

CASTELLE®

White Paper

FaxPress Premier™:  
Network Faxing in the Enterprise Environment

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## **Executive Overview**

Moving from manual faxing to computer-based, network faxing with a FaxPress Premier fax server represents one of the most cost-effective, productivity-enhancing improvements available to your organization. An ideal way to integrate computer-based, network faxing into office, workflow and messaging applications, FaxPress Premier takes care of fax jobs more quickly, accurately and inexpensively than any standalone fax machine. Sending a fax via FaxPress Premier takes less than one tenth of the time sending a fax manually does. In fact, the higher your enterprise's fax volume, the more money, time, and manpower a FaxPress Premier server can save you. In some cases, FaxPress Premier network fax servers have even enabled Castelle customers to grow their businesses – expand their client base, for example – without ever having to hire additional staff.

A combined hardware and software solution, Castelle's FaxPress Premier fax servers offer every possible computer-based, network fax option: desktop PC faxing, production faxing, fax and email integration, workflow application integration, as well as tools for developing custom fax applications. FaxPress Premier servers can be added as needed, since automatic load sharing enables multiple units to work together on the same network. Castelle's wide range of APIs means companies can develop and deploy custom fax applications using their choice of operating systems and programming languages, providing optimal return on investment.

Allowing both local and offsite users to send, receive, and manage faxes directly from their workstations, the FaxPress Premier servers are designed to deliver reduced communication costs, accelerated processing time, and more streamlined, higher quality communication. Offering straightforward integration with virtually all computing applications, messaging environments and telephony interfaces, the FaxPress Premier fax servers provide network fax solutions to suit even the most large-scale enterprise. Castelle's server-based rather than per-user based licensing allows an unlimited number of users at no additional expense.

The companies currently using Castelle's FaxPress Premier fax servers include government, manufacturing, financial, automotive, travel, insurance and health care organizations. All of them rely on their FaxPress Premier fax servers to handle business-critical and potentially sensitive information, where the received document must be uneditable and an exact replica of the original. Sales quotes, invoices, purchase orders, contracts and lab results are just a few examples of the kinds of information Castelle customers prefer to fax using their FaxPress Premier servers. With computer-based, network faxing, senders know without a doubt whether or not fax documents have been delivered successfully. Messages are either sent successfully, or the fax server transmitting the fax alerts the sender.

FaxPress Premier features include, but are not limited to:

- Inbound and outbound faxing from email applications.
- Document delivery to both fax and email recipients simultaneously
- A secure Web Client interface
- Faxing straight from desktop applications
- Fax Reporting, allowing both individual and system-wide fax transaction log information to be generated in a variety of formats
- Fax management, transmission tracking, and notification features (i.e. fax history, sender, time sent, destination address, bill-back codes, document delivery status, etc)
- Inbound routing to groups' or individual users' fax or email boxes, shared network folders, or printers
- Scheduled broadcast/batch faxing for reduced document delivery costs
- Fax archiving, eliminating the need to keep faxed copies of documents
- Least-cost fax routing, to minimize telephone charges

The FaxPress Premier's combined hardware and software solution offers fax cost savings that even purely software-based fax solutions can't provide. The FaxPress Premier's Internet and intranet fax features can drastically reduce fax transmission costs, especially on international calls. FaxPress Premier also integrates with many third party devices and applications, including: GoldMine®, HP scanners, Cardiff TELEform, as well as the Ricoh eCabinet and FabSoft Reform document management systems.

Thanks for including Castelle in the search for your organization's network fax server.

## **The FaxPress Premier Product Line**

Castelle's FaxPress Premier™ Analog and FaxPress Premier Digital fax servers represent an advanced, state-of-the-art approach to network faxing. Castelle's patent pending Premier technology, built on existing FaxPress™ hardware and software features, offers a complete, enterprise-level network faxing solution in one robust, server-class machine. With integrated file storage for system and fax data files, a multitasking embedded Windows operating system and pre-installed FaxPress Premier server software, both the FaxPress Premier Analog and FaxPress Premier Digital can support users in various networking environments, including Microsoft Windows, Novell NetWare, Linux/Unix, and Apple Macintosh. FaxPress Premier also provides a very powerful and flexible software development kit (SDK) allowing users to develop custom applications and production fax applications and achieve the highest level of ROI.

The FaxPress Premier Analog, with two Intel Dialogic 33.6 analog fax modem boards and driver software pre-installed, supports 8 fax channels across 8 regular phone lines. Upgrade packages enable the FaxPress Premier Analog to support up to 16 fax channels. The FaxPress Premier Digital includes the FaxPress Premier Digital T1 for North American markets, and the FaxPress Premier Digital T1 or ISDN for European markets. The FaxPress Premier Digital T1 supports 24 fax channels across a single T-1 line. Upgrade packages enable scalable support for up to 72 fax channels. For European markets, the FaxPress Premier Digital ISDN supports 4 fax channels across 2 ISDN lines, with upgrade packages enabling scalable support for up to 12 fax channels across 6 ISDN lines, while the FaxPress Premier Digital E1 supports 30 fax channels across a single EuroISDN E1 line, with upgrade packages enabling scalable support for up to 90 fax channels across three EuroISDN E1 lines. Additional FaxPress Premier servers can also be added to the network without having to replace existing FaxPress units, since the Premier is easily configured for load sharing, and is also backward compatible with the existing FaxPress server products.

As dedicated network fax servers, the FaxPress Premier Analog and FaxPress Premier Digital provide client workstations with access to incoming and outgoing faxes, phonebooks, transaction logs and other fax-related data via Faxmain®, the FaxPress Premier client's fax transmission and server administration utility. FaxPress Premier's email gateways provide additional fax and email integration options, allowing fax messages to be sent and received directly from a number of mail clients. Users and administrators can also access Faxmain functions through a secure web client interface.

Some of the client-based administration and fax transaction features associated with Faxmain include:

- **Fax Reporting** The FaxPress Premier's Fax Report application software module compiles the FaxPress Premier's fax transaction logs and can generate a variety of system-wide and individual graphical reports.
- **Email Integration** The FaxPress Premier's Embedded Email Gateway service runs on the FaxPress Premier server, and allows Microsoft Exchange, Lotus Notes, Novell GroupWise and any SMTP-compatible email system users to send and receive faxes directly from the mail client. An additional VIM-based email gateway for Lotus Notes is provided on the FaxPress Premier CD.
- **Automated, Production Faxing** The FaxPress Premier's Drop Directory and DropFax features support easy deployment of automated, production faxing in almost any environment.
- **Microsoft Active Directory Integration** The FaxPress Premier's Active Directory Synchronizer allows the administrator the efficiency of creating new Premier users from existing Active Directory users, and the convenience of centralized Active Directory and FaxPress Premier user management.
- **System Backup and Restore** The FaxPress Premier's backup and restore function allows all FaxPress Premier system files, user information, and fax job data to be backed up to, and restored from, a sharable network folder.
- **Secure Web Interface** Available from any workstation with a web browser, the FaxPress Premier's web interface provides access to both administrative and end-user Faxmain functions. A security feature ensures that all data is fully encrypted across the Internet.
- **Microsoft Integration** The FaxPress Premier's seamless Microsoft OS and Office application integration allows users to send faxes from the Send To menus of both Microsoft Office applications and Windows Explorer. Outlook users can send and receive faxes as easily as they send and receive email; fax cover pages can be created and edited using Microsoft Word or WordPad, giving users a great deal of creative flexibility.

The FaxPress Premier's combined hardware and software solution offers fax cost savings that purely software-based fax solutions cannot provide. Active Directory and Single Sign On support save administration time; fax and email integration reduces training time. The FaxPress Premier's Internet and intranet fax features can drastically reduce fax transmission costs, especially on international calls. And, additionally, the FaxPress Premier's server-based rather than user-based licensing eliminates additional per-user licensing costs. Specifically designed to help reduce communication costs and facilitate efficient, error-free information exchange with your customers, suppliers and staff, the FaxPress Premier fax servers take care of your enterprise's fax jobs more efficiently, reliably and less expensively than any standalone fax machine or software based fax solution.

#### T1, E1 and ISDN Digital Line Support

The FaxPress Premier Digital supports T1, E1 and ISDN carrier formats. The FaxPress Premier Digital T1 supports high-speed digital transmission in the North American market, while the FaxPress Premier Digital E1 and FaxPress Premier Digital ISDN support high-speed digital transmission in the European market. The FaxPress Premier Digital T1, with an Intel Dialogic CPI-24001- T1PCIU high-density fax modem board and 24-channel T1 interface, supports 24 fax channels across a single T-1 line. The FaxPress Premier Digital T1 can support up to three Intel Dialogic CPI/24001-T1PCIU fax boards, providing scalable support for up to 72 inbound and outbound fax channels.

For European markets, the FaxPress Premier Digital ISDN, with an Intel® Dialogic® CPI-BRI-PCI fax modem board and driver, supports 4 fax channels across 2 ISDN lines. Upgrade packages enable the FaxPress Premier Digital ISDN to provide scalable support for up to 12 fax channels across 6 ISDN lines. The FaxPress Premier Digital E1, with an Intel Dialogic CPI/3000-1E1-PCIU single slot, high-density fax board, supports 30 fax channels across a single EuroISDN E1 line. Upgrade packages enable scalable support for up to 90 fax channels across three EuroISDN E1 lines.

#### FaxPress Premier Hardware

The FaxPress Premier Analog and FaxPress Premier Digital servers support all Ethernet networks, as well as the following network operating systems:

- Microsoft Windows 98/NT/2000/XP/2003 and Windows Terminal Servers.
- Novell NetWare 5 and 6 Pure IP Networks
- Linux/Unix Networks
- Apple Macintosh with TCP/IP Networks

Some of the especially noteworthy features of the FaxPress Premier Analog and FaxPress Premier Digital fax server hardware include:

- **Integrated T1, E1 or ISDN interface for FaxPress Premier Digital Models**  
The FaxPress Premier Digital's T1, E1 and ISDN integrated interfaces provide high speed fax transmission, helping to save fax transmission time and phone costs.
- **Integrated 33.6 fax modem for FaxPress Premier Analog Models**  
Up to four Intel Dialogic CPI/400B2 analog fax boards can be installed to support 16 channels, providing 33.6 KB/s (V.34) transmission speeds for sending and receiving faxes simultaneously on all channels.
- **Industrial grade server hardware** The FaxPress Premier uses industrial grade server hardware (6 layer or above PCB) chosen for reliability, stability, and product longevity. The FaxPress Premier's industrial grade hardware offers 24/7 uptime that consumer grade hardware (below 6 layer PCB) can't provide.
- **Intel Dialogic Fax Boards** The FaxPress Premier's Intel Dialogic fax modem boards, the fax module inside the server platform, provide fast transmission and throughput, worldwide compatibility and product scalability.
- **Upgrade Kit for Scalability**  
A Hardware Upgrade Kit is available, providing the FaxPress Premier Digital and Analog servers with additional fax modem modules to support additional fax channels.

- **Integrated File Storage** FaxPress Premier's internal 40GB hard disk eliminates the need for a separate file server to store system files and fax job files. All system files are pre-installed on the FaxPress Premier, making the Premier setup quick and simple.
- **Integrated LCD Display Module**  
The LCD module displays the FaxPress Premier's IP address and server name. Push buttons allow manual setting of the FaxPress Premier IP address.
- **Rack Mount or Desk Top Stationing**  
The FaxPress Premier Analog and FaxPress Premier Digital servers can either be mounted on a rack or stationed on a desktop.

#### FaxPress Premier Server Specifications Summary Chart

This chart provides a summary of FaxPress Premier fax server specifications.

Feature	FaxPress Premier Analog	FaxPress Premier Digital
Fax board	Intel Dialogic CPI-400B2 board with 4 fax channel interfaces	Intel CPI-24001- T1PCIU board with one 24 channel T1 interface (T1) Or Intel CPI-BRI-PCI board with two 2 channel ISDN interfaces (ISDN) Or Intel Cpi/3000-1E1-PCIU board with 30 fax channels (E1)
Number of Fax Channels	8, 12, or 16	24, 48, or 72 (T1) 4, 8, or 12 (ISDN) 30, 60, or 90 (E1)
Processor Speed	850 MHz	850 MHz
Operating System	Windows Embedded OS SAK 2.0	Windows Embedded OS SAK 2.0
Hard Disk Space	40 GB	40 GB
Number of Users	Unlimited	Unlimited
Memory Configuration	256 MB	256 MB
Network Topology	10/100 BaseT Fast Ethernet RJ-45 auto-selection	10/100 BaseT Fast Ethernet RJ-45 auto-selection
Shared PS/2 port for keyboard and mouse	1	1
Parallel Port	1	1
VGA Monitor Port	1	1
Serial Port	1	1
USB Port	1	1
Power Supply	100VAC to 240VAC, 47- 63 Hz, wide range	100VAC to 240VAC, 47- 63 Hz, wide range
Maximum power	300 Watts	300 Watts
Height	3.5"	3.5"
Width	19"	19"
Depth	17.3"	17.3"
Weight	22.22 lbs (with one modem board) – 23.74 (with four modem boards)	22.22 lbs (with one modem board) – 23.23 (with three modem boards)
Fax Data Compression	Modified Huffman (MH), Modified Read (MR), and Modified Modified Read (MMR)	Modified Huffman (MH), Modified Read (MR), and Modified Modified Read (MMR)
Fax Connection	RJ-11C	RJ-48C
Fax Compatibility	ITU-T Group 3 T.4, T.6, and T.30	ITU-T Group 3 T.4, T.6, and T.30
Error Correction Mode	Yes	Yes
Dialing Method	Tone or pulse	Tone or pulse
Fax Protocol	V.34, V.17, V.29, V.27 ter	V.17, V.29, V.27 ter
LCD Display	1	1
Soft reset switch	1	1
Email Integration	Standard	Standard
PBX and Automatic Inbound Routing	Yes	Yes
Faxmain Client	Microsoft Windows, Novell Netware	Microsoft Windows, Novell Netware
Web Browser Interface	Microsoft Windows, Novell Netware, Linux/Unix, Apple Macintosh	Microsoft Windows, Novell Netware, Linux/Unix, Apple Macintosh

Web Services Programming (SDK)	Microsoft Windows, Novell Netware, Linux/Unix, Apple Macintosh	Microsoft Windows, Novell Netware, Linux/Unix, Apple Macintosh
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### **FaxPress Premier 3.x Software**

The FaxPress Premier 3.x server and client software set new standards for server reliability, administrative efficiency and convenience, as well as end user features and fax transmission options.

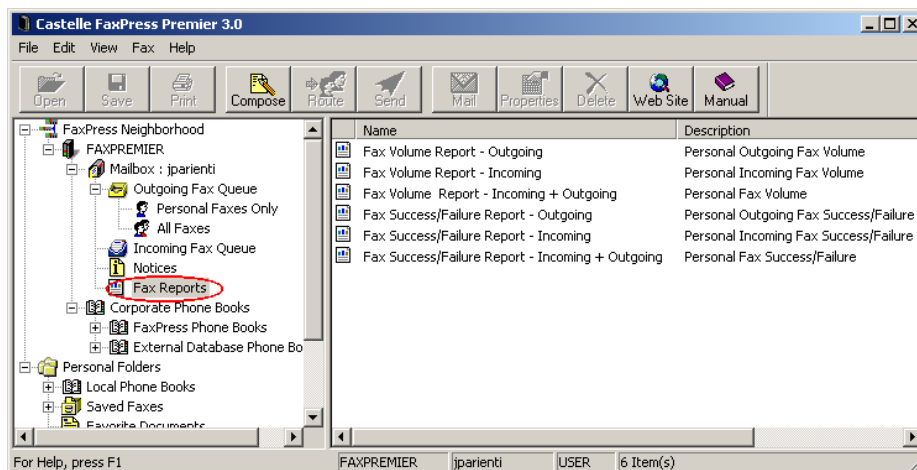
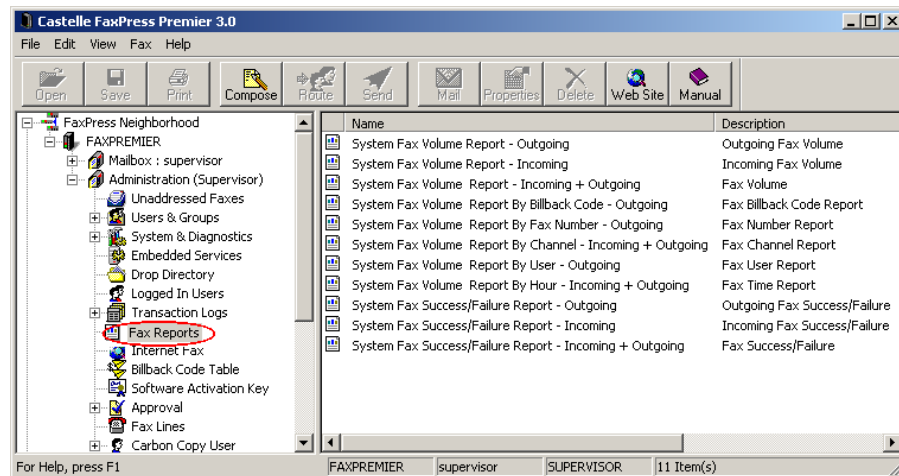
#### **Windows and Web-Based Administration and Faxing Utilities**

The FaxPress Premier Analog and FaxPress Premier Digital offer both the client-side Faxmain, a Windows-based server configuration, administration, and faxing utility as well as the FaxPress Premier Web Interface, a secure, web-based server configuration, administration, and faxing utility. Faxmain is available through the Premier client software. The Web Interface is available from any PC with a web browser. For details regarding Faxmain and the Web Interface, see Configuring the FaxPress Premier Server on page 9.

#### **Fax Reporting**

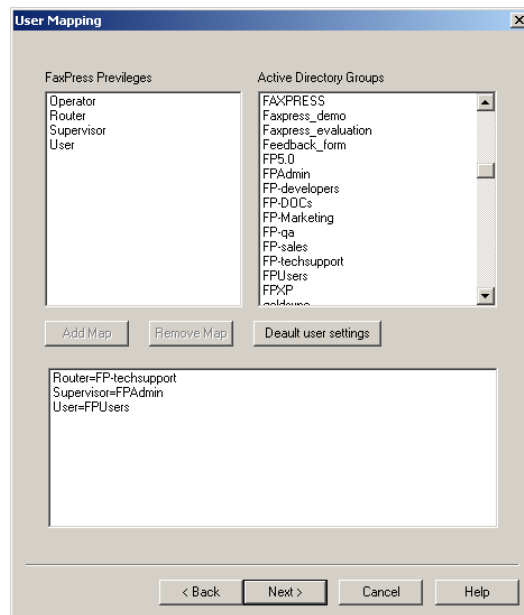
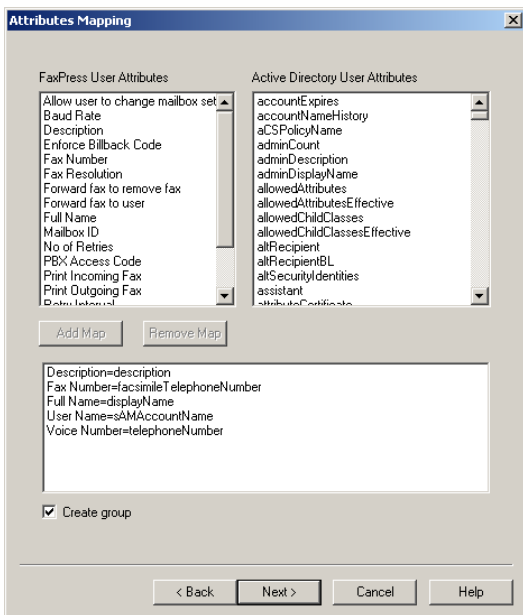
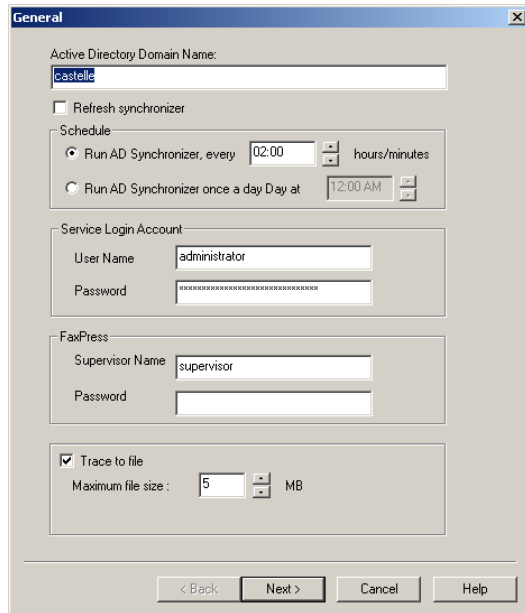
The FaxPress Premier logs a variety of information about the fax transactions it handles. FaxPress Premier Fax Report, a convenient, user-friendly presentation tool for the Premier's operations, generates the FaxPress Premier's fax transaction log information in a variety of report formats. The Fax Report's comprehensive analysis of the Premier's fax processing transactions is easily exported to spreadsheets, databases, and other report generators.

FaxPress Premier's Fax Report feature offers both system-wide and personal fax report types.



#### **FaxPress Premier Microsoft Active Directory Synchronizer**

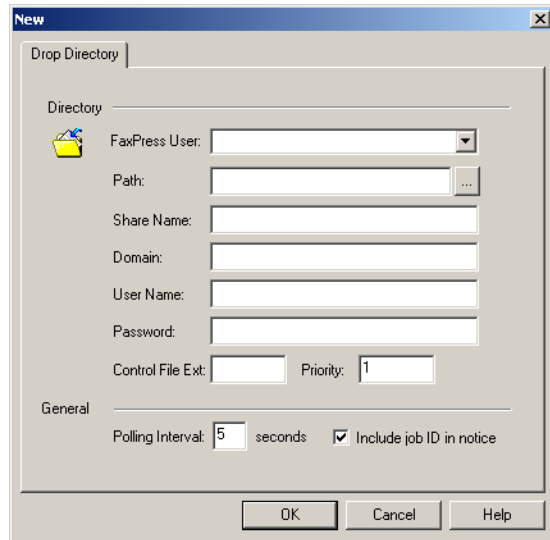
The FaxPress Premier's Microsoft Active Directory Synchronizer allows the administrator the efficiency of creating new FaxPress Premier users from existing Active Directory users, and the convenience of centralized Active Directory and FaxPress Premier user management. The Active Directory Synchronizer interface is intuitive and straightforward.



**Production Faxing Made Easy: Drop Directory and the DropFax Utility**

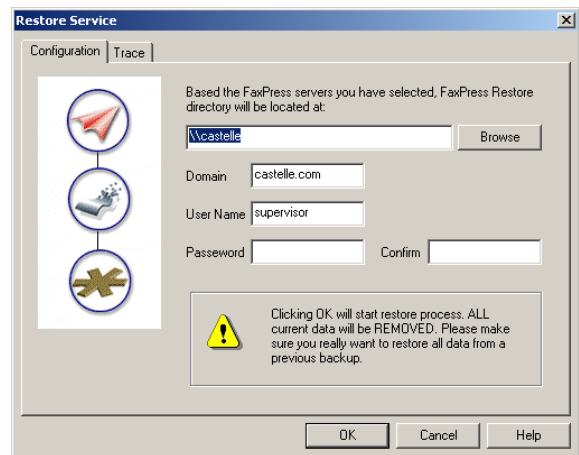
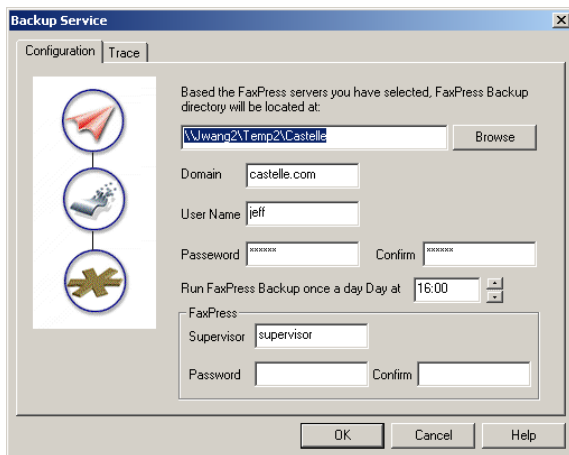
The FaxPress Premier's Drop Directory and DropFax utility features support easy deployment of automated, production faxing in almost any environment. Third-party applications can access the Drop Directory to send outgoing faxes. The Drop Directory supports fax jobs submitted in any native document format, and also supports priority fax

job settings controlled by the third party application. Drop directories can be defined in any sharable folders on the network accessible to the FaxPress. The FaxPress Premier's DropFax utility software is designed to offer developers convenient deployment of inbound production faxing based on user specified inbound fax folders. This allows third-party applications to retrieve inbound faxes in TIF format from any specified file folder. After the DropFax utility is activated, a DropFax icon appears on the desktop toolbar.



**System Backup and Restore**

The FaxPress Premier servers also come with a backup and restore function designed to protect user files and data in case of any unexpected system failure. The FaxPress backup function allows all FaxPress system files, user information, and fax job data to be backed up to a sharable network folder.



**Error Correction Mode**

Phone line noise during fax transmission can sometimes cause errors in the received image, usually causing one or more scan lines to be dropped from the image. As long as there aren't too many errors, the page is accepted and confirmed because it is still readable. If too many errors occur, however, the fax will be rejected. The FaxPress

Premier's default Error Correction Mode (ECM) guarantees faxes will be sent and received with no errors, as long as the sending or receiving machine also supports ECM.

#### FaxPress Premier Compatibility with FaxPress™

FaxPress Premier servers and FaxPress fax servers can work together on the same network. The FaxPress Premier 3.x client software can be used to access both server platforms. Advanced FaxPress Premier 3.x client features designed specifically for the FaxPress Premier platform are automatically enabled for use with the FaxPress Premier and automatically disabled for use with the FaxPress server line.

Additionally, the FaxPress Premier offers the FaxPress Premier Migration Wizard, an Administration Tools utility. Enabling existing FaxPress user accounts to be imported into FaxPress Premier, the Migration Wizard allows FaxPress user privileges, settings, and preferences to be conveniently saved and replicated on the FaxPress Premier.

#### Load Sharing with FaxPress Fax Servers

Load sharing between FaxPress Premier servers provides a way for even distribution of outbound and inbound fax loads and efficient high volume fax transmission. FaxPress Premier servers can also be configured to load share outbound faxes with any existing FaxPress fax servers on your network.

#### Microsoft Word-Based Cover Pages

The FaxPress Premier's fax cover pages can be created in Microsoft Word or WordPad, allowing all of Word's familiar formatting and editing power to be used in customizing cover pages.

#### International Character Support

With fax cover pages created in Microsoft Word and WordPad, the FaxPress Premier can, in addition to supporting English, also support the use of international characters on your fax cover pages.

#### Additional Features

Additional FaxPress Premier 3.x features include:

- Embedded Fax Archive Service, a feature rich fax database and archiving service that eliminates the need to keep copies of faxed documents.
- Priority User and Fax Job Priority (High, Normal, Low) Support
- Internal Document Routing – Send faxes to internal users in addition to remote fax recipients
- Group Users Support
- Carbon Copy capability for incoming and outgoing faxes
- Faxing straight from Microsoft and other third party applications
- Fax transmission tracking (i.e. fax history, sender, time sent, destination address, bill-back codes, etc)
- Customizable notification features, allowing users to monitor document delivery status
- Incoming and outgoing fax queue sorting, according to sender, status, destination, etc.
- Sending fax messages to both email and fax recipients simultaneously.
- Immediate or scheduled batch faxing; scheduling faxes for off-peak hours dramatically reduces document delivery costs
- Least-cost fax routing via Castelle Internet Faxing to minimize telephone charges.

## **FaxPress Premier Administration**

FaxPress Premier provides an easy plug-and-play installation procedure. DHCP-enabled, the FaxPress Premier will, when powered on in a DHCP environment, automatically be assigned a temporary IP address from your network's DHCP server. This IP address, along with the FaxPress Premier serial number, will be displayed on the FaxPress Premier's front panel LCD window, and in the System Information directory of Faxmain. The FaxPress Premier's IP address can then be statically assigned from either location.

Once it's up and running with a static IP address, the FaxPress Premier can be joined to the network domain, and will then support the importing of Active Directory users and groups using the FaxPress Premier's Active Directory Synchronizer service.

### Network Security

FaxPress Premier supports your network environment's native security features, and requires the same kind of anti-virus protection and security measures used for other network workstations.

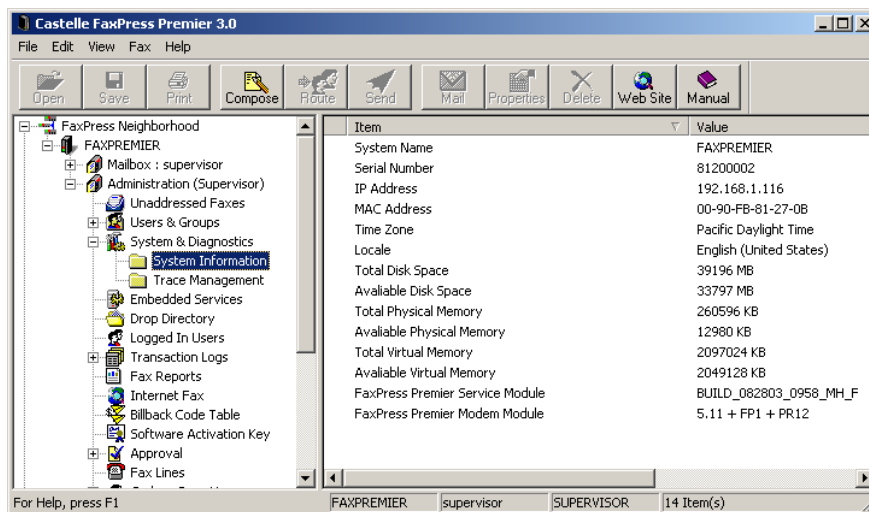
### Configuring the FaxPress Premier Server

The FaxPress Premier Analog and FaxPress Premier Digital offer both the client-side Faxmain, a Windows-based server configuration, administration, and faxing utility as well as the FaxPress Premier Web Interface, a secure, web-based server configuration, administration, and faxing utility.

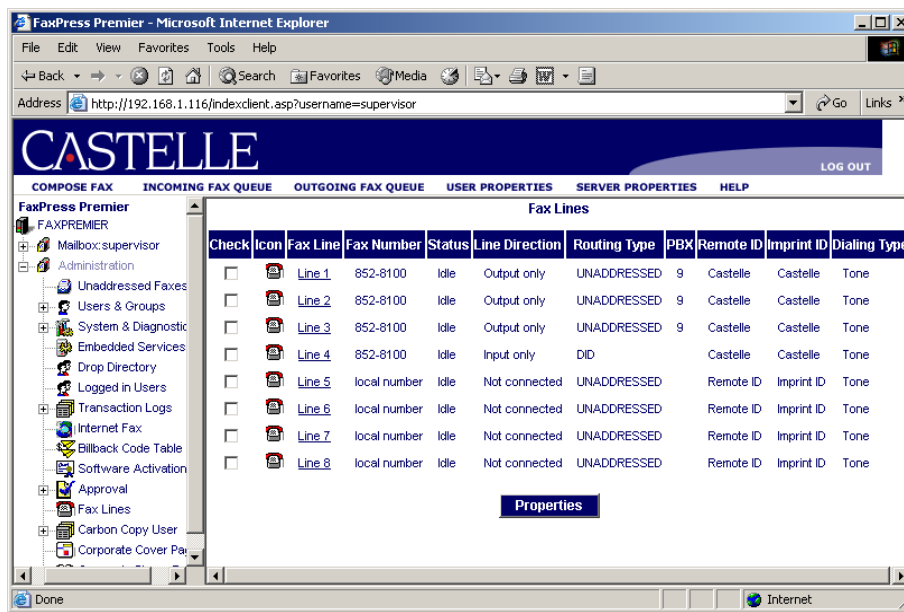
Both Faxmain and the Web Interface can be used to manage FaxPress Premier users and administer FaxPress Premier units, as well as send and receive faxes. The most frequent administrative functions FaxMain and the Web Interface utility perform include, but are not limited to:

- Adding and deleting users
- Setting user properties
- Configuring FaxPress Premier server settings
- Managing outgoing and incoming job queues
- Managing phone books and cover pages

All the FaxPress Premier and FaxPress servers on the network appear in Faxmain, allowing the administrator to manage multiple servers from one location.



The FaxPress Premier Secure Web Interface allows users to log into the FaxPress Premier with any Internet Browser from any workstation. The Web Interface provides full administrative control of the FaxPress Premier server from any Web Browser with access to the server. Faxmain, the Windows-based utility, is available through the FaxPress Premier client software.



### Managing Users

FaxPress Premier makes adding and removing FaxPress Premier users, and configuring user properties, as convenient as possible with these network operating system integration features:

- **Single Sign On** - The FaxPress Premier supports Single Sign On for both Microsoft Windows Domain users and Novell NDS users. FaxPress Premier uses NetWare native authentication mechanisms to authenticate users and allow them access to the server. Users do not need to separately logon to the FaxPress Premier. The administrator controls access simply by adding or removing users from FaxPress Premier user groups on NDS. FaxPress Premier can also be configured to require users to authenticate themselves with a password every time they wish to send or receive a fax. Automatic login is also supported for environments with minimal security concerns.
- **Synchronizing Premier Users with NT or Windows User Domains** - The FaxPress Premier's Active Directory Synchronizer allows the administrator to add Premier users from an existing NT Domain or Group without having to maintain a separate user database.
- **Centralized Client Installation** – Castelle provides support for both SMS and ZENworks, allowing administrators to use standard tools to load client software from a central location.

### Fax Approval

Fax Approval provides the FaxPress Premier administrator with an easy-to-use mechanism for assigning fax approval requirements to users. For each user, the administrator can specify whether or not approval is required for sending faxes to local, long distance or international numbers. The administrator then assigns a group of Approvers who are notified of faxes waiting for approval. Once an Approver approves the fax, it is sent out. The user who sent the fax will get notified when the fax gets approved or rejected.

### FaxPress Premier Archive

FaxPress Premier Archive provides five essential archival functions:

- All of your FaxPress Premier servers can be backed up to a single database.
- Archives outgoing faxes, incoming faxes and transaction logs for all users.
- Creates transaction information for each fax or log and stores it in a database.
- Allows all of your users to view, sort, mail, print, and re-send archived faxes directly through Faxmain.
- Optimizes FaxPress Premier performance by moving faxes from FaxPress Queues into the archive database.

Archive parameters for all users are defined using the FaxPress Premier Archive configuration wizard. The configuration wizard prompts the administrator for the following information:

- Identify all the FaxPress Premier servers to archive
- Specify type(s) and condition(s) of faxes (or transaction logs) to archive
- Specify the archival frequency and storage format
- Specify type of database to store the archival information (SQL server or Access)
- Define database housekeeping operations

Two modes are supported: Backup mode and On-line Archive mode. Backup mode provides archiving for off-line, long-term storage with backups once a day. On-line archive mode moves faxes continually into the database, where they are visible, searchable and filterable by end-users through Faxmain.

### User Privileges

FaxPress Premier allows the administrator assign four levels of system access for users:

- User - Can only view personal incoming faxes, change user preference settings (if allowed by the supervisor), change personal phone books, and control personal faxes in the incoming and outgoing queues.
- Router - Has the same privileges as the FaxPress Premier user, but can receive notifications and view incoming faxes that are received in the general mailbox (called "unaddressed"). A Router can view only the first page of the unaddressed received fax and cannot route it to him/herself.
- Operator - Has the same privileges as the Router, but can view all pages of the unaddressed incoming faxes, manage all the faxes in the unaddressed incoming and outgoing queues, and maintain the corporate phone book and fax cover page.
- Supervisor - Has complete access to and control over all the features of the system.

### PBX dial-out password security

Some PBXs require the user to enter a password to be able to dial out. FaxPress Premier allows individual PBX passwords to be configured for each user.

### FaxPress Management via SNMP

The FaxPress SNMP option allows extensive network management and control functions to be executed remotely. Administrators can monitor any FaxPress Premier, including its line status, and configure or even reset the unit. Alarming is supported, allowing an operator to see an alarm message if the number of failed faxes ever rises above a configurable threshold. All this can be done using industry standard SNMP management console programs such as HP OpenView, , Novell ManageWise (previously called NetWare NMS) and IBM Tivoli.

### Email Integration

FaxPress Premier's Email Gateways provide a variety of fax and email integration options, depending on the email environment. Serving as a link between the FaxPress Premier and your network's mail server, the Gateways allow fax messages to be sent and received directly from a number of mail clients – Microsoft Outlook, Lotus Notes, Novell GroupWise, as well as most SMTP compliant mail systems.

The Premier server's embedded Email Gateway service provides the added benefit of running on the server rather than on a network workstation, and requires no software installation.

### Microsoft Exchange and Outlook Environments

The FaxPress Premier provides both server-based and client-based email integration options for Microsoft Exchange and Outlook environments. The server-based option, FaxPress Premier Exchange Connector, is installed from the FaxPress Premier 3.x CD and runs as a service on your Exchange server. The client-based option, FaxPress Premier Outlook Direct, is also installed from the FaxPress Premier 3.x CD, but, as a service added to the user's Outlook email profile, does not require an Exchange server.

- **The FaxPress Premier Exchange Connector** supports Exchange 5.5 and Exchange 2000/2003 servers. Once installed from the Premier 3.x CD, the Premier Exchange Connector is then configured to use either the "Microsoft Exchange Connector Using SMTP" option or the "Microsoft Exchange Connector Using MAPI" option of the Premier's embedded Email Gateway service. Both enable inbound and outbound faxing through Exchange, synchronizing of the Premier and Exchange user databases, and use of the global address book for faxing, as well as convenient server-side deployment. The Premier's embedded Email Gateway service provides an accurate conversion of attached files in native formats to faxable images by invoking a background printing of attachments. The Exchange Connector management tool is accessible from Exchange Manager utility.
- **The FaxPress Premier Outlook Direct** service software provides a convenient, client-based way for Microsoft Outlook users to send and receive faxes as easily as they send and receive email, right from their Outlook client. The Castelle FaxPress Transport, a service added to the user's email profile, connects Outlook directly to the Premier server. Client rather than server-based, Outlook Direct has the ability to operate independently of an Exchange server, making it ideal for smaller networks. Outlook Direct is not the ideal choice, however, for a remote, dial-up or Virtual Private Network connection.

### IBM Lotus Notes Environments

The native, VIM-based FaxPress Premier Lotus Notes Gateway provides email integration and also allows for simple capture of Lotus Notes user information into existing Lotus Notes phone books. Using a Notes client account, the Notes Gateway logs on to the Domino server, routes incoming faxes as memos to Notes client mailboxes, and picks up fax-bound memos and delivers them to the FaxPress Premier server for conversion to fax format and transmission.

Lotus Notes users have access to a fax form via a "New FaxPress Fax" button on their desktops. This feature supports all FaxPress Premier fax delivery options and makes for convenient, user-friendly fax transmission. Additionally, the easily customized FaxPress Fax Options template provides default settings for sending faxes, further simplifying your fax messaging.

### Novell GroupWise and Other SMTP-Compatible Email Environments

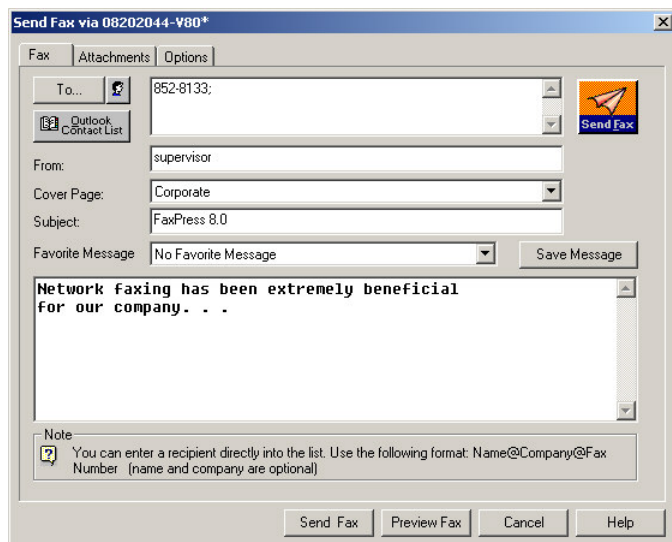
The FaxPress Premier's versatile embedded Email Gateway for Generic SMTP enables users of SMTP-compatible email systems to send and receive faxes. The embedded Email Gateway for Generic SMTP has been tested in a variety of email environments. It has proven to be a very reliable alternative to NLMs or connectors, especially since it runs as a service on the FaxPress Premier, and does not run on the NetWare or Windows server of the email system.

The embedded Email Gateway for Generic SMTP provides a robust and efficient way to fax-enable Novell GroupWise. Castelle provides a simple set of instructions that make configuration and use of the FaxPress Premier Email Gateway for Generic SMTP in the Novell environment simple and straightforward.

## Sending Faxes

FaxPress Premier provides a variety of ways to send faxes:

- **From Faxmain**, the FaxPress Premier client interface.



- **From Microsoft Office applications** by enabling and using either the Send To>Castelle FaxPress option, by enabling and using the Castelle FaxPress icon option, or by printing to the Castelle FaxPress converter.
- **From a Web Browser** by using methods similar to those used from Faxmain
- **From common third party applications** simply by printing to the Castelle FaxPress converter.
- **From custom applications** to be developed based on FaxPress Premier's SDK
- **From Windows Explorer** by right-clicking a file, after enabling this feature, and selecting "Send To>Castelle FaxPress."
- **From any email client** (Microsoft Outlook, Novell GroupWise, Lotus Notes, cc:Mail, Netscape, Eudora, etc.) by composing an email message and selecting a fax recipient, once one of the FaxPress Premier Gateways is activated.
- **From network scanners**
- **From GoldMine® Contact Manager**

In all of the above options, users can select fax and email recipients from a variety of phonebooks, create and select cover pages, type cover page subjects and messages, attach files and specify delivery options. Using Faxmain also provides access to favorite documents and favorite messages list. These lists are convenient for users who are frequently required to send the same document or message.

### Attachments

Attachments are rendered into fax documents using the original application, ensuring that the fax retains its intended formatting. Many other fax servers use third-party rendering engines that can change formatting such as pagination and table layout, causing unintentional formatting errors.

### Mail/Fax Merge

FaxPress Premier offers Microsoft Word users a "Mail Merge" feature that allows broadcasting of customized documents to multiple recipients. Destination specific info (fax numbers, names, etc.) can come from any data source supported by Word mail merge, eliminating the need to enter each destination number by hand.

## **Using Phonebooks**

### **FaxPress Premier Native Phonebooks**

FaxPress Premier provides one corporate phonebook and multiple personal phonebooks for every user. The phonebooks are stored on the Premier server. The user can also use personal phonebooks stored locally on his/her own workstation. All FaxPress Premier native phonebooks utilize the CodeBase database and can support up to 32,000 entries. FaxPress provides import and export facilities from .dbf and comma delimited formats.

### **Corporate Database Phonebooks**

The Premier also allows you to connect to existing databases and use them as phonebooks for faxing. ODBC Phone Book support allows the administrator to:

- Specify the external database to use as a Premier phonebook
- Create mappings between Premier phonebook fields and the database fields
- Create different views of the database by specifying filters

The administrator can create any number of corporate phonebooks. Each corporate phonebook can connect to a different database and contain any number of views (filters) of that database. Views can be created, for example, to show a customer list in a specific state or country. ODBC Phone Book support provides a sophisticated yet intuitive user interface for the administrator to create all those views.

Once the views are created, they become visible to all users. The end-user can use the corporate phonebooks in exactly the same way they use the Premier native Corporate Phonebooks.

FaxPress Premier ODBC phonebooks can work with any ODBC compliant database, including:

- Any SQL compliant DBMS servers, such as Microsoft SQL server, Oracle, Informix, etc.
- ISAM type databases such as: dBase, Excel, FoxPro
- Microsoft Access database

### **Personal Database Phonebooks**

Similar to connecting to corporate databases, the user can create his/her own personal fax phonebook by selecting a local, file-based database such as Access, Excel, dBase, FoxPro, etc.

### **Using Microsoft Outlook Contact Lists**

FaxPress Premier allows the user to connect directly to MAPI phonebooks and use Outlook contact lists as fax phonebooks. Other contact management packages (such as ACT) can also be supported using the generic database phonebook mechanism (use ODBC to access dBase files).

## **Internet Faxing**

Castelle's FaxPress Premier provides least-cost fax routing over an IP network as a standard feature. This feature is referred to as Castelle Internet Faxing (CIF). CIF allows you to fax between two FaxPress Premier or FaxPress locations with no incremental telephone charges – all communication takes place directly between the two FaxPress units using the Internet.

If the final destination is a Premier user, the fax is delivered electronically without ever being transmitted over telephone lines. If the destination is a traditional fax machine, the originating FaxPress will find a FaxPress closest to the final destination and transmit the final "leg" across local telephone lines.

For companies that do not have a private IP network and do not want to use the Internet for security reasons, Castelle also offers integration with third-party fax services. PCOMM offers worldwide Internet faxing over the Internet as a service and charge on a per call basis.

## **Receiving Faxes**

FaxPress Premier Analog and FaxPress Premier Digital support both automatic inbound routing and secured manual routing,

### **Automatic Inbound Routing**

The FaxPress Premier Analog and FaxPress Premier Digital have different requirements for automatic routing support. To enable automatic inbound routing, FaxPress Premier mailboxes are assigned mailbox IDs that associate them with their corresponding fax numbers. All mailbox IDs consist of either three or four digits, depending on how many digits your T1 line, DID trunk line, or PBX is passing to the Premier.

- **FaxPress Premier Analog** – requires a DID trunk or a PBX system capable of digital to analog conversion. Once the FaxPress Premier is configured to map users' DID numbers to the corresponding FaxPress Premier accounts, it will direct inbound faxes accordingly. If your PBX does not support digital to analog conversion, or if you aren't using a PBX system, you'll need a third party device like the Exacom DID Interface Module to provide the conversion required between the DID trunks and the Premier's phone line inputs. The Exacom interface translates DID signals into DTMF signals recognized by FaxPress.
- **FaxPress Premier Digital** – requires a T1 line with CSU and DNIS numbers assigned by your phone company.

### **Manual Routing**

The Premier provides two methods of manual inbound routing.

- **Secured Manual Routing** - allows a user with Router privileges to route incoming faxes to the appropriate Premier user. A Premier user with router privileges is allowed to view only the first page (cover page) of the fax, maintaining the privacy and confidentiality of the fax transaction content.
- **Line Routing (assigned-line user routing)** – allows the administrator to assign an individual user and/or print queue to each incoming telephone line. The assigned line user can administer the incoming faxes received on that line. If so configured, all the incoming faxes from that line will be printed on the network printer servicing that assigned print queue. FaxPress maintains a list of notices for each user indicating the reception and routing of faxes.

## **Web Services SDK: Developing Customized Software**

Castelle's goal is to let our customers develop and deploy applications for the FaxPress Premier using their choice of operating systems and programming languages. Our Web Services SDK provides the tools for this kind of development and is especially well suited for developing customized production fax applications. Premier exports all its functionality as WS-I conformant Web Services, enabling FaxPress Premier to be fully interoperable in .Net environments and Java environments.

Sample clients, with source code provided, have been written in Java, C++, C#, Visual Basic, and Perl. The clients have been tested for full interoperability on multiple operating systems including MS Windows, Linux, MacOS, and standard Unix platforms. Any modern programming language and operating system with Web Services functionality is compatible with the FaxPress Premier Web Services interface.

A developer guide, Web Services SDK, provides the details of different development scenarios. At a high level, the Java API, generated from Apache Axis wsdlgen, provides a 100% pure Java client for the FaxPress Premier Server. The C# and Visual Basic APIs are automatically generated from the WSDL file in Microsoft's .Net environment.

FaxPress Premier provides optimized Web Services functionality, like DIME file transfers and SSL security, for advanced environments without sacrificing the ultimate goal of compatibility in all environments. For example, an encoded file transfer is provided for environments lacking DIME attachment transfers.

FaxPress Premier, with interfaces based on open Web Services standards, is designed to be flexible enough to meet the needs of even the most heterogeneous, high volume production fax environments.

### **Pre-sales Support and Additional Information**

After reviewing the above information, you've probably determined which FaxPress Premier will best serve your purposes. If you need additional, more detailed information to determine exactly which FaxPress Premier configuration will work for you, feel free to contact the Castelle sales staff. The Castelle sales staff is available to answer questions you may have regarding the Castelle fax server products, or for questions regarding trade-in options. For a comparison of the FaxPress Premier and FaxPress product lines, refer to Castelle's network faxing white paper, **Network Faxing with FaxPress™ and FaxPress Premier™: Which Castelle Fax Server Is Right For You?**

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