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## LIB-4424 Series Release Notes

**Date: January 27, 2021**

**Version: V6.7.0 including  
hardware modification**

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### Overview

This release note covers the requirements, important notes, new features and changes addressed issues and known limitations for the LIB-4424 Series Multiservice Edge Aggregation Switch.

Firmware version v6.7.0 including hardware modification and these release notes apply to the following products:

- LIB-4424-80500
- LIB-4424-80510
- LIB-4424-80520

### New Features and Enhancements:

**This release contains two enhancements one hardware one software to address an issue with the I2C bus described in detail below.**

1). Explanation of the problem.

I2C bus remained connected to an IC redundant to the design. Because this IC was still powered, under certain conditions it would react to the information / address on the I2C bus, and in some cases would hold down the clock line, preventing communication until after the recovery or power reset.

The main issue with the I2C bus is fixed with the hardware mod, but the firmware update is to lessen the pressure on the I2C Bus being overwhelmed.

2). The cause of the problem.

See 1. Because of the unknown state of the IC in question, the exact circumstances required to cause a problem are unknowable and seemed to differ across units.

With the current polling of the devices (i.e. SFP modules and PSUs) on the bus means that there is a long period of inactivity and then all the devices are polled at the same time. Also, if there is a delay getting a response from a device over the bus, for any reason, this can then lead to further issues with other devices also being polled on the bus.

### 3). The solution.

The solution is to prevent the IC from being powered, by removing a series component from its power supply, removing it from the 3V3 rail.

The polling of the devices on the bus has been redesigned so the polling is much shorter, but only individual devices are polled each time. Also, if there is a response delay from a device, then other devices being polled over the bus are delayed until the first device is cleared, preventing blockages on the I2C bus. Also added to the syslog is an information message if there are any delays on the I2C bus for any devices.

### 4). Implications of the solution.

No hardware implications result from preventing the redundant IC being powered.

With the PSUs, instead of both PSUs being polled every 10 seconds they are now alternatively polled every 5 seconds, so from the operator's point of view they should notice no difference. With the SFP modules instead of all being polled every 10 seconds, now they are individually being polled every half second which means that 28 ports are now all polled every 14 seconds rather than 10 seconds, therefore from the operator's point of view updates in some circumstances might take slightly longer to register.

#### **Related Documentation:**

- [Liberator 4400/4424 CLI Guide Rev D](#)
- [LIB-4400/4424 installation Guide Rev F](#)
- [Liberator 4424/4400 Web User Guide Rev E](#)