

BRM, Scheduled Backup Failed

OPERATING INSTRUCTIONS

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BRM, Scheduled Backup Failed



1 Alarm Description

The alarm is raised when a scheduled backup has failed.

Table 1 BRM, Scheduled Backup Failed Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
A scheduled backup has failed.	A scheduled backup event was triggered but failed to create a backup.	Insufficient disk space	Local hard disk	The Managed Element (ME) cannot be restored to its current state later. This can imply more efforts to bring back the ME from an unstable state to a controlled state and can have impact on service availability. Subsequent scheduled backups also fail may also fail until the fault condition is cleared.
		Conflict with another ongoing task	Managed Element (ME)	
		Error reported by participant	Managed Element (ME)	
		System failover or reboot	Managed Element (ME)	



Attention!

Risk of data loss or data corruption.

For Insufficient Disk Space faults, the fault is non-transient and the user must take action or else all subsequent scheduled backups will also fail.

For all other possible fault reasons, subsequent scheduled backups will fail until the fault condition reported in the alarm no longer exists.

This alarm is only cleared after the creation of a scheduled backup of the type (System Data or User Data) that raised the alarm. For example, if the alarm is raised for a failed System Data backup, it can only be cleared when a scheduled System Data backup is successfully created.



2 Procedure

2.1 Handle Alarm BRM, Scheduled Backup Failed

Prerequisites

— This instruction references the following documents:

- Delete Backup
- Export Backup
- List Backups
- Schedule Single Backup
- Set Maximum Number of Scheduled Backups

Note: These Operating Instructions describe only the System Data backup instructions. To apply them to a User Data backup, the user needs to navigate to the User Data backup manager in the first step as follows:

```
>dn ManagedElement=<node_name>,SystemFunctions=1,BrM=1,BrmBackupManager=USER_DATA
```

— No tools are required.

— The following condition must apply:

- A BRM, Scheduled Backup Failed alarm is raised.
- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.

Steps

1. Check the Additional Text attribute of the alarm.

2. Select action based on the attribute value:

- If Additional Text contains Scheduled Backup for <backup_type> failed with disk space error, proceed with Section 2.2 Handle Reason Insufficient Disk Space on page 3.
- If Additional Text contains Scheduled Backup for <backup_type> failed due to conflict with, proceed with Section 2.3 Handle Reason BRF Conflict with Other Task on page 7.
- If Additional Text contains Scheduled Backup for <backup_type> failed due to participant error, proceed with Section 2.4 Handle Reason Participant Reported Error on page 7.



- If Additional Text contains Scheduled Backup for <backup_type> failed due to system failover or reboot, proceed with Section 2.5 Handle Reason System Failover or Reboot on page 8.

2.2 Handle Reason Insufficient Disk Space

Steps

1. Does this alarm occur every time a scheduled backup takes place?

Yes: Continue with the next step.

No: Proceed with Step 7.

2. Contact the backup administrator about the backup policy. Is the maximum number of stored scheduled backups too high?

Yes: Continue with the next step.

No: Proceed with Step 6.

3. Decrease the maximum number of stored scheduled backups.

Decreasing the value of attribute `maxStoredScheduledBackups` below the number of scheduled backups in the system automatically deletes the oldest scheduled backups and triggers a new scheduled backup. If the new scheduled backup is successful, the alarm is cleared.

For information on how to decrease the `maxStoredScheduledBackups` value, refer to [Set Maximum Number of Scheduled Backups](#).

4. Check whether a scheduled backup is triggered and successfully created.

For information on how to list the backups, refer to [List Backups](#).

5. Is the alarm cleared?

Yes: Proceed with Step 25.

No: Proceed with Step 7.

6. More storage capacity can be needed on the ME. Contact the planning organization and proceed with Step 25.

7. List the backups locally stored in the ME.

For information on how to list the backups, refer to [List Backups](#).

8. Is any locally stored manual or scheduled backup no longer required on the ME?

Yes: Continue with the next step.



No: Proceed with Step 16.

Note: A local backup file is not required if there is no immediate need to restore it on the ME or once it has been exported to a remote file storage.

9. If needed, export to the remote file storage the following locally stored backups:

- Backups that need to be preserved and have not been exported yet
- Backups that have been deleted from the remote file storage

For information on how to export a backup, refer to [Export Backup](#).

10. Delete any locally stored backup not required on the ME.



Attention!

Risk of data loss or data corruption.

Do not delete backups listed in attribute `restoreEscalationList`.

For information on how to delete a backup, refer to [Delete Backup](#).

11. Has any scheduled backup been manually deleted?

Yes: Continue with the next step.

No: Proceed with Step 14.

12. Check whether a scheduled backup is triggered and successfully created.

For information on how to list the backups, refer to [List Backups](#).

13. Is the alarm cleared?

Yes: Proceed with Step 25.

No: Proceed with Step 16.

14. Schedule a single backup.

For information on how to schedule a single backup, refer to [Schedule Single Backup](#).



Note: Ensure to create a scheduled backup of the backup type that generated the alarm. The backup type SYSTEM_DATA or USER_DATA is indicated by additionalText in the alarm.

15. Is the new scheduled backup successfully created and is the alarm cleared?

Yes: Proceed with Step 25.

No: Continue with the next step.

16. Identify which files are taking the most space and which files are the oldest by listing the files in the file system as follows:

a. `du -xak / | sort -n | tail -20`

The following is an example output:

```
37120 /usr/lib/perl5/5.10.0
46616 /usr/bin
46908 /usr/lib/perl5
47916 /usr/share
51800 /var
60688 /lib/modules/3.0.74-0.6.10.1.5564.0.⇒
PTF-default/kernel/drivers
62752 /opt/lpmsv/loader
66364 /usr/lib
71100 /opt/com/lib/comp
77900 /opt/com/lib
82564 /opt/lpmsv
90328 /lib/modules/3.0.74-0.6.10.1.5564.0.⇒
PTF-default/kernel
94164 /lib/modules/3.0.74-0.6.10.1.5564.0.⇒
PTF-default
100168 /lib/modules
103560 /opt/com
111096 /lib
128280 /usr/lib64
308568 /usr
333108 /opt
851148 /
```

b. Show a list of files older than some days, for example:

`find /cluster/ -mtime +5`

The following is an example output:



```
[...]
/cluster/home
  /cluster/hooks
  /cluster/hooks/2
  /cluster/snapshot
  /cluster/lost+found
  /cluster/dumps
  /cluster/etc/pam.d
  /cluster/etc/login.allow
[...]
```

17. Are some of these files normally deleted automatically?

Yes: Continue with the next step.

No: Proceed with Step 20.

18. Schedule a single backup.

For information on how to schedule a single backup, refer to [Schedule Single Backup](#).

Note: Ensure to create a scheduled backup of the backup type that generated the alarm. Attribute `additionalText` for command `show` on the alarm identifies the backup type.

19. Is the new scheduled backup successfully created and is the alarm cleared?

Yes: Proceed with Step 25.

No: Proceed with Step 23.

20. Can significant file space be saved by deleting some of these files without damaging the system?

Yes: Continue with the next step.

No: Proceed with Step 23.

21. Delete the files:

```
rm <file1> [<file2> ...]
```

22. Proceed with Step 18.

23. Perform data collection, refer to [Data Collection Guideline](#).

24. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

25. Job is completed.



2.3 Handle Reason BRF Conflict with Other Task

Steps

1. Refer to the alarm Additional Text to determine which task was conflicting with the scheduled backup, for example.

Scheduled Backup for System Data failed due to conflict with Create Backup task for MANUAL backup CMWBackup_20190502_10 of type BRM_SYSTEM_DATA

2. Confirm that the ongoing operation has completed.

Navigate to the BrmBackupManager Managed Object (MO) corresponding the scheduled backup type, for example:

```
>dn ManagedElement=NODE06ST, SystemFunctions=1, BrM=1, BrmBackupManager=SYSTEM_DATA
```

3. Wait until all tasks have completed. Continue to check the state of the current operation until it is finished:

```
>show progressReport, state
```

```
state=FINISHED
```

4. Schedule a single backup.

For information on how to schedule a single backup, refer to [Schedule Single Backup](#).

Note: It is assumed that there are no scheduled backup events left in the ME, or the existing scheduled backup events are too far in time and therefore not appropriate to wait for to clear the alarm.

5. Wait for the scheduled backup to complete.

6. Is the alarm cleared?

Yes: Proceed with Step 9.

No: Continue with the next step.

7. Perform data collection, refer to [Data Collection Guideline](#).

8. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

9. Job is completed.

2.4 Handle Reason Participant Reported Error

Steps



1. Perform data collection, refer to [Data Collection Guideline](#).
2. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.
3. Job is completed.

2.5 Handle Reason System Failover or Reboot

Steps

1. Wait for the system to fully recover from the failover or reboot. Continue to check the status using:

```
# cmw-status app
```

```
Status OK
```

2. Schedule a single backup.

For information on how to schedule a single backup, refer to [Schedule Single Backup](#).

Note: It is assumed that there are no scheduled backup events left in the ME, or the existing scheduled backup events are too far in time and therefore not appropriate to wait for to clear the alarm.

3. Wait for the scheduled backup to complete.
4. Is the alarm cleared?

Yes: Proceed with Step 7.

No: Continue with the next step.
5. Perform data collection, refer to [Data Collection Guideline](#).
6. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.
7. Job is completed.