



CHAPTER 21

Configuring the SCE-Sniffer RADIUS LEG

This module describes the configuration instructions to configure the SCE-Sniffer RADIUS LEG.

The SCE-Sniffer RADIUS LEG is part of the SM installation package.

The SCE-Sniffer RADIUS LEG is configured using the configuration file **rad_snif.cfg**, which resides in the **<sm-inst-dir>/sm/server/root/config** directory (**sm-inst-dir** refers to the subscriber manager (SM) installation directory).

The configuration file consists of sections headed by a bracketed section title; for example, **[SCE-Sniffer RADIUS LEG]**. Each section consists of several parameters with the format of **parameter=value**. The number sign (“#”) at the beginning of a line denotes that this is a remark line.

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Configuring the General Settings

The general configuration of the LEG appears under the section name **[SCE-Sniffer RADIUS LEG]**. The following list describes the general configuration parameters:

- **start**
Defines whether the SM should run the LEG at startup.
Possible values for this parameter are **yes** and **no**. The default value is **no**.
To start using the LEG, change this setting to **yes**.
- **packet_types**
Defines the RADIUS packet types to analyze. You should set this parameter according to the integration mode you have chosen.
Possible values are any combination of: **access-request**, **access-accept**, **accounting-start**, **accounting-interim**, and **accounting-stop** separated by commas.
The default value is **accounting-start, accounting-interim, accounting-stop**.
- **log_failures**
Defines whether the LEG should add messages about failures to the user log.

Possible values for this parameter are **true** and **false**. The default value is **true**.

- log_all

Defines whether the LEG should add all messages, including successful logins and logouts, to the user log.

Possible values for this parameter are **true** and **false**. The default value is **false**.



Note

For this LEG to work correctly, use the configuration file to enable the RDR server in the SM.

Configuring the Subscriber ID



Note

The Subscriber ID configuration is optional.

The subscriber ID is identified by the User-Name attribute by default. You can configure the LEG to use any other RADIUS attribute to identify the subscriber ID, including using the Vendor-Specific attribute.



Note

If you want to keep the default identification according to the User-Name attribute, you can skip this section.



Note

The configured attribute must be of data type **string**. When using the Vendor-Specific attribute, the configured vendor specific subtype must be of data type **string**.

The section used for subscriber ID configuration is called [**RADIUS.Subscriber ID**]. The following list describes the parameters:

- radius_attribute
Defines the attribute number for the subscriber ID classification.
The default value is 1 (User-Name attribute).
- radius_attribute_vendor_id
This parameter is only relevant if **radius_attribute** is configured to 26 (Vendor-Specific attribute).
The parameter defines the vendor ID number for the subscriber ID classification.
This parameter has no default value.
- radius_sub_attribute
This parameter is only relevant if **radius_attribute** is configured to 26 (Vendor-Specific attribute).
The parameter defines the sub attribute within the vendor specific attribute that is used for subscriber ID classification.
This parameter has no default value.
- radius_attribute_type
Defines the attribute type. Possible values for this parameter are **integer** or **string**. The default value is **string**.

Information About Configuring the Subscriber IP Address

**Note**

The Subscriber IP Address configuration is optional.

The subscriber IP Address is identified by the Framed-Route attributes, or the Framed-IP-Address attribute (Framed-IP-Netmask optional) by default. The LEG can be configured to use any other RADIUS attribute to identify the subscriber IP Address, including using the Vendor-Specific attribute as described in the [Subscriber IP Association](#) section.

To define which attribute to use for the subscriber IP address, configure the **[RADIUS.Subscriber IP Address]** section. In order to use the default values, leave the configuration remarked.

To define the attribute to be used, configure the following parameters:

- **radius_attribute**
Configure the **radius_attribute** parameter with the RADIUS attribute number. Enter the value of 26 for Vendor Specific Attributes (VSA).
- **radius_attribute_vendor_id**
This parameter is only relevant if **radius_attribute** is configured to 26 (Vendor-Specific attribute). The parameter defines the vendor ID number for the subscriber ID classification.
This parameter has no default value.
- **radius_sub_attribute**
This parameter is only relevant if **radius_attribute** is configured to 26 (Vendor-Specific attribute). The parameter defines the sub attribute within the vendor specific attribute that is used for subscriber ID classification.
This parameter has no default value.
- **radius_attribute_type**
Configure the **radius_attribute_type** parameter according to the RADIUS attribute format.
Possible values for this parameter are **integer** or **string**. If the type is **string**, you must supply a mapping table. The default value is **string**.

Subscriber IP Address Configuration Example

The following is an example of the configuration section to define which attribute to use for the subscriber IP address:

```
[RADIUS.Subscriber IP Address]
radius_attribute=26
radius_attribute_vendor_id=1000
radius_sub_attribute=3
radius_attribute_type=string
```

Information About Configuring the Policy Settings


Note

The policy configuration is optional.

Policy configuration assigns policy information such as package ID, according to the RADIUS packets. Configure the SCE-Sniffer RADIUS LEG using the policy section(s) to assign the policy information.


Note

This section is optional. If you do not need to set policy information according to RADIUS packets, you can skip this section. The SCE-Sniffer RADIUS LEG will not include any policy information when it logs in subscribers. If the subscriber already has some policies set, the LEG will not affect it.

For each policy you want to define, you need to specify a different section named **[RADIUS.Policy.policyName]**. You can use any string you want for policyName if the policy name is unique inside the configuration file.

Each policy section has the following parameters:

- **radius_attribute**
Defines the attribute number that holds the policy information.
This parameter has no default value.
- **radius_attribute_vendor_id**
This parameter is only relevant if radius_attribute is configured to 26 (Vendor-Specific attribute).
The parameter defines the vendor ID number that holds the policy information.
This parameter has no default value.
- **radius_sub_attribute**
This parameter is only relevant if radius_attribute is configured to 26 (Vendor-Specific attribute).
The parameter defines the sub attribute of the vendor specific attribute that holds the policy information.
This parameter has no default value.
- **radius_attribute_type**
Defines the type of the attribute.
Possible values are **string** or **integer**.
This parameter has no default value.
- **default_value**
Defines the default value to set in case the attribute is not found in the traffic.
The default value is set only if this policy has not been already set, for example by other LEG interfaces.
This parameter is optional. If it does not exist, a default value will not be set for this policy.
- **policy_name**
Defines the name of the subscriber property. For instance, the packageId property defines the policies of the SCA BB solution.
This parameter has no default value.

**Note**

The **policy_name** parameter is case sensitive and must be written exactly as defined by the SCA BB Console. For example, **packageId**, **monitor**, **upVlinkId**, or **downVlinkId**.

- mapping_table.<key>=<value>

A set of values (key, value) used to map the data retrieved from the RADIUS attribute to the policy index configured by the application.

**Note**

The mapping table key is case sensitive and must be written exactly as it exists in the RADIUS packets.

Policy Configuration Example

The following configuration section associates the `packageId` property of the SCA BB solution with a Vendor Specific attribute of the RADIUS packet:

```
[RADIUS.policy.packageId]
radius_attribute=26
radius_attribute_vendor_id=1000
radius_sub_attribute=2
radius_attribute_type=string
default_value=1
policy_name=packageId
mapping_table.gold=11
mapping_table.silver=12
mapping_table.bronze=13
```

This configuration indicates that if the configured RADIUS attribute of data type string holds the value *gold*, the package ID that will be introduced to the SM will have the value of 11. If the configured vendor specific attribute does not appear in the traffic, the package ID that will be introduced to the SM will have the value 1.

Applying the Configuration on the SM

After editing the relevant configuration files, use the following `p3sm` command-line utility to load the configuration file:

```
>p3sm --load-config
```

■ Applying the Configuration on the SM