

1.0 General description

This Database is being used to move Domino-Users from Server A to Server B.
The tasks conducted are the following

- a replica of the user's Mail-Database is created on the target server
- the location of the Mail-Database is changed in the Domino Directory (NAB) to the new location
- the user receives an automatically generated EMail that contains a button
- when the user presses this button, the local Location-Documents on the user's workstation are updated to the new server

You can find more information in the Document "Using this Database" in the Help-Menu.

A detailed description of all views and actions can be found in the database "AdmHelp.nsf" which is included in the distribution; its location can be obtained from the configuration-document of this database.

Additionally, every view has a "Help"-Button (notated by a question-mark) which opens the help items for this view.

Important:

If this database is created from a template or as a copy from an existing one **without documents**, the following documents

- Migration nach Fehler auf Server %%-%% (DO NOT CHANGE!!!)
- Migration auf Server %%-%% (DO NOT CHANGE!!!)

have to be copied manually into this database in the folder "Save".
Additionally, the configuration document has to be adjusted.

Other Requirements.

- This database has to be created on the **target server** and should not contain any old documents.
- The database must be registered as a mail-in database on the target server.
- The databases have to be signed by an administrative ID or a special ID-File used for signing in the company's production environment.
- Also, the button-code inside the template-documents in the database have to be signed. (see document )
- The scheduled agents "DoMigration" and "NewMail" must have the correct destination server in its properties. It is configured to run on the right one, but it may be best to check this twice.
- You should create a Push-Replica on a server outside of the cluster to make sure that a backup of all data is available in case of a failure.
- The person which uses this database to initiate the migration of users must have Author-Rights on the Domino Directory (NAB) and Manager-Rights to this Database (Migration).
- The Maildatabases must contain all target server of the cluster in their ACL or a group which provides these permissions (for example, LocalDomainServers).
- The template "alog4.ntf" or "Errlog.ntf" must be present on the target-server to which the users should be moved, so that the Migration-Database can create the Error-Log when it first starts (the location of the Error-Log is defined in the Configuration-Documents in the section "DEBUGGING"; the default is the same directory as the Migration-Database itself).

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Using Migration

The user of this database only has to create the mails to the users that should be moved. He does this via the button "New created" in the navigator. The rest of the actions runs automatically. The buttons are only used to control the flow of actions and to have quality control after the migration process.

Short description of the flow of actions

The whole process is implemented as a state machine with the first state as the creation of the user's migration mails and the last state being the confirmation mails sent back.

States (Document-Field Status in the sent document):

- 1** Mail was created, but the agent has not yet processed the documents.
- 2** Mail was processed by the agent for the first time, replica stub on the target server(s) was created.
- 3** Mail was processed by the agent for the second time, existence of the replica stub was checked (if replica stub is not present, status will be set to 128)
- 4** Replica exists (checked by examining the property "Replication History exists").
- 5** Domino Directory (NAB) was changed (This has to be done by a time offset, otherwise the mails would be sent to the new address).
If the NAB could not be changed, the status would be set to 129.
- 127** The replication is disabled in the source database. So we couldn't go from state 3 to 4, but this will be checked each time.
- 128** After the mail has been processed for the first time, the replica stub should be present. If not, this state is set.
From here, the creation of the replication stub will be subsequently tried, until it is successful and state 2 is entered again.
- 129** The Domino Directory (NAB) could not be changed in state 5.
This is subsequently tried again in this state. If the attempt is successful, state 5 is entered again.

States (Document-Field Status in the received document):

- 6** The confirmation mail to the sent mail was received, and there were no errors.
 - 7** A received mail that correlates with a sent mail is set to this status. (This status exists only in the Received Document).
 - 130** A confirmation mail from a user was received, but there were problems in changing the local environment that force a new mail to be sent out after the local problems have been validated and changed (Description is contained in the document).
-

All relevant functionality is contained in the navigator-section "In process".

A newly created migration mail is initially in the state 1. A certain amount of time after creating the document (by default, 30 minutes) the triggered agent "DoMigration" will process the document, which in turn triggers the following actions:

1. Replica-Stubs on all servers in the target-cluster are created (which are empty databases which contain only replica-information so that the replicator-task of the server can fill this database with the contents of the original database when it runs the next time).
2. The status of the document is changed to state 2.
3. The document is moved from the view "New created" to the view "Ready for send"

The document remains in this state until the triggered agent notices that the newly created replica has been filled with data by the server's replica task.

Then, the following actions are performed:

1. the status 4 is set
2. the document is moved from the view "Ready to send" to the views listed in the navigator-section "In process".
3. the document also appears in the view "Waiting" in the section "State" of the navigator.

When the document has reached this state, the following actions are triggered:

1. the Domino Directory (NAB) is changed to reflect the new location of the user's maildatabase
2. the automatically generated mail to the user that triggers the change of the client's location documents is finally sent
3. the status of the document is changed to status 5.

In this state, the document will be processed only by the scheduled agent "NewMail".

If a mail that is triggered by a user pressing the button in the migrationmail is sent back to the migration-database, the agent tries to correlate this incoming mail to a mail sent to a user.

If this succeeds, the following actions are performed:

1. The sent document is supplemented with the successful or unsuccessful editing-information of the client's location documents and gets a link to the received mail.
2. The document now appears in the view "Received" in the section "State" of the navigator.
3. The document disappears from the view "Waiting" in the section "State" of the navigator.
4. The status is changed to 7 or 130 depending on errors while changing the local settings on the client-side.

In the case of a controlled fallback the relevant view(s) are located in the navigator-section "In process"

In this views, all the users that should be migrated back to their original home-servers are selected. For this purpose, the type of the document is set to "Fallback" and the status is set to 2 (with the difference, that no replica is being created but instead the old maildatabase of the user is being used).

The rest of the actions is like described above, with the difference that the mails will appear in the views "Fallback (...)" instead.

Other important actions

Create Batchfiles in the views listed in the navigator-section "In process" (type "Migration") (see )

This action creates batchfiles from the selected documents.

There will be one file for every old homeserver.

The format of the file is an entry for every user containing a move-command like "move mail\jsmith c:\notes\fallback"

These mailfiles are created in the Domino Data-Directory of the client where the action is started. They have to be copied manually over to the data-directory of the target server and can be started there.

After executing the batchfiles the maildatabases of the selected users have been moved to the Save-directory (which is configurable) so that the users cannot access them anymore.

Replication of the databases is still possible because of Directory-Links; with the help of the directory link's properties it is ensured that the users cannot access this directory anymore.

Create Batchfiles in the views listed in the navigator-section "In process" (type "Fallback") see ()

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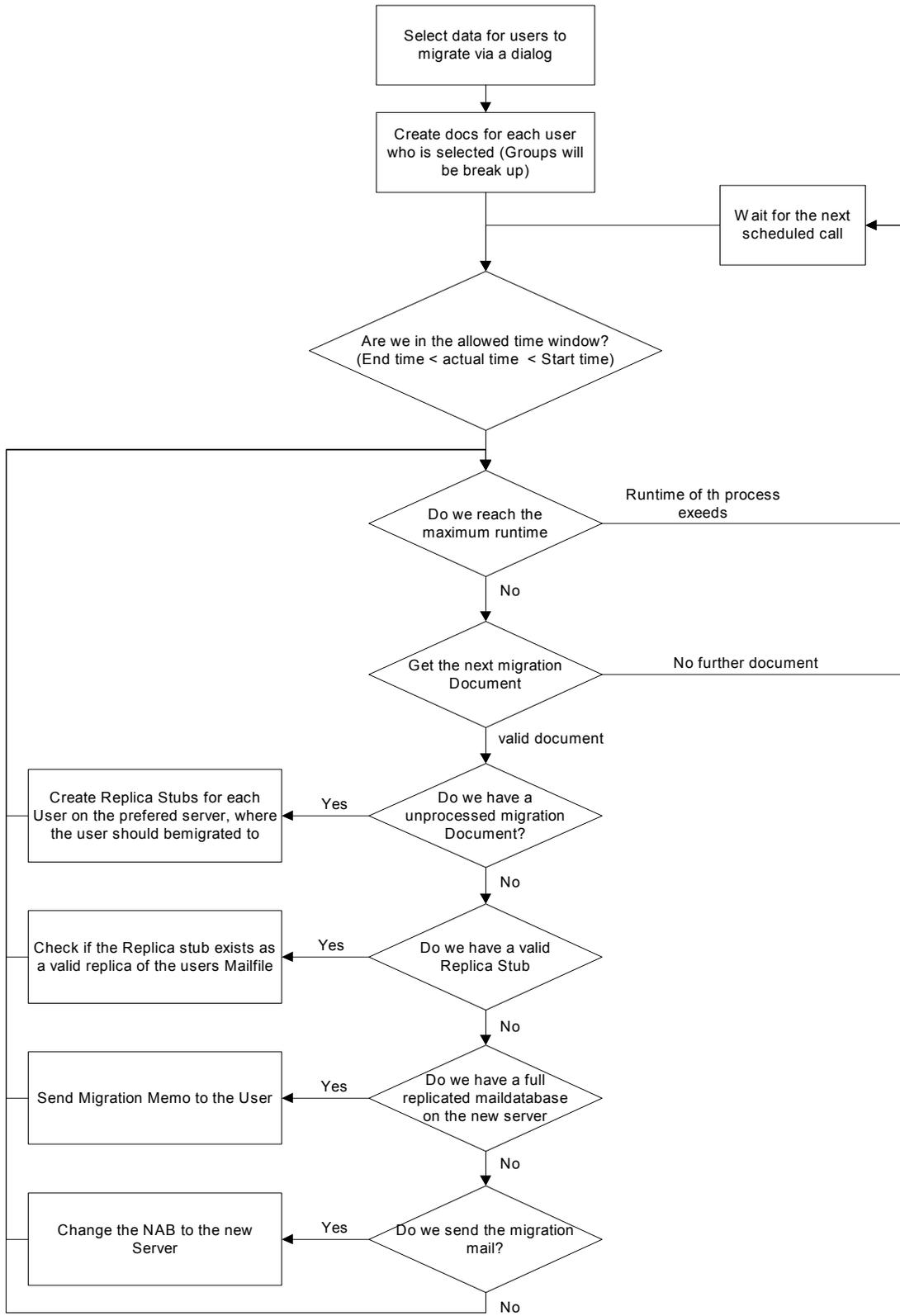
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To ensure that these actions can be performed in case of a server-crash, there should be a replica of the migration-database on another server.

Diagramm of the State-Machine



1.1 Panning a Consolidation/Migration with migrator

First Steps

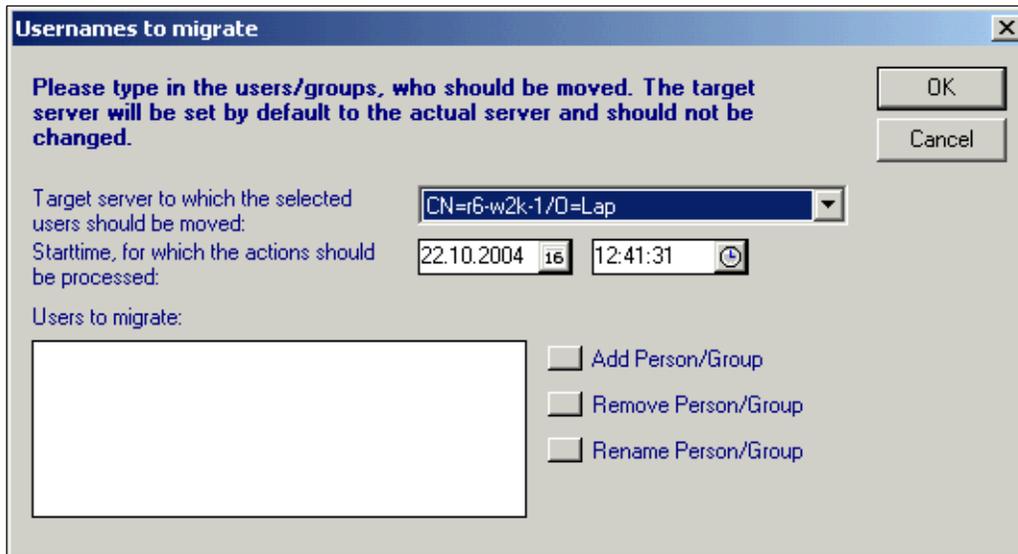
First you should have to setup the new servers as fully integrated in your architecture. This means, that you have to take care for the following point:

- actual replica of your company's NAB
- Connection documents to target server
- Connection documents from Target Server to mailservers
- Working mail topology with Target Server included
- Replication enabled for the NAB and the mail directory. During migration you should make a short replication interval of about 15 minutes
- Installation of the migrator on the target server, no replicas on mailservers or cluster partner of the target server
- Migrator must be a mail-in database on the targetserver, the name is not relevant!
- Sign the Migrator with a valid ID. This ID must have the rights
 - To read all mail databases on the old mailservers
 - Unrestricted access on the targetserver and its cluster partners
 - Ability to create replicas on the targetserver and its clusterpartners
- The target Server itself must be able to create replicas on the targetserver and its clusterpartners
- To check the correct working of migrator, you could execute the agent "", but for this the targetserver must be able to create replicas on the mailservers.
You will find all executed methods with their result in the ErrLog and, if everything is ok, you will get a Success Message
- If you want to prevent ECL alerts during migration (User had to press a button within a sent mail), you must sign all Template docs Buttons, like described in this document ()

Load Balancing in case of a cluster migration

At creation time of the migration documents, you are able to select the target server for this users.. So you could define one half of the users to have as target server "cluster partner one" and the second half "cluster partner two" and so on...

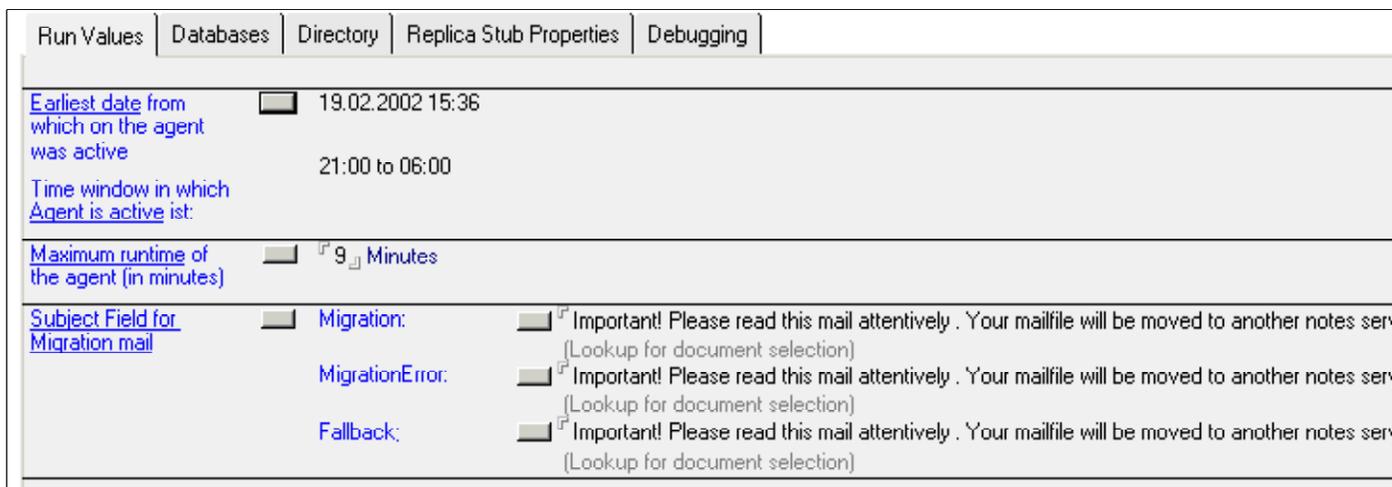
The selection possibility for the targetserver is the combo box in the Dialog "Usernames to migrate"



Configuration

A Detailed description you will find in the document (📄).

Run Values



- Select the earliest Date and the runtime window. Whereas the earliest date is taht date, the agent will execute any actiuons on the migration documents and the runtime window describes the time, when it does something.
- Press Maximum Runtime button. The script evaluates the maimum agent runtime set in you servers profile and subtract one minute for security resons

- Select the TTemplate docs for the three messages Migration/Migration after error/Fallback. The you could put in in the subject field, whatever you want. If there is a string inside name "%%-%%", this will be replaced be the target server.

Databases

Run Values	Databases	Directory	Replica Stub Properties	Debugging
Target server for the Migration	<input type="button" value="..."/>	CN=r6-w2k-1/O=Lap		
Save directory	<input type="button" value="..."/>	c:\notes\fallback		
Mail-In Database name	<input type="button" value="..."/>	migration		
Help database	<input type="button" value="..."/>			

- Press the Target server button. If the targetserver is member of a cluster, all Cluster partners will be automatically put into this field
- Press Mail-In Database Button. THE system evaluates automatically the Mailindatabase name. For this to work, the Migrator must be defined as Mail-in Database
- Press Button for Save Directory. This will define a save directory, where the old userfiles could be moved to, after migration had ended.
This directory should be defined as database link in the notes data directory. You could limit the access to this directory link to administrators and servers, so the databases will be replicated and you have the ability to make a full working fallback. THE action to create a batchfile, which moves all migrated mailfiles to this directory, you will find in the view "Migration Server"
- Press the Button Help Database : Select the location for the Help database

Directory

Run Values	Databases	Directory	Replica Stub Properties	Debugging
Extension of the target directories for the new mailfiles	<input checked="" type="radio"/> Take from original path <input type="radio"/> Additional Subdirectory with 1. letter of the firstname <input type="radio"/> Additional Subdirectory with 1. letter of the lastname <input type="radio"/> Additional Subdirectory with 1. letter of the original Mail-FileNames <input type="radio"/> Syntax depends on selection in section 'Directory Construction (Replica)'			
Typing of the filename of the new mailfile	<input type="radio"/> Take from the original <input checked="" type="radio"/> All letters lowercase <input type="radio"/> All letters Uppercase			

- If you donot plan to modify the path of the users mailfile on the target server, select "Take from original path".
- If you move the files to a UNIX server, use "All letters in lowercase"

Detailed description about the other possibilities, you find in the Configuratration description ()

Replica Stub Properties

Run Values	Databases	Directory	Replica Stub Properties	Debugging
Query Quota Information				<input checked="" type="radio"/> Yes
				<input type="radio"/> No
Should we set ourself as adminserver				<input type="radio"/> Yes
				<input checked="" type="radio"/> No
ServerConsole Command				<input type="text" value="tell sched validate %u"/>

- If you want to transfer existing Quota settings from the mailfiles, select "Yes"
- If you want to set the target server as AdminServer in the new mailfile, select "Yes"
- If you want to execute a server console command afeter the NAB Entry is changed, put in here the responsible server console command. %u will be replaced be the users name and %f by the users mailfile location.
 This could be usefull, if you want to take care for correct scheduling during migration. If you reschedule a migrated user with the command tell sched validate <Username>, the busytime.nsf on the target server will be reinitilled with the actual values of that user

Debugging

Run Values	Databases	Directory	Replica Stub Properties	Debugging
General Values		Debug Settings (Do not change)		
Debug-Level	1	Category for standard Log-Messages	<input type="text" value="Script"/>	
<input checked="" type="checkbox"/> Errors		Name of the Log-Database	<input type="text" value="migration\verlog.nsf"/>	
<input type="checkbox"/> Functions debugging		Should we show all error messages via Message box	<input type="radio"/> Yes	
<input type="checkbox"/> Miscellaneous			<input checked="" type="radio"/> No	
<input type="checkbox"/> Performance		Should we stop in debug mode during an error	<input type="radio"/> Yes	
<input type="checkbox"/> Informations			<input checked="" type="radio"/> No	
		Should we only print logmessages without storing them	<input type="radio"/> Yes	
			<input checked="" type="radio"/> No	

- The only stuff here is to set the DebugLevel to Errors and set the location for the ErrLog. If you donot have an erlog.nsf file, don't care. THE System will generate one for you out of the template "ErrLog" or if this one doesn't exist out of alog.ntf.

1.2 Signing buttons in the template documents

Before stating migration, you must sign the buttons inside the template documents.

You will find these documents in the folder Save.

- Goto Configuration -> TemplateDocs and you will see all defined template docs.
- Open a document and bring it in editmode.
- Then click with the right mouse key to the button and select edit button.
- You see the LotusScript code of the button.
- Put the cursor in the code section, type in a space, remove it and then set the cursor back in the text area of the document and save it

Remark:

If you press the button with the left key, the action will be executed and a Hide Flag will be set in the document.

This must be removed afterwards with the action "Delete Hide flag"

Grafical description of the workflow

-> Reachable by the action "Template docs" in the setup document

Check and correct agent names **Template Docs** Edit online help Edit label values

or if you switch over to "Folders" in the navigator.



-> Edit document and select out of the context menu the action Edit Button

To: []
 cc: []
 bcc: []

Subject: [Important! Please read this mail attentively . Your mailfile will be moved to another notes server!]

Dear Ladies and Sirs,

In order to optimize the access at your location, the administration copied your Mail file on other server.

The Mails arrives from now on at the Mailfile on the new server.

In order to get your Mailfile on your Lotus Notes Desktop, please press the following button!

IMPORTANT !!! Only if you press the button, you will see your new mails!

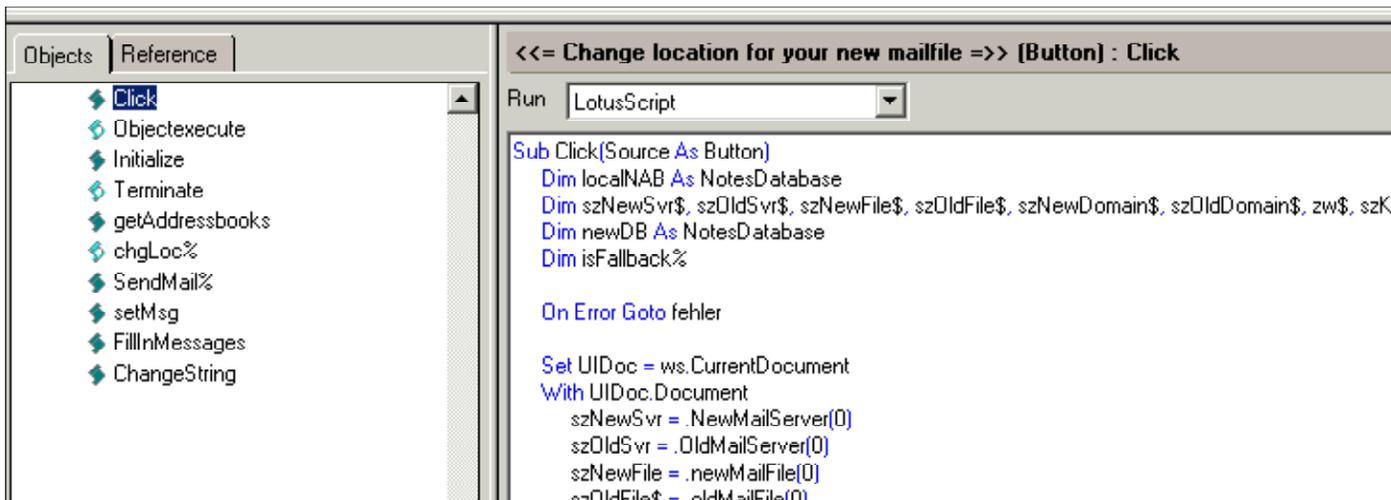


Thus Lotus Notes finds your Mail file on the new server. You have further access to your Mailfile on your Lotus Notes Desktop. You can remove this Icon within one week from the Desktop, but you can still read all mails.

In the Mailfile on the new server naturally your past Mails are also present.

If different persons have access to your Mailfile, do not forget to communicate to these your new Mailserver.

-> Afterwards you will see the code section



Objects Reference

- Click
- Objectexecute
- Initialize
- Terminate
- getAddressbooks
- chgLoc%
- SendMail%
- setMsg
- FillInMessages
- ChangeString

<<= Change location for your new mailfile =>> [Button] : Click

Run LotusScript

```

Sub Click(Source As Button)
  Dim localNAB As NotesDatabase
  Dim szNewSvr$, szOldSvr$, szNewFile$, szOldFile$, szNewDomain$, szOldDomain$, zw$, szK
  Dim newDB As NotesDatabase
  Dim isFallback%

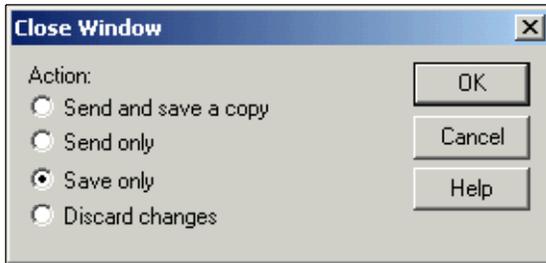
  On Error Goto fehler

  Set UIDoc = ws.CurrentDocument
  With UIDoc.Document
    szNewSvr = NewMailServer(0)
    szOldSvr = OldMailServer(0)
    szNewFile = .newMailFile(0)
    szOldFile$ = oldMailFile(0)
  
```

-> Put in a space and remove it anywhere in the code section

->Set the cursor back in the textarea, the code section disappears

->Then press Escape (Esc). The following Dialog appears:



->Click "Save only" and press OK.

The document is now signed with the actual ID, which should be a valid ID within your ECL setting

2.0.1 Agent "newMails"

Purpose

This agent is responsible for all actions on the Migration documents and received documents in the receive phase.

It is executed as a scheduled agent. It checks periodically each 30 minutes if the Inbox - folder contains new mails. If this is true, it checks according to the field "Subject", if this mail must be processed. If this field contains the expression Confirmation ... %%<NewMailserver>%% , following actions will be performed:

in the received document

- we set State = 7, which controls that these documents are shown within this view
- create a field "UNIDSendMail" which is filled with the UNID of the received document and links the incoming document to the sent document
- Simultaneously these documents are removed from the Inbox-folder.

the corresponding migration document which was sent to the user is searched. If we found it, we do the following

- Here we create a link (field "UNIDReceivedMail") to the original received document, so it is directly possible to access this document via the button or under the view in section "In Process" via action "Inspect user mail" (refer to the via "Migration mail (*)" (User , Server ) and "Fallback mail (*)" (User , Server ) too)
- in the sent document we set the state = 6 (or 130 in case of error), which show the fact that the user pressed the button.
If there was an error in the changing the location documents we see that as state 130 and a special icon in the view (refer to the views mentioned above).

With the stati set and the both fields "UNIDReceivedMail" in the sent document and "UNIDSendMail" in the received document, which links both documents together, we have all informations about the whole process and the administrator is able to view this in a simple way

2.0.2 Agent "doMigrations"

Purpose

This agent is responsible for all actions on the migration documents in the creation and send phase.

It will be executed every 30 minutes as a scheduled agent on the server. First it checks It checks periodically each 30 minutes

This agent will be scheduled on the server in a half an hour intervall. On the run, it checks first in the Setup-document, if it is allowed to run at the actual time. If so, we check, if we are in the allowed timeframe to run. Depending of this we get all documents, which have a state less than 5 (or an error state=127,128,129). Then we run on the several documents the specified actions to bring the documents in the next state, which comes behind the actual state.

So each document, which is in the collections has not reached his final state (seen from the migration actions). All other states of the documents will be set from the newMail agent, because from state 5 on, we are ready with the sending of the migration documents and are waiting for the usermails, which are generated and sent back to the migration database in case of "User pressed button".

Description of the processes

State	State description	Action
1	Migration document was created, but the agent has not yet processed the documents.	<ul style="list-style-type: none"> - Create a replica stub on the target machine and set state = 2 in case of no error. - If we could not create a stub, we set the state = 128 and tried again the next run to create one! - If we find here, that in the replication settings of the source database the "replication disables" flag is set, we set state = 127 and don't create a stub. We inform the administrator about this error, so he could manually set this flag to a valid state and tried again at the next run.
2	Migration document was processed by the agent for the first time, replica stub on the target server(s) was created.	<ul style="list-style-type: none"> - Check for the stub. If we find a valid stub on the target machine, we set state = 3 - If we donot find a stub we set state 128 and tried again the next run to create one!
3	Migration document was processed by the agent for the second time, existence of the replica stub was checked (if replica stub is not present, status will be set to 128)	<ul style="list-style-type: none"> - Check, if the stub is correctly replicated. To verify this, we validate the following conditions: <ol style="list-style-type: none"> 1. Do the stub has a replication history 2. If we have a history, we check, if we found an entry for the source machine. - If both things are valid, we could assume, that the replication with the source database was successfully executed and we set state = 4. - If not, we wait until the needed things are available.
4	Replica exists (checked by examining the property "Replication History exists") and mail had been sent to the appropriate user.	<ul style="list-style-type: none"> - Send mail to the appropriate user. For this we had to take the old name, because at this time he still work on his old database on the source machine. After sending the mail set state = 5.
5	Domino Directory (NAB) was changed (This has to be done by a time offset, otherwise th mails would be sent to the new address) and an eventually existing Server Command had been executed If the NAB could not be changed, the status would be set to 129.	<ul style="list-style-type: none"> - Last state for this process. Until here everything was done from sight of the administration. After this state, we wait for incoming mails, which were generated by the user, when he pressed the button, which is located in the migration mail.
127	The replication is disabled in the sourcedatabase. So we couldn't go from state 3 to 4, but this will be checked each time.	Go back to state 2, if we could create a valid replica stub.
128	After the mail has been processed for the first time, the replica stub should be present. If not, this state is set.	Go back to state 2, if we could create a valid replica stub.

From here, the creation of the replication stub will be subsequently tried, until it is successful and state 2 is entered again.

- 129** The Domino Directory (NAB) could not be changed in state 5. Go back to state 5, if we could change the NAB. This is subsequently tried again in this state. If the attempt is successful, state 5 is entered again.
-

For more detail, you should take a look to the "Diagram of the State Machine" in the General description ()

Remark:

You should be sure, that the entry "RunTime" in the setup document () will correspond to your setting in the NAB. This entry limits the maximum runtime of the agent programmatically. If this time value is greater than the maximum runtime defined in the NAB and there are lots of documents to be processed, the agent will be kicked out of its process cycle asynchronously from the agent manager. This could result in an undefined state for several documents and **must** not happen!

2.1 Unprocessed mails, Section "Mails\New created"

Description:

Lists all users, to which a migration mail should be sent. These mails are created by pressing the button "Create migration mails" (see , too). This task is done by the agent "ProcessMigrationMails" (see 

If documents are listed within this view, no other actions except the creation has been executed yet.

View:

Create migration mails   ErrorLog					
Target <- Source	Who	Date	Old Mailfile	New MailFile	
▼ PRS_01					
▼ Server01					
 Dan D0001013		14.06.99 11:10	mail/mail1013.nsf	mail/m/mail1013.nsf	
 Melissa D0001014		14.06.99 11:10	mail/mail1014.nsf	mail/m/mail1014.nsf	
 Jack D0001015		14.06.99 11:10	mail/mail1015.nsf	mail/m/mail1015.nsf	
 Kathy D0001016		14.06.99 11:10	mail/mail1016.nsf	mail/m/mail1016.nsf	
 Paul D0001017		14.06.99 11:10	mail/mail1017.nsf	mail/m/mail1017.nsf	
 Laurie D0001018		14.06.99 11:10	mail/mail1018.nsf	mail/m/mail1018.nsf	
 Ripka D0001019		14.06.99 11:10	mail/mail1019.nsf	mail/m/mail1019.nsf	
▼ PRS_02					
▼ Server01					
 Carolynn D0001021		14.06.99 11:10	mail/mail1021.nsf	mail/m/mail1021.nsf	
 Alexander D0001022		14.06.99 11:10	mail/mail1022.nsf	mail/m/mail1022.nsf	
 Dan D0001023		14.06.99 11:10	mail/mail1023.nsf	mail/m/mail1023.nsf	
 Melissa D0001024		14.06.99 11:10	mail/mail1024.nsf	mail/m/mail1024.nsf	
 Jack D0001025		14.06.99 11:10	mail/mail1025.nsf	mail/m/mail1025.nsf	
 Kathy D0001026		14.06.99 11:10	mail/mail1026.nsf	mail/m/mail1026.nsf	

Columns:

- Category: The name of the new mail server is shown in the first category, the name of the old mail server in the second.
- Who : All users to which migration mails are sent, are listed in this column sorted by their CommonName. The column is sorted alphabetically. The direction of the sorting can be changed with a mouse click (ascending or descending). Additionally this column is categorized by the old mail server and second by the new mail server
- Date: Creation date of the document
- Old Mailfile: Path of the mail file on the old server
- New Mailfile: Path of the mail file on the new server

Actions:



Create migration mails:

Pressing this button will create the migration mails for the selected (?) users. A form is shown where all necessary information has to be entered. The documents are created then (Siehe auch ). In this state these mails are not sent yet, (look ).

Help:

Pressing this button opens the related help document.

ErrorLog:

Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.

2.2 Ready to send mails, Section "Mails\Ready for send"

Description:

Lists all users to which a migration mail will be sent (sorted by user).

All documents in this view are processed by the agent "ProcessMigrationMails" (see )

View:

Target<- Source	Who	Date	Migration	Replica State
▼ NewServer02				
▼ OldServer01				
 Alexander D00010	Alexander D00010	14.06.99 11:10	→	 Unkown
 Carolynn D000103	Carolynn D000103	14.06.99 11:10	→	 Stub exist
 Alexander D00010	Alexander D00010	14.06.99 11:10	→	 Unkown
 Dan D0001033	Dan D0001033	14.06.99 11:10	←	 Unkown
 Melissa.D0001034	Melissa.D0001034	14.06.99 11:10	→	 Unkown

Columns:

- Category:** The name of the new mail server is shown in the first category, the name of the old mail server in the second.
- Who :** All users to which migration mails are sent, are listed in this column sorted by their CommonName. The column is sorted alphabetically. The direction of the sorting can be changed with a mouse click (ascending or descending). Additionally this column is categorized by the old mail server and second by the new mail server.
- Date:** Creation date of the document
- Migration:**
- Indicates that the documents represents a migration, which means that a user is moved from an old to a new consolidated server.
 - ← Indicates that the documents represents a fallback, which means that the user has been migrated before, but must move back to his old server according to specific problems
- Replica State**
-  The status is not known yet. The status appears as soon as the agent processMigrationMail" has created the replica stub. As the document is processed the next time, it will be checked if the stub really exists.
 -  The replica could not be found. An error which can not be corrected occurred when the replica should be created. Further information can be found in the ErrorLog database. The agent does not try to create the replica stub again, so the document remains in this status. The replica can be created manually, then the process will continue as intended.
 -  The status of the replica was checked. The stub has been created correctly and is waiting to be initialized and replicated by the replica-task of the server. If the databse already has been replicated, a mail will be sent to the user and the

document disappears from this view. It will be moved to the view Migration()
oder Fallback () (according to the state Fallback/Migration)

Actions:



Help:

Pressing this button opens the related help document.

ErrorLog:

Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.

2.3.1 Migration-mails/1. Users, Section "In Process\Migration (User)"

Description:

Lists all users to which a migration mail been sent (sorted by user). At this time a fully initialized replica exists on the migration server.

The entry in the person document of the NAB for the new location of the mail file is set.

Used Form:

see 

View:

Who	Old Mailserver	Date	NAB changed	Button pressed	Migrated	Carried out
 User002 Rollout002	FFMDOMINO3	07.06.99 15:13	✓	✓		
 User003 Rollout003	FFMDOMINO3	07.06.99 15:13	✓	✓		
 User004 Rollout004	FFMDOMINO3	07.06.99 15:13	✓	✓		
 User005 Rollout005	FFMDOMINO3	07.06.99 15:13	✓	✓		
 User006 Rollout006	FFMDOMINO3	07.06.99 15:13	✓	✓		
 User010 Rollout010	FFMDOMINO3	07.06.99 15:13	✓	✓		
 User012 Rollout012	FFMDOMINO3	07.06.99 21:05	✓	✓	✓	
 User021 Rollout021	FFMDOMINO3	08.06.99 10:52	✓	✓		

Columns:

- Who:** All users to which migration mails have been sent, are listed in this column, sorted by their CommonName. The column is sorted alphabetically. The direction of the sorting can be changed with a mouse click (ascending or descending).
- Old Mailserver:** This column is for information purposes only. It shows the server before the migration takes place. A more detailed view can be found under "Migration \ 3. Migration-Mails \ 2. Servers"
- NAB changed:**
- ✓ Indicates that the NAB has been changed.
 - ✗ Indicates that the NAB has not been changed yet.
- Notice : the point in time the change occurred is set, when the agent runs for the next time, after the mail has been sent.
- Button pressed:**
-  Indicates that no mail from this user has been received yet. Therefore it can not be determined yet if the user interaction has been successful.
 - ✓ Indicates that the user has pressed the button and the action has been successful.
 -  Indicates that the user has pressed the button, but errors have been encountered.

To determine the errors and to see, if the action will have to be repeated, the sent mail must be checked. This mail contains the necessary debug information.

Actions:



Resend Migrations-Mail after error:

If an error occurs when the mail has been sent the first time and the button has been pressed, then it will be possible to send it again. The status of the selected mails will be changed, so the mails can be sent again by the scheduled agent. This mail contains a different notice, but the process is the same as the one which already has been executed before. That means, possible problems must be first determined and eliminated, so that the process runs correctly then.

Fallback:

If persons have to move back to the old mail server because of technical or organizational problems, the person documents concerned can be selected and the fallback action can be executed. The mails concerned will be amended in the status, a renewed dispatching by the time-triggered agent can thus be made. Only the files describing the location of the mail file will be exchanged then, which means the old location information is used again. Additional flags control the behaviour of the usermail button so that the local location documents of the users are adapted correctly. A new replica will not be created using this action.

Inspect usermail:

According to the pictogram "Button pressed" it is evident whether the user already executed the action. If he did, the received mail of the user is opened when this button is pressed..

Help:

Pressing this button opens the related help document.

ErrorLog:

Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.

2.3.2 Migration-mails/Servers, Section "In Process\Migration (Server)"

Description:

Lists all users to which a migration mail been sent (sorted by server). At this time a fully initialized replica exists on the migration server.
The entry in the person document of the NAB for the new location of the mail file is set.

Used Form:

see 

View:

Source->Target	Who	Date	NAB changed	Button pressed	Migrated	Responsible processor
Server01						
PRs_01						
	User002 Rollout002	07.06.99 15:13	✓		✗	None defined
	User003 Rollout003	07.06.99 15:13	✓		✗	None defined
	User004 Rollout004	07.06.99 15:13	✓		✗	None defined
	User005 Rollout005	07.06.99 15:13	✓		✗	None defined
	User006 Rollout006	07.06.99 15:13	✓		✗	None defined
	User007 Rollout007	07.06.99 15:13	✓		✗	None defined
	User008 Rollout008	07.06.99 15:13	✓		✗	None defined
	User009 Rollout009	07.06.99 15:13	✓		✗	None defined
	User010 Rollout010	07.06.99 15:13	✓		✗	None defined
	User021 Rollout021	08.06.99 10:52	✓		✗	None defined
PRs_02						
	User012 Rollout012	07.06.99 21:05	✓	✓	✓	None defined
	User031 Rollout031	08.06.99 21:03	✓	✓	✓	None defined

Columns:

Who: All users to which migration mails have been sent, are listed in this column, sorted by their CommonName. The column is sorted alphabetically. The direction of the sorting can be changed with a mouse click (ascending or descending). Additionally this column is categorized first by the old mail server and second by the new mail server where the user has been moved to. (?)

Old Mailserver: This column is for information purposes only. It shows the server before the migration takes place. A more detailed view can be found under "Migration \ 3. Migration-Mails \

2. Servers"

- NAB changed:
- ✓ Indicates that the NAB has been changed.
 - ✗ Indicates that the NAB has not been changed yet.

Notice : the point in time the change occurred is set, when the agent runs for the next time, after the mail has been sent.

- Button pressed:
- 🔍 Indicates that no mail from this user has been received yet. Therefore it can not be determined yet if the user interaction has been successful.
 - ✓ Indicates that the user has pressed the button and the action has been successful.
 - 💣 Indicates that the user has pressed the button, but errors have been encountered. To determine the errors and to see, if the action will have to be repeated, the sent mail must be checked. This mail contains the necessary debug information.

Actions:



- Create Batchfiles: This button creates a batchfile out of the selected documents, one per source server, in which we compose a move command like "move c:\notes\fallback mail\Josef Müller". You will find these batchfiles in the notes data directories of the server, on which the migrator is located!. Remember, that you must copy the right batchfile from this location to the appropriate servers (location must be the notes data directory) by hand and ftp! After execution of this batchfiles on the appropriate servers, all mailfiles are moved back to its original location (which is configurable), so the users are able to use them in a normal way.

So a former call from the batchfiles generated in the Migration view to move the files to a save location is abolished.

Executing agent is "(GetUserListForServer)"

- Inspect user mail: According to the pictogram "Button pressed" it is evident whether the user already executed the action. If he did, the received mail of the user is opened when this button is pressed.
Executing agent is "(ShowUserMail)"

- Help: Pressing this button opens the related help document.

- ErrorLog: Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.

- Set responsible processor This action sets only a field "WorkingAdmin" in the selected documents. This is only for tracking manually actions in case of migration errors. So an admin could set himself as responsible for this user.

Executing agent is "(SetWorkingAdmin)"

2.4.1 Fallback-mails/Users, Section "In Process\Fallback (User)"

Description:

Lists all users, for which a Fallback mail had been sent (sorted by Users). At this point, a complete and actual replica of the users maildatabase exists on the fallback server (the former source server). Because of continous replication between source and target server, there is no lack of information, if a user switched back to its original source server. The NAB was changed to the original mailfile location (same condition like before starting migration).

If the user pressed the button in the fallback mail, his location document will be changed back to the old mailfile location.

Used Form:

See 

View:

Who	Old Mailserver	Date	NAB Changed	Button pressed	Migrated	Responsible
 User002 Rollout002	PRS_01	07.06.99 15:13	✗	✓		None defined
 User003 Rollout003	PRS_01	07.06.99 15:13	✓	✓		None defined
 User004 Rollout004	PRS_01	07.06.99 15:13	✓	✓		None defined
 User005 Rollout005	PRS_01	07.06.99 15:13	✓	✓		None defined
 User006 Rollout006	PRS_01	07.06.99 15:13	✓	✓	✓	None defined

Columns:

- Who:** All users to which migration mails have been sent, are listed in this column, sorted by their CommonName. The column is sorted alphabetically. The direction of the sorting can be changed with a mouse click (ascending or descending).
- Old Mailserver:** This column is for information purposes only. It shows the server before the migration takes place. A more detailed view can be found under "Migration \ 3. Migration-Mails \ 2. Servers"
- NAB changed:**  Indicates that the NAB has been changed.
 Indicates that the NAB has not been changed yet.
- Notice : the point in time the change occurred is set, when the agent runs for the next time, after the mail has been sent.
- Button pressed:**  Indicates that no mail from this user has been received yet. Therefore it can not be determined yet if the user interaction has been successful.
 Indicates that the user has pressed the button and the action has been successful.
 Indicates that the user has pressed the button, but errors have been encountered. To determine the errors and to see, if the action will have to be repeated, the sent

mail must be checked. This mail contains the necessary debug information.

Actions:



- Migration after Fallback:** If users should be moved back to the target server (new server) after the recovery of technical or organizational problems and following fallback, the persons concerned can be selected and be led back with this action. The Mails concerned will be set into the status, that a renewed dispatching by the time-triggered agent "processMigrationMail" (see ) could be made. In the Mail then only the fields, which describes the location of the mailfiles will be changed against each other. That means, old file- and servername are transfered to the the new ones and vice versa. The former inserted flags for fallback are removed, that means, the process during operation of the user Mailbuttons runs off like a normal migration.
- There will be no creation of a new replica
 - The fields "processedReceivedMail", "Fehler" und "UNIDReceivedMail" will be removed, so the mail is in its original condition!
- Inspect user mail:** According to the pictogram "Button pressed" it is evident whether the user already executed the action. If he did, the received mail of the user is opened when this button is pressed..
- Help:** Pressing this button opens the related help document.
- ErrorLog:** Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.
- Set responsible processor** This action sets only a field "WorkingAdmin" in the selected documents. This is only for tracking manually actions in case of migration errors. So an admin could set himself as responsible for this user. Executing agent is "(SetWorkingAdmin)"

2.4.2 Fallback-mails/Servers, Section "In Process\Fallback (Server)"

Description:

Lists all users, for which a Fallback mail had been sent (sorted by Users). At this point, a complete and actual replica of the users maildatabase exists on the fallback server (the former source server). Because of continous replication between source and target server, there is no lack if information, if a user switched back to its original source server. The NAB was changed to the original mailfile location (same condition like before starting migration).

If the user pressed the button in the fallback mail, his location document will be changed back to the old mailfile location.

Used Form:

See 

View:

Source->Target	Who	Date	NAB changed	Button pressed	Migrated	Responsible processor
Server01	PRs_01					
	User002 Rollout002	07.06.99 15:13	✓		✗	None defined
	User003 Rollout003	07.06.99 15:13	✓		✗	None defined
	User004 Rollout004	07.06.99 15:13	✓		✗	None defined
	User005 Rollout005	07.06.99 15:13	✓		✗	None defined
	User006 Rollout006	07.06.99 15:13	✓		✗	None defined
	User007 Rollout007	07.06.99 15:13	✓		✗	None defined
	User008 Rollout008	07.06.99 15:13	✓		✗	None defined
	User009 Rollout009	07.06.99 15:13	✓		✗	None defined
	User010 Rollout010	07.06.99 15:13	✓		✗	None defined
	User021 Rollout021	08.06.99 10:52	✓		✗	None defined
	PRs_02					
	User012 Rollout012	07.06.99 21:05	✓	✓	✓	None defined
	User031 Rollout031	08.06.99 21:03	✓	✓	✓	None defined

Columns:

Source-> Target	The category will show the home mailservers, the source in the first category and target in the second category
Who :	Here we list all users with its common name, which receive a mail. The column is alfabetic sorted, where the sort direction could be changed. Additionally the colum is categorized first for the source mailserver and second for the new mailserver, where the user had been moved.
Date	The creation date of the migration document
NAB changed:	<p>✓ Indicates that the NAB has been changed.</p> <p>✗ Indicates that the NAB has not been changed yet.</p> <p>Notice : the point in time the change occurred is set, when the agent runs for the next time, after the mail has been sent.</p>
Button pressed:	<p>🔍 Indicates that no mail from this user has been received yet. Therefore it can not be determined yet if the user interaction has been successful.</p> <p>✓ Indicates that the user has pressed the button and the action has been successful.</p> <p>💣 Indicates that the user has pressed the button, but errors have been encountered. To determine the errors and to see, if the action will have to be repeated, the sent mail must be checked. This mail contains the necessary debug information.</p>

Actions:



Create Batchfiles: This button creates a batchfile out of the selected documents, one per source server, in which we compose a move command like "move c:\notes\fallback mail\Josef Müller". You will find these batchfiles in the notes data directories of the server, on which the migrator is located!. Remember, that you must copy the right batchfile from this location to the appropriate servers (location must be the notes data directory) by hand and ftp! After execution of this batchfiles on the appropriate servers, all mailfiles are moved back to its original location (which is configurable), so the users are able to use them in a normal way.

So a former call from the batchfiles generated in the Migration view to move the files to a save location is abolished.

Executing agent is "(GetUserListForServer)"

Inspect user mail: According to the pictogram "Button pressed" it is evident whether the user already executed the action. If he did, the received mail of the user is opened when this button is pressed.
Executing agent is "(ShowUserMail)"

Help: Pressing this button opens the related help document.

- ErrorLog: Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.
- Set responsible processor This action sets only a field "WorkingAdmin" in the selected documents. This is only for tracking manually actions in case of migration errors. So an admin could set himself as responsible for this user.
Executing agent is "(SetWorkingAdmin)"

2.5.1 Received Mails/Section "State\Received mails (All)"

Description:

All received Mails, which have been processed by the "NewMail"¹ (see ) agent are shown. In contrast to the view "Received mails (New)" (see ) we show all incoming mails, which were sent from the users by pressing the button action.

¹ Remark:

The "NewMail" agent runs periodically as a scheduled agent. It scans all documents in the Inbox-folder. If new documents with an according subject are found, following actions will be triggered:

1. Receive doc becomes the state 6, to see it in the receive view
2. Set the State the sent document depending of errors
 - set state to 130 in case of an error otherwise
 - set state to 7 in the recieved document
 - set state to 6 in the sent document (Migration successfully ended)

View:

 Search new mails  Inspect Sent Mail  Reset Error state  ErrorLog					
Who	Date	Migration	Error State	Received	
▼ DOMINO					19
User003 Rollout003	07.06.99 15:13	✓	➔		1
User004 Rollout004	07.06.99 15:13	✓	➔		1
User005 Rollout005	07.06.99 15:13	✓	➔		1
User006 Rollout006	07.06.99 15:13	✓	➔		1
User007 Rollout007	07.06.99 15:13	✓	➔		1
User008 Rollout008	07.06.99 15:13	✓	➔		1
User009 Rollout009	07.06.99 15:13	✓	➔		1
User029 Rollout029	08.06.99 10:52	✓	➔		1
User030 Rollout030	08.06.99 10:52	✓	➔		1
User070 Rollout070	11.06.99 14:03	✓	➔		1
					1
▼ DOMINO3					1
User031 Rollout031	08.06.99 21:03	✓	➔		1
					20

Columns:

Category:	Shows in categories from which server the mail has been sent, which means from which server the users have moved.
Who :	In this view the Users are listed by their CommanName, under which the mail has been sent. The column is sorted alphabetically. The direction of the sorting can be changed with a mouseclick (ascending or descending).
Date:	Creation Date of the Mail
Migration:	 Shows that the selected document refers to a migration. This means that the corresponding user will move from an old to a new consolidated server.
	 Shows that the selected document refers to a fallback. This means that the corresponding user has been migrated and because of some kind of problems he will move back to the old server.
ErrorState:(?)	 The corresponding users have not pressed the button yet or the "NewMail" agent has not run yet in order to assign the relation of the received to the sent Mails.
	 The user has pressed the button and the information mail has been sent back automatically into the mail-in database. No problems in the migration process have been encountered.
	 The user has pressed the button and the information mail has been sent back automatically into the mail-in database. Problems have been encountered during the migration process. The document contains further information.
Received:	Column for counting purposes: here the documents are only combined in order to give an overview of the number of users who have already pressed the button.

Actions:



Search new mails:	Pressing this button will start the agent "NewMail" directly. Otherwise the server will start it according to its schedule. The same actions are executed in both cases. Executing agent is "NewMail"
Inspect Sent Mail:	This action opens the appropriate Migration Document, which is linked to the recieved mail Executing agent is "(ShowSendMail)"
Reset Error state:	If there was an error during changing the users location documents, the received mail was in an error state, which leads also to state 130 in the Migration document. If you donot want to resend the migration message but fix the error manually for this user, you could execute this action, which sets the states - from the migration Document to 6 (Successfully migrated) - and the state of the recieved mail to 7 (Successfully change NAB). Executing agent is "(Reset Error State)"
Help:	Pressing this button opens the related help-document.
ErrorLog:	Pressing this button opens the log-database, where all actions, errors, warnings,

etc. can be found.

2.5.2 Received Mails/Section "State\Received mails (New)"

Description:

All new received Mails, which have been processed by the "NewMail"¹ (see ) agent are shown. We won't show any documents from the same user, which are received in former times by sending the migration mail a second time in case of an error or if the user pressed the button twice, etc. For recognize this state, we store a flag in such documents, which signals that in the select statement for this view. All received documents could be inspected with the view "Received mails (All)" (see )

In this way, the administrators are able to see only the relevant received documents. It could be a bit confusing, if you see several mails received from a user, so you have to pick out the right one for take a look on the error description.

¹ Remark:

The "NewMail" agent runs periodically as a scheduled agent. It scans all documents in the Inbox-folder. If new documents with an according subject are found, following actions will be triggered:

1. Receive doc becomes the state 6, to see it in the receive view
2. Set the State the sent document depending of errors
 - set state to 130 in case of an error
 - otherwise
 - set state to 7 in the recieved document
 - set state to 6 in the sent document (Migration successfully ended)

View:

 Search new mails  Inspect Sent Mail  Reset Error state  ErrorLog					
Who	Date	Migration	Error State	Received	
▼ DOMINO				19	
User003 Rollout003	07.06.99 15:13	✓	➔	1	
User004 Rollout004	07.06.99 15:13	✓	➔	1	
User005 Rollout005	07.06.99 15:13	✓	➔	1	
User006 Rollout006	07.06.99 15:13	✓	➔	1	
User007 Rollout007	07.06.99 15:13	✓	➔	1	
User008 Rollout008	07.06.99 15:13	✓	➔	1	
User009 Rollout009	07.06.99 15:13	✓	➔	1	
User029 Rollout029	08.06.99 10:52	✓	➔	1	
User030 Rollout030	08.06.99 10:52	✓	➔	1	
User070 Rollout070	11.06.99 14:03	✓	➔	1	
				1	
▼ DOMINO3				1	
User031 Rollout031	08.06.99 21:03	✓	➔	1	
				20	

Columns:

Category: Shows in categories from which server the mail has been sent, which means from which server the users have moved.

Who : In this view the Users are listed by their CommanName, under which the mail has been sent. The column is sorted alphabetically. The direction of the sorting can be changed with a mouseclick (ascending or descending).

Date: Creation Date of the Mail

Migration:  Shows that the selected document refers to a migration. This means that the corresponding user will move from an old to a new consolidated server.

 Shows that the selected document refers to a fallback. This means that the corresponding user has been migrated and because of some kind of problems he will move back to the old server.

ErrorState:(?)  The corresponding users have not pressed the button yet or the "NewMail" agent has not run yet in order to assign the relation of the received to the sent Mails.

 The user has pressed the button and the information mail has been sent back automatically into the mail-in database. No problems in the migration process have been encountered.

 The user has pressed the button and the information mail has been sent back automatically into the mail-in database. Problems have been encountered during the migration process. The document contains further information.

Received: Column for counting purposes: here the documents are only combined in order to give

an overview of the number of users who have already pressed the button.

Actions:



- Search new mails:** Pressing this button will start the agent "NewMail" directly. Otherwise the server will start it according to its schedule. The same actions are executed in both cases. Executing agent is "NewMail"
- Inspect Sent Mail:** This action opens the appropriate Migration Document, which is linked to the received mail. Executing agent is "(ShowSendMail)"
- Reset Error state:** If there was an error during changing the users location documents, the received mail was in an error state, which leads also to state 130 in the Migration document. If you donot want to resend the migration message but fix the error manually for this user, you could execute this action, which sets the states
- from the migration Document to 6 (Successfully migrated)
- and the state of the received mail to 7 (Successfully change NAB).
Executing agent is "(Reset Error State)"
- Help:** Pressing this button opens the related help-document.
- ErrorLog:** Pressing this button opens the log-database, where all actions, errors, warnings, etc. can be found.

2.6 Wait for mail/Section "State\Waiting"

Description:

This view shows all sent mail documents, which have not yet been processed by the agent "NewMail" (📧). This means that the user has not yet pressed the button, so that the agent could not find a received mail. The state of these documents is 5, so they are in the end state of the send state machine. This condition is used as the criterium for the appearance of the documents in this view

So all documents appearing here, refer to users not having pressed the button yet.

View:

Search new mails ? → ErrorLog					
Who	Date	Migration	Error State	Received	
▼ DOMINO					19
User003 Rollout003	07.06.99 15:13	✓	→		1
User004 Rollout004	07.06.99 15:13	✓	→		1
User005 Rollout005	07.06.99 15:13	✓	→		1
User006 Rollout006	07.06.99 15:13	✓	→		1
User007 Rollout007	07.06.99 15:13	✓	→		1
User008 Rollout008	07.06.99 15:13	✓	→		1
User009 Rollout009	07.06.99 15:13	✓	→		1
User010 Rollout010	07.06.99 15:13	✓	→		1
User021 Rollout021	08.06.99 10:52	✓	→		1
User022 Rollout022	08.06.99 10:52	✓	→		1
					1
▼ DOMINO3					1
User031 Rollout031	08.06.99 21:03	✓	←		1
					20

Columns:

- Category: Shows in categories from which server the mail has been sent which means from which server the users have moved.
- Who: In this view the Users are listed by their CommanName, from which the mail has been sent. The column is sorted alphabetically. The direction of the sorting can be changed with a mouse click (ascending or descending).
- Date: Creation Date of the Mail
- Replic  The status is not known yet. The status appears as soon as the agent has created the replica stub. As the document is processed the next time, it will be checked if the stub really exists.
-  The replica could not be found. An error which can not be corrected occurred when the replica should be created. Further information can be found in the ErrorLog

database. The agent does not try to create the replica stub again, so the document remains in this status. The replica can be created manually, then the process will continue as intended.

 The status of the replica was checked. The stub has been created correctly and is waiting to be initialized and replicated by the replica-task of the server. If the database already has been replicated, a mail will be sent to the user and the document disappears from this view. It will be moved to the view Migration() oder Fallback () (according to the state Fallback/Migration)

 The status indicates that the replica exists and has been initialized and replicated.

This status includes two different numerical values:

- 2 : Replica stub has been populated by the replicator task
- 3 : The mail has been sent to the users. This status causes the agent "ProcessMigrationMails" to change the entries in the person documents of the NAB the next time it runs.

Migration:  Indicates that the documents represents a migration, which means that a user is moved from an old to a new consolidated server.

 Indicates that the documents represents a fallback, which means that the user has been migrated before, but must move back to his old server according to specific problems.

Wait: Column for counting purposes: the documents are only combined here in order to give an overview of the number of users who have not pressed the button yet.

Actions:



Search new mails: Pressing this button will start the agent "NewMail" directly. Otherwise the server will start it according to its schedule. The same actions are executed in both cases.

Help: Pressing this button opens the related help document.

ErrorLog: Pressing this button opens the log-database, where all actions, errors, warnings, etc. (according to the debug settings set in the configuration) can be found.

3.1 Form "SendMailFormular"

Purpose

As long as the documents are not processed by the "ProcessNewMail" (see ) agent, you will see the documents in its original form "Memo", which is the form, the document will be sent later on to the users. So only in the "New created" view (see ) you could see the documents in their original form, because this view shows only documents with state = 0 (unprocessed).

But if the agent processes the documents, they run into the state machine and from this point on, we use this form to show you the documents, because then you will see all needed administration informations, like the state, the source- and target servers and so on. The real text sent to the user is relative uninteressant.

This form is used in the views:

- Ready for send (see )
- Migration mails (User) (see )
- Migration mails (Server) (see )
- Fallback mails (User) (see )
- Fallback mails (Server) (see )
- Waiting (see )

Design:

This document was send with the following data:

To:

From: ()

Date:

Subject:

Status description

If you edit this data, please be shure that you know what you do, because we would use the documents later on for other actions (depends on the state) like fallback and so on.

Old		New	
MailFile	<input type="text" value="OldMailFile T"/>	MailFile	<input type="text" value="NewMailFile T"/>
Mailserver	<input type="text" value="OldMailServer T"/>	Mailserver	<input type="text" value="NewMailServer T"/>

Infos	Description
State	<input type="radio"/> StatusDesc (<input type="text" value="StatusAnz #"/>)
Receive State	<input type="radio"/> ReceiveStatusDesc (<input type="text" value="ReceiveStatusAnz #"/>)
Start Date	<input type="text" value="StartDate [16]"/>
Fallback active	<input type="text" value="Fallback T"/> <input type="radio"/> FallbackDesc
Error description	<input type="text" value="Description T"/>
Mail received	<input type="text" value="ReceivedMail"/> <input type="text" value="UNIDReceivedMail T"/>

Example:

This document was send with the following data:

To: CN=Elvis Presley/O=PRSDevel
From: Migration(Migration)
Date: 26.04.2001 16:00:40
Subject: Important! Please read this mail attentively . Your mailfile will be moved back to your original mailsver!

Old		New	
MailFile	mail\epresley.nsf	MailFile	mail\epresley.nsf
Mailsver	CN=r5-solx86-1/O=PRSDevel	Mailsver	CN=r5-w2k-1/O=PRSDevel

Infos	Description
State	<input type="radio"/> New created document (1) <input checked="" type="radio"/> First time processed <input type="radio"/> Replica Stub exist <input type="radio"/> Replica valid <input type="radio"/> Mail send <input type="radio"/> NAB changed <input type="radio"/> Error: Replication disabled in source <input type="radio"/> Error: Replica Stub doesn't exist <input type="radio"/> Error: NAB could not be changed <input type="radio"/> No confirmation (0) <input type="radio"/> Received confirmation <input type="radio"/> Error: Confirmation mail contents problems
Receive State	
Start Date	26.04.2001 14:00:00
Fallback active	<input checked="" type="radio"/> Yes <input type="radio"/> No
Error description	Replication in source database is disabled!
Mail received	Yes A9F6402325DDDA3DC1256A3A0052960D

3.2 Form "SetupDoc"

Purpose

This form is intended to configure the database. Only one document of this type exists. If it is not existent yet it will be created, otherwise the existing one will be opened. Changes can be made via the menu action "Configuration" in the navigator. Without a correct configuration the tool will not work as designed. Therefore you will be notified, if the document is saved when incorrect changes have been made or entries are missing. If the database is copied on operating system level or by a notes copy, the configuration document will be opened in the edit mode the first time the database is opened, so you could change all necessary entries.

Actions

- Check and correct agent names
This agent renames the "Run On server" property of the scheduled agents, disables and enables them, so that the AMGR recognizes the agents
- Template Docs
Open the folder for the template documents. You could change all of the content of these documents. Be shure, you have signed the button code in reference to the ECL settings with the right ID (see )
- Edit online help
Pop up the profile document for the online help values, which are used in the application
- Edit Labels
Pop up the profile for the labels which are used in the Dialogs
- Registration
Pop up the registration dialog. You have to put in here a registration number, purchased by Iunctio. To receive this, you have to send per mail your mail domain name (case sensitive) and you will receive it soon.

Tabbed table properties

RunValues

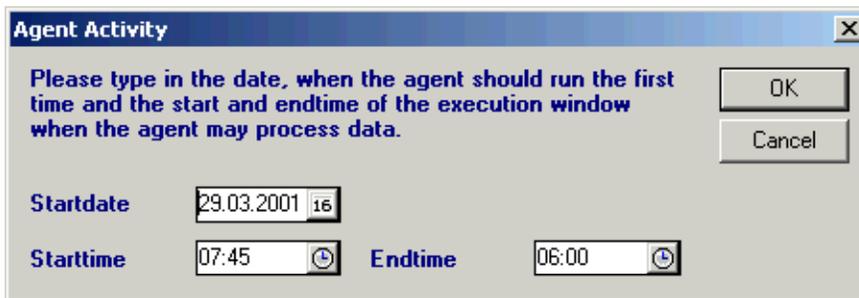
Run Values	Databases	Directory	Replica Stub Properties	Debugging
<u>Earliest date</u> from which on the agent was active			1	29.03.2001 12:58
Time window in which <u>Agent is active</u> ist:				07:45 to 06:00
<u>Maximum runtime</u> of the agent (in minutes)			2	9 Minutes
<u>Subject Field for Migration mail</u>		3		Important! Please read this mail atte Important! Please read this mail atte Important! Please read this mail atte

Infos:

1. You could define the time frame, in which the agent will process documents. Outside of this time frame the agent will run, too, but no action takes place. With this option you can run the tool in a

period of time where there is a low extent of utilization on the server.

Dialog :



2. Maximum Runtime

This agent will be executed as a scheduled agent by the AgentManager on the server. The AMgr restricts the runtime of any scheduled agent to a value which will be defined in the NAB. We have built in an algorithm, which will check, that the agent does not run longer than this value. The value used here is equal to the entry in the NAB, where 1 minute is subtracted for security reasons. This ensures the correct termination of the agent and avoids suspicious results, if the AMgr ends it asynchronously. If we could not process all existing documents, we do the rest in the next scheduled start!

3. Subject Field for Migration mail

Here the subject of the mails is defined, which will be send to the users as a migration mail. You can not edit these values directly in the template documents, because these values will be used in a programatical way. So the values here and the body of the template docs will have to be changed directly in the documents.

There are three types of documents:

- Migration template : This template will be used for creating the migration mails
- Error Template : This template will be used, if we have to resend a migration mail because of any local errors during the process of the migration
- Fallback template : This template will be used in case of a fallback to the original server

Database

Run Values	Databases	Directory	Replica Stub Properties	Debugging
<u>Target server for the Migration</u>		1	CN=JoeSrv/O=Lap	
<u>Save directory</u>		2	c:\notes\fallback	
<u>Mail-In Database name</u>		none		
<u>Help database</u>		3	migration\admhelp.nsf	

Infos

1. Target Server for the Migration

This field defines, which target server is used for the migration. If the actual server is member of a cluster, all cluster members will be shown here. This value can be used later during the creation of the migration documen to select, which server should be the new home server for the users.

2. Save directory

This field will be used in an action of the "Migration (Server)"  and the "Fallback (Server)" 

sections of the navigation. This action creates batchfiles (for each server one) in the notes data directory of the client, which can be used to move all selected mailfiles to another directory on the source server at operating system level (you have to copy the file to the specific server). So you are able to move the files behind a directory link, which could be accessed by the source server for replication, but no user has the rights to open databases behind this link.

3. Mail-In Database Name

The Migrator must be known as a Mail-In database. The Button besides the field will check this configuration in the NAB and returns it's Name, which has to be used to send documents to this database.

From all users, who pressed the button, a confirmation mail will be sent back to the Migrator database.

4. Help database

This field contains the name and path of this database. The path is relative to the notes data directory. If you donot have installed the Help database, please let this value empty.

Directory

Run Values	Databases	Directory	Replica Stub Properties	Debugging
Extension of the target directories for the new mailfiles		<input type="radio"/> Take from original path <input type="radio"/> Additional Subdirectory with 1. letter of the firstname <input type="radio"/> Additional Subdirectory with 1. letter of the lastname <input type="radio"/> Additional Subdirectory with 1. letter of the original Mail-FileNames <input checked="" type="radio"/> Syntax depends on selection in section 'Directory Construction (Replica)'		1
Typing of the filename of the new mailfile		<input checked="" type="radio"/> Take from the original <input type="radio"/> All letters lowercase <input type="radio"/> All letters Uppercase		2
				Rules for generating the target server Distribution of the d ? Disksize on UNIX in Maximum size in per disk size Database for the dir Index

Infos

1. Extension of the new target directories for the new mailfiles
2. Typing of the filename of the new mailfile
3. Rules for generating the replicas on the target machine

The first value per entry is the target server name, then, seperated by a hyphen, the Source server. All Servers afterwards, seperated with a comma are the replica servers, on which we create the maildatabases as replicas too. At the end of the string there is a static subdirectory seperated by a colon, which could only be modified by the distribution value as a postfix .

Syntax: <Servername>-<Target Server>[, <ReplicaServers>]:<Directory>

Assumption:

- We have four servers in the cluster: Server01, Server02, Server03, Server04 and by the creation of the users each user should have a replica on two other server in the cluster
- The mail directories should be named as mail101, mail102, mail201 und mail202 and should be divided into 2 separate directories,
Because we have 2 discs per Server for the mail (-> Distribution of the directories = ")
- Index is alphanumeric (Index = alphanumeric)

Example

```
Server01-Server03,Server04:mail101
Server02-Server03,Server04:mail102
Server03-Server01,Server02:mail201
Server04-Server01,Server02:mail202
```

Conclusion:

- Migration of 250 users to Server01:
250 User are created on Server01, 125 in directory mail101a and 125 in directory 101b.
250 Replicas are created on Server03 and server04. 125 (the same like on the target server) will be created in directory mail101a and 125 in directory 101b.
- Migration of 250 users to Server04:
250 User are created on Server04, 125 in directory mail202a and 125 in directory 202b.
250 Replicas are created on Server01 and server02. 125 (the same like on the target server) will be created in directory mail202a and 125 in directory 202b.

4. Distribution of the directories

Dependant on the field ' distribution ' we could do another doubling, trebling etc.. for the directories (this is for the filesystem architecture on the OS, mountpoints etc)
So then we would have on server A the directories AC1, AC2, AD1 and AD2, on server C the directories AC1 and AC2 and on server D AD1 and AD2.

5. These field can be used on UNIX systems only. Cause the possibility to mount several disks to appropriate subdirectories, we are able to make an balanced migration of users to several mountpoints.**1. Disksize in kByte**

This value describes the maximum volume size of the used disks at the several mountpoints, they should have the same size to make this process working correct. (?)

If you don't use this feature, please enter the value (0) in this field!

2. Maximum size in percent of the disk

This value multiplied by the disk size, returns the maximum level you can migrate users to a disk or mountpoint.

3. Database for the directory sizes

The actual size of the subdirectories can not be received in a direct way. We have to use a special notes application, which is part of the package (dbusage.nsf) and which have to be installed on every server of the target cluster.

This application expects an empty file in the notesdata directory with the executable bit set. In this file we write an UNIX command (du -k) and execute it afterwards as a shell command file with the Shell() command of lotus script. The output will be written to another file <Commandfilename>Disk, which we read in for creating the sizing documents. This documents can be accessed in a normal way from the Migrator to compute the value for the decision "could we move a user in a subdirectory or is there no place left".

6. Index

In case of distributed directories this value will compute the postfixes for the generated directories

(appendix to the dynamic built or static directory).

This will be a continuous number (numeric) from 1 to n or small letters from a - x (alphanumeric) and is concatenated to the directory name with an underscore.

if you press the Button besides the Rule Section, you will get this test output:



Replica Stub Properties

Run Values	Databases	Directory	Replica Stub Properties	Debugging
Query Quota Information			<input checked="" type="radio"/> Yes	
Should we set ourself as adminserver			<input type="radio"/> No	
ServerConsole Command			<input type="radio"/> Yes	
			<input checked="" type="radio"/> No	
			<input type="checkbox"/> tell sched validate %u	

Query Quota Information

Flag which decides, if the Quota Information (if any) should be copied from the old database to the Replica Stub during the creation process.

On a normal replication process the quota infoamtions are not transfered.

So we have to get these informations with a sepearate function from the source database and put it in the target database (replica stub) at creation time.

Should we set ourself as AdminServer

Flag which decides, if we should set the new mailservr after replication of the old mailfile with the new generated mailfile as adminserver.

Be carfully with this option, we dont remove the ACL Entry of the former AdminServer, we only remove the property isAdminserver from it, if it is set!

ServerConsoleCommand

If this field contains a value, it will be executed as a Severconsole command on the target server after the NAB Entry of a user would be changed to the new Mailfile location on the targetservr.

There are two possible replacement values:

- %u will be replaced by the users name
- %f will be replaced by the users mailfile

Debugging

Run Values	Databases	Directory	Replica Stub Properties	Debugging
<u>Debug-Level</u>	31	Category for standard Log-Messages	2	Script
1	<input checked="" type="checkbox"/> Errors	Name of the Log-Database	3	migration\ErrLog.nsf
	<input checked="" type="checkbox"/> Functions debugging	Should we show all error messages via Message box	4	<input type="radio"/> Yes
	<input checked="" type="checkbox"/> Miscellaneous			<input checked="" type="radio"/> No
	<input checked="" type="checkbox"/> Performance	Should we stop in debug mode during an error	5	<input type="radio"/> Yes
	<input checked="" type="checkbox"/> Informations			<input checked="" type="radio"/> No
		Should we only print logmessages without storing them	6	<input type="radio"/> Yes
				<input checked="" type="radio"/> No

Infos

1. Debug Level

You could define the granularity of the protocol, we write in an agent log. If you check all levels, each step of the process and a lot of helpfull informations will be recorded, but keep in mind, that this process is time and space consuming.

So check all levels only in case of errors. Normally you should check only "Errors" and "Functions debugging" (possibly Miscellaneous, too).

2. Category for standard log messages:

You should leave this field to the standard, it is only the default category for log entries, which have no category.

3. Name of the Log database

The Log database must be located on the same server as the migrator, but you are able to put it into the directory of your choice. Here you can define the filepath for the Agent log.

In case of a non existing log database, a new one is created. First a template called "errlog.ntf" is searched. If it exists, the log file is created from this template, If it does not exist, it is created from the standard aLog4.ntf template, which should be shipped with notes. In this case some helpfull views are missing, but logging works normal. If both are not available, logging will be disabled, because a proper log can not be created.

4. Should we show all error messages via Message Box

In case of errors in the frontend you could select "yes" here This will cause a pop up window with an alert box for each error.

This entry is only usable for debugging purposes!

5. Should we stop in debug mode during an error

In case of errors in the frontend you could select "yes" here. This will cause the script debugger (if enabled) to stop at an error, because all internal error handlers will be disabled.

This entry is only usable for debugging purposes, it should not be touched in all other cases!!!

6. Should we only print logmessages without storing form
The logging will not make any entry into the agent log, instead all errors are shown in the statusbar.

4.1 Action "Migration-Mails"

Purpose:

This form is designed to select all users/groups who/which have to move to the migration server. If a group is selected, it will be broken up automatically. If there are entries which do not exist, a mail is sent to the administrator.

Design:

Notices:

1. In this field you should enter the users' home server, where the replica stubs will be created. If this server is a member of a cluster according to the list in the setup-document, replica stubs will be created on all members of the cluster mentioned in this list, too. The existence of the server will be checked. If it does not exist, the administrator is notified and it is not possible to accept this value by clicking the "OK"-Button.
2. Start time, from which the documents - which are created by accepting the values in this box - will be processed by the agent "ProcessMigrationMails" at the earliest.
3. List of users, to which a mail should be sent to. Groups can be selected as well. They will be broken up automatically into the entries of the users, so individual documents are created. If Problems in breaking up a group are encountered (e.g. there is no member inside a group, etc.) you will be notified.
4. The three actions beside the list are designed for the following purposes:
 - The button "Add Person/Group" opens the well known notes dialog box for selecting and adding a user from the address book
 - The button "Remove Person/Group" deletes the selected entries from the list
 - The button "Rename Person/Group" opens a dialog to change the name of the selected user

If there are errors in creating the documents, please refer to the Log database. There you will find a description, whats going wrong. Possibly,

- your NABs don't match, means, that you have different NABs on the source and target machine, or
- if you use the sizing feature (Setup document), there is no more size on the target machine's directories
- etc.