



# Release Notes for the Ultra Cloud Core Subscriber Management Infrastructure Version 2020.02.3

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## Introduction

This Release Notes identifies changes and issues related to this software release. This release is the next release after 2020.02.1.

## Release Package Version Information

Software Packages	Version
base-vm.2020.02.1.qcow2.SPA.tgz	20191105
base-vm.2020.02.1.vmdk.SPA.tgz	20191105
cee.2020.02.1.SPA.tgz	2020.01.1-09
cluster-deployer-airgap.2020.02.1.qcow2.SPA.tgz	2020.01.1-05
cluster-deployer-airgap.2020.02.1.vmdk.SPA.tgz	2020.01.1-05
<b>NOTE:</b> In the event bugs need to be opened against this product, please reference the Package Component Version information in this table.	

Descriptions for the various packages provided with this release are available in the [Release Package Descriptions](#) section.

## Verified Compatibility

Products	Version
Ultra Cloud Core SMF	2020.02.3
Ultra Cloud Core PCF	2020.02.1.65
Ultra Cloud Core UPF	2020.02.3

## Enhancements and Behavior Changes

### Bulk Statistics Query Configuration

The **bulk-stats query** configuration command used for retrieving the bulk statistics data is enhanced to include the default value and default namespace in this release.

**bulk-stats query** *query\_name* {**expression** *expression* | **label** *label* | **default-namespace** *namespace* | **default-value** *value*}

The following parameters are introduced in this release:

- **default-value** *value*: Specifies the default value used in the bulk statistics file. The default value is used when the query fails to return any value.
- **default-namespace** *namespace*: Specifies the default namespace used in the bulk statistics file. The default namespace is used when the query fails to return any value. You can configure the default namespace only when the default-value is configured.

### Related Documentation

For a complete list of documentation available for this release, go to:

<https://www.cisco.com/c/en/us/support/wireless/ultra-cloud-core-subscriber-microservices-infrastructure/tsd-products-support-series-home.html>

### Installation and Upgrade Notes

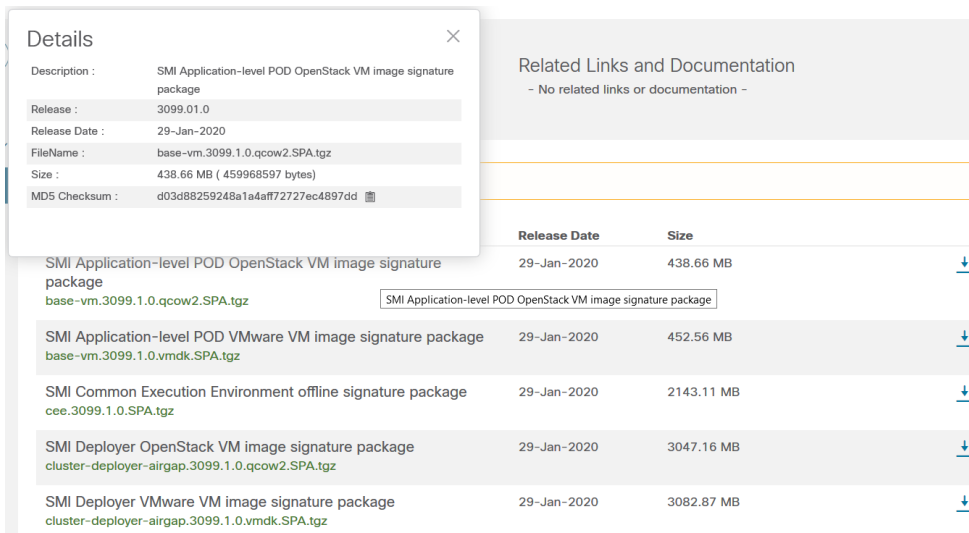
This Release Note does not contain general installation and upgrade instructions. Refer to the existing installation documentation for specific installation and upgrade considerations.

### Software Integrity Verification

To verify the integrity of the software image you have from Cisco, you can validate the SHA512 checksum information against the checksum identified by Cisco for the software.

Image checksum information is available through **Cisco.com Software Download Details**. To find the checksum, hover the mouse pointer over the software image you have downloaded.

Installation and Upgrade Notes



At the bottom you find the SHA512 checksum, if you do not see the whole checksum you can expand it by pressing the "... " at the end.

To validate the information, calculate a SHA512 checksum using the information in [Table 1](#) and verify that it matches either the one provided on the software download page.

To calculate a SHA512 checksum on your local desktop please see the table below.

**Table 1 - Checksum Calculations per Operating System**

Operating System	SHA512 checksum calculation command examples
Microsoft Windows	Open a command line window and type the following command  <pre>&gt; certutil.exe -hashfile &lt;filename&gt;.&lt;extension&gt; SHA512</pre>
Apple MAC	Open a terminal window and type the following command  <pre>\$ shasum -a 512 &lt;filename&gt;.&lt;extension&gt;</pre>
Linux	Open a terminal window and type the following command  <pre>\$ sha512sum &lt;filename&gt;.&lt;extension&gt;</pre> <p>Or</p> <pre>\$ shasum -a 512 &lt;filename&gt;.&lt;extension&gt;</pre>
<b>NOTES:</b>  <p>&lt;filename&gt; is the name of the file.</p> <p>&lt;extension&gt; is the file extension (e.g. .zip or .tgz).</p>	

If the SHA512 checksum matches, you can be sure that no one has tampered with the software image or the image has not been corrupted during download.

If the SHA512 checksum does not match, we advise you to not attempt upgrading any systems with the corrupted software image. Download the software again and verify the SHA512 checksum again. If there is a constant mismatch, please open a case with the Cisco Technical Assistance Center.

## Certificate Validation

SMI software images are signed via x509 certificates. Please view the .README file packaged with the software for information and instructions on how to validate the certificates.

## Open Bugs for this Release

The following table lists the known bugs that were found in this software release and which remain open.

**NOTE:** This software release may contain open bugs first identified in other releases. Additional information for all open bugs for this release are available in the [Cisco Bug Search Tool](#).

Bug ID	Headline
CSCvt38022	K8s service with missing endpoints after time skew

## Resolved Bugs for this Release

The following table lists the known bugs that are resolved in this specific software release.

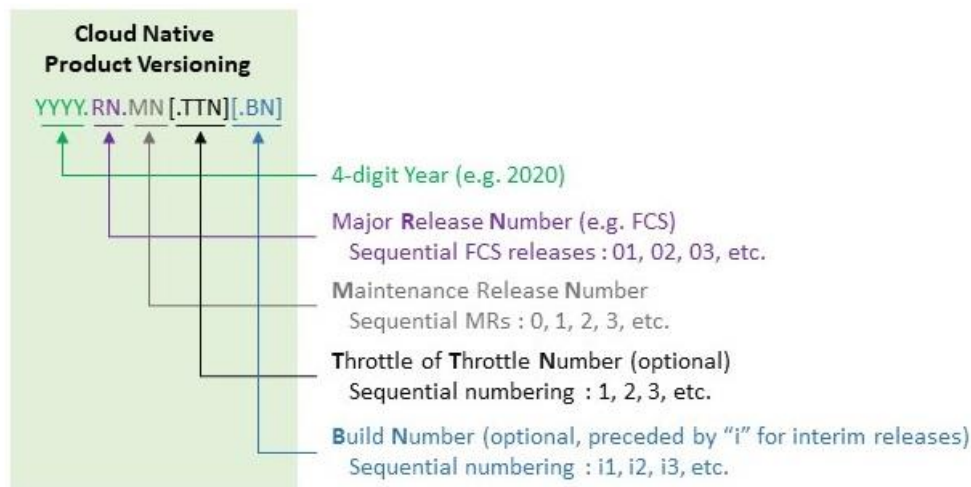
**NOTE:** This software release may contain bug fixes first introduced in other releases. Additional information for all resolved bugs for this release are available in the [Cisco Bug Search Tool](#).

None in this release.

## Operator Notes

### Cloud Native Product Version Numbering System

The **show helm list** command displays detailed information about the version of the cloud native product currently deployed.



Obtaining Documentation and Submitting a Service Request

The appropriate version number field increments after a version has been released. The new version numbering format is a contiguous sequential number that represents incremental changes between releases. This format facilitates identifying the changes between releases when using Bug Search Tool to research software releases.

## Release Package Descriptions

[Table 2](#) lists provides descriptions for the packages that are available with this release.

**Table 2 - Release Package Information**

Software Packages	Description
base-vm.<version>.qcow2.SPA.tgz	The application-level POD OpenStack VM image signature package. This package contains the base qcow2 VM image as well as the release signature, certificate, and verification information.
base-vm.<version>.vmdk.SPA.tgz	The application-level POD VMware VM image signature package. This package contains the base vmdk VM image as well as the release signature, certificate, and verification information.
cee.<version>SPA.tgz	The SMI Common Execution Environment (CEE) offline release signature package. This package contains the CEE deployment package as well as the release signature, certificate, and verification information.
cluster-deployer-airgap.<version>.qcow2.SPA.tgz	The SMI Deployer OpenStack VM image signature package. This package contains the Deployer qcow2 VM image as well as the release signature, certificate, and verification information.
cluster-deployer-airgap.<version>.vmdk.SPA.tgz	The SMI Deployer VMware VM image signature package. This package contains the Deployer vmdk VM image as well as the release signature, certificate, and verification information.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, refer to <https://www.cisco.com/c/en/us/support/index.html>.

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