



# Release Notes for the Ultra Cloud Serving Gateway Control Plane Function Version 2021.02.1

**First Published:** August 9, 2021

**Last Updated:** August 9, 2021

## Introduction

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

## Release Package Version Information

Software Packages	Version
ccg.2021.02.1.SPA.tgz	2021.02.1.i309

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

**NOTE:** The ccg.<version>.SPA.tgz software package is common to both the cnSGWc and SMF 5G Network Functions (NF). The deployment and configuration procedure determines the NF deployment.

## Verified Compatibility

Products	Version
Ultra Cloud Core SMI	2020.02.2.33
Ultra Cloud Core SMF	2021.02.1.i309

## Related Documentation

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

<https://www.cisco.com/c/en/us/support/wireless/ultra-cloud-core-serving-gateway-function/products-installation-and-configuration-guides-list.html>

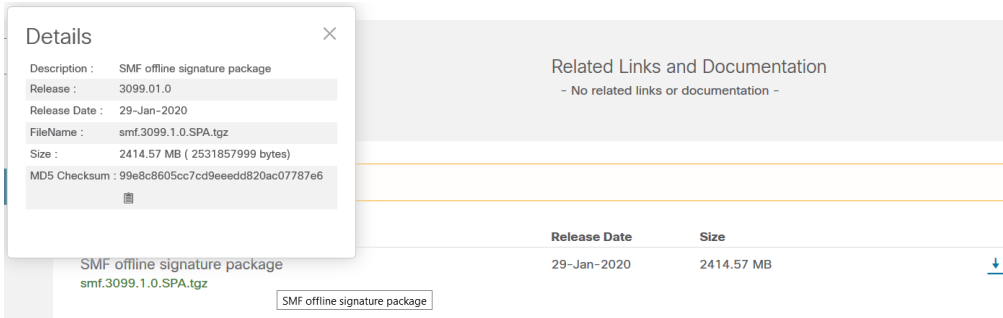
## Installation and Upgrade Notes

This Release Notes 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.



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

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

The software images are signed via x509 certificates. For information and instructions on how to validate the certificates, refer to the .README file packaged with the software.

## 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
<a href="#">CSCv53622</a>	[cnSGW] Intermittent issue - eMPS dscp marking happening incorrect
<a href="#">CSCv58517</a>	cnSGW-sequence number value is not updating properly at the time of multi-bearer deactivation
<a href="#">CSCv59735</a>	[cn-sgw-infra]- Crash when MBRequest is received less number of bearer context - BGIPC improvement
<a href="#">CSCv67254</a>	udp-proxy pod restart seen during 4M call model scale test (CDL-503)
<a href="#">CSCv87234</a>	DBCFl received from PGW with cause CNF at msg/bearer level not deleting bearer at cnSGW
<a href="#">CSCv87237</a>	DBCcmd with multiple EBI with few non-existing ebi is rejected at cnSGW
<a href="#">CSCv87695</a>	[SVI-CNSGW] panic observed at SxSession GenericMsg DeleteBearerProcedure
<a href="#">CSCv90380</a>	sgw-service pod restarts observed on the SMF with build - ccg.2021.02.1.i280
<a href="#">CSCv95372</a>	[cn-SGW]: Extra Bearer in MBC processed incorrectly

## 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](#).

Bug ID	Headline	Behavior Change
<a href="#">CSCv98303</a>	[cnSGW] : LCI/OCI sent from UP in SxEstabResp is not processed by protocol-pod	No
<a href="#">CSCv40559</a>	Non Unique key in show sub all CLI must have imsi, imei and msisdn	Yes
<a href="#">CSCv45518</a>	sgw-service pod crashes seen when scaling call-model to 1M subs	No

Resolved Bugs for this Release

Bug ID	Headline	Behavior Change
<a href="#">CSCvy49770</a>	cnSGW- ProtoToPFCPLibSessionModReq-encodeSessionModReqUsingGolangEncoder- ie.EncodeCreateURRRRIE	No
<a href="#">CSCvy69577</a>	[cnSGW] overload-exclude profile to support exclusion based on only APN-NI & APN-NI+OI both	Yes
<a href="#">CSCvy81103</a>	MBR-CBR-UBR collision	No
<a href="#">CSCvy81108</a>	Some samples are not aligned with the time axis in dashlets when selected period is 1w or longer	No
<a href="#">CSCvy81356</a>	Panic seen on gtpc-ep pod	No
<a href="#">CSCvy84553</a>	Panic when cause is missing in delete bearer command failure indication msg	No
<a href="#">CSCvy85889</a>	DDN Ack waiting and HO CSReq (OI=1), Handover CSReq not processing	No
<a href="#">CSCvy90971</a>	cnSGW- should not send 5GSIWKI flag to SMF	No

## Cloud Native Product Version Numbering System

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



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 provide descriptions for the packages that are available with this release.

Obtaining Documentation and Submitting a Service Request

**Table 2 - Release Package Information**

Software Packages	Description
cpg.<version>.SPA.tgz	The offline release signature package. This package contains the deployment software as well as the release signature, certificate, and verification information.

**NOTE:** The cpg.<version>.SPA.tgz software package is common to both the cnSGWc and SMF 5G Network Functions (NF). The deployment and configuration procedure determines the NF deployment.

## 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>.

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 ANY KIND, 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 WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR 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](http://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)

© 2021 Cisco Systems, Inc. All rights reserved.