

Directory Synchronization - Trouble Shooting

This section is designed to help you prevent inconsistencies within the directory synchronization system.

The functions covered are the upload, download and import of addresses to/from the central directory, the renaming of the transport service node name and the directory synchronization maintenance.

Provided is the online error message which may be displayed when one of the functions is invoked, the reason for the error message and how you can resolve the problem.

This chapter covers the following topics:

- Upload/Download Functions
 - Define Local Node Function - Rename Transport Service Node Name
 - Directory Synchronization Maintenance
 - Import Function
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Upload/Download Functions

The following section describes the online error messages which may appear on your terminal when you invoke the Upload/Download functions. If the resulting log message, when online or in batch mode, differs from the online error message, that log message is also given.

Cannot reach the central directory - check network data

Log Message Online/Batch:

Run time error during execution

Error: *nnnn*: Name: *Program-name* on line: *line-number*

where *nnnn* is the error number, which can be 3055, 3017, 3061, or 3148

Description/Cause:

If the LFILE parameter is not set or incorrect, the system writes a log message and stops the upload procedure.

The Upload/Download functions can be invoked online as well as in batch. During batch execution, the system will not try to set the central directory file assignment. Therefore, if the LFILE parameter is not correct, the batch utility is stopped and a message is displayed. When the Upload/Download functions are invoked online, the LFILE parameter is automatically set by the directory synchronization maintenance system.

Solution:

Using the correct LFILE parameter, restart the upload/download procedure.

No administration data for directory synchronization were found**Description/Cause:**

The existence of your directory synchronization administration data, which is specified with the Directory Synchronization Maintenance function, is checked. If the administration data is not found, the system writes a log message and stops processing.

Solution:

Install the directory synchronization. Then, create your Con-nect directory synchronization administration data with the Directory Synchronization Maintenance function and restart the Upload/Download function.

Your Con-nect node is not defined in the central directory**Description/Cause:**

The existence of your Con-nect node in the central directory is checked. If a record of your Con-nect node is not found, the system writes a log message and stops processing.

Solution:

Your central directory administrator must add a record for your Con-nect node in the central directory.

The DBID/FNR of local and central record do not match, or Invalid DBID/FNR specified in central directory**Description/Cause:**

The Con-nect DBID and FNR you defined with the Directory Synchronization Maintenance function are compared against the values specified for your Con-nect node in the central directory. In the case of batch mode, your LFILE parameter currently used is compared.

If the settings do not match, the system writes a log message and stops processing.

This check is performed to insure that no two Con-nect nodes with the same name overwrite existing address records in the central directory. If a second node with the identical name and DBID/FNR starts an upload, it would overwrite existing address records with its own addresses.

Solution:

Your central directory administrator must correct the DBID/FNR for your Con-nect node in the central directory, or you must change the name of your Con-nect node.

This node is not authorized to upload/download addresses**Description/Cause:**

It is checked whether or not your Con-nect node, as defined in the central directory, is permitted to upload/download addresses.

If your Con-nect node is not authorized to upload/download addresses, the system writes a log message and stops processing.

Additionally, the synchronization abilities, as defined in the central directory, for your Con-nect node is updated in your directory synchronization maintenance data. (You can display your synchronization abilities with the Directory Synchronization Maintenance function.)

Solution:

Your central directory administrator must modify your Con-nect node's record in the central directory to upload (to use the Upload function), download (to use the Download function) or up/download (to use both the Upload and Download functions).

Node has been renamed**Description/Cause:**

It is checked whether your Con-nect node was renamed. If a previous transport service node name for your Con-nect node is still specified on the "Directory Synchronization Maintenance" screen, the system writes a log message and stops processing.

Solution:

Using the Define Local Node function, rename your transport service node name.

Local node out of date (see situation 2), or Central node out of date (see situation 3)

The above error messages pertain only to the Upload function.

Description/Cause:

The MRU Transaction Counter on your Con-nect node is compared against the value of the MRU Transaction Counter for your node's record in the central directory. If the value for both transaction counters is not equal, the system writes a log message and continues processing.

Situation 1:

Either the MRU Transaction Counter on your Con-nect node or the counter in the central directory is blank. For example, this may occur when the Con-nect directory synchronization administration data is deleted and added again.

Solution:

In this case, no online error message is displayed, since a total upload is automatically performed when the Upload function is started

Situation 2:

On your Con-nect node the MRU Transaction Counter is less, but not blank, than the central directory's MRU Transaction Counter. For example, this may occur when an Adabas backup is restored on your Con-nect node.

Solution:

Restart the Upload function on your Con-nect node.

Situation 3:

Central directory's MRU Transaction Counter is less (but not blank) than your Con-nect's MRU Transaction Counter. For example, this may occur when a backup is restored to the central directory database.

This means that subsequent upload processes will use the (now smaller) Next Transaction ID and Alias from the central directory's administration data when new address records are uploaded. If this node uploads again, it will overwrite the address record with its own data, even though this transaction ID may already be in use for another Con-nect node.

To prevent this situation, the addressee names (with a status other than New) on the Con-nect node currently uploading and the address records in the central directory are compared. If an address is not found on the central directory, the status for the address on the Con-nect node is changed to CentDel.

If the initial upload of an address to the central directory results in a duplicate synchronization address, the synchronization address is incremented until a new one is found. This also sets the Next Alias in the central directory's Administration Data Maintenance function.

Solution:

An upload from all participating Con-nect nodes is required to refresh the central directory.

The central node was not found

This error message pertains only to the Upload function.

Description/Cause:

The existence of the central directory administration data is checked.

If the central directory administration data does not exist, the system writes a log message and stops processing.

The name of the central directory administration record is taken from the entry on your Con-nect's "Directory Synchronization Maintenance" screen. A problem will occur if: the central directory administration record cannot be found, the record is not defined as Node Type Central, or the central directory name is not identical to that specified with the central directory's Administration Data Maintenance function.

Solution:

Install the central directory or change the name defined as the central directory with the Directory Synchronization Maintenance function.

The central node is currently locked

This error message pertains only to the Upload function.

Description/Cause:

It is checked whether or not another Con-nect node is currently uploading addresses to the central directory.

If another Con-nect node is currently uploading addresses, the directory synchronization system writes the node name and current transaction counter to a log message and stops processing.

Solution:

Try to restart the Upload function later or, if a Con-nect node is blocking the upload procedure, ask your central directory administrator to force the Con-nect node out of the Upload function.

If the execution of the Upload function is forced out by your central directory administrator while a Con-nect node is uploading, the Con-nect node will receive a response code and its process will stop. In that case, the interrupted process can be restarted later.

A record of the directory synchronization is in hold status

The above error message pertains only to the Upload function.

Description/Cause:

Your Con-nect node's data defined in the central directory is placed on hold when it is read with the Upload function.

This situation can occur when multiple nodes start uploading simultaneously. In this case, the node's data remains on hold until either the node is entered as currently uploading in the central administration record, or the upload of the node's data is forced (while another node is still active).

If a response code is received because another node began uploading first, the system writes a log message and stops processing.

Solution:

Try to restart the Upload function later or, if a Con-nect node is blocking the upload procedure, ask your central directory administrator to force the Con-nect node out of the Upload function.

Define Local Node Function - Rename Transport Service Node Name

This section describes solutions to problems you might encounter when renaming your transport service node name with the Define Local Node function.

This section covers the following topics:

- Online Messages
- Log Messages
- Online and Log Messages

Online Messages

Online message displayed on the "Update Node Name in Central Directory" screen:

```
New Transport Service Node Name:      NODE1

Node Name currently used by the        NODE0
Directory Synchronization:

The Central Directory and the Node Name cannot be modified.
Check your Directory Synchronization Installation.
```

Description/Cause:

It is checked whether the central directory is available, your Con-nect node is not registered in the central directory, or whether your Con-nect node has been defined a synchronization ability which does not allow modifications to the node name (e.g. Renamed). When one of the above situations occurs, the system stops processing and the screen above is displayed.

Solution:

Contact your central directory administrator.

Online message displayed on the "Update Node Name in Central Directory" screen:

```
New Transport Service Node Name:      NODE2
Node name currently used by the
Directory Synchronization but
not in the Central Directory:          NODE1
Node Name last updated in the
Central Directory:                     NODE0
The Central Directory and the Node Name cannot be modified.
Check your Directory Synchronization Installation.
```

Description/Cause:

It is checked whether the previous modification terminated successfully.

If the last modification did not terminate successfully (e.g. the network was not available) and the network is currently not available, the system stops processing and displays the above screen.

Solution:

Press PF3 to quit and perform the Define Local Node function when the network is available.

Online message displayed on the "Update Node Name in Central Directory" screen:

```
The previous update to the current Node Name is pending.
A new Transport Service Node Name cannot be accepted until
the current Node Name is updated. Perform the update.

Node Name currently used by the
Directory Synchronization but
not in the Central Directory:          NODE1

Node Name last updated in
the Central Directory:                 NODE0

The update will modify          111          addresses
in the Central Directory and    123          remote users.
```

Description/Cause:

The current transport service node name on your Con-nect node is compared against the node name defined in the central directory (i.e. did the last modification terminate successfully).

If the last modification did not terminate successfully, the system requires you to complete the last modification before you can continue. The system stops processing and displays the above screen.

Solution:

Press PF5 to confirm the previous modification and then select the Define Local Node function again, to modify your transport service node name with the new node name.

Log Messages

No administration data for directory synchronization were found

Description/Cause:

It is checked whether or not a directory synchronization data record exists for your local Con-nect node. If no record is available, the system writes a log message and stops processing.

Solution:

Using the Directory Synchronization Maintenance function, define your directory synchronization administration data.

The transport service node name is not available

Description/Cause:

It is checked whether or not a transport service node name is defined for your Con-nect node. If no node name is found, the system writes a log message and stops processing.

Solution:

Using the Define Local Node Name function, define a transport service node name for your Con-nect node.

Transport service and directory synchronization node name do not match

Description/Cause:

It is checked whether the transport service node name (defined with the Define Local Node function) and the transport service node name defined in your directory synchronization administration data are identical. If they are not identical, the system stops processing and writes a log message.

Solution:

Quit from the current screen. Contact your central directory administrator for your old transport service node name. Then, select the Directory Synchronization Maintenance function and press PF4 to erase the directory synchronization administration data. Enter Y to confirm the erasure in the resulting window. With the Define Local Node function, change your transport service node name to the node name you obtained from your central directory administrator. Then, redefine your directory synchronization administration data, using the node name you obtained from your central directory administrator. Once the above steps are completed, you can then rename your transport service node name with the new node name (using the Define Local Node function).

A node name must be specified**Description/Cause:**

The existence of your transport service node name is checked in the directory synchronization data record. If no node name is found, the system stops processing and writes a log message.

Solution:

Using the Directory Synchronization Maintenance function, specify your transport service node name.

The transport service node name *node-name* is not correct**Description/Cause:**

The node name specified with the Define Local Node function is syntactically wrong.

Solution:

Use only alphanumeric characters.

Online and Log Messages**Cannot look up node name *node-name* in central directory****Description/Cause:**

It is checked whether or not your Con-nect's node name is defined in the central directory. If it is not defined in the central directory, or the central directory was not available (i.e. the network was down), the system stops processing and writes a log message.

Solution:

Check whether the network is available. If it is available, ask your central directory administrator to add your Con-nect node to the central directory. Otherwise, wait until the network is available to rename your transport service node name.

No authorization to modify node name *node-name***Description/Cause:**

It is checked whether you have sufficient authorization to modify your transport service node name. In this case, the status of your node in the central directory does not allow modifications.

Solution:

Contact your central directory administrator.

Node name *node-name* already exists in central directory**Description/Cause:**

It is checked that the modified node name will be unique within the central directory. If the node name already exists, the system stops processing and writes a log message.

Solution:

Rename your transport service node name, using a different node name.

The transactions in central DB could not be counted for node *node-name***Description/Cause:**

The central directory was unable to provide the total number of addresses, from your Connect node, that are currently stored in the central directory. This indicates in the most of the cases that the network is not available.

Solution:

Rename your transport service node name when the network is available.

Record does not exist**Description/Cause:**

The modification of your transport service node name in the central directory was incomplete and the reference to your previous node name was lost (e.g. previous node name was erased from the central directory's administration data maintenance).

Solution:

Contact your Software AG representative.

The transport service node name is not available**Description/Cause:**

Your directory synchronization administration data record cannot be read.

Solution:

Try to rename your transport service node name later.

Directory Synchronization Maintenance

The following section describes the online error message which may appear on your terminal and a solution to the problem, when you invoke the Directory Synchronization Maintenance function.

You must first define your transport service node name

Description/Cause:

As a prerequisite, your transport service node name must be defined. When Con-nect is installed, your transport service node name is not automatically defined.

Solution:

Use the Define Local Node function on the "Administration - External Mail Nodes" screen to define your Con-nect's transport service node name. Then, using the Directory Synchronization Maintenance function, redefine your directory synchronization maintenance data and press PF5 to save the data.

Import Function

The following section describes the online error message which may appear on your terminal when you invoke the Import function, and a solution to the problem.

Address cannot be imported - external mail node missing

Log Message Online:

Mail method of external node is not equal to original.

Log Message Batch:

Mail method of external node is not equal to original Node: *Node-name* Alias:
Directory-synchronization-alias CD-ID: *Central-directory-name*

The above log message is recorded only when the log level is 1, 2 or 3.

Description/Cause:

The Import function adds external addresses to cabinet SYSCNT on your Con-nect node. If a suitable external node does not exist on your Con-nect, the address cannot be imported.

Solution:

In the case of addressee types address, bulletin board, cabinet and name, an external node of type A (Con-nect) must be added. The name must be the same name of the originating Con-nect node.

In the case of addressee type external, an external node with the same node type and name as on the originating node must be added on your Con-nect node, using the Add Mail Node function. See *Add a Mail Node*.