Fabric OS

Documentation Updates

Supporting Fabric OS v7.2.x
Brocade Communications Systems, Incorporated

Corporate and Latin American Headquarters
Brocade Communications Systems, Inc.
130 Holger Way
San Jose, CA 95134
Tel: 1-408-333-8000
Fax: 1-408-333-8101
E-mail: info@brocade.com

Asia-Pacific Headquarters
Brocade Communications Systems China HK, Ltd.
No. 1 Guanghua Road
Chao Yang District
Beijing 100020, China
Tel: +8610 6588 8888
Fax: +8610 6588 9999
E-mail: china-info@brocade.com

European Headquarters
Brocade Communications Switzerland Sàrl
Centre Swissair
Tour B - 4ème étage
29, Route de l'Aéroport
Case Postale 105
CH-1215 Genève 15
Switzerland
Tel: +41 22 799 5640
Fax: +41 22 799 5641
E-mail: emea-info@brocade.com

Asia-Pacific Headquarters
Brocade Communications Systems Co., Ltd. (Shenzhen WFOE)
Citic Plaza
No. 233 Tian He Road North
Unit 1308 – 13th Floor
Guangzhou, China
Tel: +8620 3891 2000
Fax: +8620 3891 2111
E-mail: china-info@brocade.com

Document History

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<th>Publication number</th>
<th>Summary of changes</th>
<th>Date</th>
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<td>New document</td>
<td>October 2013</td>
</tr>
<tr>
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How this document is organized

This document contains updates to the Fabric OS v7.2.x product manuals: These updates include document fixes and changes covering new features. Table 1 below list the most recently released Fabric OS v7.2.x product manuals.

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<tr>
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<td>v7.0.0 and later</td>
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<td>April 2011</td>
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<td>v7.2.0</td>
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<td>Fabric OS Encryption Administrator’s Guide (DPM)</td>
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<tr>
<td>Fabric OS Encryption Administrator’s Guide (SKM/ESKM)</td>
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<tr>
<td>Fabric OS Encryption Administrator’s Guide (KMIP)</td>
<td>v7.2.0</td>
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<tr>
<td>Fabric OS Encryption Administrator’s Guide (LKM/SSKM)</td>
<td>v7.2.0</td>
<td>Updates on page 20</td>
<td>July 2013</td>
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<td>v7.2.0</td>
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<td>July 2013</td>
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<td>Fabric OS Message Reference</td>
<td>v7.2.0</td>
<td>No updates</td>
<td>July 2013</td>
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<tr>
<td>Fabric OS Troubleshooting and Diagnostics Guide</td>
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<td>Fabric Watch Administrator’s Guide</td>
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<td>No updates</td>
<td>July 2013</td>
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<td>FICON Administrator’s Guide</td>
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<td>Flow Vision Administrator’s Guide</td>
<td>v7.2.0</td>
<td>Update on page 27</td>
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</table>
What’s new in this document

The following changes have been made since this document was last released:

- For the *Flow Vision Administrator’s Guide*, added corrections to the following sections:
  - Flow Monitor (previously undocumented restriction).
- For the *Web Tools Administrator’s Guide*, added corrections to the following sections:
  - “Chapter 16, Configuring Standard Security Features” on page 29
- For the *FICON Administrator’s Guide*, added corrections to the following section:
  - “Chapter 5, Maintaining and Troubleshooting FICON” on page 25
- For the *Fabric OS Administrator’s Guide*, added corrections to the following sections:
  - “Chapter 3, Performing Advanced Configuration Tasks” on page 11
  - “Chapter 7, Configuring Protocols” on page 11
  - “Chapter 14, Optimizing Fabric Behavior” on page 12
- For the *Fabric OS Encryption Administrator’s Guides*, added corrections to the section related to “Displaying Universal IDs.” For KMIP, also added a correction to the section related to “Displaying and deleting decommissioned key IDs.”
  - “Fabric OS Encryption Administrator’s Guide Supporting Key Management Interoperability Protocol (KMIP) Key-Compliant Environments” on page 19
  - “Fabric OS Encryption Administrator’s Guide Supporting RSA Data Protection Manager (DPM) Environments” on page 19
  - “Fabric OS Encryption Administrator’s Guide Supporting NetApp Lifetime Key Manager (LKM) and KeySecure Storage Secure Key Manager (SSKM) Environments” on page 20
  - “Fabric OS Encryption Administrator’s Guide Supporting HP Secure Key Manager (SKM) and HP Enterprise Secure Key Manager (ESKM) Environments” on page 20
  - “Fabric OS Encryption Administrator’s Guide Supporting Tivoli Key Lifecycle Manager (TKLM) Environments” on page 21

Brocade Resources

To get up-to-the-minute information, go to [http://my.brocade.com](http://my.brocade.com) and register at no cost for a user ID and password.

For practical discussions about SAN design, implementation, and maintenance, you can obtain *Building SANs with Brocade Fabric Switches* through:

[http://www.amazon.com](http://www.amazon.com)
For additional Brocade documentation, visit the Brocade SAN Info Center and click the Resource Library location:

http://www.brocade.com

Release notes are available on the MyBrocade web site and are also bundled with the Fabric OS firmware.

Document feedback

Quality is our first concern at Brocade and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. Forward your feedback to:

documentation@brocade.com

Provide the title and version number of the document and as much detail as possible about your comment, including the topic heading and page number and your suggestions for improvement.
In this chapter

- Documentation updates for Fabric OS v7.2.0 and later

Documentation updates for Fabric OS v7.2.0 and later

The updates in this section are for the Fabric OS FCIP Administrator’s Guide, publication number 53-1002919-01, published July 2013.

About This Document

The following paragraph has been modified:

All Fabric OS switches must be running Fabric OS v6.1.0 or later; all M-EOS switches must be running M-EOSc 9.1 or later, and M-EOSn must be running 9.6.2 or later. Cisco switches must support standards-based NPIV.

Chapter 1, Access Gateway Basic Concepts

Under “Brocade Access Gateway overview”, the following paragraph has been modified: Access Gateway is compatible with M-EOS v9.1 or v9.6 or later, and Cisco-based fabrics that support standards-based NPIV. You can use the command line interface (CLI), Web Tools, or Brocade Network Advisor (BNA) to enable and disable AG mode and configure AG features on a switch. This document describes configurations using the CLI commands. Refer to the Fabric OS Command Reference Manual, the Web Tools Administrator’s Guide, or the Brocade Network Advisor User Guide for more information about AG support in those tools.

Chapter 3, Managing Policies and Features in Access Gateway Mode

Under “Considerations for the Brocade 6505 and 6510”:

The Brocade 6505 and 6510 switches are shipped in Fabric OS Native mode, but can function in either Fabric OS Native mode or Brocade Access Gateway mode. They are also supported in Access Gateway cascaded configurations. All ports on demand (POD) licenses must be present to support Access Gateway.
Chapter 4, SAN Configuration with Access Gateway

Under “Connectivity of multiple devices overview”:

Switches in AG mode can connect to the following third-party fabrics:

- Fabrics operating with M-EOSc v9.6.2 or later and M-EOSn v9.6 or later
- Cisco fabrics that support standards-based NPIV.
In this chapter

- Documentation updates for Fabric OS v7.2.0 and later

Documentation updates for Fabric OS v7.2.0 and later

The updates in this section are for the Fabric OS Administrator’s Guide, publication number 53-1002920-02, published September 2013.

Chapter 3, Performing Advanced Configuration Tasks

In the section “256-area addressing mode” on page 85, change the ATTENTION statement to 48 port cards instead of 49 port cards. The correct statement is:

**ATTENTION**
The Brocade DCX and DCX 8510-8 Backbones have safeguards that disable all 48 port cards if FICON Management Server (FMS) is enabled.

Chapter 7, Configuring Protocols

In the section “Secure Shell protocol” on page 197, add the following:

If you set up a message of the day (MOTD), the MOTD displays either before or after the login prompt, depending on the SSH client implementation. Fabric OS does not control when the message displays.

Under the heading “Traps” on page 209, add the following section:

**MAPS-TRAP**

- mapsTrapAM
  Traps to be sent for Monitoring and Alerting Policy Suite (MAPS) threshold events.

Under the heading ‘Brocade MIB files’, add the following bullet:

- BROCADE-MAPS-MIB.mib
Under the heading 'MIB loading order', add the following row to Table 30:

<table>
<thead>
<tr>
<th>MIB Name</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROCADE-MAPS-MIB</td>
<td>SNMPv2-SMI</td>
</tr>
<tr>
<td></td>
<td>Brocade-REG-MIB</td>
</tr>
<tr>
<td></td>
<td>SW-MIB</td>
</tr>
</tbody>
</table>

Chapter 14, Optimizing Fabric Behavior

In the section “Limitations and restrictions for QoS zone-based traffic prioritization” on page 424, remove the following bullet:

- Traffic prioritization is not supported on 10-Gbps ISLs.
In this chapter

- Documentation Updates for Fabric OS v7.2.0

Documentation Updates for Fabric OS v7.2.0

The updates in this section are for the Fabric OS Command Reference, publication number 53-1002921-02, published 9 September 2013.

Flow

Updated the mirror operand to specify that 256 frames per second are mirrored.

mirror

For both switch-based system and a chassis-based system, a maximum of 256 frames per second are mirrored.

Updated the examples to display mon in place of stats and changed the representation of Active as Activated for the active operands.

FUNCTION Creating a flow

To create a flow to monitor statistics from a particular source to destination on a specified LUN:

```
switch:admin> flow --create lunflow -feature monitor
-srcdev 0x010502 -dstdev 0x030700 -ingrport 1/5 -lun 4
```

FUNCTION Displaying flow data

EXAMPLES To display all flows in Flow Vision:

```
switch:admin> flow --show
```

<table>
<thead>
<tr>
<th>Flow Name</th>
<th>Feature</th>
<th>SrcDev</th>
<th>DstDev</th>
<th>IngrPt</th>
<th>EgrPt</th>
</tr>
</thead>
<tbody>
<tr>
<td>myflow1</td>
<td>mon+</td>
<td>020a00</td>
<td>030000</td>
<td>1/10</td>
<td>-</td>
</tr>
<tr>
<td>scsicsflow</td>
<td>mon+</td>
<td>520a00</td>
<td>520b00</td>
<td>-</td>
<td>1/9</td>
</tr>
<tr>
<td>lunflow</td>
<td>mon+</td>
<td>010502</td>
<td>030700</td>
<td>1/5</td>
<td>-</td>
</tr>
<tr>
<td>myflow2</td>
<td>gen+</td>
<td>010203</td>
<td>020304</td>
<td>2/3</td>
<td>-</td>
</tr>
<tr>
<td>myflow3</td>
<td>gen</td>
<td>01ba00</td>
<td>01c000</td>
<td>1/18</td>
<td>-</td>
</tr>
<tr>
<td>endtoendflow</td>
<td>mon+</td>
<td>010500</td>
<td>040900</td>
<td>2/5</td>
<td>-</td>
</tr>
<tr>
<td>flowLearn</td>
<td>mon+</td>
<td>*</td>
<td>*</td>
<td>3/5</td>
<td>-</td>
</tr>
<tr>
<td>myflow4</td>
<td>mir+</td>
<td>010203</td>
<td>-</td>
<td>1/20</td>
<td>-</td>
</tr>
</tbody>
</table>
To display the flow definition and statistics of a flow:

```
switch:admin> flow --show myflow2
Name : myflow2    Features: gen(Activated)    noConfig: Off
Definition: IngrPort(3),SrcDev(0x010203),DstDev(0x020304)
Flow Generator (Activated):
<table>
<thead>
<tr>
<th>SrcDev</th>
<th>DstDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>0x010203</td>
<td>0x020304</td>
</tr>
</tbody>
</table>
Number of frames generated from IngrPort : 1.50G
```

To display the statistics of the Flow Monitor feature:

```
switch:admin> flow --show myflow1 -feature monitor
Name : myflow1    Features: mon(Activated)     noConfig: Off
Definition: IngrPort(10),SrcDev(0x020a00),DstDev(0x030000)
Flow Monitor (Activated):
Monitor time: | Tue Jun 25 04:20:06 PDT 2013 |
| Frame Count | Frames Per Sec. | Byte count |
| Tx / Rx / Total | Tx / Rx / Total | Tx / Rx / Total |
| 18.20G/ 0 / 18.20G| 786.52k/ 0 / 786.52k | 73.48T/ 0 / 73.48T |
```

<table>
<thead>
<tr>
<th>Throughput(Bps)</th>
<th>Frame Size(Bytes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx / Rx / Total</td>
<td>Tx / Rx</td>
</tr>
<tr>
<td>1.56G/ 0 / 1.56G</td>
<td>-- / --</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BiDir</th>
<th>LUN</th>
<th>FrameType</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>no</td>
<td>4</td>
<td>sstatc</td>
</tr>
<tr>
<td>no</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>no</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>no</td>
<td>0x02</td>
<td>-</td>
</tr>
<tr>
<td>no</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

+ Denotes feature is currently activated for the flow
To display the monitor statistics from a particular source to destination on a specified LUN:

```
switch:admin> flow --show lunflow

========================================================================
Name : lunFlow Features: mon(Activated) noConfig: Off
Definition: IngrPort(5),SrcDev(0x010502),DstDev(0x030700),Lun(4)
Flow Monitor (Activated):
Monitor time: | Thu Jun 06 15:15:39 UTC 2013 |
------------------------------------------------------------------------
| I/O Count     | I/O Per Sec.(IOPS) | I/O bytes Transferred |
| Reads / Writes/ Total | Reads / Writes/ Total | Reads / Writes/ Total |
------------------------------------------------------------------------
| 44.92k/ 44.94k/ 89.85k | 2.00k/ 2.00k/ 4.01k | 5.88M/ 5.89M/ 11.77M |
------------------------------------------------------------------------

I/O bytes Per Sec.  Reads / Writes/ Total
--------------------  ---------------------------------------
2.62M/ 2.62M/ 5.25M

To display the Flow Monitor statistics for bidirectional traffic:

```
switch:admin> flow --show endtoendflow -feature monitor

========================================================================
Name : endtoendflow Features: mon(Activated)
Definition: IngrPort(1,5),SrcDev(010500),DstDev(040900),BiDir
Flow Monitor (Activated):
Monitor time: | Thu Jun 06 15:15:39 UTC 2013 |
------------------------------------------------------------------------
| Frame Count     | Frames Per Sec. | Byte count |
| Tx / Rx / Total | Tx / Rx / Total | Tx / Rx / Total |
------------------------------------------------------------------------
| 2.92M/ 2.96M/ 5.88M | 159.31k/161.78k/321.10k | 5.99G/ 5.99G/ 11.99G |
------------------------------------------------------------------------

Throughput(Bps) Frame Size(Bytes)  Tx / Rx / Total
--------------------------  ---------------------------------------
327.15M/327.28M/654.44M | 2052 / 2020 |

I/O Count  I/O Per Sec.(IOPS)  I/O bytes Transferred  
Reads / Writes/ Total  Reads / Writes/ Total  Reads / Writes/ Total  
------------------------------------------------------------------------
| 44.92k/ 44.94k/ 89.85k | 2.00k/ 2.00k/ 4.01k | 5.88G/ 5.89G/ 11.77G |
------------------------------------------------------------------------

I/O bytes Per Sec.  Reads / Writes/ Total
---------------------------------------  ---------------------
262.84M/262.73M/525.68M

```

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53-1003064-02
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To display the statistics for the Flow Mirror feature in learning mode:

```
switch:admin> flow --show mirFlow -feature mirror
Name : mirFlow       Features: mir(Activated)
Definition: EgrPort(17),DstDev(0x051100),BiDir
Flow Mirror:
------------------------------------------------------------ 
| SID(*) | DID(*) | OXID | RXID | SOF   | EOF  | Frame_type  
------------------------------------------------------------ 
| 051600 | 051100 | 0883 | ffff | SOFi3 | EOFt | SCSIRead   
| 051600 | 051100 | 0191 | Obce | SOFn3 | EOFn | Data       
| 051600 | 051100 | 0c8f | ffff | SOFi3 | EOFt | SCSIWrite  
| 051600 | 051100 | 0017 | ffff | SOFi3 | EOFt | SCIWrite   
| 051600 | 051100 | 0191 | Obce | SOFn3 | EOFn | Data       
------------------------------------------------------------  
| Dir| Time-Stamp      |
------------------------------------------------------------ 
| Tx | Jun 10 11:08:10 |
| Tx | Jun 10 11:08:10 |
| Tx | Jun 10 11:08:10 |
| Tx | Jun 10 11:08:10 |
| Tx | Jun 10 11:08:10 |
```

To display the statistics for the Flow Mirror feature in verbose mode:

```
switch:admin> flow --show mirFlow1 -feature mirror -verbose
Name : flow_verbose Features: mir(Activated)
Definition: EgrPort(1/5),SrcDev(010200),DstDev(*),BiDir
Flow Mirror:
------------------------------------------------------------------------------ 
| Time-Stamp | Dir | SOF   | EOF  | Frame_Type | Frame Contents            |
------------------------------------------------------------------------------ 
| Jun 04 08:27:04 | Tx  | SOFi3 | EOFt | SCSI3_Res  | 06040500 00010200 08290000 009a0fd3 00000000 00000000 00000000 00000000 00000001 5f010300 00000000 18000000 00000000 |
| Jun 04 08:27:04 | Tx  | SOFi3 | EOFt | SCSITxRdy  | 05040500 00010200 08890000 07ce01ca 00000000 00000000 00000018 00000000 00000000 00000000 00000000 00000000 00000000 |
| Jun 04 08:27:04 | Rx  | SOFn3 | EOFt | Data       | 01010200 00040500 08900008 089a0f71 00000000 00000000 00000000 00000000 00000000 00000000 00000000 |
| Jun 04 08:27:04 | Rx  | SOFi3 | EOFt | SCIISGGoodSts | 07010200 00040500 08900000 089a0f71 00000000 00000000 00000000 00000000 00000000 00000000 00000000 |
```

To display the feature statistics in sorted order:

```
switch:admin> flow --show myflow -feature monitor -sortby column1
Stats time: | Fri Jun 07 03:56:24 MDT 2013 |
------------------------------------------------------------------------------ 
| SID(*) | Tx Frames Count | Tx Frames per Sec. | Tx Bytes Count |
------------------------------------------------------------------------------ 
| 40600 | 11.99M | 169.68k | 25.08G |
| 40700 | 11.99M | 169.86k | 25.08G |
```
<table>
<thead>
<tr>
<th>40900</th>
<th>28.49M</th>
<th>403.22k</th>
<th>59.38G</th>
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<table>
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<tr>
<th>Tx Throughput (Bps)</th>
<th>Avg Tx Frm Sz (Bytes)</th>
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<tbody>
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<td>354.97M</td>
<td>2088</td>
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<tr>
<td>355.35M</td>
<td>2088</td>
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<td>124.48M</td>
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3 Flow
Fabric OS Encryption Administrator’s Guide

Chapter 4

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Documentation updates for Fabric OS v7.2.0 and later

Fabric OS Encryption Administrator’s Guide Supporting Key Management Interoperability Protocol (KMIP) Key-Compliant Environments

The updates in this section are for the Fabric OS Encryption Administrator’s Guide (KMIP), publication number 53-1002924-01, published July 2013.

Chapter 2, Configuring Encryption Using the Management Application

• In the section “Displaying and deleting decommissioned key IDs” on page 117, the paragraph notes:
When disk LUNs are decommissioned, the process includes the disabling of the key record in the key vault and indication that the key has been decommissioned.”

This statement is true for all key vaults except TEKA KMIP. TEKA KMIP does not modify keys that have been decommissioned.

• In the section, “Displaying Universal IDs” on page 112, after step 4, a NOTE states, “You will need to export the decommissioned key ID to the key vault.” This NOTE is inaccurate and should be removed. The Key ID/UUID displayed in this dialog is informational, and can be used to cross reference on the respective key vault where the decommissioned Key ID is manually deleted.

Fabric OS Encryption Administrator’s Guide Supporting RSA Data Protection Manager (DPM) Environments

The updates in this section are for the Fabric OS Encryption Administrator’s Guide (DPM), publication number 53-1002922-01, published July 2013.
Chapter 2, Configuring Encryption Using the Management Application

In the section, “Displaying Universal IDs” on page 86, after step 4, a NOTE states, “You will need to export the decommissioned key ID to the key vault.” This NOTE is inaccurate and should be removed. The Key ID/UUID displayed in this dialog is informational, and can be used to cross reference on the respective key vault where the decommissioned Key ID is manually deleted.

Fabric OS Encryption Administrator’s Guide Supporting NetApp Lifetime Key Manager (LKM) and KeySecure Storage Secure Key Manager (SSKM) Environments

The updates in this section are for the Fabric OS Encryption Administrator’s Guide (LKM/SSKM), publication number 53-1002925-01, published July 2013.

Chapter 2, Configuring Encryption Using the Management Application

In the section, “Displaying Universal IDs” on page 102, after step 4, a NOTE states, “You will need to export the decommissioned key ID to the key vault.” This NOTE is inaccurate and should be removed. The Key ID/UUID displayed in this dialog is informational, and can be used to cross reference on the respective key vault where the decommissioned Key ID is manually deleted.

Fabric OS Encryption Administrator’s Guide Supporting HP Secure Key Manager (SKM) and HP Enterprise Secure Key Manager (ESKM) Environments

The updates in this section are for the Fabric OS Encryption Administrator’s Guide (SKM/ESKM), publication number 53-1002923-01, published July 2013.

Chapter 2, Configuring Encryption Using the Management Application

In the section, “Displaying Universal IDs” on page 98, after step 4, a NOTE states, “You will need to export the decommissioned key ID to the key vault.” This NOTE is inaccurate and should be removed. The Key ID/UUID displayed in this dialog is informational, and can be used to cross reference on the respective key vault where the decommissioned Key ID is manually deleted.

Fabric OS Encryption Administrator’s Guide Supporting Thales e-Security keyAuthority (TEKA) Environments

The updates in this section are for the Fabric OS Encryption Administrator’s Guide (TEKA), publication number 53-1002926-01, published July 2013.

Chapter 2, Configuring Encryption Using the Management Application

In the section, “Displaying Universal IDs” on page 99, after step 4, a NOTE states, "You will need to export the decommissioned key ID to the key vault." This NOTE is inaccurate and should be removed. The Key ID/UUID displayed in this dialog is informational, and can be used to cross reference on the respective key vault where the decommissioned Key ID is manually deleted.
Fabric OS Encryption Administrator’s Guide Supporting Tivoli Key Lifecycle Manager (TKLM) Environments

The updates in this section are for the Fabric OS Encryption Administrator’s Guide (TKLM), publication number 53-1002927-01, published July 2013.

Chapter 2, Configuring Encryption Using the Management Application

In the section, “Displaying Universal IDs” on page 100, after step 4, a NOTE states, “You will need to export the decommissioned key ID to the key vault.” This NOTE is inaccurate and should be removed. The Key ID/UUID displayed in this dialog is informational, and can be used to cross reference on the respective key vault where the decommissioned Key ID is manually deleted.
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The updates in this section are for the Fabric OS FCIP Administrator’s Guide, publication number 53-1002928-01, published July 2013.

Chapter 1, FCIP Concepts and Features

Under “IP WAN network considerations,” the first bullet entry is modified as follows:

• Routers and firewalls that are in the data path must be configured to pass FCIP traffic (TCP port 3225) and IPsec traffic, if IPsec is used (UDP port 500). The Brocade TCP implementation selects a port between 49152 and 65535 as the ephemeral (or initiating) port to open up to port 3225.

Chapter 3, Configuring FCIP

In Table 10, Circuit options:

• Under Adaptive rate limiting (ARL), the correct valid ranges for -min-comm-rate are 10,000 Kbps through 1,000,000 Kbps for GbE ports and 10,000 to 10,000,000 Kbps for 10 GbE ports (XGE). Add to note that the rate does not need to be an integral value of 1,000,000 and both sides of the tunnel must have matching configurations.

• Under Adaptive rate limiting (ARL), for -max-comm-rate add to note that the rate does not need to be an integral value of 1,000,000, the maximum committed rate can be no larger than five times the minimum committed rate, and both sides of the tunnel must have matching configurations.
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The updates in this section are for the FICON Administrator's Guide, publication number 53-1002931-01, published July 2013.

Chapter 5, Maintaining and Troubleshooting FICON

In the section “Blade swapping” on page 73, add the following item to the list of restrictions:

- Faulty blades cannot be swapped.
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The updates in this section are for the Flow Vision Administrator’s Guide, publication number 53-1002999-01, published September 2013.

This change applies to the Flow Monitor feature.

The SCSI statistics SCSI Read/Write Frame Count and SCSI Read/Write Data are supported only for F_Ports for any flow configuration where either srcdev or dstdev exists on the switch, and the flow is defined using either srcdev, dstdev, ingrport or egrport (with or without bidir) OR srcdev, dstdev, lun, ingrport or egrport.
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The updates in this section are for the Web Tools Administrator’s Guide, publication number 53-1002934-01, published September 2013.

Chapter 16, Configuring Standard Security Features

Under the heading “Guidelines and restrictions”, add the following bullet after the “For some functionality and operations...” paragraph:

In order for the user-defined role to have access to the System Monitor which displays CPU and Memory Usage under the Monitor tab, you must assign read/write RBAC_FabricWatch permissions to the Chassis Access Role.
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