



# Hashed SNMP community string based on device IP address

Prime Cable Provisioning 6.3 supports the hashed SNMP community string feature based on the device's IP address which is unique for each device.

This chapter describes the command-line interface (CLI) commands that you can use to configure the Prime Cable Provisioning hashed SNMP community string based on device IP address parameters.



**Note**

To enable the logs for this feature:

```
debug on
debug dpe dpe-server
log level 6-info
```

```
This IP verify feature needs to be enabled for this feature to be enabled ..
service tftp 1 ipv4 verify-ip
service tftp 1 ipv6 verify-ip
```

The commands described in this chapter are:

Command	Description	CLI Mode		Required Privileges			
		Enable	Disable	PRIV_DPE_READ	PRIV_DPE_UPDATE	PRIV_DPE_SECURITY	PRIV_DEVICE_READ
<a href="#">snmp hash read/write community</a>	Configure read/write SNMP community string	✓		✓	✓		
<a href="#">snmp hash read/write format</a>	Configure read/write SNMP community format	✓		✓	✓		
<a href="#">snmp hash read/write key</a>	Configure read/write SNMP community key	✓		✓	✓		

Command	Description	CLI Mode		Required Privileges			
		Enable	Disable	PRIV_D PE_ READ	PRIV_DPE _UPDATE	PRIV_ DPE_ SECURIT Y	PRIV_ DEVICE_ READ
<code>snmp hash read/write enable</code>	Enable/Disable hashed SNMP community string feature for read/write	✓	✓	✓	✓		
<code>snmp hash function</code>	Configures hash function for the hashed SNMP community string feature	✓		✓	✓		
<code>snmp hash length</code>	Configures hash length for the hashed SNMP community string feature	✓		✓	✓		

## snmp hash read/write community

Use the `snmp hash read/write community` command to configure the hashed SNMP community string using the following commands:

### Syntax Description

`snmp hash read community <community parameter>`

`snmp hash write community <community parameter>`

The *<community parameter>* specifies the string that will be replaced by the hashed SNMP community string in the configuration binary file. This parameter is required before the feature is enabled for both read and write operations.

This configuration can be viewed as part of the `show running-config` command output, which displays the current DPE configuration.

### Examples

This result occurs when you enable read community snmp hash community string.

```
bac_dpe# snmp hash read community readcommunity
% OK
```

This result occurs when you enable write community snmp hash community string.

```
bac_dpe# snmp hash write community writecommunity
% OK
```

---

**Defaults**

No default behavior or values.

## snmp hash read/write format

Use the `snmp hash read/write format` command to configure the format of the input to the SNMP hash function using the following commands:

---

**Syntax Description**

**snmp hash read format** *<format parameter>*

**snmp hash write format** *<format parameter>*

The *<format parameter>* specifies the text string consisting of seed values, and placement of the IP address bytes, `#{IPBYTES}`. This parameter is required before the feature is enabled for both read and write operations.

This configuration can be viewed as part of the `show running-config` command output, which displays the current DPE configuration.

---

**Examples**

This result occurs when you enable `snmp hash read format`.

```
bac_dpe# snmp hash read format abc#{IPBYTES}xyz
% OK
```

This result occurs when you enable write `snmp hash write format`.

```
bac_dpe# snmp hash write format abc#{IPBYTES}xyz
% OK
```

---

**Defaults**

No default behavior or values.

## snmp hash read/write key

Use the `snmp hash read/write key` command to configure the secret key required for the generation of the read/write hashed SNMP community string using the following commands:

---

**Syntax Description**

**snmp hash read key** *<key parameter>*

**snmp hash write key** *<key parameter>*

The *<key parameter>* specifies the text string that will be configured as the secret key for the read/write hashed SNMP community string operations. This parameter is required before the feature is enabled for both read and write operations.

This configuration is not displayed as plain text in the `show running-config` command output, but as the checksum of the key.

**Examples**

This result occurs when you enable read key.

```
bac_dpe# snmp hash read key
o8nsotIdwQGUK31H6pTvrAUQ9n7okH4wF3YfUrS76eqTvtuywAvg6jY2gbjcwxm
% OK
```

This result occurs when you enable write key.

```
bac_dpe# snmp hash write key
o8nsotIdwQGUK31H6pTvrAUQ9n7okH4wF3YfUrS76eqTvtuywAvg6jY2gbjcwxm
% OK
```

**Defaults**

No default behavior or values.

## snmp hash read/write enable

Use the snmp hash read/write enable command to enable/disable the hashed SNMP community string read/write feature, using the following commands:

**Syntax Description**

**snmp hash read enable true / false**  
**snmp hash write enable true / false**

To enable the SNMP hash feature, the configuration parameters (*community*, *format*, and *key*) have to be set on the DPE. The other parameters (*function* and *length*) are optional. You can use this command to enable either to read or write the community string replacement at a time.

This configuration can be viewed as part of the *show running-config* command output, which displays the current DPE configuration.

**Examples**

This result occurs when you enable read snmp hash community string.

```
bac_dpe# snmp hash read enable true
% OK
```

This result occurs when you enable write snmp hash community string.

```
bac_dpe# snmp hash write enable true
% OK
```

**Defaults**

No default behavior or values.

## snmp hash function

Use the snmp hash function command to configure the cryptographic hash function:

**Syntax Description** `snmp hash function <function parameter>`

The *<function parameter>* specifies the following supported hash functions:

- HmacSHA1
- HmacSHA256
- HmacSHA512

**Examples** This result occurs when you enable dpe tftp event of the DPE.

```
bac_dpe# snmp hash function HmacSHA1
% OK
```

**Defaults** The default value is **HmacSHA512**.

## snmp hash length

Use the snmp hash length command to reduce the length of the read/write hash SNMP community string:

**Syntax Description** `snmp hash length <length parameter>`

The *<length parameter>* specifies the length of the hash output to form the SNMP community string. If this parameter is not configured the whole hash is used as the SNMP community string.

This configuration can be viewed as part of the *show running-config* command output, which displays the current DPE configuration. The minimum value is 1.

**Examples**

```
bac_dpe# snmp hash length 15
% OK
```

**Defaults** The whole hash is considered as the SNMP community string.

■ snmp hash length