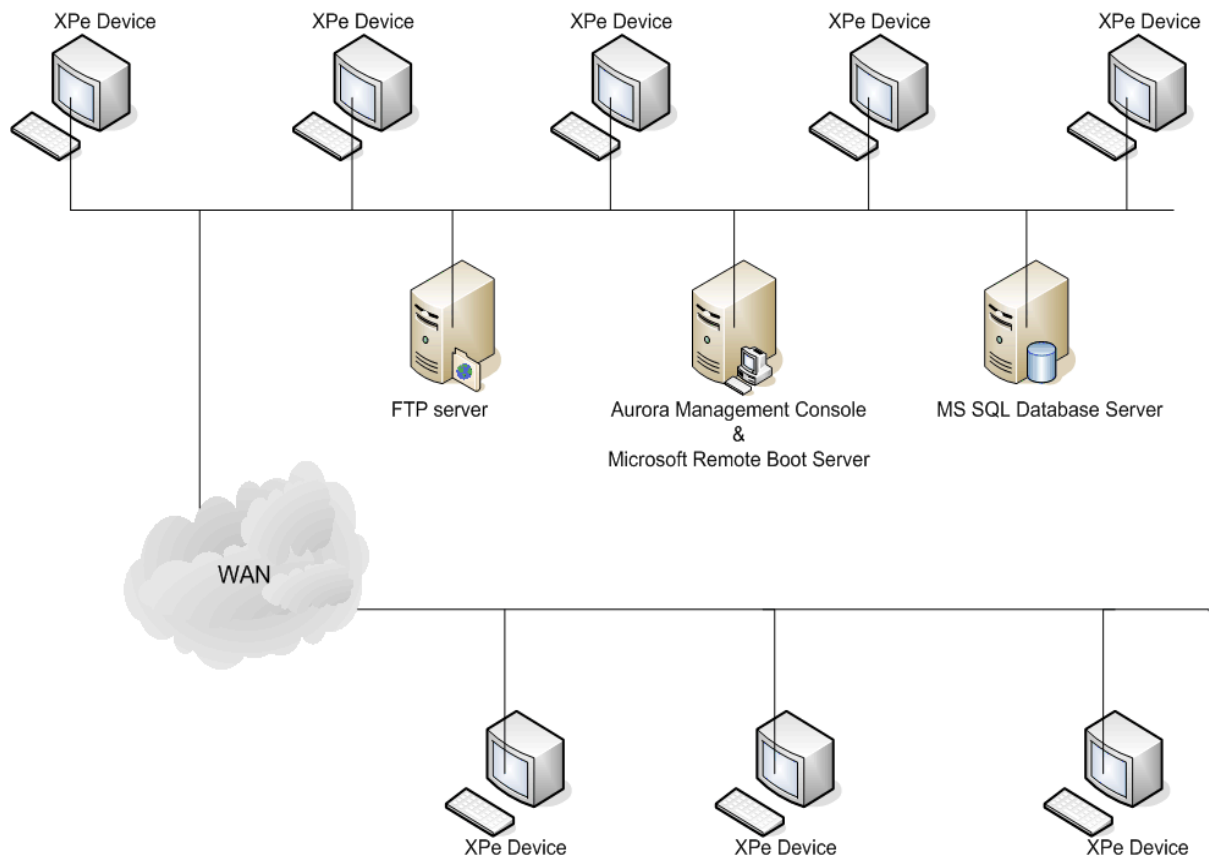
Getting Started

This chapter covers:

- [Overview](#)
- [Get to know the Aurora User Interface](#)
 - [Physical View](#)
 - [Logical View](#)
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 - [Configure the Aurora console to use a FTP server](#)
 - [XPe device registration](#)
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Overview

Conceptual Network Diagram



XPe Management Console: Consists of a graphical user interface and a server which interacts with the XPe devices. It will also help organize devices into logical groups, create and manage tasks and monitor tasks sent out to devices.

Microsoft Remote Boot Server (RBS): Integrated with the Aurora for Windows Embedded software for remote firmware reloads for single or multiple XPe devices.

XPe Device: Windows XP Embedded device preloaded with Aurora XPe agents. XPe agents register the XPe devices with the XPe management console, get task commands, execute the commands and report their status.

FTP Server: The FTP server is used for storage of cloned settings, firmware update, hot fix and application snapin or upgrade packages. These packages are uploaded from the Aurora management console and downloaded to the XPe devices on command.

Database Server: The database server stores information of all the registered XPe devices. For enterprise wide management of XPe devices, the XPe management server can be configured to use Microsoft SQL server. To manage XPe devices in a workgroup an integrated Microsoft SQL Server 2005 Express edition is provided with the installation package.

Get to know the Aurora interface

This section covers:

- [Physical View](#)
- [Logical View](#)
- [Task View](#)
- [Status Bar](#)
- [Icons](#)

Physical View

The physical view displays all the XPe devices registered with the XPe Management console. Information and status of XPe devices is displayed in this view. If you choose to Auto group devices based on the subnet range specified in the discovery option, the devices will be grouped by the IP range.

Aurora Management Console

File Edit View Management Tasks/Packages Tools Help

Physical View Logical View

Computer Name	IP Address	MAC Address	DHCP	EWF State	Current State	BehindFirewall	Product Name	Product Vers...	Agent Version	Adapters
DEM-39MFER7C6...	192.168.0.101	00-13-90-01-1e-70	Yes	Enabled	Offline	No	TC3370>XPe	061605	1.0.65.0	1
DEM-4V8875SNJ...	192.168.0.104	00-13-90-01-1e-75	Yes	Enabled	Offline	No	TC3370>XPe	061605	1.0.65.0	1
DEM-GW21ALANG...	192.168.0.108	00-13-90-01-1e-cd	Yes	Enabled	Offline	No	TC3370>XPe	061605	1.0.65.0	1
DEM-0RVPMEDE...	192.168.0.112	00-13-90-01-1b-e0	Yes	Enabled	Offline	No	TC3370>XPe	061605	1.0.65.0	1
DEM-9DVVGV0TH...	192.168.0.115	00-13-90-01-1d-e4	Yes	Enabled	Offline	No	TC3370>XPe	061605	1.0.65.0	1
DEM-2J6YSAB2HT...	192.168.0.112	00-13-90-01-e4-a5	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-MV5VTWJ3...	192.168.0.113	00-13-90-01-e4-92	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-7GD7I0NGA88...	192.168.0.114	00-13-90-01-e4-a9	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-VITGE3GE8...	192.168.0.115	00-13-90-01-e4-a9	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-CFDPVWH4G...	192.168.0.116	00-13-90-01-e4-b4	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-XUPW8557...	192.168.0.117	00-13-90-01-e4-ac	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-1KMCZQDU...	192.168.0.117	00-12-7b-00-9f-16	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-1090GZ2YC...	192.168.0.119	00-13-90-01-e4-a7	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-80DPSTR0...	192.168.0.119	00-12-7b-00-9f-4e	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-ULPGRHD...	192.168.0.110	00-13-90-01-e4-9d	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-5PV1JTBDDZI...	192.168.0.108	00-13-90-01-e4-a3	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-H5400S64D...	192.168.0.107	00-13-90-01-e4-99	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-8QG8R4MCL...	192.168.0.105	00-13-90-01-e4-ae	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-2C8ZSN10IP...	192.168.0.111	00-12-7b-00-9f-ef	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-G75OCLPK7...	192.168.0.106	00-13-90-01-e4-9f	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.70.0	2
DEM-F79GX1A122A...	192.168.0.107	00-13-90-01-af-ee	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-F68B004ID...	192.168.0.108	00-13-90-01-af-ef	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-QF5841RYD...	192.168.0.110	00-13-90-01-b0-14	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-VTND63K...	192.168.0.112	00-13-90-01-af-b9	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-Y2ULFSR7Y...	192.168.0.113	00-13-90-01-af-b7	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-88HOKQHR...	192.168.0.114	00-13-90-01-b0-0c	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-S0DWZ2PG...	192.168.0.115	00-13-90-01-b0-0e	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-JGK2K2HF...	192.168.0.116	00-13-90-01-af-34	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0	1
DEM-5568YDZH...	192.168.0.104	00-13-90-01-af-42	Yes	Disabled	Offline	No	KREIOS>XPe	081707	2.0.72.0	1
DEM-5568YDZH...	192.168.0.107	00-13-90-01-af-17	Yes	Enabled	Offline	No	KREIOS>XPe	081707	2.0.72.0	1
DEM-4V5MFWN...	169.254.107...	00-1a-5e-00-0d-ee	Yes	Disabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-8FQZRP7DV...	192.168.0.113	00-1a-5e-00-0d-d5	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.71.0	1
DEM-Y2XPAVA...	192.168.0.104	00-1a-5e-00-0e-eb	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-GJ0XPLA15B...	192.168.0.105	00-1a-5e-00-05-c1	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-3Z80V5FJG...	192.168.0.106	00-14-4a-00-09-20	Yes	Enabled	Offline	No	HELIOS>XPe	061605	1.0.65.0	1
DEM-3VW35JWV...	192.168.0.107	00-14-4a-00-07-ed	Yes	Enabled	Offline	No	HELIOS>XPe	061605	2.0.72.0	1
DEM-5TFKL1S190...	192.168.0.108	00-1a-5e-00-06-bb	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-4V5MFWN...	192.168.0.110	00-1a-5e-00-05-c9	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-KUJWNT4T...	192.168.0.120	00-1a-5e-00-0e-64	Yes	Not present	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-DU11N0QJ...	192.168.0.121	00-1a-5e-00-0e-3a	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-H25W06V1...	192.168.0.101	00-1a-5e-00-06-00	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-F1GUUD55...	192.168.0.104	00-1a-5e-00-0e-5e	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-Z3NLB1TR...	192.168.0.105	00-1a-5e-00-0e-3b	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-HQYAU0D...	192.168.0.106	00-1a-5e-00-0e-60	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-WAEUKUJ...	192.168.0.107	00-1a-5e-00-0d-cf	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-895FEDJ9H5D...	192.168.0.127	00-1a-5e-00-0e-39	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-4V5MFWN...	192.168.0.107	00-1a-5e-00-0d-9e	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0	1
DEM-3UYR1R1JM...	192.168.0.101	00-1a-5e-00-0e-29	Yes	Enabled	Offline	No	HELIOS>XPe	050706	1.0.65.0	2
DEM-MALCZVGF...	192.168.0.112	00-1a-5e-00-0d-ef	Yes	Enabled	Offline	No	HELIOS>XPe	050706	1.0.65.0	1
DEM-ED0KZZ0ZB...	192.168.0.117	00-1a-5e-00-0e-2f	Yes	Enabled	Offline	No	HELIOS>XPe	050706	1.0.65.0	1

Inventory: 76 Online: 4 4:42:45 PM

Aurora Management Console

File Edit View Management Tasks/Packages Tools Help

Physical View Logical View Task View

Computer Name	IP Address	MAC Address	DHCP	EWF State	Current State	BehindFirewall	Product Name	Product Vers...	Agent Version
DEM-OYHSRVWID...	192.168.0.101	00-1a-5e-00-0e-20	Yes	Disabled	Online	No	HELIOS>XPe	030606	1.0.65.0
DEM-H03N20BY...	192.168.0.104	00-1a-5e-00-0e-40	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0
DEM-WK8PECC1...	192.168.0.105	00-1a-5e-00-0e-62	Yes	Disabled	Offline	No	HELIOS>XPe	030606	1.0.65.0
DEM-HQ083M3M...	192.168.0.106	00-1a-5e-00-0e-3e	Yes	Disabled	Online	No	HELIOS>XPe	030606	1.0.65.0
DEM-EFV3PAM6TL...	192.168.0.107	00-1a-5e-00-0e-44	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0
DEM-5PV1JTBDDZI...	192.168.0.108	00-13-90-01-e4-a3	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-QF5841RYD...	192.168.0.110	00-13-90-01-b0-14	Yes	Disabled	Offline	No	KRONOS>XPe	050706	2.0.72.0
DEM-2J6YSAB2HT...	192.168.0.112	00-13-90-01-e4-a5	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-MV5VTWJ3...	192.168.0.113	00-13-90-01-e4-92	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-7GD7I0NGA88...	192.168.0.114	00-13-90-01-e4-a9	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-DZZUKZ5GF...	192.168.0.114	00-1a-5e-00-05-c0	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0
DEM-VITGE3GE8...	192.168.0.115	00-13-90-01-e4-a9	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-CFDPVWH4G...	192.168.0.116	00-13-90-01-e4-b4	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-XUPW8557...	192.168.0.117	00-13-90-01-e4-ac	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-A1XW753B...	192.168.0.117	00-1a-5e-00-0e-14	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0
DEM-1090GZ2YC...	192.168.0.119	00-1a-5e-00-0e-2d	Yes	Enabled	Offline	No	HELIOS>XPe	050706	2.0.72.0
DEM-80DPSTR0...	192.168.0.119	00-13-90-01-e4-a7	Yes	Enabled	Offline	No	KRONOS>XPe	050706	2.0.70.0
DEM-KUJWNT4T...	192.168.0.120	00-1a-5e-00-0e-64	Yes	Not present	Offline	No	HELIOS>XPe	050706	2.0.72.0

Inventory: 18 Online: 4 5:04:13 PM

The physical view displays:

- Computer Name – Windows Computer Name of the XPe device
- IP Address
- MAC ID
- DHCP – If the device is set to static IP DHCP field shows “ NO ”
- Adapters – Number of network adapters installed on the XPe device
- EWF State – Enhanced Write Filter state: Enabled/Disabled/Not present
- Current State – XPe device state: Online/Offline
- Product name – Commercial product name
- Product version – Version of the XPe device build
- Agent version – XPe device agent version

Logical View

For ease of management, the XPe devices registered with the management console can be manually sorted into logical groups. Information and status of XPe devices is displayed in this view.

Left pane displays created groups

Right pane displays devices added to a selected group

Computer Name	IP Address	MAC Address	DHCP	EWF State	Current State	Product Name	Product Version	Agent Version
TARGET2	192.168.0.111	00-13-90-00-14-a6	Yes	Enabled	Offline	UTC100	032205	1.0.56.0
OEM-490Q1PMTU...	192.168.0.114	90-12-02-5049-e7	Yes	Enabled	Offline	LT400-40M	092404	1.0.57.0

Physical View Logical View Task View

Ready Inventory: 3 Online: 0 4:36:31 PM

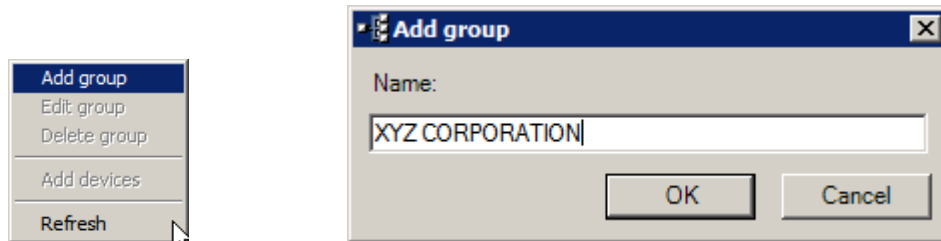
See also:

[To create a group](#)

[To add XPe devices to groups](#)

To create a group:

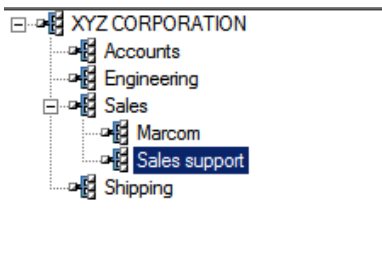
1. Right click in an empty space on the left pane of the logical view and click Add group.
2. Enter a logical name for the group and click OK. Example: Company Name for the main group



To create a sub group:

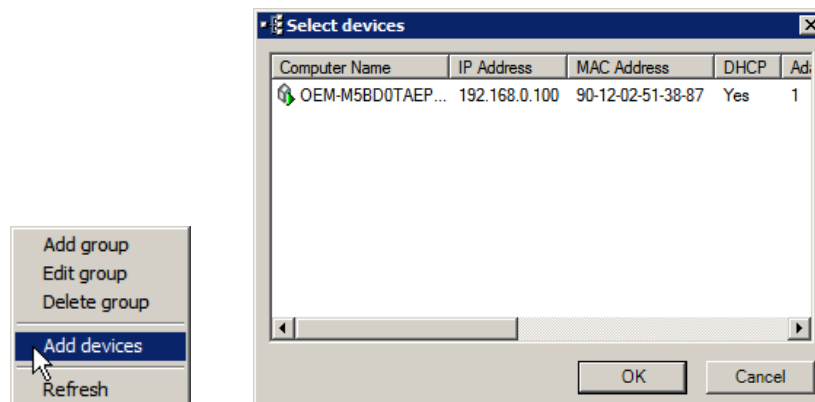
1. Right click on a created group in which a sub group has to be created and click Add group.
2. Enter a logical name for the sub group and click OK.

The following screenshot displays the group pane (left pane) of the logical view with groups and sub groups.



To add XPe devices to groups:

1. Right click on a group and click on Add devices.



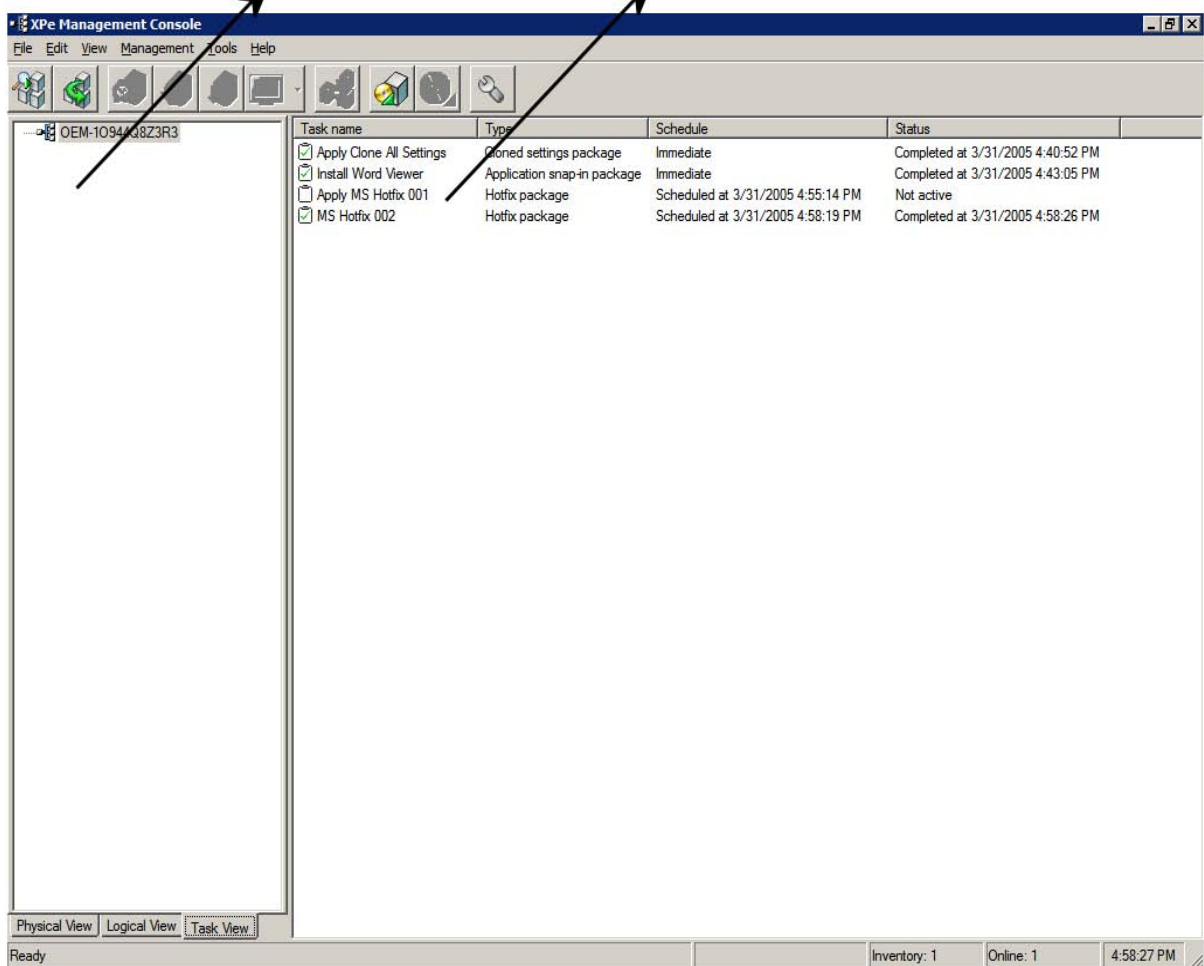
2. Select the devices from the select devices screen. To select multiple device hold Ctrl key and click the devices to add.

Note: XPe devices can be added to the groups in the logical view only if they are registered with the XPe console. Refer [XPe device registration](#) to register XPe devices in the Aurora management console database and are displayed in the Physical view.

Task View

Device pane listing devices on which tasks have been applied

Task pane listing tasks applied on a selected device



Task name	Type	Schedule	Status
<input checked="" type="checkbox"/> Apply Clone All Settings	Cloned settings package	Immediate	Completed at 3/31/2005 4:40:52 PM
<input checked="" type="checkbox"/> Install Word Viewer	Application snap-in package	Immediate	Completed at 3/31/2005 4:43:05 PM
<input type="checkbox"/> Apply MS Hotfix 001	Hotfix package	Scheduled at 3/31/2005 4:55:14 PM	Not active
<input checked="" type="checkbox"/> MS Hotfix 002	Hotfix package	Scheduled at 3/31/2005 4:58:19 PM	Completed at 3/31/2005 4:58:26 PM

Physical View Logical View Task View

Ready Inventory: 1 Online: 1 4:58:27 PM

Displays the various tasks and task status applied to the XPe devices.

Status Bar

Displays total number of devices registered with the console














Ready Inventory: 3 Online: 0 3:03:35 PM

Displays total number of online devices

The status bar is shown at the very bottom of the Management console and is visible in the physical, logical and task views. The status bar displays the total number of XPe devices registered with the Aurora management console and the total number of online devices.

Icons

The functions of the icons on the user interface are stated in the table.

Icon	Function	State
	Discover new devices	Always active
	Refresh current devices	Always active
	Wakeup device	Active when device/s is selected
	Restart device	Active when device/s is selected
	Shutdown device	Active when device/s is selected
	Remote Control (RDP)	Active when device is selected
	Shadow device (VNC)	Active when device is selected
	Clone settings	Active when device is selected
	Manage installation packages	Always active
	Add installation task	Active when device/s is selected
	Options	Always active

Before you begin

This section includes:

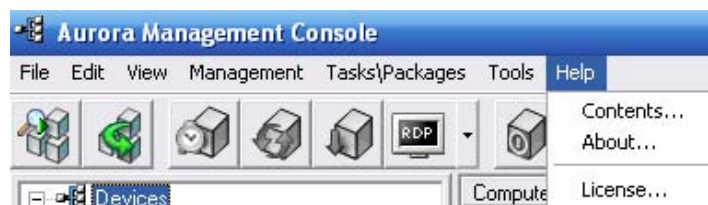
- [Install license pack.](#)
- [TCP/UDP port requirements](#)
- [XPe device registration](#)
- [Configure the Aurora console to use a FTP server](#)
- [XPe device registration](#)
- [Updating the agent on the XPe device](#)

Install license pack

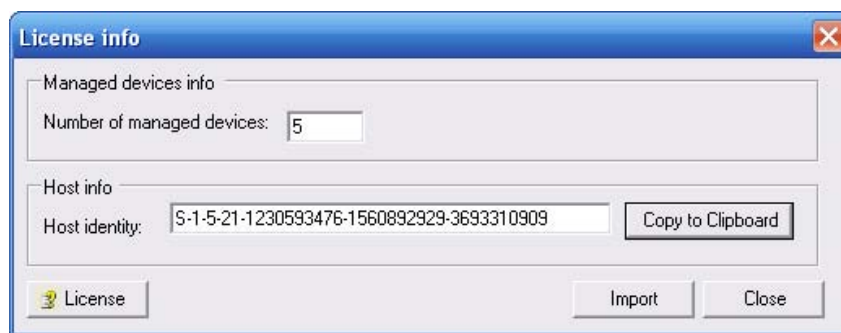
The default installation can manage up to 5 devices.

To install additional license pack for the installation product invoke the Aurora Management console from the Desktop shortcut or Start Menu → Programs → Aurora for Windows embedded → Aurora Management Console.

1. Click on the Help Menu → License...



2. Copy the Host identity by clicking the "Copy to Clipboard" button.



3. Email the Host identity to your sales or support contact.
4. Your sales/support contact will send you the link to a download a zipped license.xml file.
5. Extract the zipped license file to the Desktop or any convenient location.
6. Import the license.xml file by clicking on the "Import" button in the Help | License menu. This license file will install the authorized number of licenses on this host.

Note: Do not open the license.xml file to keep its integrity. If you have any real time virus scanner on your workstation/server disable it temporarily until you download, extract and import

the license file.

TCP/UDP port requirements

If the PC or Server on which the Aurora Management Console is installed has an Internet connection firewall or Windows Firewall enabled, the following ports have to be opened.

See [Table 1](#) for a list of standard port and see [Table 2](#) for a list of custom ports required.

Table 1: Standard Ports:

<i>Port</i>	<i>Protocol</i>	<i>Purpose</i>
67 & 68	UDP	PXE – Bootstrap used by Remote Boot Service
69	UDP	TFTP – used by Remote Boot Service
20 & 21	TCP	If FTP server is installed on a PC or server which has a Firewall

Table 2: Custom Ports:

<i>Port</i>	<i>Protocol</i>	<i>Purpose</i>
40000	UDP	XPe Agent/Server Communication
40001	TCP	XPe Agent/Server Communication
40002	TCP	XPe Agent/Server Communication

Network requirements for cross subnet environments:

1. The network should have port/broadcast enabled
2. ICMP should be enabled on the router

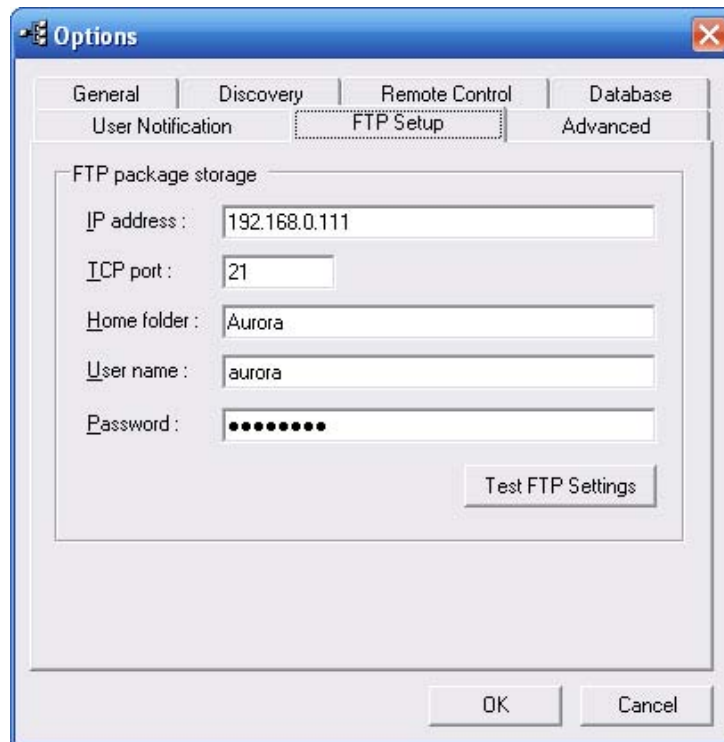
Configure the Aurora console to use a FTP server

To configure a FTP repository:

1. Create a FTP account with read/write, create directory, and browse directory permissions on the FTP Server. The FTP Server should be accessible from the Aurora management console and the XPe devices.
2. Logon to the FTP server and create a sub directory with a relevant logical name.
Example: Aurora
3. On the XPe Management console, click on the options icon or select Tools menu → options.

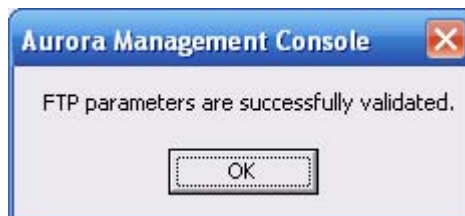
4. Select FTP setup tab.

5. If you had entered the ftp details during setup skip to step 7



6. Enter the complete path to the FTP folder and enter login credentials.

7. Click "Test FTP Settings" to check if the FTP settings are valid.



7. If the FTP server connects, press OK to save settings.

8. This will be the root FTP repository used by the Aurora for Windows Embedded console

XPe device registration

XPe devices should be discovered and registered with the Aurora management console to carry out the various management tasks. Devices can be discovered and registered in three ways.

- [Automatic registration](#)
- [Registration using the Discovery option](#)
- [Specifying the Management server on the XPe device](#)

Automatic registration

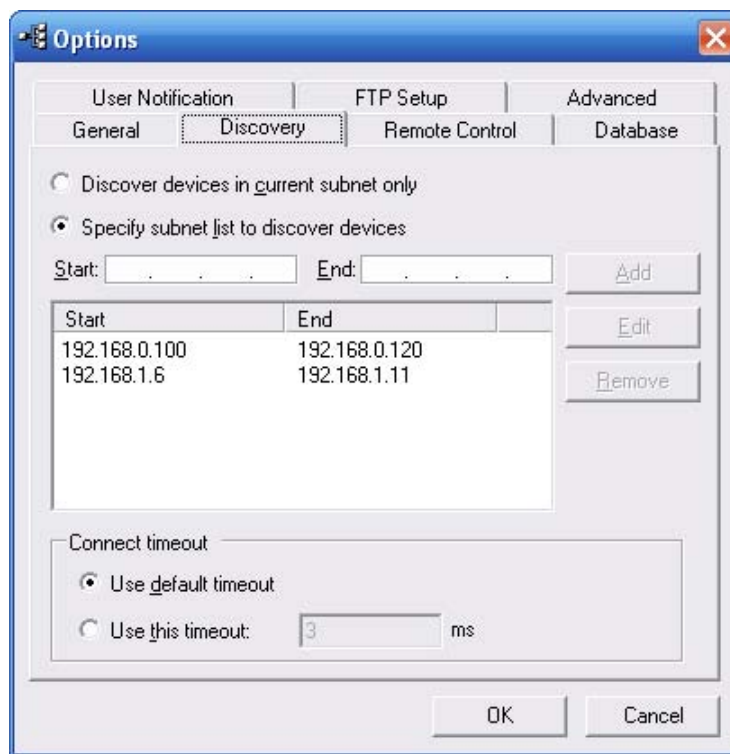
This is the default setting of the Aurora management console and XPe Agent. If the XPe devices and the Aurora management console are in the same LAN segment, the devices get registered with the console on the first boot.

Note: If the PC or Server on which the Aurora management console is installed has an Internet connection firewall enabled, ensure that the required ports are open on the firewall. See [TCP/UDP port requirements](#).

Registration using the Discovery option

The discovery option can be used to discover and register XPe devices in cross subnet environments.

You will have to setup this option by clicking on the options icon and discovery tab or select Tools menu → Options → Discovery tab.



“Discover devices in current subnet only” is selected by default.

Select “Specify subnet list to discovery devices” and add range of IP addresses to discover XPe devices. More than one subnet range can be added.

Click OK to exit the options.

Click discover new devices icon or select Management Menu → Discover new devices.

All new online XPe devices from the specified subnets should be discovered and added to the database. Devices behind a NAT firewall will not be discovered using discovery.

Note: If devices are not discovered, check to see if the devices have an older agent (version: 1.0.65.0) with dual network adapters (hardwired or wireless). Disable one adapter and try and discover the devices. Once discovered, select the device in the console and upgrade the agent to the latest agent using the Tools menu | Upgrade old agent

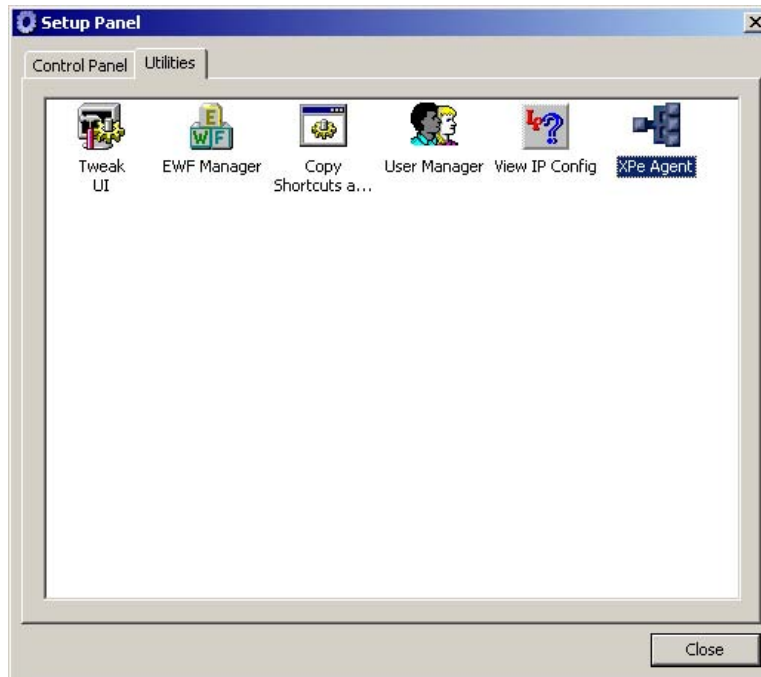
Specifying the Management Server on the XPe device

This option should be used

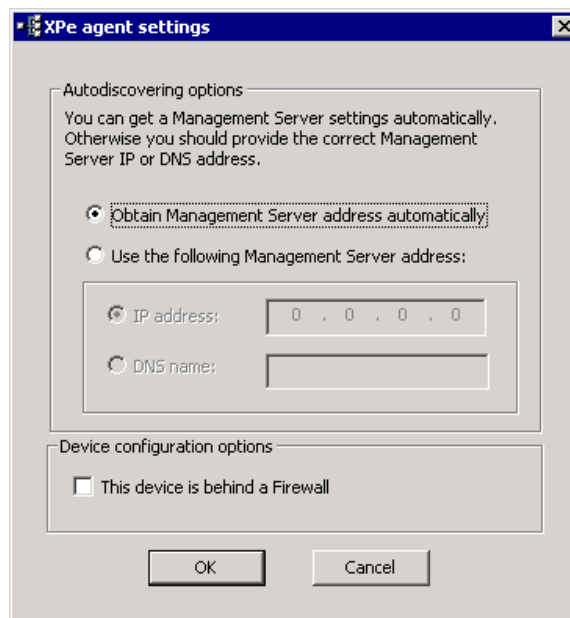
- If multiple XPe management servers are installed on the network, the management server that will be used to manage a particular XPe device has to be specified on the XPe device.
- If the XPe device is behind a NAT firewall.

To configure this option on the XPe device:

1. Click Start Menu → Setup Panel on the XPe device.



2. Click Utilities tab and double click XPe Agent icon.



3. The default option is “Obtain Management Server address automatically”.
4. Select “Use the following Management Server address” and specify the IP address or DNS name of the Management Server.
5. If the XPe device is behind a NAT firewall select the check box “This device is behind a Firewall”
5. Click OK. Commit changes to EWF using the EWF manager in the Setup Panel to make this change persistent.
6. Reboot XPe device and the device should be registered with the Aurora console.

Updating the agent on XPe devices

Once XPe devices are registered with the Aurora console, check to see if the devices have the latest agent. The current agent version is 2.0.72.0

If the devices have an older agent version select the devices with the old agent and upgrade the agent using the Tools | options | Upgrade old agent.



This will create an agent update package and upgrade the agent on the selected XPe devices. On a successful update the devices will be rebooted and the new agent version will be displayed in the console.

Using the Aurora Management Console

This chapter covers the different functions or tasks that can be carried out on the remote XPe devices by using the Aurora management server.

Tasks can be classified as:

- [Frequently used tasks](#)
 - [Refresh](#)
 - [Wake up/Restart/Shutdown](#)
 - [Remote Control/Shadow](#)
- [XPe device Initial setup tasks](#)
 - [Change Computer name](#)
 - [Clone settings](#)
- [XPe device maintenance or upgrade tasks](#)
 - [Managing hotfixes and application snap-ins](#)
 - [Applying hotfixes and application snap-ins](#)
 - [Managing and applying Firmware Update packages](#)

Frequently used tasks

Frequently used tasks include:

- [Refresh](#)
- [Wakeup/Restart/Shutdown](#)
- [Remote Control/Shadow](#)

Refresh

The refresh function gives the current Online/Offline status of the XPe device. To refresh you click on the icon or hit function key F5 or View menu → Refresh

Wake up/Restart/Shutdown

The Wake up/Restart/Shutdown function provides power on, reboot, or shutdown of a remote XPe device.

Note: To wake a client, the Wake On LAN support of the client's BIOS must be enabled.

To shutdown, reboot, or wake a client:

Select a device from the Physical View or Logical View and click on the wakeup/restart/shutdown device icon.

To select multiple XPe devices hold the Ctrl key and select the devices with a left mouse click.

To select all the XPe devices right click in an empty space on the right pane of the physical or logical view and select 'all' on the context menu or Edit Menu → select all

These functions are also available in the context menu when right click is performed on the selected XPe devices, and on the Management menu.

Remote Control/Shadow

The Aurora management Server supports:

- [Remote Desktop Connection \(RDP\) for Remote control of XPe device.](#)
- [VNC \(Virtual Network Computing\) for shadowing.](#)

Remote Desktop Connection (RDP) for Remote control of XPe device

The XPe devices support Remote Desktop Protocol or Microsoft Terminal services. To start Remote Control RDP session with an XPe device double click an online XPe device from the physical or logical view. A remote XPe device logon screen will be presented. Log on as the XPe device administrator.

Note:

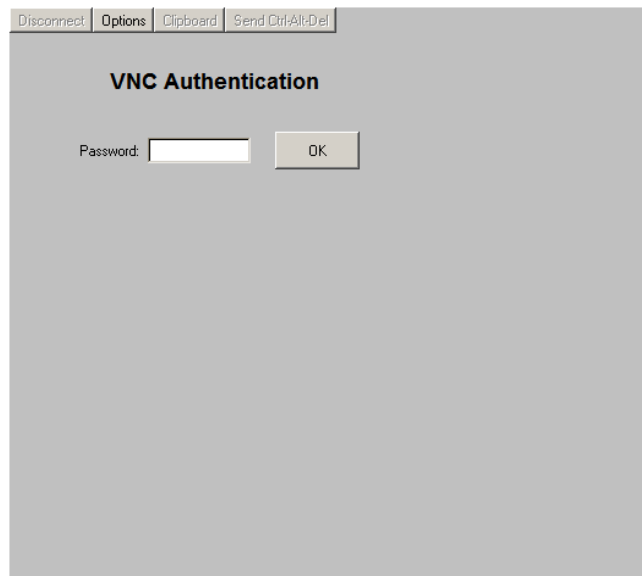
1. Only one remote or local session is allowed on an XPe device. If the logon credentials provided are of a user with admin privileges on the XPe device and a user session is open on the XPe device, the local user session is disconnected and transferred to the Aurora Management Console.
2. If the logon credentials provided are of the administrator account on the XPe device and a user session is open on the XPe device, the local user is logged off and a remote administrator session is opened on the Aurora Management Console.

VNC (Virtual Network Computing) for shadowing

To use VNC for shadowing remote user sessions:

1. An Internet browser with Java plug-in support is required on the PC/Server with the management console.
2. VNC service has to be enabled on the XPe device. The VNC service can be started from Setup Panel → Control Panel → Services
3. Select VNC Server and change Startup to Automatic. Start the VNC service
4. To start a VNC session, select an XPe device from the physical or logical view and click on the arrow beside the RDP icon. Select shadow via VNC. The default Internet browser on the PC with the management software invokes to display the VNC authentication screen prompting for the remote XPe device VNC password.

VNC shadows the remote users desktop and can be used for Help Desk activities.



XPe device Initial setup tasks

The tasks that help to configure remote XPe devices for deployment include:

- [Change Computer name/membership](#)
- Clone Settings:
 - All Settings
 - [Clone Display settings.](#)
 - [Clone Regional settings.](#)
 - [Clone Time Zone settings.](#)
 - [Clone Application settings.](#)
 - [Clone Network settings.](#)
 - [Clone Printer settings.](#)
 - [Clone Power settings.](#)

[To apply cloned settings packages to target XPe devices.](#)

The screenshot displays the options on the Management menu. The change computer name task can only be executed from the management menu.

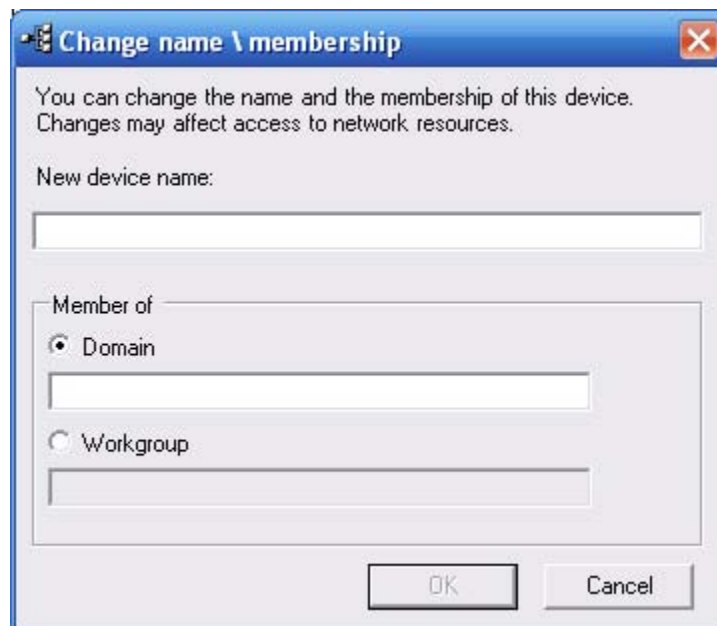


Change Computer name\membership..

The default Windows Computer Name is random generated starting with OEM – plus 11 alpha numeric characters, which an administrator can change.

To change the Computer Name:

1. Select an online XPe device from the physical or logical view.
2. Select Management menu → Change name\membership...



3. To join the XPe device to an Active directory or workgroup enter the Domain name or workgroup in the fields provide. You should have the administrator privileges in the Active

Directory to add XPe devices to the domain. A popup window will prompt you for the domain administrator credentials.

3. In the popup screen enter the credentials and click OK

4. The XPe device will reboot and its new Computer Name will be displayed once it is online.

Note: This operation can be carried out on one device at a time.

Clone settings

The cloned setting package provides the ability to set Display settings, Regional settings, Application settings, and Time Zone settings on remote XPe devices using a configure XPe device.. Configure an XPe device with the desired settings, test the settings, and then extract the settings into a cloned setting package. The cloned setting package is saved on the FTP server.

This section covers:

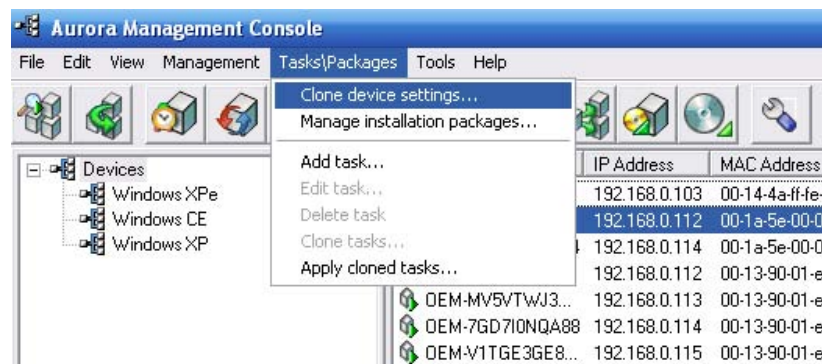
Creating cloned settings packages:

- All Settings
- [Clone Display settings.](#)
- [Clone Regional settings.](#)
- [Clone Time Zone settings.](#)
- [Clone Application settings.](#)
- [Clone Network settings.](#)
- [Clone Printer settings.](#)
- [Clone Power settings.](#)

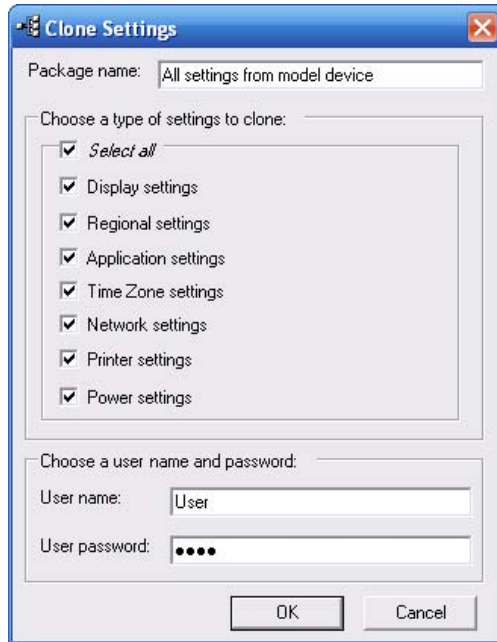
[To apply cloned settings packages to target XPe devices.](#)

To create cloned settings packages

1. To clone settings from a configured online XPe device, click on Tasks\Packages | Clone device settings menu.

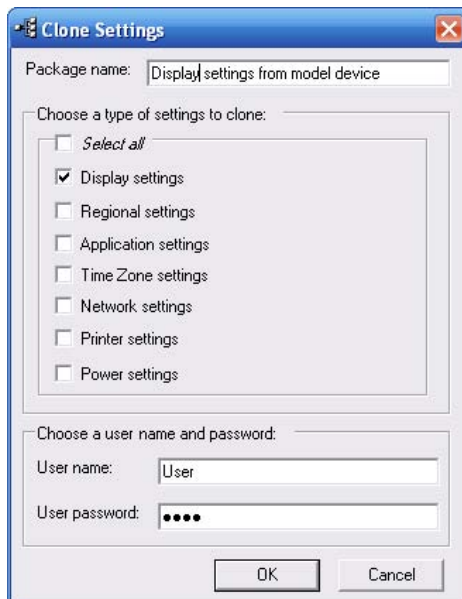


2. You will have the option to clone all the configured settings from the list of settings that can be cloned or select individual settings. These settings can then be applied as a task to one or more devices that are registered with the console.

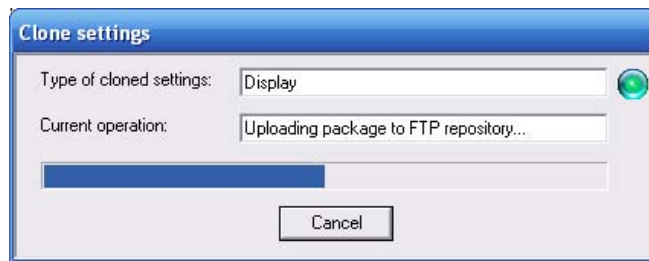


Clone Display settings:

1. Select an online model XPe device (An XPe device from which the settings have to be copied) and click the clone settings icon or select Management menu → Clone settings



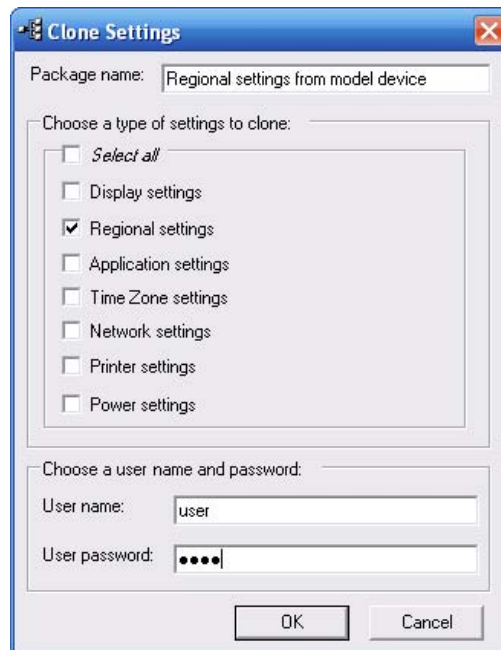
2. Check "Display settings" and enter a name for this package.
3. Enter the login credentials of the user or administrator account on the XPe device.
4. A package with the specified name will be created and uploaded to the FTP repository, which can be used to change display settings on single or multiple XPe devices.



Note: Administrator should ensure that cloned display properties are supported by the target XPe device monitors.

Clone Regional settings:

1. Select an online model XPe device and click the clone settings icon or select Management menu → Clone settings

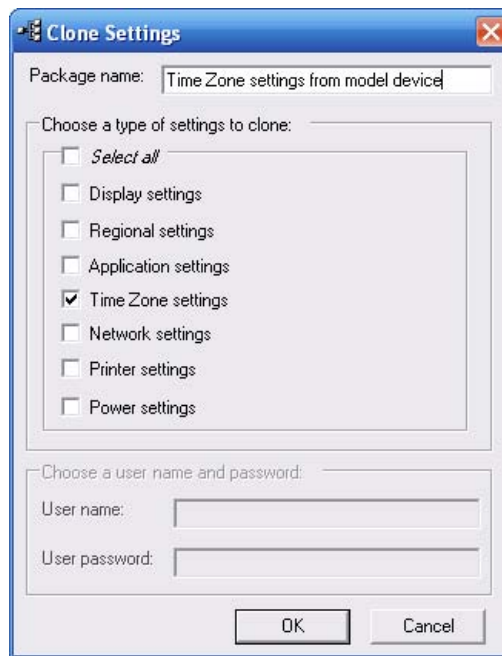


2. Check “Regional settings” and enter a name for this package.
3. Enter the log in credentials of the user or administrator account on the XPe device.
4. A package with the specified name will be created and uploaded to the FTP repository, which can be used to change Regional settings on single or multiple XPe devices.

Note: Clone regional settings, clones region specific settings like language and keyboard layout settings.

Clone Time Zone settings:

1. Select an online model XPe device and click the clone settings icon or select Management menu → Clone settings



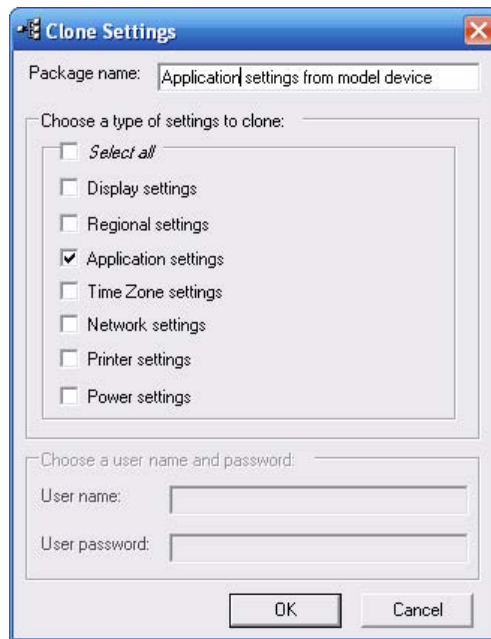
2. Check "time zone settings" and enter a name for this package and click OK
3. A package with the specified name will be created and uploaded to the FTP repository, which can be used to change time zone settings on single or multiple XPe devices

Clone application settings

Clone application settings copies the contents of "Documents and Settings\user" directory from the model XPe device. If ICA, RDP or any other applications are configured to connect to specified servers and the connection shortcuts are created on the user desktop or Startup folder, these connections will be copied to the Clone application settings package.

To create a Clone application package:

1. Select an online model XPe device (An XPe device from which the settings have to be copied) and click the clone settings icon or select Management menu → Clone settings
2. Check "Application settings" and enter a name for this package. Click OK
3. A package with the specified name will be created and uploaded to the FTP repository, which can be used to change application settings on single or multiple XPe devices.



4. The clone application package can take up to a minute to complete depending on the network speed and FTP server connection. A progress bar indicating the status of the package creation is displayed.

Clone network settings:

This will clone network settings like DHCP/Static, default gateway, DNS ..

Clone printer settings:

This is a great new feature available on this version of Aurora. You can install any local printer on a model XPe device and use the clone printer settings to create a printer package. You can then install the printers on one or multiple XPe devices.

If the model device has a network printer, only the printer drivers will be applied to the XPe device. We may have to reconfigure the network printer on individual XPe devices.

Clone power settings:

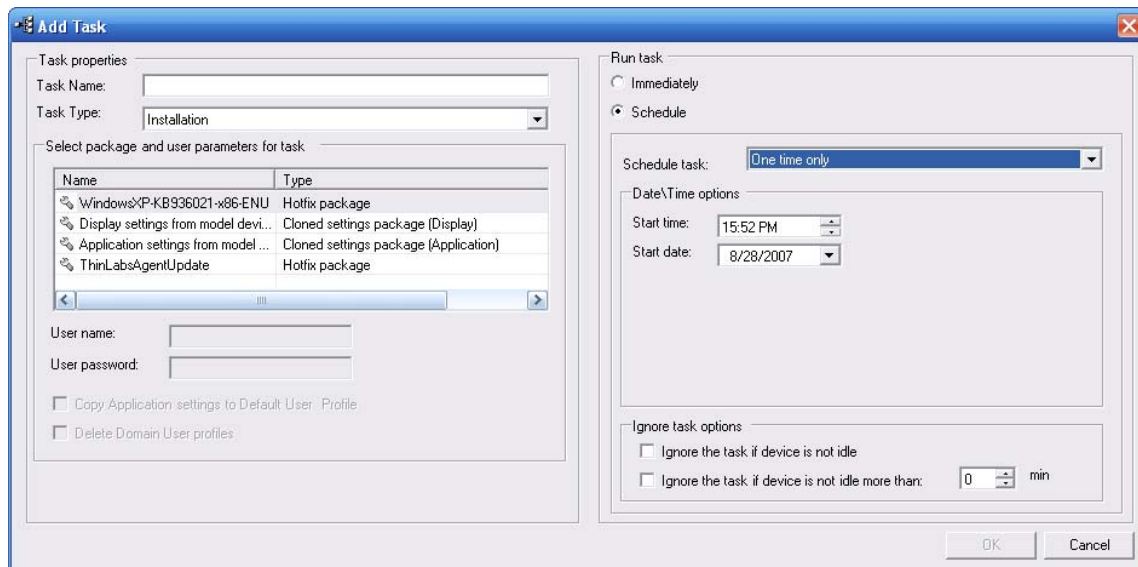
Clone power settings copies the power setting like screen saver and other power settings. Note this is a user specific setting and the settings from the

To apply cloned settings packages as a task to target XPe devices

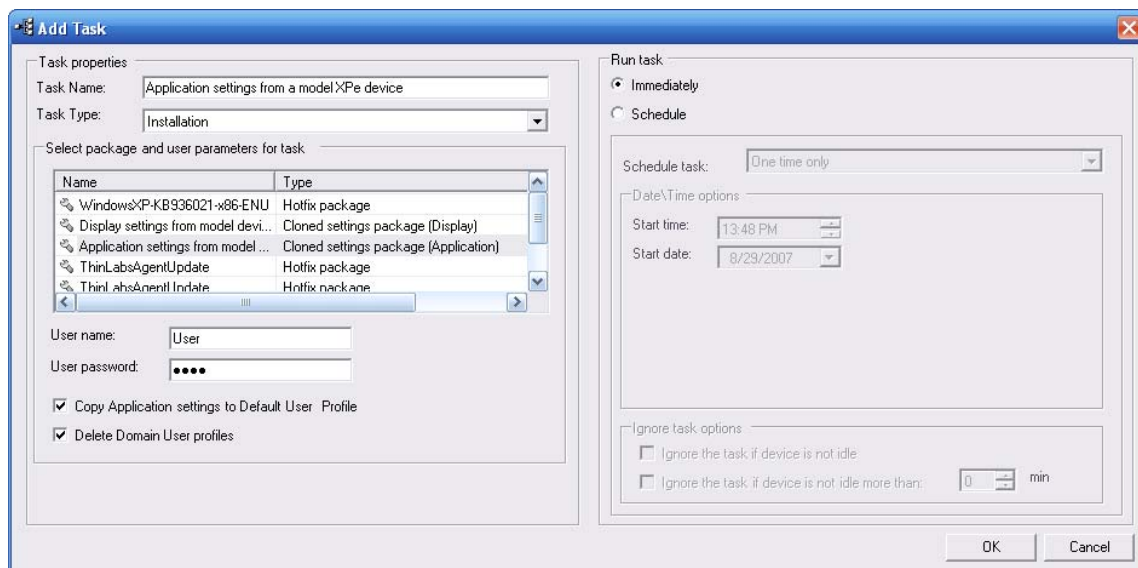
The cloned settings packages can be applied as a task to a single or to multiple XPe devices. The tasks can be applied immediately or as a scheduled event.

To apply a cloned settings package:

1. Select the XPe devices from the physical or logical view to which the settings have to be applied.
2. Right click on the selected XPe device and click Add task or click on Add task icon.



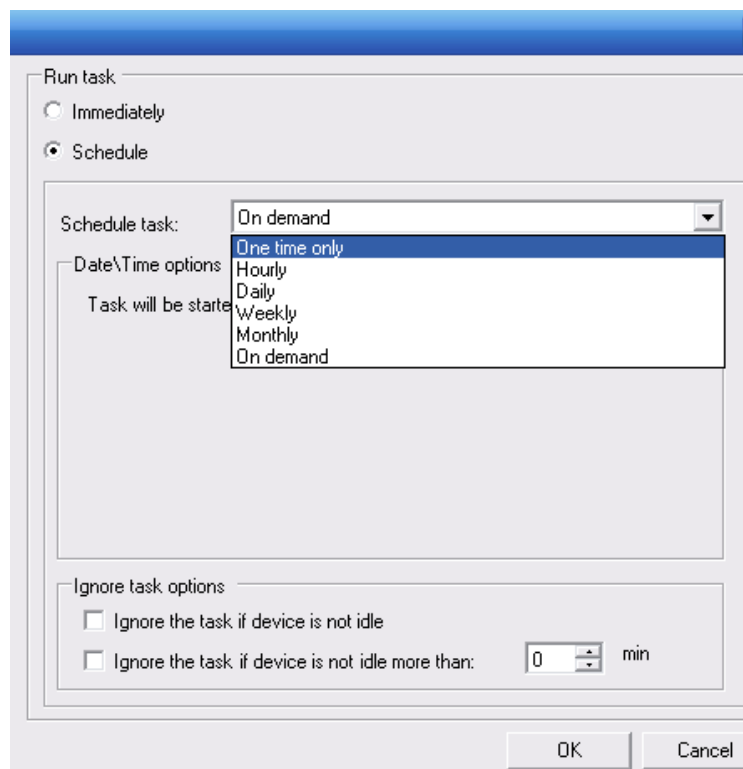
3. If the task is of the type “Cloned settings package – Application” you will have an option to apply this settings to the “Default User” profile and also delete all domain user profiles on the selected remote XPe devices. This feature will be useful when joining XPe devices to an Active Directory.



3. Select the required cloned settings package from the list.
4. Enter a name for the task.
5. Enter the XPe device user credentials if the field is active.
6. Select “Immediately” to apply the task immediately and click OK or
7. Schedule the task to run on a specific day at a specific time and click OK. Tasks, can be run
 - One time
 - Hourly
 - Daily
 - Weekly
 - Monthly
 - Or On Demand

The Hourly, Daily and Weekly schedules are useful to Wake up, shutdown or restart remote devices at a specified time every day.

If devices are offline, or are behind a firewall, the “On Demand “schedule can be used. If this option is selected, the task will be applied the next time the device comes online or rebooted.



7. The status of the task will be displayed in the task view. The status indicates whether task was immediate or scheduled, tasks in progress, success/failure and date and time of completion.
8. On successful execution of the cloned setting task, the XPe devices on which the task was applied will reboot after committing the changes to EWF.

Refer to the figure of [Task view](#).

Note: Wait for the completion of an applied task on the XPe device before applying another task. A task is considered complete when the XPe device reboots after completion of the task and the status of the XPe device changes to "online"

XPe device maintenance or update tasks

XPe device maintenance or update tasks include:

- Applying Microsoft security updates or hotfixes.
- Installing new applications or application upgrades – referred as application snap-in.
- Reloading a new version of firmware or a factory copy of the firmware.

Managing hotfixes and application snap-ins

Microsoft releases security updates and system enhancement updates periodically. These updates and enhancements are referred to as hotfixes.

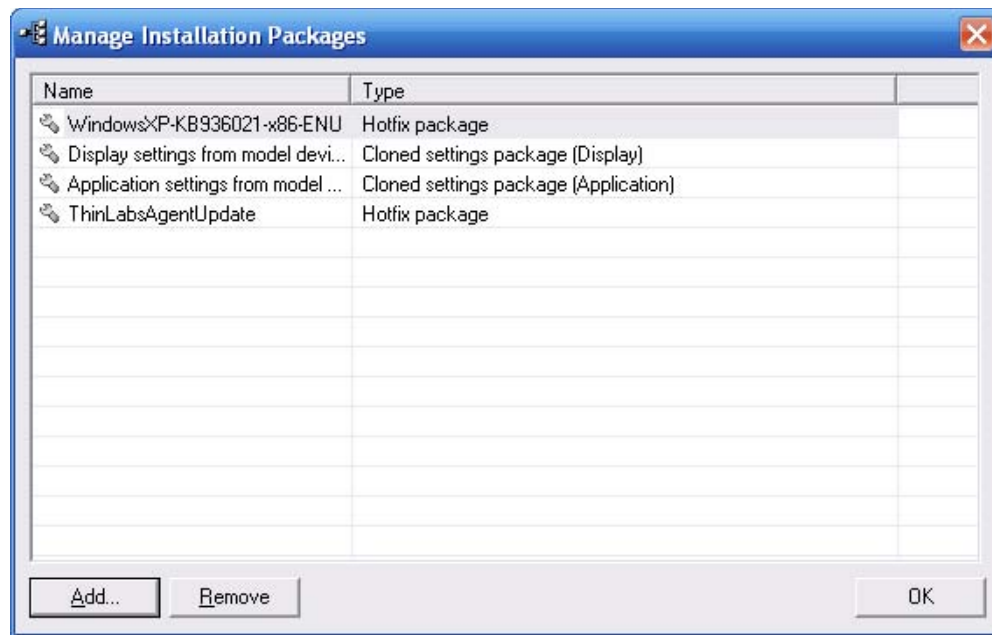
Hotfixes are packaged and released by the XPe device manufacturer. For ease of management of hotfix inventory, the package is a self executable which will extract by default to the folder "rootdir:\Program Files\Aurora for Windows Embedded\Hotfixes".

Application snap-ins are new applications or upgrades to installed applications, packaged to be deployed to remote XPe devices.

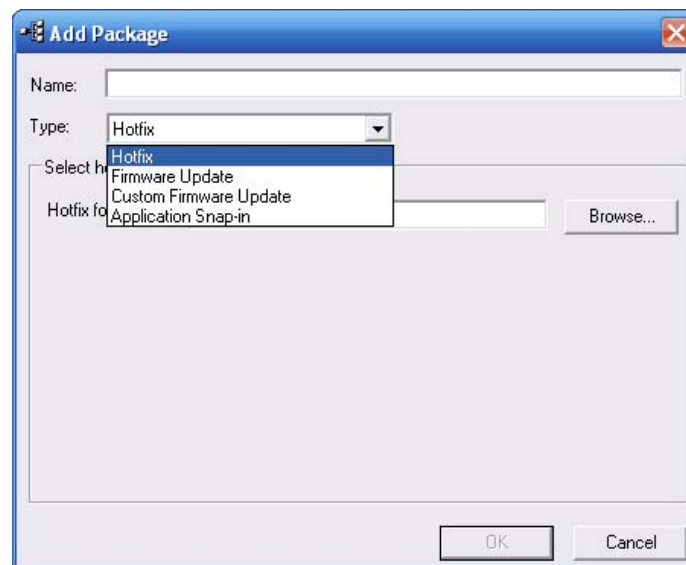
Application snap-ins are packaged and released by the XPe device manufacturer. For ease of management of application Snap-ins inventory, the package is a self executable which will extract by default to the folder "rootdir:\Program Files\Aurora for Windows Embedded\application snap-ins".

To manage hotfixes and application snap-ins:

1. Download the hotfix or application snap-in package provided by the manufacturer and execute it on the work station/Server on which the Aurora Management server is installed.
2. Click on "manage installation packages" icon or Management menu → Manage packages.
Click "Add" to add a package.



3. Select Type: hotfix, application snap-in, custom firmware update or Firmware update.



4. Click browse. By default the folder “rootdir:\Program Files\Aurora for Windows Embedded\Hotfixes”.

or

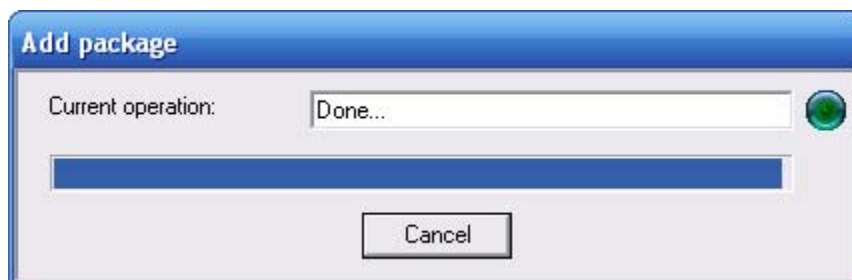
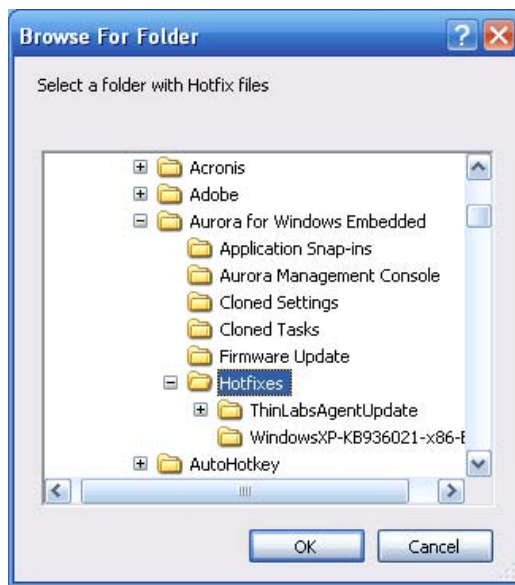
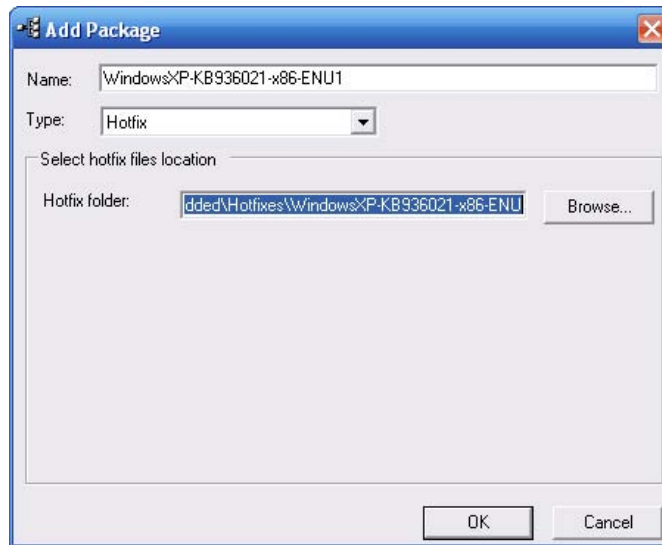
“rootdir:\Program Files\Aurora for Windows Embedded\Application snap-ins” will open depending on the type of package.

5. Expand the “Hotfix” folder or “Application snap-ins” folder and click on the folder with the hotfix name or application snap-in name. Example: “MS05-001”

6. Click OK.

7. The package will be uploaded to the FTP repository.

The following screenshots explain a pictorial explanation of the steps to upload a hotfix or application snap-in package to the FTP repository.

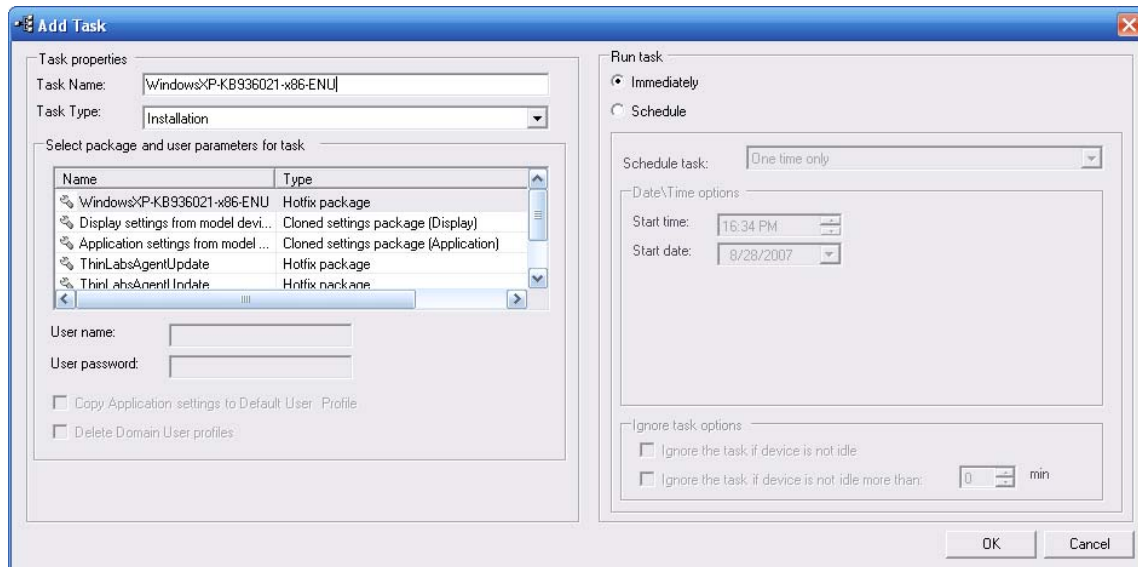


Applying hotfixes and application snap-ins as a task to XPe devices

Hotfix and application snap-in packages uploaded to the FTP repository can be applied as a task to a single or to multiple XPe devices. The tasks can be applied immediately or as a scheduled event.

To apply a hotfix or application snap-in package:

1. Select the XPe devices from the physical or logical view to which the packages have to be applied.
2. Right click on the selected XPe device and click Add task or click on Add installation task icon.



3. Select the required package from the list.
4. Select "Immediately" to apply the task immediately or schedule the task to run on a specific day at a specific time and click OK or schedule the task.
5. The status of the task will be displayed in the task view. The status indicates whether task was immediate or scheduled, tasks in progress, success, failures and date and time of completion.
6. On successful execution of the hotfix or application snap-in task, the XPe devices on which the task was applied will reboot after committing the changes to EWF.

Refer to the figure of [Task view](#)

Note: Wait for the completion of an applied immediate task on the XPe device before applying another task. A task is considered complete when the XPe device reboots after completion of the task and the status of the XPe device changes to "online"

Managing and applying Firmware Update packages

Firmware Update refers to new version of firmware or a factory copy of the firmware.

Example:

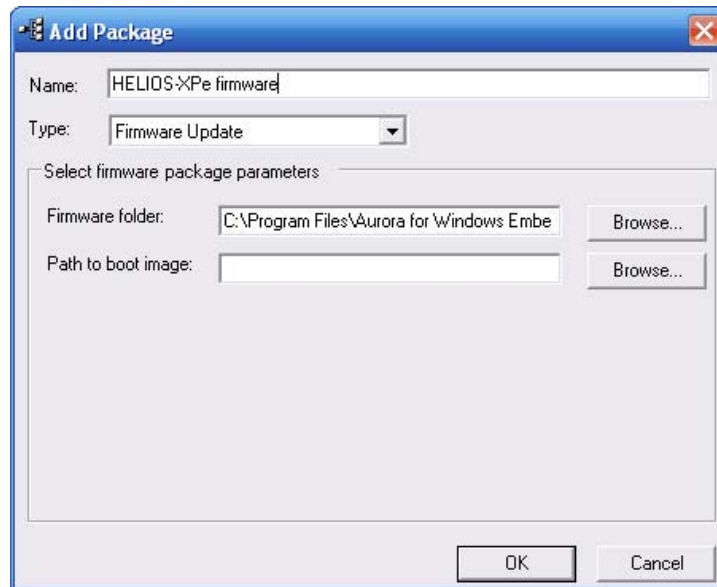
New Version: Windows XP Embedded SP2 XPe firmware.

Factory copy of firmware: Version shipped with the XPe device.

Firmware update packages are released by the XPe device manufacturer. For ease of management of Firmware Update package inventory, the package is a self executable which will extract by default to the folder “rootdir:\Program Files\Aurora for Windows Embedded\Firmware Update”

To manage Firmware update package:

1. Download Firmware update package provided by the manufacturer and execute it on the work station / Server on which the Aurora Management server is installed.
2. Click on “manage installation packages” icon or Management menu → Manage packages. Click “Add” to add a package.



3. Select Type: Firmware Update.
4. Click browse. By default the folder “ rootdir:\Program Files\Aurora for Windows embedded\Firmware Update” will open.
5. Browse “Firmware folder” and select the firmware version name. Example: “HELIOS-XPe Firmware”.
6. Browse “Boot Image” and select the boot.sdi file.
7. Click OK.
8. The package will be uploaded to the FTP repository and the boot.sdi file will be copied to the Remote Boot server downloads directory. This is a time consuming operation and the time for completion depends on the size of the package, the FTP server and network speed.

To apply the Firmware Update Package:

1. Select the XPe devices from the physical or logical view on which the Firmware has to be reloaded.

2. Right click on the selected XPe device and select “add task” or click on “Add installation task” icon.
3. Select the required “Firmware update package” from the list.
4. Select “Run now” to apply the task immediately or schedule the task to run on a specific day at a specific time and click OK.
5. The selected XPe devices will reboot with a recovery remote boot image, download the specified firmware update package to the local flash medium and on a successful reload will reboot with the new image locally.

Note: To use this feature the First Boot device in the BIOS should be set to “LAN” PXE boot. PXE boot is normally limited to the local LAN segment. This is a time consuming operation and the time for completion of the task depends on the size of the package, the FTP server and network speed.

Advanced settings of Aurora Management Console

This chapter covers the additional options found in the Tools → Options menu:

- [General](#)
- [Remote Control](#)
- [Database](#)
- [User Notification](#)
- [Advanced](#)

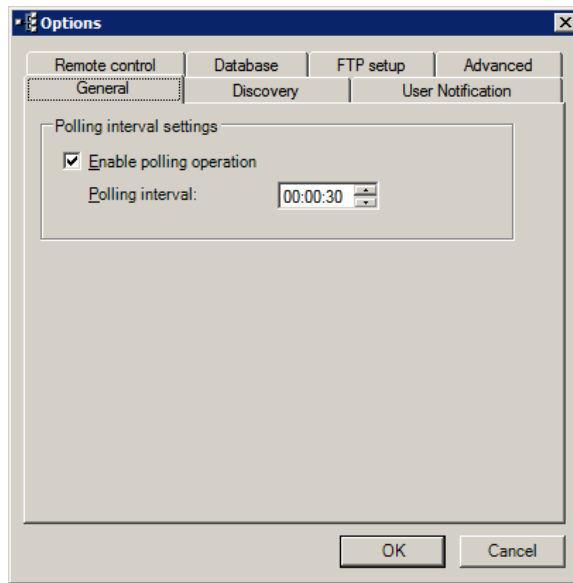
General

Polling Interval

The XPe device agent sends its online status to the management console every time it comes up after a power on or a reboot.

When a shutdown or reboot task is issued to the XPe device, the offline status can be detected by pressing the function key F5 or by clicking the refresh icon.

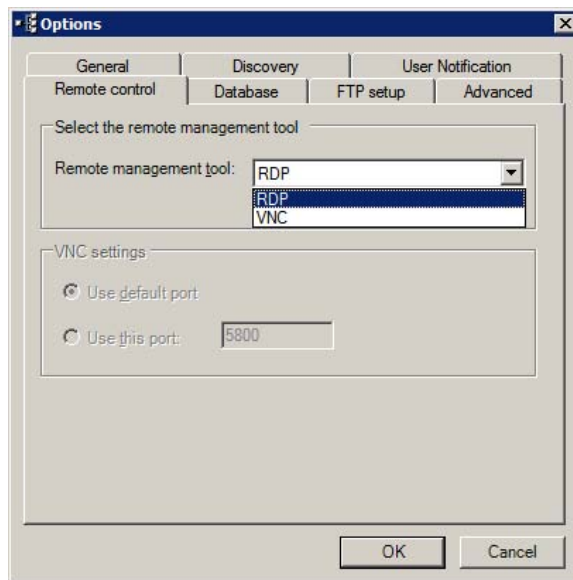
The poll function allows getting the status automatically. The polling interval can be set from the Tools → Options → General tab.



Polling is enabled by default and set to 5 minutes between polls. Polling can be disabled by unchecking "Enable Polling operation". The polling interval can also be changed.

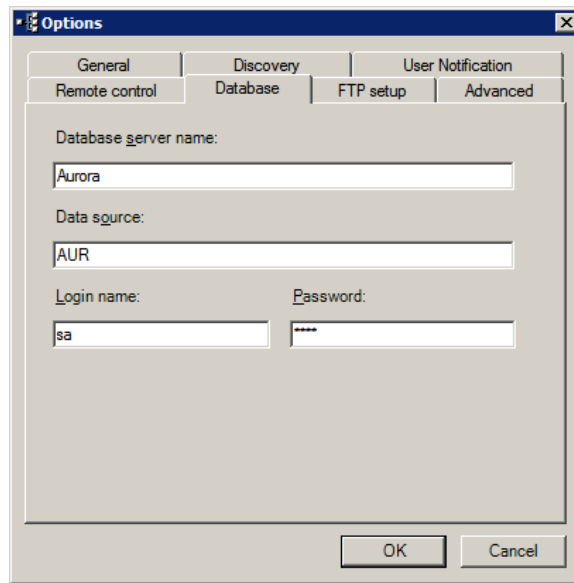
Remote Control

The default Remote control protocol is set to RDP. This can be changed to VNC or vice versa from Tools → Options → Remote Control.



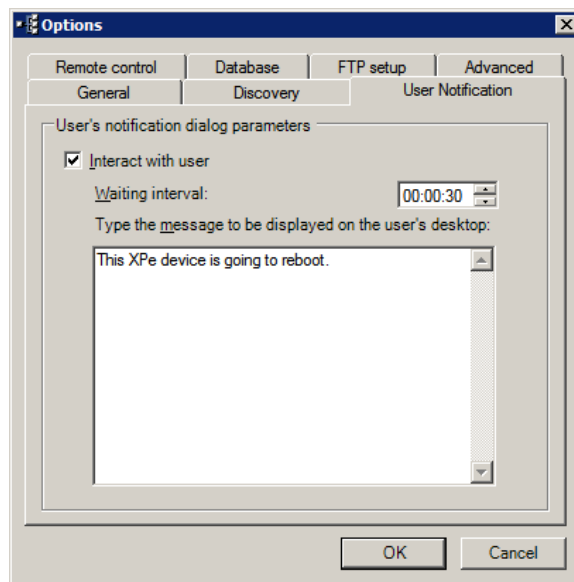
Database

The database source can be changed by using Tools → Options → Database. To change the database, a valid Aurora database server and source has to be specified.



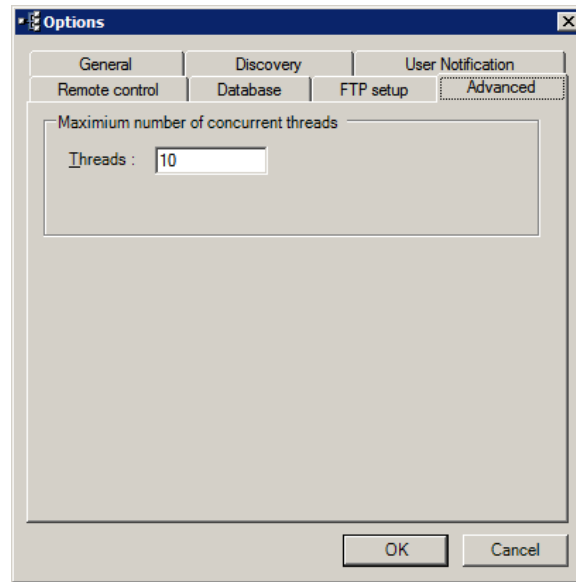
User Notification

This option is disabled by default.



If this option is enabled, users will be notified before shutdown, restart or before tasks are applied. The interval to display messages at Users desktop can also be set.

Advanced



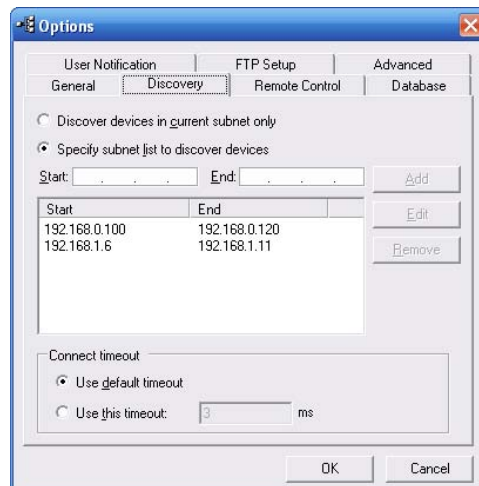
Maximum number of concurrent threads defines the number of TCP/IP threads used for discovering XPe devices. The default value is 10 threads, as Windows 2000 Professional and Windows XP allow only 10 TCP connections at any instance.

If Aurora for Windows Embedded console is installed on Windows 2000/2003 server the number of threads can be set to the maximum allowed concurrent threads allowed by the server to increase the speed of device detection.

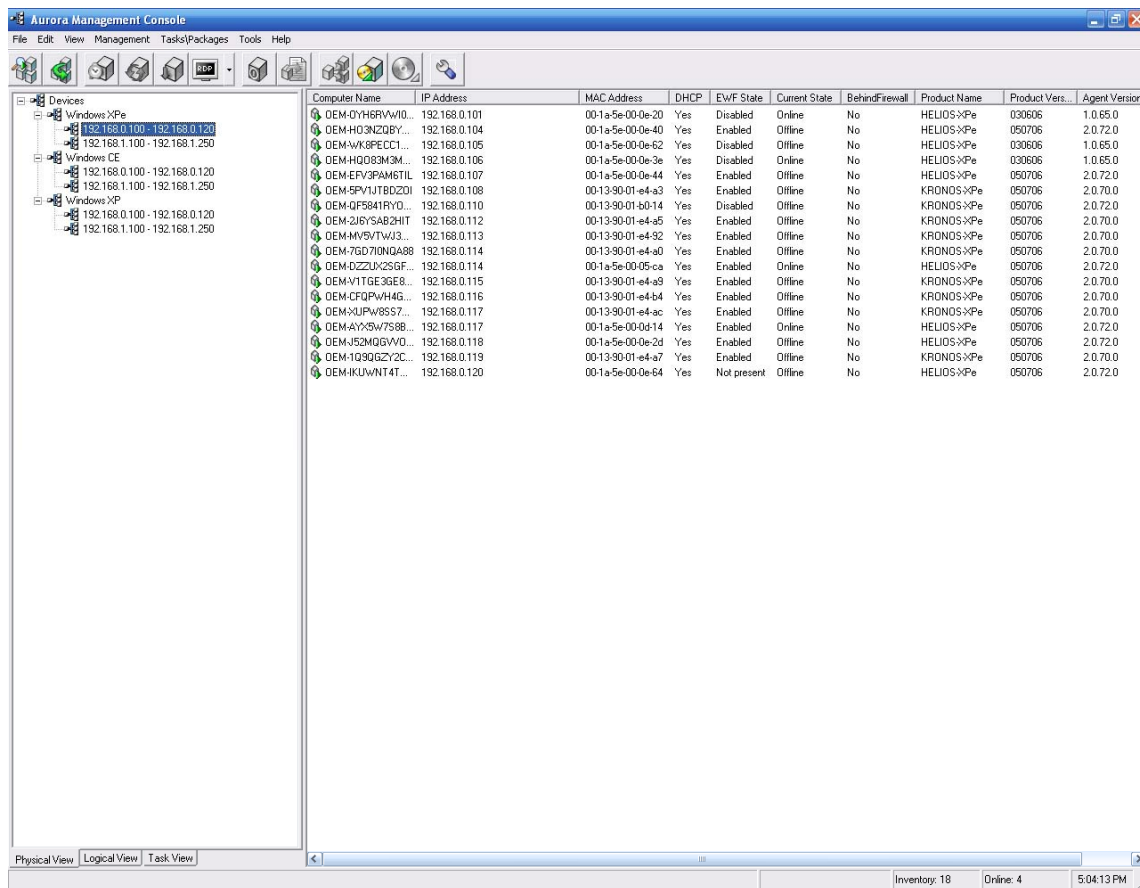
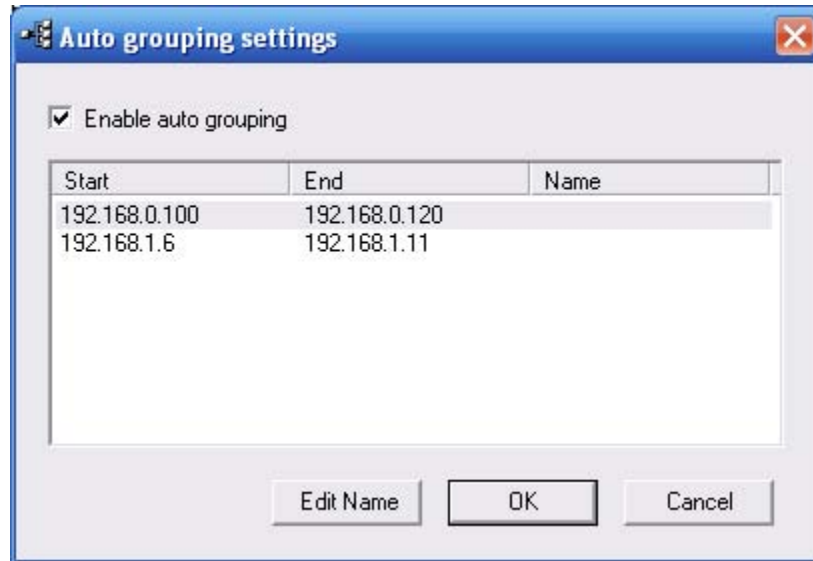
Addendum - New features

Auto group devices by subnet range

The physical view has an option to list discovered devices by their subnet range if a subnet range is specified in the Options | Discovery | Specify list to discover devices.



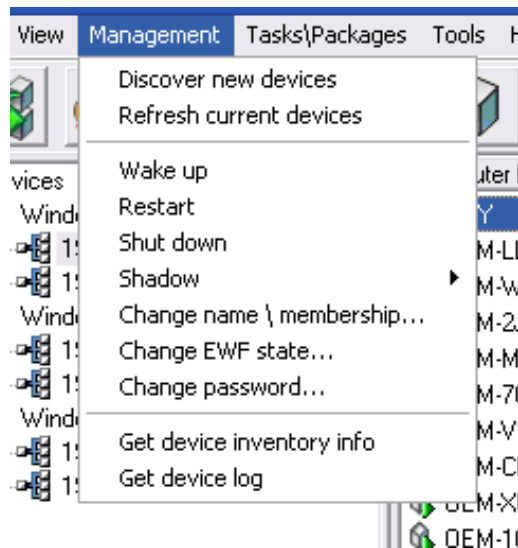
To enable this click on View | Auto grouping menu and check “Enable auto grouping”



Search device

You can search for a device by using the View | Search device menu and specifying the IP address or device name.

Management menu



The management menu and the right click menu have a few more commands implemented from build version 2.0.72.0

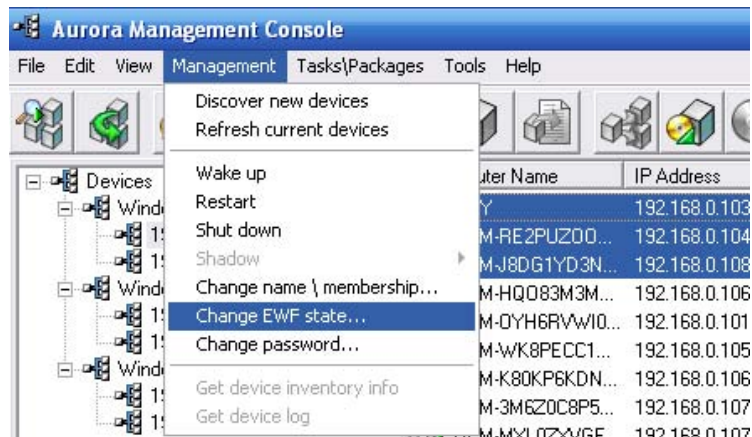
Change name /membership

This command will help to rename a device and/or help to join remote devices to a Windows workgroup or Active directory. The device rename command can only be executed on one online device at a time. You can join multiple devices to a domain simultaneously. To join the XPe device to an Active directory or workgroup enter the Domain name or workgroup in the fields provide. You should have administrator privileges in the Active Directory to add XPe devices to the domain. A popup window will prompt you for the domain administrator credentials.



Change EWF state

This command will help to change the Enhanced Write Filter (EWF) settings on remote devices. The operation can be carried out on one or multiple online selected devices in the console.



You can change the EWF state to “Enable”, “Disable” or “Commit”. The command should take effect on the selected devices and the remote devices should automatically reboot.

Change password

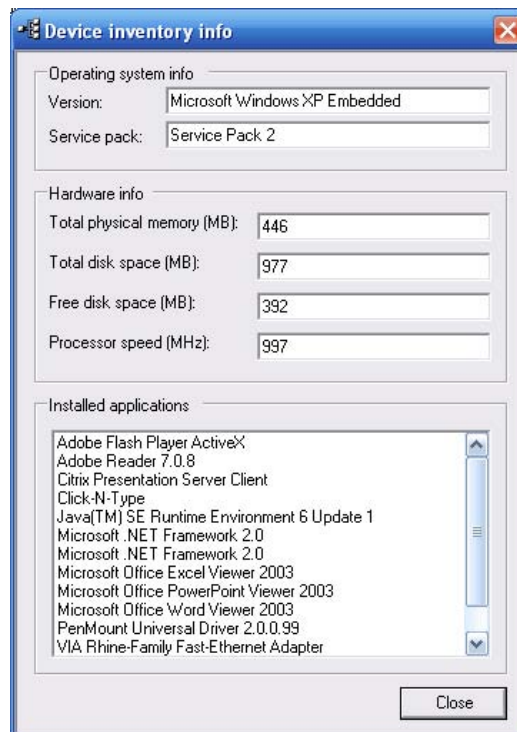
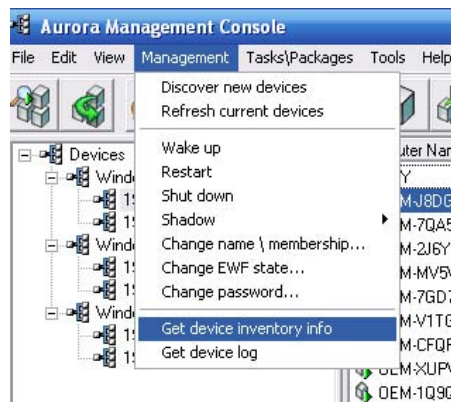
You can select multiple online devices and change the local “Administrator” and “User” account passwords. You could also choose to apply the changed password to the device auto logon settings.





Get device inventory info

This command will help you to get device inventory information and can work on one online device at a time.



Deleting XPe devices

To delete registered XPe devices from the Aurora management console database:

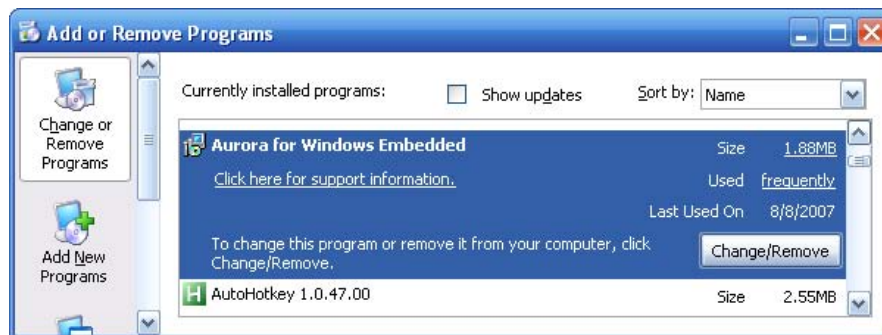
1. Select the XPe devices displayed in the right pane of Physical view. To select multiple devices hold the CTRL key and select the devices using the left mouse click.
2. Select Edit menu → Delete

Devices deleted from the physical view are removed from the database and will also be removed from the logical view. Devices deleted from the logical view will be available in the Physical view

The deleted XPe devices can be re-registered by using the options explained in [XPe device registration](#).

Uninstalling

Aurora for Windows Embedded Console and server can be uninstalled through the Microsoft Windows Control Panel → Add/Remove Programs. Select “Aurora For Windows Embedded” and click Change/Remove. The program will be uninstalled.



Note: The uninstaller program does not remove:

- Remote boot Server
- .Net Framework 2.0
- SQL 2005 Express
- These components have to be removed using their own uninstaller programs.