Open Text Fax Gateway Specifications and Implementation Scenarios

Open Text Fax and Document Distribution Group
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Introduction

Open Text Fax Gateways simplify Fax over IP (FoIP) implementations and provide a cost effective alternative to traditional fax boards and remote fax servers. Deploying an Open Text Fax Gateway together with Open Text Fax Server represents a complete solution offering that maximizes your IP infrastructure, facilitates network consolidation, and simplifies branch office management.
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Fax Gateway Product Line Technical Specifications

Open Text Fax Gateways are offered in a selection of port densities and configurations to meet the needs of all FoIP customers. All Open Text Fax Gateways support T.38 real-time faxing using the SIP protocol.

300 Series Analog Fax Gateway

Analog FoIP gateway available in 4 and 8 port offerings.

Ideal for small office situations and includes the following features.

- Desktop or rack mountable and stackable
- 4 and 8 Analog ports
- FXO, RJ11
- Network Interface 10/100 BASE-TX, RJ45
- Channel status and activity LED

900 Series BRI Fax Gateway

BRI FoIP gateway, 1-8 BRI. Available in 2 thru 16 port offerings.

Ideal for small to mid-size office situations and includes the following features.

- Desktop or rack mountable and stackable
- BRI S/T 4 or 8 ports (8/16 calls) per gateway using RJ-45 connectors
- Dual redundant 10/100 Base-TX Ethernet ports via 2 RJ-45 connectors
- RS232 RS-232 for configuration and troubleshooting

**2100 Series Fax Gateway**

Digital, analog, and BRI FoIP gateway. Available in 1, 2, and 4 T1/E1/J1 spans.

![2100 Series Fax Gateway](image)

Ideal for small to mid to large size office situations and includes the following features.

- Desktop or rack mountable and stackable
- Modular “pay-as-you-grow” architecture
- Digital (E1/T1/J1) – connecting the PSTN or PBX to the IP-network

**Fax Gateway portfolio**

Each gateway supports the T.38 and SIP protocols.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Text Fax Gateway 304</td>
<td>Analog gateway, 4 port FXO</td>
</tr>
<tr>
<td>Open Text Fax Gateway 308</td>
<td>Analog gateway, 8 port FXO</td>
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<td>Open Text Fax Gateway 904</td>
<td>ISDN gateway, 4 port BRI</td>
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<td>Open Text Fax Gateway 908</td>
<td>ISDN gateway, 8 port BRI</td>
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<td>Open Text Fax Gateway 2100</td>
<td>Modular gateway, 1T1/E1/J1</td>
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<td>Modular gateway, 2 T1/E1/J1</td>
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<tr>
<td>Open Text Fax Gateway 2100</td>
<td>Modular gateway, 4 T1/E1/J1</td>
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Setup Information

The setup information provided here is intended to be a general synopsis of the steps to implement a Fax Gateway and should not be used a guide to install or configure a Fax Gateway.

Requirements

Open Text Fax Gateways support T.38 fax over IP via the SIP protocol and cannot use other FoIP protocols. All Fax Gateway integrations require one or more Open Text Fax Servers (version 9.4 with feature pack 1 or later) and SR140 FoIP software.

The Web configuration interface requires the following:

- A connection to the Internet
- A network connection to the device
- A Web browser with Java script enabled
- Recommended screen resolution of 1024 x 768 pixels or 1280 x 1024 pixels

Figure 1. Open Text Fax Gateway Web interface
The Web interface supports the following Web browsers:

- Microsoft™ Internet Explorer™ (version 6.0 or later)
- Mozilla Firefox® (version 1.5.0.10 or later)

The Bootp configuration interface requires the following:

- A computer running Microsoft Windows XP or later

**Fax Server setup**

- Add the SR140 transport
- Use the Brooktrout configuration tool to configure the SR140 transport to use the SIP protocol and specify the local IP address of the fax server

**Gateway setup**

Use the gateway Web interface to perform the following:

- Assign the gateway an IP address (this can also be done with Bootp)
- Load the preconfigured .INI file
- Enter the Fax Server IP address
- Configure routing tables (optional)
- Save or ‘burn’ changes to gateway memory
- Configure trunk settings
- Test settings and if successful, burn to gateway memory
Implementation Scenarios

Open Text Fax Gateways can be used in a wide range of network architectures and scenarios. From small offices to large organizations with multiple locations, the Open Text Fax Gateways can be used to simplify FoIP implementations and provide the needed interoperability and network compatibility.

Each of the following scenarios requires at least one Open Text Fax Server, SR140 FoIP software, and an Open Text Fax Gateway.

Legacy PBX

Environments using a standard (non-IP) PBX can use Open Text Fax Gateways to route FoIP-based faxes between Fax Server and a legacy PBX.
No PBX/Analog POTS lines

Environments without a PBX or those that use POTS lines may achieve FoIP readiness by adding an Open Text Fax Gateway. Small to mid-sized companies and remote offices fit this scenario. This diagram also applies to a legacy TDM (Time-division multiplexing) scenario. The difference is the use of TDM vs. POTS lines.

Figure 3. Analog scenario
Small office

Environments without a PBX or those that use POTS lines may achieve FoIP readiness by adding an Open Text Fax Gateway. Small to mid-sized companies and remote offices fit this scenario. This diagram also applies to a legacy TDM scenario.

Figure 4. Small office situation

Multiple offices

A single Open Text Fax Gateway can distribute FoIP faxes across multiple offices within a WAN, regardless of where the PSTN line enters the network. Routers shown in this example are optional.
Distributed Gateway Failover

Open Text Fax Server can recognize when a gateway is unavailable and divert outbound calls to one or more alternate gateways. Outbound redundancy is achieved through the use of dialing rules that automatically failover to a secondary fax gateway. Inbound redundancy and load balancing is achieved through shared trunk group on PSTN circuits between fax gateways.

The scenario below depicts a WAN with headquarters and branch office. The headquarters gateway is unavailable, yet intra-office faxing and external faxing functionality remains via Fax Server dialing rule failover.
Virtualization concept

The diagram below depicts a simple, virtualized IP-based Fax Server deployment. Software-based fax over IP is achieved via Fax Server and an Open Text Fax Gateway. A virtual SQL server stores the Fax Server database while a third virtual machine houses the Fax Server images files.

Figure 7. Simple virtual Fax Server concept
Additional Resources

Fax Gateway training

Seats are available for upcoming training events. For the latest schedule, visit the Open Text Fax and Document Distribution Group scheduling Web site.

The Open Text Fax and Document Distribution Learning Group enables its partners and customers to successfully sell, implement and support our products and solutions. We develop and deliver a variety of instructor-led and self-paced eLearning courses, utilizing innovative learning techniques and tools, designed for multiple learning styles and time/travel constraints.

In addition to our regularly scheduled courses, onsite training is also available as a custom services engagement to meet your specific needs. These custom courses are delivered by our professional technical instructors and have specific facility requirements.

Publications

The following publications are available at the Open Text Fax and Document Distribution Group resources Web page - http://faxsolutions.opentext.com/resources.aspx

- Virtualizing Open Text Fax Server with Real-time Fax over IP and Open Text Fax Gateway
- The Open Text Fax Gateway Solution for Software-based Fax over IP
- Top Five Reasons to Use an Open Text Fax Gateway
- Open Text Fax Gateway Interoperability Guide
About Open Text

Open Text is a leader in Enterprise Content Management (ECM). With two decades of experience helping organizations overcome the challenges associated with managing and gaining the true value of their business content, Open Text stands unmatched in the market.

Together with our customers and partners, we are truly The Content Experts,™ supporting 46,000 organizations and millions of users in 114 countries around the globe. We know how organizations work. We have a keen understanding of how content flows throughout an enterprise, and of the business challenges that organizations face today.

It is this knowledge that gives us our unique ability to develop the richest array of tailored content management applications and solutions in the industry. Our unique and collaborative approach helps us provide guidance so that our customers can effectively address business challenges and leverage content to drive growth, mitigate risk, increase brand equity, automate processes, manage compliance, and generate competitive advantage. Organizations can trust the management of their vital business content to Open Text, The Content Experts.

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