

Novell® GroupWise®

6.0 Collaboration Services

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REVIEWERS GUIDE



Novell®

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Novell GroupWise

6.0

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Easy-to-use messaging and collaboration



GroupWise® 6 is the latest version of Novell's full-featured groupware offering that provides easy-to-use messaging and collaboration. Features include e-mail, calendaring, group scheduling, task management, document management, automated workflow and electronic discussions-all through a Universal Mailbox.

This version provides substantial improvements in five key areas: access, scalability, reliability, NDS® integration, and multiple-platform support. GroupWise 6 wireless support enables users to connect to the GroupWise Universal Mailbox from any WAP-enabled device such as cell phone or personal digital assistant (PDA). Caching mode and filtering improve performance and allow more users to be supported per server. Backup and restore capabilities have been improved and database integrity enhanced. The entire system can be managed through ConsoleOne™, Novell's browser-based NDS eDirectory™ management interface. eDirectory groups and roles can now be accessed for GroupWise mailing lists. And, GroupWise 6 is now available on Windows* NT/2000* as well as NetWare® 5.x and 6.x.

QUICK PROFILE

Product: GroupWise 6

Announce date: March 23, 2000

Availability: April 20, 2000

Key Benefits: New benefits for users include: wireless support (any WAP client), Client Caching Mode (improves performance and scalability), NNTP, POP, IMAP, new partner applications and user accessible backup.

Administrator features include: increased the number of users per server by double or more, multi-platform support for NT/2000, increased NDS integration, improved disk space management, better database integrity, 24x7 availability with Novell Cluster Services™, and increased manageability through HTML monitoring.

Pricing:	\$130 per user (full client)— Suggested Retail Price \$30 Per user (WebAccess/Wireless-only access)—Suggested Retail Price	available. Special pricing schemes for ISV/OEMs.
What's Included:	<ul style="list-style-type: none"> • NDS eDirectory • DirXML™ Join Engine • DirXML Driver Development Kit 	Availability: <ul style="list-style-type: none"> • Novell Authorized Resellers • Through Novell Sales • Novell Web Site—http://www.novell.com/groupwise
Licensing:	Per user, corporate or open- ended user-count pricing	Localization: 21 Languages worldwide For Additional Information: www.novell.com/groupwise

INSTALLATION REQUIREMENTS

GroupWise Agent RAM Requirements

Caching RAM Requirements	Additional RAM Requirements		
GroupWise Agent	5.5MB for NLM	N/A	N/A
Engine	4.5MB for NT		
Post Office Agent	1MB	1MB	250-400KB x number of active client users
Message Transfer Agent	1MB	1MB	50KB x number of domains and post offices serviced

For a post office with 100 concurrently active users, plan for at least 47.5MB of RAM $[5.5 + 1 + 1 + (100 \times 0.4)]$. The larger the number of users, the smaller the per user requirement. For example, for 100 active users you should plan for 400KB per user, but for 500 active users you could plan for 250KB per user.

Actual memory usage by the agents can vary widely depending on configuration and usage. POA memory requirements are influenced by the following activities: message file processing, client/server processing, indexing, and auto-date processing. MTA memory requirements are influenced by the following activities: scanning, routing, TCP/IP connections, NDS user synchronization.

Agent Hardware

- Processor: Pentium* 200Mhz+, multiprocessor optional
- Disk Space: 300MB for GroupWise software, 200MB per user recommended (configurable by administrator)
- Operating System: Novell NetWare 5 or 6, Microsoft Windows NT/2000

Client Requirements

- **Dedicated Workstation Client**
- Windows 98/NT/2000
 - Minimum 5 MB free disk space (25MB for full client install)
 - Pentium processor recommended with 28MB RAM
- **GroupWise WebAccess™ Client**—any standard Internet Browser
- **Wireless Client**—any WAP-enabled (Wireless Access Protocol) device (cell phone, PDA, pager, etc.), Palm devices with Web Clipping

OVERVIEW

GroupWise 6 is the latest version of the industry-leading groupware and collaboration software from Novell. GroupWise simplifies communications by providing the Universal Mailbox, a single access point for all types of messaging, calendaring and document information.

Features continued from the previous version (GroupWise 5.5) include e-mail, personal calendaring, group scheduling, automated workflow, task and document management, rules-based message management, and electronic discussions. GroupWise 6 includes client support for Windows 2000, Windows NT 4.0, Windows 98, and Windows 95 platforms and access through any standard Web browser through the GroupWise WebAccess agent. GroupWise 6 agents can be hosted on Windows NT/2000 and NetWare 5x and 6x servers.

GroupWise 6 provides substantial improvements over GroupWise 5.5 in five key areas:

- **Access Anywhere:** With GroupWise Wireless, connections can be made to a GroupWise Universal Mailbox from any WAP-enabled device, RIM Blackberry device, and Palm connected organizer.
- **Scalability:** The new GroupWise client caching mode allows users to work from their local hard drives, with updates and synchronization occurring in the background, which decreases server requests by up to 90%. Database maintenance in post offices can be

performed substantially faster, so larger post offices can be maintained more easily. Disk space usage can be controlled on a per post office and per-user basis. Message size, including the message body, attachments, and distribution list, can be limited for incoming and outgoing messages.

- **Reliability:** Backup capabilities now surpass standard file-level backups to enable users to selectively restore messages. GroupWise agents work reliably with Novell Cluster Services.
- **NDS eDirectory Integration:** All aspects of GroupWise administration can now be performed from ConsoleOne, Novell's eDirectory management interface. GroupWise messages can be addressed to eDirectory groups. GroupWise access is governed by the same security measures as network access, with additional layers of GroupWise-specific security.
- **Multiple-platform Support:** All GroupWise agents are available on NetWare and 5.x and 6.x, Windows NT and 2000.

GROUPWARE MARKET FACTS

The need to exchange information of all types between individuals inside and outside of an organization continues to increase. While this exchange is primarily done via e-mail, there is an increased need to share schedule information, documents, task lists, workflow, media files, and news. As connection pipelines between

companies, partners, suppliers, customers and individuals become more available at higher speeds, quality collaboration solutions that are open, accessible, and feature rich become a necessity for organizations of all sizes.

GroupWise continues to enjoy a healthy adoption rate among connected corporations and organizations. IDC estimates the number of GroupWise users worldwide to be over 20 million. In a market where many of the basic messaging needs are being met with simple Internet mail, GroupWise successfully continues to provide a feature-rich collaboration solution and enjoys continued high growth. GroupWise is the only major collaboration system that includes wireless support as a core integrated feature, removing the need expensive add-ons and integration.

According to customers and analysts, GroupWise's full collaboration functionality comes at a much lower cost than other solutions available. GroupWise is simpler to implement, easier to manage, and is fully operational with minimal hardware footprints. The resulting benefit is that more users receive higher levels of service with much less expense.

WHO USES GROUPWISE?

Because of its ease of use, broad feature set, and unparalleled scalability, GroupWise has universal appeal for companies and organizations of all types and sizes. Any organization with communication, collaboration or scheduling

needs will benefit from GroupWise's robust collection of information sharing features.

The directory-based and distributed nature of GroupWise makes it particularly suited for large organizations that are geographically dispersed. Post offices and agents can be physically distributed for performance and access yet may be tied together virtually for address, time zone and administrative management.

Medium size organizations (distributed or centralized) can also benefit from GroupWise features and functionality. GroupWise's efficient processing makes it possible to completely support a medium size organization using a single server. Hardware costs and administration expenses are kept to a minimum.

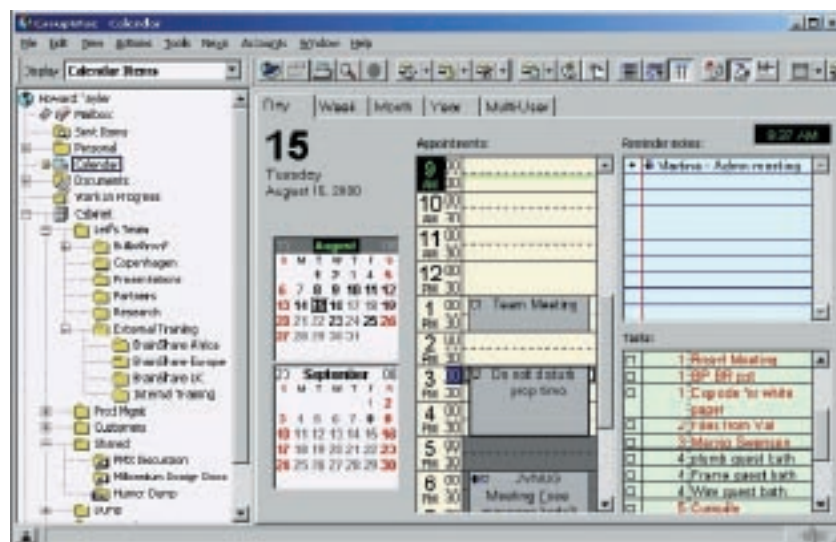
And small businesses with only a few (even remote) users can also realize significant benefits from GroupWise. Personal management, scheduling, document management, collaboration and messaging are provided for all users-even from remote locations over the Web or through wireless devices.

With the GroupWise multi-platform options and Novell's licensing policies, it is easy and cost effective to implement a full featured, messaging and collaboration solution for any organization. Using Novell's eDirectory for management of both users and software makes GroupWise significantly less expensive to manage, a fact that has been pointed out by several leading analysts including Gartner Group.

Typical uses of GroupWise 6 by organizations

Organization Type	What they do	GroupWise implementation
Enterprise Corporation	1,000 employees and up. Often have multiple divisions in multiple locations across multiple time zones	Fully distributed GroupWise system with multiple post offices, and comprehensive eDirectory implementation for management of users, partners and customers. Wireless support to connect both traditional knowledge workers, as well as delivery agents, factory workers and other personnel who serve as the core of many companies' knowledge base. Spans multiple time zones with accommodation for global coordination. Meets sophistication needs of wide range of users from simple e-mail to full-featured document and information exchange.
Medium Business	200-1000 employees with possibly more than one location	One or more possible offices or locations with multiple groups that require interactive scheduling, calendaring, messaging and collaboration capabilities. GroupWise provides internal as well as external communication and a single server can easily handle any medium-sized business workload.
Small Business	5-200 employees	Even companies as small as five employees can benefit from GroupWise with the ability to communicate, calendar and manage resources. GroupWise minimal server requirements and cross-platform ability make it a cost-effective choice in small offices.
Educational Institutions	Universities, colleges, K-12 schools and other educational institutions	GroupWise has become a standard collaboration tool for many educational organizations allowing faculty and staff to communicate, schedule and collaborate not only for administration and class work but for research as well.
Government Agencies	Provide public service and information	GroupWise is the standard for many government agencies where large directories of individuals and resources must be available for widespread access. GroupWise's high levels of security and flexibility for local or remote use are required by many government agencies.

GroupWise 6 provides Universal Mailbox which consolidates all types of collaborative information.



WHAT CAN I DO WITH GROUPWISE?

GroupWise 6 builds on the Novell's successful line of collaboration solutions to provide a complete selection of out-of-the-box tools for effective and efficient communication. Several more common uses for GroupWise include the following:

Activity	Example
E-mail	GroupWise enables full featured e-mail for any purpose. E-mail messages (with attachments) can be sent, received, stored, sorted, organized, archived, along with all standard options such as forward, copy, blind copy, reply, etc. Users have unparalleled status information on sent messages and appointments, and are able to retract messages that have not yet been opened. POP and IMAP mail sources can be consolidated. Rules for forwarding, sorting, delegating, rejecting, forwarding and vacation can be applied. Access to e-mail and information is through the GroupWise Universal Mailbox, where all communication is consolidated, or through a standard Web browser. Address books can be personalized and flexibly organized.
Calendaring and Scheduling	Individuals and resources (such as conference rooms and equipment) can be scheduled using GroupWise. Scheduling provides busy search capabilities to determine optimal meeting times for individuals and resources. Recipients can quickly accept or reject appointment requests, with annotated reasons for explanation. Time slots can be designated as free, tentatively scheduled, busy or out of the office. Calendaring capabilities provide flexible personal management with multiple views and printing options. Scheduling accommodates global coordination with time zone management and distributed post offices.
Task Management	Individual and group tasks can be scheduled, prioritized, and monitored for completion. Uncompleted tasks are automatically moved forward. Managers can also send tasks to their teams.
Document Management	GroupWise allows users to include and organize documents for document sharing and management. Features include document creation and ownership information, searching capabilities, authorized access management options, and more.
Workflow	Initiate and manage the sequence of actions necessary to complete a business process by sending a file, or a link to a file, along with instructions to a series of users (sequential workflow) or a group of users (broadcast workflow). As each user completes the work item, GroupWise automatically forwards it to the next recipient.
Paging and Faxing	Paging and faxing from the GroupWise Universal Mailbox are provided and supported through Novell and several third-party solutions. Incoming faxes can be routed directly to a recipients mailbox.
vCard	vCard support feature enables users to send electronic business cards along with messages. Business contact information is kept up-to-date by quickly converting information about new colleagues into personal address book entries.
Conversation Threads/Discussion Groups	GroupWise automatically keeps conversation threads for all messages sent and received. With conversation threading users can view a message and all replies to the message in the order they occur. When used with folder sharing, conversation threading provides discussion group capabilities so that all participants can see all messages in the order they were sent.
Web Publishing	GroupWise WebPublisher is a document management tool included with GroupWise that enables users to easily publish documents from GroupWise libraries to the World Wide Web and to an intranet. Users on the Internet or an intranet can use any Web browser to access documents in your GroupWise libraries via URLs, directory listings or full-text searches.
Integrated Personal Management	GroupWise provides a fully integrated, one-stop interface to all messaging and collaboration tools. The GroupWise Universal Mailbox e-mail, calendaring, scheduling, document and e-mail management -- all in one location.
Web Access	GroupWise Universal Mailbox and all GroupWise message components are available through any standard Web browser from any point on the Internet with valid authorization.
Wireless Access	Use any wireless handheld device (wireless phone, pager, two-way radio, or smart phone) to send and receive messages, make appointments, create tasks and notes, view calendars, search address books, and search for documents.

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Activity	Example
Caching Mode	Optimizes communications between the client and server, enabling users to work from their hard drives without being continuously connected to the network. Connection and message transfer occurs automatically in background on a periodic basis.
Proxy Access	With proper authorization, others can be granted proxy access to a user's mailbox and/or calendar for read or read/write privileges. Proxy access can also be granted for message notifications, calendar alarms and preferences.

BENEFITS

Quantifying the value of informative and streamlined communications may not be easy but realizing the benefits of free information flow is not difficult. The most common benefits of using GroupWise can be categorized as follows:

Benefit	Description
Enhanced Business Collaboration	Establishing communications with partners, customers, suppliers and inter-company groups in useful and meaningful ways is made possible with GroupWise. Share documents, tasks, calendar items, etc.
Flexible Access	Organizations must support multiple user types from administrative desktop users to global road warriors. GroupWise provides multiple access options for all types of users from different operating systems, networks, the Internet, and wireless devices.
Simple and Proactive Management	NDS eDirectory simplifies the management of complex communication networks with a single, Web-accessible interface that manages both users and software components. Administrators are automatically alerted of critical conditions, allowing them to proactively manage system health for their users.
Complete Package	GroupWise is a one-stop-shop for all communication and collaboration needs. Mail, calendar, documents, workflow, tasks, address books, and more with multiple types of access.
Standards Support	GroupWise supports all of the common messaging and communication standards including POP, IMAP, SMTP, MIME, S/MIME, NNTP, WAP, HTML, HDML, WML, LDAP, and more.
Coordination of Resources	Maximize the efficiency of resource use (equipment, conference rooms, specialized resources, etc.) through open scheduling.
Simplify Project and Task Management	Streamline information flow and distribution when working in groups on special projects or tasks. Discussion groups, workflow, meeting/resource scheduling, document sharing, etc. all enhance and simplify group projects.
Common Address Books	Economize contact management efforts through the use of a central address book that also provides for individual address book modifications.
Seamless Upgrades	Whether moving from previous versions of GroupWise or from other messaging solutions, upgrading to GroupWise 6 is simple and seamless. Upgrading from previous versions requires no change in user interface and no training time. Import utilities from other POP and IMAP solutions make the transition to GroupWise a breeze.
Enhanced Internal and External Communication	Use messaging, discussion groups, calendaring and other GroupWise features to enhance communication between internal and external stakeholders.
Simplify Global Communication	Support for multiple languages in multiple time zones simplifies the exchange of critical messaging and scheduling information between remote offices and associated business partners.
High Security	Rest assured that all messages, attachments, and associated communications require proper authentication for access and are transmitted using the highest levels of encryption and security.
Reduced Costs	GroupWise 6 enhancements contribute significantly to reducing costs. Administrative expenses go down; post offices can be consolidated to reduce hardware and management expense; and increased availability and uptime reduce the cost of lost business or downtime.

WHAT'S NEW IN GROUPWISE 6?

GroupWise 6 includes several significant improvements over the previous version, GroupWise 5.5. The following chart lists new features that are valuable to both administrators and users.

Feature	Description
	<i>Administration Features</i>
Increased Server-level Scalability	Recommended post office sizes more than double with GroupWise 6, and in some configurations those sizes could more than quadruple.
Comprehensive Disk Space Management	Administrators can limit the size of mailboxes and messages on a per user basis, allowing them to proactively and selectively manage server disk requirements.
Increased NDS Integration	GroupWise administration can be performed completely through ConsoleOne, allowing administrators to manage users for all network applications from a single interface. NDS groups and roles defined by administrators can be accessed and used from the address book by users for addressing messages and appointments.
Enhanced User Management	'Live move' enables the moving of users from one post office to another with increased performance and reliability. All information including shared folders and address books is updated to reflect the new post office. This feature, combined with increased scalability, will make it easy for administrators to consolidate and reduce the number of servers in their organizations.
Increased Security	Post office agents now use SSL encryption for inter-post office communication via SMTP, enabling Internet connections to be used between partners and customers. Dual key support for S/MIME with separate keys for authentication and encryption ensures better attachment security across the Internet.
Increased Managability	HTML monitoring; client/server user moves; ConsoleOne administration; mailbox size and message size limitations per domain, post office, or user
Multithreaded Database Checking	The GWCheck utility used to ensure database integrity is now multithread enabled making it possible to reduce the time needed for GWCheck by half. Result is better database reliability and decreased recovery times.
Improved MTA	Message Transfer Agent communication is improved to better handle unstable connections. File transfers can resume mid transfer in event of failure (chunking vs. streaming)
Web-based Server Monitoring	Web-based Monitor watches all GroupWise post office and message transfer agents. Accessible via any Web browser including WAP devices. WebAccess is also available as a Windows NT Service with SNMP support
Server Alerts	Alerts may be generated for critical events and sent via SMTP or SNMP.
Client Caching Mode	Administrator can implement and enforce client connection scheme to periodically synchronize clients with post office. Reduces server load and minimizes connection bandwidth requirements. This allows administrators to consolidate users on fewer servers and reduce their administrative requirements.
Enhanced Backup and Restore	GroupWise TSA for backup ensures that databases are backed up 'cleanly,' even when open or in use. Administrators are able to restore an individual user or item. In addition, Smart Purge ensures items will not be purged prior to backup.
24x7 Cluster Support	GroupWise 6 now supports clustering to provide enhanced fail-over and fail-back capabilities. The GroupWise message store can be part of a storage area network (SAN) making it possible to distribute storage and provide complete fault tolerance and 24x7 availability to users.
Multi-platform Support	Available on Microsoft Windows NT and 2000 in addition to NetWare 5.x and 6.x

Feature	Description
	<i>User Features</i>
Wireless Support	GroupWise Universal Mailbox is accessible from any WAP-enabled device, RIM Blackberry device, or Palm connected organizer. Users can send/receive messages, make appointments, create tasks and notes, view calendar, search address books, and search for documents
Client Caching Mode	Client Caching Mode improves performance for users and increases the scalability of servers by handling client/server communications more efficiently, while being transparent to users.
New Partner Applications	Several third party applications are integrated for use with GroupWise 6. These include: Nexic Symphony (signatures, archiving, rules, templates and other utilities), GroupLink ContactWise (contact management), Tobit Software FaxWare (fax gateway), MetaStorm InfoWise (information management), PUMATECH Intellisync (PDA synchronization), Toffa SyncWise (Palm synchronization), 2nd C Utilities (document management), Computer Associates FaxServe.
User-level Time Zone Support	The location of the user (rather than the location of the post office) will be used to determine time zone offsets. The membership of a post office may safely span multiple time zones. Travelling users can adjust the time zone on their laptops to assure they arrive at appointments at the right time.
NNTP Support	Network News Transfer Protocol (NNTP) support enables GroupWise clients to view and participate in UseNet Newsgroups from within the GroupWise client.
Simple Workflow	Addition of 'routing slips' combined with existing GroupWise document management provides workflow capabilities robust enough for most business environments
POP/IMAP Support	Universal Mailbox enhanced to give users the ability to create and work seamlessly with multiple POP and IMAP email accounts
Enhanced WebAccess	New user features include signature support, 'mark item unread', the ability to create address books and groups, rule 'activation and deactivation' of already existing rules
New Address Book Features	User profile and company information is available by mousing over a name in address box. NDS groups and roles can be selected from the address book. Shared address books can be arranged differently for each user. LDAP query results are maintained between sessions
Increased S/MIME Support	Users can communicate securely with customers, suppliers, and partners across the Internet using standards-based encryption and digital signatures. Enhancements for security and management of secure attachments include dual key support for both authentication and encryption
Print Calendar	The GroupWise calendar has been enhanced to include new options for user customization and printing
POP3/IMAP4	Users can import addresses and account information from the following POP3/IMAP4 sources: Outlook Express 4.x and 5.x and Netscape Communicator 4.0x, 4.6x, and 4.7x.
Universal Mailbox	The Universal Mailbox now consolidates from POP and IMAP (mail) as well as NNTP (news), in addition to existing GroupWise messages, calendars, tasks, documents, etc.
Backup and Restore	Users can access backups without assistance from an administrator and perform user- or item-level restoration to the master system.

GROUPWISE FEATURES

GroupWise 6, in addition to new features, includes all the functionality that has been incorporated since early versions of the product. The following is a summary list of the most valuable GroupWise features and functions.

Feature	Benefit
Reliability	
Continuous Data Access	Users always have access to data through Caching Mode even though the connection or server may be down
Quick Restore	Smart backup and restore enables users or administrators to retrieve GroupWise message items or documents from archive
Smart Backup and Restore	Item level retrieval; purging only takes place after item is archived
Improved Cluster Support	Enables creation of integrated server clusters for increased fault tolerance and better performance
Improved Database Checking	Multi-threaded database checking prevents database errors and increases database integrity
Scalability	
Application Efficiency	Software is designed to optimize hardware. Get more capability and service larger numbers of users with existing equipment
Directory-level Scalability	Manage tens of thousands of users using a single management system
Server-level Scalability	A single server can support thousands of users
Collaboration Features	
Integrated Collaboration	All collaboration activities are integrated into one, easy-to-use application for e-mail, calendaring, task lists, daily notes, shared discussions, document management, plus a host of 3rd party applications
Mailbox Management	Powerful and flexible mailbox management for users with tools such as rules, text indexing, folder-level view options, filtering, archiving, etc.
Interactive Calendaring	Notify individual users and groups of appointments, meetings, and events. Use GroupWise to reserve equipment, rooms, or other resources. The Busy Search function enables you to check calendar conflicts with other users across platforms and post offices spanning multiple time zones.
Multiple Language Support	10 languages at launch, 22 more in 30 days with the ability to support multiple languages on a single system
Document Management	Version control, reporting, robust management tools, full-text index, tight integration with many of today's document applications
Proxy	Proxy access to Universal Mailbox available to anyone with granted read or access rights
Workflow	Initiate and manage the sequence of actions necessary to complete a business process with task routing and document management
Electronic Business Card	Save and circulate business card information in vCard format
Business Collaboration	In addition to e-mail, users can share documents, folders, and collaborate with Internet users via NNTP (Network News Transport Protocol)
Personal Management	
Calendaring/Scheduling	Keep track of appointments, meetings, and events. Interactively schedule resources and meetings with others using busy search
Reminder Notes	Schedule alarms/alerts for events or tasks
Task Lists	Prioritize tasks with sorts by date or priority
Message Rules	Automatically manage mail with user definable rules. Examples include mail sorting based on sender, vacation rules, and auto replies
Search	Full search capability for locating any information in mail, calendar, tasks, address book, etc.
Remote Access	Access all GroupWise information from any point on the Internet through a standard browser using WebAccess
Personal Address Book	Create personal address book with detailed contact information. Sort and print based on personal preferences

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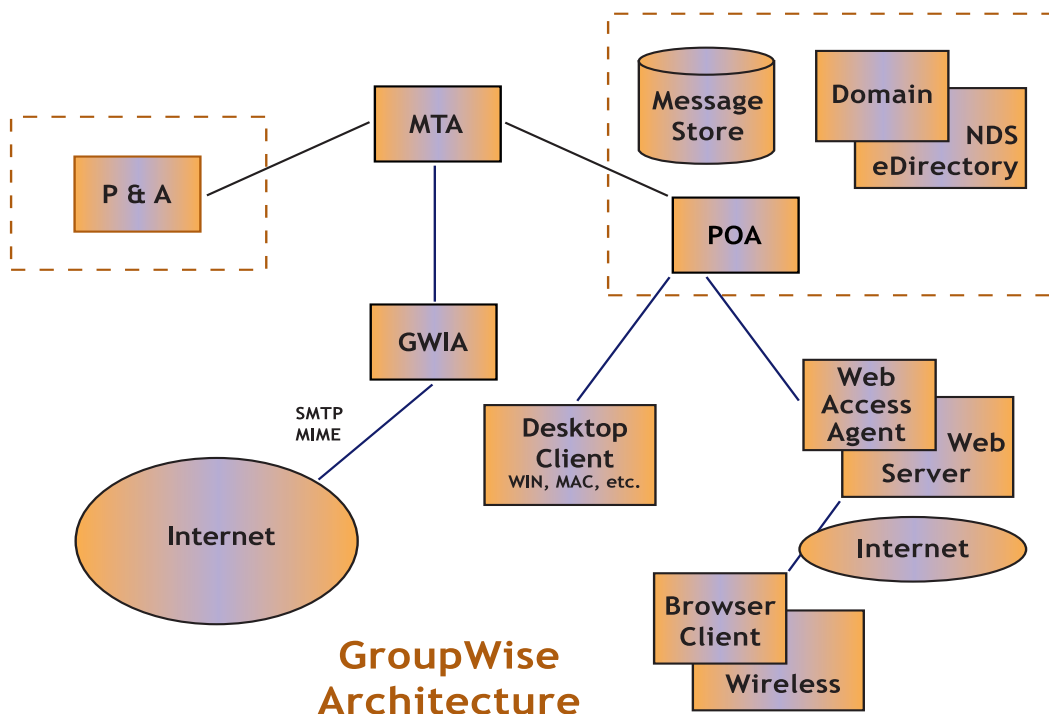
Feature	Benefit
Open Standards Support	
HTML	Hyper-text Markup Language for message editing and display
Http	Hyper-text Transport Protocol for monitoring and mailbox access
LDAP	Lightweight Directory Access Protocol for authentication and address book access
SMTP	Simple Mail Transport Protocol for Internet message transmission
POP3	Post Office Protocol 3 for standard mailbox access
IMAP	Internet Message Access Protocol for server-side mailbox access
WAP	Wireless Application Protocol for mail access using wireless devices
MIME	Multipurpose Internet Mail Extensions for standard transmission of non-text file attachments
S/MIME	MIME with RSA encryption for strong e-mail security
ODMA	Open Document Management API for integration with other document management applications
Language	Support for 21 languages with the ability to support multiple languages on the same system
Wireless Features	
Wireless Access	Get e-mail and GroupWise items from any WAP enabled device (cell phone, PDA, two-way pager, etc.). Any operation in GroupWise can be performed from a wireless device. Full folder navigation, address book access, calendar and task lists, document search and property view, password control, etc.
Open Standards Support	Support for WML (Wireless Markup Language), WAP (Wireless Application Protocol), HDML (Handheld Device Markup Language)
Web Clipping	Reduces volume of Web information transmitted for handheld PDAs
Rule Activation/Deactivation	Turn on/off rules for automatic management of messages and attachments
Wide Carrier Support	Partnerships with all major wireless service providers and supports virtually all wireless devices
Document Management	
Version Management	Manage and classify multiple versions (Official, Current, Other)
Access Control	Stipulate accessibility at multiple levels (View, Edit, Delete, Share, etc.)
Activity Logging	Track all access and modification activities
Mass Document Operations	Move, delete, copy, share, change properties on multiple documents with a single operation
Application Integration	Integrates with standard desktop applications such as Microsoft Word or Web authoring applications
Web Publishing	Publish documents from GroupWise libraries to intranets and the Internet
Utilities	
Third Party Plug-ins	Several third party applications are integrated for GroupWise 6. These include: Nexic Symphony (signatures, archiving, rules, templates and other utilities), GroupLink ContactWise (contact management), Tobit Software FaxWare (fax gateway), MetaStorm InfoWise (information management), PUMATECH Intellisync (PDA synchronization), Toffa SyncWise (Palm synchronization), 2nd C Utilities (document management)
Manageability	
Out-of-the-box Design	GroupWise is designed for out-of-the-box installation without the need for dedicated IS
Manage from Single Point	eDirectory allows single point of administration with less overhead
Reduced Administration	Manage multiple, non-integrated systems with less staff
3rd-Party Solutions	
Administration Tools	emailXtras.com (activity monitoring), Nexic
Address Books	GroupLink (ContactWise*), Nexic, Nehal
Calendar Printing	Nexic
Consulting/Training	2ndC, @dws
Custom Development	Nexic
Document Management	2nd C (DocuWise*)
Fax Integration	Biscom, Tobit
GroupWise Monitoring	EmailXtras.com, NetPro
Knowledge Management	2ndC, MetaStorm
PDA Synchronization	Advansys, Puma Technology, Syclo, Toffa
Workflow	Jetform, MetaStorm

HOW GROUPWISE WORKS

GroupWise operates using a collection of distributable agents and one or more clients.

A typical GroupWise implementation consists of the following components:

- **Message Store**—a multi-file database that is the repository for all messages, documents, attachments and other GroupWise elements such as tasks, calendars and address lists.
- **Post Office Agent (POA)**—Post Office Agents handle all traffic within a particular post office. Message routing, calendar coordination, and general information sharing between users of the same post office are functions of the POA. Only one POA is needed for a GroupWise implementation but for distributed networks or companies with multiple offices, there may be a POA at each location.
- **Message Transfer Agent (MTA)**—The Message Transfer Agent coordinates all traffic between different post offices.
- **Domain**—The domain organizes post offices into a logical grouping for addressing and routing purposes. The domain information is entered and stored in NDS eDirectory. The GroupWise domain acts as an intermediary taking information from eDirectory and distributing it to post offices.
- **NDS eDirectory**—eDirectory is required as part of any GroupWise implementation. Users defined in eDirectory may become GroupWise users and the eDirectory management interface (ConsoleOne) is used to administer GroupWise.
- **GroupWise Internet Access Agent (GWIA)**—The GroupWise Internet Access Agent allows the MTA to interact with the Internet via



SMTP and MIME. This enables GroupWise send and receive Internet mail with any standard Internet post office.

- **WebAccess Agent**—The GroupWise WebAccess agent, in conjunction with a Web server, enables users to access and manipulate any GroupWise message element using a standard Web browser from any point on the Internet or Web-enabled wireless device.
- **Clients**—GroupWise can be accessed via workstation clients (Windows, Mac, Unix) or from Web or wireless clients.

A basic GroupWise system consists of a single domain with one post office, a document library, and one or more users. Each GroupWise user has a mailbox in the post office; users run a GroupWise client to access their mailbox and to send mail to and receive mail from other users. The GroupWise agents deliver messages between users' mailboxes in a post office, and route messages between post offices in a multiple post office system.

INSTALLATION OVERVIEW

GroupWise is administered through NDS eDirectory, Novell's directory service. All components such as domains, post offices, libraries, and agents as well as all users' GroupWise accounts, are configured through objects in eDirectory. eDirectory must be installed in that environment that GroupWise will be servicing.

GroupWise comes with installation wizards for both express and custom installation. The Express Install largely automates the following processes when installing on NetWare:

- Installs GroupWise Administrator and its supporting programs for access and use by NDS eDirectory. GroupWise Administrator is a snapin to ConsoleOne that enables the GroupWise system to be managed in ConsoleOne.
- Installs the GroupWise software to pre-defined directories on the selected server.
- Creates GroupWise domain, post office, library, and agent objects in eDirectory.
- Starts the Message Transfer Agent (MTA) and Post Office Agent (POA) NLMs (NetWare Loadable Modules).

Once Express installation is finished, users can easily be added to the post office and they are ready to start using GroupWise.

Express Install requires the following:

- Install GroupWise to a single-partition eDirectory tree that does not already have GroupWise objects in it.
- Install all GroupWise files to a server located in the eDirectory tree.

Custom Installation is required if the eDirectory tree has multiple partitions, if users in multiple trees need to use GroupWise, or if GroupWise is to be run on a non-NetWare server.

Installing agents on NT is simple using the GroupWise Setup Installation Advisor. Simply select the Windows NT option when specifying an agent platform, enter an installation path, and



follow the prompts. An eDirectory tree must be selected which can either be running on NetWare or NT.

For a detailed description of the GroupWise install process, see the *GroupWise Installation Guide*.

ABOUT NOVELL

Novell, Inc. (NASDAQ:NOVL) is the world's leading provider of directory-enabled networking software. Novell solutions give businesses total control of their private networks and the Internet, simplifying the management of user access and identity. Novell's worldwide channel, consulting, developer, education and technical support programs are the most extensive in the network computing industry.

For information on Novell's complete range of products and services, contact Novell's Customer Response Center at (888) 321-4CRC (4272), or visit Novell's Web site at <http://www.novell.com>. Press may access Novell announcements and company information on the World Wide Web at <http://www.novell.com/pressroom>. Novell, NetWare, NDS and Novell Directory Services are registered trademarks, and NDS eDirectory and NetWare Management Portal are trademarks of Novell, Inc. in the United States and other countries. All third-party trademarks are the property of their respective owners.

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GLOSSARY

ConsoleOne—Java-based console management interface for all of Novell's products. ZFS can only be managed through ConsoleOne.

DirXML—Novell product that gives NDS the ability to replicate data to external application data stores and to NDS itself in a filtered fashion. DirXML servers can expose the filtered set of NDS data through LDAP, XML, or any application data format.

eDirectory—Novell's latest generation directory service designed to accommodate eBusinesses and the Internet.

GWIA—GroupWise Internet Access agent is the process that interfaces between the GroupWise message store and the Internet. Through GWIA, GroupWise users are able to seamlessly communicate over the Internet.

HTML—HyperText Markup Language, the document format used on the World Wide Web.

Indexes—In NDS/eDirectory, indexes are lists of all or portions of a directory that are available for high speed lookup or quick access by applications.

MTA (Message Transfer Agent)—The process that coordinates traffic between different GroupWise post offices.

NDS—Novell Directory Service, the industry's first true directory service introduced in 1993.

NLM (NetWare Loadable Module)—NLMs are individual processes or applications that run on NetWare. GroupWise agents run as NLMs on NetWare.

Policy Engine—The NDS enabled mechanism that enforces established rules and regulations.

POA (Post Office Agent)—Agent that handles all traffic within a particular GroupWise post office.

Replica—Replicas are 'copies' of a directory or portions of a directory. Replicas are strategically distributed reduce latency in directory access and lookup.

SSL—Secure Socket Layer is the leading security protocol on the Internet. It enables the establishment of a secure connection between the browser and a Web server through the use of public and secret keys.

WebAccess Agent—GroupWise agent that enables users to access any GroupWise message elements using a standard Web browser.

XML—Extensible Meta Language, an open standard for describing data and defining data elements on a Web page and business-to-business documents.

XSL—XML Stylesheet Language is a style sheet format for XML documents.

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