SSH-C48Q
Top-of-Rack Omni-Path Switch

CLI User's Guide

Revison 1.0

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WARNING: HANDLING OF LEAD SOLDER MATERIALS USED IN THIS PRODUCT MAY EXPOSE YOU TO LEAD, A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

SSH-C48Q CLI User's Guide
Release Date: February 5, 2016

Preface

This manual is part of the documentation set for the Intel® Omni-Path Fabric (Intel® OP Fabric), which is an end-to-end solution consisting of adapters, edge switches, director switches and fabric management and development tools.

The Intel® OP Fabric delivers a platform for the next generation of High-Performance Computing (HPC) systems that is designed to cost-effectively meet the scale, density, and reliability requirements of large-scale HPC clusters.

Both the Intel® OP Fabric and standard InfiniBand* are able to send Internet Protocol (IP) traffic over the fabric, or *IPoFabric*. In this document, however, it is referred to as *IP over IB* or *IPoIB*. From a software point of view, IPoFabric and IPoIB behave the same way and, in fact, use the same `ib_ipoib` driver to send IP traffic over the ib0 and/or ib1 ports.

Intended Audience

The intended audience for the Intel® Omni-Path (Intel® OP) document set is network administrators and other qualified personnel.

Documentation Conventions

This guide uses the following documentation conventions:

- *Note:* provides additional information.
- ***Caution:*** indicates the presence of a hazard that has the potential of causing damage to data or equipment.
- ***Warning:*** indicates the presence of a hazard that has the potential of causing personal injury.
- Text in blue font indicates a hyperlink (jump) to a figure, table, or section in this guide. Links to Web sites are also shown in blue. For example:

  See License Agreements for more information.

  For more information, visit www.supermicro.com.
- Text in **bold** font indicates user interface elements such as a menu items, buttons, check boxes, or column headings. For example:

  Click the **Start** button, point to **Programs**, point to **Accessories**, and then click **Command Prompt**.
- Text in `Courier` font indicates a file name, directory path, or command line text. For example:

  Enter the following command: `sh ./install.bin`
- Key names and key strokes are shown in underlined bold upper-case letters. For example:

  Press **CTRL+P** and then press the **UP ARROW** key.
- Text in *italics* indicates terms, emphasis, variables, or document titles.

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Notes

Introduction

This manual describes the command line interface (CLI) task information for the Supermicro SSH-C48Q Switch family.

This manual is organized as follows:

- This section provides an overview of the CLI, including the command groups, online help, and keyboard shortcuts.
- Groups and Commands describes the CLI commands.

CLI Overview

This section details the usage of the Command Line Interface (CLI) feature for the Supermicro SSH-C48Q Switch family. The CLI allows you to perform remote configuration and management tasks that mirror the functionality of the Intel® Omni-Path Fabric Chassis Viewer GUI.

The CLI is accessed via a terminal attached to the USB port or via the OOB (out of band) management port using Telnet and secure shell (SSH).

Accessing the CLI through the serial port does not require a login and password (unless configured to do so) and defaults to administrator privileges. Using the serial port allows permanent access to the switch, even if Telnet and SSH are not functioning.

For a standalone switch, you can Telnet to the IP address(es) of the unit. Once connected, the CLI works as any Telnet session does.

To access the CLI using Telnet and SSH, a login and password are required. There are two user modes, operator and administrator, with the following access privileges:

Operator:

- Read only access.

Administrator:

- Read and write access.
- Reboot access.
- Change operator and administrator passwords.
- Disable user login and passwords, which allows all users administrator-level access without the need for a user name or password.
- View all current user sessions.
- Access all of the commands executed from any open operator session.
- Log out any open user sessions.
- Send messages to the open user sessions.

The CLI allows multiple users to be logged in simultaneously. However, some commands are locked to a user(s) if another user is executing the same command.

Commands and Functional Groups

The CLI commands are grouped into functional areas as shown in the following table.

Type `list -noprompt` to display the list of command groups.

Table 1: Command Groups

Group	Description
General	General General commands for user management and CLI configuration.
Chassis	Chassis Chassis management commands, such as FRU info, fan/power supply state, and others.
Network	Network Ethernet interface management commands.
Firmware	Firmware Commands that display or modify firmware revision levels.
Fm	Fabric Management Commands used for Subnet Manager (SM), Subnet Administration (SA), Performance Manager (PM), and Fabric Executive (FE) configuration and operation.
Log	Log Commands for viewing log files as well as configuring logging parameters.
Ism	Interconnect Switch Management (ISM) Port configuration and statistics commands.
Tm	Time Management Commands for retrieving and setting the current system time, setting the time zone, and setting daylight saving time parameters.

Group	Description
`Snmp`	SNMP Commands for configuring trap destinations and security parameters required to access the switch from an SNMP manager.
`CaptureInfo`	CaptureInfo Analysis and debugging commands for capturing switch-specific information.

To list commands within a functional group, simply type the functional group name. For example, to list all of the firmware commands, type `list Firmware`. The system displays information similar to the following:

```
-> list firmware
fwUpdate            Used to update firmware.
fwListFiles         Used to display the set of
files in the firmware ramdisk.
fwShowUpdateParams  Used to display the firmware
default update parameters.
fwSetUpdateParams   Used to configure firmware
default update parameters.
showCapability      Used to display the
capabilities/features.
showLastScpRetCode  Used to display the return
code from the last SCP Firmware or
                     XML Config Push.
fwVersion          Used to display the firmware
revisions.
bootQuery         Used to display firmware boot
image information.
bootSelect          Used to modify the boot
selection.
```

Online Help

The online help for the CLI provides all necessary information to successfully execute each command.

Access online help by typing `help` *CommandName* or *CommandName* `help`.

For example, typing `help list` displays the following information for the `list` command:

```
-> help list
NAME
       list

SYNOPSIS
       list [{all | <group>}] [-noprompt]
[-verbose]

DESCRIPTION
       Used to display all the valid commands.

OPTIONS
      all      :List the commands for all groups.
       <group>   :List the commands in that
particular group, see NOTES.
       -noprompt :Just list the command groups.
     -verbose  :Print full help for each command,
instead of summary.

NOTES
       Use 'list all' to display brief help for
all available commands.
      Use 'list all -verbose' to display verbose
help for all commands.
       Use 'list -noprompt' to display the list
of command groups.
```

Keyboard Shortcuts

- The CLI keeps a history of recently executed commands. Use the **UP ARROW** and **DOWN ARROW** keys to access the history.
- Edit the current command using the **LEFT ARROW** and **RIGHT ARROW** keys.
- Press the **TAB** key after typing at least one character to either complete a command or to list all the available commands that begin with the characters already typed.

Accessing the CLI

The CLI can be accessed via Telnet, SSH, or through the switch RS-232 serial port. The following instructions use Telnet.

1) Telnet to the IP address of the switch with the following command:

`telnet <IP ADDRESS>`

NOTE: *The default IP address is 192.168.100.9 and the default netmask is 255.255.255.0.*

2) The system prompts for a user name. The CLI has the following default user names:

   Operator access: `operator`

   Administrator access: `admin`

   Type the appropriate user name and press **ENTER**.

3) The system prompts for a password. The CLI has the following default passwords:

   Operator access: `operpass`

   Administrator access: `adminpass`

   Type the appropriate password and press **ENTER**. The system responds with:

```
Welcome to the <SWITCH> CLI. Type 'list' for the
list of commands.
```

Notes

Standardized Warning Statements

1-1 About Standardized Warning Statements

The following statements are industry standard warnings, provided to warn the user of situations which have the potential for bodily injury. Should you have questions or experience difficulty, contact Supermicro's Technical Support department for assistance. Only certified technicians should attempt to install or configure components.

Read this appendix in its entirety before installing or configuring components in the Supermicro chassis.

These warnings may also be found on our web site at http://www.supermicro.com/about/policies/safety_information.cfm.

Warning Definition

Warning!

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

警告の定義

この警告サインは危険を意味します。

人身事故につながる可能性がありますので、いずれの機器でも動作させる前に、

電気回路に含まれる危険性に注意して、標準的な事故防止策に精通して下さい。

此警告符号代表危险。

您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾的声明号码

找到此设备的安全性警告说明的翻译文本。

此警告符號代表危險。

您正處於可能身體可能會受損傷的工作環境中。在您使用任何設備之前，請注意觸電的危險，並且要熟悉預防事故發生的標準工作程序。請依照每一注意事項後的號碼找到相關的翻譯說明內容。

Warnung

WICHTIGE SICHERHEITSHINWEISE

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

BEWAHREN SIE DIESE HINWEISE GUT AUF.

INSTRUCCIONES IMPORTANTES DE SEGURIDAD

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

GUARDE ESTAS INSTRUCCIONES.

IMPORTANTES INFORMATIONS DE SÉCURITÉ

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

CONSERVEZ CES INFORMATIONS.

תקנון הצהרות אזהרה

הצהרות הבאות הן אזהרות על פי תקני התעשייה, על מנת להזהיר את המשתמש מפני חבלה פיזית אפשרית. במידה ויש שאלות או היתקלות בבעיה כלשהי, יש ליצור קשר עם מחלקת תמיכה טכנית של סופרמיקרו. טכנאים מוסמכים בלבד רשאים להתקין או להגדיר את הרכיבים.

יש לקרוא את הנספח במלואו לפני התקנת או הגדרת הרכיבים במארזי סופרמיקרו.

تحذير!هذا الرمز يعني خطر انك في حالة يمكن أن تتسبب في اصابة جسدية .
قبل أن تعمل على أي معدات،كن على علم بالمخاطر الناجمة عن الدوائر الكهربائية
وكن على دراية بالممارسات الوقائية لمنع وقوع أي حوادث
استخدم رقم البيان المنصوص في نهاية كل تحذير للعثور ترجمتها

안전을 위한 주의사항

경고 !

이 경고 기호는 위험이 있음을 알려 줍니다 . 작업자의 신체에 부상을 야기 할 수 있는 상태에 있게 됩니다 . 모든 장비에 대한 작업을 수행하기 전에 전기회로와 관련된 위험 요소들을 확인하시고 사전에 사고를 방지할 수 있도록 표준 작업절차를 준수해 주시기 바랍니다 .

해당 번역문을 찾기 위해 각 경고의 마지막 부분에 제공된 경고문 번호를 참조하십시오

BELANGRIJKE VEILIGHEIDSINSTRUCTIES

Dit waarschuwings symbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij een elektrische installatie betrokken risico's en dient u op de hoogte te zijn van de standaard procedures om ongelukken te voorkomen. Gebruik de nummers aan het eind van elke waarschuwing om deze te herleiden naar de desbetreffende locatie.

BEWAAR DEZE INSTRUCTIES

Installation Instructions

Warning!

Read the installation instructions before connecting the system to the power source.

設置手順書

システムを電源に接続する前に、設置手順書をお読み下さい。

警告
将此系统连接电源前，请先阅读安装说明。
警告

將系統與電源連接前，請先閱讀安裝說明。

Warnung

Vor dem Anschließen des Systems an die Stromquelle die Installationsanweisungen lesen.

¡Advertencia!

Lea las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

Attention

Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

יש לקרוא את הוראות התקנה לפני חיבור המערכת למקור מתח.

اقر إرشادات التركيب قبل توصيل النظام إلى مصدر للطاقة

시스템을 전원에 연결하기 전에 설치 안내를 읽어주십시오 .

Waarschuwing

Raadpleeg de installatie-instructies voordat u het systeem op de voedingsbron aansluit.

Circuit Breaker

Warning!

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 250 V, 20 A.

サーキット・ブレーカー

この製品は、短絡（過電流）保護装置がある建物での設置を前提としています。

保護装置の定格が 250 V、20 A を超えないことを確認下さい。

警告

此产品的短路（过载电流）保护由建筑物的供电系统提供，确保短路保护设备的额定电流不大于 250V,20A。

警告

此產品的短路（過載電流）保護由建築物的供電系統提供，確保短路保護設備的額定電流不大於 250V,20A。

Warnung

Dieses Produkt ist darauf angewiesen, dass im Gebäude ein Kurzschluss- bzw. Überstromschutz installiert ist. Stellen Sie sicher, dass der Nennwert der Schutzvorrichtung nicht mehr als: 250 V, 20 A beträgt.

¡Advertencia!

Este equipo utiliza el sistema de protección contra cortocircuitos (o sobrecorrientes) del edificio. Asegúrese de que el dispositivo de protección no sea superior a: 250 V, 20 A.

Attention

Pour ce qui est de la protection contre les courts-circuits (surtension), ce produit dépend de l'installation électrique du local. Vérifiez que le courant nominal du dispositif de protection n'est pas supérieur à :250 V, 20 A.

מוצר זה מסתמך על הגנה המותקנת במבנים למניעת קצר חשמלי. יש לוודא כי המכשיר המגן מפני הקצר החשמלי הוא לא יותר מ-250 V, 20 A

هذا المنتج يعتمد على معدات الحماية من الدوائرالقصيرة التي تم تثبيتها في المبنى
تأكد من أن تقييم الجهاز الوقائي ليس أكثر من: 20A, 250V

경고 !

이 제품은 전원의 단락（과전류）방지에 대해서 전적으로 건물의 관련 설비에 의존합니다 . 보호장치의 정격이 반드시 250V(볼트), 20A(암페어) 를 초과하지 않도록 해야 합니다 .

Waarschuwing

Dit product is afhankelijk van de kortsluitbeveiliging (overspanning) van uw electrische installatie. Controleer of het beveiligde aparaat niet groter gedimensioneerd is dan 220V, 20A.

Power Disconnection Warning

Warning!

The system must be disconnected from all sources of power and the power cord removed from the power supply module(s) before accessing the chassis interior to install or remove system components.

電源切断の警告

システムコンポーネントの取り付けまたは取り外しのために、シャーシー内部にアクセスするには、

システムの電源はすべてのソースから切断され、電源コードは電源モジュールから取り外す必要があります。

警告

在你打开机箱并安装或移除内部器件前，必须将系统完全断电，并移除电源线。

警告

在您打開機殼安裝或移除內部元件前，必須將系統完全斷電，並移除電源線。

Warnung

Das System muss von allen Quellen der Energie und vom Netzanschlusskabel getrennt sein, das von den Spg.Versorgungsteilmodulen entfernt wird, bevor es auf den Chassisinnenraum zurückgreift, um Systemsbestandteile anzubringen oder zu entfernen.

¡Advertencia!

El sistema debe ser disconnected de todas las fuentes de energía y del cable eléctrico quitado de los módulos de fuente de alimentación antes de tener acceso el interior del chasis para instalar o para quitar componentes de sistema.

Attention

Le système doit être débranché de toutes les sources de puissance ainsi que de son cordon d'alimentation secteur avant d'accéder à l'intérieur du chassis pour installer ou enlever des composants de systéme.

אזהרה מפני ניתוק חשמלי

אזהרה !
יש לנתק את המערכת מכל מקורות החשמל ויש להסיר את כבל החשמלי מהספק לפני גישה לחלק הפנימי של המארז לצורך התקנת או הסרת רכיבים.

يجب فصل النظام من جميع مصادر الطاقة وإزالة سلك الكهرباء من وحدة امداد الطاقة قبل
الوصول إلى المناطق الداخلية للهيكل لتثبيت أو إزالة مكونات الجهاز

경고 !

시스템에 부품들을 장착하거나 제거하기 위해서는 섀시 내부에 접근하기 전에 반드시 전원 공급장치로부터 연결되어있는 모든 전원과 전기코드를 분리해주어야 합니다 .

Waarschuwing

Voordat u toegang neemt tot het binnenwerk van de behuizing voor het installeren of verwijderen van systeem onderdelen, dient u alle spanningsbronnen en alle stroomkabels aangesloten op de voeding(en) van de behuizing te verwijderen.

Equipment Installation

Warning!

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

機器の設置

トレーニングを受け認定された人だけがこの装置の設置、交換、またはサービスを許可されています。

警告
只有经过培训且具有资格的人员才能进行此设备的安装、更换和维修。
警告

只有經過受訓且具資格人員才可安裝、更換與維修此設備。

Warnung

Das Installieren, Ersetzen oder Bedienen dieser Ausrüstung sollte nur geschultem, qualifiziertem Personal gestattet werden.

¡Advertencia!

Solamente el personal calificado debe instalar, reemplazar o utilizar este equipo.

Attention

Il est vivement recommandé de confier l'installation, le remplacement et la maintenance de ces équipements à des personnels qualifiés et expérimentés.

אזהרה !
צוות מוסמך בלבד רשאי להתקין, להחליף את הציוד או לתת שירות עבור הציוד.

يجب أن يسمح فقط للموظفين المؤهلين والمدربين لتركيب واستبدال أو خدمة هذا الجهاز
경고 !

훈련을 받고 공인된 기술자만이 이 장비의 설치 , 교체 또는 서비스를 수행할 수 있습니다 .

Waarschuwing

Deze apparatuur mag alleen worden geïnstalleerd, vervangen of hersteld door geschoold en gekwalificeerd personeel.

Restricted Area

Warning!

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. (This warning does not apply to workstations).

アクセス制限区域

このユニットは、アクセス制限区域に設置されることを想定しています。

アクセス制限区域は、特別なツール、鍵と錠前、その他のセキュリティの手段を用いてのみ出入りが可能です。

警告

此部件应安装在限制进出的场所，限制进出的场所指只能通过使用特殊工具、锁和钥匙或其它安全手段进出的场所。

警告

此裝置僅限安裝於進出管制區域，進出管制區域係指僅能以特殊工具、鎖頭及鑰匙或其他安全方式才能進入的區域。

Warnung

Diese Einheit ist zur Installation in Bereichen mit beschränktem Zutritt vorgesehen. Der Zutritt zu derartigen Bereichen ist nur mit einem Spezialwerkzeug, Schloss und Schlüssel oder einer sonstigen Sicherheitsvorkehrung möglich.

¡Advertencia!

Esta unidad ha sido diseñada para instalación en áreas de acceso restringido. Sólo puede obtenerse acceso a una de estas áreas mediante la utilización de una herramienta especial, cerradura con llave u otro medio de seguridad.

Attention

Cet appareil doit être installée dans des zones d'accès réservés. L'accès à une zone d'accès réservé n'est possible qu'en utilisant un outil spécial, un mécanisme de verrouillage et une clé, ou tout autre moyen de sécurité.

אזור עם גישה מוגבלת

אזהרה !
יש להתקין את היחידה באזורים שיש בהם הגבלת גישה. הגישה ניתנת בעזרת כלי אבטחה בלבד (מפתח, מנעול וכד').

تم تخصيص هذه الوحدة لتركيبها في مناطق محظورة .
يمكن الوصول إلى منطقة محظورة فقط من خلال استخدام أداة خاصة،
قفل ومفتاح أو أي وسيلة أخرى للالأمان

경고 !

이 장치는 접근이 제한된 구역에 설치하도록 되어있습니다 . 특수도구 , 잠금 장치 및 키 , 또는 기타 보안 수단을 통해서만 접근 제한 구역에 들어갈 수 있습니다 .

Waarschuwing

Dit apparaat is bedoeld voor installatie in gebieden met een beperkte toegang. Toegang tot dergelijke gebieden kunnen alleen verkregen worden door gebruik te maken van speciaal gereedschap, slot en sleutel of andere veiligheidsmaatregelen.

Battery Handling

Warning!

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

電池の取り扱い

電池交換が正しく行われなかった場合、破裂の危険性があります。交換する電池はメーカーが推奨する型、または同等のものを使用下さい。使用済電池は製造元の指示に従って処分して下さい。

警告
电池更换不当会有爆炸危险。请只使用同类电池或制造商推荐的功能相当的电池更换原有电池。请按制造商的说明处理废旧电池。
警告

電池更換不當會有爆炸危險。請使用製造商建議之相同或功能相當的電池更換原有電池。請按照製造商的說明指示處理廢棄舊電池。

Warnung

Bei Einsetzen einer falschen Batterie besteht Explosionsgefahr. Ersetzen Sie die Batterie nur durch den gleichen oder vom Hersteller empfohlenen Batterietyp. Entsorgen Sie die benutzten Batterien nach den Anweisungen des Herstellers.

Attention

Danger d'explosion si la pile n'est pas remplacée correctement. Ne la remplacer que par une pile de type semblable ou équivalent, recommandée par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.

¡Advertencia!

Existe peligro de explosión si la batería se reemplaza de manera incorrecta. Reemplazar la batería exclusivamente con el mismo tipo o el equivalente recomendado por el fabricante. Desechar las baterías gastadas según las instrucciones del fabricante.

אזהרה !

קיימת סכנת פיצוץ של הסוללה במידה והוחלפה בדרך לא תקינה. יש להחליף את הסוללה בסוג התואם מחברת יצרן מומלצת.

סילוק הסוללות המשומשות יש לבצע לפי הוראות היצרן.

هناك خطر من انفجار في حالة استبدال البطارية بطريقة غير صحيحة فعليك استبدال البطارية
فقط بنفس النوع أو ما يعادلها كما أوصت به الشركة المصنعة
تخلص من البطاريات المستعملة وفقا لتعليمات الشركة الصانعة

경고 !

배터리가 올바르게 교체되지 않으면 폭발의 위험이 있습니다 . 기존 배터리와 동일하거나 제조사에서 권장하는 동등한 종류의 배터리로만 교체해야 합니다 . 제조사의 안내에 따라 사용된 배터리를 처리하여 주십시오 .

Waarschuwing

Er is ontploffingsgevaar indien de batterij verkeerd vervangen wordt. Vervang de batterij slechts met hetzelfde of een equivalent type die door de fabrikant aanbevolen wordt. Gebruikte batterijen dienen overeenkomstig fabrieksvoorschriften afgevoerd te worden.

Redundant Power Supplies

Warning!

This unit might have more than one power supply connection. All connections must be removed to de-energize the unit.

冗長電源装置

このユニットは複数の電源装置が接続されている場合があります。

ユニットの電源を切るためには、すべての接続を取り外さなければなりません。

警告

此部件连接的电源可能不止一个，必须将所有电源断开才能停止给该部件供电。

警告

此裝置連接的電源可能不只一個，必須切斷所有電源才能停止對該裝置的供電。

Warnung

Dieses Gerät kann mehr als eine Stromzufuhr haben. Um sicherzustellen, dass der Einheit kein trom zugeführt wird, müssen alle Verbindungen entfernt werden.

¡Advertencia!

Puede que esta unidad tenga más de una conexión para fuentes de alimentación. Para cortar por completo el suministro de energía, deben desconectarse todas las conexiones.

Attention

Cette unité peut avoir plus d'une connexion d'alimentation. Pour supprimer toute tension et tout courant électrique de l'unité, toutes les connexions d'alimentation doivent être débranchées.

אם קיים יותר מספק אחד

אזהרה !

ליחדה יש יותר מחיבור אחד של ספק. יש להסיר את כל החיבורים על מנת לרוקן את היחידה.

قد يكون لهذا الجهاز عدة اتصالات بوحدات امداد الطاقة.

يجب إزالة كافة الاتصالات لعزل الوحدة عن الكهرباء

경고 !

이 장치에는 한 개 이상의 전원 공급 단자가 연결되어 있을 수 있습니다. 이 장치에 전원을 차단하기 위해서는 모든 연결 단자를 제거해야만 합니다.

Waarschuwing

Deze eenheid kan meer dan één stroomtoevoeraansluiting bevatten. Alle aansluitingen dienen verwijderd te worden om het apparaat stroomloos te maken

Backplane Voltage

Warning!

Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.

バックプレーンの電圧

システムの稼働中は危険な電圧または電力が、バックプレーン上にかかっています。

修理する際には注意ください。

警告
当系统正在进行时，背板上有很危险的电压或能量，进行维修时务必小心。
警告

當系統正在進行時，背板上有危險的電壓或能量，進行維修時務必小心。

Warnung

Wenn das System in Betrieb ist, treten auf der Rückwandplatine gefährliche Spannungen oder Energien auf. Vorsicht bei der Wartung.

¡Advertencia!

Cuando el sistema está en funcionamiento, el voltaje del plano trasero es peligroso. Tenga cuidado cuando lo revise.

Attention

Lorsque le système est en fonctionnement, des tensions électriques circulent sur le fond de panier. Prendre des précautions lors de la maintenance.

מתח בפנל האחורי

אזהרה !
קיימת סכנת מתח בפנל האחורי בזמן תפעול המערכת. יש להיזהר במהלך העבודה.

هناك خطر من التيار الكهربائي أوالطاقة الموجودة على اللوحة
عندما يكون النظام يعمل كن حذرا عند خدمة هذا الجهاز

경고 !

시스템이 동작 중일 때 후면판 (Backplane) 에는 위험한 전압이나 에너지가 발생 합니다 . 서비스 작업 시 주의하십시오 .

Waarschuwing

Een gevaarlijke spanning of energie is aanwezig op de backplane wanneer het systeem in gebruik is. Voorzichtigheid is geboden tijdens het onderhoud.

Comply with Local and National Electrical Codes

Warning!

Installation of the equipment must comply with local and national electrical codes.

地方および国の電気規格に準拠

機器の取り付けはその地方および国の電気規格に準拠する必要があります。

警告

设备安装必须符合本地与本国电气法规。

警告

設備安裝必須符合本地與本國電氣法規。

Warnung

Die Installation der Geräte muss den Sicherheitsstandards entsprechen.

¡Advertencia!

La instalacion del equipo debe cumplir con las normas de electricidad locales y nacionales.

Attention

L'équipement doit être installé conformément aux normes électriques nationales et locales.

תיאום חוקי החשמל הארצי

אזהרה !
התקנת הציוד חייבת להיות תואמת לחוקי החשמל המקומיים והארציים.

تركيب المعدات الكهربائية يجب أن يمتثل للقوانين المحلية والوطنية المتعلقة بالكهرباء

경고 !

현 지역 및 국가의 전기 규정에 따라 장비를 설치해야 합니다 .

Waarschuwing

Bij installatie van de apparatuur moet worden voldaan aan de lokale en nationale elektriciteitsvoorschriften.

Product Disposal

Warning!

Ultimate disposal of this product should be handled according to all national laws and regulations.

製品の廃棄

この製品を廃棄処分する場合、国の関係する全ての法律・条例に従い処理する必要があります。

警告
本产品的废弃处理应根据所有国家的法律和规章进行。
警告

本產品的廢棄處理應根據所有國家的法律和規章進行。

Warnung

Die Entsorgung dieses Produkts sollte gemäß allen Bestimmungen und Gesetzen des Landes erfolgen.

¡Advertencia!

Al deshacerse por completo de este producto debe seguir todas las leyes y reglamentos nacionales.

Attention

La mise au rebut ou le recyclage de ce produit sont généralement soumis à des lois et/ou directives de respect de l'environnement. Renseignez-vous auprès de l'organisme compétent.

סילוק המוצר

אזהרה !
סילוק סופי של מוצר זה חייב להיות בהתאם להנחיות וחוקי המדינה.

عند التخلص النهائي من هذا المنتج ينبغي التعامل معه وفقا لجميع القوانين واللوائح الوطنية

경고 !

이 제품은 해당 국가의 관련 법규 및 규정에 따라 폐기되어야 합니다 .

Waarschuwing

De uiteindelijke verwijdering van dit product dient te geschieden in overeenstemming met alle nationale wetten en reglementen.

Hot Swap Fan Warning

Warning!

The fans might still be turning when you remove the fan assembly from the chassis. Keep fingers, screwdrivers, and other objects away from the openings in the fan assembly's housing.

ファン・ホットスワップの警告

シャーシから冷却ファン装置を取り外した際、ファンがまだ回転している可能性があります。ファンの開口部に、指、ドライバー、およびその他のものを近づけないで下さい。

警告
当您从机架移除风扇装置，风扇可能仍在转动。小心不要将手指、螺丝起子和其他物品太靠近风扇
警告

當您從機架移除風扇裝置，風扇可能仍在轉動。小心不要將手指、螺絲起子和其他物品太靠近風扇。

Warnung

Die Lüfter drehen sich u. U. noch, wenn die Lüfterbaugruppe aus dem Chassis genommen wird. Halten Sie Finger, Schraubendreher und andere Gegenstände von den Öffnungen des Lüftergehäuses entfernt.

¡Advertencia!

Los ventiladores podran dar vuelta cuando usted quite ell montaje del ventilador del chasis. Mandtenga los dedos, los destornilladores y todos los objetos lejos de las aberturas del ventilador

Attention

Il est possible que les ventilateurs soient toujours en rotation lorsque vous retirerez le bloc ventilateur du châssis. Prenez garde à ce que doigts, tournevis et autres objets soient éloignés du logement du bloc ventilateur.

אזהרה !
כאשר מסירים את חלקי המאוורר מהמארז, יתכן והמאווררים עדיין עובדים. יש להרחיק למרחק בטוח את האצבעות וכלי עבודה שונים מהפתחים בתוך המאוורר

من الممكن أن المراوح لا تزال تدورعند إزالة كتلة المروحة من الهيكل يجب إبقاء الأصابع ومفكات البراغي
وغيرها من الأشياء بعيدا عن الفتحات في كتلة المروحة.

경고 !

섀시로부터 팬 조립품을 제거할 때 팬은 여전히 회전하고 있을 수 있습니다 . 팬 조림품 외관의 열려있는 부분들로부터 손가락 및 스크류드라이버 , 다른 물체들이 가까이 하지 않도록 배치해 주십시오 .

Waarschuwing

Het is mogelijk dat de ventilator nog draait tijdens het verwijderen van het ventilatorsamenstel uit het chassis. Houd uw vingers, schroevendraaiers en eventuele andere voorwerpen uit de buurt van de openingen in de ventilatorbehuizing.

Power Cable and AC Adapter

Warning!

When installing the product, use the provided or designated connection cables, power cables and AC adaptors. Using any other cables and adaptors could cause a malfunction or a fire. Electrical Appliance and Material Safety Law prohibits the use of UL or CSA -certified cables (that have UL/CSA shown on the code) for any other electrical devices than products designated by Supermicro only.

電源コードと AC アダプター

製品を設置する場合、提供または指定された接続ケーブル、電源コードと AC アダプターを使用下さい。他のケーブルやアダプタを使用すると故障や火災の原因になることがあります。電気用品安全法は、UL または CSA 認定のケーブル (UL/CSE マークがコードに表記) を Supermicro が指定する製品以外に使用することを禁止しています。

警告

安装此产品时,请使用本身提供的或指定的连接线,电源线和电源适配器.使用其它线材或适配器可能会引起故障或火灾。除了 Supermicro 所指定的产品，电气用品和材料安全法律规定禁止使用未经 UL 或 CSA 认证的线材。(线材上会显示 UL/CSA 符号)。

警告

安裝此產品時，請使用本身提供的或指定的連接線，電源線和電源適配器．使用其它線材或適配器可能會引起故障或火災。除了 Supermicro 所指定的產品，電氣用品和材料安全法律規定禁止使用未經 UL 或 CSA 認證的線材。(線材上會顯示 UL/CSA 符號)。

Warnung

Bei der Installation des Produkts, die zur Verfügung gestellten oder benannt Anschlusskabel, Stromkabel und Netzteile. Verwendung anderer Kabel und Adapter kann zu einer Fehlfunktion oder ein Brand entstehen. Elektrische Geräte und Material Safety Law verbietet die Verwendung von UL-oder CSA-zertifizierte Kabel, UL oder CSA auf der Code für alle anderen elektrischen Geräte als Produkte von Supermicro nur bezeichnet gezeigt haben.

¡Advertencia!

Al instalar el producto, utilice los cables de conexión previstos o designados, los cables y adaptadores de CA. La utilización de otros cables y adaptadores podría ocasionar un mal funcionamiento o un incendio. Aparatos Eléctricos y la Ley de Seguridad del Material prohíbe el uso de UL o CSA cables certificados que tienen UL o CSA se muestra en el código de otros dispositivos eléctricos que los productos designados por Supermicro solamente.

Attention

Lors de l'installation du produit, utilisez les bables de connection fournis ou désigné. L'utilisation d'autres cables et adaptateurs peut provoquer un dysfonctionnement ou un incendie. Appareils électroménagers et de loi sur la sécurité Matériel interdit l'utilisation de UL ou CSA câbles certifiés qui ont UL ou CSA indiqué sur le code pour tous les autres appareils électriques que les produits désignés par Supermicro seulement.

חשמליים ומתאמי AC

אזהרה !
כאשר מתקינים את המוצר, יש להשתמש בכבלים, ספקים ומתאמים AC אשר נועדו וסופקו לשם כך. שימוש בכל כבל או מתאם אחר יכול לגרום לתקלה או קצר חשמלי. על פי חוקי שימוש במכשירי חשמל וחוקי בטיחות, קיים איסור להשתמש בכבלים המוסמכים ב- UL או ב- CSA (כשאר מופיע עליהם קוד של UL/CSA) עבור כל מוצר חשמלי אחר שלא צוין על ידי סופרמיקרו בלבד.

عند تركيب الجهاز يجب استخدام كابلات التوصيل،والكابلات الكهربائية
ومحولات التيار المتردد
التي . أن استخدام أي كابلات ومحولات أخرى يتسبب في حدوث عطل أو حريق.
تم توفيرها لك مع المنتج
الأجهزة الكهربائية ومواد قانون السلامة يحظر استخدام الكابلات CSA أو UL
معتمدة من قبل
لأي أجهزة كهربائية أخرى غير المنتجات المعينة من قبل Supermicro
(التي تحمل علامة UL/CSA)

경고 !

제품을 설치할 때에는 제공되거나 지정된 연결케이블과 전원케이블 , AC 어댑터를 사용해야 합니다 . 그 밖의 다른 케이블들이나 어댑터들은 고장 또는 화재의 원인이 될 수 있습니다 . 전기용품안전법 (Electrical Appliance and Material Safety Law) 은 슈퍼마이크로에서 지정한 제품들 외에는 그 밖의 다른 전기 장치들을 위한 UL 또는 CSA 에서 인증한 케이블 (전선 위에 UL/CSA 가 표시) 들의 사용을 금지합니다 .

Waarschuwing

Bij het installeren van het product, gebruik de meegeleverde of aangewezen kabels, stroomkabels en adapters. Het gebruik van andere kabels en adapters kan leiden tot een storing of een brand. Elektrisch apparaat en veiligheidsinformatiebladen wet verbiedt het gebruik van UL of CSA gecertificeerde kabels die UL of CSA die op de code voor andere elektrische apparaten dan de producten die door Supermicro alleen.

Groups and Commands

This section lists all CLI functional groups along with the commands for each group. The commands for all supported switches are listed. Any commands that are different for a particular switch are noted.

For more specific information for each functional group, execute the command:

```
help GroupName
```

For more specific command information, execute the command:

```
help CommandName
```

General

Commands in this category are used for user management and CLI configuration.

help

Displays help information for a specific command.

To get help on a particular command, type:

```
[command] help
```

For convenience purposes, you can also type:

```
help [command]
```

NOTE: *Tab completion mode does not work if you use the form* `help [command].`

command

Name of the command for which help information is requested.

```
-> help list
NAME
       list
SYNOPSIS
       list [group] [-noprompt]
DESCRIPTION
       List available commands.
OPTIONS
       group     - List the commands in that
particular group
       -noprompt - Just list the command groups.
```

The following General Help text is returned when help help is entered:

```
-> help help
General Help
Type list or ? for the list of commands.
To get help on a particular command type:
<command> help.
For convenience purposes you can also type: help
<command>

Use the Up and Down arrow keys to browse command
history, Left and Right arrow keys to edit the
current command and the Tab key for tab completion
of a command.

Two alternate key bindings exist for the
backspace and delete keys. If these keys are not
responding as expected, use the 'swapBsDel'
command to swap the bindings.

Commands are grouped into subcategories. To list
the commands in a subcategory, type in the
category heading. Category headings are
identified by starting with a capital letter. For
example, to list all the commands that handle log
configuration, type 'Log'.
```

```
The help descriptions use the following
conventions. Formatting differences between the
help output and this document are also noted.
```

- Square brackets `[ ]` indicate optional parameters. For example, `[-noprompt]`
- Angle brackets < > indicate user-selectable input. For example, `<command>`.

NOTE: *In this document, user-selectable input is indicated with italics, such as `help command`*

- Text outside the angle brackets < > is actual text that needs to be entered.

  When there is more than one choice, the options are separated by pipe characters | within curly braces `{ }`. For example, `case {off | on}`

list

```
Displays a list of all valid commands.
```

```
list [{all | group}] [-noprompt] [-verbose]
```

all

Lists the commands for all groups.

group

Displays a list of commands for a particular group. See Example for options.

-noprompt

Displays a list of the command groups only.

-verbose

Prints full help for each command, instead of a summary.

```
->list -noprompt
List of Valid Groups:
General     General commands for user management
and CLI configuration.
Chassis     Chassis management commands. (FRU
info, fan / power supply state,
            etc).
Network     Ethernet interface management
commands.
Firmware    Used to display or modify firmware
revision levels.
Fm          SM configuration and management.
Log         Log file display and configuration.
Ism         Port configuration and statistics.
Tm          Used to display and configures the
system time.
Snmp        Snmp configuration commands.
CaptureInfo Information capture commands for
support personnel use.
```

Type list all to display brief help for all available commands.

Type list all -verbose to display verbose help for all commands.

Type list -noprompt to display the list of command groups.

history

Displays the command history for the CLI session.

history

None.

```
-> history
command history [30 max lines]:
  ismPortCounters
  ismPortSetWidth Cable01 -verbose
  ismPortEnable help
```

```
time
timeZoneConf
timeDSTConf
history
```

reboot

```
Reboots the device.
reboot [now] [-m] [slot slot] [-s] [-n] [all]
```

now

Does not prompt before rebooting.

-m

Reboots Master (local) Supermicro SSH-C48Q Switch Family (non-disruptive).

slot slot

Resets specific device where *slot* = slotNumber (disruptive).

-s

Reboots Slave (remote) Supermicro SSH-C48Q Switch Family.

-n

Reboots Slave (remote) management card only (non-disruptive).

all

Reboots all local devices (excludes -n/-m/-s options).

```
-> reboot
Disruptive reboot selected
Proceed with reboot? [N]
Default (no arguments) reboots the local device
disruptively after prompt.
```

Use the argument all to perform disruptive reboot of all present Management Modules and cards.

You can reboot the local (Master) Management Module or the remote (Slave) Management Module with one or multiple arguments.

Non-disruptive reboots do not interfere with switch traffic if ASIC firmware is not changing.

If rebooting the local device from Telnet, SSH, or another method, you must reconnect after rebooting.

See also: showInventory.

killCliSession

Terminates an existing CLI session.

killCliSession *sessionNumber*

sessionNumber

The session number that is returned from the who command.

```
-> killCliSession
must supply session number
```

This command logs out remote sessions. Use who to obtain the list of active sessions.

who

Displays all the active CLI sessions.

who

None.

```
->who
user  role  index logged in       last cmd
```

```
type  ip address
-----------------------------------------------
--------------------------
admin admin 0     02:25:26 10/14/2015 02:25:26
10/14/2015 serial
admin admin 1     09:23:16 10/16/2015 09:59:01
10/16/2015 ssh   ::ffff:10.127.236.39
```

Displays a list of currently active CLI sessions. Note that a session can be *active*, but no user information is available. In most cases, this indicates the session is waiting for the user to enter login information.

For each session, the following information is displayed:

- `user` - user name of the logged in user.
- `role` - security role of the user.
- `index` - internal session index.
- `logged in` - timestamp of when the user logged in.
- `last cmd` - timestamp of the user's last command.
- `type` - method used to connect to the system.
- `ip address` - IP address of the user (if applicable).

broadcast

Writes a message to all active CLI sessions.

broadcast "*msg*"

"msg"

Message text. The message text must be encapsulated in quotes " " and must be non-empty.

```
-> broadcast "The system will be rebooted in 5
minutes."
```

swapBsDel

Toggles the key bindings for the backspace and delete characters.

swapBsDel

None.

-> swapBsDel

Terminals may bind the backspace and delete key bindings differently. This command swaps two commonly used bindings, which allow you to use the backspace and delete keys properly without having to adjust your terminal settings.

Backspace and delete swapping is persistently maintained per user (that is, each login account can have a separate binding).

setTermWidth

Modifies the terminal width for text formatting purposes.

setTermWidth *width*

width

Width of your terminal window. Minimum width is 20 characters. Note that not all commands adhere to this setting.

-> setTermWidth 100

getTermWidth

Displays the terminal width for text formatting purposes.

getTermWidth

None.

```
-> getTermWidth
Current terminal width: 80 characters.
```

Displays the terminal width used for text formatting purposes. Note that not all commands adhere to this setting.

prompt

Modifies the CLI prompt (global for all active CLI sessions).

prompt *prompt*

prompt

The new prompt, range 1 - 11 characters. The new prompt is not saved across reboots.

```
-> prompt "Edge-> "
Edge->
```

If the prompt contains a space, asterisk, comma, parenthesis, or semicolon it must be enclosed with double quotes " ". For example: "*a prompt*". Also, if a prompt is not accepted, try to enclose it with double quotes.

The prompt must end in “->” (note trailing space) for some Intel® Omni-Path Fabric Suite FastFabric Tools to function correctly.

case

Displays or modifies the case sensitivity of the command interpreter for the CLI session.

```
case [{off | on}]
```

off | on

Turns case sensitivity off or on.

```
-> case off
Case sensitivity is now off
```

If no value is entered, the current setting is displayed.

When case sensitivity is on, the CLI input must match the exact character case (lower and upper case) as specified in the help text. When case sensitivity is turned off, the CLI input may be any combination of upper and lower case.

showLastRetCode

Displays the return code from the last executed command.

```
showLastRetCode [-brief]
```

-brief

Displays only the numeric value of the return code.

```
-> showLastRetCode
Last Exit Code: 0: Success
```

This allows for automated systems to determine if a command was successful or not.

echo

Echoes the input parameters back to the output.

echo [*text1 text2*]

text1 text2

Text to be echoed. If there are multiple arguments, they must be separated by spaces.

```
-> echo text1 text2
text1 text2
```

logout

Terminates the current CLI session.

logout

None.

```
-> logout
```

user

Modifies user accounts.

user [*username*]

username

Name of user account to change to.

```
-> user operator
User changed to: operator
```

Use this command to change to the operator account, or to the admin account.

passwd

Modifies a user account password.

passwd [*username*] [-r]

username

User account name associated with the password change.

-r

Resets user account password. This option is only allowed from serial connection.

```
-> passwd operator1
Changing password for user: operator1
(current) password:
(new) password:
confirm the new password:
Password was updated successfully.
```

NOTE: *Password text is not displayed.*

The minimum password length is eight (8) characters. The maximum length is 40 characters.

If you call this command when logged in from an operator account, you can only reset the password for the current account and no arguments are accepted.

userAdd

Adds a user account.

userAdd *role username* [*password*]

role

Options include:

admin

Administrator

operator

Operator

support

Support personnel

username

New user account name. Must be between 4 and 32 characters.

password

Optional password. If not supplied, the default password for that role is used.

```
-> userAdd admin Bob
User added: Bob
Password is set to the default password for this
role: admin
```

userRem

Removes a user account.

userRem *username*

username

User account name to delete.

```
-> userRem Bob
User deleted: Bob
```

userListShow

Displays all user accounts for this device.

```
userListShow
```

None.

```
-> userlistshow
username             role
operator             operator
admin                admin
ivtester             support
```

sshKey

Displays or modifies the configured set of SSH keys.

```
sshKey [{show | add "key" | rem <index> | rem -all} [-u username]]
```

show

Displays the SSH public keys in the user's `authorized_keys` file.

add "key"

Adds key to the user's `authorized_keys` file. Must be enclosed within double-quotes as shown: "*key*"

rem index

Removes key at *index* for the user.

rem -all

Removes all keys for the user.

-u username

Performs the operation on the user *username* (must have administrative privileges).

NOTE: *Users with administrative privileges may use the -u option to manage keys for other users. When valid key is present, user can log in without a password.*

```
-> sshKey show
 Index   Key
---------------------------------
   1     "ssh-rsa
AAAAB3NzaC1yc2EAAAABIwAAAQEArNiSexu30rZjs1HAXbDB
wTgJgcxLF..."
```

loginMode

Displays or changes how users are authenticated when connecting to the GUI or CLI.

loginMode [*mode*]

mode

Determines how users are able to login. Options include:

0

Username and password are required.

1

Password is not required.

2

Username and password are **not** required.

3

LDAP Authentication is required.

```
-> loginmode
Current login mode is: 2 = Username / password are
not required
```

If no value is entered, the current setting is displayed.

When user names are disabled, all users are logged on as the administrative user. There is no way to change this behavior.

setldapSvrIpAddr

Displays or modifies the LDAP server IP address.

setldapSvrIpAddr [*ipaddress*]

ipaddress

IP address of the LDAP server to be modified in the format 192.168.0.1. The LDAP server is contacted for remote authentication.

NOTE: *If no value is entered, the current setting is displayed.*

```
-> setldapSvrIpAddr 192.168.0.29
```

setldapSvrPort

Displays or modifies the TCP port number to use for LDAP.

setldapSvrPort [*port*]

port

The TCP port number to use for LDAP user login authentication.

NOTE: *If no value is entered, the current setting is displayed.*

```
-> setldapSvrPort 389
```

idleTimeoutGet

```
Displays the idle timeouts for the CLI and GUI
interfaces to the system. If set to zero, the
timeout for that interface is disabled.

idleTimeoutGet [{--all | --cli | --gui}]
```

--all

Display all timeouts. If no option is entered, this is the default behavior.

--cli

Display the timeout for CLI sessions.

--gui

Display the timeout for GUI sessions.

```
-> idleTimeoutGet --all
CLI timeout is 600 seconds.
GUI timeout is 0 seconds.
```

idleTimeoutSet

```
Sets the idle timeout for the CLI and GUI
interfaces.

idleTimeoutSet [{--all | --cli | --gui}] timeout
```

--all

Sets the idle timeout for both the CLI and the GUI to the same value.

--cli

Sets the idle timeout for the CLI. This is the default if no identifier is specified.

--gui

Sets the idle timeout for the GUI.

timeout

Value for idle timeout (in seconds). If set to 0, the timeout is disabled.

```
-> idleTimeoutSet --all 700
CLI timeout is 700 seconds.
GUI timeout is 700 seconds.
```

sessionTimeoutDisable

Disables the idle timeout for the current CLI session.

```
sessionTimeoutDisable
```

None.

```
-> sessionTimeoutDisable
Disabled session idle timeout.
```

This value does not persist across instances of the session. That is, each time you log on, it defaults back to the system default value.

sessionTimeoutEnable

Enables the idle timeout for the CLI session.

```
sessionTimeoutEnable
```

None.

```
-> sessionTimeoutEnable
Enabled session idle timeout.
```

This value does not persist across instances of the session. That is, each time you log on, it defaults back to the system default value.

loginMsgGet

Displays the CLI login message.

```
loginMsgGet
```

None.

```
-> loginMsgGet
Welcome message: Be certain to logout when you are
finished using the CLI.
```

You can customize the login message using loginMsgSet.

loginMsgSet

Sets the welcome message displayed when logging onto the CLI.

```
loginMsgSet {-clear | string}
```

-clear

Clears welcome message.

string

Sets the welcome message.

NOTE: *Must be encapsulated in double quotes.*

```
-> loginMsgSet "Be certain to logout when you are
finished using the CLI."
Welcome message set successfully
```

View the current message using loginMsgGet.

loginNameGet

Displays the text string that is shown prior to logging in via Telnet.

```
loginNameGet
```

None.

```
-> loginNameGet
login-name: Switch1
```

The login name is an arbitrary string displayed prior to a user attempting a login to a new CLI session. This command displays the current value of this string.

loginNameSet

Modifies the text string that is displayed prior to logging in via Telnet.

```
loginNameSet {-clear | loginName}
```

-clear

Clears the login name.

loginName

Sets the login name.

```
-> loginNameSet Switch1
login-name set successfully
```

The login name is an arbitrary string displayed prior to a user attempting a login to a new CLI session. This command modifies this string.

serialAuthGet

Displays the mode setting for serial console authentication. If enabled, user login and authentication are required on the serial console of the system.

```
serialAuthGet
```

None.

```
-> serialAuthGet
Serial authentication is currently disabled.
```

serialAuthSet

Modifies the serial console authentication mode setting.

```
serialAuthSet {0 | 1}
```

NOTE: *You must exit and log in again for the setting to take effect.*

0

Disables authentication.

1

Enables authentication.

```
-> serialAuthSet 1
Serial authentication set to enabled.
```

uiConfig

```
Displays or modifies the user interface access
methods.

uiConfig [-telnet {0|1}] [-https {0|1}] [-http
{0|1}] [-sftp {0|1}] [-snmp {0|1}] [-ssh {0|1}]
```

-telnet

Disables or enables access to the device via Telnet.

`0` = Disable access.

`1` = Enable access.

-https

Disables or enables HTTPS access.

`0` = Disable access.

`1` = Enable access.

-http

Disables or enables HTTP access.

`0` = Disable access.

`1` = Enable access.

-sftp

Disables or enables SFTP access.

`0` = Disable access.

`1` = Enable access.

-snmp

Disables or enables SNMP access.

0 = Disable access.

1 = Enable access.

-ssh

Disables or enables SSH access.

0 = Disable access.

1 = Enable access.

```
-> uiconfig -telnet 0
Successfully modified configuration.
 Option         Value
-----------------------
 -telnet         0
 -http           1
 -https          0
 -sftp           1
 -snmp           1
 -ssh            1
```

There are several access methods for this device. With no arguments, this command displays the access methods that can be configured, and whether each method is currently enabled or disabled.

This command can also be used to enable or disable various access methods. Use -<proto> 0 to disable a protocol, and -<proto> 1 to enable it. Multiple operations may be specified in a single command.

A reboot is not required for this command to take effect. Depending on the specific method, it may take 5-10 seconds for the change to take effect. Note that existing connections (for example, a Telnet session) are not affected by disabling the underlying access method.

Any access method supported by the device but not listed here, cannot be configured and is always enabled.

genPost

Displays General POST results and runs tests.

genPost [{all | *test*}]

all

Runs all tests.

test

Runs specific test number.

The CLI prompts you to enter a test number or enter all to run all tests.

```
-> genPost

ID Gen POST Name                    Result   ENA
DEM PWR Result-Ext
-------------------------------------------------
--------------------------
*  POST TEST CPU                NO-RUN    Y   N   Y
*  POST TEST MEM DRAM           NO-RUN    Y   N   Y
*  POST TEST BOOTROM IMG CHKSUM   NO-RUN    Y   N
Y
*  POST TEST RUN-TIME IMG CHKSUM  NO-RUN    Y   N
Y
*  POST TEST JMP RAM            NO-RUN    Y   N   Y
6  POST TEST I2C PROBE          NO-RUN    Y   Y   N
7  POST TEST FAN TRAYS          NO-RUN    Y   Y   N
8  POST TEST REAL-TIME CLOCK      NO-RUN    Y   Y
N
9  POST TEST PROTO              NO-RUN    Y   Y   N

Enter Test Index(0 to Exit, 'all' for All tests)
```

```
all
Running: all
POST PROTO Parameters P1:1 P2:2 P3:3

ID Gen POST Name                    Result   ENA
DEM PWR Result-Ext
-------------------------------------------------
---------------------------
*  POST TEST CPU                NO-RUN    Y   N   Y
*  POST TEST MEM DRAM           NO-RUN    Y   N   Y
*  POST TEST BOOTROM IMG CHKSUM   NO-RUN    Y   N
Y
*  POST TEST RUN-TIME IMG CHKSUM  NO-RUN    Y   N
Y
*  POST TEST JMP RAM            NO-RUN    Y   N   Y
6  POST TEST I2C PROBE           PASS     Y   Y   N
7  POST TEST FAN TRAYS           FAIL      Y   Y
N  Fans (1) < minimum (4)
8  POST TEST REAL-TIME CLOCK     PASS     Y   Y   N
9  POST TEST PROTO               PASS      Y   Y
N  ResultExt: Successful, no errors

Enter Test Index(0 to Exit, 'all' for All tests)
0
```

If no argument is entered, the list of tests is displayed; however, no tests are run.

exit

Terminates the current CLI session.

exit

None.

exit

Chassis

Commands in this category are used for chassis management, such as FRU info, fan/power supply state, and others.

hwCheck

Displays the hardware status for chassis, modules, fans, and power supplies.

hwCheck [{-verbose | {0 | 1}}]

Returns GOOD or provides detailed status/warning/error information. If an error/warning is detected, this command automatically provides verbose information. Options include:

-verbose

Verbose output mode.

0

Quiet output (default).

1

Verbose output.

```
-> hwcheck
Chassis hardware status: GOOD
e-> hwcheck -verbose
Chassis hardware status: GOOD
Fan Tray 1 health:
        status=Operational
        errors=0
        warnings=0.
Power Supply 1 health:
```

```
        status=Engaged
        errors=0
        warnings=0
        fanErrors=0.
Power Supply 2 health:
        status=Engaged
        errors=0
        warnings=0
        fanErrors=0.
Supermicro SSH-C48Q Switch health:
      LTC4260 Voltage Min Val.      Max Val.
Status
        12.995        10.800        14.300
Voltage is OK
      LTC2974 Voltage Min Val.      Max Val.
Status
         1.800         1.614         1.984
Voltage is OK
         2.515         2.244         2.755
Voltage is OK
         5.000         4.744         5.255
Voltage is OK
         3.300         2.963         3.635
Voltage is OK
      LTC3880 Voltage Min Val.      Max Val.
Status
         0.999         0.945         1.054
Voltage is OK
      LTC3880 Voltage Min Val.      Max Val.
Status
         0.998         0.945         1.054
Voltage is OK
      LTC3880 Voltage Min Val.      Max Val.
Status
         0.899         0.804         0.995
Voltage is OK
      LTC3880 Voltage Min Val.      Max Val.
Status
         0.901         0.804         0.995
Voltage is OK
```

```
      LTC3880 Voltage Min Val.      Max Val.
Status
         3.334         3.161         3.508
Voltage is OK
      Temperature     Warning      Critical
Actual
      ASIC_EXT          90C          105C
30C
      ASIC_INT          94C          104C
34C
      QSFP_MAX          70C          100C
N/A
      CPU_CORE          90C          100C
26C
        Temperature Errors          = 0
        Temperature Warnings        = 0
        Temperature I/O Errors      = 0
        Good Temperatures           = 3
        Voltage Warnings            = 0
        Voltage Errors              = 0
        Voltage I/O Errors          = 0
        Initialize Errors           = 0
        Module Attention LED color = Off
        Chassis LED color           = Green
```

hwMonitor

Displays current port states, fan speeds, temperatures, and voltages until disabled.

`hwMonitor [slot] [onepass] [-all]`

slot

Slot number to display. Use `0` for current slot of the management board.

onepass

Displays the current values and exit. Do not continuously monitor.

-all

Displays all information screens.

The CLI displays different output depending on the Intel® Omni-Path switch type. The display refreshes automatically.

Example for Supermicro SSH-C48Q Switch Family

```
-> hwmonitor
   System monitor, Uptime: 4 days 0 hours 21
minutes 1 seconds
   Power Supply 1: online      Power Supply 2:
offline
  Fan Tray 1 Speed: 7620  7483  7554  7859  7749
7516

   Temperatures: LTC2974 U42     [Unused]=25C
     [Unused]=25C
     [Unused]=25C
   [ASIC_EXT]=32C
   Temperatures: FROM ASIC     [ASIC_INT]=35C
   Temperatures: FROM ASIC     [QSFP_MAX]=N/A
   Temperatures: MGMT CARD     [CPU_CORE]=29C

   Voltages: LTC4260 U2   [12.0v(Raw)]=12.880
   Voltages: LTC3880 U4   [1.0v]=0.999
   Voltages: LTC3880 U5   [1.0v]=0.999
   Voltages: LTC3880 U6   [0.9v]=0.899
   Voltages: LTC3880 U7   [0.9v]=0.898
   Voltages: LTC3880 U8   [3.3v]=3.334
   Voltages: LTC2974 U42  [1.8v]=1.799
[2.5v]=2.499  [5.0v]=5.000  [3.3v]=3.299

                        Omni-Path Port Status
  Cable01[ Down ]    Cable02[Active]    Cable03[
Down ]    Cable04[ Down ]
  Cable05[ Down ]    Cable06[ Down ]    Cable07[
Down ]    Cable08[ Down ]
  Cable09[ Down ]    Cable10[ Down ]    Cable11[
Down ]    Cable12[ Down ]
```

```
  Cable13[Active]    Cable14[ Down ]    Cable15[
Down ]    Cable16[ Down ]
  Cable17[ Down ]    Cable18[ Down ]    Cable19[
Down ]    Cable20[ Down ]
  Cable21[ Down ]    Cable22[ Down ]    Cable23[
Down ]    Cable24[Active]
  Cable25[ Down ]    Cable26[ Down ]    Cable27[
Down ]    Cable28[ Down ]
  Cable29[ Down ]    Cable30[ Down ]
Cable31[Active]    Cable32[ Down ]
  Cable33[ Down ]    Cable34[ Down ]    Cable35[
Down ]    Cable36[Active]
  Cable37[ Down ]    Cable38[ Down ]    Cable39[
Down ]    Cable40[ Down ]
  Cable41[ Down ]    Cable42[ Down ]    Cable43[
Down ]    Cable44[ Down ]
  Cable45[ Down ]    Cable46[Active]    Cable47[
Down ]    Cable48[ Down ]
```

To exit monitoring, press the **Enter** key.

The *slot* may require a prefix. The Power Supply, Fan, and Chassis slots require a prefix since their slot numbers overlap with the Leaf, Spine, and Management Module slot numbers. (The Leaf, Spine, and Management Module slots do not require a prefix, however, they are listed for completeness.) Prefix values include:

- Power Supply = P
- Fan = F
- Chassis = C
- Leaf = L
- Spine = S
- Management Module = M

P (Power) column heading uses the following characters:

- * = Device is inserted and powered on.

- ! = Device is inserted and powered off.
- A = Device is required in the configuration, but is not inserted.
- = Device is not required in the configuration, and is not inserted. (Column is empty.)

TMP (Temperature) headings have two columns:

- E (Error) column heading uses the following characters:

  X = A temperature error condition exists on the device.

  = No temperature error condition on the device. (Column is empty.)

- W (Warning) column heading uses the following characters:

  X = A temperature warning condition exists on the device.

  = No temperature warning condition on the device. (Column is empty.)

VLT (Voltage) headings have two columns:

- E (Error) column heading uses the following characters:

  X = A voltage error condition exists on the device.

  = No voltage error condition on the device. (Column is empty.)

- W (Warning) column heading uses the following characters:

  X = A voltage warning condition exists on the device.

  = No voltage warning condition on the device. (Column is empty.)

showNodeDesc

Displays the node subnet management agent (SMA) description (or the default).

```
showNodeDesc [-d]
```

-d

Shows the default node name for this unit.

```
-> showNodeDesc
Node (SMA) Description is =
OmniPth000000f600000000
```

If no value is entered, the current node description is displayed.

setNodeDesc

Modifies the node (SMA) description.

```
setNodeDesc "nodeString"
```

nodeString

Node description must be enclosed in quotes and must be no more than 64 characters.

```
-> setNodeDesc "OmniPath Fabric Switch"
Node (SMA) Description successfully changed to
"OmniPath Fabric Switch"
```

setNodeDescFormat

Displays or modifies the node (SMA) description format modifier.

```
setNodeDescFormat [format]
```

format

Description format type. If no value is entered, the current setting is displayed. Options include:

0

Verbose format.

1

Brief format (consistent with the CLI/GUI Port Stat port naming).

```
-> setNodeDescFormat
Format = 0
```

fruInfo

```
Displays field replaceable unit (FRU)
information.
```

```
fruInfo {slot | -all}
```

slot

Slot number to display FRU information.

-all

Displays information for all available slots.

```
-> fruInfo
Display chassis info
xInfo_ChassisInfo:
       RecType:      1             LastRec:
0               LenMult:       0
       ReadOnly:     1            RecordFormat:
2               RecLen:       14
         LogicalLen:  020
         HdrChkSum:    c6
         ChassisGuid:  00117501ff5131bf
        SlotCount:    1       (IB Mods in Chassis)
```

```
        SlotNumbers:  81       (pairs:ext0|Slt1)
       CmeAccess:   80      (bits:ext0|Slt1|Cme)
        SlotNumber:    0 <-Record accessed via
this slot
        CmeAccessBits: 2        (Access slot
relative)
        ProxyAccess:   0        (Access slot
relative)
       LockDrivesCTR: 0       (Clear to Remove
interlock)
        MechLock:      1
        NodeCount:     0

xInfo_AssetTagInfo:
       RecType:      8             LastRec:
1               LenMult:       0
       ReadOnly:     0            RecordFormat:
1               RecLen:        c
        LogicalLen:  012
        HdrChkSum:    68
        FRUHandle:     1
        Asset Tag Enc: 4
        Asset Tag:    00 00 00 07

xInfo_FRUInfo:
       RecType:      2             LastRec:
0               LenMult:       0
       ReadOnly:     1            RecordFormat:
1               RecLen:       74
        LogicalLen:  116
        HdrChkSum:    66
        FruType:       4
        FruHandle:     1
        FRUGUIDType:   1
        FruGuid:      00117501ff5131bf
        SerNumEncLen: cd        SerNum:
USFU131500007
        PtNumEncLen:  ca        PartNum:
H50565-004
        ModelEncLen:  cb        ModelNum:
```

```
100SWE48QF2
       VersionEncLen:c3        Version:      004
      MfgEncLen:   d1       Manufacturer: Intel
Corporation
       ProdNmEncLen: df       ProductName:  100
OP Edge 48p Q7 forward 2PSU
      MfgIdEndLen:  1       MfgId:       001175
       MfgTime:      15/03/26 10:00
       OemEncLen: 40   OemData:
```

chassisQuery

Displays information about the line cards in a chassis.

chassisQuery [-master] [-slave] [*slot*] [-showType] [-type *cardtype*] [-ignoreInvalidType]

-master

Displays the master slot number.

-slave

Displays the slave slot number.

slot

Slot number (numeric).

-showType

Displays the card type.

-type card_type

Displays slots that have the specified card type.

NOTE: *Use `chassisQuery -showType` to display valid card types for the chassis.*

-ignoreInvalidType

Does not return an error if an invalid card type is supplied.

NOTE: *This option is only valid when used with* `-type`*.*

```
-> chassisQuery
slots: 201 202
```

If no options are entered, all currently occupied slots that support firmware update are displayed.

showInventory

Displays asset information on all entities in the chassis.

showInventory

None.

```
-> showInventory
_____________________________________
             Power Supply 1
-------------------------------------
   Manufacturer Id - 001175
 Manufacturer Name - Intel Corporation
       Part Number - N/A
      Product Name - Supermicro SSH-C48Q Switch
Series Power Supply


_____________________________________
             Power Supply 2
-------------------------------------
   Manufacturer Id - 001175
 Manufacturer Name - Intel Corporation
       Part Number - N/A
      Product Name - Supermicro SSH-C48Q Switch
Series Power Supply


_____________________________________
```

```
             Fan Tray 1
-----------------------------------
   Manufacturer Id - 001175
 Manufacturer Name - Intel Corporation
       Part Number - N/A
      Product Name - Supermicro SSH-C48Q Switch
Series Fan Tray


_____________________________________
Supermicro SSH-C48Q Switch Series
-----------------------------------
              GUID - 00117501ff5131bf
   Manufacturer Id - 001175
 Manufacturer Name - Intel Corporation
     Mfg Date/Time - 2015/03/26  10:00
             Model - 100SWE48QF2
       Part Number - H50565-004
      Product Name - 100 OP Edge 48p Q7 forward
2PSU
     Serial Number - USFU131500007
           Version - 004

Total devices found: 4
```

setBeacon

Modifies or displays the chassis beacon LED setting.

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

```
setBeacon [{0 | 1}]
```

If no value is entered, the current setting is displayed. Options include:

0

Disable beacon.

1

Enable beacon.

```
-> setBeacon 0
```

setSystemContact

```
Sets or displays the chassis system contact
information.
```

```
setSystemContact [contact]
```

contact

System contact string; must be enclosed in double quotes. Maximum length is 255 characters.

If no value is entered, the current setting is displayed.

```
-> setSystemContact
System Contact      : {no value}
```

setSystemName

```
Sets or displays the chassis system name.
```

```
setSystemName [name]
```

name

System name string; must be enclosed in double quotes. Maximum length is 255 characters.

If no value is entered, the current setting is displayed.

```
-> setSystemName
System Name         : {no value}
```

setSystemLocation

```
Sets or displays the chassis system location.
setSystemLocation [location]
```

location

System location string; must be enclosed in double quotes. Maximum length is 255 characters.

If no value is entered, the current setting is displayed.

```
-> setSystemLocation
System Location     : {no value}
```

Network

```
Commands in this category are used for Ethernet
interface management.
```

ifShow

```
Displays the interface statistics for the OOB
(out of band) management port.
ifShow [ifName]
```

ifName

The network interface name. If *ifName* is entered, only the interfaces belonging to that group are displayed. If no value is entered for *ifName*, all attached interfaces are displayed.

```
-> ifShow
lo0     Link type:Local loopback  Queue:none
        inet 127.0.0.1  mask 255.255.255.255
```

```
        inet6 unicast fe80::1%lo0  prefixlen 64
automatic
        inet6 unicast ::1  prefixlen 128
        UP RUNNING LOOPBACK MULTICAST NOARP
ALLMULTI
        MTU:1500  metric:1  VR:0  ifindex:1
        RX packets:41 mcast:3 errors:0 dropped:0
        TX packets:41 mcast:3 errors:0
        collisions:0 unsupported proto:0
        RX bytes:1903  TX bytes:1903

gei0    Link type:Ethernet  HWaddr
00:00:95:12:d3:1d  Queue:none
        capabilities: TXCSUM TX6CSUM VLAN_MTU
VLAN_TXHWTAG VLAN_RXHWTAG
        inet 10.228.209.95  mask 255.255.252.0
broadcast 10.228.211.255
        inet6 unicast 2002:ae4:d15f::ae4:d15f
prefixlen 32
        inet6 unicast
fe80::200:95ff:fe12:d31d%gei0  prefixlen 64
automatic
        UP RUNNING SIMPLEX BROADCAST MULTICAST
        MTU:1500  metric:1  VR:0  ifindex:2
        RX packets:226 mcast:0 errors:0 dropped:0
        TX packets:156 mcast:10 errors:0
        collisions:0 unsupported proto:0
        RX bytes:14k  TX bytes:13k
```

routeShow

Displays the interface routes for the OOB (out of band) management port.

```
routeShow
```

None.

```
-> routeShow
```

```
INET route table - vr: 0, table: 254
Destination              Gateway
Flags    Use   If                          Metric
0.0.0.0/0               10.228.208.1
UGS      40    gei                    0   0
10.228.208.0/22          WRS-Template
UC       4     gei                    0   0
WRS-Template             WRS-Template
UH       25    lo0                     0
localhost                localhost
UH       17    lo0                     0

INET6 route table - vr: 0, table: 254
Destination              Gateway
Flags    Use   If                          Metric
localhost6               localhost6
UH       0     lo0                     0
2002:ae4::/32
2002:ae4:d15f::ae4:d15f   UC    0   gei
0   0
2002:ae4:d15f::ae4:d15f
2002:ae4:d15f::ae4:d15f   UH   0   lo0
0
fe80::%lo0/64            fe80::1%lo0
UC       0     lo0                     0
fe80::%gei0/64
fe80::200:95ff:fe12:d31d%gei0 UC   0  gei
0   0
fe80::1%lo0              fe80::1%lo0
UH       0     lo0                     0
fe80::200:95ff:fe12:d31d%gei0
fe80::200:95ff:fe12:d31d%gei0 UH   0  lo0
0

ipnet_cmd_route failed ret:0
```

ping

Sends ping packets to a specified IP address.

```
ping {hostname | ipAddress} [packetCount]
```

hostname

The network hostname to ping. Hostname is limited to 64 characters.

ipAddress

The IP address to ping.

packetCount

The number of packets with which to ping the host (default is 5).

```
-> ping 172.26.0.254
PING 172.26.0.254: 56 data bytes
64 bytes from 172.26.0.254: icmp_seq=0. time=0.
ms
64 bytes from 172.26.0.254: icmp_seq=1. time=0.
ms
64 bytes from 172.26.0.254: icmp_seq=2. time=0.
ms
64 bytes from 172.26.0.254: icmp_seq=3. time=0.
ms
64 bytes from 172.26.0.254: icmp_seq=4. time=0.
ms
----172.26.0.254 PING Statistics----
5 packets transmitted, 5 packets received, 0%
packet loss
round-trip (ms)  min/avg/max = 0/0/0
```

This routine spawns a process to send ping packets to the specified IP address. If *packetCount* is given, the process exits after that number of packets are sent. If *packetCount* is omitted, the number of packets defaults to 5.

ping6

Sends ping packets to a specified IPv6 address.

ping6 [-n] [-c *packetCount*] [-I *interface*] *ipv6Address*

-n

Numeric output only.

-c packetCount

The number of packets with which to ping the host (default is 5).

-I interface

The local interface name to use (useful for link local ping).

ipv6Address

The network host to ping (scoped address accepted).

This routine spawns a process to send ping packets to the specified IPv6 address. If *packetCount* is given, the process exits after that number of packets are sent. If *packetCount* is omitted, the number of packets defaults to 5.

showChassisIpAddr

Displays the chassis IP address.

showChassisIpAddr

None.

```
-> showChassisIpAddr
Chassis IP Address: 10.228.209.95 Net mask:
255.255.252.0
```

setChassisIpAddr

Modifies the chassis IP address and network mask.

NOTE: *If you are not using the console port, changing the chassis IP address drops the connection to the CLI, which may cause the device to become unreachable.*

setChassisIpAddr [-h *ipaddress*] [-m *netMask*]

-h ipaddress

The new IP address in dotted notation format xxx.xxx.xxx.xxx.

-m netMask

The network mask (may be in dotted notation or hexadecimal format).

```
-> setChassisIpAddr -h 172.26.0.221 -m
255.255.240.0
```

setChassisIpv6Addr

Changes the user-configured chassis IPv6 address.

setChassisIpv6Addr {*ipv6Address* | *maskLen*}

ipv6Address

The new IPv6 address in notation format a:b:c:d:e:f:g:h; embedded 0s can be shortened, for example, a:b::g:h.

maskLen

Network mask length (0-128).

```
Changing the chassis IPv6 address may drop the
connection to the CLI if not using the console
port, and may cause the device to become
unreachable.
```

delChassisIpv6Addr

Deletes the user-configured chassis IPv6 address.

delChassisIpv6Addr

None.

-> delChassisIpv6Addr

Deleting the chassis IPv6 address may drop the connection to the CLI if not using the console port, and may cause the device to become unreachable. This command does not affect link-local or autoconfigured addresses.

showChassisIpv6Addr

Displays the user-configured chassis IPv6 address.

showChassisIpv6Addr

None.

```
-> showChassisIpv6Addr
Chassis IPv6 Address/Prefix Length:
2002:0ae4:d15f::0ae4:d15f/32
```

Only displays the user-configured IPv6 address. To see all the IPv6 addresses, including any autoconfigured addresses, use the command ifShow.

autoConfIPv6Enable

Enables IPv6 address autoconfiguration.

autoConfIPv6Enable

None.

-> autoConfIPv6Enable

This command allows prefix learning from attached routers. It does not affect link-local or manually configured addresses.

autoConfIPv6Disable

Disables IPv6 address autoconfiguration.

autoConfIPv6Disable

None.

-> autoConfIPv6Disable

This command prevents prefix learning from attached routers. It does not affect link-local or manually configured addresses.

autoConfIPv6Disable

Disables IPv6 address autoconfiguration.

autoConfIPv6Disable

None.

-> autoConfIPv6Disable

This command prevents prefix learning from attached routers. It does not affect link-local or manually configured addresses.

autoConfIPv6Show

Displays IPv6 address autoconfiguration setting(s).

autoConfIPv6Show

None.

```
-> autoConfIPv6Show
OOB IPv6 Autoconfig is enabled
```

ndpShow

Displays the IPv6 neighbors table.

ndpShow

None.

```
-> ndpShow
Neighbor                              Linklayer
Address  Netif     Expire  St
2002:ae4::                    00:00:95:12:d3:1d
gei0      perm    R
2002:ae4:d15f::ae4:d15f
00:00:95:12:d3:1d  gei0      perm    R
ff02::2                       33:33:00:00:00:02
gei0      587 s   S
ff02::2                         link#1
lo0       577 s   S
::1                             link#1
lo0       perm    R
ff02::1:ff12:d31d
33:33:ff:12:d3:1d  gei0      564 s   S
fe80::200:95ff:fe12:d31d
00:00:95:12:d3:1d  gei0      perm    R
ff02::16                      33:33:00:00:00:16
gei0      585 s   S
fe80::1                         link#1
lo0       perm    R
```

```
fe80::                          00:00:95:12:d3:1d
gei0      perm    R
ipnet_cmd_ndp failed ret:0
```

showDefaultRoute

Displays the default gateway IP address.

```
showDefaultRoute
```

None.

```
-> showDefaultRoute
Gateway IP Address: 172.26.0.254
```

This is the IP address for the default gateway to route packets from the OOB (out of band) management port to an external network.

setDefaultRoute

Changes the default gateway IP address.

```
setDefaultRoute -h ipaddress
```

-h ipaddress

The default gateway IP address in dotted decimal format (*xxx.xxx.xxx.xxx*).

```
setDefaultRoute -h 172.26.0.235
```

Use this command to configure the IP address for the default gateway to route packets from the OOB (out of band) management port to an external network.

arpShow

```
Displays the link level address resolution
protocol (ARP) table.

arpShow

None.

-> arpShow
   10.228.209.95 at 00:00:95:12:d3:1d permanent
published on gei0
  10.228.211.255 at ff:ff:ff:ff:ff:ff on gei0
    10.228.208.1 at 00:00:5e:00:01:50 on gei0
```

hostShow

```
Displays the host name table.

hostShow

None.

-> hostShow
hostname      inet address
aliases
--------      ------------
-------
localhost     127.0.0.1
CHASSIS
WRS-Template      10.228.209.95
home              10.228.211.254
switchA           127.1.1.1
```

dhcpEnable

Enables DHCP on the Ethernet interface.

```
dhcpEnable
```

None.

```
-> dhcpEnable
DHCP is enabled
```

Enables the DHCP client subsystem, requests a DHCP lease, and then configures the interface with the lease data from the server.

dhcpDisable

Disables DHCP on the Ethernet interface.

```
dhcpDisable
```

None.

```
-> dhcpDisable
DHCP is disabled
```

Any DHCP-acquired IP address is released. The interface is then configured to the default static values from the current bootline.

dhcpShow

Displays the current DHCP leases.

```
dhcpShow [{-verbose | -v}]
```

-verbose

Enables verbose output mode.

-v

Enables verbose display.

```
-> dhcpShow
Client state = BOUND
Assigned IP address: 172.26.3.35
Client subnet mask: 255.255.240.0
DHCP server: 172.26.1.20
Default IP router: 172.26.0.1
Client lease duration: 518400 secs (421299
remaining)
```

dnsParamsShow

Displays the stored domain name system (DNS) parameters.

```
dnsParamsShow
```

None.

```
-> dnsParamsShow
DNS Resolver       : Enabled
DNS Server Address : xxx.xxx.xxx.xxx
Local Domain Name  : st.intel.com
```

This command retrieves the stored configuration parameters used for domain name resolution.

dnsParamsSet

Changes the DNS configuration parameters.

```
dnsParamsSet [-s ipaddress] [-d domain name] [-e
{1|0}]
```

-s ipaddress

DNS server IP address in dotted notation format (*xxx.xxx.xxx.xxx*)

-d domain name

The local domain name where this switch is installed (limit 32 characters).

-e

`0` = Disable the DNS resolver.

`1` = Enable the DNS resolver.

```
-> dnsParamsSet -e 0
-> dnsParamsShow
DNS Resolver       : Disabled
DNS Server Address : xxx.xxx.xxx.xxx
Local Domain Name  : st.intel.com
```

The DNS resolver cannot be enabled until both the server address and local domain name have been configured. It is necessary to manually reboot the switch in order to start or stop the DNS resolver.

IpoStlConfigShow

Displays the IPoSTL enable/disable setting.

NOTE: *In this release, the term `IpoIb` is partially replaced by a temporary term `IpoStl`. Command names have been updated, however, the returned text may display `IpoIb`. This will be updated in a future release.*

```
IpoStlConfigShow
```

None.

```
-> IpoStlConfigShow
IpoIb feature is currently disabled
```

IpoStlConfigEnable

Enables the IPoStl feature.

NOTE: *In this release, the term `IpoIb` is partially replaced by a temporary term `IpoStl`. Command names have been updated, however, the returned text may display `IpoIb`. This will be updated in a future release.*

IpoStlConfigEnable

None.

-> IpoStlConfigEnable

IpoStlConfigDisable

Disables the IPoStl feature.

NOTE: *In this release, the term `IpoIb` is partially replaced by a temporary term `IpoStl`. Command names have been updated, however, the returned text may display `IpoIb`. This will be updated in a future release.*

IpoStlConfigDisable

None.

-> IpoStlConfigDisable

IpoStlAddressShow

Displays the IPoSTL IP address and associated netmask settings.

NOTE: *In this release, the term `IpoIb` is partially replaced by a temporary term `IpoStl`. Command names have been updated, however, the returned text may display `IpoIb`. This will be updated in a future release.*

IpoStlAddressShow

```
None.

-> IpoStlAddressShow
IP Address & Netmask are not configured for IpoIb
interface

IPoSTL must be enabled to display these fields.
```

IpoStlAddressSet

```
Changes the IPoSTL IP address and network mask
settings.
```

NOTE: *In this release, the term `IpoIb` is partially replaced by a temporary term `IpoStl`. Command names have been updated, however, the returned text may display `IpoIb`. This will be updated in a future release.*

```
IpoStlAddressSet -h ipaddress [-m netMask]
```

-h ipaddress

The new IP address in dotted notation format `xxx.xxx.xxx.xxx`.

-m netMask

Network mask (in hexadecimal format).

```
-> IpoStlAddressSet -h 123.45.6.789

IPoSTL must be enabled to display these fields.
```

IpoStlAddressSetIPv6

```
Modifies the IPoStl IPv6 address and netmask.
```

NOTE: *In this release, the term `IpoIb` is partially replaced by a temporary term `IpoStl`. Command names have been updated, however, the returned text may display `IpoIb`. This will be updated in a future release.*

```
IpoStlAddressSetIPv6 ipv6Address/netMaskLen
```

The option *ipv6Address/netMaskLen* is made up of two major components, separated by a /.

ipv6Address

Notation format is: a:b:c:d:e:f:g:h, where embedded 0s can be shortened (for example, a:b::g:h).

netMaskLen

Value between 0 and 128 inclusive.

```
-> IpoStlAddressSetIPv6 ipv6Address/netMaskLen
```

IpoStlAddressShowIPv6

Displays the IPoStl IPv6 address and associated netmask settings.

NOTE: *In this release, the term IpoIb is partially replaced by a temporary term IpoStl. Command names have been updated, however, the returned text may display IpoIb. This will be updated in a future release.*

IpoStlAddressShowIPv6

None.

```
-> IpoStlAddressShowIPv6
```

Firmware

Commands in this category are used to manage firmware, such as display firmware revision, update firmware, and other tasks.

fwUpdate

Updates the firmware.

NOTE: *This command is only available on ISupermicro SSH-C48Q Switch Family.*

fwUpdate [*hostip username password directory filename*]

Firmware update uses FTP to retrieve the firmware file, then writes the file to flash. If you omit any options, the system prompts you to provide it, as shown in the example.

hostip

Host IP address where the firmware file resides.

username

FTP user name.

password

FTP user password.

directory

After logging in, the directory to change to.

filename

Name of the firmware file.

```
-> fwUpdateSlot 1
Enter 1 for FTP, 2 for local file: 1
Ftp Server IP Address:[192.168.0.195]
Ftp user name:[ftp] xxxxx
Ftp password:[ftp] xxxxx
File Directory:[PATH TO FIRMWARE FILE]
File name:[xxxx.pkg]
```

This command uses multiple modes to update firmware images:

- Mode 1 initiates a FTP transfer for the firmware package and saves the firmware image to flash.
- Mode 2 copies the firmware package from a local file system and saves the firmware image to flash.
- Mode 3 initiates a FTP transfer for a FPGA package file and updates the FPGA EEPROM.

If all options are passed from the command line, Mode 1 is the default. Any other modes are specified by omitting the command line options and entering the mode interactively when prompted. Some modes may not be available in all configurations.

fwUpdateSlot

Updates the firmware on a specific card.

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

fwUpdateSlot *slot* [*hostip username password directory filename*]

Firmware update uses FTP to retrieve the firmware file, then writes the file to flash. If you specify only the *slot*, the system prompts you to provide the remaining information, as shown in the example.

slot

Chassis slot number to update.

hostip

Host IP address where the firmware file resides.

username

FTP user name.

password

FTP user password.

directory

After logging in, the directory to change to.

filename

Name of the firmware file.

```
-> fwUpdateSlot 1
Enter 1 for FTP, 2 for local file: 1
Ftp Server IP Address:[192.168.0.195]
Ftp user name:[ftp] xxxxx
Ftp password:[ftp] xxxxx
File Directory:[PATH TO FIRMWARE FILE]
File name:[xxxx.pkg]
```

fwUpdateChassis

Updates the firmware for all cards in a chassis or management card only.

NOTE: *This command is only available on ISupermicro SSH-C48Q Switch Family.*

`fwUpdateChassis` *`moduletype`* `[-noprompt] [reboot]`

Firmware update retrieves the firmware file from an FTP server, saves the file locally, then writes the file to flash. Using the all option updates all cards in the chassis. This assumes that all firmware files are in the same directory of the FTP server. You are prompted for the names of each file for each *moduletype* present in the chassis. You are also prompted whether to save the entered values as defaults for future firmware updates.

moduletype

Type of card to update. Values include:

all

Updates all cards in the chassis.

management

Updates the management card.

-noprompt

When entered, the system does not prompt for FTP information, it uses the saved values.

reboot

Upon successful completion, reboots the updated cards.

```
-> fwUpdateChassis all reboot
```

fwListFiles

Lists the contents of the firmware directory.

fwListFiles

None.

```
-> fwListFiles
Listing Directory /firmware:
```

```
drwxrwxrwx  1 0       0                1024 Oct
14 02:24 operator/
drwxrwxrwx  1 0       0                1024 Oct
14 02:24 admin/
drwxrwxrwx  1 0       0                1024 Oct
14 02:24 ivtester/
```

The firmware directory temporarily stores firmware files before they are written to flash.

fwShowUpdateParams

Displays the default update firmware settings.

```
fwShowUpdateParams
```

None.

```
-> fwShowUpdateParams
Firmware update ftp configuration settings:
 host:[10.127.236.39]
 user:[ftp]
 password:[ftp]
 directory:[/pub]
 filename
management:[STL1.q7.10.0.0.991.51.spkg]
```

fwSetUpdateParams

Changes the default update firmware settings.

```
fwSetUpdateParams [-c cardtype [-h hostname] [-u
username] [-p password] [-d
directory] -f filename]
```

All options are shared across all card types, except for *filename*.

-c cardtype

Options include: `management`

NOTE: *The* `cardtype` *parameter is only required when specifying the* `filename`*.*

-h hostname

The host name or IP address of the FTP server. Maximum = 64 characters.

-u username

The user name to access the FTP server.

-p password

The password to access the FTP server.

-d directory

The directory containing the firmware file.

-f filename

The firmware file name.

showCapability

`Displays capability and feature information for a specific release.`

`showCapability [-key feature]`

-key feature

Displays information for a particular feature.

NOTE: *If no value is entered, the key features for the system are displayed.*

```
-> showCapability
fwPush: 1
slaveCli: 1
smConfig: 1
```

showLastScpRetCode

Displays the return code from the last SCP firmware or XML configuration push operation to the unit.

showLastScpRetCode [*slot*] [-all]

slot

The slot number in the chassis.

-all

All slots in the chassis.

```
-> showLastScpRetCode 101
SCP: Slot 101 Last Exit Code: 0: Success
```

Use this command in automated systems to determine whether or not an SCP firmware or XML config push was successful.

fwVersion

Displays the firmware versions for a unit.

fwVersion [*slot*]

slot

Slot number.

```
-> fwVersion
Supermicro SSH-C48Q Switch Series Information
-----------------
  Firmware Version: 10.0.0.991.51
  Firmware build:   10_0_0_991_51
  Firmware BSP:     q7
  Bootrom Version:  10.0.0.991.43
```

bootQuery

Displays boot image version information.

bootQuery *slot* [-active] [-alternate] [-all]

slot

Slot number.

-active

Displays the version of the active firmware image.

-alternate

Displays the version of the alternate firmware image.

-all

Displays the versions for the primary and alternate firmware images.

```
-> bootQuery 0 -all
Primary firmware version: 10.0.0.991.51
Alternate firmware version: 10.0.0.991.42
Active firmware version: 10.0.0.991.51
```

bootSelect

Selects which boot image to boot next.

bootSelect *slot* [-i *index*] [-alternate] [-version *version*] [-noprompt]

slot

The slot number using the next boot image.

-i index

The index of the boot image to be used next.

-alternate

Chooses the alternate image to be used next.

-version version

Chooses a specific version to be the image to be used next.

-noprompt

Displays the current configuration only.

```
-> bootselect 0
Currently installed firmware versions
index : alias    : version
--------------------------
   1  : image1   : :10.0.0.0.322;
*# 2  : image2   : :0usha.011215.0839;

  * - indicates Primary image (will run at next
reboot)
  # - indicates Active image

Default boot image index = 2

Enter new Default image index: [2]
->
```

In the output:

- * next to the image entry indicates the currently selected boot image.
- # indicates the currently active boot image.

Fabric Management

Commands in this category are used for Subnet Manager (SM), Subnet Administration (SA), Performance Manager (PM), and Fabric Executive (FE) configuration and operation.

pmResetCounters

Resets various statistics and counters maintained by the performance manager (PM).

pmResetCounters

None.

-> pmResetCounters

pmShowCounters

Displays various statistics and counters maintained by the performance manager (PM).

pmShowCounters

None.

```
-> pmShowCounters
                                COUNTER: THIS SWEEP
LAST SWEEP      TOTAL
------------------------------------ ----------
---------- ----------
                      PM Sweeps:        0
1      32039
     Ports whose PMA failed query:       0
0        206
  Nodes with 1 or more failed Ports:       0
0        197
     Total transmitted PMA Packets:       0
```

```
228    7307203
          PMA Query Retransmits:        0
0       7418
   PMA Query Retransmits Exhausted:       0
0        206
        PM TX GET(ClassPortInfo):        0
0         98
    PM TX GET(PortSamplesControl):       0
0          0
     PM TX GET(PortSamplesResult):       0
0          0
         PM TX GET(PortCounters):        0
172    5507335
         PM TX SET(PortCounters):        0
35    1119563
   PM TX GET(PortCountersExtended):       0
11     352409
    PM TX GET(VendorPortCounters):       0
0          0
    PM TX SET(VendorPortCounters):       0
10     320380
               PM RX GETRESP(*):         0
228    7299579
             PM RX STATUS BUSY:         0
0          0
          PM RX STATUS REDIRECT:         0
0          0
          PM RX STATUS BADCLASS:         0
0          0
         PM RX STATUS BADMETHOD:         0
0          0
      PM RX STATUS BADMETHODATTR:        0
0          0
          PM RX STATUS BADFIELD:         0
0          0
           PM RX STATUS UNKNOWN:         0
0          0
        PA RX GET(ClassPortInfo):        0
0          0
            PA RX GET(GrpList):         0
```

```
0         13
             PA RX GET(GrpInfo):        0
0         82
 .... ....
 .... ....
 .... ....
```

pmShowRunningTotals

Displays the running total counters for all ports in the fabric maintained by the performance manager (PM).

pmShowRunningTotals

None.

smAdaptiveRouting

Displays or dynamically sets SM Adaptive Routing when the feature is configured.

smAdaptiveRouting [*runningMode*]

runningMode

0 = adaptive routing is disabled.

1 = adaptive routing is enabled.

```
-> smAdaptiveRouting
SmAdaptiveRouting is 0 (disabled)
```

The subnet manager must be running to use this command. Changes made with this command affect only the currently running SM in a fabric with multiple SMs running. Changes are forgotten if the SM is restarted or the chassis is rebooted. To make persistent changes, edit the Fabric Manager XML configuration file.

smControl

```
Starts and stops the embedded FM.
smControl [start | stop | restart | status]
```

start

Starts the embedded FM.

stop

Stops the embedded FM.

restart

Restarts the embedded FM. (Starts it if it's not already running.)

status

Prints out the embedded FM status.

```
-> smControl start
Starting the SM...
```

smConfig

```
Configures startup parameters of the embedded
subnet manager.
smConfig [query] [startAtBoot yes|no]
[startOnSlaveCmu yes|no]
```

query

Displays present settings, no change.

startAtBoot

yes

Displays present settings, no change.

no

Does not start the subnet manager at chassis boot.

startOnSlaveCmu

Starts the subnet manager at chassis boot.

yes

Starts the subnet manager on the slave CMU.

no

Does not start the subnet manager on the slave CMU.

```
Option 1

-> smConfig
Start at boot? [Y]
Start on slave CMU? [N]

Option 2

-> smConfig startAtBoot yes startOnSlaveCmu yes
Saving....
Saving complete...

Use this command to configure the subnet manager.
Changes to these parameters do not take effect
until the next reboot of the Chassis Management
Card(s).

This command is only available on the master
chassis management card.
```

smPKeys

```
Displays partition keys (PKeys) in the PKey
table.
```

NOTE: *The subnet manager must be running to display PKeys.*

```
smPKeys
```

None.

```
-> smPKeys
Virtual Fabric: Default  PKey: 0xffff
Virtual Fabric: Networking PKey: 0x1234
```

smForceSweep

Forces a fabric sweep by the embedded subnet manager.

smForceSweep

None.

-> smForceSweep

This command has no output message. To see the resulting sweep information, the "Info" level log messages must be turned on. Refer to smLogLevel, smLogMode, and smLogMask.

smResetCounters

Resets various statistics and counters maintained by the subnet manager.

smResetCounters

None.

-> smResetCounters

smRestorePriority

Restores normal priorities from elevated states for the SM and PM.

smRestorePriority [sm|all]

sm

Restore normal SM priority.

all

Restore normal priorities for the SM and PM.

```
-> smRestorePriority
```

This command restores the normal priorities of various subnet managers after they have elevated their priority as a result of a failover. Issuing this command allows the "unsticking" of a sticky failover. Issuing this command without arguments restores the normal priorities of the SM. The priority of the PM is based on the priority of the SM.

smLogLevel

Displays or dynamically sets the subnet manager logging level.

smLogLevel [*loglevel*]

loglevel

Logging level. Options include:

0

NONE+

1

WARN+

2

NOTICE+

3

INFO+

4

VERBOSE+

5

DEBUG2+

6

DEBUG4+

7

TRACE+

```
-> smLogLevel
Log Level:2
```

The subnet manager must be running to use this command. Changes made with this command affect only the currently running SM in a fabric with multiple SMs running. Changes are forgotten if the SM is restarted or the chassis is rebooted. To make persistent changes, edit the Fabric Manager XML configuration file.

smLogMode

Displays or dynamically sets the subnet manager logging mode.

smLogMode [*logmode*]

logmode

Logging mode. Options include:

0

Use normal logging levels.

1

Logging is quieted by downgrading the majority of fatal, error, warn, and info log messages.

3

(INFO) and only outputting user actionable events when LogLevel is 1 or 2.

```
-> smLogMode
Log Mode:0
```

The subnet manager must be running to use this command. Changes made with this command affect only the currently running SM in a fabric with multiple SMs running. Changes are forgotten if the SM is restarted or the chassis is rebooted. To make persistent changes, edit the Fabric Manager XML configuration file.

smLogMask

Displays or dynamically sets the subnet manager logging mask for a specific subsystem.

smLogMask *subsystem* [*mask*]

subsystem

Subsystem. Options include: CS, MAI, CAL, DVR, IF3, SM, SA, PM, PA, FE, APP

mask

Bit mask for logging to enable.

```
-> smLogMask SA
SA Log Mask: 0x1ff
```

The subnet manager must be running to use this command. Changes made with this command affect only the currently running SM in a fabric with multiple SMs running. Changes are forgotten if the SM is restarted or the chassis is rebooted. To make persistent changes, edit the Fabric Manager XML configuration file.

smPmStart

Controls the start of the performance manager (PM) and Fabric Executive (FE) during subnet manager (SM) start-up.

```
smPmStart [enable | disable | none]
```

enable

Enables the start of the PM and FE at SM start-up.

disable

Enables the start of the FE and disables the PM at SM start-up.

none

Disables the start of PM and Fabric Executive (FE) at SM start-up.

```
-> smPmStart
SM is enabled
PM is enabled
FE is enabled
-> smPmStart disable
SM is enabled
```

```
PM is disabled
FE is enabled

The configuration can only be changed from the
master Chassis Management Card.
```

smShowConfig

```
Displays the XML configuration file.

smShowConfig [-infoOnly | -contentOnly]
[-noprompt]
```

-infoOnly

Displays the timestamp for the XML configuration file.

-contentOnly

Displays the contents of the XML configuration file.

-noprompt

Do not prompt to ‘Continue’ for each page of displayed output.

```
Example 1

->smShowConfig -infoOnly
XML config file loaded 09:43:07    04/09/2015

Example 2

->smShowConfig
XML config file loaded 09:43:07 04/09/2015
<?xml version="1.0" encoding="utf-8"?>
<Config>
<!-- Common FM configuration, applies to all FM
instances/subnets -->
<Common>
<!-- Various sets of Applications which may be
used in Virtual Fabrics -->
<!Applications defined here are available for use
in all FM instances. -->
```

```
<!-- Additional Applications may be defined here
or per FM instance. -->
<!-- Applications specified per FM instance will
add to -->
<!-- instead of replace those Application
definitions. -->
<Applications>
...
...
...
Continue? [Y]
```

With no arguments, the XML configuration file timestamp and contents are displayed, one screen at a time. Enter Y or Enter at the prompt to continue displaying command output. Enter N at the prompt to terminate the output.

The -infoOnly and -contentOnly flags limit the information that is displayed. Use the -noprompt flag to send all output to the screen at once.

This command is only available on the master Chassis Management Card.

smShowLids

Displays all fabric LID information as known by the subnet manager.

smShowLids

None.

Use this command to display the current LID assignments for the devices in the fabric. This command requires the given chassis to be the master FM.

Similar information can also be obtained using the FastFabric commands on the management node:

- opasaquery
- opareport

smShowMcMember

Displays multicast member information in the embedded subnet manager.

```
smShowMcMember [-h]
```

-h

Display the host name as part of the output.

```
-> smShowMcMember
Multicast Groups:
  join state key: F=Full N=Non S=SendOnly Member
0xff12601bffff0000:00000001ffffd5bb (c001)
  qKey = 0x00000000  pKey = 0xFFFF  mtu = 4  rate
= 3  life = 19  sl = 0
  0x0011750000ffd5bb F
0xff12401bffff0000:00000000ffffffff (c000)
  qKey = 0x00000000  pKey = 0xFFFF  mtu = 4  rate
= 3  life = 19  sl = 0
  0x00066a01a0007116 F  0x0002c902003fffd5 F
0x00066a00a00001ac F
  0x00066a01a000015d F  0x00066a00a00001a3 F
0x00066a00a00001dc F
  0x00066a00a000035a F  0x0011750000ffd5c2 F
0x0011750000ffd664 F
  0x0011750000ffd9c2 F  0x0011750000ffd9f8 F
0x0011750000ffd5b9 F
  0x0011750000ffda4a F  0x0011750000ffd5bb F
0x0011750000ffd9de F
```

Use this command to display multicast member information in the subnet manager. This command is not available unless the subnet manager is in Master mode.

Similar information can also be obtained using the FastFabric command on the management node:

- opashowmc

smShowServices

Displays subnet administration service records of the subnet manager.

smShowServices

None.

The components (fields) of each service record are displayed. Each service record is stored in a location identified by a *Slot* number that is displayed before any component of that service record. If a group of slots does not contain service records, the first slot of the empty group is displayed as empty.

This command states that the SM is in the STANDBY mode if the SM is not in MASTER mode.

Similar information can also be obtained using the FastFabric command on the management node:

- opasaquery -o service

smShowInform

Displays event forwarding (inform) table in the embedded subnet manager.

smShowInform

None.

Use this command to display the event forwarding (inform) table in the subnet manager. This

command is not available unless the subnet manager is in the Master mode.

Similar information can also be obtained using the FastFabric command on the management node:

- opasaquery -o inform

smShowCounters

Displays various statistics and counters maintained by the subnet manager.

smShowCounters

None.

```
-> smShowCounters
COUNTER:                                THIS SWEEP
LAST SWEEP      TOTAL
------------------------------------ ----------
---------- ----------
  SM State transition to DISCOVERY:       0
0          2
    SM State transition to MASTER:        0
0          1
   SM State transition to STANDBY:        0
0          1
   SM State transition to INACTIVE:       0
0          0
    Total transmitted SMA Packets:      123
711        2181
        Direct Routed SMA Packets:      123
711        2122
          LID Routed SMA Packets:        0
0          40
           SMA Query Retransmits:        0
0          18
   SMA Query Retransmits Exhausted:       0
0          3
              SM TX GET(Notice):        0
```

```
0          0
              SM TX SET(Notice):        0
0          0
             SM RX TRAP(Notice):        0
0          0
       SM TX TRAPREPRESS(Notice):       0
0          0
       SM TX GET(NodeDescription):        0
148        444
             SM TX GET(NodeInfo):        0
148        444
          SM TX GET(SwitchInfo):        0
6         18
...
```

This command is not available unless the subnet manager is in Master mode.

smShowLidMap

Displays the LID-to-port GUID map for the subnet manager.

smShowLidMap

None.

```
-> smShowLidMap
-----------------------------------------------
---------------------------------
SM is currently in the MASTER state, with Topology
Pass count = 341
-----------------------------------------------
---------------------------------
Lid 0x0001: guid = 0x00066a000600013c, pass =
341, Intel 12300
GUID=0x00066a00da000100 172.26.2.2 Spine 1, Ch
Lid 0x0002: guid = 0x00066a0007000170, pass =
341, Intel 12300
GUID=0x00066a00da000100 172.26.2.2 Leaf 4, Chi
Lid 0x0003: guid = 0x00066a100600013c, pass =
```

```
341, Intel 12300
GUID=0x00066a00da000100 172.26.2.2 Spine 1, Ch
Lid 0x0006: guid = 0x00066a00a0000248, pass = 229
Lid 0x0007: guid = 0x00066a01a0007116, pass =
341, st149
Lid 0x0008: guid = 0x0000000000000000, pass = 0
Lid 0x0028: guid = 0x0000000000000000, pass = 0
Lid 0x002a: guid = 0x0000000000000000, pass = 0
```

Use this command to display the LID-to-port GUID map of the subnet manager. The pass count for a LID is incremented each time the SM sweep detects that LID.

If LMC has been used to assign multiple LIDs to a node, those assignments are reflected in the output.

This command is not available unless the subnet manager is in the Master mode.

Similar information can also be obtained using the FastFabric command on the management node:

- opasaquery
- opareport -o lids

smShowTopology

Displays the current LID assignments for the devices in the fabric.

smShowTopology

None.

smShowVFInfo

Displays Virtual Fabric (VF) information.

NOTE: *The subnet manager must be running to use this command.*

smShowVFInfo

None.

smLooptestStart

Starts the SM Loop Test in normal mode with the specified number of 256 byte packets. If the SM has not been previously started, this command starts the SM.

NOTE: *The Loop Test only operates if the SM is in the Master state.*

smLooptestStart [*packets*]

packets

The number of 256 byte packets used when starting the SM Loop Test. Valid values = 0 - 10. Default = 0. If the number of packets is 0, then no packets are injected.

smLooptestFastModeStart

Starts the SM Loop Test in fast mode with the specified number of 256 byte packets. If the SM has not been previously started, this command starts the SM.

NOTE: *The Loop Test only operates if the SM is in the Master state.*

smLooptestFastModeStart [*packets*]

packets

The number of 256 byte packets used when starting the SM Loop Test in Fast Mode. Valid values = 0 - 10. Default = 5. If the number of packets is 0, then no packets are injected.

smLooptestStop

```
Stops the SM Loop Test.

smLooptestStop

None.

-> smLooptestStop
Waiting for SM to complete shutdownA|2011/09/15
14:21:46.500U: Thread "esm_Start"
(0x85738dd8)
        ESM: SM Control: Initiating shutdown of
the subnet manager. Some errors and
warnings are common during this process 0
N|2011/09/15 14:21:46.500U: Thread "esm_Start"
(0x85738dd8)
        MSG:NOTICE|SM:Intel 12200
GUID=0x00066a00e3002711:port 0|COND:#7 SM
shutdown|NODE:Intel 12200
GUID=0x00066a00e3002711:port
0:0x00066a00e3002711
........N|2011/09/15 14:21:54.720U: Thread
"INVALID" (0xcca13ac8)
        MSG:NOTICE|SM:Intel 12200
GUID=0x00066a00e3002711:port 0|COND:#13 SM state
to inactive|NODE:Intel 12200
GUID=0x00066a00e3002711:port
0:0x00066a00e3002711|DETAIL:transition from
MASTER to NOTACTIVE
...A|2011/09/15 14:21:57.720U: Thread
"esm_Start" (0x85738dd8)
       ESM: SM Control: Subnet manager shutdown
complete. 0
```

```
...................done
The SM Loop Test is being stopped
```

Use this command to stop the SM Loop Test. Returns switch LFTs back to normal.

NOTE: *This command will stop SM if it was started by either the `smLooptestStart` command or the `smLooptestFastModeStart` command. If SM was started using the `smcontrol start` command, this command will not stop SM.*

smLooptestInjectPackets

Injects packets into the SM Loop Test.

`smLooptestInjectPackets [`*`packets`*`]`

packets

The number of packets to inject into the SM Loop Test. Valid values are 1 - 10 (default = 1).

```
-> smLooptestInjectPackets 2
Sending 2 packets to all loops
Packets have been injected into the SM Loop Test
-> topology_loopTest: DONE
```

smLooptestInjectAtNode

Injects packets to a specific switch node for the SM Loop Test.

`smLooptestInjectAtNode [`*`node index`*`]`

node index

The node index of the switch to inject packets.

```
-> smLooptestInjectAtNode 3
Sending 2 packets to node index 3
Packets have been injected into the SM Loop Test
for node 3
-> topology_loopTest: DONE
```

smLooptestInjectEachSweep

Enables/disables packet injected on each sweep for the SM Loop Test.

smLooptestInjectEachSweep *setting*

setting

Options include:

1

Inject packets on each sweep.

0

Do not inject packets on each sweep for the SM Loop Test.

```
-> smLooptestInjectEachSweep 1
sm_looptest_inject_packets_each_sweep: loop test
will inject packets every sweep,
numPackets=2
The SM Loop Test will inject packets every sweep
```

smLooptestPathLength

Sets the loop path length for the SM Loop Test.

smLooptestPathLength [*length*]

length

The loop path length for the SM Loop Test. Valid values are 2, 3 (default), and 4.

```
-> smLooptestPathLength 3
The SM Loop Test path length has been set to 3
-> topology_loopTest: DONE
```

smLooptestMinISLRedundancy

Sets the minimum number of loops in which to include each ISL for the SM Loop Test in Fast Mode.

`smLooptestMinISLRedundancy [`*`loops`*`]`

loops

The minimum number of loops to include in each ISL for the SM Loop Test. If no value is entered, the default (default = 4) is used.

NOTE: *This command is only applicable if running the Loop Test in Fast Mode.*

```
->  smLooptestMinISLRedundancy 3
-> topology_loopTest: DONE
```

smLooptestShowLoopPaths

Displays the loop paths for the SM Loop Test.

`smLooptestShowLoopPaths [`*`node index`*`]`

node index

The node index of the node to print the loop paths. If no value is entered, the default (all nodes) is used.

```
-> smLooptestShowLoopPaths
Node Idx: 0, Guid: 0x00066a00e3002711 Desc Intel
12200 GUID=0x00066a00e3002711
-----------------------------------------------
-------------------------
 Node  Node                        Node    Path
 Idx   Lid       NODE GUID      #Ports    LID
PATH[n:p->n:p]
 ---- ------  -----------------  ------  ------
--------------
    0 0x0001  0x00066a00e3002711    36    0x0040
0:9->0:33
    0 0x0001  0x00066a00e3002711    36    0x0042
0:33->0:9
-----------------------------------------------
-------------------------
There are 2 total loop paths of <=4 links in
length in the fabric!
Two LIDs are used per loop path to inject packets
in clockwise and anti-clockwise
directions
```

smLooptestShowSwitchLft

Displays the switch LID Forwarding Table (LFT) for the SM Loop Test.

smLooptestShowSwitchLft [*node index*]

node index

The node index of the switch for which to print the switch LFT. If no value is entered, the default (all switches) is used.

```
-> smLooptestShowSwitchLft
Node[0000]  LID=0x0001  GUID=0x00066a00e3002711
[Intel 12200
GUID=0x00066a00e3002711] Linear Forwarding Table
   LID    PORT
 ------   ----
```

```
 0x0001   0000
 0x0005   0031
 0x0009   0017
 0x0010   0011
 0x0016   0021
 0x001d   0022
 0x0021   0025
 0x0040   0009
 0x0041   0033
 0x0042   0033
 0x0043   0009
```

smLooptestShowTopology

Displays the topology for the SM Loop Test.

smLooptestShowTopology

None.

```
-> smLooptestShowTopology
sm_state = MASTER  count = 481  LMC = 0, Topology
Pass count = 4, Priority = 0,
Mkey = 0x0000000000000000
------------------------------------------------
---------------------------------
Intel 12200 GUID=0x00066a00e3002711
------------------------------------------------
---------------------------------
Node[  0] => 00066a00e3002711  (2)  ports=36,
path=
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
          0 00066a00e3002711   4  LID=0001
LMC=0000   1  1    4k  4k  1X-8X  4X
2.5-10   5.0  0200004a    0   0
        9 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    0  33
```

```
       11 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    1   1
       17 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    2   1
       21 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    3   1
       22 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    4   1
       25 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    5   1
       31 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    6   1
       33 0000000000000000  4                1
1    2k  2k     4X  4X
2.5-10  10.0  00000000    0   9  9
-------------------------------------------------
---------------------------------
st164 HFI-1
-------------------------------------------------
---------------------------------
Node[  1] => 0002c9000100d050  (1)  ports=2,
path=11
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
          1 0002c9000100d051   4  LID=0010
LMC=0000   8  1    2k  2k  1X/4X  4X
2.5-10  10.0  02510868    0  11 11
-------------------------------------------------
---------------------------------
st10 HFI-1
-------------------------------------------------
---------------------------------
Node[  2] => 00117500007eaa56  (1)  ports=2,
```

```
path=17
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
           1 00117500007eaa56   4  LID=0009
LMC=0000   2  1    4k  2k  1X/4X  4X
2.5-10  10.0  07610868    0  17 17
------------------------------------------------
---------------------------------
st166 HFI-1
------------------------------------------------
---------------------------------
Node[  3] => 00117500007ec376  (1)  ports=1,
path=21
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
           1 00117500007ec376   4  LID=0016
LMC=0000   2  1    4k  2k  1X/4X  4X
2.5-10  10.0  07610868    0  21 21
------------------------------------------------
---------------------------------
compute000 HFI-1
------------------------------------------------
---------------------------------
Node[  4] => 0002c90300032de8  (1)  ports=2,
path=22
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
           1 0002c90300032de9   4  LID=001d
LMC=0000   8  1    2k  2k  1X/4X  4X
2.5-10  10.0  02510868    0  22 22
------------------------------------------------
---------------------------------
compute001 HFI-1
------------------------------------------------
---------------------------------
Node[  5] => 0002c90300033694  (1)  ports=2,
path=25
```

```
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
           1 0002c90300033695   4  LID=0021
LMC=0000   8  1    2k  2k  1X/4X  4X
2.5-10  10.0  02510868    0  25 25
-----------------------------------------------
---------------------------------
st9 HFI-1
-----------------------------------------------
---------------------------------
Node[  6] => 00117500007eaa1c  (1)  ports=1,
path=31
      Port ----  GUID  ----  (S)  LID      LMC
_VL_   __MTU__  __WIDTH__
___SPEED____  CAP_MASK   N#  P#
           1 00117500007eaa1c   4  LID=0005
LMC=0000   2  1    4k  2k  1X/4X  4X
2.5-10  10.0  07610868    0  31 31
```

smLooptestShowConfig

Displays the configuration for the SM Loop Test.

```
smLooptestShowConfig
```

None.

```
-> smLooptestShowConfig
Loop Test is running with following parameters:
 Max Path Length   #Packets   Inject Point
 ---------------   --------   ------------
        4           00004        All Nodes
FastMode=1, FastMode MinISLRedundancy=4,
InjectEachSweep=0, TotalPktsInjected
since start=4
```

Log

Commands in this category are used for log file display and configuration.

logShow

Displays the log file that is contained in RAM.

logShow

None.

```
-> logShow
N|2015/10/14 02:20:14.820U: Thread
"csmLogThread" (0x42358c0)
        MSG:NOTICE|CHASSIS:hds1swb6231|COND:#18
FRU state changed from offline to
online|FRU:Supermicro SSH-C48Q Switch
Series|PN:H50565-004
================================================
================================
I|2015/10/14 02:24:55.010U: Thread "startup"
(0x3520a20)
        Log: Recovered 51127 bytes of log data
from persistent store
A|2015/10/14 02:24:55.190U: Thread "startup"
(0x3520a20)
        boot: Supermicro SSH-C48Q Switch Series
q7 Firmware Booting Version: 10.0.0.991.51
A|2015/10/14 02:24:55.190U: Thread "startup"
(0x3520a20)
        boot: Memory: Physical: 0x7ff00000
Available: 0x7ff00000 Reserved: 0x0
A|2015/10/14 02:24:55.190U: Thread "startup"
(0x3520a20)
      boot: Encapsulated PRR-A0 Firmware Version:
PRR-A0
A|2015/10/14 02:24:55.190U: Thread "startup"
```

```
(0x3520a20)
        boot: Reboot cause (7): Reboot Command
Entered on CLI.
N|2015/10/14 02:24:57.710U: Thread
"csmLogThread" (0x42358c0)
        MSG:NOTICE|CHASSIS:hds1swb6231|COND:#7
Power Supply N+1 redundancy
available|FRU:Chassis|PN:H50565-004
A|2015/10/14 02:25:15.970U: Thread "PrrVpdR1"
(0x6f7dce8)
        PrrVpd: Enhanced port 0 is operational
A|2015/10/14 02:25:15.970U: Thread "PrrVpdR1"
(0x6f7dce8)
        PrrVpd: Enhanced port 0 communication
enabled
N|2015/10/14 02:25:16.820U: Thread
"csmLogThread" (0x42358c0)
        MSG:NOTICE|CHASSIS:hds1swb6231|COND:#18
FRU state changed from offline to
online|FRU:Supermicro SSH-C48Q Switch
Series|PN:H50565-004
```

logClear

```
Deletes all entries in the log file.

logClear [-noprompt]
```

-noprompt

Delete all log messages without prompting.

```
-> logClear
Ram Log cleared
```

logConfigure

Configures the log settings.

logConfigure

None. This is an interactive command. See **Notes** section for configuration selections.

```
-> logConfigure
Type Q or X to exit.
Please enter the number corresponding to what you
want to configure.
index : name          : description
--------------------------
  1   : Device       : Logging device. (IE. Ram,
syslog, etc)
  2   : Preset        : General log filter.
Select: 1
Configurable devices
index : name    : |D|F|E|A|W|P|C|I|P|N|1|2|3|4|5|
-----------------------------------------------
----
  1   : Ram     : |X|X|X|X|X| | | | |X| | | | | |
  3   : Console  : |X|X|X|X|X| | | | |X| | | | | |
  5   : Syslog   : |X|X|X|X|X| | | | |X| | | | | |
Type Q or X to exit
Enter the device index you wish to configure: 1
Level: Dump [1]
Level: Fatal [1]
Level: Error [1]
Level: Alarm [1]
Level: Warning [1]
Level: Partial [0]
Level: Config [0]
Level: Info [0]
Level: Periodic [0]
Level: Notice [1]
Level: Debug1 [0]
Level: Debug2 [0]
Level: Debug3 [0]
```

```
Level: Debug4 [0]
Level: Debug5 [0]
Log device configuration changed
...
```

```
This is an interactive command to configure
active log settings, options include:
```

2 Preset

Enable or disable each log level that may be generated on the system. The log presets act as a general filter. For example, if the Info logging level is disabled in the presets, no Info messages will be shown on any output device, regardless of the Info log setting for a device.

1 Device

Enable a device to display or process log messages of each level. The level must also be active in Preset for log messages to be processed for a device. Choose a device to configure log levels for that device. If chosen, additional options are displayed:

5 Syslog

Syslog server on the network.

1 Ram

Internal log storage for the switch.

3 Console

Switch serial console

logResetToDefaults

```
Restores the log file default settings.
```

```
logResetToDefaults [-noprompt]
```

-noprompt

Restore the defaults without prompting.

```
-> logResetToDefaults
Log configuration has been reset
```

logSyslogConfig

```
Configures the syslog host IP address and port.
```

logSyslogConfig [-h *hostname or ip_address*] [-p *port*] [-f *facility*] [-m *mode*]

-h hostname or ip_address

Sets the syslog server hostname or IP address in dotted decimal format (xxx.xxx.xxx.xxx).

-p port

The host port number on which the syslog server is listening, in *xxxx* format.

-f facility

The syslog facility to use in the messages. Values include:

0

kern

1

user

2

mail

3

daemon

4

auth

5

syslog

6

lpr

7

news

8

uucp

9

cron

10

authpriv

11

ftp

12

ntp

13

audit

14

alert

15

clock

16

local0

17

local1

18

local2

19

local3

20

local4

21

local5

22

local6

23

local7

-m mode

Whether syslog is to be put into a special OEM mode. Values are `0` or `1`.

```
-> logSyslogConfig -h 172.26.0.202
Successfully configured the syslog host

Additional configuration may be necessary to
fully configure the log system.
```

If configured, the device can forward its log messages to a syslog host. This command allows a user to configure the host and port to send messages to and the facility to use in the messages.

logShowConfig

Displays the current log configuration settings.

logShowConfig

None.

```
-> logshowconfig

Log Configuration for: Supermicro SSH-C48Q Switch
Series
------------------------------
Configurable devices
index : name    : |D|F|E|A|W|P|C|I|P|N|1|2|3|4|5|
-------------------------------------------------
----
  1   : Ram     : |X|X|X|X|X| | | | |X| | | | | |
  3   : Console : |X|X|X|X|X|X|X|X|X|X| | | | | |
  5   : Syslog  : |X|X|X|X|X| | | | |X| | | | | |

Configurable presets
index : name     : state
------------------------------
  1   : Dump     : Enabled
  2   : Fatal    : Enabled
  3   : Error    : Enabled
  4   : Alarm    : Enabled
  5   : Warning  : Enabled
  6   : Partial  : Enabled
  7   : Config   : Enabled
  8   : Info     : Enabled
  9   : Periodic : Enabled
  15  : Notice   : Enabled
```

```
10  : Debug1   : Disabled
11  : Debug2   : Disabled
12  : Debug3   : Disabled
13  : Debug4   : Disabled
14  : Debug5   : Disabled
```

logSyslogTest

Tests the Syslog configuration.

logSyslogTest *severityType*

severityType

Options include:

-e Send Error severity CSM test message to Syslog.

-w Send Warning severity CSM test message to Syslog.

-n Send Notice severity CSM test message to Syslog.

```
-> logSyslogTest -e
Currently configured Syslog host is: 0.0.0.0 port
514 facility 22
Syslog configuration has been tested
```

This command tests the Syslog configuration by sending CSM message(s) to registered Syslog servers.

Interconnect Switch Management (ISM)

Commands in this category are used for port configuration and statistics.

ismPortStats

Displays link error information associated with each switch port.

ismPortStats does not return meaningful information until three things have occurred:

1) The SM has configured a LID for the switches in the chassis.
2) The chassis software has discovered that the switches have been assigned a LID and has polled for port statistic information.
3) The management leaf is down or not installed.

ismPortStats [-clear] [-noprompt] [-cols *columns*] [-port *port*]

-clear

Clears the statistics. Statistics are displayed first, then cleared.

-noprompt

Does not provide a Continue prompt for each page of display.

-cols columns

Sets the number of columns to be displayed per line.

-port port

Specifies a port to display.

```
-> ismPortStats
Name              Cable01        Cable02
Cable03
PhysState            Up           Up
Up
PortState           Act           Act
Act
LinkWidth            4X           4X
4X
LinkSpeed          25Gbps         25Gbps
25Gbps
LinkDowned           26           23
23
InPKeyViol            0            0
0
OutPKeyViol           0            0
0
Continue? [Y] y

Name              Cable04        Cable05
Cable06
PhysState            Up           Up
Up
PortState           Act           Act
Act
LinkWidth            4X           4X
4X
LinkSpeed          25Gbps         25Gbps
25Gbps
LinkDowned           23           23
23
InPKeyViol            0            0
0
OutPKeyViol           0            0
0
Continue? [Y] n
```

ismPortCounters

Displays a table comparision of transmit, receive, and error counters corresponding to each port of the switch. Optionally displays link error statistics associated with each port of the switch.

NOTE: *This command is best displayed with a terminal width of at least 120 columns.*

```
ismPortCounters [-clear] [-active] [-errors]
[-potential] [-stats] [-noprompt]
```

-clear

Clears the counters. Counters are first displayed, then cleared.

-active

Displays only the counters for ports in the active state.

-errors

Displays only the counters for ports with receive symbol errors.

-potential

Displays only the counters for ports with active link or width under their maximum supported value.

-stats

Shows the optional link error counters associated with each switch port.

-noprompt

Does not provide a `Continue` prompt for each page of display.

```
-> ismPortCounters
                          Transmit           |
Receive          |  Symbol  |        Active
   Name           Packets    Words     Discard
```

```
|  Packets    Words      |  Errors  |   Speed Width
Potential
Cable01         3951205094 2800544271045        9
|  4154378847 3019711679236 |       0 |   25Gbps
4X  100%
Cable02         8993888342 5766797571908        0
|  9315042983 5518255518847 |       0 |   25Gbps
4X  100%
Cable03         6868061425 4318743689062        0
|  8561944708 5264142620113 |       0 |   25Gbps
4X  100%
Cable04         8262061496 5049268426836        1
|  6800356522 4251674103990 |       0 |   25Gbps
4X  100%
Cable05         8546497592 5227761745800        0
|  6941410928 4331259837656 |       0 |   25Gbps
4X  100%
Cable06         8350835339 5037891440796        0
|  6958770839 4337087233138 |       0 |   25Gbps
4X  100%
Cable07         7021157994 4402588069177        0
|  8546345859 5122253460133 |       0 |   25Gbps
4X  100%
Cable08         3101749244 2075461900855        0
|  3817201891 2834664788232 |       0 |   25Gbps
4X  100%
Cable09                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
Cable10                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
Cable11                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
Cable12                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
Cable13                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
Cable14                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
Cable15                    0          0          0
|         0         0 |       0 |  0.0Gbps  0X    0%
```

```
Cable16                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Cable17                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Cable18                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Cable19                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Cable20                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Cable21                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Cable22                    0          0          0
|         0        0 |       0 |  0.0Gbps  0X    0%
Continue? [Y] n
```

The system prompts to continue the output after each group of ports are displayed.

Port counter descriptions:

- Transmit
  - Packets - Number of packets transmitted by the port.
  - Words - Number of data words transmitted by the port.
  - Discard - Number of transmit packets discarded by the port due to congestion or errors.
- Receive
  - Packets - Number of data packets received by the port.
  - Words - Number of data words received by the port.
- Active
  - Speed - Active link speed of the port.
  - Width - Active link width of the port.
  - Potential - Port utilization based on the maximum supported link speed and maximum supported link width.

ismLinearFwdb

Displays the entries in the linear forwarding table. LIDs and a corresponding port are shown. A packet addressed to a LID is forwarded to the corresponding port listed in the displayed table.

ismLinearFwdb [*switch*]

switch

Switch number.

```
-> ismLinearFwdb
Switch Switch 1 Linear Fwdb (LFTTOP = 0x0):
```

ismMultiFwdb

Displays the Multicast Forwarding database for the switch.

ismMultiFwdb [*switch*]

switch

Switch identifier.

```
-> ismMultiFwdb
Switch Switch 1 Multicast Fwdb:
c000      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
```

```
c001      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
c002      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
c003      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
c020      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
```

```
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
c021      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
c022      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
c023      0 (EnhPrt0)  1 (Cable01)  2 (Cable02)
3 (Cable03)  4 (Cable04)  5 (Cable05)  6 (Cable06)
7 (Cable07)  8 (Cable08)  9 (Cable09) 10 (Cable10)
11 (Cable11) 12 (Cable12) 13 (Cable13) 14
(Cable14) 15 (Cable15) 16 (Cable16) 17 (Cable17)
18 (Cable18) 19 (Cable19) 20 (Cable20) 21
(Cable21) 22 (Cable22) 23 (Cable23) 24 (Cable24)
25 (Cable25) 26 (Cable26) 27 (Cable27) 28
(Cable28) 29 (Cable29) 30 (Cable30) 31 (Cable31)
32 (Cable32) 33 (Cable33) 34 (Cable34) 35
(Cable35) 36 (Cable36)
...
```

This command is best displayed with a terminal width of at least 120 columns.

ismSwitchInfoLid

Displays SMA switch information for a specific switch chip.

ismSwitchInfoLid *switch*

switch

Switch index (number of a Leaf or Spine switch or of the local switch).

ismPortStatLid

Displays port statistics for a specific LID.

ismPortStatLid *lid port*

lid

IBTA local identifier (LID of the Leaf or Spine switch or the local switch).

port

Port number (defaults to 0).

ismPortInfoLid

Displays SMA port information for a specific LID.

ismPortStatLid *lid* [*port*]

lid

IBTA local identifier (LID of the Leaf or Spine switch or the local switch).

port

Port number (defaults to 0).

ismNodeInfoLid

Displays SMA node information for a specific LID.

`ismNodeInfoLid` *`lid`*

lid

IBTA local identifier (LID of the Leaf or Spine switch or the local switch).

ismPortSetWidth

Displays or modifies the LinkWidth.Supported setting for a port. LinkWidth.Supported should be a subset of LinkWidthDowngrade.Supported for proper port operation.

`ismPortSetWidth` *`portName`* [*`linkWidth`*] [-bounce] [-verbose]

portName

Valid entries for *`portName`* depend on the chassis type. Use the command `ismPortStats` to see the current *`portName`* definitions.

On edge systems, an example cable *`portName`* is:

`Cable01`, that is, Cable Port 1.

On director class systems, an example cable *`portName`* is:

`L101P01`, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

`S105AP18L104AP36`, that is, Spine 105 chip A port 18.

The option `portName` is case-sensitive.

If `portName` contains spaces, it must be bounded by quotation marks. For example, `ismPortSetWidth "Cable 1", 1`.

linkWidth

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismPortSetWidth Cable01 -verbose
Cable01 link width supported: 4X_3X_2X_1X
```

If only the *portName* is entered, the current settings are displayed.

ismChassisSetWidth

Displays or modifies the LinkWidth.Supported setting for all chassis ports. LinkWidth.Supported should be a subset of LinkWidthDowngrade.Supported for proper port operation.

ismChassisSetWidth [*linkWidth*] [-bounce] [-verbose]

linkWidth

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismChassisSetWidth
Cable01 link width supported: 2X
Cable02 link width supported: 2X
```

```
Cable03 link width supported: 2X
...
```

If no parameter is entered, the current settings are displayed.

ismModuleSetWidth

Displays or modifies the LinkWidth.Supported setting for each of the module ports. LinkWidth.Supported should be a subset of LinkWidthDowngrade.Supported for proper port operation.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

`ismModuleSetWidth [`*`linkWidth`*`] [-bounce]`

linkWidth

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

If no parameter is entered, the current settings are displayed.

ismIslSetWidth

Displays or modifies the LinkWidth.Supported setting for each of the inter-switch-link (ISL) ports. LinkWidth.Supported should be a subset of LinkWidthDowngrade.Supported for proper port operation.

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

`ismIslSetWidth [`*`linkWidth`*`] [-bounce] [-verbose]`

linkWidth

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
If no parameter is entered, the current settings
are displayed.
```

ismPortSetLWDS

```
Displays or modifies the
LinkWidthDownGrade.Supported (LWDS) setting for a
port. This setting becomes effective on the next
port bounce.
```

`ismPortSetLWDS` *`portName`*
`[`*`LinkWidthDownGradeSupported`*`] [-bounce] [-verbose]`

portName

Valid entries for *`portName`* depend on the chassis type. Use the command `ismPortStats` to see the current *`portName`* definitions.

On edge systems, an example cable *`portName`* is:

`Cable01`, that is, Cable Port 1.

On director class systems, an example cable *`portName`* is:

`L101P01`, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

`S105AP18L104AP36`, that is, Spine 105 chip A port 18.

The option `portName` is case-sensitive.

If `portName` contains spaces, it must be bounded by quotation marks. For example, `ismPortSetWidth "Cable 1", 1`.

LinkWidthDownGradeSupported

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismPortSetLWDS Cable01
Cable01 LWDS: 4X_3X_2X_1X
```

Calling this function with only the *portName* option displays the current values.

ismChassisSetLWDS

Displays or modifies the LinkWidthDowngrade.Supported setting for all

chassis ports. This setting becomes effective on the next port bounce.

ismChassisSetLWDS [*LinkWidthDownGradeSupported*] [-bounce] [-verbose]

LinkWidthDownGradeSupported

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
If no parameter is entered, the current settings
are displayed.
```

ismModuleSetLWDS

Displays or modifies the LinkWidthDowngrade.Supported (LWDS) setting for each of the module ports. This setting becomes effective on the next port bounce.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

`ismModuleSetLWDS [`*`LinkWidthDownGradeSupported`*`] [-bounce]`

LinkWidthDownGradeSupported

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismModuleSetLWDS
Cable01 LWDS: 4X_3X_2X_1X
Cable02 LWDS: 4X_3X_2X_1X
Cable03 LWDS: 4X_3X_2X_1X
...
```

If no parameter is entered, the current settings are displayed.

ismIslSetLWDS

Displays or modifies the LinkWidthDowngrade.Supported (LWDS) setting for each of the inter-switch-link (ISL) ports. This setting becomes effective on the next port bounce.

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

ismIslSetLWDS [*LinkWidthDownGradeSupported*] [-bounce] [-verbose]

LinkWidthDownGradeSupported

Options include:

1

1X

2

2X

3

2X_1X

4

3X

5

3X_1X

6

3X_2X

7

3X_2X_1X

8

4X

9

4X_1X

10

4X_2X

11

4X_2X_1X

12

4X_3X

13

4X_3X_1X

14

4X_3X_2X

15

4X_3X_2X_1X

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

If no parameter is entered, the current settings are displayed.

ismPortSetFmEnabled

Displays or modifies the FM ENABLED setting for a port.

ismPortSetFmEnabled *portName* [*fmEnabled*] [-bounce] [-verbose]

portName

Valid entries for *portName* depend on the chassis type. Use the command ismPortStats to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

Cable01, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

L101P01, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

S105AP18L104AP36, that is, Spine 105 chip A port 18.

The option portName is case-sensitive.

If portName contains spaces, it must be bounded by quotation marks. For example, ismPortSetWidth "Cable 1", 1.

fmEnabled

Options include:

0

Disabled.

1

Enabled.

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismPortSetFmEnabled Cable01
Cable01 FM_ENABLED: DISABLED
```

Calling this function with only the *portName* option displays its current values.

ismChassisSetFmEnabled

Displays or modifies the FM ENABLED setting for all chassis ports.

ismChassisSetFmEnabled [*fmEnabled*] [-bounce] [-verbose]

fmEnabled

Options include:

0

Disabled.

1

Enabled.

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismChassisSetFmEnabled
Cable01 FM_ENABLED: DISABLED
Cable02 FM_ENABLED: DISABLED
Cable03 FM_ENABLED: DISABLED
...
```

```
Calling this function without specifying a
setting displays the current values.
```

ismPortSetCrcMode

```
Displays or modifies the cyclic redundancy check
(CRC) mode setting for a port.
```

```
ismPortSetCrcMode portName [crcMode] [-bounce]
[-verbose]
```

portName

Valid entries for *portName* depend on the chassis type. Use the command `ismPortStats` to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

`Cable01`, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

`L101P01`, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

`S105AP18L104AP36`, that is, Spine 105 chip A port 18.

crcMode

Options include:

0

16b

1

14b_or_16b

2

48b_or_16b

3

48b_or_14b_or_16b

4

per_lane_or_16b

5

per_lane_or_14b_or_16b

6

per_lane_or_48b_or_16b

7

per_lane_or_48b_or_14b_or_16b

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismPortSetCrcMode Cable01
Cable01 CRD_MODE: 14b_or_16b
```

Calling this function with only the *portName* option displays its current values.

ismChassisSetCrcMode

Displays or modifies the cyclic redundancy check (CRC) mode setting for all chassis ports.

```
ismChassisSetCrcMode [crcMode] [-bounce]
[-verbose]
```

crcMode

Options include:

0

16b

1

14b_or_16b

2

48b_or_16b

3

48b_or_14b_or_16b

4

per_lane_or_16b

5

per_lane_or_14b_or_16b

6

per_lane_or_48b_or_16b

7

per_lane_or_48b_or_14b_or_16b

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismChassisSetCrcMode
Cable01 CRD_MODE: 14b_or_16b
Cable02 CRD_MODE: 14b_or_16b
Cable03 CRD_MODE: 14b_or_16b
...
If no parameter is entered, the current settings
are displayed.
```

ismModuleSetCrcMode

Displays or modifies the cyclic redundancy check (CRC) mode setting for all module ports.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

`ismModuleSetCrcMode [`*`crcMode`*`] [-bounce]`

crcMode

Options include:

0

16b

1

14b_or_16b

2

48b_or_16b

3

48b_or_14b_or_16b

4

per_lane_or_16b

5

per_lane_or_14b_or_16b

6

per_lane_or_48b_or_16b

7

per_lane_or_48b_or_14b_or_16b

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismModuleSetCrcMode
Cable01 CRD_MODE: 14b_or_16b
Cable02 CRD_MODE: 14b_or_16b
Cable03 CRD_MODE: 14b_or_16b
...
```

If no parameter is entered, the current settings are displayed.

ismIslSetCrcMode

Displays or modifies the cyclic redundancy check (CRC) mode setting for all inter-switch-link ports.

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

`ismIslSetCrcMode [`*`crcMode`*`] [-bounce] [-verbose]`

crcMode

Options include:

0

16b

1

14b_or_16b

2

48b_or_16b

3

48b_or_14b_or_16b

4

per_lane_or_16b

5

per_lane_or_14b_or_16b

6

per_lane_or_48b_or_16b

7

per_lane_or_48b_or_14b_or_16b

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
If no parameter is entered, the current settings
are displayed.
```

ismPortSetVCU

```
Displays or modifies the VCU (Virtual lane Credit
Units) setting for a port.
```

`ismPortSetVCU` *`portName`* [*`vcu`*] [-bounce] [-verbose]

portName

Valid entries for *portName* depend on the chassis type. Use the command `ismPortStats` to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

`Cable01`, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

`L101P01`, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

`S105AP18L104P36`, that is, Spine 105 chip A port 18.

The option `portName` is case-sensitive.

If `portName` contains spaces, it must be bounded by quotation marks. For example, `ismPortSetWidth "Cable 1", 1`.

vcu

Valid options range from 0 to 7 inclusive. Default = 0.

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismPortSetVCU Cable01
Cable01 VCU: 0
```

If only the *portName* is entered, the current settings are displayed.

ismChassisSetVCU

Displays or modifies the VCU (Virtual lane Credit Units) setting for all chassis ports.

ismChassisSetVCU [*vcu*] [-bounce] [-verbose]

vcu

Valid options range from 0 to 7 inclusive. Default = 0.

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the -bounce option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

```
-> ismChassisSetVCU
Cable01 VCU: 0
Cable02 VCU: 0
Cable03 VCU: 0
...
```

If no parameter is entered, the current settings are displayed.

ismModuleSetVCU

Displays or modifies the VCU (Virtual lane Credit Units) setting for all module ports.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

ismModuleSetVCU [*vcu*] [-bounce]

vcu

Valid options range from 0 to 7 inclusive. Default = 0.

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismModuleSetVCU
Cable01 VCU: 0
Cable02 VCU: 0
Cable03 VCU: 0
...
If no parameter is entered, the current settings
are displayed.
```

ismIslSetVCU

```
Displays or modifies the VCU (Virtual lane Credit
Units) setting for all inter-switch-link ports.
```

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

`ismIslSetVCU [`*vcu*`] [-bounce] [-verbose]`

vcu

Valid options range from 0 to 7 inclusive. Default = 0.

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

-verbose

Verbose output mode.

If no parameter is entered, the current settings are displayed.

ismChassisSetMtu

Displays, sets, and unsets the chassis maximum packet MTU Capability and VL Capability for all ports.

ismChassisSetMtu [*mtuCap* [*vlCap*]] [-bounce]

mtuCap

Options include:

4

2048 bytes

5

4096 bytes

6

8192 bytes

7

10240 bytes

vlCap

If the *vlCap* option is not specified, the command defaults to the maximum VL(s) for the selected *mtuCap*. Options include:

1

VL0

2

VL0-VL1

3

VL0-VL2

4

VL0-VL3

5

VL0-VL4

6

VL0-VL5

7

VL0-VL6

8

VL0-VL7

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismChassisSetMtu
Cable01 MTUCap=4(2048 bytes) VLCap=1(1 VLs)
Cable02 MTUCap=4(2048 bytes) VLCap=1(1 VLs)
Cable03 MTUCap=4(2048 bytes) VLCap=1(1 VLs)
...
```

If no value is entered for *mtuCap*, the current setting is displayed.

ismModuleSetMtu

Displays, sets, and unsets the chassis maximum packet MTU Capability and VL Capability for all module ports.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

`ismModuleSetMtu [`*`mtuCap`* `[`*`vlCap`*`]] [-bounce]`

mtuCap

Options include:

4

2048 bytes

5

4096 bytes

6

8192 bytes

7

10240 bytes

vlCap

If the *`vlCap`* option is not specified, the command defaults to the maximum VL(s) for the selected *`mtuCap`*. Options include:

1

VL0

2

VL0-VL1

3

VL0-VL2

4

VL0-VL3

5

VL0-VL4

6

VL0-VL5

7

VL0-VL6

8

VL0-VL7

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismModuleSetMtu
Cable01 MTUCap=4(2048 bytes) VLCap=1(1 VLs)
Cable02 MTUCap=4(2048 bytes) VLCap=1(1 VLs)
Cable03 MTUCap=4(2048 bytes) VLCap=1(1 VLs)
...
```

If no value is entered for *mtuCap*, the current setting is displayed.

ismPortEnable

Enables a port.

ismPortEnable *portName* [-verbose]

portName

Valid entries for *portName* depend on the chassis type. Use the command ismPortStats to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

Cable01, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

L101P01, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

S105AP18L104AP36, that is, Spine 105 chip A port 18.

The option portName is case-sensitive.

If portName contains spaces, it must be bounded by quotation marks. For example, ismPortSetWidth "Cable 1", 1.

-verbose

Verbose output mode.

```
-> ismPortEnable Cable01 -verbose
Enabled port Cable01!
```

ismChassisSetEnable

Displays or modifies the port enable setting for each port in the chassis.

ismChassisSetEnable [*enable*]

enable

Options include:

0

Disable

1

Enable

```
-> ismChassisSetEnable
Cable01 is ENABLED
Cable02 is ENABLED
Cable03 is ENABLED
...
```

If no value is entered, the current setting is displayed.

When disabling ports, only cable ports are disabled.

ismModuleSetEnable

Displays or modifies the port enable setting for each port in the module.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

ismModuleSetEnable [*enable*]

enable

Options include:

0

Disable

1

Enable

If no value is entered, the current setting is displayed.

ismPortDisable

Disables a port.

ismPortDisable *portName* [-verbose]

portName

Valid entries for *portName* depend on the chassis type. Use the command ismPortStats to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

Cable01, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

L101P01, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

S105AP18L104AP36, that is, Spine 105 chip A port 18.

The option portName is case-sensitive.

If portName contains spaces, it must be bounded by quotation marks. For example, ismPortSetWidth "Cable 1", 1.

-verbose

Verbose output mode.

ismChassisSetSpeed

Displays or modifies the LinkSpeed.Supported setting for all ports in the chassis.

ismChassisSetSpeed [*linkSpeed*] [-bounce]

linkSpeed

Options include:

2

25 Gbps

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the -bounce option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismChassisSetSpeed
Cable01 link speed supported is force 25.5
Cable02 link speed supported is force 25.5
...
```

Each external port must be connected to another similarly configured port to establish a link.

Calling this function without an option displays the current settings.

ismModuleSetSpeed

Displays or modifies the LinkSpeed.Supported setting for all ports in the module.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

```
ismModuleSetSpeed [linkSpeed] [-bounce]
```

linkSpeed

Options include:

2

25 Gbps

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
Each cable port must be connected to another
similarly configured port to establish a link.
```

```
Calling this function without an option displays
the current settings.
```

ismIslSetSpeed

```
Displays or modifies the LinkSpeed.Supported
setting for all inter-switch ports in the
chassis.
```

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

```
ismIslSetSpeed [linkSpeed] [-bounce]
```

linkSpeed

Options include:

2

25 Gbps

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

`This command sets the supported link speed on each of the internal switch-to-switch ports.`

`Calling this function without an option displays the current settings.`

ismPortSetSpeed

`Displays or modifies the LinkSpeed.Supported setting for a port.`

`ismPortSetSpeed` *`portName`* `[`*`linkSpeed`*`] [-bounce]`

portName

Valid entries for *`portName`* depend on the chassis type. Use the command `ismPortStats` to see the current *`portName`* definitions.

On edge systems, an example cable *`portName`* is:

`Cable01`, that is, Cable Port 1.

On director class systems, an example cable *`portName`* is:

`L101P01`, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

`S105AP18L104AP36`, that is, Spine 105 chip A port 18.

The option `portName` is case-sensitive.

If `portName` contains spaces, it must be bounded by quotation marks. For example, `ismPortSetWidth "Cable 1", 1`.

linkSpeed

Options include:

2

25 Gbps

-bounce

Brings the active links down and back up if a new value is set.

Calling this function with the `-bounce` option disruptively brings active links down and back up so the links use the new setting immediately. Otherwise, the new setting is used the next time links retrain.

```
-> ismPortSetSpeed Cable01
Cable01 link speed supported is force 25.5
```

```
Calling this function without an option displays
the current settings.
```

ismPortSetBeacon

```
Displays or modifies the LED beacon indicator for
a port.
```

```
ismPortSetBeacon portName [{0 | 1}] [-verbose]
```

portName

Valid entries for *portName* depend on the chassis type. Use the command `ismPortStats` to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

`Cable01`, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

`L101P01`, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

S105AP18L104AP36, that is, Spine 105 chip A port 18.

The option portName is case-sensitive.

If portName contains spaces, it must be bounded by quotation marks. For example, ismPortSetWidth "Cable 1", 1.

{0 | 1}

If no value is entered, the current setting is displayed. Options include:

0

Off

1

On

-verbose

Verbose output mode.

```
-> ismPortSetBeacon Cable01
Cable01 beacon is off
```

ismPortQsfpInfo

Displays information from the installed QSFPs.

ismPortQsfpInfo [{all | L*xxx* | L*xxx*P*yy* | Cable*yy*]} [-verbose]

If no value is entered, the current setting is displayed. Options include:

all

Displays info for all installed QSFPs in chassis.

Lxxx

Displays info for all installed QSFPs on the specified leaf.

LxxxPyy

Displays info for QSFP installed on the specified leaf and port.

Cableyy

Displays info for QSFP installed on the specified port.

NOTE: *This option is only available on Supermicro SSH-C48Q Switch Family models.*

-verbose

Verbose output mode.

```
-> ismPortQsfpInfo Cable01

 Port   Vendor    Xmit   Link      IB  Part
Rev  Serial            EEPROM
 Name    Name        Tech    Length       Max
Number                Number            Checksum
-------------------------------------------------
-------------------------------------------------
Cable01  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0027  Valid

Total number of QSFPs found: 1

-> ismPortQsfpInfo Cable01 -verbose

PortName     : Cable01          Data Checksum  :
Valid
Vendor Name  : FCI Electronics   Identifer     :
QSFP+
Vendor OUI   : FC-7C-E7         Bit Rate, nom. :
25500 Mbps
Vendor P/N   : 10131941-2010LF   Encoding      :
Unspecified
Vendor Rev   : 2                IB Compliance  :
EDR FDR QDR DDR SDR
```

```
Vendor S/N   : CN1449FA102L0027  Power Class    :
1.5W max
Date Code    : 12-04-2014        Lot  Code      :
Xmitter Tech : Copper Cable unequalized
Cable Length : 1 meter
Attenuation  : 0dB @ 2.5GHz   5dB @ 5.0GHz
Cable End    : Not Indicated

-> ismPortQsfpInfo all

 Port   Vendor    Xmit   Link      IB  Part
Rev  Serial            EEPROM
 Name    Name         Tech    Length       Max
Number                Number            Checksum
-------------------------------------------------
-------------------------------------------------
Cable01  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0027  Valid
Cable02  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1515FA102L0314  Valid
Cable03  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0149  Valid
Cable04  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0288  Valid
Cable05  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0285  Valid
Cable06  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0311  Valid
Cable07  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1515FA102L0075  Valid
Cable08  FCI Electr  Copper     1 meter   EDR
10131941-2010LF   2   CN1449FA102L0254  Valid

Total number of QSFPs found: 8
```

ismChassisBounce

Bounces enabled ports for an entire chassis.

```
ismChassisBounce [-verbose]
```

-verbose

Verbose output mode.

ismModuleBounce

Bounces enabled ports for an entire module.

NOTE: *This command is only available on Intel® Omni-Path Host Fabric Interface.*

```
ismModuleBounce [-verbose]
```

-verbose

Verbose output mode.

ismIslBounce

Bounces all enabled inter-switch-link ports in the chassis.

NOTE: *This command is only available on Supermicro SSH-C48Q Switch Family.*

```
ismIslBounce [-verbose]
```

-verbose

Verbose output mode.

ismPortBounce

Bounces enabled ports.

ismPortBounce *portName* [-verbose]

portName

Valid entries for *portName* depend on the chassis type. Use the command ismPortStats to see the current *portName* definitions.

On edge systems, an example cable *portName* is:

Cable01, that is, Cable Port 1.

On director class systems, an example cable *portName* is:

L101P01, that is, Leaf 101 Port 1.

On director class systems, an example interswitch link name is:

S105AP18L104AP36, that is, Spine 105 chip A port 18.

The option portName is case-sensitive.

If portName contains spaces, it must be bounded by quotation marks. For example, ismPortSetWidth "Cable 1", 1.

-verbose

Verbose output mode.

ismRemoveStateDump

Removes switch ASIC state dump files.

ismRemoveStateDump

None.

ismShowStateDump

Displays contents of switch ASIC state dump files.

ismShowStateDump [all]

all

Displays the contents of all switch ASIC state dump files.

ismTakeStateDump

Captures switch ASIC state dump information.

ismTakeStateDump [-lid *lid*]

lid lid

Specifies the LID of the unmanaged switch on which to capture ASIC state dump information.

This command is only available in support Login mode. Contact Supermicro technical support for more information.

The state dump files are created in a local RAM file system. The naming convention is: */firmware/prr*.gz*. Copy these files using sftp run from an external host.

After the files have been copied externally, Supermicro recommends you enter reboot now all to resume normal operation. You must do the file copy **before** the reboot, because the state dump files in the local RAM file system are not persistent across the reboot.

It is normal for the errors PrrVpd: MadLocalProcess and Ism: Communication to occur during and after capturing a state dump.

ismShowArConfig

Displays adaptive routing info for a specific switch chip or entire chassis.

ismShowArConfig [*switch*]

switch

Switch index.

```
-> ismShowArConfig
    Switch Name     | Ena | Pau | LRO |  Algo  |
Freq | Thresh |   Events
-------------------- | --- | --- | --- | ------ |
---- | ------ | ----------
Switch 1           |   0 |   0 |   0 |     0 |
0 |      0 |          0
```

ismShowArMoves

Displays adaptive routing adjustments for a specific switch chip or entire chassis.

ismShowArMoves [*switch*]

switch

Switch index.

Time Management

Commands in this category are used for retrieving and setting the current system time, setting the time zone, and setting daylight saving time parameters.

time

Configures the time on the device.

time [-S *ipaddr*] [-T *hhmmss[mmddyyyy]*]

-S ipaddr

Sets the NTP Server IP address.

-T hhmmss[mmddyyyy]

Sets the local clock time hour, minutes, and seconds. Optionally, the month, day, and year can be set.

```
-> time
09:52:12  10/16/2015
Configured to use the local clock

-> time -S 172.26.0.254
Configured the NTP server ip address successfully
13:53:02  10/16/2015
Configured to use NTP server IP address:
172.26.0.254
```

Time is configured locally (using a local clock) or is set to be updated by an NTP server. If you set the time locally, the unit unconfigures the NTP server IP address if set.

If no value is entered, the current system time is displayed.

timeZoneConf

Displays or configures the time zone setting.

timeZoneConf [*offset*]

offset

The time offset in relation to Greenwich Mean Time (GMT). The *offset* parameter specifies a time zone the system should use when setting the time. In the United States, valid time zone offsets include:

-5

Eastern Standard Time (GMT-5)

-6

Central Standard Time (GMT-6)

-7

Mountain Standard Time (GMT-7)

-8

Pacific Standard Time (GMT-8)

```
-> timeZoneConf -5
Timezone offset successfully configured
Current time zone offset is: -5
```

timeDSTConf

Configures and displays the Daylight Saving Time settings.

timeDSTConf [*sw sd sm ew ed em*]

sw

Start which, valid options include:

1

1st

2

2nd

3

3rd

4

4th

5

5th

sd

Start day, valid options include:

1

Sunday

2

Monday

3

Tuesday

4

Wednesday

5

Thursday

6

Friday

7

Saturday

sm

Start month, valid options include:

3

March

4

April

5

May

6

June

7

July

8

August

9

September

10

October

11

November

ew

End which, valid options include:

1

1st

2

2nd

3

3rd

4

4th

5

5th

ed

End day, valid options include:

1

Sunday

2

Monday

3

Tuesday

4

Wednesday

5

Thursday

6

Friday

7

Saturday

em

End month, valid options include:

3

March

4

April

5

May

6

June

7

July

8

August

9

September

10

October

11

November

```
-> timeDSTConf 2 1 3 1 1 11
Timezone offset successfully configured
Current DST = Start: 2'nd Sunday of March End:
1'st Sunday of November
```

timeNtpTimeout

Displays or sets the number of seconds to wait for a NTP response.

```
timeNtpTimeout [numSeconds]
```

numSeconds

New timeout setting (default = 2 seconds).

```
-> timeNtpTimeout
Current NTP timeout value: 2 seconds
-> timeNtpTimeout 3
Current NTP timeout changed to 3 seconds
```

If no value is entered, the current setting is displayed.

NTP timeout is the amount of time (in seconds) for the system to wait for a response from the NTP server. This setting can be configured using the same command with the new timeout value (in whole seconds) as the only argument. The default setting is 2 seconds. The NTP timeout value is not used on line cards or slave CMUs.

timeNtpRefreshTime

Displays or sets the delay between syncing the clock via NTP.

timeNtpRefreshTime [*numSeconds*]

numSeconds

New refresh delay setting.

```
-> timeNtpRefreshTime
Current NTP refresh delay value: 60 seconds
-> timeNtpRefreshTime 50
Current NTP refresh delay changed to 50 seconds.
```

If no value is entered, the current setting is displayed.

The NTP refresh time is the delay in seconds between attempts to sync the clock via NTP. This value can be configured by using this same command with the new refresh time (in whole seconds) as the only argument. The NTP refresh time is not used on line cards or slave CMUs.

SNMP

Commands in this category are used for configuring trap destinations and SNMP security parameters.

snmpCommunityConf

Configures and displays the SNMP community strings.

snmpCommunityConf [-r *readonly_comm_str*] [-w *read_write_comm_str*]

-r readonly_comm_str

A read-only community string.

-w read_write_comm_str

A read/write community string.

```
-> snmpCommunityConf -r public
Read Only Community String Was Set To: public
```

If no value is entered, the current settings are displayed.

To disable an entry, use a set of double quotes (for example, " ") as the community name.

snmpTargetAddr

Displays and modifes the snmpTargetAddrTable entries.

snmpTargetAddr {show | add | edit | delete} -n *name* [-a *address*] [-p *port*] [-t

```
timeout] [-r retry_count] [-l tag_list] [-v
parameters] [-s storage_type] [-i
status]
```

show

Displays the contents of the snmpTargetAddrTable.

add

Adds a row to the snmpTargetAddrTable.

edit

Modifies an existing row in the snmpTargetAddrTable.

delete

Removes an existing row of the snmpTargetAddrTable.

-n name

Name. A unique name used to identify a row.

Any name with a space (for example, xxx v3) must be surrounded by double quotes (" ").

-a addr

The target machine IP address in dotted decimal form.

-p port

The target port to send traps and information.

-t timeout

The time to wait for an information response.

-r retry_count

Retry count. The number of re-send attempts for information.

-l tag_list

Tag list. Indicates the traps and information that is sent.

-v parameters

Parameters. This maps to an entry in the `snmpTargetAddrTable`.

-s storage_type

Storage type. Determines whether the entry is saved in flash memory.

Options include: `volatile` or `nonVolatile` (string).

-i status

Status. Options include:

1

Active

2

Not In Service

3

Not Ready

```
-> snmpTargetAddr
rfc2573t:snmpTargetAddrTDomain: nms v1 :
1.3.6.1.6.1.1
rfc2573t:snmpTargetAddrTDomain: nms v2 :
1.3.6.1.6.1.1
rfc2573t:snmpTargetAddrTDomain: nms v3 :
1.3.6.1.6.1.1
rfc2573t:snmpTargetAddrTAddress: nms v1 :  (ip
addr)00.00.00.00 (port)0000
rfc2573t:snmpTargetAddrTAddress: nms v2 :  (ip
addr)00.00.00.00 (port)0000
rfc2573t:snmpTargetAddrTAddress: nms v3 :  (ip
addr)00.00.00.00 (port)0000
```

If no value is entered, the current settings are displayed.

The output is in the form: mib : mib_object : table_index : value

For more details on the snmpTargetAddrTable, see SNMP-TARGET-MIB, RFC 2573.

snmpTargetParams

Displays the snmpTargetParamsTable entries.

snmpTargetParams [show]

show

Displays the contents of the snmpTargetParamsTable.

```
-> snmpTargetParams
rfc2573t:snmpTargetParamsMPModel: v1 params : 0
rfc2573t:snmpTargetParamsMPModel: v2 params : 1
rfc2573t:snmpTargetParamsMPModel: v3 params : 3
rfc2573t:snmpTargetParamsSecurityModel: v1
params : 1
rfc2573t:snmpTargetParamsSecurityModel: v2
params : 2
rfc2573t:snmpTargetParamsSecurityModel: v3
params : 3
```

If no value is entered, the current settings are displayed.

The output is in the form: mib : mib_object : table_index : value

For more details on the snmpTargetParamsTable, see SNMP-TARGET-MIB, RFC-2573.

snmpNotifyProfile

Displays the snmpNotifyFilterProfileTable entries.

```
snmpNotifyProfile [show]
```

show

Displays the contents of the snmpNotifyFilterProfileTable.

```
-> snmpNotifyProfile
rfc2573n:snmpNotifyFilterProfileName: v1 params
: v1 params
rfc2573n:snmpNotifyFilterProfileName: v2 params
: v2 params
rfc2573n:snmpNotifyFilterProfileName: v3 params
: v3 params
rfc2573n:snmpNotifyFilterProfileStorType: v1
params : 3
rfc2573n:snmpNotifyFilterProfileStorType: v2
params : 3
rfc2573n:snmpNotifyFilterProfileStorType: v3
params : 3
```

If no value is entered, the current settings are displayed.

The output is in the form: mib : mib_object : table_index : value

For more details on the snmpNotifyFilterProfileTable, see SNMP-NOTIFICATION-MIB, RFC-2573.

snmpNotifyFilter

Displays the snmpNotifyFilterTable entries.

```
snmpNotifyFilter [show]
```

show

Displays the contents of the snmpNotifyFilterTable.

```
-> snmpNotifyFilter
rfc2573n:snmpNotifyFilterMask:  v1 params : 0
rfc2573n:snmpNotifyFilterMask:  v2 params : 0
rfc2573n:snmpNotifyFilterMask:  v3 params : 0
rfc2573n:snmpNotifyFilterType:  v1 params : 1
rfc2573n:snmpNotifyFilterType:  v2 params : 1
rfc2573n:snmpNotifyFilterType:  v3 params : 1
```

If no value is entered, the current settings are displayed.

The output is in the form: mib : mib_object : table_index : value

For more details on the snmpNotifyFilterTable, see SNMP-NOTIFICATION-MIB, RFC-2573.

snmpNotify

Displays the snmpNotifyTable entries.

```
snmpNotify [show]
```

show

Displays the contents of the snmpNotifyTable.

```
-> snmpNotify
rfc2573n:snmpNotifyTag: switch : rfc1493
rfc2573n:snmpNotifyTag: interfaces : rfc2233
rfc2573n:snmpNotifyTag: rmon : rfc1757
rfc2573n:snmpNotifyTag: snmp : rfc1907
```

```
rfc2573n:snmpNotifyTag: tms : tmscom
rfc2573n:snmpNotifyType: switch : 1
```

If no value is entered, the current settings are displayed.

The output is in the form: mib : mib_object : table_index : value

For more details on the snmpNotifyTable, see SNMP-NOTIFICATION-MIB, RFC-2573.

snmpSystem

Displays and modifies the SNMP system information.

snmpSystem {show | edit} [-n *sysName*] [-c *sysContact*] [-l *sysLocation*]

show

Shows the contents of the snmpTargetAddrTable.

edit

Modifies an existing row in the snmpTargetAddrTable.

-n sysName

Specifies system name information.

-c sysContact

Specifies system contact information.

-l sysLocation

Specifies system location information.

```
-> snmpSystem show
rfc1907:sysDescr: þ : 20.28.4D.61.73.74.65.72.29
rfc1907:sysObjectID:  : 1.3.6.1.4.1.10222.7.1.2
rfc1907:sysUpTime:  : 1 Day(s), 23 Hour(s), 34
Minute(s), 47 Second(s)
rfc1907:sysContact: þ : {no value}
rfc1907:sysName: þ : Intel 12800-040-254
rfc1907:sysLocation: þ : Main Chassis Unit, Slot
254
rfc1907:sysServices:  : 79
```

If no value is entered, the current setting is displayed.

The output is in the form: mib : mib_object : table_index : value.

snmpUsrSec

Displays and configures SNMP V3 users.

snmpUsrSec [{add *username* | show [*username*] | edit *username* | delete *username*} [-a {MD5 *key* | SHA *key* | NONE}]]

add username

Adds an entry to the V3 user table.

show username

Shows entries in the V3 user table.

edit username

Modifies an entry in the V3 user table.

delete username

Removes an entry in the V3 user table.

-a algo

Authentication algorithm and key. Options include:

MD5 key

MD5 authentication algorithm is used.

SHA key

SHA authentication algorithm is used.

NONE

No authentication algorithm is used.

```
-> snmpUsrSec
User    : initialmd5
Auth    : MD5
Auth Key: 0x047b473f93211a17813ce5fff290066b
Priv    : NONE
User    : initialsha
Auth    : SHA
Auth Key:
0x1c8cbd687fb0f0a22ddd24315db0d84c09eb5ff3
Priv    : NONE
User    : initialnone
Auth    : NONE
Priv    : NONE
```

If no value is entered, the current settings are displayed.

Handles configuration and display of SNMP v3 users. Supported authentication algorithms are: NONE, MD5, and SHA. A key (passphrase) is required for all except the NONE algorithm.

No privacy algorithms are currently supported.

CaptureInfo

Commands in this category are used by support personnel for analysis and debugging.

capture

Displays information for this device.

capture

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

showAllConfig

Displays fundamental chassis configuration information.

showAllConfig

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureFw

Displays firmware information for this device.

captureFw

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureSm

Displays Subnet Management information for this device.

captureSm

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureIsm

Displays switch information for this device.

captureIsm

None.

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureChassis

Displays chassis information for this device.

captureChassis

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureNetwork

Displays network information for this device.

captureNetwork

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureLog

Displays log information for this device.

captureLog

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureMisc

Displays miscellaneous information for this device.

captureMisc

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureSnmp

Displays SNMP information for this device.

captureSnmp

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

captureShell

Displays shell command information for this device.

captureShell

None.

The output of this command is intended for support personnel to capture switch configuration, logs, and other pertinent data.

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Notes