3GPP Specification Compliance for PCF Interfaces

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Products or Functional Area	PCF
Applicable Platform(s)	SMI
Feature Default Setting	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 2: Revision History

Revision Details	Release
Enhancement introduced. PCF supports N5 Interface.	2022.02.0
First introduced.	2020.02.0

Feature Description

The PCF is compliant with the December 2018 and June 2019 compliance version of 3GPP specification for the PCF interfaces such as N7, N25, N28, and Nnrf. The PCF processes the messages from these interfaces as per the compliance profile configured for the corresponding services.

Currently, IE encoding and decoding are supported. Only the existing features work with the June 2019 specification versions. No additional features in the June 2019 version are supported.

Note   The PCF continues to support the older versions of 3GPP specifications and the compliance profile configuration controls the same for the PCF interfaces.

Standards Compliance

The PCF is one of the control plane network functions (NFs) of the 5G core network. The PCF uses different interfaces to communicate with the other NFs or nodes, for example, the N7 interface exists between the SMF and PCF. Each of the PCF interfaces complies with a specific version of 3GPP specification.

Use the following table to determine the compliance mapping of each PCF interface and the 3GPP Standards specification versions.

Table 3: Compliance Mapping

Interface	Relationship	3GPP Specification	Version
Rx	Reference point for interworking with AF and PCF.	29.214 Release 15	15.1.0
N5	Reference point between AF and PCF.	29.514 Release 16	16.7.0
N7	Reference point between SMF and PCF.	29.510 Release 15	15.4.0 and 15.2.0
N15	Reference point between AMF and PCF.	29.507 Release 15	15.4.0
N36	Reference point between UDR and PCF	29.519 Release 15	15.4.0
N28	Reference point between PCF and CHF	29.594 Release 15	15.4.0 and 15.2.0
Lightweight Directory Access Protocol (LDAP)	Reference point between PCF and external subscriber profile.	NA	RFC 4511 Lightweight Directory Access Protocol (LDAP)
Nnrf	Reference point between PCF and NRF.	29.510 Release 15	15.4.0 and 15.4.0

Configuring Interfaces and Endpoints

This section describes how to configure the interfaces/endpoints that interact with PCF.

- For configuring the N5, N7, N15, N25, and N28, see Configuring the REST Endpoints.

- For configuring the LDAP endpoint, see Configuring the LDAP Endpoint.

- Configuring the NRF interface involves the following steps:
    - Configuring the NRF Endpoint for Management Services
    - Configuring the NRF Endpoint for Discovery Service