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FastIron Family

Documentation Updates

Supporting IronWare R07.4.00 releases

BROCADE

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Document History

Title	Publication number	Summary of changes	Date
<i>FastIron Family Documentation Updates</i>	53-1002757-01	New document	October 19, 2012
<i>FastIron Family Documentation Updates</i>	53-1002757-02	Added the new "show link-aggregate partner" CLI command	February 22, 2013
<i>FastIron Family Documentation Updates</i>	53-1002757-03	Revised for 07.4.00d release	July 31, 2013

Title	Publication number	Summary of changes	Date
<i>FastIron Family Documentation Updates</i>	53-1002757-04	Revised for 07.4.00e release	December 20, 2013
<i>FastIron Family Documentation Updates</i>	53-1002757-05	Revised for 07.4.00f release	April 30, 2014
<i>FastIron Family Documentation Updates</i>	53-1002757-06	Revised for 07.4.00g release	September 30, 2014
<i>FastIron Family Documentation Updates</i>	53-1002757-07	Revised for 07.4.00h release	February 27, 2015

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About This Document

This document contains updates to the product manuals for the Brocade ICX, FCX, TurboIron 24X, and FastIron SX, FWS, and FESX (IPv6 Models) Switches running the IronWare software release 07.4.00 stream. These updates became available after the 07.4.00a documents were released.

Brocade resources

To get the latest version of all the document, go to <http://www.brocade.com/ethernetproducts>.

Getting technical help

To contact Technical Support, go to <http://www.brocade.com/services-support/index.page> for the latest e-mail and telephone contact information.

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Brocade FastIron ICX 6610 Stackable Switch Hardware Installation Guide Updates

The information in this section is a supplement to the *Brocade FastIron ICX 6610 Stackable Switch Hardware Installation Guide*.

Package contents shipped with an ICX 6610 switch

The package contents shipped with an ICX 6610 switch includes two 1M Passive copper QSFP stacking cables.

Installing the device in a rack or cabinet



CAUTION

Make sure the rack or cabinet housing the device is adequately secured to prevent it from becoming unstable or falling over.

NOTE

You need a #2 Phillips screwdriver for installation.

Before mounting the switch in a rack, pay particular attention to the following factors:

- **Temperature:** Since the temperature within a rack assembly may be higher than the ambient room temperature, check that the rack-environment temperature is within the specified operating temperature range.
- **Mechanical loading:** Do not place any equipment on top of a rack-mounted unit.
- **Circuit overloading:** Be sure that the supply circuit to the rack assembly is not overloaded.
- **Grounding:** Rack-mounted equipment should be properly grounded. Particular attention should be given to supply connections other than direct connections to the mains.

2-Post rack mount installation

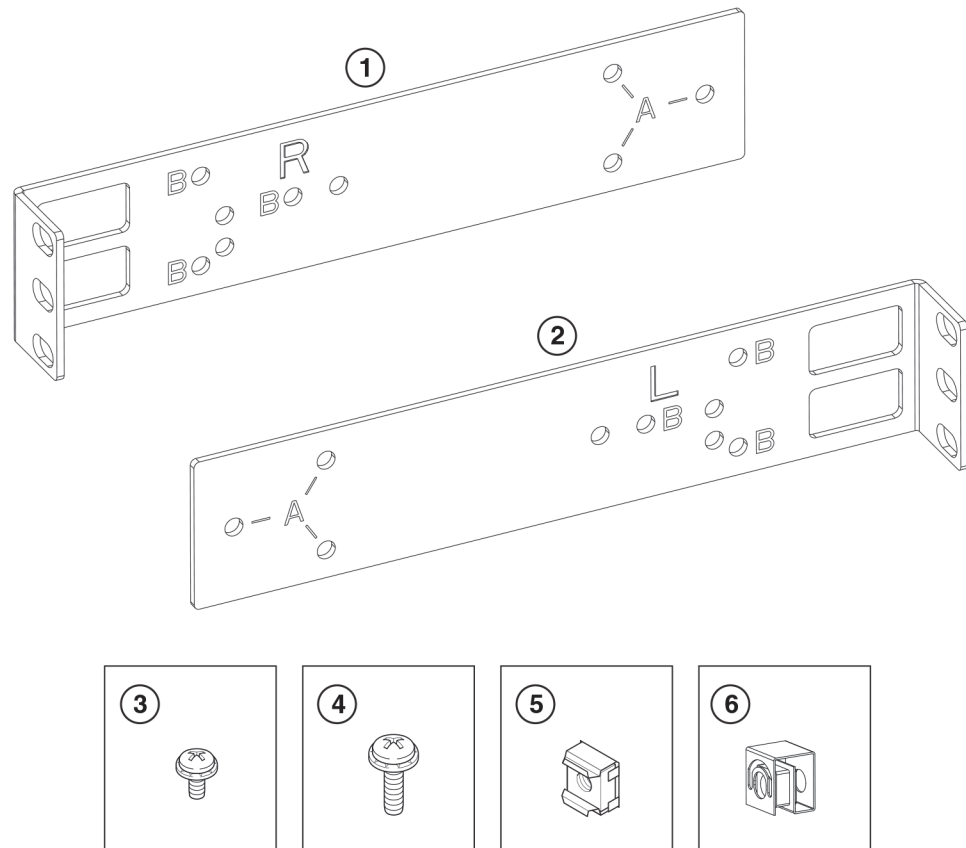
NOTE

Use the following procedure when installing the Brocade ICX 6610 device in a 2-post rack. For 4-post racks, follow the procedures in the section “[4-Post rack mount installation](#)” on page 6.

Remove the rack mount kit from the shipping carton. The kit contains the following:

- Two L-shaped mounting brackets.
- Sixteen 8-32 x 3/8 in., panhead Phillips screws with patchlocks.
- Four 10-32 x 5/8 in., panhead Phillips screws (torque to 25 in-lb, 29 cm-kg)
- Eight 32-10 retainer nuts (for square-hole rack rails)
- Eight 32-10 retainer nuts (for round-hole rack rails)

FIGURE 1 2-post rack mount kit for Brocade ICX 6610



- | | | | |
|---|---|---|--|
| 1 | Bracket, front right | 2 | Bracket, front left |
| 3 | Screw, 8-32 x 3/8 in., panhead Phillips | 4 | Screw, 10-32 x 5/8 in., panhead Phillips |
| 5 | Retainer nut, 10-32, (for square-hole rack rails) | 6 | Retainer nut, 10-32, (for round-hole rack rails) |

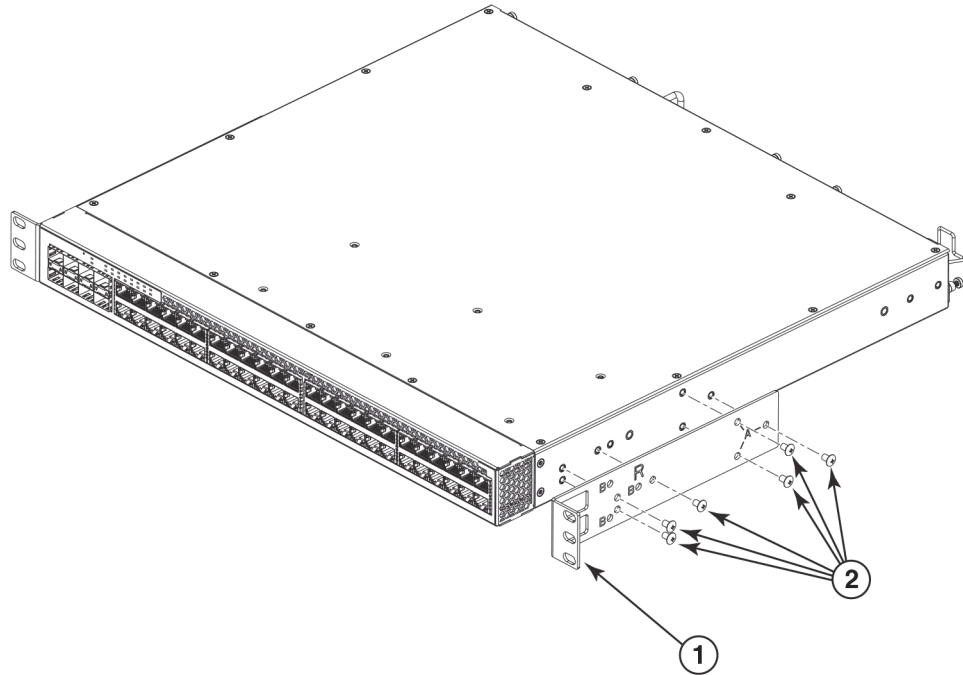
Installing the device in a rack or cabinet

Use the following steps to mount devices in a 2-post rack.

1. Attach the mounting brackets to the sides of the device using the 8-32 x 3/8 in. screws.

There are two sets of holes, labeled "A" or "B". Use the holes labeled "A" if you want the device to be flushed with the rack rails ([Figure 2](#)).

FIGURE 2 Attaching the brackets on an Brocade ICX 6610, flush rail mounting



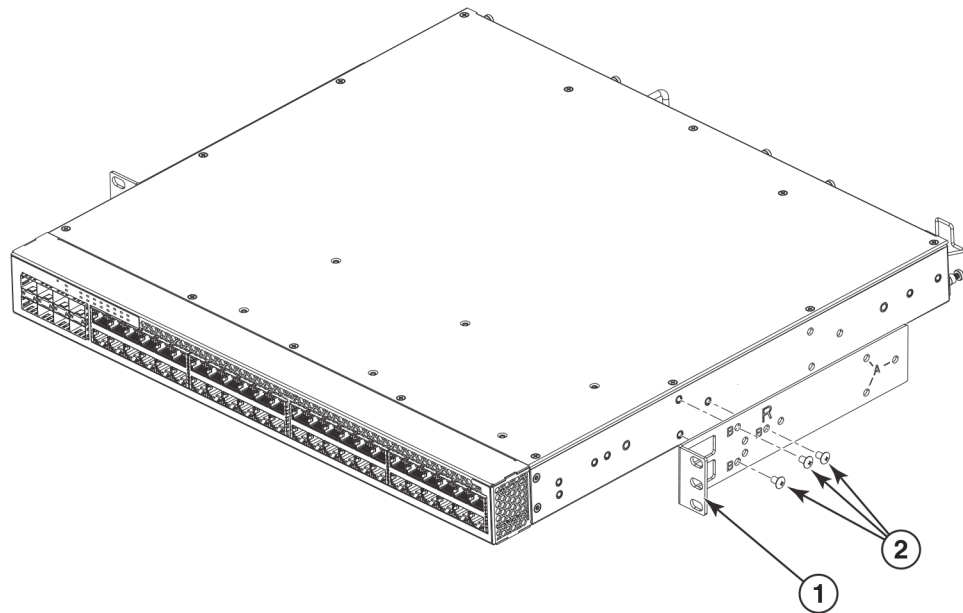
1 Bracket

2 8-32 x 3/8 in. screws

Installing the device in a rack or cabinet

Use the holes labeled “B” if you want the device to protrude 4-1/2 inches from the front of the rail rack (Figure 3).

FIGURE 3 Attaching the brackets on a Brocade ICX 6610 devices, mid rail mounting



1 Bracket

2 8 - 32 x 3/8 in. screws

2. Position the switch in the cabinet, providing temporary support under the switch until the rail kit is secured to the cabinet.
3. Attach the front right bracket to the rail rack using two 10-32 x 5/8 in. screws and the appropriate round or square retainer nuts (Figure 4 or Figure 5).

FIGURE 4 Installing the device, flush rail mounting

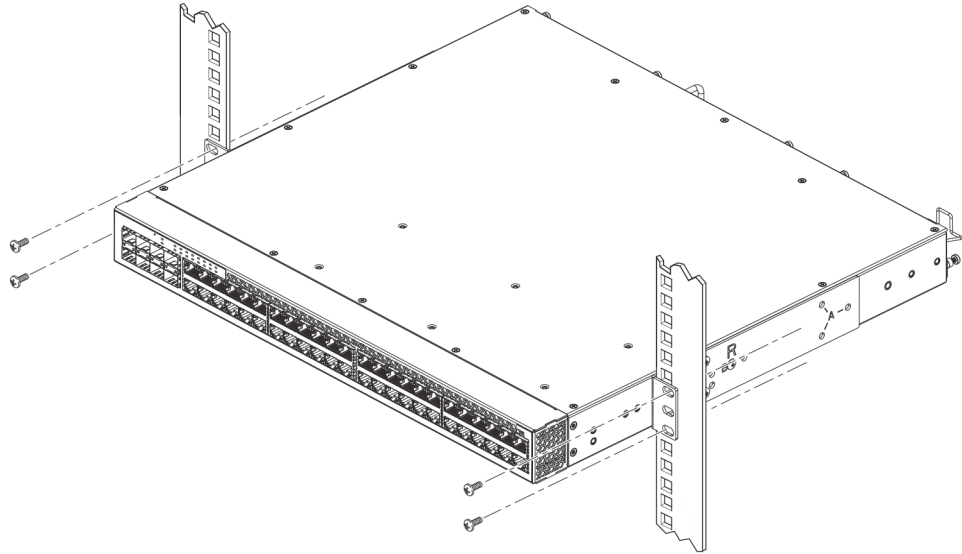
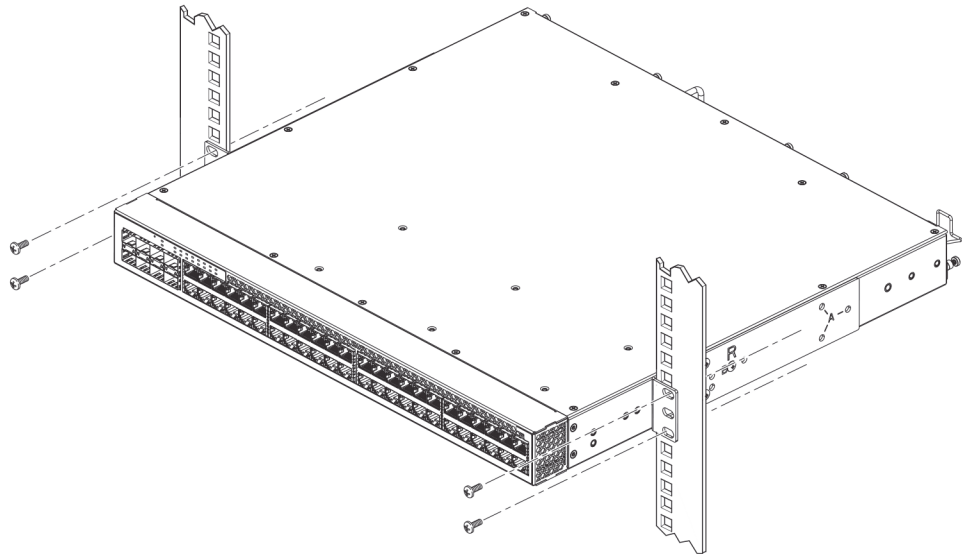


FIGURE 5 Installing the device, mid rail mounting



4. Repeat [step 1](#) to [step 3](#) to attach the left front bracket to the left front rack rail and tighten all 10-32 x 5/8 in. screws to a torque of 25 in-lb (29 cm-kg). See [Figure 4](#) or [Figure 5](#).
5. Proceed to the section “Attaching a PC or terminal” of the *Brocade ICX 6610 Stackable Switch Hardware Installation Guide*.

4-Post rack mount installation

Kits for 4-post rack mounting are not included in the shipping carton and must be ordered separately.

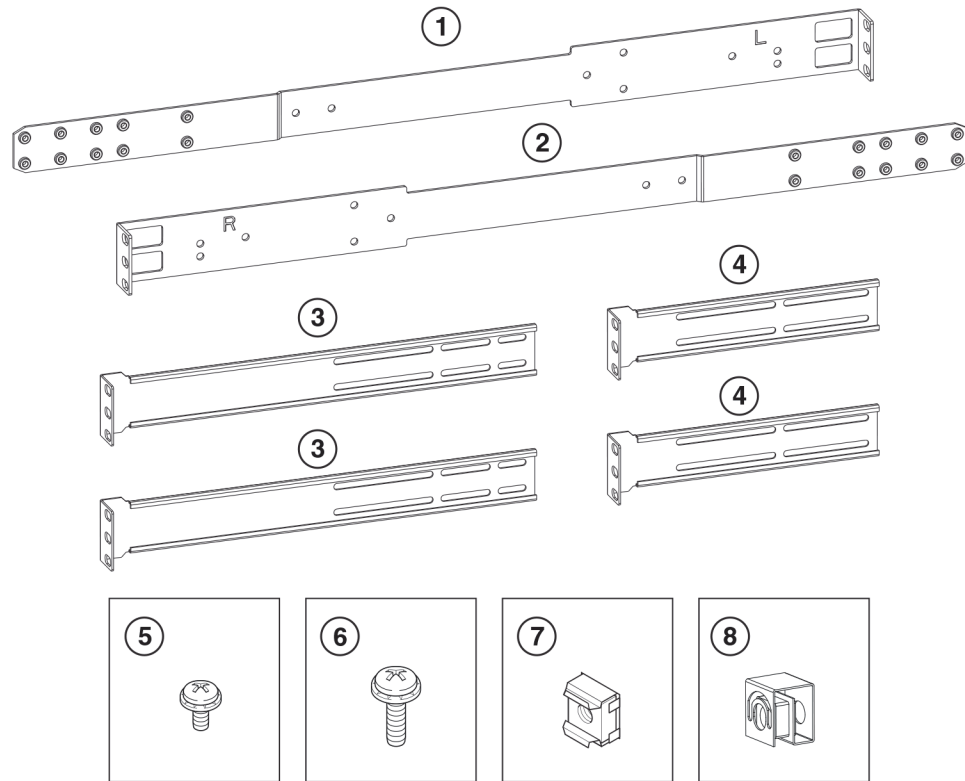
NOTE

Use the following procedure when installing the Brocade ICX 6610 device in a 4-post rack cabinet. For 2-post cabinets, follow the procedures in the section [“2-Post rack mount installation”](#).

Remove the rack mount kit from the shipping carton. The kit contains the following (Figure 6):

- Two mounting brackets.
- Two pairs of extension brackets. Use the shorter pair for rack that are up to 27 inches deep. Use the longer pair for racks up to 32 inches deep.
- Thirty-two 8-32 x 3/8 in., panhead Phillips screws with patchlocks.
- Eight 10-32 x 5/8 in., panhead Phillips screws (torque to 25 in-lb, 29 cm-kg).
- Eight 32-10 retainer nuts (for square-hole rack rails).
- Eight 32-10 retainer nuts (for round-hole rack rails)

FIGURE 6 4-post rail kit



- | | | | |
|---|---|---|--|
| 1 | Bracket, front right | 2 | Bracket, front left |
| 3 | Bracket extensions up to 34 in. | 4 | Bracket extensions, up to 27 in. |
| 5 | Screw, 8-32 x 3/8 in., panhead Phillips | 6 | Screw, 10-32 x 5/8 in., panhead Phillips |
| 7 | Retainer nut, 10-32, (for square-hole rack rails) | 8 | Retainer nut, 10-32, (for round-hole rack rails) |

Use the steps below to mount devices in a 4-post rack.



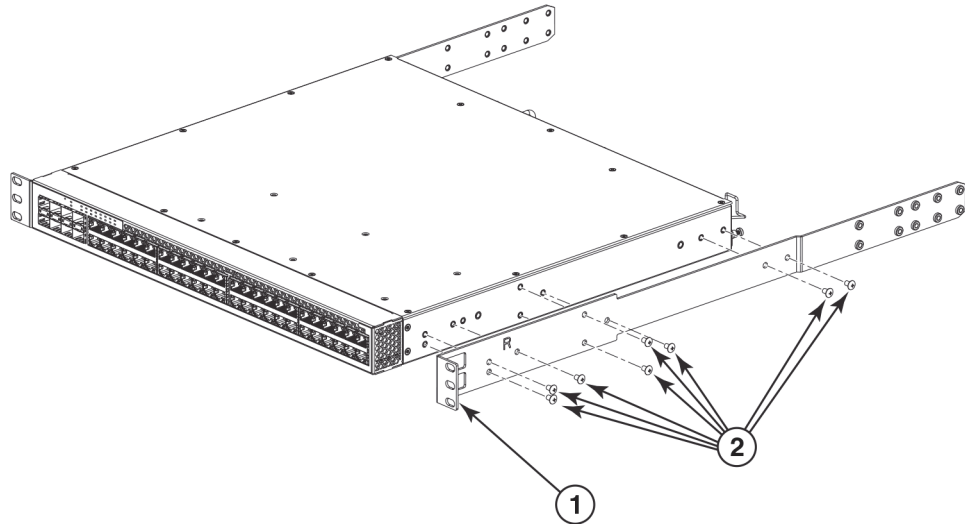
CAUTION

Do not use the hardware supplied in a 2-post rack mounting kit to mount a Brocade ICX 6610 device in a 4-post rack. Mounting the device in a 4-post rack requires additional hardware to prevent drooping from possible flexing and distortion of the 4-post rack when a device is not properly installed.

Installing the device in a rack or cabinet

1. Attach the mounting brackets to the sides of the device as illustrated in [Figure 7](#), using the 8-32 x 3/8 in. screws.

FIGURE 7 Attaching 4-post brackets

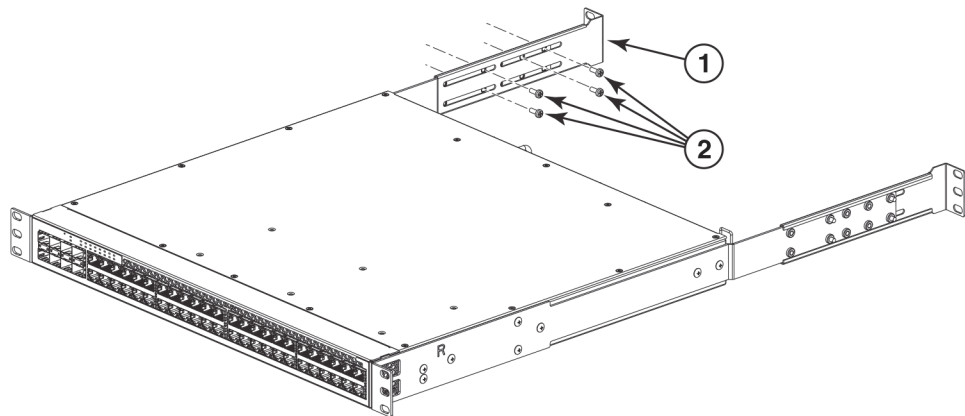


1 Bracket

2 8 - 32 x 3/8 in. screws

2. Attach the appropriate extensions as required for the type of rack in which you are installing the device ([Figure 8](#)).

FIGURE 8 Attaching bracket extensions

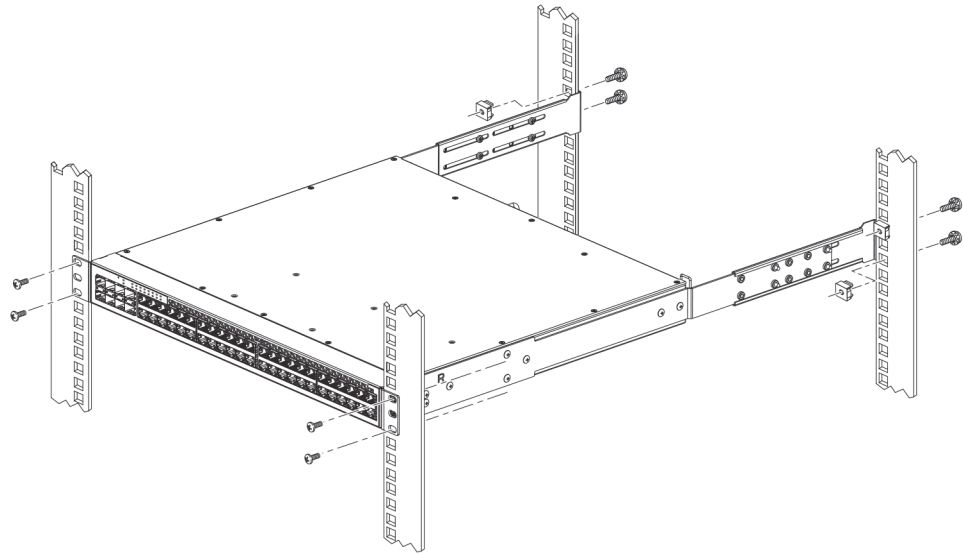


1 Bracket

2 8 - 32 x 3/8 in. screws

3. Position the switch in the cabinet, providing temporary support under the switch until the rail kit is secured to the cabinet.
4. Attach the brackets to the front and back rails, using the 10-32 x 5/8 in. screws and the appropriate round or square retainer nuts ([Figure 9](#)).

FIGURE 9 Attaching device to a 4-post rack



Proceed to the section “Attaching a PC or terminal” of the *Brocade ICX 6610 Stackable Switch Hardware Installation Guide*.

Installing the device in a rack or cabinet

Brocade ICX 6430 and ICX 6450 Stackable Switches Hardware Installation Guide Updates

The information in this section is a supplement to the *Brocade ICX 6430 and ICX 6450 Stackable Switches Hardware Installation Guide*.

VCT is not supported on Brocade ICX 6430 and ICX 6450 stackable switches

Brocade ICX 6430 and ICX 6450 Stackable Switches Hardware Installation Guide says that Virtual Cable Test (VCT) technology is supported on the Brocade ICX 6430 and ICX 6450 stackable switches. This is incorrect VCT is not supported on Brocade ICX 6430 and ICX 6450 stackable switches.

VCT is not supported on Brocade ICX 6430 and ICX 6450 stackable switches

FastIron Configuration Guide Updates

The information in this section are updates to the 07.4.00a version of the *FastIron Configuration Guide*.

Configuring stack guard

A stack unit can be configured to disable the stacking control traffic on non-stacking ports.

The stacking control traffic boundary can be defined by configuring the **stack guard** command. The **stack guard** command, if configured allows the stacking control traffic only through the ports configured as stacking ports.

NOTE

A port which is part of stack connection is also considered as stacking port.

The following scenario explains stacking control traffic on a stack where the stack guard command is configured:

In a two unit stack consisting of Unit 1 and Unit 2, the prospective stacking ports are as follows:

- Unit 1: 1/2/1 and 1/2/3
- Unit 2: 2/2/1 and 2/2/3

Assume that the connecting ports between Unit 1 and Unit 2 are 1/2/3 and 2/2/1. In such a scenario, ports 1/2/1 and 2/2/3 are free to be used as data ports. If stack guard is enabled and ports 1/2/3, 2/2/1, and 2/2/3 are configured as stacking ports using the stack-port command, the stacking packet will not be sent or received on port 1/2/1.

stack guard

Disables stacking control traffic on non-stacking ports and allows the traffic only through the ports configured as stacking ports.

Syntax	stack guard no stack guard				
Command Default	The stacking control traffic is allowed on stacking and non-stacking ports.				
Command Modes	Global configuration mode				
Usage Guidelines	The no form of the command removes the stack guard configuration and allows the stacking control traffic on both stacking and non-stacking ports.				
Examples	The following example configures stack guard functionality. <pre>Brocade(config)# stack guard</pre>				
History	<table> <thead> <tr> <th>Release</th> <th>Command History</th> </tr> </thead> <tbody> <tr> <td>07.4.00h</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Command History	07.4.00h	This command was introduced.
Release	Command History				
07.4.00h	This command was introduced.				

Enabling BPDU protection by port

Before enabling STP BPDU guard on individual interfaces, spanning tree must be enabled on the corresponding VLAN.

Configuration notes for port mirroring and monitoring

Port mirroring on SX chassis between third generation and first generation modules is not supported. If the first generation module has the mirror port and the third generation module is being monitored, the mirrored packets will contain CRC errors.

LLDP configuration notes and considerations

By default, the Brocade device forwards LLDP packets even though LLDP is not configured on the device. This ensures consistency with other protocols and allows transparent forwarding, though it amounts to noncompliance with IEEE Standards.

Event (RMON group 9)

There are two elements to the Event Group—the event control table and the event log table .

The event control table defines the action to be taken when an alarm is reported. Defined events can be found by entering the CLI command, show event. The Event Log Table collects and stores reported events for retrieval by an RMON application.

A sample entry and syntax of the event control table is shown below.

```
device(config)# rmon event 1 description 'testing a longer string'
trap public owner nyc02
```

Syntax rmon event *event-entry* *description text-string* {log | trap | log-and-trap} owner
rmon-station

NOTE

FastIron devices currently support only the trap option.

Trunk group load sharing

The following note is removed from the *Trunk group load sharing* section:

NOTE

Layer 2 and Layer 3 AppleTalk traffic is not load-balanced. Layer 3 routed IP or IPX traffic also is not load balanced. These traffic types will however still be forwarded on the trunk ports.

Trunk group rules

The *Trunk group rules* section is updated with the following content:

- The sFlow configuration enabled on the primary port of a trunk group is applicable to all the ports of the trunk group. Disabling the sFlow on the primary port of a trunk group removes the configuration from all the ports of the trunk group.
- Combination of copper and fibre ports, even if they are of the same speed, cannot be members the same trunk group.

Configuring a multi-port static MAC address

If the system has only default VLAN, the command to add a static entry for a server has to be issued from the global configuration mode.

If the system has multiple VLANs, the command has to be issued from the VLAN configuration mode.

```
device(config-vlan-30)#static-mac-address 0000.0063.67ff ethernet 1/1/1
```

Configuring and enabling sFlow

The following note is removed from the *Configuring and enabling sFlow* section:

NOTE

If you change the router ID or other IP address value that sFlow uses for its agent_address, you need to disable and then re-enable sFlow to cause the feature to use the new source address.

Changing the login timeout period for Telnet sessions

The default login timeout period value of a Telnet session is 1 minute.

Configuring the route map

The description of the deny parameter is updated as follows:

Syntax **[no] route-map** *map-name* { **permit** | **deny** } *num*

If you specify **deny** routemap instance, it is ignored and not programmed in Layer 4 CAM.

Scroll control

The following content is updated in the “Scroll control” section:

By default, the CLI uses a page mode to paginate displays that are longer than 24 lines to 24-line page increments. For example, if you display a list of all the commands at the global CONFIG level, the page mode stops the display at each 24-line increment and lists your choices for continuing the display. An example is given below.

```
aaa
all-client
appletalk
arp
boot
some lines omitted for brevity...
ipx
lock-address
logging
mac
--More--, next page: Space, next line:
Return key, quit: Control-c
```

The software provides the following scrolling options:

- Press the **Space bar** to display the next page (one screen at a time).
- Press the **Return** or **Enter** key to display the next line (one line at a time).
- Press **Ctrl-C** or **Q** to cancel the display.

To toggle page display mode, enter the **skip** and **page** commands from the Privileged EXEC level of the CLI as given below:


```
Brocade#skip
Disable page display mode
Brocade#page
Enable page display mode
```

Adding multiple ACLs to a route map

You can apply multiple ACLs to a route map by entering commands such as the following:

```
device(config)#route-map test-route
device(config-routemap test-route)match ip address 50 51 52 53 54
```

Configuring exec authorization

When TACACS+ exec authorization is performed, the Brocade device consults a TACACS+ server to determine the privilege level of the authenticated user. To configure TACACS+ exec authorization on the Brocade device, enter the following command:

```
Brocade(config)#aaa authorization exec default tacacs+
```

Syntax **aaa authorization exec default tacacs+[none]**

Configuring an IP helper unicast

By default, IP helper does not forward client broadcast request to a server within the network. To forward a client broadcast request when the client and server are on the same network, configure an IP helper with unicast option on the interface connected to the client.

To configure an IP helper unicast option on interface 2 on chassis module 1, enter the following commands:

```
device(config)# interface 1/2
device(config-if-1/2)ip helper-address 1 10.10.10.1 unicast
```

The IP helper with unicast parameter forwards the client request to the server 10.10.10.1 which is within the network.

Syntax: **ip helper-address num ip-addr (unicast)**

The `num` parameter specifies the helper address number and can be from 1 through 16.

The `ip-addr` command specifies the server IP address or the subnet directed broadcast address of the IP subnet the server is in.

The `unicast` parameter specifies that the client request must be forwarded to the server which is on the same network.

High CPU on SXL

The following content is added in the “Flow-based learning configuration considerations” and “MAC clear commands” sections:

On SXL with authentication protocols and high traffic, the clear mac and mac flush operations log a lot of new address messages resulting in high CPU utilization for few minutes.

Port speed and duplex mode modification

The following note is added in the “Port speed and duplex mode modification” section.

NOTE

When you use fix speed and duplex configuration, the non-auto MDI-MDIX configuration should be used.

PHY calibration in stack ports of ICX 6610

On every boot initialization, an ICX 6610 device performs PHY calibration on the 40G and 4*10G stack ports. Sometimes, this calibration is incorrect, and results in CRC errors and link drops on a port. FastIron IronWare detects the calibration errors and, by default, recovers the port by recalibrating it. You can use the **no snmp-server enable traps nlp-phy-40g** command to disable this recovery of incorrectly calibrated stack ports. To re-enable the default behavior of recalibrating the incorrectly calibrated stack ports for recovery, use the **snmp-server enable traps nlp-phy-40g** command.

Syslog messages for PHY calibration

On boot initialization, an ICX 6610 device in a stack performs PHY calibration on its 40G and 4*10G stack ports, and generates a syslog message. The following syslog message example shows the calibration of all 16 ports(4 PHY with 4 lanes for each) on an ICX 6610 stack unit.

```
SYSLOG: <14>0d00h02m52s : ICX6610-48 Router System: Port init success
Stack unit 3 Port 3/2/1 Lane 0 T 0 R 0 Type 0: 1630x00000x0000
1640x00000x0000 1710x00000x0000 1580x00000x0000 1630x00000x0000
1630x00000x0000 1640x00000x0000 1630x00000x0000 1670x00000x0000
1680x00000x0000 1690x00000x0000 1680x00000x0000 1650x00000x0000
1680x00000x0000 1660x00000x0000 1640x00000x0000
```

If any stack port in an ICX 6610 device has the PHY Tx or Rx CMU (voltage) reaching a threshold value of 31 and the port is recalibrated, the stack unit generates a syslog message similar to the following:

```
SYSLOG: <14>0d00h08m49s : ICX6610-48 Router System: Port init success
Stack unit 2 Port 2/2/1 Lane 0 T 22 R 23 Type 0: 10xc0f00x0216 10xc2430x87ea
10xcc080x08dc 10xcc090x08a3 10xcc040x004b 10xcc000x00fb 10xcc010x4880
10xcc0d0x002c 10xefed0x0027 10xef020x8000 10xef030xfa66 10xef040x8000
10xef050xfd03 10xeffc0x0001 10xeff90x0000 10xeff90x0000 10xeff60x0000
10xeff60x0000 10xeffd0x0000 10xefd20xc6ec 10xefd30x8121 10xefeb0x08a3
10xd0800x0ab9 10xd08f0x00fe 10xc0f20x0000 10xcc0a0x0668 10xcc0b0x0b6e
10xcc0c0x08e1 10xd0080x0001 10xd0920x0001 10xc20c0x1880 10xefe10x0000
10xefe20x0000 10xefe30x0000 10xefe40x0000 10xef2c0x00a9 10xefcc0x00a9
10xeffe0x0004 10xeffe0x0004 10xeffe0x0004 10xeff70x0000 10xeff80x0000
10xeff60x0000 10xca140x82f8 10xca440x82f8 30x00200x100d 30x00210x80ff
10xd0920x0001 10xca240x0001 10xca250x00e1 10xca260x0001 10xca270x0100
10xca280x0000 10xca290x1010 10xca2a0x1314 10xca2b0x1010 10xca2c0x8000
10xca2d0x0000 10xd0920x0000
```

Stack port resiliency in ICX 6610 devices

In an ICX 6610 device, sometimes a stacking port cannot send or receive packets though the port is logically operational. To detect this, probe packets are sent between the ICX 6610 units in a stack every two seconds. If a port is logically operational and does not receive a probe packet for 60 seconds, it is considered a malfunctioning port. To resolve this, you can configure the active controller to perform correctional steps such as error-disabling malfunctioning ports and reloading one or more stack units. You can use the **show errdisable summary** command to view a list of all error-disabled ports with the reason for error-disabling these ports.

NOTE

A malfunctioning stack port that is error-disabled cannot be enabled until the unit is reloaded.

NOTE

Traffic interruption happens for a few seconds or longer while the port malfunction is detected and fixed.

Configuring stack port resiliency in ICX 6610

To configure stack port resiliency on an ICX 6610 device in a stack, run the **stack stack-port-resiliency** command in global configuration mode. This enables the active controller to perform correctional steps such as error-disabling malfunctioning ports and reloading one or more stack units, depending on the value configured for the *level* variable in this command.

The following example shows the configuration of stack port resiliency on a stack with the *level* variable value set to 2.

```
Brocade(config)# stack stack-port-resiliency 2
```

Syslog messages for stack port resiliency

For stack port resiliency, syslog messages are generated when the active controller performs correctional steps such as error-disabling malfunctioning ports, reloading one or more stack units, and reloading an entire stack. These syslog messages do not have a fixed format. They also may not be entirely accurate because of communication problems between stack units.

When a malfunctioning port is error-disabled, the stack unit generates a syslog message similar to the following:

```
SYSLOG: <10>0d00h10m22s : ICX6610-24P Router Stack: port 2/2/8 U2
errdisable 2/2/8: reason: 2/2/8 --> 1/2/8
```

When a stack unit reloads, the stack unit generates a syslog message similar to the following:

```
SYSLOG: <9>3d21h52m57s : ICX6610-24P Router Stack: unit 3 Reload u3 in
10 sec due to 3/2/6 port problems. reason: lose one nbr
SYSLOG: <9>0d00h08m59s : ICX6610-48 Router Stack: unit 2 U3 detects stack
port problem. will reload u2: one directional CPU to CPU: u2 --> u3, one
directional CPU to CPU: u2 --> u4,
```

When the entire stack reloads, the active controller generates a syslog message similar to the following:

```
SYSLOG: <9>0d00h12m07s : ICX6610-48 Router Stack: "stack
stack-port-resiliency 3" is configured. Active u3 reloads the stack in 5s.
```

Stack port resiliency in ICX 6610 devices

```
reason: no CPU to CPU: u1 -x- u4, no CPU to CPU: u2 -x- u4, no CPU to
CPU: u3 -x- u4,
SYSLOG: <9>0d00h12m28s : ICX6610-24P Router Stack: "stack
stack-port-resiliency 3" is configured. Active u1 reloads the stack in 5s.
reason: 1: 1/2/1 (T0) ---> 2/2/6 (T1) *** error: one-way 2: 1/2/2
(T0) ---> 2/2/7 (T1) *** error: one-way 3: 1/2/3 (T0) ---> 2/2/8
(T1) *** error: one-way 4: 1/2/4 (T0) ---> 2/2/9 (T1) ***
error: one-way 5: 1/2/5 (T0) ---> 2/2/10(T1) *** error: one-way
one directional CPU to CPU: u2 --> u4,
```

stack stack-port-resiliency

NOTE

This command is only supported on an ICX 6610 device in a stack.

Configures different levels of correctional steps that an active controller can take to fix stacking ports that cannot send or receive packets though the ports are logically operational. The correctional steps involve error-disabling malfunctioning ports and reloading one or more stack units. The **no** form of this command sets the level variable value to 1.

Syntax **stack stack-port-resiliency** *level*
no stack stack-port-resiliency *level*

Command Default This feature is enabled with the *level* variable value set to 1.

Parameters *level* When a stacking port is malfunctioning, the correctional steps that an active controller can take, depend on the value of this *level* variable. Its value can range from 0 to 3.

Command Modes Global configuration mode

Usage Guidelines

NOTE

A non-active controller is any stack unit that is not an active controller.

NOTE

If you use the command and set the *level* variable value to 1, this configuration shows in the **show run** command output. If you use the **no** form of this command, the *level* variable value is set to 1 but this configuration will not show in the **show run** command output.

The different levels and the corresponding correctional steps are as follows:

- If the *level* value is set to 0, the active controller does not perform any correctional steps.
- If the *level* value is set to 1 and the unit with the malfunctioning port is a non-active controller:
 - The active controller checks if other ports in the same static LAG are fully operational.
 - If the total bandwidth of the operational static LAG is equal to or more than 20 Gbps, the malfunctioning port is error-disabled.
 - If the total bandwidth of the operational static LAG is less than 20 Gbps and error-disabling all ports of the LAG can lead to the disconnection of one or more other units from the stack, the unit reloads.
 - If the total bandwidth of the operational static LAG is less than 20 Gbps and error-disabling all ports of the LAG does not lead to the disconnection of one or more other units from the stack, all the ports of the LAG are error-disabled.
- If the *level* value is set to 2 and the unit with the malfunctioning port is a non-active controller, the unit reloads. After this reload, if any other non-active controller unit is not able to communicate with the active controller, it also reloads.

Enabling broadcast or unknown unicast traffic to the PVLAN on FSX devices

- If the *level* value is set to 3, the correctional steps in level 2 are performed. If the port is still not operating correctly, the entire stack reloads.

NOTE

You can use the **show errdisable summary** command to view a list of all error-disabled ports with the reason for error-disabling these ports.

NOTE

Traffic interruption happens for a few seconds or longer while the port malfunction is detected and fixed.

Examples The following example shows the configuration of stack port resiliency on a stack with the *level* variable value set to 2.

```
Brocade(config)# stack stack-port-resiliency 2
```

History**Release****Command History**

07.3.00g

This command was introduced.

**Related
Commands**

[show errdisable summary](#)

Enabling broadcast or unknown unicast traffic to the PVLAN on FSX devices

The following content was erroneously excluded from the 7.4 Layer 2 configuration guide:

Command syntax

To configure the ports in the primary VLAN to forward broadcast or unknown unicast and multicast traffic received from sources outside the PVLAN, enter the following commands at the global CONFIG level of the CLI.

```
Brocade(config)# pvlan-preference broadcast flood  
Brocade(config)# pvlan-preference unknown-unicast flood
```

These commands enable forwarding of broadcast and unknown-unicast packets to ports within the PVLAN. To again disable forwarding, enter a command such as the following.

```
Brocade(config)# no pvlan-preference broadcast flood
```

This command disables forwarding of broadcast packets within the PVLAN.

Syntax: [no] pvlan-preference broadcast | unknown-unicast flood

NOTE

The `pvlan-preference broadcast` and `pvlan-preference unknown-unicast` commands are not supported on the FCX and ICX platforms. These are supported on all the other FastIron platforms.

Selection of master node

NOTE

Any node on an MRP ring that has two shared interfaces cannot be elected as the master node.

Static MAC address

The following note in the “Configuring a multi-port static MAC address” and “Assigning static MAC entries to priority queues” sections is not valid.

NOTE

The location of the `static-mac-address` command in the CLI depends on whether you configure port-based VLANs on the device. If the device does not have more than one port-based VLAN (VLAN 1, which is the default VLAN that contains all the ports), the `static-mac-address` command is at the global CONFIG level of the CLI. If the device has more than one port-based VLAN, then the `static-mac-address` command is not available at the global CONFIG level. In this case, the command is available at the configuration level for each port-based VLAN.

Power classes for PDs

The default maximum power allocation for a Class 0 PoE+ device has changed from 30 watts to 15.4 watts.

TABLE 1 Power classes for PDs

Class	Usage	Power (watts) from Power Sourcing Device	
		Standard PoE	PoE+
0	default	15.4	15.4
1	optional	4	4
2	optional	7	7
3	optional	15.4	15.4
4	optional	15.4	30

Multi-Device Port Authentication

In the table “Supported Multi-device port authentication (MDPA) features”, the feature “Source guard protection” listed in “Support for Multi-Device Port Authentication together with:” is not supported in Layer 2 images.

Example 5: Configuring a static trunk group for devices in an IronStack

To configure a static trunk group for units in an IronStack and then deploy the trunk group, enter the following commands:

```
Brocade (config)#trunk ethernet 1/1/1 ethernet 1/1/2
Trunk will be created in next trunk deploy
Brocade (config)#write memory
Brocade (config)#trunk deploy
```

The trunk configuration does not take effect until you deploy it.

The result of the configured trunk group in the **show trunk** output is as follows:

```
Brocade(config)#show trunk
Configured trunks:
Trunk ID: 1
Hw Trunk ID: 1
Ports_Configured: 2
Primary Port Monitored: Individually
Ports PortName Port_Status Monitor Rx_Mirr Tx_Mirr Monitor_Dir
1/1/1 none enable off N/A N/A N/A
1/1/2 none enable on 1/1/15 1/1/15 both
Operational trunks:
Trunk ID: 1
Hw Trunk ID: 1
Duplex: Full
Speed: 1G
Tag: No
Priority: level0
Active Ports: 2
Ports Link_Status port_state
1/1/1 active Forward
1/1/2 active Forward
```

SSH show commands

Effective from 07.2.03 FastIron release, there are following changes in SSH show commands:

- The **ssh show-host-keys** command is deprecated.
- The **show ip ssh** command output displays SSH server status and whether SSH authentication keys are of DSA or RSA type.

Virtual Cable Testing support

Information in the 07.4.00a version of the *FastIron Configuration Guide* is not correct. The guide will be updated in the next release. VCT is **not** supported on the following devices:

- Brocade FSX with third generation modules
- Brocade ICX 6610 devices
- Brocade ICX 6430 devices

- Brocade ICX 6450 devices

ACL-based Rate Limiting and ACL Counting

The feature support table in Chapter 50, Rate Limiting on FastIron WS Series Switches shows that ICX 6610, ICX 6430, and ICX 6450 support ACL-based rate limiting. That is incorrect. These devices do not support ACL-based Rate Limiting.

Also, that feature support table should say that ACL counting is not supported on ICX 6430.

FWS supports DSA keys only

The section on SSH2 authentication types in the *FastIron Configuration Guide* does not contain information about the limitation for FWS devices. FWS devices support only DSA keys and hence there are no options for the crypto key generate command. On FWS devices, the syntax is **crypto key generate | zeroize**.

Stacking configuration for ICX 6430

Release 07.4.00a allows ICX 6430 48-port units and 24-port units to be included in an IronStack.

IPv6 routing features

Release 07.4.00a supports IPv6 static routes and ECMP load sharing on ICX 6450.

show link-aggregate partner

The “show link-aggregate partner” CLI command is new in software release 07.4.00c. It provides information on the System Priority, System ID, Key, Actor, and Partner of each LAG port.

```
Brocade(config)#show link-aggregate partner
[SP - System Priority] [SID - System Id] [K - Key] [ACTR - ACTOR] [PRTR - PARTNER]
Port 1/1 ACTR(SP=1,SID=748e.f833.e600,K=10000) PRTR(SP=1,SID=0012.f223.3900,K=10000)
Port 1/2 ACTR(SP=1,SID=748e.f833.e600,K=30000) PRTR(SP=1,SID=748e.f820.e6c5,K=30000)
Port 4/1 ACTR(SP=1,SID=748e.f833.e600,K=10000) PRTR(SP=1,SID=0012.f223.3900,K=10000)
Port 4/2 ACTR(SP=1,SID=748e.f833.e600,K=10000) PRTR(SP=1,SID=0012.f223.3900,K=10000)
Port 16/1 ACTR(SP=1,SID=748e.f833.e600,K=10000) PRTR(SP=1,SID=0012.f223.3900,K=10000)
Port 16/2 ACTR(SP=1,SID=748e.f833.e600,K=30000) PRTR(SP=1,SID=748e.f820.e6c5,K=30000)
```

Local accounts with encrypted passwords

The **service password-encryption** command is deprecated in release 07.4.00a.

Displaying CPU utilization statistics

The `show process cpu` command is deprecated in release 07.4.00a.

Enabling port speed down-shift

The port speed down-shift feature is no longer supported in release 07.4.00a.

Specifying the maximum number of login attempts for Telnet access

NOTE

The number of allowed telnet login attempts set by `telnet login-retries` command is only effective when you configure telnet connection with both `enable telnet authentication` and `enable telnet password` commands.

MCT configuration considerations

The following content in the 07.4.00a version of the *FastIron Configuration Guide* is incomplete or inaccurate:

- An ICL is preferably a static trunk that provides port level redundancy and higher bandwidth for cluster communication.
- An ICL cannot be an LACP trunk (must be either a static trunk or single port).

The revised content is as follows:

- It is recommended that you set up ICL as a static trunk with at least two ports. This provides port level redundancy and higher bandwidth for cluster communication.
- An ICL cannot be a regular port link or an LACP trunk. It must be a single or multiple ports static trunk.

The following content is an additional MCT configuration consideration in the 07.4.00a version of the *FastIron Configuration Guide*:

- In any MCT configuration, there are two different cluster-related IDs, the Cluster ID and the Cluster RBridge ID. The Cluster ID uniquely identifies a cluster and all cluster devices in the same MCT cluster have the same Cluster ID. The Cluster RBridge ID uniquely identifies a cluster device within the cluster. To avoid conflicts, ensure that the Cluster ID and the Cluster RBridge ID are unique within an MCT configuration and not confused with each other.

Documentation updates for Unified IP MIB Reference

The information in this section is a supplement to the *Unified IP MIB Reference*.

Supported on FastIron devices

FastIron devices support the following RFC:

- 3411 – SNMP Framework MIB

NOTE

In RFC 3411, the snmpEngineBoots object supports the maximum value 9999.

Supported on FastIron devices