

Console Interface

Console Structure

- Console access via ssh
- Console access via comm port serial
- Shell Commands via WebUI – Command Execution
- Gateway CLI Commands via WebUI – Command Execution
- Operating system is Linux based. Therefore Linux expertise is mandatory.

Working in shell is very powerful and flexible, but also dangerous
A system can be corrupted, formatted, erased if user makes a mistake.

Connect via SSH

Use default SSH clients on any desktop

- Windows – putty
- Linux – native ssh

On login prompt

- Username: root
- Password: < your custom password >

Connect via USB Serial

- USB to Serial cable
 - Use supplied usb to serial cable
- Configure Terminal Client on Laptop
 - Windows HyperTerminal
 - Linux – minicom
- Serial Settings
 - 115200, N, 8, 1 vt100
- Press enter a few times until a login prompt appears.
 - Login via: username: root, password: sangoma

Bash Shell

Once successfully logged into the system, either via ssh or usb serial, user will be offered a bash prompt.

- SBC system is based on Linux
- The initial console after login will be a bash shell

System Commands

System commands are based on Linux operating systems.
Listed here are some most useful debugging commands.

- tcpdump
 - Provides network capture to a pcap file

- Can be analyzed using Wireshark on Desktop or Laptop.
- `ethtool`
 - Provides detail network interface information, like Ethernet link status.
 - Run: `ethtool` for all the options
 - Eg: `ethtool eth0 – show Ethernet status`
- `ifconfig`
 - Network interface statistics tool
 - Shows error counters on Ethernet and TDM interfaces.
 - Notice the error and overrun counters on `wanpipew1g1` interfaces.
- `nsc_cli`
 - Provides SBC CLI

Refer to the appendix for all System Commands

SBC CLI – `nsc_cli`

- First log into the System Console (bash)
- Once on bash prompt: run
 - `nsc_cli`

The SBC gateway must be running and started in Control Panel.

Command Description

<code>status</code>	Shows SBC Status
<code>showchannels</code>	List all active calls
<code>log[debug, error, crit]</code>	Set log level to debug log level critical