

# Fuel Plugin Configuration Guide

## Cloud Execution Environment

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### USER GUIDE

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# 1 Introduction

This User Guide (UG) describes the different Fuel plugins available for the Cloud Execution Environment (CEE), and the mandatory Fuel plugins for a supported CEE configuration.

## 1.1 Target Group

Support organization personnel with a solid knowledge of Linux CLI, OpenStack, and CEE.

## 1.2 Prerequisites

This section states the prerequisites that have to be fulfilled.

### 1.2.1 Conditions

Ensure that the following condition is met:

- Access to the Fuel VM on the kickstart server

### 1.2.2 Documents

No document is needed as a prerequisite when using this UG.



## 2 Fuel Plugin Handling in CEE

This section describes the handling of Fuel plugins in a CEE region.

CEE software releases contain the officially supported Fuel plugins. To enable the officially supported plugins, see Section 2.2 on page 2.

To customize CEE with user specified Fuel plugins, see Section 2.1 on page 2.

### 2.1 Adding Fuel Plugins to a CEE Region

The officially supported plugin packages are available in Fuel at the following location:

```
/var/www/nailgun/ericsson/fuel-plugins
```

CEE installation scripts will install and enable the plugins, listed in Section 2.2 on page 2, from this location. Customized Fuel plugins have to be added to this directory before starting the CEE installation in the CEE installation flow.

**Note:** Adding customized Fuel plugins to a CEE installation deviates from an officially supported CEE configuration. Support for lifecycle management functions, for example, updates, are not guaranteed.

### 2.2 Enabling Fuel Plugins for a CEE Region

Refer to section *Fuel Plugins* in the *Configuration File Guide* to enable a Fuel plugin in a CEE region.

The configuration attributes can be user specified to override the default values, as detailed in the *Configuration File Guide*. To find the possible configuration attributes and their allowed values for the officially supported Fuel plugins in CEE, see the following sections:

- For the mandatory Fuel plugins, see Section 3 on page 3
- For the optional Fuel plugins, see Section 4 on page 11



## 3 Mandatory Fuel Plugins for CEE

This section describes the mandatory Fuel plugins for a supported CEE configuration.

### 3.1 Networking

#### 3.1.1 CSS

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of Ericsson Cloud SDN Switch (CSS) with CEE.

**Plugin name:** `ericsson_css`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

**Configuration Attributes:**

*Table 1 CSS Configuration Attributes*

Option = default value	(Type) Help string
<code>install_css_dpdk = true</code>	(BoolOpt) Install CSS with DPDK. Always expected to be the default value. Possible values: <ul style="list-style-type: none"><li>• <code>true</code></li><li>• <code>false</code></li></ul> Related options: <ul style="list-style-type: none"><li>• <code>dpdk_bond_mode</code></li></ul>



Table 1 CSS Configuration Attributes

Option = default value	(Type) Help string
<code>redundant_traffic_interface = true</code>	<p>(BoolOpt) Redundancy for traffic interfaces. For multi-server deployments the default value, <code>true</code>, is expected. For single server deployments, since only one traffic interface is present, the expected value is <code>false</code>.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• <code>true</code></li> <li>• <code>false</code></li> </ul> <p>Related options:</p> <ul style="list-style-type: none"> <li>• <code>dpdk_bond_mode</code></li> </ul>
<code>dpdk_bond_mode<sup>(1)</sup> = balance-slb</code>	<p>(StrOpt) Describes the mode of DPDK traffic bond configured by the CSS plugin. This value is suggested to be set as <code>active-backup</code> for BSP and vCEE based deployments.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>• <code>active-backup</code></li> <li>• <code>balance-slb</code></li> </ul> <p>Related options:</p> <ul style="list-style-type: none"> <li>• <code>install_css_dpdk</code></li> <li>• <code>redundant_traffic_interface</code></li> </ul>

(1) This parameter is not available when `install_css_dpdk` or `redundant_traffic_interface` is set to `False`.

## 3.2 High Availability

### 3.2.1 CM-HA

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of Continuous Monitoring High Availability (CM-HA) with CEE.

**Plugin name:** `cm_ha`

**Depends on:** Watchmen

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

## 3.3 Security

### 3.3.1 Ericsson TLS

**Note:** This plugin will be available in a future release of CEE R6.



### Configuration Attributes:

Option = default value	(Type) Help string
<code>openssl_ciphersuites = ECDHE-ECDSA-AES128-GCM-SHA256:ECHE-ECDSA-AES256-GCM-SHA384:ECHE-RSA-AES128-GCM-SHA256:ECHE-RSA-AES256-GCM-SHA384:ECHE-RSA-AES256-GCM-SHA384:ECHE-ECDSA-AES128-SHA:ECHE-RSA-AES128-SHA</code>	(StrOpt) Cipher suites to be used for OpenSSL.  Possible values: <ul style="list-style-type: none"> <li>Valid cipher suites</li> </ul>
<code>openssl_protocols = TLSv1.2</code>	(StrOpt) Specifies the OpenSSL protocol used for TLS.  Possible values: <ul style="list-style-type: none"> <li>TLSv1.1</li> <li>TLSv1.2</li> </ul>
<code>gnutls_priority = NONE:+SUITEB128:+SUITEB192:+VERS-TLS-1.2</code>	(StrOpt) GnuTLS priority used within the Ericsson TLS.  Possible values: <ul style="list-style-type: none"> <li>NONE:+SUITEB128:+SUITEB192:+VERS-TLS-1.2</li> </ul>

**Plugin name:** ericsson idam



**Depends on:** LDAP

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

## 3.4 Fault Management

### 3.4.1 Watchmen

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of Ericsson Watchmen component with CEE.

**Plugin name:** `ericsson_watchmen`

**Depends on:** HCFramework, LDAP, IdAM

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

**Configuration Attributes:**

*Table 3 Watchmen Configuration Attributes*

Option = default value	(Type) Help string
<code>galera_password</code>	(StrOpt) Watchmen plugin requires galera database password.

### 3.4.2 HCFramework

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of Ericsson HCFramework component with CEE.

**Plugin name:** `ericsson_hcframework`

**Depends on:** LDAP, IdAM

**Conflicts with:** None

**CEE Release Compatibility:** R6.4



## 3.5 Performance Management

### 3.5.1 Zabbix

This plugin enables the integration of Zabbix component with CEE.

**Plugin name:** zabbix\_monitoring

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.3

**Configuration Attributes:**

Table 4 Zabbix Configuration Attributes

Option = default value	(Type) Help string
username = admin	(StrOpt) Username for Zabbix Administrator. The default value is admin.  Possible values: • A valid text as user name
password = Zabbix	(StrOpt) Password for Zabbix Administrator. If no value is specified, the default password will be used. It is recommended to specify a strong password. <sup>(1)</sup>  Possible values: • A valid password
db_password = fae2oom_aeR6	(StrOpt) Password for Zabbix Database. If no value is specified, the default password will be used. It is recommended to specify a strong password. <sup>(1)</sup>  Possible values: • A valid password
monitoring_password = Og1aaQivaiv1	(StrOpt) Password for monitoring user of Zabbix. If no value is specified, the default password will be used. It is recommended to specify a strong password. <sup>(1)</sup>  Possible values: • A valid password

(1) Refer to the *Security User Guide* for the recommended password policies.



### 3.5.2 PMAPI and PMReporter

This plugin enables the integration of PMAPI and PMReporter component with CEE.

**Plugin name:** `ericsson_pmap`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

**Configuration Attributes:**

Table 5 PMAPI and PMReporter Configuration Attributes

Option = default value	(Type) Help string
<code>Ceilometer_user_password</code>	(StrOpt) Password used by PMReporter.

## 3.6 Infrastructure Management

### 3.6.1 NTP

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of NTP service with CEE.

**Plugin name:** `ericsson-ntp`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

**Configuration Attributes:**

Table 6 NTP Configuration Attributes

Option = default value	(Type) Help string
<code>eri_ntp_check_connection = true</code>	(BoolOpt) Possible values: <ul style="list-style-type: none"><li>• <code>true</code></li><li>• <code>false</code></li></ul>



Table 6 NTP Configuration Attributes

Option = default value	(Type) Help string
<code>eri_ntp_config = ntp-mirantis</code>	(StrOpt) NTP configuration type Possible values: <ul style="list-style-type: none"> <li>• ntp-mirantis</li> <li>• ntp-cic</li> <li>• ntp-vcic</li> </ul> Related options: <ul style="list-style-type: none"> <li>• eri_ntp_orphan</li> </ul>
<code>eri_ntp_orphan = false</code>	(BoolOpt) Possible values: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>
<code>eri_ntp_orphan_stratum</code>	(StrOpt) Orphan stratum level Possible values: <ul style="list-style-type: none"> <li>• 2 – 4</li> </ul> Related options: <ul style="list-style-type: none"> <li>• eri_ntp_orphan</li> </ul>
<code>eri_ntp_authentication = None</code>	(StrOpt) Authentication and encryption method Possible values: <ul style="list-style-type: none"> <li>• None (No authentication)</li> <li>• md5(Authentication with md5 encryption)</li> </ul> Related options: <ul style="list-style-type: none"> <li>• eri_ntp_auth_upstream_key</li> <li>• eri_ntp_auth_upstream_password</li> <li>• eri_ntp_auth_own_key</li> <li>• eri_ntp_auth_own_password</li> </ul>
<code>eri_ntp_auth_upstream_key</code>	(StrOpt) Upstream key to use Possible values: <ul style="list-style-type: none"> <li>• 1 – 65535</li> </ul>

*Table 6 NTP Configuration Attributes*

<b>Option = default value</b>	<b>(Type) Help string</b>
<code>eri_ntp_auth_upstream_password</code>	(StrOpt) Upstream password
<code>eri_ntp_auth_own_key</code>	(StrOpt) Key used by upstream Possible values: <ul style="list-style-type: none"><li>• 1 – 65535</li></ul>
<code>eri_ntp_auth_own_password</code>	(StrOpt) Password used by upstream



## 4 Optional Fuel Plugins for CEE

This chapter describes the list of Fuel plugins which are optional for a CEE configuration.

The optional plugins can be enabled or disabled depending on the configuration and the hardware setup.

### 4.1 Networking

#### 4.1.1 SR-IOV

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of SR-IOV feature with CEE.

**Plugin name:** `ericsson_sriov`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

#### 4.1.2 Ericsson CSC

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of Ericsson Cloud Software-defined Networking (SDN) with CEE.

**Plugin name:** `ericsson_csc`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

#### 4.1.3 Extreme

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of Extreme switches with CEE.



**Plugin name:** `extreme_plugin`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

**Configuration Attributes:**

*Table 7 Extreme Configuration Attributes*

Option = default value	(Type) Help string
<code>install_extreme_plugin = true</code>	(BoolOpt) Possible values: <ul style="list-style-type: none"><li>• <code>true</code></li><li>• <code>false</code></li></ul>

## 4.2 Storage

### 4.2.1 EMC VNX

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of EMC VNX with CEE.

**Plugin name:** `emc_vnx`

**Depends on:** LDAP, IdAM

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

**Configuration Attributes:**

*Table 8 EMC VNX Configuration Attributes*

Option = default value	(Type) Help string
<code>cee_managed = true</code>	(BoolOpt) Possible values: <ul style="list-style-type: none"><li>• <code>true</code></li><li>• <code>false</code></li></ul>
<code>emc_username = admin</code>	(StrOpt) EMC VNX username.





Table 8 EMC VNX Configuration Attributes

Option = default value	(Type) Help string
<code>emc_password = ericsson</code>	(StrOpt) EMC VNX password
<code>emc_sp_a_ip = 192.168.2.12</code>	(StrOpt) EMC VNX SP A IP
<code>emc_sp_b_ip = 192.168.2.13</code>	(StrOpt) EMC VNX SP B IP
<code>emc_pool_name = cinderpool</code>	(StrOpt) EMC VNX pool name
<code>hw_type = VNX5400</code>	(StrOpt) EMC VNX hardware type Possible values: <ul style="list-style-type: none"> <li>• VNX5400</li> <li>• VNX5500</li> </ul>

## 4.2.2 EMC ScaleIO

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of EMC ScaleIO with CEE.

**Plugin name:** `eri_scaleio_plugin`

**Depends on:** LDAP, IdAM

**Conflicts with:** None

**CEE Release Compatibility:** R6.4

## 4.3 Infrastructure Management

### 4.3.1 HDS Agent

**Note:** This plugin will be available in a future release of CEE R6.

This plugin enables the integration of HDS Agent with CEE.

**Plugin name:** `hds_agent`

**Depends on:** None

**Conflicts with:** None

**CEE Release Compatibility:** R6.4