

Cisco Elastic Services Controller 4.5 Release Notes

Introduction

Cisco Elastic Services Controller (ESC) is a Virtual Network Functions Manager (VNFM), which performs lifecycle management of Virtual Network Functions (VNFs).

The Cisco Elastic Services Controller (ESC) promotes agility, flexibility, and programmability in Network Function Virtualization (NFV) environments - and offers comprehensive automated lifecycle management capabilities. By design, Cisco ESC is built as an open and a modular system. It provides a single point of control to manage all aspects of VNF lifecycle for generic virtual network functions (VNFs) in a dynamic environment. Drawing on industry standards and open APIs, you can control the full lifecycle of all of your virtualized resources, whether using Cisco or third-party VNFs, allowing you to choose best-of-breed industry solutions.

- As part of the Cisco Orchestration Suite, ESC is packaged with Cisco Network Services Orchestrator (NSO) and Cisco NFV Orchestrator (NFVO) bundle. This is available within Cisco Solutions such as Cisco Managed Services Accelerator (MSX).
- As a standalone product, ESC is available as a Virtual Network Function Manager bundled with several Cisco VNFs such as VPN, vRouter and many others.

Supported Virtual Infrastructure Managers (VIM)

ESC supports lifecycle management of VNFs on OpenStack, VMware vCenter, vCloud Director and Amazon Web Services (AWS). For more details, see the [Cisco Elastic Services Controller Install and Upgrade Guide](#).

New Features and Enhancements of 4.5

This section describes the features added in Cisco Elastic Services Controller Release 4.5.

- **OpenStack Network with vxlan-evpn type Support**—ESC supports creating vxlan-evpn for a provider network type in Cisco VIM. For more information, see the *Cisco Elastic Services Controller User Guide*.
- **ESC Supports NUMA for VMware vSphere**—ESC supports NUMA for VMware vSphere by adding additional configuration parameters. For more information, see the *Cisco Elastic Services Controller User Guide*.
- **Alarms and Notifications for VM Load and Failure**—ETSI now generates alarms and notifications for VM load and failure. For more information, see ETSI Alarms and Notifications in the *Cisco Elastic Services Controller User Guide*.
- **Auto Scaling and Healing of VNFs using KPIs**—ETSI supports auto-scaling and healing of VMs using the KPIs. For more information, see the *Cisco Elastic Services Controller User Guide*.

- **Cisco VNFD Extensions**—ETSI supports extensions to configure SR-IOV, IPv6, Allowed Address pair, Affinity Anti-affinity and port security. For more information, see Supporting Advanced VNFD Extensions in the *Cisco Elastic Services Controller User Guide*.
- **VIM Connections for ETSI**—You can create VIM Connectors using the REST/NETCONF APIs, or using the credentials of the existing VIM Connection info in the ETSI LCM operations. For more information, see Managing VIM Connectors Using ETSI API in the *Cisco Elastic Services Controller User Guide*.
- **Retrieving the Deployment Descriptor**—The ETSI API allows you to retrieve the deployment descriptor. For more information, see Retrieving the Deployment Descriptor in the *Cisco Elastic Services Controller User Guide*.

For more information, see the [Cisco Elastic Services Controller User Guide](#) and [Cisco Elastic Services Controller Install and Upgrade Guide](#).

Cisco Elastic Services Controller Bugs

For a complete list of open and resolved bugs for this release, use the Cisco [Bug Search](#) tool.

Open Bugs

The table below lists the open issues in the Cisco Elastic Services Controller 4.5 release.

Table 1: Open Bugs in Cisco Elastic Services Controller 4.5

Bug ID	Description
CSCvp03813	Default VIM connector user can't be updated when VIM has deployed resources
CSCvp03795	Service can become stuck in deploying state when service update fails
CSCvo46451	ESC Portal Notifications "Error Report" does not load some notification records
CSCvo14116	Image deletion can fail due to stale dependency on un-deployed service
CSCvo00655	Deployment IP addresses not displayed on Portal when deployment ETSI or uses dual stack feature
CSCvn53293	Service can get stuck in INERT STATE when recovering a deployment and all VIM/VNF communication lost
CSCvn50047	ESC un-deployment can fail to remove dependent interfaces
CSCvo92454	ESC enforces no limit on Portal log file size
CSCvo84457	Downstream of volume based service software update failure, entering recovery may detach volume
CSCvo78809	Cannot update default VIM connector password when using --encrypt_key_prompt after ESC restart
CSCvo76893	Error during un-deployment requires ESC restart to clear the deployment

Resolved Bugs

The table below lists the resolved issues in the Cisco Elastic Services Controller 4.5 release.

Table 2: Resolved Bugs in Cisco Elastic Services Controller 4.5

Bug ID	Description
CSCvo55339	Volume reference is not reset after a failed initial deployment with volume creation
CSCvo44156	Service referencing invalid volume ID can become stuck in deploying state on attempting recovery
CSCvo37640	Starting a stopped ETSI deployed service fails; failure not propagated to NFVO
CSCvo26772	lodash Object.prototype Denial of Service Vulnerability
CSCvo19607	Static port leaks when VM deploy fails due to corrupted image (OpenStack)
CSCvo15546	Multiple Vulnerabilities in jackson-databind 2.9.8 and 2.8.11
CSCvo08332	Service utilizing out-of-band volumes can become stuck in deploying state (on compute HW failure)
CSCvn98227	port_security_enabled setting can disappear in op_data after redeploy
CSCvn89931	In-flight recovery can fail when an ESC switchover occurs within the recovery initialize window
CSCvn81386	ESC Portal Dashboard page fails to loads
CSCvn81236	VIM connector down and ESCManager restarted, service undeploy cannot cleanup database
CSCvn77454	Deployment with LCS, pre_deploy script execution failed but notif indicated vm deployed successfully
CSCvn76186	Duplicate VM_RECOVERY_COMPLETE failure notifications can be generated
CSCvn49917	ESC will not be able to delete VM after allowing update locator
CSCvn37701	ETSI: missing vnfExtCpdId , extLinkPorts data in instantiatedVnfInfo from SOL001-Align

Cisco Bug Search Tool

Bug Search Tool (BST), the online successor to Bug Toolkit, is designed to improve our customers' effectiveness in network risk management and device troubleshooting.

BST allows partners and customers to search for software bugs based on product, release, and keyword, and aggregates key data such as bug details, product, and version. The service has provision to filter bugs based on credentials to provide external and internal bug views for the search input.

To use the BST to search for a specific bug or to search for all bugs in a release:

Procedure

Step 1 Go to <http://tools.cisco.com/bugsearch>.

Step 2 At the Log In screen, enter your registered Cisco.com username and password; then, click Log In. The Bug Search page opens.

Note If you do not have a Cisco.com username and password, you can register for them at <http://tools.cisco.com/RPF/register/register.do>.

Step 3 To search for a specific bug, enter the bug ID in the Search For field and press Return.

Step 4 To search for bugs in the current release:

1. In the Search For field, enter a keyword and press Return. (Leave the other fields empty).
2. When the search results are displayed, use the filter tools to find the types of bugs you are looking for. You can search for bugs by modified date, status, severity, and so forth.

Tip To export the results to a spreadsheet, click the Export All to Spreadsheet link.

See [Bug Search Tools & Resources](#) on Cisco.com. For more details on the tool overview and functionalities, check out the help page, located at <http://www.cisco.com/web/applicat/cbsshelp/help.html>

Accessibility Features in Cisco ESC

For a list of accessibility features in Cisco ESC 4.5, see [Voluntary Product Accessibility Template \(VPAT\)](#) on the Cisco website, or contact accessibility@cisco.com.

All product documents are accessible except for images, graphics, and some charts. If you would like to receive the product documentation in audio format, braille, or large print, contact accessibility@cisco.com.

Related Documentation

The following documents are available for Cisco Elastic Services Controller:

- *Cisco Elastic Services Controller User Guide*
- *Cisco Elastic Services Controller Install and Upgrade Guide*
- *Cisco Elastic Services Controller NETCONF API Guide*
- *Cisco Elastic Services Controller REST API Guide*
- *Cisco Elastic Services Controller ETSI API Guide*
- *Cisco Elastic Services Controller Deployment Attributes*

You can access the documents at:

<http://www.cisco.com/c/en/us/support/cloud-systems-management/elastic-services-controller-esc/tsd-products-support-series-home.html>.

