

License Management, Autonomous Mode Activated

OPERATING INSTRUCTIONS

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License Management, Autonomous Mode Activated



1 Alarm Description

The alarm is raised when an installed license cannot be reached.

In a deployment with multiple license key files, the alarm is raised in response to a single missing or corrupted license key file.

Table 1 License Management, Autonomous Mode Activated Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Failing to reach an installed license	The configured license servers do not respond to the Managed Element (ME) attempt to refresh its license inventory. License information remains unreachable. The ME enters Autonomous mode	A missing or corrupted license key file	License servers	Service is limited to the features and capacity granted to the ME when the connection was lost. If the fault duration exceeds 24 hours, the licensed services are affected (no availability or limited capacity) and alarm License Management, Key File Fault is raised.
			Possible IP network issue	
			Domain Name System (DNS) server	
			Network interface	

Note: The alarm can be raised as a result of maintenance activities.

2 Procedure

2.1 Handle Alarm License Management, Autonomous Mode Activated

Prerequisites

— This instruction references the following documents:

- Activate Emergency Unlock Mode
- Data Collection Guideline
- Install License Key File



- License Management, Key File Fault
- No tools are required.
- The following conditions must apply:
- The alarm is raised.
 - No ongoing maintenance activities are affecting the network or Network Elements.
 - The user has proper authority to handle configuration management of the Network Elements.
 - Linux® shell access to the System Controllers (SCs).
 - Access to an Ericsson Command-Line Interface (ECLI).

Steps

1. If there are any network-related alarms on the ME, act on them first.
2. Log on to the SC to access a Linux shell, for example:

```
ssh <user>@<hostname> -p 7022
```

3. Check connectivity with the persistent storage path, for example:

```
ls -l /storage/system/software/lm-apr9010503
```

4. Is the persistent storage path accessible?

Yes: Continue with the next step.

No: Consult the next level of maintenance support. Further actions are outside the scope of this instruction.

5. Exit the Linux shell:

```
exit
```

6. Start the ECLI, for example:

```
ssh <user>@<hostname> -p 22
```

7. Navigate to the `KeyFileManagement` Managed Object (MO), for example:

```
>dn ManagedElement=N0DE06ST,SystemFunctions=1,Lm=1,KeyFileManagement=1
```

8. View the key file information:

```
(KeyFileManagement=1)>show -r
```



The following is an example output:

```
KeyFileManagement=1
  reportProgress
    actionId=0
    actionName="loadLicKeyFile"
    progressInfo=""
    progressPercentage=100
    result=SUCCESS
    resultInfo="Successfully loaded the new LKF"
    state=FINISHED
    timeActionCompleted="2014-05-13T14:12:34"
    timeActionStarted="2014-05-13T14:12:34"
    timeOfLastStatusUpdate="2014-05-13T14:12:34"
  KeyFileInformation=1
    installationTime="2014-05-13T14:12:34"
    locatable=true
    productType="SSR 8000"
  KeyFileInformation=2
    installationTime="2014-05-13T14:11:35"
    locatable=false
    productType="SASN"
  KeyFileInformation=3
    installationTime="2014-05-13T14:12:15"
    locatable=true
    productType="EDA 1500"
```

If locatable=false, then the corresponding license key file is missing or corrupted.

9. Change directory to the location where the license key file is stored on the SC, for example:

```
cd /storage/system/software/lm-apr9010503/SSR\8000/8887563311a276a54cba15d6359a7f8c
```

Note: Each license key file is stored in a hashed subdirectory. The path to the hashed directory contains productType of the license key file, for example:

```
/storage/system/software/lm-apr9010503/SSR\8000/8887563311a276a54cba15d6359a7f8c
```

The SC detects the restored file within one minute.

For each license key file where locatable=false, transfer the backup license key file to the SC from the backup location.

10. Open an SFTP session, for example:

```
>sftp <user>@<hostname>
```



Enter remote host password if necessary.

password:

11. Navigate to the directory where the backup license key files are located, for example:

```
sftp>cd /cluster/licenses
```

12. Copy the backup license key files, for example:

```
sftp>get license.xml
```

Note: If backup files are unavailable, order replacement license key files from the Ericsson software supply organization and install the files, refer to [Install License Key File](#).

If resolving the issue is expected to take more than 24 hours, Emergency Unlock can be used to prevent the system from entering Locked mode, refer to [Activate Emergency Unlock Mode](#).

The following is an example output when copying a backup license key file from the /cluster/licenses/ folder:

```
Fetching license.xml
```

13. Exit the SFTP session:

```
sftp>exit
```

14. Is the alarm cleared?

Yes: Proceed with Step 17.

No: Continue with the next step.

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