



# Secure Router 4134

## Software Release 10.1.2 Readme Notes

### **1. Release Summary**

Release Date: 19-Dec-2008

Purpose: Software maintenance release to address customer found software issues.

### **2. Notes for Upgrade**

Please see the technical documentation for the Secure Router 4134 version 10.1.1 available at: <http://www.nortel.com/support> for details on how to upgrade your Secure Router unit.

#### **File Names for This Release**

<b>Description</b>	<b>File Size</b>	<b>Version</b>	<b>File Name</b>
Secure Router 4134 Application Image	19,417,391	10.1.2	SR4134.Z

### **3. Version of Previous Release**

Software Version 10.1.1

### **4. Compatibility**

N/A

## **5. New Features in the 10.1.2 Release**

### **5.1 TACACS+ Support for Cisco Privilege Levels**

The ability of support for Cisco Privilege levels simplifies the setup of AAA authorization of commands when using TACACS+ Server. Cisco defined 16 possible privilege levels in which 3 are set up by default. This release supports all the default levels that Cisco supports which are level zero, one and fifteen. For all other TACACS+ Privilege levels the user will have the same user level as the default user. The TACACS+ privilege level maps to a corresponding user levels on the SR 4134 which each user can see by issuing the CLI command ***show whoami***. The corresponding mapping between the TACACS+ Privilege levels and SR 4134 user levels are as follows:

<b>TACACS+ Privilege Level</b>	<b>SR 4134 User Level</b>
15	1 (super user)
1	4 (default)
0	3

The following table shows the CLI commands each user level supports:

<b>User Level</b>	<b>Privilege Name</b>	<b>Definition</b>
1 (highest)	PRIVILEGE_ADMIN	Admin Level Can access any command and configure any feature in the router, including user configuration and administration
2	PRIVILEGE_CONFIGURE	Configure Level Can access any command and configure any feature in the router, except user configuration and administration
3	PRIVILEGE_TEST	Test Level Every command that level 4 can execute plus clear arp, show conf, show run, show start, show user, show file.
4 (default)	PRIVILEGE_NORMAL	Normal Level Can only enter ping, trace, mtrace telnet, and show commands except for: (show conf, show run, show start, show user, show file, show ftp)

### 5.1.1 Setting up TACACS+ Server for Privilege Levels

Simple setup for the TACACS+ server is to set up a separate group for each privilege level on your TACACS+ server and then assign each user to the appropriate group. The following figure shows a portion of the `tac_plus.cfg` file used by a Freeware version of TACACS+ server on Linux.

```
group = configure {
service = exec {
priv-lvl = 15
}
}
group = test {
service = exec {
priv-lvl = 0
}
}
group = group1 {
service = exec {
priv-lvl = 1
}
}
user = admin {
    login = file /etc/passwd
    member = configure
}
user = tester {
    login = file /etc/passwd
    member = test
}
user = user1 {
    login = file /etc/passwd
    member = group1
}
```

On the SR 4134 under the AAA configuration section you need to specify that the AAA authentication and authorization will use TACACS. The following commands need to be specified under the AAA section with the appropriate protocols and other services.

```
aaa
aaa authentication login default tacacs
aaa authentication protocols default ascii
aaa authorization commands default tacacs
```

## **5.2 PSTN Connectivity via T1/E1 BRI**

*PSTN connectivity via ISDN BRI S/T interface has been certified and is available for all countries and regions.*

## **5.3 Ability to set ISDN Plan and Type**

A new CLI command **map** was added under the bundle configuration to set the ISDN plan and type.

### **COMMAND:**

### **configure interface bundle isdn map**

**Synopsis:**     **isdn map { addr <string> plan <numbering-plan> type <number-type> }**

**no isdn map { addr <string> plan <numbering-plan> type <number-type> }**

### **Description:**

To set ISDN type and plan used on a bundle for outgoing traffic by the router.

<b>Parameter</b>	<b>Value</b>	<b>Definition</b>	<b>Default Value</b>
addr	String	Either the calling number or the called number. It can be a regular expression also for pattern matching. If the called number matches the argument then the specified ISDN type and plan are used	N/A
plan	unknown isdn tel data telex national private	----- ISDN/telephony numbering - E.164/E.163 telephony numbering - E.163 data numbering - X.121 telex numbering - Recommendation F.69 national standard numbering private numbering	<b>Called Party</b> Data – isdn Voice - unknown  <b>Calling Party</b> Data – unknown Voice - unknown
type	unknown international national network subscriber overlap abbreviated	----- international number national number network specific number subscriber number overlap sending abbreviated number	<b>Called Party</b> Data – national Voice - unknown  <b>Calling Party</b> Data – unknown Voice - unknown

### **Example:**

The following example sets the numbering plan and number type as unknown for all the calls.

```
TORNADO/configure>interface bundle wan
TORNADO/configure/interface/bundle/wan > isdn map .% unknown unknown
```

### **5.3.1 Supported Number Plan and Type for each Switch Type**

#### **Switch-Type: Euro**

<b>Number Plan</b>
unknown - unknown
isdn - ISDN/telephony numbering - E.164/E.163
data - data numbering - X.121
telex - telex numbering - Recommendation F.69
national - national standard numbering
private - private numbering
extension - reserved for extension

<b>Number Type</b>
unknown
international
national
network
subscriber
extension

#### **Switch-Type: DMS100**

<b>Number Plan</b>
unknown - unknown
isdn - ISDN/telephony numbering - E.164/E.163
private - private numbering

<b>Number Type</b>
unknown
international
national
subscriber

#### **Switch-Type: QSIG**

<b>Number Plan</b>
unknown - unknown
isdn - ISDN/telephony numbering - E.164/E.163
private - private numbering

<b>Number Type</b>
unknown
international
national
subscriber

**Switch-Type: CCITT**

<b>Number Plan</b>
unknown - unknown
isdn - ISDN/telephony numbering - E.164/E.163
tel - telephony numbering - E.163
data - data numbering - X.121
telex - telex numbering - Recommendation F.69
national - national standard numbering
private - private numbering
extension - reserved for extension

<b>Number Type</b>
unknown
international
national
network
subscriber
abbreviated
extension

**Switch-Type: 5ESS**

<b>Number Plan</b>
unknown - unknown
isdn - ISDN/telephony numbering - E.164/E.163
national - national standard numbering
private - private numbering

<b>Number Type</b>
unknown
international
national
subscriber

## **6. Problems Resolved in the 10.1.2 Release**

<b>Bug Reference</b>	<b>Subsystem</b>	<b>Description</b>
Q01911622	ISDN	Able to set number plan for ISDN Calls though CLI
Q01919818	Platform	Route does not work properly when the SR 4134 is between the Source and Destination IP Address of the trace route
Q01920730	SNMP	Community string not stored properly when done by a TACACS user
Q01954042	TACACS	TACACS privilege level mapping issues

## **7. Outstanding Issues**

Refer to the Secure Router 4134 version 10.1.1 Release notes

## **8. Known Limitations**

Refer to the Secure Router 4134 version 10.0 and 10.1.1 Release notes

VRRP only supports tracking Bundle interfaces

Packet Capture (PCAP) debug feature does not support modular Ethernet interfaces. To capture packets on the modular Ethernet ports, use port mirroring and an external device connected to the destination port.

## **9. Documentation Corrections**

None

## **10. Notes**

None

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