

# Certificate Management, Automatic Enrollment Failed

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## OPERATING INSTRUCTIONS

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# 1 Introduction

This instruction concerns alarm handling.

## 1.1 Alarm Description

The alarm is raised when automatic certificate enrollment or renewal failed to execute because of local misconfiguration or remote enrollment service denial.

**Note:** The alarm is raised only if the `renewalMode` in a *NodeCredential* Managed Object (MO) is set to `AUTOMATIC`.

The possible alarm causes and fault locations are explained in Table 1.

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Automatic certificate enrollment or renewal has failed	Automatic enrollment or renewal failed to execute because of local misconfiguration or break in remote enrollment service	Configuration or customization error  This can be for one of the following reasons: <ul style="list-style-type: none"><li>• Local misconfiguration</li><li>• Failure in remote enrollment service</li></ul>	Node credential	Certificate is not renewed, which causes certificate expiration  Expired certificate can cause secured service failure, for example, Internet Protocol Security connection authenticated by non-existing or expired certificate can fail

The alarm attributes are listed and explained in Table 2.

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	6946819
Managed Object Class	<i>NodeCredential</i>



Table 2 Alarm Attributes

Attribute Name	Attribute Value
Managed Object Instance	ManagedElement=<node_name>, SystemFunctions=1, SecM=1, CertM=1, NodeCredential=<node_credential_id>
Specific Problem	Certificate Management, Automatic Enrollment Failed
Event Type	processingErrorAlarm (4)
Probable Cause	x733ConfigurationOrCustomizationError (307)
Additional Text	Automatic enrollment or renewal failed to execute because of local misconfiguration or remote enrollment service denial
Perceived Severity	warning (6)

**Note:** When the automatic online node credential renewal has failed and the threshold for certificate expiration time has been crossed, another alarm *Certificate Management, the Certificate is to Expire* is raised.

## 1.2 Prerequisites

This section provides information on the documents, tools, and conditions that apply to the procedure.

### 1.2.1 Documents

This instruction references the following documents:

- *Change Enrollment Server*
- *Configure Enrollment Authority*
- *Configure Enrollment Server Group Together with Enrollment Servers*
- *Configure Renewal Mode of Node Credential*
- *Data Collection Guideline*
- *Install Node Credential Online*
- *Renew Node Credential Online*

### 1.2.2 Tools

No tools are required.



### 1.2.3

### Conditions

Before starting this procedure, ensure that the following conditions are met:

- A Certificate Management, Automatic Enrollment Failed alarm is raised.
- The user has the System Security Administrator role.
- The user is familiar with the security policy and environment of the organization. The user knows what mechanism is appropriate to use to install and renew node credentials online.
- For the online renewal of node credentials, the correct configuration information for enrollment server groups and enrollment authorities is obtained from the IT or security administrator.
- No ongoing maintenance activities are affecting the network or network elements.
- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.

## 2

## Procedure

Do the following:

1. Navigate to the *NodeCredential* Managed Object (MO) given in the alarm, for example:

```
>ManagedElement=NODE06ST, SystemFunctions=1, SecM=1, CertM=1, NodeCredential=1
```

2. Compare if the existing configuration information for the *NodeCredential* MO matches with the information received from the IT or security administrator.

The values of attributes `enrollmentServerGroup` and `enrollmentAuthority` can be checked in the *NodeCredential* MO with the following command:

```
(NodeCredential=1) >show
```

3. Change the attribute `renewalMode` to `MANUAL`.

For information on how to change attribute `renewalMode`, refer to *Configure Renewal Mode of Node Credential*.



**Note:** When `renewalMode` is set to `MANUAL`, the alarm is cleared but the problem remains.

4. Select the appropriate action based on the result in Step 2:
  - There is a mismatch with the *NodeCredential* MO configuration information – Continue with Step 5.
  - There is no mismatch with the *NodeCredential* MO configuration information – Continue with Step 6.
5. Select the appropriate action based on the result in Step 2:
  - If the *EnrollmentServerGroup* MO or the *EnrollmentServer* MO needs to be reconfigured, follow the instruction *Configure Enrollment Server Group Together with Enrollment Servers*, then continue with the next step.
  - If the *EnrollmentServer* MO needs to be changed, follow the instruction *Change Enrollment Server*, then continue with the next step.
  - If the *EnrollmentAuthority* MO needs to be changed, follow the instruction *Configure Enrollment Authority*, then continue with the next step.
  - If some of the *NodeCredential* MO attribute values are wrong, correct the faulty attribute values using the values in *Install Node Credential Online*.

6. Renew the certificate.

For information on how to renew the certificate, refer to *Renew Node Credential Online*.

7. Was the *Renew Node Credential Online* procedure successful?

Yes: Continue with the next step.

No: Proceed with Step 9.

**Note:** The cause of the failure is shown in `resultinfo` of the attribute `nodeCredentialId`.

8. Change the attribute `renewalMode` back to `AUTOMATIC`.

For information on how to change the attribute `renewalMode`, refer to *Configure Renewal Mode of Node Credential*.

9. Is the alarm cleared?

Yes: Proceed with Step 12.

No: Continue with the next step.



10. Perform data collection, refer to *Data Collection Guideline*.
11. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.
12. Job is completed.