

Move License from PEM to base for M9XT-FC1632

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Introduction

This document describes how the port-activation licensing works on the MDS 9132T (DS-C9132T-K9) platform when the M9XT-FC1632 PEM module is installed.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

Cisco MDS 9132T 32-Gbps 32-Port Fibre Channel Switch with 16 32-Gbps FC ports (FC1/1-16) in the base chassis, without the 8-port activation license (M9132T-PL8) installed, and with an M9XT-FC1632 module featuring 16 32-Gbps FC ports installed in the expansion slot.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

This document specifically addresses the process of moving licenses between the base ports (FC1/9-16) and expansion ports (FC1/17-32) in the absence of the 8-port activation license (M9132T-PL8).

A customer purchased the M9XT-FC1632 Port Expansion Module with all 16 ports active (FC1/17-32) and a default configuration of 8 active ports (FC1/1-8). They assumed that the license could be transferred between active expansion ports and eligible ports (FC1/9-16). However, when attempting to remove the port-activation license from the expansion module to move it to the base module, they encountered the error message "**fc1/x: (error) requested config change not allowed,**" where x represents a port number between 17-32.

Additionally, when installing the M9XT-FC1632 Port Expansion Module, the extra 16 ports do not show up in the "show license usage" output as follows:

```
`show license usage` Feature Ins Lic Status Expiry Date Comments Count -----  
----- FM_SERVER_PKG No - Unused -  
ENTERPRISE_PKG No - Unused - PORT_ACTIV_9132U_PKG No 8 In use never - -----  
-----
```

However, the "show port-license" output shows the base 8 licensed ports (fc1/1-8) and the 16 additional ports (fc1/17-32) as licensed.

```
`show port-license` Available port activation licenses are 0 -----  
----- Interface Cookie Port Activation License -----  
----- fc1/1 16777216 acquired fc1/2 16781312 acquired fc1/3 16785408 acquired fc1/4  
16789504 acquired fc1/5 16793600 acquired fc1/6 16797696 acquired fc1/7 16801792 acquired  
fc1/8 16805888 acquired fc1/9 16809984 eligible fc1/10 16814080 eligible fc1/11 16818176  
eligible fc1/12 16822272 eligible fc1/13 16826368 eligible fc1/14 16830464 eligible fc1/15  
16834560 eligible fc1/16 16838656 eligible fc1/17 16842752 acquired fc1/18 16846848 acquired  
fc1/19 16850944 acquired fc1/20 16855040 acquired fc1/21 16859136 acquired fc1/22 16863232  
acquired fc1/23 16867328 acquired fc1/24 16871424 acquired fc1/25 16875520 acquired fc1/26  
16879616 acquired fc1/27 16883712 acquired fc1/28 16887808 acquired fc1/29 16891904 acquired  
fc1/30 16896000 acquired fc1/31 16900096 acquired fc1/32 16904192 acquired
```

Problem

The customer in question could not move the port activation license between the expansion and base module.

Solution

This behavior is by design for the scenario for activating the first 24 consecutive ports. However, since the customer in question did not purchase the M9132T-PL8 (8-port activation license) to activate ports FC1/9-16, their only option was to move the port-activation license from FC1/1-8 to FC1/9-16 and use the 24 consecutive ports starting from interface FC1/9-32. Alternatively, they could purchase an additional 8-port license if desired.

```
MDS9132-1-rack7(config-if)# int fc1/17  
MDS9132-1-rack7(config-if)# no port-license  
fc1/17: (error) requested config change not allowed  
MDS9132-1-rack7(config-if)#
```

The licensing guide is now updated:

Cisco MDS 9000 Series Licensing Guide, Release 8.x

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/8_x/config/licensing/cisco_mds9000_licens



Note: Cisco MDS 9132T 32-Gbps 32-Port Fibre Channel Switches have 16 32-Gbps FC ports (FC1/1-16) in the base chassis and 16 32-Gbps FC ports on the LEM module (FC1/17-32). Port licenses are not movable between the base chassis and the LEM module.

Conclusion

To license ports fc1/1-8 (8 ports) and, for example, port fc1/9, you need to obtain an additional 8-port license even if the M9XT-FC1632 Port Expansion Module is installed.