



# Release Notes for the Ultra Cloud Core Policy Control Function

## Version 2021.04.1

**First Published:** November 24, 2021

**Last Updated:** November 24, 2021

### Introduction

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

### Release Package Version Information

| Software Packages     | Version   |
|-----------------------|-----------|
| pcf.2021.04.1.SPA.tgz | 2021.04.1 |

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

### Verified Compatibility

| Products             | Version      |
|----------------------|--------------|
| Ultra Cloud Core SMI | 2020.02.2.33 |
| Ultra Cloud CDL      | 1.6.x        |

For information on the Ultra Cloud Core SMI release, refer to the SMI documents available at:

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

### 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-policy-control-function/tsd-products-support-series-home.html>

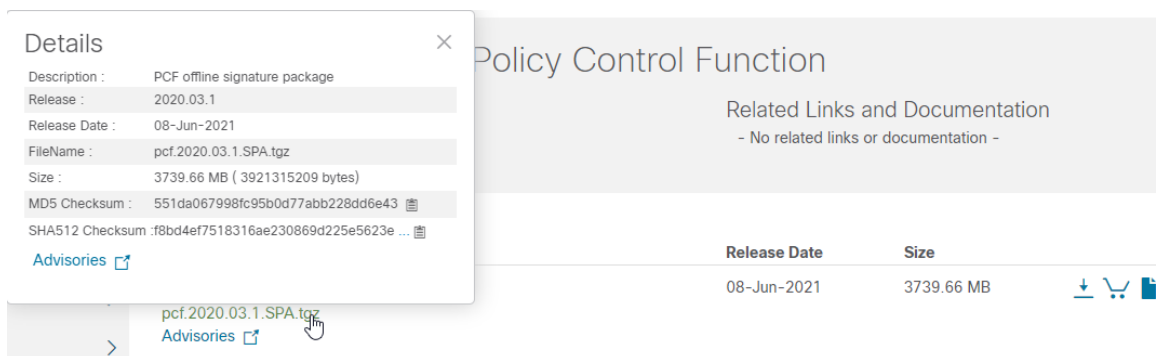
### Installation and Upgrade Notes

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<br><br>> certutil.exe -hashfile <filename>.<extension> SHA512                                   |
| Apple MAC  | Open a terminal window and type the following command<br><br>\$ shasum -a 512 <filename>.<extension>  |
| Linux  | Open a terminal window and type the following command<br><br>\$ sha512sum <filename>.<extension><br><br>Or<br><br>\$ shasum -a 512 <filename>.<extension> |
| <b>NOTES:</b><br><br><filename> is the name of the file.<br><br><extension> 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

PCF 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="#">CSCvz83293</a> | scanner issue with java and openjdk  |
| <a href="#">CSCvz96874</a> | PCF sends Two subsequent N28 subscribe with different session ID when Session is out of date occur |
| <a href="#">CSCvz99318</a> | Media_Type stats print Domain name as UNKNOW   |

## Resolved Bugs for this Release

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

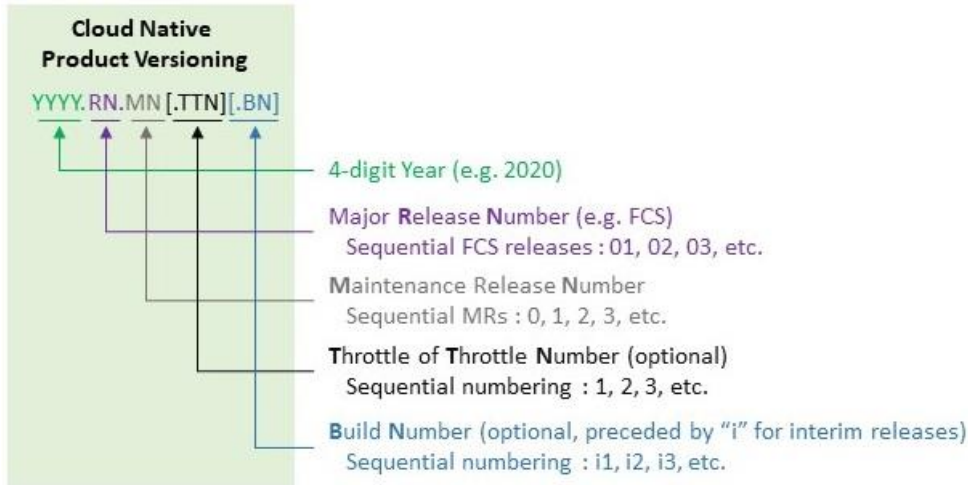
**NOTE:** This software release may contain bug fixes first introduced in other releases. Additional information for all resolved bugs for this release are available in the [Cisco Bug Search Tool](#).

| Bug ID                     | Headline   | Product | Behavior Change |
|----------------------------|--|---------|-----------------|
| <a href="#">CSCwa30041</a> | WPS default bearer uplift not included in N7-Notify for Initial AAR with the flow status as Enable | PCF     | No              |

## 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.



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 software packages that are available with this release.

**Table 2 - Release Package Information**

| Software Packages     | Description   |
|-----------------------|---|
| pcf.<version>.SPA.tgz | The PCF offline release signature package. This package contains the PCF deployment software 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

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