

# Basic System Operations

## Ericsson Core CLI

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Operating Instructions

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# 1 Examples

## 1.1 Display the System Status

This example shows the status of the system when all processes on the active controller card are in the ready state.

### Steps

1. To display the status of the system, enter the **show system status** command.

#### Example

```
[local]Ericsson#show system status
System Status: OK
```

## 1.2 Display Active Alarms

This example lists all active alarms in the system. Optionally, you can display detailed information of each alarm with the specified alarm ID.

**Note:** Reloading an element clears all outstanding alarms. If the failure condition still persists after reloading the element, the alarms are raised again.

### Steps

1. To list all active alarms in the system, enter the **show fm alarm** command.

#### Example

```
[local]Ericsson#show fm alarm
fm alarm 1
source /lme:lm/feature-key[id=FAT1023253/1__]
last-event-time 2018-03-29T11:11:45.000345+00:00
sequence-number 1
active-severity major
additional-text "License not found = FAT1023253/1__."
major-type 193
minor-type 393217
specific-problem "License Management, License Key Not Available"
event-type quality-of-service-alarm
probable-cause configuration-or-customisation-error
original-event-time 2018-03-29T11:11:45.000345+00:00
original-severity major
original-additional-text "License not found = FAT1023253/1__."
fm alarm 2
source /lme:lm
```



```
last-event-time      2018-03-29T11:11:45.000346+00:00
sequence-number     2
active-severity      major
additional-text      "Base Package License Key not available or expired→
"
major-type           193
minor-type           393223
specific-problem     "Base Package License, License Key Not Available"
event-type           quality-of-service-alarm
probable-cause       configuration-or-customisation-error
original-event-time  2018-03-29T11:11:45.000346+00:00
original-severity    major
original-additional-text "Base Package License Key not available or expired→
"
fm alarm 3
source              /hw:hardware/component[name='slot21']
last-event-time     2018-03-29T11:11:59+00:00
sequence-number     3
active-severity      major
additional-text      "Filesystem Full"
major-type           193
minor-type           3188852760
specific-problem     "Filesystem Full"
event-type           equipment-alarm
probable-cause       m3100-indeterminate
original-event-time  2018-03-29T11:11:59+00:00
original-severity    major
original-additional-text "Filesystem Full"
```

## 1.3 Display the Date and Time

This example displays the date and time according to the RTC. Optionally you can display the system clock.

### Steps

1. To display the current date and time given by the RTC, use the **show clock rtc** command.

This example displays the date and time according to the RTC.

#### Example

```
[local]Ericsson#show clock rtc
Mon Apr 15 17:38:35 2013 UTC
```

## 1.4 Display Command Aliases

1. To display the list of aliases defined using the **alias** command on the system, enter the **show running-config alias** command.

#### Example

```
[local]Ericsson#show running-config alias
alias show-admin-config
  expansion "show running-config alias ; show running-c →
onfig asp ; show running-config bridge; show running-c →
onfig card ; show running-config contexts ; show runni →
```



```
ng-config interfaces ; show running-config qos ; show →
running-config swim ; show running-config system ; sho →
w running-config yang-server; show running-config cm-n →
otification-sender;"
!
alias show-user-config
  expansion "show running-config | exclude fm | exclude →
  pm | exclude alarm-type | exclude measurement-type"
!
```

2. To display the list of private aliases defined using the **user alias** command for the administrator, enter the **show running-config user alias** command. The system security administrators can view all the private aliases on the system.

#### Example

```
[local]Ericsson#show running-config user alias
user admin1
alias show-user-config
  expansion "show running-config | exclude fm | exclude →
  pm | exclude alarm-type | exclude measurement-type"
!
```

## 1.5 Display Enabled and Disabled Services

1. To display the status (enabled or disabled) of all context, process, and protocol services, enter the **show service** command.

#### Example

```
[local]Ericsson#show service
Context Services:
  auto-system-recovery      enabled
  card-auto-reload          enabled
  console-break              disabled
  domain-wildcard            disabled
  inter-context routing      disabled
  multiple-contexts          enabled
  upload-coreDump            disabled
  history-username-display   disabled

Process Services:
  ppp                        enabled
  pppoe                       enabled
  l2tp                        enabled
```

Protocol Services:

Protocol	Client	Server
----------	--------	--------



```
-----  
ftp                Disabled          Not Supported  
tftp              Enabled           Not Supported  
ssh               Disabled         Disabled  
sftp              Disabled         Disabled  
scp               Disabled         Disabled  
telnet            Enabled           Enabled
```

## 1.6 Display System Memory and Statistics

This example displays memory statistics for the complete system. Optionally you can display memory statistics for a line card, alarm card, and active and standby controller cards.

### Steps

1. To display memory statistics for the complete system, use the **show memory** command

#### *Example*

```
[local]Ericsson#show memory  
Memory: Total 24555932k, Used 1377360k, Free 23178572k, Reserved 0k →
```

## 1.7 Enable Debugging Messages

From operational mode, you can enable debug messages for any process.

### Steps

1. To display messages in real time, use the **logging console** command in context configuration mode if you are connected to the system through the console port. Or, use the **terminal monitor** command in operational mode if you are connected to the system through a Telnet or SSH session.



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## Caution!

Risk of performance loss Enabling the generation of debug messages can severely affect system performance. Use `debug` commands only when necessary and for as short a time as possible.

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This example shows the output of the `show debugging` command before and after debugging is enabled for the RCM process.

### Example

```
[local]Ericsson#show debugging
No debugging is turned on.
```

```
[local]Ericsson#debug rcm
[local]Ericsson#show debugging
RCM:
    event debugging is turned on
```

## 1.8 Manage Terminal Sessions on a Remote Host

Use the `ssh` command or the `telnet` command (if you have enabled it using the `service telnet server` command in context configuration mode) to establish remote sessions from the local system to a host. You can configure certain characteristics of the remote session, which are in effect during the session. If you use automated scripts to establish multiple Telnet or SSH sessions, note that the router supports a maximum rate of about one login every 30 seconds and may refuse new sessions for 5-10 minutes if your script exceeds this rate. This example configures the current terminal sessions as follows:

- Changes the width and length of the terminal window to 70 characters and 30 lines, respectively.
- Enables the display of system events on the remote session continuously, as they are logged. This setting enables you to view the Event Log output while connected to a system through a remote session rather than while working on the console.

To manage terminal sessions on a remote host, perform the following steps starting in operational mode.

### Steps

1. Set the size of the terminal window.



### Example

```
[local]Ericsson#screen-width 70  
[local]Ericsson#screen-length 30
```

2. Display system events in the remote session.

### Example

```
[local]Ericsson#terminal monitor
```

## 1.9 Test IP Connectivity Between Two Hosts

Ping and traceroute packets enable you to test the IP connection between two hosts. A ping test determines whether the destination host is reachable by Equal-Cost Multipath (ECMP) packets. A traceroute packet identifies the hops between the source and the destination. This example uses these utilities to test the IP connectivity between IPv6 hosts `Ericsson1`, at `2002:a:1:2::2`, and `Ericsson2`, at `2001:a:1:2::1`, which are connected through four intermediate hops. You can conduct similar tests for IPv4 hosts using the `ping` and `traceroute` commands.

To test IP connectivity between two hosts, perform the following steps in operational mode.

### Steps

1. From `Ericsson1`, send a ping packet to the destination. In this example, the output indicates that the destination host received the packets.

#### Example

```
[vpn1]Ericsson1#ping ipv6 2001:a:1:2::1 source 2002:a:1:2::2  
PING 2001:a:1:2::1 (2001:a:1:2::1): source 2002:a:1:2::2, 8 data by →  
tes,  
timeout is 1 second, source 2002:a:1:2::2  
.!!!!  
----2001:a:1:2::1 PING6 Statistics----  
5 packets transmitted, 5 packets received, 0% packet loss  
round-trip min/avg/max/std-dev = 1.520/1.837/2.008/0.182 ms
```

2. Send a traceroute packet to the destination. In this example, the output lists the four intermediate hops between the source and destination.

#### Example

```
[vpn1]Ericsson1#traceroute ipv6 2001:a:1:2::1  
traceroute6 to 2001:a:1:2::1 from 2002:a:1:2::2, 30 hops max, 12 byte packets  
1  ::ffff:19.20.21.2  3.504 ms  3.263 ms  3.616 ms  
   MplsLabel: 589826 MplsExpBits: 0 TTL: 1  
   MplsLabel: 589825 MplsExpBits: 0 TTL: 1  
2  ::ffff:20.20.20.102  2.784 ms  3.118 ms  3.094 ms  
   MplsLabel: 589826 MplsExpBits: 0 TTL: 1
```



```
          MplsLabel: 589825 MplsExpBits: 0 TTL: 2
3 * * *
4 fe80::230:88ff:fe04:3009 3.146 ms 2.695 ms 3.016
```