

Comparison of Mail Servers

Subjects: Others

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This is a comparison of mail servers: mail transfer agents, mail delivery agents, and other computer software that provide e-mail services. Unix based mail servers are built using a number of components because a Unix style environment is, by default, a toolbox operating system. A stock Unix-like server already has internal mail, more traditional ones also come with a full MTA already part of the standard installation. To allow the server to send external emails, an MTA such as Sendmail, Postfix, or Exim is required. Mail is read either through direct access (shell login) or mailbox protocols like POP and IMAP. Unix based MTA software largely acts as enhancement or replacement of the respective system's "native" MTA. Windows servers do not natively implement email. Windows based MTAs therefore have to cover the whole set of email related functionality.

Keywords: e-mail ; email ; computer software

1. Feature Comparison

00000	00000 Server OS support	00000 Features												00000 Storage		00000 Users	
Mail server	Linux/Unix	SMTP	POP3	IMAP	IMAP IDLE	SMTP over TLS	DANE	POP over TLS	IPv6	SSL	Webmail	ActiveSync	Sieve	Database	Filesystem	Other	License
agorum core	Yes	Yes	No	Yes	No	No	No	No	No	Yes	Yes	No	No	Yes	No	No	GPLv2
Apache James	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	?	Yes	No	No	Yes	Yes	Yes	No	ASLv2
Axigen	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Ajax, Basic & Mobile	Yes	Yes	Proprietary, Embedded, Optimized for Email and Groupware	No	Yes	Proprietary (free version: 5 domains, 5 users, 5 groups)
Citadel	Yes	Yes	Yes	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	GPLv3
CommuniGate Pro	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Proprietary (Free for up to 5 users)
Courier Mail Server	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	maildrop	No	maildir	No	GPLv3 ^[1]
Cyrus IMAP	Yes	No	Yes	Yes	Yes	No	?	Yes	Yes	Yes	No	No	Yes	Yes (indexes)	Yes	Yes	4-clause BSD ^[2]
Dovecot	Yes ^[3]	No	Yes	Yes	Yes	No	?	Yes	Yes	Yes	No	No	Yes	Yes	maildir, mbox, dbox	No	Mixed: MIT and LGPL 2.1 ^[4]
Eudora Internet Mail Server	No	Yes	Yes	Yes	?	No	?	No	?	No	No	No	?	No	No	Yes	Proprietary
Exim	Yes	Yes	Dovecot, UJW IMAP	Dovecot, UJW IMAP	Dovecot, UJW IMAP	Yes	Yes ^[5]	No	Yes	Yes	No	No	Yes	Yes	Yes	No	GPLv2+ ^[6]
FirstClass	Yes	Yes	Yes	Yes	?	Yes	?	Yes	?	Yes	Yes	Yes	?	Yes	Yes	Yes	Proprietary
Gordano Messaging Suite	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	?	Yes	Yes	Yes	No	Yes	Yes	Yes	Proprietary

GroupWise	Yes	Yes	Yes	Yes	?	Yes	?	Yes	?	Yes	Yes	Yes	?	Yes	No	No	Proprietary
Halon	Yes	Yes	No	No	No	Yes	Yes ^[7]	No	Yes	Yes	No	No	?	Yes	Yes	Yes	Proprietary
Haraka	Yes	Yes	No	No	No	Yes	?	No	Yes	Yes	No	No	?	Yes	Yes	Yes	MIT
hMailServer	No	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	No	?	Yes	Yes	No	GNU AGPL
IBM Lotus Domino	Yes	Yes	Yes	Yes	?	Yes	?	Yes	Yes	Yes	Yes	Yes	?	Yes	No	No	Proprietary
IceWarp Mail Server	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	No	Proprietary
Ipswitch iMail Server	No	Yes	Yes	Yes	Yes (since v12.2) ^[8]	Yes	?	Yes	?	Yes	Yes	Yes	?	No	Yes	No	Proprietary
Kerio Connect	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Proprietary
Kolab	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	GPLv3
Kopano	Yes	External ^[9]	Yes	Yes	Yes	External ^[9]	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Amazon S3 AGPLv3, paid ^[10]
Mailsite	No	Yes	Yes	Yes	?	Yes	?	Yes	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary
Mailtraq	No	Yes	Yes	Yes	Yes	Yes	?	Yes	?	Yes	Yes	No	?	Yes	Yes	Yes	Proprietary
MDaemon	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Proprietary
Mercury Mail Transport System	No	Yes	Yes	Yes	Yes	Yes	?	Yes	?	Yes	Yes	No	?	No	Yes	No	Proprietary donationware
Microsoft Exchange Server	No	Yes	Yes	Yes	Yes ^[11] (^[12]	Yes	?	Yes	Yes (2007 sp1 onwards) ^[13]	Yes	Yes	Yes	?	ESE only	Yes (up to 2003 only) ^[14]	Yes	Proprietary
NetMail	Yes	Yes	Yes	Yes	?	Yes	?	Yes	?	Yes	Yes	No	?	Yes	No	No	Proprietary
OpenSMTPD	Yes	Yes	No	No	No	Yes	No ^[15]	No	Yes	Yes	No	No	?	possible through custom backends	Yes	No	ISC

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23. Authentication - Dovecot Wiki. http://wiki.dovecot.org/Authentication .	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Proprietary
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26. "Documentation for build-in ClamAV-Maillet". http://james.apache.org/server/3/dev-provided-maillets.html#ClamAVScan . Retrieved 2013-03-19.	Yes	External ^[9]	Yes	Yes	Yes	External ^[9]	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	AGPLv3, paid ^[10]
	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	No	Yes	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	GPLv2 ^[24]
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	ZPL and proprietary editions ^[21]
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28. "Index of /~gordon/courier-pythonfilter". http://phantom.dragonsdawn.net/~gordon/courier-pythonfilter/ .	Mail server	Linux/Unix	SMTP	POP3	IMAP	IDLE	SMTP over TLS	DANE	POP over SSL	IPv6	SSL	Webmail	ActiveSync	Sieve	Database	Filesystem	Other	License	

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35. Faurot, Eric. "OpenSMTPD: Welcome!". <http://www.opensmtpd.org/presentations/asiabsdcon2013-smtpd/#slide-16>.

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37. "Trusted Domain Project - About Us". <http://www.trusteddomain.org/opendmarc.html>. **PLAIN, LOGIN**

Retrieved from https://encyclopedia.pub/entry/history/show/78382	Yes	No	Yes	No	No	Yes	Yes	GSSAPI, CRAM-MD5, DIGEST-MD5, APOP, CLRTXT, LOGIN, PLAIN, LDAP, Internal
CommuniGate Pro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Active Directory (LDAP), CLRTXT, CRAM-MD5, DIGEST-MD5, APOP, GSSAPI, NTLM, MSN, SESSIONID, External Authentication Plug-in. Also supports X.509 PKI auth via STARTTLS/SSL
Courier Mail Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Managed by Courier authentication library which can use PAM, Userdb, PostgreSQL(beta), MySQL, LDAP, and EXTERNAL.
Cyrus IMAP	No	Yes	Yes	Yes	Yes	Yes	Yes	Supports X.509 PKI auth via STARTTLS and EXTERNAL. Uses <i>Cyrus SASL</i> authentication library for support for other mechanisms: Berkeley DB, GDBM, or NDBM (sasldb), PAM, MySQL, PostgreSQL, SQLite, LDAP, Active Directory(LDAP), DCE, Kerberos 4 and 5, proxied IMAP auth, getpwent, shadow, SIA, Courier Authdaemon, httpform, APOP and SASL mechanisms: ANONYMOUS, CRAM-MD5, DIGEST-MD5, EXTERNAL, GSSAPI, LOGIN, NTLM, OTP, PASSDSS, PLAIN, SRP
Dovecot	No	Yes	Yes	Yes	Yes	Yes	Yes	Not an SMTP server, but offers SASL to MTAs.^{[22][23]} POP-before-SMTP via DRAC plugin. PAM, MySQL, PostgreSQL, SQLite, LDAP, Active Directory(LDAP), Kerberos 5, proxied IMAP auth, getpwent, shadow, SIA, BSDauth, Vpopmail. APOP and SASL mechanisms: ANONYMOUS, PLAIN, LOGIN, CRAM-MD5, DIGEST-MD5, SCRAM-SHA1, EXTERNAL, GSSAPI, NTLM, OTP, SKEY, RPA.

Eudora Internet Mail Server	Yes	No	Yes	Yes	No	No	CRAM-MD5, DIGEST-MD5, PLAIN, LOGIN
Exim	Yes	Yes	Yes	Yes	Yes	Yes	Cyrus SASL, Dovecot SASL, GNU SASL, CRAM-MD5, Heimdal GSSAPI, PLAIN, LOGIN, SPA
FirstClass	Yes	?	?	Yes	Yes	Yes	
Gordano Messaging Suite	Yes	Yes	Yes	No	Yes	Yes	PLAIN, LOGIN, CRAM-MD5, DIGEST-MD5, APOP, ODBC, Active Directory, NT Domain
GroupWise	Yes	Yes	Yes	Yes	Yes	Yes	eDirectory, Any LDAPv3-compliant source
Halon	Yes	No	No	Yes	Yes	Yes	Many mechanism (SMTP callout, Dovecot SASL, REST, etc.) via script. ^[24]
Haraka	Yes	No	No	Yes	Yes	Yes	Proxy to other server, any other mechanism via AUTH plugins.
IceWarp Mail Server	Yes	Yes	Yes	Yes	Yes	Yes	PLAIN, LOGIN, CRAM-MD5, NTLM
Ipswitch IMail Server	Yes	No	Yes	Yes	Yes	Yes	Active Directory, Windows authentication, CRAM-MD5, PLAIN, LOGIN
Kolab	Yes	Yes	Yes	Yes	Yes	Yes	Kolab employs Cyrus and Postfix and thus supports all Cyrus SASL authentication methods and X.509 PKI auth via STARTTLS and EXTERNAL.
Mailsite	Yes	No	Yes	Yes	Yes	Yes	NT Domain, Active Directory, PLAIN, LOGIN, NTLM, SCRAM-MD5, CRAM-MD5
Mailtraq	Yes	Yes	Yes	Yes	Yes	Yes	NT Domain, Active Directory, Local Directory
Mercury Mail Transport System	Yes	Yes	Yes	Yes	No	?	Internal, LOGIN, PLAIN, CRAM-MD5, Netware, LDAP?, partial NT Domain
Microsoft Exchange Server	Yes	?	Yes	No	No	Yes	Active Directory, LOGIN, ^[25] NTLM
NetMail	Yes	Yes	Yes	Yes	Yes	Yes	eDirectory, LDAP
Oracle Communications Messaging Server	Yes	Yes	Yes	Yes	Yes	Yes	Plain, Login, CRAM-MD5, Digest-MD5, Certificate
OpenSMTPD	Yes	No	No	Yes	Yes	Yes	By default PLAIN and LOGIN over SSL only, Certificates, bsd_auth and PAM. Supports adding new authentication mechanisms through custom backends.
Postfix	Yes	No	No	Yes	Yes	Yes	Supports all Cyrus SASL authentication methods except for APOP.
Qpopper	No	Yes	Yes	Yes	Yes	Yes	Pluggable Authentication Modules, GSSAPI, CRAM-MD5, DIGEST-MD5, APOP, PLAIN, LDAP, CMU SASL library, Kerberos
qmail	with patch	with vpopmail	Yes	Yes	Yes	Yes	Works with any checkpassword utility. The original supports only LOGIN and PLAIN. Alternate checkpassword utilities support authentication against PAM, LDAP, and databases.
Scalix	Yes	?	Yes	Yes	Yes	Yes	Internal, LOGIN, PLAIN, X.500 (DAP), LDAP, OpenLDAP, Active Directory, eDirectory, Kerberos, etc.

Sendmail	Yes	Yes	No	Yes	Yes	Yes	Supports all Cyrus SASL authentication methods except for APOP. Also supports X.509 PKI auth via STARTTLS and EXTERNAL.
WinGate	Yes	Yes	Yes	Yes	Yes	No	NT Domain, Active Directory, CRAM-MD5, SASL PLAIN, SASL LOGIN
Zarafa	Yes	No	No	Yes	Yes	Yes	PLAIN, LOGIN using internal backends: Internal, Active Directory, any LDAP-compatible source, Unix
Zentyal	Yes	Yes	Yes	Yes	Yes	Yes	Active Directory using Dovecot SASL mechanisms
Zimbra	Yes	No	Yes	Yes	Yes	Yes	Internal, LDAP, Open LDAP, Active Directory
Mail server	SMTP AUTH	POP before SMTP	APOP	Filesystem	Database	LDAP	Other

3. Antispam Features

Mail Server	DNSBL	SURBL	Spamtraps	Greylisting	SPF	DKIM	DMARC	Tarpit	Bayesian filters	Regular expressions	Embedded Antivirus	Embedded Antispam
agorum core	No	No	No	No	No	No	No	No	No	Yes	No	No
Apache James	?	?	?	?	?	?	?	?	Yes	?	Yes ClamAV ^[25]	Optional (Apache SpamAssassin)
Axigen	Yes	Yes ^[22]	No	Yes	Yes	Yes	?	No	Yes, in SpamAssassin	Yes	Yes CYREN	Yes CYREN
Citadel	Yes	Yes	No	No	Optional (via SpamAssassin)	?	?	No	Optional (via SpamAssassin)	No	Optional (ClamAV)	Optional (SpamAssassin)
Courier Mail Server	Yes	?	Yes	Yes ^[28]	Yes	Yes ^[29]	Yes ^[30]	Yes	Yes ^[28]	Yes ^[28]	Yes Clamav	Yes ^[28]
Dovecot	?	?	?	?	?	?	?	?	?	?	?	?
Eudora Internet Mail Server	Yes	?	Yes	Yes	?	?	?	?	?	?	?	?
Exim	Yes	Yes	Yes	Yes	Optional at build time	Yes	Optional at build time	Yes	Optional with spamassassin etc.	Yes	Optional any	Optional any
FirstClass	Yes	Yes	No	?	Yes	?	?	Yes	Yes	Yes	Yes Symantec	?
Gordano Messaging Suite	Yes	Yes	Yes	Yes	Yes	?	?	Yes	Yes	Yes	Yes CYREN, Authentium	Yes CYREN
GroupWise	Yes	?	?	?	?	?	?	?	?	?	?	?
Halon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Optional (via SpamAssassin)	Yes	Optional (Sophos, ClamAV)	Optional (CYREN, SpamAssassin)
Haraka	Yes	Yes	Yes	Yes	Yes	Yes	?	Yes	Optional with spamassassin etc.	Yes	Optional ClamAV, AVG, any via plugins	Optional SpamAssassin, MessageSniffer
hMailServer	Yes	Yes	No	Yes	Yes	Yes	?	No	No	Yes	Yes ClamAV	Yes SpamAssassin
IBM Lotus Domino	Yes ^[31]	?	?	?	No ^[32]	?	?	?	?	?	?	?
IceWarp Mail Server	Yes	Yes	Yes	Yes	Yes	?	?	Yes	Yes	Yes	Yes	Yes

Ipswitch IMail Server	Yes	Yes	No	No	Yes	Yes ^[33]	Yes ^[34]	No	Yes	Yes	Yes Symantec, BitDefender	Yes CYREN
Kolab	Yes	?	?	Yes	Yes	?	?	?	Optional with spamassassin etc.	Yes	Optional (via content filter interface)	Optional (via content filter interface)
Mailsite	Yes	Yes	Yes	Yes	Yes	?	?	No	Yes	Yes	Yes	Yes
Mailtraq	?	?	?	?	?	?	?	?	?	?	?	?
Mercury Mail Transport System	Yes	?	?	Yes (GreyWall extension)	?	?	?	?	Yes (SpamHalter extension)	?	Yes (ClamWall extension)	?
Microsoft Exchange Server	Yes (2003 & later)	?	?	Yes	Yes	?	?	Yes (2003 & later)	?	?	?	?
NetMail	?	?	?	?	?	?	?	?	?	?	?	?
OpenSMTPD	?	?	?	?	Yes	Yes ^[35]	?	?	?	?	?	?
Oracle Communications Messaging Server	Yes	Yes	Yes	Yes	Yes	?	?	Yes	Optional with spamassassin etc.	Yes	Optional any	Optional any
Postfix	Yes	?	?	Yes	Yes	Optional ^[36]	Optional ^[37]	?	Optional with spamassassin etc.	Yes	Optional (via content filter interface)	Optional (via content filter interface)
qmail	?	?	?	Yes	?	?	?	?	No	?	No	No
Scalix	Yes	Yes (via Scalix AntiSpam powered by Cyren or SpamAssassin)	Yes (via Scalix AntiSpam powered by Cyren or SpamAssassin)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (via Scalix ZeroHour AntiVirus powered by Cyren or ClamAV)	Yes
Sendmail	Yes	Yes (via milter/SA)	?	Yes	Optional	Optional ^[36]	Optional ^[37]	?	Optional with spamassassin etc.	?	Yes ClamAV	Yes SpamAssassin
SparkEngine	?	?	?	?	?	?	?	?	?	?	?	?
Synovel Collabsuite	Yes	Yes	Yes	Yes	Yes	?	?	?	Yes	Yes	YesClamAV	Yes SpamAssassin
UW IMAP	?	?	?	?	?	?	?	?	?	?	?	?
WinGate	?	?	?	?	?	?	?	?	?	?	?	?
Zarafa	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]	External ^[9]
Zimbra	Yes	Yes (via SpamAssassin)	?	Yes (via Cluebringer Policy Daemon)	Yes	Yes	?	Yes	Yes	Yes (partially)	Yes (via ClamAV, optionally any via Amavisd)	Yes (via SpamAssassin)
Mail Server	DNSBL	SURBL	Spamtraps	Greylisting	SPF	DKIM	DMARC	Tarpit	Bayesian filters	Regular expressions	Embedded Antivirus	Embedded Antispam