



# **Dialogic<sup>®</sup> Brooktrout<sup>®</sup> SR140 Fax Software with Multi-Tech MultiVOIP<sup>®</sup> MVP210**

## **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 **Multi-Tech MultiVOIP® MVP210** 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 **Multi-Tech MVP210**.

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.

## 2. Configuration Details

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

### 2.1 Gateway

Vendor	<b>Multi-Tech Systems, Inc.</b>
Model	<b>MultiVOIP® MVP210</b>
Software Version	<b>6.11.27-07-Aug-09</b>
PSTN Device	<b>TR1034</b>
Protocol to PSTN Device	<b>Analog DID</b>
IP Device	<b>SR140</b>

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, and the Multi-Tech MultiVOIP® MVP210 will be denoted herein as Multi-Tech MVP210 or MVP 210, or some other form thereof, Also, all mentions of SDK herein refer to the Dialogic Brooktrout SDK.

### 2.2 Dialogic® Brooktrout® SR140 Fax Software

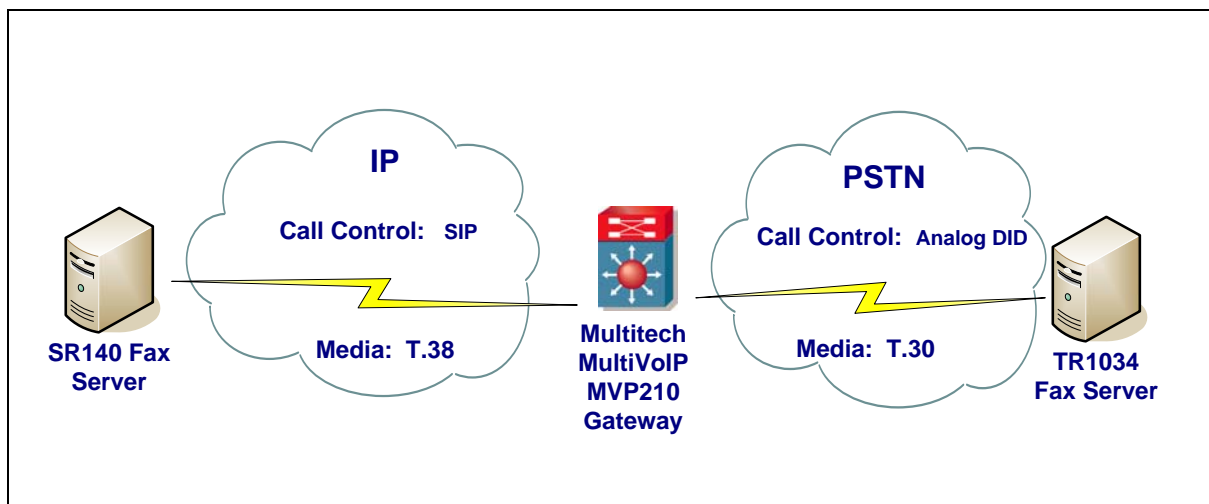
Vendor	<b>Dialogic</b>
Model	<b>Dialogic® Brooktrout® SR140 Fax Software</b>
Software Version	<b>SDK 6.1.1 and higher</b>
Protocol to Gateway or Call Manager	<b>SIP</b>
callctrl.cfg file	<b>All defaults</b>

## 2.3 Dialogic® Brooktrout® TR1034 Fax Board

Vendor	<b>Dialogic</b>
PSTN Device	<b>Dialogic® Brooktrout® TR1034 Fax Board</b>
Software Version	<b>SDK 6.1.1 and higher</b>
Protocol to PSTN Device	<b>Analog DID</b>
callctrl.cfg file	<b>All defaults</b>

## 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 3<sup>rd</sup> party fax application
- TR1034 Fax Server = Fax Server including Dialogic® Brooktrout® TR1034 Fax Board and 3<sup>rd</sup> party fax application

## 3. Prerequisites

The MultiVOIP® MVP210 must be on firmware version 6.11.27-07-Aug-09 and higher. Older firmware versions will not work.

## 4. Summary of Limitations

MultiVOIP® MVP210 firmware versions older than 6.11.27-07-Aug-09 were found to have the following issues:

1. Did not send T.38 reINVITEs when receiving calls from TR1034
2. Interpreted inbound calls from TR1034 as modem calls and did not switch to T.38
3. Constantly set 't38faxversion' to 3 instead of 0 on calls from TR1034 and the calls failed

Multi-Tech has fixed all of these issues in firmware versions 6.11.27-07-Aug-09 and higher.

## 5. Deployment Details

### 5.1 Network Addresses

Device #	Device Make, Model, and Description	Device IP Address
1	Multi-Tech MultiVOIP® MVP210	38.117.139.235
2	Dialogic® Brooktrout® SR140	208.252.7.115

### 5.2 Dialing Plan Overview

Using the FAE test kit, the test mode was SR140 ⇔ MVP210 ⇔ TR1034. The screenshot from the FAE test kit is shown below:

```

Interop Suite 208.252.7.115
Interop Field Test v1.2 Main Menu
1. Change Site Configuration
2. Send tests (Single channel 0 sending)
3. Receive tests (Single channel 0 receiving)
4. Troubleshoot connection
5. Batch testing
6. Exit script

Input selection: 1

There are two modes in which the tests can be run. In loopback mode,
two channels are used, and faxes are sent from one channel to the other
via the gateway under test. To use this mode, specify 2 endpoints
when prompted.

The other mode uses a single SR140 channel to send and receive fax calls from
the gateway, and an external endpoint, such as a fax machine, will be used
as the second endpoint. To use this mode, specify 1 endpoint when prompted.

The current setting for each value is shown in brackets. If you do not
want to change a setting, just press enter to keep that settings.

Number of endpoints (channels) to use (can be 1 or 2): [1]
SR140 channel number to use for endpoint1: [0]
Dial string endpoint1 should use to call the second endpoint:
[17812929305038.117.139.235]

*****
Current Configuration
Using a single endpoint (requires an external endpoint to run tests)
endpoint1_channel_number is 0
endpoint1_dialstring is 17812929305038.117.139.235
*****

Interop Field Test v1.2 Main Menu
1. Change Site Configuration
2. Send tests (Single channel 0 sending)
3. Receive tests (Single channel 0 receiving)
4. Troubleshoot connection
5. Batch testing
6. Exit script

Input selection:
    
```

### 5.3 Call Routing Configuration

Direct routing to gateway was used on the SR140.

## 6. Dialogic® Brooktrout® SR140 Fax Software Setup Notes

For the sample test configuration, the SR140 was configured using the default values, consult the Dialogic® Brooktrout® Fax Products Installation and Configuration Guide for details.

The Installation & Configuration Guide for SDK 6.1.x is available from the site below:

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

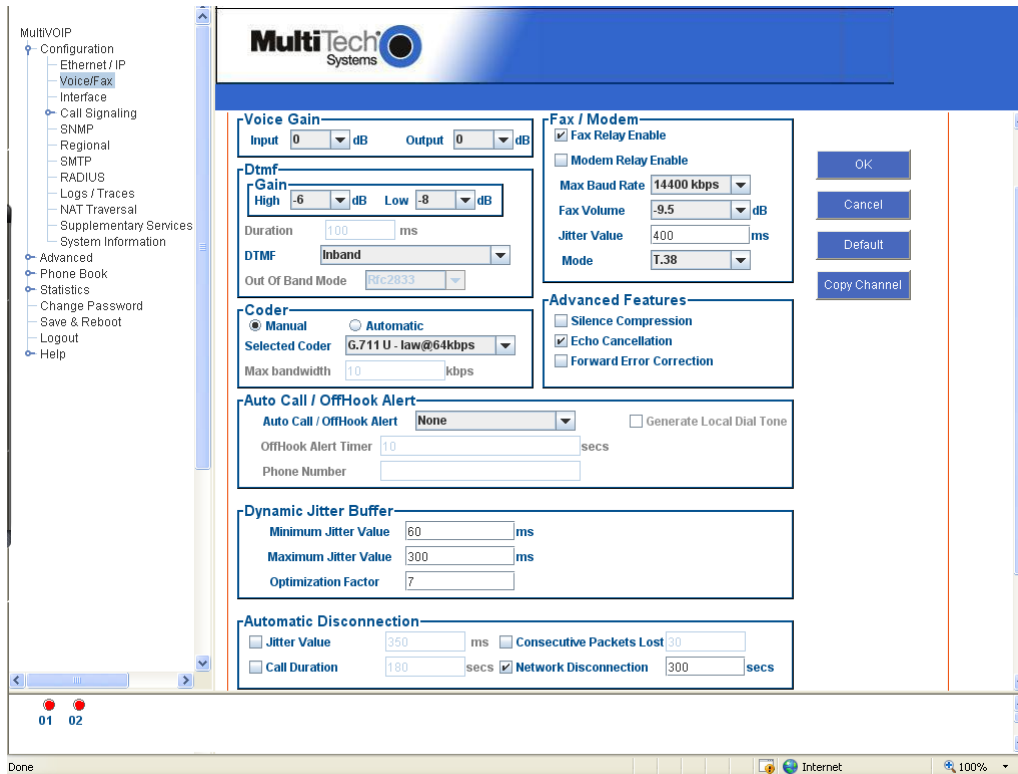
## 7. Dialogic® Brooktrout® TR1034 Fax PSTN Setup Notes

For the sample test configuration, the TR1034 was configured using the default values, consult the Dialogic® Brooktrout® Fax Products Installation and Configuration Guide for details.

## 8. Multi-Tech MVP210 Gateway Setup Notes

For the sample test configuration, the MVP210 was configured using the default settings and required no special setup. The MVP210 set up screen shots are shown below:





## 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.