



602LAN SUITE 5.0 Groupware

Technical Whitepaper

Table of Contents

Table of Contents	2
Introduction	3
Overview	3
How it works	3
System Requirements.....	4
User Management	5
User Groups.....	5
Active Directory Synchronization	5
Messaging Services	6
SMTP / POP3 / IMAP Server	6
Advanced Anti-spam Services	7
Anti-virus Scan.....	8
Attachment Filter	8
LDAP Server	8
Internet Sharing	9
HTTP Proxy	9
Anti-virus Scan.....	9
Content Filter	9
Whitelist and Blacklist Support.....	9
Collaboration and Sharing.....	10
Web Client.....	10
Calendar Tasks and Events.....	10
Shared Contacts	10
Document Sharing with WebDAV	10
Full-text Search.....	11
E-mail Archive.....	11
Outlook Connector	12
Conclusion	13
About Software602.....	13

Introduction

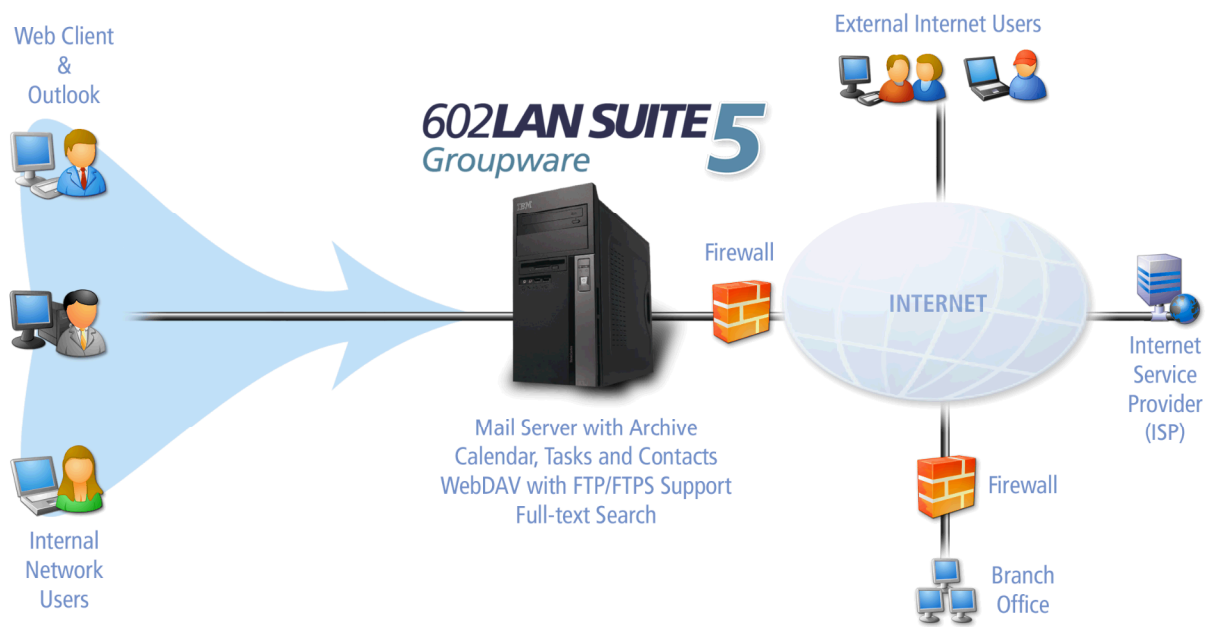
Overview

602LAN SUITE Groupware is a secure messaging solution with web collaboration that contains SMTP/POP3/IMAP/LDAP services along with integrated anti-virus & advanced anti-spam protection. Along with native Outlook support that 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
- FTP and WebDAV Access
- Advanced SMTP Protection
- Bayesian Anti-spam
- BitDefender Anti-virus
- S/MIME Support
- Administration from Web
- Thunderbird Connector
- Shared Contacts
- vCard & iCal Support
- LDAP and LDAPS Server
- Full-text Search
- E-mail Archiving
- SQL Data Storage
- Automatic Backups
- Fax Services

How it works

602LAN SUITE 5.0 Groupware can be installed and configured in many different ways to provide many different network services. The diagram below shows the implementation of 602LAN SUITE Groupware within a network topology.



System Requirements

The recommended system configuration for 602LAN SUITE Groupware is a dual-core machine with Windows® 2003 Server and 1GB of RAM. Below are the minimum requirements:

Operating Systems

- Windows® 2000 Professional
- Windows® 2000 Server
- Windows® XP Professional
- Windows® XP Professional x64 Edition
- Windows® Vista
- Windows® Vista x64 Edition
- Windows® Server 2003
- Windows® Server 2003 x64 Edition

Memory and Hard Drive Space

- 512 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 1.1
- Microsoft® .NET Framework 1.1 Service Pack 1
- Microsoft® Internet Information Services 5.0 or higher in 32-bit mode (optional)

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
- XPI Plug-in for Mozilla® Thunderbird 2.0 or higher
- Windows® taskbar notification application (Groupware InfoPanel)

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 change e-mail and fax settings.

Users can easily be created or deleted and rights can be granted. Rights such as: sending and receiving faxes, distributing unsorted e-mail, sending e-mail to the Internet, proxy access, and disk space quota limits can be restricted by the administrator. Automatic Fax distribution by Fax ID is supported and multiple e-mail aliases can be setup for each mailbox. 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.

Fax routes allow users to receive faxes based upon the fax identification. Example: A fax machine's identification is 'Acme Company', the user BOB has Acme Company for 'Route faxes with the following Fax ID(s) to this user'. So, when Acme Company sends a fax, 602LAN SUITE will realize that the fax should go to BOB.

User Groups

602LAN SUITE Groupware 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 (Proxy users, Internet mail users, LDAP users, etc.) and access permissions to shared folders (Administrators, Power Users, etc.)

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

The screenshot displays the 602LAN SUITE Groupware Admin interface. The top navigation bar includes icons for Status, Users, Groups, Console, and Queue. Below this is a secondary bar with 'Admin', 'Save', and 'Back' options. A left-hand navigation tree lists various administration tasks, with 'SMTP' selected under the 'E-mail' category. The main content area is titled 'SMTP' and contains a section for 'SMTP SERVER SETTINGS'. This section includes two sub-sections: 'Enable SMTP server' and 'Enable SSL SMTP server'. Each sub-section has a checked checkbox, an 'IP address' dropdown menu set to 'All', and a 'Port' text input field. The first sub-section has a port of '25', and the second has a port of '465'.

SMTP / POP3 / IMAP Server

The multi-threaded 602LAN SUITE Groupware SMTP/SSL SMTP server can fit into any network infrastructure and 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 602LAN SUITE Groupware 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. Scheduling can be performed every minute or at predefined times. The option for leaving messages on the ISP's POP3 server is available to allow e-mail 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 the number of junk e-mail is growing daily. Various studies show that **over 70%** of all e-mail traffic is junk! 602LAN SUITE Groupware uses the latest technology to block unsolicited e-mail and prevent your system from being abused as an open relay. Multiple protection options include SMTP security, DNS-BL lookup services, Bayesian content filtering, Blacklist & Whitelist and IP filtering.

SMTP security

602LAN SUITE Groupware 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, 602LAN SUITE Groupware can detect and reject spam e-mail that comes from e-mail servers known (or believed) to send spam. This is done by taking the IP address of the remote mail 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

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, 602LAN SUITE Groupware 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

602LAN SUITE Groupware includes BitDefender anti-virus technology that scans all incoming and outgoing e-mail messages and attachments for malicious viruses and worms at the server before they reach a user mailbox or are relayed through the SMTP server. The virus engine has been certified by ICASA 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. One-year subscription to anti-virus updates is included to ensure up-to-date protection. The update scheduler automatically updates anti-virus signatures without the need of administrator intervention.



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 602LAN SUITE Groupware server. Searching is generally performed by the e-mail client (e.g. Outlook Express, Thunderbird). LDAP over SSL (LDAPS) is also supported.

Internet Sharing

HTTP Proxy

For controlled access to the Internet, 602LAN SUITE Groupware implements application-level proxies to provide the highest level of access control. All application proxy ports are fully configurable to allow easy administrator integration into any network environment.

602LAN SUITE Groupware provides the following application-level proxies:

- SOCKS v4 & v5
- HTTP/HTTPS & FTP
- Telnet
- RealAudio (PNA)

Organizations wanting to share Internet connectivity to all networked workstations will be faced with concerns over Internet bandwidth. With the use of a proxy cache, web content can be stored for use by the same user requesting the same information in the time period allotted by the cache. The cache can be configured to clean itself every hour, specify how much space it occupies (in KB), and how objects will be cached. Dynamic pages and HTTP meta commands will dictate how the cache will function so users will get the latest content.

Anti-virus Scan

The BitDefender anti-virus engine can be used to scan all traffic through the HTTP proxy. This will prevent users from downloading malicious files from the Internet.

Content Filter

The Content Filter can filter 22 categories of objectionable and inappropriate web content providing you with complete Internet access control. Increase productivity, reduce recreational web surfing and limit legal liability associated with pornography and illegal file downloads. The content filter is powered by PureSight, based on proprietary Active Content Recognition (ACR) technology. The ACR engine recognizes different types of parameters and takes into account the words used in the web page, the basic layout and format of the page.

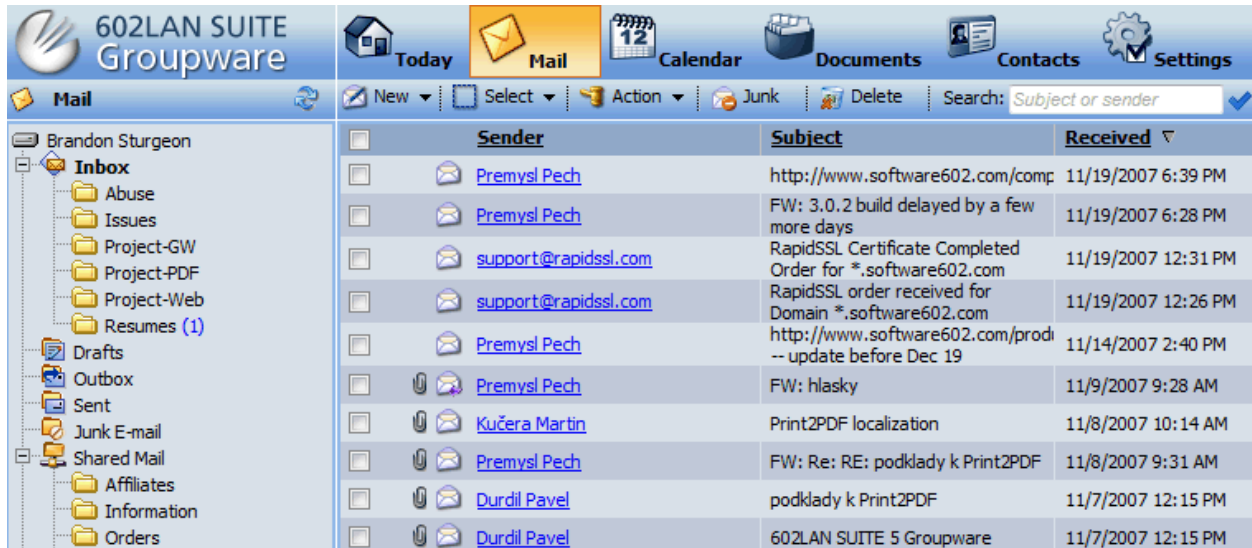
Whitelist and Blacklist Support

Take control of Internet access provided to users via the proxy server by specifying what sites are accessible. Allow users to access only specific web sites related to your business or restrict access to sites with inappropriate content.

Collaboration and Sharing

Web Client

The included web client integrates e-mail, 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.

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, 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--	
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"/> from <input type="text"/> to <input type="text"/>
Size	<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="text"/> kB

E-mail Archive

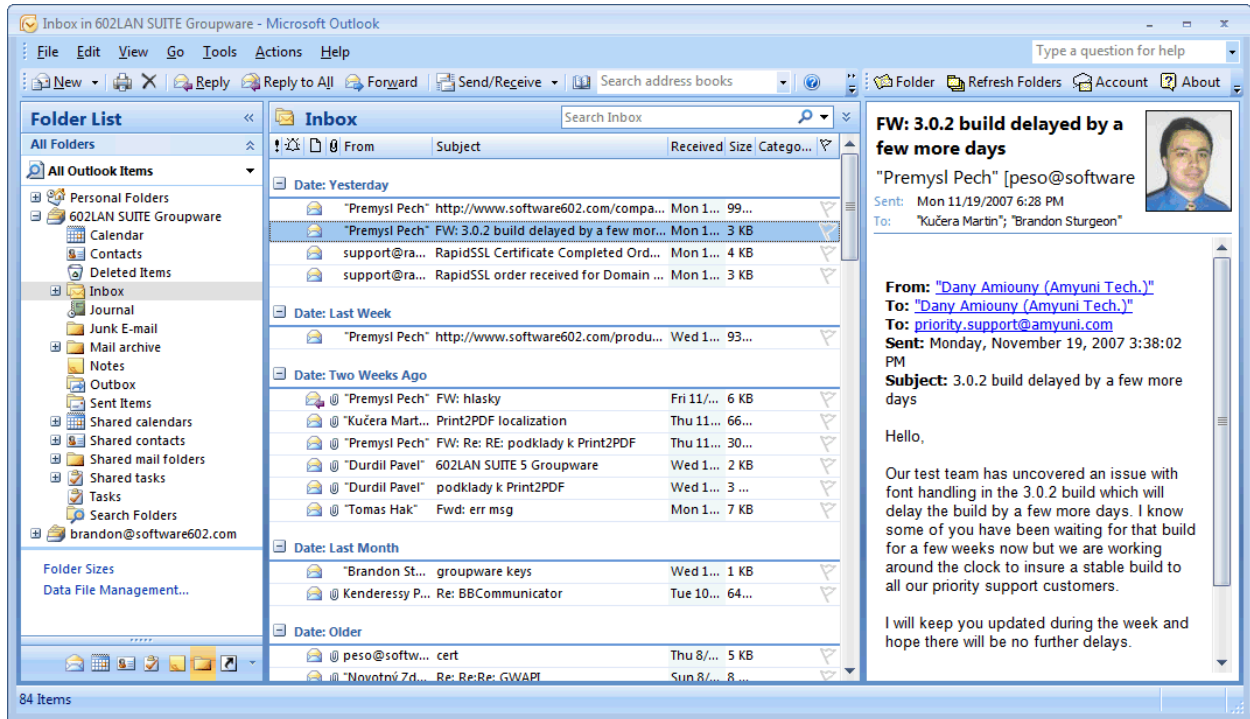
Archive messages sent and received by the 602LAN SUITE Groupware server. This read-only archive is compressed and encrypted. Different archive settings can be defined for incoming messages and outgoing messages. A limit on attachment size is also available.

The screenshot shows the 602LAN SUITE Groupware interface. The top navigation bar includes icons for Today, Mail, Calendar, Documents, Contacts, and Settings. The Mail folder is selected, showing a list of messages. The left sidebar displays a tree view of folders, including Filters, Attachments, Brandon Spam, Company Archive, and Trash. The Company Archive folder is expanded, showing a list of messages from various senders and recipients, including Premysl Pech, estore@software602.com, and Brandon Sturgeon. The main pane displays a list of messages with columns for Sender/Recipient, Subject, and Received/Sent.

Sender/Recipient	Subject	Received/Sent
Premysl Pech	RE: FW: SSL Certificate Due To Expire for SECURE.SOFTWARE602.COM	11/19/2007 9:31 A
estore@software602.com	Estore Maintenance for 11/19/2007 7:00:20 AM	11/19/2007 6:59 A
estore@software602.com	Estore Maintenance for 11/18/2007 7:00:20 AM	11/18/2007 6:59 A
estore@software602.com	Estore Maintenance for 11/17/2007 7:00:19 AM	11/17/2007 6:59 A
Premysl Pech	RE: FW: hlasky	11/16/2007 1:13 F
peso@software602.com	Event: Wendy doctor appt. 11/26/2007 9:00:00 AM	11/16/2007 12:00
Mantis Bug Tracker	[602LAN SUITE Groupware 0000157]: Fix strings under Database Repair	11/16/2007 10:50
estore@software602.com	Estore Maintenance for 11/16/2007 7:00:19 AM	11/16/2007 6:59 A
Premysl Pech	Update: Task: Support Services do 11/30/2007	11/15/2007 5:55 F
Brandon Sturgeon	RE: Re: please check this file	11/15/2007 10:30

Outlook Connector

The Outlook Connector provides real-time two-way synchronization of mail, contacts, tasks, and calendar events between Outlook and the 602LAN SUITE Groupware server. The connector supports Microsoft Outlook 2002, 2003 and 2007.



Conclusion

Organizations can leverage the power of the Internet without fear. Control Internet access, increase employee productivity by reducing spam and eliminate viruses. Easily implement a complete Internet and e-mail security strategy with this all-in-one server application.

For more information, visit the 602LAN SUITE Groupware 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 602LAN SUITE Groupware, a secure messaging solution with web collaboration that contains SMTP/IMAP/LDAP services along with 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