

VANGUARD DATASHEET

Platforms

Windows NT, Windows 2000, Windows XP, Windows Server, Windows Vista, Solaris, Linux (including SELinux), AIX. No special hardware.

Integration

Protects with any other Standards compliant Internet Mail Server – either on another machine (recommended) or the same machine as the current mail service. Simple setup for use with Microsoft Exchange, Lotus Notes, Novel Groupware and GMS. Other servers supported via custom configuration using LDAP, SQL or custom DLLs. Fully automatic user and alias discovery. Cached operation to reduce protected server load. Protects multiple servers\domains spanning multiple machines. Per user mail routing.

- **Windows**
All services operate as Windows Services. Event log used for critical system events. Perfmon for viewing progress. Option to use Windows user database (SAM) accounts for account information including User, Password, Home directory, etc. NT database users have same account options as Vanguard users. Available on single server, PDC or BDC versions of Windows NT Server.
- **Unix**
Option to use standard user accounts & shadow passwords.
- **Services provided**
Provides SMTP, ESMTP, SSMTP, HTTP/FTP Proxy Internet services including SSL, HTTP, HTTPS included on domain or user level.

ANTI-VIRUS

Features

Bi-directional SMTP scanning (inbound/outbound). Dual scanning - Signature based and Zerohour. Disinfection/removal of viruses. Dynamic shared library ensures speed and tight integration.

Messages

Multiple, independent MIME decoders. Scan inline text. Decode TNEF files. Decode ZIP files.

Actions

Return to sender, Reject, Redirect to account, Deliver as normal, Quarantine. Each action additionally has the ability to disinfect or remove the virus from the message. Actions can be set separately at System, Domain and User levels.

Alerts

Optionally alert Postmaster, Sender or recipient, or any combination of these. Alerts can be set separately at both System, Domain and User levels.

Outbreak Protection

Real-time Zero-hour virus scanning provides instant, signature-less protection.

Updates

Signature definition files automatically updated every 15 minutes using Gordano's patented, firewall friendly, update mechanism. There is no interruption to service while the update occurs.

ANTI-SPAM

Content

Recurrent Pattern Detection (RPD) scanning. Scan content for restricted words or phrases and act, Filters support weighting (number of occurrences), Act if message contains score exceeding predefined level, Intelligent character matching, Anti-Spam Update Service (see below) Bayesian filter (at System, Domain and User levels), over 50 message quality checks, Quarantine available to all options, separate domain and system level actions (reject, redirect, discard, deliver to user, deliver to users quarantine folder), Alert postmaster, recipient, sender.

IWF

Internet Watch Foundation URL lists checked in real-time.

Attachments\Content Types

Block by extension or content type, check inside TNEF, check inside ZIP, reject password protected ZIP, reject ZIP within ZIP, reject corrupt ZIP, reject office\OpenDoc packages.

Connection

DNSBL Checks, Allowed IP's, Define Local Clients, Multiple relay options, SMTP authentication, Maximum messages and recipients per remote server, MML Scripts at all protocol stages, Maximum connections allowed per remote server, restrict outbound mail size

Identity

SPF Checks, Verify machine name and fail if no match in DNS. Verify domain of sender and fail if no match, Verify domain of recipient and fail if no match. All may reject, log, discard, deliver or deliver to users quarantine. Validate FROM address for local domains. Require authentication.

AI

Monitor sending IP address, sender and recipient for abnormal activity levels and take action if any anomalies found.

User Level Filters

Integration with system level Zerohour, Bayesian, Scored Word check and Message quality settings. Set to Exclusive, Very high, High, Medium or Low. White list and block list checks.

Bypass Facilities

IP, machine name, sender and receiver bypasses for all checks at System, Domain and User level. Content check bypass by IP, Authenticated user bypass for all checks, Treat IP as authenticated. Relay bypasses. System, Domain and User address book based whitelisting.

Quarantine

System, domain and User quarantine mailboxes. System, Domain and User quarantine reminder emails. Fully customizable quarantine reminder emails. Administrator and user management of quarantine mailboxes. Accept messages, whitelist senders, block senders.False positive/false negative reporting. Quarantine search. Quarantine purge. Automated Bayesian filter training.

ANTI-SPAM UPDATE SERVICE

Maintained by our in house team of engineers, the update service makes use of special honey pot accounts to detect spam. The following items are updated and dynamically presented to customers using our patented firewall friendly delivery mechanism.

Restricted Words

Banned words or phrases

Scored Restricted Words

Weighted words or phrases, ban if pre-defined score reached.

Bayesian

Spam probability checks, user defined probability levels.

Updates

Definition files automatically updated every 15 minutes using Gordano's patented, firewall friendly, update mechanism. There is no interruption to service while the update occurs.

PROXY SERVER

WWW & SSL Proxy

Maximum number files or size in MB. How often to purge. Error page definition. Specify MIME types. Change default page name.

FTP Proxy

Allows proxy of FTP Traffic.

Reverse Proxy

Protects internal web servers and allows chaining of proxies

Authentication

Username and password

Acceleration

Compression of cached files to improve download times to the client.

Security

- **Anti-virus integration**
Full integration with the virus scanner
- **Anti-spam integration**
Specify a list of file and/or mime types that are not allowed
- **Trusted sites**
List of specific sites whose content is trusted at all times
- **Banned Sites**
A list of sites to which connection is disallowed at all times

CONFIGURATION

Port Requirements

All may be changed - granularity is SMTP (in & out), HTTP Proxy, HTTP Configuration. SSL ports configurable for each server.

Disk & Directory Locations

Software may be installed on any disk. Out, Temp, Domain, Log directory, each domain's base directory and User directories may be individually specified. UNC path names may be used.

Security

• Resource Protection

Relay protection may be switched on or off. Maximum number RCPTs may be set. IPs of machines allowed to claim they are from local domains may be specified. Limit maximum SMTP sessions from one remote host. WWW auto timeout. Disable any ESMTP command.. 4 types of ETRN. NTMETRN allows passworded ETRN queue restart from remote system. Limit configuration to specified IP Addresses. Passwords encrypted in Vanguard's database. Limit access by IP address list/range.

• Commercial

Configurable footer may be added to each outbound message. Disallow manuals on GUI. Set SMTP logon message. Messages encrypted during transfer using SSL across all services. Multiple SSL certificates supported. Outbound POST authentication to remote SMTP. Delay in SMTP to prevent address harvesting. X-Authenticated header added if AUTH used. Traceability provided by primary email address included in head of each message. Insert optional "X-Mailer" clause.

• Passwords

Define policy with options: Maximum number times a letter occurs, Minimum length, must have a digit, letter or symbol. Must change password every X days with automatic change after expiration.

Resource Utilization

POST can limit outbound bandwidth used. Ports may be set for SMTP in, SMTP out, DNS, WWW Proxy, WWW Configuration. Number of threads may be set (up to 1000 per service). Connection time per service may be set. Set minimum disk free space before rejecting incoming email (default 10MB).

Tuning

DNS Caching, Expiry, Flush, Max C Name Depth, force UDP/TCP

Technology Supported

COM, ODBC, LDAP, SMTP, ESMTP, RAS, C, C++, C#, .Net, VB, Perl, Java, SAM. ETRN, CFX.

Account Options

Accounts may have any one or more of the following attributes: quarantine mailbox. All messages may be processed by a script before delivery.

• Quarantine Mailbox

Quarantined messages managed by HTTP, accept messages, whitelist senders, block senders. Quarantine reminder email.

• Mailbox

Maximum mailbox size, account size, message set globally, by domain or per user. Default mailbox name may be changed. Bulk load management via Web or CSV file. Full management via CFX

Tags. Multiple folder support. NT SAM users mailbox placed in user's home directory (if set). Define message sent to user at 90% account quota.

- **Script**
Execute MML code to carry out any function. Examples of rotating mail robot in option pack.
- **Aliases**
If allowed, user may define up to 20 aliases for their primary account. Option allowed on a user / domain / global basis.
- **Passwords**
User may change passwords - must know original (disable/enable on user/domain/global basis).
- **Personal Details**
Full details of the user can be stored including Name, Position, Telephone no., Fax no., etc.

User Profiles

Any number of profiles. System wide and domain wide. Options include Account Control, Access, Configuration, Privileges and GUI Preferences.

- **Account Control**
Maximum message size, Maximum inbox size, Maximum account size, Default group membership.
- **Access**
Allow access to email WWW. Allow configuration from anywhere. Password control - automatic expiration every X days, or never.
- **Configuration**
Defines what users with this profile may alter on the messaging system. Options include:., Scripts, Manage message logs, AS and AV. Complete system management. Log management. Management of AS and/or AV for all domains.
- **Privileges**
Defines what the user may alter of their own account. Options include: change passwords, change personal details, add aliases.
- **GUI Preferences**
Sets a different set of GUI display for users with this profile. Options include: background color, title color, font face and size.

Groups

Any number of groups. Secure access to groups. Additional security includes no posting, by password or anyone. Special group "everyone" includes all accounts on the domain. Special group "allusers" includes all accounts on the system.

Mail Delivery

Retry, warning and return time. Specific delivery rules for domains that match a given wild card – allows destination server, port and retry time to be set. View current queues. DNS Cache size, flush and expiry times may be selected. Specific DNS servers may be set (instead of default NT servers).

Rules

- **Default Delivery**
Unknown user action allows messages to be transferred, failed, delivered or rejected when the user account does not exist in a domain.
- **Smart Host**
Define default (MX resolution, warning time, return time) or define rule on a per destination server basis with the following options: destination domain, IP to deliver to, port, password for remote AUTH/ETRN commands.
- **Smart Delivery**
Allow redirection of inbound email to any address based on wildcard RCPT, incoming IP, MAIL, local IP parameters. Options include: Delete message, forward elsewhere, ignore rule, fail with 5xx or 4xx with specific message.
- **IP/Domain Matching**
Wildcard - "*" , "?". Negation. Range masks. Absolute range. Inclusive selections.
- **Regular Expressions**

Domains

- **Multiple Domain support**
Full Domains. Domains may share IP addresses (Virtual Domain), 200 domain aliases per domain. Aliases may be wildcarded.
- **Full & Virtual**
Automatic log of all messages with ZIP. Set maximum accounts. User message on account creation. Default delivery rule. NTSAM users. Message size limits & archiving. Footer text appended to messages.
- **IP Requirements**
One IP per full domain. Virtual domains do not require an IP. ETRN options for queue restart. Advanced flexible IP\port setup available.

Reports

System wide reports include Current Activity, Domain report, Outbound mail queue size (with restart options), listing of undeliverable email. Per domain reports include account report (showing account name, last access time, profile, disk space used and available), Undeliverable mail, Virus scan results.

- **Current Activity**
Shows activity of each session all services showing service, thread id, IP address, status and connection time. Report may be ordered by any field.
- **Domains**
Shows all domains on the system with domain name, IP address, type of domain (full, virtual), date created, number of users, disk space. Report may be ordered by any field. Select domain to see the accounts report.
- **Outbound mail queue size**
Display list of outbound mail updated every 5, 10, 30 or 60 seconds/minutes, with number of messages or queue size. Domain and queue size shown. Report may be ordered by any field.

- **Undeliverable mail**
Display messages that can't be delivered to local domains.
- **Quarantine**
Displays and manages all messages placed in the quarantine folders at system and domain levels. Accept, Forward or Delete quarantined messages.
- **Virus Scan Report**
Report on all virus activity at system and domain levels.
- **Virus List Report**
Queries the virus definition files for particular viruses, supports wildcards. Complete list of viruses covered can be returned.
- **Search Email**
Search logs for all activity for a particular email address over selected time frame.
- **Alerts**
Displays a list of Alerts produced by the main services. Double click on any of the alerts for full description.
- **Accounts**
Display all accounts in any domain with account name, last access time, profile, disk space and percentage allocated disk space used. Report may be ordered by any field.
- **Outbreak reports**
Real-time AS and AV outbreak reports.
- **W3C logging**
Log in standard W3C format.
- **SNMP**
Statistics available via SNMP.

Delegation options

Manage complete system, logs, WWW configuration, Domain level. At domain level allow domain admin control over scripts, message logs, mailboxes. Allow/disallow user access change passwords, change personal details or aliases. Menus may be switched on/off for some users.

Account handling

Derelict accounts may be deleted based on last access or last message delivered date. Bulk addition. Email to all users in a given domain – with same rights as all other users.

Access Control

Users can have the rights to administer domains, system options, support facilities, AS options and manipulate logs independently. Some menus can be switched on and off.

Customer Advertising

Footer may be added to all messages on per-domain basis. Configuration WWW pages may have header, footer, first page and support pages replaced by customer.

ESMTP Options

- **Receipt**
AUTH, VRFY, DSN, Enhanced Status Commands, ETRN (4 options), Size, 8BitMIME, Return Receipt, Pipelining, Restart.
- **Delivery**
AUTH, VRFY, DSN, Enhanced Status Commands, ETRN, Size, 8BitMIME, Pipelining, Restart.
- **SIZE Command**
Option to negotiate message size before an attempt to send the message is made. Stops messages being sent that are too large to be accepted.
- **8BitMIME Command**
Allows all 8-bits of the protocol to be used rather than 7-bits thus offering a saving of 12% bandwidth.
- **Pipelining Command**
Allows all SMTP commands to be put into one packet saving bandwidth and latency.
- **Restart Command**
Allows negotiation of status of message delivery so only those bytes not sent on previous occasions need be delivered subsequently. May dramatically reduce bandwidth requirements.
- **AUTH Command**
Option to require per domain with bypass IP addresses. Define error message. Can use AUTH on outbound connections for authentication.
- **VRFY Command**
Option to allow remote servers to check existence of accounts.
- **DSN Command**
Delivery Status Notification option allows Vanguard to confirm delivery status of messages to sending system.
- **Enhanced Status Commands**
Option to give more information about why a given SMTP Transaction has failed.
- **ETRN Command**
Allows remote delivery queue start up. Passwords available to work on networks with DHCP implemented.
- **AUTH Command**
Option to require per domain with bypass IP addresses. Define error message. Can use AUTH on outbound connections for authentication. X-Authenticated header added if AUTH used.
- **VRFY Command**
Option to allow remote servers to check existence of accounts.

MML Scripts

- **Execution**
Multiple scripts may be executed at each SMTP phase. Scripts may redirect email or reject email. Scripts allow custom filtering for specific requirements to be created dependant on

message content, sending server, receiving domain, sending address, etc. Messages may also be delivered to a script for further processing.

- **Message Delivery**

MML may be used in the following locations during delivery: each SMTP command, Incoming, Outgoing, Delivery, each Domain, each User (delivery - before mail delivered to account, script - deliver message to script).

- **WWW**

Web server allows scripts to be executed on the fly.

Session Management

By IP address, cookies or both. Maximum session time defined globally, domains or per user.

RFC's

- **Compliance**

RFCs 821, 822, 974, 1035, 1123, 1321, 1521, 1652, 1730, 1734, 1741, 1845, 1846, 1854, 1870, 1891, 1893, 1894, 1985, 2034, 2045, 2046, 2142, 2197, 2505, 2554.

- **Over-ride options**

RFC822 header may be enforced. RFC1123 return. Correction of SMTP From: & To: clauses. MSMAil Address fix.

Disaster Recovery

All configuration data may be compressed and emailed at regular intervals to a safe haven for later recovery.

Error handling

Limit number of bad commands accepted from remote host before forcing disconnect. Maximum hop count (default 17)

Error Management

Option to automatically send trap information (MML and CPU) to Gordano for resolution.

Log Management

Message Logs – per domain; delete, compress, email to remote location for archive automatically after given number of days. Search and View.

DLLs

DLLs may be written to receive email for user accounts & domains. Authentication DLL. Vanguard's User Management DLL may be replaced. DLLs allow SMTP behaviour to be controlled. Three DLLs – incoming, outgoing and delivery – may control mail message behaviour. DLL for mail logging. Protocol level SMTP DLL.

Mail Tools Provided

MAIL: User maintenance (add, replace, extract), Lookup A, C NAME and MX records, display statistics, fix email addresses, run MML script, Kick servers, DNS Purge & Dump, Start/Stop individual or all services, sleep, rebuild indexes, dump and reload all configuration information. ADDUSER: add/delete user, add/

delete alias, get/set variable. ADMIN: Allows emergency addition of system administrator account. INSPECTOR: Check accounts on server, delete messages. MONITOR: View protocol level transactions. COM: Allows control of accounts via VB, C++, etc.

Message Correction

Correct Outlook From: & To: Clauses. Adds missing Date: clause. MSMAil Address fix. Convert LF terminated lines to CRLF. Enforce DSN, RFC822Header.

Message Manipulation

Insert optional "X-Mailer" clause. Add footer to all messages (per domain). X-Authenticated added if SMTP AUTH used.

Load Sharing

Split utility provided to split domains across machines. Rules to allow sharing of a domain across unlimited number Vanguard servers.

Configuration

Search (with global, domain & user opt-out). Context sensitive help. Change all post configurations.

ACCESSORY PACK

Contents

Example MML SMTP scripts, Example Event scripts, Example code, Authentication DLL examples, Mailbox Inspector, Domain Conversion, ETRN Client, Domain conversion tools, etc.

PATENTS

Autoport

A method of moving users and their mailboxes from any Internet standards mail server to GMS. Patent No. GB2391649

Maintaining Software & Data

A method of automatically updating and maintaining software. Patent No. GB2374163

Anti-spam filter

A method of verifying the legitimacy of email senders. Patent No. GB2385965

Transitory E-mail Addresses

A method and apparatus of managing e-mails creates transitory or temporary e-mail addresses. Patent No. GB2398399

The above patents are the subject of outstanding patent applications in the US. Other patents have been applied for.

ABOUT GORDANO LTD.

Founded in 1994, Gordano is a well established developer of low-cost, high performance Internet messaging software. Over 54 million accounts are served in more than 25,000 organizations worldwide using the company's flagship products to support business-critical operations.