NORBIT WBMS direct interface without NORBIT GUI

Basic outline V1

12.2018

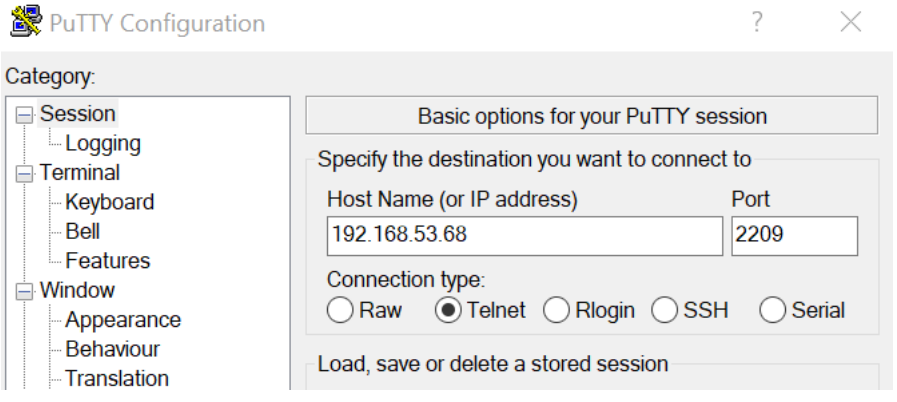
The interface allows for multiple users to access the data ports simultaneously

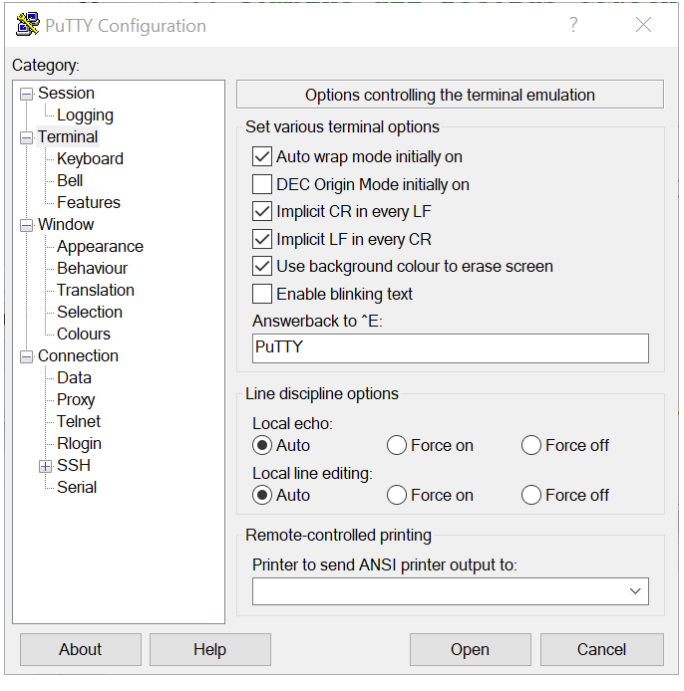
Connections can be established via standard TCP/IP network to 4 ports on the sonar IP

- Port **2209** uses **telnet** protocol and opens the command link on the WBMS. It is used for configuring and querying the status of the WBMS.
- Port **2210** opens the bathymetric **binary** data stream link from the WBMS. It sends the data to all recipients when a ping is ready.
- Port **2211** opens the water column **binary** data stream link from the WBMS.
- Port **2212** opens the snippet **binary** data stream link from the WBMS.

Sample configuration of Putty to send/receive commands from sonar

Assuming the IP of the soanr to be 192.168.53.68 Putty needs to be configured in the following way:





Sample configuration of Putty to send/receive commands from sonar

After booting sonar will appear on the network and can be pinged

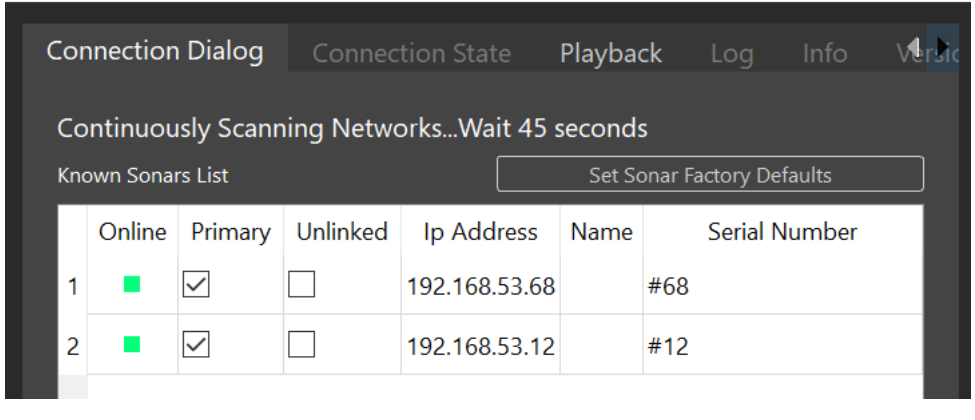
Command Prompt

```
Microsoft Windows [Version 10.0.17134.472]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\PP>ping 192.168.53.12

Pinging 192.168.53.12 with 32 bytes of data:
Reply from 192.168.53.12: bytes=32 time<1ms TTL=64
Reply from 192.168.53.12: bytes=32 time<1ms TTL=64
Reply from 192.168.53.12: bytes=32 time<1ms TTL=64
Reply from 192.168.53.12: bytes=32 time<1ms TTL=64
```

The IP is broadcasted and NORBIT GUI can be used to troubleshoot or detect the sonars on the network



Sample configuration of Putty to send/receive commands from sonar

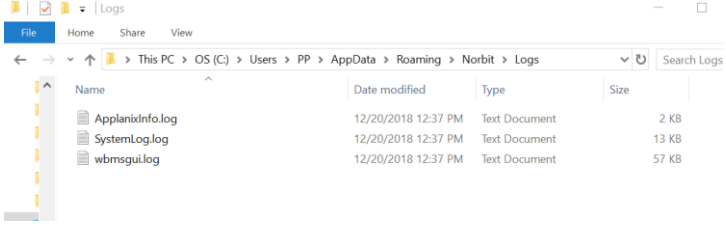
After connecting with Putty to port 2209 the terminal will report sonar readiness:

Sonar is ready to accept commands

Use NORBIT GUI to test / troubleshoot commands and response from the sonar.

- NORBIT GUI saves all outgoing and incoming commands into the log files.
- These files are excellent for debugging and troubleshooting of the external communicators
- The logs are located in **%appdata%/norbit/logs**
- Every time when GUI starts it backs up old logs and creates new ones.
- There are three types of logs
- ApplanixInfo.log – navigation log
- SystemLog.log – all commands/response to the sonar
- Wbmsgui.log – local GUI verbose log

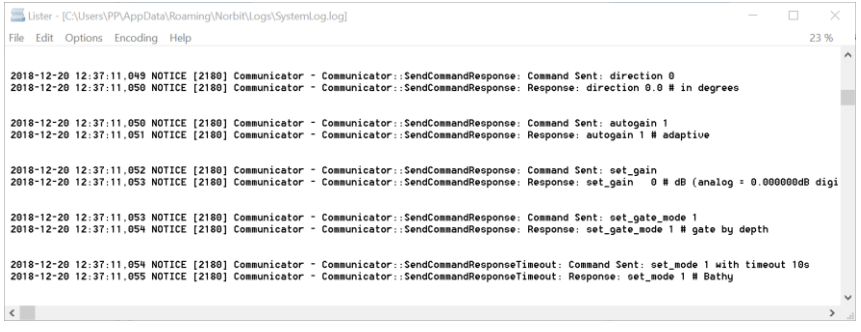
- SystemLog.log is the one of interest



Sample Explorer view for user name PP

Use of the SystemLog.log

- Every time when there is a communication with the sonar by user clicking a button or changing parameters the GUI forms a proper message and sends it to the sonar.
- At the same time it writes this message to the SystemLog.log along with the response from the sonar.
- That allows to quickly identify what command has been send and what was the response which help troubleshooting configuration issues.



Sample print of the view of SystemLog.log file

Please refer to TN-180196-1D-WBMS_DFD_External.pdf for details of all commands and data format.