
VisNetic MailServer

System Node Reference

Version 9.1


 powerful email server
.....
product updates: http://www.deerfield.com/products/visnetic-mailserver
other great products: http://www.deerfield.com
.....
<small>This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe criminal and civil penalties, and will be prosecuted to the maximum extent possible under law.</small>
<small>VisNetic® MailServer is a Trademark of Deerfield Communications Inc. All rights reserved. Portions Copyright© 2000-2003, IceWarp Software. VisNetic® MailServer is published by Deerfield.com®</small>

Contents

System	1
Services	2
Service Ports	2
Services - General Tab	3
Service Properties - Properties	5
Service Properties - Logging	7
Service Properties - Access	8
Service Properties - Other	9
Services - LDAP Tab	10
LDAP Server	12
LDAP Configuration	12
Using LDAP	15
LDAP Tools	18
LDAP References	19
Server Diagnostics	20
Logging	22
Logging - General	22
Logging - Services	24
Tools	26
System Backup	26
Service Watchdog	28
System Monitor	29
Tasks & Events	30

Remote Server Watchdog 31

TCP/IP Tunnel 34

Server Migration 36

 Server Migration - General Tab..... 37

 Server Migration - Manual Tab..... 39

 Server Migration - Statistics Tab 40

 Server Migration - Logging..... 41

Database Migration 41

Storage..... 43

 Storage - Accounts..... 43

 Storage - Directories 44

 Storage - Load Balancing 45

 Storage - Local Settings..... 47

Internet Connection 48

Certificates 51

 Certificates - Server 51

 Certificates - CA..... 54

 Certificates - Secure Destinations 54

Advanced 57

 Protocols 57

 Patterns 59

 Translation..... 60

CHAPTER 1

System

The system node contains options and settings related to overall Server functionality.

These include:

Service (see "Services" on page 2) management

Logging (on page 22) options

Tools (on page 26) supplied with VisNetic MailServer

Storage (on page 43) options

Internet Connection (on page 48) manager

Certificate (see "Certificates" on page 51) management

and some **Advanced** (on page 57) options

In This Chapter

Services	2
Logging	22
Tools.....	26
Storage	43
Internet Connection	48
Certificates	51
Advanced	57

CHAPTER 2

Services

In This Chapter

Service Ports	2
Services - General Tab.....	3
Services - LDAP Tab	10
Server Diagnostics	20

Service Ports

Each service is bound to an IP address and port number.

These can be changed if required, however, VisNetic MailServer's default ports conform to Internet standards and may be required by your ISP.

Most installations will work correctly with the defaults.

If you are using a Firewall you must open the ports for all the services you are using.

Warning - VisNetic MailServer's POP3 and IMAP run as one service so if you stop one, the other will also stop.

The same is true for IM and SIP.

You should also be aware that WebMail and FTP run under the Control Service. If you stop or restrict access to the Control Service your users may not be able to use WebMail or FTP.

Service Ports

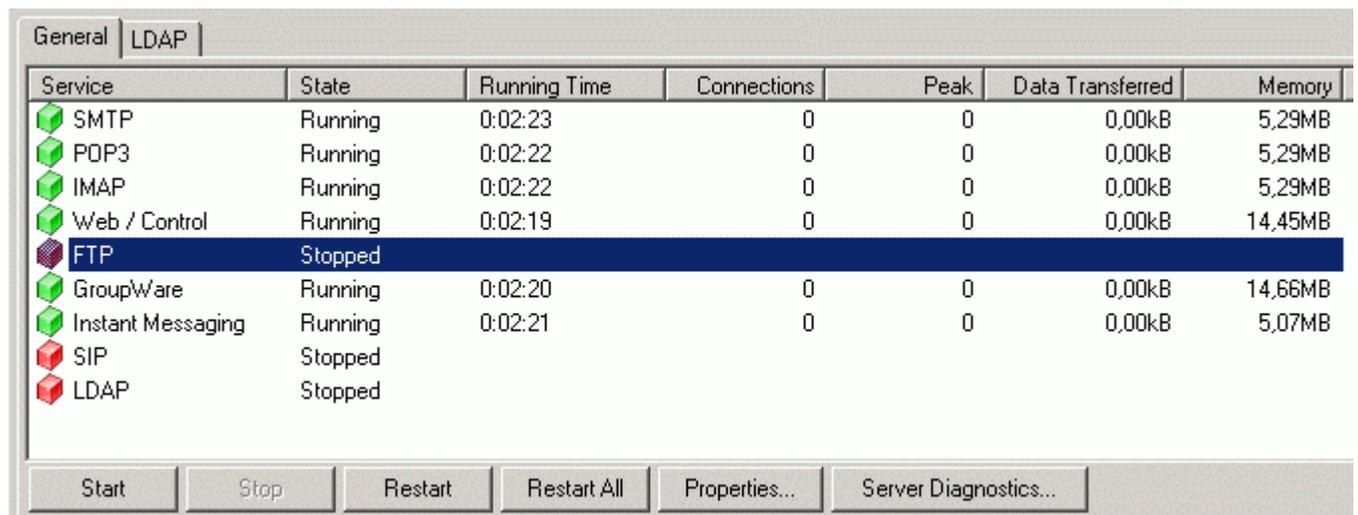
Service	Purpose	Standard Ports	SSL Ports
SMTP	Send mail	25,366	465
POP3	Receive mail	110	995
IMAP	Read mail	143	993
Control (Web)	Web admin, web mail, proxy server	32000	32001

Calendar	GroupWare and Calendar	5229	
IM	Instant Messaging Server	5222	5223
LDAP	LDAP Server (directory service)	389, 636	
FTP	File Transfer Protocol		
SIP	Session Initiation Protocol	5060 plus user-defined range (see SIP)	

You may also need to set specific IP binding of the machine the server is running on if that machine is running other, non-VisNetic MailServer services (IIS, for example) as VisNetic MailServer will bind to all available IP addresses

Services - General Tab

Selecting the System Node in the Administrator Console brings up a screen similar to the following:



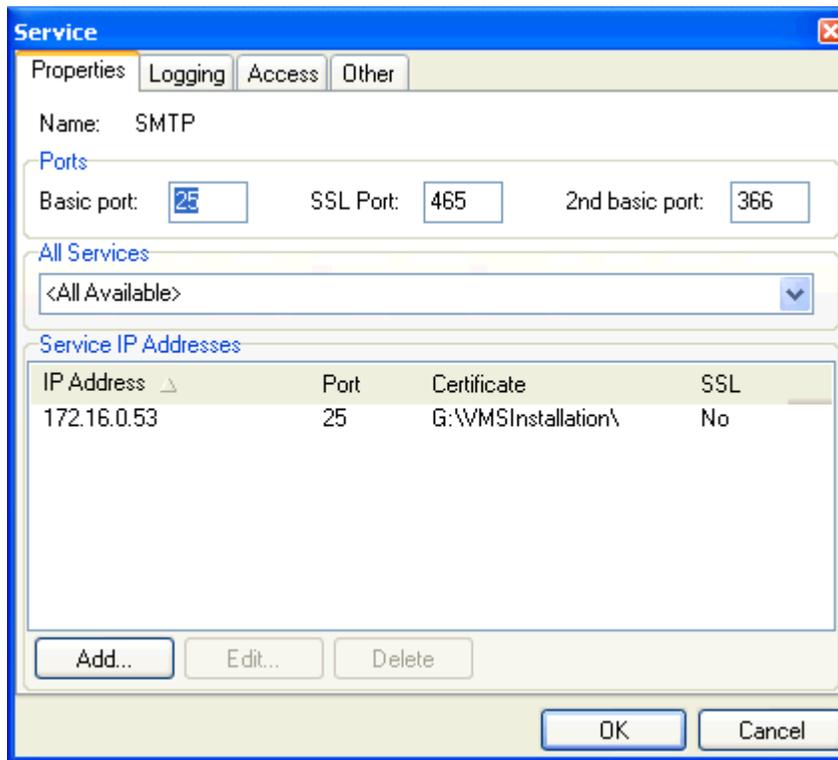
Service	State	Running Time	Connections	Peak	Data Transferred	Memory
SMTP	Running	0:02:23	0	0	0,00kB	5,29MB
POP3	Running	0:02:22	0	0	0,00kB	5,29MB
IMAP	Running	0:02:22	0	0	0,00kB	5,29MB
Web / Control	Running	0:02:19	0	0	0,00kB	14,45MB
FTP	Stopped					
GroupWare	Running	0:02:20	0	0	0,00kB	14,66MB
Instant Messaging	Running	0:02:21	0	0	0,00kB	5,07MB
SIP	Stopped					
LDAP	Stopped					

This shows you a complete list of available Services on your server and some information about their Status

Column Name	Description
Service	This gives the name of the available service. To the left of the name is either a red or green box which gives you a visual indication of whether the service is running - a Green box if the service is running or a Red box if the service is stopped.
State	Tells you whether the service is Running or Stopped.
Running Time	How long the service has been running.
Connections	How many current connections to the service.
Peak	Highest number of concurrent connections.
Data Transferred	How much traffic this service has had.
Memory	Current Memory used by the service.
Button	Use
Start	Start the Service (if stopped)
Stop	Stop the service (if started)
Restart	Stops the service, then starts it again. You may need to do this if you have changed properties, for example IP binding or the service Port.
Restart All	Perform a stop/Start on every service.
Properties	Open up the service dialog for the selected service (you can also double-click the service to open properties). Discussed in detail in following topics.
Server Diagnostics	Performs basic diagnostics on your services. Discussed further in <i>Server Diagnostics</i> (on page 20).

Service Properties - Properties

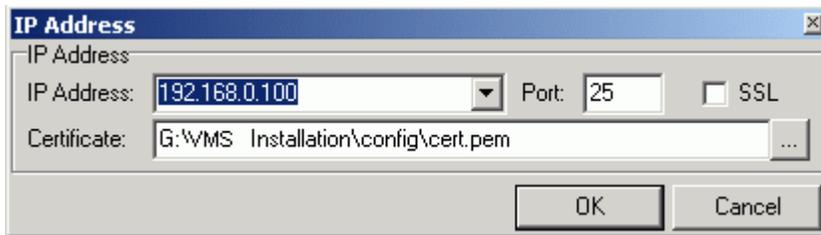
Pressing the Properties button when you have a service selected opens the Service dialog:



This dialog is the same for all VisNetic MailServer services.

Field	Description
Ports	<p>The ports that this service listens on.</p> <p>The defaults are the standard Internet ports as defined by ICANN (Internet Corporation for Assigned Names and Numbers).</p> <p>Some services do not need an SSL port as they can convert a non-SSL connection to an SSL connection on the same port.</p>
All services	<p>This is a Global Setting that affects All Services.</p> <p>A combo box is presented, where you can choose between all the known IP addresses for this machine, a <none> option, and an <All Available> option.</p> <p>You can also type multiple IP addresses manually into the text area, separated by semi-colons. e.g. 192.168.0.32;192.168.0.57;192.168.0.145</p>
Service IP addresses	<p>Here you can specify an IP address to bind this specific service to.</p> <p>This might be useful if you need to run a service on a non-standard port or for</p>

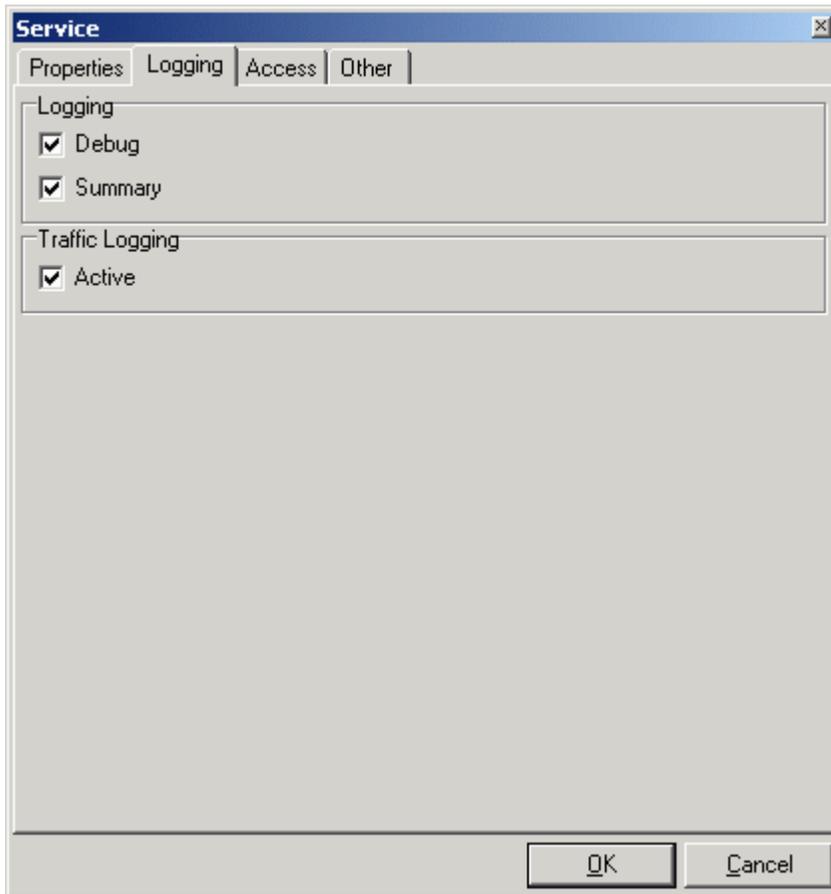
assigning a special certificate.



Binding is not necessary for correct multiple domain configuration.

If you do need to bind VisNetic MailServer on Windows 2000 or Windows XP, you will need to disable the IP Pooling features of the operating system first. More details can be found on the Microsoft Web site.

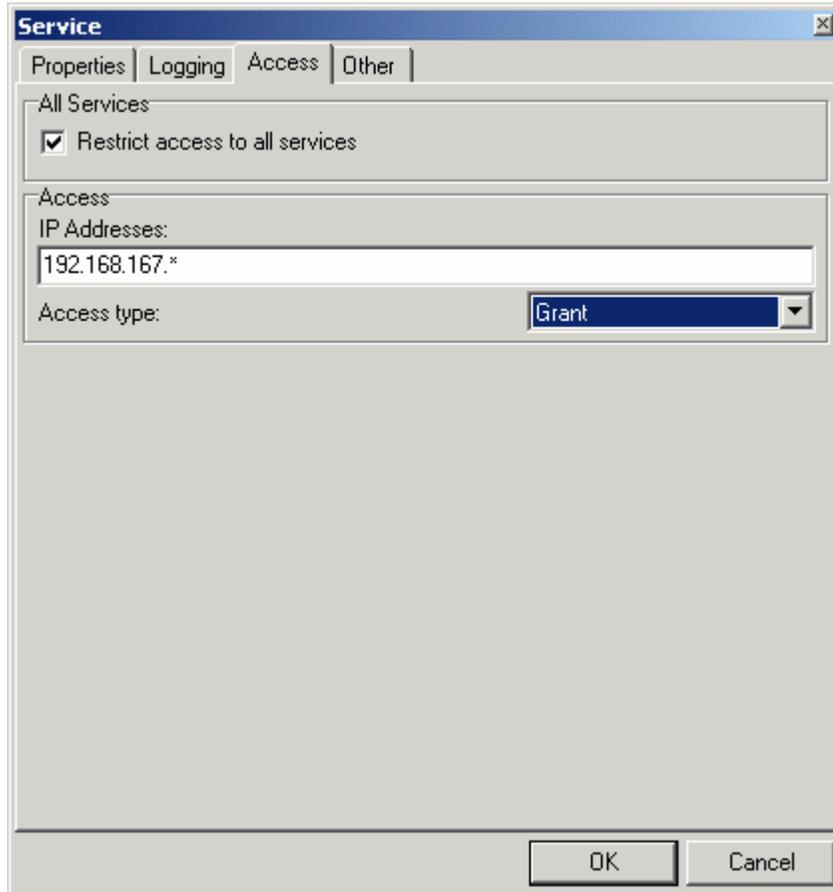
Service Properties - Logging



Field	Description
Logging	<p>Debug</p> <p>The most detailed logging will be used showing all service traffics.</p> <p>Summary</p> <p>Summary type logs only the general summary information and status of a service session. Summary lines start with the string ***.</p> <p>The same settings can be edited also in Logging - Services (on page 24).</p>
Traffic Logging	<p>If enabled, you can use Traffic Charts to show the amount of traffic for appropriate service.</p>

Other related options can be set in **Logging** (on page 22).

Service Properties - Access



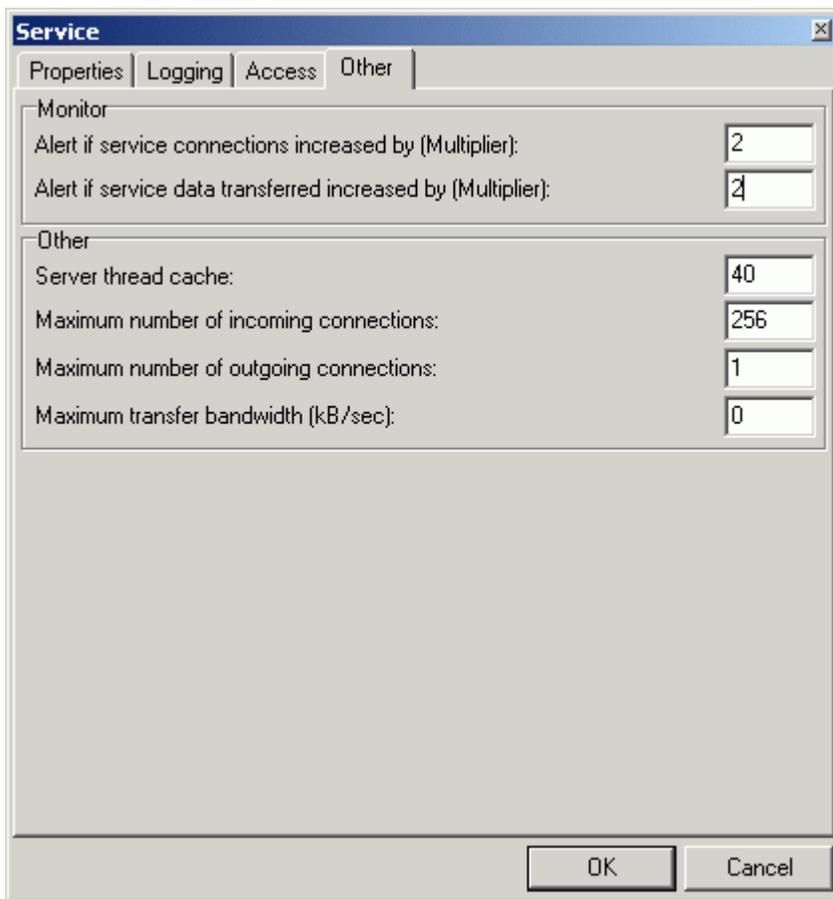
The Access feature acts as a basic firewall and allows you to block or grant access to specific IP addresses that try to connect to your server.

This is not an anti relaying option, and normally you would not need to use this feature.

Field	Description
Restrict access to all services	This option affects all services. Check this box to enable the feature.
IP Addresses	Specify IP addresses you wish to grant or block access to. You can specify full IP addresses here or subnets (masked IP addresses). Multiple entries are allowed, separated with semicolons.

	<p>Example: 192.168.*.*;127.0.0.1;192-193.*.*.*;[Firewall]</p> <p>Note that [Firewall] is a Pattern (see "Patterns" on page 59).</p>
Access type	<p>Grant means only the listed IPs will be able to establish connections to your server. Deny means the listed IPs will not be allowed to connect..</p>

Service Properties - Other



Field	Description
Alert if service connections increased by (Multiplier)	<p>Enables service connections monitoring by entering a multiplier.</p> <p>For example, a value of 2 will create an alert when the service connections increased by 200% in one minute.</p>

	The alert email message is sent to the email account specified in the System Monitor (on page 29) tool.
Alert if service data transferred increased by (Multiplier)	Enables service data transferred monitoring by entering a multiplier. For example, if you enter 1.5, you will be alerted after a 150% increase in the amount of data transferred by a particular service. The alert email message is sent to the email account specified in the System Monitor (on page 29) tool.
Server thread cache	The thread cache specifies the maximum number of threads that can be reused for new client connections. Each new connection that is accepted by the server is given a separate execution thread. In order to improve performance, server sockets store these threads in a cache rather than freeing them when the connection is closed. New connections can then reuse threads from the cache, rather than requiring the server to create a new thread every time a connection is accepted. NOTE - It is not recommended to change the defaults values unless you have a specific reason to do so
Maximum number of incoming connections	The maximum number of simultaneous connections from remote servers. You can limit the flow of incoming connections with this option.
Maximum number of outgoing connections	The maximum number of simultaneous connections to another mail server. You can limit the flow of outgoing connection with this option. Consider using this limit if your server's CPU usage is too high.
Maximum transfer bandwidth	You can restrict the maximum speed which can be used for particular service. This is useful if you have a slow connection and you want to leave bandwidth available for other services. A value of "0" means no restriction is applied.

Services - LDAP Tab

NOTE - although this feature is still supported and the node is still available you can now define Group Accounts and have the Group synchronized with LDAP (see GroupWare - LDAP). The use of Groups accounts is the preferred method.

LDAP is an acronym for **Lightweight Directory Access Protocol**.

LDAP, also known as a Directory System Agent (DSA), allows you to locate organizations, individuals, and other resources such as files and devices in a network, regardless if you are on the Internet or on a corporate intranet. Additionally, it does not matter whether or not you know the domain name, IP address, or geographic whereabouts.

An LDAP directory can be distributed among many servers on a network, then replicated and synchronized regularly.

LDAP was developed at the University of Michigan; it is "lightweight" in contrast to DAP, a part of the older X.500 direct protocol for networks.

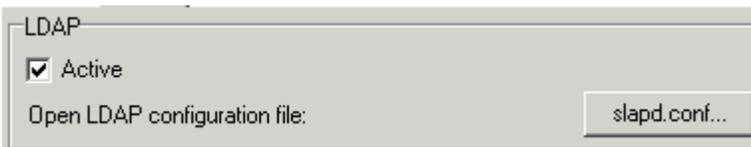
VisNetic MailServer's implementation of the LDAP is based on the OpenLDAP Project at <http://www.openldap.org/>, extended with SSL support. The whole LDAP server is installed and configured automatically during the VisNetic MailServer installation, and also includes proper configuration for Netscape Messenger and Outlook Express (schemas).

There many **resources** (see "LDAP References" on page 19) (see "LDAP References") about LDAP on the Internet. It is definitely good idea to study some of them...

LDAP utilizes Client-Server Architecture.

LDAP Server is installed with VisNetic MailServer and resides in the folder <InstallDirectory>\LDAP\

LDAP Client is usually your email client, or other application. Many current email clients, including Microsoft Outlook, Eudora, and Netscape Communicator are able to access this LDAP Server. See the section for **Using LDAP** (on page 15).



Field	Description
Active	Enables/disables LDAP service.
Shared address book (LDAP user sync)	If checked, all new users on the server are stored also in LDAP and it means that anyone who knows the login information can access global address book via LDAP (e.g. from Email Client) The already created users have to be converted to LDAP by Convert Users to LDAP.
slapd.conf	Opens the configuration file. See LDAP Configuration (on page 12) section.
Reload	Refreshes the LDAP data storage
Convert Users To LDAP	Once you have enabled Shared address book, you can convert all current users to that LDAP too.

NOTE - although this feature is still supported and the node is still available you can now define Group Accounts and have the Group synchronized with LDAP (see GroupWare - LDAP)

LDAP Server

VisNetic MailServer Professional supports LDAP v3 and is based on the OpenLDAP project. Any additional information can be found on that site. See the license agreement in the LDAP\readme.txt file.

Once installed, you can start the LDAP server and it will be ready and working. It has its suffix already created so you can go on with creating new entries immediately.

LDAP runs under the Control service and works only on Windows NT and higher (NT,2000,XP) platforms. It does not support Windows ME,95,98.

LDAP setting files can be found in the <InstallDirectory>\LDAP directory and follows the OpenLDAP project.

To activate LDAP, you have to have the Professional version of VisNetic MailServer running on Windows NT platforms. Click Active and Save. LDAP server will start immediately.

When started you can see it is really running in the System tab where it has to say "LDAP" under the control service.

You can also change the LDAP ports. LDAP in VisNetic MailServer supports SSL so you can connect to the LDAP over a secure connection using the certificates installed on VisNetic MailServer. Same certificates as for HTTP and other services will be used.

The Reload button will make sure to restart the LDAP server so it reloads all of the LDAP setting files. Make always sure to check the LDAP running status. If any errors were created in the settings, the LDAP server will not start.

LDAP Configuration

To configure LDAP properly you have to have some prior knowledge. To learn more about LDAP search the Internet or follow the resource links. VisNetic MailServer's LDAP will let you immediately add, modify, delete and search records on LDAP.

The main settings are done in the file LDAP\slapd.conf. The file looks like this:

```
# $OpenLDAP: pkg/ldap/servers/slapd/slapd.conf,v 1.8.8.7 2001/09/27 20:00:31 kurt Exp $
#
# See slapd.conf(5) for details on configuration options.
# This file should NOT be world readable.
#
include      schema/core.schema
include      schema/inetorgperson.schema

# Define global ACLs to disable default read access.

# Do not enable referrals until AFTER you have a working directory
# service AND an understanding of referrals.
#referral    ldap://root.openldap.org

#pidfile      slapd.pid
#argsfile     slapd.args

# Load dynamic backend modules:
# modulepath %MODULEDIR%
# moduleload back_ldap.la
# moduleload back_ldbm.la
# moduleload back_passwd.la
# moduleload back_shell.la

#
# Sample Access Control
#   Allow read access of root DSE
#   Allow self write access
#   Allow authenticated users read access
#   Allow anonymous users to authenticate
#
#access to dn="" by * read
#access to *
#   by self write
#   by users read
#   by anonymous auth
#
# if no access controls are present, the default is:
#   Allow read by all
```

include

This item lets you include additional schema definitions. All schema definitions are located in the LDAP\Schema directory. You can create your own definitions and edit the existing. Make sure to follow the creation rules otherwise LDAP will not start. If you are a beginner use always the existing schema definitions.

suffix

This item identifies the suffix you will use the LDAP server under. All client connections will have to use this suffix. All DB records are also under this suffix so when you change the suffix you need to create the new records again under the suffix. Usually the suffix is like your domain name.

```
suffix "dc=vmsdemo.com,dc=com"
```

We wanted to you to be able to use the LDAP right always so we created the suffix

```
suffix "dc=root"
```

rootdn

This item identifies the administrator user of LDAP that does not need to exist in LDAP and still perform any actions like add, edit and delete records. It always has to contain the suffix at the end. The default is.

```
rootdn "cn=admin,dc=root"
```

rootpw

This item contains the password for rootdn the administrator account in LDAP.

The rest of the slapd.conf lets you perform additional changes. Make sure you do not change them unless you know what you are doing. Any additional information can be found at <http://www.openldap.org/>.

Using LDAP

Adding, modifying and deleting records on LDAP can be done using different LDAP tools. We recommend using LDAP Administrator from Softera (<http://www.softerra.com/>) which is a shareware and can be downloaded from. It has a nice windows-like explorer interface and works properly.

All mail clients supporting LDAP allow you to search records on LDAP servers. Hardly some will help you to modify records on the server. Some mail clients have a better LDAP implementation and searching is smooth and some are cumbersome and hardly to use.

Configuring Netscape Messenger

Configuring Netscape Messenger to use LDAP servers is easy and is done in the Address Book area. Click File and New Directory.

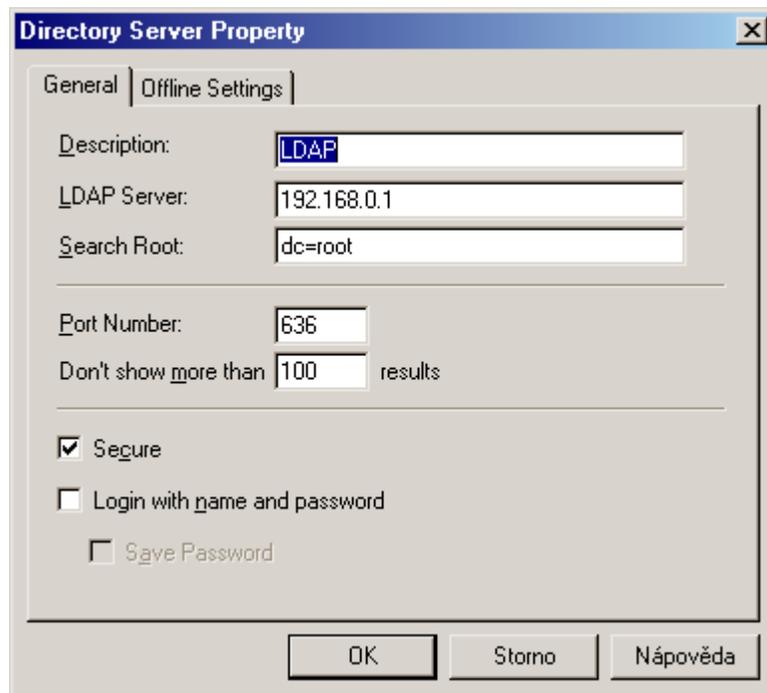
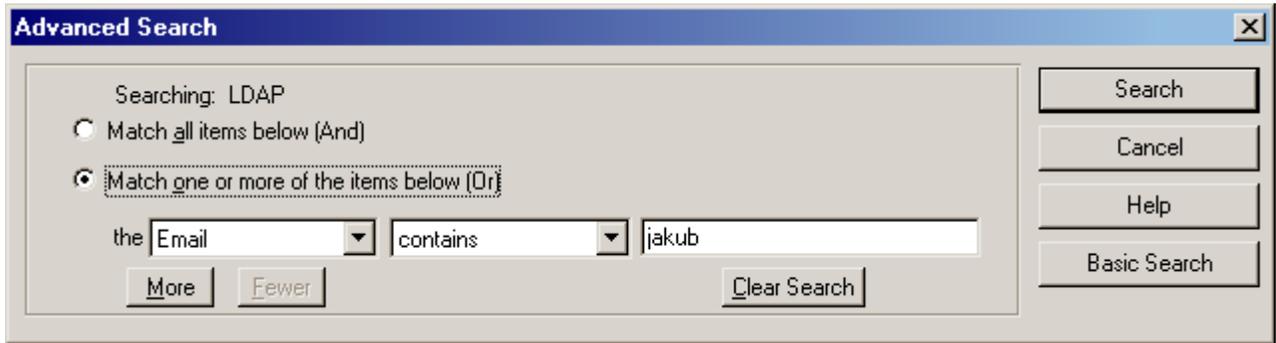


Figure 1: Professional
- LDAP Advanced
Search

The description can be anything you would like to see in the Address Book. The server needs to be the IP or the host name of the LDAP server. Search root is the suffix or desired root you want. Leave the port numbers default. You can use the secure SSL connections if needed. Configuring is done.

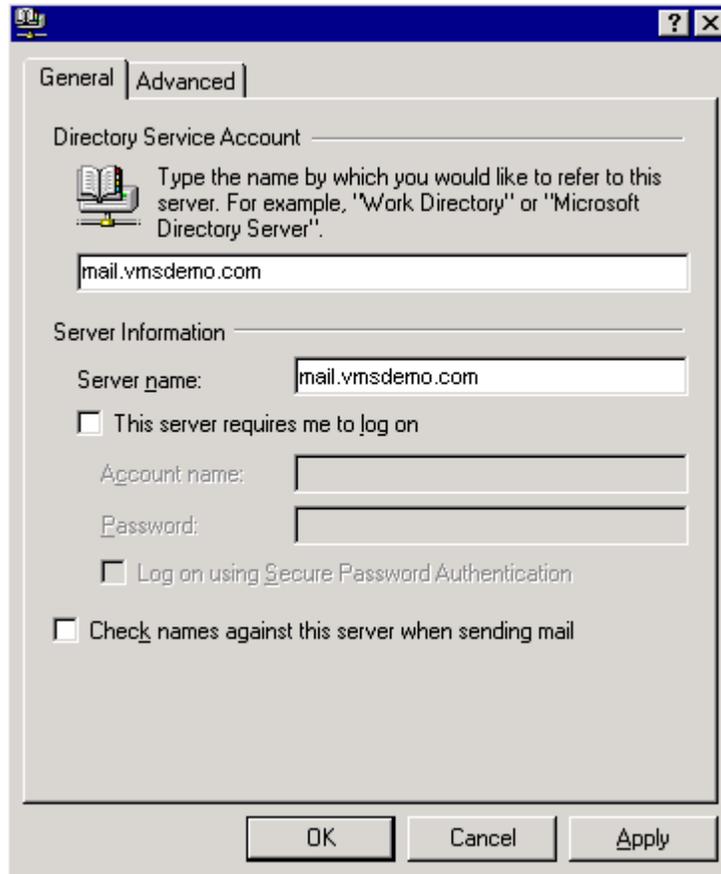
To search the directory, click the directory and press Search. A dialog will appear.

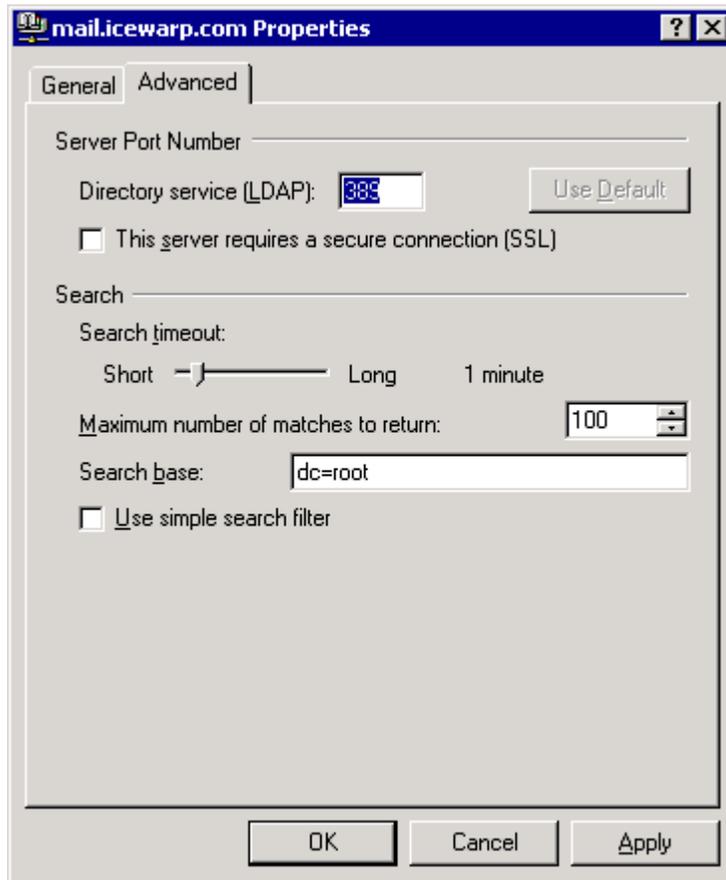


Press search and a list of items will appear in the directory listing. The list and the search are cached and next time you open the directory last search results will be present.

Configuring Outlook Express

Outlook Express supports LDAP a differently. Each time you want to use it, you have to perform a search and select the directory you want to search. To configure Outlook Express to use LDAP, select the Tools -- Accounts - Directory Service and click Add Directory Service.





Searching in Outlook can also be a bit complicated. You have to open the Address Book and in the Edit menu item use the Find Persons item. Select the LDAP directory and fill in the desired search conditions. Click Search.

LDAP Tools

There are some tools in the LDAP directory that help to administer LDAP DB. The tools have the same parameters as the tools of the OpenLDAP project.

slapadd

Slapadd allows you to add records to LDAP DB using the LDIF format. You can see an example in the LDAP directory. The two files, create.ldif and create.bat, create the suffix in the LDAP DB using the slapadd tool. Similarly you can add more records by editing the create.ldif file. Syntax of the LDIF format can be found on the Internet.

schema

The LDAP schema, as with all database schemas, is the definition of what can be stored in the directory. The basic thing in an entry is an attribute, like given Name. Each attribute is associated with a syntax that determines what can be stored in that attribute (plain text, binary data, encoded data of some sort), and how searches against them work (case sensitivity, for example). An object class is a three-tuple, consisting of (must have, required, may have), saying what other attributes can or should be present.

There is a standard core of schema definitions (object classes, attributes and syntaxes), and you can define your own to suit your particular needs. Most every organization will want to do that.

The best resource for information where you can browse object classes, attributes, syntaxes and matching rules.

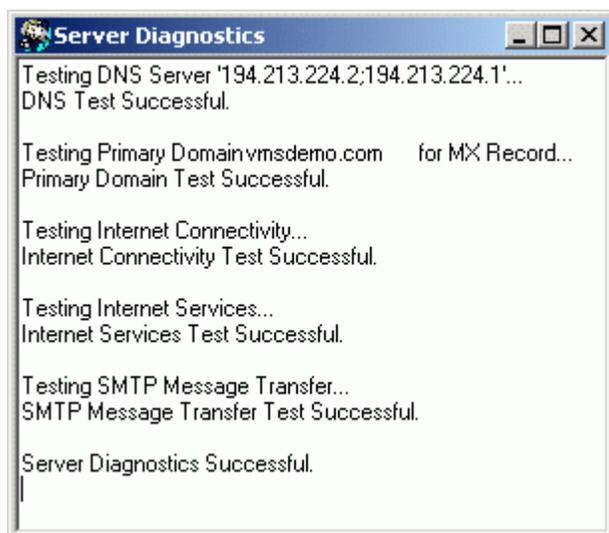
LDAP References

- LDAP Zone **<http://www.ldapzone.com>** (<http://www.ldapzone.com/>)
- ldapman.org **<http://www.ldapman.org>** (<http://www.ldapman.org/>) has some great introductory articles.
- The LDAP Schema Repository **<http://ldap.akbkhhome.com>** (<http://ldap.akbkhhome.com/>) is indispensable for figuring out what to stuff in there and how.
- A System Administrator's View of LDAP **<http://people.netscape.com/bjm/whyLDAP.html>** ([http://people.netscape.com/bjm/whyLDAP.html /](http://people.netscape.com/bjm/whyLDAP.html/)) by Bruce Markey from Netscape is a very clear introduction to our use of it.
- Jeff Hodge's LDAP roadmap and faq **<http://www.kingsmountain.com/LDAPRoadmap>** (<http://www.kingsmountain.com/LDAPRoadmap/>)
- The Yahoo! category **http://dir.yahoo.com/Computers_and_Internet/Communications_and_Networking/Protocols/LDAP__Lightweight_Directory_Access_Protocol_** (http://dir.yahoo.com/Computers_and_Internet/Communications_and_Networking/Protocols/LDAP__Lightweight_Directory_Access_Protocol_/) has great links.
- Here's something about the Abstract Syntax Notation **<http://www.techapps.co.uk/asn1gloss.html>** (<http://www.techapps.co.uk/asn1gloss.html>) used in specifying the protocol.
- Here's something about the Basic Encoding Rules **<http://renoir.vill.edu/~cassel/netbook/ber/node1.html>** (<http://renoir.vill.edu/~cassel/netbook/ber/node1.html/>) defining what the protocol looks like on the wire.
- More about BER, this time LDAP-specific **<http://users.neca.com/vmis/berldap.htm>** (<http://users.neca.com/vmis/berldap.htm/>)

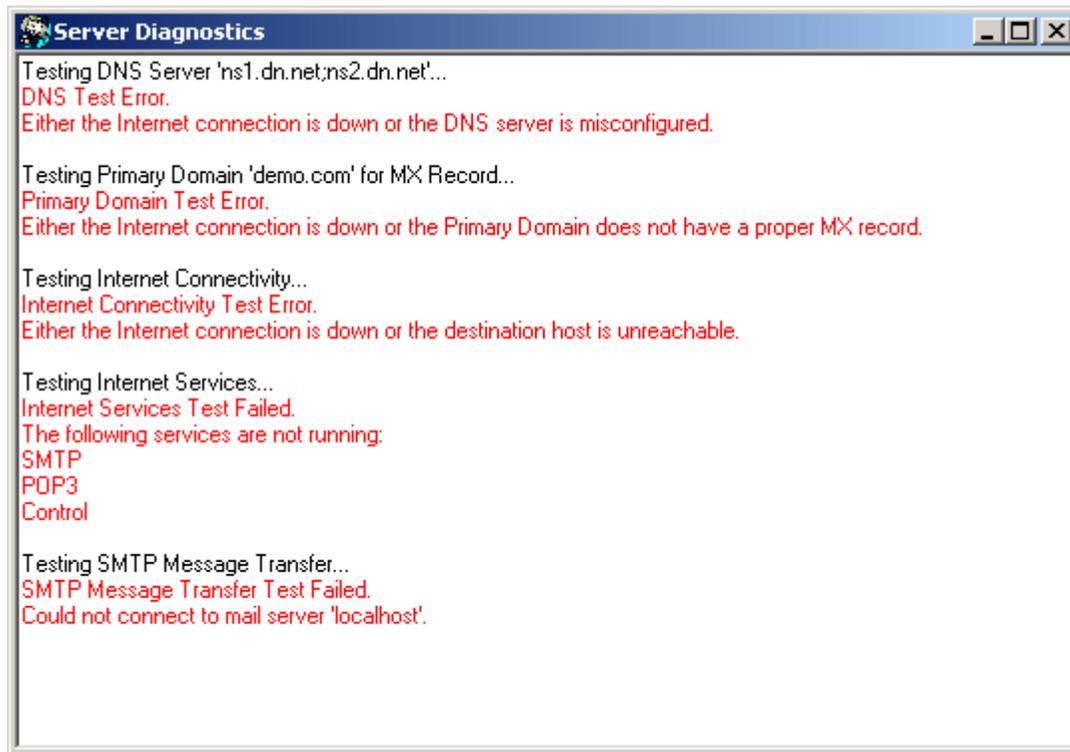
Server Diagnostics

The Server diagnostics button will start a series of simple server tests will be performed, allowing you to check basic server functionality.

If all the tests are successful the results will look something like this:



And if tests fail you will get results similar to this:



NOTE - the Internet connectivity test attempts to contact the icewarp.com server so if this test fails you could check that www.icewarp.com is accessible from a browser where you know the internet connection is working. If that is ok you should check your firewall and/or router settings.

CHAPTER 3

Logging

The logging Node allows you set the Activity log options for all services.

Each services can create Summary and/or Debug (detailed) activity logs which can help greatly when trying to solve any problems within VisNetic MailServer.

Logs can be written to simple files or to a database (see note below)

Log files can be rotated based on size and/or deleted after a number of days.

Log entries can be written to the standard system syslog.

These options can also be set in the Services node (see **Service - Properties** (see "Service Properties - Properties" on page 5)).

In This Chapter

Logging - General.....	22
Logging - Services.....	24

Logging - General

In the General tab you decide how log entries will be saved.

Field	Description
Enable file logging	Check this option to write log entries to text files.
Delete logs older than (Days)	By default, a new log file is created on a daily basis. This option allows you to delete old log files by specifying a threshold in days.

	In the screenshot above logs over 7 days old are deleted automatically.
Archive deleted logs to file	Check this option and specify a fully qualified path to a file to have deleted logs archived to that file.
File log cache	Here you can specify an amount of memory to be used as a cache for logs. Log entries are written to the cache until the cache is full, at which point the cache is written and the cache cleared. A value of 0 specifies that no cache is used. In the screenshot above the cache is set to 32kB
Rotate log files when size exceeds	On a very busy server with a high level of logging the daily log files could become too large to be readable. If you specify a number here then the logs will be rotated when the file reaches that size. In the above screenshot files will be rotated when they reach 4MB in size.
Logs	Press this button to immediately access the Status - Logs Node of VisNetic MailServer.

Log files are saved in the <InstallDirectory>\logs directory with a filename ayyyymmdd-nn.log, where;

a - is one of

c - for Control Service

f - for FTP Service

g - for GroupWare Service

m - for IMAP Service

p - for POP3 Service

s - for SMTP Service

yyyy - is the year

mm - is the month (2 digits)

dd - is the day (2 digits)

nn - is a two digit incremental value, starting at 00, used when the log rotates within a one day period

So, m20060913-01.log is the second IMAP log for 13th September 2006

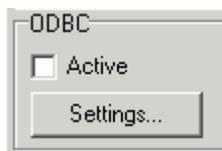
An exception to this rule is the SIP logs, which are stored in <InstallDirectory>\logs\sip

Syslog

Send logs to system log function (syslog)

Send logs to server (syslog protocol):

Field	Description
Send logs to system log function (syslog)	You can check this option to have all logged events sent to the system log. Events are written using the Windows API function C_System_Logging_General_SystemLogFunction.
Send logs to server (syslog protocol)	Check this option to have the Syslog sender send its data to an external (remote) syslog server. This is usually used in large multi-server installations where there is a centralized syslog repository. Information packets are sent over UDP using the system log call function.



You can have the log data sent to any ODBC database by checking the Active checkbox.

Press the Settings button to setup the ODBC connection.

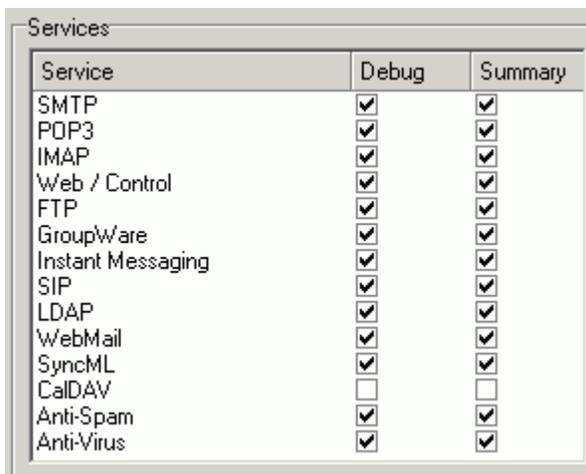
NOTE - the use of a database to store log entries is not recommended as this can have a serious impact on server performance.

Please note that when using ODBC logging the log entries cannot be displayed in Status - Logs.

You must extract these entries from the database if you wish to examine them.

Logging - Services

The Services tab allows you to select service logging options.



Debug Logging

Check this box to have detailed log entries for the service.

Summary Logging

Check this box to have summary log entries written for the service. The summary log entries start with the string `***` and contain very basic information for the service.

CHAPTER 4

Tools

This chapter discusses various Tools that are built in to VisNetic MailServer to help automate tasks and monitor systems.

In This Chapter

System Backup	26
Service Watchdog.....	28
System Monitor.....	29
Tasks & Events	30
Remote Server Watchdog	31
TCP/IP Tunnel.....	34
Server Migration	36
Database Migration.....	41

System Backup

The System Backup Tool allows you to schedule regular backups of your server.

You can also run a manual backup or restore using the File -> Backup Settings and File -> Restore Settings menu items.

The screenshot shows a dialog box titled "General" with the following fields and controls:

- Active
- Backup to file: E:\Backup\''''''_MM_DD''.mcb
- Password protection: *****
- Delete backup files older than (Days): 30
- Buttons: Schedule..., Backup Now

Field	Description
Active	Check this option to enable scheduled backup.
Backup to file	Enter the name of the backup file that the backup should be written to. Use the "." button to browse to a directory or type directly to the text area. If you specify a folder that does not exist it will be created when the backup first runs. You can use various variables within the file name, see the table below for

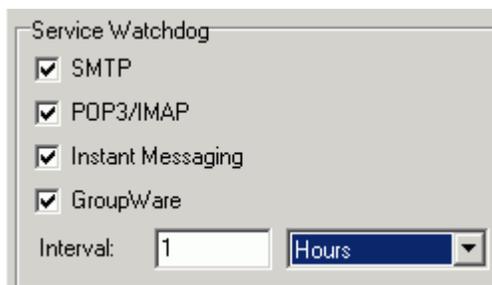
	more details.
Delete backup files older than (days)	<p>If you use variables to create dated/timed files you should probably use this feature to delete files older than a set number of days.</p> <p>Specify any non-zero amount to have files deleted.</p> <p>In the screenshot above any .mcb files over 30 days old will be automatically deleted.</p>
Schedule	<p>Use this button to set a schedule for regular automatic backups of your VisNetic MailServer configuration.</p> <p>NOTE - This is HIGHLY recommended.</p>
Backup	Press this button to backup your system immediately.

Variable	Description
YYYY	Current Year.
MM	Current Month (01 - 12)
DD	Current Day (01 - 31)
HH	Current Hour (01 - 24)
NN	Current Minutes (00 - 59)
SS	Current Second of the actual time (00 - 59)

Field	Description
Backup user data located in mail directories	<p>Check this option to include User data contained in mail directories.</p> <p>This will back up User specific data but not the mail messages, nor any auto-responders, filters etc. that the User has set up.</p> <p>Use this option with care if you have a large number of Users as the backup could take a long time.</p>

Backup the license	<p>Check this option to include a copy of your VisNetic MailServer license in the backup.</p> <p>This is useful if you experience a server crash and need to re-install VisNetic MailServer.</p> <p>If you restore to a different machine than the one you generated the license for it will not work and you will need to regenerate your license.</p> <p>If, for some other reason, your license fails to work properly after a restore you can always regenerate the license.</p>
Backup all emails	<p>Check this option to include all mail messages in the backup.</p> <p>Use this option with care. A large production server could contain millions of emails and including them in your backup could cause major degradation in your server's performance.</p>
Skip backup of emails if larger than	<p>If you choose to include mail messages in your backup you could cut down the size and duration of the backup process by excluding larger messages.</p> <p>Specify a non-zero value to exclude messages greater in size than that value.</p> <p>In the above screenshot messages larger than 20MB will be excluded from the backup.</p>
Skip backup of emails if older than (Days)	<p>When including mail messages in your backup you can also help performance by skipping messages older than the specified number of days.</p> <p>A value of 0 means don't skip any messages.</p> <p>In the above example messages over 90 days old will be excluded.</p>
Additional directories	<p>You can add other directories to your backup by specifying them here.</p> <p>Multiple entries should be separated by semicolons.</p> <p>This could be useful for backing up logs etc.</p>

Service Watchdog



VisNetic MailServer provides a basic service watchdog feature that monitors the specified services and if any of them are stopped it will automatically try to restart it.

The Service Watchdog runs under the Control service, because of this it cannot monitor the Control Service.

Check the box next to each Service you wish to monitor.

Specify in the Interval: text area and dropdown how often the watchdog should check the Services (every 1 hour in the above screenshot)

System Monitor

The System Monitor resides in the SMTP Service and monitors various aspects of your server.

You can have alerts sent to a User if thresholds you define are broken. We recommend that this User is an administrator so he can access the system and fix, or suggest a fix for, the problem.

Field	Description
Active	Check this box
Alert email address	Any Alerts will be sent to the address(es) specified here Multiple addresses can be entered, separated by semicolons.
Alert if available physical memory drops below	Enter a non-zero value here to have an alert sent based on available memory. In the screenshot above an alert will be sent if the available memory falls below 128kB
Alert if free disk space drops below	Enter a minimum free disk space figure which will be used as a threshold. When available disk space falls below this figure an alert will be sent to the alert email address. If the value is zero no disk space monitor is applied.
Select disk drives to be checked	The Paths button opens the diskspace.dat file where different values can be entered for different disk drives.

	Examples are included in the editor.
CPU utilization threshold	Enter a non-zero value to indicate a CPU utilization threshold for alerts. If CPU usage is higher than this threshold for the length of time specified in the next text box an alert will be sent.
Alert if CPU usage exceeds threshold for	The length of time the CPU utilization must break the threshold before an alert is sent. In the above screenshot a CPU alert will be sent if the utilization exceeds 80% for more than 2 minutes.

Tasks & Events

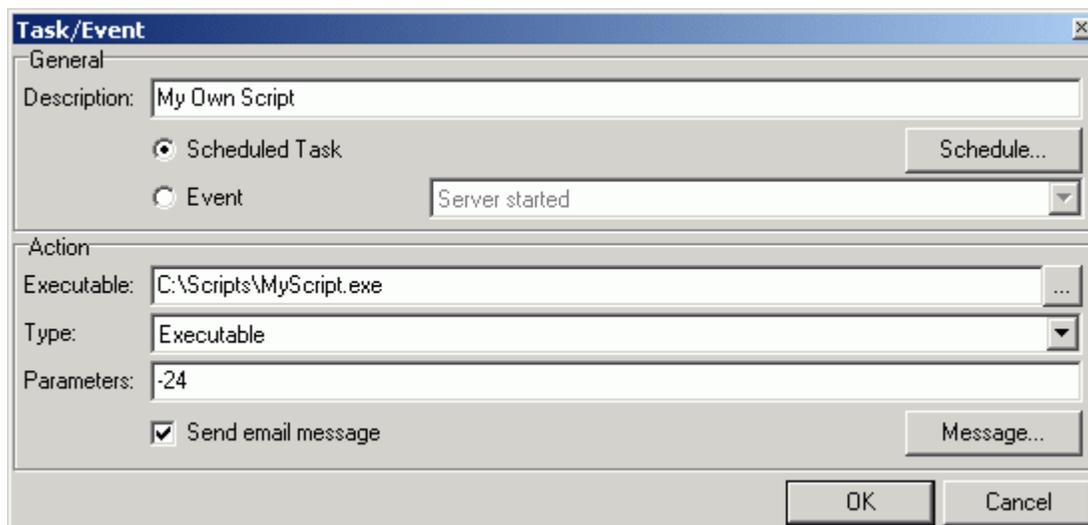
Tasks & Events is a feature that lets you execute any application or process at a given time using the schedule settings.



Use the **Delete** button to delete a selected item.

Use the **Run Now** button to immediately run a selected item.

Pressing the **Add** or **Edit** button will open the **Task/Event** dialog shown below.



Field	Description
Description	Simple description of the task or event item which is then shown in the Tasks & Events list.
Scheduled Task	Choose this option to make this Item a scheduled task. Use the Schedule... button to define a schedule for this item.
Schedule	Pressing this button allows you define a schedule for this item.
Event	Choose this option to run this item when the selected trigger event happens. There are three trigger events you can chose from: Server started Run this item when the <i>Control Service</i> starts Server stopped Run this item when the <i>Control Service</i> stops Settings changed Run this item when settings are changed
Executable	Specify the full path or URL to the executable.
Type	Specify the interface to be used to run this item Executable is used for a DOS executable. StdCall and Cdecl are library interface specifications when you are calling a DLL file. URL should be specified for a remote executable script.
Parameters	Specify any parameters that should be passed to the executable.
Send email message	Check this option to send an email when this item is triggered. Use the Message button to specify the email details.
Message	Press this button to open the Message dialog which allows you to configure the details of the email to be sent.

Remote Server Watchdog

The Remote Server Watchdog allows you to have VisNetic MailServer check remote servers automatically and raise an alert if the server cannot be contacted for a specified length of time.

You can also monitor a URL and its content. In addition, you can automatically download the content of the URL if it has changed.

The General section defines default options - if you leave any of these options empty in an item definition, these default settings are used.

Field	Description
Active	Enables the Server Watchdog
Report email address	The default email address for reports. Use the "..." button to open the Select Accounts dialog.
Server is down when unreachable for more than (Min):	Enter a non-zero value here to effectively allow a monitored server to be down for this length of time. In the above screenshot a server will not be considered down until it cannot be contacted for more than 15 minutes.
Notify when server is back online	Check this option to have VisNetic MailServer send a report when an unreachable Server becomes reachable again.

A list view of monitored servers is available:

Description	Server / URL	Port	Email
My FTP Server	ftp.vmsdemo.com	21	admin@vmsdemo.c

Buttons: Add... Edit... Delete Schedule... Check Now

Description - shows the free-form description of the server.

Server / URL - shows the monitored server or URL.

Port - shows the port that VisNetic MailServer is using to reach the server.

Email - shows the email address that reports are being sent to.

The **Delete** button will delete the selected item from the list.

The **Schedule** button will bring up a simple schedule dialog where you can specify how often the servers should be checked.

The **Check Now** button can be used to immediately check all servers.

Pressing the **Add** or **Edit** button opens the **Remote Server Item** dialog, where you can define or change an item:

Remote Server Item

General

Description: My FTP Server

Report address: admin@vmsdemo.com

Schedule (Leave empty to use the global schedule): Schedule...

Server

Server: ftp.vmsdemo.com

Server port: 21 Server down if unreachable for more than (Min): 15

Server send string:

Server result regex:

URL

URL:

Download to file:

OK Cancel

Field	Description
Description	A short description of the item that is shown in the list
Report address	Specify the email address for reports on this item to be sent to. Use the "." button to open the Select Accounts dialog. Overrides the address specified in the General area.
Schedule	Use this button to set a schedule for checking this server. Overrides the schedule set in the General area.
Server	Specify the server hostname or URL to be checked.
Server port	Specify the port to contact the server.
Server down if unreachable for more than (Min)	Set to a non-zero value to have VisNetic MailServer not consider the server unreachable until it is unreachable for this length of time.
Server send string	String that will be sent to the server on defined port after the connection is established. Example: 'GET /download/merak.zip HTTP/1.1'#13#10'Host: www.vmsdemo.com'#13#10#13#10 Each line should be separated in the simple quotes and the decimal values of

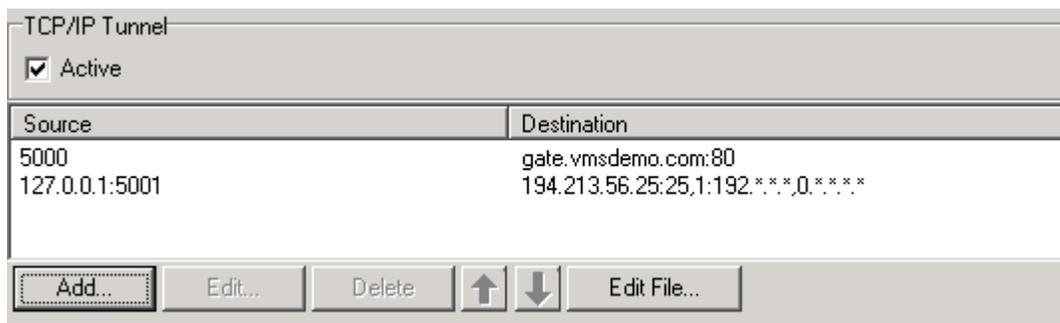
	<p>the CRLF should be specified using the format #13#10.</p> <p>If you leave this field blank no string will be sent to the server.</p>
Server result regex	<p>Regular expression that describes the required remote server response.</p> <p>If the server responds with any other response it will be considered as being down.</p> <p>If you leave this field blank no returned-string checking is performed.</p>
URL	<p>If a URL is specified, VisNetic MailServer will monitor the URL.</p> <p>VisNetic MailServer will record the last date, time, and size of the content. If anything has changed it will send a notification and optionally download the content (if enabled).</p>
Download to file	<p>If checking a URL you have the option to automatically download the content a local file if the contents change.</p> <p>Specify a full filename you wish the content to be saved to.</p> <p>Leave the field blank and no download will be performed.</p>

TCP/IP Tunnel

A TCP/IP tunnel is a gateway listening on a specific port that forwards all communications to a specific destination.

VisNetic MailServer allows you to create multiple TCP/IP tunnels on your system, which can optionally be SLL encrypted.

A list of tunnels is displayed:

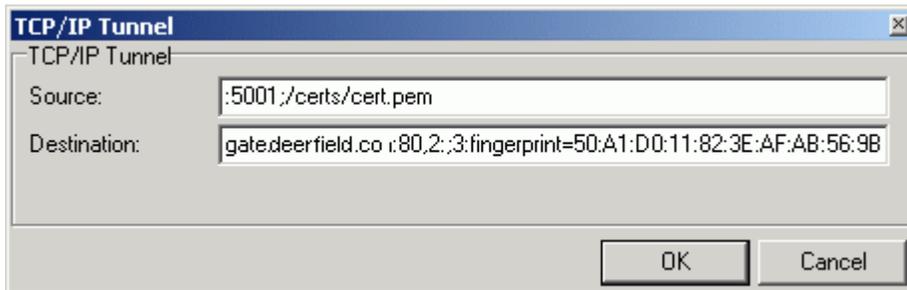


Source - shows the listening IP address, port, and whether the connection should be SSL

Destination - shows the destination host or IP address, port, and rights for ports

The **Delete** button deletes the selected tunnel definition.

The **Add** and **Edit** buttons will open the **TCP/IP Tunnel** dialog, where a tunnel can be defined or modified:



Field	Description
Source	<p>Where VisNetic MailServer will listen.</p> <p>Syntax:</p> <p>[IP]:port[;SSL]</p> <p>IP - optional, the listening IP</p> <p>:port - mandatory, the listening port</p> <p>;SSL - optional, the connection should be SSL encrypted</p> <p>Examples:</p> <p>:5001;SSL</p> <p>Listens on all interfaces on port 5001 as an SSL server</p> <p>127.0.0.1:5001</p> <p>Listens on IP 127.0.0.1 port 5001</p>
Destination	<p>Where VisNetic MailServer will send received data.</p> <p>Syntax:</p> <p>[IP]:port[;SSL][,rights]</p> <p>IP - optional, the IP address</p> <p>:port - mandatory, the port</p> <p>;SSL - optional, states the connection should be SSL encrypted</p> <p>,rights - optional, consists of 0 (to reject) or 1 (to accept) followed by a comma, followed by an IP address range</p> <p>:fingerprint= - optional, specify the fingerprint of a certificate that must be held</p> <p>Examples:</p> <p>gate.vmsdemo.com:80;SSL</p>

	<p>Sends SSL encoded data to gate.vmsdemo.com port 80</p> <p>194.213.224.2:25,1:192.*.**</p> <p>sends all data to 194.213.224.25 port 25 only (the 1) for connections from 192.*.**</p> <p>gate.vmsdemo.com.com:80,2;;3:fingerprint=50:A1:D0:11:82:3E:AF:AB:56:9B:5D:D9:D4:24:A5:D2</p> <p>Listens on port 5001 as an SSL server and forwards all data SSL decoded to gate.deerfield.com. Requires client certificate and the client certificate has to have a fingerprint of 50:A1:D0:11:82:3E:AF:AB:56:9B:5D:D9:D4:24:A5:D2</p>
--	---

Server Migration

The biggest challenge for today's System Administrators when moving to a new email server is working out a painless way to move all the Users, and data, from the old server to the new server.

The classical approach to this problem is to utilize a custom program to extract the data directly from the old server's database and then import it into the new Server's database. The problem here is finding a safe, reliable program designed to work with the two server technologies.

Enter the **VisNetic MailServer Migration Tool included in VisNetic MailServer Console**.

The VisNetic MailServer Mail Migrator uses a smart proxy approach by sitting between your users and your old server. When your users login to VisNetic MailServer for the first time, via POP3/IMAP, VisNetic MailServer will use the User/password combination given to access the old server and retrieve data.

User's mailboxes are built automatically for you so you don't even need to know who your Users are.

Before actually going through the migration process, you must first prepare the system to be ready for the migration:

- Lets say your old mail server handles mail for a domain called "foo.com".
- Users access the mail server via a host name called "mail.foo.com".
- They use that address in their POP3/IMAP and SMTP settings of their mail client.
- Now, you modify your DNS records so that the migrator machine becomes the new "mail.foo.com" and create a new A DNS record called "oldmail.foo.com" that points at the original mail server (POP3/IMAP).
- You have to make sure that MX records for domain "foo.com" point at host name "mail.foo.com".
- You can use the DNS Query tool to check DNS records are setup correctly.

There is a detailed Migration Guide available for download from <http://www.deerfield.com/support/visnetic-mailserver/>

Server Migration - General Tab

There is a detailed Migration Guide available for download from <http://www.deerfield.com/support/visnetic-mailserver/>

The screenshot shows a dialog box titled "General" with the following elements:

- Source host:** A text input field followed by a dropdown menu currently showing "Both".
- Migration account:** A text input field.
- Log file:** A text input field.
- Access Mode:** Three radio buttons: "Standard", "Username" (which is selected), and "Extended recipient resolving".
- Below the radio buttons are three checkboxes:
 - Do not use X-Envelope-To header
 - Do not process Received header
 - Multi domain migration (Requires unique domain IP binding)
- At the bottom of the dialog are three buttons: "Start", "Stop", and "Finish Migration".

Field	Description
Source host	Defines the source for migration and the type(s) of account: Both - POP3 & IMAP Accounts. POP3 IMAP
Migration account	When you create your domain you must create a migrator account first. Specify this account here.
Log file	Specify a full path and filename where the migration log will be saved.
Access Mode	Select one of: Standard This mode will create one alias per Account, based on the From: header of received messages Username This mode does not parse messages at all and the alias of the New Account is the same as the login name. This is the recommended option. Extended recipient resolving This mode will parse received messages for all possible aliases for the new Account and will create those aliases with the Account. This option has two

	<p>further sub-options:</p> <p>Do not use X-Envelope-To header</p> <p>Check this option if you are sure that all old messages have strictly correct MIME headers.</p> <p>If they don't, this option will cause the migration to fail.</p> <p>Do not process Received header</p>
Multi domain migration (Unique IP binding)	<p>Use this option with care.</p> <p>Use this option only with care. It enables the multi domain migration where you can migrate more domains at once. This feature however requires certain rules.</p> <p>Every domain to be migrated requires a virtual IP binding. This is done by the Virtual IP Binding button on the domain property in VisNetic MailServer. All domains must have a unique IP set. Now all your email login attempts must come directly to the correct IP. The migration will then exactly know the domain name the new account belongs to and will create it in that particular domain</p> <p>Example:</p> <p>2 domains to be migrated.</p> <p>foo1.com - IP Binding - 192.168.0.1</p> <p>foo2.com - IP Binding - 192.168.0.2</p> <p>The actual Backup Domain settings can be set to the same mail server. The incoming mail server still has to be the only one.</p> <p>Now for your foo1.com users you give them an incoming mail server host name that points to 192.168.0.1. It can be mail.foo1.com.</p> <p>foo2.com will get also a host name mail.foo2.com that points to 192.168.0.2.</p> <p>By this you should be all set. Now when somebody connects to server to either of those IPs VisNetic MailServer already knows what domain the account belongs to thus it will migrate all users to proper domains.</p> <p>The advantage of this feature is that it does not require that you previously had IP bindings on the old mail server.</p>
Start Button	This button appears at the bottom of all Server Migration Screens. Press it to start the migration process.
Stop button	This button stops the migration process.
Finish Migration	This button instructs VisNetic MailServer to complete all outstanding account migrations.

Server Migration - Manual Tab

There is a detailed Migration Guide available for download from <http://www.deerfield.com/support/visnetic-mailserver/>

The Manual tab allows you to manually migrate Accounts.

To migrate an account you must know the Account name and password.

You can migrate a single account or a batch of accounts (via a text file containing account information).

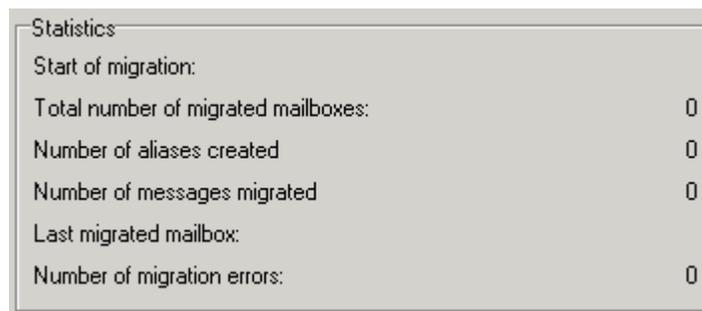
If you do have a list of Accounts and passwords available then the Bulk user method is the recommended way to migrate Accounts, as it more controllable by yourself as to when and what is migrated.

Field	Description
Single user	Select this option if you wish to manually migrate a single user
Username	Specify the Username of the single account you wish to migrate.
Password	Specify the password for the single account you wish to migrate.
Domain	Domain that account is in.
Bulk user	Select this option to use a file containing a list of Users to drive the migration. See below
Bulk file	Check this option to migrate Accounts in bulk. You should create a file listing the Accounts you wish to migrate, in the following format: <pre>user1:pass1 user2:pass2:alias@domain</pre>

	<p>With one Account/password/Address per line</p> <p>Use the '...' button to open a standard browser to locate and select your file.</p>
Migrate Accounts and their Messages	<p>Press this button to have VisNetic MailServer migrate the specified Accounts, creating each Account during the process.</p> <p>VisNetic MailServer will log in to the original server using the Account(s) specified and retrieve the data.</p>
Migrate messages for existing accounts	<p>Press this button to migrate Messages for existing accounts only.</p> <p>You can use this option if you have already created the Accounts specified (maybe you need to do a phased migration).</p> <p>NOTE - that if you have a complete list of your Accounts you could use tool.exe to create the accounts in a batch mode, ready for message migration.</p> <p>VisNetic MailServer will log in and retrieve any messages.</p>

Server Migration - Statistics Tab

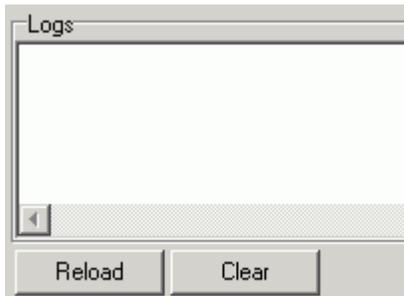
There is a detailed Migration Guide available for download from <http://www.deerfield.com/support/visnetic-mailserver/>



Statistics	
Start of migration:	
Total number of migrated mailboxes:	0
Number of aliases created	0
Number of messages migrated	0
Last migrated mailbox:	
Number of migration errors:	0

The statistics tab shows the progress of the migration process. It is highly recommended to watch the statistics tab - in particular the **Number of migration errors**.

Server Migration - Logging



The Logs tab allows you to view log information for the server migration in progress.

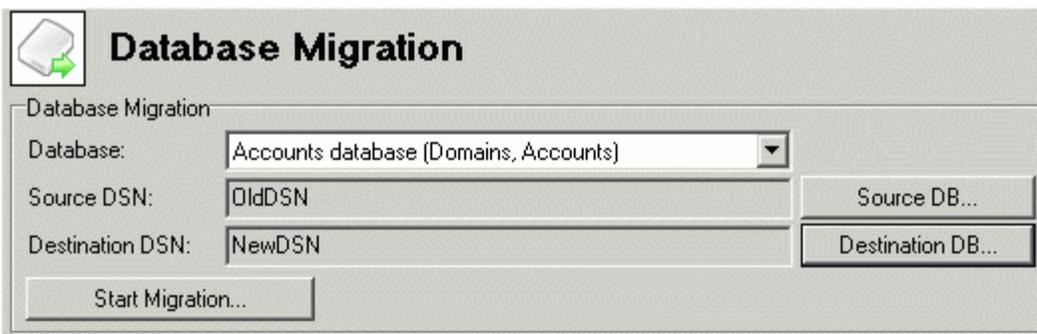
Press the Reload button to reload/refresh the log.

Press the Clear button to clear the log window.

Database Migration

The Database Migration node allows you to easily migrate the VisNetic MailServer database from one database server to another,

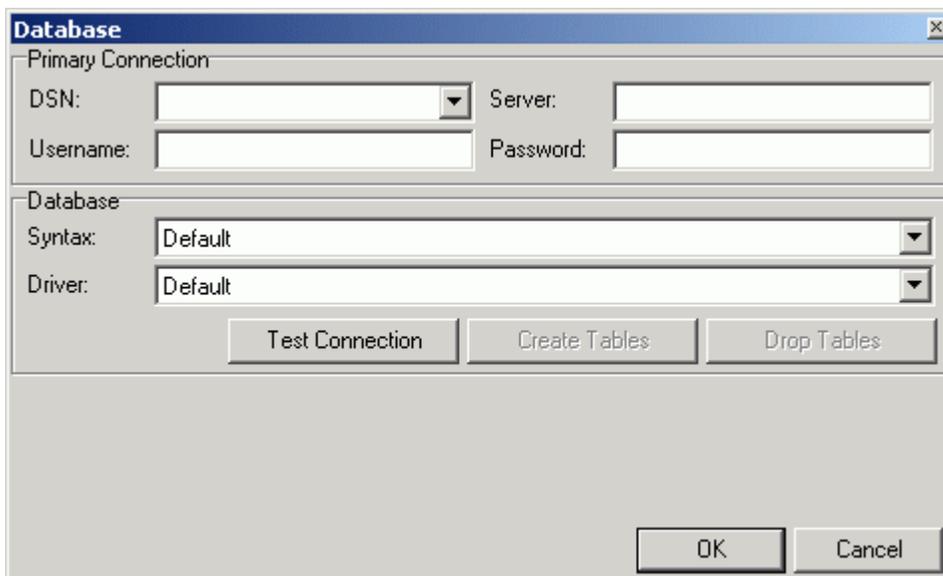
You may want to do this to change the physical server or to change the database technology in use (for example, upgrading from MS Access to MySQL or MS SQL Server)



Field	Description
Database	Select which VisNetic MailServer database you want to migrate from the dropdown list. Available databases are: Accounts Database Anti-Spam Database

	Groupware Database
Source DSN	Press the Source DB button to define the source dSN for migration
Destination DB	Press the Destination DB button to define the target DSN for the migration.
Start Migration	Press this button to start the migration process.

Both the Source DB and Destination DB buttons open the Database dialog, where you should specify the details of the source and destination databases:



Field	Description
DSN	Select the DSN of the database
Server	Enter the hostname of the database server
Username	Enter a Username to access the database
Password	Enter the password for the use
Syntax	Select the database technology in use (this is required because of minor differences in SQL syntax)
Driver	Select a driver for the database technology you are using.
Test Connection	Press this button to test that VisNetic MailServer can access the database with the details entered.
Create Tables	Press this button to Create the required tables (on the target DSN).
Drop Tables	Press this button to delete Tables (on the Source DSN, after the migration).

CHAPTER 5

Storage

The Storage Node allows you to modify where, and in some cases how, various information is stored.

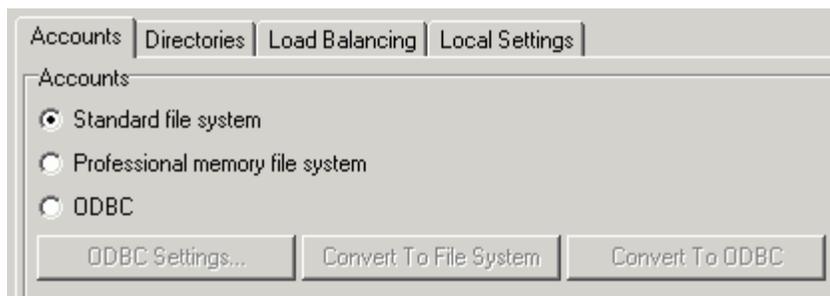
In This Chapter

Storage - Accounts	43
Storage - Directories.....	44
Storage - Load Balancing.....	45
Storage - Local Settings	47

Storage - Accounts

The Accounts tab allows you to choose the type of storage system that VisNetic MailServer will use to store Account and Domain information.

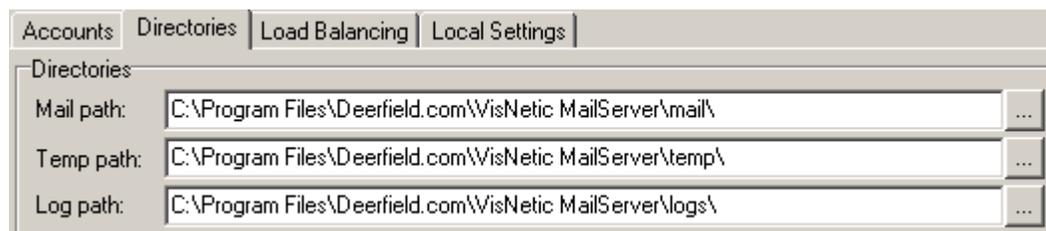
The size of your installation (number of Accounts and Domains) should determine which system you should use.



Field	Description
Standard file system	Uses the operating system's standard binary files, stored on your hard drive(s). Suitable for installations up to 500 Accounts.
Professional memory file system	Uses the same file system as the Standard system but VisNetic MailServer additionally performs some caching functions. The most frequently accessed Account information is stored in RAM to speed up access to those accounts. Suitable for installations up to 1000 Accounts.

ODBC	<p>Uses a database storage system for Account and Domain information system.</p> <p>As databases use indexing features this can significantly increase the speed of Account and Domain information retrieval.</p> <p>Recommended for installations with over 1000 Accounts.</p> <p>NOTE - for very large installations we recommend you use a heavy-duty database application rather than something like MS Access, and run the database system on a dedicated server.</p>
ODBC Settings	<p>Use this button to open the Database dialog where you can specify ODBC connection information.</p> <p>See ODBC Settings for more details.</p>
Convert to File System	<p>If you are using an ODBC system and wish to revert to a file system you should use this button first to convert the information, then select the file system you wish to use</p>
Convert to ODBC	<p>If you are using a file system and are changing to an ODBC system you will need to use this button, after you have set up your ODBC Settings, to migrate your information into the database.</p>

Storage - Directories



The directories dialog specifies where VisNetic MailServer stores various files. The directories need not be created in advance, VisNetic MailServer will create all directories as required.

Field	Description
Mail path	Specify a fully qualified path to the directory where User Mailboxes and the Outgoing Message Queue should be stored,
Temp path	<p>A fully qualified path where incoming messages are stored before they are processed.</p> <p>NOTE that this directory is automatically emptied when VisNetic MailServer starts so you should not store any data here that you wish to keep.</p>
Log path	A fully qualified path where all the VisNetic MailServer Log Files should be stored.

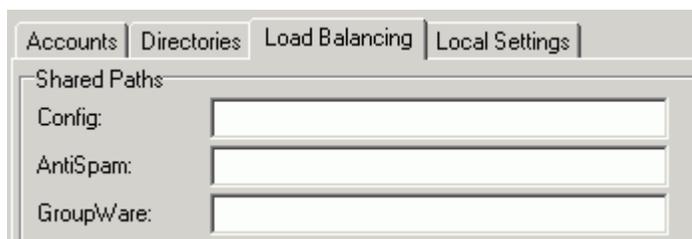


Field	Description
Use mailbox path alphabetical sorting	<p>Use this option for larger installation to create additional "alphabetized" subdirectories to the Mail Path.</p> <p>This is a performance fix for Windows systems where file display can be slow for directories containing many thousands of subdirectories.</p> <p>Specify a number in the Number of characters from alias to path prefix box</p> <p>For example, in the above screenshot:</p> <p>User john will have messages stored in <i><path></i>\joh\john</p> <p>User george will have messages stored in <i><path></i>\geo\george</p> <p>User alexander will have messages stored in <i><path></i>\ale\alexander</p>
Number of characters from alias to path prefix	<p>The number of characters to take from the alias of the User if you select to Use mailbox path alphabetical sorting.</p>

Storage - Load Balancing

The Load balancing section allows you to set up multiple VisNetic MailServer installations to serve as a load balanced system, with each server taking a share of the processing.

This is achieved by using common folders for Configuration, AntiSpam and GroupWare settings, and for the Mail and Logs folders. Each instance of VisNetic MailServer will use these common settings.



Shared Paths

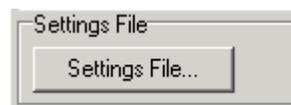
Field	Description
Config	The fully qualified path to the config directory\<InstallDirectory>\Config\
AntiSpam	The fully qualified path to the spam directory\<InstallDirectory>\Spam\
GroupWare	The fully qualified path to the calendar directory\<InstallDirectory>\Calendar\

NOTE - these paths should be UNC pathnames and each VisNetic MailServer should have full rights to each path



Logon

Field	Description
Remote logon	Specify the remote path, username and password to logon with. Example: \\server\mail;user;password \\server\logs;user;password



Use the Settings File button to open the file path.cfg where all the above settings are stored. Examples are given in the file.

For a fully balanced system you should also:

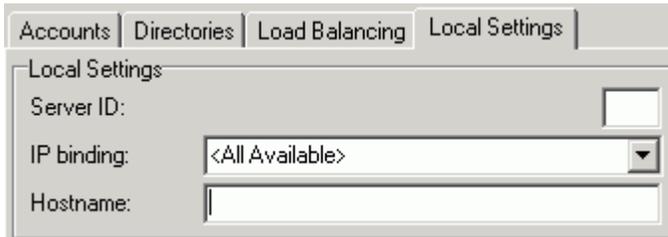
use common folders for Mail and Logs (**Storage - Directories** (on page 44)).

make sure that "Automatically check if configuration has changed and reload" is checked (**Storage - Local Settings** (on page 47)).

Do not share the Temp folders, these should be separate and local for each VisNetic MailServer (**Storage - Directories** (see "Storage - Directories" on page 44)).

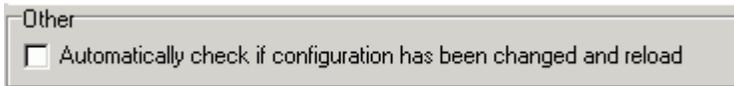
Use different hostnames and IP addresses for each VisNetic MailServer (**Storage - Local settings** (see "Storage - Local Settings" on page 47)).

Storage - Local Settings



Local Settings

Field	Description
Server ID	Specifies the prefix for all message files. Maximum 2 characters.
IP binding	The IPs you want the server to bind to Example: 127.0.0.1;192.168.0.1 Server Binding " " Outgoing Binding
Hostname	The hostname you want the server to use in communication with other servers.

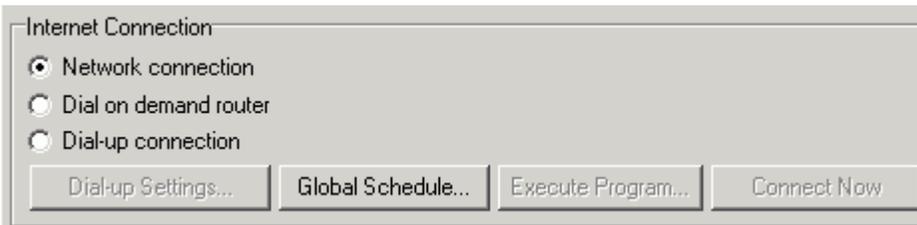


Other

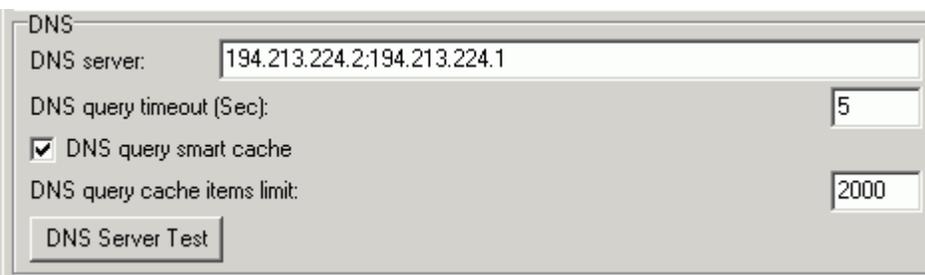
Field	Description
Automatically check configuration change and reload	If enabled, VisNetic MailServer will automatically check the settings and configuration of Load Balancing and if something has changed VisNetic MailServer will automatically reload new configuration.

CHAPTER 6

Internet Connection



Field	Description
Network connection	Check this box if you have a permanently-on connection to the internet.
Dial on demand router	Check this box if your server is connected to the Internet via a Dial-on-Demand router. You will need to use the Dial-up Settings button to specify connection information (see below) You can also use the Execute Program button to specify an external application to run prior to connection (for example, a program that start your router's connection).
Dial-up connection	Check this option if you use a standard dial-up connection. You will need to use the Dial-up Settings button to specify connection information (see below).
Global Schedule	Use this button to specify a schedule for connecting to the internet. If no schedule is specified here then all of your Remote Accounts should have their own schedules specified. If you have a Global Schedule specified and also a schedule for a Remote Account then the Remote Account schedule will override the Global schedule.
Execute Program	If you use a Dial-on-Demand router you can specify an application to be run before the connection is established.
Connect Now	Use this button to connect immediately to the Internet. This is useful to test your connection settings and also to collect messages manually.



Field	Description
DNS Server	Specify IP addresses for your DNS Servers here. Multiple entries should be separated by Semicolons. You should specify two or three DNS servers so if one is unavailable then the second can be accessed, and so on. NOTE - VisNetic MailServer will attempt to automatically locate your DNS servers on initial installation.
DNS query timeout	The amount of time (in seconds) to wait for a DNS Server response before considering this a timeout and trying the next DNS server in your list.
DNS query smart cache	Allows VisNetic MailServer to cache the results of DNS queries, which can greatly enhance server performance on high load servers.
DNS query cache items limit	Specify the number of DNS queries to be cached. The higher the number, the greater the performance improvement can be, but we recommend not specifying a value greater than 2000 as the cache will use up some of your servers memory.
DNS Server Test	Use this button to test the functionality of the servers you specified. You should always perform this test when you add or change DNS servers.

Field	Description
Connection	The drop-down box will list all connections defined on your computer. Select the one you wish VisNetic MailServer to use.
Login name / Password	The login Username and Password for the connection chosen.
Disconnect after max idle time:	You can have the connection terminated after a set period of inactivity.

	Useful for dial-up connections where you incur connection charges.
Schedule	Use this button to specify a schedule for connections to be established.
Connect if number of messages in the outgoing queue exceeds	Specify a number here to have VisNetic MailServer establish a connection when the number of outgoing messages reaches this number. A value of 0 disables this option.
Connect if there is a message waiting for more than minutes	Specify an the maximum amount of time a message should be in the outgoing Queue before a connection is made. A value of 0 disables this option.
Connect if a message with this header and value arrives	Check this option to have VisNetic MailServer check outgoing message headers and establish a connection if certain criteria are met. Use the ':' button to specify the criteria in a simple file. Examples are given.

CHAPTER 7

Certificates

The Certificates Node allows you to

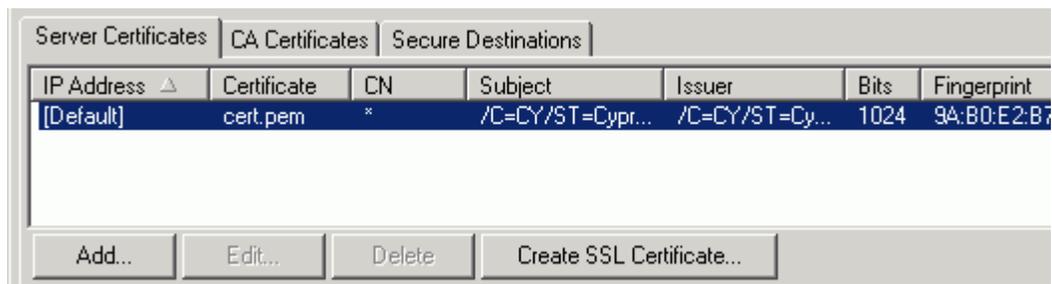
- Create your own SSL certificates
- Assign any SSL Certificate to particular Server IP addresses
- Secure the connections for any Hostnames and Services

In This Chapter

Certificates - Server.....	51
Certificates - CA.....	54
Certificates - Secure Destinations	54

Certificates - Server

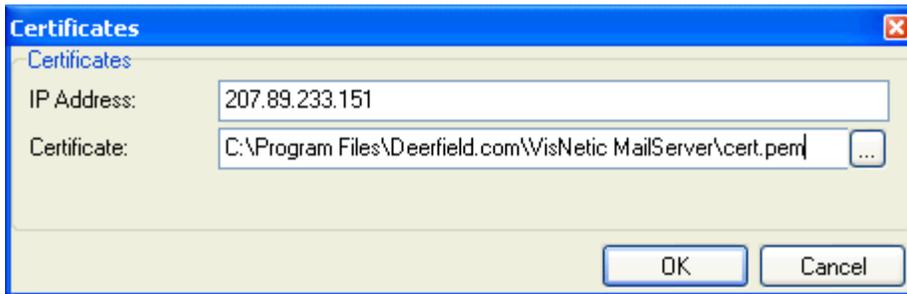
The **Server Certificates** tab displays a list of the certificates used within VisNetic MailServer.



The [Default] certificate, displayed as the first in list, is an integrated SSL certificate that is shipped with VisNetic MailServer. You cannot delete or edit this default certificate.

Add Button

The **Add** button allows you to assign an SSL certificate to it's specific IP address, the **Certificates** dialog opens



Enter the IP address that is associated with your SSL certificate.

Enter the fully qualified path to the .PEM certificate file - or use the '...' button to browse to it's location.

Edit Button

Use the **Edit** button to modify certificate information.

Delete Button

Use the **Delete** button to delete certificate information.

Create SSL Certificate

Use this button to create an SSL certificate for your server.

The certificate .PEM file will be saved to the VisNetic MailServer config directory.

The **Digital Certificate** dialog will open:

The screenshot shows a 'Digital Certificate' dialog box with the following fields and values:

Field	Value
Bits	1024
Certificate validity (Days)	365
Common name	mail.vmsdemo.com
State	Michigan
Locality	Gaylord
Organization	Deerfield.com
Organization unit	Marketing
Country	USA
Email	sales@vmsdemo.com

Buttons: Create, Cancel

The certificate is designed to re-assure anyone connecting to your server that you are who you say you are, so the more accurate and complete the information in the certificate, the more comfortable your Users will feel.

Field	Description
Bits	Required. Specify the number of bits to be used for the encryption of this certificate.
Certificate validity (Days):	Required. Specify the number of days this certificate is valid for.
Common name	Required. This should be the hostname of the server the certificate is going to be associated with.
State	Optional - Use this for the country or state associated with your organization.
Locality	Optional. The city associated with your organization.
Organization	Optional. Your company name.
Organization unit	Optional. Your company's office reference (useful if you have multiple servers).
Country	Optional. The two letter country code associated with your organization. EN - England US - USA CY - Cypress etc.

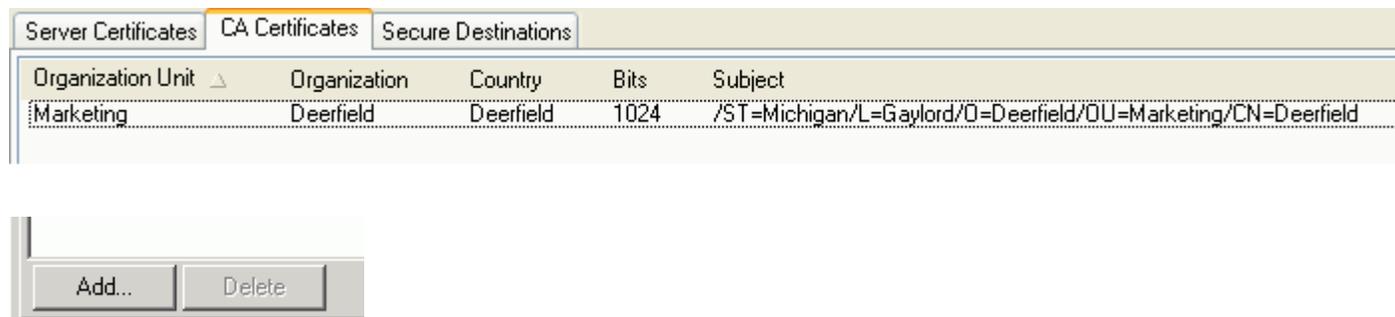
Email	Optional. The email address associated with your organization.
-------	--

Press the Create button to create the certificate, the following dialog will be displayed:



Certificates - CA

The **CA Certificates** tab allows you to administer certificates provided by a Certificate Authority (CA), such as Thawte or VeriSign.



Use the **Add** button to add a trusted certificate. A standard file browser window will be presented to allow you to locate the .PEM file containing the certificate.

Use the **Delete** button to delete the selected certificate.

Certificates - Secure Destinations

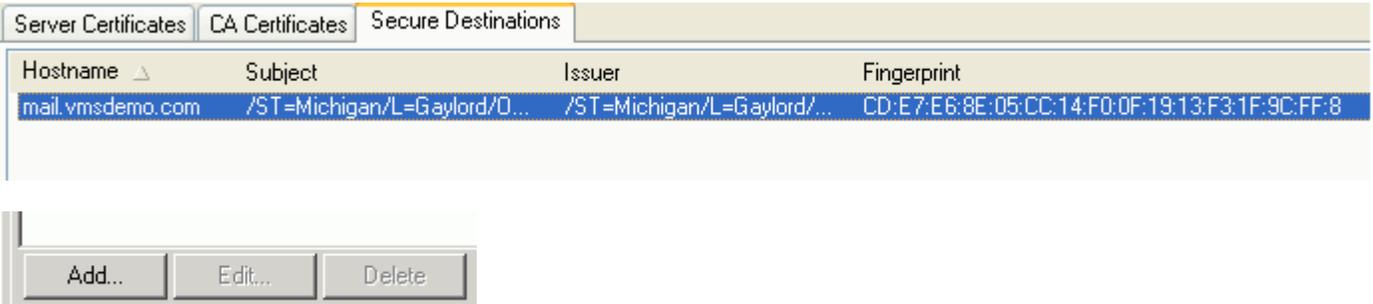
The Secure Destinations tab allows you to define your hostnames which will only accept SSL connections, whether they be POP3, IMAP or SMTP.

This can prevent DNS spoofing.

The SSL architecture is very strict:

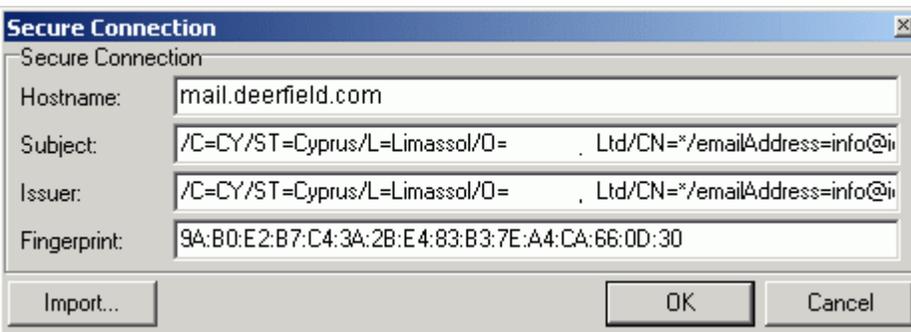
- If SSL is demanded and the processed message is plain, it is returned.
- If SSL is demanded and the processed message is SSL certified the certificate is validated against the certificate(s) you defined for the host, if the certificate does not match the email is returned

- Hostnames automatically adapt - if an incoming message is SSL certified VisNetic MailServer switches to SSL mode.



Add, Edit

Use the Add and Edit buttons to add or edit a certificate's information. The Secure Connection dialog will open:



Use the Import button to select a .PEM file to add to the system. A standard Browse dialog will open for this.

Upon selection of the .PEM file the certificate is read and the fields populated with the correct information.

Field	Description
Hostname	Identifies the host that will be secured with certificate. you can use patterns here (e.g. *.vmsdemo.com, or only * will work perfectly).
Subject	The entity that is identified by a certificate.
Issuer	The organization or authority that issued the certificate.
Fingerprint	A unique number (or "fingerprint") associated with a certificate. The fingerprint is not actually part of the certificate itself but is produced by applying a mathematical function to the contents of the certificate. If the contents of the certificate change, even by a single character, the

	<p>function produces a different number. Certificate fingerprints can therefore be used to verify that certificates have not been altered.</p>
--	--

CHAPTER 8

Advanced

The Advanced Node allows you to enable and manage certain Protocol related settings.

Also contained is the Patterns node, where you can define named sets of Items for use in various places within VisNetic MailServer.

In This Chapter

Protocols	57
Patterns	59
Translation	60

Protocols

Field	Description
Session inactivity timeout	Specifies the number of seconds of inactivity before a session is automatically timed out.
Maximum protocol bad commands	If the Server receives more than this number of invalid or un-supported commands in a session it will close that session.
Maximum number of outstanding connection request	The maximum length to which the queue of pending connections can grow.
Protocol response delay (ms)	Number of milliseconds that VisNetic MailServer will wait until a response is given - for each part of a session. NOTE - use with care, this can seriously affect server performance by slowing it down.

Extensions

Enable SSL/TLS

Enable IPv6 protocol

Enable SNMP server (Port)

Enable Daytime server (Port)

Enable Daytime clock synchronization

Enable Change password protocol

Field	Description
Enable SSL/TLS	This option lets you enable or disable the SSL/TLS engine. It is enabled by default.
Enable IPv6 Protocol	This option enables IPv6 protocol support. VisNetic MailServer supports the IPv6 protocol completely, including AAAA DNS records and IPv6 service binding.
Enable SNMP server (Port)	The Simple Network Management Protocol (SNMP) forms part of the internet protocol suite as defined by the Internet Engineering Task Force. The protocol can support monitoring of network-attached devices for any conditions that warrant administrative attention. Check this box to enable the protocol. You will need to specify the UDP listening port in the text area.
Enable Daytime server (Port)	VisNetic MailServer can act as a time server for your whole network, allowing you to keep the time synchronized on all your network servers and PCs. Specify which port VisNetic MailServer will listen on, the default port is 13.
Enable Daytime clock synchronization	When checked, VisNetic MailServer will synchronize itself with an Internet-based atomic clock on a regular basis.
Enable Change password protocol	This option allows a User to change his password, via the POP3 protocol. The User's mail client must support the feature. You will also need to manually bind POP3/IMAP to port 106 to use this feature.

Special

Multi CPU support

Multithreaded ODBC (Thread pooling):

Field	Description
Enable multi CPU support	If your server is multi CPU this option allows VisNetic MailServer to utilize these capabilities. This can significantly improve VisNetic MailServer's performance on medium to high load servers.

Multithreaded ODBC (Thread pooling)	Check the box to use multiple threads for Database activity, and enter the number of threads to use.
-------------------------------------	--

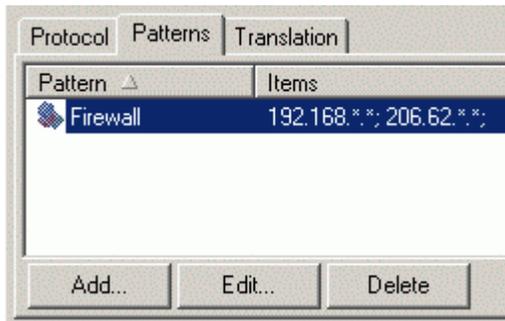
Patterns

The Patterns Node allow you to specify groups of items as a single name for you in many places within VisNetic MailServer.

Patterns can be used in

- Account names
- Access
- Black & White filters

Selecting the Node presents you with a list of the defined patterns:

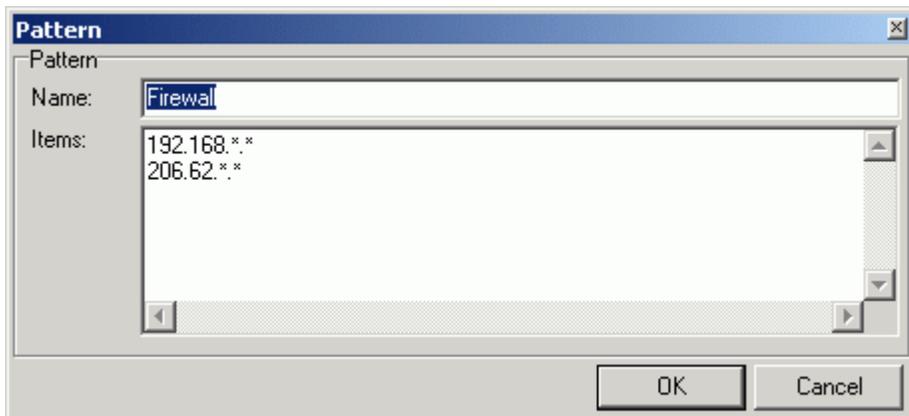


The above example shows an item called **Firewall** containing two IP address items - 192.168.*.* and 206.62.*.*

In places where patterns are allowed you can specify **[Firewall]** (note the square brackets) instead of the two items, so, for example, you could use this pattern in a Service Access definition.

Use the **Delete** button to delete a selected pattern

Pressing the **Add** or **Edit** button brings up the Pattern dialog:



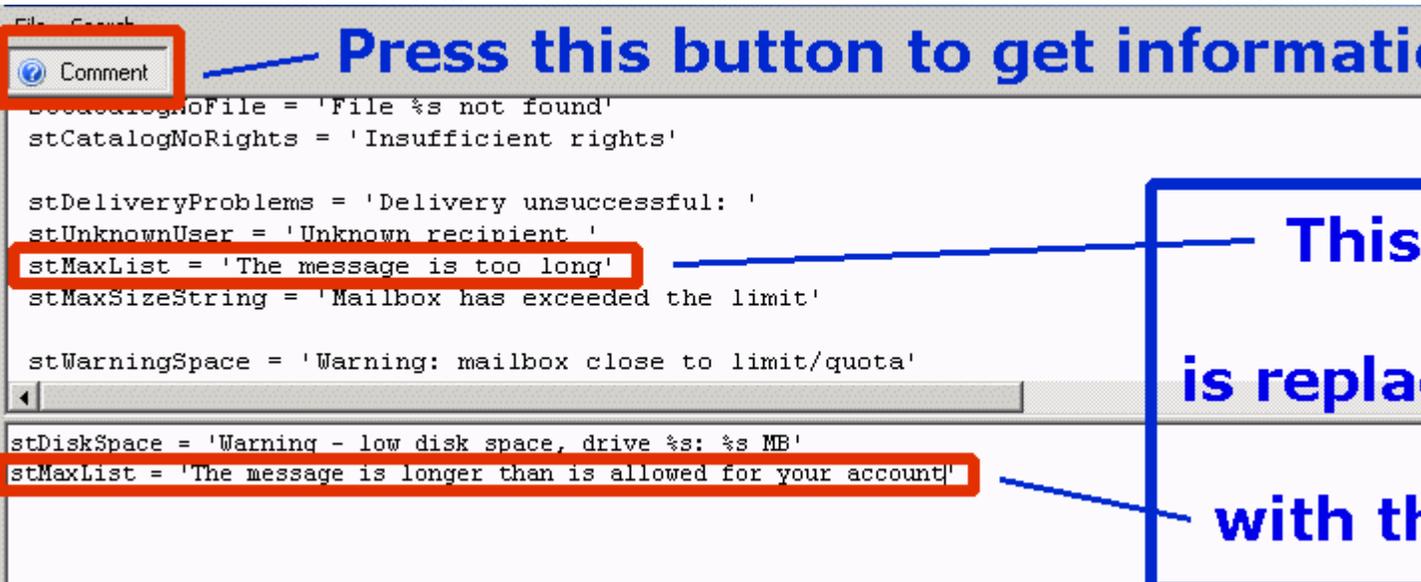
Field	Description
Name	Specify a unique name for the pattern.
Items	Specify a list of items, one per line. You can include - <ul style="list-style-type: none"> ▪ IP addresses with masks ▪ email and domains with masks ▪ account names with masks ▪ other patterns

Translation

The Translation area allows you to customize your system generated message strings. This can be used to translate messages into a local language.



Press the Strings Translation button to open a simple text editor containing the strings.dat file:



The Comment button will display a list of all the strings you can customize.

You can copy the string from the top pane into the bottom pane and make your changes.

NOTE - that where there is %s this should not be changed as this is replaced by a system variable when the string is used.

Index

A

Advanced • 1, 59

C

Certificates • 1, 53

Certificates - CA • 56

Certificates - Secure Destinations • 56

Certificates - Server • 53

D

Database Migration • 43

I

Internet Connection • 1, 50

L

LDAP Configuration • 11, 12

LDAP References • 11, 19

LDAP Server • 12

LDAP Tools • 18

Logging • 1, 7, 22

Logging - General • 22

Logging - Services • 7, 25

P

Patterns • 9, 61

Protocols • 59

R

Remote Server Watchdog • 32

S

Server Diagnostics • 4, 20

Server Migration • 37

Server Migration - General Tab • 38

Server Migration - Logging • 42

Server Migration - Manual Tab • 40

Server Migration - Statistics Tab • 42

Service Ports • 2

Service Properties - Access • 8

Service Properties - Logging • 7

Service Properties - Other • 9

Service Properties - Properties • 5, 22

Service Watchdog • 29

Services • 1, 2

Services - General Tab • 3

Services - LDAP Tab • 10

Storage • 1, 45

Storage - Accounts • 45

Storage - Directories • 46, 48

Storage - Load Balancing • 47

Storage - Local Settings • 48, 49

System • 1

System Backup • 26

System Monitor • 10, 29

T

Tasks & Events • 30

TCP/IP Tunnel • 34

Tools • 1, 26

Translation • 62

U

Using LDAP • 11, 15