



Software602 Groupware Server 6.0

Technical Whitepaper

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Introduction

Overview

Software602 Groupware Server is a secure messaging solution with web collaboration that contains SMTP/POP3/IMAP/LDAP/XMPP services along with integrated anti-virus & advanced anti-spam protection. Native Microsoft Outlook support provides synchronization of contacts, tasks, and calendar items. Here is a quick feature list:

- Integrated Web Client
- Outlook Connector
- Shared Calendar
- Active Directory Sync
- SMTP / POP3 / IMAP Server
- Advanced SMTP Protection
- Bayesian Anti-spam
- BitDefender Anti-virus
- Commtouch Real-time Spam Filter
- S/MIME Support
- Administration from Web
- Shared Contacts
- vCard & iCal Support
- LDAP and LDAPS Server
- Jabber/XMPP Instant Message Server
- Full-text Search
- E-mail & IM Archiving
- SQL Data Storage
- Automatic Backups
- FTP and WebDAV Access

How it works

Software602 Groupware Server 6.0 can be installed and configured in many different ways to provide many different network services. The diagram below shows the implementation of Software602 Groupware Server within a network topology.



System Requirements

The recommended configuration for Software602 Groupware Server is a dual-core machine with Windows® 2008 Server and 2GB of RAM. Below are the minimum requirements:

Operating Systems

- Windows® 2000 Professional
- Windows® 2000 Server
- Windows® XP Professional (x86 and x64)
- Windows® Vista (x86 and x64)
- Windows® Server 2003 (x86 and x64)
- Windows® Server 2008 (x86 and x64)

Memory and Hard Drive Space

- 1024 MB of RAM
- 200 MB for installation
- Additional storage space for user mailboxes, e-mail archive, full-text index, etc.

Server Requirements

- Microsoft® .NET Framework 2.0 for Windows® 2000
- Microsoft® .NET Framework 3.5 for Windows® XP/Vista/2003/2008
- Microsoft® Internet Information Services 5.0 or higher

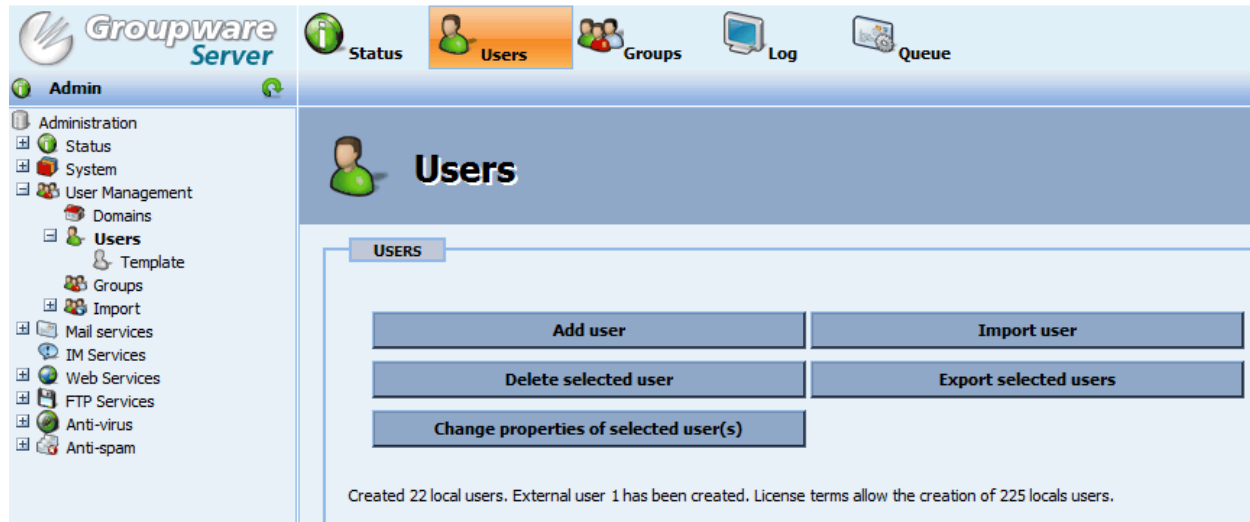
Client Requirements

- Microsoft® Internet Explorer 6.0 or higher
- Mozilla® Firefox® 2.0 or higher

Client Access Options

- Outlook Connector requires Microsoft® Outlook 2002 or higher
- Windows® SMAPI extension requires Windows® 2000 or higher

User Management



Users consist of local users and external users (e.g. a customer) that can login to the Groupware Client. They are allowed access to public folders in Groupware Documents and do not need to be listed within the Local User list.

Within user details, it is possible to add the user to a system groups (for permissions) or a user group (for group management). It is also possible to modify contact information, determine used space, change the password and e-mail settings.

Users can easily be created or deleted and rights can be granted. Rights such as: distributing unsorted e-mail, sending e-mail to the Internet, and disk space quota limits can be restricted by the administrator. Import users from an LDAP server or synchronize users from Active Directory.

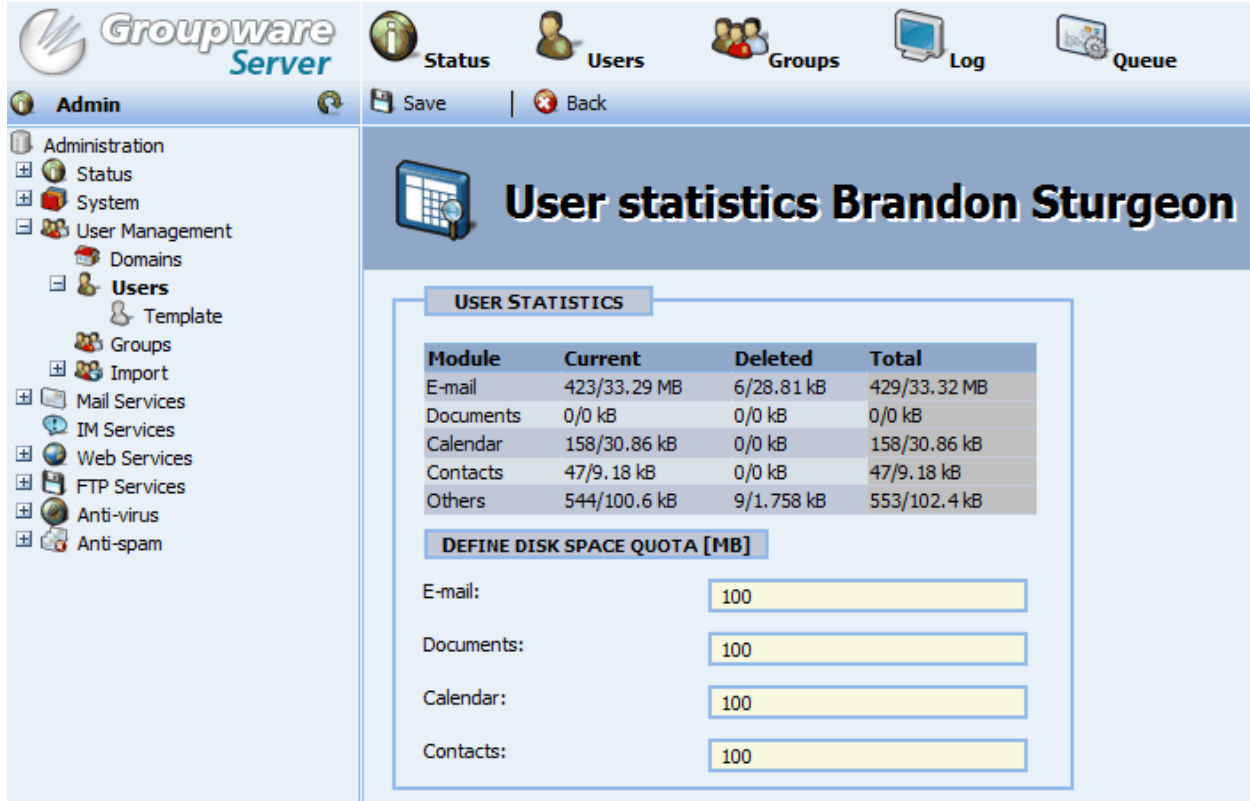
Aliases are used if a user needs to receive e-mail for more than one recipient. If the domain name is company.com and the user BOB is created, then BOB will automatically receive e-mail for bob@company.com. If BOB wants to receive e-mail for sales@company.com BOB will need the alias 'sales', so he will receive e-mail addressed to both accounts. Aliases are also used to receive e-mail for a different domain. If BOB wants to receive e-mail for bob@firm.com, enter bob@firm.com for the alias.

User Groups

Software602 Groupware Server supports two types of groups: user groups (that are created by the user) and system groups (built-in groups). System groups are used to define access to Groupware services (Instant Messaging users, Mail users, LDAP users, etc.) and access permissions to shared folders (Administrators, Power Users, etc.)

Template Support

Easily define a template for disk space quotas, group membership, and other user properties. This will allow the creation of new users in a unified manner.



The screenshot shows the Groupware Server Admin interface. The left sidebar contains a navigation menu with categories like Administration, System, User Management, Users, Groups, Mail Services, IM Services, Web Services, FTP Services, Anti-virus, and Anti-spam. The main content area is titled "User statistics Brandon Sturgeon" and contains a table of user statistics and a section for defining disk space quotas.

Module	Current	Deleted	Total
E-mail	423/33.29 MB	6/28.81 kB	429/33.32 MB
Documents	0/0 kB	0/0 kB	0/0 kB
Calendar	158/30.86 kB	0/0 kB	158/30.86 kB
Contacts	47/9.18 kB	0/0 kB	47/9.18 kB
Others	544/100.6 kB	9/1.758 kB	553/102.4 kB

DEFINE DISK SPACE QUOTA [MB]

E-mail:

Documents:

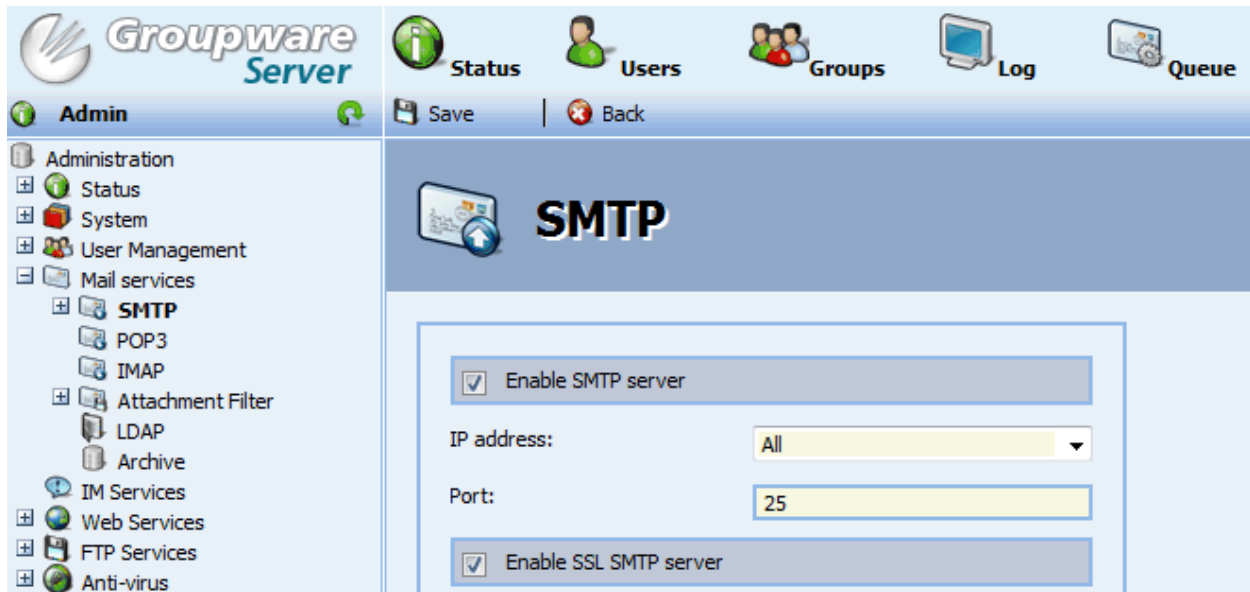
Calendar:

Contacts:

Active Directory Synchronization

Synchronization with Active Directory provides the ability to bind a user from the directory to Groupware. The selected users will be loaded into Groupware and these users will login to Groupware using their Active Directory password.

Messaging Services



SMTP / POP3 / IMAP Server

The multi-threaded SMTP/SSL SMTP server can provide the performance that today's business networks require. The SMTP server can send e-mail to an ISP's SMTP server or directly via MX Records. ETRN, ATRN, SMTP/POP3 authentication and ESMTP service is also supported. SMTP relay can be protected by the IP Filter and the option for requiring IMAP/POP3 access before sending e-mail can be enabled for further protection.

The integrated POP3/ SSL POP3 server allows users to collect e-mail from their Software602 Groupware Server mailbox. It provides POP3 e-mail collection and distribution. This function will automatically download and sort e-mail from remote POP3 mailboxes into local mailboxes if a shared POP3 mailbox has been aliased to a domain name from the ISP. It can also be setup to download individual user's personal mailboxes directly from the ISP and distribute them to their local mailbox. Download scheduling is available as well as the option for leaving messages on the ISP's POP3 server to allow collection from multiple locations.

The IMAP/SSL IMAP server provides true client/server e-mail access. The current version, IMAP version 4 revision 1 (IMAP4rev1), is defined by RFC 3501. Secure IMAP is supported using the same protocol operated within a secure SSL channel (SSL IMAP).

Advanced Anti-spam Services

Junk e-mail is an ever-increasing problem and is growing daily. Various studies show that **over 90%** of all e-mail traffic is junk! Software602 Groupware Server uses the latest technology to block unsolicited e-mail and prevent your system from abuse. Multiple protection options include: Commtouch real-time filter, SMTP security rules, DNSBL lookup service, Bayesian content filtering, Blacklist, Whitelist and IP filtering.

Real-time filter

The real-time filter is based on [Commtouch's Anti-spam](#) service. Commtouch analyzes billions of transactions in real-time to identify new spam, malware and zombie outbreaks as they are initiated. Real-time messaging security based on Commtouch Recurrent Pattern Detection (RPD)[™] technology provides a maintenance-free solution that works out-of-the-box.

SMTP security

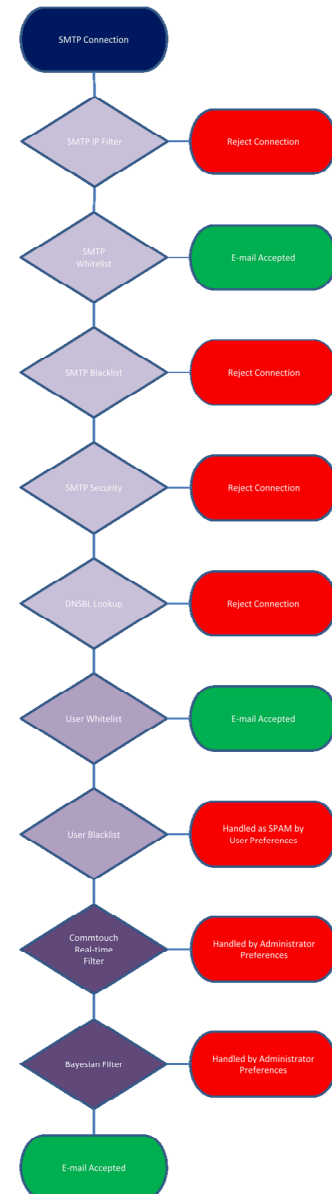
Software602 Groupware Server includes many SMTP protection measures to prevent abuse and stop spam. Options to throttle SMTP connections will prevent denial-of-service (DoS) attacks and directory harvest attacks. Reverse DNS will protect against spam from non-existent e-mail domain names. SMTP command monitoring options can detect junk messages if too many recipients are listed or too many commands fail. Messages can also be controlled inbound and outbound based on file size.

DNS-BL lookup service

With DNSBL, Groupware Server can detect and reject spam that comes from servers known (or believed) to send spam. This is done by taking the IP address of the remote server, converting it to a domain name using the ip4r format (1.2.3.4 becomes 4.3.2.1.lookupzone.com), and seeing if that lookup exists.

Bayesian filter

The Bayesian filter will automatically analyze and rate the content of each processed message. The pieces of text that occur often in a junk e-mail can be identified and rated. The main advantage is that the filtering process is self-healing, meaning that when the content of junk e-mail changes, so do the abilities to filter it. Administrators & users can easily teach the filter anytime unwanted e-mail is received. If a message is determined to be junk, Software602 Groupware Server can automatically delete the message, deliver it to the user or send it to special Anti-spam account.



Technical description of the Bayesian filter: <http://spambayes.sourceforge.net/>

SMTP Blacklist & Whitelist

This form of anti-spam protection provides rejection of known hosts/senders the user does not want to receive e-mail from (blacklist) and hosts/senders to ALWAYS accept e-mail from (whitelist). An Administrator manages the global (server-based) lists and each user directly controls their own personal lists.

SMTP IP Filter

The integrated SMTP IP Filter provides an easy way to allow what network(s) can relay e-mail through the mail server. This will eliminate the abuse that can be caused by others using the SMTP server as an open relay.

Anti-virus Scan

Software602 Groupware Server includes BitDefender anti-virus technology that scans all messages and attachments, local server files, and Groupware objects and documents for malicious viruses and worms at the server. The Groupware Client also includes an ActiveX component to provide scanning of client files from within Microsoft Internet Explorer.

The virus engine has been certified by ICSA Labs and West Coast Labs. It has also received multiple VB 100% detection awards. It provides exceptional scanning speed and detection accuracy, which is critical to ensure fast & secure message delivery.

All infected parts of an e-mail can be automatically removed, an e-mail notification to the recipient/sender can be sent and the entire message can be delivered to a special account for later review. Incoming and outgoing rules can be defined separately for added control. E-mail can be certified virus free by a custom signature. The update scheduler automatically updates anti-virus signatures without the need of administrator intervention.



The screenshot displays the Groupware Server Admin interface. The top navigation bar includes icons for Status, Users, Groups, Log, and Queue. Below this is a secondary bar with Save and Back buttons. The left sidebar contains a tree view with categories like Administration, Mail services, IM Services, Web Services, FTP Services, and Anti-virus. The Anti-virus section is expanded, showing sub-items: Incoming Messages, Outgoing Messages, Message Certification, External Scan, Internal Scan, Update, and Anti-spam. The main content area is titled "Anti-virus settings" and contains the following information:

- Last update: 6/27/2008 10:57:22 AM
- Anti-virus subscription expiration: 10/24/2008 11:59:59 PM
- Enable anti-virus scanning of delivered e-mail messages
- Treat suspected messages as infected
- Enable External Scan (anti-virus scanning of server files)

Attachment Filter

Incoming and outgoing messages can include attached files. It is possible to block message attachments with specific file extensions. Messages including these attachment extensions can be blocked or delivered with the offending attachment removed.

LDAP Server

The LDAP (Lightweight Directory Access Protocol) server allows clients to find contact information (e-mail addresses) of other users from the Software602 Groupware Server server. Searching is generally performed by the e-mail client (e.g. Outlook Express, Thunderbird). LDAP over SSL (LDAPS) is also supported.

Instant Messaging Services



The screenshot shows the Groupware Server Admin interface. The top navigation bar includes links for Status, Users, Groups, Log, and Queue. The left sidebar contains a tree view of administration options, with 'IM Services' selected. The main content area is titled 'IM Services' and contains the following configuration options:

- IM SERVICES**
- Text description: eXtensible Messaging and Presence Protocol (XMPP) is an open, XML-inspired protocol for near real time, extensible instant messaging (IM) and presence information. Unlike most instant messaging protocols, XMPP is based on open standards. Like e-mail, it is an open system where anyone who has a domain name and a suitable Internet connection can run their own Jabber server and talk to users on other servers. You can obtain client software for the IM server, [here](#).
- Enable IM server
- Fully Qualified Domain Name:

Jabber/XMPP Server

eXtensible Messaging and Presence Protocol (XMPP) is an open, XML-inspired protocol for near real time, extensible instant messaging (IM) and presence information. Unlike most instant messaging protocols, XMPP is based on open standards. Like e-mail, it is an open system where anyone who has a domain name and a suitable Internet connection can run their own Jabber server and talk to users on other servers.

Instant Message Archive

Never lose important information from an instant message again. Always have full-text search access from any web browser to your chat logs.

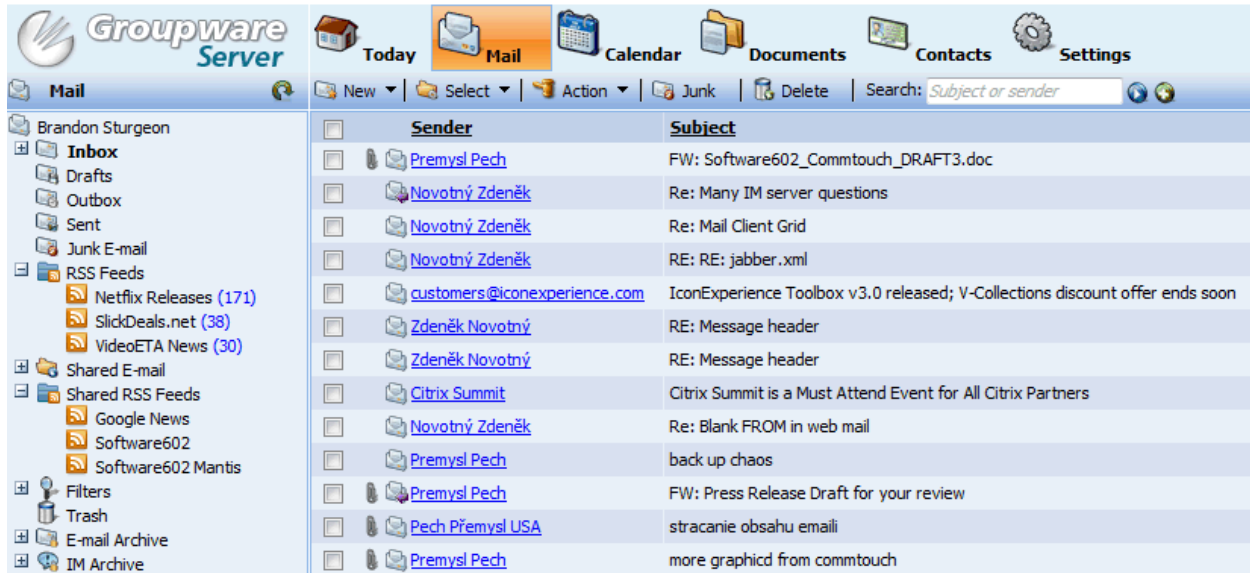
Client Support

The IM server has been tested with the following Instant Message clients: Psi, Miranda, Qip, and Pidgin. You can obtain client software for the IM server, [here](#).

Collaboration and Sharing

Web Client

The included web client integrates e-mail, RSS feeds, contacts, tasks, calendar, and document sharing into a rich browser-based interface. Access all groupware functionality from anywhere using a standard web browser. The client works in Microsoft Internet Explorer 6 or higher and Mozilla Firefox 2.0 or higher.



Calendar Tasks and Events

Manage your private calendar or share your calendar information with others. When an event or appointment is due, a pop-up will remind you in the web client. Therefore, no important event is ever missed, even when connected from a remote location. Easily check free/busy availability when you need to schedule a meeting with your colleagues.

Shared Contacts




Public contacts are accessible by anyone in the organization, private contacts are managed by the user, and shared contacts can be controlled with user & group permissions.

Document Sharing with WebDAV

Easily create, share, and publish documents online. Access the document storage from a standard web browser, FTP / FTPS client, or WebDAV web folder.


Full-text Search

The SQL based full-text search engine can quickly find any e-mail, instant message, attachment, shared contact, calendar task/event or document object. Additional search options include searching by owner, date created/ modified and file size.

 Search	with all of the words	<input type="text"/>	<input type="button" value="Search"/> <input checked="" type="checkbox"/> Show Context
	with the exact phrase	<input type="text"/>	
	with at least one of the words	<input type="text"/>	
	without the words	<input type="text"/>	
 Owner		--all-- <input type="button" value="v"/>	
 Date	<input checked="" type="radio"/> All	<input type="radio"/> Last week <input type="radio"/> Last month <input type="radio"/> Last year	<input type="radio"/> Custom <input type="text" value="modified"/> <input type="button" value="v"/> from <input type="text"/> <input type="button" value="calendar"/> to <input type="text"/> <input type="button" value="calendar"/>
	<input checked="" type="radio"/> All	<input type="radio"/> Small (less than 100 KB) <input type="radio"/> Medium (less than 1 MB) <input type="radio"/> Large (greater than 1 MB)	<input type="radio"/> Exactly <input type="text" value="at least"/> <input type="button" value="v"/> <input type="text"/> kB

E-mail Archive

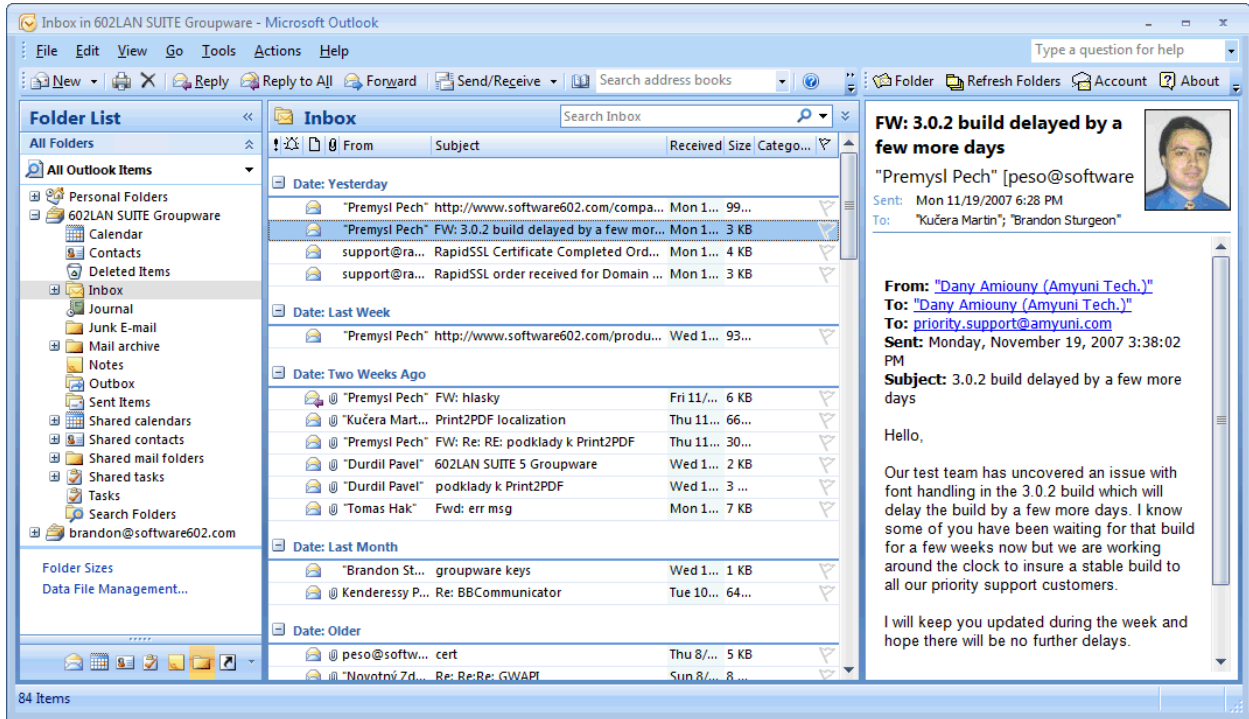
Archive messages sent and received by the Software602 Groupware Server. This read-only archive is compressed and encrypted. Different archive settings can be defined for incoming messages and outgoing messages. A limit on attachment size is also available.

 **Archive**

INCOMING MESSAGES:
 Do not archive
 Subjects only
 Messages only
 Messages and attachments up to:
 All
 Registered messages only
 Only archive messages that are classified as Not Junk

Outlook Connector

The Outlook Connector provides real-time two-way synchronization of mail, contacts, tasks, and calendar events between Outlook and the Software602 Groupware Server server. The connector supports Microsoft Outlook 2002, 2003 and 2007.



Conclusion

Organizations can leverage the power of the Internet without fear. Increase employee productivity by reducing spam and eliminate viruses. Easily implement a complete communication security strategy with this all-in-one collaboration application.

For more information, visit the Software602 Groupware Server web site at:

<http://www.software602.com/products/groupware/>

About Software602

Based in Jacksonville, Florida (USA), Software602, Inc. is an international software vendor providing technology for business with customers in over 200 countries. Our most recognized products are Software602 Groupware Server, a secure messaging solution with web collaboration that contains SMTP/IMAP/LDAP services and integrated anti-virus & anti-spam protection, along with Print2PDF Server Edition, a network shareable PDF converter and Print2PDF Conversion Server, a high-performance PDF generator server.

For more information, visit:

<http://www.software602.com/>

Software602, Inc.
500 Osceola Avenue
Jacksonville Beach, FL 32250
Toll-free: (888) 468-6602
Phone: (904) 642-5400
Fax: (904) 565-6024