A Whitepaper on Rainmail Ecomail Server

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Rainmail Ecomail Server

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Introduction

Rainmail **Ecomail** Server (hereafter Ecomail) is a compact mailing solution providing fully integrated centralized E-mail and Browsing access for users. Ecomail is ideally suited for small and medium business enterprises having just a dial-up/DSL line. Running on the solid platform of Linux, Ecomail consists of a Powerful, efficient and affordable Mail server, Proxy server and a Web server.

Companies with about 10-25 users can opt for Ecomail to kickstart their Corporate Mail activity rather than investing in expensive solutions.

Rationale

Ecomail helps organizations to take advantage of the Internet by providing a cost-effective and secure communication system within the organization. As **Email** today has become an integral part of any organization's communication system, the success of the same is determined based on the reliability and efficiency of the system. Ecomail enables organizations to maintain a high standard of service.

Typically, small and medium enterprises, with about 10-15 users maintain a single Email account bought from an ISP. This single account is used for both mailing as well as for browsing by select users. The inherent disadvantages in this set up are:

- There is no corporate identity as the domain name used is that of the ISP (xyz@vsnl.com)

- Distribution of the mails to the concerned users is manual - Manual print outs have to be taken and distributed.

- Inter-office communication is also through cumbersome paper work

- Internet connections have to be manually established by an administrator or by the user every time someone wants to check emails.

- No confidentiality of communication is possible due to manual intervention and paper distribution

- There is no prevention mechanism for unsolicited/spam mails

- No provision for centralized back up & retrieval of mail data which may result in loss of valuable data incase of a breakdown.

- Multiple modems/internet accounts are needed for browsing by various users and no control on unauthorized browsing activities. May result in wasteful expenditure on internet and telephone/cable charges.

Ecomail seeks to address all the above related issues and provide many more features that improves the overall work culture and productivity of the company. Needless to say, it also results in significant costs savings.

A Typical Setup Scenario on Rainmail Ecomail Server

Proposed Setup
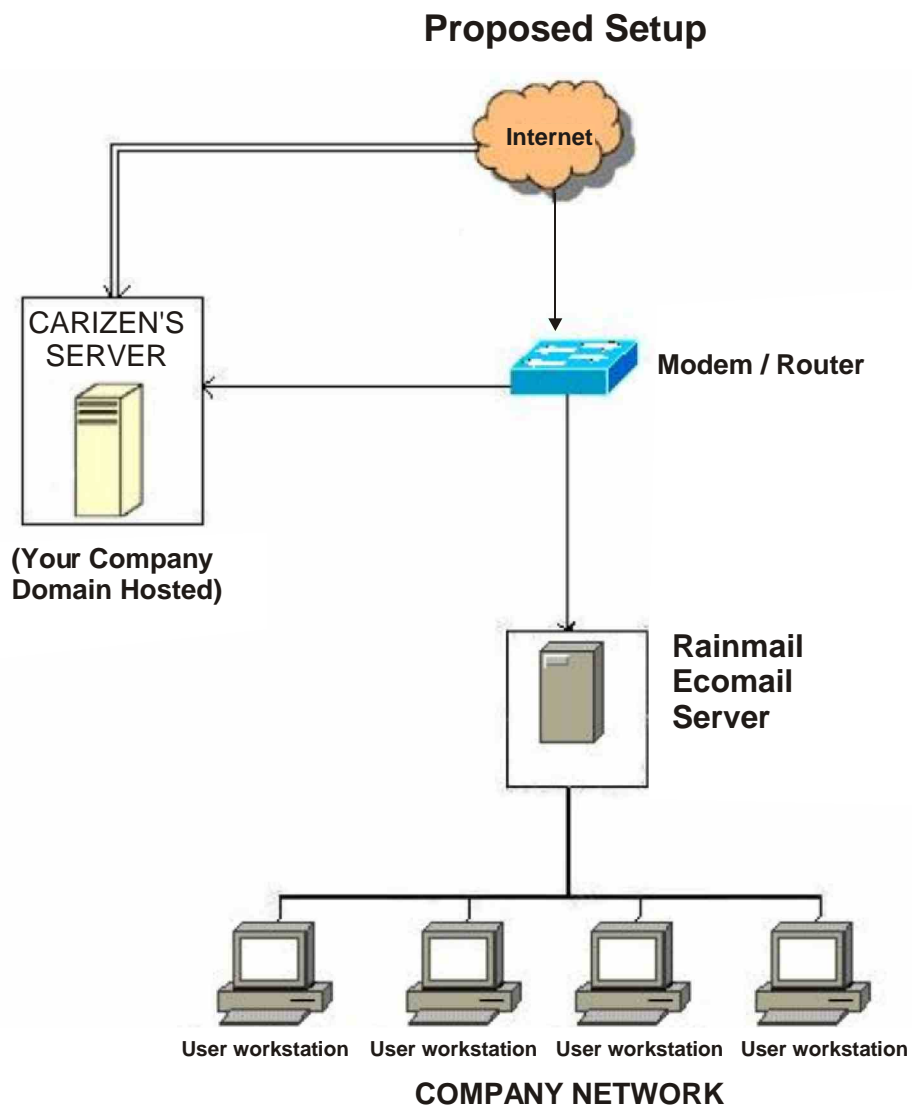
Advantages of Ecomail

Some of the unique points of why Ecomail is the preferred solution of clients today:

- **Easy Installation**

  Ecomail is based on standard Linux components like Qmail, fetchmail, Apache, SAMBA, and bind. There are lots of Linux consultants who can put together a solution by installing and configuring these software at client premises. However these typically take at least 2-3 days to do and is done manually by the consultant. While the consultant may provide documentation for installation steps, that is where it will end.

  Ecomail is given in a CD and includes an easy to use GUI based Installation which ensures that client themselves can install the software. All installation and initial configuration is handled by the installation software and can typically be completed within 15-30 minutes.

- **GUI based Configuration/Administration**

  There are disparate administration console for different software (like Qmail, SAMBA, fetchmail) in Linux and when a solution is put together by a consultant, clients are made to use these different administrative programs which make the learning curve very steep. Also, clients have to be aware of interactions between these programs if the system is to be maintained properly.

  Ecomail avoids this problem by bypassing the Linux administrative programs completely and providing a Single administrative console GUI that can be used to configure anything to do with Ecomail .

  This ensures that learning curve for Ecomail is easy and administrative tasks can be performed even by users with little or no knowledge of Linux.

Advantages of Ecomail - contd.

- **Single sign-on**

  Ecomail takes a very deep view of "integration". Rather than treating integration as just co-existence of different programs on a single server, Ecomail takes a unified view.

  One of the main advantages of this approach is the single sign-on (or Login) system. User accounts created in Ecomail are valid for any facilities offered be it Email, Proxy, Web. That is the same account and password can be used to avail of any of the facilities.

  When password is changed by user, it is applicable for all facilities. This not only is of great convenience to users, but also increases security of the system because the inconvenience of having to change password at multiple places and/or remember multiple passwords discourages the user from changing password often and leaves the system vulnerable for brute-force password attacks.

- **Enterprise Functions**

  In addition to installing and configuring various services like Email, Proxy, etc., Ecomail also provides functions that help in keeping Ecomail running smoothly in an enterprise.

  Ecomail has a single click Backup/Restore facility that ensures that there is minimal downtime. In case of Hardware crashes, Ecomail can be made up and running on a new hardware (with all old applications, configuration and data) in as quick as 30 minutes using this facility.

  Ecomail also ensures that most of the administrative functions are automated so that system administrators can concentrate on most important things. Logs are automatically rotated.

Advantages of Ecomail - contd.

- ## Connectivity Independence

  Ecomail can work with any kind of Internet connectivity including PSTN, ISDN, Cable, DSL, VSAT and Leased lines. This ensures that even if the client's leased line is down, all the services can be continually made available to client using a backup connection like ISDN, DSL or Cable.

  Single click in the administrative console can switch the connectivity back and forth. This ensures that even in a dire situation like failure of connectivity, backup administrative task can be done by a person with little or no knowledge of Linux.

- ## Multi Location support

  While most solutions are great for single locations, Ecomail has been designed keeping in mind the requirements of organizations with multiple locations. For example, one concept preferred in organizations with multiple branches is to have the same address book at ALL the locations.

  Ecomail has tools for the same (with the address book synchronize feature). Ecomail also supports the concept of email domains which make the de-centralized maintenance of email addresses a reality.

- ## Support Services (SRTS)

  Ecomail provides an unique mode of support called SRTS. This gives the client control of allowing a support personnel to log in through the Internet and fix the problem in minutes instead of days.

  Security of this scheme is ensured by a client specified password and also 128 Bit encryption.

  SRTS, combined with traditional forms of support (like Phone, Email, on-site) ensure that Ecomail can be put to work for your organization in the most efficient manner.

Features

In this section, we shall see the individual features of each module that constitutes the Rainmail Ecomail Server.

- ### Mail Server

Ecomail Email server is based on Qmail. Qmail is the No. 2 MTA in the Internet and is one of the most secure, fast MTA's available today. This ensures that the email server can be scaled right from 10 users to 1 million users as the organization's need increases.

Some of the salient features of Ecomail Email server are:

Multiple domain support

Users can consolidate emails from all their domains in a single Ecomail installation. Ecomail supports "true" multiple domains and not just aliasing. This means that you can have the same user name in different domains and different persons can access them.

Sub domain support

Sub domains can be created under a single domain for different departments/locations and Ecomail can be used as a centralized mail server for all these domains/sub-domains.

Local creation/maintenance of email addresses

When user gets email services from Ecomail , email addresses can be created/maintained locally without needing to add/delete/change any settings in the Gateway server.

Group Lists - Logical groupings for mail, browsing, work group

Ecomail supports the concept of "Groups". Users can be combined into groups and these groups can be used to give/restrict email/browsing/other facilities.

Features - contd

Mailing Lists

Mailing list can be created in Ecomail and can be used to send mails to groups of users. The mailing lists can be either made public (available to outside users) or private (not available to outside users).

Internal only users

In conjunction with email services, users can be restricted to only sending internal mails and not allowed to send mails outside of LAN.

Anti Virus protection for all incoming, outgoing and internal emails

All internal, incoming as well as outgoing mails are scanned for viruses and if any virus is found, the mail is quarantined. The virus engine used for scanning is updated automatically every week.

Connectivity Independent

Works with all kinds of connectivity including PSTN, ISDN , DSL, Cable and permanent connectivity. This ensures that critical facilities like Email need not be affected because of connectivity failures.

Compatible with Lotus Notes/Exchange Server

Can function as a gateway to the above mail servers for sending/receiving mails from the Internet. This facility can be used to either increase security of mailing or to make a smooth transition from Lotus Notes/Exchange Server to Ecomail .

Batch mode mailing with queuing

In a PSTN/ISDN connectivity, mails can be made to go out at pre-determined intervals. Any sent mails will be stored in the queue till it is ready to be sent out. This optimizes the Internet connectivity and potentially saves cost of Internet/Phone connectivity.

Features - contd

Spam control

Multiple type of SPAM controls are available. Ecomail allows one to blacklist based on sender address/domain, thus reducing unwanted mails.

When email services are availed, SPAM control based on contents of is supported. This method uses a battery of tests (some of them based on email headers and some of them based on actual text) and tags the email as SPAM when the score exceeds a certain fixed value.

POP3/IMAP Support

Emails can be viewed with any POP3/IMAP client (Outlook express, Eudora, etc). By default, emails retrieved this way are deleted from the server. However, by enabling the option to keep a copy on the server, user can keep a backup copy of all emails in the server.

Web-based email client

Emails can be accessed from anywhere in your LAN/WAN using the included web based email client. Some of the salient features of this web based email client are:

Multiple Folder support

Messages can be sorted onto Multiple folders for easy tracking and maintenance.

Draft Folder support

Messages can be composed in multiple steps by using the Draft facility. Partially composed messages can be placed in the Draft folder and can be added to till actually sent.

Spell Check

Included spell checker ensures that user's correspondence can be maintained clean easily.

Filtering rules

Filtering rules allow redirection/deletion of messages based on certain criteria like "Subject", "From address", "To address" and Body content.

External mail consolidation

Email client support consolidation of all your POP accounts into this single account. By specifying details of your various mail accounts, you can ensure that mails coming to different accounts are downloaded onto your account in Ecomail for easy access.

Message arrival notification

Sound can be played/pop up window can be displayed whenever a new mail arrives.

Read Receipt

Supports read receipt, by which a mail is received when the recipient reads the message in his email client.

Automated scheduler

In a dial-up scenario, mails can be made to be received/sent with included automatic scheduler.

Auto-forwarder/auto-responder

Automatic forwarding of mails to a different email address/host is supported. Using this feature, users can forward their emails to a different address for checking.

The Auto-reply feature ensures that the sender gets a "canned" message whenever he sends a mail. This facility is useful if the recipient is not able to read the mails for a long period of time (say due to vacation or illness).

This feature can also be used to send "canned" replies when email is sent to certain generic email addresses.

Features - contd

Back up & Restore

Single click Backup & restore functionality ensures that Ecomail ca be made up and running even in the case of catastrophic hardware failures within 30 minutes.

Address Book Server

Global address book can be maintained using the LDAP based address book server. These address books can be automatically synchronized in multi-location environments so that the same address book is available in different locations.

Address book server also supports searching of addresses in LDAP compliant email clients like Netscape, Outlook Express and Outlook.

SMS Alerts

SMS Alerts can be sent to mobile numbers on receipt of non-junk emails. This is a free facility and is available wherever the mobile service provider supports this facility. Some of the operators who currently support this facility are Airtel, RPG and Aircel.

- ### Proxy Server

Based on the industry leading "Squid", Ecomail proxy server not controls who is given access to access Internet, but also speeds up Internet access using Caching methodology.

The easy-to-use GUI allows to create groups of users and give them specific permission to browse the Internet. Detailed features can be seen below:

Automatic connection

When used in conjunction with a PSTN/ISDN line, a valid browsing request automatically makes the Modem dial and establish an Internet connection. Similarly, if there is no browsing activity for a pre-determined interval, the proxy also disconnects the Modem from Internet, thus saving on Internet charges.

Web caching

Whenever a site is downloaded, it is also cached onto the local Hard Drive. Next time, the request is serviced from the local hard drive (if the page has not changed). This saves on precious Internet bandwidth and also makes accessing Internet faster.

User restrictions

Specific users/group of users can be barred/given Internet access. If an user is given access, he is prompted for an user name and password when he tries to browse. If it is a valid account, the user is allowed to browse.

Site restrictions

Users/Group of users can be restricted to certain sites. This can be done by either allowing users to browse certain sites ONLY or by not allowing the users to browse certain sites.

IP restrictions

Internet access can be restricted/allowed ONLY to certain machines based on their IP address.

Time based browsing

Users/Group of users can be restricted to browse only during certain time of the day. This combined with any or all of the above facilities ensures that Internet usage can be controlled as per he policy set by the organization.

Browsing Reports

Detailed Internet access logs are available to system administrators. These present information like which user browsed which site from which machine.

Other information like the top sites, sites accessed, time accessed, bandwidth usage are present in the reports.

Rainmail Ecomail Server

- **Web Server**

   Ecomail provides a web server using the industry leading "Apache" server. It is a complete cross-platform, secure server used right from small organizations to large portals. In addition to serving static pages in the form of HTML and various other documents, Apache also allows serving of database driven dynamic pages using PHP, Perl, Servlets, JSP, ASP (using an optional module) and CGI Scripts.

   Database connectivity support also extends from MySQL, PostgreSQL, Oracle and any ODBC compliant database using ODBC.

   A default Intranet page containing various useful links is installed with Ecomail . This can be customized changed to suit customer requirements and a complete dynamic Intranet (possibly with workflow) can be implemented.

- **Support infrastructure**

   In addition to a proven software and unbeatable service, Ecomail ensures that all its features are utilized efficiently with a strong and committed support team.

   Ecomail ensures quick resolution to support problems by providing multiple support mechanisms. Details of support mechanism follow:

   ### 24 X 7 Support

   Support can be availed of by contacting any of the branches/resellers during office hours. A cell number is provided at each location for support during non-office hours/emergencies.

   ### Multiple Mechanisms

   Email, Phone, SRTS and on-site support mechanisms ensure that your problem WILL get sorted and that too in the quickest time possible.

Features - contd

SRTS

Secure Remote Technical Support, a concept pioneered and available ONLY with Ecomail , ensures that our technical support personnel can reach you and fix the problem in minutes.

If you can reach the Internet, Ecomail support personnel can reach you and fix the problem. There is no restriction on having a static IP.

This mechanism, besides being quick is completely secure as it can ONLY be enabled by the client, authentication is based on a password provided by the client, the whole transaction is encrypted AND it can easily be disabled once the support resolution is completed.

Infrastructure

Offices at Chennai, Mumbai, Delhi, Bangalore and Hyderabad and resellers in multiple locations ensure that even on-site support is possible at any of your locations.