

Configure Preventive Maintenance Policy Reporting Alarms for Logical File System

OPERATING INSTRUCTIONS

Copyright

© Ericsson AB 2016. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

Disclaimer

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

Trademark List

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



Contents

1	Introduction	1
1.1	Prerequisites	1
2	Procedure	3





1 Introduction

This document describes how to configure a file group preventive maintenance policy, which automatically issues an alarm when a limit is exceeded. An alarm can only be issued when the number of files in a file group subtree, or a size of file group subtree exceeds a limit. The alarm informs the user that manual maintenance is required.

Such policy requires configuring a threshold monitor. Up to eight threshold monitors are supported per file group policy.



Do!

Carefully read the following information before proceeding.

File group preventive maintenance policies must not be configured for the predefined file groups `PerformanceManagementReportFiles`, `AlarmLogs`, and `AlertLogs`. These file groups are subject to internal preventive maintenance policies.

Note: It is recommended not to configure more than one `FileGroupPolicy` Managed Object (MO) per file group subtree, to keep the configuration simple. If multiple policies are configured, they must not have overlapping threshold intervals.

1.1 Prerequisites

This section describes the prerequisites, which must be fulfilled before using the procedure.

1.1.1 Conditions

The following conditions must apply:

- The user has appropriate access rights to MO `FileGroup`, matching the visible directories that have been set according to the security rules described in Section 6 in *File Management*.
- A file group exists.
The file group is called `Function2Files` in this document.
- The chosen name of the new threshold monitor is unique. The chosen value pair for attributes `monitoredAspect` and `thresholdSeverity` is unique



within the configured policy. The interval defined by attributes `thresholdLow` and `thresholdHigh` does not overlap with a threshold monitor defined by another policy for the same `FileGroup` MO.

- The retention time to set is known.
- The maximum number of files to set is known.
- `monitoredAspect`, `thresholdHigh`, `thresholdLow`, and `thresholdSeverity` are known.
- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.



2 Procedure

In this example, it is assumed that a function called `Function2` produces files that are regularly transferred and deleted by some external system. In this context, it is important to detect if these files are not collected any more, which can indicate a problem with the collection process.

To configure a preventive maintenance policy reporting alarms in the logical file system:

1. Navigate to the `FileM` MO, for example:

```
>dn ManagedElement=NODE06ST,SystemFunctions=1,FileM=1
```

2. Enter Config mode:

```
(FileM=1)>config
```

3. Create the `FileGroupPolicy` MO, for example:

```
(config-FileM=1)>FileGroupPolicy=alarmHighFileNumber
```

4. Associate the policy to the chosen file group, for example:

```
(config-FileGroupPolicy=alarmHighFileNumber)>fileGroup="ManagedElement=NODE06ST,SystemFunctions=1,FileM=1,LogicalFs=1,FileGroup=Function2Files"
```

5. Define the attribute values of the new MO, for example:

```
(config-FileGroupPolicy=alarmHighFileNumber)>maxNumberFiles=0
```

```
(config-FileGroupPolicy=alarmHighFileNumber)>retentionTime=0
```

Note: `maxNumberFiles=0` means that no limit is set regarding the number of files. `retentionTime=0` means that files in the file group `Function2Files` are kept forever. When these two values are set to 0, the value of `fullFileGroupAction` is not taken into account by the ME.

6. Create a `ThresholdMonitoring` MO, for example:

```
(config-FileGroupPolicy=alarmHighFileNumber)>ThresholdMonitoring=warningAt10
```

7. Define the values for the attributes of the new MO, for example:

```
(config-ThresholdMonitoring=warningAt10)>monitoredAspect=QUANTITY
```

```
(config-ThresholdMonitoring=warningAt10)>thresholdHigh=10
```



```
(config-ThresholdMonitoring=warningAt10)>thresholdLow=5
```

```
(config-ThresholdMonitoring=warningAt10)>thresholdSeverity=WARNING
```

In this example, a File Management, Number of Files in FileGroup Exceeded alarm with severity WARNING is issued if the number of Performance Measurement files reaches 10. The alarm is cleared when the number of files is 5 or below.

8. Commit the settings:

```
(config-FileGroupPolicy=warningAt10)>commit
```

9. Navigate to the FileGroupPolicy MO:

```
(FileGroupPolicy=warningAt10)>up
```

10. Verify that the new file group policy exists and that the attribute values are correct, for example:

```
(FileGroupPolicy=alarmHighFileNumber)>show -v -r
```

The following is an example output:

```
FileGroupPolicy=alarmHighFileNumber
  fileGroup="ManagedElement=NODE06ST,SystemFunctions=1,FileM=1,⇒
LogicalFs=1,FileGroup=Function2Files
  fileGroupPolicyId=alarmHighFileNumber
  fullFileGroupAction=DISCARD_OLDEST <default>
  maxFileGroupSize=0 <default>
  maxNumberFiles=0 <default>
  retentionTime=0 <default>
  userLabel=[] <empty>
  ThresholdMonitoring=warningAt10
    monitoredAspect=QUANTITY
    thresholdHigh=10
    thresholdLow=5
    thresholdMonitoringId="warningAt10"
    thresholdSeverity=WARNING <default>
    userLabel=[] <empty>
```