



Configuring test ports

Application Note AN253
Revision v1.1
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1 Overview

This Application Note explains how to configure the test ports and how to read the statistics while they are running.

2 Pre-requisites

Two Vocality units with an IP or serial aggregate between them.

A device sitting between the Vocality units that can insert delay as well as packet loss.

3 Hardware configuration

None.

4 Software configuration

Connect two BASICS units through a Sim3 satellite simulator.

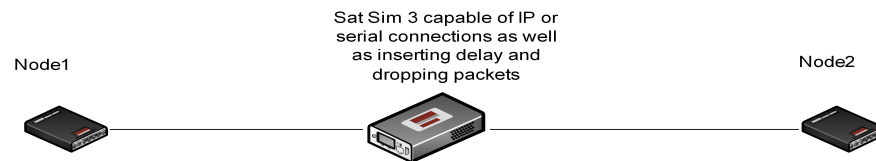


Figure 1 Two BASICS units with a Sim3 satellite simulator in between

To configure a connection between two test ports, one test port is configured as Type 'TxRx' and the other end is configured as Type 'Echo'. In the examples below, Node 1 is configured as TxRx and Node 2 is configured as Echo.



Ch	Type	Rate	Dest	State	Packets	Lost	%	RTT Min	RTT Avg	RTT Max
00	TxRx	9600	2:TP:0	Tx@9600	4632	95	02.05	1010	1010	1010
01	Off	-	-	Idle	-	-	-	-	-	-
02	Off	-	-	Idle	-	-	-	-	-	-
03	Off	-	-	Idle	-	-	-	-	-	-
04	Off	-	-	Idle	-	-	-	-	-	-
05	Off	-	-	Idle	-	-	-	-	-	-
06	Off	-	-	Idle	-	-	-	-	-	-
07	Off	-	-	Idle	-	-	-	-	-	-
08	Off	-	-	Idle	-	-	-	-	-	-
09	Off	-	-	Idle	-	-	-	-	-	-
10	Off	-	-	Idle	-	-	-	-	-	-
11	Off	-	-	Idle	-	-	-	-	-	-
12	Off	-	-	Idle	-	-	-	-	-	-
13	Off	-	-	Idle	-	-	-	-	-	-
14	Off	-	-	Idle	-	-	-	-	-	-
15	Off	-	-	Idle	-	-	-	-	-	-

Figure 2 Diagnostics > Test Ports menu - Node 1 TxRx

Node 1 in Figure 2 has the test port set to transmit and receive with a bandwidth of 9.6k. It is showing a 2% packet loss and a round trip delay around 1000 ms. This is consistent with the error package configured on the Sim3.

When looking at Node 2 in Figure 3 you will notice that the packet loss is only 1%, as opposed to the 2% you are seeing from Node 1 in Figure 2. This is because these statistics show the error loss in only one direction. Node 1 is showing packet loss in each direction. If you have reason to believe there may be packet loss in one direction only you can also use network diagnostics to help you isolate this. (See Applications Note AN252 for further details.)



Ch	Type	Rate	Dest	State	Packets	Lost	%	RTT Min	RTT Avg	RTT Max
00	Echo	-	1.TP:0 Rx@9600	6609	66	00.99	-	-	-	-
01	Off	-		Idle	-	-	-	-	-	-
02	Off	-		Idle	-	-	-	-	-	-
03	Off	-		Idle	-	-	-	-	-	-
04	Off	-		Idle	-	-	-	-	-	-
05	Off	-		Idle	-	-	-	-	-	-
06	Off	-		Idle	-	-	-	-	-	-
07	Off	-		Idle	-	-	-	-	-	-
08	Off	-		Idle	-	-	-	-	-	-
09	Off	-		Idle	-	-	-	-	-	-
10	Off	-		Idle	-	-	-	-	-	-
11	Off	-		Idle	-	-	-	-	-	-
12	Off	-		Idle	-	-	-	-	-	-
13	Off	-		Idle	-	-	-	-	-	-
14	Off	-		Idle	-	-	-	-	-	-
15	Off	-		Idle	-	-	-	-	-	-

Figure 3 Diagnostics > Test Ports menu - Node 2 Echo

5 Testing

Simple confirmation test. Fault finding is addressed in other Application Notes.

6 About Application Notes

Application Notes are intended as a supplement to, rather than a substitute for, your User Manual. Should you have queries which are not answered by our current documentation, your local Vocality support team would be happy to hear from you.

E-mail support@vocality.com.