

Upgrade Using One-Step Activation

OPERATING INSTRUCTIONS

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1 Introduction

This document describes how to perform the execution phase of a software upgrade.

A software upgrade has a limited time window during which some planned service impact is allowed. The execution phase of the software upgrade can have service impact and must be executed only within the upgrade time window and not during normal “traffic hours”.

The procedure in this document covers the following:

- How to activate (that is, apply) the upgrade package on the Managed Element (ME)
- How to commit the upgrade

This document describes how to upgrade using a one-step activation. One-step activation is applicable to upgrade packages designed for one-step or step-by-step activations. It is, however, not recommended to apply it to an upgrade package designed for multiple steps, since it implies reduced user interaction and increases the upgrade failure probability.

The procedure is illustrated by an example where a software version with product name `ERIC-COREMW_RUNTIME`, product number `CXP9020355_1`, and product revision `R7E01` is running in the system. A software upgrade package `ERIC_UP-CXP9020355_1-R7F01`, which is designed to upgrade this software version to product revision `R7F01`, has already been prepared and is going through the activation phase. This upgrade package has an activation fallback-timer, attribute `activationFallbackTimer` in the Managed Object (MO) *UpgradePackage* equal to 1200 seconds.

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 ME has passed a health check routine.
- The upgrade package is prepared.
- The fallback capability is supported by the ME, that is, attribute `timeoutFallbackCapability=SUPPORTED` in the *SwM* MO.



- An Ericsson Common Command-Line Interface (ECLI) session in Exec mode is in progress.



2 Procedure

To upgrade using one-step activation:

1. Navigate to the upgrade package, for example:

```
>dn ManagedElement=NODE06ST,SystemFunctions=1,SwM=1,UpgradePackage=ERIC_UP-CXP9020355_1-R7F01
```

2. Activate the upgrade package:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01)>activate
```

The system returns output `true` for a successfully triggered activation or `false` otherwise.

3. Verify the result for a successfully triggered operation:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01)>show -v
```

In the following example output, `state=RUNNING` and `progressPercentage=10`. It shows that 10% of the activation is completed.

```
UpgradePackage=ERIC_UP-CXP9020355_1-R7F01
[...]
state=ACTIVATION_IN_PROGRESS <read-only>
[...]
reportProgress <read-only>
[...]
actionName="Activate" <read-only>
[...]
progressInfo="Activate UpgradePackage" <read-only>
progressPercentage=10 <read-only>
[...]
state=RUNNING <read-only>
[...]
```

4. Continue to check the progress of the activation until it is completed:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01)>show -v
```

The following example output shows the final result with `state=FINISHED` and `progressPercentage=100`:



```

UpgradePackage=ERIC_UP-CXP9020355_1-R7F01
[...]
state=WAITING_FOR_COMMIT <read-only>
[...]
reportProgress <read-only>
  actionId=1 <read-only>
  actionName="Activate" <read-only>
[...]
progressInfo="Activate UpgradePackage" <read-only>
progressPercentage=100 <read-only>
result=SUCCESS <read-only>
resultInfo="Campaign execution successfully completed" <read-only>
state=FINISHED <read-only>
[...]
stepProgressPercentage=100 <read-only>
timeActionCompleted="2013-12-18T05:24:31" <read-only>
timeActionStarted="2013-12-18T04:43:50" <read-only>
timeOfLastStatusUpdate="2013-12-18T05:24:31" <read-only>

```

5. Navigate to the *SwM* MO:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01) >up
```

6. Verify how much time remains before fallback:

```
(SwM=1) >show timeRemainingBeforeFallback
```

The following example output shows that 1155 seconds remain before fallback.

```
1155
```



Do!

Carefully read the following information before proceeding.

Once the activation is effective, indicated by `state=WAITING_FOR_COMMIT`, the fallback countdown starts. Attribute `timeRemainingBeforeFallback` is automatically set to the value (in this example 1200 seconds) contained in attribute `fallbackTimer` in the *SwM* MO.

If the user does not commit the operation before `timeRemainingBeforeFallback` reaches zero, a fallback is automatically triggered.

7. Verify that the ME behaves properly. This includes, but is not necessarily limited to, passing a health check routine.
8. Is the ME behaving properly?

Yes: Proceed with the next step.

No: Cancel the activation, refer to *Cancel Upgrade Operation*.



9. Navigate to the upgrade package:

```
(SwM=1>UpgradePackage=ERIC_UP-CXP9020355_1-R7F01
```

10. Commit the upgrade by using action `commit` in the Upgradepackage MO:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01)>commit
```

The system returns output `true` or `false`.

Note: A software management upgrade is confirmed/committed by executing the software management action `commit` in Exec mode. This is different from ECLI command `commit` used to apply configuration changes in Config mode.

11. Check the progress of action `commit`:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01)>show -v
```

The following is an example output when the commit operation completed successfully:

```
[...]
state=COMMIT_COMPLETED <read-only>
[...]
reportProgress <read-only>
  actionId=2 <read-only>
  actionName="Commit" <read-only>
[...]
  progressPercentage=100 <read-only>
  result=SUCCESS <read-only>
  resultInfo="Campaign committed successfully. Updated model successfully." <read-only>
  state=FINISHED <read-only>
[...]
```

12. Navigate to the *SwM* MO:

```
(UpgradePackage=ERIC_UP-CXP9020355_1-R7F01)>up
```

13. Verify that the active software state is the expected one:

```
(SwM=1)>show -v
```

The following is an example output. The active software version corresponds to the activated software upgrade scope. A software version with product name `ERIC-COREMW_RUNTIME`, product number `CXP9020355_1`, and product revision `R7F01` is running in the system.

```
SwM=1
  activeSwVersion
    "ManagedElement=NODE06ST, SystemFunctions=1, SwM=1, SwVersionMain==>
ERIC-COREMW_RUNTIME-CXP9020355_1-R7F01" <read-only>
[...]
  SwVersionMain=ERIC-COREMW_RUNTIME-CXP9020355_1-R7F01
  UpgradePackage=ERIC_UP-CXP9020355_1-R7F01
```

A software version with product name `ERIC-COREMW_RUNTIME`, product number `CXP9020355_1`, and product revision `R7F01` is now committed and running in the system.