· || · · || · · CISCO.

Release Notes for the Ultra Cloud Core Subscriber Management Infrastructure Version 2020.02.2.47

First Published: February 14, 2022 Last Updated: March 4, 2022

Introduction

This Release Note identifies changes and issues related to this software release.

Release Package Version Information

Software Packages	Version
base.20211122.iso.SPA.tgz	20211122
cee.2020.02.2.47.SPA.tgz	2020.02.2.47
cluster-deployer-2020.02.2.47.SPA.tgz	2020.02.2.47

Descriptions for the various packages provided with this release are provided in the Release Package Descriptions section.

Feature and Behavior Changes

Refer to the <u>Release Change Reference</u> for a complete list of feature and behavior changes associated with this software release.

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-supportseries-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.

Cisco Systems, Inc. www.cisco.com

Installation and Upgrade Notes

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.

	Release 2020.02.2.47		Troffice of Entro	and Documentation	
Details	×		SMI Release Note	S	
Description :	SMI Common Execution Environment bm offline signature package				
Release :	2020.02.2.47				
Release Date :	12-Feb-2022				
FileName :	cee-2020.02.2.47.SPA.tgz				
Size :	2496.39 MB (2617654963 bytes)				
MD5 Checksum :	ce4c100c288ca9b2e6497fe79449fb16 💼				
SHA512 Checksum :	1bd1d6f7ffc9bc3f73e3a6ebd3e54fbf 📋	Release Date Size	Size		
MI Release Notes Advisories 📑		gnature	12-Feb-2022	2496.39 MB	<u>+</u> \:
	cee-2020.02.2.47.SPA.tgz Advisories ⊡*				
SMI Deployer Baremetal image signature package cluster-deployer-2020.02.2.47.SPA.tgz Advisories ⊑*		ge	12-Feb-2022	3477.48 MB	±₩
	SMI Application-level POD ISO image signature smi-install-disk.20211122.iso.SPA.tgz Advisories [7]	package	12-Feb-2022	420.54 MB	+ ₩

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 <u>Table 1</u> and verify that it matches either one provided on the software download page.

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

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

Table 1 – Checksum Calculations per Operating System

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

None for this release.

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 <u>Cisco Bug Search Tool</u>.

Resolved Bugs for This Release

The table below highlights the known bugs that are resolved in this specific software release.

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 <u>Cisco Bug Search Tool</u>.

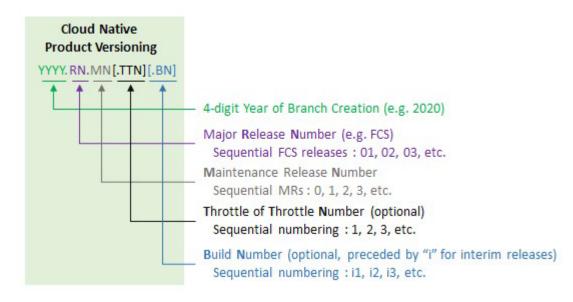
Bug ID	Headline	Behavior Change
<u>CSCvz76712</u>	Base OS Upgrade and address CVEs	N
<u>CSCwa52901</u>	Change CNDP Alerting rules/severity for pod restarts and crash loop	N
<u>CSCvz40263</u>	Cisco Ultra Cloud Core - Subscriber Microservices Infrastructure Privilege Escalation Vulnerability	Y
<u>CSCwa22903</u>	LogsForwarder switch to use Fluentbit instead of fluentd	N
<u>CSCvz13039</u>	Introduce new serial log collector for UPF	Y
<u>CSCwa59409</u>	SMI High Memory Alert generates duplicates	Ν

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 descriptions for the packages that are available with this release.

Table 2 - Release Package Information

Software Packages	Description
base. <version>.iso.SPA.tgz</version>	The application-level POD ISO image signature package for use with bare metal deployments. This package contains the base ISO image as well as the release signature, certificate, and verification information.
cee. <version>SPA.tgz</version>	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- <version>.SPA.tgz</version>	The SMI Deployer image signature package for use with bare metal deployments. This package contains the Deployer v 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.

Obtaining Documentation and Submitting a Service Request

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANYKIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITHTHE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSEOR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright ©1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: http://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

© 2022 Cisco Systems, Inc. All rights reserved.