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RightFax 10 Recommended Hardware Requirements & Supported Software Versions

RIGHTFAX APPLICATION SERVER HARDWARE REQUIREMENTS

- § 2.4 GHz or Higher Xeon Processor or 3.6 Pentium IV or Higher Processor (Supports single and multiple CPU systems)
- § Memory: 2GB RAM or greater (Minimum 4GB Recommended)
- § Installed programs require 1.2 GB hard disk *
- § 2x 76 GB Hard Drives, Raid 1 (for better performance 3x 76GB, Raid 5) or greater
- § SVGA or higher resolution monitor running at a resolution of 1024 x 768 or higher
- § DVD drive
- § Keyboard and mouse
- § 2U Minimum Racked Server (if a fax board will be part of your RightFax system configuration)
- § Server chassis must be able to accommodate a full-length, full-height PCI fax board unless otherwise noted
- § PCI, PCI-X, and PCI-Express expansion slots (*Please note, expansion slots are only required if your RightFax configuration will include Brooktrout TR1034 or TruFax fax boards. Additionally, RightFax 10 does not support the older Brooktrout TR114 Series fax boards.*) Please provide your Advantage representative with your server's PCI slot/riser card configuration in order to make sure the correct board is shipped.

* Hard disk minimum requirements do not include space for storage of document images.
To calculate needed disk space, we recommend using an estimate of 35kb per fax page.

SUPPORTED OPERATING SYSTEMS FOR THE RIGHTFAX APPLICATION SERVER(S)

SUPPORTED WINDOWS SERVER OPERATING SYSTEMS

Please contact your Advantage representative for more information on running RightFax in a virtual environment.

- § Windows Server 2008 R2 Standard x64
- § Windows Server 2008 R2 Enterprise x64
- § Windows 2008 Standard x86 and x64
- § Windows 2008 Enterprise x86 and x64

WINDOWS CLUSTER SERVICES

- § Microsoft Windows Server 2008 and Windows Server 2008 R2 Failover Clustering services are currently not supported.

INTERNET BROWSER

- § Internet Explorer 6.0 SP 2 or later is required for RightFax Web Access and Enterprise Fax Manager Web Edition. *Internet Explorer 9.0 is not supported.*

WINDOWS TERMINAL SERVICES

- § Windows 2008
- § Windows 2008 R2 (Also known as "Remote Desktop Services")
- § Citrix XenApp Client Windows 2008

NOTE: *OpenText RightFax requires an HP LaserJet 4 printer driver on the server. Windows Server 2008 R2 does not include this driver by default. Before installing the RightFax on Windows Server 2008 R2, install an HP LaserJet 4 printer driver on the computer where you will be installing the RightFax server software.*

MICROSOFT SQL SERVER

Supported Versions of Microsoft SQL

Microsoft SQL Server is required to run RightFax. All RightFax software editions include a licensed copy of 2008 SQL Express. The SQL Express database will support approximately 1,000,000 fax records. Your Advantage Technologies engineer will make a recommendation whether or not SQL Express should be used based on your RightFax configuration and daily fax volumes.

RightFax uses a SQL database to store all data on faxes, users, and dialing rules. During Setup, you have the option to connect to an existing SQL Server, or install a new RightFax database which includes a new installation of SQL Server 2008 Express directly on the RightFax server. Following are the supported versions Microsoft SQL:

- § Microsoft SQL Server 2008 Standard Edition
- § Microsoft SQL Server 2008 Enterprise Edition
- § Microsoft SQL Server 2005 Standard Edition
- § Microsoft SQL Server 2005 Enterprise Edition
- § Microsoft SQL Server 2005 Express Edition

New Installation Permissions

During new server installations, setup will prompt for two SQL accounts. The first is used by Setup to execute SQL create statements during the creation of the RightFax database. This account is required only for Setup and is neither saved nor used by RightFax. The SQL permissions required for this account are provided here:

- § Create database
- § Create table
- § Create procedure
- § Create view
- § Create rule
- § Create default

Windows authentication can be used or a local SQL account for the installation of RightFax. RightFax currently supports Microsoft SQL in the following version – 2005 and 2008. All editions are supported – Standard, Enterprise, 32-bit and 64-bit.

HARDWARE

Open Text follows the minimum hardware requirements specified by Microsoft at the following links:

- § <http://www.microsoft.com/sql/evaluation/sysreqs/2000/default.asp>
- § <http://www.microsoft.com/sql/prodinfo/sysreqs/default.mspx>

Most installations will need additional memory and processor speed than the minimum.

VIRTUALIZATION SUPPORT FOR RIGHTFAX

RightFax 10.0 server software is supported in the following virtual environments:

- § Microsoft Hyper-V with optional Live Migration
- § VMware ESX 3.01. or later.
- § VMware vSphere 4.0 and later with VMotion VMware

RIGHTFAX REMOTE DOCTRANSPORT OPERATING SYSTEM AND SERVER HARDWARE

- § Any Intel server running a Windows Server 2008 OS.
- § PCI, PCI-X, or PCIe expansion slot to support the specific fax board being used in the system configuration
- § Customers can also use virtual machines for RightFax Remote DocTransport servers when using the Brooktrout SR140 or the RightFax IP-Enabled Fax Channel Licenses.

CLIENTS SUPPORTED OPERATING SYSTEMS AND SOFTWARE *

RightFax FaxUtil Legacy Support RightFax 10.0 servers are compatible with RightFax FaxUtil client software versions 9.0 or later.

OPERATING SYSTEM

- § Microsoft Windows 7 x86 and x64 versions
- § Microsoft Windows Vista x86 and x64 versions
- § Microsoft Windows XP Professional SP2 or later x86 and x64 versions

INTERNET BROWSER

- § Internet Explorer 6.0 SP2 or later is required for RightFax Web Access and Enterprise Fax Manager Web Edition. *Internet Explorer 9.0 is not supported.*

SUPPORTED EMAIL SYSTEMS & EMAIL CLIENTS

RightFax Business Edition and Enterprise Edition include the RightFax Secure SMTP Email Gateway. This email gateway is typically used for outbound fax delivery notification, routing of inbound faxes to email, and integration with hosted mail systems like Office365, Hosted Exchange and Google Mail. Customers interested in advanced email integration features will need to purchase either the RightFax Connector for Microsoft Exchange or the RightFax IBM Lotus Notes Modules.

MICROSOFT EXCHANGE

- § Exchange Server 2010
- § Exchange Server 2007
- § Exchange Server 2010 Unified Messaging UM

MICROSOFT OUTLOOK

- § Outlook 2010
- § Outlook 2007

MICROSOFT SHAREPOINT

- § RightFax 10 supports Microsoft SharePoint Connector 2007 via the RightFax Connector for SharePoint.

IBM LOTUS NOTES

Notes Client, Domino Server and iNotes Web Access

- § Lotus Domino Server R7, R8, R8.5 and R 8.5.1
- § Lotus Notes R7, R8, R8.5 and R 8.5.1 (32 bit only. Cannot be installed on a 64 bit version of RightFax)

LOTUS DOMINO WEB ACCESS (iNotes)

- § Lotus Domino Web Access

******* PLEASE READ THIS SECTION CAREFULLY *******

If you are reading this document, you should have some idea of the type of RightFax configuration you will be deploying. There are basically two types of systems that we configure today; systems that run the RightFax software over an analog or digital fax board or boards. We typically refer to these systems as "legacy systems." In most cases today, we deploy "boardless" RightFax systems. Boardless systems DO NOT use fax boards, but rather run over the Brooktrout SR140 fax over IP communications layer or software. We usually refer to boardless systems as IP-based fax systems as they are typically connected to an IP-based phone system. Boardless or IP-based fax system can also be connected to OpenText Fax Gateways or Dialogic Media Gateways when a customer is not running a supported IP-based phone system, has analog fax lines they would like to use, or have already provisioned a stand-alone PRI for their fax communications platform..

Since the Brooktrout TR1034 and TruFax intelligent fax boards require an expansion slot, it is critical that we make sure that the correct board is ordered for your specific expansion slot type (PCI, PCI-X, or PCIe) in the Intel server and to make sure the tower or rack-mount server machine has enough space to accommodate the fax board.

Please note, RightFax 10 does not support the older Brooktrout TR114 Series analog and digital fax boards. Please contact your Advantage Technologies representative for replacement fax board availability and pricing.

FAX BOARD AND BOARDLESS SYSTEM REQUIREMENTS AND IP-BASED INTEROPERABILITY

ATTENTION: The next section of this document "SERVER CHASSIS REQUIREMENTS FOR USE WITH BROOKTROUT TR1034 and TRUFAX BOARDS" only applies to RightFax system configurations that include the Brooktrout TR1034 and TruFax fax boards.

If you are planning to integrating RightFax an IP-based phone system (Cisco, Avaya, Alcatel, Mitel, ShoreTel, NorTel, and others) or with an OpenText Fax Gateway or Dialogic Media Gateway, please review the latest IP-Based interoperability list to determine if your IPT is supported. Our interoperability list can be downloaded here: <http://www.atechnologies.com/fojpininterop.pdf>

Detailed information regarding your specific RightFax system configuration type will be included in a statement of work and reviewed prior to any orders being placed and services being scheduled.

SERVER CHASSIS AND EXPANSION SLOT REQUIREMENTS FOR BROOKTROUT TR1034 AND TRUFAX BOARDS

This section explains the server chassis requirements for the installation of the Brooktrout (now Dialogic) fax boards. TR1034 boards are offered in both uPCI (supports both PCI and PCI-X slots)-X and PCIe (supports PCI Express) formats. A number of the analog fax board also come in half-length dimensions. Your Advantage representative will recommend the appropriate fax board for your RightFax system configuration.

The server that houses the Brooktrout fax board(s) must have sufficient room and air circulation to accommodate a full length, full height PCI card with dimension outlined below.

It is important to provide your Advantage representative with accurate information regarding your server's specific slot configuration and types. Here is some basic information that should be followed:

uPCI FAX BOARDS REQUIRE:

- § At least one (1) 32 or 64 bit PCI or PCI-X slot (3.3v or 5.0v)
- § A hardware interrupt (assigned by system BIOS)
- § A block of consecutive I/O ports (assigned by system BIOS)

12 addresses for two (2) channel boards
20 addresses for four (4) channel boards

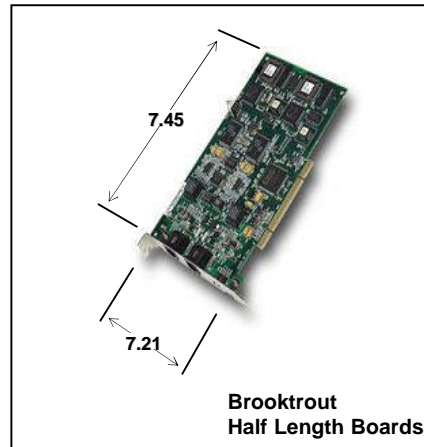
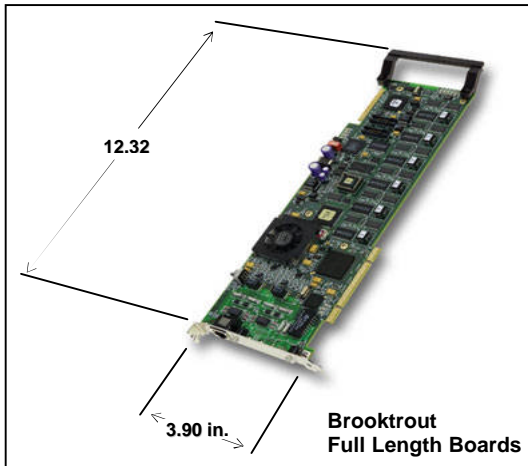
PCIe FAX BOARDS REQUIRE:

§ At least one (1) PCI Express slot, 4X (4 Lane) or higher; for each fax board that will be plugged into the server's chassis.
Please note, PCIe 1X (1 Lane) slots are not compatible.

Lanes	Pins Total	Pins in variable section	Total Length	Length of variable section
x4	64	42	39 mm	21.65 mm
x8	98	76	56 mm	38.65 mm
x16	164	142	89 mm	71.65 mm

§ A hardware interrupt (assigned by system BIOS)
 § A block of consecutive I/O ports (assigned by system BIOS)

12 addresses for two (2) channel boards
 20 addresses for four (4) channel boards



RIGHTFAX IP-CHANNEL AND BROOKTROUT SR140 INTEROPERABILITY FOR IP-ENABLED FAX SYSTEMS

The RightFax IP-Channels and Brooktrout SR140 FoIP products are compliant to the T.38, SIP, and H.323 industry standards. They will interoperate with equipment which properly adheres to these standards. However, given that other T.38 network products on the market are relatively new, we are providing this list of equipment which we have successfully tested. This list should be considered a subset of all the equipment that is interoperable. We are continually expanding this list as we access and verify interoperability with more FoIP network equipment, so please check back frequently.

Dialogic

- § Dialogic® DMG 1000 & 2000 Series
 - SIP
 - Release 5.1.118_5n or later
- § Dialogic® DMG 4000 Series
 - SIP
 - SUI-1_8.51 or later
- § Dialogic® IMG 1010 Integrated Media Gateway
 - SIP, H.323
 - Release 10.3.2 or later

The following IP PBXs, Gateways, SIP Trunking interfaces, and other devices have been tested for Interoperability with the SR140, TR1034 fax board and the RightFax IP-Enabled Fax Channels.

Network Access:

SIP Trunking:

- § babyTEL
- § Broadview Networks BroadSpeed SIP Trunking Service
 - Note: BroadSpeed SIP Trunking Service does not support Error Correction Mode (ECM)
- § BroadVox
- § Global Crossing
- § Node4

Network Elements:

Cisco

- § Cisco Unified Communication Manager (Cisco Unified CallManager)
 - SIP, H.323, & (MGCP via CallManager)
 - release 4.2.3 or later within the 4.2.x product line. H.323, MGCP
 - release 5.0.4(a) or later within the 5.0.x product line. SIP
 - release 6.0.1 or later within the 6.0.x product line. H.323, SIP, MGCP
 - release 6.1.x or later within the 6.1.x product line. H.323, SIP, MGCP
 - release 7.0.x or later within the 7.0.x product line. H.323, SIP, MGCP
 - release 7.1.3 or later within the 7.1.x product line. H.323, SIP, MGCP
 - release 8.0.2 or later within the 8.x product line, H.323, SIP, MGCP
- § Cisco Integrated Services Router (IOS based gateways capable of supporting T.38)
 - SIP, H.323, & (MGCP via CallManager)
 - IOS version 12.3 or later
 - T.38 V.34 supported on IOS 15.1.1T or later
- § Cisco AS Universal Gateway Series (those capable of supporting T.38)
 - SIP, H.323, & (MGCP via CallManager)
 - IOS version 12.3 or later
- § Cisco High Performance Gatekeeper Series (H.323 IOS Gatekeepers)
 - H.323
 - IOS version 12.3 or later
- § Cisco Unified Communications 500 Series for Small Business
 - SIP and H.323
 - UC 520
 - IOS version 12.4 or later

Avaya

- § Avaya IP Office
 - SIP
 - IP Office 500 hardware with VCM 32 (T.38 support) with the third-party SIP endpoint license
 - Release 6.0 or later
 - DevConnect certified on Release 7.0
- § Avaya Communication Manager
 - H.323, SIP (CM release 5.0 or greater)
 - Release 3.01 (with update 628.6-11410) or later within the 3.x codeline
 - Release 4.03 or later within the 4.x codeline
 - Release 5.0 or later within the 5.x codeline
- § Avaya Media Gateway Series (those capable of supporting T.38)
 - H.323, SIP
 - Firmware version 26.31.0 or later

Nortel

- § Nortel Communication Server 1000 Release 5.5
 - SIP
 - Release 5.5 or later

Alcatel

- § Alcatel OmniPCX Enterprise
 - SIP, H.323
 - Release 7.1 or later
 - Certified with Release 9.1
- § Alcatel OmniPCX Office (OXO)
 - SIP
 - Release 7.0 or later

Siemens

- § HiPath 8000
 - SIP
 - Release V3.0 R2 PS19.E05 or later
- § RG8702 Media gateway
 - SIP

Aastra Technologies

- § Ericsson MX-ONE Telephony System
 - SIP
 - Release V3.2 SP1 or later
- § The MX-ONE Telephony System includes:
 - Ericsson MX-ONE Manager Telephony System version 8.48.1
 - Ericsson MX-ONE Telephony Server version 12.45.6
 - Ericsson MX-ONE Media Gateway Classic version 1.4_5

3Com

- § 3Com VCX V7000 platform
 - SIP
 - Software version 9.0.7 or later
- § 3Com Media Gateway
 - SIP
 - Software version 4.40.211.387 or later

Linksys

- § Linksys SPA 8000 Gateway
 - SIP
 - Software version 5.1.10 or later
 - Hardware version 1.0.0 or later

Multi-Tech

- § MultiVoIP MVP210
 - SIP
 - Multi-Tech MVP210 firmware version 6.11.27-07-Aug-09 or later

Mitel

- § Mitel 3300 MXe
 - SIP
 - Mitel 3300 MXe controller software version 9.0.3.15 or later
 - Prerequisites: The DSP II module, T.38 licenses, and SIP trunk licenses must be installed and enabled

Quintum

- § Quintum Tenor Series
 - SIP, H.323
 - Release P104-12-10 or later

ShoreTel

- § IPBX/Gateway
 - SIP
 - Software Release 10 Build 15.6.4207.0 (Controlled Release)
 - Software Release 11.1 build 16.23.5609.0
 - Hardware Version 220T1A Switch
 - Please contact Dialogic Tech Support for specific configuration parameters; requires Dialogic SDK 6.2.3 or later

Patton

- § Patton 4960 PRI Gateway
 - SIP
 - R5.4 2009-07-20 or later
- § Patton 4554 BRI Gateway
 - SIP
 - R5.3 2009-05-20 or later

ADDITIONAL REQUIREMENTS FOR RIGHTFAX IN A SHARED SERVICE CONFIGURATION (COLLECTIVE)

If you are planning to run multiple RightFax systems in a Shared Services configuration or what we call a "RightFax Collective", it is required that all RightFax servers can to the same image directly location. *We do not recommend sharing the image directory off one RightFax server to the other. In this type of configuration, if the RightFax node that is hosting the image store is down, the other nodes of the shared environment or collective will not be able to write images and therefore will be considered off line.*

The same applies to where you will host your SQL server. We recommend the SQL server be hosted on a separate server to enable the SQL database to be available to RightFax if any of the nodes in the shared environment or collective goes down.

Load Balancer Ports – these ports must be open for the collective to function properly:

RightFax FaxUtil (PC client software).....	1052 & 1053
RightFax Enterprise Fax Manager (EFM).....	10520, 10521, & 445
RightFax Web Access (RWA).....	80
LPR Printing.....	515
SMB.....	445

ABOUT ADVANTAGE TECHNOLOGIES, INC.

Advantage Technologies, Inc. is one of the country's leading integrators of the RightFax fax server and automated electronic document delivery solutions. The company is a national level Captaris Platinum Elite solutions partner and a currently active member of the Captaris Advisory Council. For over 10 years we've been working with organizations of all sizes to help determine their requirements and implement, configure and support the RightFax product. All of our engineers and consultants are certified on the entire RightFax suite of products. For more information on the RightFax fax server and electronic document delivery solutions, please contact Advantage Technologies at toll free 1-866-730-1700 or via email at info@atechnologies.com.

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