Welcome

Welcome to e/pop™, a real-time communication application from WiredRed Software. The e/pop server software extends the capabilities of e/pop by adding real-time routing to connect users over virtually any connection, offline message storage and centralized user management.

e/pop can operate as both a standalone peer-to-peer application without a server, or a client/server distributed and scalable platform with the e/pop server. Using an e/pop server you can connect users across networks, the Internet and between businesses. Working with your company network, e/pop server is the ultimate application for communication throughout any organization.

Real-time communication is much more than instant messaging. A complete solution for communications requires security controls and the centralized management of users, groups and profile lists. The e/pop server architecture takes into account that most businesses will want to communicate easily with coworkers, while network managers will want to centrally control all feature access, security, group and user details.

With multiple distributed e/pop servers you can communicate across diverse geographic boundaries in real-time using all the features provided by the e/pop client application.

Who Should Read this Guide?

Releases Covered in this Guide

What You Should Know

Basic Features

The basic administrator's features and their tasks are described in this administrator's guide and include the following:

- Installation and Deployment
- Feature controls
- Security
- Pipes
- <u>Groups</u>
- <u>Users</u>
- Profiles
- Remote administration

Administrator's Guide Organization

The following provides a brief description of each section of the e/pop Administrator's Guide. The Administrator's Guide is available from <u>WiredRed's</u> Web site for downloading and printing.

Chapter 1: Introduction Describes the organization of the Administrator's and Overview Guide, components, features and benefits of using the e/pop server. Describes installing e/pop server and deploying the Chapter 2: Installation and Deployment e/pop client to the user. Chapter 3: Feature Describes using the e/pop control panel. Controls Describes the security policy, system accounts and Chapter 4: Security global security code. Chapter 5: Pipes Describes pipes including: adding, modifying and system accounts. Describes creating and modifying groups. Chapter 6: Groups Describes creating and modifying users. Chapter 7: Users Chapter 8: Profiles Describes using profiles. Chapter 9: Remote Describes using the remote administration feature of Administration e/pop.

Components and Features

<u>Panel</u>

The e/pop server application includes the following components and features:

Server Console	The server console application is used for administering the following:
	• Pipes
	• Groups
	• Users
	 Profiles
<u>Pipes</u>	Pipes are used to connect servers together across subnets, wide area networks (WANs) and across the internet. Pipes are the real-time routing connections from one e/pop server to another e/pop server.
<u>Groups</u>	Groups provide a centralized way to create, manage and organize users within groups in the e/pop server.
<u>Users</u>	Users provide an administrative tool to create, manage and organize e/pop clients in the e/pop server.
<u>Profiles</u>	Profiles provide a centralized way to manage and control the presentation of groups and users to the e/pop clients.
<u>Security</u>	The server security policy defines the level of security required by all connecting e/pop clients and pipes.
e/pop Control	Control panel options are used for customizing and managing

access to e/pop and e/pop's features.

Requirements

To install e/pop server you must have the following:

- <u>Hardware</u>
- Operating System
- <u>Network Configuration</u>

What's New?

WiredRed's <u>e/pop 3.0 server</u> platform is the most comprehensive real-time communication product for collaboration. The new version is delivered with new and improved features and functionality.

e/pop 3.0 contains the tools that you need to manage all the aspects of real-time communication in your company; combined with the tools necessary to centrally administer and secure e/pop communications for the network manager, including:

- · instant messaging
- status
- groups
- profiles and buddy lists
- chat
- · remote control
- · application sharing and
- · voice conferencing

e/pop 3.0 Server

Each of the following provides a brief description of the new enhancements delivered with the e/pop 3.0 Server.

- Send mail to offline users
- Centralized group management
- Control the profile user list or buddy list on the server
- Centralized Public and Private chat rooms
- Scalable architecture that can connect e/pop over enterprise WANs
- Manage all your e/pop servers from one location
- Terminal Server for NT/2000 and Citrix Winframe support
- Advanced compression and encryption for maximum performance and security
- Servers can operate as a NT/2000 service or an application on any Windows platform
- Real-time traffic analysis of bandwidth utilization

e/pop 3.0 Client

The following provides a brief description of the new enhancements delivered with the e/pop 3.0 client.

- Locations connect to your office e/pop system from any location
- Improved messaging
- Improved macro, shortcut and message storage history features
- Complete support for Internet connections
- Integrated voice conferencing system
- Improved support for client/server and peer-to-peer connections

Benefits of Using e/pop

A brief description of the benefits you will enjoy using the e/pop server is listed in the following table.

- Improve productivity
- Easy to install
- Enhance communications
- Improved interaction
- Improve service and support
- Simple management
- Leverage deployed directories

WiredRed Support

To contact support, please visit our web site at:

http://www.wiredred.com

or send e-mail to:

support@wiredred.com

WiredRed Sales

For sales and product ordering information, please visit our web site at:

http://www.wiredred.com

or send e-mail to:

sales@wiredred.com

Installing and Deploying e/pop

This topic describes the installation and deployment of the e/pop server application, including the configuration settings used by the network administrators to manage and control the e/pop server application and information about starting, deploying and removing the e/pop client program.

Note: After installing, an entry will be placed into the Add/Remove programs in the event you need to uninstall the software.

Installing the Server Software

From e/pop CD-ROM

From WiredRed Web Site

Starting e/pop Server

• Windows NT 4.0 or 2000

The installation will install the e/pop server application and optionally, the e/pop server service. If you choose the e/pop server service it will automatically be started once the setup is completed.

• Windows 95, 98 and ME

To start the e/pop server from the Windows tool bar:

• Click Start > Programs > E/Pop Server > e/Pop Server

Server Console Application

The e/pop server administrator uses the Server Console application for controlling access and configuring the e/pop server. For an example of the Server Console application when started refer to the illustration in the Administrator's Guide. Using the server console, you have access to manage the following:

- Servers and server settings
- Pipes
- Groups
- Users
- Profiles
- System Accounts

Server Configuration

The network administrator uses the Server Settings accessible through the Server Console application in configuring the e/pop server. The Server Settings menu shows the default server settings when the e/pop server is delivered.

Server Settings

Use these settings to specify saving console log messages and assigning the Global Code.

- Console log to disk
- Global Code for e/pop Clients

User Settings

The user settings control the defaults when new users are automatically created on the server. The User Settings shows the default user settings when the e/pop Server is delivered.

General User Settings

Select the following to specify the preferences and settings for new users.

- Always assign the following profile to new users on this server
- Send a message to the following user when a new user is created

Security Policy Setting

Use these settings to set the encryption and security on the server. The Security Policy setting menu shows the default security policy settings when the e/pop Server is delivered.

The security encryption check boxes define the encryption method for data sent from e/pop clients to the server and between connected servers over pipes.

- RC4 encryption
- RSA encryption with RC4
- RSA encryption with DES
- RSA encryption with Triple-DES
- RSA encryption with AES

General Security Preferences

To require passwords for user, pipes or access to the system console, select the appropriate check boxes (refer to the Security Policy setting menu).

- Always require accounts for users
- Always require system accounts for pipes
- Always require system accounts for console

Chat Settings

Chat settings control preferences for managing public and private chat rooms on the e/pop server. Using these options, you can control various features of chat. (Refer to the Chat Settings menu.)

General Chat Settings

Select the check box for 'Always keep chat history for chat rooms'

Chat History

Enter the amount of lines of chat history text that will be available for chat rooms and the amount that will be archived to disk for future purposes. By default, the past 50 lines of chat room activity will be provided to any new chat users entering a chat room and all chat history for the chat room (denoted by 0) will be archived to disk.

- Chat memory history buffer
- · Chat disk history buffer

Message Settings

Use Message Settings to specify preferences for messages on the server. Messages are normally saved to data storage on the server only if a specific recipient is offline. Select one of the check boxes for the general preference of this server.

- Saves messages normal mode
- Saves messages local server mode
- Saves messages routed local server mode

Port Settings

Use these settings to specify the TCP and UDP ports used for connections. To change the TCP and UDP ports used by the server, enter new values in these fields; refer to the Port Settings menu. The values must match with the port values provided to the e/pop client through the use of the e/pop control panel application (refer to the Feature Controls topic).

TCP Ports

Enter the TCP ports to be used for client connections, console connections and real-time pipe routing.

- Server (InP): Default 35000
- Console (InP): Default 35001
- Pipes In (InP/OutP): Default 35002
- Pipes Out (InP/OutP): Default 35010

UDP Ports

Enter the UDP ports to be used for communicating with the server viewer and auto discovery of peer-topeer clients.

- Viewer (OutP): Default 35003
- Client (InP/OutP): Default 35004

Removing e/pop

An entry will be added to the Add/Remove Programs feature of the Windows Control Panel. You can uninstall the program by selecting the 'e/Pop Server' listing in the Add/Remove Programs feature.

Note: As with most programs, uninstalling will remove all programs and data files. Uninstalling e/pop server removes all data files from your e/pop server. To retain those data files you must make a backup before uninstalling.

Customizing the e/pop Client

Note: For information on customizing e/pop to restrict user access and feature control, please refer to the <u>Features Controls</u> topic.

e/pop provides a very simple installation and customization. The setup procedure does not install files in any other directory than the e/pop directory. Therefore, it is not necessary to run the setup procedure on each computer. You simply install the e/pop client once, modify it using the e/pop control panel to restrict features and customize e/pop and then copy the contents of the entire e/pop directory to another computer.

e/pop can operate from a shared file server, or locally on a hard drive. When installing e/pop on a local hard drive, you can simply copy the e/pop directory onto the local computer. The following are some recommended methods for copying the e/pop client installation to other computers:

- Customizing e/pop Client using Method One
- Customizing e/pop Client using Method Two
- Customizing e/pop Client using Method Three

Program Files

The e/pop application includes the following program files during installation:

Console.log	server activity log	Υ
EPopCon.exe	e/pop server console	Υ
EPopCon.log	e/pop server console log	Υ
EPopS.exe	e/pop server service	N
EPopSx.exe	e/pop server application	N
EPopSxV.exe	e/pop server activity viewer	N
MyServers.DAT	server database for console	Y
MyServers.IDX	server database for console	Y
TDAccount.DAT	system accounts file	Y
TDAccount.IDX	system accounts file	Y
TDChat.BLB	chat rooms file	Y
TDChat.DAT	chat rooms file	Y
TDChat.IDX	chat rooms file	Y
TDMessage.BLB	message file	Y
TDMessage.DAT	message file	Y
TDMessage.IDX	message file	Y
TDPipe.DAT	pipes files	Y
TDPipe.IDX	pipes files	Y
TDProfile.BLB	profiles file	Y
TDProfile.DAT	profiles file	Y
TDProfile.IDX	profiles file	Y
TDSetting.DAT	server settings and configuration file	Y
TDSetting.IDX	server settings and configuration file	Y
TDUser.BLB	users file	Y
TDUser.DAT	users file	Y
TDUser.IDX	users file	Y

Feature Controls

This topic describes using the e/pop Control Panel to pre-configure the e/pop client with restricted features and the default configuration. The Control Panel lists the features options and their setting. Refer to the Quick Reference for brief descriptions of the general settings included such as:

- · confirmations and removing features
- storage location for personal files
- directory and network access
- · security options.

Using the Control Panel

The e/pop Control Panel provides a method whereby the actual default configuration of the e/pop's executable file can be modified to your exact requirements. Using the Control Panel for e/pop, you can provide a secure method to control the accessibility of features within the e/pop application. The e/pop Control Panel actually modifies the e/pop executable. Therefore the e/pop program must not be running in order for the Control Panel to save and embed new settings. Using the e/pop Control Panel is the best way to limit features and implement security.

You can access the e/pop Control Panel from either the Help menu of e/pop or the Window's application group for e/pop. Once the e/pop Control Panel is running, you must open an e/pop application in order to make changes.

Opening the e/pop Application File

From the e/pop client window

1 Click the **Help** button and select **Control Panel**.

Before you begin to set options to control access and features, open the e/pop client executable using one of the following methods:

- Click on the File button and select Open e/Pop Application, select EPop.exe, click Open, or
- Click on the **Open** button and select *EPop.exe*.

Note: After opening the *EPop.exe* file the **Save** button on the Control Panel becomes active.

2 Close the e/pop client by clicking on the **Close** button at the top right corner of the client window.

Note: If your e/pop client is configured to '**Always minimized in the system tray**,' to completely close the e/pop client:

- Click on the File button on the toolbar
- Click Exit.
- 3 Modify e/pop client to your specifications and requirements.
- 4 Save the e/pop client executable (EPop.exe).

The name of the e/pop client program itself (*EPop.exe*) can be modified to meet your individual requirements. The e/pop Control Panel embeds the changes directly into the *EPop.exe* file, so making copies of the EPop.exe file with various names and different control panel settings can provide your users with different levels of access.

Hiding Access to the Control Panel

If you do not want the Control Panel menu item to display on the e/pop Help menu, you can hide it from view. By removing the file *EPopCp.exe* from the installation directory, users cannot view or access the e/pop Control Panel. Additionally, e/pop includes extensive security features to prevent people from making changes to an e/pop application. (See <u>e/pop Security</u> topic for more information and the <u>Security Options</u> help topic.

A Quick Guide to Control Panel Settings

The following table provides a brief description of the Feature Control Settings menu available in the e/pop Control Panel.

General Display the splash screen and the tray icon.

Exit Display and control the ability to exit.

Restriction Disable ability to access e/pop, dialogs, menus and

functions.

Options Disable access to option controls as well as specific

option pages.

Workgroups General preferences for workgroups and settings

for default workgroups.

My Files Specify location and history paths for user personal

files (history, message, macros and shortcuts).

Status Specify default personal status message(s) and

options.

Features Disable the ability to access, send and receive

features.

Confirmation Receive Specify whether receive confirmations are optional,

required or removed as features.

Confirmation Send Specify whether confirmations are required when

sending to multiple recipients as features.

Sounds Specify sounds for new messages and chat

sessions.

Message Specify preferences and default archive location for

messages.

Chat Specify preferences for chat.

Networks Disables support for specific networks and network

objects.

Directory Specify preferences for the directory.

Protocol Specify protocol settings for P2P, UDP and TCP

communications.

Domain Specify domain and accessible trusted domains.

Identity Specify whether the user's identity is taken from the

server and can be modified or is mandatory.

Advanced Protocol Specify any additional subnets for IPX/SPX or IP

broadcasting.

Security

Specify the global security code for limiting access to the e/pop control panel (see e/pop Security for additional security information).

General Options

Use the General Options settings to specify if the splash screen and the tray icon display when you start e/pop.

- **Splash Screen Options** Select one of the following to specify whether or not e/pop displays the splash screen when you start up:
 - Default Splash Screen Options
 - Never show splash screen
 - Always show splash screen
- **Tray Icon Options** Select one of the following to control whether e/pop is a system tray application or a task bar application:
 - Default
 - Always minimized in the system tray
 - · Always minimized in the task bar

Exit Options

Use the Exit Options settings to disable exiting e/pop and to select how e/pop responds when a user attempts to exit using the close button. Select the following to disable the ability to exit the program:

• Completely disable the ability to exit

Select one of the following to specify whether or not a confirmation message is displayed when a user attempts exiting e/pop using the close button.

- Default
- Always ask
- Always exit
- Always minimize

Restriction Options

Use the Restrictions Options setting to disable opening e/pop from the tray icon or to hide or disable access to the tray icon. Select the following to disable the ability to activate e/pop.

• Completely disable the ability to activate e/pop

Select one of the following to activate specific restrictions prohibiting access to specific dialogs, menus and functions:

- Disable the tray icon
- Disable access to the tray icon menu
- Disable access to Do Not Disturb
- Disable access to edit status messages
- Disable access to change your status
- Disable access to edit auto reply messages
- Disable access to change your auto reply

Options (Feature Access)

Use the Options settings to disable access to specific pages and features within e/pop Client Options. Select one of the following general preferences for controlling e/pop Options:

- Completely disable access to Options
- Disable access to `run when Windows starts'

Disable Feature Option

By selecting to disable an individual's feature page, the page is removed from the e/pop application and the user is not able to access that specific page.

Workgroups Options

Use the settings in the Workgroups option menu to disable the ability to create workgroups and to specify any default workgroups. WiredRed recommends the e/pop server product for centralized workgroup management. Refer to <u>Using Groups</u> topic for further information.

General Workgroup Preferences

Select one of the following to set general preferences for workgroups:

- Disable the ability to modify workgroups
- Use only the workgroups specified
- Always include the default network workgroup
- · Always exclude the default `User's'

Changing Workgroups

Add, delete or edit a specified workgroup or workgroups to be included by default. These workgroups will appear for each user running the e/pop application, in addition to any workgroups they have already specified. To restrict the workgroup(s) to only those indicated in the e/pop control panel, select the option 'Use only the workgroups specified.'

Note: Adding and editing will create entries in the local workstations registry. Deleting will NOT remove it from the local workstation registry. Enabling the option 'Use only the workgroups specified' will remove any workgroups from the local workstation registry.

Adding Workgroup

Deleting Workgroup

Editing Workgroup

My Files Options

Use the My Files settings to enable message history retention and to specify the location where personal files are located.

My Files General Options

Enter the location for user personal files for history, macros and shortcuts. This path can include environment variables to user home directories on shared file servers.

My Files Personal Files Preferences

Select whether user specific personal files for message history, macros and shortcuts are always enabled, disabled or selected by the user.

Select one of the following general preferences for personal files:

- <u>History</u>
- Macros
- Shortcuts

Status Options

You can include standard status messages within an e/pop application by creating them within the e/pop Control Panel. Status messages created in the e/pop Control Panel are in addition to any status messages created by the user within the program.

Status Message

Enter one or more personal status messages to be included by default. To add, delete, or edit a personal status message, refer to the following sections.

Note: Adding and editing will create entries in the local workstations registry. Deleting will NOT remove it from the local workstation registry.

Adding Personal Status Message

Deleting Personal Status Message

Editing Personal Status Message

Editing Status Message Options

Detail Options

Specify the details for status messages.

- User details
- Contact info
- Time stamp

Features Options

The Features option of the Control Panel allows you to remove specific features from e/pop. By selecting the various 'send' features, you can remove the ability to send or use these features. The icons, buttons and associated groups disappear from e/pop for the features you disable.

Note: Administrators can configure e/pop with the ability to receive a certain feature and disable the ability to send the same feature when they distribute the e/pop program. By configuring e/pop in this manner, the administrator can configure another e/pop application with the ability to remote control a user who does not have the permission to use remote control, producing a one-way feature.

Send Features Options

Select any of the following to remove the ability to send a feature from e/pop, and to remove the associated icons, buttons and groups:

- Message
- Chat
- AppShare
- Remote Control
- Remote Admin
- Voice Conference

Receive Features Options

Select any of the following to remove the ability to receive a feature within e/pop:

- Message
- Chat
- AppShare
- Remote Control
- Remote Admin
- Voice Conference

Confirmation Receive Options

The Confirmation Receive option determines whether you require a confirmation before an e/pop feature can happen on a user's workstation. By default, the individual e/pop user decides the confirmation and sets the option in their e/pop options. You can make confirmations mandatory by enabling the confirmation or always prevent a confirmation by disabling the feature.

Selecting Confirm Receive Feature

Select Default, Enabled, or Disabled for each feature.

- Default
- Enabled
- Disabled

Note: To always require a user to confirm a remote control session request, enable the confirmation for remote control. By setting a confirmation to enabled or disabled in the e/pop Control Panel, you are circumventing any preference the user has selected in e/pop options.

Confirmation Send Options

The Confirmation Send option determines whether a confirmation is required before a feature can be performed against a group of users. By default, the individual e/pop user decides the confirmation and sets the option in their e/pop options. You can make confirmations mandatory by enabling the confirmation or always prevent a confirmation by disabling the feature.

Selecting Confirm Send Feature

Select Enabled or Disabled for each feature.

- Enabled Confirmation messages are always required.
- Disabled Confirmation messages are not displayed.

Sounds Options

Use the Sounds Option settings to specify sounds for new messages and chat session invitations.

Message Sounds

Play the following sound when a new message arrives.

• Click **Browse** to open a sound file, such as *Pop.wav*.

Chat Sounds

Play the following sound when a chat session invitation arrives.

• Click **Browse** to open a sound file, such as *Pop.wav*.

Note: You can use environment variables within the path to a sound file. (For example, j:\%user%\epop\sounds\alarm.wav)

Message Options

Use the Message Option settings to specify preferences for receiving, sending, composing and saving messages.

Message General Preferences

Select one of the following general preferences for messages:

- Enable pasted bitmaps within messages
- Disable the ability to send file attachments
- Disable the ability to reply or forward
- Disable the ability to modify the recipients
- Disable the ability to export messages
- Suspend the screensaver to display messages
- Use sender's name as message caption

Save Message Location

Specify the location to save (exporting) messages.

• Click **Browse** to select a directory location.

Chat Options

Use the Chat Option settings to specify preferences for composing, exporting, printing and copying within a chat session.

Chat General Preferences

Select one of the following general preferences for chat:

- Disable type-ahead feature for chat messages
- Disable the ability to export chat
- Disable the ability to print chat
- Disable the ability to copy within chat

Networks Options

Support for specific networks can be completely removed from the e/pop application by selecting the appropriate network type. Removing a network causes e/pop to ignore communication for this network and not display the objects for the disabled directory. Refer to the Networks Options menu for additional information.

Select one or more of the following networks to disable support:

- **NT Domain** When checked, the NT/2000 domain network support is removed from e/pop and the directory objects for the domain are not displayed.
- **Netware NDS** When checked, the NetWare NDS network support is removed from e/pop and the directory objects for the NDS tree are not displayed.

Note: You can leave support for a network, but remove the ability for a user to access the Directory of that network by disabling the directory instead of the network. (See the <u>Directory</u> topic for more details.)

Directory Options

Specify preferences for the Directory Options and remove access to specific network directories.

General Directory Options

Select one of the following general preferences for controlling the Directory:

- Completely disable access to the directory
- Always sort the User's Directory
- Completely remove all top-level users from directory
- Completely remove offline users from User's directory

Specific Directory Options

You can remove the display of any particular network directory by selecting one of the following:

- NT Domain When enabled trusted and default domains are not displayed.
- NetWare NDS When enabled the NetWare NDS tree is not displayed.

Protocol Options

Use the Protocol Options settings to specify any protocol adjustments to be included in an e/pop application for network communication. Select one of the following as the default protocol:

- Default
- IPX/SPX
- <u>IP</u>

UDP and TCP Ports

Specify the base ports for peer UDP communication:

- **Server (Out):** Default = 25004
- Client (In): Default = 35010+

Specify the base ports for server TCP communication:

- **Server (Out):** Default = 35000
- Client (In): Default = 35004-35006

Domain Options

Use the Domain Options settings to specify preferences for domains and trusted domains.

General Domain Options

Select the following general preferences for domains. This can be any domain controller (PDC or BDC). Specify the nearest domain controller for the best performance.

• Always use [] for domain objects

Trusted Domain Preferences

You can include trusted domains in the e/pop directory, provided that a trust has been established between your default domain and the trusted domain. Specify the name of one or more accessible trusted domains to be included. You can **Add**, **Delete** or **Edit** trusted domains.

Adding Trusted Domain

Deleting Trusted Domain

Editing Trusted Domain

Identity Options

Use the Identity Options settings to specify the source for your identity information and how your identity is displayed in the directory.

- Identity Directory Display Select one of the following to specify how users control their identity.
 - Default
 - On the first run, set the user's initial identity
 - On each run, set the user's identity
- Network Identity Source Select one of the following as the source of the user's identity:
 - Machine name
 - Login name
 - NDS full name
 - Domain full name

Advanced Protocol Options

Use the Advanced Protocol Options settings to specify any additional subnets for IPX/SPX or IP directed broadcasting. For more information on subnet addressing, see "Using Directed Broadcasting" in Chapter 1 in the e/pop User Guide.

Modifying IPX/SPX Subnets

To Add, Delete or Edit additional subnets, refer to the sections that follow.

Note: Adding and editing will create entries in the local workstations registry. Deleting will NOT remove it from the local workstation registry.

Add IPX/SPX Subnet

Delete IPX/SPX Subnet

Edit IPX/SPX Subnet

Modifying IP Subnets

To require the e/pop application to always use broadcasting or multicasting, select the appropriate field:

- Default
- Broadcasting
- Multicasting

Specify additional subnets to be included for IP broadcasting. Add, Delete or Edit additional subnets.

Note: Adding and editing will create entries in the local workstation's registry. Deleting will NOT remove it from the local workstation's registry.

Add IP Subnet

Delete IP Subnet

Edit IP Subnet

Note: For networks with many subnets, it is recommended that you create a file containing all the subnet that is centrally located on a file server instead of embedding subnets using the e/pop Control Panel. The command line switches:

/BROADADDR+=

and

/BROADADDR-=

are used in conjunction with the /FILE= switch to create a compatible file of broadcast subnet addresses. For more details on command line switches, visit the WiredRed Web site:

http://www.wiredred.com

Note: To remove the 255.255.255.255 broadcast subnet address from e/pop, include the command line switch /BROADADDR-=255.255.255.255.

Security Options

Use the Security Options settings to specify the security codes installed to permit communication and restrict access to features.

Global Code

Enter a global code that must be installed on each e/pop installation. The global code prevents users from making changes to a modified e/pop client without first knowing and entering the global code to access the e/pop Control Panel. Additionally the global code is used to block communication from any e/pop client without the same global code. In e/pop Peer mode, this prevents one e/pop client from talking to another or using unauthorized features. In e/pop Server mode, the global security code is used to match e/pop clients with an e/pop server. The e/pop server will reject any e/pop clients that do not match the server's global security code.

Global Code Preference

Specify the general global code preference.

• Always require matching global code - When enabled, prohibits e/pop users without the matching global code to interact with e/pop.

Using e/pop Security Policy

This topic describes the security features and security related settings accessible to network administrators to manage and control access and secure communications while using e/pop.

Selecting a Security Policy

e/pop's real-time engine uses a combination of security protocols. The server security policy defines the level of security required by all connecting e/pop clients and pipes.

Note: The e/pop server's default security implementation is RC4 encryption to secure communication between users, servers and the data flowing over pipes.

Organizations can selectively enable additional security controls and implement RSA to communicate with users and other servers over pipes.

RSA encryption is combined with RC4, DES or AES encryption to secure the connection and maximize performance. RSA is used to authenticate connections and secure communications while exchanging passwords and security keys.

e/pop offers the following encryption options:

- RC4 encryption
- RSA encryption with RC4
- RSA encryption with DES
- RSA encryption with Triple-DES
- RSA encryption with AES

RC4 provides basic, secure and fast communications over all connections. RSA is combined with DES or Triple-DES to enhance security and RSA with AES provides the highest level of encryption and security.

RSA Security

RSA is used to authenticate connections and establish secure communications. It provides a high level of security for mission-critical business information traveling over unsecured networks. We recommend using RSA when either the type of data, or the medium the data is being sent over is sensitive. We recommend using RSA for public networks such as the Internet.

Enabling RSA encryption will require all connections to create digital certificates. The digital certificates are unique to each user and stored under the name MyCertificate.* in each individual user's e/pop directory.

The initial digital certificate creation process can take a while (refer to <u>Creating Certification</u> illustration). With this in mind, consider creating a common certificate with the e/pop client before distributing the e/pop client or only use RSA level security when the implementation requires it.

Using RSA Security on the e/pop Server

Encrypt by enabling RSA on the server, all users and servers connecting over pipes will create digital certificates. To enable RSA and subsequently automatically create digital certificates:

- 1 Start the e/pop Server Console.
- 1 Connect to the desired server.
- 2 Click the Server Settings 5 Server Settings button.
- 3 Select the Security Policy tab.
- 4 Check the RSA encryption w/RC4, click OK, you will receive the Restart message.
- To enable the security policy change, you must restart the e/pop server. The server will create a certificate unique (refer to <u>Creating Certification</u> illustration) to the server on initial restart if you selected RSA security. Future e/pop console connections will also be secured using the server's security policy. The secure connection icon will appear at the bottom of the Server Console window indicating you have a secure connection.

The following files are created on the server when **RSA encryption** is enabled.

- TDCertificate.DAT
- TDCertificate.IDX
- TDCertificate.BLB

Using RSA Security on the e/pop Client

The e/pop server's security policy not only affects server console connections and pipes, but also e/pop client connections. Initial user connections to a server with a new security policy that includes RSA will require the client to create a secure certificate. You can create and distribute the MyCertificate.* files with your e/pop distribution or they can be created automatically by the client.

The secure certificate creation message (refer to <u>Creating Certification</u> illustration) will appear on your screen during the initial certificate creation. This process is only performed once for each e/pop client. The secure connection icon will appear at the bottom of the e/pop Client window indicating you have a secure connection.

The following files are created when RSA is included in the server's security policy:

- MyCertificate.DAT
- MyCertificate.IDX
- MyCertificate.BLB

System Accounts

System accounts are used to control authentication and logon for pipes and server console access. Once enabled in the server's settings, a system account and password must exist for any connecting pipe or remote access to a server through the server console program.

e/pop server does not require user authentication or logon by default. Network administrators can enable accounts and passwords to control various aspects of server security. The following forms of authentication are available:

- Accounts for users
- System accounts for pipes
- · System accounts for console

To require passwords for users, pipes or console access, select the appropriate boxes in the Security Policy Options menu.

To create a System Account, select the **System Accounts** button on the main tool bar in the Server Console. The Accounts dialog window appears giving you the options to **Add**, **Edit** or **Delete** a system account.

Adding System Accounts

Deleting System Accounts

Editing System Accounts

Server Settings User Accounts

User accounts are activated when the system administrator wants to require password authentication for all e/pop clients. Once enabled in the server's settings, an account and password must exist for every connecting e/pop client and the system administrator must manually create all e/pop accounts.

To require authentication and passwords for e/pop clients select, 'Always require accounts for users.'

Note: When 'Always require accounts for users' is enabled all users connecting to the server **MUST** logon with a user account and password.

When you enable 'Always require accounts for users,' you must create all new users within the e/pop server console. An account name and password must be included with the newly created user in order for the e/pop client to authenticate with the server and establish a connection

When you select user accounts, users will require an account to use e/pop. System managers must create accounts in the Users section of the system console for new users to connect and communicate.

When you include a password with the account, the user must enter the password before he/she will be connected.

Pipe Accounts

Pipe accounts are used to control access to pipes. Once enabled in the Server Settings, a system account and password must exist for any connecting pipe to a remote access to a server.

To require passwords and authentication for pipes, select 'Always require system accounts for pipes.'

Enabling system accounts for pipes will ensure that remote servers cannot create and connect a pipe to your local server without first providing an account and password that you created on your local e/pop server on their behalf.

Server Console Accounts

Server Console accounts is used to control access to the server console. Once enabled in the Server Settings, a system account and password must exist for any access to the Server Console program.

To require passwords and authentication for e/pop Server Console access to the server, select 'Always require system accounts for console access'.

In order to prevent unauthorized e/pop Server Console access to your server, you should enable this option and create a system account with the appropriate access. If you enable this option without creating a system account you will no longer be able to access your e/pop server through the e/pop Server Console program.

When you include a password with the account, the user must enter the password before the user will be connected. Using the password limits access to the System Console.

Global Code

The global security code provides additional security to the e/pop client in the e/pop server. The global code effectively brands your particular e/pop client with your e/pop server so that only matching e/pop clients can connect to their respective server.

Note: The same global code must be installed on all e/pop clients that connect to your server to secure communication. The encrypted code is embedded in the e/pop client application.

Assigning a Global Code to the e/pop Server

The global code on the server restricts access to any connecting e/pop client that does not contain a matching global security code. The global code is specific to a server and all e/pop clients connecting to that server. e/pop clients connecting to other e/pop servers do not have to have a matching global code. Each system administrator can choose their own global code for their clients and server on their own installation regardless of whether those servers are connected and communicating to each other over pipes.

To assign a global security code to an e/pop server:

- 1 Open the e/pop **Server Console** and connect to the desired server.
- 2 Click the **Server Settings** Server Settings button.
- 3 Enter a global code on the Server page.

Assigning a Global Code to the e/pop Client

The global code provides security to the e/pop application and installation. It prevents users from opening an existing e/pop application with the control panel program to make modifications without first knowing the global code. Additionally all e/pop communications are secured with the global code so that an e/pop application without a matching global code cannot communicate with another e/pop application that contains a global code.

A user cannot download and install a fully functional e/pop application from the site expect to communicate with your installation. e/pop recommends that you include a global code in your e/pop application. Global codes are verified automatically, and if the global codes match, the e/pop applications and users can communicate.

To assign a global password:

- 1 Open the e/pop Control Panel from the Help option.
- 2 Click the **Open** button and select *Epop.exe*.
 - Note that the **Save** button is now active.
 - Exit the e/pop application.
- 6 Select the Security option.
- 7 Enter in the global code.
- 8 Click the Save button.

Note: Security codes are encrypted into the e/pop application. Each time you modify the e/pop application using the e/pop control panel, you must provide any security codes you require before saving.

Using Pipes

This topic describes the Pipe feature in the e/pop server. Pipes are virtual real-time connections from the server, where they are created, to other e/pop servers. Pipes are used to connect servers establishing a real-time router between e/pop servers to route, secure and compress data between networks. Creating, using and manipulating pipes are covered in this topic.

What is a Pipe?

A pipe represents a connection between two e/pop servers. e/pop uses the pipe to route information and communication in real-time between users in one location, with users in another. The real-routing technology can communicate over pipes that connect:

- LANs
- WANs (wide area networks)
- Subnets
- VLANs
- Internet
- VPNs
- XDSL

The pipe was designed to easily connect offices, in a variety of locations, together in real-time. Pipes can also be used to extend communications in a B2B environment between different organizations. Because pipes leverage the security policy of your e/pop server, you can ensure that your communications is secure even if you connect two different organizations together over a public network (example: the Internet).

Because pipes tunnel all traffic between various e/pop locations, they are suitable for routing communications over virtually any TCP/IP connection through firewalls, Network Address Translation Devices (NATs) and gateways.

e/pop uses a channel mechanism efficiently designed to insure data is not transmitted more than once across a pipe once when directed to a channel.

e/pop provides a scalable solution with the real-time routing engine. The routing engine handles the internal management status, or presence, for the e/pop user, channel management and data pipe flow. Users connect directly to a real-time routing server that connects to each other over virtual pipes.

Connecting Using Pipes

Pipes provide virtual connections to enable remote sites to connect together between servers. e/pop's real-time router establishes virtual pipes between e/pop servers to route, secure and compress data between networks. The Example of Using Pipes illustration showing Server A and Server B, which are individual servers with separate user directories. Prior to using e/pop's pipe feature to connect the two servers, each server could only view the list of the users connected to their server. After creating a virtual pipe linking Server A and Server B, each server views a combined list of the users logged on to both servers.

e/pop uses a channel mechanism efficiently designed to ensure data is not transmitted more than once across a pipe, and once when directed to a channel. Pipes are designed to provide the work-around necessary to route over virtually any TCP/IP connection, through firewalls, and gateways, including demilitarized zones with firewalls.

Users can connect to a real-time router in the system over virtually any connection and immediately appear as real-time objects in the e/pop system once they are connected.

Pipes are created on one server (the source) and connect directly to another server (the destination). The TCP/IP connection is originated at the source server, and is received on the destination server. It is not necessary to create a pipe on both servers to connect them together. Because pipes are bidirectional, it is only necessary to create a pipe on one server.

The destination server will automatically accept the pipe connection provided it is authorized. By default, all pipe connections are authorized. To require connecting pipes to have an account and password you must enable the feature 'Always require system accounts for pipes' in the destination server's settings and create a system account on the destination server. The account and password must be included with the source server's pipe.

Pipes can be created in a variety of patterns to connect your various e/pop servers together throughout an organization, around the world. Pipes are intelligent real-time routing devices. They can automatically re-route your real-time traffic in the event of a physical network failure or outage. You can create multiple pipes on any server to multiple destination servers. Therefore it is possible to configure your real-time routing in a variety of network design topologies. The layout of your pipes in your organization should be based on the infrastructure design of your WAN and VLANs to limit connections over slower WAN links based upon the TCP/IP sub-networking of your network.

Common pipe topologies include:

- Chain Topology
- Star Topology
- Mesh Topology
- Example of Using Pipes

Benefits of Using Pipes

The benefits of using pipes include:

- Connectivity
- <u>Security</u>
- Quick
- Bandwidth
- Bi-directional
- Creating and Maintaining

Creating and Maintaining Pipes

Use the server console application when creating and maintaining Pipes used in the e/pop server. The following pipe tasks are available through the Server Console.

Adding Pipes

Delete Pipes

Edit Pipes

Graph Pipes

Using Groups

This topic describes using the grouping features of the e/pop server and available through the Server Console menu. While e/pop users can still individually access grouping, the e/pop server administrator can also centrally control and manage groups. e/pop's grouping is not restricted to single groups, but instead can be organized by locations and departments under sophisticated tree structures.

What is Grouping?

e/pop uses a hierarchical tree organizational structure for grouping. e/pop can organize users under multiple tree objects at any level. This makes it possible to organize users by location, department and even multi-departmental. Users can also appear under various objects at different positions in the directory tree. This makes organizational structure grouping virtually limitless.

Group management is both centralized and de-centralized in the e/pop architecture. Network managers can use the e/pop management tools to organize users under various structures in the directory. These structures can be presented to users and can be centrally controlled using e/pop profiles. Group management is also decentralized, by allowing groups of users to organize themselves without the intervention of the network manager, using the automated workgroup creation feature available in the e/pop client.

Using the existing directory architecture of the network is a feature that is useful to e/pop's operation. Network managers can choose to have Novell NetWare NDS and NT/2000 Domain objects used as user and group objects within the real-time communication architecture. This provides flexibility to the existing organization structure as it is extended to the communication system of e/pop.

Creating and Maintaining Groups

Use the server console application when creating and maintaining Groups used in the e/pop server. The following group tasks are available through the Server Console:

- Add Group
- Add Root Group
- Rename Group
- Delete Group
- Adding Users to Groups

Note: When you right-click on an empty groups directory or creating groups for the first time, the drop-down appears with all actions grayed-out with the exception of **Add Root Group**.

Managing Users

This topic describes creating, modifying and accessing the individual users of e/pop that are connected to the e/pop Server. The Users section of the e/pop server console provides a complete list of the users who have accounts on the server.

Users logging on to e/pop announce themselves to the real-time engine using a status or presence message. The status message gives instructions to the real-time server about your location within the entire e/pop system. Status messages are relayed over each server's pipes and e/pop's real-time routing server tracks users by their status location.

e/pop does not require the administrator to create user accounts for the existing users on the network. e/pop recognizes the type of network you are connected to and the directory of any server on which you are logged. Your individual "identity" is then transmitted from the user's workstation to the server and the user account is created. The created user account is then displayed to all users of e/pop.

The <u>Creating a User Screen</u> illustration is an example of an automatic and <u>manual</u> creation of a user in the e/pop server. Referring to the illustration the TEMP1 user was auto-created. Note the information e/pop was acquired from the e/pop client. You can see the identity of the auto-created user as well as their assigned IP address. The manually created user is identified only by their account name.

If you want to show users from other servers and locations, click on the **All Servers** box on the Users directory. Users from other locations will appear in blue.

From the e/pop Server Console window, click the Users Icon on the left side of the window. This brings up the Users directory. The following tasks are available from the Users directory:

Manually Adding New Users

Deleting Users

Editing Users

Applying User Settings

Removing and re-installing Users

An entry is added to the Add/Remove Programs feature of the Windows Control Panel on the e/pop client workstation after installing e/pop. When an e/pop client connects to an e/pop server for the first time, the e/pop client generates a unique user identification number.

When removing and re-installing current e/pop client users, it is necessary to use the following steps:

- 1 Un-install the program by selecting the 'e/pop' listing in the Add/Remove Programs feature.
- 2 Contact the network administrator to delete your current account on the e/pop server.
- 3 Re-install the e/pop client application.

Administrator User Options

There are several options to use when setting up the e/pop server and clients. To take full advantage of the automatic creation of users on the server and the administrator the flexibility of logging onto e/pop client systems, implement the following:

- Enable the Microsoft Windows Roaming Profiles option. This option will eliminate creating duplicate users and using the e/pop license unnecessarily.
 - If the Roaming Profiles option does not fit into your requirements:
- Manually create the users and assign each user a password.
 - Using manually created user accounts will force users to logon to the e/pop server each time they connect.

Using Profiles

This topic describes using the Profile feature of the e/pop server. Profiles provide a centralized way to manage the presentation of the directory. Each profile defines a specified, limited presentation of users and objects that can be assigned to e/pop users, thereby limiting their access to other users within the directory.

For example, a typical organization might have an Accounting and Sales department. The e/pop system administrator chooses to limit the users and groups that are accessible by users in these respective departments by creating a profile for each department. The first profile is called 'Accounting' and the second profile is called 'Sales.'

For the Accounting users, the administrator drags and drops any user or group objects into the profile window that he wants into the 'Accounting' profile. He then assigns the profile 'Accounting' to the e/pop users within the Accounting department. Immediately the list of users and groups seen by the Accounting e/pop users is limited to the users and groups that have been included in the profile.

The e/pop system administrator will manage these profiles to include new objects as they become available for the appropriate department. By adding e/pop server groups, NDS groups, NT/2000 domain groups or other network groups to the profile, any new users appearing under these objects will automatically be visible to any users assigned to the profile.

Refer to the Profile Menu for an example of the profile section of the e/pop Server Console

Creating a Profile

The default e/pop server contains no profiles and all users within the system are presented with a complete directory of users and groups throughout the system. Once you have created a Profile use one of the following:

Adding a Profile

Adding Users and Groups to a Profile

Applying a Profile

Using Profile Settings

e/pop provides a preference setting under the Users tab of the Security setting (refer to Profiles Settings menu). The system administrator can select 'Always assign the following profile to new users on this server.'

This option setting allows for flexibility and ease of administration when adding new users to the e/pop server. Automatically created users will be assigned to the specified profile.

Remote Administration

This topic describes using the Remote Administration features of e/pop. The various remote administration features can run applications on remote computers on your network. You can also remotely control tasks and processes, reboot or shut down computers.

Note: Access to these features can be restricted or removed from the e/pop application through use of the e/pop Control Panel. (Refer to the Remote Administration illustration in the Administrator's Guide.)

Starting Remote Administration

Closing Tasks or Processes

The Tasks feature of Remote Administration allows you to examine the active window tasks of one or more computers remotely over the network. Individual tasks can be isolated using the search filter. For an example of the Remote Tasks using a wildcard (*) search refer to the Administrator's Guide.

Running Programs on Remote Computers

The **Run** feature of Remote Administration allows you to execute a command on remote computers over the network immediately. Use the **Run** feature of e/pop to execute a program, batch file, registry merge, file association or other update throughout your network. You can also run URL references and any valid command line that works from the **Start > Run** feature of Windows.

Rebooting or Shutting Down Remote Computers

The Reboot feature of Remote Administration allows you to remotely power off, reboot or reset computers across the network.

System Console Menu

The Server Console application is used to control access and to configure the e/pop server. Server Console menu example illustrates the server console when started. Using the server console, you have access to manage the following:

Disable the tray icon

When enabled, the e/pop tray icon is hidden.

Disable access to the tray icon menu

When enabled, the e/pop tray icon menu is no longer accessible by right clicking on the tray icon.

Disable access to Do Not Disturb

When enabled, the do not disturb feature of e/pop is removed.

Disable access to edit status messages

When enabled, the user cannot edit e/pop status messages.

Disable access to change your status

When enabled, the user cannot change e/pop status.

Disable access to edit auto reply messages

When enabled, the user cannot edit auto reply messages.

Disable access to change your auto reply

When enabled, the user cannot change e/pop auto reply messages.

Disable the ability to modify workgroups

When enabled, the user is prevented from adding, removing or changing the workgroup.

Use only the workgroups specified

When enabled, access is limited to the workgroup or workgroups the user is assigned.

Always include the default network workgroup

When enabled, the Network Neighborhood workgroup is included in the directory list.

Always exclude the default `User's' workgroup

When enabled, the User's workgroup(s) is not included in the e/pop directory.

My Files History

By default, History can be enabled or disabled by the user.

My Files Macros

By default, Macros are enabled.

My Files Shortcuts

By default, Shortcuts are enabled.

User Details Options

User logon, machine name and identity will display in the directory next to the user's status.

User Contact Info Option

User specified contact information, such as phone number, will display in the directory next to the user's status.

User Time Stamp Option

The last time a user changed their status, a time stamp will display next to the user's status in the directory.

Default Protocol Option

The protocol is based upon the user-selected option.

IPX/SPX Protocol Option

The protocol is enforced and is always IPX/SPX.

IP Protocol Option

The protocol is enforced and is always IP.

Always User for Domain Objects

Specify the domain-controller server that e/pop uses to obtain a list of domain objects.

Always assign the following profile to new users on this server

When enabled, the profile selected in the pull-down will be the default for new users.

Send a message to the following user when a new user is created

When enabled, the user selected in the pull-down will be received a message reporting a new user has been created.

RC4 encryption

RC4 is a default, fast static key encryption technique that is adequate for most installations. Using RC4 secures communication between e/pop clients and the server over pipes connecting to the server.

RSA encryption with RC4

A combination of PKI digital certificates and RSA used to establish and authenticate communication with RC4 encryption.

RSA encryption with DES

A combination of PKI digital certificates and RSA to establish and authenticate communication with DES encryption

RSA encryption with Triple-DES

A combination of PKI digital certificates and RSA used to establish and authenticate communication with Triple-DES encryption.

RSA encryption with AES

A combination of PKI digital certificates and RSA used to establish and authenticate communication with AES encryption. (AES is the US government approved Rijndael standard.)

Console log to disk

The console log tracks all the server related activity and stores this information to disk. The activity is stored in the file *console.log* in your e/pop server's directory.

Global Code for e/pop Clients

The Global Code provides security and control branding over your e/pop installation. The supplied Global Code in the e/pop server is matched to the embedded e/pop Global Code within any connecting e/pop clients. If the connecting client does not match, the e/pop client is rejected from connecting to the server.

Always require accounts for users

When enabled users will require an account and password to use e/pop. The administrator must create accounts in the Users section of the System Console.

Always require system accounts for pipes

When enabled the administrator must create system accounts using the **System Accounts**

5ystem Accounts button on the system console's main page in order for pipes to connect to the server.

Always require system accounts for console

When enabled the administrator must create system accounts using the **System Accounts**button on the system console's main page in order for system administrators to connect to the server using the server console.

Always keep chat history for chat rooms

When enabled chat history will be retained.

Chat memory history buffer

Default is 50 lines.

Chat disk history buffer

Default is 0 (unlimited chat lines).

Saves messages normal mode

Default saved for specific recipient when offline.

Saves messages local server mode

Saves all messages destined to users on a server whether users are online or offline.

Saves messages routed local server mode

Saves all messages routed through pipes whether or not the messages are destined to users on this server.

Confirm Exit Default

User specified option or the last setting e/pop used. By default, e/pop displays a confirmation message when you exit.

Completely disable the ability to exit

If enabled, users cannot exit e/pop from any of e/pop's available options.

Always Ask Exit Confirmation

When attempting to exit from the close button, e/pop displays a confirmation message.

Always Exit Confirmation

When attempting to exit from the close button, e/pop exits.

Always Minimize Exit Confirmation

When attempting to exit from the close button, e/pop minimizes instead.

Completely disable the ability to activate e/pop

If enabled, e/pop automatically minimizes to the system tray and the tray icon remains visible. You cannot activate e/pop by double-clicking the tray icon. The tray menu remains enabled.

Completely disable access to Options

When enabled, the Options feature is removed from user access. The **Options** button and the **Options** selection in the tray menu are removed from the e/pop application.

Disable access to `run when Windows starts'

When enabled, you cannot access the 'run when Windows starts' feature in Options. This feature allows users to determine whether e/pop is auto-started when Windows starts by adding a registry key entry to auto-start e/pop.

Message Feature

When enabled a user cannot send messages.

Chat Feature

When enabled a user cannot start chat sessions.

AppShare Feature

When enabled a user cannot use AppShare.

Remote Control Feature

When enabled a user cannot use remote control.

Remote Admin Send Feature

When enabled a user cannot use remote administration.

Voice Conference Send Feature

When enabled a user cannot voice conference.

Message Receive Feature

When enabled a user cannot receive messages.

Chat Receive Feature

When enabled a user cannot receive chat.

AppShare Receive Feature

When enabled a user cannot receive AppShare.

Remote Control Receive Feature

When enabled a user cannot receive remote control.

Remote Admin Receive Feature

When enabled a user cannot receive remote administration.

Voice Conference Receive Feature

When enabled a user cannot receive voice conferencing.

Enable pasted bitmaps within messages

Enables you to paste bitmap images into the body of an instant message.

Disable the ability to send file attachments

Prevents users from attaching files to messages.

Disable the ability to reply or forward

Disables access to the reply and forward message options.

Disable the ability to modify the recipients

Disables the ability to change the recipient's field for a message.

Disable the ability to export messages

Removes the ability to save messages as .RTF files.

Suspend the screensaver to display messages

Suspends the screensaver temporarily to display a message.

Use sender's name as message caption

Uses the sender's name instead of the subject of a message as the caption for message window.

Disable type-ahead feature for chat messages

Disable the ability to export chat

Prevents users from saving (exporting) chat session.

Disable the ability to print chat

Prevents users from printing chat session.

Disable the ability to copy within chat

Prevents users from copying within a chat session.

Default Directory Identity

The identity is based upon the users network login or computer name. Users can change their identity at any time by using Options.

On the first run, set the user's initial identity

The identity is initialized to the network preference the first time that e/pop is executed. The users can change their identity at any time, using Options.

On each run, set the user's identity

The identity is initialized to the network preference each time that e/pop is executed.

Machine name

The identity is based upon the computer name specified in Window's Network Identification settings.

Login name

The identity is based upon the login name.

NDS full name

The identity is based upon the full name field of the NetWare NDS.

Domain full name

The identity is based upon the full name field of the NT User Manager for the default doma	ain.

Default IP subnet

The choice to use multicasting or broadcasting is based upon the user-selected option.

Broadcasting

When selected broadcasting is always used.

Multicasting

When selected multicasting is always used.

Hardware Requirements

- Pentium II 400 or better (Pentium III is recommended)
- 128 MB RAM minimum
- 500 MB of disk space

Operating System Requirements

- Windows NT4 or 2000 (recommended), Windows 9x, ME (optional)
- Service Pack 3 and above for NT 4.0

Minimum Network Configuration

- Network card (attached to a local area network)
- TCP/IP protocol installed on server

Send mail to offline users

e/pop's new server allows messages to be composed and sent to users while they are offline. The server handles message routing and interconnecting to multiple distributed servers over wide area networks.

Centralized group management

Now you can create groups on your server and organize all your users centrally

Control the profile user list or buddy list on the server

Profiles provide complete control over the presentation of users and groups to the e/pop users on your network.

Centralized Public and Private chat rooms

Create permanent chat rooms that reside on the server and can be joined at any time

Scalable architecture that can connect e/pop over enterprise WANs

e/pop's real-time routing allows servers to connect over a wide area network for enterprise scale communications.

Manage all your e/pop servers from one location

e/pop's new console application allow you to connect to any of your e/pop servers from anywhere in the world and manage them.

Terminal Server for NT/2000 and Citrix Winframe support

With the e/pop server, users can communicate within Terminal Server and Citrix Winframe virtual sessions.

Advanced compression and encryption for maximum performance and security

e/pop combines RSA digital certificates and signing, RC4, DES and the newly adopted government standard AES for secure communications. The security controls ensure your communications are private over any connection

Always minimized in the task bar

When you minimize the program, it will appear as a task bar application.

Servers can operate as a NT/2000 service or an application on any Windows platform e/pop dedicated servers can operate as a background process on Windows NT/2000.

Real-time traffic analysis of bandwidth utilization

Watch the real-time data flow through the network from status, message, chat and other aspects of e/pop using the server console.

Method One

- 1 Copy the entire e/pop client folder to a location on a server.
- 2 Create a login script to distribute the application from the shared folder to everyone's desktop.

Method Two

- 1 Copy the entire e/pop client folder to a location on a shared server.
- 2 Launch e/pop from the server.
- 3 Open the login script and add the following UNC name. (Login script commands for Windows NT and NetWare.)
 - Windows NT 4.0 and above using DOMAINS start \\servername\\share\\foldername\\epop.exe
 - Novell 4.x NDS server and above @f:\foldername\epop.exe

Method Three

• Use a third party software distribution program to deploy the e/pop client to your users.

Installing the Server Software

Using any Windows 9x, NT or 2000 operating system, e/pop's server operates as either an NT/2000 system service or an application. The e/pop server setup will install the e/pop server service, the e/pop server application and the e/pop server viewer program. It is only necessary to operate either the e/pop server service or the e/pop server application depending upon your particular environment.

To update an existing e/pop server to a new revision, simply install over the existing installation. Under most circumstances, the e/pop server setup program can replace existing programs and services, even if those services are currently running on the server. e/pop clients will automatically be reconnected to the server once the process is completed.

The e/pop server viewer is installed in most installations. The server viewer program is a console viewer, providing status of the activity (in real-time text) occurring on the e/pop server and should be added to your server's startup group.

From e/pop CD-ROM

Windows NT 4.0 and 2000 servers are recommended for use with the e/pop server application. To install e/pop on the server do the following:

- 1 Insert the e/pop product CD into your CD-ROM drive.
- 2 Follow the directions in the dialog boxes on the screen.

You can install e/pop into any directory you choose during the setup procedure. The default installation directory for e/pop server is the following:

C:\Program Files\WiredRed\EPopS

From WiredRed Web Site

To install e/pop on the server from WiredRed's Web site:

- 1 Download the server application file from the WiredRed Web site.
- 2 Navigate using Windows explorer to the downloaded e/pop server file (essetup.exe).
- 3 Double-click on essetup.exe file.
- 4 Follow the directions in the dialog boxes on each screen.

You can install e/pop into any directory you choose during the setup procedure. The default installation directory for e/pop server is the following:

C:\Program Files\WiredRed\EPopS

Locations

The locations feature can connect to your office's e/pop server through any type of connection, from any location including a hotel, through firewalls, gateways and VPNs.

Improved messaging

Provides new functionality for selecting recipients while composing or forwarding messages.

Improved history feature

The macro, shortcut and message history features have been completely redesigned for improved performance and usability.

New Routing Architecture

e/pop's new routing architecture allows you to connect to your e/pop infrastructure using any type of connection (VPN, RAS and dial-up).

Voice conferencing

Provides both person-to-person voice chats and group voice conferences over your network.

Improved support for client/server

e/pop can operate in both peer-to-peer (P2P) mode as well as client/server for interconnecting over enterprise networks. Peer-to-peer supports IPX, TCP, UDP and multicasting.

Improve productivity

Improve timeliness and efficiency of communication.

Easy to Install

Maximize the deployed network i	investment of broadband	networks and high	performance backbones.

Enhance Communications

Remove delays inherent with most forms of office communication.

Improved Interaction

Establish real-time interaction with employees, partners, vendors and customers for true instant collaboration.

Improve service and support

Leverage high performance remote control and network features to provide technical support throughout the organization.

Simple management

Comprehensive management tools for easy administration by the network manager.

Leverage deployed directories

Utilize existino	NetWare	or Microsoft de	eployed	I directories t	to interact with	n live networ	k groups and users

Adding a Profile

To add a profile click on the **Add Profile** button and the Add Profile menu appears.

- 1 Enter the name for the new profile (for example Staff).
- 2 Click OK.

The profile will appear in the Using Profiles list.

Manual Creation of Users

Adding New Users

From the e/pop Server Console window, click the Users Icon on the left side of the window. This brings up the Users directory. To add a new User following these steps:

1 Right-click and select **Add User** from the drop-down menu. The user account menu appears.

Closing Tasks or Processes

To close tasks and processes on remote computers:

- 1 Click the **Tasks** tab.
- 2 Click **Search** to display all window processes for the selected users.
- 3 Type in a search filter if needed.
 - (Example: Internet* for any processes beginning with 'Internet'), refer to the Remote Run Feature illustration in the Administrator's Guide for a search example.
- 4 Select the window processes to be closed.
- 5 Click **Log Receipts** 2 to receive a return receipt with a successful closing of a task.
- 6 Click **Send** to close the selected processes.

Running Programs on Remote Computers

To run programs on remote computers:

- 1 Click the **Run** tab (the Remote Run Feature menu appears).
- 2 Type in the name of the program, folder, or document you want to run.
- 3 Click **Log Receipts** 2 to receive a return receipt with a successful run.
- 4 Click Send.

Rebooting or Shutting Down Remote Computers

To reboot or shut down remote computers (refer to the Remote Reboot Feature illustration in the Administrator's Guide):

- 1 Click the **Reboot** tab.
- 2 Select either Shutdown or Restart.
 - Include the Power Off option in conjunction with Shutdown to turn the power off on machines with Advanced Power Management capabilities.
 - The Force option can be used to close applications that would normally pause the shutdown of Windows, such as saving a document before exiting.
- 3 Click **Log Receipts** 2 to receive a return receipt with a successful reboot.
- 4 Click Send.

Starting Remote Administration

You can start Remote Administration in one of these ways:

- 1 Select the object(s) from the directory for the remote administration session (refer to the Remote Administration illustration in the Administrator's Guide for an example).
 - From the left side of the window, click the Admin button and then the Remote Admin icon, or
 - Select Remote Admin from the Actions Menu.
- 2 Right-click a user in the Directory and select Remote Admin or press Ctrl +A.
- 3 Double-click on a user in the Directory if Remote Admin has been set as the default feature (see **Options** > **Directory** > Remote Admin from the e/pop client menu).

Creating a Profile

- 1 Click the **Profiles** icon to display the Profiles directory.
- 2 Click on the **All Servers** button to view users and groups from all servers and locations using e/pop if needed. **Note:** Users from other locations appear in blue.

Manually Adding New Users

From the e/pop Server Console window, click the **Users** Icon on the left side of the window. This brings up the Users directory. Following these steps to add a User:

- 1 Right-click and select **Add User** from the drop-down menu. The user account menu will appear.
- 2 Enter the account and password for this new user.
- 3 Click OK.

Deleting Users

To delete a user or group of users:

- 1 Select the user or group of users from the User directory.
- 2 Right-click and select **Delete User** from the drop-down menu.

Editing Users

- 1 Right-click and select **Edit** User from the drop-down menu. The User account menu appears.
- 2 Enter the changes to the user account.
- 3 Click **OK**.

Creating a User Screen



Applying User Settings

To specify settings and preferences for new users:

- 1 Highlight the user from the User directory and click on the **Server Settings** button. The Settings menu appears
- 2 Select the User tab.
- 3 Click on the 'Always assign the following profile for new users on this server,' if you want to use a default profile.
- 4 Click on the 'Send a message to the following user when a new user is created,' to send a message when a new user is created.
- 5 Click **OK**.

Using e/pop Security Policy

This topic describes the security features and security related settings accessible to network administrators to manage and control access and secure communications while using e/pop.

The Security Policy

e/pop's real-time engine uses a combination of security protocols. The server security policy defines the level of security required by all connecting e/pop clients and pipes.

The e/pop server's default security implementation is RC4 encryption to secure communication between users, servers and the data flowing over pipes.

Organizations can selectively enable additional security controls and implement RSA to communicate with users and other servers over pipes.

RSA encryption is combined with RC4, DES or AES encryption to secure the connection and maximize performance. RSA is used to authenticate connections and secure communications while exchanging passwords and security keys.

e/pop offers the following encryption options:

- RC4 encryption
- RSA encryption with RC4
- RSA encryption with DES
- RSA encryption with Triple-DES
- RSA encryption with AES

RC4 provides basic, secure and fast communications over all connections. RSA is combined with DES or Triple-DES to enhance security and RSA with AES provides the highest level of encryption and security.

Adding Workgroups

- 1 Click **Add** and the Add Workgroup menu appears.
- 2 Enter the name of the **Workgroup** and click **OK**. (For example: *accounting.users*.)

Deleting Workgroup

- Select a Workgroup from the drop down menu and click **Delete**.
- 2 Click **OK**.

Editing Workgroup

- 1 Select a Workgroup from the drop down menu.
- 2 Click **Edit** and the Edit Workgroup menu appears.
- 3 Make changes click **OK**.

Adding Personal Status Message

- 1 Click **Add** and the Add Status menu appears.
- 2 Enter the message (For example: Meeting in Progress!)
- 3 Click **OK**.

Deleting Personal Status Message

- 1 Select a Message from the drop down menu and click **Delete**.
- 2 Click OK.

Editing Personal Status Message

- 1 Select a Message from the drop down menu.
- 2 Click **Edit** and the Edit Status menu appears.
- 3 Make changes and click **OK**.

Editing Status Message Options

Specify the details for status messages.

- User Details
- Contact Info
- Time Stamp

Confirm Receive Default

User decides in their own e/pop options whether specific features require a confirmation.

Confirm Received Enabled

Confirmation messages are always required and displayed.

Confirm Received Disabled

Confirmation messages are not displayed.

Adding Trusted Domain

- 1 Click **Add** and the Add Trusted Domain menu appears.
- 2 Enter name of the trusted domain to be included.
- 3 Click OK.

Deleting Trusted Domain

- 1 Select a domain from the drop down menu.
- 2 Click **Delete**.
- 3 Click OK.

Editing Trusted Domain

- 1 Select a domain from the drop down menu to be modified.
- 2 Click **Edit** and the Edit Trusted Domain menu appears.
- 3 Make changes.
- 4 Click OK.

Who Should Read this Guide?

	The intended	audience	for this	quide is	the	administrator	at the	server	level
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Releases Covered in this Guide

This guide covers Release 3.0 of Wired Red's e/pop server software.

What You Should Know

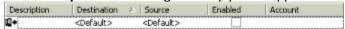
This guide assumes you have:

- Familiarity with Graphical User Interfaces (GUIs)
- An understanding of the Windows Operating System
- Familiarity with network protocols

Adding Pipes

From the e/pop Server Console window, click the **Pipes** icon on the left side of the window. This brings up the Pipes directory. Use the following steps to add a pipe:

1 Right-click and select **Add Pipe** or click on the drop-down next to the **Connect** button and select **Add Pipe**. The following default pipe will appear:



- 2 Highlight the default pipe and right-click and select **Edit Pipe** or click on the drop-down next to the **Connect** button of cornect and select **Edit Pipe** and the Pipe Settings menu appears.
- 3 Enter the name or description for the pipe and specify the IP address of the destination e/pop server.
- 4 Select the pipe and click on the **Disabled/Enabled** button to use the pipe.
- 5 Click on the **Apply Changes** button to save your changes to the e/pop server.

Deleting Pipes

From the e/pop Server Console window, click the **Pipes** icon on the left side of the window. This brings up the Pipes directory. To delete a pipe do the following:

- 1 Select the pipe to be deleted.
- 2 Right-click and select **Delete Pipe**.
- 3 Click on the **Apply Changes** button to save your changes to the e/pop server.

Editing Pipes

From the e/pop Server Console window, click the **Pipes** icon on the left side of the window. This brings up the Pipes directory. To edit a pipe do the following:

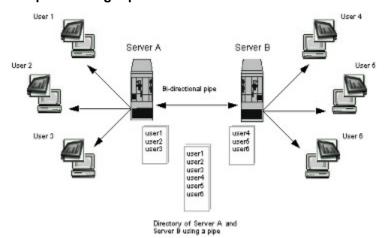
- 1 Right-click and select Edit Pipe.
- 2 Select the pipe to be edited from the drop-down menu and click **Edit**. You can change the following:
 - Name of pipe
 - IP address
 - Assign an account and password (refer to the System Accounts topic in the Security topic).
 - Default route which network card on the e/pop server, will be utilized. Provide a staticTCP/IP route to use a different route.
- 3 Make changes.
- 4 Click OK.
- 5 Click on the **Apply Changes** button to save your changes to the e/pop server.

Viewing Pipes

The Graph feature provides a real-time snapshot of traffic traveling over a specific pipe. The snapshot provides the most recent 30-second sample of activity. To view the activity of a particular pipe, from the e/pop Server Console window, click the Pipes icon on the left side of the window. This brings up the Pipes directory.

- 1 Select the pipe to be graphed.
- 2 Right-click and select Graph.

Example of Using Pipes



Chain Topology

Each server is connected together with a single pipe to the next server. This is recommended when your environment has only two physical locations.

Star Topology

One e/pop server acts at the hub for all e/pop server locations. Pipes only need to be created on the hub itself to connect all locations together. The hub is the most powerful e/pop server as it performs all the physical routing effort. This is recommended when your environment has multiple locations, wants centralized control over e/pop routing and the WAN routing design is appropriate.

Mesh Topology

Each e/pop server has a pipe to every other e/pop server at all locations. e/pop's real-time routing technology will automatically determine the best route to other e/pop users in the enterprise when using a mesh. This is recommended when your environment has multiple locations, doesn't need centralized control over e/pop routing, wants redundancy in the real-time routing and the WAN routing design is appropriate.

Adding a Group

After the Root Group is created you can create groups or nested groups beneath the root group. Using the following steps to add a group:

- 1 Click the **Groups** icon to display the Groups directory.
- 2 Select the root group, right-click to activate the drop-down list.
- 3 Select Add Group and click.

Added Groups



Adding a Root Group

After the Root Group is created you can create groups or nested groups beneath the root group. Using the following steps to add a group:

To modify a group name do the following:

- 1 Click the **Groups** icon to display the Groups directory.
- 2 Select the root group, right-click to activate the drop-down list.



3 Select Add Group and click.

The new group will appear in the Groups directory, see the example below.



Renaming a Group

To modify a group name do the following:

- 1 Click the **Groups** icon to display the Groups directory.
- 2 Highlight the group to modify and right-click and select **Rename Group** or press **F2**.
- 3 Enter the name of the group and press enter to accept the change.

Deleting a Group

To delete groups, simply select the group or groups to be deleted and do the following:

- 1 Click the **Groups** icon to display the Groups directory.
- 2 Highlight the group to be deleted right-click and select **Delete Group**. To select more than one group hold down the **Ctrl** or **Shift key** and select.

Add Users to a Group

To add users to a group, you select a user(s) from the user's listing below the group area and drag them into the appropriate group.

• Users will immediately appear as part of this group to other e/pop users.

Completely disable access to the directory

Disables the ability to access objects in the directory, essentially removing a user's ability to send any e/pop features.

Always sort the User's Directory

Sorts objects under the User's network alphabetically.

Completely remove all top-level users from directory

Hides all users within the User's network who are not a member of a workgroup.

Completely remove offline users from User's directory

Removes users within the User's network as they go offline.

Adding IPX/SPX Subnet

- 1 Click **Add** and the Add IPX Subnet menu appears.
- 2 Enter the IPX/SPX subnet to be added.
- 3 Click **OK**.

Note: Adding will create an entry in the local workstations registry.

Deleting IPX/SPX Subnet

- 1 Select the subnet to delete from the drop down menu.
- 2 Click Delete.
- 3 Click OK.

Note: Deleting will NOT remove it from the local workstation registry.

Editing IPX/SPX Subnet

- 1 Select the subnet to modify from the drop down menu.
- 2 Click **Edit** and the Edit Trusted Domain menu appears.
- 3 Make changes.
- 4 Click OK.

Note: Editing will create an entry in the local workstations registry.

Adding IP Subnet

- 1 Click **Add** and the Add IP Subnet menu appears.
- 2 Enter the IP subnet to be added.
- 3 Click OK.

Deleting IP Subnet

- 1 Select the subnet to delete from the drop down menu.
- 2 Click Delete.
- 3 Click OK.

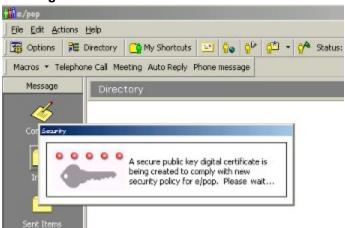
Note: Deleting will NOT remove it from the local workstation registry.

Editing IP Subnet

- 1 Select the subnet to modify from the drop down menu.
- 2 Click **Edit** and the Edit IP Subnet menu appears.
- 3 Make changes.
- 4 Click OK.

Note: Adding will create an entry in the local workstations registry.

Creating Certification Illustration



Pipe Connectivity

•	Connect servers	together	across	geographic	boundaries.
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Pipe Security

•	Implements Public Keys Infrastructure (PKI) to secure communication between users and the server
	and between servers over pipes.

Pipe Speed

•	Pipes carry a message with multiple recipients once to the server destination. The receiving server
	disperses the message to all recipients.

Pipe Bandwidth

• Uses a minimum amount of bandwidth.

Pipe Bi-directional

•	Designed to transmit data over one connection through bi-directional transmission. Because pipes
	are bi-directional, it is only necessary to create a pipe on one server.

Pipe Creating and Maintaining

• Use the server console application when creating and maintaining Pipes used in the e/pop server.

Adding System Accounts

Use the following steps to **Add** an system account:

- 1 Select **Systems Accounts** ³ ^{5ystem Accounts} button (the System Accounts menu will appear).
- 2 Click the Add button on the Accounts menu (the Accounts Properties menu appears).
- 3 Enter the account name and password.
- 4 Indicate what the account is used for by checking the appropriate checkboxes:
 - Allow console logons for server console logon access.
 - Allow pipe logons pipe connections from remote servers.
- 9 Click OK.

Deleting System Accounts

Use the following steps to **Delete** an system account:

- 2 Select the system account to delete.
- 3 Click the **Delete** button.
- 4 Click OK.

5

Editing System Accounts

Use the following steps to **Edit** an system account:

- 1 Select **System Accounts** button (the System Accounts dialog will appear).
- 2 Select the system account to edit.
- 3 Click the **Edit** button.
- 4 Make changes.
- 5 Click **OK**.

Default Splash Screen Options

User specified option or the last splash setting e/pop used. By default, e/pop displays the splash screen when starting e/pop.

Never show splash screen

Removes the splash screen when starting e/pop.

Always show splash screen

Always show the splash screen when starting e/pop.

Default Tray Icon Option

User specified option or the last setting e/pop used.

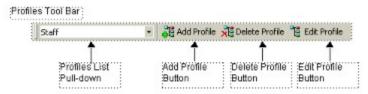
Always minimized in the system tray

When you minimize the program, it will appear as a tray icon.

Always minimized in the task bar

When you minimize the program, it will appear as a task bar application.

Using Profiles List Illustration



Adding Users and Groups to a Profile

To add a user or group to a profile do the following.

- 1 Select a user or group of users.
- 2 Drag and drop the user or group into the profile.
 - Adding a group to a profile will include all current and future users under that group into the selected profile.

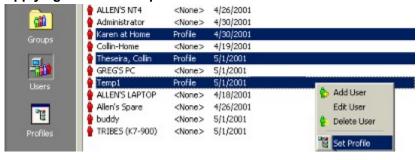
Adding a single user includes that user individually.

Applying a Profile

After you have created the profile(s) you must apply them to the users.

- 1 Click the **Users** icon.
- 2 Select the objects from the Users list to assign the profile.
- 3 Right-click and select the **Set Profile** button

Applying a Profile Sample



{ewl RoboEx32.dll, WinHelp2000, }