# File system

### Stufin, backup, processed or errors do not exist

When stufin does not exist the mule instance starts up normally. It creates the stufin folder automatically upon start. It reports that the endpoint has been registered on the folder. There are no errors present in the log when the folder doen not exist.

The folders are created when needed. Since stufin is the inbound endpoint it can be created by any callers wishing to place a file in the directory. The other folders are created by the instance (typically backup and then processed, errors is only created when an error occurs while processing the message).

### Stufin is not accessible

The instance will not start if the stufin dir is not accessible (the folder is actually a file or cannot be created by the instance on demand because of rights issues or file system problems). The log will contain error message 1.

#### Other directories are not accessible

When the backup, processed or errors directory are not accessible (they are files or cannot be created by the instance on demand because of rights issues or file system problems) the instance will start normally without reporting any errors. When a message arrives the message will be processed into the GM. The logs will contain error message 2 because the file that has been processed cannot be written away to a directory. In this case (message 2) the error has happened because the backup directory was a file.

## **Database**

### aftap/initieel database not present or incorrectly configured

When the username/password are not correct the instance will start normally. When a request is received by the instance error message 3 is displayed in the log. The erroneous configuration is detected when the first message arrives. No message will be present in the database and so the message will not be processed. The log will also list the content of the request that could not be written to the database. This content is not logged somewhere else.

When the connection string itself is wrong (not only the credentials) the error message will vary. The message is self-describing. In the case of a wrong host the message will contain the string "Unknown host specified" instead of "Invalid username/password".

### Vulgm guc bron database not correctly configured

The vulgm instance will poll on a certain database in the guc\_bron database. If the credentials for the guc\_bron database in the vulgm instance are wrong error message 4 is displayed in the logs. The vulgm instance will not start with this error in the configuration.

### Vulgm ldgm is not correctly configured

Message 5 is displayed when the ldgm crdentials are incorrect. The instance will start normally without any error messages in the log. When a message is received the error will be displayed in the logs. The message will not be processed by the GM because the LDGM schema is an important link in the chain of schema's.

### Logging guc is not correctly configured

Message 6 is displayed when the guc credentials are incorrect. The instance will start normally without any error messages in the log. When a client requests data from the MLO web service (which is served through the guc\_totaal or MLO instance) the error message is displayed. The client will nog get anything indicating an error. Instead the client receives an empty response envelope for the specified service method.

### MLO OC4J EXGM services not configured correctly

The instance is not affected by this misconfiguration. The error is introduced when the credentials in the managed datasource in OC4J are incorrect. The instance will not report any errors in its logs. On the OC4J instance errors will be reported regarding the misconfigured managed datasource when a request is posted to the OC4J server (typically the instance is in the middle between the client and the OC4J server). The client will get message 7 as output from the instance to which it posted the request.

## Network

### Proxy behaviour when port is already in use

When the port on which the proxy instance will listen is already in use error message 8 will be displayed in the log. The instance will not start.

### Vulgm behaviour when port is already in use

The vulgm instance has the queue (database connection) as its primary input. It also has the file system as input and an HTTP inbound endpoint on which it can receive messages. If the port on which the HTTP inbound endpoint listens is already in use the vulgm instance will not start. Error message 9 is displayed in the log.

### Instances behaviour after network problems

The vulgm has been tested with a machine on which the interface was taken down while the instance was running. The interface was taken down by using the "ifconfig <interface> down" command and brought up by using the "ifconfig <interface> up" command. The instance continued running normally after the interface was brought up. No errors were reported in the log. The instance was able to receive requests on the port after the interface was brought up.

# Endpoints not available/erroneous

The aftap and initieel instances are used as proxies to web services running behind them (the DDS4ALL web service for instance). As the web service can be on an external system it is possible that this web service cannot be contacted (network problems) or that there are internal errors in the web service (exceptions inside the web service).

#### Web service cannot be contacted

If the web service cannot be contacted from the proxy, error message 10 is displayed in the log. The proxy instance will keep running normally and will keep reporting this error upon each request until the web service is available again.

### Internal Server Error on web service

If the web service has an internal server error this error will not be reported in the log. If the web service was able to send a response containing details of the exception that was encountered this response will be proxied to the client as is.

## **Error Messages**

### Message 1

INFO 2009-07-10 14:57:28,150 [WrapperListener\_start\_runner] org.mule.transport.file.FileConnector: Registering listener:

guc.bron.gbaprs.vulgm.FileInService on endpointUri: file:///home/default/instances/temp/stufin

ERROR 2009-07-10 14:57:28,153 [WrapperListener\_start\_runner] org.mule.retry.notifiers.ConnectNotifier: Failed to connect/reconnect: file:///home/default/instances/temp/stufin. Root Exception was: Path: /home/default/instances/temp/stufin exists but isn't a directory.

Type: class java.io.IOException

ERROR 2009-07-10 14:57:28,157 [WrapperListener\_start\_runner] org.mule.MuleServer:

Message : Initialisation Failure: Path: /home/default/instances/temp/stufin exists but isn't a directory

Type : org.mule.retry.RetryPolicyExhaustedException

Code : MULE\_ERROR-84

JavaDoc : http://www.mulesource.org/docs/site/current2/apidocs/org/mule/retry/RetryPolicyExhaustedException.html

Object : file:///home/default/instances/temp/stufin

## Message 2

ERROR 2009-07-10 15:22:50,006 [guc.bron.gbaprs.vulgm.FileConnector.dispatcher.1] org.mule.DefaultExceptionStrategy:

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Message : Streaming failed. Could not get output stream. Failed to route event via endpoint:

DefaultOutboundEndpoint{endpointUri=file:///home/default/instances/temp/backup, connector=FileConnector{this=1205d8d, started=true, initialised=true, name='guc.bron.gbaprs.vulgm.FileConnector', disposed=false, numberOfConcurrentTransactedReceivers=4, createMultipleTransactedReceivers=true, connected=true, supportedProtocols=[file], serviceOverrides=null}, transformer=[], name='endpoint.file.home.default.instances.temp.backup', properties={outputPattern=#[header:gm\_filename]}, transactionConfig=Transaction{factory=null, action=NEVER, timeout=0}, filter=null, deleteUnacceptedMessages=false, securityFilter=null, synchronous=false, initialState=started, remoteSync=false, remoteSyncTimeout=10000, endpointEncoding=UTF-8}. Message payload is of type: String

Type : org.mule.api.transport.DispatchException

Code : MULE\_ERROR-42999
Payload : Some unsupported text file.

JavaDoc : http://www.mulesource.org/docs/site/current2/apidocs/org/mule/api/transport/DispatchException.html

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Exception stack is:

1. Not a directory (java.io.IOException)

java.io.UnixFileSystem:-2 (null)

2. Streaming failed. Could not get output stream. Failed to route event via endpoint:

DefaultOutboundEndpointUri=file:///home/default/instances/temp/backup, connector=FileConnector{this=1205d8d, started=true, initialised=true, name='guc.bron.gbaprs.vulgm.FileConnector', disposed=false, numberOfConcurrentTransactedReceivers=4, createMultipleTransactedReceivers=true, connected=true, supportedProtocols=[file], serviceOverrides=null}, transformer=[], name='endpoint.file.home.default.instances.temp.backup', properties={outputPattern=#[header:gm\_filename]}, transactionConfig=Transaction{factory=null, action=NEVER, timeout=0}, filter=null, deleteUnacceptedMessages=false, securityFilter=null, synchronous=false, initialState=started, remoteSync=false, remoteSyncTimeout=10000, endpointEncoding=UTF-8}. Message payload is of type: String (org.mule.api.transport.DispatchException)

org.mule.transport.file.FileConnector:575

(http://www.mulesource.org/docs/site/current2/apidocs/org/mule/api/transport/DispatchException.html)

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Root Exception stack trace:

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java.io.IOException: Not a directory

at java.io.UnixFileSystem.createFileExclusively(Native Method)

at java.io.File.createNewFile(File.java:883)

at org.mule.util.FileUtils.createFile(FileUtils.java:93)

at org.mule.transport.file.FileConnector.getOutputStream(FileConnector.java:565)

at org.mule.transport.file.FileMessageDispatcher.doDispatch(FileMessageDispatcher.java:59)

at org.mule.transport.AbstractMessageDispatcher$Worker.run(AbstractMessageDispatcher.java:273)

at org.mule.work.WorkerContext.run(WorkerContext.java:310)

at edu.emory.mathcs.backport.java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1061)

at edu.emory.mathcs.backport.java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:575)

at java.lang.Thread.run(Thread.java:619)
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Exception stack is:

1. Cannot get connection for URL jdbc:oracle:thin:@localhost:1521/xe : ORA-01017: invalid username/password; logon denied (SQL Code: 0, SQL State: + null) (java.sql.SQLException) org.enhydra.jdbc.standard.StandardDataSource:216 (null)

2. Failed to route event via endpoint: DefaultOutboundEndpoint{endpointUri=jdbc://enqueue-request, connector=JdbcConnector{this=97aaa6, started=true, initialised=true, name='guc.bron.gbaprs.initieel.JdbcEnqueue', disposed=false, numberOfConcurrentTransactedReceivers=4, createMultipleTransactedReceivers=false, connected=true, supportedProtocols=[jdbc], serviceOverrides=null}, transformer=[ObjectToString{this=11dde0c, name='guc.bron.gbaprs.initieel.ToString', ignoreBadInput=false, returnClass=class java.lang.String, sourceTypes=[class java.lang.Object, class [B, class java.io.InputStream, interface org.mule.api.transport.OutputHandler]}], name='endpoint.jdbc.enqueue.request', properties={}, transactionConfig=Transaction{factory=null, action=NEVER, timeout=0}, filter=null, deleteUnacceptedMessages=false, securityFilter=null, synchronous=true, initialState=started, remoteSync=true, remoteSyncTimeout=10000, endpointEncoding=UTF-8}. Message payload is of type: String (org.mule.api.transport.DispatchException)

Root Exception stack trace:

java.sql.SQLException: Cannot get connection for URL jdbc:oracle:thin:@localhost:1521/xe: ORA-01017: invalid username/password; logon denied

at org.enhydra.jdbc.standard.StandardDataSource.getConnection(StandardDataSource.java:216)
at org.enhydra.jdbc.standardDataSource.getConnection(StandardDataSource.java:144)
at org.mule.transport.jdbc.JdbcConnector.getConnection(JdbcConnector.java:215)
at org.mule.transport.jdbc.sqlstrategy.SimpleUpdateSQLStrategy.executeStatement(SimpleUpdateSQLStrategy.java:61)
at org.mule.transport.jdbc.JdbcMessageDispatcher.doSend(JdbcMessageDispatcher.java:67)
at org.mule.transport.AbstractMessageDispatcher.send(AbstractMessageDispatcher.java:168)
at org.mule.transport.AbstractConnector.send(AbstractConnector.java:1929)
at org.mule.endpoint.DefaultOutboundEndpoint.send(DefaultOutboundEndpoint.java:77)

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at org.mule.DefaultMuleSession.sendEvent(DefaultMuleSession.java:327)
         at org.mule.DefaultMuleSession.sendEvent(DefaultMuleSession.java:213)
         at org.mule.routing.outbound.AbstractOutboundRouter$2.doInTransaction(AbstractOutboundRouter.java:152)
         at org.mule.transaction.TransactionTemplate.execute(TransactionTemplate.java:99)
         at org.mule.routing.outbound.AbstractOutboundRouter.send(AbstractOutboundRouter.java:159)
         at org.mule.routing.outbound.ChainingRouter.route(ChainingRouter.java:71)
         at org.mule.routing.outbound.DefaultOutboundRouterCollection$1.doInTransaction(DefaultOutboundRouterCollection.java:64)
         at org.mule.transaction.TransactionTemplate.execute(TransactionTemplate.java:45)
         at\ org. mule. routing. outbound. Default Outbound Router Collection. route (Default Outbound Router Collection. java: 69)
         at org.mule.service.AbstractService.sendToOutboundRouter(AbstractService.java:903)
         at org.mule.model.seda.SedaService.doSend(SedaService.java:235)
         at org.mule.service.AbstractService.sendEvent(AbstractService.java:506)
         at org.mule.DefaultMuleSession.sendEvent(DefaultMuleSession.java:354)
         at org,mule.routing.inbound.DefaultInboundRouterCollection.send(DefaultInboundRouterCollection.java:220)
         at org.mule.routing.inbound.DefaultInboundRouterCollection.route(DefaultInboundRouterCollection.java:180)
org. mule.transport. Abstract Message Receiver \$ Default Internal Message Listener. on Message (Abstract Message Receiver.java: 365)
         at\ org. mule. transport. Abstract Message Receiver. ioute Message (Abstract Message Receiver. java: 253)
         at\ org. mule. transport. Abstract Message Receiver. java: 194)
         at org.mule.transport.http.HttpMessageReceiver$HttpWorker.doRequest(HttpMessageReceiver.java:272)
         at org.mule.transport.http.HttpMessageReceiver$HttpWorker.processRequest(HttpMessageReceiver.java:230)
         at org.mule.transport.http.HttpMessageReceiver$HttpWorker.run(HttpMessageReceiver.java:190)
         at org.mule.work.WorkerContext.run(WorkerContext.java:310)
         at edu.emory.mathcs.backport.java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1061)
         at edu.emory.mathcs.backport.java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor,java:575)
         at java.lang.Thread.run(Thread.java:619)
```

Message

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denied
)
Type : org.mule.transport.ConnectException

Type . org.mule.transport.ConnectException

Code : MULE\_ERROR-84

SQL Code : 1017

 ${\it Java Doc} \qquad : http://www.mulesource.org/docs/site/current2/apidocs/org/mule/transport/ConnectException.html}$ 

: Initialisation Failure: Cannot create PoolableConnectionFactory (ORA-01017: invalid username/password; logon

SQL State : 72000

### Message 5

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ERROR 2009-07-14 09:29:13,612 [connector.http.0.receiver.8] nl.rotterdam.ioo.gm.services.MsgLoaderServiceImpl: put new gm\_error\_msg in message header: Could not open JDBC Connection for transaction; nested exception is org.apache.commons.dbcp.SQLNestedException: Cannot create PoolableConnectionFactory (ORA-01017: invalid username/password; logon denied

org.spring framework.transaction. Cannot Create Transaction Exception: Could not open JDBC Connection for transaction; nested exception is org.apache.commons.dbcp.SQLNested Exception: Cannot create Poolable Connection Factory (ORA-01017: invalid username/password; logon denied) and the properties of the properties

## Message 6

ERROR 2009-07-14 12:46:47,602 [connector.http.0.receiver.5] nl.rotterdam.ioo.guc.dao.EventDaoIbatisImpl: insertEvent failed: org.springframework.jdbc.UncategorizedSQLException: SqlMapClient operation; uncategorized SQLException for SQL []; SQL state [null]; error code [0];

- --- The error occurred in nl/rotterdam/ioo/guc/dao/event.xml.
- --- The error occurred while executing query.
- --- Check the SELECT EVENT\_Q.NEXTVAL AS EVENT\_KEY FROM DUAL
- --- Check the SQL Statement (preparation failed).
- --- Cause: org.apache.commons.dbcp.SQLNestedException: Cannot create PoolableConnectionFactory (ORA-01017: invalid username/password; logon denied

); nested exception is com.ibatis.common.jdbc.exception.NestedSQLException:

- --- The error occurred in nl/rotterdam/ioo/guc/dao/event.xml.
- --- The error occurred while executing query.
- --- Check the SELECT EVENT\_Q.NEXTVAL AS EVENT\_KEY FROM DUAL
- --- Check the SQL Statement (preparation failed).
- --- Cause: org.apache.commons.dbcp.SQLNestedException: Cannot create PoolableConnectionFactory (ORA-01017: invalid username/password; logon denied

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns1="http://services.gm.ioo.rotterdam.nl/">
 <soap:Body>
   <soap:Fault>
     <faultcode>soap:Server</faultcode>
     <faultstring>nl.rotterdam.ioo.gm.services.GmAfnemerException: java.lang.reflect.UndeclaredThrowableException at
nl.rotterdam.ioo.gm.services.PrsServiceImpl.getBurger(PrsServiceImpl.java:98)</faultstring>
   </soap:Fault>
 </soap:Body>
</soap:Envelope>
Message 8
ERROR 2009-07-29 11:16:30,837 [WrapperListener_start_runner] org.mule.MuleServer:
Message
                : Failed to bind to uri "http://localhost:9000/piv"
Type
               : org.mule.transport.ConnectException
Code
               : MULE_ERROR-0
JavaDoc
                : http://www.mulesource.org/docs/site/current2/apidocs/org/mule/transport/ConnectException.html \\
Exception stack is:
1. Address already in use (java.net.BindException)
java.net.PlainSocketImpl:-2 (null)
2. Failed to bind to uri "http://localhost:9000/piv" (org.mule.transport.ConnectException)
 org.mule.transport.tcp.TcpMessageReceiver:77
(http://www.mulesource.org/docs/site/current2/apidocs/org/mule/transport/ConnectException.html)
```

ERROR 2009-07-29 11:53:40,124 [WrapperListener_start_runner] org.mule.MuleServer:	
**************************************	
Message : Failed to bind to uri "http://localhost:9000/gm/msgloader"	
Type : org.mule.transport.ConnectException	
Code : MULE_ERROR-0	
${\it Java Doc} \qquad : http://www.mulesource.org/docs/site/current2/apidocs/org/mule/transport/ConnectException.html$	
**************************************	
Exception stack is:	
1. Address already in use (java.net.BindException)	
java.net.PlainSocketImpl:-2 (null)	
2. Failed to bind to uri "http://localhost:9000/gm/msgloader" (org.mule.transport.ConnectException)	
org.mule.transport.tcp.TcpMessageReceiver:77 (http://www.mulesource.org/docs/site/current2/apidocs/org/mule/transport/ConnectException.html)	
**************************************	
Message 10	
ERROR 2009-07-29 15:19:14,773 [connector.http.0.receiver.6] org.mule.service.DefaultServiceExceptionStrategy:	
****************	
Message : Failed to route event via endpoint: DefaultOutboundEndpoint{endpointUri=http://localhost:9000/dummy, connector=HttpConnector{this=c272bc, started=true, initialised=true, name='connector.http.0', disposed=false, numberOfConcurrentTransactedReceivers=4, createMultipleTransactedReceivers=true, connected=true, supportedProtocols=[http], serviceOverrides=null}, transformer=[ObjectToHttpClientMethodRequest{this=1f217ec, name='null', ignoreBadInput=false, returnClass=interface org.apache.commons.httpclient.HttpMethod, sourceTypes=[interface org.mule.api.MuleMessage, class [B, clasjava.lang.String, class java.io.InputStream, interface org.mule.api.transport.OutputHandler, class org.mule.transport.NullPayload]}], name='endpoint.http.localhost.9000.dummy', properties={}, transactionConfig=Transaction{factory=null, action=NEVER, timeout=filter=null, deleteUnacceptedMessages=false, securityFilter=null, synchronous=true, initialState=started, remoteSync=true, remoteSyncTimeout=10000, endpointEncoding=UTF-8}. Message payload is of type: PostMethod	

 $Type \hspace{1.5cm} : org.mule.api.transport.DispatchException \\$ 

Code : MULE\_ERROR-42999

 $Pay load \\ : org. apache. commons. httpclient. methods. PostMethod@18bbb61$