Upgrading Gateways to SNMPv3 in CLI

Introduction

- This is a reference/guide on how to enable SNMPv3, a higher security protocol, for your gateway devices

- List of Requirements:

1. KonaFT
2. A Command Line Program/Environment
3. A gateway capable of SNMPv3 activation (depending on the BSP version)
    - Instructions for BSP upgrades can be found here

- The high-level procedure involves these steps:

4. Enabling SNMPv3
5. Verification of SNMPv3
6. Resetting SNMPv3 Password
7. (Optional) Re-enabling SNMPv2
8. Logging into KonaFT

Gateway BSP Versions for SNMPv3

- Below lists the minimum BSP version for SNMPv3 activation for all TEKTELIC gateway models:

- **Mega** – BSP 6.X.X or higher
- **Macro** – BSP 6.X.X or higher
- **Enterprise** – BSP 3.X.X or higher
- **Micro** – Not supported; currently in development
- **Micro PoE** – BSP 3.X.X or higher
- **Micro Lite** – Not Applicable

- You can confirm the gateway's BSP version once connected in the KonaFT application:
  1. At the bottom right of the program
  2. "Board Details" tab -> "SW Management" subtab -> "Read Versions" -> "Release" version

Requirements

- KonaFT
- A program that is capable of connecting to your gateway via SSH (such as PuTTy, Tera Term, etc.)
- The Gateway and computer using KonaFT must be in the same subnet (in KonaFT, use *Tools -> Find My Gateway -> Scan* to determine your subnet/IP address).

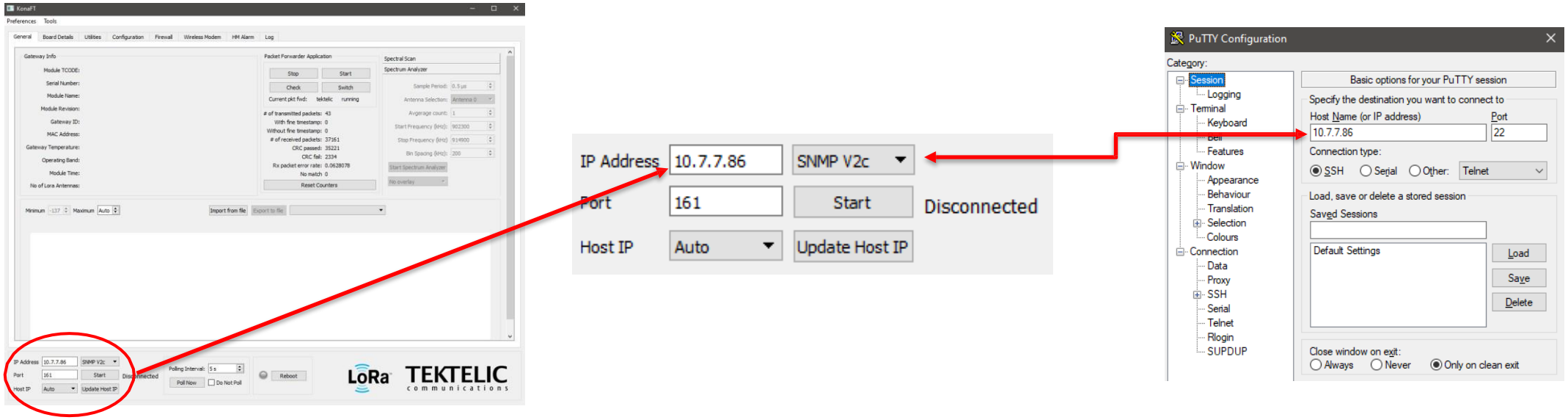


Figure-1 IP Address Configuration

Enabling SNMPv3

- Connect to your gateway through SSH. When prompted, login using the credentials below:
  - Some gateways with the **“admin”** username may still have **“root”** and the serial number as the default username and password, respectively.
- Upon logging in, you should see your gateway model and the last 6 digits of the MAC address.

Username	Password	Notes
root	9-Digit Serial Number of the gateway (i.e. 1212A3434)	• Applies to gateways with serial numbers that start with 21 and below.
admin	9-Digit Serial Number of the gateway (i.e. 1212A3434)	• Applies to gateways with serial numbers that start with 21 and below.
admin	Random string of characters provided in the test report.	• Applies to gateways with serial numbers that start with 22 and above.

Table-1 Gateway Login Credentials

Note: If the password is not on the test report, please contact TEKTELIC Support and provide the following:

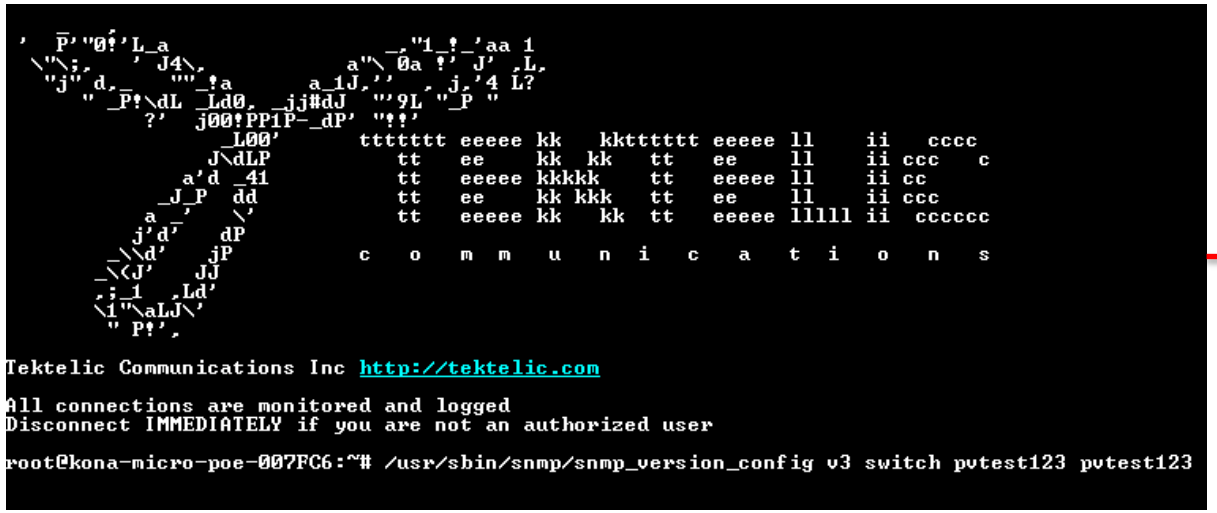
- T-code (i.e. **T000XXYY**), Revision (i.e. **A1**), and serial number (i.e. **1212A3434**)

Enabling SNMPv3 (cont.)

- Execute the following command in the SSH program to enable SNMPv3:
  - **NOTE:** The password must be a minimum of 8 characters.

/usr/sbin/snmp/snmp_version_config v3 switch <new_password> <new_password>

- After executing the command, SNMPv2 will be disabled and SNMPv3 will be enabled.



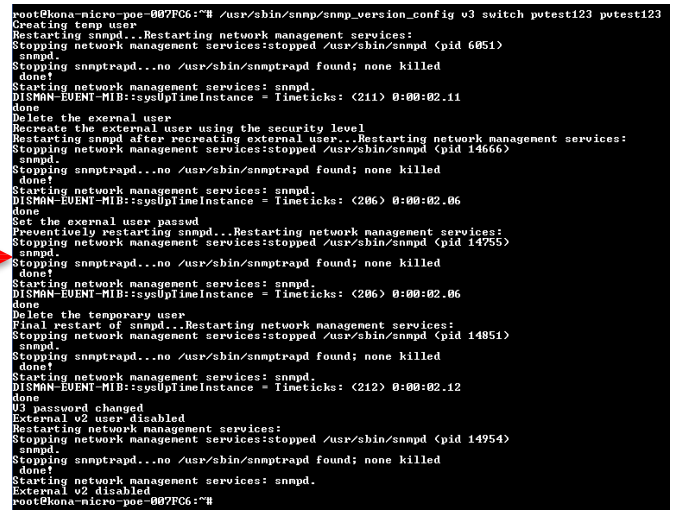


Figure-2 Enabling SNMPv3 Command and Output

Verification of SNMPv3

- To confirm if SNMPv3 is active, execute the following command in the SSH program:

/usr/sbin/snmp/snmp_version_config v3 isenabled

- The output will return **“true”.**

- To confirm if SNMPv2 is inactive, execute the following command in the SSH program:

/usr/sbin/snmp/snmp_version_config v2 isenabled

- The output will return **“false”.**

```
root@kona-micro-poe-007FC6:~# /usr/sbin/snmp/snmp_version_config v3 isenabled
true
root@kona-micro-poe-007FC6:~# /usr/sbin/snmp/snmp_version_config v2 isenabled
false
root@kona-micro-poe-007FC6:~#
```

Figure-3 Verifying SNMPv3 is Enabled and SNMPv2 is Disabled

Verification of SNMPv3 (cont.)

- If you need to check the security protocol of your gateway and the encryption ID, execute the following command in the SSH program:

cat /etc/snmp/snmpd.d/snmpd-local.conf

- At the bottom of the output, the information will be displayed in a format similar to the following:

createUser konaPublic SHA256 0000AAAA1111BBBB AES

```
#   Warning: the minimum pass phrase length is 8 characters.
createUser konaPublic SHA256                    AES
root@kona-micro-poe-007FC6:~#
```

Figure-4 Example Encryption ID of SNMPv3

Resetting SNMPv3 Password

- In order to reset the password for SNMPv3, enter the following command in the SSH program:
  - **NOTE:** The password must be a minimum of 8 characters.

/usr/sbin/snmp/snmp_version_config v3 reset <new_password> <new_password>

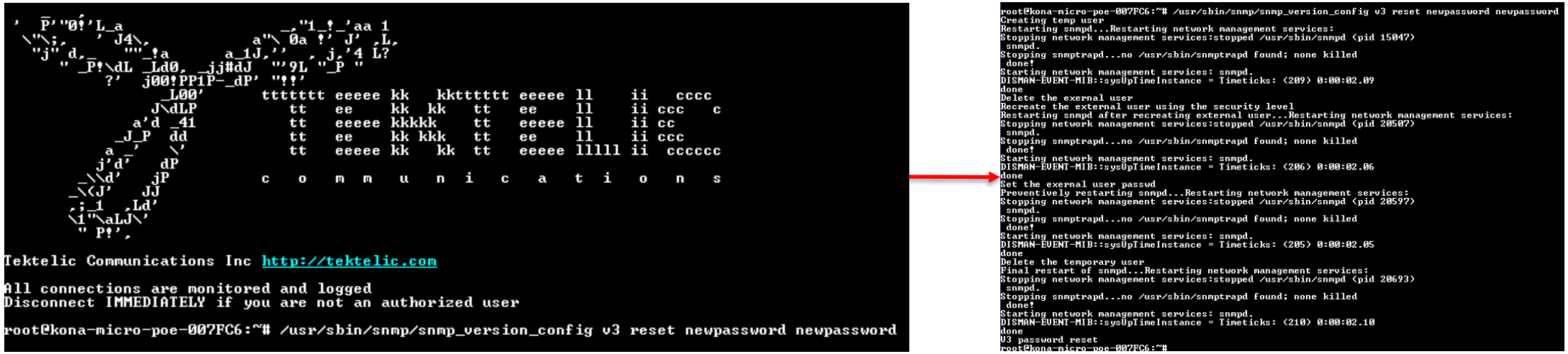


Figure-5 SNMPv3 Password Reset Command

(Optional) Re-enabling SNMPv2

- To reenable SNMPv2, please execute the following command:

/usr/sbin/snmp/snmp_version_config v2 enable

- To disable SNMPv2, please execute the following command:

/usr/sbin/snmp/snmp_version_config v2 disable

- **NOTE:** Both protocols can be active at the same time.

Logging into KonaFT

- Now SNMPv3 is enabled, the gateway login procedure through KonaFT will be as follows:
  - Enter the IP address for the gateway and switch to SNMPv3 in KonaFT; press Start
  - Enter konaPublic as the user name, and your newly created password (both are case sensitive); press OK to connect

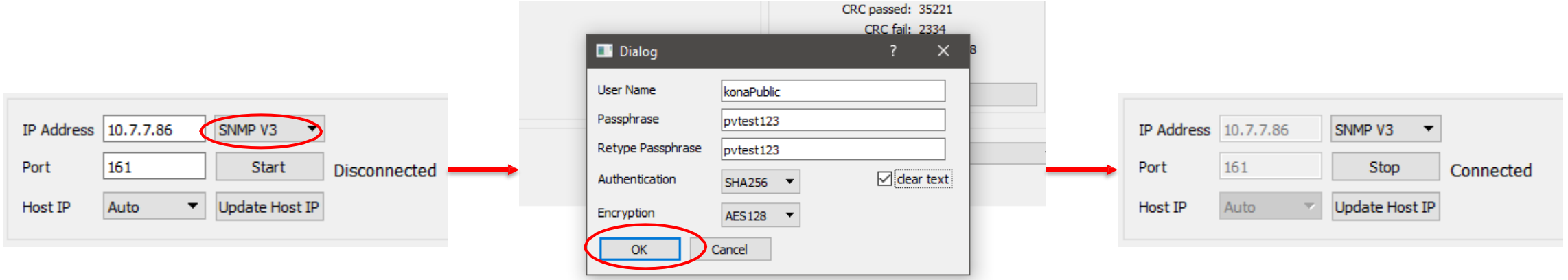


Figure-6 SNMPv3 Connection in KonaFT

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