Dialogic® Brooktrout® SR140 Fax Software with Patton 4960 PRI and 4554 BRI Gateways

Installation and Configuration Integration Note

IMPORTANT NOTE

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February 2010 64-0600-14

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1. Scope

This document is intended as a general guide for configuring a basic installation of the ***Patton 4960 PRI and the Patton 4554 BRI Gateways*** 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 should not and 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 ***Patton Gateways***.

The sample configuration shown and/or referred in the subsequent sections was used for lab validation testing by Dialogic. Therefore, it is quite possible that the sample configuration will not match an exact configuration or 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 Patton Gateways will be denoted herein as Patton 4960 PRI and Patton 4554 BRI, or some other form thereof.

2. Configuration Details

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

2.1 Gateway

Vendor	***Patton***
Model(s)	***4960 PRI Gateway*** ***4554 BRI Gateway***
Software Version(s)	***PRI – R5.4 2009-07-20 SIP*** ***BRI – R5.3 2009-05-20 SIP***
PSTN Device	***Dialogic® Diva® Server BRI-2M***
Protocol to PSTN Device	***Euro ISDN PRI and BRI***
IP Device	***Dialogic® Brooktrout® SR140***

2.2 Dialogic® Brooktrout® SR140 Fax Software

Vendor	***Dialogic***
Model	***Dialogic® Brooktrout® SR140 Fax Software***
Software Version	***SDK 6.1.2 build 11***
Protocol to Gateway or Call Manager	***SIP***
callctrl.cfg file	***Default callctrl.cfg file included in SDK 6.1.2***

2.3 Dialogic® Diva® BRI-2M Fax Board

Vendor	***Dialogic***
PSTN Device	***Dialogic® Diva® BRI-2M Fax Board***
Software Version	***SDK 5.5, Diva SU 8.5.7***
Protocol to PSTN Device	***Euro ISDN PRI and BRI***
callctrl.cfg file	***Standard setup***

2.4 Network System Configuration

The diagram below details the sample configuration used in connection with this document.

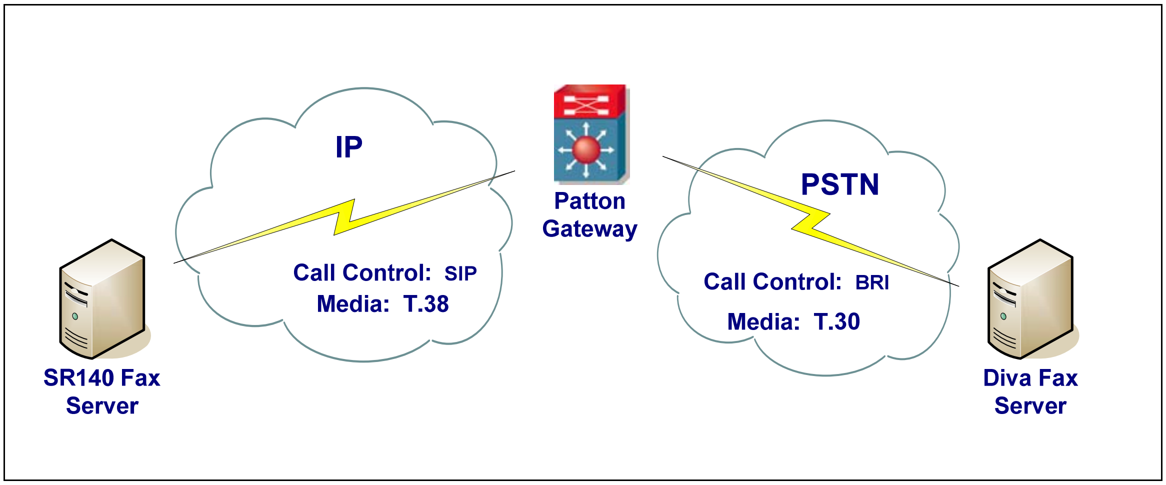


Diagram Notes:

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

3. Prerequisites

None.

4. Summary of Limitations

The Patton 4960 and 4554 gateways support up to V.17 and do not support V.34. 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. All calls initiated and answered by the Diva BRI-2M fax board at V.34 and were negotiated to V.17 and successfully completed.

5. Deployment Details

5.1 Network Addresses

Device #	Device Make, Model, and Description	Device IP Address
1	SR140 Fax Server	10.0.1.139
2	Patton 4960 PRI Gateway	10.0.1.14
3	Patton 4554 BRI Gateway	10.0.1.93

5.2 Dialing Plan Overview

Dialing from SR140 was performed using a SIP URI phone_number@Gateway_IP_Address. This was configured in the FoIP Interop test tool setup.

6. Dialogic® Brooktrout® SR140 Fax Software Setup Notes

Default setup for SR140 was used during the tests, varied by the interop test tool during the test runs.

The Installation and Configuration Guides for the SR140 is available from the site:

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

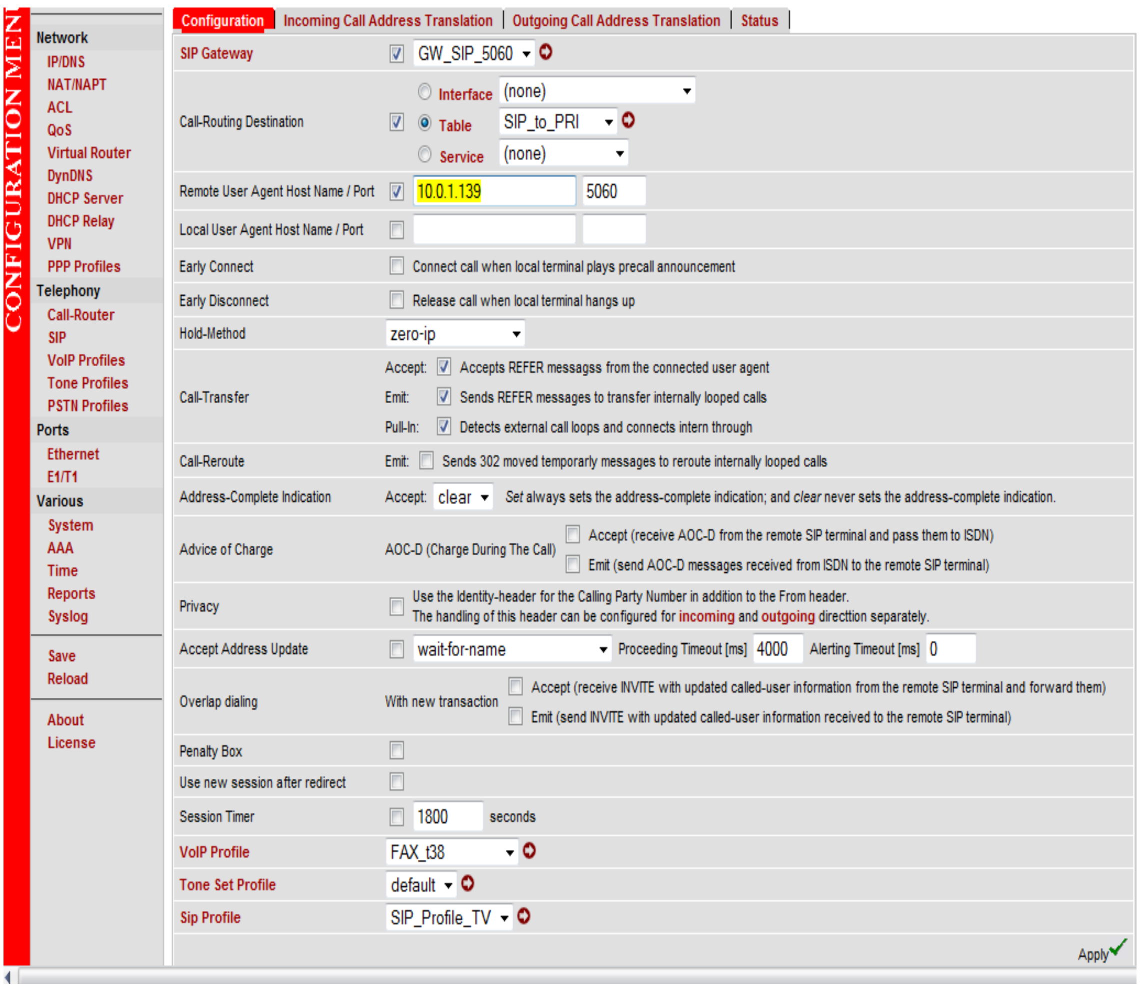
7. Dialogic® Diva® BRI-2M Fax Board Setup Notes

Default setup for the Diva BRI-2M was used. Calls were terminated and generated by a Diva SDK fax sample application that had been modified to enable control of ECM and fax file to send. All calls were generated and answered at V.34 but negotiated down to V.17 by the Patton gateways.

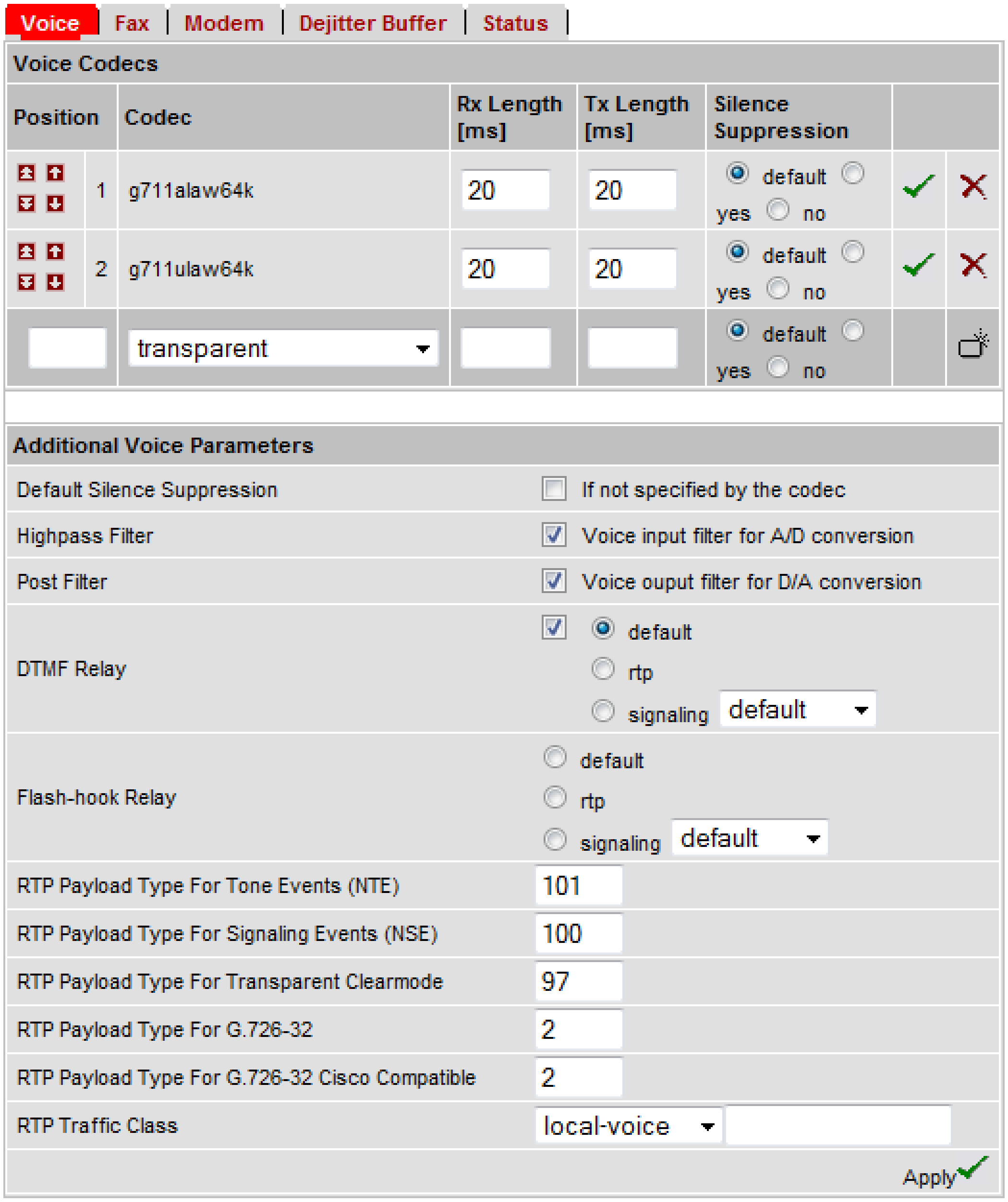
8. Gateway Setup Notes

Patton 4960 PRI Configuration and Patton 4554 BRI configuration were identical apart from the Call-Routing Destination which depends on the individual call routes setup. The 4960 PRI configuration screens are shown.

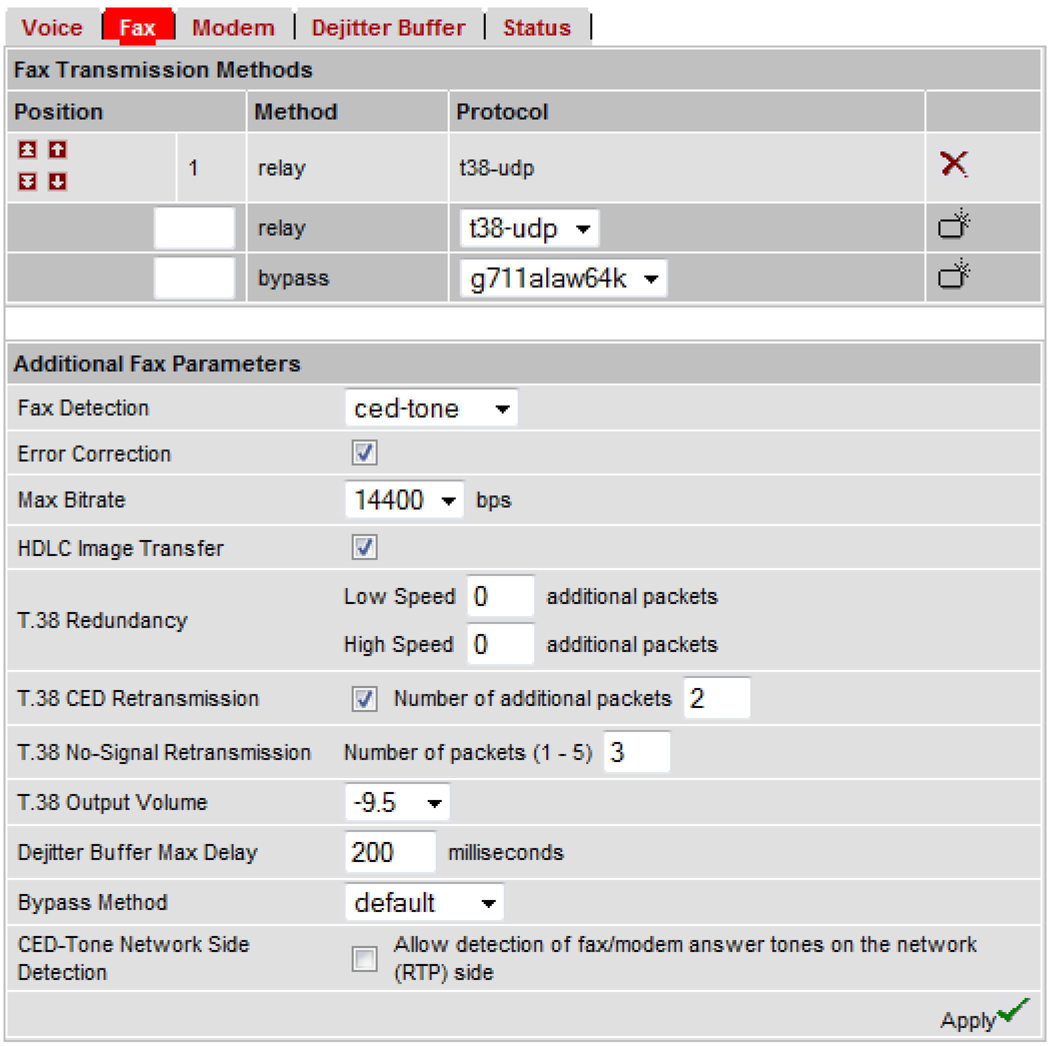
Remote User Agent Host Name / Port = SR140 Fax Server



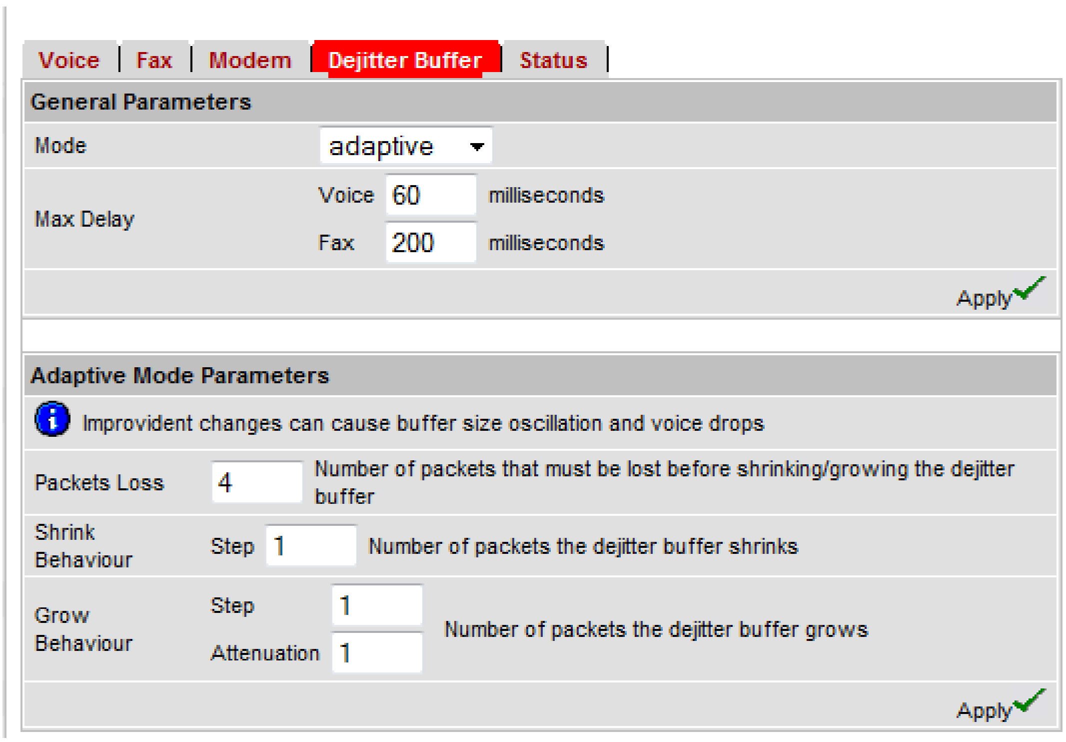
VoIP Profile T.38 / Voice Tab



VoIP Profile T.38 / Fax Tab



VoIP Profile T.38 / Dejitter Buffer Tab



9. 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.