RollMechanic

Operator's Manual

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Contents

Introduction

RollMechanic enables users to perform bulk operations on medium to large RollCall networks. Performing these operations on a unit by unit basis, using the Control Panel, would require constant user attention. RollMechanic allows multiple unit selection, from a single unit up to the entire network. Once an operation has been initiated, no further user intervention is required until the operation has been completed.

For example, using RollMechanic it is possible to:

- Backup the settings of every unit on the network, in one operation.
- Create an inventory of every unit on the network, in one operation.

This User Instruction Manual will help you through each stage of the setup, configuration and operation of RollMechanic. If you have any questions regarding the use and operation, please refer to the contact details listed at the end of this manual.

Installing RollMechanic

RollMechanic is installed by means of a Windows installation executable.

To install the RollMechanic software:

- Double click on the installer file, and then follow the on-screen instructions.

The default installation location of RollMechanic is:

- C:\Program Files\Snell\RollMechanic

RollMechanic requires the Sun Java Runtime Environment version 1.6 (JRE 1.6) or later to be installed.

Changing the Default Home Directory

By default, the RollMechanic uses `...\All Users\.snell\` as its home directory. This home directory contains files required or created by RollMechanic.

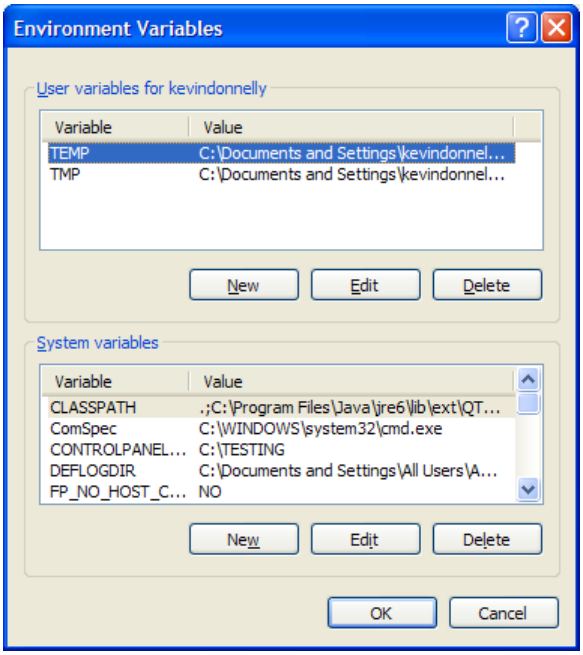
Under nearly all circumstances, this location will be accessible to all users on a computer and RollMechanic will function correctly. However, certain organizations may have IT security policies in place that restrict access to the `…\All Users\` directory.

If this is the case, a different home directory can be specified using the `CONTROLPANEL_HOME` environment variable.

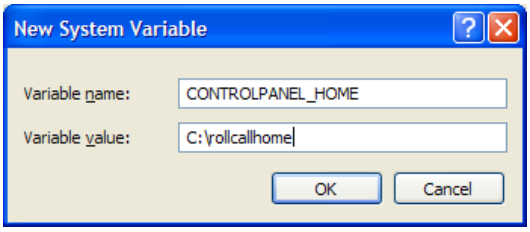
To change the Home Directory:

1. Ensure that RollMechanic is not running.
2. Click the Windows **Start** menu and select **Control Panel**.

3. From the **Control Panel** window, open the **System** properties, click the **Advanced** tab, and then click **Environment Variables**.



4. In the **System variables** section, click **New**.
5. In the window that appears, enter CONTROLPANEL_HOME in the **Variable name** field. Then, in the **Variable value** field, enter the location in which you would like the home directory to be created, for example, C:\rollcallhome.



6. Click **OK** to close the New System Variable window, and then click **OK** to close the Environment Variables and System Properties windows.

Savesets and Memory

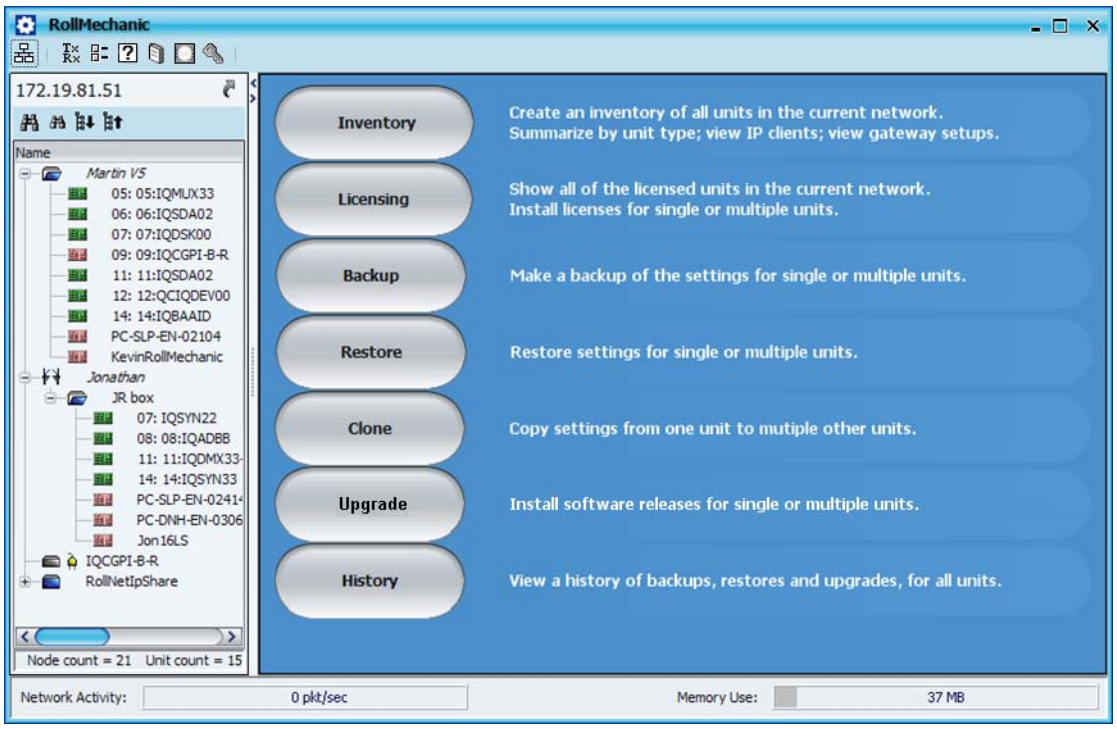
RollCall saves and restores the state of a unit through the use of saveset and memory files.

A saveset is a list of RollCall command numbers. A unit's saveset is defined inside its template. The commands in the saveset are filtered according to the current RollCall user level (as defined in Preferences menu). This is done by referencing the unit's menu set for the corresponding user level.

Memory files are similar to savesets. A memory file is usually a single file that resides on a unit. It contains the current state of the unit, including user memories.

Note: *Not all units support savesets or memory. For units that do not support either, it is not possible to save their state.*

The Main Window

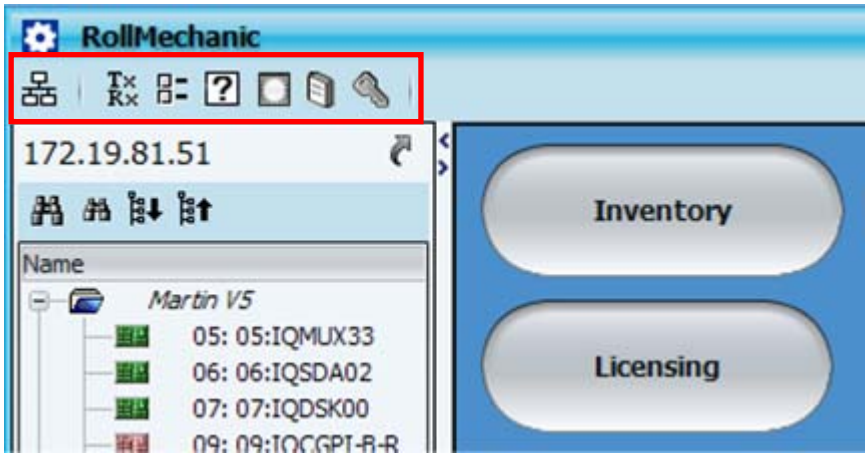


The RollMechanic window appears as shown above. The main components of the window are:

- The Main Toolbar.
- The Network List.
- The Main Menu.

Main Toolbar Options

The main toolbar is located in the top-left corner of the RollMechanic window.

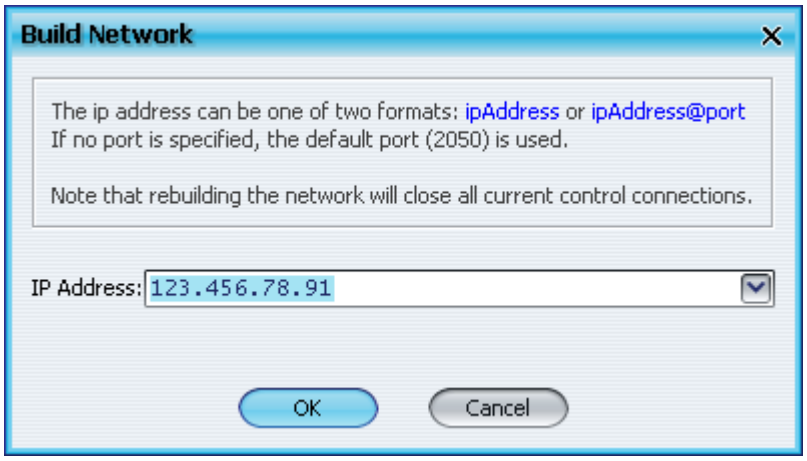


The toolbar provides access to the following functions:

- Build Network. See page 9.
- Comms Window. See page 10
- Preferences. See page 12.
- About. See page 18.
- Manual. See page 19.
- Software Releases. See page 20.
- Licenses. See page 22.

Build Network

This option connects RollMechanic to a RollCall Network via IP. The first time it is run, the IP address will be blank.



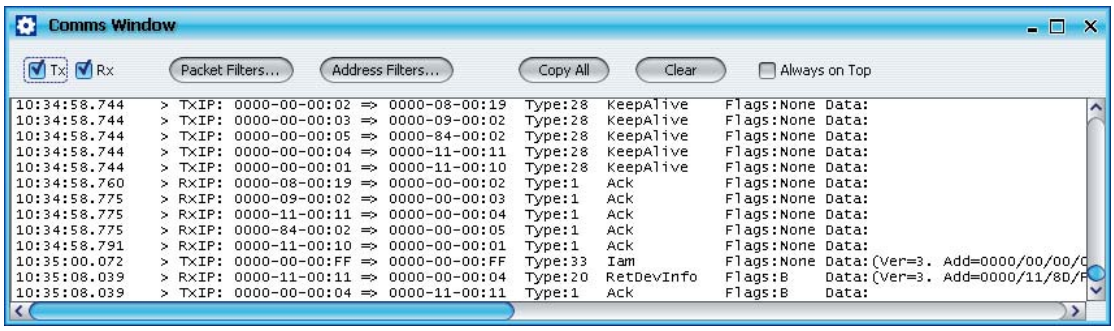
IP addresses can be entered in dot-decimal notation or as a DNS entry. The default port number is 2050, which is the default port number of the IQ modular chassis. A different port number may be specified by appending the port number to the IP address, separated by '@'.

Alternatively, an IP address can be selected from the drop down list. The drop down list is populated with all the IP addresses to which successful connections have been made.

The build network operation is confirmed by pressing OK .

Comms Window

The Comms Window monitors RollCall packets (messages) transmitted from, and received by, RollMechanic. It is used to help diagnose communication problems in a particular RollCall network.



Referring to the numbers 1 to 8 shown in the diagram above, the function of each field is listed below:

Field 1 ***Timestamp***: When the packet was received or transmitted

Field 2 ***TxIP:*** Transmitted by RollMechanic.

RxIP: Received by RollMechanic.

Field 3 ***Src:*** The source RollCall address. This is the address of the sender of the packet. The RollCall address format is net/unit/port/index.

Field 4 ***Dest:*** The destination RollCall address. This is the address of the recipient of the packet. The RollCall address format is net/unit/port/index.

Field 5 ***Type:*** The RollCall packet type.

Field 6 ***Packet Name:*** As defined by the packet type.

Field 7 ***Flags:*** B - back channel packet / W - wide area packet

Field 8 ***Data*** - this is specific to the packet type.

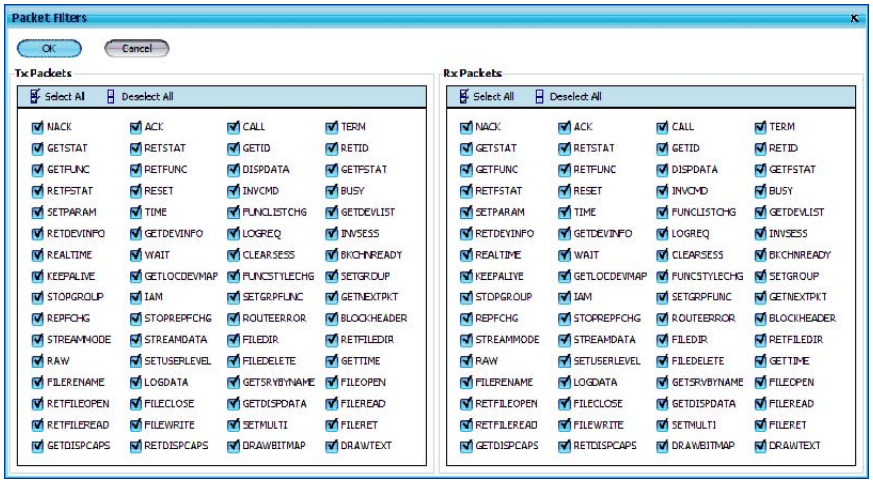
Controls

Tx
Enables/disables monitoring of transmitted packets.

Rx
Enables/disables monitoring of received packets.

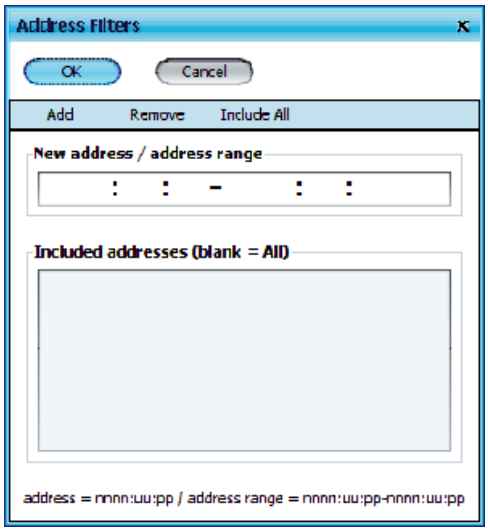
Packet Filters

This allows selective monitoring of specific RollCall packet types for both transmission and reception. In the Packet Filters dialog, select the packet types to be monitored. Select All and Deselect All toolbar buttons are provided for convenience.



Address Filters

This allows selective monitoring of packets to and from RollCall units. In the Address Filters menu the user can compile a list of addresses to monitor.



Using address filters:

- Type either a single RollCall address or address range in the ***New address / address range*** box.
- Press ***Add*** to add it to the list. Repeat this as required.
- The user can selectively remove addresses or address ranges from the list by highlighting the item in the list and pressing ***Remove***.
- To monitor all addresses (the default) press ***Include All*** to remove all addresses from the list. An empty list means monitor all addresses.

Copy All
This copies the current contents of the Comms Window to the clipboard.

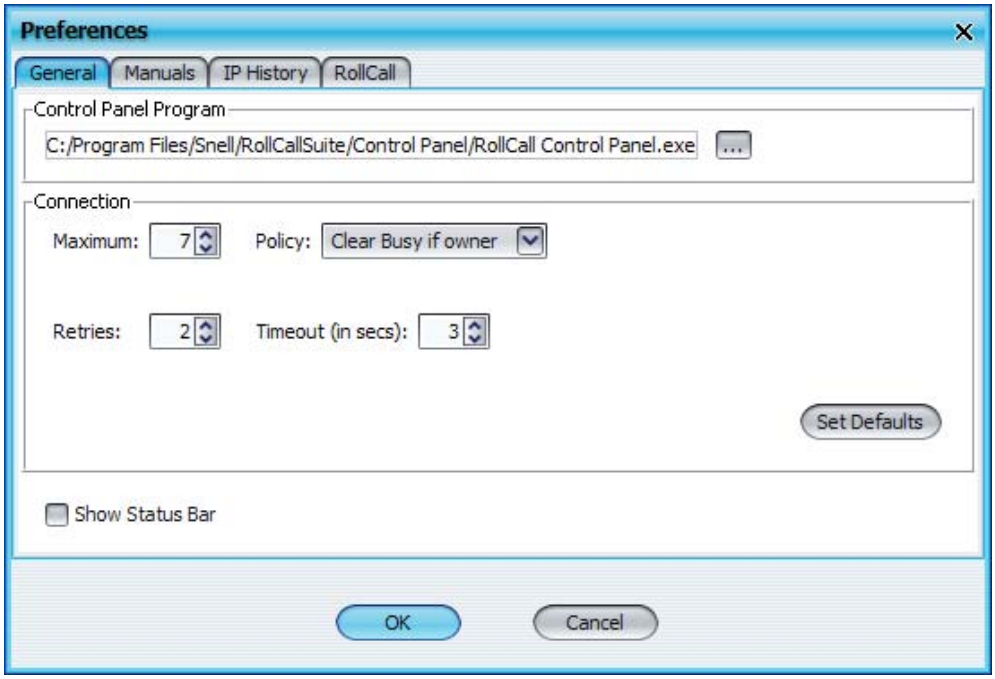
Clear
This deletes the contents of the Comms Window.

Always on Top
This will keep the Comms Window in front of all other windows. This is useful when only using a single computer monitor and the user wants to watch the Comms Window while interacting with the control panel.

Preferences

The preferences dialog contains the following four tabs, each providing a different set of user options.

General Tab



Control Panel Program
This specifies the location of the RollCall Control Panel program. By default, the location used is:
`C:\Program Files\Snell\RollCall Suite\Control Panel\RollCall Control Panel.exe`.
If the RollCall Control Panel is not installed in this default location, the location used by RollMechanic can be changed by clicking the ... button, and specifying a new location in the window that appears.

Maximum
This specifies the maximum number of simultaneous saves or restores. It has a range from 1 to 20. When the network connection is via a gateway, it is recommended to leave this at the default setting of 7. When the network connection is via RollNet (using RollProxy for example) it is possible to increase this value to improve performance.

Policy
When attempting to connect to a unit on the RollCall network, the Policy option specifies the action that RollMechanic takes in the event of a busy connection.

- **Fail on Busy**: If the connection is busy, regardless of the connection's owner, the RollMechanic connection will fail.
- **Clear Busy if owner**: If the connection is busy, and the RollMechanic user is the owner (i.e. the same RollCall client), the busy state will be cleared and the connection will be made.
- **Clear Busy always**: If the connection is busy, regardless of the owner, when RollMechanic attempts to connect, the busy state will be cleared and the connection will be made.

The default setting for Policy is *Clear Busy if owner*.

Retries
This defines the number of times a RollCall packet will be retransmitted if no response is received (TIMEOUT). It has a range from 0 to 4. It is recommended to leave this at its default value of 2.

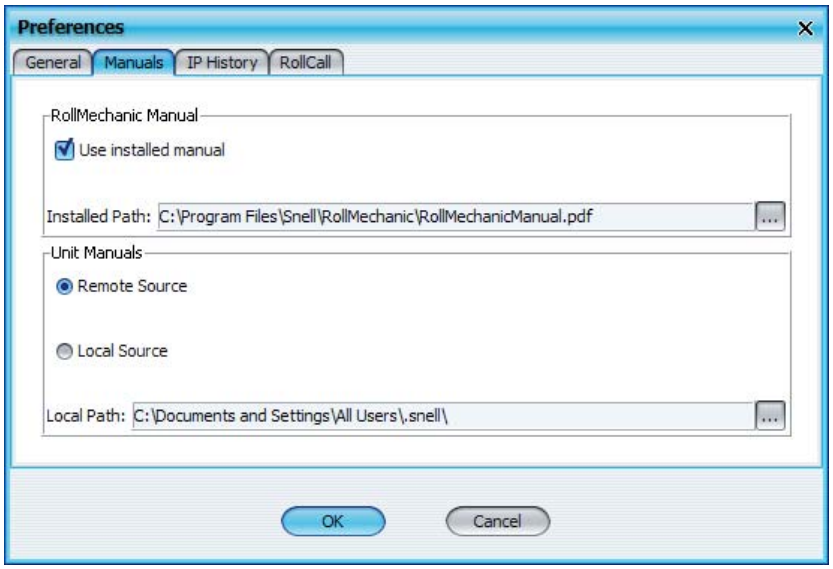
Timeout (in secs)
This specifies the time that the system will wait for a response to a packet that has been sent. The default timeout period is 3 seconds.

Set Defaults
This returns the values of Maximum Connections, Connect Sequence, and Retries to the following default settings:

- Maximum Connections: 7
- Policy: Clear Busy if owner
- Retries: 2
- Timeout: 3 seconds

Show Status Bar
Select this option to display status bar, showing network activity and memory use, at the bottom of the RollMechanic main window.

Manuals Tab



RollMechanic can access user manuals for itself and for the units that it is connected to over a RollCall network. These options allow you to specify the means by which manuals are accessed.

RollMechanic Manual

When you install the RollMechanic, a copy of this user manual is installed in the main installation directory. Select **Use Installed Manual** to use this copy. If you wish to specify a different location for the installed Control Panel Manual, you may do so by changing the directory specified in the **Installed Path** field.

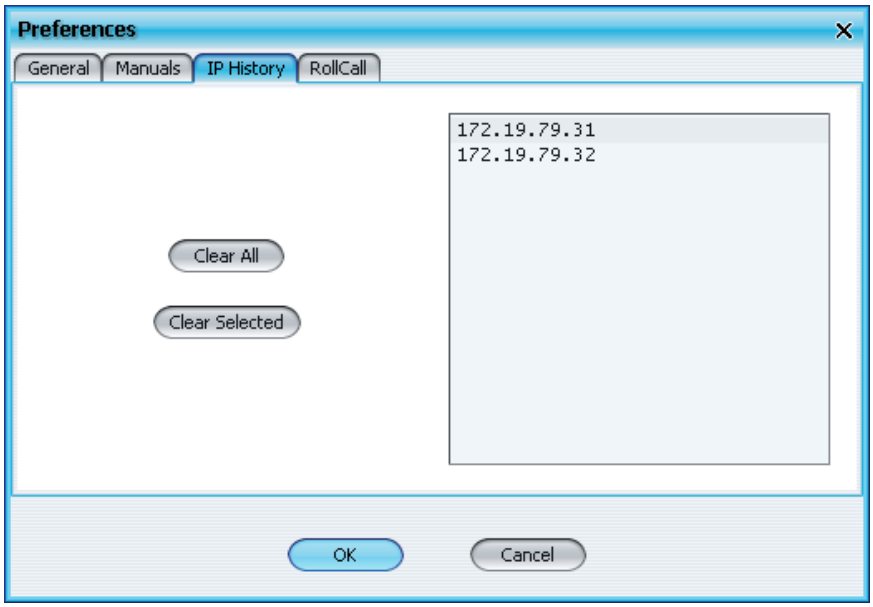
Unit Manuals

These options allow you to specify how the Control Panel will access unit manuals.

Remote source – this option opens manuals via the Snell Web site. If the computer on which RollMechanic is installed has external internet access, it is recommended that you select this option to ensure that you have access to the most recent user manuals.

Local Source – opens the manuals from either a local directory, a network server or from the product CD – as specified in the **Local Path** field. If the computer on which RollMechanic is installed does not have external internet access, select this option.

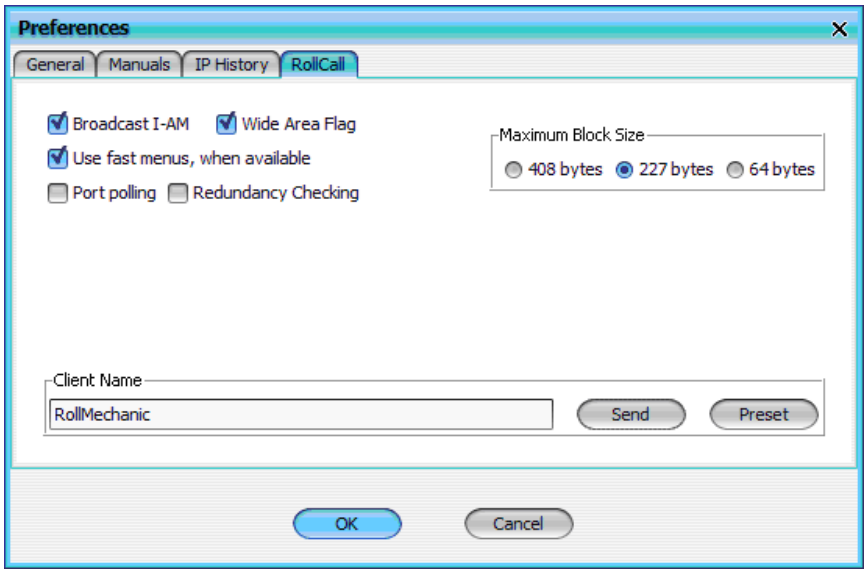
IP History Tab



The IP History tab displays a list of IP addresses to which RollMechanic has successfully connected.

- Click **Clear All** to clear the entire history list.
- Click **Clear Selected** to clear only selected IP addresses in the list. (To select IP addresses click on them in the list. To select multiple addresses, use Shift + click, or Ctrl + click.)

RollCall Tab



Broadcast I-AM
This option enables a gateway to list RollMechanic in its port listing if RollMechanic has an Ethernet (or serial) connection to the gateway.

Wide Area Flag
When selected in conjunction with the **Broadcast I-AM** option, the Wide Area Flag allows the I-AM message to cross RollNet segment boundaries. Note that this option has no function unless **Broadcast I-AM** is also selected.

Use fast menus, when available
This option enables the use of fast menus for gateways that support them. This significantly decreases the amount of time it takes to download a menu from a module. Note that fast menus, if available, are only available at the supervisor level.

Port Polling
This option is for use with older gateways that do not support connected sessions. It enables the Control Panel to keep module status up to date by the use of periodic polling. It is recommended to only use this feature when necessary because it can generate a lot of additional network traffic.

Redundancy Checking
This option affects how RollMechanic performs backup/restore/clone and network discovery operations.

When this option is selected, RollMechanic checks unit serial numbers during these operations to determine the actual physical units present on the network, which may differ from the units listed. By doing so, RollMechanic can ensure that the operation requested is only performed once per physical unit.

If your network is configured such that the same physical unit or units can be seen from more than one subnet, selecting this option can:

- Increase the speed of backup/restore/clone operations.
- Eliminate errors that may occur during network discovery in instances where the discovery process attempts to open two or more views of the same unit simultaneously.

By default, Redundancy Checking is not enabled.

Maximum Block Size
This defines the maximum “file packet length” used in file transfers between the control panel and units on the network. This setting should not be changed unless advised by Snell.

Client Name
This is the name by which RollMechanic is seen on the RollCall network. The user can change the client name to a unique identity. The default setting is “RollMechanic”

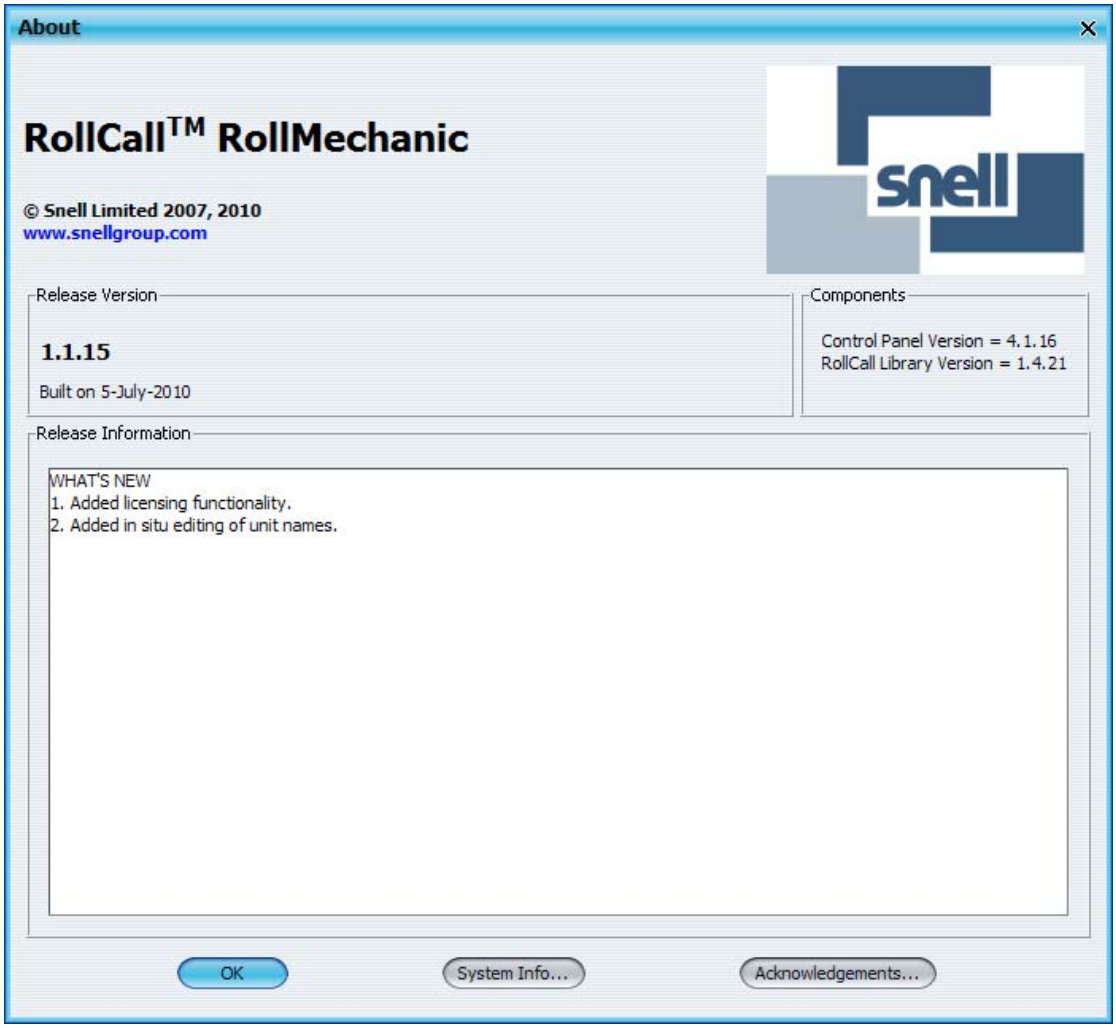
To change the client name, type the new name in the text box and then click **Send** to set the new name, then press OK

To return the control panel to the default setting, click **Preset**. The client name will be reset to “RollMechanic”.

User Level
Unlike RollCall Control Panel, RollMechanic does not have a ***User Level*** option. All connections are made at ‘supervisor’ level.

About

The About dialog contains information relating to the RollMechanic software release, System Information (the computer being used) and Acknowledgements to third party software libraries.



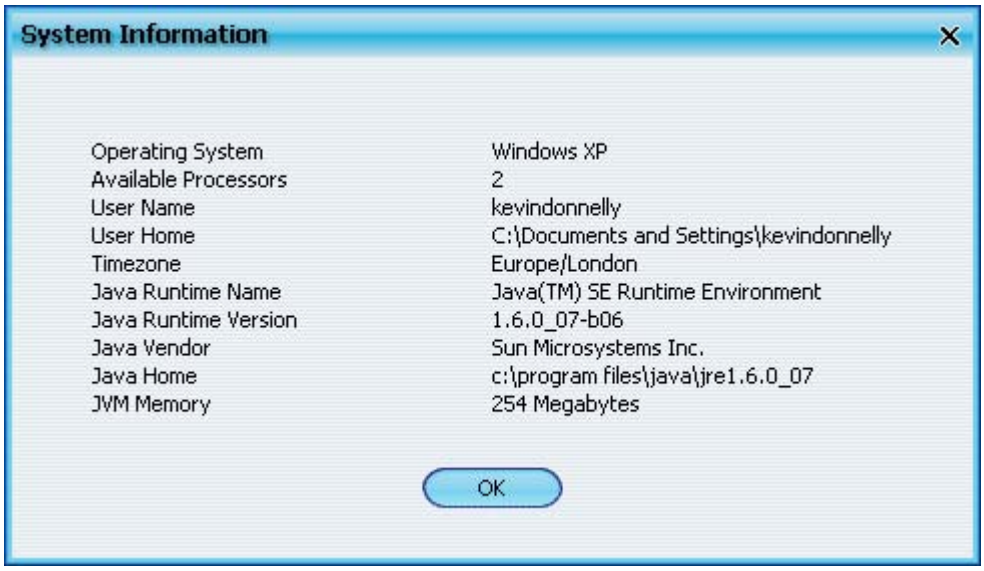
Release Version
This displays the release version of RollMechanic.

Components
This displays internal component versions.

Release Information
This area highlights the new functions, features and options that apply to the software.

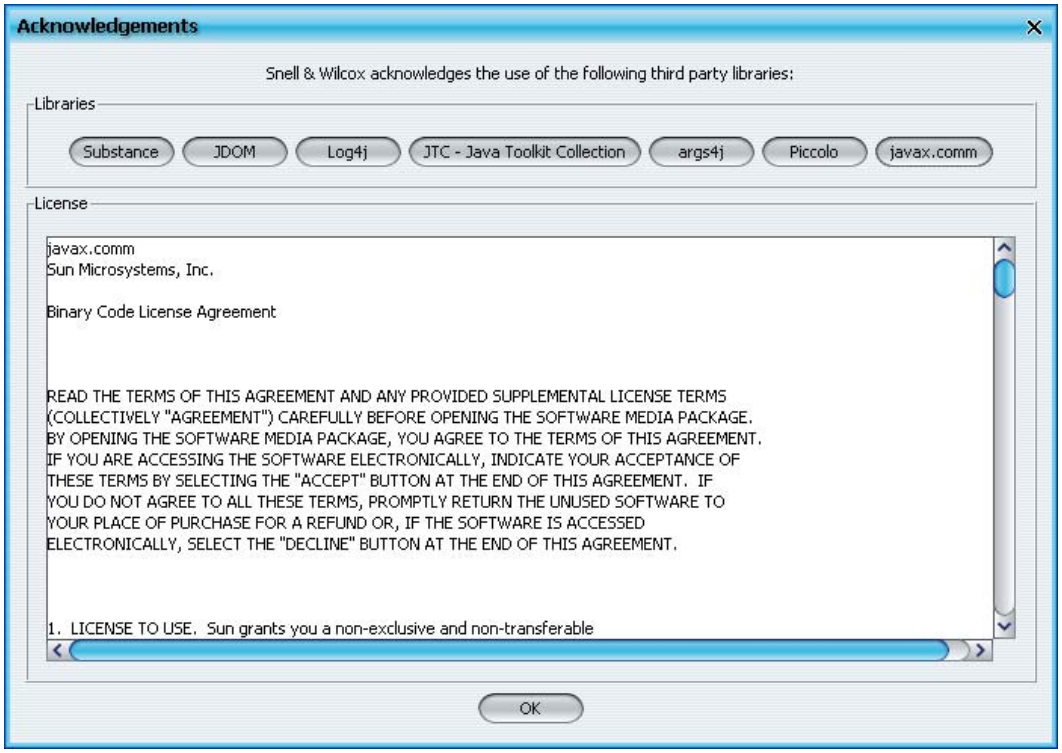
System Information

The information contained in this dialog relates to the computer that the Control Panel software is being used on.



Acknowledgements

This lists the third party libraries used in the Control Panel and provides copies of their licenses.

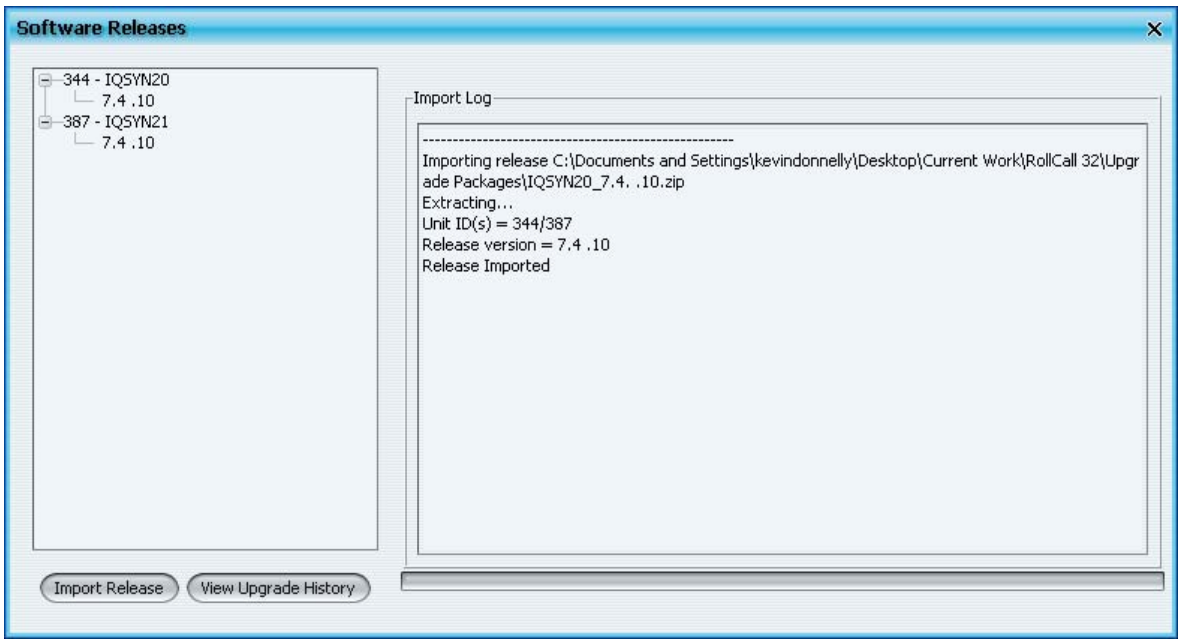


Manual

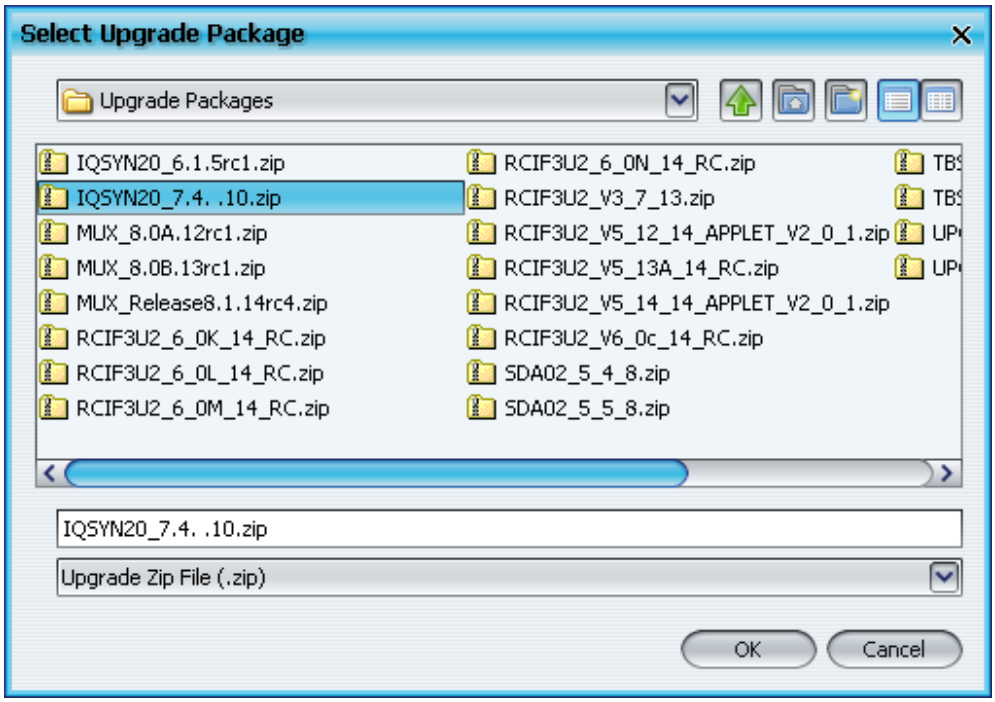
Displays this User Manual. A PDF viewer, such as Adobe® Acrobat® will be needed to view this, and all product manuals.

Software Releases

This dialog allows software release files to be imported. After these files have been imported, individual units can be upgraded using the Upgrade function. See page 54.



Click **Import Release**, select the upgrade package zip file to be imported, and click **OK**.

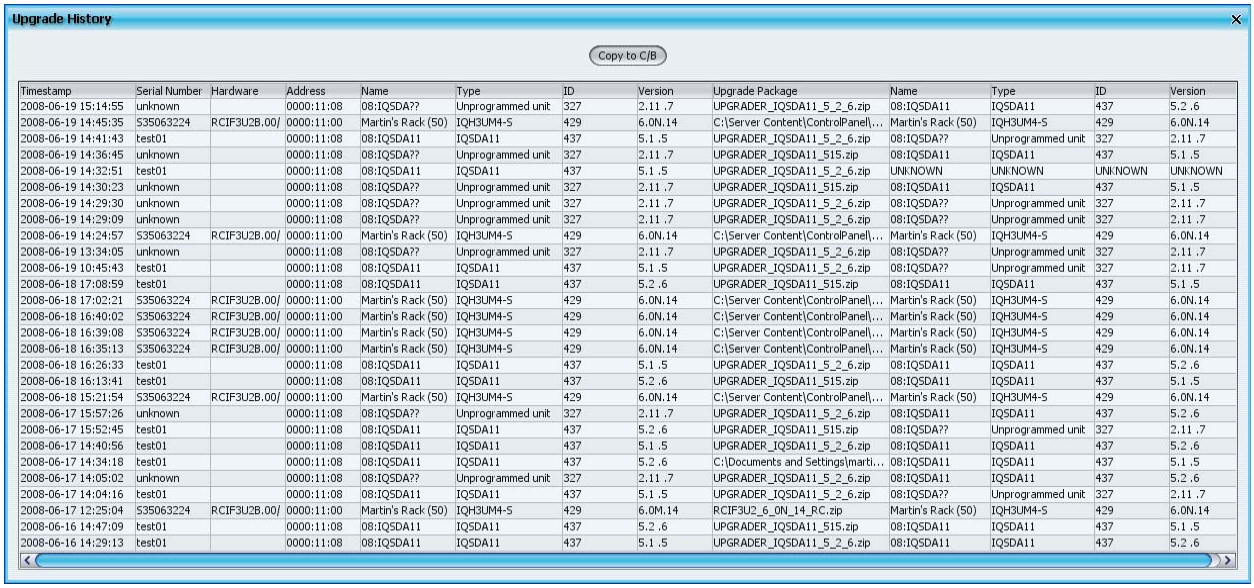


The Import Log section displays the log file information generated by the import process.

An upgrade package can be deleted by right clicking on it and selecting **Delete**.

Upgrade History

Every time an upgrade is performed, whether successful, aborted or cancelled, an entry is made into the upgrade history file. This file is a record of upgrades and cannot be edited.



Timestamp	Serial Number	Hardware	Address	Name	Type	ID	Version	Upgrade Package	Name	Type	ID	Version
2008-06-19 15:14:55	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA11	IQSDA11	437	5.2 .6
2008-06-19 14:45:35	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-19 14:41:43	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-19 14:36:45	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_515.zip	08:IQSDA11	IQSDA11	437	5.1 .5
2008-06-19 14:32:51	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
2008-06-19 14:30:23	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_515.zip	08:IQSDA11	IQSDA11	437	5.1 .5
2008-06-19 14:29:30	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-19 14:29:09	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-19 14:24:57	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-19 13:34:05	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-19 10:45:43	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-18 17:08:59	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.2 .6	UPGRADER_IQSDA11_515.zip	08:IQSDA11	IQSDA11	437	5.1 .5
2008-06-18 17:02:21	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-18 16:40:02	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-18 16:39:08	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-18 16:35:13	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-18 16:26:33	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA11	IQSDA11	437	5.2 .6
2008-06-18 16:13:41	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.2 .6	UPGRADER_IQSDA11_515.zip	08:IQSDA11	IQSDA11	437	5.1 .5
2008-06-18 15:21:54	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14	C:\Server Content\ControlPanel\...	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-17 15:57:26	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA11	IQSDA11	437	5.2 .6
2008-06-17 15:52:45	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.2 .6	UPGRADER_IQSDA11_515.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-17 14:40:56	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA11	IQSDA11	437	5.2 .6
2008-06-17 14:34:18	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.2 .6	C:\Documents and Settings\marti...	08:IQSDA11	IQSDA11	437	5.1 .5
2008-06-17 14:05:02	unknown		0000:11:08	08:IQSDA??	Unprogrammed unit	327	2.11 .7	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA11	IQSDA11	437	5.2 .6
2008-06-17 14:04:16	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA??	Unprogrammed unit	327	2.11 .7
2008-06-17 12:25:04	S35063224	RCIF3U2B.00/	0000:11:00	Martin's Rack (50)	IQH3UM4-S	429	6.0M.14	RCIF3U2_6_0N_14_RC.zip	Martin's Rack (50)	IQH3UM4-S	429	6.0N.14
2008-06-16 14:47:09	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.2 .6	UPGRADER_IQSDA11_515.zip	08:IQSDA11	IQSDA11	437	5.1 .5
2008-06-16 14:29:13	test01		0000:11:08	08:IQSDA11	IQSDA11	437	5.1 .5	UPGRADER_IQSDA11_5_2_6.zip	08:IQSDA11	IQSDA11	437	5.2 .6

Each entry contains the following information:

- Timestamp
- Serial Number
- Hardware version (if available)
- RollCall Address
- Unit Name pre upgrade
- Unit Type pre upgrade
- Unit ID pre upgrade
- Unit Version pre upgrade
- Upgrade Package, this can be one of the following:
    - The name of the original zip file from which the release was imported.
    - The RollCall address of the unit from which the release was imported.
- Unit Name post upgrade
- Unit Type post upgrade
- Unit ID post upgrade
- Unit Version post upgrade

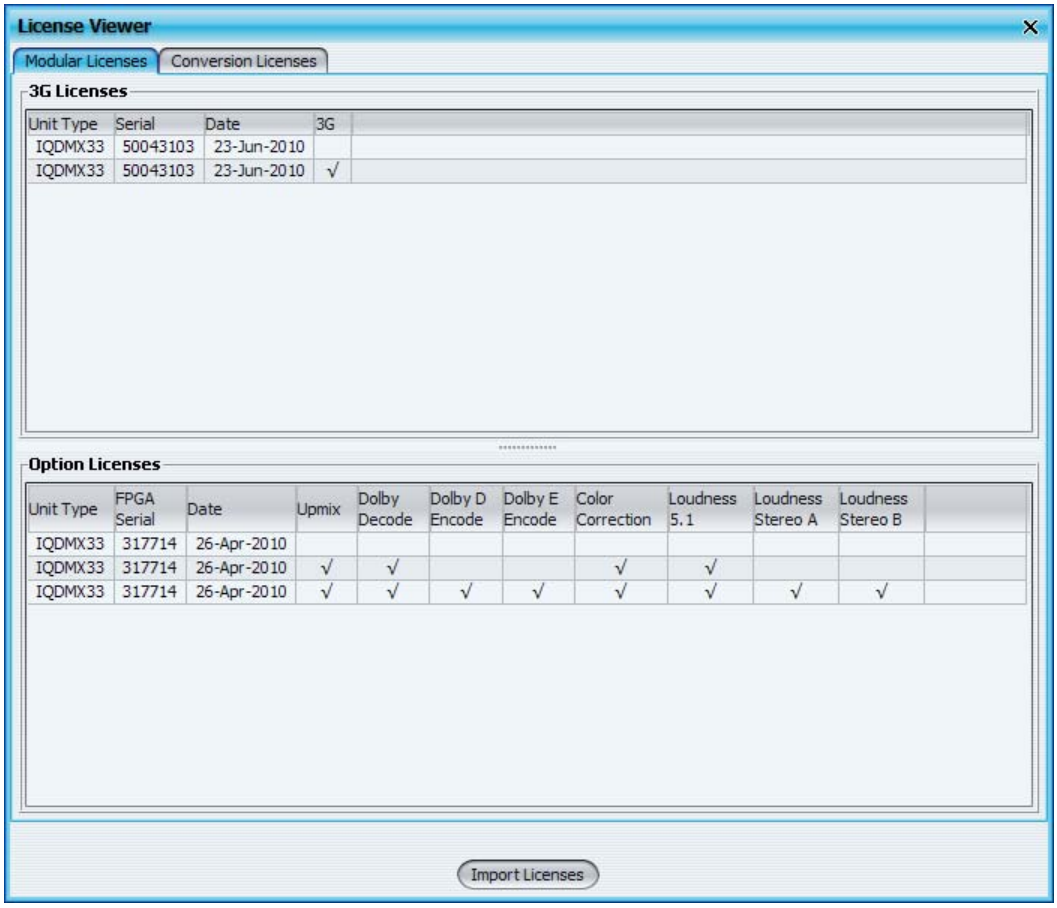
Licenses

Some IQ Modular and conversion products have additional features that can only be used if they are licensed. The License Viewer enables you to manage the licenses that these products require.

Modular Licenses

The IQ Modular products that support licensed options can have two license types:

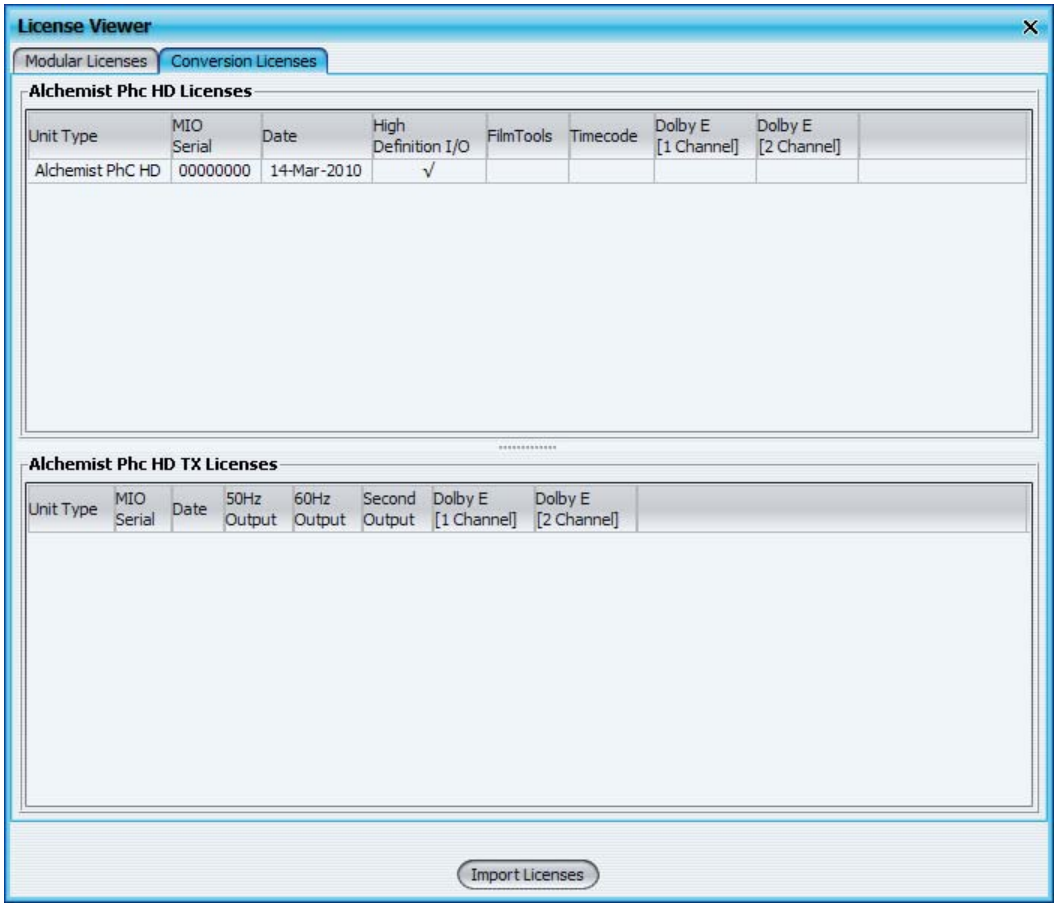
- **3G:** A 3G license will enable 3Gbps features on certain modules.
- **Option Licenses:** An option license will enable any or all of several features on certain modules.



If a feature is enabled on a license, a check mark is displayed in the column below the feature.

Conversion Licenses

The Alchemist Ph.C - HD and Alchemist Ph.C - HD TX Motion Compensated Conversion Platforms also support licensed options. You can manage these from the Conversion Licenses tab.



Importing Licenses

License files are contained in Zip archives. Before you can import license files, you must first obtain them from Snell and then store them in a network location that can be accessed by RollMechanic.

To import license files:

1. Open the License Viewer.
2. Click **Import Licenses** and then browse to the location of the license files.
3. Select the license files and click **OK**. A summary dialog appears.
4. Click **OK** to close the summary.

After you have imported licenses, they can be installed to several units at once by means of the Licensing menu. For more information, see page 34.

Alternatively, they can be installed to individual units by means of the Unit License option. For more information, see *Unit License* on page 30.

Removing Licenses

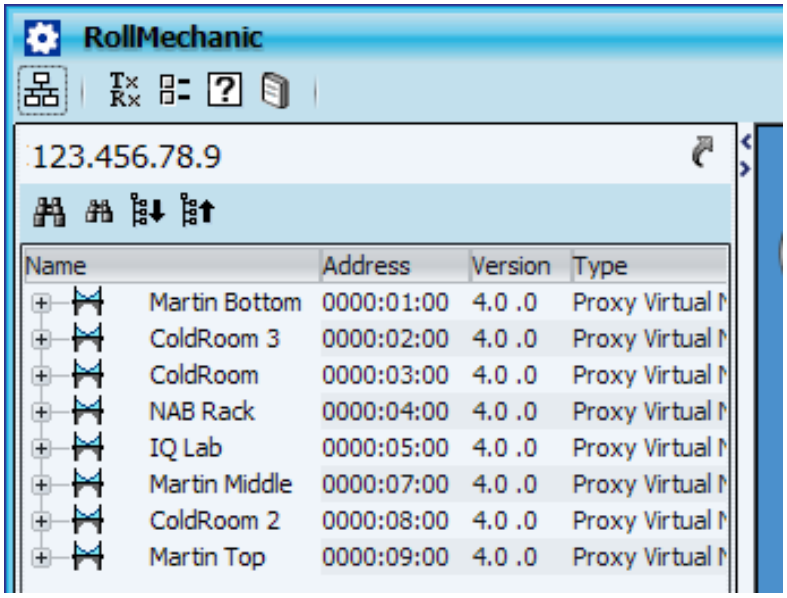
Licenses are stored in an internal database. You can remove license files from the database if they are no longer required.

To remove license files:

1. Open the License Viewer.
2. Select the license or licenses to be removed, right-click on them and then select **Remove**.
3. A confirmation dialog appears. Click **Yes** to remove the license or licenses. Click **No** to cancel the operation. A summary dialog appears.
4. Click **OK** to close the summary.

Network List

The network list, on the left side of the RollMechanic window, displays all of the units on the RollCall network. When a network connection is initially established, the list will show the top level nodes in the network.



The following icons are used to graphically illustrate the components of the RollCall Network:

- Bridge unit, which links to another RollCall network. This may be a physical bridge device, or a virtual bridging element such as the RollCall IP Proxy.
- Bridge unit - expanded.
- Unit with sub-units, e.g. modular chassis.
- Unit with sub-units - expanded.
- Unit with sub-units - non controllable state.
- Unit with sub-units - non controllable state - expanded.
- Module.
- Module - non controllable state.
- Stand-alone unit with no sub-units.
- Stand-alone unit - non controllable state.
- Indicates that the unit is being controlled by a remote control panel, and is available for other control panels to connect, (multisession).
- Indicates that the unit is being controlled by a remote control panel, but is *not* available for other control panels to connect to, (single-session).

Network Discovery

When RollMechanic initially connects to a RollCall network, only the top level nodes are displayed. RollMechanic is unaware of any units below the displayed level, and will remain as such until the units are *discovered*. This is done to improve the performance of RollMechanic by reducing the amount of information that needs to be gathered about the network – some of which may not be needed by the user.

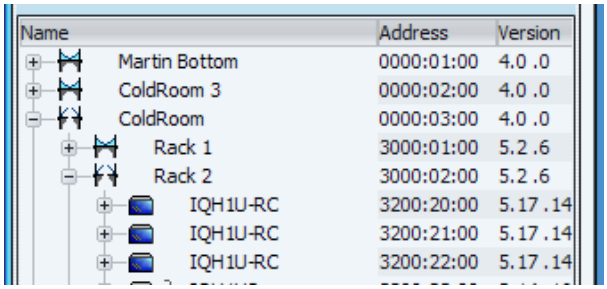
For example, in the case of an extremely large network, it may take up to several minutes for RollMechanic to gather the information that it requires to fully display the network. However, the user may only wish to view a single unit on the network. In this instance, it is not necessary to discover the entire network; instead, RollMechanic only needs to be aware of the unit to which the user wants to connect (and naturally those that are above it in the tree structure). Therefore, it is useful to be able to only discover, and subsequently display, parts of a network.

Once a network component has been discovered, it will remain so for the remainder of the currently connected RollMechanic session.

Note: *If your network is configured such that the same physical unit or units can be seen from more than one subnet, it is possible that during the network discovery process RollMechanic may attempt to open the same physical unit (on different subnets) simultaneously, causing an error to occur. Enabling the Redundancy Checking option in the RollCall preferences can prevent this error from occurring. See Redundancy Checking on page 17 for more information.*

Manually Discovering a Network

Any node with a **+** sign next to it can be discovered and expanded, either by clicking on the **+** sign or by double clicking on the name. The picture below shows a partially expanded network.



There are two toolbar buttons at the top of the network browser that can be used to discover the RollCall network.

Discover Network – all units

The **Discover Network – all units** button (the large binoculars) polls the entire RollCall Network and gathers information about everything that is connected to it. Depending on the size of the RollCall network, this process can take several minutes to complete.

If required, the discovery process can be interrupted by clicking the **Cancel** button while the discovery process is running. After a network has been discovered, it is displayed in the network tree fully expanded.

Discover Network – gateways only

The **Discover Network – gateways only** button (the small binoculars) polls the RollCall Network tree and gathers information down to the Gateway level. Anything below the Gateway level must then be discovered by manually expanding the relevant Gateways. This option does not take as much time as **Discover Network – all units**.

As with the 'all units' option, this action can be canceled while the discovery process is running. Similarly, when the discovery process is complete, the network tree will be displayed in the expanded view.

The Expand Tree and Collapse Tree buttons do not perform any function with regard to network discovery. Their only purpose is to change the visual representation of the network tree view.

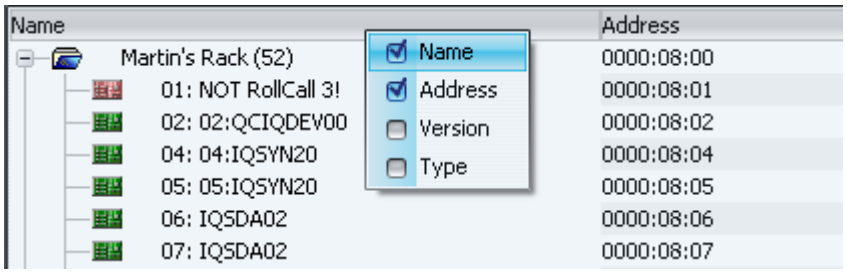
Expand Tree

This button fully expands all of discovered network components in the view. Note that before a network node can be expanded, it must first be discovered as described previously in this section.

Collapse Tree

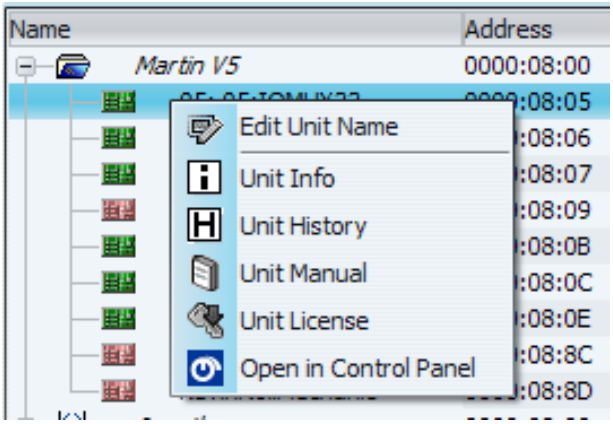
This button fully collapses the network view. Note that any units that have already been 'discovered' will remain so for the remainder of the currently connected session.

By default, the network list displays name and address information for each unit or node on the network, version and type information can also be displayed. Right click on the column header bar to specify the header columns to be displayed.



Right click on a node or unit in the Network list to:

- Display unit information.
- View unit history.
- Open the selected unit's manual.
- Open the selected unit in the RollCall Control Panel.



Edit Unit Name enables you to edit the name of any gateway or module in the Network Tree. For more information, see page 29.

Unit Info displays information related to the currently selected unit.

Note: A **+** symbol shown next to **Menu** indicates that the unit supports fast menus.

Unit History displays the history (upgrades, backups, restorations, etc…) of the currently selected unit.

Unit Manual displays the currently selected unit manual.

Unit License opens the Unit License window, which displays the currently installed licenses as well as any available licenses in the licensing database. For more information, see page 30.

Open in Control Panel opens the currently selected unit's template in the RollCall Control Panel.

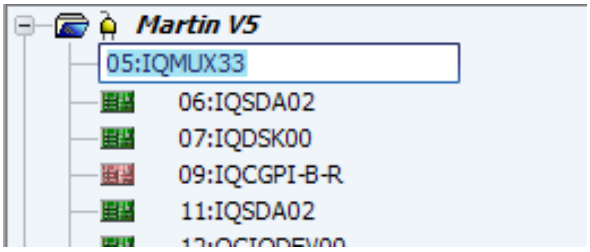
Edit Unit Name

You can edit the name of any gateway or module in the Network Tree.

To edit the name of a unit:

1. Right click on the unit in the Network Tree and select **Edit Unit Name**. Alternatively, select the unit and press the F2 key.

   A text entry box appears in place of the unit name.



2. Type a new unit name in the text box and press the **Enter** key to accept; or, press the **Esc** key to cancel the action. Names have a maximum length of 19 characters.

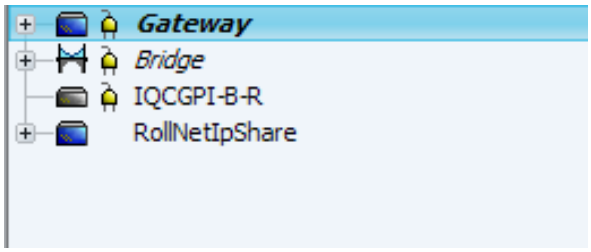
To return a unit to its default name, delete all of the text in the text entry box and press the **Enter** key.

When a gateway is also acting as a bridge, it is displayed as having two nodes in the network tree. One node is shown as the gateway and the other is shown as the bridge. By default, both nodes share the same unit name.

To alleviate confusion, a naming convention exists to allow separate names to be given to the gateway and the bridge.

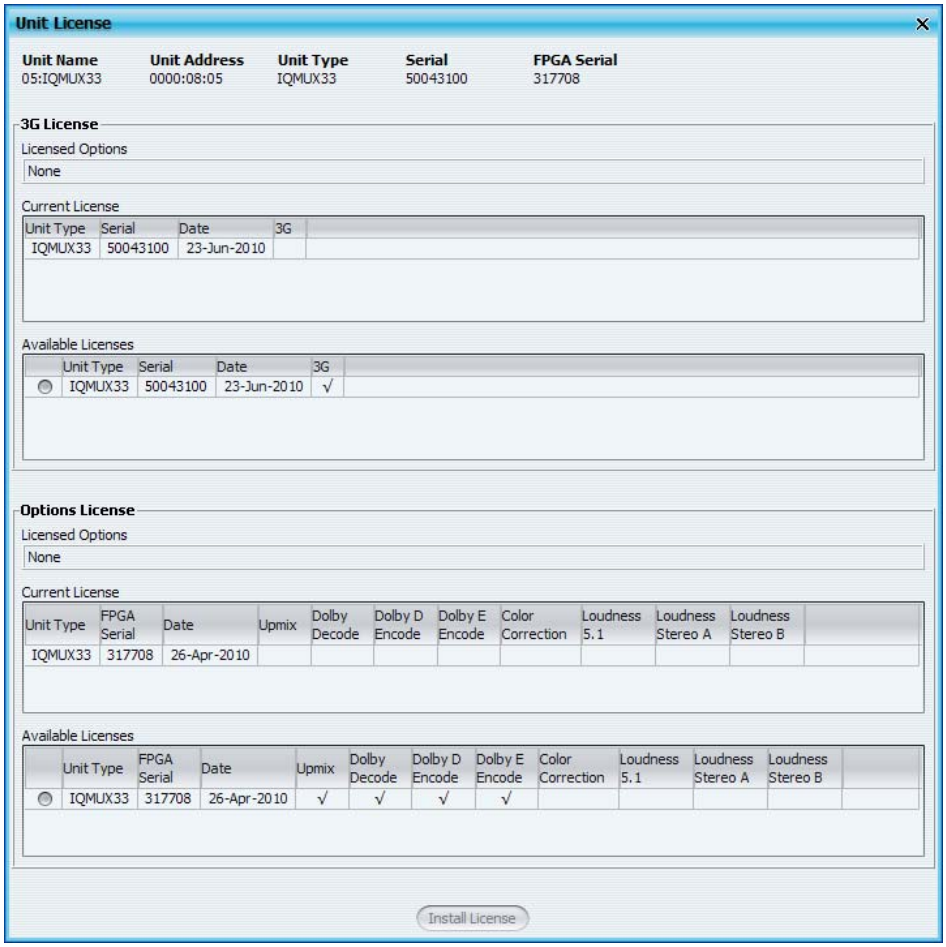
If the unit name contains a tilde (~) character, the text before the ~ will be used as the gateway name and the text after the ~ will be used as the bridge name. (Note that the 19 character length restriction still applies.)

For example, the name **Gateway~Bridge**, would be displayed as shown below.



Unit License

If a unit supports licensed options, right click on the unit and select **Unit License** to open the Unit License window.



The Unit License window displays the currently installed licenses for both 3G and Licensed Options as well as any available licenses in the licensing database.

Before you can install a license, you must first import it to the license database. For more information, see *Licenses* on page 22.

In the above example, the IQMUX33 does not have any licensed options enabled. However, two licenses are available, one for 3G and one for upmixing, Dolby® decoding and Dolby® encoding.

To install licenses:

1. Select the licenses you want to install and then click **Install Licenses**.
2. In the confirmation dialog that appears, click **Yes** to install the licenses. To cancel the operation, click **No**.

   A confirmation dialog appears, asking if you want to restart the module. The licenses will not be valid until the module is restarted.
3. Click **Yes**.

   Unit License window will close. When the unit has restarted the new licenses will be active.

Inventory

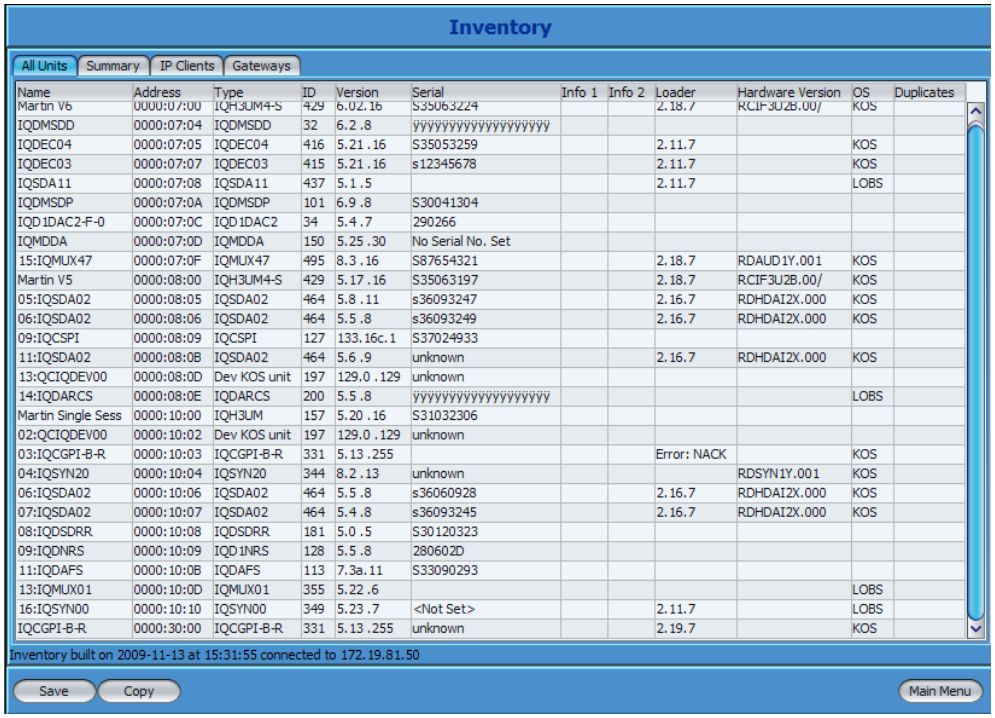
The Inventory window comprises several tabs that display information about the RollCall network and the units on it.

Note: *Until a unit has been **discovered**, as described in the previous section, it will not appear in the Inventory*

To save the information displayed on any of the Inventory tabs to a text file, click **Save**.

To copy the information displayed on any of the Inventory tabs to the clipboard, click **Copy**.

All Units Tab



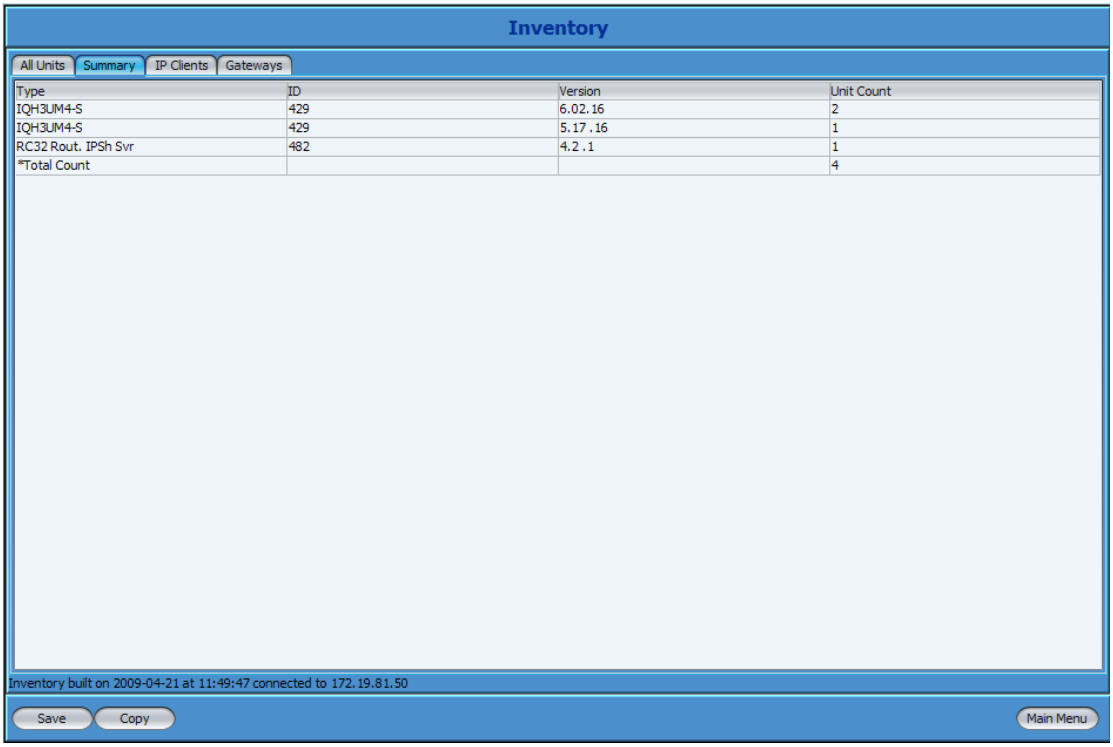
The All Units tab displays the following information about the units on the RollCall network:

- **Name:** The name of the unit.
- **Address:** The RollCall address of the unit on the network.
- **Type:** The unit type.
- **ID:** The unit's RollCall ID.
- **Version:** The unit's currently installed software version.
- **Serial:** The unit's serial number.
- **Info 1 & Info 2:** User configurable information, provided by the Gateway card.
- **Loader Version:** The unit's current loader version.
- **Hardware Version:** The unit's current hardware version.
- **OS:** The unit's operating system type.
- **Duplicates:** Indicates any duplicate addresses.

For each of these columns:

- If N/A is displayed, the unit does not support the information type.
- If nothing is displayed, RollMechanic cannot determine the information, or the information is not available.

Summary Tab

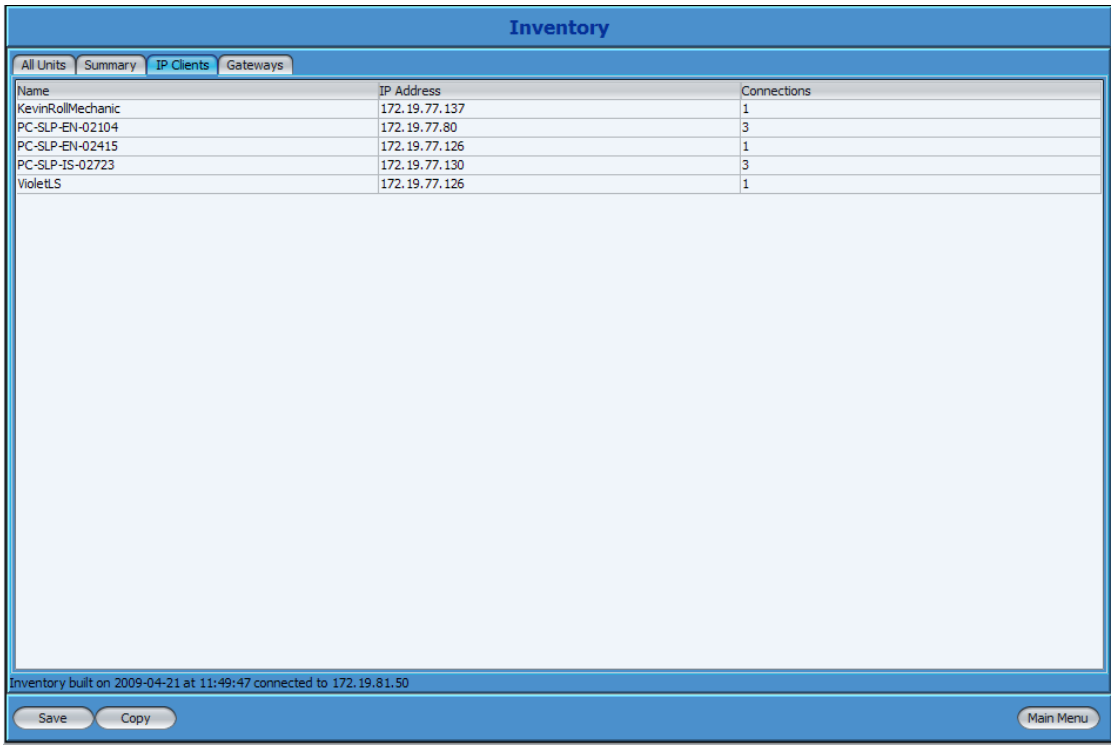


The Summary tab displays the following summary information about the units on the RollCall network:

- **Type:** The unit type.
- **ID:** The unit's RollCall ID.
- **Version:** The currently installed software version.
- **Unit Count:** The number of unit's on the RollCall network that share the same Type, ID, and Version.

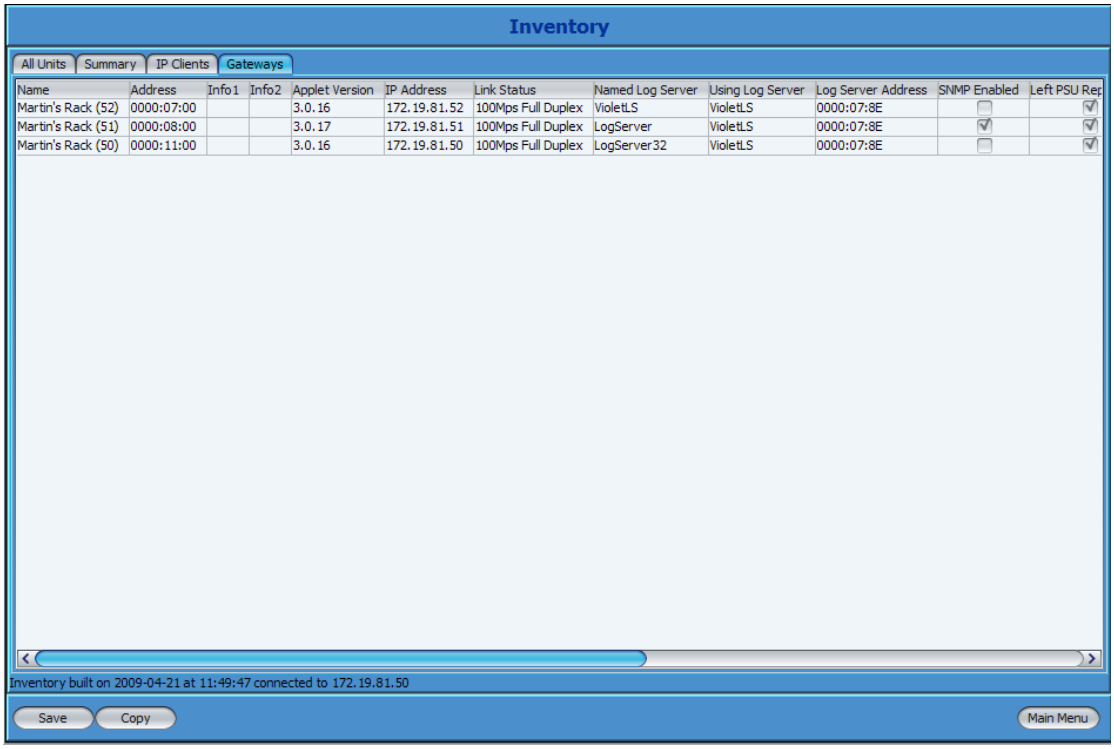
IP Clients

The IP Clients tab displays the RollCall clients that are currently connected to the network via IP.



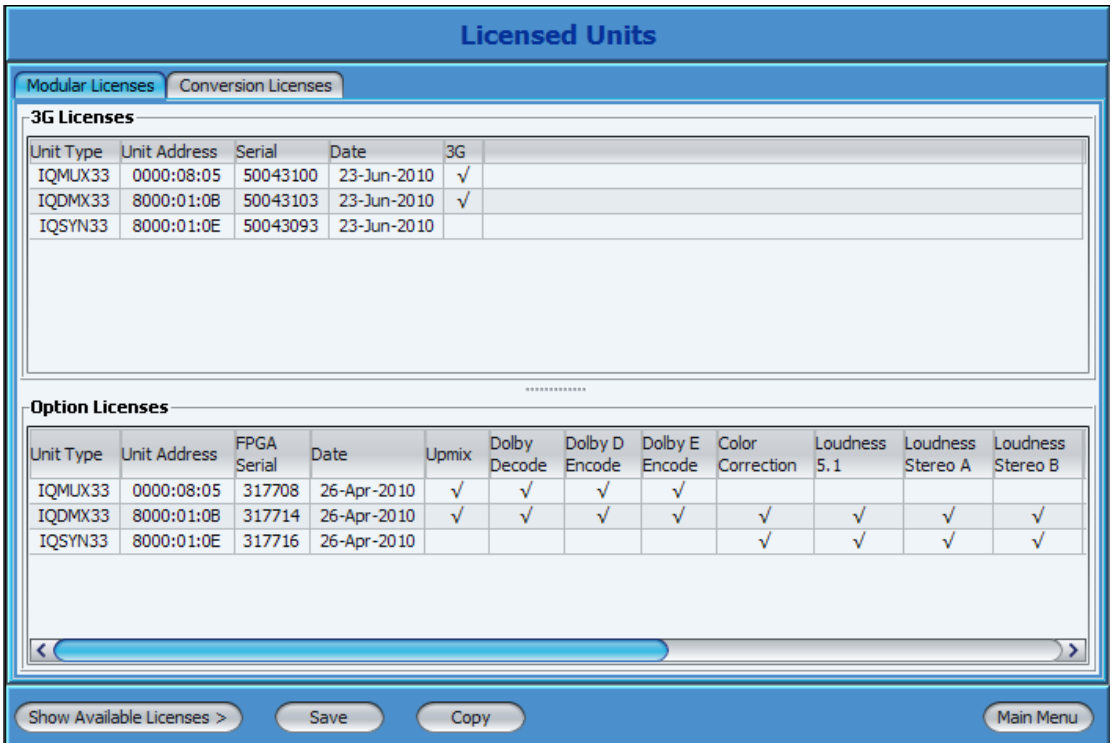
Gateways

The Gateways tab displays information about the Gateways that are currently connected to the RollCall Network.



Licensing

The Licensing menu displays all of the licensed units in the current network and enables you to install new licenses for single or multiple units.

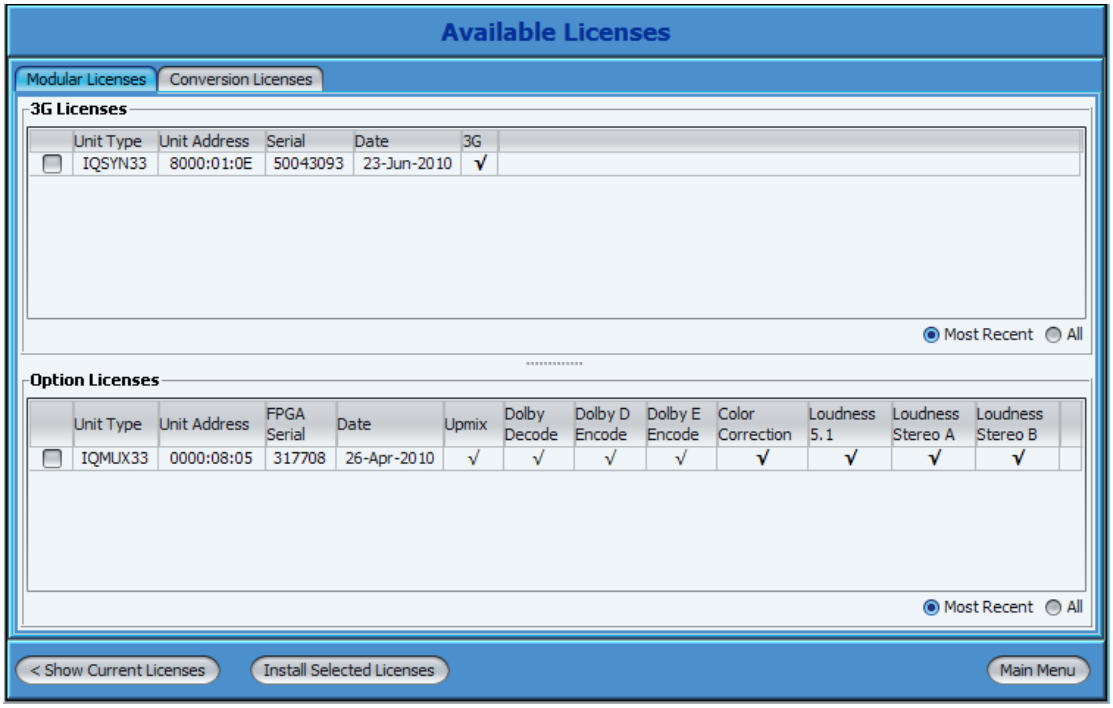


When you first open the Licensing menu, the Licensed Units window appears. This window displays all of the licensed units on the RollCall network and provides a summary of the options that are licensed. A check mark below a licensed feature indicates that the feature is licensed for that unit type.

Click **Save** to save the list of licensed units to a text file.

Click **Copy** to copy the list of licensed units to the clipboard.

Click **Show Available Licenses >** to open the Available Licenses window.



The Available Licenses window displays the licenses in the Licensing database. These are imported to RollMechanic by means of the *Licenses* toolbar option. For more information, see page 22.

By default, only the most recent available license files are shown. These include only files that are newer than the licenses that are currently installed.

If you choose to display all available licenses (by selecting the **All** radio button), all licenses stored in the licensing database are displayed, including those that are older than the currently installed licenses. This is useful if you want to roll back to a previous license version.

For each license a table displays a summary of the license features and compares it to the currently installed license, indicating what the result of installing the license would be.

	Unit Type	Unit Address	FPGA Serial	Date	Upmix	Dolby Decode	Dolby D Encode	Dolby E Encode	Color Correction	Loudness 5.1	Loudness Stereo A	Loudness Stereo B
☐	IQMUX33	0000:08:05	317708	26-Apr-2010	×	×	×	×				
☐	IQMUX33	0000:08:05	317708	26-Apr-2010	√	√	√	√	**√**	**√**	**√**	**√**
☐	IQDMX33	8000:01:0B	317714	26-Apr-2010	×	×	×	×	×	×	×	×
☐	IQDMX33	8000:01:0B	317714	26-Apr-2010	√	√	×	×	√	√	×	×

- A **bold** check mark indicates that a feature is present on the available license but is not present on the currently installed license. Installing the available license would add the feature.
- A check mark (regular weight) indicates that a feature is present on the available license and that it is also present on the currently installed license. Installing the available license would not have any effect with respect to that feature.
- A blank entry in the table indicates that the feature is neither present on the available license nor the currently installed license. Installing the available license would not have any effect with respect to that feature.
- An x indicates that the feature is not present on the available license but is present on the currently installed license. Installing the available license would **remove** the feature.

To install license files:

- Obtain the license files from Snell and import them into the Licensing database. See *Licenses* on page 22 for more information.

1. Open the Licensing menu, the Licensed Units window will be displayed. Click **Show Available Licenses**. The Available Licenses window will be displayed.
2. Select the licenses that you want to install.

   Options to select all licenses, deselect all licenses, select all licenses for a specific unit type or deselect all licenses of a specific unit type are available by right-clicking in the table.
3. Click **Install Selected Licenses**.
4. In the confirmation dialog that appears, click **Yes** to proceed or click **No** to cancel the operation. A summary dialog appears.
5. Click **OK** to close the summary dialog. A message stating that you must restart the units for the new licenses to take effect appears.
6. Click **Yes** to restart the units. Note that the Alchemist Ph.C – HD and the Alchemist Ph.C – HD TX must be manually restarted.

Backup, Restore and Clone

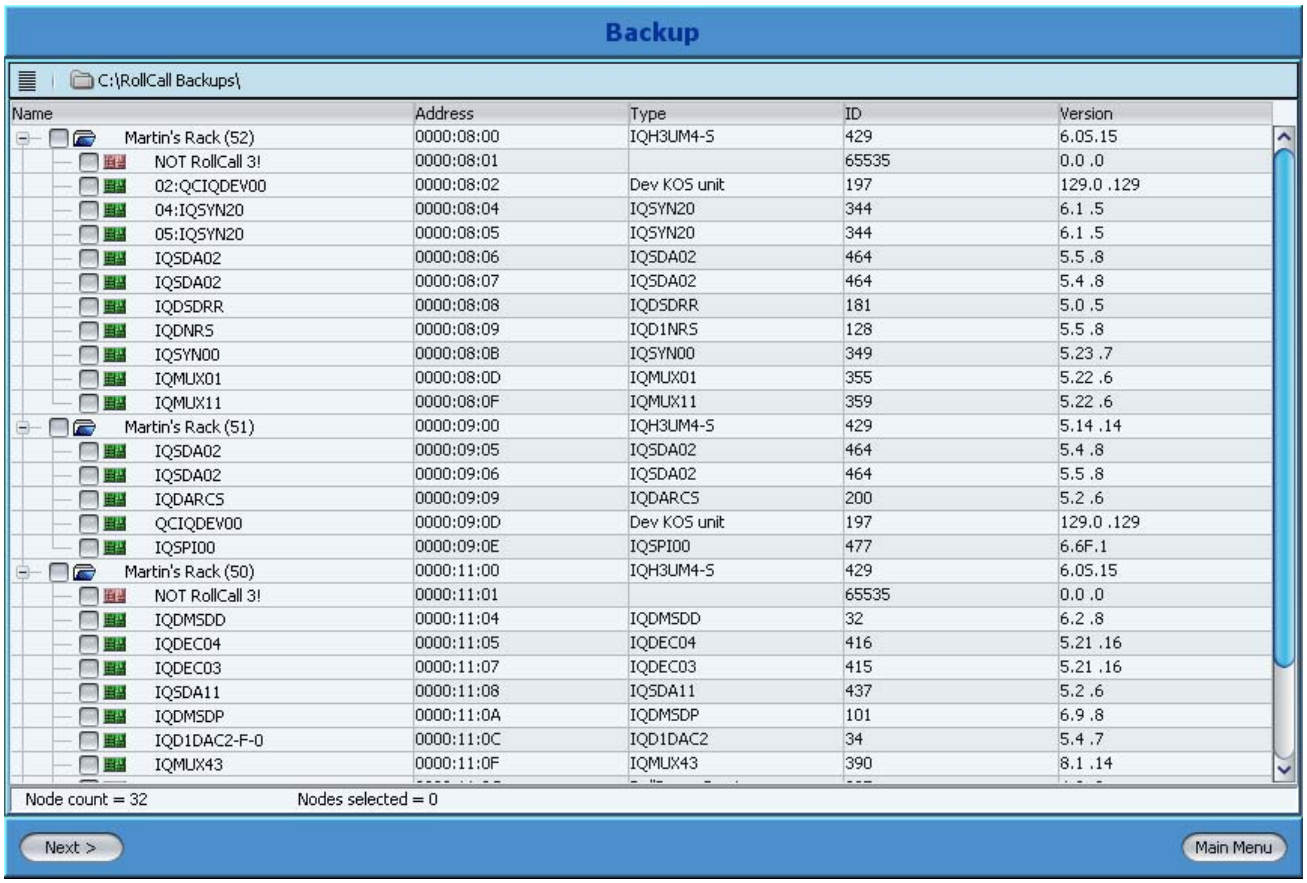
The following sections of this user manual are about the Backup, Restore, and Clone functions.

Note: *If your network is configured such that the same physical unit can be seen from more than one subnet, selecting the Redundancy Checking option in the RollCall Preferences can increase the speed of these operations. See Redundancy Checking on page 17 for more information.*

Backup

The Backup menu provides access to RollMechanic's backup functions.

To access the Backup menu, click **Backup** on the main menu.

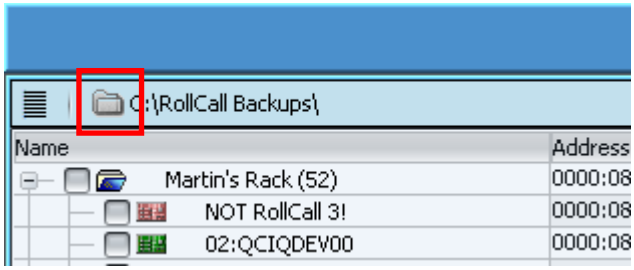


Name	Address	Type	ID	Version
Martin's Rack (52)	0000:08:00	IQH3UM4-S	429	6.05.15
NOT RollCall 3!	0000:08:01		65535	0.0 .0
02:QCIQDEV00	0000:08:02	Dev KOS unit	197	129.0 .129
04:IQSYN20	0000:08:04	IQSYN20	344	6.1 .5
05:IQSYN20	0000:08:05	IQSYN20	344	6.1 .5
IQSDA02	0000:08:06	IQSDA02	464	5.5 .8
IQSDA02	0000:08:07	IQSDA02	464	5.4 .8
IQDSDRR	0000:08:08	IQDSDRR	181	5.0 .5
IQDNRS	0000:08:09	IQD1NRS	128	5.5 .8
IQSYN00	0000:08:0B	IQSYN00	349	5.23 .7
IQMUX01	0000:08:0D	IQMUX01	355	5.22 .6
IQMUX11	0000:08:0F	IQMUX11	359	5.22 .6
Martin's Rack (51)	0000:09:00	IQH3UM4-S	429	5.14 .14
IQSDA02	0000:09:05	IQSDA02	464	5.4 .8
IQSDA02	0000:09:06	IQSDA02	464	5.5 .8
IQDARCS	0000:09:09	IQDARCS	200	5.2 .6
QCIQDEV00	0000:09:0D	Dev KOS unit	197	129.0 .129
IQSPI00	0000:09:0E	IQSPI00	477	6.6F.1
Martin's Rack (50)	0000:11:00	IQH3UM4-S	429	6.05.15
NOT RollCall 3!	0000:11:01		65535	0.0 .0
IQDMSDD	0000:11:04	IQDMSDD	32	6.2 .8
IQDEC04	0000:11:05	IQDEC04	416	5.21 .16
IQDEC03	0000:11:07	IQDEC03	415	5.21 .16
IQSDA11	0000:11:08	IQSDA11	437	5.2 .6
IQDMSDP	0000:11:0A	IQDMSDP	101	6.9 .8
IQD1DAC2-F-0	0000:11:0C	IQD1DAC2	34	5.4 .7
IQMUX43	0000:11:0F	IQMUX43	390	8.1 .14

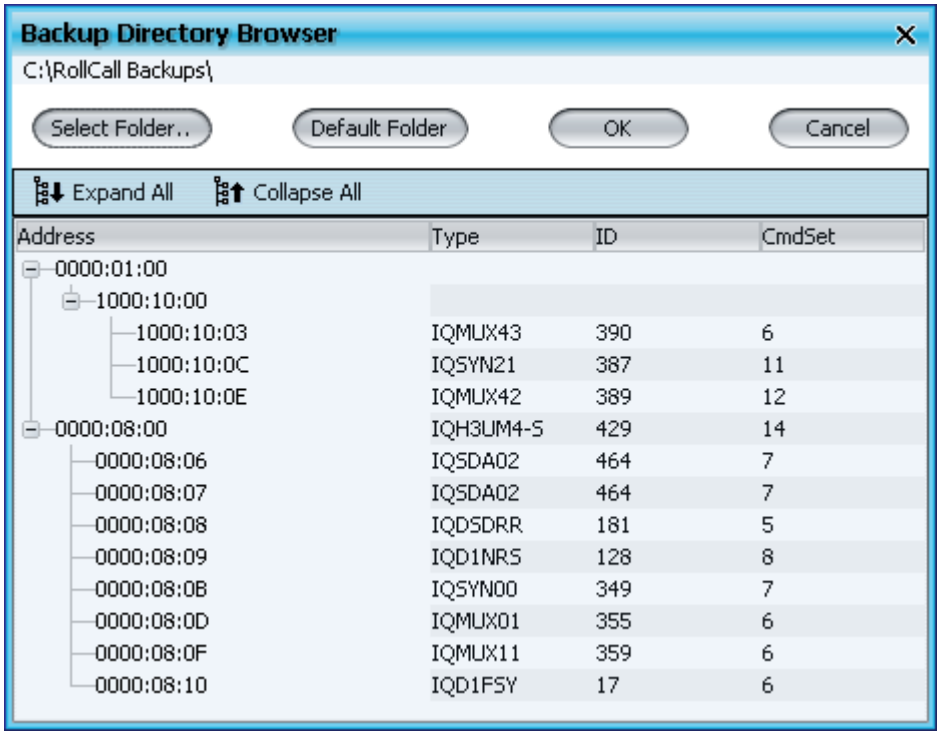
To return to the main menu at any time, click **Main Menu** in the lower-right corner of the window.

Specifying the Backup Directory

The current backup directory is displayed at the top of the Backup window. To change the location of the Backup directory, click the button.



The Backup Directory Browser appears.



The Backup Directory Browser displays a list of all the backup files in the current backup directory. Each backup file is displayed as an entry in a tree table. There are four columns of information:

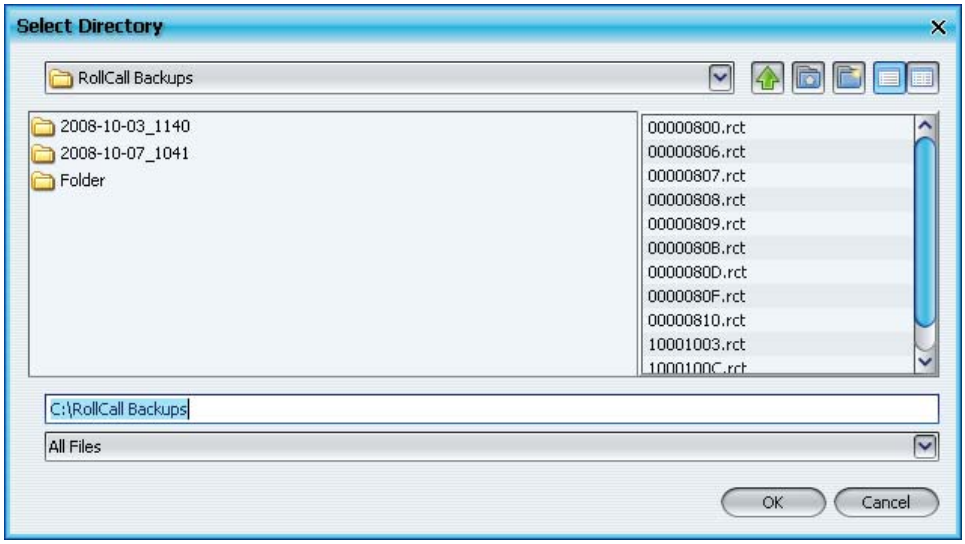
Address The address of the unit from which the backup file was made.

Type The type of unit at that address.

ID The ID of the unit at that address

CmdSet The command set version of the unit at that address.

To change the backup directory, click Select Folder in the Backup File Browser. The Select Directory window appears.



To return the backup directory to the system default, click **Default Folder**.

The Backup Window

The Backup window displays the nodes that comprise the RollCall network. From this window, nodes can be selected and their states saved to the Backup directory.

Some nodes logically contain others; for example, gateways contain modules, and bridges contain gateways. Each node is selected individually, and selecting a node does not automatically select the nodes contained within it. However, the toolbars and contextual menus provide several means by which multiple nodes can easily be selected.

Note: *The reason for using the term 'node' as opposed to 'unit' is because nodes and units do not necessarily correspond one-to-one.*

For example, in the case of a gateway bridge, the gateway is represented by two nodes in the network – one for the gateway and another for the bridge. Another example is when a node represents something that isn't a unit, such as a RollProxy service or a LogServer.

There are five columns of information for each node in the network.

Name The name of the node.

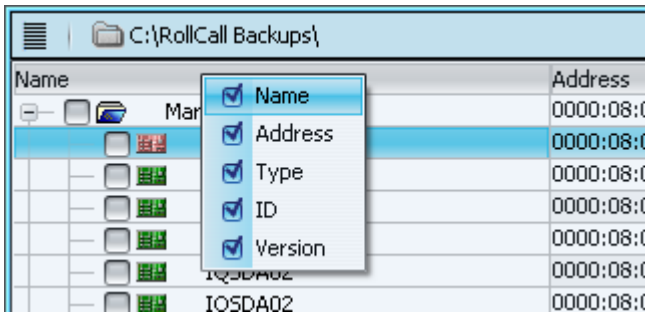
Address The RollCall address of the node.

Type The node type.

ID The RollCall ID of the node.

Version The current version of the node.

To change the displayed columns, right click on the column header bar.



In addition to the information displayed in the main columns, at the bottom of the window, there are two additional pieces of information.

Node count This displays the number of nodes currently detected in the network.

Nodes selected This displays the number of nodes that are currently selected.

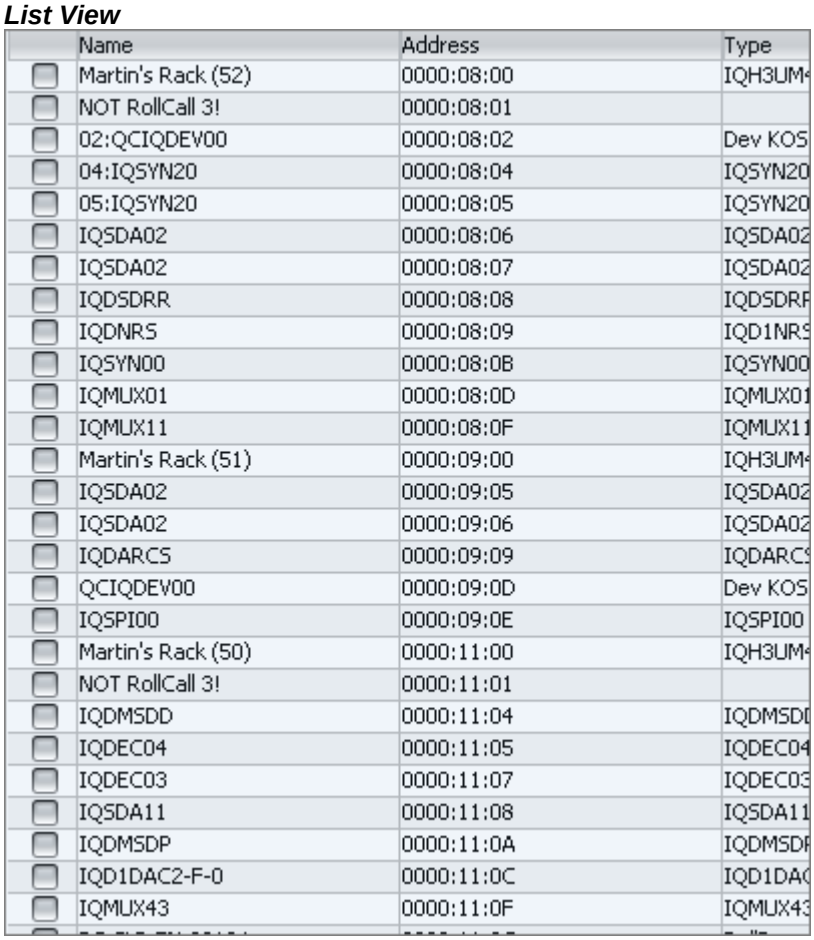
Changing the Network View

The Toggle List/Tree View button toggles the network list view between the default tree view and a flat list.

Tree View

Name	Address	Type
Martin's Rack (52)	0000:08:00	IQH3UM
NOT RollCall 3!	0000:08:01	
02:QCIQDEV00	0000:08:02	Dev KO
04:IQSYN20	0000:08:04	IQSYN2
05:IQSYN20	0000:08:05	IQSYN2
IQSDA02	0000:08:06	IQSDA0
IQSDA02	0000:08:07	IQSDA0
IQDSDRR	0000:08:08	IQDSDR
IQDNRS	0000:08:09	IQD1NR
IQSYN00	0000:08:0B	IQSYN0
IQMUX01	0000:08:0D	IQMUX0
IQMUX11	0000:08:0F	IQMUX1
Martin's Rack (51)	0000:09:00	IQH3UM
IQSDA02	0000:09:05	IQSDA0
IQSDA02	0000:09:06	IQSDA0
IQDARCS	0000:09:09	IQDARC
QCIQDEV00	0000:09:0D	Dev KO
IQSPI00	0000:09:0E	IQSPI00
Martin's Rack (50)	0000:11:00	IQH3UM
NOT RollCall 3!	0000:11:01	
IQDMSDD	0000:11:04	IQDMSD
IQDEC04	0000:11:05	IQDEC0
IQDEC03	0000:11:07	IQDEC0
IQSDA11	0000:11:08	IQSDA1
IQDMSDP	0000:11:0A	IQDMSD
IQD1DAC2-F-0	0000:11:0C	IQD1DA
IQMUX43	0000:11:0F	IQMUX4

List View

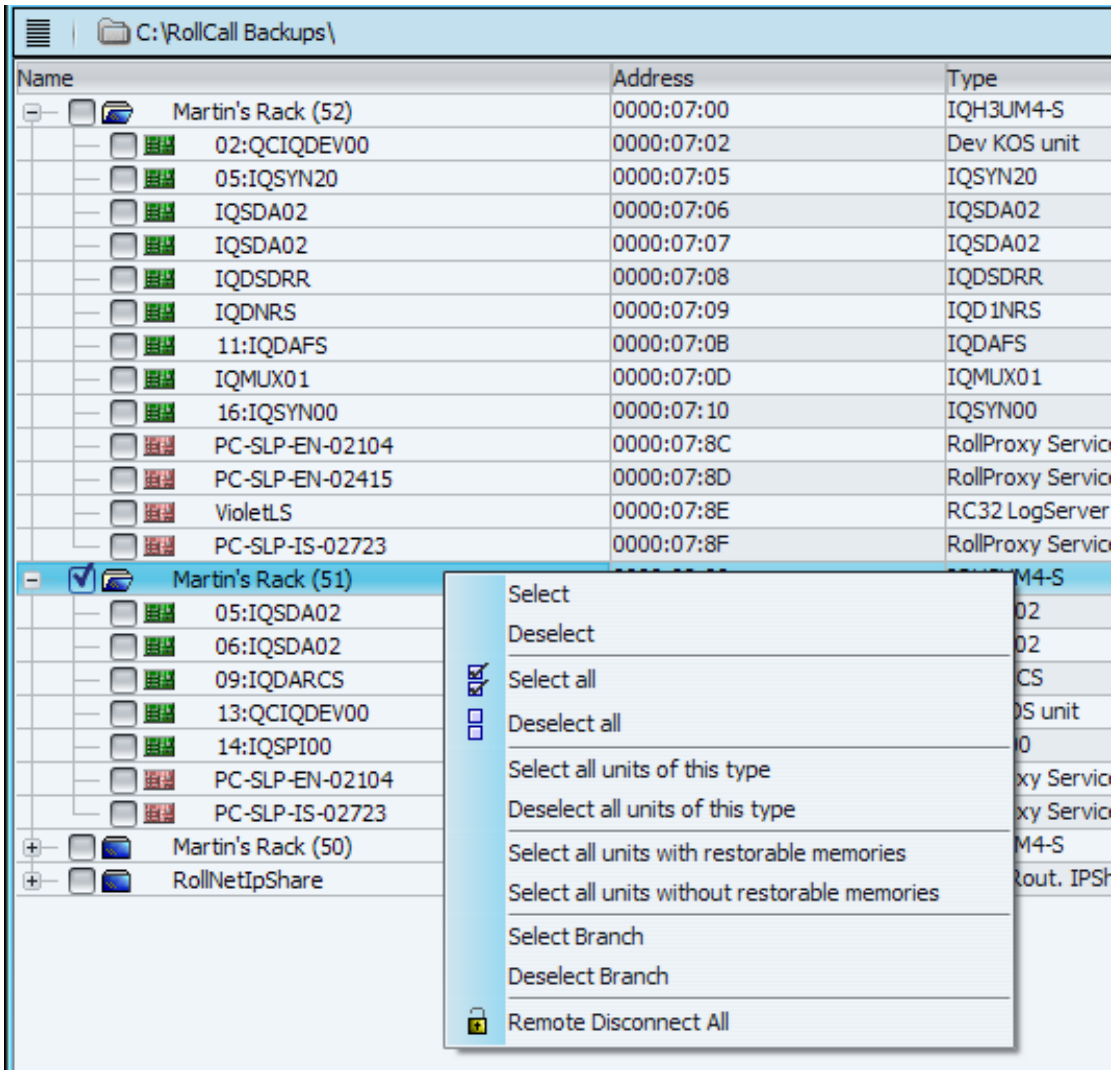


	Name	Address	Type
☐	Martin's Rack (52)	0000:08:00	IQH3UM
☐	NOT RollCall 3!	0000:08:01	
☐	02:QCIQDEV00	0000:08:02	Dev KOS
☐	04:IQSYN20	0000:08:04	IQSYN20
☐	05:IQSYN20	0000:08:05	IQSYN20
☐	IQSDA02	0000:08:06	IQSDA02
☐	IQSDA02	0000:08:07	IQSDA02
☐	IQDSDRR	0000:08:08	IQDSDRR
☐	IQDNRS	0000:08:09	IQD1NRS
☐	IQSYN00	0000:08:0B	IQSYN00
☐	IQMUX01	0000:08:0D	IQMUX01
☐	IQMUX11	0000:08:0F	IQMUX11
☐	Martin's Rack (51)	0000:09:00	IQH3UM
☐	IQSDA02	0000:09:05	IQSDA02
☐	IQSDA02	0000:09:06	IQSDA02
☐	IQDARCS	0000:09:09	IQDARCS
☐	QCIQDEV00	0000:09:0D	Dev KOS
☐	IQSPI00	0000:09:0E	IQSPI00
☐	Martin's Rack (50)	0000:11:00	IQH3UM
☐	NOT RollCall 3!	0000:11:01	
☐	IQDMSDD	0000:11:04	IQDMSDD
☐	IQDEC04	0000:11:05	IQDEC04
☐	IQDEC03	0000:11:07	IQDEC03
☐	IQSDA11	0000:11:08	IQSDA11
☐	IQDMSDP	0000:11:0A	IQDMSDP
☐	IQD1DAC2-F-0	0000:11:0C	IQD1DAC
☐	IQMUX43	0000:11:0F	IQMUX43

When in list view, the view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order.

Selecting Nodes

Nodes can either be selected individually, or by means of a contextual menu, which is opened by right clicking on a node.



The options in the contextual menu are:

- **Select:** Selects a single node.
- **Deselect:** Deselects a single mode.
- **Select all:** Selects the entire network.
- **Deselect all:** Deselects the entire network.
- **Select all units of this type:** Selects all units of a type. For example, right clicking on an IQSDA02 and choosing this option selects all IQSDA02 modules on the network.
- **Deselect all units of this type:** Deselects all units of a type. For example, right clicking on an IQSDA02 and choosing this option deselects all IQSDA02 modules on the network.
- **Select Branch:** Selects everything contained within a branch of the network. For example, right-clicking on a Gateway in the list, and choosing this option, will select everything contained within the Gateway.

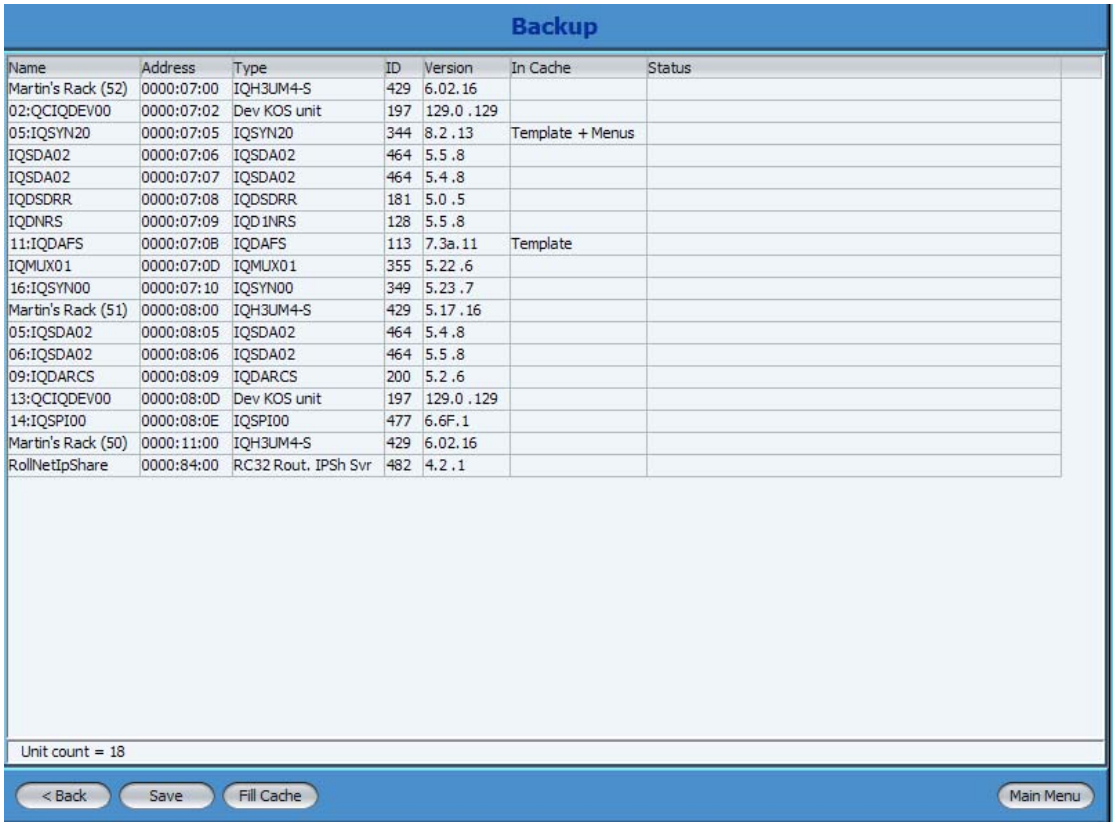
- **Deselect Branch:** Deselects everything contained within a branch of the network. For example, right-clicking on a Gateway in the list, and choosing this option, will deselect everything contained within the gateway.
- **Remote Disconnect All:** This option disconnects all busy control sessions. Note that this option disconnects sessions without warning to other users and should be used with care.

Performing a Backup

After selecting the nodes to be backed up, click **Next** at the bottom of the window.

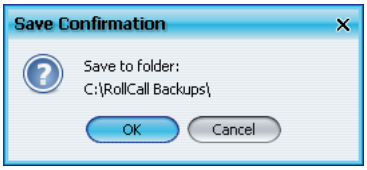
When the **Next** button is clicked, the network list is replaced by a table containing only the units that have been selected. Two new columns are displayed: In Cache and Status.

The In Cache column indicates whether there is a cached copy of the unit's template and menu set. The Status column provides feedback during the actual save operation.



The view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order (by address).

To start the save operation, click the **Save** button. A confirmation dialog appears. Verify that the save operation will save the selected nodes to the correct directory, and click **OK** to proceed.



The save operation commences and a running report of the operation appears in the Status Column. The save firstly downloads any non-cached templates followed by any non-cached menus. Then it downloads the current

state for each unit. Statistics are compiled at the bottom of the screen - Unit count, Units saved, Units saved with errors, Units without Savesets, Units failed.

When the operation is complete, a dialog appears providing the option to view the log immediately, or simply proceed. Click **View Log** to view the log, or click **OK** to close the dialog.

Alternatively, if there were any failed saves, a dialog appears providing the option to retry the failed operations.

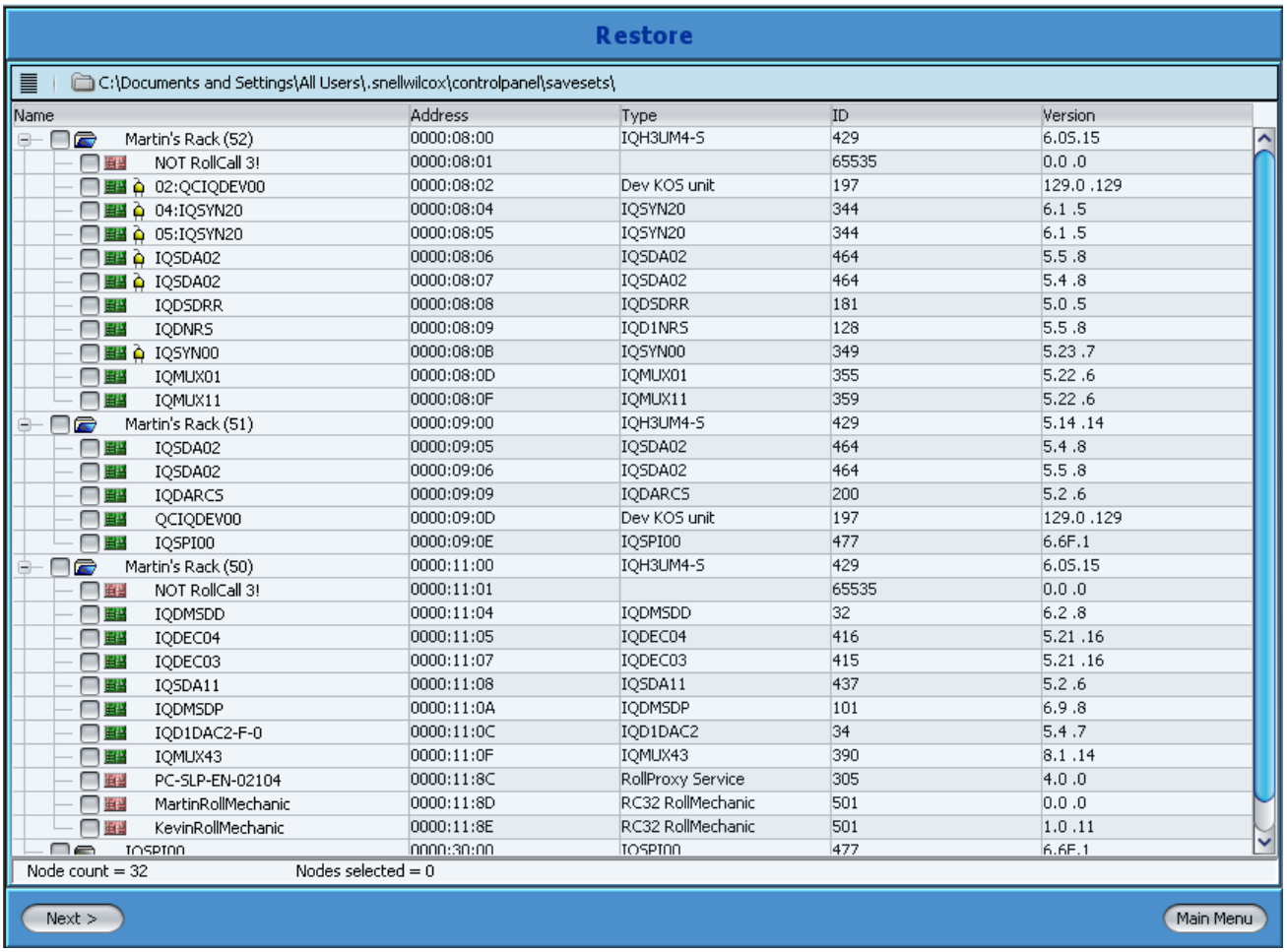
Fill Cache

The Fill Cache option loads the templates and menus for the selected units without saving. This may be useful when configuring large networks.

Restore

The Restore menu provides access to RollMechanic's restoration functions.

To access the Restore menu, click **Restore** on the main menu.



Name	Address	Type	ID	Version
Martin's Rack (52)	0000:08:00	IQH3UM4-S	429	6.05.15
NOT RollCall 3!	0000:08:01		65535	0.0 .0
02:QCIQDEV00	0000:08:02	Dev KOS unit	197	129.0 .129
04:IQSYN20	0000:08:04	IQSYN20	344	6.1 .5
05:IQSYN20	0000:08:05	IQSYN20	344	6.1 .5
IQSDA02	0000:08:06	IQSDA02	464	5.5 .8
IQSDA02	0000:08:07	IQSDA02	464	5.4 .8
IQDSDRR	0000:08:08	IQDSDRR	181	5.0 .5
IQDNRS	0000:08:09	IQD1NRS	128	5.5 .8
IQSYN00	0000:08:0B	IQSYN00	349	5.23 .7
IQMUX01	0000:08:0D	IQMUX01	355	5.22 .6
IQMUX11	0000:08:0F	IQMUX11	359	5.22 .6
Martin's Rack (51)	0000:09:00	IQH3UM4-S	429	5.14 .14
IQSDA02	0000:09:05	IQSDA02	464	5.4 .8
IQSDA02	0000:09:06	IQSDA02	464	5.5 .8
IQDARCS	0000:09:09	IQDARCS	200	5.2 .6
QCIQDEV00	0000:09:0D	Dev KOS unit	197	129.0 .129
IQSPI00	0000:09:0E	IQSPI00	477	6.6F.1
Martin's Rack (50)	0000:11:00	IQH3UM4-S	429	6.05.15
NOT RollCall 3!	0000:11:01		65535	0.0 .0
IQDMSDD	0000:11:04	IQDMSDD	32	6.2 .8
IQDEC04	0000:11:05	IQDEC04	416	5.21 .16
IQDEC03	0000:11:07	IQDEC03	415	5.21 .16
IQSDA11	0000:11:08	IQSDA11	437	5.2 .6
IQDMSDP	0000:11:0A	IQDMSDP	101	6.9 .8
IQD1DAC2-F-0	0000:11:0C	IQD1DAC2	34	5.4 .7
IQMUX43	0000:11:0F	IQMUX43	390	8.1 .14
PC-SLP-EN-02104	0000:11:8C	RollProxy Service	305	4.0 .0
MartinRollMechanic	0000:11:8D	RC32 RollMechanic	501	0.0 .0
KevinRollMechanic	0000:11:8E	RC32 RollMechanic	501	1.0 .11
IQSPI00	0000:30:00	IQSPI00	477	6.6F.1

To return to the main menu at any time, click **Main Menu** in the lower-right corner of the window.

Specifying a Restore Directory

The current Restore directory is displayed at the top of the window. The process for changing this directory is the same as that for changing the Backup directory. See page 38.

The Restore Window

The Restore window displays the same information about the nodes on the network as the Backup window. See page 39.

Changing the Network View

The process for changing the view of the Restore window is the same as that for the Backup window. See page 40

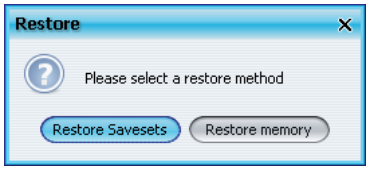
Selecting Nodes

The process for selecting nodes in the Restore window is the same as that for the Backup window. See page 42.

Performing a Restoration

After selecting the nodes to be restored, click **Next** at the bottom of the window.

When the **Next** button is clicked, a dialog appears providing the option to restore from Savesets or Memory.



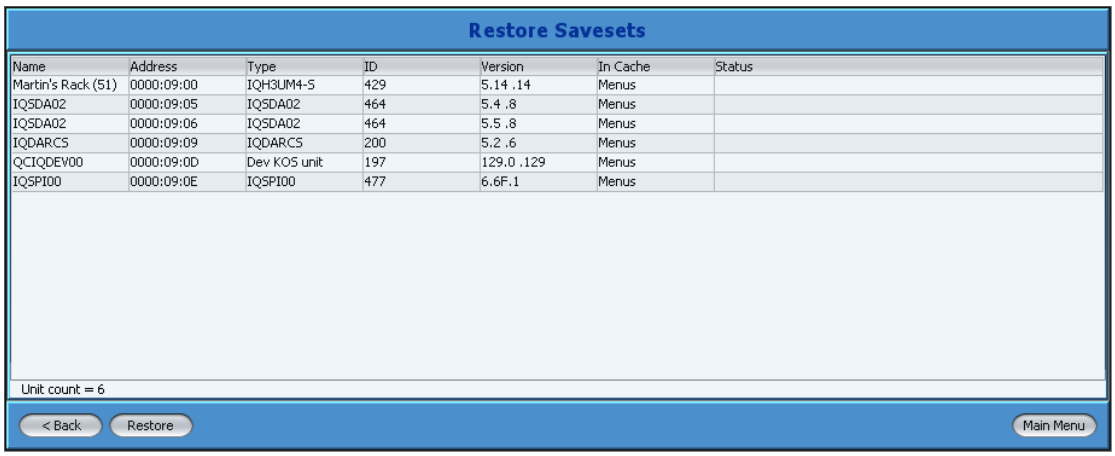
For more information about savesets and memory, see *Savesets and Memory* on page 6.

Some units do not support memory restore. In this case the Restore memory option is grayed out.

The advantage to using memory restore is that it will recall any user memories that have been defined, which savesets do not. On the other hand, the disadvantage of using memory restore is that some unit types require restart to complete the operation.

Restore Savesets

After selecting the restore method, the network list is replaced with a table containing only the units that have been selected. The Saveset and Memory columns are replaced with two new columns: In Cache and Status.



The In Cache column indicates whether there is a cached copy of the unit's menu set (the template is not required for the restore operation). The Status column provides feedback during the actual restore operation.

The view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order (by address).

To start the restore operation, click the **Restore Savesets** button. A confirmation dialog appears. Within the dialog, the option, **Allow restore for different command set version**, is presented. If this option is not selected, the ID and CmdSet in the backup file must match the ID and CmdSet of the unit being restored to. If this option is selected, this requirement is relaxed, and the CmdSet is ignored.

Verify that the restore operation will be made from the correct directory and click **OK** to proceed.

The restore operation commences and a running report of the operation appears in the Status Column.

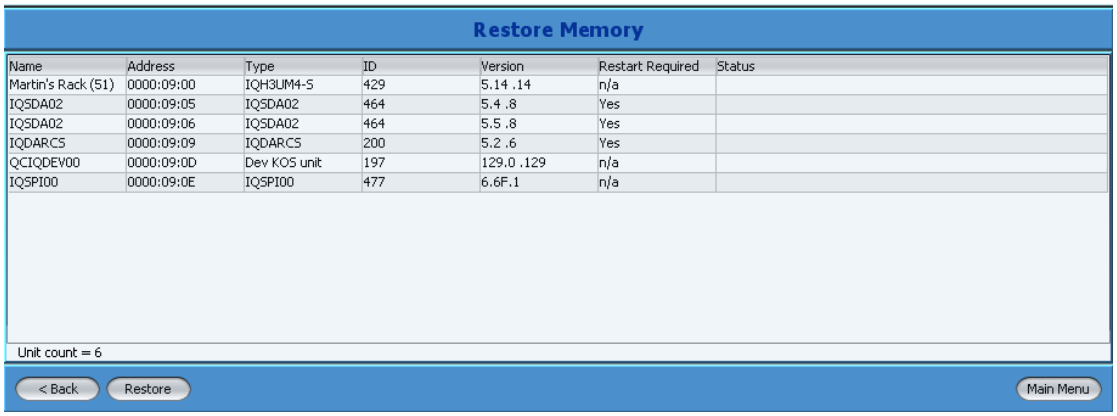
When the operation is complete, a dialog appears providing the option to view the log immediately, or simply proceed. Click **View Log** to view the log, or click **OK** to close the dialog.

Alternatively, if there were any failed restorations, a dialog appears, providing the option to retry the failed operations.

Restore Memory

After selecting the restore method, the network list is replaced with a table containing only the units that have been selected. The Saveset and Memory columns are replaced with two new columns: Restart Required and Status.

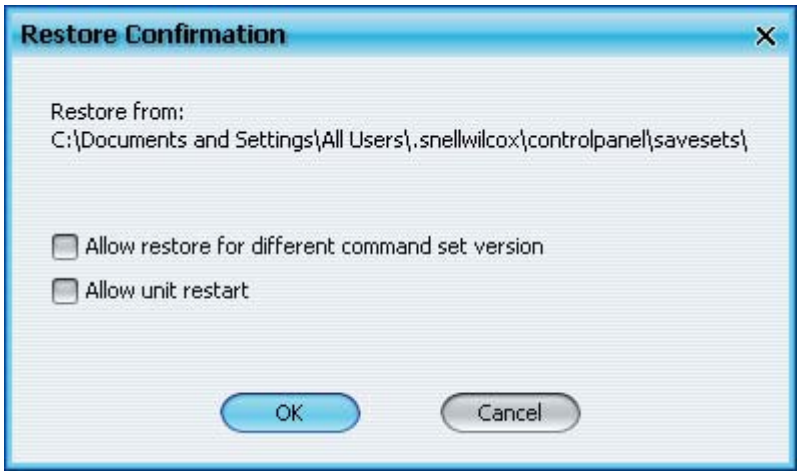
The Restart Required column indicates whether the unit will be restarted during the restore operation. The Status column provides feedback during the actual restore operation.



The view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order (by address).

To start the restore operation, click the **Restore Memory** button. A confirmation dialog appears. Within the dialog, two options are presented:

- **Allow restore for different command set version**. If this option is not selected, the ID and CmdSet in the backup file must match the ID and CmdSet of the unit being restored to. If this option is selected, this requirement is relaxed, and the CmdSet is ignored.
- **Allow unit restart**. If this option is selected, all units that require restart will be automatically restarted. If it is not selected, RollMechanic will not restart any units, and those units requiring a restart to complete the operation will not be restored.



Verify that the restore operation will be made from the correct directory and click **OK** to proceed.

The restore operation commences and a running report of the operation appears in the Status column.

When the operation is complete, a dialog appears providing the option to view the log immediately, or simply proceed. Click **View Log** to view the log, or click **OK** to close the dialog.

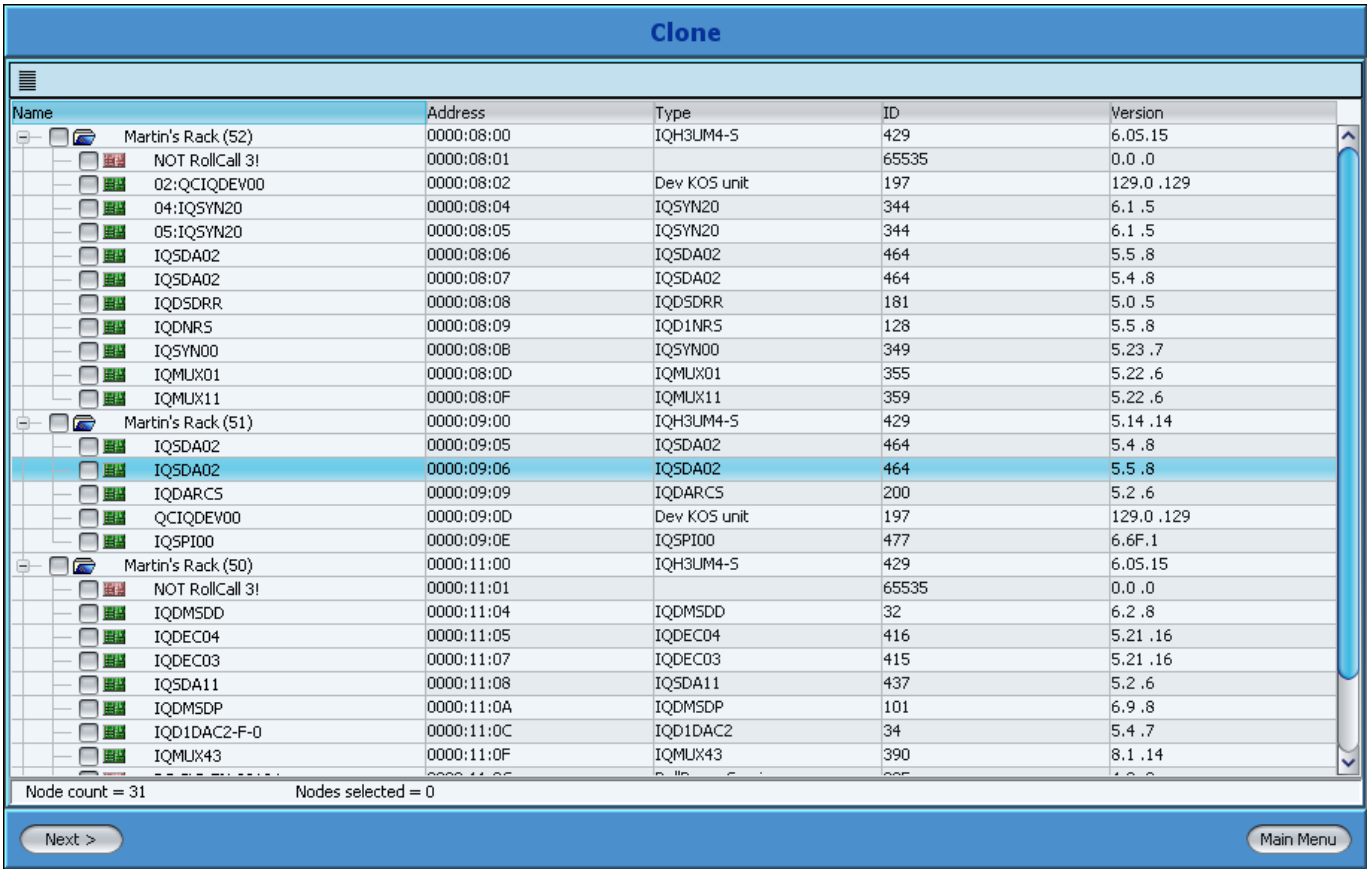
Alternatively, if there were any failed restorations, a dialog appears, providing the option to retry the failed operations.

Clone

The purpose of the clone function is to propagate the settings of one unit on the network to one or more other units. The clone option copies the settings from a specified backup file to all selected units. A clone operation is very similar to a restoration in that it takes the information stored in the backup file and restores the settings to the selected units.

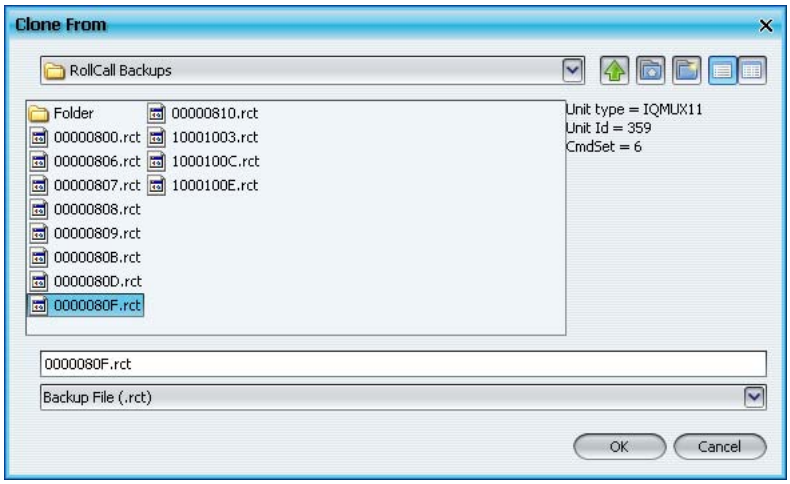
Where the units are of the same type, the clone operation can be performed using either savesets or memory. However, where the units are of different types, the clone operation can only be performed using savesets.

To access the Clone menu, click **Clone** on the main menu, and then select units as required.



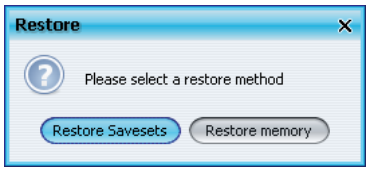
When the **Next** button is clicked:

- If the selected units are of the same type, the Clone From window appears.
- If the selected units are of different types, a warning appears, stating that the units are not of the same type. Click **Yes** to continue, or **No** to cancel the operation. On clicking **Yes**, the Clone From window appears.



The Clone From window contains a list of the backup files in the backup directory. If required, the Clone From window can be used to select a different directory. Click on a backup file to select it. When a file is selected, its details (Unit type, Unit ID, and CmdSet) are shown on the right of the window. When the correct file is selected, click **OK** to proceed.

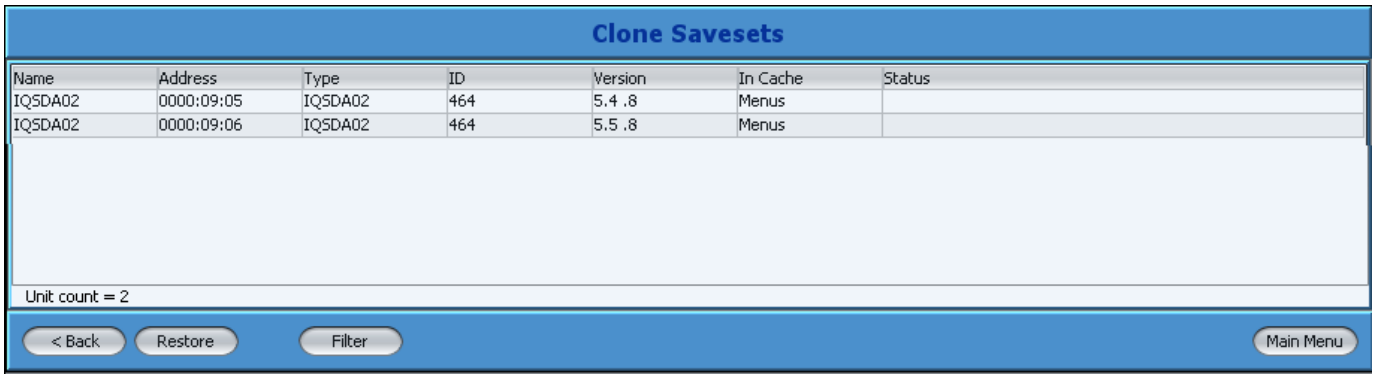
When the button is clicked, a dialog appears providing the option to restore from Savesets or Memory.



Note: *If the units are not of the same type, they cannot be cloned from memory – only savesets can be used.*

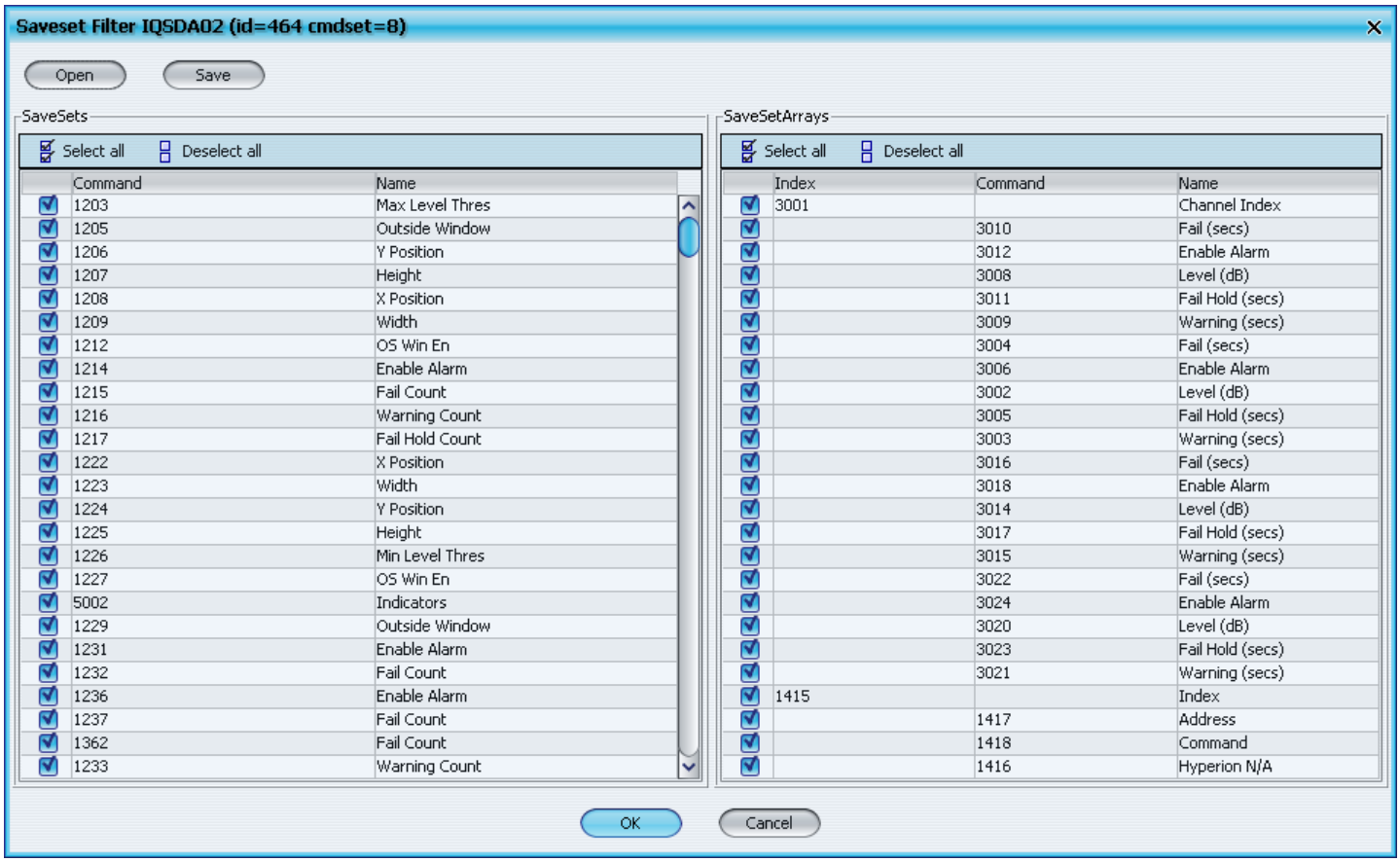
Clone from Savesets

Click **Restore Savesets**. A table showing the selected units is displayed. This table is identical to the one displayed when performing a restore from saveset operation; but, additionally, it provides the option to filter the saveset so that only certain commands are cloned from the backup file.



The view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order (by address).

To filter the saveset, click the **Filter** button. The Saveset Filter window is displayed,



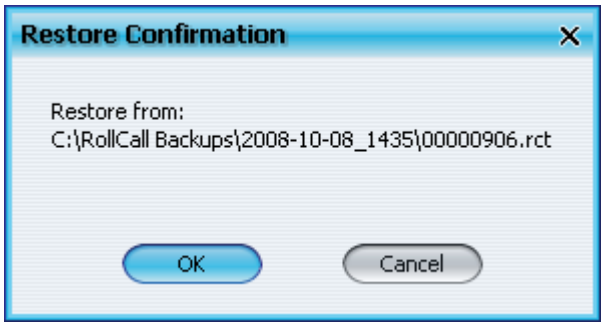
Select the commands that will be restored to the selected units. Select All and Deselect All options are available for convenience.

To save the filter file for future use, click **Save**.

To open an existing filter file, click **Open**.

Click **OK** to proceed.

To start the clone operation, click the **Restore Savesets** button. A confirmation dialog appears. Verify that the restore operation will be made from the correct file and click **OK** to proceed.



The restore operation commences and a running report of the operation appears in the Status Column.

When the operation is complete, a dialog appears providing the option to view the log immediately, or simply proceed. Click **View Log** to view the log, or click **OK** to close the dialog.

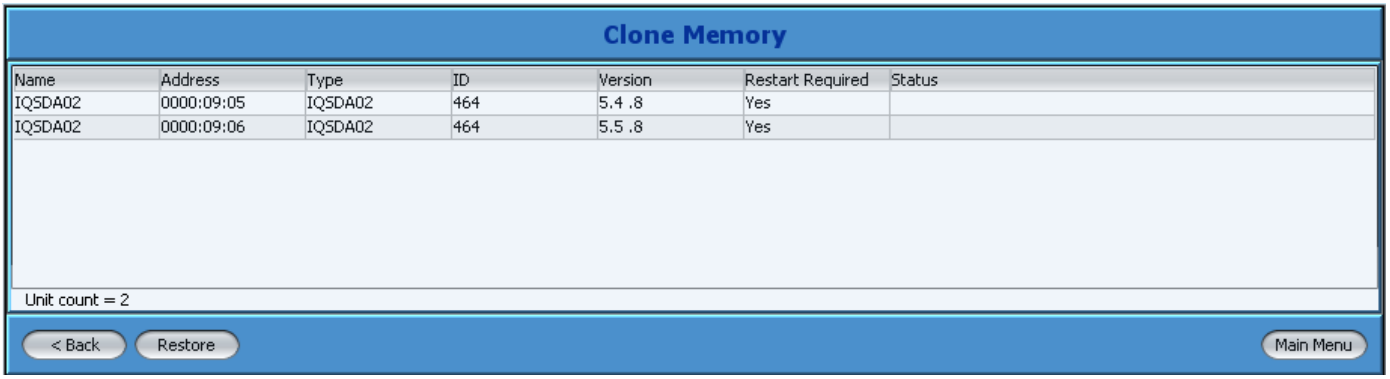
Alternatively, if there were any failed restorations, a dialog appears, providing the option to retry the failed operations.

Note: *When cloning multiple unit types, additional filtering is also applied. This is to prevent inappropriate values being restored to dissimilar controls that coincidentally share the same command number as that in the backup file.*

Clone from Memory

Click **Restore Memory**. A table showing the selected units is displayed. This table is identical to the one displayed when performing a restore from memory operation.

The Restart Required column indicates whether the unit will be restarted during the clone operation. The Status column provides feedback during the actual operation.



The view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order (by address).

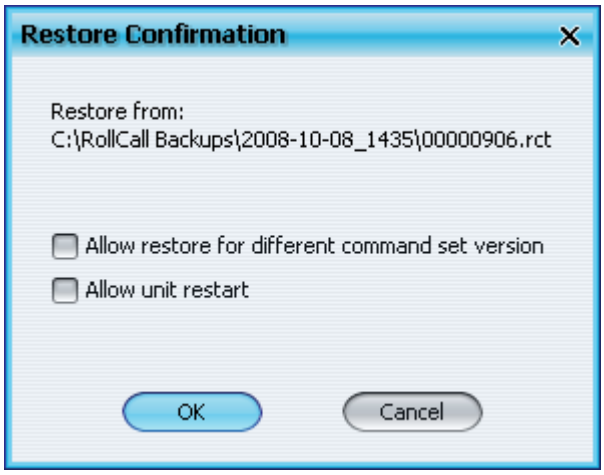
To start the clone operation, click the **Restore Memory** button. A confirmation dialog appears. Within the dialog, two options are presented:

- **Allow restore for different command set version**. If this option is not selected, the ID and CmdSet in the backup file must match the ID

and CmdSet of the unit being restored to. If this option is selected, this requirement is relaxed, and the CmdSet is ignored.

- **Allow unit restart**. If this option is selected, all units that require restart will be automatically restarted. If it is not selected, RollMechanic will not restart any units, and those units requiring a restart to complete the operation will not be restored.

Verify that the restore operation will be made from the correct file and click **OK** to proceed.



The operation commences and a running report appears in the Status column.

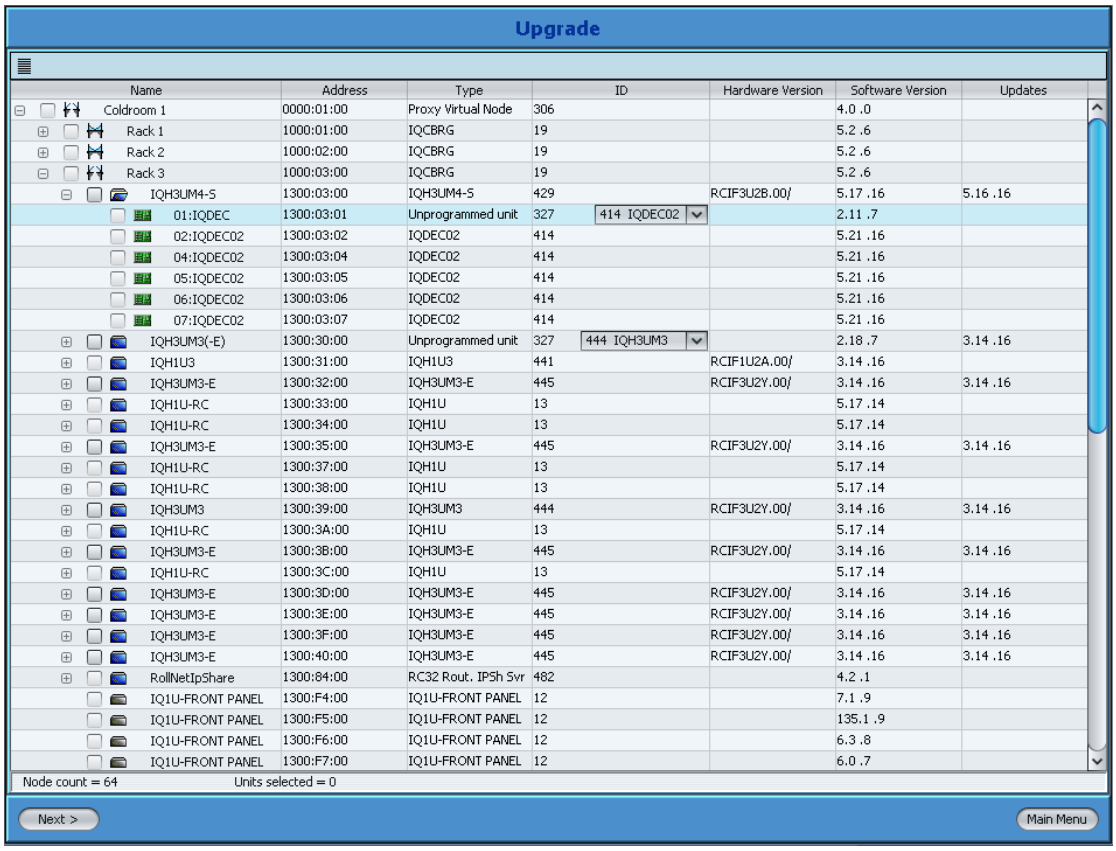
When the operation is complete, a dialog appears providing the option to view the log immediately, or simply proceed. Click **View Log** to view the log, or click **OK** to close the dialog.

Alternatively, if there were any failed restorations, a dialog appears, providing the option to retry the failed operations.

Upgrade

The Upgrade menu function provides access to RollMechanic's upgrade functions.

To access the Upgrade menu, click **Upgrade** on the main menu.



To return to the main menu at any time, click **Main Menu** in the lower-right corner of the window.

The Upgrade Window

When you open the Upgrade menu, the Upgrade window appears. This window is a repeat of the *Network List* (see page 25) with additional columns – Hardware Version, which only applies to some modules, and Updates. The Updates column shows a list of updates available for the modules.

Note: *In the Updates column, the latest upgrade package is selected by default. This can be changed for an individual unit by clicking on its update cell and choosing another upgrade package from the drop down list.*

Changing the Network View

The Toggle List/Tree View button toggles the Upgrade window view between the default tree view and a flat list.

List View

	Name	Address	Type
☐	Martin's Rack (52)	0000:08:00	IQH3UM
☐	NOT RollCall 3!	0000:08:01	
☐	02:QCIQDEV00	0000:08:02	Dev KOS
☐	04:IQSYN20	0000:08:04	IQSYN20
☐	05:IQSYN20	0000:08:05	IQSYN20
☐	IQSDA02	0000:08:06	IQSDA02
☐	IQSDA02	0000:08:07	IQSDA02
☐	IQDSDRR	0000:08:08	IQDSDRR
☐	IQDNRS	0000:08:09	IQD1NRS
☐	IQSYN00	0000:08:0B	IQSYN00
☐	IQMUX01	0000:08:0D	IQMUX01
☐	IQMUX11	0000:08:0F	IQMUX11
☐	Martin's Rack (51)	0000:09:00	IQH3UM
☐	IQSDA02	0000:09:05	IQSDA02
☐	IQSDA02	0000:09:06	IQSDA02
☐	IQDARCS	0000:09:09	IQDARCS
☐	QCIQDEV00	0000:09:0D	Dev KOS
☐	IQSPI00	0000:09:0E	IQSPI00
☐	Martin's Rack (50)	0000:11:00	IQH3UM
☐	NOT RollCall 3!	0000:11:01	
☐	IQDMSDD	0000:11:04	IQDMSDD
☐	IQDEC04	0000:11:05	IQDEC04
☐	IQDEC03	0000:11:07	IQDEC03
☐	IQSDA11	0000:11:08	IQSDA11
☐	IQDMSDP	0000:11:0A	IQDMSDP
☐	IQD1DAC2-F-0	0000:11:0C	IQD1DAC
☐	IQMUX43	0000:11:0F	IQMUX43

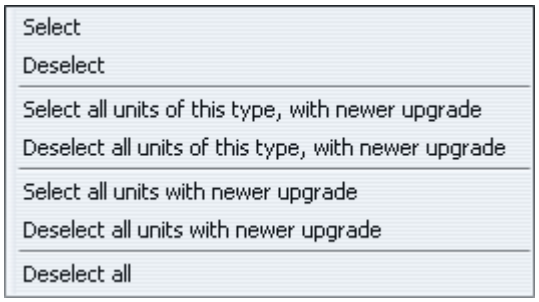
When in list view, the view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order.

Tree View

Name	Address	Type
Martin's Rack (52)	0000:08:00	IQH3UM
NOT RollCall 3!	0000:08:01	
02:QCIQDEV00	0000:08:02	Dev KO
04:IQSYN20	0000:08:04	IQSYN2
05:IQSYN20	0000:08:05	IQSYN2
IQSDA02	0000:08:06	IQSDA0
IQSDA02	0000:08:07	IQSDA0
IQDSDRR	0000:08:08	IQDSDR
IQDNRS	0000:08:09	IQD1NR
IQSYN00	0000:08:0B	IQSYN0
IQMUX01	0000:08:0D	IQMUX0
IQMUX11	0000:08:0F	IQMUX1
Martin's Rack (51)	0000:09:00	IQH3UM
IQSDA02	0000:09:05	IQSDA0
IQSDA02	0000:09:06	IQSDA0
IQDARCS	0000:09:09	IQDARC
QCIQDEV00	0000:09:0D	Dev KO
IQSPI00	0000:09:0E	IQSPI00
Martin's Rack (50)	0000:11:00	IQH3UM
NOT RollCall 3!	0000:11:01	
IQDMSDD	0000:11:04	IQDMSD
IQDEC04	0000:11:05	IQDEC0
IQDEC03	0000:11:07	IQDEC0
IQSDA11	0000:11:08	IQSDA1
IQDMSDP	0000:11:0A	IQDMSD
IQD1DAC2-F-0	0000:11:0C	IQD1DA
IQMUX43	0000:11:0F	IQMUX4

Selecting Nodes

Nodes can either be selected individually, or by means of a contextual menu, which is opened by right clicking on a node.



Note: *For units that cannot be upgraded, a shorter menu appears. Nodes without upgrade packages are not selectable. An additional option,* ***Import Upgrade from unit****, is available for some nodes – see* Import Upgrade from Unit *on page 61.*

The options in the contextual menu are:

- **Select:** Selects a single node.
- **Deselect:** Deselects a single mode.

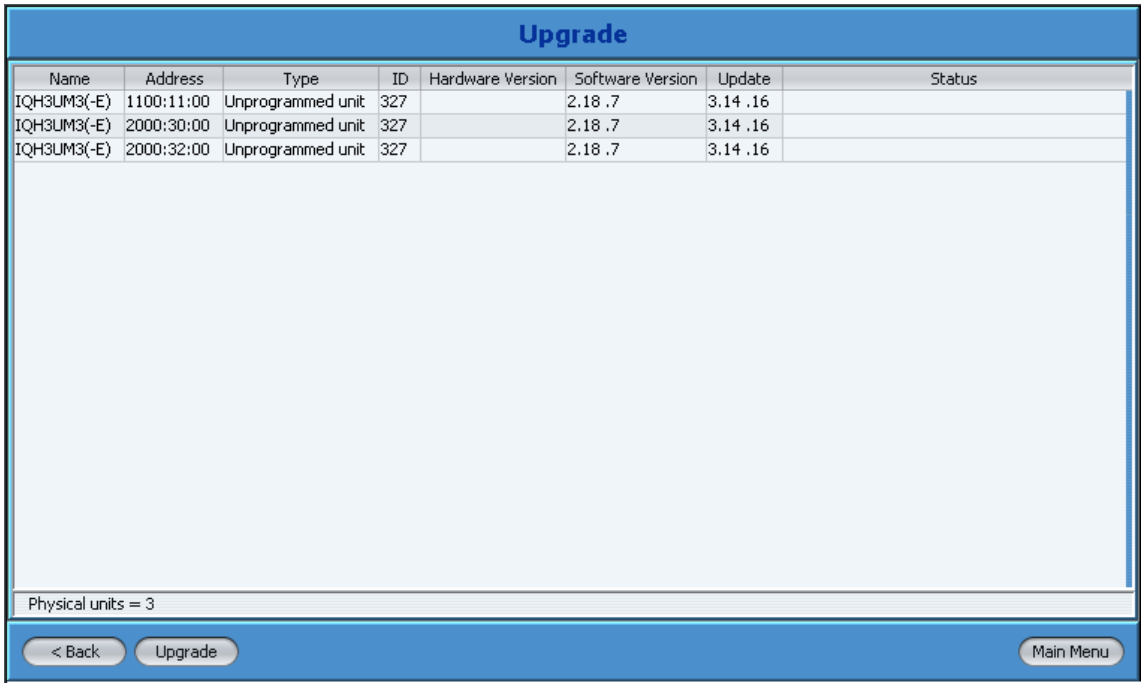
- **Select all units of this type, with newer upgrade:** Selects all units of a type with a newer upgrade available. For example, right clicking on an IQSDA02 and choosing this option selects all IQSDA02 modules on the network with a newer upgrade.
- **Deselect all units of this type, with newer upgrade:** Deselects all units of a type with a newer upgrade. For example, right clicking on an IQSDA02 and choosing this option deselects all IQSDA02 modules on the network with a newer upgrade.
- **Select all units with newer upgrade:** Selects all units with a newer upgrade available.
- **Deselect all units with newer upgrade:** Deselects all units with a newer upgrade available.
- **Deselect all:** Deselects all selected units.

Note: *When a series of nodes is highlighted, only the Select and Deselect options are available.*

Performing an Upgrade

After selecting the nodes to be upgraded, click **Next** at the bottom of the window.

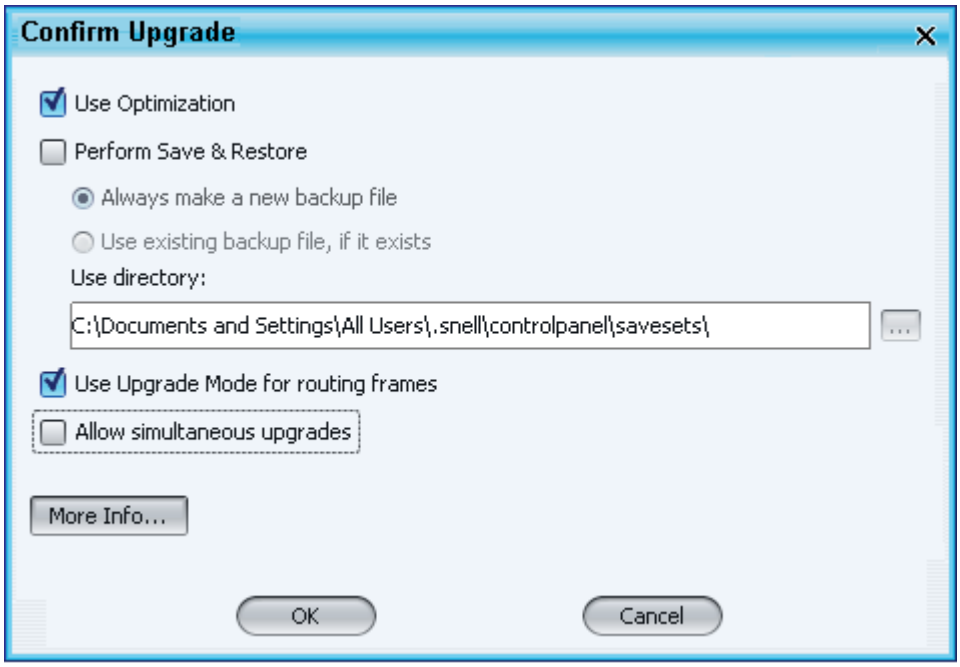
When the **Next** button is clicked, the network list is replaced by a table containing only the units that have been selected. A new column is displayed: Status. The Status column provides feedback during the upgrade operation.



The view can be sorted by column. Click on a column header to sort the list by that column; click once more to reverse the sort order; click a third time to return to the default list sort order (by address).

To start the upgrade operation, click the **Upgrade** button. The Confirm Upgrade dialog appears.

Confirm Upgrade



Use Optimization
When selected, each file in the upgrade package is examined to see if it is already on the unit and whether it has changed; only new and changed files will be copied during the upgrade. This can reduce the amount of time taken to do the upgrade. When deselected, all files in an upgrade package will be copied to the unit.

Perform Save & Restore
When selected, this option restores a unit's current settings from a backup file, during the upgrade. The way the settings are restored depend on which of the following two options is selected:

- **Always make a new backup file** – this either saves the current settings to a new backup file in the specified directory or replaces the existing backup file.
- **Use existing backup file, if it exists** – if there is a backup file with the unit's address in the specified directory, a new backup is not made. Instead, the existing backup file is used. This option reduces time.
- **Use directory** – this shows the location of the backup file. To change the backup directory, click ... . The Select Backup Directory dialog appears. Select the required drive and directory and click **OK**.

Each unit (or module) stores its current settings in a single file in its memory. When a unit is restarted, this file is used to restore the unit to its last known state. During an upgrade, this file is preserved. Whether the file is still valid, depends upon whether the 'command set' has changed. The command set is the last part of the software version:

In general, if any units in the upgrade selection are going to change their command set version, then it is advisable to turn on automatic save and restore.

Use Upgrade Mode for routing frames
A 'routing frame' is a frame that provides part of a physical connection to a target frame or module. All newer frames have 'upgrade mode' control. When this option is selected, some of a frame's activities (thumbnailing, logging and rolltracks) are shut down. This reduces the amount of traffic and processing overhead on the frame, avoiding network errors.

Allow simultaneous upgrades
When selected, this allows more than one unit to be upgraded at a time. When clear, the upgrade process updates the first unit, waits until it completes then updates the next unit (this can take longer).

Note: *Only four modules can be updated per frame and four upgrades per connection. Without these limits, the upgrade may fail*.

More Info
This displays information about each option on the Confirm Upgrade dialog.

Upgrade Process

After completing the Confirm Upgrade dialog, click **OK** to proceed.

Note: *The dialog settings are saved for next time use. You can cancel an upgrade at any time. See* Cancelling an upgrade *on page 60.*

The upgrade operation commences and a running report of the operation appears in the Status column. The following icon appears at the right of the Status column to indicate the progress of the upgrade for each unit: 

A bar appears at the bottom of the Upgrade window, showing the overall progress of the upgrade. Statistics are compiled at the bottom of the screen – Physical unit count, Units upgraded, Units upgraded with warnings, Units failed, Units cancelled.

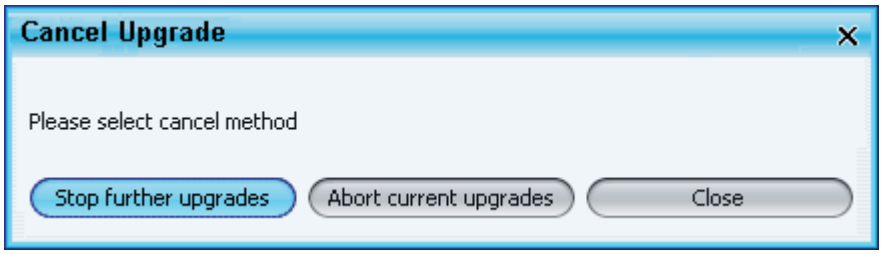
When the operation is complete, a dialog appears providing the option to view the log immediately, or simply proceed. Click **View Log** to view the log or click **OK** to close the dialog.

Alternatively, if there were any failed upgrades, a new dialog appears providing the option to retry the failed operations.

In the Status column, ticks appear next to each unit that was upgraded successfully. Upgrade information is added to the history. See History on 62.

Cancelling an upgrade

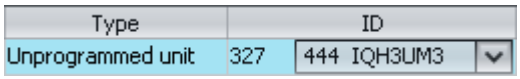
To cancel an upgrade, click **Cancel** at the bottom of the Upgrade window. The Cancel Upgrade dialog appears.



Each of the buttons is described below. The effect of the buttons depends on whether **Allow simultaneous upgrades** was selected in the Confirm Upgrade dialog (see *Allow simultaneous upgrades* on page 59).

	Allow simultaneous upgrades	Allow simultaneous upgrades
Stop further upgrades	This allows the current upgrade to continue until it finishes but prevents any further upgrades.	This allows the current upgrades to continue until they finish but prevents any further upgrades.
Abort current upgrades	This stops the current upgrade immediately and prevents any further upgrades.	This stops all upgrades immediately and prevents any further upgrades.

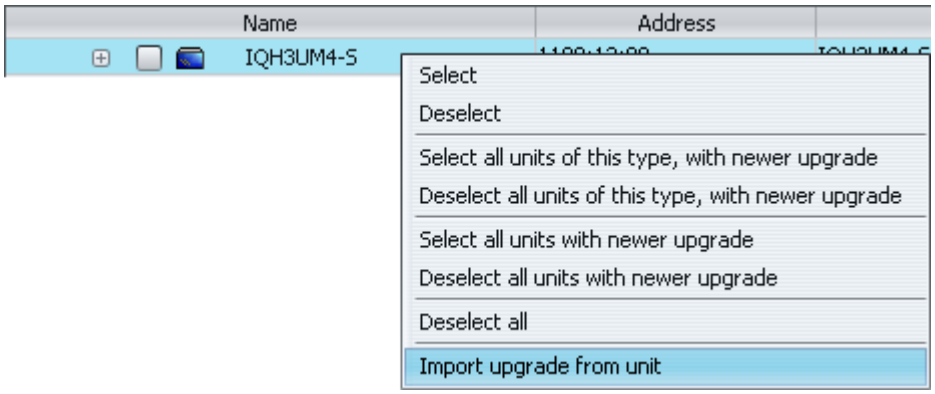
Any units whose upgrade has been aborted will revert to the Unprogrammed Unit type (ID=327).



To upgrade the unit, select the correct option from the ID drop down list and click **Next**. Follow the instructions for *Performing an Upgrade* on page 57.

Import Upgrade from Unit

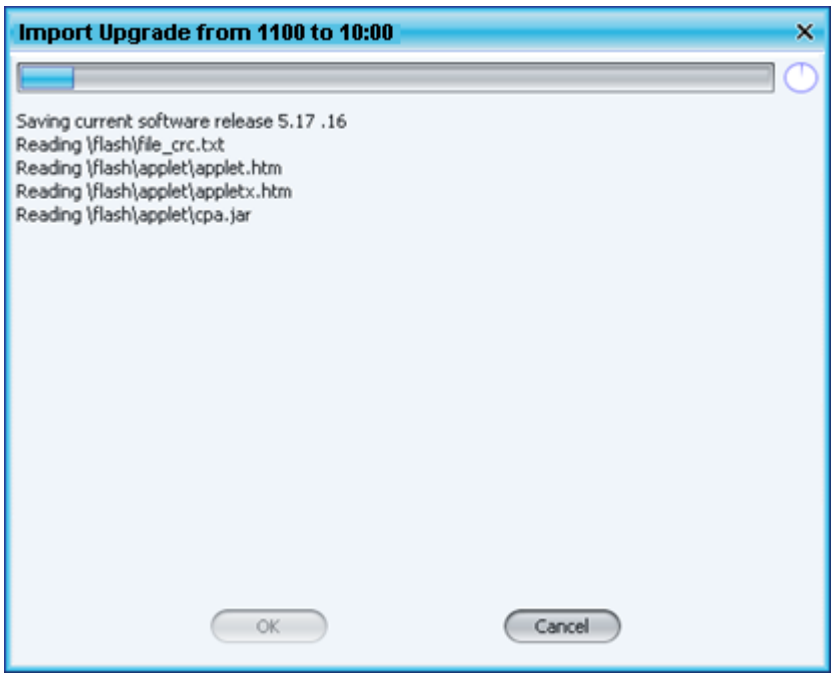
This option is available when you right click some nodes on the Upgrade window.



It creates a software release from the version currently on the unit. Note that this option is only displayed if the unit's version is not already in the list of software releases.

After clicking **Import upgrade from unit** a confirmation message appears. Click **Yes** to continue.

The Import Upgrade dialog is displayed.



A progress bar and icon appear at the top of the dialog box to indicate the progress of the import upgrade.

When the import upgrade process has been completed successfully, a tick appears next to the progress bar.

Click **OK** to complete the process.

History

The History menu provides access to the logs that are recorded when backup, restore and upgrade operations are performed.

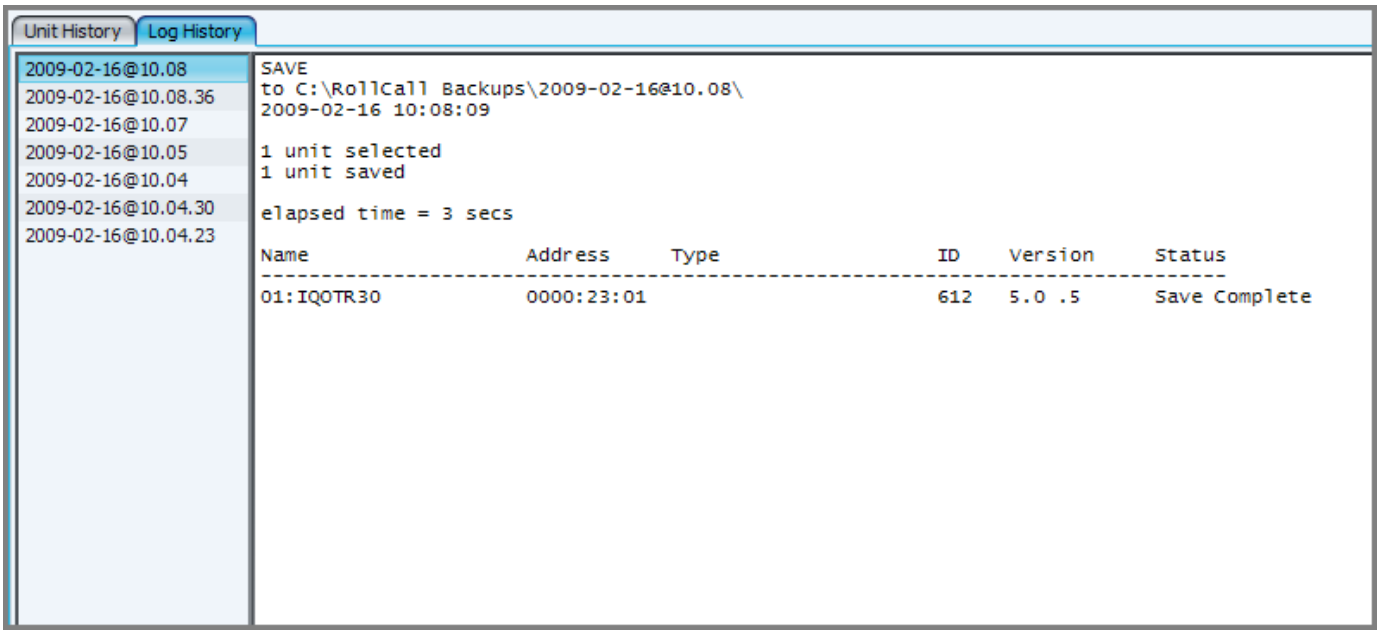
To open the History menu, click the **History** button on the Main Menu.

There are two tabs on the page:

- The Log History tab
- The Unit History tab

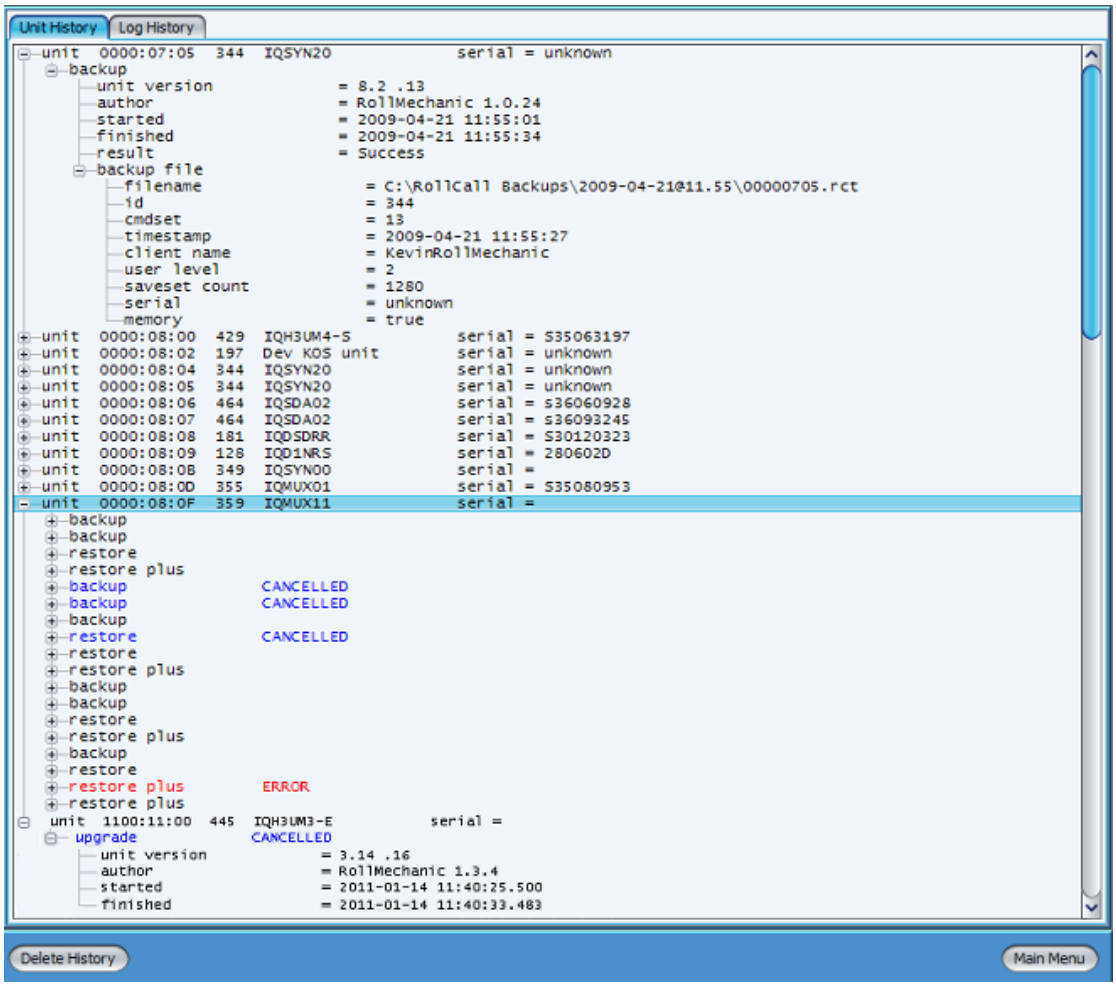
Log History

The Log History tab displays the log information generated by each backup, restore or upgrade operation. To view a log, select it from the list on the left and it is displayed on the right.



Unit History

The Unit History tab displays the save, restore, backup and upgrade history of each unit. Each unit that has either been backed up or restored is show at the top level of the tree structure on the tab. Expanding the tree structure beneath a unit shows increasing detail about the backup, restore and upgrade actions that have been performed on the unit.



The actions that are recorded on the Unit History tab are:

- Upgrade
- Backup
- Restore
- Restore Plus (includes memories)
- Clone
- Clone Plus (includes memories)

If an action was successful, it is shown in black text.

If an action was cancelled, it is shown in blue text.

If an action was unsuccessful, it is shown in red text.

Contact Information

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Manual Revision Record

Date	Version No.	Issue No.	Change	Comments
30/04/08	1	1		Not Released
08/10/08	1	1b	GUI re-design.	Not Released
22/04/09	1	2		First released version
16/11/09	1	3	For software version 1.1	New issue
25/02/10	1	4	Added Redundancy Checking control.	New issue
09/07/10	1	5	Added new licensing features and in situ unit name editing.	New issue
21/01/11	1	6	Added new upgrade features and Software Releases option	New issue