PERL API Reference for Network Compliance Manager 1.3

CiscoWorks

Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

Text Part Number: OL-10254-06

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Getting Started

Intended Audience

This document is intended for network engineering professionals who:

- Write scripts to automate device configuration.
- Are comfortable with basic Practical Extraction and Reporting Language (PERL) programming, and have an understanding of database schema and access methods.
- Have knowledge of the CiscoWorks Network Compliance Manager (NCM) CLI. NCM CLI documentation is available in Appendix C or can be accessed within the CLI using the `help` command. Most information that is available from the NCM Web interface and the NCM CLI is also available through the PERL API.
- Integrate various third party systems with NCM 1.3, such as network management, workflow, and trouble ticketing solutions.

Overview

This guide includes information on the PERL Application Programming Interface (API). The PERL API enables NCM to communicate with external systems and vice-versa. The PERL API can be used to add and retrieve data to and from NCM.

Common tasks, such as adding devices into NCM and alerting third party systems when a device configuration changes, can be programmatically accessed using the PERL API. Users who want to use other languages can automate their common functions using CLI or Telnet protocols.

NOTE: To install the enhanced PERL API, refer to “Installing the Enhanced PERL API” on page 6.

Document Conventions

This document uses the following conventions:

- File names, directory names, and answers/arguments supplied by the user are represented in Courier font, for example: `ONAAPI.zip`
- Display of on-screen activity is represented in Courier font, for example:
  `Volume Serial Number`

Installing the Enhanced PERL API

The following modules are provided on the Distribution CD:

- Opsware::NAS::Util
- Opsware::NAS::Client
- Opsware::NAS::Connect

Installation Requirements

PERL version 5.8 or later is required.

If you are using the Auto Installer, skip to the “Auto Installer Method” section in the Installation Steps section below. (NOTE: NCM 1.1 and above does not currently support the system call to run the install.pl script. At this time, you will have to manually install the enhanced PERL API.)

If you are manually installing the PERL API, confirm that certain versions of PERL and/or PERL modules (that are not part of some core PERL distributions) are installed before you begin. Refer to the META.yml file within each package/tarball for its requirements.

If your PERL distribution does not contain all of the required PERL modules, they are available at http://www.cpan.org and/or via PPM. (If you are using ActivePerl, try PPM first.)

To install any of the required modules, use one of the following commands:

- ppm install SOAP-Lite
- cpan install SOAP::Lite

NOTE: that PPM (ppm.exe) is part of the ActivePerl distribution. If you are using ActivePerl, it is recommended that you use the PPM method. You can also run PPM without arguments and then issue the install command. You may need to do this for some PERL modules that have multiple versions to choose from, followed by install # (where # is the item in the list returned by the install command). Keep in mind that PPM prefers to use the '-' as a namespace separator in place of the PERL '::' separator.

NOTE: NMAKE.EXE is installed when installing NCM on a Windows platform. It is located the /client directory. CPAN is simply a wrapper for the perl -MCPAN -e shell command. The CPAN command (or cpan.exe) is part of the core PERL install on all PERL versions since 5.8.0 (including ActivePerl).

Installation Steps

There are two methods for installing the PERL API modules. The first and by far the easiest method is to use the Auto Installer. You can only use the Auto Installer, however, if you have installed the PERL API distribution via the Cisco NCM installer. Otherwise, you must use the manual installation method.

Auto Installer Method:

The Auto Installer installs all of the Opsware::NAS modules as well as their dependencies.

1. Open a shell. If you are on a Windows platform, open a command shell. If you are on a Linux or Solaris platform, you can either open a command shell or SSH into the NCM server. (Note: You will need to have privileges to both create and modify files for NCM as well as PERL. As a result, you might need Administrator privileges on a Windows Platform and root privileges on Linux or Solaris platforms.)
2. Change to the directory where NCM is installed. This directory will have been set when you installed NCM.
3. To run the install script, enter: perl client/perl_api/har/install.pl

NOTE: If PERL is not in your path and/or you have multiple PERL versions installed, use the full path to the PERL executable that you will be using. This should also match the value for the PERL interpreter set in the NCM server configuration.

As noted, the above procedure installs all of the Opsware::NAS modules, as well as their dependencies. However, only "pure perl" dependencies are provided. For example, SOAP::Lite is provided, which includes a minimalist lightweight XML parser. For the best performance, it is recommended that you have the XML::Parser module installed.

If you are using ActivePerl (with a PERL version of 5.8 or better), the XML::Parser module is included with the distribution. Otherwise, you will need to use PPM, CPAN, or manually download and install the module.

Manual Install Method:

Keep in mind that the installation could fail if your PERL installation does not meet certain requirements. Refer to the “System Requirements” section on page 9. In addition, the Opsware::NAS PERL modules are distributed as compressed tarballs, similar modules on CPAN. They are located in the following directory: <NCM_ROOT>/client/perl_api/Opsware/.

To untar and uncompress all of the modules at one time, you can use the ptar command. ptar is distributed as part of the popular PERL module Archive::Tar, which is included in the standard ActivePerl distributions. To view the contents of the directory and to extract the contents into your current directory, enter: ptar -xzvf PATH/TO/whatever.tar.gz.

For each of the following modules, uncompress and untar the module(s) and change to the directory that was created:

- Opsware::NAS::Util
- Opsware::NAS::Client
- Opsware::NAS::Connect

To install the PERL API on a Windows platform with ActivePerl (or any platform running a version of PERL that has the Module::Build module installed):

- perl Build.PL
- perl Build build
- perl Build test
- perl Build install

You may also use the traditional CPAN method. Enter:

- perl Makefile.PL
- make
- make test
- make install

NOTE: If you are using the CPAN method on a Windows platform, you will need to enter nmake rather than make.

PERL Documentation

After installing the PERL API, you can view the following PERL POD pages:

- perldoc Opsware::NAS::Client
- perldoc Opsware::NAS::Connect
- perldoc Opsware::NAS::Client::4_5_x
- perldoc Opsware::NAS::Client::6_0_x

Your PERL distribution can also build HTML files for the documentation.

Examples

There are PERL API examples in the demo directory. These examples illustrate how to use the PERL API. Keep in mind that it is possible to run the examples without installing the PERL modules by remaining in the demo directory and supplying the relative (or full) path to each example, as in:

- unix_box$ perl demo/list_users.pl
- C:\Windows\Box> perl demo\list_users.pl

Installing the Legacy PERL API

To use the NCM PERL API, you should have at least 50 MB of free disk space (the minimum required disk space 44 MB), and the following installed on your system:

- ActivePerl, Version 5.6 or higher. ActivePerl can be downloaded from http://www.activestate.com/Products/Language_Distributions/
- NCM Client utilities installed and configured
- WinZIP or an equivalent archiving utility

Operating Systems

The NCM PERL API has been tested with the following operating systems:

- Windows 2000 Professional with Service Pack 2
- Windows 2000 Server with Service Pack 2
- Windows 2003 Server
- Windows XP Professional
- Red Hat Linux Enterprise AS (update 2 and 3)
- Solaris 9.x

Note: If you plan to use the PERL API to write scripts to run as Advanced Scripts in NCM, make sure NCM is configured with the correct path to PERL.

Windows Installation

Step One: Installing NCM

You must install the NCM Client on the host on which you are using the PERL API. (**Note**: You do not have to do Steps 1 and 2 if you are installing the PERL API on the same server on which you installed NCM.)

1. Insert the NCM installation CD into your CD drive. The InstallAnywhere Self Extractor opens. Follow the Install Wizard instructions. (**Note**: A license key is not required for installing the NCM client.)
2. On the “Choose Install Set” page, select the Client Only option. When prompted, ensure that the hostname of the NCM server is entered correctly. If ActivePerl is not installed, refer to Step Two below. (**Note**: To verify that ActivePerl is installed, at the command line enter: `perl -v` and see what prints out.)
3. To verify that the NCM client has been installed, run the `<NCM_ROOT>\client\runclient.bat` command. You might be prompted for your username and password. Enter the same credentials that you would use to login to the NCM server. Try some commands, such as `list device` and `list user`. (**Note**: <NCM_ROOT> is the drive and directory on which you installed the NCM client.)

Step Two: ActivePerl for Windows

ActivePerl for Window should already be installed on your Windows system. (**Note**: ActivePerl is not provided on the NCM install CD or with the NCM product.) Keep in mind that the NCM PERL API must be copied to the appropriate location.

1. Run the setup_perl.bat file. The setup_perl.bat file is located in `<NCM_ROOT>\client\sdk`.
2. Ensure that the PATH is set correctly to include the directory containing perl.exe (for example, `C:\Perl\bin`). Recent versions of the distribution set the PATH environment variable correctly. The directory where PERL is installed is referred to as PERL_HOME_DIR (`C:\Perl\bin` in the example).
3. Enter `perl -V` at the command prompt to see what your Perl @INC variable is set to. (**Note**: <NCM_ROOT> is the drive and directory on which you installed the NCM server.)
4. Copy the `TrueControlAPI.pm` file from <NCM_ROOT>\client\sdk to somewhere in the Perl @INC path, for example: `C:\Perl\lib`.

Step Three: Testing the Installation

To test the PERL API installation

1. Edit the following variables in the `getUserInfo.pl` file (<NCM_ROOT>/client/sdk/examples/perl/getUserInfo.pl). Be sure to remove the leading and trailing “@” on the variable definition.
   - Host
   - User
   - Password
2. Run: `perl getUserInfo.pl`

Solaris and Linux Installation

Step One: Installing NCM

You must install the NCM Client on the host on which you are using the PERL API. (**Note**: You do not have to do Steps 1 and 2 if you are installing the PERL API on the same server on which you installed NCM.)

1. Insert the NCM installation CD into your CD drive. The InstallAnywhere Self Extractor opens. Follow the Install Wizard instructions. (**Note**: A license key is not required for installing the NCM client.)
2. On the “Choose Install Set” page, select the Client Only option. When prompted, ensure that the hostname of the NCM server is entered correctly.
3. Login to NCM using the CLI login (Telnet) and ensure that the NCM client (*runclient.sh* and *truecontrol-client.jar*, located in /<NCM_ROOT>/client/) is running. Try some commands, such as `list device` and `list user`. You may be prompted for your username and password. Enter the same credentials that you used to login.

Step Two: Installing the PERL Inline-0.33 Module

1. Copy the TrueControlAPI.pm file to somewhere in INC path, for example: */usr/lib/perl5/site_perl*. TrueControlAPI.pm is located in /<NCM_ROOT>/client/sdk/.
2. Enter `perl -V` to see what your PERL installs INC variable is set to.
3. Install the PERL Inline-0.44 module. Enter:

   ```
   #cd <NCM_ROOT>/client/Inline/Inline-0.44
   #perl Makefile.PL
   #Do you want to install Inline::C?[n]n
   #make
   #make install
   ```

4. Install the PERL Inline-Java-0.33 module. Enter:

   ```
   #cd <NCM_ROOT>/client/Inline/Inline-Java-0.33
   #perl Makefile.PL
   #Do you wish to build the JNI extension? [yn] n
   #make
   #make install
   ```

Step Three: Testing the Installation

To test the PERL API installation:

1. Edit the following variables in the `getUserInfo.pl` file: (/<NCM_ROOT>/client/sdk/examples/perl/ getUserInfo.pl)
   - Host
   - User
   - Password
2. Run: `#perl getUserInfo.pl`

Relationship between the API and the CLI or Telnet/SSH Proxy

`Session.exec` is used to send a request to the API. The commands accepted by `Session.exec` are, with the exceptions noted below, syntactically identical to those accepted by the CLI or the Proxy interface interactive mode. You may find it convenient to test commands intended for your programs using Telnet to your server and entering the commands manually.

All commands accepted by the CLI or Telnet/SSH Proxy are valid for `Session.exec`, except for the `show version, import`, and `help` commands. The PERL API does not support these.

Legacy PERL API Functions

An '@' and '$' symbol preceding the function name signifies the type of data returned by the function. Each function can be called directly by its name. The PERL module exports the function name into the calling programs namespace.

true_create ()

Arguments: None

Returns: SessionObject

Description: SessionObject includes the following methods:

```
String getOption(optionName, defaultValue)
Void   open(userName, password, NCMHostUrl)
```

Note: `NCMHostUrl` is a string that has the format `<hostname>:<portNumber>`

```
Result exec(command)
String getTimestamp(JavaDateObject)
int    getShort(JavaShortValue)
```

true_open

Arguments: `username, password [, NCMHostUrl [, SessionObject]]`

Note: Arguments in square brackets are optional.

Returns: Undefined

`NCMHostUrl` defaults to `localhost:1099` (if not specified).

`SessionObject` defaults to the session opened by `true_open()` (if not specified).

Description: Authenticates against the NCM server with username and password. If the authentication fails, it prints an error. This is a high-level API call for writing simple scripts. To capture a failed authentication, use the following API calls:

```
my $session = true_create();
eval {
    $session->(username, password [, NCMHostUrl]);
}
if ($@) {
     # handle authentication failure here
     if (caught("java.lang.Exception") {
         # grab $@->getMessage() or $@->toString()
           # to get the Java error, which may not always
           # be bad password. Could be host not reachable
           # or something else.
} else {
         # something happened in Perl, not in Java
         # that caused the failure. Print $@
}
}
```

true_close

Arguments: `[sessionObject]`

Returns: Unspecified

Description: `SessionObject` defaults to the session opened by `true_open()` (if not specified). Disconnect from the NCM Server.

true_exec

Arguments: `command [, sessionObject]`

Returns: ResultObject

Description: `SessionObject` defaults to the session opened by `true_open()` (if not specified). Executes the command in the session. `true_exec()` returns a ResultObject. ResultObject has these methods:

```
String getReturnStatus()
Boolean getSucceeded()
String getText()
ResultSet getResultSet()
String getStackTrace()
ResultSet is a java.sql.ResultSet
```

true_getValue

Arguments: `ResultSet, ColumnName`

Returns: Depends on ColumnName

Description: Grabs the value in a named column from the current row in the ResultSet.

true_getText

Arguments: ResultObject

Returns: text string

Description: Grabs the text string from the result object.

true_getColumnCount

Arguments: ResultSet

Returns: int

Description: Returns the number of columns in the ResultSet.

true_getColumnName

Arguments: `ResultSet, columnNumber`

Returns: Depends on columnNumber.

Description: Grabs the column name associated with the column number.

printAllNamesAndValuesInResultSet

Arguments: `ResultSet`

Returns: unspecified

Description: Prints the column count and all the column names to STDOUT. This is useful for debugging scripts.

Programming Example

This section shows how a simple application can be written using PERL.

Note: A ResultSet refers to a list of all rows in the database that match a SQL Statement. You can read the results of each row using an iterator such as next().

In general, to find the phone number of a person in a database that contains first names, last names, and phone numbers for a large number of people, you would typically connect to a database and issue a SQL Statement. The results (the names and numbers that match the SQL Statement, for example all users with the first name Bob), would be available within a ResultSet. If several entries in the database correspond to individuals with a first name of Bob, you can read each row and check for the last name using the iterator next().

In terms of NCM, the `List Device` command lists all of the devices currently managed by NCM and displays information for these devices. The following data is a subset of the data stored for each device.

Database Column Name	Description
PrimaryIPAddress	Displays the device's IP address.
PrimaryFQDN	Displays the fully qualified Domain Name, for example POS6-0.BR1.SEA1.ALTER.NET.
DeviceName	Displays an internal name for the device, for example L2-Switch-Bld3-Closet.
Vendor	Displays the device's manufacturer, for example Nortel Networks.

The following program retrieves the above device data.

```
# Header {{{
# -File  Print information regarding devices
# -Copyright    2001-2006, Cisco Systems, Inc.
# -Author
# }}}
use TrueControlAPI;
use strict;
my $username  = "@FILL_IN_USERNAME@";
my $password  = "@FILL_IN_PASSWORD@";
my $CiscoHost = "@FILL_IN_HOST@";
true_open($username, $password, "$CiscoHost:1099");
my $res = true_exec("list device");
my $resultset = $res->getResultSet();
while($resultset->next() )
{
        print(true_getValue($resultset,"PrimaryIPAddress"), "\n");
        print(true_getValue($resultset,"PrimaryFQDN"), "\n" );
        print(true_getValue($resultset,"DeviceName"), "\n" );
        print(true_getValue($resultset,"Vendor"), "\n");
}
true_close();
```

Copy the above program into a file and save it as ListDevice.pl.

Run the program using the command: `perl ListDevice.pl`. The program prints a list of all devices registered with NCM. For each device, the IP address, fully qualified Domain Name, Device Name, and Vendor are printed, if available.

Statements	Description
Use TrueControlAPI	Indicates the module that is to be loaded by PERL.
true_open ($username, $password, $server:$port)	Enables you to create a session. A session must be created for any command to be run.
true_exec ("list device")	Enables you to run the List Device command. Refer to the `help` command in the proxy for information on commands and their arguments.
true_close ()	Closes the session.

Note: Several examples are provided in the *c:\<NCM_ROOT>\client\sdk\Examples:\perl* directory.

Commands

This section provides information for issuing commands and receiving the correct result data types. When invoked via the NCM PERL API, the required user permissions for all commands are the same as for the Telnet/SSH Proxy interactive mode.

Commands and Return Values

The following table lists the commands and return values.

Command	Success Code	Return Value (s)	Asynchronous
activate device	200	null	
add advanced script	200	null	
add authentication	200	String	
add command script	200	null	
add device	201	null	
add device to group	200	null	
Add diagnostic	200	null	
add event	200	null	
add group	200	null	
Add group to parent group	200	null	
Add parent group	200	null	
add ip	200	null	
add system message	200	null	
add user	207	null	
annotate access	200	null	
annotate config	200	null	
configure syslog	200	null	
deactivate device	200	null	
del access	200	null	
del authentication	200	null	
del device	200	null	
del device data	200	null	
del device from group	200	null	
del drivers	200	null	
del event	200	null	
del group	200	null	
Del group from parent group	200	null	
del ip	200	null	

Command	Success Code	Return Value (s)	Asynchronous
del session	200	null	
del script	200	null	
del system message	200	null	
del task	217	null	
del user	211	null	
deploy config	200	null	√
diff config	200	null	
discover driver	200	null	√
discover drivers	200	null	√
get snapshot	200	null	√
list access	200	ResultSet	
list access all	200	ResultSet	
list basicip	200	Collection of String	
list config	200	ResultSet	
list config all	200	ResultSet	
list device	501	ResultSet	
list device data	200	ResultSet	
list deviceinfo	200	Collection of String	
list diagnostic	200	Collection of String	
list drivers	200	ResultSet	
list event	200	ResultSet	
list groups	200	ResultSet	
list icmp	200	Collection of String	
list int	200	Collection of String	
list ip	200	ResultSet	
list ip all	200	ResultSet	
list module	200	ResultSet	
list ospfneighbor	200	Collection of String	
list port	200	ResultSet	
list routing	200	Collection of String	
List script	200	ResultSet	
list session	200	ResultSet	
list system message	200	ResultSet	
list task	200	ResultSet	

Command	Success Code	Return Value (s)	Asynchronous
list task all	513	ResultSet	
list user	511	ResultSet	
Mod advanced script	200	String	
mod authentication	200	String	
Mod command script	200	String	
mod device	204	null	
Mod diagnostic	200	String	
mod group	200	null	
mod ip	200	String	
mod module	200	null	
mod port	200	null	
mod task	215	null	
mod unmanaged device	200	null	
mod user	209	null	
passwd	200	null	√
pause polling	200	null	
ping	200	String	√
reload server options	200	null	
resume polling	200	null	
run advanced script	200	null	
run command script	200	String	
run diagnostic	200	String	√
run script	200	String	√
show access	200	ResultSet	
show basicip	200	String	
show config	200	String	
show device	200	ResultSet	
show device config	200	String	
show device latest diff	200	String	
show deviceinfo	200	String	
show diagnostic	200	String	
show event	200	ResultSet	
show fastlookup	200	String	
show group	200	ResultSet	

Command	Success Code	Return Value (s)	Asynchronous
show icmp	200	String	
show int	200	String	
show ip	200	ResultSet	
show latest access	200	ResultSet	
show module	200	ResultSet	
show ospfneighbor	200	String	
show polling status	200	String	
show port	200	ResultSet	
show routing	200	String	
show script	200	String	
show session	200	ResultSet	
show session commands	200	String	
show snapshot	200	String	
show system message	200	ResultSet	
show task	221	ResultSet	
show user	219	ResultSet	
synchronize	200	String	√
traceroute	200	String	√

ResultSet Contents

Where the Commands and Return Values table lists a `ResultSet` return type, these are the data types returned for columns 1 through N:

Command	ResultSet Contents starting with column 1
list device data list config list config all	java.lang.Integer deviceDataID java.lang.String dataBlock java.lang.String blockType java.util.Date createDate java.lang.String comments java.lang.Integer deviceAccessLogID java.lang.Short blockFormat
list drivers	java.lang.Integer driverLookupID java.lang.Integer deviceID java.lang.String baseModelName java.lang.String driverName
show access list access list access all show latest access	java.lang.Integer deviceAccessLogID java.lang.String displayName java.lang.String actionTaken java.lang.String accessTrigger java.util.Date createDate java.lang.Integer createUserID

Command	ResultSet Contents starting with column 1
	java.lang.Integer interceptorLogID java.lang.String comments java.lang.Short noPrune java.lang.String externalChangeRequestID java.lang.Integer deviceID java.lang.String changeEventData java.lang.String deviceDataCustom1 java.lang.String deviceDataCustom2 java.lang.String deviceDataCustom3 java.lang.String deviceDataCustom4 java.lang.String deviceDataCustom5 java.lang.String deviceDataCustom6
list device show device	java.lang.Integer deviceID java.lang.String primaryFQDN java.lang.String hostName java.lang.String primaryIPAddress java.lang.String consoleIPAddress java.lang.String nATIPAddress java.lang.String tFTPServerIPAddress java.lang.Integer consolePort java.lang.String deviceName java.lang.String serialNumber java.lang.String assetTag java.lang.String softwareVersion java.lang.String firmwareVersion java.lang.String vendor java.lang.String model java.lang.String deviceType java.lang.String geographicalLocation java.lang.String timeZone java.lang.String deviceFunction java.lang.String comments java.util.Date createDate java.util.Date lastAccessAttemptDate java.util.Date lastAccessSuccessDate java.util.Date lastSnapshotDate java.lang.String lastAccessAttemptStatus java.lang.Integer lastModifiedUserID java.lang.Short excludeFromPoll java.lang.Short canUseChangeAgents java.lang.String accessMethods java.lang.String modemNumber java.lang.Short managementStatus java.lang.String feedSource java.util.Date lastImportDate java.util.Date lastRecordModifiedDate java.lang.String changeEventData java.lang.Integer mostRecentConfigID java.lang.Integer lastConfigChangeUserID

Command	ResultSet Contents starting with column 1
	java.lang.Integer latestStartupRunningDiffer java.lang.String deviceCustom1 java.lang.String deviceCustom2 java.lang.String deviceCustom3 java.lang.String deviceCustom4 java.lang.String deviceCustom5 java.lang.String deviceCustom6
list groups show group	java.lang.Integer deviceGroupID java.lang.String deviceGroupName java.util.Date createDate java.lang.String comments java.lang.String deviceGroupCustom1 java.lang.String deviceGroupCustom2 java.lang.String deviceGroupCustom3 java.lang.String deviceGroupCustom4 jjava.lang.String deviceGroupCustom5 java.lang.String deviceGroupCustom6 java.lang.Integer deviceCount
show session list session	java.lang.Integer interceptorLogID java.util.Date startDate java.util.Date endDate java.lang.Integer userID java.lang.Integer deviceID java.lang.String deviceIP java.lang.String sessionType java.lang.String sessionData java.lang.Short status java.lang.String interceptorLogCustom1 java.lang.String interceptorLogCustom2 java.lang.String interceptorLogCustom3 java.lang.String interceptorLogCustom4 java.lang.String interceptorLogCustom5 java.lang.String interceptorLogCustom6
list system message show system message	java.lang.Integer eventID java.lang.Integer eventUserID java.lang.Integer eventDeviceID java.lang.String eventType java.util.Date eventDate java.lang.Short eventClass java.lang.Integer eventTaskID java.lang.String eventText
list task show task	java.lang.Integer scheduleTaskID java.lang.Integer deviceGroupID java.lang.Integer succeededChildCount java.lang.Integer failedChildCount java.lang.Integer pendingChildCount java.lang.Integer parentTaskID

Command	ResultSet Contents starting with column 1
	java.util.Date createDate java.util.Date scheduleDate java.lang.String comments java.lang.Integer duration java.lang.Short status java.lang.String taskType java.lang.Integer taskUserID java.lang.Short retryCount java.lang.Short retryInterval java.lang.Short repeatType java.lang.Short repeatWeekday java.lang.Integer repeatInterval java.lang.Integer deviceID java.lang.Integer deviceDataID java.lang.String result java.lang.Short expensive java.lang.String taskData java.util.Date startDate java.lang.Integer resultConfigID
list user show user	java.lang.Integer userID java.lang.String username java.lang.String firstName java.lang.String lastName java.lang.String userPassword java.lang.String emailAddress java.util.Date createDate java.lang.String timeZone java.lang.Short requiredUser java.lang.String aaaUserName java.lang.String aaaPassword java.lang.Short useAaaLoginForProxy java.lang.String userCustom1 java.lang.String userCustom2 java.lang.String userCustom3 java.lang.String userCustom4 java.lang.String userCustom5 java.lang.String userCustom6
show event list event	java.lang.Integer eventID java.lang.Integer eventUserID java.lang.Integer eventDeviceID java.lang.String eventType java.util.Date eventDate java.lang.Short eventClass java.lang.Integer eventTaskID java.lang.String eventText java.lang.String eventData java.lang.Integer configPolicyID
show ip	java.lang.Integer ipID

Command	ResultSet Contents starting with column 1
list ip list ip all	java.lang.String ipValue java.lang.String ipMask java.lang.Integer ipPriority java.lang.String ipName java.lang.String comments java.util.Date changeDate java.lang.Short ipType java.lang.Short usedToAccess java.lang.Integer devicePortID java.lang.Integer lastModifiedUserID java.lang.Integer deviceID
show module list module	Integer deviceModuleID Integer deviceID String slot String moduleModel String moduleDescription String moduleOS String firmwareVersion String hardwareRevision Integer memory String moduleCustom1 String moduleCustom2 String moduleCustom3 String moduleCustom4 String moduleCustom5 String moduleCustom6 String comments String serialNumber
show port list port	Integer devicePortID Integer deviceID String portCustom1 String portCustom2 String portCustom3 String portCustom4 String portCustom5 String portCustom6 String comments String portName String portAllows String portType String portStatus String description

Appendix A: NCM Documentation

To open any of the available documents, after logging into NCM, on the menu bar click Docs. The CiscoWorks Network Compliance Manager Documentation page opens. Click the title of the document you want to view in PDF. NCM also provides context-sensitive help that you can access via the Help icon on the top of each page of the Web interface.

All documentation, including this document and any or all of the parts of the NCM documentation set, might be upgraded over time. Therefore, we recommend you access the NCM documentation set using the Cisco.com URL:

http://www.cisco.com/en/US/products/ps6923/tsd_products_support_series_ho me.html

The Docs tab visible from within Network Compliance Manager might not include links to the latest documents.

- *User Guide for Network Compliance Manager 1.3* — Includes information on how to use NCM.
- Context-Sensitive Help — Click the Help icon on any page for Help.
- *Device Driver Reference for Network Compliance Manager 1.3* — Includes device-specific information for configuring devices to work with NCM.
- *PERL, Java, and SOAP API Reference Guides* — Includes instructions for using the Application Programming Interfaces for PERL, Java, and SOAP.

Appendix B: Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly What’s New in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Appendix C: CLI/API Command Reference

activate device

Mark a device as activated.

Synopsis

activate device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- activate device -ip 192.0.2.10
- activate device -ip "East Site:192.0.2.10"

add advanced script

Add a new advanced script.

Synopsis

add advanced script -name <Name> [-description <Description>] [-scripttype <Script Type>] [-family <Device Family>] -language <Script Language> [-parameters <Parameters>] -script <Script Text>

Description

- -name - Name for the new advanced script
- -description - Description for the new advanced script
- -scripttype - Script type (i.e. user defined subcategory)
- -family - Device family for the new advanced script
- -language - Language for the new advanced script - must be a supported language such as Expect or Perl
- -parameters - Command line parameters for the new advanced script
- -script - Script text

Examples

- add advanced script -name "Extended Ping" -description "Run extended ping to desired address" -scripttype "Troubleshooting scripts" -family "Cisco IOS" -language "Expect" -parameters "-l /usr/etc/log.txt" -script "send \"extended ping $Target_IP$\""

---

add authentication

Modify device password information.

Synopsis

add authentication -loc <Location> [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-snmpro <Read only community string(s)>] [-snmprw <Read write community string(s)>] [-snmpv3user <SNMPv3 Username>] [-snmpv3authpw <SNMPv3 Authentication Password>] [-snmpv3encryptpw <SNMPv3 Encryption Password>] [-user <Username>] [-passwd <Password>] [-enableuser <Enable username>] [-enablepasswd <Enable password>] [-connectionmethods <Connection methods>] [-accessvariables <Access variables>] [-start <Task start date>] [-appendsnmpro] [-appendsnmprw] [-sync] [-group <Group name>]

Description

This command can modify passwords on a specific device or device group, or merely update what the system knows of a device's or network's password information. The -ip option provides information specific to the device. Otherwise, the command adds a network-wide password rule to the system. When using this command to modify passwords on a device, the modification operation is actually a scheduled task.

- -loc - The location to which password information should be written. Valid values for this argument are "db", "device", and "group". "db" tells the command that password information should be changed only in the system's database. "device" tells the command that the password changes should be made on the device as well and "group" performs the same function as "device" but across all devices in the group.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.: The device to which this password information should apply.
- -host - A valid hostname: An existing device to which this password information should apply.
- -fqdn - A valid Fully Qualified Domain Name: An existing device to which this password information should apply.
- -deviceid - A device ID

- -snmpro - When used in conjunction with -loc db, this argument is taken as a single community string understood by the system as THE read only community string for the device or network. When used in conjunction with -loc device, this argument is taken as a comma-seperated list of read only community strings to be, either set on the device, or appended to an existing list of read only community strings (depends on whether or not the -appendsnmpro flag was supplied.)
- -snmprw - When used in conjunction with -loc db, this argument is taken as a single community string understood by the system as THE read write community string for the device or network. When used in conjunction with -loc device, this argument is taken as a comma-seperated list of read write community strings to be, either set on the device, or appended to an existing list of read write community strings (depends on whether or not the -appendsnmprw flag was supplied.)
- -snmpv3user - When used in conjunction with -loc db, this argument is taken as the username for snmpv3 access.
- -snmpv3authpw - When used in conjunction with -loc db, this argument is taken as the authentication password for snmpv3 access.
- -snmpv3encryptpw - When used in conjunction with -loc db, this argument is taken as the encryption password for snmpv3 access.
- -user - Username.
- -passwd - Password.
- -enableuser - ADDITIONAL username to get to "enable" mode.
- -enablepasswd - ADDITIONAL password to get to "enable" mode.
- -connectionmethods - The methods used by the system to connect to devices. Can be telnet, serial_direct, or SSH.
- -accessvariables - To override variables in the script, such as prompts.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run. Use this option only if the argument to the -loc flag is "device".
- -appendsnmpro - Supply this option if read only community strings should be appended to any existing on the device. Use this option only if the argument to the -loc flag is "device".
- -appendsnmprw - Supply this option if read write community strings should be appended to any existing on the device. Use this option only if the argument to the -loc flag is "device".
- -sync - Indicates that the command should return only after the password change task is complete. Do not use this option with -start.
- -group - The group name for performing this command across all devices in a group.

Examples

- add authentication -loc db -ip 192.0.2.10 -passwd fish -snmpro public -enablepasswd 31337
- add authentication -loc db -ip 192.0.2.10 -passwd old -enablepasswd joshua -snmpro public -snmprw public
- add authentication -loc device -ip 192.0.2.10 -passwd limited -enablepasswd full
- add authentication -loc device -ip 192.0.2.10 -passwd some -enablepasswd all -snmprw brillig,slithy,toves,gire -appendsnmprw -sync
- add authentication -loc device -ip 192.0.2.10 -passwd less -enablepasswd more -snmpro foo,bar,fork,snork -start 2004:02:29:23:59

- add authentication -loc group -group MyDevices -passwd less -enablepasswd more -snmpro foo,bar,fork,snork -start 2004:02:29:23:59

add command script

Add a new command script.

Synopsis

add command script -name <Name> [-description <Description>] [-scripttype <Script Type>] -mode <Mode> [-driver <Driver List>] -script <Script Text>

Description

- -name - Name for the new command script
- -description - Description for the new command script
- -scripttype - Script type (i.e. user defined subcategory)
- -mode - Command script mode
- -driver - List of applicable drivers - provided as a comma separated list of internal driver names
- -script - Script text

Examples

- add command script -name "Extended Ping" -description "Run extended ping to desired address" -scripttype "Troubleshooting scripts" -mode "Cisco IOS enable" -driver "CiscoIOSGeneric,CiscoIOSSwitch" -script "extended ping $Target_IP$"

add device

Add a device to the system.

Synopsis

add device -ip <IP address> [-hostname <Host name>] [-comment <Comment>] [-description <Device name>] [-model <Device model>] [-vendor <Device vendor>] [-domain <Domain name>] [-serial <Serial number>] [-asset <Asset tag>] [-location <Location>] [-unmanaged <Unmanaged>] [-nopoll <Do not poll>] [-consoleip <Console IP address, if using console server>] [-consoleport <Console Port>] [-tftpserverip <TFTP server IP address, if using NAT>] [-natip <NAT IP address>] [-useconsoleserver <true or false>] [-accessmethods <Comma-separated list of access methods>] [-hierarchylayer <Hierarchy layer>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device will be put in.
- -hostname - The device's host name
- -comment - Additional information regarding the device.
- -description - The descriptive name of the device (informational only).
- -model - The device's model (such as 2620).

- -vendor - The device's vendor (such as Cisco).
- -domain - A fully qualified domain name (such as www.google.com).
- -serial - The device's serial number.
- -asset - The device's asset tag.
- -location - The device's location.
- -unmanaged - 0: Mark this device as managed by the system. 1: Mark this device to be unmanaged by the system.
- -nopoll - 0: Mark this device to be polled for changes. 1: Mark this device as not to be polled for changes.
- -consoleip - a.b.c.d where 0 <= a,b,c,d <= 255
- -consoleport - The port number
- -tftpserverip - a.b.c.d where 0 <= a,b,c,d <= 255
- -natip - a.b.c.d where 0 <= a,b,c,d <= 255
- -useconsoleserver - true, if the device uses a console server. false, if the device does not. If this option is not provided, it is assumed that the device does not use a console server.
- -accessmethods - A comma-separated list of access methods, or "none". The set of access methods: {telnet, ssh, rlogin, SCP, FTP, TFTP, SNMP, snnp_noauthnopriv, snmp_authnopriv, snmp_authpriv}. If this option is not provided, the system will try all access methods when attempting to connect to the device.
- -hierarchylayer - This device attribute is used in diagramming. When you config a network diagram, you can select which hierarchy layers on which to filter. Valid values include: (core, distribution, access, edge and "layer not set").

Examples

- add device -ip 192.0.2.10
- add device -ip "East Site:192.0.2.10"
- add device -ip 192.0.2.10 -model 3460 -vendor Cisco
- add device -ip 192.0.2.10 -comment "the web server." -domain www.minibosses.com
- add device -ip 192.0.2.10 -consoleip 192.0.2.10 -consoleport 62888 -useconsoleserver true -accessmethods ssh,SNMP

---

add device to group

Add a device to a device group.

Synopsis

add device to group [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] -group <Device group>

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -group - The name of the device group to which the device should be added.

Examples

- add device to group -ip 192.0.2.10 -group tech-dev
- add device to group -ip "Default Site:192.0.2.10" -group tech-dev

---

add diagnostic

Add a new custom diagnostic script.

Synopsis

add diagnostic -name <Name> [-description <Description>] -mode <Mode> [-driver <Driver List>] -script <Script Text>

Description

- -name - Name for the new diagnostic
- -description - Description for the new diagnostic
- -mode - Command script mode
- -driver - List of applicable drivers - provided as a comma separated list of internal driver names
- -script - Diagnostic script text

Examples

- add diagnostic -name "Show IP CEF" -description "Gather IP CEF information" -mode "Cisco IOS enable" -driver "CiscoIOSGeneric,CiscoIOSSwitch" -script "show ip cef"

---

add event

Add an event.

Synopsis

add event -message <Event> [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>]

Description

An email message (containing the event) will be the result of an added events if the system is configured to send email for added events.

- -message - The text of the event
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name

Examples

- add event -ip 192.0.2.10 -message "Connectivity to the border router has been restored."
- add event -message "This is a test of the emergency broadcast system."

---

add event rule

Add a event rule.

Synopsis

add event rule -name <Event Rule Name> -action <Event Action> -receiverhost <Hostname or IP Address> [-receiverport <Port>] [-events <List of Event Types>] [-community <Community String>]

Description

Add new event rule. It will subscribe provided host to the system events.

- -name - The name identifier for event rule
- -action - event type, for now only snmp supportes, use -action snmp
- -receiverhost - A valid hostname or ip address
- -receiverport - A numeric port, if not provided, then 162 will be used
- -events - List of event types, separated by column. If not provided, then ALL will be used
- -community - Community string, if not provided, then public will be used

Examples

- add event rule -name Name1 -receiverhost host1 -action snmp -community private -events "Device Added:Device Deleted"
- add event rule -name Name2 -receiverhost host2 -action snmp

---

add group

Add a group to the system.

Synopsis

add group -name <Name> -type <Type> [-comment <Comment>] [-shared <Shared>]

Description

- -name - The name of the group to add.
- -type - The type of the group to add. "device" and "user" are the valid values for this option.
- -comment - Additional information about the group.
- -shared - 1 if the group is shared, 0 if it is not.

Examples

- add group -name "border routers" -type device -comment "The group containing all border routers."

---

add group to parent group

Add a device group to a parent device group.

Synopsis

add group to parent group -parent <Parent group name> -child <Child group name>

Description

- -parent - Name of the parent group
- -child - Name of the child group

Examples

- add group to parent group -parent "North America" -child "West Region"

---

add image

Add images to database.

Synopsis

add image -imageset <imageset name> -images <images> [-driver <driver name>] [-model <model name>] [-memory <minimum system memory (in bytes)>] [-processor <processor name>] [-bootrom <BootROM name>]

Description

Add images to database. Must specify either driver or model

- -imageset - The imageset the images will add to.
- -images - The images to add. The paths specified by this option must point to files accessible by the management server. Files must be placed on the management server first.
- -driver - The driver the images required.
- -model - The device model the images required.
- -memory - The minimum system memory required (in bytes) for images.
- -processor - The hardware required for images.
- -bootrom - The BootROM required for images.

Examples

- add image -imageset fooset -images c:\\data\\bar.bin -driver CiscoPIX
- add image -imageset fooset -images c:\\data\\bar.bin,c:\\images\\foobar.bin -model "WS-C2924M-XL-EN (C2900XL series)"

- add image -imageset fooset -images /var/upload/bar.bin,/var/upload/foo.bin -driver CiscoPIX

add imageoption

Add information for device which is not under management but needed for software image update.

Synopsis

add imageoption [-imagemodels <device model names (separeted by ',')>] [-imageprocessors <device processor names (separeted by ','),>] [-imagebootroms <device bootROM names (separeted by ','),>]

Description

Add information for device which is not under management but needed for software image update.

- -imagemodels - device model to be added.
- -imageprocessors - device processors to be added.
- -imagebootroms - device BootROMs to be added.

Examples

- add imageoption -imagemodels model1,model2 -imageprocessors PP3,PP4

add ip

Add new secondary ip.

Synopsis

add ip -ipvalue <Value> [-deviceip <Device IP address>] [-comment <Comment>] [-usetoaccess <Use to Access Device>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ipvalue - The ip value a.b.c.d where 0 <= a,b,c,d <= 255
- -deviceip - The device's ip address a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -comment - Additional information regarding the device.
- -usetoaccess - Use this IP Value to access its device, 0 - yes, 1 - no, default - no
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- add ip -deviceip 192.0.2.10 -ipvalue 192.0.2.10 -comment "my own ip"
- add ip -deviceip 192.0.2.10 -ipvalue 192.0.2.10 -usetoaccess 0
- add ip -deviceid 1401 -ipvalue 192.0.2.10 -usetoaccess 0

add metadata

Add a piece of custom data to be associated with a specific field and associated entity.

Synopsis

add metadata -fieldid <Metadata Field ID> [-data <Data>] -associatedtableid <Matching Row ID>

Description

- -fieldid - Field ID the data is to be associated with
- -data - Data to be associated, if not included, data is null
- -associatedtableid - ID of the associated row the data coresponds to

Examples

- add metadata -fieldid 121 -associatedtableid 21031
- add metadata -fieldid 121 -data Room101 -associatedtableid 21031

add metadata field

Used to define a custom data field for a specific table.

Synopsis

add metadata field -fieldname <Field Name> [-fieldvalues <Field Values>] [-inuse <In Use>] [-flags <Allow HTML>] -associatedtable <Associated Table>

Description

- -fieldname - Name of the field to be added
- -fieldvalues - List of comma separated values that the field is restricted to. If not specified, the value for this field is not restricted
- -inuse - Turns the field on or off. 1 is on, 0 is off. When the field is off, it will not be displayed with the other custom fields.
- -flags - Used for allowing HTML in the field value. 1 is allow, 0 is disallow. If disallowed, HTML will be escaped for displaying.
- -associatedtable - The table to associate this field with

Examples

- add metadata field -fieldname Room -fieldvalues 101,102,103,104 -inuse 1 -flags 0 -associatedtable RN_DEVICE

- add metadata field -fieldname Building -inuse 1 -flags 0 -associatedtable RN_DEVICE

---

add parent group

Add a parent group to the system.

Synopsis

add parent group -name <Name> -type <Type> [-comment <Comment>]

Description

- -name - The name of the parent group to add.
- -type - The type of the parent group to add. "device" is currently the only valid argument to this option.
- -comment - Additional information about the parent group.

Examples

- add parent group -name "North America" -type device -comment "Parent group to roll up East, Central and West regions."

---

add partition

Add a partition to view.

Synopsis

add partition -viewname <Viewname> -name <Name> [-comment <Comment>]

Description

- -viewname - The name of the view this partition goes to.
- -name - The name of the partition to add.
- -comment - Additional information about the partition.

Examples

- add partition -viewname "Site" -name Redmond -comment "Redmond Site"

---

add system message

Add a system message.

Synopsis

add system message -message <System Message> [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

An email message (containing the system message) will be the result of an added system messages if the system is configured to send email for added events.

- -message - The text of the system message
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- add system message -ip 192.0.2.10 -message "Connectivity to the border router has been restored."
- add system message -message "This is a test of the emergency broadcast system."

---

add user

Add a user to the system.

Synopsis

add user -u <Username> -p <Password> -fn <First name> -ln <Last name> [-email <Email address>] [-aaausername <Username>] [-aaapassword <AAA Password>] [-useaaaloginforproxy <Use AAA Logins for Proxy (yes|no)>] [-extauthfailover <Allow External Auth Failover (yes|no)>]

Description

- -u - Username
- -p - Password
- -fn - First name
- -ln - Last name
- -email - Email address
- -aaausername - AAA username for this user.
- -aaapassword - AAA password for this user.
- -useaaaloginforproxy - Whether to user AAA logins for the Proxy Interface for this user (yes|no).
- -extauthfailover - Whether to allow external auth failover for this user (yes|no).

Examples

- add user -u johnd -p fish -fn john -ln doe -email johnd@example.net

---

add user to group

Add a user to a user group.

Synopsis

add user to group -u <Username> -g <User group name>

Description

- -u - Username
- -g - User group name

Examples

- add user to group -u johnd -g "User Group 1"

---

annotate access

Modify the comments on, or the display name of, a device access record.

Synopsis

annotate access -id <Device access record ID> [-comment <Comment>] [-name <Name>] [-customname <Custom name>] [-customvalue <Custom value>]

Description

- -id - Specifies a device access record. Think of this as a "device access record ID".
- -comment - Additional information regarding the access record.
- -name - An optional name for the access record.
- -customname - The custom field name
- -customvalue - The custom field value

Examples

- annotate access -id 2 -comment "Device tainted at this point." -name "Intrusion detected"
- annotate access -id 2 -customname TicketID - customvalue 5

---

annotate config

Add a comment to the specified config.

Synopsis

annotate config -id <Config ID> -comment <comment>

Description

Note that comments added by means of this command are not added to the config itself. They are stored seperately along with the config.

- -id - The ID of the config on which you are commenting.
- -comment - Additional information regarding the config.

Examples

- annotate config -id 1754 -comment "north campus group template."

assign driver

Manually assign driver to device.

Synopsis

assign driver [-ip <IP address>] [-id <Device ID>] -name <Driver Name>

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -id - A valid device id
- -name - A valid internal driver name, supported by system

Examples

- assign driver -ip 192.0.2.10 -name CiscoIOSGenericNoLog
- assign driver -id 70 -name CiscoIOSGenericNoLog

configure syslog

Configure a device to send syslog messages to the system's change detection facilites.

Synopsis

configure syslog [-ip <IP address>] [-group <Groupname>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-rep <Task repeat period>] [-sync] [-start <Task start date>] [-comment <Snapshop comment>] [-usesyslogrelay <IP address>]

Description

Have the system configure the specified device to send all syslog messages necessary for the system's change detection facilites to function optimally to the system's syslog server. The configuration operation is atually a scheduled task.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -group - A valid group name. Do not use this option with -ip (exactly one of -ip or -group must be specified).
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.

- -sync - Indicates the command should return only after the Configure Syslog task is complete. Do not use this option with -rep or -start.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run.
- -comment - An optional comment about the Configure Syslog task.
- -usesyslogrelay - Indicates to the syslog configuration task that the device currently logs to syslog relay host. Supply this option if you wish to set up forwarding on that relay host rather than have the device log directly to the system's syslog server. The specified IP address is taken to be the IP address of the relay host.

Examples

- configure syslog -ip 192.0.2.10
- configure syslog -ip 192.0.2.10 -usesyslogrelay blanka
- configure syslog -host Zangief -start 2004:02:29:23:59 -rep 1weeks
- configure syslog -ip 192.0.2.10 -sync
- configure syslog -group mygroup

---

connect

Connect to a device.

Synopsis

connect [-login] [-method <telnet|ssh|ssh1|ssh2|rlogin>] [-override] [-info] [-ignoreptyerrors] []

Description

Connect to a device through the system's Proxy Interface via telnet, ssh, or rlogin. If you are connected to a device through a console server, you may hit ctrl-\ to return to the the system shell after logging out of the device.

- -login - Bypass single sign-on and instead take the user to the device login prompt.
- -method - Method used to connect to devices outside of the system or for devices in the system when single sign-on is turned off (implies -login option).
- -override - Force a connection to a device in the event that simultaneous connection warning or prevention is turned on.
- -info - Dump connection variable information (can set the info prefix following a colon, like "-info:")
- -ignoreptyerrors - Ignore pty errors for SSHv2 connections if "-login" option is on.
- - Hostname, Device ID, Fully Qualified Domain Name, or Primary IP Address to use to lookup the device to connect to. The characters * and ? can be used as wildcards. The device id can be specified instead by preceding it with a '#'
- - Port to use to connect to devices outside of the system.

Examples

- connect 192.0.2.10
- connect -login Zangief

- connect -override mydevice

---

deactivate device

Mark a device as deactivated.

Synopsis

deactivate device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- deactivate device -host rtr5.vfm.lab

---

del access

Delete access records.

Synopsis

del access [-id <Device Access Record ID.>] [-cutoff <Date>]

Description

This command can delete a single access record when provided that record's id (via. the option "-id"), or all access records prior to a given date (via the option "-cutoff"). Provide exactly one of "-id", "-cutoff". Note that deleting access records will cause all configs associated with the deleted access record to also be deleted.

- -id - A device access record ID.
- -cutoff - YYYY:MM:DD:HH:mm. All access records prior to this date will be deleted.

Examples

- del access -id 6288
- del access -cutoff 2004:02:29:23:59

---

del authentication

Deletes all password information associated with the specified device.

Synopsis

del authentication [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.: The device for which password information should be deleted.
- -host - A valid hostname: The device for which password information should be deleted.
- -fqdn - A valid Fully Qualified Domain Name: The device for which password information should be deleted.
- -deviceid - A device ID

Examples

- del authentication -ip 192.0.2.10

del device

Delete the specified device.

Synopsis

del device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- del device -ip 192.0.2.10
- del device -ip "East Site:192.0.2.10"

del device data

Delete device configuration and diagnostic data.

Synopsis

del device data [-id <Config ID>] [-cutoff <Date>]

Description

This command can delete a single device data block when provided that device data id (via. the option "-id"), or all device data prior to a given date (via the option "-cutoff"). Provide exactly one of "-id", "-cutoff".

- -id - A config ID
- -cutoff - YYYY:MM:DD:HH:mm. All configs prior to this date will be deleted.

Examples

- del device data -id 866227436
- del device data -cutoff 2004:02:29:23:59

---

del device from group

Delete a device from a device group.

Synopsis

del device from group [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] -group <Device group>

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -group - The name of the device group from which the device should be deleted.

Examples

- del device from group -ip 192.0.2.10 -group tech-dev

---

del drivers

Delete all drivers associated with a device.

Synopsis

del drivers [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- del drivers -ip 192.0.2.10

---

del event

Delete the specified event.

Synopsis

del event -id <event ID>

Description

- -id - A valid event id

Examples

- del event -id 799

---

del group

Delete a group from the system.

Synopsis

del group -name <Name> -type <Type>

Description

Specify the group by both its name and type.

- -name - The name of the group to be removed.
- -type - The type of the group to be removed.

Examples

- del group -name "border routers" -type "device"

---

del group from parent group

Remove a device group from a parent device group.

Synopsis

del group from parent group -parent <Parent group name> -child <Child group name>

Description

- -parent - Name of the parent group
- -child - Name of the child group

Examples

- del group from parent group -parent "North America" -child "Costa Rica NOC"

---

del ip

Delete the specified ip.

Synopsis

del ip -ipvalue <Value> [-deviceip <Device IP address>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ipvalue - The ip value a.b.c.d where 0 <= a,b,c,d <= 255
- -deviceip - The device's ip address a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- del ip -deviceip 192.0.2.10 -ipvalue 192.0.2.10
- del ip -deviceid 1401 -ipvalue 192.0.2.10

---

del metadata

Delete a specific piece of custom data.

Synopsis

del metadata -metadataid <Metadata ID>

Description

- -metadataid - ID of the custom data to delete

Examples

- del metadata -metadataid 54535

del metadata field

Delete a custom data field and all data currently associated with that field.

Synopsis

del metadata field -fieldid <Field ID>

Description

- -fieldid - ID of the custom data field to delete

Examples

- del metadata field -fieldid 8394

del partition

Delete a partition from view.

Synopsis

del partition -name <Name>

Description

- -name - The name of the partition to be removed.

Examples

- del partition -name "Redmond Site"

del script

Delete an existing command script, advanced script or diagnostic.

Synopsis

del script [-id <Script / Diagnositc ID>] [-name <Script / Diagnositc Name>] [-type <Script / Diagnositc Type>]

Description

Delete the indicated command script, advanced script or diagnostic. The desired script or diagnostic can be specified by ID, or by a combination of name and type. If more than one name match occurs, then an error will be reported and you must specify the unique script desired by ID.

- -id - ID of the desired script or diagnostic
- -name - Name of the desired script or diagnostic
- -type - Type of the desired script or diagnostic - may be command, advanced or diagnostic

Examples

- del script -id 5
- del script -name "Edit Port Duplex" -type command

del session

Delete an interceptor log record.

Synopsis

del session -id <Interceptor log id>

Description

- -id - Interceptor log ID

Examples

- del session -id 5

del system message

Delete the specified system message.

Synopsis

del system message -id <System message ID>

Description

- -id - A valid system message id

Examples

- del system message -id 799

del task

Delete a task.

Synopsis

del task -id <Task ID>

Description

Deletes a task, whether it has run or not.

- -id - A task ID

Examples

- del task -id 4321

---

del user

Delete a user from the system.

Synopsis

del user -u <User name>

Description

- -u - The user name to be deleted

Examples

- del user -u johnd

---

del user from group

Delete a user from a user group.

Synopsis

del user from group -u <Username> -g <User group name>

Description

- -u - Username
- -g - User group name

Examples

- del user from group -u johnd -g "User Group 1"

---

delete image

Delete software images from database

Synopsis

delete image -imageset <imageset name> -images <images separated by ,>

Description

Delete software images from database

- -imageset - imageset name the images will be deleted.
- -images - images to be deleted.

Examples

- delete image -imageset fooset -images bar.bin,baz.bin

---

deploy config

Deploy config to a device.

Synopsis

deploy config [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Config ID>] [-configtext <Config Text>] [-start <Task start date>] [-sync] -option <Deployment option>

Description

Deploy the specified config to a specified device either right away, or at some point in the future. The deploy operation is actually a scheduled task.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - The ID of the config to deploy to the specified device.
- -configtext - The configuration text to deploy to the specified device.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run. Do not use this option with -sync.
- -sync - Indicates that the command should return only after the deploy task is complete. Do not use this option with -start.
- -option - current or startup_reload, as applicable to the device.

Examples

- deploy config -ip 192.0.2.10 -id 1962 -sync -option current
- deploy config -ip "East Office:192.0.2.10" -id 1962 -sync -option current
- deploy config -ip 192.0.2.10 -id 276 -start 2004:02:29:23:59 -option startup_reload
- deploy config -ip 192.0.2.10 -configtext "logging 192.0.2.10\nlogging192.0.2.10" -option current

---

deploy image

Deploy software images to device.

Synopsis

deploy image -ip <device ip address> -imageset <imageset name> -images <images separated by ,> [-reboot <reboot instruction>] [-rebootwait <reboot wait (in seconds)>] [-filesystem <file system of device>] [-pretask <task to run before deployment>] [-posttask <task to run after deployment>] [-verify <true|false>]

Description

Deploy software images to device.

- -ip - ip address of the device the images will deploy to.
- -imageset - imageset name the images from.
- -images - images from the imageset to be deployed.
- -reboot - wheather to reboot the device after deploy images.
- -rebootwait - seconds to wait before reboot.
- -filesystem - filesystem name of the device the images will deploy to.
- -pretask - name of task before deployment.
- -posttask - name of task after deployment.
- -verify - verify the image after deployment.

Examples

- deploy image -ip 192.0.2.10 -imageset fooset -images bar.bin,foo.bin -filesystem flash:
- deploy image -ip 192.0.2.10 -imageset fooset -images bar.bin,foo.bin -filesystem flash: -reboot -rebootwait 60
- deploy image -ip 192.0.2.10 -imageset fooset -images bar.bin,foo.bin -filesystem flash: -reboot -rebootwait 60 -posttask squeeze
- deploy image -ip 192.0.2.10 -imageset fooset -images bar.bin,foo.bin -filesystem flash: -verify true

---

diff config

Show the differences between two configs.

Synopsis

diff config -id1 <Config ID> -id2 <Config ID>

Description

- -id1 - The ID of a config
- -id2 - The ID of a config

Examples

- diff config -id1 1961 -id2 1989

disable device

Mark a device as disabled.

Synopsis

disable device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- disable device -host rtr5.vfm.lab

discover driver

Discover a driver for a device.

Synopsis

discover driver [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

Attempts to match a driver to the specified device.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.: The device for which a driver should be discovered.
- -host - A valid hostname: The device for which a driver should be discovered.
- -fqdn - A valid Fully Qualified Domain Name: The device for which a driver should be discovered.
- -deviceid - A device ID

Examples

- discover driver -ip 192.0.2.10
- discover driver -ip "East Site:192.0.2.10"

discover drivers

Discover drivers for all devices.

Synopsis

discover drivers

Description

Attempts to match a driver to each device that the system recognizes.

Examples

- discover drivers
- discover drivers -noskip

---

enable device

Mark a device as enabled.

Synopsis

enable device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- enable device -ip 192.0.2.10
- enable device -ip "East Site:192.0.2.10"

---

exit

Exit the system.

Synopsis

exit

Description

Exit the the system.

Examples

- exit

get snapshot

Get the config from a device.

Synopsis

get snapshot [-ip <IP address>] [-group <Groupname>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-rep <Task repeat period>] [-sync] [-start <Task start date>] [-comment <Snapshot comment>] [-duration <Estimated duration of snapshot task.>]

Description

Get the config from a specified device either right away, or at some point in the future. The retrieval operation is actually a scheduled task. Using this command, you can set the task to repeat periodically.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -group - A valid group name. Do not use this option with -ip (exactly one of -ip or -group must be specified).
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.
- -sync - Indicates the command should return only after the snapshot retrieval task is complete. Do not use this option with -rep or -start.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run.
- -comment - An optional comment about the snapshot.
- -duration - A number concatenated with a units signifier. Valid signifiers are m (minutes), h (hours), d (days), w (weeks). If this option is not provided, the duration for the task is set to 60 minutes.

Examples

- get snapshot -ip 192.0.2.10
- get snapshot -ip "East Office:192.0.2.10"
- get snapshot -host Zangief -start 2004:02:29:23:59 -rep 2days
- get snapshot -ip 192.0.2.10 -sync
- get snapshot -group mygroup

import

Import device or device password information.

Synopsis

import -input <Filename or CSV data> -data <device or auth> [-log <Filename>] [-append <true or false>] [-discoverafter <true or false>] [-configuresyslog <true or false>] [-filter <Filename>] [-cleanafter <true or false>] [-deviceorigin <Any String>]

Description

This command can import into the system device or device password information contained in appropriately formatted CSV files. (Contact customer support for a CSV file format specification.)

- -input - Either the name of a file that contains CSV data or the CSV data itself.
- -data - Whether the type of information imported is devices or device authentication.
- -log - Command log file.
- -append - If true, will append imported information to existing information. If false, will overwrite existing device/auth records. This option is false by default.
- -discoverafter - Discover drivers for imported device? This option is false by default.
- -configuresyslog - Configure devices to send syslog messages to the system? Valid values are true | false
- -filter - An application that reads the input file from stdin, and writes a the system compatible CSV file to stdout.
- -cleanafter - If true, then after importing data, a process will run on the server that will delete old devices. Devices are deleted according to the current configuration of the system's "deletion-on-import" rules, and the argument to the deviceorigin option. This option is false by default.
- -deviceorigin - A description of the source of the data. This is recorded by the system, but is not visible via any UI.

Examples

- import -input devices.csv -data device -log import.log -append true -cleanafter false -deviceorigin "Border Routers" -filter prepro.exe
- import -input auth.csv -data auth -log import.log
- import -data device -input "primaryIPAddress\n1.2.3.4\n1.10.3.4"

list access

List all access records for a device.

Synopsis

list access [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -start - Display only those access records created on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: " " e.g. "3 days ago" is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those access records created on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list access -ip 192.0.2.10
- list access -ip "East Office:192.0.2.10"

---

list access all

List all access records for all devices.

Synopsis

list access all

Description

Examples

- list access all

---

list acl

List ACLs.

Synopsis

list acl [-host <Host Name>] [-ip <IP Address>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-aclid <ACL ID>] [-handle <Handle>] [-recent <Most Recent (true|false)>] [-includescript] [-includeapplication]

Description

Lists all device ACLs in the system unless you include any of the options to limit the ACLs listed.

- -host - A valid host name.
- -ip - List only ACLs with a valid IP Address (of format a.b.c.d where 0 <= a,b,c,d <= 255.)
- -fqdn - List only ACLs with a valid Fully Qualified Domain Name
- -deviceid - List only ACLs with this deviceid.
- -aclid - List only ACLs with this aclid.
- -handle - List only ACLs with this handle
- -recent - Display only those acl's that are most recent.
- -includescript - Include Script in the display.
- -includeapplication - Include Application in the display.

Examples

- list acl
- list acl -ip 192.0.2.10
- list acl -ip 192.0.2.10 -aclid 139
- list acl -ip 192.0.2.10 -deviceid 201
- list acl -deviecid 501 -includescript
- list acl -handle test34 -recent true -includeapplication

---

list all drivers

List all drivers installed in the system.

Synopsis

list all drivers

Description

Examples

- list all drivers

---

list authentication

list Authentication.

Synopsis

list authentication [-rulename <Rule Name>]

Description

Displays the Authentication Rules by Rule Name.

- -rulename - List Authentication by rule name

Examples

- list authentication -rulename 1

list basicip

List all configs for which the BasicIP model can be shown.

Synopsis

list basicip [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -start - Display only those configs stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those configs stored on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list basicip -ip 192.0.2.10

list config

List all configs for the specified device.

Synopsis

list config [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>] [-size] [-ids <Config ID List>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -start - Display only those configs stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those configs stored on or before the given date. Values for this option have the same format as for the option -start.
- -size - Display the size (in bytes) of each config
- -ids - List only configs in this comma-separated list of IDs.

Examples

- list config -ip 192.0.2.10
- list config -ip "East Office:192.0.2.10"
- list config -ip 192.0.2.10 -size

---

list config all

List all configs for all devices.

Synopsis

list config all

Description

Examples

- list config all

---

list config id

List config IDs for the specified configs.

Synopsis

list config id [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>] [-id <Config ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -start - Display only those configs stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those configs stored on or before the given date. Values for this option have the same format as for the option -start.
- -id - Display only the specified config id.

Examples

- list config id -ip 192.0.2.10
- list config id -ip "East Site:192.0.2.10"

list custom data definition

list Custom Data Definition.

Synopsis

list custom data definition -tablename <Table Name>

Description

List Custom Data Definition by table name.

- -tablename - List Custom Data for specific table

Examples

- list custom data definition -tablename "Device Configuration & Diagnostics"
- list custom data definition -tablename Devices
- list custom data definition -tablename "Device Blades/Modules"
- list custom data definition -tablename "Device Interfaces"
- list custom data definition -tablename "Device Groups"
- list custom data definition -tablename Users
- list custom data definition -tablename "User Groups"
- list custom data definition -tablename Tasks
- list custom data definition -tablename "Telnet/SSH Sessions"

list device

List devices.

Synopsis

list device [-software <Software Version>] [-vendor <Device Vendor>] [-type <Device Type>] [-model <Device Model>] [-family <Device Family>] [-group <Device Group>] [-disabled] [-pollexcluded] [-ids <Device ID List>] [-hierarchy <Hierarchy Layer>] [-host <Device Host Name>] [-ip <Device IP Address>] [-realm <Realm Name>] [-startid <ID>] [-limitcount <Count>]

Description

Lists all devices in the system unless you include any of the options to limit the devices listed.

- -software - List only devices running this software
- -vendor - List only devices with this vendor name
- -type - List only devices of this type (Router, Switch, etc.)
- -model - List only devices of this model ("2500 (3000 series)", BIG-IP, etc.)
- -family - List only devices in this device family ("Cisco IOS", F5, etc.)
- -group - List only devices in this device group
- -disabled - List only devices that are unmanaged.
- -pollexcluded - List only devices excluded from polling.
- -ids - List only devices in this comma-separated list of IDs.
- -hierarchy - List only devices in this hierarchy layer.
- -host - List only devices with this host name
- -ip - List only devices with this IP Address
- -realm - List only devices in this realm
- -startid - List devices starting with DeviceIDs greater than or equal to this one.
- -limitcount - Return this many rows (maximum defaults to 10000).

Examples

- list device
- list device -group "border routers"
- list device -group "border routers" -disabled
- list device -family "Cisco IOS"
- list device -vendor Nortel
- list device -ids 1023,763,8723

---

list device data

List configuration and diagnostic data records for the specified device.

Synopsis

list device data -ip <IP address> [-dataType <Data type>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -dataType - A string describing the type of device data record to list

Examples

- list device data -ip 192.0.2.10
- list device data -ip 192.0.2.10 -dataType "configuration"

---

list device family

List device families.

Synopsis

list device family [-software <Software Version>] [-vendor <Device Vendor>] [-type <Device Type>] [-model <Device Model>] [-group <Device Group>]

Description

Lists device families in the system.

- -software - List only device families for devices running this software
- -vendor - List only device families for devices with this vendor name
- -type - List only device families for devices of this type (Router, Switch, etc.)
- -model - List only device families for devices of this model ("2500 (3000 series)", BIG-IP, etc.)
- -group - List only device families for devices in this device group

Examples

- list device family
- list device family -group "border routers"
- list device family -vendor Nortel

---

list device group

List device groups.

Synopsis

list device group [-software <Software Version>] [-vendor <Device Vendor>] [-type <Device Type>] [-model <Device Model>] [-family <Device Family>] [-parent <Parent Device Group Name>]

Description

Lists device groups in the system.

- -software - List only device groups for devices running this software

- -vendor - List only device groups for devices with this vendor name
- -type - List only device groups for devices of this type (Router, Switch, etc.)
- -model - List only device groups for devices of this model ("2500 (3000 series)", BIG-IP, etc.)
- -family - List only device groups for devices in this device family ("Cisco IOS", F5, etc.)
- -parent - List only device groups that are direct descendants of this parent device group name

Examples

- list device group
- list device group -family "Cisco IOS"
- list device group -vendor Nortel

---

list device id

list device IDs.

Synopsis

list device id [-software <Software Version>] [-vendor <Device Vendor>] [-type <Device Type>] [-model <Device Model>] [-family <Device Family>] [-group <Device Group>] [-disabled] [-pollexcluded] [-id <Device ID>] [-host <Device Host Name>] [-ip <Device IP Address>] [-realm <Realm Name>] [-hierarchy <Hierarchy Layer>] [-viewable_by <Viewable By>]

Description

Lists all device IDs in the system unless you include any of the options to limit the device IDs listed.

- -software - List only devices running this software
- -vendor - List only devices with this vendor name
- -type - List only devices of this type (Router, Switch, etc.)
- -model - List only devices of this model ("2500 (3000 series)", BIG-IP, etc.)
- -family - List only devices in this device family ("Cisco IOS", F5, etc.)
- -group - List only devices in this device group
- -disabled - List only devices that are unmanaged.
- -pollexcluded - List only devices excluded from polling.
- -id - List only this device.
- -host - List only devices with this host name
- -ip - List only devices with this IP Address
- -realm - List only devices in this realm
- -hierarchy - List only devices with this hierarchy layer
- -viewable_by - List only devices that are viewable by this user

Examples

- list device id
- list device id -group "border routers"

- list device id -group "border routers" -disabled
- list device id -family "Cisco IOS"
- list device id -vendor Nortel
- list device id -viewable_by 201

list device model

List device model names.

Synopsis

list device model [-software <Software Version>] [-vendor <Device Vendor>] [-type <Device Type>] [-family <Device Family>] [-group <Device Group>]

Description

Lists device model names in the system.

- -software - List only device model names for devices running this software
- -vendor - List only device model names for devices with this vendor name
- -type - List only device model names for devices of this type (Router, Switch, etc.)
- -family - List only device model names for devices in this device family ("Cisco IOS", F5, etc.)
- -group - List only device model names for devices in this device group

Examples

- list device model
- list device model -group "border routers"
- list device model -family "Cisco IOS"
- list device model -vendor Nortel

list device software

List device software versions.

Synopsis

list device software [-vendor <Device Vendor>] [-type <Device Type>] [-model <Device Model>] [-family <Device Family>] [-group <Device Group>]

Description

Lists device software versions in the system.

- -vendor - List only device software versions for devices with this vendor name
- -type - List only device software versions for devices of this type (Router, Switch, etc.)
- -model - List only device software versions for devices of this model ("2500 (3000 series)", BIG-IP, etc.)

- -family - List only device software versions for devices in this device family ("Cisco IOS", F5, etc.)
- -group - List only device software versions for devices in this device group

Examples

- list device software
- list device software -group "border routers"
- list device software -family "Cisco IOS"
- list device software -vendor Nortel

list device type

List device types.

Synopsis

list device type [-software <Software Version>] [-vendor <Device Vendor>] [-model <Device Model>] [-family <Device Family>] [-group <Device Group>]

Description

Lists device types in the system.

- -software - List only device types for devices running this software
- -vendor - List only device types for devices with this vendor name
- -model - List only device types for devices of this model ("2500 (3000 series)", BIG-IP, etc.)
- -family - List only device types for devices in this device family ("Cisco IOS", F5, etc.)
- -group - List only device types for devices in this device group

Examples

- list device type
- list device type -group "border routers"
- list device type -family "Cisco IOS"
- list device type -vendor Nortel

list device vendor

List device manufacturers.

Synopsis

list device vendor [-software <Software Version>] [-type <Device Type>] [-model <Device Model>] [-family <Device Family>] [-group <Device Group>]

Description

Lists device manufacturers in the system.

- -software - List only device manufacturers for devices running this software
- -type - List only device manufacturers for devices of this type (Router, Switch, etc.)
- -model - List only device manufacturers for devices of this model ("2500 (3000 series)", BIG-IP, etc.)
- -family - List only device manufacturers for devices in this device family ("Cisco IOS", F5, etc.)
- -group - List only device manufacturers for devices in this device group

Examples

- list device vendor
- list device vendor -group "border routers"
- list device vendor -family "Cisco IOS"

---

list deviceinfo

List all configs for which the DeviceInformation model can be shown.

Synopsis

list deviceinfo [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- list deviceinfo -ip 192.0.2.10

---

list diagnostic

List all configs for which the given diagnostic may be shown.

Synopsis

list diagnostic -diagnostic <Diagnostic Name> [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -diagnostic - A diagnostic name
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -start - Display only those diagnostics stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those diagnostics created on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list diagnostic -ip 192.0.2.10 -diagnostic "vlan report"

---

list drivers

List all drivers associated with a device.

Synopsis

list drivers [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- list drivers -ip 192.0.2.10

---

list event

List events.

Synopsis

list event [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-type <Event Type>] [-start <Date>] [-end <Date>]

Description

Lists all the events and system messages

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.: Display only those events associated with the specified device.
- -host - A valid hostname: Display only those events associated with the specified device.
- -fqdn - A valid Fully Qualified Domain Name: Display only those events associated with the specified device.
- -deviceid - A device ID
- -type - A valid event type: Display only events of this type.Values for this option may one of the following:Approval No Longer RequiredApproval RequestApproval GrantedApproval Task ChangedApproval Task DeletedApproval DeniedApproval Task TimeoutApproval OverrideCommand Authorization ErrorUser Authentication ErrorConfiguration Policy AddedConfiguration Policy Non-ComplianceConfiguration Policy ChangedConfiguration Policy Pattern TimeoutConfiguration Rule AddedConfiguration Rule ChangedDevice Access FailureDevice AddedDevice Password ChangeDevice BootedDevice Command Script FailedDevice Command Script Completed SuccessfullyDevice Configuration ChangeDevice Configuration Change - No UserDevice Configuration Deployment FailureDevice Configuration DeploymentDevice Data FailureDevice DeletedDevice Diagnostic ChangedDevice Diagnostic FailedDevice Diagnostic Completed SuccessfullyDevice Flash Storage Running LowGroup ModifiedGroup AddedGroup DeletedDevice InaccessibleDevice EditedLast Used Device Password ChangedDevice ManagedDevice Missing from ImportDevice Permissions - ModifiedDevice Reservation ConflictDevice SnapshotDevice Software ChangeDevice Startup/Running Config DifferenceDevice UnmanagedSoftware Vulnerability DetectedEmail Report SavedExternal Directory Server Authentication ErrorLicense Almost ExceededLicense Almost ExpiredLicense ExceededLicense ExpiredModule AddedModule ChangedModule RemovedMonitor OkayMonitor ErrorDevice Permissions - New DeviceDevice Password Change FailureConcurrent Telnet/SSH Session OverrideReserved Device Configuration ChangedScheduled for Deploy Configuration EditedScheduled for Deploy Password ModifiedServer StartupSession Data CapturedSoftware Update FailedSoftware Update SucceededSummary Reports GeneratedPending Task DeletedTask StartedTicket CreatedUser LoginUser LogoutUser AddedUser DeletedUser Permission ChangedUser Message

- -start - Display only events after this date.Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only events before this date.

Examples

- list event -ip 192.0.2.10
- list event -ip "East Site:192.0.2.10"
- list event -start yesterday

list group id

List all device groups or user groups viewable by userID.

Synopsis

list group id -type <Type> [-viewable_by <Viewable By>]

Description

List all device groups or user groups viewable by a particular user.

- -type - Type
- -viewable_by - Viewable By

Examples

- list group id -type device -viewable_by 201
- list group id -type user -viewable_by 201

list groups

List groups of the specified type; for a specific device or all groups in the system.

Synopsis

list groups -type <Type> [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-parent <Parent Group Name>]

Description

- -type - The type of the groups to be listed. "device" is currently the only valid argument to this option.
- -ip - List all device groups containing the device with this IP address
- -host - List all device groups containing the device with this hostname

- -fqdn - List all device groups containing the device with this Fully Qualified Domain Name
- -deviceid - List all device groups containing the device with this device ID
- -parent - List all device groups that are children of the indicated parent group

Examples

- list groups -type device
- list groups -type device -ip 192.0.2.10
- list groups -type device -parent "North America"

list icmp

List all configs for which the ICMPTest model may be shown.

Synopsis

list icmp [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -start - Display only those ICMPTest models stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those ICMPTest models stored on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list icmp -ip 192.0.2.10

list image

List images in database or device.

Synopsis

list image [-ip <ip address>] [-imageset <imageset name>]

Description

Use -imageset option to list images in database, and -ip to list images in device

- -ip - The device ip which the images list from.
- -imageset - The imageset which images list from.

Examples

- list image -ip 10.1.1.1
- list image -imageset fooset

---

list imageoption

List information for device which is not under management but in configuration data.

Synopsis

list imageoption -name <device property name (model|processor|bootrom)>

Description

List information for device which is not under management but in configuration data for software image management purpose.

- -name - device property name to list.

Examples

- list imageoption -name model

---

list imageset

List imageset in database.

Synopsis

list imageset

Description

List imageset in database

Examples

- list imageset

---

list int

List all configs for which the ShowInterfaces model may be shown.

Synopsis

list int [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -start - Display only those ShowInterfaces models stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those ShowInterfaces models stored on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list int -ip 192.0.2.10

---

list ip

List ip.

Synopsis

list ip [-deviceip <Device IP address>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

Lists ip addresses for specific device.

- -deviceip - The device's ip address a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- list ip -deviceip 192.0.2.10

- list ip -deviceid 1401

---

list ip all

List all secondary ip.

Synopsis

list ip all

Description

List all secondary ip addresses in the system.

Examples

- list ip all

---

list metadata

List all the custom data associated with a specific entry in a specific table.

Synopsis

list metadata -table <Database Table> -associatedtableid <Matching Row ID>

Description

- -table - Table the data is associated with
- -associatedtableid - ID of the associated row from the table.

Examples

- list metadata -table RN_DEVICE -associatedtableid 21031
- list metadata -table RN_DEVICE_PORT -associatedtableid 221

---

list metadata field

List all the custom data fields associated with a specific table.

Synopsis

list metadata field -table <Database Table>

Description

- -table - Table the fields are associated with

Examples

- list metadata field -table RN_DEVICE
- list metadata field -table RN_DEVICE_PORT

list module

List modules (or blades) in the system.

Synopsis

list module [-model <Model Number>] [-type <Module Description>] [-firmware <Firmware Version>] [-hardware <Hardware Revision>] [-memory <Memory>] [-comment <Comment>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-group <Device Group Name>]

Description

- -model - List only device modules matching this model number
- -type - List only device modules matching this module description
- -firmware - List only device modules matching this firmware version
- -hardware - List only device modules matching this hardware revision
- -memory - List only device modules with this amount of memory
- -comment - List only device modules matching this comment
- -ip - List only device modules on the device with this IP address
- -host - List only device modules on the device with this hostname
- -fqdn - List only device modules on the device with this Fully Qualified Domain Name
- -deviceid - List only device modules on the device with this device ID
- -group - List only device modules on all devices with this device group name

Examples

- list module -host border7.red
- list module -type ethernet

list ospfneighbor

List all configs for which the ShowOSPFNeighbors model may be shown.

Synopsis

list ospfneighbor [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -start - Display only those ShowOSPFNeighbors models stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those ShowOSPFNeighbors models stored on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list ospfneighbor -ip 192.0.2.10

---

list partition

Show details for a single view.

Synopsis

list partition -viewname <View Name>

Description

Show details for a single parition.

- -viewname - The View Name to show.

Examples

- list partition -viewname Site

---

list policy id

Lists IDs of all policies that apply to a given device

Synopsis

list policy id -deviceid <Device ID>

Description

- -deviceid - device id

Examples

- list policy id -deviceid 312

---

list policy rule

Lists all rules of a policy

Synopsis

list policy rule -policyid <Policy ID>

Description

- -policyid - policy id

Examples

- list policy rule -policyid 6120

---

list port

List ports (or interfaces) for a specific device in the system.

Synopsis

list port [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - List all device ports on the device with this IP address
- -host - List all device ports on the device with this hostname
- -fqdn - List all device ports on the device with this Fully Qualified Domain Name
- -deviceid - List all device ports on the device with this device ID

Examples

- list port -host border7.red
- list port -ip 192.0.2.10

---

list routing

List all routing tables for a device.

Synopsis

list routing [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -start - Display only those routing tables stored on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those routing tables stored on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list routing -ip 192.0.2.10
- list routing -ip "East Site:192.0.2.10"

list rule condition

Lists all conditions of a policy rule

Synopsis

list rule condition -ruleid <Rule ID>

Description

- -ruleid - rule id

Examples

- list rule condition -ruleid 6120

list script

List command scripts, advanced scripts and/or diagnostics.

Synopsis

list script [-type <Type>] [-scripttype <Script Type>] [-name <Name>] [-mode <Mode>] [-ids <Script ID List>]

Description

- -type - Type of the desired script or diagnostic - may be command, advanced or diagnostic
- -scripttype - User defined script type (i.e. subcategory) - applies only to command scripts and advanced scripts
- -name - Script name
- -mode - Script mode - for command scripts and diagnostics the script's level of device access (such as Cisco IOS enable); for advanced scripts the device family (such as Cisco IOS)
- -ids - List only scripts in this comma-separated list of IDs.

Examples

- list script
- list script -type diagnostic
- list script -type advanced -scripttype "Core Provisioning Scripts"
- list script -name "Set Banner"
- list script -mode "Cisco IOS enable"

list script id

List command script IDs, advanced scripts and/or diagnostics.

Synopsis

list script id [-type <Type>] [-scripttype <Script Type>] [-name <Name>] [-mode <Mode>] [-id <ID>]

Description

- -type - Type of the desired script or diagnostic - may be command, advanced or diagnostic
- -scripttype - User defined script type (i.e. subcategory) - applies only to command scripts and advanced scripts
- -name - Script name
- -mode - Script mode - for command scripts and diagnostics the script's level of device access (such as Cisco IOS enable); for advanced scripts the device family (such as Cisco IOS)
- -id - Script ID

Examples

- list script id
- list script id -type diagnostic
- list script id -type advanced -scripttype "Core Provisioning Scripts"
- list script id -name "Set Banner"
- list script id -mode "Cisco IOS enable"

list script mode

List valid modes for commands scripts and diagnostics, and valid device families for advanced scripts, for all devices or a specified device.

Synopsis

list script mode [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Device ID>] [-type <Type>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.

- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A device ID
- -type - Type of the desired script or diagnostic - may be command, advanced or diagnostic

Examples

- list script mode
- list script mode -type diagnostic
- list script mode -ip 192.0.2.10
- list script mode -id 1420 -type advanced

list session

List all interceptor log records for a device.

Synopsis

list session [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -start - Display only those interceptor log records created on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those interceptor log records created on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list session -ip 192.0.2.10

list site

List all Sites in the system.

Synopsis

list site

Description

Result includes the name of each site in the system, and the number of devices in each site.

Examples

- list site

---

list sys oids all

List all sys oids supported by the system.

Synopsis

list sys oids all

Description

List all sys oids in the system.

Examples

- list sys oids all

---

list system message

List system messages.

Synopsis

list system message [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Date>] [-end <Date>]

Description

Lists all system messages unless you include one of the options. Including one of the device options displays all system messages associated with the specified device.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -start - Display only those system messages created on or after the given date. Values for this option may be in one of the following formats:YYYY-MM-DD HH:MM:SS e.g. 2002-09-06 12:30:00YYYY-MM-DD HH:MM e.g. 2002-09-06 12:30YYYY-MM-DD e.g. 2002-09-06YYYY/MM/DD e.g. 2002/09/06YYYY:MM:DD:HH:MM e.g. 2002:09:06:12:30Or, one of: now, today, yesterday, tomorrowOr, in the format: e.g. 3 days ago is a positive integer. is one of: seconds, minutes, hours, days, weeks, months, years;. is one of: ago, before, later, after.
- -end - Display only those system messages created on or before the given date. Values for this option have the same format as for the option -start.

Examples

- list system message
- list system message -host chi-border-07

---

list task

Display a list of tasks.

Synopsis

list task [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Task start date>] [-end <Task end date>] [-parentid <Parent task ID>] [-status <Task status>] [-id <Task ID>]

Description

This command behaves differently depending on the options you give it. The command by itself returns a list of all tasks. Each option filters the returned list of tasks, causing it to return a subset of the total list.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.: Display only those tasks associated with the specified device.
- -host - A valid hostname: Display only those tasks associated with the specified device.
- -fqdn - A valid Fully Qualified Domain Name: Display only those tasks associated with the specified device.
- -deviceid - A valid device ID: Display only those tasks associated with the specified device.
- -start - YYYY:MM:DD:HH:mm: Display only those tasks whose schedule date falls on or after the given date.
- -end - YYYY:MM:DD:HH:mm: Display only those tasks whose schedule date falls on or before the given date
- -parentid - a task ID: Display only those tasks whose parent is the task specified by the given Task ID.
- -status - (pending | succeeded | failed | running | paused | starting | waiting | synchronous | skipped | warning): Display only those tasks with the specified status.
- -id - a task ID: Display the task with the given task ID.

Examples

- list task -parentid 78
- list task -start 2004:02:29:23:59 -status failed
- list task -start 2004:02:29:00:00 -end 2004:03:01:00:00 -ip 192.0.2.10
- list task -id 23

list task all

List all tasks.

Synopsis

list task all

Description

Equivalent to "list task".

Examples

- list task all

list topology

List Device Information from Topology Data.

Synopsis

list topology [-mac <MAC Address>] [-ip <IP Address>]

Description

- -mac - Show only devices that have seen this MAC address (no colons)
- -ip - Show only devices that have seen this IP Address

Examples

- list topology
- list topology -mac 00AABBCCDDEE
- list topology -ip 192.0.2.10
- list topology -mac 00AABBCCDDEE -ip 192.0.2.10

list topology graph

List probable Layer 1 topology data.

Synopsis

list topology graph [-deviceids <List of Device IDs>] [-deviceportids <List of Device Port IDs>] [-serverids <List of Server IDs>] [-serverportids <List of Server Interface IDs>] [-deviceid <A Device ID>]

Description

- -deviceids - A comma separated list of device IDs
- -deviceportids - A comma separated list of device port IDs
- -serverids - A comma separated list of server IDs
- -serverportids - A comma separated list of server interface IDs
- -deviceid - A device ID

Examples

- list topology graph -deviceid 193
- list topology graph -deviceids 54302,16001

---

list topology ip

List IP address Topology Data.

Synopsis

list topology ip [-deviceip <Device IP/hostname>] [-portid <Device Port ID>] [-notcurrent < >] [-type <(all|internal|connected)>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -deviceip - The ip/hostname of the device for which to show IP topology data.
- -portid - The port id for which to show IP topology data.
- -notcurrent - Specify to limit output to only IP topology data that is no longer visible.
- -type - Limit the IP data to a specific type.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- list topology ip -deviceip 192.0.2.10
- list topology ip -portid 54302
- list topology ip -deviceip 192.0.2.10 -notcurrent
- list topology ip -portid 54302 -type internal
- list topology ip -deviceid 1401

---

list topology mac

List MAC address Topology Data.

Synopsis

list topology mac [-deviceip <Device IP/hostname>] [-portid <Device Port ID>] [-notcurrent < >] [-type <(all|internal|connected)>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -deviceip - The ip/hostname of the device for which to show MAC topology data.
- -portid - The port id for which to show MAC topology data.
- -notcurrent - Specify to limit output to only MAC topology data that is no longer visible.
- -type - Limit the MAC data to a specific type.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- list topology mac -deviceip 192.0.2.10
- list topology mac -portid 54302
- list topology mac -deviceip 192.0.2.10 -notcurrent
- list topology mac -portid 54302 -type internal
- list topology mac -deviceid 1401

list user

List all users.

Synopsis

list user

Description

List all users known to the system.

Examples

- list user

list user id

List all users viewable by userID.

Synopsis

list user id [-viewable_by <Viewable By>]

Description

List all users viewable by a particular user.

- -viewable_by - Viewable By

Examples

- list user id -viewable_by 201

---

list view

display the views defined within the system.

Synopsis

list view

Description

Show the views defined within the system. This command takes no arguments.

Examples

- list view

---

list vlan

Show the vlans and their associated Device Port ID on a device.

Synopsis

list vlan [-deviceip <Device IP/Hostname>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -deviceip - The ip/hostname of the device for which to show vlans.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- list vlan -deviceip 192.0.2.10
- list vlan -deviceid 1401

---

list vlan ports

Show the ports on a given vlan, identified by its port id.

Synopsis

list vlan ports -id <VLAN port id>

Description

- -id - The port id of the vlan (provided in 'list vlan').

---

login

Synopsis

login -username <Username> -password <Password> [-host <Host>]

Description

- -username - @ProductAbbreviation@ username
- -password - @ProductAbbreviation@ password
- -host - URL of @ProductAbbreviation@ server (defaults to localhost:1099)

---

logout

Synopsis

logout -sessionid <Session ID>

Description

- -sessionid - @ProductAbbreviation@ SOAP API Session ID

---

mod advanced script

Modify an existing advanced script.

Synopsis

mod advanced script [-id <Script ID>] [-name <Script Name>] [-newname <New Name>] [-description <New Description>] [-scripttype <New Script Type>] [-family <New Device Family>] [-language <New Script Language>] [-parameters <New Parameters>] [-script <New Script Text>]

Description

Modify the indicated advanced script. The desired script can be specified by ID or name. If more than one name match occurs, then an error will be reported and you must specify the unique script desired by ID.

- -id - ID of the advanced script to edit
- -name - Name of the advanced script to edit

- -newname - New name for the script being modified
- -description - New description for the script being modified
- -scripttype - New script type (i.e. user defined subcategory)
- -family - New device family for the script being modified
- -language - New language for the script being modified - must be a supported language such as Expect or Perl
- -parameters - New command line parameters for the script being modified
- -script - New script text

Examples

- mod advanced script -id 22 -newname "Set Duplex" -description "Sets the interface duplex configuration" -scripttype "Interface Management Scripts"
- mod advanced script -name "Extended Ping" -family "Cisco IOS" -language "Expect" -parameters "-l /usr/etc/log.txt" -script "send \"extended ping $Target_IP$\""

---

mod authentication

Modify device password information.

Synopsis

mod authentication -loc <Location> [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-snmpro <Read only community string(s)>] [-snmprw <Read write community string(s)>] [-snmpv3user <SNMPv3 Username>] [-snmpv3authpw <SNMPv3 Authentication Password>] [-snmpv3encryptpw <SNMPv3 Encryption Password>] [-user <Username>] [-passwd <Password>] [-enableuser <Enable username>] [-enablepasswd <Enable password>] [-connectionmethods <Connection methods>] [-accessvariables <Access variables>] [-start <Task start date>] [-appendsnmpro] [-appendsnmprw] [-sync] [-group <Group name>] [-rulename <Password Rule name>]

Description

This command can modify passwords on a specific device, across all devices in a device group, or merely update what the system knows of the device's password information. When using this command to modify passwords on a device or device group, the modification operation is actually a scheduled task.

- -loc - The location to which password information should be written. Valid values for this argument are "db", "device", and "group". "db" tells the command that password information should be changed only in the system's database. "device" tells the command that the password changes should be made on the device as well and "group" performs the same function as "device" but across all devices in the group.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.: An existing device to which this password information should apply.
- -host - A valid hostname: An existing device to which this password information should apply.

- -fqdn - A valid Fully Qualified Domain Name: An existing device to which this password information should apply.
- -deviceid - A valid device ID: An existing device to which this password information should apply.
- -snmpro - When used in conjunction with -loc db, this argument is taken as a single community string understood by the system as THE read only community string for the device or network. When used in conjunction with -loc device, this argument is taken as a comma-seperated list of read only community strings to be, either set on the device, or appended to an existing list of read only community strings (depends on whether or not the -appendsnmpro flag was supplied.)
- -snmprw - When used in conjunction with -loc db, this argument is taken as a single community string understood by the system as THE read write community string for the device or network. When used in conjunction with -loc device, this argument is taken as a comma-seperated list of read write community strings to be, either set on the device, or appended to an existing list of read write community strings (depends on whether or not the -appendsnmprw flag was supplied.)
- -snmpv3user - When used in conjunction with -loc db, this argument is taken as the username for snmpv3 access.
- -snmpv3authpw - When used in conjunction with -loc db, this argument is taken as the authentication password for snmpv3 access.
- -snmpv3encryptpw - When used in conjunction with -loc db, this argument is taken as the encryption password for snmpv3 access.
- -user - Username.
- -passwd - Password.
- -enableuser - ADDITIONAL username to get to "enable" mode.
- -enablepasswd - ADDITIONAL password to get to "enable" mode.
- -connectionmethods - The methods used by the system to connect to devices. Can be telnet, serial_direct, or SSH.
- -accessvariables - To override variables in the script, such as prompts.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run. Use this option only if the argument to the -loc flag is "device".
- -appendsnmpro - Supply this option if read only community strings should be appended to any existing on the device. Use this option only if the argument to the -loc flag is "device".
- -appendsnmprw - Supply this option if read write community strings should be appended to any existing on the device. Use this option only if the argument to the -loc flag is "device".
- -sync - Indicates that the command should return only after the password change task is complete. Do not use this option with -start.
- -group - The group name for performing this command across all devices in a group.
- -rulename - The password rule name to apply the access variables to

Examples

- mod authentication -loc db -ip 192.0.2.10 -passwd fish -snmpro public -enablepasswd 31337
- mod authentication -loc device -ip 192.0.2.10 -passwd limited -enablepasswd full

- mod authentication -loc device -ip 192.0.2.10 -passwd some -enablepasswd all -snmprw brillig,slithy,toves,gire -appendsnmprw -sync
- mod authentication -loc device -ip 192.0.2.10 -passwd less -enablepasswd more -snmpro foo,bar,fork,snork -start 2004:02:29:23:59
- mod authentication -loc group -group MyDevices -passwd less -enablepasswd more -snmpro foo,bar,fork,snork -start 2004:02:29:23:59

mod command script

Modify an existing command script.

Synopsis

mod command script [-id <Script ID>] [-name <Script Name>] [-newname <New Name>] [-description <New Description>] [-scripttype <New Script Type>] [-mode <New Mode>] [-driver <New Driver List>] [-script <New Script Text>]

Description

Modify the indicated command script. The desired script can be specified by ID or name. If more than one name match occurs, then an error will be reported and you must specify the unique script desired by ID.

- -id - ID of the command script to edit
- -name - Name of the command script to edit
- -newname - New name for the script being modified
- -description - New description for the script being modified
- -scripttype - New script type (i.e. user defined subcategory)
- -mode - New command script mode
- -driver - New list of applicable drivers - provided as a comma separated list of internal driver names
- -script - New script text

Examples

- mod command script -id 22 -newname "Set Duplex" -description "Sets the interface duplex configuration" -scripttype "Interface Management Scripts"
- mod command script -name "Extended Ping" -mode "Cisco IOS enable" -driver "CiscoIOSGeneric,CiscoIOSSwitch" -script "extended ping $Target_IP$"

mod device

Modify the properties of a device.

Synopsis

mod device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-hostname <New Hostname>] [-comment <Comment>] [-description <Device name>] [-model <Device model>] [-vendor <Device vendor>] [-domain <Domain name>] [-serial <Serial number>] [-asset <Asset tag>] [-location <Location>] [-unmanaged <Unmanaged>] [-nopoll <Do not poll>] [-newIP <New IP address>] [-consoleip <Console IP address, if using console server>] [-consoleport <Console Port>] [-tftpserverip <TFTP server IP address, if using NAT>] [-natip <NAT IP address>] [-customname <Customname>] [-customvalue <Customvalue>] [-useconsoleserver <true or false>] [-accessmethods <Comma-separated list of access methods>] [-hierarchylayer <Hierarchy layer>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -hostname - The device's new host name
- -comment - Additional information regarding the device.
- -description - The descriptive name of the device (informational only).
- -model - The device's model (such as 2620).
- -vendor - The device's vendor (such as Cisco).
- -domain - A fully qualified domain name (such as www.google.com).
- -serial - The device's serial number.
- -asset - The device's asset tag.
- -location - The device's location.
- -unmanaged - 0: Mark this device as managed by the system. 1: Mark this device to be unmanaged by the system.
- -nopoll - 0: Mark this device to be polled for changes. 1: Mark this device as not to be polled for changes.
- -newIP - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device will be put in. This is the new IP address of the device.
- -consoleip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with REALM_NAME:, where REALM_NAME is the name of the Realm the address is in.
- -consoleport - The port number
- -tftpserverip - a.b.c.d where 0 <= a,b,c,d <= 255
- -natip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with REALM_NAME:, where REALM_NAME is the name of the Realm the address is in.
- -customname - The custom field name
- -customvalue - The custom field value
- -useconsoleserver - true, if the device uses a console server. false, if the device does not.

- -accessmethods - A comma-separated list of access methods, or "none". The set of access methods: {telnet, ssh, rlogin, SCP, FTP, TFTP, SNMP, snmp_noauthnopriv, snmp_authnopriv, snmp_authpriv}.
- -hierarchylayer - This device attribute is used in diagramming. When you config a network diagram, you can select which hierarchy layers on which to filter. Valid values include: (core, distribution, access, edge and "layer not set").

Examples

- mod device -ip 192.0.2.10 -newIP 192.0.2.10
- mod device -ip 192.0.2.10 -newIP "West Site:192.0.2.10"
- mod device -ip "East Site:192.0.2.10" -newIP "West Site:192.0.2.10"
- mod device -ip 192.0.2.10 -nopoll 1 -comment "enabled polling by change detection."
- mod device -ip 192.0.2.10 -customname Owner -customvalue Bob
- mod device -ip 192.0.2.10 -useconsolesever false

mod diagnostic

Modify an existing custom diagnostic script.

Synopsis

mod diagnostic [-id <Diagnostic ID>] [-name <Diagnostic Name>] [-newname <New Name>] [-description <New Description>] [-mode <New Mode>] [-driver <New Driver List>] [-script <New Script Text>]

Description

Modify the indicated diagnostic script. The desired diagnostic can be specified by ID or name. If more than one name match occurs, then an error will be reported and you must specify the unique diagnostic desired by ID.

- -id - ID of the diagnostic to edit
- -name - Name of the diagnostic to edit
- -newname - New name for the diagnostic being modified
- -description - New description for the diagnostic being modified
- -mode - New command script mode
- -driver - New list of applicable drivers - provided as a comma separated list of internal driver names
- -script - New diagnostic script text

Examples

- mod diagnostic -id 22 -newname "Show IP CEF" -description "Gather IP CEF information"
- mod diagnostic -name "Extended Ping To Core" -mode "Cisco IOS enable" -driver "CiscoIOSGeneric,CiscoIOSSwitch" -script "extended ping 192.0.2.10"

mod group

Modify a group.

Synopsis

mod group -type <Type> -name <Name> [-newname <New name>] [-comment <Comment>] [-customname <Customname>] [-customvalue <Customvalue>] [-shared <Shared>]

Description

Modify the comments associated with and/or the name of a group.

- -type - The type of the group. "device" is currently the only valid argument to this option.
- -name - The name of the group to be modified.
- -newname - The new name for the modified group. Do not use this option unless you also use -name.
- -comment - Additional information regarding the group.
- -customname - The custom field name
- -customvalue - The custom field value
- -shared - 1 if the group is shared, 0 if it is not.

Examples

- mod group -name "mystery routers" -type device -comment "removing these devices is a bad idea, but we don't really know what purpose they serve."
- mod group -type device -name "border routers" -newname "defunct"
- mod group -type device -name "border routers" -customname Location -customvalue Earth

---

mod ip

Modify the properties of a ip.

Synopsis

mod ip -ipvalue <Value> [-deviceip <Device IP address>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-comment <Comment>] [-usetoaccess <Use to Access Device>]

Description

- -ipvalue - The ip value a.b.c.d where 0 <= a,b,c,d <= 255
- -deviceip - The device's ip address a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

- -comment - Additional information regarding the device.
- -usetoaccess - Use this IP Value to access its device, 0 - yes, 1 - no, default - no

Examples

- mod ip -deviceip 192.0.2.10 -ipvalue 192.0.2.10 -comment "my own ip"
- mod ip -deviceip 192.0.2.10 -ipvalue 192.0.2.10 -usetoaccess 0
- mod ip -deviceid 1401 -ipvalue 192.0.2.10 -usetoaccess 0

---

mod metadata

Modify an existing piece of custom data associated with a specific field and associated entity.

Synopsis

mod metadata -metadataid <Metadata ID> [-fieldid <Metadata Field ID>] [-data <Data>] [-associatedtableid <Matching Row ID>]

Description

- -metadataid - ID of the custom data to delete
- -fieldid - Field ID the data is to be associated with
- -data - New data to be associated
- -associatedtableid - ID of the associated row the data coresponds to

Examples

- mod metadata -metadataid 99381 -fieldid 121 -data Room102
- mod metadata -metadataid 99381 -data Room101 -associatedtableid 21031

---

mod metadata field

Used to modify an existing custom data field.

Synopsis

mod metadata field -fieldid <Field ID> [-fieldname <Field Name>] [-fieldvalues <Field Values>] [-inuse <In Use>] [-flags <Allow HTML>] [-associatedtable <Associated Table>]

Description

- -fieldid - ID of the field to modify
- -fieldname - New name of the field
- -fieldvalues - List of comma separated values that the field is restricted to. If not specified, the value for this field is not restricted
- -inuse - Turns the field on or off. 1 is on, 0 is off. When the field is off, it will not be displayed with the other custom fields.
- -flags - Used for allowing HTML in the field value. 1 is allow, 0 is disallow. If disallowed, HTML will be escaped for displaying.
- -associatedtable - The table to associate this field with

Examples

- mod metadata field -fieldid 2221 -fieldname Room -fieldvalues 101,102,103,104 -inuse 1 -flags 0 -associatedtable RN_DEVICE
- mod metadata field -fieldid 2221 -inuse 0

mod module

Modify a module's properties.

Synopsis

mod module -id <Module ID> [-comment <Comment>] [-customname <Customname>] [-customvalue <Customvalue>]

Description

- -id - The ID of a module
- -comment - Additional information about the module.
- -customname - The custom field name
- -customvalue - The custom field value

Examples

- mod module -id 527 -comment "Internal Use Only"

mod partition

Modify a partition.

Synopsis

mod partition -name <Name> -newname <New name> [-comment <Comment>]

Description

- -name - The name of the partition to be modified.
- -newname - The new name for the modified partition. Do not use this option unless you also use -name.
- -comment - Additional information regarding the partition.

Examples

- mod partition -name "Default Site" -newname "Redmond Site"

mod port

Modify a port's properties.

Synopsis

mod port -id <Port ID> [-comment <Comment>] [-customname <Customname>] [-customvalue <Customvalue>]

Description

- -id - The ID of a port
- -comment - Additional information about the port.
- -customname - The custom field name
- -customvalue - The custom field value

Examples

- mod port -id 527 -comment "Internal Use Only"

mod task

Modify a scheduled task.

Synopsis

mod task -id <Task ID> [-comment <Comment>] [-retryInterval <Retry interval>] [-expensive] [-notexpensive] [-days <Days>] [-retryCount <Retry count>] [-repeatType <Repeat type>] [-duration <Duration>] [-start <Start>] [-repeatInterval <Repeat interval>] [-approve <Approval comment>] [-reject <Reason the task is not approved>] [-override <Reason for overriding approval process>] [-customname <Custom name>] [-customvalue <Custom value>]

Description

- -id - The task ID of the task to modify.
- -comment - Additional information about the task.
- -retryInterval - The number of seconds between retries.
- -expensive - Mark the task as expensive. Do not use this option with -notexpensive.
- -notexpensive - Mark the task as not expensive. Do not use this option with -expensive.
- -days - This argument differs depending on the task.For weekly tasks, -days should be a comma-separated list of weekdays. Each item in the list is a day of the week upon which the task should be run. Valid weekdays are: sun, mon, tue, wed, thur, fri, sat.For monthly tasks, -days should be a single integer between 1 and 31, corresponding to the day of the month upon which the task should be run.
- -retryCount - The number of times to retry the task if it fails.
- -repeatType - The metric by which a task repeats. Valid values are 1: once, 2: periodically, 3: daily, 4: weekly, 5: monthly. If you modify this value, then modify -repeatInterval or -days accordingly.
- -duration - Estimated duration the task will run(in minutes)
- -start - YYYY:MM:DD:HH:mm. The first date the task will run.

- -repeatInterval - This option differs depending on the task.For Periodic tasks, this is the period in minutes.For Monthly tasks, each bit of the integer (except the last) represents a day, but we recommend using the -days option to modify the days on which a monthly task runs.This option is invalid with all other tasks.
- -approve - Approve the task
- -reject - Reject the task
- -override - Override the approval requirement
- -customname - The custom field name
- -customvalue - The custom field value

Examples

- mod task -id 7097 -repeatType 4 -days mon,wed,thur
- mod task -id 54 -retryCount 2 -duration 60
- mod task -id 54 -reject "needs technical review"

mod topology graph

Modify topology data.

Synopsis

mod topology graph -type <Topology data type> -data <Topology data value> -deviceid <Device ID> [-deviceportid <Device ID>] [-remotedeviceid <Device ID>] [-remotedeviceportid <Device ID>] [-serverid <Server ID>] [-serverportid <Server ID>]

Description

- -type - The topology data type, typically "phy_inferred" for L1
- -data - The topology data value, typically a MAC address (without colons)
- -deviceid - The source device ID
- -deviceportid - The source device port ID
- -remotedeviceid - The destination device ID
- -remotedeviceportid - The destination device port ID
- -serverid - The destination server ID
- -serverportid - The destination server port ID

Examples

- mod topology graph -type phy_inferred -data 0007E912C8D7 -deviceid 193 -remotedeviceid 2837
- mod topology graph -type phy_inferred -data 00123F76F759 -deviceid 193 -serverid 105001

mod unmanaged device

Modify the properties of an unmanaged device.

Synopsis

mod unmanaged device -ip <IP address> -comment <Comment>

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -comment - Additional information regarding the device.

Examples

- mod unmanaged device -ip 192.0.2.10 -comment "no need"

---

mod user

Modify a user's properties.

Synopsis

mod user -u <Username> [-p <Password>] [-fn <First name>] [-ln <Last name>] [-email <Email address>] [-priv <User Privilege>] [-newusername <Username>] [-aaausername <Username>] [-aaapassword <AAA Password>] [-useaaaloginforproxy <Use AAA Logins for Proxy (yes|no)>] [-extauthfailover <Allow External Auth Failover (yes|no)>] [-customname <Customname>] [-customvalue <Customvalue>] [-status <Enable or Disable the user (enable|disable)>]

Description

- -u - Username
- -p - Password
- -fn - First name
- -ln - Last name
- -email - Email address
- -priv - User Privilege (1=Limited Access,2=Full Access,3=Power User,4=Admin)
- -newusername - New username for this user.
- -aaausername - AAA username for this user.
- -aaapassword - AAA password for this user.
- -useaaaloginforproxy - Whether to user AAA logins for the Proxy Interface for this user (yes|no).
- -extauthfailover - Whether to allow external auth failover for this user (yes|no).
- -customname - The custom field name
- -customvalue - The custom field value
- -status - enable or disable

Examples

- mod user -u johnd -p new -fn Johnathan -email jdoe@example.net
- mod user -u johnd -p new -fn Johnathan -email jdoe@example.net -priv 2

- mod user -u -customname Title -customValue Engineer
- mod user -u johnd -status disable

os ping

Run a ping command from the server to the sepecified device.

Synopsis

os ping

Description

The ping command is an OS command. All ping options that are available at the OS level are supported. Users should be able to enter any host name or address. The behavior is that it simply passes the string to the OS, executes it as a command and returns the results of the executed command.

Examples

- os ping 192.0.2.10

os-ping

Run a ping command from the server to the sepecified device.

Synopsis

os-ping

Description

The ping command is an OS command. All ping options that are available at the OS level are supported. Users should be able to enter any host name or address. The behavior is that it simply passes the string to the OS, executes it as a command and returns the results of the executed command.

Examples

- os-ping 192.0.2.10
- os-ping -t 192.0.2.11

passwd

Change current user's password.

Synopsis

passwd -oldpwd <your old password> -newpwd <your new password>

Description

Causes the current user's password to be changed.

- -oldpwd - youroldpassword
- -newpwd - yournewpassword

Examples

- passwd -oldpwd youroldpassword -newpwd yournewpwd

---

pause polling

Stop polling.

Synopsis

pause polling

Description

Stop polling devices for configuration changes.

Examples

- pause polling

---

ping

Run a ping command on a device.

Synopsis

ping -source <IP address | Hostname | Fully Qualified Domain Name> -sourcegroup <Groupname> -dest <List of IP addresses> -rep <Task repeat period> -async -start <task start date>

Description

Causes a series of ping commands to be executed on a device. One ping command is executed for each target host specified. This series of commands may by run on the device immediately, or scheduled to run sometime in the future. Via this command, the task scheduled can be set to repeat periodically. Note that if not scheduled as a task, this command may take some time to complete.

- -source - Can be an IP address (a.b.c.d where 0 <= a,b,c,d <= 255), or a valid hostname, or a valid Fully Qualified Domain Name.
- -sourcegroup - A valid group name. Exactly one of -source or -sourcegroup must be specified.
- -dest - A comma seperated list of devices. Devices may be specified in any way that is understood by the ping program on the device specified by the option "-source".
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes, the two integers don't have to be the same. This option should not be used unless -async is also supplied.

- -async - Indicates that the ping operation should be scheduled on the system as a task. The start time for the task will be immediatly unless an alternate start data is provided by means of the -start option.
- -start - YYYY:MM:DD:HH:mm. The date on which the task will first be run. This option should not be used unless -async is also supplied.

Examples

- ping -source 192.0.2.10 -dest 192.0.2.10
- ping -source 192.0.2.10 -dest 192.0.2.10,192.0.2.10,192.0.2.10
- ping -source 192.0.2.10 -dest 192.0.2.10 -async -start 2004:02:29:23:59 -rep 2days
- ping -source 192.0.2.10 -dest 192.0.2.10 -async
- ping -sourcegroup mygroup -dest 192.0.2.10

quit

Exit the system.

Synopsis

quit

Description

Exit the the system.

Examples

- quit

reload content

Synopsis

reload content

Description

Load any new content packs (such as scripts or policies) that have been installed on the server since the last time it was restarted or content was reloaded.

Examples

- reload content

reload drivers

Synopsis

reload drivers -force

Description

Causes the server to reload all installed driver files.

- -force - Force drivers to be reloaded even when there is error

Examples

- reload drivers
- reload drivers -force

---

reload server options

Synopsis

reload server options

Description

Causes the server to reload config variables from all config files.

Examples

- reload server options

---

resume polling

Resume polling.

Synopsis

resume polling

Description

Resume polling devices for configuration changes.

Examples

- resume polling

---

rlogin

Make an rlogin connection to a device.

Synopsis

rlogin [-override] []

Description

Connect to a device through the system's Proxy Interface via telnet (bypassing single sign-on). If you are connected to a device through a console server, you may hit ctrl-\ to return to the the system shell after logging out of the device.

- -override - Force a connection to a device in the event that simultaneous connection warning or prevention is turned on.
- - Hostname, Device ID, Fully Qualified Domain Name, or Primary IP Address to use to lookup the device to connect to. The characters * and ? can be used as wildcards.
- - Port to use to connect to devices outside of the system.

Examples

- rlogin 192.0.2.10
- rlogin -override mydevice

---

run advanced script

Run an existing advanced script against a device or group of devices.

Synopsis

run advanced script [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-group <Groupname>] -name <Script Name> [-parameters <Parameters>] [-variables <Variable List>] [-start <Task start date>] [-rep <Task repeat period>] [-sync] [-nowait] [-comment <Snapshop comment>] [-presnapshot <true or false>] [-postsnapshot <true, false or task>]

Description

Runs an existing advanced script, specified by name, against a device or group of devices. The proper variant of the script will be applied to each device. If no variant of the script supports a given device, that device will be skipped. The script is run as a system task.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -group - A valid group name. Either a device or a group must be specified, but not both (exactly one of -ip, -hostname, -fqdn or -group must be specified).
- -name - Name of the advanced script to run
- -parameters - Command line parameters for the advanced script to run
- -variables - A list of variables to be replaced in the script - provided as a list of name=value pairs, separated by commas. Values can be surrounded in single-quotes ('). Within a quoted value, a single-quote can be embedded with two single-quote characters. Example: "variable1=value1,varable2='this is ''value 2'''"
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run.
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.
- -sync - Indicates the command should return only after the snapshot retrieval task is complete. Do not use this option with -rep or -start.

- -nowait - Indicates that the task should not wait if there is another task currently running against the same device.
- -comment - An optional comment about the snapshot.
- -presnapshot - If false, this indicates that the snapshot that runs before the script should be skipped.
- -postsnapshot - If false, this indicates that the snapshot that runs after the script should be skipped. If "task", this indicates that snapshot after the script should run as a separate task.

Examples

- run advanced script -ip 192.0.2.10 -name "Extended Ping" -parameters "" -variables "Target_IP=192.0.2.10" -start 2004:02:29:23:59 -rep 2days -comment "running extended ping"
- run advanced script -group mygroup -name "Set Interface Description" -variables="interface=Ethernet1,description='provider ''MCI'',link id T207'" -parameters "-l /usr/etc/log.txt" -sync

---

run command script

Run an existing command script against a device or group of devices.

Synopsis

run command script [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-group <Groupname>] -name <Script Name> [-variables <Variable List>] [-linebyline] [-start <Task start date>] [-rep <Task repeat period>] [-sync] [-nowait] [-comment <Snapshop comment>] [-presnapshot <true or false>] [-postsnapshot <true, false or task>]

Description

Runs an existing command script, specified by name, against a device or group of devices. The proper variant of the script will be applied to each device. If no variant of the script supports a given device, that device will be skipped. The script is run as a system task.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -group - A valid group name. Either a device or a group must be specified, but not both (exactly one of -ip, -hostname, -fqdn or -group must be specified).
- -name - Name of the command script to run
- -variables - A list of variables to be replaced in the script - provided as a list of name=value pairs, separated by commas. Values can be surrounded in single-quotes ('). Within a quoted value, a single-quote can be embedded with two single-quote characters. Example: "variable1=value1,varable2='this is ''value 2'''"
- -linebyline - Indicates that line by line deployment is preferred, rather than file-based deployment

- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run.
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.
- -sync - Indicates the command should return only after the snapshot retrieval task is complete. Do not use this option with -rep or -start.
- -nowait - Indicates that the task should not wait if there is another task currently running against the same device.
- -comment - An optional comment about the snapshot.
- -presnapshot - If false, this indicates that the snapshot that runs before the script should be skipped.
- -postsnapshot - If false, this indicates that the snapshot that runs after the script should be skipped. If "task", this indicates that snapshot after the script should run as a separate task.

Examples

- run command script -ip 192.0.2.10 -name "Extended Ping" -variables "Target_IP=192.0.2.10" -start 2004:02:29:23:59 -rep 2days -comment "running extended ping"
- run command script -group mygroup -name "Set Interface Description" -variables="interface=Ethernet1,description='provider "MCI",link id T207'" -linebyline -sync

run diagnostic

Run a diagnostic on a device.

Synopsis

run diagnostic [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-group <Group Name>] -diagnostic <Diagnostic Name> [-rep <Task repeat period>] [-start <Task start date>] [-sync] [-comment <Run script comment>]

Description

Run the specified diagnostic on a specified device either right away, or at some point in the future. The run diagnostic operation is actually a scheduled task.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -group - A name of a device group (mutually exclusive with -ip, -host, or -fqdn)
- -diagnostic - A diagnostic to run. Built-in diagnostics are '@ProductAbbreviation@ Routing Table', '@ProductAbbreviation@ Interfaces' and '@ProductAbbreviation@ OSPF Neighbors'.

- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run. Do not use this option with -sync.
- -sync - Indicates that the command should return only after the deploy task is complete. Do not use this option with -start.
- -comment - An optional comment about the diagnostic.

Examples

- run diagnostic -ip 192.0.2.10 -diagnostic "vlan report" -sync
- run diagnostic -ip 192.0.2.10 -diagnostic "@ProductAbbreviation@ Routing Table" -start 2004:02:29:23:59
- run diagnostic -group "Core Routers" -diagnostic "@ProductAbbreviation@ OSPF Neighbors" -rep 7days -start 2004:01:01:01:00:00 -comment "Weekly Core Router OSPF Neighbors pull"

---

run external application

Execute a command.

Synopsis

run external application -app <Command> [-start <Task start date>] [-rep <Task repeat period>] [-sync] [-comment <Comment text>] [-startdir <Directory path>] [-resultfile <File path>] [-errorifnonzero <true or false>]

Description

Runs a @ProductAbbreviation@ task which spawns a new process that executes a command external to @ProductAbbreviation@.

- -app - The command to execute.
- -start - YYYY:MM:DD:HH:mm The time when the command will be executed. Do not use this option with -sync.
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.
- -sync - Indicates that the CLI command should return only after the task is complete. Do not use this option with -start.
- -comment - Comments to be attached to the task that runs to execute the command.
- -startdir - The working directory of the process in which the command is executed.
- -resultfile - The file to contain the output of the command.
- -errorifnonzero - If true the task will be marked FAILED or WARNING if the command returns a non zero result code.

Examples

- run external application -start 2006:03:23:11:33 -startdir /usr/local/bin -resultfile /home/jdoe/out.log -app"echo foo"
- run external application -app "grep -c /bin/csh /etc/passwd" -resultfile /home/jdoe/out.log -sync

---

run gc

Run the garbage collector.

Synopsis

run gc

Description

Recycle unused objects to increase the amount of free memory.

Examples

- run gc

---

run script

Run a command script on a device.

Synopsis

run script [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-group <Group Name>] [-mode <Command Script Mode>] -script <Command Script> [-rep <Task repeat period>] [-start <Task start date>] [-sync] [-nowait] [-comment <Run script comment>]

Description

Run the specified command script on a specified device either right away, or at some point in the future. The run script operation is actually a scheduled task. If no mode is specified the first supported enable, supervisor, provisioning or root mode will be used.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -group - A name of a device group (mutually exclusive with -ip, -host, or -fqdn)
- -mode - A command script mode to run the script in.
- -script - A script to run, may separate commands with '\n'. Commands that require multiple entries before returning to the device prompt can separate each entry with '\\r\\n'.
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.

- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run. Do not use this option with -sync.
- -sync - Indicates that the command should return only after the deploy task is complete. Do not use this option with -start.
- -nowait - Indicates that the task should not wait if there is another task currently running against the same device.
- -comment - An optional comment about the script being run.

Examples

- run script -ip 192.0.2.10 -mode "Cisco IOS enable" -script "show ver" -sync
- run script -ip 192.0.2.10 -mode "Nortel BCC" -script "show system info" -start 2004:02:29:23:59
- run script -group "Core Routers" -mode "Cisco IOS configuration" -script "banner motd xCore Router\\r\\ndo not touch!\nprompt %h%p" -start 2004:01:01:01:00:00 -comment "Get the core routers banner and prompt standardized"

---

show access

Display a device access record.

Synopsis

show access -id <Device access record ID>

Description

- -id - Specifies a device access record. Think of this as a "device access record ID".

Examples

- show access -id 510

---

show acl

Show ACL.

Synopsis

show acl -id <Device ACL ID>

Description

Displays the device ACL in the system including Script and Application.

- -id - List only ACLs with this deviceaclid

Examples

- show acl -id 241

show basicip

Show a BasicIP model.

Synopsis

show basicip [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Config ID>]

Description

If the -ip flag is given, show the BasicIP model for the most recent config for the specified device.If the -id flag is given, show the BasicIP model for the specified config.Include either the -id or -ip option, but not both.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A config ID

Examples

- show basicip -ip 192.0.2.10
- show basicip -ip "East Site:192.0.2.10"
- show basicip -id 73253

show config

Show the contents of a config.

Synopsis

show config -id <Config ID> [-mask]

Description

- -id - The ID of a config
- -mask - Mask out sensitive information such as device passwords

Examples

- show config -id 2600
- show config -id 2405 -mask

show configlet

Show the configlet inbetween start and end pattern.

Synopsis

show configlet [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-start <Start Block>] [-end <End Block>] [-type <Helper>]

Description

- -ip - List all device ports on the device with this IP address
- -host - List all device ports on the device with this hostname
- -fqdn - List all device ports on the device with this Fully Qualified Domain Name
- -deviceid - List all device ports on the device with this device ID
- -start - Block start pattern for the configlet
- -end - Block end pattern for the congfiglet
- -type - Type (helper) of the configlet

Examples

- show configlet -ip 1.2.3.4 -start webfarm -type C_POOL

---

show device

Show a device's properties.

Synopsis

show device [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A device ID

Examples

- show device -ip 192.0.2.10
- show device -ip "East Site:192.0.2.10"
- show device -id 527

---

show device config

Show the config most recently retrieved from the specified device.

Synopsis

show device config [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- show device config -ip 192.0.2.10
- show device config -ip "East Site:192.0.2.10"

---

show device family

Show the family classification associated with the specified device.

Synopsis

show device family -ip <IP address>

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.

Examples

- show device family -ip 192.0.2.10
- show device family -ip "East Site:192.0.2.10"

---

show device latest diff

Show the difference between two configs most recently retrieved from the specified device.

Synopsis

show device latest diff [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- show device latest diff -ip 192.0.2.10
- show device latest diff -ip "East Site:192.0.2.10"

---

show deviceinfo

Show a DeviceInformation model.

Synopsis

show deviceinfo [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Config ID>]

Description

If the -ip flag is given, show the DeviceInformation model for the most recent config for the specified device.If the -id flag is given, show the DeviceInformation model for the specified config.Include either the -id or -ip option, but not both.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A config ID

Examples

- show deviceinfo -ip 192.0.2.10
- show deviceinfo -ip "East Site:192.0.2.10"
- show deviceinfo -id 73253

---

show diagnostic

Show a diagnostic's results.

Synopsis

show diagnostic -id <Diagnostic ID>

Description

- -id - A diagnostic ID

Examples

- show diagnostic -id 73253

---

show driver

Show the driver assigned to a device.

Synopsis

show driver [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- show driver -ip 192.0.2.10
- show driver -host rtr5.vfm.lab

---

show event

Display the details of an event.

Synopsis

show event -id <event ID>

Description

- -id - A valid event id

Examples

- show event -id 27

---

show group

Show all information for a group.

Synopsis

show group [-name <Group name>] [-id <Group id>]

Description

- -name - The group name for whom information will be displayed
- -id - The group id for whom information will be displayed

Examples

- show group -name johnd
- show group -id 5

---

show icmp

Show an ICMPTest model.

Synopsis

show icmp [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Config ID>]

Description

If the -ip flag is given, show the ICMPTest model for the most recent config for the specified device.If the -id flag is given, show the ICMPTest model for the specified config.Include exactly one of the -id or -ip option.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A config ID

Examples

- show icmp -ip 192.0.2.10
- show icmp -id 73253

---

show int

Show a ShowInterfaces model.

Synopsis

show int [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Config ID>]

Description

If the -ip flag is given, show the ShowInterfaces model for the most recent config for the specified device.If the -id flag is given, show the ShowInterfaces model for the specified config.Include either the -id or -ip option, but not both.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A config ID

Examples

- show int -ip 192.0.2.10
- show int -ip "East Site:192.0.2.10"
- show int -id 73253

---

show ip

Show a ip's properties.

Synopsis

show ip -ipvalue <Value> [-deviceip <Device IP address>] [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ipvalue - The ip value a.b.c.d where 0 <= a,b,c,d <= 255
- -deviceip - The device's ip address a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- show ip -deviceip 192.0.2.10 -ipvalue 192.0.2.10
- show ip -deviceid 1401 -ipvalue 192.0.2.10

---

show latest access

Show the most recent access record for the specified device.

Synopsis

show latest access [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- show latest access -ip 192.0.2.10
- show latest access -ip "East Office:192.0.2.10"

---

show metadata

Show a specific piece of custom data.

Synopsis

show metadata -metadataid <Metadata ID>

Description

- -metadataid - ID of the custom data to show

Examples

- show metadata -metadataid 54535

---

show metadata field

Show a custom data field

Synopsis

show metadata field -fieldid <Field ID>

Description

- -fieldid - ID of the custom data field to show

Examples

- show metadata field -fieldid 8394

show module

Show a module's properties.

Synopsis

show module -id <Module ID>

Description

- -id - The ID of a module

Examples

- show module -id 527

show ospfneighbor

Show a ShowOSPFNeighbors model.

Synopsis

show ospfneighbor [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Config ID>]

Description

If the -ip flag is provided, show the ShowOSPFNeighbors model for the most recent config for the specified device.If the -id flag is given, show the ShowOSPFNeighbors model for the specified config.Include either the -id or -ip option, but not both.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A config ID

Examples

- show ospfneighbor -ip 192.0.2.10
- show ospfneighbor -ip "East Site:192.0.2.10"
- show ospfneighbor -id 73253

show permission

Display whether or not a user has permissions for a particular resource.

Synopsis

show permission -resource <resource> [-u <username>] [-id <user ID>]

Description

- -resource - The name of a Command or Resource.
- -u - Username
- -id - User ID

Examples

- show permission -resource com.rendition.dib.DeleteACLTask -u bob
- show permission -resource "Add Device" -id 101715

---

show policy

Shows policy information

Synopsis

show policy -id <Policy ID>

Description

- -id - policy id

Examples

- show policy -id 6120

---

show policy compliance

Shows policies and device compliance states

Synopsis

show policy compliance [-policyid <Policy ID>] [-deviceid <Device ID>] [-compliance <Compliance State (in|out|unknown)>]

Description

- -policyid - policy id
- -deviceid - device id
- -compliance - compliance state (in|out|unknown)

Examples

- show policy compliance
- show policy compliance -policyid 6120
- show policy compliance -deviceid 312
- show policy compliance -policyid 6120 -deviceid 312
- show policy compliance -policyid 6120 -compliance in
- show policy compliance -deviceid 25549 -compliance out

show policy rule

Shows rule information

Synopsis

show policy rule -id <Rule ID>

Description

- -id - rule id

Examples

- show policy rule -id 3508

show polling status

Show the current status of polling.

Synopsis

show polling status

Description

Examples

- show polling status

show port

Show a port's properties.

Synopsis

show port -id <Port ID>

Description

- -id - The ID of a port

Examples

- show port -id 527

show routing

Display a routing table.

Synopsis

show routing [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-id <Routing table ID>]

Description

If the -ip flag is given, show the most recent routing table captured for the specified device.If the -id flag is given, show the specified routing table.Include either the -id or -ip option, but not both.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -id - A routing table ID

Examples

- show routing -host rtr6.vfm.lab
- show routing -id 3276

---

show rule condition

Shows rule condition information

Synopsis

show rule condition -id <Condition ID>

Description

- -id - condition id

Examples

- show rule condition -id 3508

---

show script

Show one command script, advanced script or diagnostic.

Synopsis

show script [-id <Script / Diagnositc ID>] [-name <Script / Diagnositc Name>] [-type <Script / Diagnositc Type>]

Description

Output the indicated command script, advanced script or diagnostic. The desired script or diagnostic can be specified by ID, or by a combination of name and type. If more than one name match occurs, then an error will be reported and you must specify the unique script desired by ID.

- -id - ID of the desired script or diagnostic
- -name - Name of the desired script or diagnostic
- -type - Type of the desired script or diagnostic - may be command, advanced or diagnostic

Examples

- show script -id 5
- show script -name "Edit Port Duplex" -type command

---

show server option

Display the setting of a server option

Synopsis

show server option -name <option name> [-default <default value>]

Description

Display the value of an Admin Setting or server configuration option. If the option is not set and no default is provided then this command will fail.

- -name - The name of the server option.
- -default - The value to return if the option is not set.

Examples

- show server option -name proxy/ssh_listener_port
- show server option -name customer/https_port -default 443

---

show session

Show interceptor log record.

Synopsis

show session -id <Interceptor log id>

Description

- -id - Interceptor log ID

Examples

- show session -id 5

---

show session commands

List all commands in interceptor log record.

Synopsis

show session commands -id <Interceptor log id>

Description

- -id - Interceptor log ID

Examples

- show session commands -id 5

---

show snapshot

Show the config most recently retrieved from the specified device.

Synopsis

show snapshot [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>]

Description

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID

Examples

- show snapshot -ip 192.0.2.10
- show snapshot -ip "East Site:192.0.2.10"

---

show system message

Display the details of a system message.

Synopsis

show system message -id <System message ID>

Description

- -id - A valid system message id

Examples

- show system message -id 27

---

show task

Shows detailed information about a task.

Synopsis

show task -id <Task ID>

Description

- -id - The task ID whose details will be displayed

Examples

- show task -id 354

---

show topology

Show details for a single topology record.

Synopsis

show topology -id <Topology Data ID>

Description

- -id - The id of the topology record to show.

Examples

- show topology -id 6543201

---

show user

Show all information for a user.

Synopsis

show user [-u <User name>] [-id <User id>]

Description

- -u - The user name for whom information will be displayed

- -id - The user id for whom information will be displayed

Examples

- show user -u johnd
- show user -id 5

---

show version

Synopsis

show version

Description

Display the release version of @ProductAbbreviation@.

Examples

- show version

---

source

Have the the system client execute all commands contained within a text file.

Synopsis

source <The name of the file containing CLI commands to execute.>

Description

This command has no options but takes one argument: the name of the file to "source". The source file should contain only valid CLI commands each seperated by one newline.

Examples

- source C:\temp\commands.txt

---

ssh

Make an ssh connection to a device.

Synopsis

ssh [-override] []

Description

Connect to a device through the system's Proxy Interface via ssh (bypassing single sign-on). If you are connected to a device through a console server, you may hit ctrl-\ to return to the the system shell after logging out of the device.

- -override - Force a connection to a device in the event that simultaneous connection warning or prevention is turned on.

- - Hostname, Device ID, Fully Qualified Domain Name, or Primary IP Address to use to lookup the device to connect to. The characters * and ? can be used as wildcards.
- - Port to use to connect to devices outside of the system.

Examples

- ssh 192.0.2.10
- ssh -override mydevice

---

stop task

Stop a running task.

Synopsis

stop task -id <Task ID>

Description

- -id - The task ID of the task to stop.

Examples

- stop task -id 54

---

stop task all

Stop all Running and Waiting tasks.

Synopsis

stop task all

Description

Examples

- stop task all

---

synchronize

Synchronize a device's startup and running configs.

Synopsis

synchronize [-ip <IP address>] [-host <Hostname>] [-fqdn <Fully Qualified Domain Name>] [-deviceid <Device ID>] [-group <Group Name>] [-skipinsync <Skip if Synchronized>] [-rep <Task repeat period>] [-start <Task start date>] [-sync] [-comment <Task comment>]

Description

Synchronize a device's startup configuration so it matches its running configuration. The synchronize operation is actually a scheduled task.

- -ip - a.b.c.d where 0 <= a,b,c,d <= 255. You may optionally prefix the IP with SITE: where SITE is the name of the Site the device is in.
- -host - A valid hostname
- -fqdn - A valid Fully Qualified Domain Name
- -deviceid - A device ID
- -group - A name of a device group (mutually exclusive with -ip, -host, or -fqdn)
- -skipinsync - Indicates that the command should skip any device that the system indicates already has matching startup and running configs.
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes--the two integers do not have to be the same. Do not use this option with -sync.
- -start - YYYY:MM:DD:HH:mm. The first date on which the task will run. Do not use this option with -sync.
- -sync - Indicates that the command should return only after the synchronize task is complete. Do not use this option with -start.
- -comment - An optional comment about the synchronize task.

Examples

- synchronize -ip 192.0.2.10 -sync
- synchronize -ip 192.0.2.10 -start 2004:02:29:23:59
- synchronize -group "Core Routers" -skipinsync -start 2004:01:01:01:00:00 -comment "Make sure core routers have matching startup and running configs"

---

telnet

Make a telnet connection to a device.

Synopsis

telnet [-override] []

Description

Connect to a device through the system's Proxy Interface via telnet (bypassing single sign-on). If you are connected to a device through a console server, you may hit ctrl-\ to return to the the system shell after logging out of the device.

- -override - Force a connection to a device in the event that simultaneous connection warning or prevention is turned on.
- - Hostname, Device ID, Fully Qualified Domain Name, or Primary IP Address to use to lookup the device to connect to. The characters * and ? can be used as wildcards.
- - Port to use to connect to devices outside of the system.

Examples

- telnet 192.0.2.10
- telnet -override mydevice

---

test config

Test policy compliance for a device configuration script.

Synopsis

test config -family <Device Family> -script <Configuration Script> [-policy <Policy Name>] [-group <Device Group>]

Description

This command is used to verify whether a configuration script is in compliance with applicable policies.

- -family - The device family for the configuration script to be tested("Cisco IOS", F5, etc.)
- -script - The configuration script to be tested.
- -policy - The name of the policy for which the script will be test against.
- -group - Specify a device group name. The test will be performed against the policies that are applicable to the group. If both -policy and -group are used, -group argument will be ignored.If none of -policy and -group is used, test will be performed against all applicable policies.

Examples

- test config -family "Cisco IOS" -script "version 12.1 ...."
- * Note this command is intended for API use since it is difficult to input the entire configuration script in the command line.

---

test software

Test software compliance for a device or device group.

Synopsis

test software [-ip <IP Address>] [-group <Device Group>]

Description

- -ip - The IP address of a single device to test.
- -group - A device group containing multiple devices to test.

Examples

- test software -ip 192.0.2.10
- test software -group CoreRouters

traceroute

Run a traceroute command on a device.

Synopsis

traceroute -source <IP address | Hostname | Fully Qualified Domain Name> -sourcegroup <Group name> -dest <List of devices> -rep <Task repeat period> -async -start <task start date>

Description

Causes a series of traceroute commands to be executed on a device. One traceroute command is executed for each target host specified. This series of commands may by run on the device immediately, or scheduled to run sometime in the future. Via this command, the task scheduled can be set to repeat periodically. Note that if not scheduled as a task, this command may take some time to complete.

- -source - Can be an IP address (a.b.c.d where 0 <= a,b,c,d <= 255), or a valid hostname, a valid Fully Qualified Domain Name.
- -sourcegroup - A valid group name. Exactly one of -source or -sourcegroup must be specified.
- -dest - A comma seperated list of devices. Devices may be specified in any way that is understood by the traceroute program on the device specified by the option "-source".
- -rep - (#min | #:# | #days | #weeks | #months) where # is a positive integer. #:# is hours:minutes, the two integers don't have to be the same. This option should not be used unless -async is also supplied.
- -async - Indicates that the traceroute operation should be scheduled on the system as a task. The start time for the task will be immediatly unless an alternate start data is provided by means of the -start option.
- -start - YYYY:MM:DD:HH:mm. The date on which the task will first be run. This option should not be used unless -async is also supplied.

Examples

- traceroute -source 192.0.2.10 -dest 192.0.2.10
- traceroute -source 192.0.2.10 -dest 192.0.2.10,192.0.2.10,192.0.2.10
- traceroute -source 192.0.2.10 -dest 192.0.2.10 -start 2004:02:29:23:59 -rep 2days
- traceroute -source 192.0.2.10 -dest 192.0.2.10 -async
- traceroute -sourcegroup mygroup -dest 192.0.2.10

undeploy image

undeploy software images from device

Synopsis

undeploy image -ip <device ip address> -images <images separated by ,> [-reboot <reboot instruction>] [-rebootwait <reboot wait (in seconds)>] [-filesystem <file system of device>] [-pretask <task to run before delete>] [-posttask <task to run after delete>]

Description

delete software images from device.

- -ip - ip address of the device the images will be deleted.
- -images - images to be deleted.
- -reboot - wheather to reboot the device after deleting images.
- -rebootwait - seconds to wait before reboot.
- -filesystem - name of filesystem of the device the images will be deleted.
- -pretask - name of task before delete.
- -posttask - name of task after delete.

Examples

- undeploy image -ip 10.1.1.1 -images bar.bin,baz.bin -filesystem flash:
- undeploy image -ip 10.1.1.1 -images bar.bin,baz.bin -filesystem flash: -reboot -rebootwait 60
- undeploy image -ip 10.1.1.1 -images bar.bin,baz.bin -filesystem flash: -reboot -rebootwait 60 -posttask squeeze

---

update dynamic group

Update dynamic group's member devices.

Synopsis

update dynamic group -name <Group name>

Description

Recalculate a dynamic group's member devices based on the predefined criteria. This has no effect on a non-dynamic device group.

- -name - The group name for which the member devices will be updated

Examples

- update dynamic group -name "all device out of compliance"

---

version

Display the system version.

Synopsis

version

Description

Displays the system version build number.

Examples

- version