Troubleshooting and Diagnostics

Troubleshooting Logging

The following information will guide you to enable debugging on your Vega Gateway for troubleshooting issues.

We are trying to divide the logging in multiple use-cases so we could try to capture more useful/relevant information as per the issue type.

> Before starting any troubleshooting step, please make sure your unit is running the latest general available firmware.
> The firmware upgrade procedure is described here: Firmware Update

> Always make sure you are collecting "show support" command output from Vega and providing this to Sangoma Technical support team along with other logs while reporting an issue.

• Standard Logging -

If you are not sure type of issue to capture issue specific logging then please make sure you are performing below mentioned steps to collect minimum logs.

1. To enable debugging in your Vega Gateway, insert the following commands, one-by-one:

Vega 100G - 200G - 400G - Vega 50 BRI - Vega 60 BRI

```
debug enable router rs
debug enable _isdn 89
debug enable _logger i
log display v
sip monitor on
log display off
debug on

If you are using ENP run this command as well.
debug enable _sip lefw
```

Vega 50 FXO/FXS - Vega 5000 - Vega 3000 - Vega 3050 - Vega 60 FXO/FXS

```
    debug enable router rs
    debug enable _pots 12346
    debug enable _logger i
    log display v
    sip monitor on
    log display off
    debug on

    If you are using ENP run this command as well.
    debug enable _sip 1efw
```

CAS R2

```
    debug enable router rs
    debug enable isdn rs
    debug enable _cas 4567
    debug enable _logger i
    sip monitor on
    log display off
    debug on

    If you are using ENP run this command as well.
    debug enable _sip 1efw
```

2. If possible try to collect PCAP of the issue call as well. Refer to https://wiki.sangoma.com/display/VG/Packet+Capture

- Please note that we can collect at max 5 MB size of pcap so not recommended to use for Load/Traffic time.
- Applicable only for next gen vega gateways.
- If issue is reproducible in single call then highly recommended to collect pcap.

3. Reproduce your issue now

4. Type the following two commands which will dump diagnostic information. Send the output of both of the following commands along with pcap (if possible) in two separate text files (each file for each command) to technical support

-> debug dump

-> show support

- ## Audio issue Logging -
  - **Refer to https://wiki.sangoma.com/display/VG/Capturing+Audio+issues**

- ## Vega Gateway Reboot -

For Next Generation Vega Gateways -

If you observe Vega gateway is crashing randomly then try to collect following information -

1. Please look if there is core file present in the system - Refer to https://wiki.sangoma.com/display/VG/Vega-XXXG+Debugging#Vega-XXXGDebugging-Vegarebootingorcrashing
   If yes then scp the core file from Vega gateway to your local system and share with Sangoma Technical Support team.

   Please note that We will loose the core file If there is hard reboot or complete Vega gateway box reboot will occur.

2. Enable Syslog in Vega to make sure we have syslog output/logging during Vega crash time. This will help us to identify scenario during which crash could happen

3. "show support " output from Vega box.

For Old Vega Gateways (Vega 50 , 5000 , 100, 200 , 400 GW) -

Refer to https://wiki.sangoma.com/display/VG/Capturing+Software+Reboots

- **SNMP Issues -**

    Refer to SNMP Configuration and Troubleshooting

- **DSP Failure -**
    - GUI is displaying DSP failure after an upgrade of Vega SW to 11.1 or 12.0.
    - Refer to DSP Failure Issue

- **Private Wire (PW) Issues -**
    - Collect Show Support
    - Setup configuration
    - If its audio related issue then please collect the pcap as mentioned above.
    - To enable debugging in Vega Gateway, insert the following commands one-by-one:

<div style="border:1px dashed #6699cc; padding:10px;">

CAS PW Logging

```
debug enable isdn rs
debug enable router rs
debug enable sip rs
debug enable _cas iweft56
debug enable _logger i
log display v
sip monitor on
log display off
debug on
```

</div>

- **SNMP Issue**

    Please refer to SNMP Troubleshooting in order to get how to troubleshoot SNMP related issues.

How to Run These Commands in WebGUI

1) Log into the webui **http://<IP of Vega>/**
   (i.e. http://192.168.2.12/)

2) As shown in the picture below click on *Expert Config -> Advanced*, then type the command "*show support*" in the CLI Command window. Once done click Submit. This will popup a new window with the output of the command. Copy all text "**ctrl->A**" (select all) and paste this into a txt file and send this to support@sangoma.com
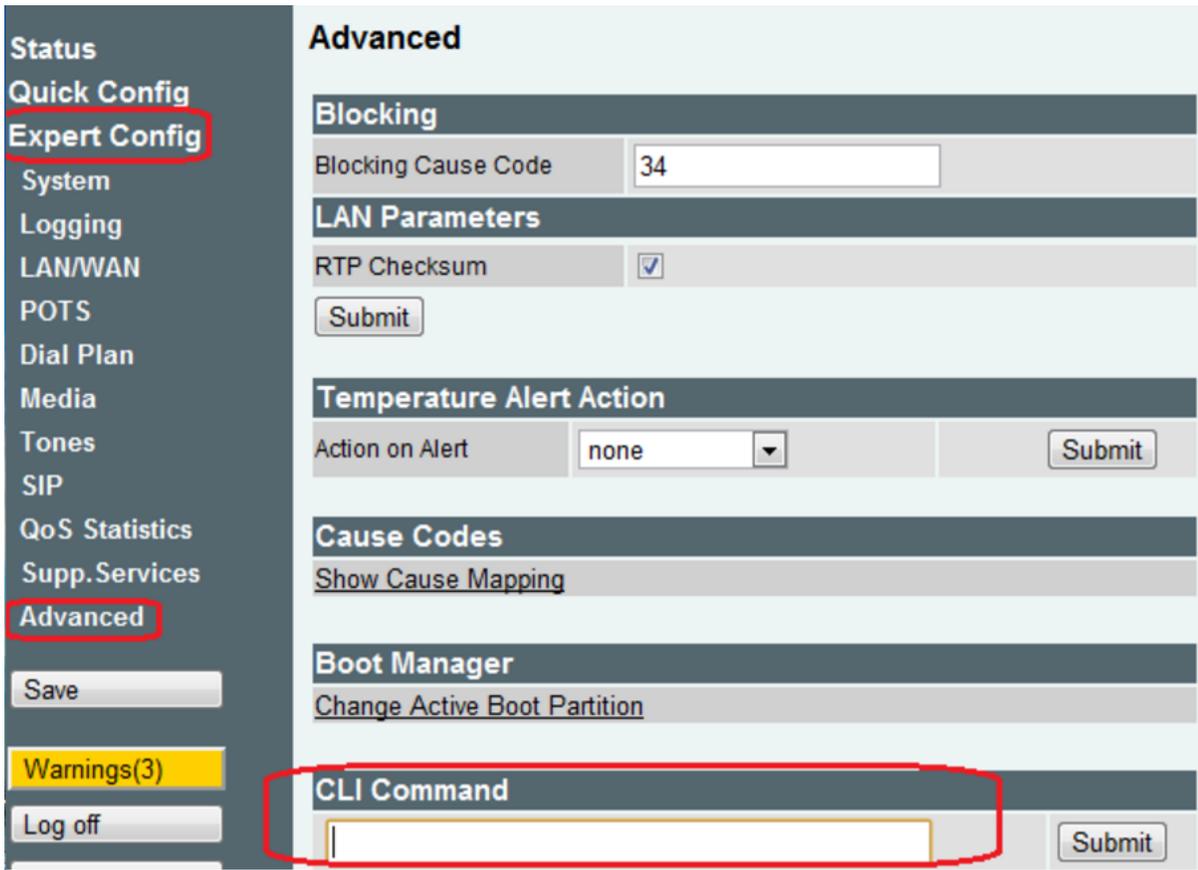
# How to Run Commands via SSH/Telnet

1) You can use many telnet clients but if you do not have one already download PuTTY from http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html

2) Open PuTTY and put the address of your system in the "Host Name" field, then select "Telnet" from the connection type. Once done click "Open" at the bottom.
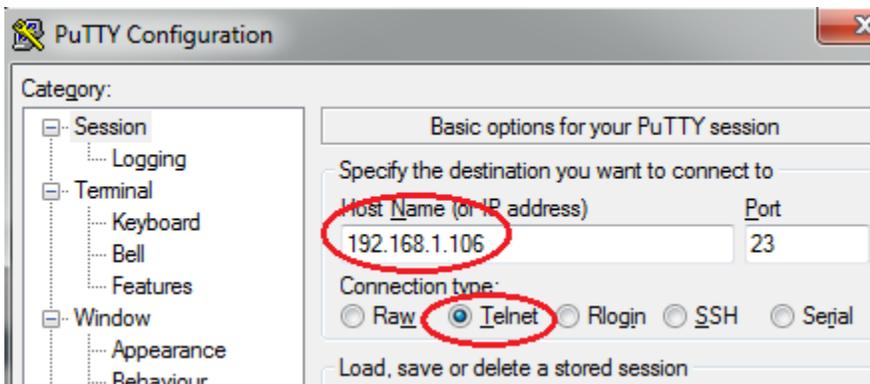
3) Log into the Vega using username/password.
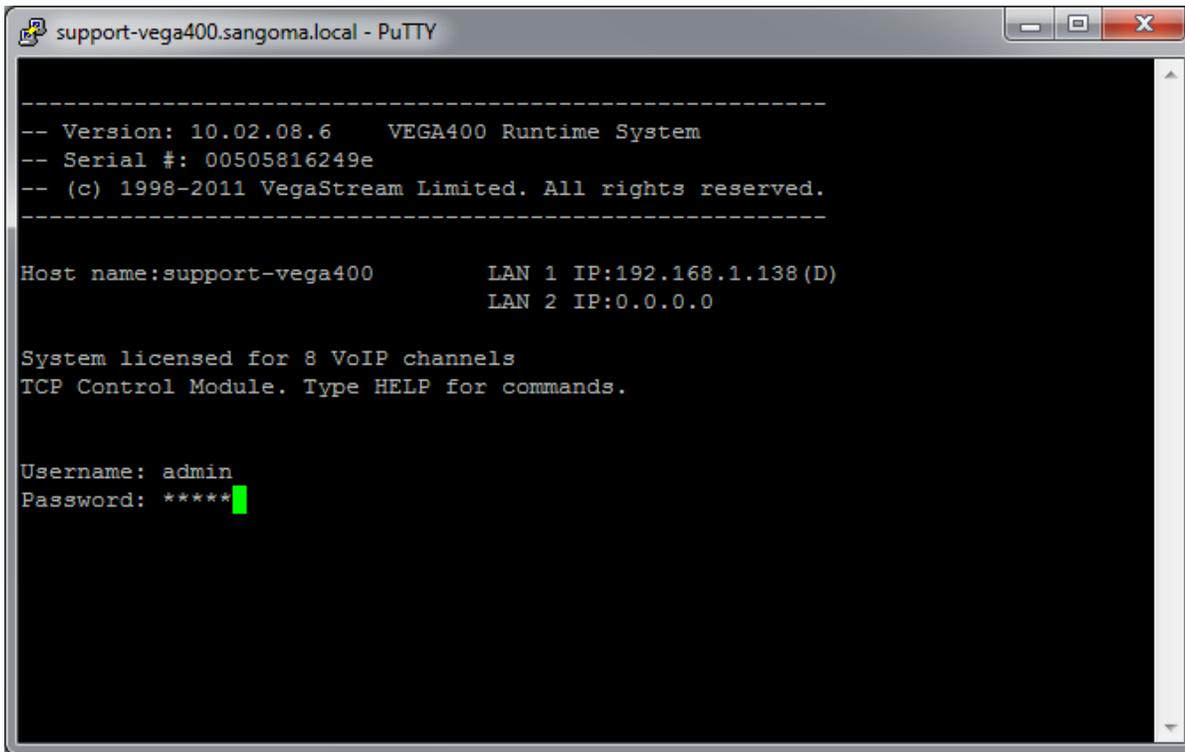
```
support-vega400.sangoma.local - PuTTY

-----------------------------------------------------------
-- Version: 10.02.08.6     VEGA400 Runtime System
-- Serial #: 00505816249e
-- (c) 1998-2011 VegaStream Limited. All rights reserved.
-----------------------------------------------------------

Host name:support-vega400      LAN 1 IP:192.168.1.138(D)
                               LAN 2 IP:0.0.0.0

System licensed for 8 VoIP channels
TCP Control Module. Type HELP for commands.


Username: admin
Password: *****
```

4) Run the "show support" command then right click on the PuTTY title bar and click "Copy All to Clipboard" then paste this into a text file and send this to support@sangoma.com

```
start date: 15/12/2011
expiry date: none
licensed CODECs: Octet,G                    xA
system NOT licensed for
system NOT licensed for
system NOT licensed for
system licensed for DSL

-----------------------------------                  -
-

-----------------------------------                  -
-
-- SHOW SUPPORT complete                             -
-
-----------------------------------                  -
-

WARNING: Password is set
WARNING: Configuration c                           e
WARNING: Configuration r                          ha
admin  >
```

	Restore	
	Move	
	Size	
▬	Minimize	
▫	Maximize	
x	**Close**	**Alt+F4**
	Special Command	▶
	Event Log	
	New Session...	
	Duplicate Session	
	Saved Sessions	▶
	Change Settings...	
	Copy All to Clipboard	
	Clear Scrollback	
	Reset Terminal	
	Full Screen	
	About PuTTY	