



**Dialogic[®] Brooktrout[®] SR140 Fax Software with
Node4 SIP Trunking Service**
Installation and Configuration Integration Note

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1. Scope

This document is intended as a general guide for configuring a basic installation of the **Node4 SIP Trunking Service** for use with Dialogic® Brooktrout® SR140 Fax over IP (FoIP) software platform. The interoperability includes **SIP** call control and **T.38/T.30** media.

This document is not intended to be comprehensive and thus does not replace the manufacturer's detailed configuration documentation. Users of this document should already have a general knowledge of how to install and configure the **Node4 SIP Trunking Service**.

The sample configuration shown and/or referred in the subsequent sections was used for lab validation testing by Dialogic. Therefore, it is possible and even likely that the example configuration will not match the exact configuration and versions that would be present in a deployed environment. However, the sample configuration does provide a possible starting point to work with the equipment vendor for configuring your device. Please consult the appropriate manufacturer's documentation for details on setting up your specific end user configuration.

For ease of reference, the Dialogic® Brooktrout® SR140 Fax Software and Dialogic® Brooktrout® TR1034 Fax Boards will sometimes be denoted herein, respectively, as SR140 and TR1034. All references to the SDK herein refer to the Dialogic® Brooktrout® Fax Products SDK. The Node4 SIP Trunking Service will sometimes be denoted herein as Node4 or SIP Trunk, or some other form thereof.

2. Configuration Details

The following systems were used for the sample configuration described in the document.

2.1 Node4 SIP Trunking Service

Vendor	Node4
Model	SIP Trunking Service
Software Version	N/A
IP Device	Dialogic® Brooktrout® SR140
Protocol to IP Device	SIP
Additional Notes	N/A

2.2 Dialogic® Brooktrout® SR140 Fax Software

Vendor	<i>Dialogic</i>
Model	<i>Dialogic® Brooktrout® SR140 Fax Software</i>
Software Version	<i>SDK 6.3</i>
Protocol to SIP Trunking Service	<i>SIP</i>
callctrl.cfg file	<i>DEFAULT</i>

2.3 Network System Configuration

The diagram below details the sample configuration used in this document. On the IP side, the SR140 was configured to send and receive T.38 faxes. On the PSTN side, the Dialogic® ISDN board with a fax application was used to send and receive T.30 faxes over an ISDN connection. Carrying traffic between the two was the Node4 SIP trunk. Testing consisted of the full suite of interop calls between the two endpoints: first the SR140 sending and the ISDN fax server receiving and then the ISDN fax server sending with the SR140 receiving.

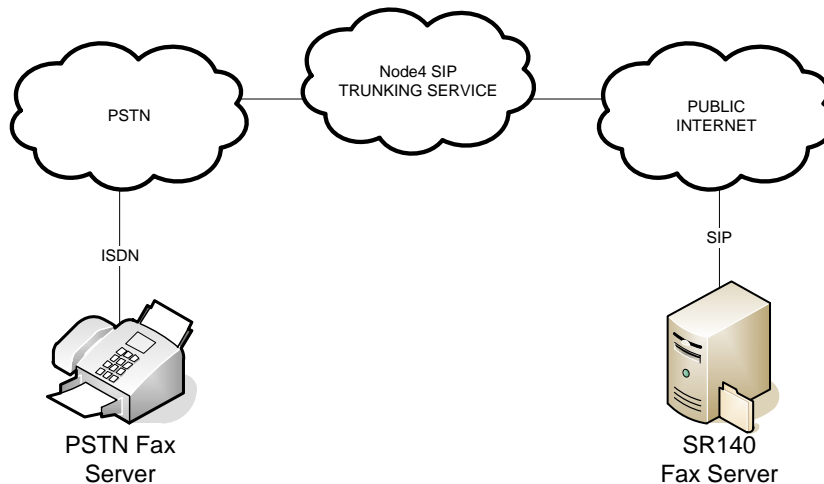


Diagram Notes:

SR140 Fax Server = Fax Server including Dialogic® Brooktrout® SR140 Fax Software and third party fax application.

PSTN Fax Server = Fax server including Dialogic® ISDN fax board and third party fax application.

3. Prerequisites

The SR140 based fax server must be assigned an IP address able to be reached by the SIP Trunking service. A fax server that has been assigned a private IP address will have communication issues talking to the Node4 SIP Trunking service.

4. Summary of Limitations

The Node4 SIP Trunk service supports up to V.17 (version 0) and does not currently support V.34 (version 3). SR140 was configured to initiate calls at V.17 as default during most of the tests. Some additional tests were performed with SR140 initiating calls at V.34 and the calls were negotiated to V.17 and successfully completed.

5. Node4 SIP Trunk Setup Notes

The standard SIP Trunk service from Node4 was used in this test configuration. No special configuration was required.

6. Dialogic® Brooktrout® SR140 Fax Software Setup Notes

The default setup for SR140 was used in this test configuration. The ***Installation and Configuration Guides*** for the SR140 are available from the following site:

<http://www.dialogic.com/manuals/brooktrout/default.htm>

7. Frequently Asked Questions

- *"I'm configured as near as possible to this the sample configuration described in this document, but calls are still not successful; what is my next step?"*
 - ➔ Provide this document to your gateway support.
 - ➔ Ensure T.38 is enabled on the gateway.
 - ➔ Confirm that basic network access is possible by pinging the gateway.
- *"How do I obtain Wireshark traces?"*
 - ➔ The traces can be viewed using the Wireshark network analyzer program, which can be freely downloaded from <http://www.wireshark.org>.
 - ➔ To view the call flow in Wireshark, open the desired network trace file and select "Statistics->VoIP Calls" from the drop down menu. Then highlight the call and click on the "Graph" button.