

How to do a general firmware update using Industrial HiVision and Multiconfig

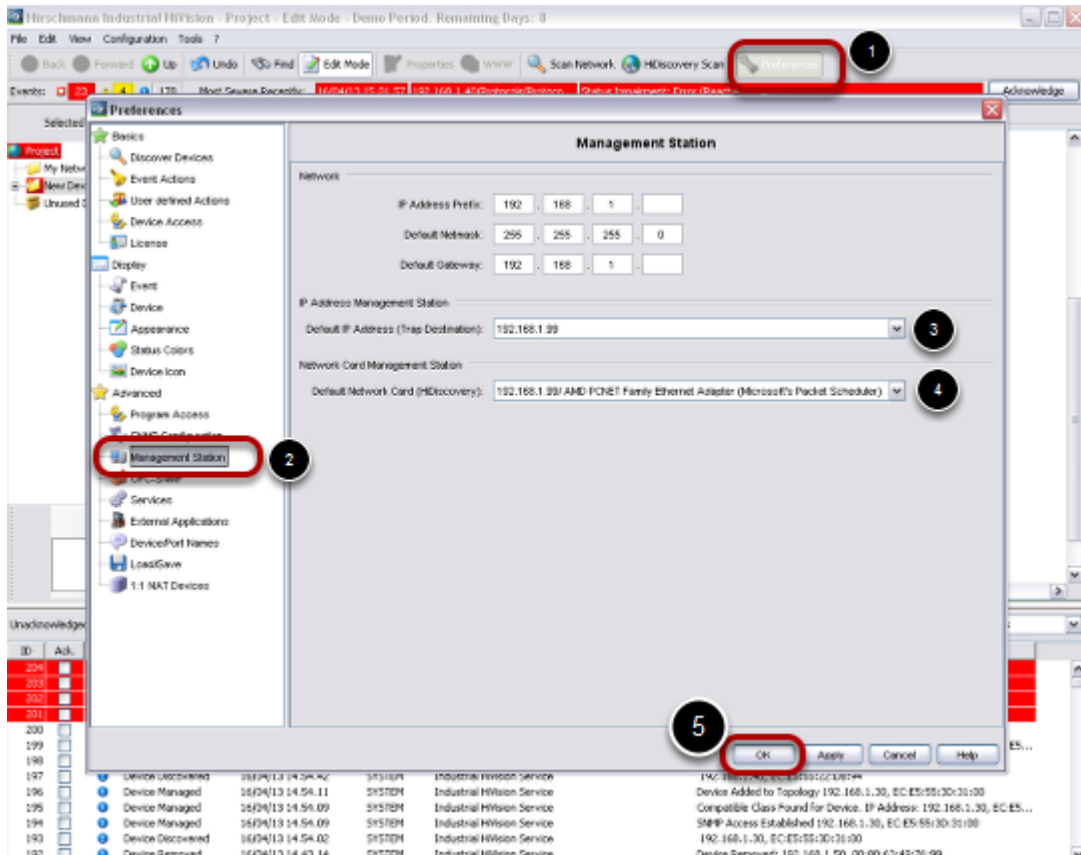
- 2018-02-21 - Industrial HiVision

The goal of this procedure is to update the firmware of several switches using Industrial HiVision and Multiconfig.

Prerequisites

1. Power up all the switches and connect them together creating a bus topology.
2. Download and install Industrial HiVision (IHV) on a pc. IHV can be downloaded here: <http://hivision.de/English/download/index.phtml>. The program has full functionalities for a limited period of 30 days.
3. The firmware you want to installed has been stored on your pc.

Set up preferences



The screenshot shows the Hirschmann Industrial HiVision software interface. The main window is titled "Hirschmann Industrial HiVision - Project - Edit Mode - Demo Period. Remaining Days: 0". The "Preferences" dialog box is open, showing the "Management Station" configuration. The dialog has a left sidebar with various options, and a main area with network configuration fields. Numbered callouts (1-5) highlight key elements:

- 1. The "Preferences" button in the main application window.
- 2. The "Management Station" option in the left sidebar.
- 3. The "Default IP Address (Tras Destination)" dropdown menu.
- 4. The "Default Network Card (HiDiscovery)" dropdown menu.
- 5. The "OK" button at the bottom of the dialog.

The "Management Station" dialog contains the following fields:

- Network:
 - IP Address Prefix: 192 . 168 . 1 .
 - Default Netmask: 255 . 255 . 255 . 0
 - Default Gateway: 192 . 168 . 1 .
- IP Address Management Station:
 - Default IP Address (Tras Destination): 192.168.1.29
- Network Card Management Station:
 - Default Network Card (HiDiscovery): 192.168.1.29\AMD PCNET Family Ethernet Adapter (Microsoft's Packet Scheduler)

The bottom of the dialog shows buttons for "OK", "Apply", "Cancel", and "Help".

1. Connect the pc with IHV to one of the switches of the network.

2. Launch IHV.
3. Go to 'Preferences', 'Management Station' and check that in 'Default IP Address' and 'Default Network Card' is selected the right network card of your pc. Click ok.

Disable Firewall on you pc

Disable all firewalls on your pc.

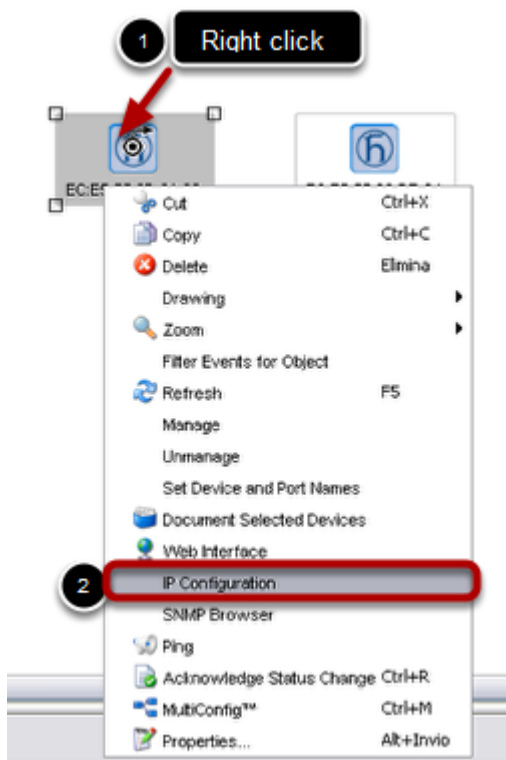
Discover the switches of your network

The screenshot shows the Hirschmann Industrial HiVision software interface. The main window displays a network map with two discovered switches. The bottom pane shows a log of unacknowledged events, including device discovery and management actions.

ID	Ack.	Type	Category	Time	User	Source	Component	Message
192	<input type="checkbox"/>	Device Removed		16/04/13 14:43:14	SYSTEM	Industrial HiVision Service		Device Removed: 192.168.1.50, 00:80:53:49:76:99
191	<input type="checkbox"/>	Device Managed		16/04/13 14:38:22	SYSTEM	Industrial HiVision Service		Device Added to Topology: 192.168.1.50, 30:90:63:49:76:99
190	<input type="checkbox"/>	Device Managed		16/04/13 14:38:19	SYSTEM	Industrial HiVision Service		Compatible Class Found for Device. IP Address: 192.168.1.50, 00:80:53:49:76:99
189	<input type="checkbox"/>	Device Managed		16/04/13 14:38:16	SYSTEM	Industrial HiVision Service		SNMP Access Established: 192.168.1.50, 30:90:63:49:76:99
188	<input type="checkbox"/>	Device Managed		16/04/13 14:38:15	SYSTEM	Industrial HiVision Service		Device Added to Topology: 0.0.0.0, EC:85:55:22:DB:94
107	<input type="checkbox"/>	Device Managed		16/04/13 14:38:14	SYSTEM	Industrial HiVision Service		Device Added to Topology: 0.0.0.0, EC:85:55:22:DB:94
186	<input type="checkbox"/>	Device Managed		16/04/13 14:38:12	SYSTEM	Industrial HiVision Service		Compatible Class Found for Device. IP Address: 0.0.0.0, EC:85:55:22:DB:94
185	<input type="checkbox"/>	Device Managed		16/04/13 14:38:12	SYSTEM	Industrial HiVision Service		Compatible Class Found for Device. IP Address: 0.0.0.0, EC:85:55:22:DB:94
104	<input type="checkbox"/>	Device Discovered		16/04/13 14:38:11	SYSTEM	Industrial HiVision Service		New Device Detected via 'HiDiscovery': 192.168.1.50, 00:80:53:49:76:99
103	<input type="checkbox"/>	Device Discovered		16/04/13 14:38:11	SYSTEM	Industrial HiVision Service		New Device Detected via 'HiDiscovery': 0.0.0.0, EC:85:55:22:DB:94
182	<input type="checkbox"/>	Device Discovered		16/04/13 14:38:11	SYSTEM	Industrial HiVision Service		New Device Detected via 'HiDiscovery': 0.0.0.0, EC:85:55:22:DB:94
181	<input type="checkbox"/>	Application Info		16/04/13 14:38:11	SYSTEM	HiDiscovery Service		HiDiscovery Scan finished
100	<input type="checkbox"/>	Application Info		16/04/13 14:38:06	SYSTEM	HiDiscovery Service		HiDiscovery Scan started

Click 'HiDiscovery Scan'. The system will look for Hirschmann switches. In the example, 2 new switches had been discovered.

IP assignment



Assign an IP address to each switch, right clicking on a switch, 'IP configuration'.

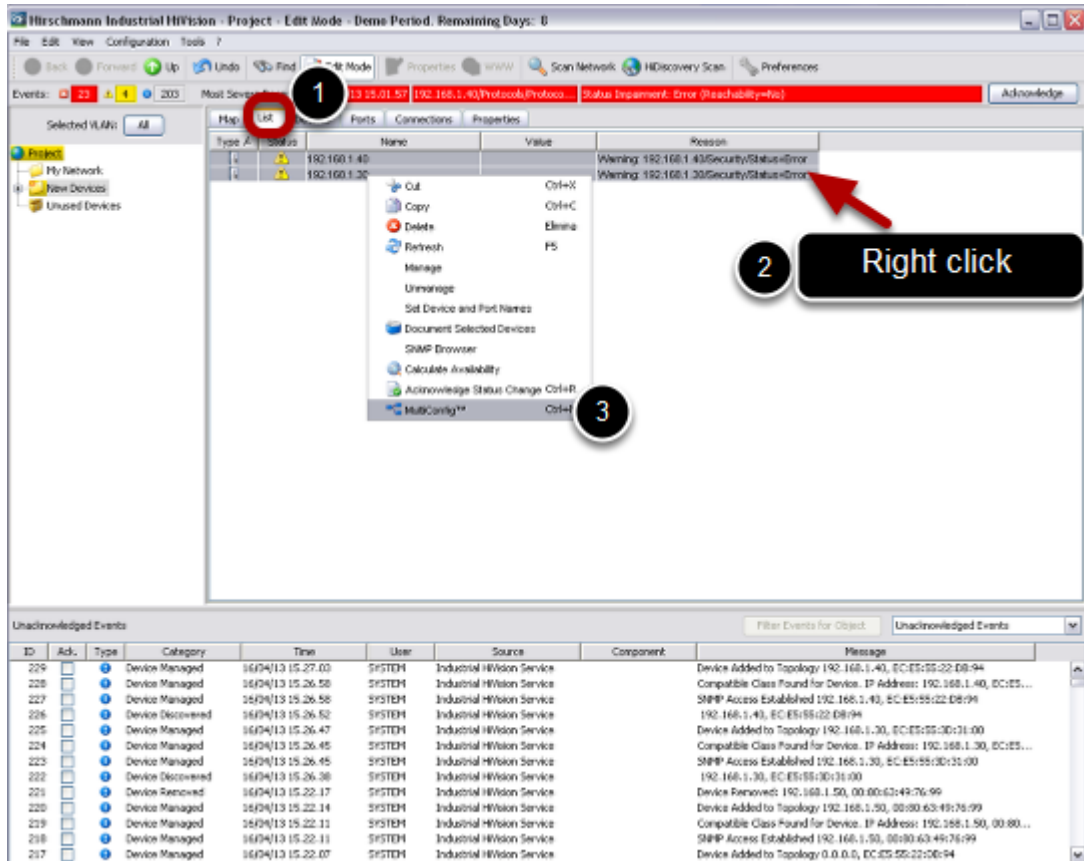


Type IP and subnet mask according to your network addressing plan.

Optional

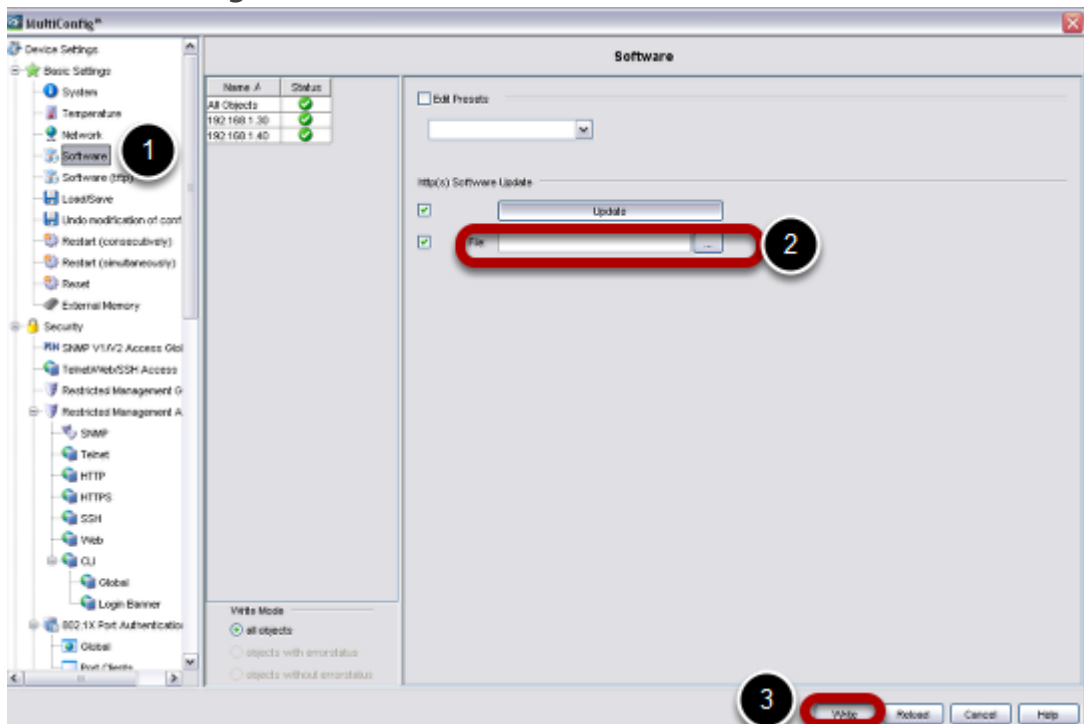
If you want to create the network topology, right click in an empty space and select auto topology.

Select all the switches you want to update



Click on 'List' tab, select all the switches you want to update, then right click, Multiconfig

Use Multiconfig

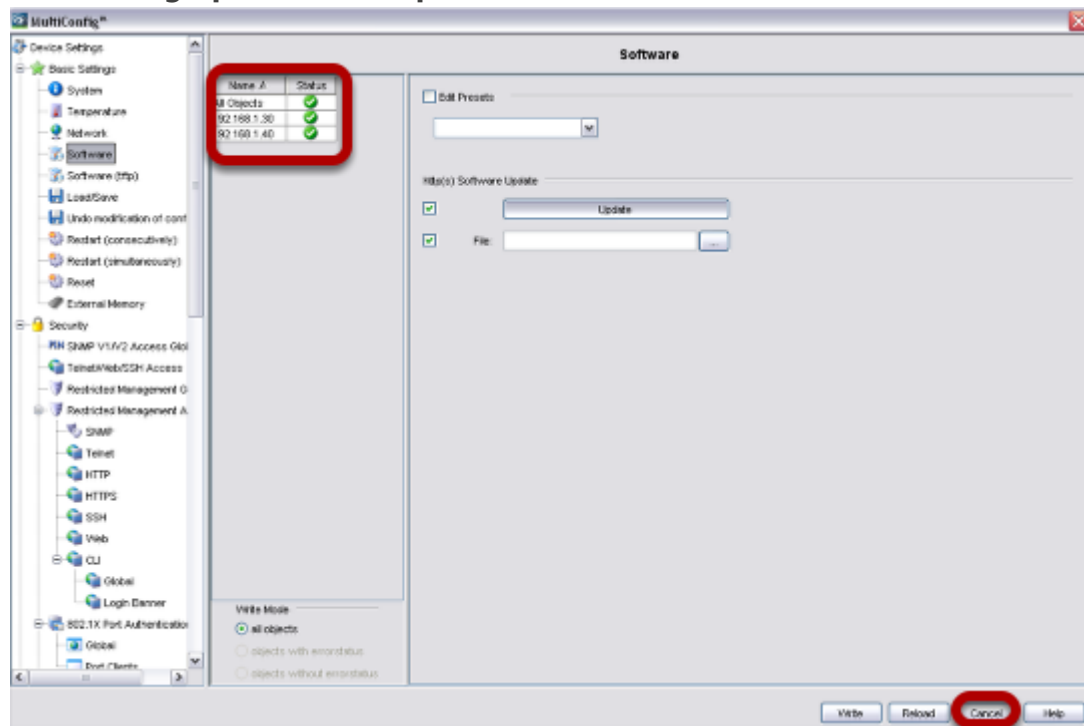


Go to 'Basic Settings', select 'Software'.

In 'File', please specify the path in which you stored the firmware to use.

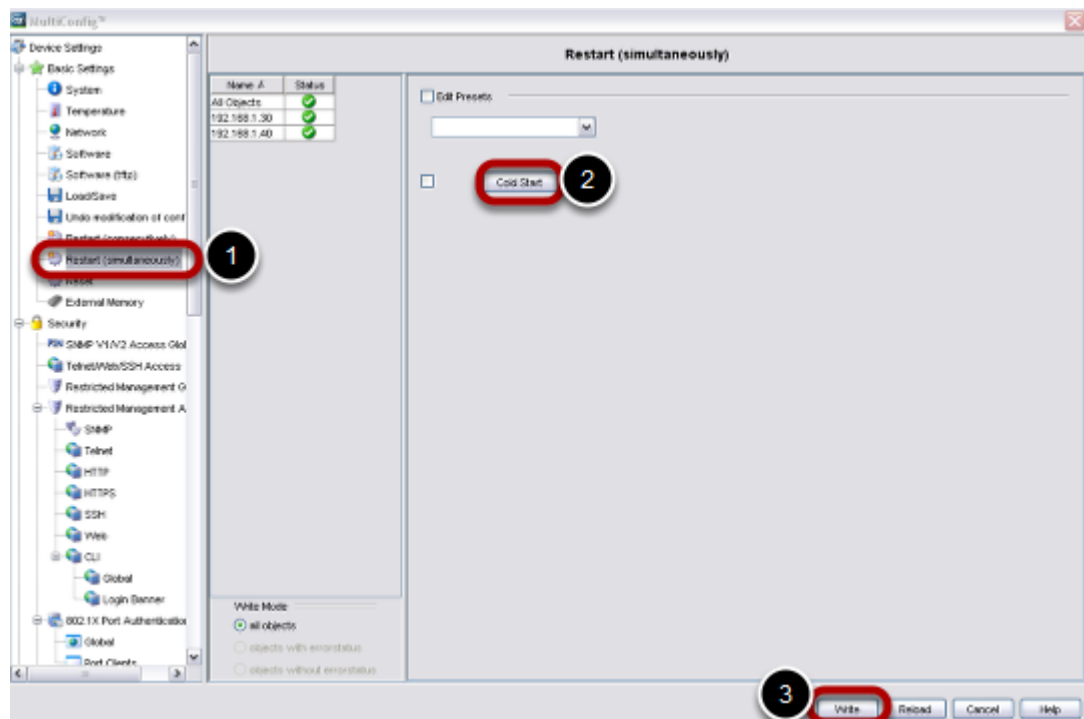
Click 'Write'

Multiconfig operation completed



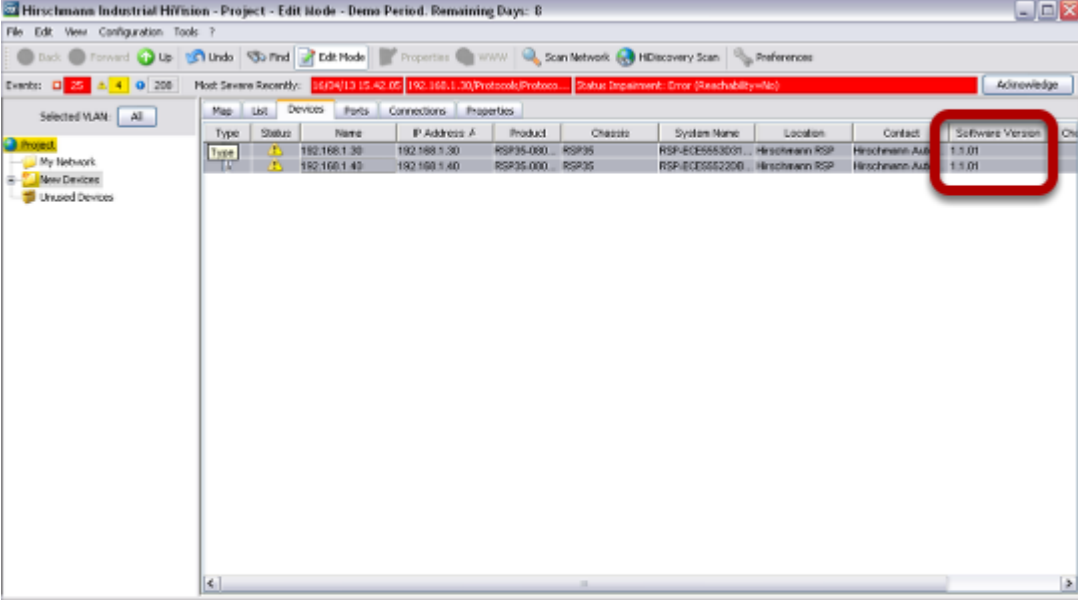
When Multiconfig completes the operations, you can see a green sign. To close this window, click 'Cancel'

Reboot the switches



Using again Multiconfig, go to 'Basic Settings', 'Restart (simultaneously)', 'Cold Start' and reboot the switches.

Check new firmware version



The screenshot shows the Hirschmann Industrial HiVision software interface. The top menu bar includes File, Edit, View, Configuration, and Tools. Below the menu bar, there are navigation buttons: Back, Forward, Up, Find, Undo, Edit Mode, Properties, Scan Network, HDiscovery Scan, and Preferences. The main window displays a table of devices with columns: Type, Status, Name, IP Address, Product, Chassis, System Name, Location, Contact, and Software Version. The 'Software Version' column is highlighted with a red box. Below the table, there is an 'Unacknowledged Events' section with a table of events.

Type	Status	Name	IP Address	Product	Chassis	System Name	Location	Contact	Software Version
Light	OK	192.168.1.30	192.168.1.30	RSP35.080	RSP35	RSP-EC5553031	Hirschmann RSP	Hirschmann Aut...	1.3.01
Light	OK	192.168.1.43	192.168.1.40	RSP35.000	RSP35	RSP-EC5552200	Hirschmann RSP	Hirschmann Aut...	1.3.01

ID	Ack.	Type	Category	Time	User	Source	Component	Message
236	<input type="checkbox"/>	User Intervention		16/04/13 15:43:08	SYSTEM	Industrial HiVision		Refresh Device (FS): Device: 192.168.1.30, EC:55:55:30:31:00
235	<input type="checkbox"/>	User Intervention		16/04/13 15:43:06	SYSTEM	Industrial HiVision		Refresh Device (FS): Device: 192.168.1.40, EC:55:55:22:00:94
234	<input type="checkbox"/>	Status Better		16/04/13 15:42:34	SYSTEM	192.168.1.30	Protocol/Protocol SM...	Status Improvement: OK (Reachability=Yes)
233	<input type="checkbox"/>	Status Better		16/04/13 15:42:05	SYSTEM	192.168.1.40	Protocol/Protocol Ph...	Status Improvement: OK (Reachability=Yes)
232	<input checked="" type="checkbox"/>	Status worse		16/04/13 15:42:05	SYSTEM	192.168.1.30	Protocol/Protocol SM...	Status Impairment: Error (Reachability=no)
231	<input checked="" type="checkbox"/>	Status worse		16/04/13 15:41:46	SYSTEM	192.168.1.40	Protocol/Protocol Ph...	Status Impairment: Error (Reachability=no)
230	<input type="checkbox"/>	User Intervention		16/04/13 15:39:30	SYSTEM	Industrial HiVision		Refresh Device (FS): Device: 192.168.1.30, EC:55:55:30:31:00
229	<input type="checkbox"/>	Device Managed		16/04/13 15:27:03	SYSTEM	Industrial HiVision Service		Device Added to Topology: 192.168.1.40, EC:55:55:22:00:94
228	<input type="checkbox"/>	Device Managed		16/04/13 15:26:58	SYSTEM	Industrial HiVision Service		Compatible Class Found for Device: IP Address: 192.168.1.40, EC:55:55:22:00:94
227	<input type="checkbox"/>	Device Managed		16/04/13 15:26:58	SYSTEM	Industrial HiVision Service		SNMP Access Established: 192.168.1.40, EC:55:55:22:00:94
226	<input type="checkbox"/>	Device Discovered		16/04/13 15:26:52	SYSTEM	Industrial HiVision Service		192.168.1.40, EC:55:55:22:00:94
225	<input type="checkbox"/>	Device Managed		16/04/13 15:26:47	SYSTEM	Industrial HiVision Service		Device Added to Topology: 192.168.1.30, EC:55:55:30:31:00
224	<input type="checkbox"/>	Device Managed		16/04/13 15:26:45	SYSTEM	Industrial HiVision Service		Compatible Class Found for Device: IP Address: 192.168.1.30, EC:55:55:30:31:00

Under 'List' select all you switches, press 'F5', check that the new firmware version is shown.