

This version of the alert contains the **Proprietary Information** field. The proprietary information in this alert is for Nokia internal use only and is not to be shared with customers. The customer version of the alert is posted on the external OLCS site.

16-0907 Existing VSD installations may not be able to start up properly if the Ejabberd process somehow gets restarted

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Product category:	IP Networking
Product line:	Multiservice Core Switching Products
Product family:	Nuage Portfolio
Product:	Nuage Virtualized Services Platform (VSP)
Model:	VSD
Version:	3.2, 4.0
Product category:	IP Networking
Product line:	Multiservice Core Switching Products
Product family:	Nuage Portfolio
Product:	Nuage Virtualized Network Services (VNS)
Version:	3.2, 4.0

Overview:

The communication between VSD and VSC/VSG utilizes the XMPP protocol. The Nuage VSP solution employs Ejabberd for XMPP connection maintenance. In a faulty condition, Ejabberd will fail to start, resulting in failure of XMPP communication between VSD and VSC/VSG. Direct implication of this is isolation of VSD node(s) from the rest of the VSP entities; this would lead to loss in network services.

To identify if you are currently in a faulty condition and unable to start up the Ejabberd process because of this issue, you will see the following error when checking the ejabberd status:

```
# /opt/ejabberd/bin/ejabberdctl status
Failed RPC connection to the node 'ejabberd@vsd': nodedown
```

Impact:

If Ejabberd is in a state where it cannot start up properly, users will experience loss of network services due to the fact that VSD will not be able to communicate with VSC/VSGs.

Impacted version(s):

Ejabberd version ejabberd_nuagenetworks-3.2.9_2 installed in VSP release 3.2R1 to 3.2R7 and 4.0R1.
Nuage VSP 3.0Rx releases are not impacted.

Cause:

The cause of the issue was traced back to a bug in third party vendor (ProcessOne) software employed by the Nuage VSP solution. The Nuage VSP components were not involved in the triggering of this issue, rather this was directly caused by the bug in the ProcessOne component.

Action To Be Taken:

ProcessOne has provided a temporary fix which will require users to patch affected setups by following the qualified procedures listed in the Preventative Section of this alert.

If you have any questions or need assistance with executing the patch procedure on a production deployment, please feel free to contact your local Nokia support team or get in touch with the Nokia Welcome Center to get assistance from the Nuage Global support teams.

Preventive Action:

The procedure is supported only for VSD 3.2.R3 to 3.2.R7 and 4.0.R1 with Ejabberd version 3.2.9_2 at the moment.

The patch file can be obtained through the customer support portal here:

https://download-na.support.alcatel-lucent.com/cgi-bin/DldFile.pl? Submit=Next&HierId=213540&DldType=3.2.9_2_license.tgz

The same patch file can be used for VSD 3.2.R3 to 3.2.R7 and VSD 4.0.R1: 3.2.9_2_license.tgz

There are two types of procedures that can be performed, depending on the state of the Ejabberd process on your VSD(s):

-Option 1: to be used where the Ejabberd process is already in a failed (nodedown) state.

-Option 2: to be used where the Ejabberd process is still up and running. This method will apply the new license without impacting existing XMPP connections.

Option 1: On a VSD where Ejabberd process is already in a failed (nodedown) state.

Login to each VSD node and execute the following steps, one node at a time:

1. Download the patch tar file to /tmp

2. Go to the below location on your VSD.

Note: The folder ejabberd_nuagenetworks-3.2.9_X where X is your minor version of ejabberd, e.g. ejabberd_nuagenetworks-3.2.9_2

```
[root@vsd ~] cd /opt/ejabberd/lib/ejabberd_nuagenetworks-3.2.9_X/ebin
```

3. Back up Ejabberd

```
[root@vsd ebin] tar zcf orig_backup.tgz ejabberd.beam ejabberd_admin.beam ejabberd_c2s.beam ejabberd_cluster.beam
ejabberd_config.beam ejabberd_listener.beam ejabberd_sm.beam
```

4. Untar the patch to your current location (/opt/ejabberd/lib/ejabberd_nuagenetworks-3.2.9_X/ebin)

Note: The file 3.2.9_X_license.tgz where X is your minor version of ejabberd, e.g. 3.2.9_2_license.tgz

```
[root@vsd ebin] tar zxf /tmp/3.2.9_X_license.tgz
```

5. Start Ejabberd service

```
[root@vsd ebin]# /opt/ejabberd/bin/ejabberd.init start
Starting ejabberd...
done.
```

6. Check Ejabberd status to make sure it's still in started and running states

```
[root@vsd ebin]# /opt/ejabberd/bin/ejabberdctl status
The node 'ejabberd@vsd.mydomain' is started with status: started
ejabberd 3.2.9_2 is running in that node
```

7. Continue starting up the remaining VSD processes.

Option 2: On a VSD where Ejabberd is still running

Login to each VSD node and execute the following steps, one node at a time:

1. Download the patch tar file to /tmp

2. Go to the the below location on your VSD.

Note: The folder ejabberd_nuagenetworks-3.2.9_X where X is your minor version of ejabberd, e.g. ejabberd_nuagenetworks-3.2.9_2

```
[root@vsd ~] cd /opt/ejabberd/lib/ejabberd_nuagenetworks-3.2.9_X/ebin
```

3. Back up Ejabberd

```
[root@vsd ebin] tar zcf orig_backup.tgz ejabberd.beam ejabberd_admin.beam ejabberd_c2s.beam ejabberd_cluster.beam
ejabberd_config.beam ejabberd_listener.beam ejabberd_sm.beam
```

4. Untar the patch to your current location (/opt/ejabberd/lib/ejabberd_nuagenetworks-3.2.9_X/ebin)

Note: The file 3.2.9_X_license.tgz where X is your minor version of ejabberd, e.g. 3.2.9_2_license.tgz

```
[root@vsd ebin] tar xzf /tmp/3.2.9_X_license.tgz
```

5. Load the new beam files to the running Ejabberd

a. Open ejabberd debug console

```
[root@vsd ebin] /opt/ejabberd/bin/ejabberdctl debug
```

IMPORTANT: we will attempt to attach an INTERACTIVE shell
to an already running ejabberd node.
If an ERROR is printed, it means the connection was not successful.
You can interact with the ejabberd node if you know how to use it.
Please be extremely cautious with your actions,
and exit immediately if you are not completely sure.

To detach this shell from ejabberd, press:
control+c, control+c

To bypass permanently this warning, add to ejabberdctl.cfg the line:
EJABBERD_BYPASS_WARNINGS=true
Press return to continue

b. Press ENTER when prompt

```
Erlang/OTP 17 [erts-6.4] [source] [64-bit] [smp:2:2] [async-threads:10] [hipe] [kernel-poll:true]
```

```
Eshell V6.4 (abort with ^G)
>
```

c. Reload the newly patched beam files

```
> [l(M) || M<-[ejabberd,ejabberd_admin,ejabberd_c2s,ejabberd_cluster,ejabberd_config,ejabberd_listener,ejabberd_sm]].
```

```
(ejabberd@vsd.mydomain)1> [l(M) ||
M<-[ejabberd,ejabberd_admin,ejabberd_c2s,ejabberd_cluster,ejabberd_config,ejabberd_listener,ejabberd_sm]].
[{module,ejabberd},
 {module,ejabberd_admin},
 {module,ejabberd_c2s},
 {module,ejabberd_cluster},
```

```
{module,ejabberd_config},  
{module,ejabberd_listener},  
{module,ejabberd_sm}]
```

d. Press Ctrl+C to exit debug
([ejabberd@vsd.mydomain](#))2>
Session terminated, killing shell... ..killed.

6. Check Ejabberd status to make sure it's still in started and running states

```
[root@vsd ebin]# /opt/ejabberd/bin/ejabberdctl status  
The node 'ejabberd@vsd.mydomain' is started with status: started  
ejabberd 3.2.9_2 is running in that node
```

Note: The information placed in the Proprietary Information field will not be sent to the customer and will not appear in the alert pdf file published on the external OLCS site.

Proprietary Information:

Internally, the license files can be obtained on Nokia Intranet at:

```
ejabd\_lic@172.22.34.57/license">ftp://ejabd:ejabd\_lic@172.22.34.57/license</A>
```

Internal ticket #: VSD-17181

Contact:

Nokia Technical Support

Please contact the technical support team for your country. If you are unsure of who that is, you can locate the correct number by using our [Technical Support phone number look-up tool](#).