

# Dev\_disp in yellow state

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Installing a SAP NetWeaver ABAP system is easy, keeping it up and running demands a little bit more. Don't expect a NetWeaver ABAP system to just work, be prepared to do some additional configuration.

## Symptom

After starting the SAP NetWeaver ABAP instance, you are not able to connect to it. SAPGui tries to connect, but never finishes. This indicates that the message server accepts connections, but cannot process them. At the server, the startsap command executed successfully, it shows that ASCS and DI were started. But still, no connection is possible. What happened?



## Analysis

Taking a look into the dev\_disp log reveals that really a problem is going on.

### Log file: dev\_disp

```
Tue Apr 28 09:45:49 2015
*** WARNING => DpRequestProcessingCheck: potential request processing problem detected (199. check)
77]

Tue Apr 28 09:45:50 2015
*** WARNING => DpRequestProcessingCheck: potential request processing problem detected (200. check)
77]

Tue Apr 28 09:45:51 2015
*** WARNING => DpRequestProcessingCheck: potential request processing problem detected (201. check)
77]

Tue Apr 28 09:45:52 2015
*** WARNING => DpRequestProcessingCheck: potential request processing problem detected (202. check)
77]

Tue Apr 28 09:45:53 2015
*** WARNING => DpRequestProcessingCheck: potential request processing problem detected (203. check)
77]
```

It is always a good idea to check the connection to the database (here: MaxDB).

### Command:

```
/usr/sap/GWD/DVEBMGS00/exe/R3load -testconnect
```

```
/usr/sap/GwD/DVEBMGS00/exe/R3load -testconnect
----- Start of patch information -----
patchinfo (patches.h): (0.023) R3load: Memory overwrite when converting
DBSL patchinfo (patches.h): (0.020) Its: fixed year-wide navigation in (
----- End of patch information -----
process id 13585
(DB) INFO: connected to DB
(DB) INFO: Maxdb Kernel version 7.9.08.023
SQLDBC 7.9.8.023
```

## It's full of stars!

Where documentation meets reality

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The program hangs and never terminates. Also, no trans.log file is created. This indicates a DB problem. Check if the DB is up and running.

```
gwdadm@nwgw74:~> dbmcli db_enum
OK
GWD      /sapdb/GWD/db      7.9.08.23      fast  running
GWD      /sapdb/GWD/db      7.9.08.23      quick offline
GWD      /sapdb/GWD/db      7.9.08.23      slow  offline
GWD      /sapdb/GWD/db      7.9.08.23      test  offline
```

- DB GWD is up and running.

More information about DBMCLI

- [SCN Wiki](#)
- [MaxDB documentation](#)

To get more information about MaxDB database, dbmcli offers the info command: **dbmcli info**

**Command:** `dbmcli -d GWD -u control, info LOG`

```
gwdadm@nwgw74:~> dbmcli -d GWD -u control, info LOG
OK
END
Name | Value
-----|-----
Log Mirrored | = NO
Log Writing | = ON
Log Automatic Overwrite | = OFF
Max. Size (KB) | = 2045488
Backup Segment Size (KB) | = 682664
Backup Interval (seconds) | = 0
Used Size (KB) | = 2045488
Used Size (%) | = 100
Not Saved (KB) | = 2045488
Not Saved (%) | = 100
Log Since Last Data Backup (KB) | = 0
Savepoints | = 5634
Checkpoints | = 0
Physical Reads | = 0
Physical Writes | = 0
Queue Size (KB) | = 1600
Queue Overflows | = 4
Group Commits | = 0
Waits for Logwriter | = 0
Max. Waits | = 0
Average Waits | = 0
OMS Log Used Pages | = 0
OMS Min. Free Pages | = 0
```

## Problem

The above command reveals what is causing the problem. The log area is full:

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Max. Size (KB)	= 2045488
Backup Segment Size (KB)	= 682364
Backup Interval (seconds)	= 0
Used Size (KB)	= 2045488
Used Size (%)	= 100

Used size is 100%. MaxDB cannot write anything anymore to the log area. The solution is to archive the log area so MaxDB gains more space for the log area and is able to save new entries to it. Another command that can be used to find out if the log area is full is:

**Command:** `dbmcli -d GWD -u control, show active`

```
gwdadm@nwgw74:~> dbmcli -d GwD -u control, show active
OK

SERVERDB: GwD

ID  UKT  UNIX  TASK  APPL Current  Timeout/ Region  Wait
   tid  type  pid state  Priority cnt try  item
T87  8    7308  User  13585 LOG FULL (246)  0          0    1199(s)
T88  8    7308  User  13441 LOG FULL (246)  !          0    1199(s)
T90  8    7308  User  13396 LOG FULL (246)  !1         0    89    1199(s)
T106 8    7308  User  11249 LOG FULL (246)  0          0    1199(s)
```

## Solution

The solution is to create a backup medium that MaxDB uses to archive its log area to.

- [SCN Wiki](#)

**Command:** `medium_put`

- [MaxDB documentation](#)

Best approach is to ensure that a backup medium for DB and for log area are available for MaxDB to use.

Create backup mediums

1. Log on to MaxDB with `dbmcli`.
2. Command: `dbmcli -d -u control,`

```
eccadm@uwecc:~> dbmcli -d ECC -u control,
dbmcli on ECC>
```

3. Create medium for data backup

**Command:** `backup_template_create backup_data_1 to FILE /sap/sapdb//backup/DAT0001`

## CONTENT DATA

```
dbmcli on GwD>backup_template_create backup_data_1 to FILE /sap/sapdb/GwD/backup/DAT0001 CONTENT DATA
OK
```

4. Create medium for log area backup

5.

**Command:** *backup\_template\_create backup\_log\_1 to FILE /sap/sapdb/GwD/backup/LOG CONTENT LOG*

```
dbmcli on GwD>backup_template_create backup_log_1 to FILE /sap/sapdb/GwD/backup/LOG CONTENT LOG
OK
```

6. Start backup. For this, an open db connection must be established. If you are not already logged on to MaxDB via dbmcli, connect!

7. **Command:** *db\_connect*

8.

Backup of data

**Command:** *backup\_start backup\_data\_1*

```
dbmcli on GwD>db_connect
OK

---
dbmcli on GwD>backup_start backup_data_1
OK
Returncode          0
Date                 20150428
Time                 00112710
Server               nwgw74
Database             GwD
Kernel Version       Kernel    7.9.08   Build 023-123-250-592
Pages Transferred    3111392
Pages Left           0
Volumes              1
Medianame            backup_data_1
Location             /sap/sapdb/GwD/backup/DAT0001
ErrorText
Label                DAT_000000001
Is Consistent        true
First LOG Page       355479
Last LOG Page
DB Stamp 1 Date      20150428
DB Stamp 1 Time      00112709
DB Stamp 2 Date
DB Stamp 2 Time
Page Count           3111374
Devices Used         1
Database ID          nwgw74:GwD_20150428_112709
Max Used Data Page   0
Converter Page Count 1676
```

9.

Backup log area

**Command:** *backup\_start backup\_log\_1*

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```
dbmcli on GwD>backup_start backup_log_1
OK
Returncode          0
Date                20150428
Time               00123440
Server             nwgw74
Database           GwD
Kernel Version     Kernel 7.9.08 Build 023-123-250-592
Pages Transferred  255736
Pages Left         0
Volumes           1
Medianame          backup_log_1
Location           /sap/sapdb/GwD/backup/LOG.003
Errortext
Label             LOG_000000003
Is Consistent
First LOG Page     0
Last LOG Page     355479
DB Stamp 1 Date   20150420
DB Stamp 1 Time   00134849
DB Stamp 2 Date   20150428
DB Stamp 2 Time   00112709
Page Count        255736
Devices Used      1
Database ID       nwgw74:GwD_20150428_112709
Max Used Data Page
Converter Page Count
```

*\*You do the data backup first because this for the log area backup to be executed, a data backup must be run at least once before.*

After these steps, a backup for the data content and for the log area was created.

```
nwgw74:/sap/sapdb/GwD # ls -alh backup/
total 26G
drwxr-xr-x 2 sdb sdba 4.0K Apr 28 12:35 .
dr-xr-xr-x 7 root sapinst 4.0K Apr 28 11:23 ..
-rw-rw---- 1 sdb sdba 24G Apr 28 11:33 DAT0001
-rw-rw---- 1 sdb sdba 667M Apr 28 12:34 LOG.001
-rw-rw---- 1 sdb sdba 667M Apr 28 12:35 LOG.002
-rw-rw---- 1 sdb sdba 665M Apr 28 12:35 LOG.003
```

To ensure that the log area is automatically backed up and is not reaching its limit again, activate auto backup.

```
dbmcli on GwD>autolog_on backup_log_1
OK
```

To get a list of configured mediums available in MaxDB, issue the command `medium_getall`

```
dbmcli on GwD>medium_getall
OK
backup_log_1 /sap/sapdb/GwD/backup/LOG FILE AUTO
17 20150428112517 NONE 0
```