



# Enterprise Operating System

Version 05.05.01

## Release Notes P/N 958-000190-551 Rev A

6/11/04

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These release notes describe features, code fixes, and other information for enterprise operating system (E/OS) version 05.05.01.

Section	Page
<i>Applicable Products</i>	1-2
<i>What's New in E/OS 05.05.01</i>	1-2
<i>Standards Compliance</i>	1-4
<i>Upgrade and Downgrade Considerations</i>	1-5
<i>Prerequisites for Installing and Using E/OS 05.05.01</i>	1-5
<i>Related Documentation</i>	1-6
<i>Code Enhancements &amp; Fixes in E/OS 05.05.01</i>	1-6
<i>Outstanding Known Issues in E/OS 05.05.01</i>	1-8

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## Applicable Products

McDATA E/OS firmware version 05.05.01 is only supported on the second-generation Sphereon 4300 Switch.

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## What's New in E/OS 05.05.01

E/OS 05.05.00 provided support for the Sphereon 4300 switch as a 12-port device with a single power supply. Four ports on this switch are enabled as the default. Up to 12 ports can be enabled with Flexport feature keys. The Full-Fabric Capability feature is required to establish E\_Port connections.

E/OS 05.05.01 provides support for second-generation Sphereon 4300 switches. E/OS 05.05.01 gives customers the option of keeping their fabrics at E/OS version 05.xx.xx, instead of upgrading the entire fabric to version 06.02.00 or higher when installing a second-generation Sphereon in an existing fabric.

E/OS 05.05.01 is based on E/OS 05.05.00, and does not contain any additional changes or bug fixes. For additional fixes or functionality, it is recommended that the entire fabric be upgraded to E/OS release 06.02.00 or higher.

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## SNMP

E/OS 05.05.01 supports the following management information base (MIB) versions on all products:

- Fabric Element MIB: Ver 1.1
- MIB-II MIB: RFC-1213, sections that are not implemented are not included
- FCEOS MIB: Ver 2.0
- SNMP Framework MIB: RFC-2271 (1997/09/30)
- FA MIB: Ver 3.1

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## Fabric Support

The Sphereon 4300 Switch is supported in fabrics containing any type of McDATA switch or director, with up to 24 products in a fabric. To function in these fabrics, the Full-Fabric Capability feature must be enabled on the Sphereon 4300 Switch.

## Zoning Limitations

The E/OS family of products includes the ability to configure large zone sets, including up to 1024 zones and 1024 end ports in a single zone set. The following tables show the supported limits for the Sphereon 4300 Switch.

**NOTE:** Hard Zoning will be enforced upon firmware initialization. Devices not conforming to zoning rules will be restricted to their assigned zones.

**Table 1-1**

Zoning Parameter	Maximum Value
Number of end ports	1024
Unique zone members	1024
Members per zone	1024
Zones*	1024
Number of zone sets	64
Maximum Devices Supported	1024

\*The supported number of zones is based on a zone name with a maximum of 32 characters. The maximum number of zones decreases if full 64 character names are used. The supported limits are based on two members per zone.

Zone set sizes are affected by the number of zones in the zone set, the length of each zone name, the number of members in each zone, and the Interoperability mode of the fabric. Please consult with McDATA Professional Services or your support representative if you have questions regarding specific zone set configurations.

## CBR Utility

A standalone Configuration Backup and Restore (CBR) utility is now available for customers that do not use EFCM for backing up and restoring user configuration data. You can use this utility to backup and restore configuration data from all switch and director products running E/OS versions 04.00.00 and higher.

The CBR utility is available for no charge in the McDATA support section at [www.mcddata.com](http://www.mcddata.com) or by contacting your sales representative or service provider. For details on CBR, refer to the *Configuration Backup and Restore Utility CBR Version 6.0.0 Installation*

*and User Guide* (958-000370-000), also available from the same Website location.

To locate the CBR utility and publication on the Website:

1. Select *File Center* from the *Support* tab.
2. Log into *File Center*.
3. Select the *Documents* tab.
4. Select *E/OS Release Notes* as a category
5. Select *Search*.

Select *Download* for the *Backup/Restore Utility*.

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## Standards Compliance

- E/OS 05.05.01 is compliant with the following Fibre Channel protocols:
  - FC-GS-3
  - FC-PH Rev 4.3
  - FC-PH-2
  - FC-PH-3
  - FC-GS-2
  - FC-FLA
  - FC-FG
  - FC-SW-2
- E/OS 05.05.01 is compliant with the Fibre Channel Element MIB (FE-MIB).
- E/OS 05.05.01 is compliant with the following TCP/IP MIB-II groups:
  - System
  - Interface
  - Address Translation
  - IP
  - ICMP

- TCP
- UDP
- SNMP
- E/OS 05.05.01 is compliant with the following classes of service:
  - Class 2
  - Class 3
  - Class F

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## Upgrade and Downgrade Considerations

Downgrading to release 05.05.00 is only supported on first-generation Sphereon 4300 Switches. Second generation Sphereon 4300 Switches can only be downgraded to release 05.05.01.

E/OS 05.05.01 is the first E/OS version supported on the second-generation 4300 Switch. You cannot downgrade this switch below version 05.05.01.

First generation 4300s are also supported in E/OS releases 06.00.00 and above, but second generation 4300s are not supported until release 06.02.00. When upgrading a second generation 4300, you must use version 06.02.00 or above.

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## Prerequisites for Installing and Using E/OS 05.05.01

- E/OS 05.05.01 must be installed on a Sphereon 4300 Switch.
- Other McDATA products in the same fabric as a Sphereon 4300 Switch operating with E/OS version 05.05.01 must be at a minimum revision level for proper fabric operation. The minimum firmware levels are listed below, but it is recommended you upgrade to the latest shipping versions of each release (check with McDATA Customer Support for latest version).
  - All E/OS-based products excluding the Sphereon 4300: Version 05.01.00.
  - ED-5000 Version 04.01.00.

- Although products may co-exist in a fabric running different levels of E/OS firmware, all products *must* be at the same major functional release level for optimum fabric stability and robustness.

## Related Documentation

The following documents provide additional support and information pertaining to E/OS release 05.05.01:

- Sphereon 4300 Switch Installation and Service Manual
- McDATA Command Line Interface User Manual
- McDATA SANpilot User Manual
- Configuration Backup and Restore Utility CBR Version 6.0.0 Installation and User Guide

## Code Enhancements & Fixes in E/OS 05.05.01

The code fixes and enhancements in the following table are the same as in E/OS 05.05.00. E/OS 05.05.01 is based on E/OS 05.05.00, which is based on E/OS 05.01.00. Therefore, all enhancements and fixes in 05.05.00 are also included in E/OS 05.05.01.

Enhancements and fixes are organized by their Problem Category, then their incident report number (IR Number). Each enhancement and fix is assigned a Problem Category, based on whether it relates to simple network management protocol (SNMP), the Telnet command line interface (CLI), embedded management, SANpilot, systems services, maintenance port, or other issue.

IR Number	Description	Problem Category
9077	config.snmp.authtrap True/False statements are now rejected as invalid arguments and Enable/Disable are now accepted. This is now compatible with E/OS 5.1.	CLI
9078	config.snmp.show command now shows Enabled/Disabled instead of True/False.	CLI
9410/9429/9430	On-line help files updated for the Sphereon 4300.	Embedded Web Server

IR Number	Description	Problem Category
8843	Resolved instance where Sphereon 4300 faulted with a 700b code when running a multi alpa load test.	Fabric services
9316	Sphereon 4300 will not enable loop mode when NOS is received on an active point to point link. (LIP will not be sent after receiving a NOS).	H/W high availability management
7533	Request for Link Incident Notification (RLIR) print statements have been removed from the maintenance port when running active device traffic.	Maint port
8835/8841	Fault caused by un-initialized name server database has been resolved.	Name server
8716	4300 Will no longer send out of order frames (OOOF) to loop devices.	Other
8836	The 4300 will now auto negotiate with storage when the storage is also set to auto negotiate.	Other
8683	4300 will now count all class 3 frames that have been discarded.	Other
7204	The Sphereon 4300 will no longer distribute a Request for Link Incident Notification (RLIR) when the receiving node does not exchange Request for Node Identification (RNID).	Other
8970/9022	Will validate ALPA field of SID for received frames when port is operating in loop mode. This will prevent a port from logging in if the ALPA is not valid.	Other
9056	1C019 fault will not occur if an EFCM window is activated (note: EFCM is not supported on initial Sphereon 4300 release).	Other
9207	With devices logged into the switch, default zone disabled, no active zone set, after a POR the local switch will now show a route to themselves (the logged in devices).	Other
9215	Hard zoning will no longer prevent an N-Port from talking to itself if the port/attached node is not a member of a zone (or default zone).	Other
8719	Will be able to force a fault/dump by pressing the IML button 5 times in 5 seconds.	System services

## Outstanding Known Issues in E/OS 05.05.01

This release is based on E/OS 05.05.00, which was based on 05.01.00. Please refer to the 05.01.00 SRN for a complete list of outstanding known issues.

Refer to the following table for details on outstanding known issues. These issues are organized by their Problem Category then their incident number (IR Number). Each is assigned a Problem Category, based on whether it relates to simple network management protocol (SNMP), the Telnet command line interface (CLI), embedded management, web server, systems services, or other issue.

IR Number	Description	Problem Category
20534	Moving a Fibre Channel cable or changing port speeds while the port is autonegotiating can hang the port. Customer impact is medium. For a workaround and recovery, reset the port using your management application.	H/W High Avail Mgmt
9263	During a firmware upgrade, if the "Download firmware file from" field is left blank, or random text is entered in this field, you will get an error, "System File Error Firmware Successfully Loaded" when you click the Send and Load Firmware button.	Embedded Web Server
9738	Sphereon 4300 frame flows stop on all ports (f-port and fl-port) when performing a portfail or a portblock on an FL-port. This does not occur when blocking an F-port. When a failed port is reset, any buffers in the offline port's TX queue will be lost for at least 20 seconds followed by a link reset.	Other