



# Lotus Notes Support and Troubleshooting

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**Lotus.** Notes.6

**Lotus.** Notes.7



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# Introduction

This document has been compiled from the articles I started posting on my website since early 2009.

Be aware that the information you'll find in this document might deviate from the environment you are working in, processes that you will need to follow, or tools you have in place to perform specific tasks (User management for example).

This information has been composed by me and a couple of colleagues. The reason for creating this guide is for training and or reference purposes in a helpdesk environment.

There are a lot of companies out there that use lotus notes, but the usage and knowledge among users and helpdesk staff is very limited. We found that the majority of information is presented on a pretty high level, and is therefore not always accessible for everyone.

In this guide we tried to make the basic workings of the system and the troubleshooting of the most common problems accessible for a wider audience.

# Situation

The situation or environment I was working in consisted in a large, global company network, containing several domino domains, and approx 60 Domino Servers.

We have employed tools for functions as user management and have hardly ever used the domino admin client for this; neither have we used the domino Policy functionality to push certain settings to users. You will therefore find that there is little information on those topics.

This document will start off with some basic information, like what the client and the server are and what they are used for. After that, chapters will cover different parts of the client-server structure, and the basic troubleshooting steps.

# 1 What is Lotus Notes – The Server

## What is Lotus Notes?

Lotus Notes and Lotus Domino is a client – server database driven application that allows people to share information.

The basic components of the Lotus environment are:

- The Lotus Domino Server
- The Lotus Notes client
- The Lotus Notes Database

## The Lotus Domino Server

A Domino server is in the first place a database server: it stores and serves to the clients a number of Notes databases. Notes databases consist of one single file, usually with the extension “.nsf”. Example. Catalog.nsf, akoppe.nsf ....

All these Lotus Notes databases can be categorized as follows:

### Notes administrative databases

These are used to manage and configure the Lotus environment i.e. the server itself.

Example:

- The Public Address book on the server, names.nsf, holds configuration information about all servers and users in the Notes domain.
- Log.nsf: contains the log of the server
- Catalog.nsf: Contains all databases on the server

### Standard Domino applications

These are the applications database running on the domino server.

The main examples are the Mail database and Domino Discussion databases or the address book.

### Custom Domino applications

These are databases that are developed to serve a particular purpose.

Typical examples of Domino applications are:

- Documentation databases (e.g. Knowledge bases)
- Workflow applications (e.g. IXOS ...)

Apart from serving databases, the Notes server also runs some back-end processes to support for instance mail routing, replication, calendaring and scheduling.

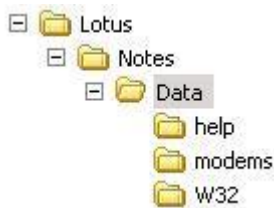
## 2 What is Lotus Notes – The Client

### The Lotus Notes Client

#### Basics

The Lotus Notes client is the software being installed on your workstation. It allows you to connect to your Domino server and therefore access your mail and other database applications. It also stores your personal information such as your Lotus Notes ID file (your identification on the domino infrastructure) and your personal address book. (names.nsf)

The Lotus client (the software) is usually installed on the hard drive of your PC under Lotus/Notes/Data. All main resources being used by Lotus Notes are stored in that location. Microsoft Windows and Lotus Notes are not related and do not interfere with each others, they are totally independent.



Please note:

For the Lotus Notes Client, names.nsf is your personal address book and contains your personal information. Mail address, connection documents, location documents.

For the Lotus Notes Servers, names.nsf is a general address book containing all information about all users, all connections ...

#### Password authentication

Lotus Notes is a very secure platform.

Because simple user/password authentication is quite easy to break (you only need to obtain a user name and a password), Lotus Notes security is based on certificates and public / private key encryption.

This basically works as follows:

My lotus notes ID is AlexK/ES/ABITEOF

When I connect to the Lotus Notes server (authenticate to domino server), the server will authenticate my name, and my certificate.

The Certificate is like a stamp on an identity card. The server I want to authenticate with actually holds the original of this stamp in its Name and Address book, so he can compare it to the stamp I presented him. When the two matches, he will believe that I really am AlexK/ES/ABITEOF, and will allow me all the access I have been granted.

The stamps involved in Notes authentication are electronic signatures.

In that example, the stamps are AlexK, but also ES for Spain and ABITEOF as the company name.

All this information, my name and certificates are stored in the ID file. (akoppe.id)

## The ID file

This ID file holds all my certificates and is protected by a password. Without a password, the ID file is useless, and without an ID file, you cannot access anything in Notes. When I want to authenticate myself, the Notes client will extract my user name and certificates from the ID file (and ask me for the password to open that ID file if needed). The Notes password I enter is specific to the ID file I use.

In practice, this means that if a Notes user forgets his password, you need to give him a copy of his ID file, and the password that goes with that particular copy. In most Notes environments, it is common practice for Notes administrators to keep a backup copy of every ID file that is created on a central place. When a user forgets his password, the ID file he uses is removed, and replaced with the backup copy. The user then uses the standard password to access that ID file (dummy file).

However, the standard procedure in the Domino Administration client will put the newly created ID file in the servers' Address book. This is not a very secure procedure, and a lot of customers will have an alternative solution.

## Workspace and bookmarks

Once you have been authenticated with your password and your ID file you get to the welcome page or the workspace.

The welcome page in Lotus Notes is a page that contains dynamic elements you can customise. Examples of elements are: A view of your mail file, a list of documents in a specific document library, etc. The configurations of the elements of the welcome page are stored in the file Bookmarks.nsf

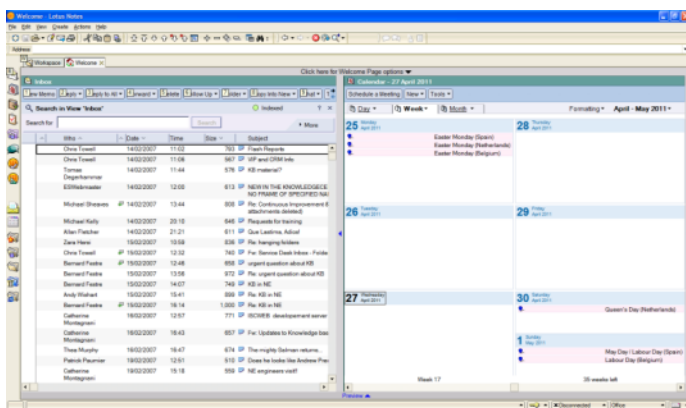


Figure 1. Lotus Notes Welcome Page

The workspace contains icons to all the resources you have been accessing.



Figure 2. Lotus Notes Workspace

These icons are actually shortcuts to the different databases on different domino servers.

On the left hand side, the vertical bar contains bookmarks which are similar to the workspace icons. You can easily locate your mail, your address book, your calendar and your most frequently used databases. These bookmarks are, just as the welcome page configuration, stored in the file bookmarks.nsf.

## How-To – Recertification

### Recertifying Expired Users

Use this procedure when a user ID has expired. There are two ways of undertaking this with both procedures included here.

- **Procedure 1** Update the ID file of the user locally.
- **Procedure 2** Updates the expiry date of the certificate in the person document in the Domino Directory. It uses the AdminP Process so there will be a delay while the task processes ( on larger domains this can take quite some time). Use this procedure if immediate access is required by the user and you can't wait for AdminP (The Administration Process) to update the certificates.

You will need:

- The Correct Administrative Rights on the Domino Network
- Access to the Domino Administrator Client
- The certifier ID file
- The user's Lotus Notes ID file and its password.

#### Procedure 1

1. Copy the users ID File (NotesUsername.id), which is located in the Notes folder, to a folder you can access in your session.

- You can now access the ID file in Domino Administrator:



2. From the Domino Administrator client, select the server that the user is on :
  - File, Open Server, Type the server name (ex. HUBSERVER/ABITEOF), click OK.

Select **Configuration** tab then open the **Certification** tab on the right-hand **Tools** bar.

The certifier ID file can usually be found in your **DRIVE:\Notes\IDs\Certs** folder.

Click on **Certify** and *select the same certifier used to create the user.*

Enter the password for the certifier.

It will ask you for the ID file to certify. Select the Users' ID file you have just copied to your profile.

Then, enter the user's Lotus Notes password.



3. Add X time to the Expiration date and click on **certify**.

You might get some error message. You can confirm all went well by checking the Status bar at the bottom of your Notes Administrator window (something like "Steve Homething/ES/ABITEOF has been successfully recertified").

This has updated the certificate in the Domino Directory and updated the certificate in the Users' ID file.

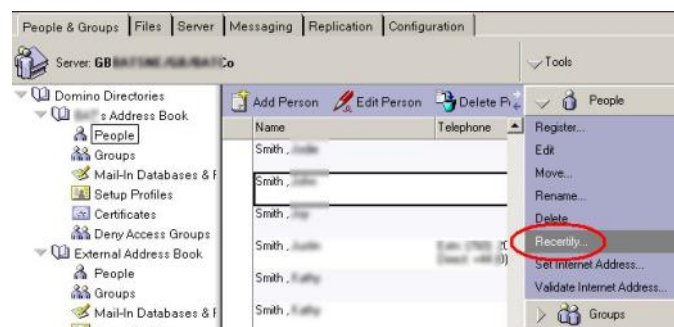
You need to copy the users' ID file back to the users Notes directory, overwriting the original.

Make sure the user closed notes, before overwriting his/her ID File, and if unsure if anything went ok, please rename the original copy first.

The user should now be able to access Notes. If they can't, then this will be a caching issue. Delete the Cache.ndk (in v.5, Cache.dsk. In v.6, Cache.ndk) file, wait 15 minutes and try again.

## Procedure 2

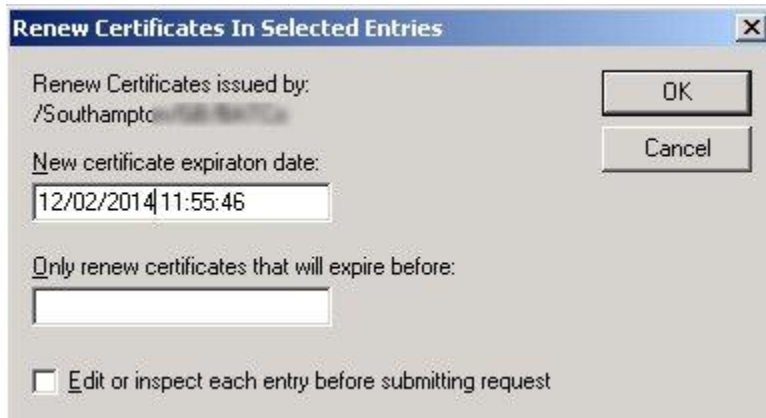
1. Using the Domino Admin client, ensure you are using server user's home server because it will mean the user will be able to access the server sooner.
2. Click on the **People & Groups** tab
3. Under the Domino Directory (the Address Book), click on the **People** view
4. Highlight the user in the view, (in this case: John Smith)
5. Open the document and make a note of his full hierarchical name after the first forward slash. In this case: /ES/ABITEOF
6. **Ensure that the server you are using matches the user's server; you can confirm this by checking the server address book.**
7. Close the Person document
8. On the far right hand side of the Admin client, expand the **People** tool and click on **Recertify**



You will then be asked for the certifier. It is very important that you use the correct certifier (The same certifier that was used to create the user). For this user we require the /ES/ABITEOF certifier

The certifier ID file can usually be found in your \$users\Notes\IDs\Certs folder.

9. Select the correct certifier (.cid certifiers will not show in the pane unless you change **Files of type** to **All Files**)
10. Enter the password for the certifier
11. Manually change the expiration date to today's date plus X. There is no need to check the " **Edit or inspect**" ... box.



12. Click **OK** to complete



The administration process will now update the person document in the Domino Directory. This could take some time. When completed, the next time the user authenticates with the server, the certificates will be updated automatically in the user's ID file.

# 3 Important Databases

## Mail database

### Internal Mail

Example. Alex k/ES/ABITEOF to Danny B/GB/ABITEOF

One of the most important or most used applications of Lotus Notes is e-mail.

Internal mail means mail from one Notes user to another and works as followed:

1. User A opens his mail database and creates a Memo for User B. When addressing the memo, he can take advantage of Auto completion or look up the addressee in an address book.
2. When User A sends the mail, the Notes client will contact the server and transfer the mail to it. The Notes server will look up User B in the Public address book to find User B's Mail server.
3. If that Mail server is the same as User A's, the server will look up the Notes Mail file of User B and deliver the mail to it immediately.
4. If both users are on different servers, the mail will be stored in the Mail.box on the server. At scheduled times; the servers will connect to exchange mail.

### External Mail

Example. Alex K/ES/ABITEOF (Alex\_K@ABITEOF.com) to DannyBlack@hotmail.com

External mail (internet mail) is similar to internal mail.

The main difference is that the recipient is not in the address book, and is not on any Notes server in the domain. The mail router will detect that the mail is destined to an external user (based on the address format username@domain.com). The mail will then be delivered to a Notes server and remain in the queue until being picked up and send out on the internet.

### The Lotus Notes Databases

The most common database is the Lotus Notes e-mail Database.

Notes databases are basically a collection of Documents and when you open a Lotus a Lotus Notes database, you are presented with a view of these documents. This is part of the database design.

Lotus Notes database are being designed and used as a tool to ensure all aspects of the business can be stored on the Lotus Notes servers. Therefore a large number of applications like SAP are communicating with Lotus Notes databases sending information to the servers and being viewed by the users.

### Catalog.nsf

A database directory is available on all Lotus Domino servers by simply opening the server and the database filename Catalog.nsf. It contains all the databases currently being stored on the server, their filename, their access control list and some other settings.

## Access Control

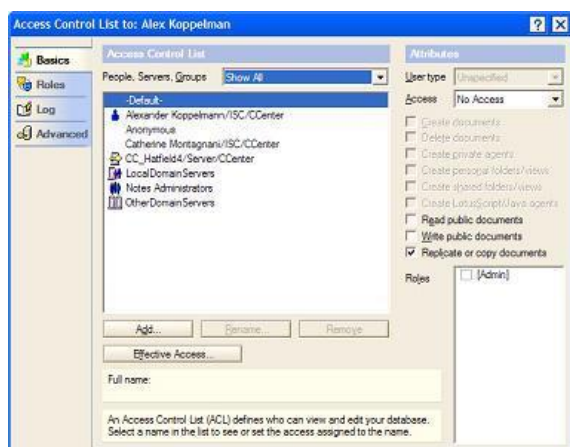
All Lotus Notes databases user's administration is managed by the Access Control list.

The Access control list is available by > right click on the database icon > database > access control



The Access control list of a database allows the following levels of access:

- **No access:** if you are listed in the ACL of the database with No access, you have no access.
- **Reader:** you will be able to read documents in the database. You will not be able to create or modify any documents.
- **Author:** you will be able to read all documents, and you will be able to modify those documents for which you re listed as an Author
- **Editor:** you will be able to read and modify all documents
- **Designer:** you will be able to read and modify all documents + you will be able to modify the design of the database (e.g. create / modify views)
- **Manager:** you will be able to read and modify all documents, modify the design and additionally, you will be able to modify the Access Control List of the database, or delete it altogether.



### Example.

The Access Control list of your mailfile contains yourself as manager.

This list contains all groups allowed access to this database. Here are some examples:

#### **Default-**

On the right top corner User type is unspecified and access is no access.

#### **ServerName / Local Domain Servers / OtherDomainServers**

These are server access groups. To ensure for example, that your emails are being sent across the company.

#### **Notes Administrators**

This is a person group (note the small icons displayed on the right of the groups names). These groups manage access to the Helpdesk to my mailbox.

As you understand access to the Lotus Notes databases are given through a group or directly by adding the person's name to the Access Control list of the database. The preferred way is to add a user to a group as groups are managed by the Server address book rather than grant him access to the database as databases are sprayed over the network.

**TIP:** The "effective access" a person, server, or a group has to documents in a database is not always apparent. For example, if there are two groups with different levels of access to documents, and someone is a member of both groups, you may wonder what access the person actually has. With one click, you can determine a person's effective access to the documents.

## How-To – Check Effective Access

The database access control list will give you enough information in most cases. If, however you want to check a bit more thoroughly, check a users' or groups effective access:

1. Open the database that you want to check.
2. Choose File - Database - Access Control.
3. Click Basics and then click the "Effective Access" button.
4. Select the person, server, or group whose effective access you want to determine and then press Enter or click the "Calculate Access" button.
  - Access in the top left of the dialog box shows the selected name's effective database access as determined by the database ACL.
  - The checked boxes on the left side of the dialog box indicate the access rights for the selected name.
  - The "Groups" and "Roles" boxes on the right of the dialog box show all the individual and group name entries and roles that could potentially control the selected name's access to the documents in the database.
  - "Full Access Administrator" is checked if the person, server, or group has full administrator rights to the database. For example, if a person has this privilege, that person can delete the database even if he or she does not have Manager-access to the database.

## 4. Troubleshooting View Errors

There are two main categories of error that are common to Lotus Notes – Configuration Errors and View Errors. In this chapter we will be looking specifically at View errors.

There are several files which are needed for the correct functioning of the Lotus Notes Client. If they become corrupted, or are poorly configured, database functionality is nearly always lost and the Notes Client may stop working.

There are three that are “the usual suspects” for View errors.

- **Bookmark.nsf:** Contains your saved bookmarks and Welcome Page information.
- **Cache.ndk:** Contains all design elements (the design note itself) cached from a server copy of a replica.
- **Desktop6.ndk:** Contains the list of workspace pages and databases on those workspace pages.

### The Extensions:

- **.NSF :** Notes Storage Facility - Database - Holds Notes Data
- **.NDK :** Notes Design Elements - Contains User Settings
- **.NTF :** Notes Template Facility - Database template used to create specific types of database.

### Troubleshooting – General Points

It is good practice when you delete or rename desktop6.ndk or bookmark.nsf to also delete cache.ndk. However it is not necessary to rename or delete desktop6.ndk or bookmark.nsf if you are removing cache.ndk.

If Bookmark.nsf or Desktop6.ndk is removed and a new file created the new file will be based on the default settings and any changes the user has made are lost.

### Bookmark.nsf

Errors with bookmark.nsf typically appear when Notes is trying to access a database, bookmark or document and cannot. In most instances this occurs while starting the Notes Client or when opening a database. This can produce a wide range error messages.

- *Unable to load frames content invalid or non existent*
- *An error occurred while opening a window*
- *The System Cannot Find the File Specified*
- *Invalid or nonexistent document*
- *Context Toolbar not found, Bookmark needs update*
- *The linked document cannot be found in the view*

All the above error messages indicate that notes is trying to open something – a file, document, frame etc – and cannot. This indicates that the bookmarked item cannot be found, possibly because it has been removed or because the bookmark.nsf has become corrupted. In either case the corrupted bookmarks need to be removed.

As the frameset and view information for bookmarked databases is cached in the bookmark.nsf file, errors with the view of a database can also be caused by a corrupted bookmark file. Mails showing as numbers rather than showing sender / subject information or the Inbox showing only as All Documents are common errors caused by a corrupt bookmark.nsf.

### Cache.ndk

Errors with the cache file can cause notes to behave in an erratic manner, crash or run slowly – generally with no error message. When errors like this occur you should run Killnotes (a free download from IBM), remove the cache and restart Notes. This may not always correct the problem – especially if it is a poor performance issue – but cache errors can appear to be network errors. Error messages such as “*an unexpected network error has occurred*” are typically caused by a corrupted cache. Troubleshooting the cache file will help to identify if the problem is a network error or not.

If notes will not restart after crashing you should run kill notes and remove the cache file.

**!** The cache file is responsible for the unread marks in databases so errors like a users read mail still showing as read can be corrected by removing the cache.

The Cache file is generally held locally as it allows faster notes client performance.

### Desktop6.ndk

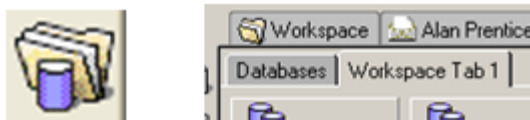
Desktop6.ndk performs a similar role to bookmark.nsf but is responsible for the user’s workspaces and databases held on it.

Errors with the workspace, such as missing icons or a missing workspace tab are likely caused by a corrupted desktop6.ndk.



If the desktop6 file is recreated any changes to the workspace the user made before the recreation will be lost – if possible it is advisable for the user to make a note of any databases that may be lost as they can easily be added from the History Bookmark or with a Catalog look up.

**!** If the user has a desktop5.ndk file in L:\Notes the default databases will be automatically added to the Workspace. If not they are available from the Databases bookmark > Workspace Tab 1.



Several of these databases are “left over” from before the upgrade to Notes 6 so several of them are Notes 5 databases – help etc – and are not needed.



! If a database has been removed from the workspace and has been accessed within the last seven days and the user isn't sure of the path to the database it can be re-added using the Bookmark History bookmark – the Icon is a Folder with a Pillar in front of it.

## How-To – Clearing Bookmark.nsf

There are two ways to clear the bookmark.nsf

The first is to ask the user to close Notes, Go to **Program Files\Notes (Notes Client installation folder)** then delete/rename bookmark.nsf – when they reopen Notes bookmark.nsf will create a new bookmark.nsf file. This will be based on the default template and any changes the user has made to their book marks will be lost.

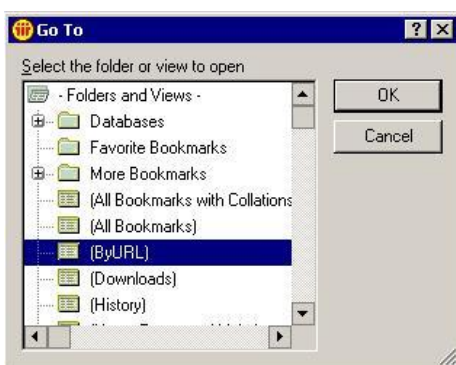


The second (less impacting), is to have the user left-click once on the bookmarks database on their workspace.

They then have to hold **[Ctrl + Shift]** and select “**Go To...**” from the **View** tab.



In the pop-up box that opens select **(ByURL)**. This will open Bookmark database and display all bookmarks.

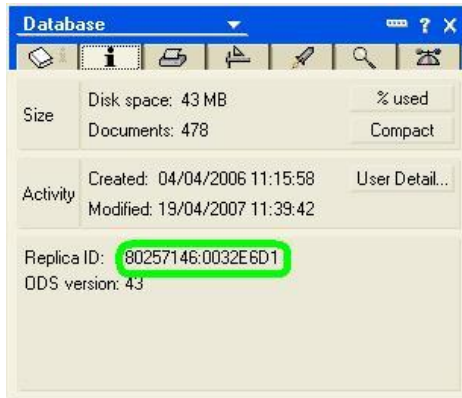


Use **Ctrl + A** to select all and then press delete. After refreshing a confirmation box will appear asking if you're sure you want to delete. OK this and close the database.

Note: During this process it is very likely that you will get an error message – probably “Object Variable not set”. This is normal as you are selecting a corrupted entry. You can OK

The user should then go to their workspace and refresh – this will repopulate the bookmarks database with all valid bookmarks in use. The user will not lose any changes that they have made.

If the corruption is only affecting one database you can delete only the bookmarks relating to that database. Make a note of the Database Replica ID > **Right-click on Database > Database > Properties > 2<sup>nd</sup> Tab.**



Then use the above method to show the bookmarks then use **View>Search** this view to locate the bookmarks – in the search field enter the Replica ID without the colon ‘:’. Select the bookmarks and delete then refresh workspace as above.

If it isn't on their workspace the bookmark database can be opened using **Open Database> Local> bookmark.nsf.**

## How-To – Finding and Clearing Cache

When troubleshooting Lotus Notes, in most cases it is advisable that you clear the client cache. This forces the client to reload settings and views from scratch, instead of grabbing it from the cache (where something corrupted might be stored).

The location of the cache file can be found in the notes.ini file in Program Files\Notes (Notes Client Installation folder).

```
[Notes]
Cache=L:\Notes\Cache.ndk
Preferences=546065521
SPELL_LANG=2057
KitType=1
AltNameLanguage=en
ContentLanguage=en-GB
WeekStart=2
XLATE_CSID=52
Preference_en=,,,,,en-GB,,
Region=en
Directory=L:\notes
WinNTIconPath=L:\notes\W32
Location=Office (Network) 2106 CN=
```

It will normally be one of two places:

Program Files\Notes\cache.ndk or

%USERPROFILE%\Lotus\Notes\Cache.ndk

The user should browse to the correct location and delete the file. Be aware that this file can only be deleted with the notes client closed.

When you remove cache.ndk it is good practice to also run [killnotes](#) especially if the issue with the cache caused the Notes client to crash.

(Killnotes is a tool from IBM, that closes all open notes sessions and processes.)

# 5 Template Issues

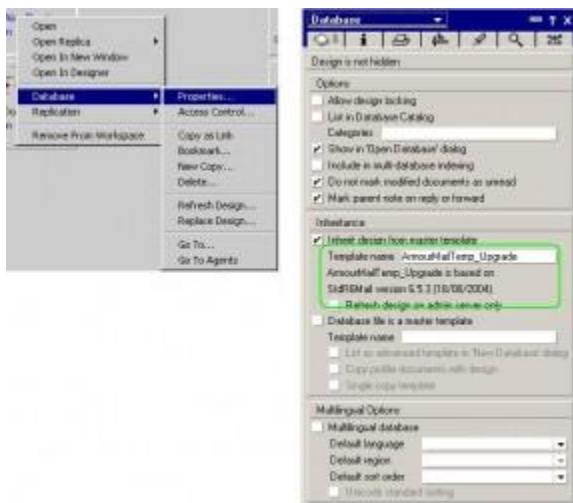
More serious errors with the View of a database may require that the design of the database be refreshed or replaced. A further troubleshooting step prior to refreshing or replacing the design is to update all views using

**! [Ctrl + Shift + F9].**

If none of the above steps have resolved the issue and you are sure that it is not a configuration issue you should first refresh the design by right-clicking on the **Database icon on your workspace>Database>Refresh Design**. You will be prompted for a server name; this should be the home server (Where the database is located).

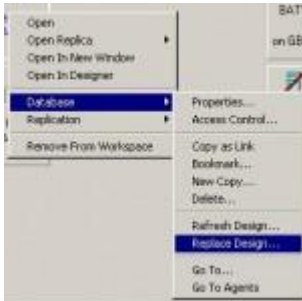


Should this not resolve the issue you can replace the design using a very similar method. You need to make a note of the current template, you can find this by right-clicking on the **database icon>database>properties**. The information is in the settings tab - the fourth from the left.



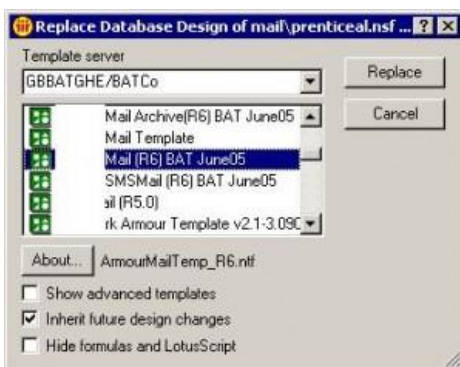
## How-To – Replacing Template Design

As mentioned in the previous Chapter, to replace the design right-click on the Database icon on your workspace>Database>Replace Design.



You will again be prompted for a server; this should be the home server.

You will then be asked for a template – this should be the template that was showing in the database properties.



You don't always have to guide the user or take control of their PC to update the database design. As long as the user has closed their Notes Client you can make the changes yourself with the database opened from your own workspace.

! After refreshing or replacing the design you should remove cache.ndk.

Bookmark errors tend to be characterised by elements of a view being inaccessible, this often generates an error message and may prevent access to the database. Template issues in contrast, while often making elements of the database fail to function, tend not to give an error. Errors like mails disappearing from a view (assuming "show unread only" or a similar rule isn't applied), buttons or options such as Out Of Office or File to Armour are often Template Issues and can be resolved by refreshing/replacing the design.

# 6 Bookmark.nsf, Desktop6.ndk and Cache.ndk

As mentioned in previous chapters, the above mentioned files are a very important part of each Lotus Notes Client installation.

## Bookmark.nsf

- Icons, notes, and user customized design elements (framesets and views) are cached in the Bookmark.nsf file.
- The bookmarks are stored as documents so that multiple operations on bookmarks across multiple clients can be resolved and not cause replication conflicts.
- History bookmarks are automatically purged after 7 days. These bookmarks represent every database or document that the user has visited.
- The bookmarks can be viewed as either lists or as grid/icons – If using the “grid” view bookmark.nsf works in conjunction with desktop6.nsf.
- Each view type operates on the same set of bookmarks, so operations (such as adds or deletes) on one view of the bookmarks will automatically affect the other view.

## Desktop6.ndk

- Continues to contain cached items pertaining to databases previously accessed from bookmarks. Those cached items are primarily the list of design elements including their NoteIDs and UNIDs.
- Contains the list of workspaces and databases on those workspaces.
- The Desktop6.ndk is only used if a workspace is used – if a welcome page is being used and databases are accessed using the catalogue lookup function or via bookmarks then Desktop6.ndk is redundant.

## Cache.ndk

- Contains all design elements (the design note itself) cached from a server copy of a replica. For multiple replicas, only 1 copy of the design element is cached if they are the same.
- Also contains the unread journal which is used to coordinate unread information across multiple replicas when accessed from the same client.



This is a very common issue. The unread count on the database icon on the users' workspace shows an incorrect number of unread documents. Deleting the Cache file, will rescan the unread items and display these correctly.

If however, this does not work, ask the user if he could go to Edit -> Unread Marks -> Scan Unread.

This should also scan the mail file for unread items, and will try to display them correctly.

- The cache.ndk is created automatically whenever Notes starts, if the file does not already exist. Therefore, if this file is deleted, it will be recreated the next time the Notes Client is started.
- The cache.ndk, by default, is located in the Notes data directory, unless a line in the notes.ini file redirects it somewhere else.
- Design elements (forms, sub forms, navigators, scripts, etc.) for a database are cached locally in the cache.ndk. This speeds up access to commonly used design elements. When a database is opened, it is determined whether the design elements need to be re-cached from the database, based on an internal time stamp.

## 7. Notes.ini

By default, the Notes.ini file is located in the same folder Lotus Notes is installed in, and contains the information you provide when you set up Notes, including the options you select in User Preferences. Notes.ini may also contain information created by your administrator. This file gets deleted when you uninstall Notes.

Most of the variables in the notes.ini file are accessible from the Notes client, and should not be touched in the .ini file. However in some cases, for troubleshooting reasons it might be needed to read or edit the .ini file.

Here are a couple of important values:

### Directory=

This is the folder where the Lotus Notes Data Directory is located. This is an important line, because a lot of clients use roaming profiles. This means that the Lotus Notes client is installed on the local users' computer, and the Data folder (containing the cache file, templates and other data, like replicas of databases) somewhere on a server.

### Cache=

This line allows you to specify a new location for the notes cache. This means, that even though the Directory path is set to a specific location, the cache file can still be stored somewhere else.

(In some installations, the cache file is not located in the standard location, If you need to delete the cache file and cannot find it, check for this line in the notes.ini file)

**!** It is also possible to completely rebuild the notes client by cleaning up the notes.ini file. The next chapter will explain how to do that.

### How-To – Rebuild the Lotus Notes Client

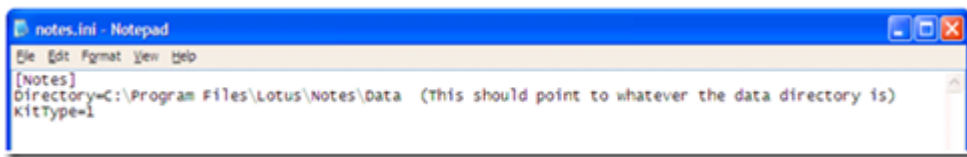
In this article we rebuild the Lotus Notes client. This is possibly the last troubleshooting action you can perform before re-installing it. Therefore, make sure what you are doing and that all important configuration files, are saved somewhere. (Test this first to see if this works well in your environment!)

- Right click anywhere on the desktop and select new folder, name the folder backup.
- Click on start search for files or folders and search for the following files:

#### **NAMES.NSF, DESKTOP5.DSK or DESKTOP6.NDK and NOTES.INI**

Then hold control and select all of the files and select edit and copy to folder, browse to the backup folder and click ok.

- Then select these files, (except the notes.ini) in the original notes data folder and delete them, double click on Notes.ini file and delete all the text except for the first three lines: [notes], directory= path-to-your-notes-data-folder, and KIT TYPE = 1



Then save the file.

- Now restart lotus notes. You will receive the following screen click on next.

The steps you'll have to take from now on are those of a standard new set-up. So make sure you have the name of the user, and the location of his or her mail-file.



(Screenshot from a Lotus Notes V. 5 Client. This screen displays up till version 7)

- The next screen will prompt you for your name and domino server you would like to connect to. Fill in the full name of the user, e.g. k, and un-tick the box next to I want to connect to a domino server
- Now you will be prompted for the Lotus Sametime credentials. Here fill in the details.
- Click next and in the screen that appears you will be asked for any other services you can have notes connect to (Internet mail, Newsgroups, proxies, etc) Usually none of these are being used.
- You now have Lotus notes ready for use, we can add back in the address book and the desktop icons by selecting them in the backup folder, names.nsf & desktop5.dsk and copy to folder lotus\notes\data overwriting the files that the client recreated.

# 8 The Lotus Notes PERSONAL Address Book (NAB)

When you address a message to a person, Notes looks in your Personal Address Book (NAMES.NSF) for the person's mail address. If Notes does not find the information it needs there, it checks in the Domino directory on your home server.

The Personal Address Book contains the following elements:

- **Contacts:** You can save information about people in contact documents in your Personal Address Book.
- **Groups:** A place to Group contacts together. This can either be used for mail distribution (Mailing lists), or access control.
- **Connections:** Explained in more detail below
- **Locations:** Explained in more detail below

## Connection Documents

An important part of the address book is the Connections. The Connection documents store information Notes needs to access a server, such as the server's full Domino name, Internet address (IP), or telephone number. One server may have multiple Connection documents if you access it in multiple ways, for example over the LAN at work and using a dialup modem from home.

**Tip!** If you know the IP address of the server for which you want a Connection document, choose File - Database - Open, type the IP address into the Server field, and click Open. Lotus Notes opens the server and automatically creates a Connection document for the server in your Personal Address Book.

## Location documents

The location document tell Lotus Notes where you are, what kind of connection you have to the servers (TCPIP, Dial-up, ... ), where your mail-file can be found (locally or on the server), which server you want to use as mail server, and some more settings. The location you are currently using is displayed in the lower right corner of the screen, the left of the Inbox icon.



You can change it by clicking on the location, and then selecting a different location. You can modify the current location by clicking it and then select "Edit Current".

You can also select it from the menu File/Mobile and then select the appropriate option.

The default locations documents are:

- **Home**  
When you are using a dial up connection and a modem
- **Office**  
when you are connecting from the office with a direct access to the server. This is the best connection in terms of performance.
- **Island**  
when you are not connected at all to the network, this location document will tell Lotus Notes not to send any mail or access resources.
- **Internet**  
when you are connected to the internet, Lotus Notes can connect to the Domino Servers ... only if you have the necessary access and if the company allows access from the internet.



# 10 Replication and Archiving

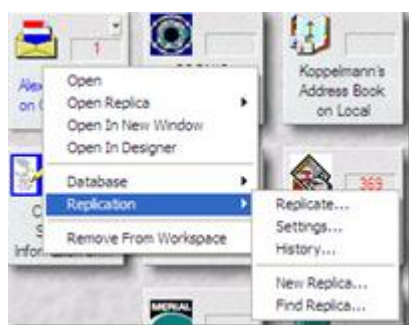
Replication is one of the most important, yet least understood features of Lotus Notes/Domino. Replication is the process of keeping different copies (Replicas) of the same database synchronized.

That applies to both the design (the look and colours, the forms you fill out, the views that display the documents, the security, etc), and the information (documents) inside the databases.

So what does that mean?

Think of one of the Lotus Notes databases you use at work.

That database most likely resides on more than one server in your company.



Perhaps employees in Canada access it on Server A, while employees in France access it on Server B, Germany uses Server C, and people in Japan use Server D. You want everyone to see the same information.

So when you create a new document in that database, or edit (update) and existing document, or even delete a document, replication is the Domino process that makes sure those changes are also reflected in the other databases.

Replication occurs on a schedule that your Domino Administrators set-up.

For important databases this schedule maybe frequent, such as every 10 minutes, or 5, or even 1. Other databases which are not as "time sensitive" may replicate only once a day.

A "local replica" of a database allows you to access Notes data stored on your own computer, rather than accessing it on a server across a network connection. This "local access" results in much quicker access times, and most importantly means you can still work when you don't have a network or internet connection. If you are in a meeting room without network access, or on a train/airplane, or at a customer site where you can't access your own company's servers.... with Lotus Notes you can still have all the information you need at your finger tips!

! Replication keeps the local databases "synchronized" with the versions on the server.

In short these are the (dis-)advantages of creating local replicas of databases:

Type of Database access	Advantages	Disadvantages
Server-based	<ul style="list-style-type: none"> <li>○ No additional Notes client configuration.</li> <li>○ Information in mail file is always current.</li> <li>○ Easier mail-file maintenance.</li> <li>○ Messages and notifications are processed without delay.</li> </ul>	<ul style="list-style-type: none"> <li>○ Increased network utilization.</li> <li>○ Performance impact by heavy network loads.</li> <li>○ Slower access over dial-up and poor network connections.</li> <li>○ Loss of productivity due to server</li> </ul>

	<ul style="list-style-type: none"> <li>○ Can use Notes client, Domino Web Access, and other clients to access mail.</li> </ul>	<p>outages.</p>
Local replica-based	<ul style="list-style-type: none"> <li>○ Access to mail when the server or network is not available.</li> <li>○ Increase in performance when accessing mail.</li> <li>○ Less impact on the network.</li> </ul>	<ul style="list-style-type: none"> <li>○ Additional configuration of the Notes client.</li> <li>○ Reliance on the Notes client.</li> <li>○ Additional user training.</li> <li>○ Requires additional help desk resources to troubleshoot problems.</li> <li>○ Requires sufficient PC disk space.</li> <li>○ Increased risk of data theft.</li> <li>○ Possible time delay in sending and receiving information.</li> <li>○ Out-of-date information in server-based replica when accessing with another client (for example, Domino Web Access).</li> <li>○ Database links, view links, and doclinks may not work properly when disconnected from the server.</li> <li>○ No lookups of free time when scheduling meetings.</li> </ul>

A very common problem experienced with replication is the replication or save conflict.

### Troubleshooting Replication

There are a several things that can go wrong in replication process. Most of these have to do with the replication being set-up wrongly. Going through the settings with the user, preferably using remote control, you can easily see why certain replication process fails.

Another easy fix is to clear the replication history. This is like deleting a cache file that saves the elements previously replicated. This means that on the next time it replicates it will not skip the elements previously replicated and make a complete replica. To do this, follows these steps:

1. Open the Replicator page and right-click on local mail file Replicator tab or the line with user's name and envelope icon.
2. Select Replication History, and click on Clear.
3. Click yes, and then exit out of the mail file.
4. Click on Start, to run the replication.
5. Verify whether or not new messages are now in the Inbox.
  - If they are, everything worked.
  - If they are not, have the client clear the Replication History on the server copy of the mail file as well.

The last resort would be to create a new local replica. In the windows explorer find the replica of the database, and cut-paste it into another location (desktop for example). Now create the replica following the next steps.

## How to Create a Local Replica

### To create a new full replica

#### 1. Do one of the following:

- Open the database you want to create a replica for, and from the menu, choose File - Replication - New Replica.
- Drag the database's bookmark to the Replicator icon on the bookmark bar.

#### 2. If the database you're creating a replica for is on a server, Notes opens the Create Replica for Database *DatabaseName* dialog box (where *DatabaseName* is the title of the database). Do one of the following:

- To create the replica locally in the data directory (the default), proceed to step 4.
- To create the replica on a server, in the Server list, select or enter the name of a server on which you want to create the replica, and click OK.
- Modify the file name for the replica in the "File path" field. To specify a file path, click the folder icon and browse to the directory on the server where you want to save the replica.

#### 3. If the database you're creating a replica for is local, Notes opens the Overwrite Replica for Database *DatabaseName* dialog box. Do one of the following:

- To create the replica on a server, in the Server list, select or enter the name of a server on which you want to create the replica, and click OK. Lotus Notes changes the title of the dialog box to Create Replica for Database *DatabaseName*.
- To create the replica locally, modify the file name for the replica in the "File path" field. To specify a file path, click the folder icon and browse to the directory in your operating system where you want to save the replica. Modifying the file name in any way will prevent overwriting if the original database is local, but the title of the dialog box changes only if you enter a different file path.

#### 4. (Optional) Click "Replica Settings" and do any of the following:

- (Optional) Select "Encrypt the replica using" and choose an encryption type (Strong, Simple, or Medium) from the list.
- (Optional) To improve full-text searching of this replica, select "Create full text index for searching." To save space on your hard drive, deselect it.
- (Optional) To use the same security settings for the replica as for the original database, leave "Copy Access Control List" selected. To use different settings, deselect it. The check box is available only when you are not the database manager and the database's ACL is not set to enforce a consistent ACL across all replicas.
- (Optional) To create the new replica when you click OK, regardless of the setting in your replication preferences, leave "Create Immediately" selected. To wait until the next scheduled replication, deselect this option.

- (Optional) To customize settings for this replica, such as whether to replicate to or from the server (or both), a schedule, and which documents in the database to replicate, click [More Settings](#).

**5.** Click OK.

# 11 Updall and Fixup, ways to fix corrupted databases

If you encounter database corruption in a database (For example: "*This database cannot be opened because a consistency check of it is needed*"), you can use any of these methods to try to fix the problem.

Because corruption is much less of an issue for logged databases, these methods are primarily used for solving corruption problems in unlogged databases.

- Run Fixup to fix corrupted views and documents.
- Run Updall to fix corrupted views and full-text indexes; if a corrupted view is the problem, try Updall before trying Fixup.
- Run Compact with the -c option to fix corruption problems that Fixup doesn't correct.
- Press SHIFT+F9 to rebuild one view; press CTRL+SHIFT+F9 to rebuild all views in a database.
- Create a replica of the database.

## UPDALL:

### Updall options

You can use any of these methods to run Updall on a server:

- Task - Start tool in the Domino Administrator - use this method if you don't want to use command-line options.
- Load Updall console command - use this method if you're comfortable using command-line options or if you want to run Updall directly at the server console when there is no Domino Administrator running on the server machine.
- Program document that runs Updall - use this method to schedule Updall to run at particular times.
- Run Updall on a Win32 platform - use this method if you are unable to run Updall at the server console. This method requires that you use the "n" prefix, for example, nupdall - R.

When you use these methods, you can include options that control what Updall updates. For example, you can update all views and not update any full-text search indexes.

The following tables describe the options you can use with Updall. The first column describes the option names as they appear in the Task - Start tool. The second column lists the equivalent command-line options that you use when you use a console command to run Updall and when you schedule Updall to run in a Program document.

Use this syntax when you use the Load updall console command:

*Load updall databasepath options*

For example:

*Load updall SALES.NSF -F*

You can specify multiple options -- for example:

*Load updall -F -M*

### Updall – Basic options

Option in Task - Start tool	Command-line option	Description
Index all databases  Index only this database or folder	<i>databasepath</i>	"Only this database" updates only the specified database. To update a database in the Domino data folder, enter the file name, for example, SALES.NSF. To update databases in a folder within the data folder, specify the database path relative to the data folder, for example, DOC\README.NSF.  "Index all databases" (or no database path) updates all databases on the server.
Update this view only	<i>database - Tviewtitle</i>	Updates a specific view in a database. Use, for example, with -R to solve corruption problems.

### Updall - Update options

Option in Task - Start tool	Command-line option	Description
Update: All built views	-V	Updates built views and does not update full-text indexes.
Update: Full text indexes	-F	Updates full-text indexes and does not update views.

### Updall - Rebuild options

Option in Task - Start tool	Command-line option	Description
Rebuild: Full-text indexes only	-X	Rebuilds full-text indexes and does not rebuild views. Use to rebuild full-text indexes that are corrupted.
Rebuild: All used views	-R	Rebuilds all used views. Using this option is resource-intensive, so use it as a last resort to solve corruption problems with a specific database.

### Updall - Search Site options

Option in Task - Start tool	Command-line option	Description
Update database configurations: Incremental	-A	Incrementally updates search-site database configurations for search site databases.

Update database configurations: Full	-B	Does a full update of search-site database configurations for search site databases.
--------------------------------------	----	--

## FIXUP:

A) When running from Domino Administrator:

Use this method to run Fixup on one or a few databases.

From the Domino Administrator, select the server that stores the databases you want to run Fixup on. If the Domino Administrator does not run on a server, you can select local to run Fixup on databases stored on the client.

1. Click the Files tab.
2. Select the databases on which to run Fixup.
3. In the Tools panel at the right, select Database - Fixup.
4. (Optional) [Select options to control how Fixup runs.](#)
5. Click OK

B) When running from the Console:

Open up the domino server and get to the domino server console. In there, type the following command:

*Load fixup -F DBFILEPATH.nsf*

If you use Microsoft remote desktop to connect to the domino server, make sure you run the **mstsc.exe /console** command. If you do not, you will not be able to see the running console.

Command Line Options:

Fixup options in Fixup tool and Task - Start tool	Command-line equivalent	Description
Fixup all databases  Fixup only this database or folder	<i>databasepath</i>	"Fixup only this database or folder" runs Fixup only on a specified database or all databases in a specified folder. To run Fixup on a database in the Domino data folder, enter the file name, for example SALES.NSF. To run Fixup on a database or databases in folders within the data folder, enter the path relative to the data folder. For example, to run Fixup on all databases in the DATA\SALES folder, specify SALES.
Report all processed databases to log file	-L	Reports to the log file every database that Fixup opens and checks for corruption. Without this argument, Fixup logs only actual problems encountered.
Scan only since last fixup	-I	When you run Fixup on a specific database, Fixup checks only documents modified since Fixup last ran. Without this option, Fixup checks all documents.

Scan all documents	-F	When you run Fixup on all databases, Fixup checks all documents in the databases. Without this option, Fixup checks only documents modified since it last ran.  <b>Note</b> To specify this option using the Fixup tool, deselect "Scan only since last fixup."
Perform quick fixup	-Q	Checks documents more quickly but less thoroughly. Without this option, Fixup checks documents thoroughly.
Exclude views (faster)	-V	Prevents Fixup from running on views. This option reduces the time it takes Fixup to run. Use if view corruption isn't a problem.
Don't purge corrupted documents	-N	Prevents Fixup from purging corrupted documents so that the next time Fixup runs or the next time a user opens the database, Fixup must check the database again. Use this option to salvage data in documents if the corruption is minor or if there are no replicas of the database.
Optimize user unread lists	-U	Reverts ID tables in a database to the previous release format. Don't select this option unless Customer Support recommends doing so.
Fixup transaction-logged databases	-J	Runs on databases that are enabled for transaction logging. Without this option, Fixup generally doesn't run on logged databases.  If you are using a certified backup utility, it's important that you schedule a full backup of the database as soon after Fixup finishes as possible.
Fixup open databases	-O	If you run Fixup on open databases, Fixup takes the databases offline to perform the fixup.  This is the default if you run Fixup and specify a database name. Without this option, when you do not specify database names, Fixup does not run on open databases.
Fixup subdirectories	-Y	Runs Fixup on databases in subfolders (subdirectories).
Don't fixup subdirectories	-y	Does not run Fixup on databases in subfolders (subdirectories).

Most of the information in this chapter is coming from the IBM Domino 6/7 Forum.

# 12 Out Of Office

The Out Of Office message is an auto responder to any incoming email, advising the sender of the email, that the recipient is currently not in the Office. The agent that sends out the emails also sets the users calendar as busy during these days.

## Troubleshooting the Out of Office

The most common problem is that the agent does send out any mails while the agent is set to enabled, or the agent has been disabled and the user keeps getting reminders that he should disable it.

The most important troubleshooting step is to check on the server if the agent is enabled, by the correct user, on the correct server, and if the user has the correct access level (should be at least editor). This is how you can check that:

### Is the agent enabled?

Check whether or not the agent is enabled. The screenshots below shows how the Out of Office agent appears in the agent list when enabled or disabled:

#### Out of Office agent enabled



Name/Comment	Alias	Trigger	Private	Last Modified	Last Modified By
AccountSettings...	actAccountSettings	None		09/16/2003 04:11:20 PM	Lukas Notes Template Dev
LocalSchedule@office		Scheduled		09/16/2003 04:11:43 PM	Lukas Notes Template Dev
OutOfOffice	OutOfOffice	Scheduled		09/14/2008 11:12:47 AM	Lukas Notes Template Dev
Send Memo to Admin	After mail arrival			12/19/2002 08:01:28 PM	Lukas Notes Template Dev

#### Out of Office agent disabled



Name/Comment	Alias	Trigger	Private	Last Modified	Last Modified By
AccountSettings...	actAccountSettings	None		09/16/2003 04:11:20 PM	Lukas Notes Template Dev
LocalSchedule@office		Scheduled		09/16/2003 04:11:43 PM	Lukas Notes Template Dev
OutOfOffice	OutOfOffice	Scheduled		09/14/2008 11:12:47 AM	Lukas Notes Template Dev
Send Memo to Admin	After mail arrival			12/19/2002 08:01:28 PM	Lukas Notes Template Dev

### Questions to consider while troubleshooting

- Is the Out of Office agent not working for just one person, or for everyone? If it is not working for everyone, it is more likely to be a mail configuration issue.
- Is the agent signed by an ID other than Notes Template Developers? If it is signed by another ID, this means some operations have been performed to change the agent. Is it a signature that you expected? (Server for Editor level users, mail owner for Designer/Manager users). If not, check the access level of the signer.
- If the agent is supposed to be running now, is the agent in the agent manager schedule queue?
- Are there any errors on the server console?
- If the user has Editor Access, are there requests issued on the user's behalf in the AdminP task?
- Is the agent scheduled to run on the right server?
- Has the user been recently renamed?
- Did the user's ACL recently change? If the user's access used to be a Designer and then was changed to Editor, the Out of Office agent may be signed by an ID that causes AdminP to fail.

# 13 Mail Rules

This is quite a simple one. You'd be surprised however how many people struggle with this in Lotus Notes, especially people who are used to the Microsoft way of things.

You can use mail rules to have Notes act automatically on new messages you receive that meet certain conditions. For example, you could create a rule that checks for messages from a certain sender or that contain a certain subject and have Notes automatically move the messages to a certain folder, send copies of the messages to someone, or delete unwanted messages before you ever see them in your Inbox.

Notes stores the mail rules you create in the Rules folder in your mail database. You can go there to add new rules as well as work on the ones you've created. For example, you can edit rules, change their order so that one rule has priority over another, and turn them off when you don't want to use them, or delete them entirely.

## **How do I create "rules" in Lotus Notes to filter out some unwanted mail?**

You can use mail "rules" to have Notes act automatically on new messages you receive that meet certain conditions. For example, you could create a rule that checks for messages from a certain sender or that contain a certain subject. If a received message fits any of the rules you have specified, you can have Notes automatically move the message to a certain folder or delete it altogether.

Notes stores the mail rules you create in the Rules folder in your mail database. You can go there to add new rules, as well as to work on or edit the ones you've already created.

## **How to create a mail-rule**

To create a new rule, do the following:

1. Open your mail database and click on the 'Rules' folder.
2. Click "New Rule."
3. Under "Specify Conditions," select a part of messages to check (such as "sender" or "subject"), select a state (such as "contains" or "is"), and type the criteria to check for (such as the name of a certain person or a certain word). For example, you could select "sender," select "contains," and type Alice to filter all messages sent to you by Alice French, Alice Stearns, and anyone else named Alice. Or you could select "Size (in bytes)," select "is greater than," and type 2000 to filter all messages sent to you that are greater than 2000 bytes in length.
4. Click Add.
5. Under "Specify Actions," select "move to folder," "copy to folder," "change importance to," or "delete."
6. If you selected "move to folder" or "copy to folder," click "Choose Folder" and select a folder. If you selected "change importance to," select an importance level.
7. Click "Add Action."
8. Click OK

# 14 Interesting Resources

Because the documents I wrote in for the [Lotus Notes troubleshooting guide](#) do not cover everything, or far from that, cover only a few common problems and details about the Lotus notes infrastructure, here are some links to handy troubleshooting resources:

- [IBM - All Lotus Troubleshooting Links](#)
- [IBM – Notes/Domino 6/7 Forum](#) - This is not an easy place to find stuff, use And/Or in your searches to find relevant information.
- [IBM – Lotus Notes and Domino Wiki](#)
- [NFSTools.com](#)
- [Lotusdomino.com](#) - A huge collection of links and resources.
- [AdmiNotes](#)

## Sources and Thank-you's

A lot of information in the document is coming from Official IBM Sources. If you look hard enough, you will find an extensive source of information in the form of forums, PDF documents and blogs of people that work with IBM.

Also I'd like to thank the colleagues that helped me document all these things. Mainly AP, who, if he'd ever read this, would directly recognise some of the material ;)

