

# Install License Key File

---

## OPERATING INSTRUCTIONS

**Copyright**

© Ericsson AB 2017, 2018. 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

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Prerequisites	1
<b>2</b>	<b>Procedure</b>	<b>3</b>
	<b>Reference List</b>	<b>7</b>



Install License Key File



# 1 Introduction

This document describes how to install an Ericsson License Manager (ELIM) formatted license key file on the Managed Element (ME).

Once received from the Ericsson software supply organization, a license key file must be installed on the ME to enable the corresponding license key.

## 1.1 Prerequisites

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

### 1.1.1 Documents

Before starting this procedure, ensure that the following information or documents are available:

- LM User Guide for ELIM

### 1.1.2 Conditions

The following conditions must apply:

- The name and location (external host and directory) of the ELIM formatted license key file are known.
- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.
- License Management (LM) has been properly installed.
- All SC and PL boards have been started.
- The fingerprint has been provided to the Ericsson software supply organization, that is, the license key file has been ordered.

For more information about how to order license key file, see Section 1.1.3 on page 1.

### 1.1.3 How to Order License Key File

#### **Prerequisites:**

IPWorks has been installed successfully.



### Procedure:

To order the license key file, do the following:

1. Log on to the Ericsson Command-Line Interface (ECLI):

```
ssh <username>@<MIP_OAM_IP> -p 22 -t -s cli
```

2. Get the fingerprint string, and then exit the ECLI:

```
show ManagedElement=<Node Name>,SystemFunctions=1,Lm=1  
,fingerprint
```

```
fingerprint="<fingerprint string>"
```

3. Exit the ECLI:

```
exit
```

4. Order license key file by providing the fingerprint to the Ericsson software supply organization.
5. After the license key file is provided, install the license key file, see Section 2 on page 3.



## 2 Procedure

To install a license key file:

1. Upload the license key file from an external host to the IPWorks host:

```
scp <LKF name>.xml root@<SC-1 IP address>:/cluster/licenses/
```

2. Log on to the ECLI:

```
ssh <username>@<MIP_OAM_IP> -p 22 -t -s cli
```

3. Navigate to the *KeyFileManagement* MO, for example:

```
>ManagedElement=<Node Name>,SystemFunctions=1,Lm=1,KeyFileManagement=1
```

4. Install the license key file, for example:

```
(KeyFileManagement=1)>installKeyFile file:///cluster/licenses/<LKF name>.xml "<password>"
```

The system returns `true` if the operation is successful.

**Note:**

- If the file location is not password protected, enter an empty string ("" ) instead of a password.
- LM only checks for the presence of the file in persistent storage. If the file becomes unavailable, LM transitions to Autonomous mode.

5. Verify that the license key file installation completed successfully:

For example:

```
(KeyFileManagement=1)>show reportProgress
```



```
reportProgress
  actionId=0
  actionName="loadLicKeyFile"
  progressInfo=""
  progressPercentage=100
  result=SUCCESS
  resultInfo="Successfully loaded the new LKF"
  state=FINISHED
  timeActionCompleted="2015-06-11T08:26:08"
  timeActionStarted="2015-06-11T08:26:07"
  timeOfLastStatusUpdate="2015-06-11T08:26:08"
```

The system returns `result=SUCCESS` if the license key file was installed successfully.

If `result=FAILURE`, check the installation status to determine the cause.

6. Force a synchronization of the license keys in use with the information in the installed key files:

```
(KeyFileManagement=1) >up
```

```
(Lm=1) >refreshLicenseInventory
```

The system returns `true` if the operation is successful.

7. Verify the success of the synchronization by checking the time stamp:

```
(Lm=1) >show
```

A recent time stamp indicates a successful update, for example:

```
Lm=1
fingerprint="<Id>"
fingerprintUpdateable=false
lastInventoryChange="2015-06-11T08:36:08"
lastLicenseInventoryRefresh="2015-06-11T08:36:08"
lmState=INTEGRATION_UNLOCK
lockingCode=""
referenceToLicenseServer
" "
AutonomousMode=1
EmergencyUnlock=1
IntegrationUnlock=1
KeyFileManagement=1
```

A recent time stamp that follows the attributes `lastLicenseInventoryRefresh` indicates a successful update.

8. Check the identity of the *KeyFileInformation* instances for the installed license key files:





```
(Lm=1) > show KeyFileManagement=1
```

For example:

```
KeyFileManagement=1
  reportProgress
    actionId=0
    actionName="loadLicKeyFile"
    progressInfo=""
    progressPercentage=100
    result=SUCCESS
    resultInfo="Successfully loaded the new LKF"
    state=FINISHED
    timeActionCompleted="2015-06-11T08:26:08"
    timeActionStarted="2015-06-11T08:26:07"
    timeOfLastStatusUpdate="2015-06-11T08:26:08"
  KeyFileInformation=1
  KeyFileInformation=2
```

#### 9. Show the required KeyFileInformation:

```
(Lm=1) > show KeyFileManagement=1,KeyFileInformation=<n>
```

Where **n** is the instance number of the KeyFileInformation to print.

The system returns the contents of selected KeyFileInformation. For example:

```
KeyFileInformation=1
  installationTime="2015-06-11T08:26:08"
  locatable=true
  productType="IPWorks"
  sequenceNumber=1000
```

#### 10. Publish the license to make it effect:

```
(Lm=1) > publishLicenseInventory
```

The system returns `true` if the operation is successful.

#### 11. Verify whether the license is valid:

For example:

```
(Lm=1) > show
```



```
Lm=1
  fingerprint="<Id>"
  fingerprintUpdateable=false
  lastInventoryChange="2015-06-11T08:46:08"
  lastLicenseInventoryRefresh="2015-06-11T08:46:08"
  lmState=INTEGRATION_UNLOCK
  lockingCode=""
  referenceToLicenseServer
    ""
  AutonomousMode=1
  CapacityKey=1
  EmergencyUnlock=1
  IntegrationUnlock=1
  KeyFileManagement=1
```

The appearance of *CapacityKey* means that the license is available. Likewise, if it is a feature license, the appearance of *FeatureKey* means the license is available.

12. Exit the ECLI:

```
exit
```



## Reference List

### Ericsson Documents

- [1] *LM User Guide for ELIM*, 2/1553-APR 901 0503/5 Uen