

# RUCKUS Edge Command Reference Guide, 2.2.0

**Supporting RUCKUS Edge Software Release 2.2.0**

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# Contact Information, Resources, and Conventions

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## Contacting RUCKUS Customer Services and Support

The Customer Services and Support (CSS) organization is available to provide assistance to customers with active warranties on their RUCKUS products, and to customers and partners with active support contracts.

For product support information and details on contacting the Support Team, go directly to the RUCKUS Support Portal using <https://support.ruckuswireless.com>, or go to <https://www.ruckusnetworks.com> and select **Support**.

### What Support Do I Need?

Technical issues are usually described in terms of priority (or severity). To determine if you need to call and open a case or access the self-service resources, use the following criteria:

- Priority 1 (P1)—Critical. Network or service is down and business is impacted. No known workaround. Go to the **Submit a Case** section.
- Priority 2 (P2)—High. Network or service is impacted, but not down. Business impact may be high. Workaround may be available. Go to the **Submit a Case** section.
- Priority 3 (P3)—Medium. Network or service is moderately impacted, but most business remains functional. Click the **CONTACT** tab at the top of the page and explore the **Self-Service Online Help** options.
- Priority 4 (P4)—Low. Requests for information, product documentation, or product enhancements. Click the **CONTACT** tab at the top of the page and explore the **Self-Service Online Help** options.

### Open a Case

When your entire network is down (P1), or severely impacted (P2), call the appropriate telephone number listed below to get help:

- Continental United States: 1-855-782-5871
- Canada: 1-855-782-5871
- Europe, Middle East, Africa, Central and South America, and Asia Pacific, toll-free numbers are available at <https://support.ruckuswireless.com/contact-us> and Live Chat is also available.
- Worldwide toll number for our support organization. Phone charges will apply: +1-650-265-0903

We suggest that you keep a physical note of the appropriate support number in case you have an entire network outage.

## Self-Service Resources

The RUCKUS Support Portal at <https://support.ruckuswireless.com> offers a number of tools to help you to research and resolve problems with your RUCKUS products, including:

- Technical Documentation—<https://support.ruckuswireless.com/documents>
- Community Forums—<https://community.ruckuswireless.com>
- Knowledge Base Articles—<https://support.ruckuswireless.com/answers>
- Software Downloads and Release Notes—[https://support.ruckuswireless.com/#products\\_grid](https://support.ruckuswireless.com/#products_grid)
- Security Bulletins—<https://support.ruckuswireless.com/security>

Using these resources will help you to resolve some issues, and will provide the Technical Assistance Center (TAC) with additional data from your troubleshooting analysis if you still require assistance through a support case or Return Merchandise Authorization (RMA). If you still require help, open and manage your case at [https://support.ruckuswireless.com/case\\_management](https://support.ruckuswireless.com/case_management).

## Document Feedback

RUCKUS is interested in improving its documentation and welcomes your comments and suggestions.

You can email your comments to RUCKUS at [#Ruckus-Docs@commscope.com](mailto:#Ruckus-Docs@commscope.com).

When contacting us, include the following information:

- Document title and release number
- Document part number (on the cover page)
- Page number (if appropriate)

For example:

- RUCKUS SmartZone Upgrade Guide, Release 5.0
- Part number: 800-71850-001 Rev A
- Page 7

## RUCKUS Product Documentation Resources

Visit the RUCKUS website to locate related documentation for your product and additional RUCKUS resources.

Release Notes and other user documentation are available at <https://support.ruckuswireless.com/documents>. You can locate the documentation by product or perform a text search. Access to Release Notes requires an active support contract and a RUCKUS Support Portal user account. Other technical documentation content is available without logging in to the RUCKUS Support Portal.

White papers, data sheets, and other product documentation are available at <https://www.ruckusnetworks.com>.

## Online Training Resources

To access a variety of online RUCKUS training modules, including free introductory courses to wireless networking essentials, site surveys, and products, visit the RUCKUS Training Portal at <https://commscopeuniversity.myabsorb.com/>. The registration is a two-step process described in this [video](#). Create a CommScope account and then register for, and request access for, CommScope University.



# Document Conventions

The following table lists the text conventions that are used throughout this guide.

**TABLE 1** Text Conventions

Convention	Description	Example
monospace	Identifies command syntax examples	<code>device(config)# interface ethernet 1/1/6</code>
<b>bold</b>	User interface (UI) components such as screen or page names, keyboard keys, software buttons, and field names	On the <b>Start</b> menu, click <b>All Programs</b> .
<i>italics</i>	Publication titles	Refer to the <i>RUCKUS Small Cell Release Notes</i> for more information.

## Notes, Cautions, and Safety Warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the order of increasing severity of potential hazards.

### NOTE

A NOTE provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

### ATTENTION

An ATTENTION statement indicates some information that you must read before continuing with the current action or task.



### CAUTION

A CAUTION statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.



### DANGER

A DANGER statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

## Command Syntax Conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
<b>bold text</b>	Identifies command names, keywords, and command options.
<i>italic text</i>	Identifies a variable.
[ ]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{x  y  z}	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <i>member[member...]</i> .
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.



# About This Guide

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## Introduction

This *RUCKUS Edge Command Reference Guide* contains the syntaxes and commands for configuring and managing RUCKUS Edge (collectively referred to as “the device” throughout this guide) from the command line interface.

This guide is written for service operators and system administrators who are responsible for managing, configuring, and troubleshooting RUCKUS devices. Consequently, it assumes a basic working knowledge of local area networks, wireless networking, and wireless devices.

### NOTE

If release notes are shipped with your product and the information there differs from the information in this guide, follow the instructions in the release notes.

Most user guides and release notes are available in Adobe Acrobat Reader Portable Document Format (PDF) or HTML on the support site at <https://support.ruckuswireless.com/contact-us>



# Using the RUCKUS Edge Command Line Interface

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## Accessing the CLI

You can access the Command Line Interface (CLI) through a direct serial connection, which involves connecting your computer directly to the device using a serial cable. Alternatively, you can initiate a remote SSH connection, which allows you to securely connect to the device over a network, providing greater flexibility and convenience, especially when managing devices that are not physically accessible.

## Command Mode

The RUCKUS Edge Command Line Interface (CLI) is designed as a hierarchical, shell-like interface that facilitates user interaction with the system. It operates in two distinct modes: basic and advanced. The basic mode offers a simplified access level, suitable for general users who need to perform routine tasks without delving into complex configurations. On the other hand, the advanced mode provides a more comprehensive access level, allowing experienced users and administrators to interact with the system and software submodules in greater depth, enabling detailed configuration and troubleshooting capabilities.

## Basic Mode

Basic mode is the default mode for the device. It supports the lowest level of user permissions. In this mode, you can execute basic commands such as `show` and `support-*`. The following example shows the basic mode after login. The `enable` command enters advanced mode.

```
Edge> enable
Edge#
```

## Advanced Mode

Advanced mode supports more commands for system operations and accessing software submodules. The following example shows the advanced mode prompt and accessing the `system` software submodule

```
Edge# system
(system) #
```

## Generic Command Options

Across the RUCKUS Edge devices there are few command options that have the same or similar functionality.

To avoid repetition and to keep the command syntax looking less complex, generic command options are introduced. These options appear under the **help** on the console for many commands in various modes.

The following table describes the generic command options.

**TABLE 2** Generic Command Options

Command Option	Description	Mode
<b>enable</b>	Enters advance CLI mode.	Basic mode
<b>enroll-device</b>	Enrolls device.	Basic mode
<b>exit</b>	Exits the RUCKUS Edge host CLI	Basic mode
<b>show</b>	Displays all the show commands associated with the mode	Basic mode
<b>help</b>	Displays the help text for the current command.	Basic mode

## Command Help

You can display command information in any mode with the **help** command.

```
Edge> help
Edge Command Line Interface

Available Commands:
  enable      Enter advanced CLI mode
  exit        Exit the Edge host CLI
  help        Help about any command
  set         Set
  show        Show
  support-core Collect core-dump related info
  support-export Export debug related info
  support-log Collect debug log related info
Edge# help show
Show

Available Commands:
  internal-network Show current internal network settings
  license          Show license information
  manager          Manager
  serial           Show serial number
  version          Show OS version
Edge# help show serial
Show serial number

Available Commands:
  qrcode      Show serial number QR code
Edge# help show serial qrcode
Show serial number QR code
```

## Command Completion

Command completion allows you to run a command by entering a partial string. To automatically complete commands or keywords, start typing and then press **Tab**. For example, in advanced mode, type `sh` and press **<TAB>** once; the CLI completes it to `show`. Press **<TAB>** twice; the CLI completes it to `shutdown`. Press **<TAB>** three times; the CLI returns to `sh`.

```
Edge# sh<TAB>
Edge# show

Edge# sh<TAB><TAB>
Edge# shutdown

Edge# sh<TAB><TAB><TAB>
Edge# sh
```

The command completion iteratively provides available subcommands by pressing the **<TAB>** key. For example, in advanced mode, type `show` followed by a space and press **<TAB>** once. A subcommand, `internal-network`, is automatically appended. Press **<TAB>** again, and the subcommand is replaced by `license`. If you continue this process, the available subcommands of `show` will be iteratively appended to the end of the `show` command.

```
Edge# show <TAB>
Edge# show internal-network<TAB>
Edge# show license<TAB>
Edge# show manager<TAB>
Edge# show serial<TAB>
Edge# show version<TAB>
Edge# show
```

Utilizing command completion can significantly enhance the efficiency and accuracy of command execution within the RUCKUS Edge CLI.

```
Edge# sh<TAB>
Edge# show m<TAB>
Edge# show manager s<TAB>
Edge# show manager status
```





# Commands C and D

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- [cluster..... 19](#)
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- [create lag..... 21](#)
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## cfgmgr

Configures devices and displays status.

### Syntax

**cfgmgr**

### Command Default

### Modes

Advanced mode

### Usage Guidelines

Use this command to enter the Config Manager mode from the Advanced mode. After entering the Config Manager mode, you can manage log configurations such as CCM log and syslog levels for the configuration manager and view configuration status and history.

## Commands C and D

### cfgmgr

## Examples

The following example shows how to enter the Configuration Manager mode to manage log configurations and view configuration status and history.

```
Edge# cfgmgr

(cfgmgr)# help
CLI - Config Manager configuration and status.

Usage:
  (cfgmgr)# [command]

Available Commands:
  exit      Exit the system mode.
  help     Help about any command
  set      set configuration
  show     Show information

Flags:
  -h, --help  help for (cfgmgr)#

Use "(cfgmgr)# [command] --help" for more information about a command.
```

## History

Release version	Command history
1.0.0	This command was introduced.

# cluster

Provides access to cluster mode for managing the cluster and viewing its status, including operational data and system health.

## Syntax

**cluster**

## Command Default

Cluster is not configured.

## Modes

Advanced mode

## Usage Guidelines

Use this command to enter the Cluster mode from the Advanced mode. After entering the Cluster mode, you can view operational data, system status, and initiate a switch-over between active and standby nodes.

## Examples

The following example shows how to enter the Cluster mode to initiate a switch-over between active and standby nodes and check the status of a device's cluster.

```
Edge# cluster
(cluster)# --help
  CLI - Cluster Management

Available Commands:
  exit          Exit the system mode.
  help         Help about any command
  show         Show information
  switch-over  Initiates a switch-over if the current node is Active
```

## History

Release version	Command history
1.0.0	This command was introduced.

# connect-agent

This command is used for check the connection status between the RUCKUS Edge device and RUCKUS One.

## Syntax

**connect-agent**

## Command Default

## Modes

Advanced mode

## Command Output

The **connect-agent** command displays the following information.

Output field	Description
exit	Exits the system mode.
help	Provides further built-in commands.
set	Provides connection settings.
show	Displays information about current configuration of the command.

## Usage Guidelines

Use this command to enter the Connect Agent mode from the Advanced mode. After entering the Connect Agent mode, you can check and manage the onboarding status of your RUCKUS Edge device.

## Examples

```
Edge# connect-agent
(connect-agent)# help
CLI - Connection status and settings.
```

```
Available Commands:
  exit      Exit the system mode.
  help      Help about any command
  set       Connection setting
  show      Show information
```

## History

Release version	Command history
1.0.0	This command was introduced.

## create lag

Creates a Link Aggregation Group (LAG) by specifying a unique LAG ID.

### Syntax

```
create lag id [ static | dynamic ]
```

### Command Default

If the aggregation mode is not specified, dynamic LAG is created by default.

### Parameters

*id*

Specifies a unique identifier for the LAG. The value ranges from 0 through 4.

**static**

Configures a static LAG, where interfaces are manually aggregated without using the Link Aggregation Control Protocol (LACP).

**dynamic**

Configures a dynamic LAG, which uses the Link Aggregation Control Protocol (LACP) to automatically aggregate interfaces.

### Modes

Network mode

### Usage Guidelines

Each LAG interface requires at least one physical interface as a member link. For more information on adding a member port, refer to [lag add](#) on page 29

### Examples

The following example configures a static LAG.

```
Edge# network
Network # create lag 2 static
```

The following example configures a dynamic LAG.

```
Edge# network
Network # create lag 3
```

### History

Release version	Command history
1.0.0	This command was introduced.

## delete lag

Deletes a Link Aggregation Group (LAG).

### Syntax

```
delete lag id
```

### Parameters

*id*

Specifies the unique identifier of the LAG, used to target the specific LAG instance that needs to be deleted.

### Command Default

A LAG is created.

### Modes

Network mode

### Usage Guidelines

### Examples

The following example deletes an existing LAG.

```
Edge# network  
Network # delete lag 2
```

### History

Release version	Command history
1.0.0	This command was introduced.

# dump-db

Dumps the Feature Flag (FF) database and Configuration Database (CfgDB) contents into the logs.

## Syntax

`dump-db`

## Command Default

## Modes

FeatureFlag mode

## Usage Guidelines

Use this command to generate log entries containing the database information, which can then be reviewed to verify system configurations or identify issues.

## Examples

The following example dumps the contents of both the Feature Flag (FF) database and the Configuration Database (CfgDB) into the system logs.

```
Edge# featureflag
(feature-flag)# dump-db
Result: Successfully executed, Code: 0
```

## History

Release version	Command history
1.0.0	This command was introduced.





# Commands E through L

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## enroll-device

Enrolls new device to the platform.

### Syntax

**enroll-device**

### Modes

Basic mode

Advanced mode

### Usage Guidelines

After receiving an OTP from RUCKUS One via mobile application or an E-mail, use the command **enroll-device** <OTP> to enroll the device with RUCKUS One.

### Examples

```
Edge# enroll-device XEXGB8
accepts 1 arg(s), received 0
```

### History

Release version	Command history
1.0.0	This command was introduced.

## feature

Manages feature flags and allows you to enable, disable, or delete specific features.

### Syntax

```
feature --action [ enable | disable | delete ] --name feature-flag-name
```

### Parameters

**--action**

Specifies to perform the action on the feature flag.

**--enable**

Activates the specified feature flag.

**--disable**

Deactivates the specified feature flag.

**--delete**

Removes the feature flag from the system.

**--name** *feature-flag-name*

Specifies the name of the feature flag to manage. For example, `myfeature` represents the feature that will be targeted by the action.

### Modes

Feature Flag mode

### Usage Guidelines

### Examples

The following example enables feature flag named `myfeature`.

```
Edge# featureflag
(feature-flag)# feature --action enable --name myfeature
Result: The config tool manually triggered configuration successfully.
, Code: 200
```

### History

Release version	Command history
1.0.0	This command was introduced.

# featureflag

Manages Feature Flags (FF).

## Syntax

**featureflag**

## Command Default

FeatureFlag mode is not enabled.

## Modes

Advanced mode

## Usage Guidelines

Use this command to enter the Feature Flag mode from the Advanced mode. After entering the Feature Flag mode, you can enable, disable, or modify specific features and access commands to view feature flag statuses, manage feature flag settings, configure logging, and perform diagnostics.

## Commands E through L

### featureflag

## Examples

The following example shows how to enter the Feature Flag mode to manage specific features.

```
Edge# featureflag
(feature-flag)# help
CLI - Feature Flag configuration and status.

Usage:
  (feature-flag)# [command]

Available Commands:
  dump-db      Dump FF DB and CfgDB in the logs
  exit         Exit the system mode.
  feature      Feature Flag Management
  help         Help about any command
  logfile      Set Feature Flag log into a file
  loglevel     Set Feature Flag Module log level
  show         Display Feature Flag Information

Flags:
  -h, --help  help for (feature-flag)#

(feature-flag)# dump-db
Result: Successfully executed, Code: 0

(feature-flag)# feature
Error: required flag(s) "action", "name" not set
Usage:
  (feature-flag)# feature [flags]

Flags:
  -a, --action string  Possible values: enable, disable, delete
  -h, --help           help for feature
  -n, --name string    example: myfeature

(feature-flag)# logfile
Error: required flag(s) "file" not set
Usage:
  (feature-flag)# logfile [flags]

Flags:
  -f, --file string  Path with file name: eg - /tmp/ff.log
  -h, --help         help for logfile

(feature-flag)# loglevel
Error: required flag(s) "level" not set
Usage:
  (feature-flag)# loglevel [flags]

Flags:
  -h, --help           help for loglevel
  -l, --level string   Possible values: panic, fatal, error, warning, info, debug, trace
```

## History

Release version	Command history
1.0.0	This command was introduced.

## lag add

Adds a member port to an existing Link Aggregation Group (LAG).

### Syntax

```
lag add id member-port [ passive ] [ long-timeout ]
```

### Command Default

Ports are not added to the LAG by default.

### Parameters

*id*

Specifies the unique identifier of the LAG to which the member port will be added.

*member-port*

Specifies the port that will be added as a member of the LAG.

**passive**

Enables passive mode for LACP on the member port. In passive mode, the port only responds to LACP packets and does not initiate them, allowing the peer or partner device to control LACP negotiations.

**long-timeout**

Sets a longer timeout for LACP on the member port, which increases the amount of time between LACP packets to detect link failures. The value of this timeout is 90 seconds. Hello packets are transmitted every 30 second. After 3 misses (3\*30s = 90 seconds), the peer information is flushed and LACP state is declared as down.

### Modes

Network mode

### Usage Guidelines

Each LAG requires at least one physical interface as a member link.

A physical port can be part of only one LAG at any point of time.

The interfaces should be in the unconfigured state. It is recommended that the interfaces which are going to be part of the LAG should not have any prior configurations.

All the member interfaces of a LAG should be of the same speed. If the ports within a LAG is of different speeds after auto-negotiation, there is no check for the operational speed mismatch.

Non-PCI passthrough interfaces should not be configured as LAG member ports and are not a supported configuration. LAG is not supported with VMware® ESXi™ NIC teaming.

Modifying the LACP mode and timeout for an existing LAG can trigger LACP negotiation, potentially leading to traffic disruption.

## Commands E through L

lag add

## Examples

The following example adds a member port to an existing LAG.

```
Edge# network
Network # lag add 2 port1 passive
```

## History

Release version	Command history
1.0.0	This command was introduced.

# lag remove

Removes a member port from Link Aggregation Group (LAG).

## Syntax

**lag remove** *member-port*

## Command Default

Ports are not added to the LAG by default.

## Parameters

*member-port*

Specifies the port to be removed from LAG.

## Modes

Network mode

## Usage Guidelines

## Examples

The following example removes a member port from LAG.

```
Edge# network
Network # lag remove port1
```

## History

Release version	Command history
1.0.0	This command was introduced.

# logfile

Configures the file location where Feature Flag logs are stored.

## Syntax

**logfile** --file *file-path-name*

## Parameters

**--file** *file-path-name*

Specifies the full file path and name where the log file is stored.

## Modes

Feature Flag mode

## Usage Guidelines

## Examples

The following example set the log file path.

```
Edge# featureflag
(feature-flag)# logfile --file /tmp/ff.log
```

## History

Release version	Command history
1.0.0	This command was introduced.



# logging

Provides access to Log Manager CLI interface to configure logging settings and view the status of the logging system on the device.

## Syntax

**logging**

## Command Default

## Modes

Advanced mode

## Usage Guidelines

Use this command to enter the Logging mode from the Advanced mode. After entering the Logging mode, you can enable, disable, or modify specific features and access commands to adjust the log level, enable or disable log streaming, and view logging-related information for diagnostic and troubleshooting purposes.

## Examples

The following example shows how to enter the Logging mode to configure logging settings and view the status of the logging system on the device.

```
Edge# logging
(logging)# help
CLI - Logging configuration and status.
Usage:
  (logging)# [command]

Available Commands:
  exit          Exit the system mode.
  help          Help about any command
  log-level     Set log level
  log-streaming Enable/Disable log streaming
  show          Display logging related Information
```

## History

Release version	Command history
1.0.0	This command was introduced.

# loglevel

Sets the logging level for the Feature Flag (FF).

## Syntax

```
loglevel --level log-level
```

## Parameters

**--level**

Specifies the log level. The level determines the severity of messages that are logged.

*log-level*

Specifies the severity of messages that are logged, with one of the following values: **fatal**, **error**, **warning**, **info**, **debug**, and **trace**

## Modes

Feature Flag mode

## Usage Guidelines

## Examples

The following example sets the log level to `info`.

```
Edge# featureflag  
(feature-flag)# loglevel --level info
```

The following example sets the log level to `debug`.

```
Edge# featureflag  
(feature-flag)# loglevel --level debug
```

## History

Release version	Command history
1.0.0	This command was introduced.

# log-streaming

Manages streaming of logs to RUCKUS One.

## Syntax

**log-streaming** [ flags ]

**log-streaming** --action { enable | disable } --duration *duration in minutes* --pod *pod-name* --pod *pod-name*

## Parameters

### flags

Refers to the parameters that enables streaming of logs to RUCKUS One.

## Modes

Logging mode

## Usage Guidelines

The flags allow you to specify options to configure streaming of logs to RUCKUS One.

- --action (or -a): Specifies the action to perform for log streaming. The possible values are:
  - **enable**: Activates log streaming to RUCKUS One.
  - **disable**: Stops log streaming.
- --duration (or -d): Defines the duration in minutes for which log streaming should be enabled. The value ranges from 1 through 30 minutes.
- --pod (or -p): Specifies the pod from which logs will be streamed. Multiple pods can be specified using this flag.
- --help (or -h): Displays help information for the **log-streaming** command.

## Examples

The following example enables log streaming for 10 minutes from the pods `seinfra-events` and `nats-0`.

```
Edge# logging
(logging)# log-streaming --action enable --duration 10 --pod seinfra-events --pod nats-0
```

## History

Release version	Command history
1.0.0	This command was introduced.



# Commands N and P

---

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## network

Enters the network configuration mode, providing access to perform network-related configurations and diagnostic operations.

### Syntax

**network**

### Command Default

The network mode is not enabled.

### Modes

Advanced mode

### Usage Guidelines

Use this command to enter the Network mode from the Advanced mode. After entering the Network mode, you can configure network interfaces, manage link aggregation (LAG), run diagnostics (for example, ping, traceroute, and nslookup), capture network traffic, and view or modify advanced network settings like DHCP, DNS, and VXLAN configurations.

## Commands N and P

### network

## Examples

The following example shows how to enter the Network mode from the Advanced mode.

```
Edge> enable
Password:
Edge# network
Network # help
Avaliable Command:
?
clear vxlan-gpe tunnel keepalive session statistics
create lag
delete lag
exit
help
lag add
lag remove
nslookup
packet-capture filter
packet-capture save
packet-capture start
packet-capture status
packet-capture stop
ping
set default gateway
set dns server
set interface ip address
set interface state
set log level
show default gateway
show dhcp client
show dns server
show hqos bw profile
show hqos interface
show hqos queue
show interface address
show lacp
show lag
show log level
show peer-tunnel
show pin-info
show pin-pan
show route
show sdlan config
show sdlan counters
show sdlan info
show sdlan peer
show sdlan summary
show tunnel profile
show version
show vxlan config
show vxlan dstats
show vxlan pmtu table
show vxlan tunnel
show vxlan tunnel profile
show vxlan-gpe config
show vxlan-gpe dstats
show vxlan-gpe pmtu table
show vxlan-gpe tunnel
show vxlan-gpe tunnel keepalive session
start dhcp client
stop dhcp client
traceroute
For Detail Information: [command] help
e.g. set interface help
```

## History

Release version	Command history
1.0.0	This command was introduced.

## nslookup

Performs a lookup on the domain name system (DNS) for the domain name.

### Syntax

```
nslookup domain
```

### Parameters

**domain**

Specifies the domain name.

### Modes

Network configuration mode

### Usage Guidelines

TBD

### Examples

The following example performs a lookup on the DNS for the domain name, ruckus.com.

```
Edge# network
Network# nslookup ruckus.com
[199.83.134.46 192.230.66.46]
```

### History

Release version	Command history
1.0.0	This command was introduced.



# packet-capture filter

Configures packet capture filters on the network device.

## Syntax

```
packet-capture filter [list_rule ] [ clean ] [ vlan vlan ] [src_mac mac] [dst_mac mac] [ src_ip ip ] [dst_port port ] [ L2_proto proto]  
[L3_proto proto ]
```

## Command Default

Packet capture filter is not configured.

## Parameters

### list\_rule

Lists the existing packet capture filters.

### clean

Clears all existing packet capture filters

### vlan *vlan*

Specifies the VLAN ID to match.

### src\_mac *mac*

Specifies the source MAC address to match.

### src\_ip *ip*

Specifies the source MAC address to match. The MAC address must be specified in the MAC format: AA:BB:CC:DD:EE:FF format.

### dst\_port *port*

Specifies the destination MAC address to match. The MAC address must be specified in the MAC format: AA:BB:CC:DD:EE:FF format.

### L2\_proto *proto*

Specifies the Layer 2 protocol Address Resolution Protocol (ARP) to match.

### L3\_proto *proto*

Specifies the Layer 3 protocols such as ICMP, IGMP, TCP , or UDP to match.

## Modes

Network configuration mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Commands N and P

packet-capture filter

## Examples

The following example configures the packet-capture filter.

```
Edge# network
Network# packet-capture filter src_ip 1.1.1.1 dst_ip 2.2.2.2
Packet capture filter rule applies success
Network# packet-capture filter vlan 100
Packet capture filter rule applies success
```

## History

Release version	Command history
1.0.0	This command was introduced.

## packet-capture save

Downloads the packet capture (.pcap) file using TFTP or FTP.

### Syntax

```
packet capture save [sftp | ftp server_ip username password server_path
```

### Parameters

- tx**  
Captures transmitted packets.
- rx**  
Captures received packets.
- drop**  
Captures dropped packets
- sftp**  
Specifies the Secure File Transfer Protocol (SFTP) to use for transferring the file.
- ftp**  
Specifies the File Transfer Protocol (FTP) to use for transferring the file.
- server\_ip*  
Specifies the IPv4 address of the SCP server or the TFTP server.
- username*  
Specifies the username to authenticate with the remote server.
- password*  
Specifies the password associated with the username.
- server\_path*  
Specifies the path on the remote server where to save the .pcap file.

### Modes

Network configuration mode

### Usage Guidelines

### Examples

The following example downloads the .pcap file from RUCKUS Edge using SFTP.

```
Network# packet-capture save sftp 10.206.82.63 username password /upload  
Captured file found, start sftp upload..  
packet-capture.pcap      | 1653 kB | 1653.2 kB/s | ETA: 00:00:00 | 100%
```

**Commands N and P**  
packet-capture save

## History

Release version	Command history
1.0.0	This command was introduced.

## packet-capture start

Starts capturing packet data into a buffer.

### Syntax

```
packet-capture start [ tx ] [ rx ] [ drop ] [ max num_of_captured_packet | 1-50000 ] [ interface interface ]
```

### Parameters

**max num\_of\_captured\_packet** | 1-50000

Specifies the maximum number of packets to capture. The valid range is 1 through 50000 packets.

**interface** *interface*

Specifies the username to authenticate with the remote server.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example stops capturing packet data into a buffer.

```
Network# packet-capture start  
Your packet capture is running in filter mode  
Packet capture start...
```

### History

Release version	Command history
1.0.0	This command was introduced.

## packet-capture status

Displays the status of the packet capture feature.

### Syntax

`packet-capture status`

### Command Default

The packet capture feature is not active.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example displays the status of the packet-capture feature.

```
Network# packet-capture status  
Capture enabled: 2410 of 50000 pkts...
```

### History

Release version	Command history
1.0.0	This command was introduced.

## packet-capture stop

Stops capturing packet data into a buffer.

### Syntax

**packet-capture stop**

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example stops capturing packet data into a buffer.

```
Network# packet-capture stop  
Write 3736 packets to packet-capture.pcap, and stop capture...
```

### History

Release version	Command history
1.0.0	This command was introduced.

# ping

Checks reachability of the device to the Internet or network manager such as RUCKUS One.

## Syntax

**ping** {*ip-address* | *domain*} [**source** *interface*] [**size** *datasize*] [**repeat** *count*] [**verbose**]

## Parameters

*ip-address*

Specifies the IPv4 address.

*domain*

Specifies the domain name.

**source** *interface*

Specifies the source interface be used as the origin of the ping packets.

**size** *datasize*

Specifies the data size of the packet. The valid range is from 18 through 1500.

**repeat** *count*

Specifies the number of ping packets to sends.

**verbose**

Enables verbose output, which includes the time it took for each ping packet to be sent and received, and the packet loss percentage.

## Modes

Network configuration mode

## Usage Guidelines

## Examples

The following example checks if the device is accessible on the network.

```
Edge# network
Network# ping 192.168.1.1
Sending 1, 16-byte ICMP Echo to 192.168.1.1, timeout 5000 msec, TTL 64
Type Control-c to abort
Reply from 192.168.1.1 : bytes=16 time=2ms TTL=64
Success rate is 100 percent (1/1), round-trip min/avg/max=2/2/2 ms.
```

## History

Release version	Command history
1.0.0	This command was introduced.



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## reboot

Reboot the system.

### Syntax

**reboot**

### Modes

Advanced mode

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

### Examples

```
Edge-VM-1-867# reboot  
Proceeding reboot to recover the device (yes/N)?
```

### History

Release version	Command history
1.0.0	This command was introduced.

## rproxy

Displays rproxy information.

### Syntax

**rproxy**

### Modes

Advanced mode

The following example shows sample output for the **rproxy** command.

### Examples

```
Edge# rproxy
I0825 10:43:05.398815
9 command.go:51] "Print basic info about the application" version="unknown"
goVersion="go1.20.5" gitCommit="4122175147e2f4e1e73fe64d4d4631a41a867c9c"
buildTime="2023-06-28T06:10:41+0000" compiler="gc" os="linux" arch="amd64" cores=2
2023/08/25 10:43:05 error: Config File "config" Not Found in "[/app]"
I0825 10:43:05.399301
9 main.go:29] "config ready" log-level=""
```

### History

Release version	Command history
1.0.0	This command was introduced.

# set resource-manager configuration

Sets the resource manager configuration.

## Syntax

```
set resource-manager configuration {data-plane cpu cpu-num | default}
```

## Command Default

Resource manager configuration is not set.

## Parameters

**data-plane cpu *cpu-num***

Configures the CPU settings for the dataplane of the device.

**default**

Sets resource-manager all resource back to default configuration.

## Modes

Resource manager configuration mode

## Usage Guidelines

This command is supported only on RUCKUS Edge.

## Examples

The following example configures the dataplane CPU.

```
Network# resource-manager
(resource-manager)# set data-plane cpu configuration
Setting these configurations might cause network disconnection. Do you want to proceed?
(y/N)
```

## History

Release version	Command history
1.0.0	This command was introduced.

Commands R through Se  
show resource-manager information

# show resource-manager information

Displays the current resource manager configuration.

## Syntax

**show resource-manager information resource-config**

## Parameters

**resource-config**

Specified the current resource-manager configuration.

## Modes

Resource manager configuration mode

## Usage Guidelines

This command is supported only on RUCKUS Edge.

## Examples

The following example resets the all configuration of the device.

```
Network# resource-manager
(resource-manager)# show resource-manager information resource-config
Resource Info:
=====
Node Resources:
  Node Allocatable CPU: 2000m
  Node Unallocated CPU: 0m

Configured Resources:
  System CPU resource: 750m
  Data-Plane CPU resource: 1250m

Applied Resources:
  Application Name: System
  Utilized CPU: 750m
  Attached with CPU ID: 0
  Application Name: Data-Plane
  Utilized CPU: 1250m
  Control plane CPU resource: 250m
  Data plane CPU resource: 1000m
  Attached with CPU IDs: 1,11

(CPU resource type is in unit m: millicore)
```

## History

Release version	Command history
1.0.0	This command was introduced.

## reset

Resets the configuration.

## Syntax

**reset**

[**configuration** | **golden**]

## Modes

Advanced mode

**configuration**

Resets device configuration.

**golden**

Resets device to golden version.

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

```
Edge# reset
Reset
```

```
Available Commands:
  configuration  Reset device configuration
  golden         Reset device to golden version
```

```
Edge# reset configuration
? Warning: Resetting the system configuration will erase all current settings and cannot be recovered.
This action may cause system instability or data loss.
Are you absolutely sure you want to proceed with resetting the configuration and rebooting?
Note that this operation will automatically reboot the system on success.
(reset/N)
reset/N
Command execution cancelled.
```

```
Edge# reset golden
? Warning: The system will load golden default version. All configurations and data will be erased.
This action may cause system instability or data loss.
Are you sure you want to proceed with resetting the system to golden default and rebooting?
Note that this operation will automatically reboot the system on success.
(reset/N)
reset/N
Command execution cancelled.
```

## History

Release version	Command history
1.0.0	This command was introduced.

## set cfgmgr

Configures the config manager setting to manage log configurations such as CCM log and syslog levels.

### Syntax

```
set cfgmgr [ ccmlog value | syslog ]
```

### Command Default

### Parameters

#### ccmlog value

Enables or disables the CCM log, where the *value* specifies the action.

- **1:** Enables CCM log.
- **0:** Disables CCM log.

#### syslog

Sets the syslog log level for the configuration manager.

### Modes

Config Manager mode

### Usage Guidelines

### Examples

The following example enables CCM log.

```
Edge# cfgmgr  
(cfgmgr) # set cfgmgr ccmlog 1
```

The following example enables syslog.

```
Edge# cfgmgr  
(cfgmgr) # set cfgmgr syslog
```

### History

Release version	Command history
1.0.0	This command was introduced.

## set dns server

Configures or deletes the Domain Name System (DNS) server on RUCKUS Edge.

### Syntax

**set dns server** [**del**] *ipv4-address*

### Command Default

The DNS server is not configured.

### Parameters

**del**

Deletes the specified DNS server from the list of configured servers.

*ipv4-address*

Specifies the IPv4 address of the DNS server you want to add or delete.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example configures the IP address of the DNS server.

```
Network# set dns server 192.95.1.1
```

This example deletes the IP address of the DNS server.

```
Network# set dns server del 192.95.1.1
```

### History

Release version	Command history
1.0.0	This command was introduced.

## set default gateway

Configures the default gateway for your device.

### Syntax

```
set default gateway [del] dst ipv4-address
```

### Command Default

The default gateway is not configured.

### Parameters

**del**

Deletes the specified default gateway.

*dst ipv4-address*

Specifies the destination IPv4 address of the default gateway.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example configures the default gateway with the IP address 192.168.1.1.

```
Edge# network
Network# set default gateway 192.168.1.1
```

This example deletes the default gateway with the IP address 192.168.1.1.

```
Edge# network
Network# set default gateway del 192.168.1.1
```

### History

Release version	Command history
1.0.0	This command was introduced.



## set drs-address

Sets the RUCKUS Edge device to onboard the RUCKUS One controller.

### Syntax

**set drs-address** *drs-address*

### Command Default

### Parameters

*drs-address*

Specifies the drs address.

### Modes

Connect Agent mode

### Command Output

The **set drs-address** command displays the following information.

Output field	Description
Set DRS address	Onboards the Edge device to the RUCKUS One controller.

### Usage Guidelines

Use this command to Onboard the Edge device to the RUCKUS One controller from the Connect Agent mode.

### Examples

```
Edge# connect-agent
(connect-agent)# set drs-address drsqa.ruckuswireless.com
Set DRS address (drsqa.ruckuswireless.com) successfully.
```

### History

Release version	Command history
1.0.0	This command was introduced.

## set interface IP address

Configures the IP address settings for the interface.

### Syntax

```
set interface ip address [del] ipv4-address/mask gateway
```

### Command Default

The interface IP is not configured

### Parameters

**del**

Deletes the specified IPv4 address.

*ipv4-address/mask*

Specifies the IPv4 address and subnet mask for the interface.

*gateway*

Specifies the default gateway address.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example configures the IP address settings for the interface.

```
Edge# network  
Network# set interface ip address port1 192.168.1.100/24 192.168.1.1
```

### History

Release version	Command history
1.0.0	This command was introduced.

## set interface state

Configures the operational state of an interface to up or down.

### Syntax

```
set interface state interface{up | down}
```

### Command Default

The interface state is not configured.

### Parameters

*interface*

Specifies the interface.

**up**

Enables the interface.

**down**

Disables the interface.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example configures the operational state of the interface, port1 to up.

```
Edge# network
Network# set interface state port1 up
```

### History

Release version	Command history
1.0.0	This command was introduced.

## set internal-network

To set the internal network.

### Syntax

```
set internal-network ipv4-network
```

### Parameters

*ipv4 network*  
Specify the internal IPv4 address.

### Modes

Basic mode  
Advanced mode

### Usage Guidelines

If the RUCKUS Edge deployment environment and the RUCKUS Edge device use the same network, you can use the **set internal-network** command to change the internal services network, which helps to prevent conflicts. The command will automatically set the device internal network to subnet /16 network. It is important to make this change before enrolling the device with RUCKUS One.

The following example shows sample output for the **set internal-network** command.

### Examples

```
Edge# set internal-network 10.128.0.0
Warning: Set internal network will erase all current settings and reboot the device.
The operation will set the device internal network to be 10.128.0.0/16.
Are you sure that you want to proceed with the setting and rebooting the device?
(yes/N)
```

After restarting the system, use the **show internal-network** command to verify if the changes have been applied.

```
Edge# show internal-network
Internal Network: 10.128.0.0/16
```

### History

Release version	Command history
1.0.0	This command was introduced.

# Show Commands

---

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• show vxlan tunnel.....	124
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## Show Commands

show

# show

Displays the system information.

## Syntax

```
show [ internal-network ip-address | license | manager status | serial | version ]
```

## Modes

Basic mode

Advanced mode

### **internal-network**

Retrieves the current internal network setting.

*ip-address*

Specify the IP address.

### **license**

Displays the license information.

### **manager status**

Displays the connection status.

### **serial**

Displays the serial number.

### **version**

Displays the version number of the operating system.

## Modes

Basic mode

Advanced mode

## Usage Guidelines

The following example shows sample output for the **show manager status** command.

## Examples

```
Edge# show manager status
===== network =====
port1 (LAN/up): 00:0c:29:48:85:71 10.12.13.17/24
port2 (LAN/up): 00:0c:29:48:85:7b 10.12.15.17/24
port3 (WAN/up): 00:0c:29:48:85:85 10.176.154.17/25
Default Gateway: 10.176.154.1
DNS Server: 8.8.8.8

===== connect-agent =====
----- RUCKUS One information -----
Edge is not managed by RUCKUS One
Connection agent state:  SETUP
Status:  RUCKUS Edge cannot get controller list.
Please check your RUCKUS Edge entry setting.
Nats Leaf status: OFFLINE
Server List:
DRS default URL:  registrar.ruckuswireless.com
-----
```

The following example shows sample output for the **show serial** command.

```
Edge# show serial
Device Serial: 964ACA206E07F411EF84A0000C29488571
```

The following example shows sample output for the **show internal-network** command.

```
Edge# show internal-network
Internal Network: 10.128.0.0/16
```

## History

Release version	Command history
1.0.0	This command was introduced.

## Show Commands

show (cluster)

# show (cluster)

Displays information about the cluster, including operational data and system status.

## Syntax

```
show [ oper-data | status ]
```

## Parameters

### oper-data

Displays operational database information for debugging purposes.

### status

Displays the current status of the cluster, including whether the system is in active or standby mode.

## Modes

Cluster mode

## Examples

The following example shows status in active node.

```
Edge-VM-1-867# cluster
(cluster)# show status
2024-04-03T20:33:43Z:cmutils.WaitForGenResp> >Received from server:
96B4F3C397EB9E11EE82F6083571EAA26C:Reply:
===== Configuration =====
Node: Serial: 96B4F3C397EB9E11EE82F6083 IP: 11.0.0.0
Node: Serial: 962D1D2A56EB9E11EE88E0083 IP: 11.0.0.0
Cluster Name: R-Cluster Cluster Id: 82d2e70f-ffe2-4d1d-a772-88cc4f0b ClusterMode :
CM_MODE_ACTIVE_BACKUP

===== Operational Status =====
My Serial No: 96B4F3C397EB9E11EE82F6083571E
Role: Active RoleUpdTime: 2024-04-03T20:18:19Z
Cluster Details:
  Name: R-Cluster
  Id: 82d2e70f-ffe2-4d1d-a772-88cc45
  Mode: CM_MODE_ACTIVE_BACKUP
FSM Previous/Current: state 6/7 DataPlaneStart/StateReady event 17/1 EventFSMAudit/EventTimer
FSM VRRP Status Received: vrrp_status:<instance_id:246 vrrp_role:VRRP_ROLE_MASTER > Acted:
vrrp_status:<instance_id:246 vrrp_role:VRRP_ROLE_MASTER >
Neighbor 1
  SN: 962D1D2A56EB9E11EE88E008 IP:11.0.0.0 Port: 3008 role: Backup state: 7/StateReady
  Rx Role Upd Time: 0001-01-01T00:00:00Z Role Upd Time: 2024-04-03T20:26:49Z State Upd Time:
2024-04-03T20:28:13Z
  cpu: 0 RAM:0 TxConn: 3 RxConn: 1 Connection Status:Connected
```



This example displays output of the **show oper-data** command

```
cluster)# show oper-data
Dumping Operational status data...
EdgeClusterMgrOper: {CM_STATUS_DP_HA_START 2 {} [] 0}
EdgeClusterMgrDPCmds: {CM_VRRP_CMD_START {} [] 0}
EdgeHAMgrVRRPOper: {[instance_id:14 vrrp_role:VRRP_ROLE_MASTER ] {} [] 0}
(cluster)#

(cluster)# show oper-data
Dumping Operational status data...
EdgeClusterMgrOper: {CM_STATUS_DP_HA_START 2 {} [] 0}
EdgeClusterMgrDPCmds: {CM_VRRP_CMD_START {} [] 0}
EdgeHAMgrVRRPOper: {[instance_id:14 vrrp_role:VRRP_ROLE_MASTER ] {} [] 0}
(cluster)#
```

## History

Release version	Command history
1.0.0	This command was introduced.

## Show Commands

show config-result-history

# show config-result-history

Displays the configuration history for each applied GPB.

## Syntax

```
show config-result-history
```

## Modes

Config Manager mode

## Examples

The following example shows sample output for the **show config-result-history** command.

```
Edge-VM-1-867# cfgmgr
(cfgmgr)# show config-result-history
The Latest History Result
===== The Final Result: =====
===== The Final Result: Success =====
TimeStamp: Mon-Aug-26-2024-16:00:04
Request Id: 9da07715-608f-4e12-80b7-704c8c69
GPB Name: Edge
GPB Result: Success

TimeStamp: Mon-Aug-26-2024-16:00:04
Request Id: 9da07715-608f-4e12-80b7-704c8c69
GPB Name: EdgeClusterConfig
GPB Result: Success

TimeStamp: Mon-Aug-26-2024-16:00:05
Request Id: 9da07715-608f-4e12-80b7-704c8c69
GPB Name: Wlan
GPB Result: Success

TimeStamp: Mon-Aug-26-2024-16:00:05
Request Id: 9da07715-608f-4e12-80b7-704c8c69fa48
GPB Name: Zone
GPB Result: Success

===== The Final Result: Success =====
TimeStamp: Thu-Aug-22-2024-11:59:15
Request Id: 9da07715-608f-4e12-80b7-704c8c69
GPB Name: Edge
GPB Result: Fail
Failed Feature Name: None
Failed Feature Attribute: None
Failed Feature Attribute Value: 0
Failed Reason: nosuchfieldforkey'applying_gpb:Edge'field'Edge_964ACA206E07F411EF84A0000C'

TimeStamp: Thu-Aug-22-2024-11:59:15
Request Id: 9da07715-608f-4e12-80b7-704c8c69
GPB Name: EdgeClusterConfig
GPB Result: Success

TimeStamp: Thu-Aug-22-2024-11:59:15
Request Id: 9da07715-608f-4e12-80b7-704c8c69
GPB Name: Wlan
GPB Result: Success

TimeStamp: Thu-Aug-22-2024-11:59:15
Request Id: 9da07715-608f-4e12-80b7-704c8c69fa48
GPB Name: EdgeApps
GPB Result: Success

TimeStamp: Thu-Aug-22-2024-11:59:15
Request Id: 9da07715-608f-4e12-80b7-704c8c69fa48
GPB Name: EdgeDNS
GPB Result: Success

===== The Final Result: Success =====
TimeStamp: Wed-Aug-21-2024-19:31:53
Request Id: c8d71d5b-580f-453a-b414-0c7aca3
GPB Name: Wlan
GPB Result: Success

TimeStamp: Wed-Aug-21-2024-19:31:53
Request Id: c8d71d5b-580f-453a-b414-0c7a
GPB Name: Zone
GPB Result: Success

===== The Final Result: Success =====
```

## Show Commands

show config-result-history

TimeStamp: Sat-Aug-03-2024-15:47:41  
Request Id: 2167092e-39ca-46bc-b1df-019e20  
GPB Name: Wlan  
GPB Result: Success

## History

Release version	Command history
1.0.0	This command was introduced.

# show default gateway

Displays the default gateway of the ip route address.

## Syntax

**show default gateway**

## Modes

Network mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The following example shows sample output for the **show default gateway** command.

```
Network # show default gateway  
10.206.67.254, metric=1
```

## History

Release version	Command history
1.0.0	This command was introduced.

**Show Commands**  
show dns server

## show dns server

Displays all the DNS servers.

### Syntax

**show dns server**

### Modes

Network mode

### Examples

The following example shows sample output for the **show dns server** command.

```
network# show dns server
dns cache service Enable: (2/2/0/0)
ip4 name servers:
8.8.8.8
10.10.10.10
10.10.10.10
10.10.10.10
```

### History

Release version	Command history
1.0.0	This command was introduced.

## show (featureflag)

Displays information about feature flags.

### Syntax

```
show --name [ feature-name | all ] --option { configured | registered }
```

### Parameters

**--name** *feature-name*

Displays information about the specific feature flag.

**--name** all

Displays information about all available feature flags.

**option**

Defines the type of feature flag information to display.

**configured**

Displays all feature flags that are configured in the system (even if they are not registered).

**registered**

Displays all feature flags that are registered by clients, regardless of configuration status.

### Modes

Feature Flag mode

### Examples

The following example shows the feature-flag clients that are registered.

```
Edge-VM-1-867# featureflag
(feature-flag)# show --name all --option registered
Result: Successful, Code: 1
```

```
-----
S.No  Name                Application
-----
1     f1                   my-app
```

The following example shows all feature flags that are configured.

```
Edge-VM-1-867# featureflag
(feature-flag)# show --name all --option configured
Result: Successful, Code: 0
```

```
-----
S.No  Name                State
-----
1     f1                   true
```

**Show Commands**  
show (featureflag)

## History

Release version	Command history
1.0.0	This command was introduced.



# show gpb-decode-all

Displays the decode of all GPB (Google Protocol Buffers) messages applied during configuration.

## Syntax

```
show gpb-decode-all
```

## Modes

Config Manager mode

**Show Commands**  
show gpb-decode-all

## Examples

The following example shows sample output for the **show gpb-decode-all** command.

```
Edge-VM-1-867# cfmgr
(cfmgr)# show config-result-history
##### gpb name: EdgeNetworkConfig #####
##### EdgeNetworkConfig_964ACA206E07F411EF84A0000C29 unmarshal data #####
NetworkPorts:
  PortType:
    LAN_PORT_TYPE
  Name:
    port1
  Enabled:
    true
  Mac:
    00:0c:00:48:85:00
  Inet:
    ip:"10.10.10.10" subnet:"255.255.255.0"
  DhcpClientOptions:

  PortType:
    LAN_PORT_TYPE
  Name:
    port2
  Enabled:
    true
  Mac:
    00:0c:00:48:48:7c
  Inet:
    ip:"10.10.10.10" subnet:"255.255.255.0"
  DhcpClientOptions:

  PortType:
    WAN_PORT_TYPE
  Name:
    port3
  Enabled:
    true
  Mac:
    00:0c:00:45:43:85
  Inet:
    ip:"10.10.10.10" subnet:"255.255.255.128" gateway:"10.176.150.2"
  EnableNat:
    true
  DhcpClientOptions:
    opt3_router:true

##### gpb name: EdgeDNS #####
##### EdgeDNS_964ACA206E07F411EF84A0000C2 unmarshal data #####
NameServers:
  0.0.0.1
##### gpb name: EdgeClusterConfig #####
##### EdgeClusterConfig_e3b822f1-82e8-4ce3-8a63-6067 unmarshal data #####
ClusterName:
  Edge-VM-1
ClusterId:
  e3b822f1-82e8-0ee4-8a63-e7b359e5
ClusterMode:
  CM_MODE_ACTIVE_BACKUP
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show interface address

Displays the interface address.

## Syntax

**show interface address**

## Modes

Network mode

## Examples

The following example shows sample output for the **show interface address** command.

```
Edge-VM-1-867# network
Network# show interface address
local0 (dn):
loop1 (up):
  L3 10.254.2.241/30
loop2 (up):
  L3 10.254.2.245/30
port1 (up):
  L3 10.206.67.214/24
port2 (up):
tap0 (up):
  L3 10.254.1.254/24
```

## History

Release version	Command history
1.0.0	This command was introduced.

**Show Commands**  
show internal-network

## show internal-network

Displays internal network settings.

### Syntax

**show internal-network**

### Modes

Basic mode

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

### Examples

```
Edge# show

Available Commands:
  internal-network  Show current internal network settings
  license          Show license information
  manager          Manager
  serial           Show serial number
  version          Show OS version

Edge# show internal-network
Internal Network: 10.254.0.0/16
```

### History

Release version	Command history
1.0.0	This command was introduced.

# show lacp

Displays LACP configuration details and status.

## Syntax

**show lacp** [ *member-port* ] [ **details** ]

## Parameters

*member-port*

Displays LACP status of the member port.

**details**

Displays detailed information of LACP configuration and status, including advanced metrics such as port state, LACP priority, and partner information information LACP status of the port including active members.

## Modes

Network mode

## Examples

The following example shows sample output for the **show lacp** command.

```
Edge-VM-1-867# network
Network# show lacp

state
interface name          sw_if_index  lag interface  actor state          partner
exp/def/dis/col/syn/agg/tim/act  exp/def/dis/col/syn/agg/tim/act
port2                   2           lag0           0 0 1 1 1 1 1 1 0 0 1
1 1 1 0 1
LAG ID: [(ffff,08-35-71-13-68-73,0004,00ff,0001), (0001,8c-7a-15-3a-fe-42,4e21,0001,0009)]
RX-state: CURRENT, TX-state: TRANSMIT, MUX-state: COLLECTING_DISTRIBUTING, PTX-state: PERIODIC_TX
```

## Show Commands

show lacp

The following example shows sample output for the **show lacp port1 details** command.

```
Edge-VM-1-867# network
Network# show lacp port1 details
Number of interfaces: 2
  port1
    Good LACP PDUs received: 5616
    Bad LACP PDUs received: 0
    LACP PDUs sent: 197
    last LACP PDU received:      .44 seconds ago
    last LACP PDU sent:         .76 seconds ago
    Good Marker PDUs received: 0
    Bad Marker PDUs received: 0
    debug: 0
    loopback port: 0
    port_enabled: 1
    port_moved: 0
    ready_n: 1
    ready: 1
    long timer: 0
  Actor
    system: 08:35:71:13:68:73
    system priority: 65535
    key: 6
    port priority: 255
    port number: 1
    state: 0x3f
      LACP_STATE_LACP_ACTIVITY (0)
      LACP_STATE_LACP_TIMEOUT (1)
      LACP_STATE_AGGREGATION (2)
      LACP_STATE_SYNCHRONIZATION (3)
      LACP_STATE_COLLECTIING (4)
      LACP_STATE_DISTRIBUTING (5)
  Partner
    system: 8c:7a:15:3a:fe:42
    system priority: 1
    key: 20001
    port priority: 1
    port number: 10
    state: 0x3d
      LACP_STATE_LACP_ACTIVITY (0)
      LACP_STATE_AGGREGATION (2)
      LACP_STATE_SYNCHRONIZATION (3)
      LACP_STATE_COLLECTIING (4)
      LACP_STATE_DISTRIBUTING (5)
    wait while timer: not running
    current while timer:      2.56 seconds
    periodic timer:          29.24 seconds
  RX-state: CURRENT
  TX-state: TRANSMIT
  MUX-state: COLLECTING_DISTRIBUTING
  PTX-state: PERIODIC_TX
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show lag

Displays the status and configuration details of Link Aggregation Groups (LAGs) in the system.

## Syntax

**show lag** [*id*] [**details**]

## Parameters

*id*

Displays the details of a specific LAG.

**details**

Displays detailed information of LAG including the mode, load balancing mechanism, and member interface details such as active members and device instance information.

## Modes

Network mode

## Examples

The following example displays the status of LAGs in the system.

```
Edge-VM-1-867# network
Network# show lag
Name                tag      Idx   State  MTU (L3/IP4/IP6/MPLS)  Counter  Count
lag1                none     7     down   1500/0/0/0
```

The following example displays the LAG details.

```
Edge-VM-1-867# network
Network# show lag details
lag1
mode: lacp
load balance: l34
number of active members: 0
number of members: 0
device instance: 0
interface id: 1
sw_if_index: 7
hw_if_index: 7
```

## History

Release version	Command history
1.0.0	This command was introduced.

## Show Commands

show logs

# show logs

Displays logs of specific pods.

## Syntax

```
show logs { prefix | pod-name }
```

## Parameters

*prefix*

Displays the logs of the pod specified by the initial part of the pod name instead of the full name of the pod, simplifying log retrieval.

*pod-name*

Displays the logs of the pod specified by the full name of the pod.

## Modes

Logging mode



## Examples

The following example shows sample output for the **show logs** command.

```
Edge-VM-1-867# logging
(logging)# show logs helm-install-clustermgr-5pdpj
-----
Displaying logs for pod: helm-install-clustermgr-5pdpj
-----
if [[ ${KUBERNETES_SERVICE_HOST} =~ .*:.* ]]; then
    echo "KUBERNETES_SERVICE_HOST is using IPv6"
    CHART="${CHART//%\{KUBERNETES_API%\}%/[${KUBERNETES_SERVICE_HOST}]:${KUBERNETES_SERVICE_PORT}}"
else
    CHART="${CHART//%\{KUBERNETES_API%\}%/${KUBERNETES_SERVICE_HOST}:${KUBERNETES_SERVICE_PORT}}"
fi

set +v -x
+ [[ ' ' != \t\r\u\e ]]
+ export HELM_HOST=127.0.0.1:44134
+ HELM_HOST=127.0.0.1:44134
+ helm_v2 init --skip-refresh --client-only --stable-repo-url https://charts.helm.sh/stable/
+ tiller --listen=127.0.0.1:44134 --storage=secret
Creating /home/klipper-helm/.helm
Creating /home/klipper-helm/.helm/repository
Creating /home/klipper-helm/.helm/repository/cache
Creating /home/klipper-helm/.helm/repository/local
Creating /home/klipper-helm/.helm/plugins
Creating /home/klipper-helm/.helm/starters
Creating /home/klipper-helm/.helm/cache/archive
Creating /home/klipper-helm/.helm/repository/repositories.yaml
Adding stable repo with URL: https://charts.helm.sh/stable/
Adding local repo with URL: http://127.0.0.1:8879/charts
$HELM_HOME has been configured at /home/klipper-helm/.helm.
Not installing Tiller due to 'client-only' flag having been set
++ jq -r '.Releases | length'
++ timeout -s KILL 30 helm_v2 ls --all '^clustermgr$' --output json
[main] 2024/07/25 23:02:33 Starting Tiller v2.17.0 (tls=false)
[main] 2024/07/25 23:02:33 GRPC listening on 127.0.0.1:44134
[main] 2024/07/25 23:02:33 Probes listening on :44135
[main] 2024/07/25 23:02:33 Storage driver is Secret
[main] 2024/07/25 23:02:33 Max history per release is 0
[storage] 2024/07/25 23:02:33 listing all releases with filter
+ V2_CHART_EXISTS=
+ [[ ' ' == \1 ]]
+ [[ ' ' == \v\2 ]]
+ [[ -f /config/ca-file.pem ]]
+ [[ -n ' ' ]]
+ shopt -s nullglob
+ helm_content_decode
+ set -e
+ ENC_CHART_PATH=/chart/clustermgr.tgz.base64
+ CHART_PATH=/tmp/clustermgr.tgz
+ [[ ! -f /chart/clustermgr.tgz.base64 ]]
+ base64 -d /chart/clustermgr.tgz.base64
+ CHART=/tmp/clustermgr.tgz
+ set +e
+ [[ install != \d\e\l\l\e\t\e ]]
+ helm_repo_init
+ grep -q -e 'https?://'
+ [[ helm_v3 == \h\e\l\m\_v\3 ]]
+ [[ /tmp/clustermgr.tgz == stable/* ]]
+ [[ -n ' ' ]]
+ helm update install
+ [[ helm_v3 == \h\e\l\m\_v\3 ]]
++ tr '[:upper:]' '[:lower:]'
++ jq -r '"\(. [0].app_version),\(. [0].status)'"
++ helm v3 ls --all -f '^clustermgr$' --namespace default --output json
+ LINE=0.1.0,deployed
+ IFS=,
+ read -r INSTALLED_VERSION STATUS _
+ VALUES=
```

## Show Commands

show logs

```
+ for VALUES_FILE in /config/*.yaml
+ VALUES=' --values /config/values-01_HelmChart.yaml'
+ [[ install = \d\e\l\l\e\t\e ]]
+ [[ 0.1.0 =~ ^(null)$ ]]
+ [[ deployed =~ ^(pending-install|pending-upgrade|pending-rollback)$ ]]
+ [[ deployed == \d\e\p\l\o\y\e\d ]]
+ echo 'Already installed clustermgr'
+ [[ helm_v3 == \h\e\l\m\_v\3 ]]
+ helm_v3 mapkubeapis clustermgr --namespace default
Already installed clustermgr
2024/07/25 23:02:48 Release 'clustermgr' will be checked for deprecated or removed Kubernetes APIs and
will be updated if necessary to supported API versions.
2024/07/25 23:02:48 Get release 'clustermgr' latest version.
2024/07/25 23:02:50 Check release 'clustermgr' for deprecated or removed APIs...
2024/07/25 23:02:50 Finished checking release 'clustermgr' for deprecated or removed APIs.
2024/07/25 23:02:50 Release 'clustermgr' has no deprecated or removed APIs.
2024/07/25 23:02:50 Map of release 'clustermgr' deprecated or removed APIs to supported versions,
completed successfully.
+ echo 'Upgrading helm v3 chart'
+ echo 'Upgrading clustermgr'
+ shift 1
+ helm_v3 upgrade clustermgr /tmp/clustermgr.tgz --values /config/values-01_HelmChart.yaml
Upgrading clustermgr
Release "clustermgr" has been upgraded. Happy Helming!
NAME: clustermgr
LAST DEPLOYED: Thu Jul 25 23:02:51 2024
NAMESPACE: default
STATUS: deployed
REVISION: 3
+ exit
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show log level

Displays log level for all class.

## Syntax

**show log level**

## Modes

Network mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

```

Network # show log level
info
Available Commands:
  exit          exit
  help          help
  nslookup      nslookup <domain>
  packet-capture
  ping          ping <ipv4-address|domain> [source <interface>] [size <datasize[18-1500]>] [repeat
<count>] [verbose]
  set
  show
  traceroute    traceroute <ipv4-address|domain>

Network # ping
ping <ipv4-address|domain> [source <interface>] [size <datasize[18-1500]>] [repeat <count>] [verbose]
116 bytes from 8.8.8.8: icmp_seq=1 ttl=118 time=1.5913 ms
116 bytes from 8.8.8.8: icmp_seq=2 ttl=118 time=1.7539 ms
116 bytes from 8.8.8.8: icmp_seq=3 ttl=118 time=1.5692 ms
116 bytes from 8.8.8.8: icmp_seq=4 ttl=118 time=1.7417 ms
116 bytes from 8.8.8.8: icmp_seq=5 ttl=118 time=1.5953 ms

Statistics: 5 sent, 5 received, 0% packet loss

Network # traceroute
traceroute <ipv4-address|domain>
traceroute to google.com (142.251.42.238), 30 hops max, 46 byte packets
 1 10.42.0.1 (10.42.0.1) 0.005 ms 0.004 ms 0.004 ms
 2 10.254.1.254 (10.254.1.254) 0.099 ms 0.062 ms *
 3 10.206.67.254 (10.206.67.254) 8.247 ms 6.343 ms 5.041 ms
 4 10.7.42.30 (10.7.42.30) 0.779 ms 0.802 ms 0.868 ms
 5 210.58.90.1 (210.58.90.1) 3.837 ms 12.844 ms 3.741 ms
 6 203.79.251.137 (203.79.251.137) 2.526 ms 1.191 ms 1.044 ms
 7 211.76.96.66 (211.76.96.66) 1.011 ms 1.069 ms 211.76.96.166 (211.76.96.166) 3.780 ms
 8 203.79.255.98 (203.79.255.98) 2.506 ms 1.417 ms 1.957 ms
 9 108.170.244.33 (108.170.244.33) 1.552 ms 1.553 ms 1.499 ms
10 209.85.142.121 (209.85.142.121) 1.434 ms 209.85.242.125 (209.85.242.125) 2.001 ms
209.85.142.121 (209.85.142.121) 1.631 ms
11 142.251.42.238 (142.251.42.238) 2.958 ms 1.821 ms 1.775 ms

Network # nslookup
nslookup <domain>
[192.168.1.1]

```

**Show Commands**  
show log level

## History

Release version	Command history
1.0.0	This command was introduced.

# show log-level

Displays the currently configured log level for the pods.

## Syntax

```
show log-level [ prefix | pod-name ]
```

## Parameters

*prefix*

Displays the log level of the pod specified by the initial part of the pod name instead of the full name of the pod, simplifying log retrieval.

*pod-name*

Displays the log level of the pod specified by the full name of the pod.

## Modes

Logging mode

## Show Commands

show log-level

## Examples

The following example shows sample output for the **show log-level** command.

```
Edge-VM-1-867# logging
(logging)# show log-level
-----
                        Log Level Status
-----
cfgmgr                  : info
cia                    : info
configdb-master-0     : notice
dhcp-app-agent        : info
edgeapp-adapter       : info
edgeapp-controller-manager : info
featureflag           : info
fluent-bit            : info
fluent-operator       : info
logmgr                : info
nats-0                : info
operdb-master-0       : notice
pal                   : info
rproxy                : info
rpv2se                : info
seinfra-events        : info
seinfra-tools         : info
stats-reporter        : info
vpp-device-plugin     : info
vpp-infra-cfg-agent   : info
vpp-infra-cli         : info
vpp-infra-oper-agent  : info
vpp-infra-statsd     : info
vpp-infra-vpp         : info
|-(acl_plugin)        : info
|-(policer)           : info
|-(qos_profile_logger) : info
|-(ruc_nsg)           : info
|-(ruc_peer_tunnel)  :
|-(ruc_qos_cpp)       : info
|-(ruc_qos_nsg)       : info
|-(sdlan)             :
|-(se-vxlan-pmtu-enforce) : info
|-(se_event_sender)  : info
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show log-streaming

Displays the current log-streaming status.

## Syntax

**show log-streaming**

## Modes

Logging mode

## Examples

The following example shows sample output for the **show log-streaming** command.

```
Edge-VM-1-867# logging
(logging)# show log-streaming
-----
                Log Streaming Status
-----
Streaming Enabled           : true
Streaming Duration         : 5
Streaming Enable Config Result : true
Streaming Start Time       : 2023-06-22 06:21:53.498021341 +0000 UTC m=+416.688875513
Streaming Expiry Time      : 2023-06-22 06:26:53.498021341 +0000 UTC m=+716.688875513
Streaming Timer Status     : Running
Streaming Disable Config Result : false
```

## History

Release version	Command history
1.0.0	This command was introduced.

**Show Commands**  
show manager status

## show manager status

Displays information on the network manager application.

### Syntax

**show manager status**

### Modes

User privilege mode

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

### Examples

The below example displays information on the network manager.

```
device# show manager status
===== network =====
port1 (LAN/up): 00:0c:29:48:85:71 10.12.13.17/24
port2 (LAN/up): 00:0c:29:48:85:7b 10.12.15.17/24
port3 (WAN/up): 00:0c:29:48:85:85 10.176.154.17/25
lag1 (UNCONFIGURED/DOWN): 02:fe:01:00:00:00
Default Gateway: 10.176.154.1
DNS Server: 8.8.8.8

===== connect-agent =====
---- RUCKUS One information ----
Edge is not managed by RUCKUS One
Connection agent state: SETUP
Status: RUCKUS Edge cannot get controller list.
Please check your RUCKUS Edge entry setting.
Nats Leaf status: OFFLINE
Server List:
DRS default URL: registrar.ruckuswireless.com
-----
```

### History

Release version	Command history
1.0.0	This command was introduced.



## show peer-tunnel

This command displays the configuration of peer-tunnel and fallback setting. The peer tunnel is used to send guest WLAN traffic between Data Center RUCKUS Edge and DMZ RUCKUS Edge.

### Syntax

```
show peer-tunnel
```

### Command Default

No command default.

### Modes

Network mode

### Command Output

The **show peer-tunnel** command displays the following information.

Output field	Description
TUNNEL-ID	Identifier of the tunnel.
TUNNEL-UUID	UUID assigned by RUCKUS One for this peer tunnel service.
SERVICE	Displays the type of service.
SERVICE-ID	RUCKUS One assigned service identifier
Local-Addr	IP address of the local Edge device.
Remote-Addr	Remote IP address of the peer Edge device.
Rand-remote-Addr	Randomized remote IP address list of peer Edge device
Initiator	Displays if the Edge device is an Initiator or a Responder: <b>Yes</b> , indicates it is an initiator, and <b>No</b> indicates it is a responder.
SCHED-TYPE	RUCKUS One configured Fallback schedule type. <b>Daily</b> , <b>Weekly</b> and <b>Interval</b> schedule types chosen for Fallback.
WEEK-DAY	Day of the week to trigger fallback. This is valid only for weekly schedule type.
HRS	Displays fallback time interval in hours.
MINS	Displays fallback time interval in minutes.
Network-Name	Wi-Fi network name.
WLAN-ID	WLAN ID associated with the Wi-Fi network.
VLAN-ID	VLAN ID associated with the Wi-Fi network
Venue	RUCKUS One venue to which the RUCKUS Wi-Fi and Edge devices are on-boarded.

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Show Commands

show peer-tunnel

It displays the configuration details, but the corresponding VxLAN tunnel might not be created. To verify if the tunnel is created, use the show vxlan tunnel command.

## Examples

The below example displays the peer tunnel information on a Data Center Edge device when the fallback is not configured.

```
DBGvpp# show peer-tunnel
TUNNEL-ID TUNNEL-UUID          SERVICE  SERVICE-ID Local-Addr      Remote-Addr
Rand-remote-Addr Initiator
3          81c31118-2204-372a-a4eb-faff8d7c108f SDLAN    2          172.20.20.33    172.20.20.41
172.20.20.42      Yes
172.20.20.41
172.20.20.43
```

```
DIST-TYPE  SCHED-TYPE WEEK-DAY  HRS  MINS
No Fallback configured for this peer tunnel
```

```
Network-Name          WLAN-ID  VLAN-ID  Venue
293 R650 SNULU Captive 44       100     SNULU SD-LAN Venue
293 R760 SNULU Captive 45       100     SNULU SD-LAN Venue
```

The below example displays the peer tunnel information on a Data Center Edge device when the fall back is configured.

```
Network# show peer-tunnel
TUNNEL-ID TUNNEL-UUID          SERVICE  SERVICE-ID Local-Addr      Remote-Addr
Rand-remote-Addr Initiator
3          81c31118-2204-372a-a4eb-faff8d7c108f SDLAN    2          172.20.20.33    172.20.20.41
172.20.20.42      Yes
172.20.20.41
172.20.20.43
```

```
DIST-TYPE  SCHED-TYPE WEEK-DAY  HRS  MINS
Random     Week-Day   Wednesday  12   0
```

```
Network-Name          WLAN-ID  VLAN-ID  Venue
293 R650 SNULU Captive 44       100     SNULU SD-LAN Venue
293 R760 SNULU Captive 45       100     SNULU SD-LAN Venue
```

The below example displays the peer tunnel information on a DMZ Edge device when the fallback is not configured.

```
Network# show peer-tunnel
TUNNEL-ID TUNNEL-UUID          SERVICE  SERVICE-ID Local-Addr      Remote-Addr
Initiator
1          81c31118-2204-372a-a4eb-faff8d7c108f SDLAN    3          172.20.20.41    172.20.20.32    No
172.20.20.31
172.20.20.34
172.20.20.33
```

```
DIST-TYPE  SCHED-TYPE WEEK-DAY  HRS  MINS
No Fallback configured for this peer tunnel
```

```
Network-Name          WLAN-ID  VLAN-ID  Venue
293 R650 SNULU Captive 44       100     SNULU SD-LAN Venue
293 R760 SNULU Captive 45       100     SNULU SD-LAN Venue
```

## History

Release version	Command history
2.2.0	Supporting fallback feature.

Release version	Command history
2.1.0	Supporting multi-venue feature.
1.0.0	This command was introduced.

Show Commands  
show peer-tunnel-ka

## show peer-tunnel-ka

This command displays the status of the peer-tunnel keepalive.

### Syntax

show peer-tunnel-ka

### Command Default

No command default.

### Modes

Network mode

### Command Output

The **show peer-tunnel-ka** command displays the following information.

Output field	Description
TUNNEL-ID	Displays the tunnel ID.
SERVICE	Displays the service name.
SERVICE-ID	Displays the service ID.
Initiator	Displays if the Edge device is an initiator or a responder. <b>Yes</b> indicates an initiator and <b>No</b> indicates a responder.
KA-TUN-STATUS	Displays if the status of the keep alive tunnel <b>Up</b> or <b>Down</b> .
UP-TIME	Displays the time since the tunnel is up. The value of this is current time - start time of the tunnel creation.
KA-TUN-STATE	Displays the state of tunnel out. For example, <b>INIT</b> , <b>CONNECTING</b> , <b>CONNECTED</b> and <b>VRRP_BACKUP_WAIT</b> .
Local-Addr	Displays the local IP address of the Edge device.
Remote-Addr	Displays the peer IP address of the peer tunnel keepalive.
Remote-Index	Peer Index in randomized remote address array list to which the local Edge node connects.
FB-TIME-LEFT	Displays scheduled time remaining for the next fallback.

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The below example displays the **SD-LAN** tunnel keepalive information on Data Center Edge.

```

=====When tunnel status is up=====
Network# show peer-tunnel-ka
TUNNEL-ID SERVICE  SERVICE-ID Initiator KA-TUN-STATUS UP-TIME
3          SDLAN    2          Yes         Up           0Y0MOD 0h2m26s

KA-TUN-STATE      Local-Addr      Remote-Addr      Remote-Index  FB-TIME-LEFT
CONNECTED         172.20.20.33    172.20.20.42    0             0Day 23Hrs 6Mins 23Secs

=====When tunnel status is down=====
Network# show peer-tunnel-ka
TUNNEL-ID SERVICE  SERVICE-ID Initiator KA-TUN-STATUS UP-TIME
1          SDLAN    2          Yes         Down        -

KA-TUN-STATE      Local-Addr      Remote-Addr      Remote-Index  FB-TIME-LEFT
CONNECTING        172.20.20.33    172.20.20.42    0             0Day 23Hrs 6Mins 23Secs

```

The below example displays the **SD-LAN** tunnel keepalive information on DMZ Edge.

```

=====When tunnel status is up=====
Network# show peer-tunnel-ka
TUNNEL-ID SERVICE  SERVICE-ID Initiator KA-TUN-STATUS UP-TIME
1          SDLAN    3          No          Up           0Y0MOD 0h6m48s

Local-Addr      Remote-Addr
172.20.20.42    172.20.20.33

=====When tunnel status is down=====
Network# show peer-tunnel-ka
TUNNEL-ID SERVICE  SERVICE-ID Initiator KA-TUN-STATUS UP-TIME
1          SDLAN    3          No          Down        -

```

## History

Release version	Command history
2.2.0	Supporting fallback feature.
2.1.0	This command was introduced.

## Show Commands

show pods

# show pods

Displays the list of running pods.

## Syntax

`show pods`

## Modes

Logging mode

## Examples

The following example shows sample output for the **show pods** command.

```
Edge-VM-1-867# logging
(logging)# show pods
```

```
-----
List of Pods
-----
Name (Namespace) | Status |
-----|-----|
helm-install-operdb-bd4df (default) | Succeeded |
helm-install-rks-traefik-lgrf5 (default) | Succeeded |
helm-install-rpv2se-786zw (default) | Succeeded |
helm-install-sharedb-cswld (default) | Succeeded |
helm-install-configdb-5wqg4 (default) | Succeeded |
upgrade-1-lv52x (default) | Succeeded |
upgrade-2-9ftdg (default) | Succeeded |
node-debugger-964aca206e07f411ef84a0000c29488571-8dtj8 (default) | Failed |
upgrade-3-dp2tn (default) | Succeeded |
upgrade-4-5wlxm (default) | Succeeded |
helm-install-featureflag-6s5kn (default) | Succeeded |
helm-install-edgeapp-adapter-5zd5q (default) | Succeeded |
helm-install-edgeapp-controller-h85g2 (default) | Succeeded |
helm-install-dnb-qzwlw (default) | Succeeded |
helm-install-nats-mrtdt (default) | Succeeded |
helm-install-logmgr-6dm87 (default) | Succeeded |
helm-install-fluent-operator-dsksw (default) | Succeeded |
helm-install-trust-cert-v46p6 (default) | Succeeded |
helm-install-stats-reporter-rjmt8 (default) | Succeeded |
helm-install-seinfra-events-cz87j (default) | Succeeded |
helm-install-seinfra-tools-49gkj (default) | Succeeded |
helm-install-rproxy-8j9ww (default) | Succeeded |
seinfra-tools-f3nqo-5r8bn (default) | Succeeded |
node-debugger-964aca206e07f411ef84a0000c29488571-c8nf6 (default) | Succeeded |
upgrade-5-g56bb (default) | Succeeded |
node-debugger-964aca206e07f411ef84a0000c29488571-98d2x (default) | Failed |
edgeapp-adapter-7cd648898c-65vf1 (default) | Running |
stats-reporter-57b9f4d476-dmndf (default) | Running |
seinfra-events-56ff7b7457-gr47q (default) | Running |
configdb-master-0 (default) | Running |
rpv2se-vj57k (default) | Running |
dnb-dnb-9d6d78d74-w4xpn (default) | Running |
fluent-bit-b2zb2 (default) | Running |
fluent-operator-5f59b978b5-46xqb (default) | Running |
featureflag-54d897cbb-n6ngt (default) | Running |
edgeapp-controller-manager-55b88f4cb6-fh7w9 (default) | Running |
logmgr-8698767684-f4dq2 (default) | Running |
operdb-master-0 (default) | Running |
rks-traefik-7788594f97-cjf55 (default) | Running |
clustermgr-66bcc5b557-zq8cb (default) | Running |
cfgmgr-749994c8f5-t5hl4 (default) | Running |
cia-67f8dd44f7-6678j (default) | Running |
helm-install-cfgmgr-4t2rp (default) | Succeeded |
helm-install-pal-5txjv (default) | Succeeded |
helm-install-clustermgr-5pdpj (default) | Succeeded |
helm-install-cia-7xv48 (default) | Succeeded |
helm-install-resource-manager-v9ldc (default) | Succeeded |
pal-nrs84 (default) | Running |
resource-manager-8497f9ff7d-lp4p9 (default) | Running |
helm-install-vpp-infra-7zsgj (default) | Succeeded |
vpp-infra-oper-agent-65bdd8467d-qh829 (default) | Running |
vpp-infra-cfg-agent-588fccd848-97w4n (default) | Running |
vpp-infra-cli-77665fbb5f-xznlb (default) | Running |
vpp-infra-statsd-74cc5fcc98-8lhmq (default) | Running |
nats-0 (default) | Running |
rproxy-786dc46444-jrdkx (default) | Running |
vpp-infra-vpp-hkxjq (default) | Running |
node-debugger-964aca206e07f411ef84a0000c29488571-hprcb (default) | Running |
```

**Show Commands**  
show pods

## History

Release version	Command history
1.0.0	This command was introduced.



## show pin-info

Displays PIN information of the RUCKUS Edge device.

### Syntax

**show pin-info**

### Command Default

No command default.

### Modes

Network configuration mode

### Command Output

The **show pin-info** command displays the following information.

Output field	Description
PIN UUID	Service ID of Personal Identity Networks (PIN) .
DHCP Service	Name of DHCP service used by PIN service.
DHCP Pool	Name of DHCP pool used by PIN service .
DHCP Address Range	DHCP pool IP address range.
Max PAN Number	Maximum PAN number configured by the user.
Max UE per PAN	Maximum UE number per PAN configured by the user.

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

```
vpp# show pin-info
PIN 1 info:
  PIN UUID:          8107bb1b-04f1-4ff1-8ad6-ef29e152478d
  DHCP Service:     DHCP-PIN-1
  DHCP Pool:        dhcp-pool-2
  DHCP Address Range: 150.1.1.8 - 150.1.1.247
  Max PAN Number:   30
  Max UE per PAN:   5
```

### History

Release version	Command history
2.2.0	This command is introduced as Early Access.

Show Commands  
show pin-pan

## show pin-pan

Displays security policies in Personal Area Network (PAN).

### Syntax

show pin-pan

### Command Default

No command default.

### Modes

Network mode

### Command Output

The **show pin-pan** command displays the following information.

Output field	Description
PAN-VNI	Personal Area Networks (PAN) VXLAN Network Identifier.
PAN-ID	PAN ID.
BD-ID	Bridge domain ID of PAN.
BVI-Intf	BVI interface name of PAN.
BVI-Intf-Addr	BVI interface IP address.
PAN-PERSONA-ID	PAN persona ID.

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

```
DBGvpp# show pin-pan
PAN-VNI  PAN-ID  BD-ID  BVI-Intf  BVI-Intf-Addr  PAN-PERSONA-ID
9232     2      4097  loop4097  150.1.1.17/29  38f5a430-4773-4f1a-be48-acfc8467
9235     5      4100  loop4100  150.1.1.41/29  ec3500ef-a67a-4794-80f2-5a727983
9227     11     4106  loop4106  150.1.1.89/29  8ddff19a-005f-470f-a1fc-7724bd84
9229     13     4108  loop4108  150.1.1.105/29 dea7b49a-1eda-44b9-8125-1f97b67c
9230     14     4109  loop4109  150.1.1.113/29 9f740757-5392-4b9b-8548-54f4c1ae
9233     3      4098  loop4098  150.1.1.25/29  bd216c40-7326-4bc7-bd91-a094c9e9
9234     4      4099  loop4099  150.1.1.33/29  285acdd8-0449-4290-8e3a-1ee1ea67
9217     1      4096  loop4096  150.1.1.9/29   cd3f3cac-a16b-46d9-a38c-e61daab3
9228     12     4107  loop4107  150.1.1.97/29  14efa190-04d4-4d64-bc04-f76b9e0f
9231     15     4110  loop4110  150.1.1.121/29 f56ba269-2988-4820-98ed-6f1bc49b
```

## History

Release version	Command history
2.2.0	This command is introduced as Early Access.

## Show Commands

show resource manager

# show resource manager

Displays the current resource allocation.

## Syntax

**show resource manager**

## Modes

Network mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The below example displays the resource allocation in the RUCKUS Edge device.

```
network# show resource-manager
Resource Info:
=====
Node Resources:
  Node Allocatable CPU: 2000m
  Node Unallocated CPU: 0m

Configured Resources:
  System CPU resource: 750m
  Data-Plane CPU resource: 1250m

Applied Resources:
  Application Name: System
  Utilized CPU: 750m
  Attached with CPU ID: 0
  Application Name: Data-Plane
  Utilized CPU: 1250m
  Control plane CPU resource: 250m
  Data plane CPU resource: 1000m
  Attached with CPU IDs: 1,11

(CPU resource type is in unit m: millicore)
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show route

Displays the vector packet processor (VPP) routing information.

## Syntax

**show route**

## Modes

Network configuration mode

## Usage Guidelines

This command is supported only on RUCKUS Edge.

## Examples

The below example displays the VPP routing information.

```
network# show route
0.0.0.0/0 via 10.176.153.129, metric=1
10.254.1.0/24 via 10.254.1.254, metric=1
10.176.153.0/24 via 10.176.153.217, metric=1
10.254.2.240/30 via 10.254.2.241, metric=1
10.254.2.244/30 via 10.254.2.245, metric=1
10.176.153.129/32 via 10.176.153.129, metric=1
10.176.153.130/32 via 10.176.153.130, metric=1
10.254.2.242/32 via 10.254.2.242, metric=1
10.254.1.1/32 via 10.254.1.1, metric=1
10.254.2.246/32 via 10.254.2.246, metric=1
```

## History

Release version	Command history
1.0.0	This command was introduced.

**Show Commands**  
show sdlan config

## show sdlan config

Displays SD-LAN configuration details.

### Syntax

`show sdlan config`

### Command Default

No command default.

### Modes

Network mode

### Command Output

The `show sdlan config` command displays the following information.

Output field	Description
core-port	
mac-age	Inactivity period (in seconds) for the MAC entries.
sw-if-idx	Software if-index for the core-port
Total SDLAN services	Number of SDLAN services configured
Total Remote SDLAN services	Total number of remote SDLAN services. An SDLAN service configured on cluster A to do guest VLAN tunneling to cluster B, will be treated as remote SDLAN service by the cluster B.
Name	SDLAN service name configured by admin.
ID	Internal Index generated by Edge for this SDLAN service.
UUID	UUID assigned by R1 for this SDLAN service.
Local	Whether the SDLAN service is local or remote.
Total WLANs	Total number of WLANs on which this SDLAN service is enabled.
Network-Name	Wireless Network Name for this WLAN.
WLAN-ID	WLAN ID assigned by R1 for this wireless network association with a given venue.
SSID-VLAN	SSID VLAN for this WLAN.
VENUE	Venue on which this WLAN is activated.

### Usage Guidelines

This command is supported only on the Edge device. The **Network Summary** section provides information about the uplink connection type for each network. It indicates whether the network traffic is bridged over the uplink port into the core network or tunneled to another Edge device.

## Examples

The below example displays the SD-LAN service configuration information when executed on a Data Center Edge device.

```
Network# show sdlan config
core-port: port1                               sw-if-idx: 1
mac-age: 5 mins

Total SDLAN services: 1
Total Remote SDLAN services: 0

Name: dc-sdlan
ID: 2
UUID: SL0a669f6e6a894def96c75dac12
Local: Yes
Total WLANs: 6

Network-Name      WLAN-ID      SSID-VLAN      VENUE
student-1         1            100            Bldg#1
student-2         2            110            Bldg#2
faculty-1         3            200            Bldg#1
faculty-2         4            210            Bldg#2
guest-1           5            120            Bldg#1
guest-2           6            220            Bldg#2

Networks Summary:

Network-Name      Venue        Uplink-Conn-Types
student-1         Bldg#1      bridge-to-core-network
student-2         Bldg#2      bridge-to-core-network
student-3         Bldg#1      bridge-to-core-network
faculty-3         Bldg#2      bridge-to-core-network
guest-1           Bldg#1      tunnel-to-peer(10.22.1.13)
guest-2           Bldg#2      tunnel-to-peer(10.22.1.13)
```

The below example displays the SD-LAN service configuration information on DMZ Edge device.

```
Network# show sdlan config
core-port: port1                               sw-if-idx: 1
mac-age: 5 mins

Total SDLAN services: 1
Total Remote SDLAN services: 1

Name: dc-sdlan
ID: 2
UUID: SL0a669f6e6a894def96c75dac12
Local: No
```

## History

Release version	Command history
2.1.0	Supporting multi-venue feature.
1.0.0	This command was introduced.

**Show Commands**  
show sdlan counters

## show sdlan counters

Displays the SD-LAN related counters information. Use it check SDLAN related failures.

### Syntax

**show sdlan counters**

### Command Default

No command default.

### Modes

Network mode

### Command Output

The **show sdlan counters** command displays the following information.

Output field	
BD create success/failures	Number of times SD-LAN bridge-domain creation was successful/failure.
BD delete success/failures	Number of times SD-LAN bridge-domain deletion was successful/failure.
Sub-port create success/failures	Number of times SLDAN 802.1q sub-port creation was successful/failure.
Sub-port delete success/failures	Number of times SLDAN 802.1q sub-port deletion was successful/failure.
Sub-port add to bd success/failures	Number of times SLDAN 802.1q sub-port addition to bridge-domain was successful/failure.
Sub-port remove from bd success/failures	Number of times SLDAN 802.1q sub-port deletion from bridge-domain was successful/failure.
Set tag-rewrite failures	Number of times there were failures in setting 802.1q tag rewrite on SLDAN 802.1q sub-port.
Set admin up failures	Number of times there were failures in setting admin-up on the SLDAN 802.1q sub-port.
Tunnel create success/failures	Number of times tunnels creation was successful/failure.
Tunnel delete success/failures	Number of times tunnel deletion was successful/failures.
Tunnel add to bd success/failures	Number of times tunnel addition to bridge-domain was successful/failure.
Tunnel remove from bd success/failures	Number of times tunnel deletion from bridge-domain was successful/failure.

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.



## Examples

The below example displays the **SD-LAN**-related counters on Data Center to Edge.

```
Network# show sdlan counters

BD create success:          6          BD create failures:          0
BD delete success:         0          BD delete failures:          0

Sub-port create success    4          Sub-port create failures    0
Sub-port delete success    0          Sub-port delete failures    0

Sub-port add to bd success  4          Sub-port add to bd failures  0
Sub-port remove from bd success 0          Sub-port remove from bd failures 0
Set tag-rewrite failures   0          Set admin up failures       0

Tunnel create success      8          Tunnel create failures      0
Tunnel delete success      0          Tunnel delete failures      0

Tunnel add to bd success   10         Tunnel add to bd failures   0
Tunnel remove from bd success 0          Tunnel remove from bd failures 0
```

## Examples

The below example displays the **SD-LAN**-related counters on DMZ to Edge.

```
Network# show sdlan counters

BD create success:          5          BD create failures:          0
BD delete success:         3          BD delete failures:          0

Sub-port create success    5          Sub-port create failures    0
Sub-port delete success    3          Sub-port delete failures    0

Sub-port add to bd success  5          Sub-port add to bd failures  0
Sub-port remove from bd success 3          Sub-port remove from bd failures 0
Set tag-rewrite failures   0          Set admin up failures       0

Tunnel create success      5          Tunnel create failures      0
Tunnel delete success      3          Tunnel delete failures      0

Tunnel add to bd success   5          Tunnel add to bd failures   0
Tunnel remove from bd success 3          Tunnel remove from bd failures 0
Network#
```

## History

Release version	Command history
2.1.0	Supporting multi-venue feature.
1.0.0	This command was introduced.

## Show Commands

show sdlan info

# show sdlan info

Displays the current VLANs which are serviced by the SDLAN.

## Syntax

**show sdlan info**

## Command Default

No command default.

## Modes

Network mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Command Output

The **show sdlan info** command displays the following information.

Output field	Description
Total VLANs	Total number of VLANs currently bridged by SD-LAN.
VLAN	VLAN identifier.
Type	Whether the VLAN is created dynamically (due to reception of traffic).
BD_ID	Identifier of the bridge-domain for this VLAN.
Uplink-Port	Uplink port. If the VLAN traffic has to be bridged on core-port, uplink port will be a 802.1q sub-port on the core-port. If the VLAN traffic has to be tunneled to another Edge cluster, uplink port will be a tunnel port.
AP-Tunnels	Number of AP tunnels for this VLAN. This indicate number of APs which have UEs assigned this VLAN and thus tunneling VLAN traffic to Edge.
Peer-Tunnels	Number of tunnels to other RUCKUS Edge device for this VLAN.
Access-Clients	Number of MACs that are learned on non-uplink ports for this VLAN.
Uplink-Clients	Number of MACs that are learned on uplink ports for this VLAN.

## Examples

The below example displays the **SD-LAN** operation information from Data Center to RUCKUS Edge

```
Network# show sdlan info
```

```
Total VLANs: 5
VLAN   Type      BD-ID  Uplink-Port      AP-Tunnels  Peer-Tunnels  Access-Clients  Uplink-Clients
100    dynamic  100    port1.100         1            0              1                1
110    dynamic  110    port1.110         1            0              1                0
120    dynamic  120    vxlan_gpe_tunnel3 2            1              1                1
200    dynamic  200    port1.200         2            0              1                1
220    dynamic  220    vxlan_gpe_tunnel8 1            1              1                1
```

The below example displays the **SD-LAN** operation information from DMZ to RUCKUS Edge.

```
Network# show sdlan info
```

```
Total VLANs: 2
VLAN   Type      BD-ID  Uplink-Port      AP-Tunnels  Peer-Tunnels  Access-Clients  Uplink-Clients
120    dynamic  120    port1.120         0            1              1                1
220    dynamic  220    port1.220         0            1              1                1
```

## History

Release version	Command history
2.1.0	Supporting multi-venue feature.
1.0.0	This command was introduced.

## Show Commands

show sdlan mac

# show sdlan mac

Displays the sdlan mac details.

## Syntax

```
show sdlan mac <addr> | [vlan<num>]
```

## Parameters

**addr**

Enter the MAC address.

**vlan <num>**

Enter the vlan number.

## Modes

Network mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The below example displays the **SD-LAN** mac details.

```
Network# show sdlan mac 6e:b5:7c:0e:d8:d0
  Mac-Address      Vlan      Interface-Name      Tunnel-Info
  6e:b5:7c:0e:d8:d0  100      vxlan_tunnel3      src 10.23.1.14 dst 10.23.1.11 src_port 4789
dst_port 4789 vni 100
```

## History

Release version	Command history
1.0.0	This command was introduced.

## show sdlan peer

Displays the sdlan information for an AP or peer Edge.

### Syntax

```
show sdlan peer <peer-ip> [ vlan <num> ] [ summary ]
```

### Command Default

No command default.

### Parameters

- peer** <peer-ip>  
Specifies the IP address of the peer device.
- vlan**<num>  
Specifies VLANs tunneled.
- summary**  
Specifies VLAN/Tunnel information.

### Modes

Network mode

### Command Output

The **show sdlan peer** <peer-ip> [ vlan <num> ] [ summary ] command displays the following information.

Output field	
VLAN	Identifier of the vlan for which the given peer (AP or another Edge) is tunneling traffic.
Clients	Number of MACs learned on this tunnel.
Interface-Name	Name of the tunnel interface.
Tunnel-Info	Information about the tunnel.
Counter	Packet/byte counter type.
Count	Value of this counter.
Mac-Address	MAC address of the client reachable via the tunnel to the given peer.
Vlan	VLAN assigned to the client.
Age (min)	Inactivity/age of this client's MAC.
Interface-Name	Interface name of the tunnel port on which this client MAC is learned.
Total Tunnels	Total number of vlan tunnels currently active for the given peer.
Total Clients	Total number of clients whose traffic is currently tunneled by the given peer.
Total rx packets	Total number of rx packets and rx bytes on all the currently active tunnels from the given peer.
Total tx packets	Total number of tx packets and tx bytes on all the currently active tunnels from the given peer.

## Show Commands

show sdlan peer

## Examples

```
Network# show sdlan peer 10.23.1.11
```

```
Displaying all tunnels from peer 10.23.1.11
```

Vlan	Clients	Interface-Name	Tunnel-Info	Counter	Count
200	1	vxlan_gpe_tunnel11	src 10.23.1.14 vni 200	rx packets	4
				rx bytes	252
				tx packets	5
210	2	vxlan_gpe_tunnel4	src 10.23.1.14 vni 210	tx bytes	566
				rx packets	12
				rx bytes	532
120	1	vxlan_gpe_tunnel1	src 10.23.1.14 vni 120	rx packets	125
				rx bytes	8386
				tx packets	61
110	1	vxlan_gpe_tunnel7	src 10.23.1.14 vni 110	tx bytes	7946
				rx packets	4
				rx bytes	196
100	1	vxlan_gpe_tunnel12	src 10.23.1.14 vni 100	rx packets	16
				rx bytes	840
				tx packets	6
1	0	vxlan_gpe_tunnel6	src 10.23.1.14 vni 1	tx bytes	672
				rx packets	101
				rx bytes	9394
220	1	vxlan_gpe_tunnel2	src 10.23.1.14 vni 220	tx packets	100
				tx bytes	13096

```
Displaying all clients MACs on peer 10.23.1.11
```

Mac-Address	Vlan	Age(min)	Interface-Name
6e:b5:7c:0e:d8:d0	100	2	vxlan_gpe_tunnel12
82:92:d7:93:1a:ef	220	0	vxlan_gpe_tunnel2
3e:e1:82:c1:e6:56	200	1	vxlan_gpe_tunnel11
46:30:e0:60:8f:81	120	1	vxlan_gpe_tunnel1
c2:58:f9:3c:8a:b2	210	1	vxlan_gpe_tunnel4
9e:43:9a:b6:ea:52	210	1	vxlan_gpe_tunnel4
6e:9c:a1:b4:db:a8	110	2	vxlan_gpe_tunnel7

```
Summary:
```

```
Total Tunnels: 7, Total Clients: 7  
Total rx packets: 262, Total rx bytes: 19600  
Total tx packets: 172, Total tx bytes: 22280
```

```
Network# show sdlan peer 10.23.1.11 summary
```

```
Summary:
```

```
Total Tunnels: 7, Total Clients: 7  
Total rx packets: 265, Total rx bytes: 19894  
Total tx packets: 175, Total tx bytes: 22682
```

```
Network# show sdlan peer 10.23.1.11 vlan 210
```

```
Displaying VLAN 210 tunnels from peer 10.23.1.11
```

Vlan	Clients	Interface-Name	Tunnel-Info	Counter	Count
210	2	vxlan_gpe_tunnel4	src 10.23.1.14 vni 210	rx packets	12
				rx bytes	532

```
Displaying VLAN 210 clients MACs on peer 10.23.1.11
```

Mac-Address	Vlan	Age(min)	Interface-Name
c2:58:f9:3c:8a:b2	210	2	vxlan_gpe_tunnel4
9e:43:9a:b6:ea:52	210	2	vxlan_gpe_tunnel4

```
Summary:
```

```
Total Tunnels: 1, Total Clients: 2  
Total rx packets: 12, Total rx bytes: 532
```

## History

Release version	Command history
2.1.0	Supporting multi-venue feature.
1.0.0	This command was introduced.

**Show Commands**  
show sdlan summary

## show sdlan summary

Displays the brief information of the SD-LAN.

### Syntax

**show sdlan summary**

### Command Default

No command default.

### Modes

Network mode

### Command Output

The **show sdlan summary** command displays the following information.

Output field	
Total VLANs	Total number of active VLANs.
Total Access Clients	Total number of clients on all APs whose traffic is tunneled to Edge.
Total Uplink Clients	Total number of clients whose MACs are learnt on the uplink ports.
Total AP-Tunnels	Total number of tunnels from all APs.
Total Peer-Tunnels	Total number of peer tunnels.

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

### Examples

The below example displays the **SD-LAN** operation information of Edge in Data Center.

```
Network# show sdlan summary

Total VLANs: 7
Total Access Clients: 1
Total Uplink Clients: 2
Total AP-Tunnels: 11
Total Peer-Tunnels: 2
```



The below example displays the **SD-LAN** operation information on DMZ Edge.

```
Network# show sdlan summary
```

```
Total VLANs: 1  
Total Access Clients: 0  
Total Uplink Clients: 0  
Total AP-Tunnels: 0  
Total Peer-Tunnels: 1
```

## History

Release version	Command history
2.1.0	Supporting multi-venue feature.
1.0.0	This command was introduced.

## Show Commands

show serial

# show serial

Displays the serial number of your RUCKUS Edge device.

## Syntax

**show series**

## Modes

User Privileged Mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The the follwing example shows how to display the serial number of your RUCKUS Edge device.

```
Device# show serial
Device Serial: 964ACA206E07F411EF84A0000C29488571
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show status

Displays the current status of the configuration.

## Syntax

**show status**

## Modes

Config Manager mode

## Examples

The following example shows sample output for the **show status** command.

```
Edge-VM-1-867# cfmgr
(cfmgr)# show status
Config Manager State: WAIT
The Latest Config Result: Success
TimeStamp: Fr-Apr-21-2023-08:22:57
Request Id: 4b6ac493-9816-4815-89700-8f8bf8833da6
GPB Name: EdgeNetworkingConfig
GPB Result: Success
```

## History

Release version	Command history
1.0.0	This command was introduced.

## Show Commands

show status

# show status

Displays the current onboarding status of the RUCKUS Edge device.

## Syntax

**show status**

## Command Default

## Modes

Connect Agent mode

## Command Output

The **show status** command displays the following information.

Output field	Description
Connection agent state	Connection agent state.
Status	Status: <ul style="list-style-type: none"><li>• Success</li><li>• The Edge device cannot get controller list. Please check your RUCKUS Edge entry setting. The Edge device gets empty response from VPP status. Please check the network connectivity between controller and device.</li><li>• The Edge device gets cert and key failed. Please check your OTP enroll-device setting.</li><li>• The Edge device cannot reach to controller. Please check the network connectivity between controller and device.</li><li>• The Edge device has been approved</li><li>• The Edge device gets in pending state. Please check controller setting.</li><li>• The Edge device gets in REJECT state from controller. Please check controller setting.</li><li>• The Edge device gets into re-discovery to renew JWT. Current JWT is invalid.</li></ul>
Nats Leaf status	Indicates if RUCKUS Edge connects to RUCKUS One as a NATS leaf and is ready to send or receive notification to RUCKUS One. [ ONLINE   OFFLINE ]
Server List	Server List
DRS default URL	Server URL for device registration.

## Usage Guidelines

The following example shows sample output for the show status command.

## Examples

```
(connect-agent)# show status
----- RUCKUS One information -----
Edge is not managed by RUCKUS One
Connection agent state:  SETUP
Status:  RUCKUS Edge cannot get controller list.
Please check your RUCKUS Edge entry setting.
Nats Leaf status: OFFLINE
Server List:
DRS default URL:  registrar.ruckuswireless.com
-----
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show tunnel profile

Displays the tunnel profile information.

## Syntax

**show tunnel profile**

## Modes

Network configuration mode

## Command Output

The **show tunnel profile** command displays the following information.

Output field	Description
User	User that created the tunnel profile.
INST	The instance ID of the tunnel profile.
ID	The ID of the tunnel profile.
UUID	The unique identifier (UUID) of the tunnel profile.
Name	The name of the tunnel profile.
FF	Indicates whether Forced Fragmentation (FF) is enabled for the tunnel profile (Y/N).
MO	Indicates whether Manual Override (MO) is enabled for the tunnel profile (Y/N)
M-PMTU	The maximum packet size (MTU) allowed on the tunnel interface.
AGE-TIME	The age of the tunnel profile in seconds.
KA-INTERVAL	The keep-alive interval in seconds.
KA-RETRY	The number of keep-alive retries before declaring the tunnel down.

The following example shows sample output for the **show tunnel profile** command.

## Examples

```
network# show tunnel profile
  USER      INST  ID          UUID                               NAME                               FF?  MO?  M-PMTU
AGE-TIME KA-INTERVAL  KA-RETRY
SD-LAN    (2)    2    20 SLb18ee155f4144271a3290e9503 Default tunnel profile    N    N    0
1200      2      5
PEER-TUNNEL (3)    12    19 bb08e651cf864ea0bc522b84683f    DMZ tunnel                N    Y    1400
1200      2      5
2 vxlan tunnel profile(s)
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show version

Displays the vector packet processing (VPP) version.

## Syntax

`show version`

## Modes

Network configuration mode

## Usage Guidelines

This command is supported only on RUCKUS Edge.

## Examples

The following example shows how to display the VPP.

```
Network# show version  
vpp v22.06.0-1090~g4777236bc built by root on buildkitsandbox at 2024-07-24T08:05:57
```

## History

Release version	Command history
1.0.0	This command was introduced.

## show vxlan config

Displays Virtual Extensible LAN (VxLAN) configuration details.

### Syntax

**show vxlan config**

### Modes

Network mode

The **show vxlan config** command displays the following information.

Output field	Description
Dynamic Tunnel	Displays whether the dynamic tunnel feature for VXLAN tunnels is enabled or disabled.
Aging Time	Displays the inactivity (or age) for the dynamic VXLAN tunnels.

### Usage Guidelines

The following example shows sample output for the **show vxlan config** command.

### Examples

```
Network # show vxlan config  
DynamicTunnel:disabled DynTun-app-ref-cnt:0  
AgingTime:1200
```

### History

Release version	Command history
1.0.0	This command was introduced.



## show vxlan dstats

Displays dynamic status for Virtual Extensible LAN (VxLAN) on the RUCKUS Edge device.

### Syntax

```
show vxlan dstats
```

### Modes

Network mode

### Usage Guidelines

### Command Output

Output field	Description
TunAddFail	Number of dynamic tunnel addition failures.
TunDelFail	Number of dynamic tunnel deletion failures.
IntfAddFail	Number of failures for the tunnel add actions performed by the service/user module.
IntfRemoveFail	Number of failures for the tunnel delete actions performed by the service/user module.
TunAddSuccess	Number of dynamic tunnel addition success.
TunDelSuccess	Number of dynamic tunnel deletion success.
IntfAddSuccess	Number of success for the tunnel add actions performed by the service/user module.
IntfRemoveSuccess	Number of success for the tunnel delete actions performed by the service/user module.
TunDecapPktsClamped	Number of payload TCP SYN/SYN-AC packets whose MSS got adjusted as per the tunnel pmtu value.
DynamicTunnelRequests	Number of requests sent to the main thread for creating dynamic VXLAN tunnels.
DecapHashTblAddFailures	Number of failures while trying to add the tunnel decap entry to the hash table.
DynamicTunnelCount	Total number of dynamic vxlan tunnels that are currently active.

The **show vxlan-gpe dstats** command displays the following information.

### Examples

```
Network # show vxlan dstats
TunAddFail:0
TunDelFail:0
IntfAddFail:0
IntfRemoveFail:0
TunAddSuccess:0
TunDelSuccess:0
IntfAddSuccess:0
IntfRemoveSuccess:0
TunDecapPktsClamped:0

DynamicTunnelRequests:0
DecapHashTblAddFailures:0
DynamicTunnelCount:0
```

**Show Commands**  
show vxlan dstats

## History

Release version	Command history
1.0.0	This command was introduced.

## show vxlan pmtu table

Displays the Maximum Transmission Unit (MTU) updates for the VxLAN received from APs for the RUCKUS Edge device.

### Syntax

```
show vxlan pmtu table
```

### Modes

Network mode

### Usage Guidelines

Output field	Description
IP Address	IP address of the AP.
PMTU	Path MTU of the tunnel to this AP. This PMTU is reported by AP
Time Stamp	Time stamp when this AP last reported a change in PMTU.
Count	Number of times, this AP reported a change in the tunnel PMTU value.

The following example shows sample output for the **show vxlan pmtu table** command.

### Examples

```
network# show vxlan pmtu table
  IP-Address      PMTU      Time-Stamp      Count
  53.0.0.66      1450      08/12/2023 06:58:10 AM      1
1 vxlan pmtu entries
```

### History

Release version	Command history
1.0.0	This command was introduced.

# show vxlan tunnel

Displays the VxLAN tunnel information.

## Syntax

**show vxlan tunnel**

## Modes

Network mode

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The following example displays the VxLAN tunnel information for a RUCKUS Edge in Data Center.

```
Network# show vxlan tunnel
[0] instance 0 src 10.23.1.14 dst 10.23.1.11 src_port 4789 dst_port 4789 vni 100 fib-idx 0 sw-if-idx 7
pmtu 1450 user 1 flags 0 encap-dpo-idx 20
[1] instance 1 src 10.23.1.14 dst 10.23.1.12 src_port 4789 dst_port 4789 vni 200 fib-idx 0 sw-if-idx 9
pmtu 1450 user 1 flags 0 encap-dpo-idx 19
[2] instance 2 src 10.23.1.14 dst 10.23.1.11 src_port 4789 dst_port 4789 vni 1 fib-idx 0 sw-if-idx 11
pmtu 1450 user 1 flags 0 encap-dpo-idx 20
[3] instance 3 src 10.23.1.14 dst 10.22.1.13 src_port 4789 dst_port 4789 vni 120 fib-idx 0 sw-if-idx 12
pmtu 1450 user 1 flags 0 encap-dpo-idx 18
[4] instance 4 src 10.23.1.14 dst 10.23.1.11 src_port 4789 dst_port 4789 vni 200 fib-idx 0 sw-if-idx 13
pmtu 1450 user 1 flags 0 encap-dpo-idx 20
[5] instance 5 src 10.23.1.14 dst 10.23.1.11 src_port 4789 dst_port 4789 vni 110 fib-idx 0 sw-if-idx 14
pmtu 1450 user 1 flags 0 encap-dpo-idx 20
[6] instance 6 src 10.23.1.14 dst 10.23.1.11 src_port 4789 dst_port 4789 vni 120 fib-idx 0 sw-if-idx 16
pmtu 1450 user 1 flags 0 encap-dpo-idx 20
[7] instance 7 src 10.23.1.14 dst 10.23.1.12 src_port 4789 dst_port 4789 vni 220 fib-idx 0 sw-if-idx 17
pmtu 1450 user 1 flags 0 encap-dpo-idx 19
[8] instance 8 src 10.23.1.14 dst 10.22.1.13 src_port 4789 dst_port 4789 vni 220 fib-idx 0 sw-if-idx 18
pmtu 1450 user 1 flags 0 encap-dpo-idx 18
[9] instance 9 src 10.23.1.14 dst 10.23.1.12 src_port 4789 dst_port 4789 vni 210 fib-idx 0 sw-if-idx 19
pmtu 1450 user 1 flags 0 encap-dpo-idx 19
```

The below example displays the VxLAN tunnel information on DMZ Edge device.

```
show Network# show vxlan tunnel
[0] instance 0 src 10.22.1.13 dst 10.23.1.14 src_port 4789 dst_port 4789 vni 120 fib-idx 0 sw-if-idx 8
pmtu 1450 user 1 flags 0 encap-dpo-idx 18
[1] instance 1 src 10.22.1.13 dst 10.23.1.14 src_port 4789 dst_port 4789 vni 220 fib-idx 0 sw-if-idx 9
pmtu 1450 user 1 flags 0 encap-dpo-idx 18
```

## History

Release version	Command history
1.0.0	This command was introduced.

# show vxlan tunnel profile

Displays the Virtual Extensible LAN (VxLAN) tunnel profile information.

## Syntax

**show vxlan tunnel profile**

## Modes

Network mode

## Usage Guidelines

## Command Output

The **show vxlan tunnel profile** command displays the following information.

Output field	Description
User	User that created the tunnel profile.
INST	The instance ID of the tunnel profile.
ID	The ID of the tunnel profile.
UUID	The unique identifier (UUID) of the tunnel profile.
Name	The name of the tunnel profile.
FF	Indicates whether Forced Fragmentation (FF) is enabled for the tunnel profile (Y/N).
MO	Indicates whether Manual Override (MO) is enabled for the tunnel profile (Y/N)
M-PMTU	The maximum packet size (MTU) allowed on the tunnel interface.
AGE-TIME	The age of the tunnel profile in seconds.
KA-INTERVAL	The keep-alive interval in seconds.
KA-RETRY	The number of keep-alive retries before declaring the tunnel down.

The following example shows sample output for the **show vxlan tunnel profile** command.

## Examples

```
network# show vxlan tunnel profile
  USER          INST  ID          UUID                               NAME                               FF?  MO?  M-PMTU
AGE-TIME KA-INTERVAL  KA-RETRY
SD-LAN        (2)    2    20 SLb18ee155f4144271a3290e9503 Default tunnel profile    N    N    0
1200          2          5
PEER-TUNNEL  (3)    12   19 bb08e651cf864ea0bc522b84683f    DMZ tunnel                N    Y   1400
1200          2          5
2 vxlan tunnel profile(s)
```

## Show Commands

show vxlan tunnel profile

## History

Release version	Command history
1.0.0	This command was introduced.

# show vxlan-gpe config

Displays Generic Protocol Extension for Virtual Extensible LAN (VxLAN-GPE) configuration details.

## Syntax

**show vxlan-gpe config**

## Command Default

No command default.

## Modes

Network mode

## Command Output

The **show vxlan-gpe config** command displays the following information.

Output field	Description
DynamicTunnel	Displays whether the dynamic tunnel feature for vxlan-gpe tunnels is enabled or disabled.
AgingTime	Inactivity (or age) for the dynamic VXLAN tunnels.

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

The following examples show the output of the **show vxlan-gpe config** command.

## Examples

```
Network# show vxlan-gpe config
DynamicTunnel:disabled DynTun-app-ref-cnt:0
AgingTime:300
```

## History

Release version	Command history
2.1.0	This command was introduced.

## Show Commands

show vxlan-gpe dstats

# show vxlan-gpe dstats

Displays dynamic tunnel statistics for the Generic Protocol Extension for Virtual Extensible LAN (VxLAN-GPE) tunnels on the RUCKUS Edge device.

## Syntax

```
show vxlan-gpe dstats
```

## Command Default

No command default.

## Modes

Network mode

## Command Output

The **show vxlan-gpe dstats** command displays the following information.

Output field	Description
TunAddFail	Number of dynamic tunnel addition failures.
TunDelFail	Number of dynamic tunnel deletion failures.
IntfAddFail	Number of failures for the tunnel add actions performed by the service/user module.
IntfRemoveFail	Number of failures for the tunnel delete actions performed by the service/user module.
TunAddSuccess	Number of dynamic tunnel addition success.
TunDelSuccess	Number of dynamic tunnel deletion success.
IntfAddSuccess	Number of success for the tunnel add actions performed by the service/user module.
IntfRemoveSuccess	Number of success for the tunnel delete actions performed by the service/user module.
TunDecapPktsClamped	Number of payload TCP SYN/SYN-AC packets whose MSS got adjusted as per the tunnel pmtu value.
DynamicTunnelRequests	Number of requests sent to the main thread for creating dynamic VXLAN tunnels.
DecapHashTblAddFailures	Number of failures while trying to add the tunnel decap entry to the hash table.
DynamicTunnelCount	Total number of dynamic vxlan tunnels that are currently active.

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.



## Examples

```
Network# show vxlan-gpe dstats
TunAddFail:0
TunDelFail:0
IntfAddFail:0
IntfRemoveFail:0
TunAddSuccess:132
TunDelSuccess:123
IntfAddSuccess:0
IntfRemoveSuccess:0
TunDecapPktsClamped:0

DynamicTunnelRequests:132
DecapHashTblAddFailures:0
DynamicTunnelCount:9
```

## History

Release version	Command history
2.1.0	This command was introduced.

## Show Commands

show vxlan-gpe pmtu table

# show vxlan-gpe pmtu table

Displays the Generic Protocol Extension for Virtual Extensible LAN (VxLAN-GPE) PMTU updates received from APs for the RUCKUS Edge device.

## Syntax

**show vxlan-gpe pmtu table**

## Command Default

No command default.

## Modes

Network mode

## Command Output

The **show vxlan-gpe pmtu table** command displays the following information.

Output field	Description
IP-Address	IP address of the AP.
PMTU	Path MTU of the tunnel to this AP. This PMTU is reported by AP.
Time-Stamp	Time stamp when this AP last reported a change in PMTU.
Count	Number of times, this AP reported a change in the tunnel PMTU value.

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

```
Network# show vxlan-gpe pmtu table
  IP-Address      PMTU      Time-Stamp      Count
  192.168.31.3    1450      04/16/2024 04:11:12 AM    3
  192.168.30.2    1450      04/16/2024 03:41:00 AM    1
2 vxlan pmtu entries
```

## History

Release version	Command history
2.1.0	This command was introduced.

# show vxlan-gpe tunnel

Displays the Generic Protocol Extension for Virtual Extensible LAN (VxLAN-GPE) tunnel information for the RUCKUS Edge device.

## Syntax

**show vxlan-gpe tunnel**

## Command Default

No command default.

## Modes

Network mode

## Command Output

The **show vxlan-gpe tunnel** command displays the following information.

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

```
Network# show vxlan-gpe tunnel
[0] lcl 172.20.20.100 rmt 172.20.20.200 lcl_port 4790 rmt_port 4790 vni 16777215 fib-idx 0 sw-if-idx 6
user 0 pmtu-user-type 3 pmtu-user-inst 2 pmtu 1450 decap-next-protocol ethernet
[1] lcl 172.20.20.100 rmt 172.20.20.5 lcl_port 4790 rmt_port 4790 vni 50 fib-idx 0 sw-if-idx 7 user 1
pmtu-user-type 2 pmtu-user-inst 2 pmtu 1450 decap-next-protocol ethernet
[2] lcl 172.20.20.100 rmt 172.20.20.5 lcl_port 4790 rmt_port 4790 vni 100 fib-idx 0 sw-if-idx 8 user 1
pmtu-user-type 2 pmtu-user-inst 2 pmtu 1450 decap-next-protocol ethernet
[3] lcl 172.20.20.100 rmt 172.20.20.3 lcl_port 4790 rmt_port 4790 vni 100 fib-idx 0 sw-if-idx 9 user 1
pmtu-user-type 2 pmtu-user-inst 2 pmtu 1450 decap-next-protocol ethernet
[4] lcl 172.20.20.100 rmt 172.20.20.5 lcl_port 4790 rmt_port 4790 vni 16777215 fib-idx 0 sw-if-idx 11
user 2 pmtu-user-type 4 pmtu-user-inst 0 pmtu 1450 decap-next-protocol ethernet
[5] lcl 172.20.20.100 rmt 172.20.20.200 lcl_port 4790 rmt_port 4790 vni 100 fib-idx 0 sw-if-idx 12 user
1 pmtu-user-type 3 pmtu-user-inst 2 pmtu 1450 decap-next-protocol ethernet
[6] lcl 172.20.20.100 rmt 172.20.20.3 lcl_port 4790 rmt_port 4790 vni 16777215 fib-idx 0 sw-if-idx 13
user 2 pmtu-user-type 4 pmtu-user-inst 0 pmtu 1450 decap-next-protocol ethernet
```

Release version	Command history
2.1.0	This command was introduced.

## Show Commands

show vxlan-gpe tunnel keepalive session

# show vxlan-gpe tunnel keepalive session

Displays Generic Protocol Extension for Virtual Extensible LAN (VxLAN-GPE) tunnel keepalive session information. The AP uses the tunnel keepalive messages to bring up the tunnel to the device and to monitor the health of the tunnel. Without the keep-alive feature, if the Edge device becomes unreachable, the AP will continue tunneling traffic to the Edge, causing the traffic to be lost in the network. With the keep-alive feature enabled, the AP will generate events, bring down the tunnel, and stop broadcasting WLANs whenever the Edge device is unreachable. Additionally, the AP will periodically report its tunnel status to the RUCKUS One controller.. These details will assist in troubleshooting.

## Syntax

```
show vxlan-gpe tunnel keepalive session [ peer <peer-ip> ] [ summary | detail ]
```

## Command Default

No command default.

## Parameters

**peer** <peer-ip>

Specifies the IP address of the tunnel peer.

**summary**

Displays a brief summary of only the total number active and backup tunnel keepalive sessions.

**detail**

Displays detailed keepalive session information.

## Modes

Network mode

## Command Output

The **show vxlan-gpe tunnel keepalive session** [ **summary** | **detail** ] command displays the following information.

Output field	Description
Total active tunnel keepalive sessions	Displays the total number of active keepalive sessions to the RUCKSU Edge device.
Total backup tunnel keepalive sessions	Displays the total number of backup keepalive sessions to the RUCKSU Edge device.
Peer IP	Displays the IP address of the tunnel peer.
Start time	Displays the time since the keepalive session were established.
Status	Displays if the session is <i>Up</i> or <i>Down</i> .
Active/Backup	Displays whether the Edge device is Active (Peer forwards traffic to this Edge device) or back up (Peer is not forwarding any traffic to this Edge device at this moment but will start forwarding once its current Active Edge goes down) Edge for this session.
Mode	Initiator (This Edge device initiated the keepalive session to the Peer) / Responder (This Edge is only responding to keepalive request initiated by the Peer).

Output field	Description
Interval and Retry	Keepalive Session transmit Interval in seconds and Max Retry before it declares the session as down or peer as un-reachable. This is only displayed for Initiator keepalive sessions.
Start time	Time since keepalive session was established.
Age Remaining	Keepalive Session will Age out after these many second if no packets are received from the tunnel Peer.

## Usage Guidelines

This command is supported only on the RUCKUS Edge device.

## Examples

The below example displays the tunnel keepalive session summary information.

```
vpp# show vxlan-gpe tunnel keepalive session peer 192.168.31.3 summary
'summary' and 'Peer' option are mutually exclusive
vpp# show vxlan-gpe tunnel keepalive session summary
Total active tunnel keepalive sessions:2
Total backup tunnel keepalive sessions:3
vpp#
```

The below example displays the tunnel keepalive session information.

```
vpp# show vxlan-gpe tunnel keepalive session
# Peer IP Start time Status Active/Backup
1 192.168.31.3 2024-09-26 17:37:05 Up Backup
2 192.168.30.4 2024-09-26 22:40:27 Up Active
3 192.168.31.4 2024-09-26 22:40:33 Up Backup
4 192.168.31.7 2024-09-26 23:29:35 Up Active
5 192.168.10.14 2024-09-26 22:40:36 Up Backup
vpp# show vxlan-gpe tunnel keepalive session peer 192.168.31.3
# Peer IP Start time Status Active/Backup
1 192.168.31.3 2024-09-26 17:37:05 Up Backup
vpp# show vxlan-gpe tunnel keepalive session peer 192.168.31.3 detail
Peer IP address : 192.168.31.3
Mode : Responder
Session state: Up (Backup)
Start time: 2024-09-26 17:37:05
Last PDU received : 1.68 seconds ago
Last PDU transmit : 1.68 seconds ago
Age remaining : 5 seconds
Keepalive Request Packets Sent: 0 Received: 22611
Keepalive Reply Packets Sent:22611 Received: 0
Keepalive Connection Packets Sent: 0 Received: 1
Keepalive BackUp Packets Sent: 0 Received: 18245
```

## Show Commands

show vxlan-gpe tunnel keepalive session

The below example displays the tunnel keepalive session detail.

```
show vxlan-gpe tunnel keepalive session detail
Peer IP address : 2.1.1.1
Mode : Initiator
Interval: 2   Retry: 5
Session state: Up (Active)
Start time: 2024-08-14 05:50:23
Last PDU received :      1.57 seconds ago
Last PDU transmit :     1.57 seconds ago
Age remaining : 10 seconds
Keepalive Request Packets      Sent: 51      Received: 0
Keepalive Reply Packets        Sent: 0        Received: 49
Keepalive Connection Packets   Sent: 3        Received: 0
Keepalive BackUp Packets       Sent: 0        Received: 0

Peer IP address : 2.1.1.3
Mode : Initiator
Interval: 2   Retry: 5
Session state: Down (Active)
Start time: -
Last PDU received :          0.00 seconds ago
Last PDU transmit :          .57 seconds ago
Age remaining : 0 seconds
Keepalive Request Packets      Sent: 51      Received: 0
Keepalive Reply Packets        Sent: 0        Received: 0
Keepalive Connection Packets   Sent: 5        Received: 0
Keepalive BackUp Packets       Sent: 0        Received: 0
```

For Responder Session :

```
=====
show vxlan-gpe tunnel keepalive session detail
Peer IP address : 2.1.1.2
Mode : Responder
Session state: Up (Active)
Start time: 2024-08-14 05:50:24
Last PDU received :          1.36 seconds ago
Last PDU transmit :          1.36 seconds ago
Age remaining : 9 seconds
Keepalive Request Packets      Sent: 0        Received: 234
Keepalive Reply Packets        Sent: 234      Received: 0
Keepalive Connection Packets   Sent: 0        Received: 1
Keepalive BackUp Packets       Sent: 0        Received: 0
```

The below example displays the tunnel keepalive session peer detail.

```
show vxlan-gpe tunnel keepalive session peer 2.1.1.1 detail
Peer IP address : 2.1.1.1
Mode : Initiator
Interval: 2   Retry: 5
Session state: Up (Active)
Start time: 2024-08-14 05:50:23
Last PDU received :          .89 seconds ago
Last PDU transmit :          .89 seconds ago
Age remaining : 9 seconds
Keepalive Request Packets      Sent: 142     Received: 0
Keepalive Reply Packets        Sent: 0        Received: 140
Keepalive Connection Packets   Sent: 3        Received: 0
Keepalive BackUp Packets       Sent: 0        Received: 0
```

## History

Release version	Command history
2.1.0	This command was introduced.

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## shutdown

Shutdown the device immediately.

### Syntax

**shutdown**

### Command Default

No command default.

### Modes

Advanced mode

### Usage Guidelines

Use this command to reboot the whole system gracefully.

### Examples

```
Edge-VM-1-867# shutdown
? Warning! This action will immediately shutdown the device.
Do you really want to shutdown the device?
(yes/N)
```

### History

Release version	Command history
2.1.0	This command was introduced.

## support-core

Collects core-dump related information.

### Syntax

**support-core** [ **all** | **list** | **filename** *filename* ]

### Modes

Basic mode

Advanced mode

**all**

Collects the core-dump information and uploads it to a filesaver.

**filename**

Select a core file with a specific filename.

**list**

Lists all the core-dump filenames in the system.

### Usage Guidelines

*filename*

Specify the filename for a particular core file.

### Examples

```
Edge# support-core
Collect core-dump related info

Available Commands:
  all      Collect core-dump related info all
  filename Select a core file with the specific filename, get file names through [support-core
list] command
  list     List all core-dump filename

Edge# support-core all
Succeeded to collect core-dump information, filename: coredump.tar.gz

Edge# support-core list
File Size: 68123698, File Name: core.vpp_main.0.2726hgn47dgb789hvhjk368018hownxy79553329d48er7hgs.
10551.1658000320000.lz4
```

### History

Release version	Command history
1.0.0	This command was introduced.



# support-export

Exports debug related information.

## Syntax

```
support-export [ rpoint filename | { [ scp | sftp { all | core | log } target IP user destination path ] }
```

## Parameters

**rpoint**  
Export debug information through the rpointv2 protocol.

**scp**  
Export debug information through the SCP protocol.

**sftp**  
Export debug information through the SFTP protocol.

**all**

**core**

**log**

*filename*  
Specify the filename.

*target IP*  
The IP address of the target

*user*

*destination path*  
Specify the destination path.

## Modes

Basic mode

Advanced mode

## Usage Guidelines

The three options for uploading the core and the log file bundle to the server are: rpointv2, SCP, and SFTP protocols.

The following example exports all debug related information from the specified IP address to a destination using the SCP protocol.

## Commands Sh through T

### support-export

## Examples

```
Edge# support-export scp all 10.176.154.37 user /tmp/  
Please enter the destination user password:  
The remote host 10.176.154.37 ECDSA key fingerprint is SHA256:ZMR7qlPZ1lOx7ghytu09J19eDYv53kjkEyN  
+KRneyj320 .  
Are you sure to connect (yes/no)?  
yes  
Succeed to scp the debug info file(logs-2024-05-02_17-33-34.tar.gz).  
Succeed to scp the debug info file(coredump-2024-05-02_17-44-52.tar.gz).
```

## History

Release version	Command history
1.0.0	This command was introduced.

# support-log

Collects the log-related debug information into a filename.

## Syntax

**support-log**

## Modes

Basic mode

Advanced mode

## Usage Guidelines

## Examples

```
Edge# support-log  
Succeeded to collect log debug information, file name: logs.tar.gz
```

## History

Release version	Command history
1.0.0	This command was introduced.

## stats

Displays the statistics.

### Syntax

**stats**

### Modes

Advanced mode

### Usage Guidelines

This command is supported only on the RUCKUS Edge device.

### Examples

```
Edge# stats
I0825 10:46:35.341961      14 command.go:47] "Print basic info about the application" version="unknown"
goVersion="go1.20.7" gitCommit="0a892f567ce4bad71e9d95dbf9643425b358128f"
buildTime="2023-08-17T03:29:42+0000" compiler="gc" os="linux" arch="amd64" cores=2
I0825 10:46:35.342108      14 main.go:29] "config ready" log-level=""
```

### History

Release version	Command history
1.0.0	This command was introduced.

## switch-over

Initiates a switch-over between the active and standby nodes in a cluster.

### Syntax

`switch-over`

### Command Default

### Modes

Cluster mode

### Usage Guidelines

This command can only be executed when the current node is in an active state. This is used in high-availability setups for maintaining uninterrupted service.

### Examples

The following example initiates switch-over.

```
Edge# cluster
(cluster)# switch-over
2024-09-18T19:01:32Z:cmutils.WaitForGenResp> >Received from server:
964ACA206E07F411EF84A0000C29488571:Reply:
```

### History

Release version	Command history
1.0.0	This command was introduced.

## system

Displays system information.

### Syntax

```
system { enroll-device otp-number | reboot | reset | show serial }
```

### Modes

Advanced mode

System mode

### Parameters

#### enroll-device

Enroll the device certificate using OTP.

#### reboot

Reboot the system.

#### reset

Reset the system configuration to its default settings.

#### show serial

Displays the serial number.

#### *otp-number*

Enter the One Time Password (OTP) received through email or SMS.

## Usage Guidelines

When the new RUCKUS Edge device is added, ACX will automatically send an OTP notification to your email or SMS. Before enrolling, go to the Connect Agent mode from the Advanced mode and enter the reachable DRS server domain name.

The following example shows how to enter the DRS server domain name before enrolling a device.

```
Edge# connect-agent  
(connect-agent)# set drs-address drsqa.ruckuswireless.com  
Set DRS address (drsqa.ruckuswireless.com) successfully.
```

```
Edge# system  
(system)# enroll-device YLM453  
Successfully enrolled device certificate.
```

```
Edge# system  
(system)# show serial  
Device Serial: 964ACA206E07F41123240000C29488571
```

## History

Release version	Command history
1.0.0	This command was introduced.

# start dhcp client

Starts the Dynamic Host Configuration Protocol (DHCP) client on a network interface.

## Syntax

`start dhcp client interface`

## Command Default

The DHCP client is not configured.

## Parameters

*port*  
Specifies the port.

## Modes

Network configuration mode

## Usage Guidelines

This command is supported only on RUCKUS Edge.

## Examples

The following example starts the DHCP client on the interface, port1.

```
Edge# network
Network# start dhcp client port1
```

## History

Release version	Command history
1.0.0	This command was introduced.

## stop dhcp client

Configures or deletes the Domain Name System (DNS) server on RUCKUS Edge.

### Syntax

**stop dhcp client** *interface*

### Command Default

The DHCP client is not configured.

### Parameters

*port*  
Specifies the port.

### Modes

Network configuration mode

### Usage Guidelines

This command is supported only on RUCKUS Edge.

### Examples

The following example stops the DHCP client on the interface, port1.

```
Edge# network
Network# stop dhcp client port1
```

### History

Release version	Command history
1.0.0	This command was introduced.



## traceroute

Determines the path through which a RUCKUS Edge can reach another device.

### Syntax

**traceroute** [ *ipv4-address* | *domain* ]

### Parameters

*ipv4-address*

Specifies the IPv4 address of the destination host.

*domain*

Specifies the domain name of the destination host.

### Modes

Network configuration mode

### Usage Guidelines

TBD

### Examples

The following example traces the path that packets take from your RUCKUS Edge to a specified destination.

```
Edge# network
Network# traceroute 168.95.1.1
traceroute to 168.95.1.1 (168.95.1.1), 30 hops max, 46 byte packets
 1 10.42.0.1 (10.42.0.1) 0.007 ms 0.005 ms 0.004 ms
 2 10.254.1.254 (10.254.1.254) 0.525 ms 0.403 ms *
 3 10.206.67.254 (10.206.67.254) 8.131 ms 14.550 ms 9.191 ms
 4 10.7.42.30 (10.7.42.30) 0.882 ms 0.755 ms 0.699 ms
```

### History

Release version	Command history
1.0.0	This command was introduced.



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