Nesox Email Marketer
White Paper

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1 Introduction

1.1 What is Email Marketer?

Nesox Email Marketer® is a professional email newsletter software and opt-in email marketing software for targeted mailing list building, email campaigns creating, bulk mailing, and open and click tracking at your own computer.

More than a bulk mailer or mass mailing software, Email Marketer is the perfect desktop solution for all your targeted email marketing needs and it covers every aspect of bulk email marketing. Email Marketer helps you create successful opt-in newsletters and email marketing campaigns, it is easy to build and manage your own opt-in mailing lists for subscribers, create and send email campaigns with personalized messages such as HTML newsletters, e-magazines, account statements, reports, statistics, bills to your customers in just minutes, and get real-time opening and click-through tracking reports that help you measure ROI and refine your business strategy.

1.2 Who needs Email Marketer?

With the pervasiveness of the Internet, email has become the marketing tool of choice for getting the message out to current and prospective customers and contacts. For most small businesses, permission-based email marketing campaigns are the most cost-effective way to reach new and existing customers. Email Marketer is the email marketing software of choice. Use it to quickly and easily create professional-looking email newsletters; targeting different customer segments with personalized messages. And, most importantly, it brings value to your emailing campaigns.

If you've wanted to use email marketing in your organization, or deliver email newsletters to your subscribers or customers, but you didn't want to use complex, confusing software or services that are too technical, Email Marketer is the perfect choice for you.

1.3 Why Email Marketer?

Electronic mail (e-mail) has always been an indispensable part of the internet, and probably the most used online web application, as well. It plays a very important role in today's daily business transactions, personal life, and recreational activities.

As such, e-mail service has become the most important service offered by most companies, and is regarded as a major indicator when it comes to judging one's service quality. It is essential to the internet service provider and large corporations to come up with a complete e-mail service system; which will provide a proper solution to meet their scalability, delivers messages in time and reliably, and long lasting; a system that guarantees a smooth operation, and also ready to satisfy potential rapid increase in service demand.

The flagship product of Nesox Solutions, Email Marketer™ is a corporate level mail delivery and tracking system which has proven to satisfy the needs mentioned above. It has already been adopted by every large ISP and major corporations, and is currently supporting millions of users.

Different from some other e-mail systems employed by local intranet or small businesses, Email Marketer™ is specifically designed to provide the critical personalized group sending service for ISP and larger corporate customers, with emphasis on free scalability, excellent performance, high reliability and practicality. During the years, Email Marketer™ has been upgraded constantly, improvements were made on various functions, and it has become the leading choice for email information service providers in today's market. Email Marketer™ has a proven history of satisfactory performance for telecommunication usage, and with its scalability, it is now possible for ISP and corporations to establish an e-mail service platform to provide point-to-point mail delivery service for millions of users, at a low cost and also have a high service quality. All the features within Email Marketer™ will enable the customer to maintain a lower TCO (Total cost of ownership), improve the service quality, and therefore maximize profit.

At present time, Email Marketer is being widely used in domains such as direct email marketing, online marketing research, email newsletter, customer relationship management, permitted email marketing, direct mailing service, and collaborative working etc. And, it is receiving customer appreciations from all over.

Email Marketer™ is doing its utmost to support ISP and large corporate customers, in further reducing the TCO (Total Cost of Ownership), and setting up the core message service system. With its technical expertise in the internet services, dedication in the research and development of advance network and information technology, and vast experiences from previous projects, Nesox will be able to utilize the Email Marketer™ system to the fullest, and offer customers the best service possible in overall design and proposal implementation, and providing a full technological support.

Nesox Email Marketer is amazingly easy to install, easy to configure and easy to use. Most users can send their first email campaign in few minutes, and sending subsequent campaigns takes mere seconds. Even if you have no technical background whatsoever, Email Marketer makes it simple to create email marketing campaigns for you.

Personalized email marketing made easy with Email Marketer... Nothing compares. With Email Marketer you can easily:

- Create eye-catching, colorful HTML messages with email templates and styles.

- Compose your messages using the built-in WYSIWYG HTML editor.

- Send personalized emails to your customers in minutes.

- Pick targeted recipients based on subscribers' demographic information.

- Track your email marketing campaigns in real time.

- Build your own permission-based mailing lists.

- Remove opt-out email addresses from your lists automatically.

- Import or export contact lists from various data repositories: TXT, CSV, Excel, Access file and enterprise databases such as Microsoft SQL Server, Oracle etc.

- Get opening and click results of your campaign real-time.

- Keep customers coming back to your website and establish strong customer relationships.

- Proven technology based on years of R&D.

- Your satisfaction is 100% guaranteed, you have a full 30 days to try the software risk-free.

… And much more!

Email Marketer helps you handle the enormous challenges you face: prepare the target mailing list, merge the personalized content, and distribute the contents in high speed. It makes your life easier and saves much your time for other aspects.

Email Marketer has the following exciting features:

1. Integrated environment with wizards

- Unlimited Email Campaigns Management.

- Step by Step Instructions.

- Simple yet Powerful and Efficient.

- Complex and Compact Interface.

- Multi Languages.

2. Email Marketer easily enables the creation of appealing layouts for your message contents

- WYSIWYG Editing.

- Rich Commercial Newsletter Templates.

- Message with both HTML and Text.

- Embedded Media in HTML.

- Visual Personalization.

- Importing and Exporting.

3. Always use highly-focused and updated mailing lists

- Integrates with Any Database on the Network.
- Direct Data Source Connecting.
- Predefining Lists.
- Built-in List Database with a Capacity of Millions.
- Validating Your List.
- Excluding from Black Lists.
- SQL Queries.
- Powerful Importing and Exporting.

4. Unlimited personalization of your messages

- Fields Merge.
- Dynamic Contents.
- Advanced Personalization via Message Scripting.
- VBScript Compatible.
- Message Preview.

5. Control delivery, measure efficiency

- Selective Format.
- SMTP Free Delivery.
- Secured Messages.
- Schedule your mailings.
- Speed Adjustment.
- Fast, Multi-Threaded Sending.
- Delivery Testing.
- Continuous Retry.
- Delivery Resuming.
- Compatible with AntiSpam laws.

6. Handles subscription and unsubscription real time

- Subscribe by Email or Web Form.
- Unsubscribe Link in Message.

- Incoming Messages Management.

7. Website Integration with subscriber and tracking service

- Multi List Subscription.

- Customizable Subscriber Form.

- Tracking for Open and Click.

- XML Based.

8. Professional and real-time reports

- Rich Campaign Reports.

- Rich List Reports.

"When people read the E-mail, they are in working state, even if they are not working. They sit up straight, the look is absorbed. This is exactly the very good time to provide information for them. If you do ingeniously and do in the proper way, you will get the unexpectedly a lot of responses from them."--WILLIAM THAMES(Revent Direct Marketing VP)

2 Technical Features

Email Marketer™ system is developed by using Visual C ++ 6.0 Enterprise Edition and Delphi 6.0 Enterprise Edition. It is in conformation with all Windows application programming standards such as multi-threads, XML, RFC, etc, and it is designed in combination with object oriented techniques. The user interface of Email Marketer™ is elegant in appearance; the functions are stable and plentiful, making this system suitable for both beginner and advanced users.

2.1. Key Features

Email Marketer makes building your business easy with tools that cover every aspect of email marketing via the following exciting features:

1. Integrated environment with wizards

Unlimited Campaigns Management. Email Marketer has been designed to be completely adapted to project management. It lets you organize and save your work according to project milestones.

Step by Step. Provides a clear step by step approach to your projects by using distinct stages. A typical project is started at the design stage where you can create the message contents, scripts and distribution lists. After these tasks are completed, the project is published and in standby for review.

Simple yet Powerful and Efficient. It is easy switch between the accounts, messages, scripts, lists, preview, publish, and the reports of a project.

Complex and Compact Interface.

Multi Languages. Just one click to switch the interface to your own language, even the campaign reports.

2. The appealing layouts for your message contents

- **WYSIWYG Editing.** Includes a professional HTML editor similar to popular web editors, with WYSIWYG, source and preview modes. If you would rather use your preferred application, Email Marketer is fully compatible with all content creation applications such as DreamWeaver, FrontPage etc.

- **Rich Templates.** When tight deadlines dictate your success and the need for immediate content arises, Email Marketer utilizes your pre-existing templates such as newsletters, email ads, stock quotes, push-email, etc.

- **Message with both HTML and Text.** Email Marketer makes the creation of contents easy by offering you the possibility to create an alternate text via HTML message.

- **Embedded Media in HTML.** Email Marketer can embed media such as graphics, sound, and flash in HTML to send them along with the message, rather than having them reside on a web server somewhere.

- **Visual Personalization.** Similar to Active Server Page (ASP) scripting language, these embedded scripts let you customize your contents without any limit. And, the text and script editors with colorize, indent, bookmarks and debugging features for your scripts.

- **Importing and Exporting.** Save and load your original work or an online web page in clicks.

3. Always use highly-focused and updated mailing list

- **Integrates with Any Database on the Network.** Connecting to Excel, Access, SQL Server, Sybase, Oracle, MySQL, XML and other ADO and ODBC/OLEDB compliant databases and automatically generating necessary SQL queries.

- **Direct Data Source Connecting.** Avoid unnecessary duplication by connecting directly to the database related to the project. You save time and you work directly on the most accurate and up to date data.

- **Predefining Lists.** Predefining data sources and SQL queries (segments) for quick and easy user access.

- **Built-in List Database with a Capacity of Millions.** Email Marketer lets you alternatively create a project-specific database with your preferred application.

- **Validating Your List.** Email Marketer makes the elaboration of receiver's list easy thanks to a full set of tools: removing of duplicates, management of fields containing several email addresses, sending of test message and checking of the address validity.

- **Excluding with Black Lists.** All these features are also available for the creation and the management of black lists. It allows you to exclude receivers without modifying the data source.

- **SQL Queries.** Email Marketer supports SQL queries to let you quickly create distribution lists from outside database records (data source) for those who want a more advanced interface to the database. You can also import most database formats found on corporate, office or personal systems.

- **Importing and Exporting.** You can also import or export with most database formats found on corporate, office or personal systems in clicks.

4. Unlimited personalization of your messages

- **Fields Merge.** Insert database fields in the message body or in the subject. You can

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customize your contents by using an unlimited number of data source fields.

- **Dynamic Contents.** Enable content according to your conditions: Email Marketer allows you to modify the contents before the delivery. Via personalization script, you can easily decide who will receive which content according to receiver's country, preferred products, purchasing date, etc.

- **Advanced Personalization via Message Scripting.** By using the script interface, Email Marketer allows the generation of emails with a much higher level of customization than only database field merging: management of sending according to time zones, personalization of attachments for each receiver, etc. The only limit of personalization is your data source precision.

- **VBScript Compatible.** Users familiar with VBScript or Active Server Pages can directly edit the mailing project global script to further customize the mailing project. Samples of global scripts are provided and available to users not familiar with VBScript. Script commands can include any VBScript function.

- **Message Preview.** Program enables you to view each personalized message before they're sent.

5. Control delivery, measure efficiency

- **Selective Format.** Send specific content for each receiver in Text or HTML format.

- **SMTP Free Delivery.** Emails may be delivered directly or relayed to multiple SMTP relay servers for large scale distribution. Built-in email delivery server that frees you from email limits placed by your ISP.

- **Secured Messages.** Via the S/MIME protocol, Email Marketer gives you the opportunity to send secured messages. Emails are digitally signed and their contents encrypted. It guarantees your messages origin, integrity and confidentiality. This tool will open new doors for email use (commercial data, billing, banking information, internal or external communication of confidential data…).

- **Schedule your mailings.** Allows automatic scheduling of email campaigns for launching on a daily, weekly, or monthly basis etc. Email Marketer Scheduler Service manages this difficult job for you.

- **Speed Adjustment.** Email Marketer can slow or accelerate your email campaign sending speeds in accordance with your mail server maximum speed, or to match your ISP bandwidth or other Internet access limitations. Outbound email campaigns are easily throttled by messages per hour and help keep you compliant with your service provider.

- **Fast, Multi-Threaded Sending.** On a fast PC, Marketer can saturate a T1 line with outbound email, using up to 512 threads for message generation and delivery. Depending on your database speed, CPU, and complexity of your scripting, Marketer can generate up to 30 personalized messages per second. Many ISPs throttle back the

amount of email you may send. If that is too much for your mail server to handle, Marketer lets you specify how many messages to send per unit time for precise flow control. You can scale it back to 100 per hour if necessary.

- **Delivery Testing.** Send test emails to yourself before launching the entire campaign and decides the next.

- **Continuous Retry.** For failure deliveries, Email Marketer attempts to resend them automatically. Retry count could be customized.

- **Delivery Resuming.** Resumes sending from the previous breakpoint it left off and no duplicate mails are sent.

6. Handles subscription and unsubscription real time

- **Subscribe by Email or Web Form.** If you have a website, Email Marketer helps with subscription via web form. If not, incoming messages with special topic also does the job. Manage efficiently: add new data or update your database, automate the sending of new emails, manage easily the opt-in and opt-out processes or route emails automatically when receiving web forms.

- **Unsubscribe Link in Message.** Email campaigns can be sent with a working unsubscribe link automatically inserted in the message, making accurate unsubscribe processing a breeze! The software automatically flags recipient addresses which have unsubscribed, no matter what list they are on.

- **Incoming Messages Management.** If you are using an off-line list database, Email Marketer handles and converts opt-in or opt-out requests received via web forms to requests with email to your mailbox.

7. Website Integration with subscriber and tracking service

- **Multi List Subscription.** Email Marketer works with customizable subscriber, our revolutionary web-based subscription management.

- **Customizable Subscriber Form.** Your customers can set their own email preferences, select options or indicate interests directly from your website. This data is directly available to Marketer, making targeted communication with your customers a snap.

- **Tracking for Open and Click.** With powerful tracking service, real-time email click thru and HTML open tracking are available.

- **XML Based.** Both the online subscriber and tracking results are XML based and communicated with Email Marketer.
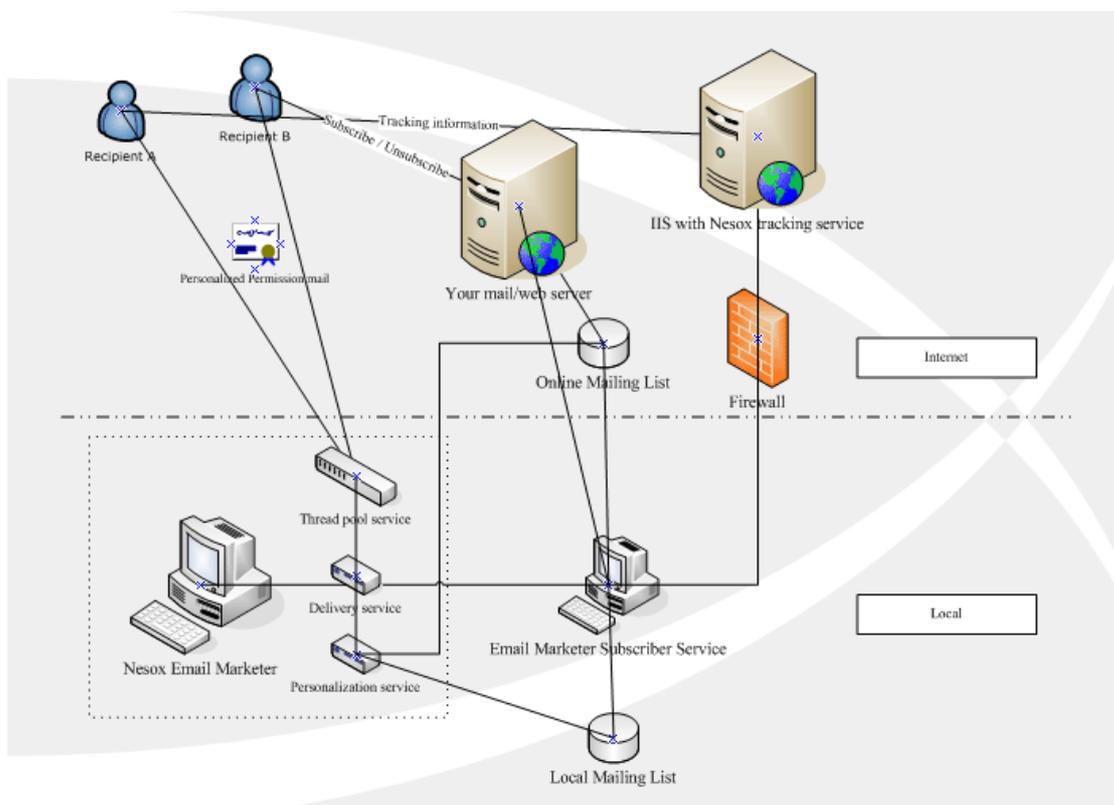
8. Professional and real-time reports

- **Rich Campaign Reports.** HTML formatted and consists of tables, graphs and charts to represent opening rate, click rate, statistics per receiver or per day, etc. Your organization is able to analyze your receivers' behavior, to measure the campaign efficiency, to evaluate its impact on sales, etc.

- **Rich List Reports.** List reports tell you the scale of your mailing list and groups, subscriber and unsubscriber amount by date with charts.

2.2 Technical Structure

Email Marketer is combined by three applications:

- Email Marketer Administrator, majors for mailing list management, list subscription and unsubscription, email campaign management including creation, sending and reporting

- Email Marketer Monitor, majors for project task scheduling service and mail monitoring service (for Business Edition only)

- Online service, majors for email open and hyperlink click tracking(for Business Edition only)

3 Unique Features

3.1 Campaign Management

A Email Marketer™ project is composed of five components, which are: General Information, Message Information, Recipient Information, Publish Information and Report Information.

A Email Marketer™ project is stored as a .mpj extension named project file. Email Marketer™ is embedded with compressing and encryption functions, which guarantee the security of project files, and makes safe keeping and transmission very convenient.

Email Marketer™ offers a project guiding function, which makes the establishment of the new project fast and simple. An encrypted project can not be opened without a password.

3.2 WYSIWYG Editor for HTML message

Email Marketer™ offers a mail editor interface similar to HTML editors such as FrontPage and DreamWeaver. The operation on the system is rather straight forward, What You See Is What You Get (WYSIWYG). One can not only arrange all kinds of display items such as pictures and texts by drag and slide, but also insert buttons, hyperlinks, Flash, tables, and individualized scripts. All shown items can be edited by a simple click of the mouse, making message editing simple and fast.

One can also perform spelling and grammar checks while editing a message, do prints or print preview at the same time, thereby preventing any potential false actions.

For advanced users, Email Marketer™ offers HTML source code editing, which provide a more convenient way in modifying, searching, and replacing source codes; it also supports highlights and personalization script.

Besides above-mentioned information, Email Marketer™ also offers the following function to assist message editing.

- Background Image Setting

- Background Music Setting

- Language Encoding Setting

- Foreground and Background Appearance Setting

- Hyperlink Color Setting

- Margin Width Setting

- Finding and Replacing

- Font Style Setting

- Font Shape (bold, italic, underlined, strike) Setting

- Paragraph Alignment (left、right、center) Setting

- Font Property(including name、size、shape、effect、color etc) Setting

- Content Indention Setting

- Spelling and Grammar Checking

- Insertion and edit on User Defined Script

- Insertion and edit on Self-Defining Personalization Script

- Insertion and edit of Images

- Insertion and edit of Hyperlinks

- Insertion and edit of Flash

- Insertion and edit of Horizontal Thread

- Insertion and edit on Tables, Setup of Cells

- Personalization Script Grammar Checking

3.3 Message Personalization Scripts

Email Marketer™ allows you to insert personalization script items in the message body and title. This means that you can control the contents of each individual email with your own programming. The personalization script is completely compatible with the most frequently used script languages such as VBScript and JavaScript, etc. Allowing it to visit outside database and show its content, and on this basis has expanded to two major COM targets namely User and Message, which support mail users and mail body content respectively.

For users that not familiar with the VBScript, Email Marketer™ has offered a series of menu commands, which can be used to insert user attributes such as mail address, name, etc in a simple way; and in the mail body, inserting script functions and other logic processing.

Email Marketer™ will compile the mail title and body before its sends, automatically replacing scripts with proper user attributes. The recipient will feel as if the message is sent for him specifically. In this way, Email Marketer™ achieves multi personalized messaging from single message.

With personalization scripts, you access the objects of the email by means of several Email Marketer script objects. As a result of this, you can easily:

- output text

- attach file attachments to the e-mail

- modify the subject / body

- load texts/templates from a file

- access the current user attributes

- access an external database via ADO

- read or write files

- control the mailing process

- save the message object to file

- and more…

This means that you will be able to manage the following tasks, for example:

- different title for different user gender

- all recipients of the domain xyz.com receive a different text content

- all of those interested in the product xyz receive product information as an attachment

- and more…

3.4 Varies Message Encoding Methods

The message language encoder can support English, Germany, Spanish, Chinese, Japanese, Unicode, etc, covers more than 30 countries.

The MIME encoder offers four encoding ways including 8bit, Base64, UUCode, and QuotedPrintable. The high efficiency of these encoding methods enables the processing of messages with millions of bytes under 0.1 second.

The mail content encoder allows one to send a text and HTML message at the same time, preventing the user from leaving out important information because of restrictions from the email client application.

3.5 Delivery Free of Mail Server

Email Marketer™ is embedded with a high-speed mail delivering engine, thus eliminates the need of a SMTP server for relaying. All mail is delivered to recipients directly, saving the relaying time from the routers. In this way, the recipient receives the message at the first instant, and because this software does not rely on a third party SMTP Server, failure of delivery will be notified right away, therefore preventing the occurrence of losing messages between sender and recipient.

For mails that can not be successfully delivered, one can pre-define the retry times of the delivery task, thus increase the success rate as much as possible, and ensure the success of your information business.

3.6 Mailing List Management and Link

Email Marketer™ is implemented with a function which manages a List Library, like what Microsoft does with its Address book. But besides mail address, the List Library has more than 30 list attributes, which enable a complete filtering of users.

Email Marketer™ offers four ways to choose project recipients as follow:

1. Email Marketer's build-in list database.

2. Existing Local Database for Access, Text, CSV, Excel, DBF and other data files.

3. Existing ODBC Compatible Database for MSSQL, MySQL, Oracle, DB2 etc.

4. Existing OLE DB Compatible Database for MSSQL, MySQL, Oracle, DB2 etc.

The above operations can all be accessed by the list wizard feature.

One can perform add, delete, edit, search, group(include both dynamic and static group), print, etc, on any mailing list, and also import/export user information from other programs such as Outlook, Excel, Plain text file, Address Book, etc.

3.7 Hi-Speed Delivery

Project delivers mail to selected recipients. The system allows one to use three methods of delivery – "Direct mailing", "Relay mailing" and "Mixed mailing". One can define the sender, sender address, and reply address. During message delivering, one may pause / continue sending mail, and will receive detail delivery information immediately. After the delivery has completed, Email Marketer™ will provide detailed transmission results in report form.

The mail delivery engine of Email Marketer™ is based upon a engine for concurrent multi-threads, that is to say, within the core design, it has adopted the Process Pool architecture; thus vastly reducing the system load, and achieving a quantum leap in system performance. This way, a large number of mails can be delivered at same time; the bandwidth is fully utilized, enabling the user to send as much as possible within any given time frame.

Of course, all these are processed by the system itself, the operator only needs to define the thread number according to one's soft and hardware configuration.

At the same time, Email Marketer™ utilizes the non-blocking I/O technology in the kernel design for the first time, further improve the overall security of the system, and enabling a better performance under high concurrent circumstances.

For Business Edition of Email Marketer™, a task scheduler helps plan your mailing task at a defined date / time.

3.8 Multi-Level Buffering

To a larger corporate, the total number of users is usually in terms of tens of thousands,

through multi-level buffering, Email Marketer™ makes the most enormous improvement performance wise as described below.

- Personalization script buffering, only one single compiling needed

- Attachment content data buffering, avoiding duplex coding

- DNS buffering, which uses the mail service addresses of Hash Table and index users

- Buffering of User information, avoiding network overload caused by extra access the User List

- Optimized mail body contents, minimizing the size of the mail.

3.9 Message Monitoring and Tracking

Email Marketer Tracking Service is an online HTTP service for monitoring the opens of messages and the clicks of links in message. With the tracking service, Email Marketer monitors and tracks mail by real time and when the recipients open or click email sent by Email Marketer, the behavior will be automatically recorded into online tracking service. And, in Email Marketer, it provides you with real-time email click thru and HTML open tracking reports.

3.10 System Configuration

The following options can be configured by Email Marketer Administrator.

- General options of Administrator

- Default sender information

- Default language, encoding type priority of the mail

- Font, grammar highlight options of mail editor

- Thread count, retry count, DNS address and buffer options

- User defined variables

4 Data Table

4.1 System Editions

We provide two editions of Nesox Email Marketer: Personal Edition and Business Edition.

Personal Edition

- Create and manage unlimited mailing list database

- Rich list reports

- Create, design and deliver mailing campaign projects

- Rich campaign project reports

Business Edition

- All features of Personal Edition

- Scheduling message deliveries

- List subscribe or unsubscribe via email or web form

- Possible to track email opens and clicks via tracking service

You can download the trial version of each edition of Email Marketer and try it for free before purchasing. So, you will get a good feel about how the software works and how you can benefit from it. The Trial Edition may be converted into a full (registered) edition by entering a valid registration key.

Edition Difference Details

To see which edition of Email Marketer is best suited to your needs please check out all of the below features, which goes through the differences in depth.

Function / Edition	Personal Edition	Business Edition
Mailing List		
Built-in List Database with a Capacity of Millions	✔	✔
List Validation, Querying and Grouping	✔	✔
Various List Data Source Linking	✔	✔
Various List Data Repositories Linking	✔	✔

List Attribute Field Customization	✓	✓
List Importing and Exporting with Various Format	✓	✓
Subscribe or Unsubscribe via Email		✓
Subscribe or Unsubscribe via Static Web Forms		✓
Customizing for Subscribe and Unsubscribe Form		✓
List Statistics Reports	✓	✓
Campaign Project		
Project Management	✓	✓
Project Protective Encryption and Compression	✓	✓
Project Statistics Reports	✓	✓
Email Design		
Rich Content Templates	✓	✓
Rich Style Templates	✓	✓
WYSIWYG HTML Editing	✓	✓
Embedded Media in HTML	✓	✓
Importing and Exporting	✓	✓
Personalization	✓	✓
Spelling Check	✓	✓
Email Delivery		
Multi Mail Account Management	✓	✓
SMTP Free Delivery	✓	✓

Concurrent Multi-Thread Delivery	✔	✔
Mixed Delivery	✔	✔
Message Preview before Delivery	✔	✔
Delivery Testing	✔	✔
Delivery Logs and Diagnosing	✔	✔
Delivery Retry for Failures	✔	✔
Scheduling Deliveries		✔
Others		
Multi Language Support and Switch	✔	✔
Automatic Upgrade Checking	✔	✔
Real-time Tracking for Message Open		*
Real-time Tracking for Message Click		*

4.2 System Requirements

Hardware requirements

1. Pentium 133 or above
2. True-Color Displayer (640x480 16bit)
3. 32MB RAM or above
4. Hard disk drive with at least 10 MB free disk space
5. Mouse

Software requirements

1. Windows 9x/ME/NT/2000/2003/XP
2. Internet Explorer 5.5 or later
3. IIS 5.0 or later (for optional tracking service of the Business Edition only)

4.3 System Performances

Name	Minimum	Maximum	Recommended Value (Average)
Delivery Thread Count	1	10,000	50
System User Allowed		2,147,483,648	1,000,000
User Importing/Exporting		1000 / sec	100 / sec
Attachments		2,147,483,648	1
DNS buffer		2,147,483,648	200
CPU Usage During Delivery	1%	90%	20%
Hard Drive Usage Per Mail			2.18 Transfer
Network Usage Per Mail			6.86 KB
Mail of Delivery	1 / sec	200 / sec	20 / sec

If one needs to optimize performance further more, then the following concerns have to be addressed:

● Avoid unnecessary personalized configuration to save overall resources spend on compiling

● Reduce mail size to decrease network roundtrip, try not sending mail more than 10 KB in size

● Increase the bandwidth of network

● Increase system memory, larger number of users demands more system memory

● Validation of the email addresses before delivery

● Use local DNS server(in the same LAN)

5. Glossary

Word	Explanation
ASP	Active Server Pages is the script editing environment on the server. One can develop dynamic web pages or establish powerful network application program with it. ASP includes HTML mark, text and command script.
DHTML	Full name is Dynamic HTML. In broad sense, all what can react to users operations can be named dynamic HTML; Specifically, it means HTML 4.0 defined protocols.
DNS Service	Domain Name System means domain name mapping server, its function is to change the domain name into IP address that can be recognized by the network.
ESMTP Protocol	Enhanced SMTP is an extension of the SMTP protocol that allows for new features such as supporting graphics, audio, and video files, and text in various foreign languages. Not all mail servers implement ESMTP so those features can only be used when both the client and the server conform to the protocol. These extensions were first described in RFC 1869.
GUI	User Graphic Interface
GUID	Globally Unique Identifier. Identifier generated according to an algorithm that is intended to be unique across all systems.
HTML	Hypertext Markup Language
Hyper Link	Hyper links, abbreviate as links. Method for jumping from one site to another on the internet. The hyperlink is often shown in a different form from normal text. Should the link be clicked, users can begin to jump to other sites. Hypertext has text pointed to other texts. Clicking it can show other files.
IE	Microsoft Internet Explorer
IIS	Microsoft Internet Information Server (or Services).
JavaScript	It is the most popular web script language at present, used for

	developing dynamic web page.
MIME Protocol	MIME is the abbreviation for 'Multipurpose Internet Mail Extensions'. As to the complementation of SMTP agreement, MIME has been the standard for sending non-text e-mail through SMTP protocol. At present, the use of MIME has already surmounted the range which just deals with receiving and sending e-mail, and has become one of the basic protocols transmitting the information of the multimedia on internet.
ODBC	Open Database Connectivity. A common standard of Microsoft that allows relational and non-relational database programs - like dBase, Oracle, Microsoft Access - to access the information independent of its file format.
OLE DB	An open specification that has been developed by Microsoft for accessing both relational and no relational data. OLE DB interfaces can provide much of the same functionality that is provided by database management systems. OLE DB evolved from the Open Database Connectivity (ODBC) application programming interface.
TCP/IP	Transfer Control Protocol / Internet Protocol.
VBScript	Visual Basic Scripting Edition applies the flexible script to more extensive fields, including web application script in IE and web server script in Microsoft Internet Information Service.
WWW Service	Abbreviation for World Wide Web.
XML	Extensible Mark-up Language. Like HTML it is a specification for formatting web documents and web pages. It supports communication between various companies and applications and is a simplified version of SGML. Despite the various operating system platforms and end devices, data access logic and application logic do not have to be changed.