Oracle® Communications Cloud Native Binding Support Function User's Guide





Oracle Communications Cloud Native Binding Support Function User's Guide, Release 1.5.0

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What's New in This Guide

This section introduces the new/updated features for Release 1.5.0 in Oracle Communications Cloud Native Binding Support Function (BSF) User's Guide.

New/Updated Features

For BSF Release 1.5.0, this guide has been updated to include the following features:

• Support for Session Viewer has been added. See Session Viewer



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Introduction

Binding Support Function (BSF) provides a PDU session binding functionality, which ensures that an AF request for a certain PDU Session reaches the relevant PCF holding the PDU Session information. This service:

- Allows Policy Control Function users to register, update, and remove the binding information
- Allows NF consumers to retrieve the binding information

References

This section provides the details of the references for Binding Support Function.

Binding Support Function Cloud Native Installation and Upgrade Guide

Acronyms

This section provides the details of the acronyms used in the document.

Table 1-1 Acronyms

Field	Description
AF	Application Function
BSF	Binding Support Function
FQDN	Fully Qualified Domain Names
GPSI	Generic Public Subscription Identifier
HTTP	Hypertext Transfer Protocol
NEF	Network Exposure Function
NF	Network Function
NRF	NF Repository Function
PCF	Policy Control Function
OCPM	Oracle Communications Policy Management
PDU	Protocol Data Unit
RDBMS	Relational Database Management System
S-NSSAI	Single Network Slice Selection Assistance Information. An S-NSSAI is comprised of: - A Slice/Service type (SST), which refers to the expected Network Slice behaviour in terms of features and services; - A Slice Differentiator (SD), which is an optional information that complements the Slice/Service type(s) to differentiate amongst multiple Network Slices of the same Slice/Service type.
SMF	Session Management Function
SUPI	Subscription Permanent Identifier
UDSF	Unstructured Data Storage network function



Table 1-1 (Cont.) Acronyms

Field	Description
UE	User Equipment



Binding Support Function Architecture

This section provides information about Binding Support Function Architecture.

The BSF Management Service is an internal service used for the OCPM BSF/PCF to provide a PDU session binding functionality, which ensures that an AF request for a certain PDU Session reaches the relevant PCF holding the PDU Session information.

The service implements the Binding Support Management Service as defined in 3GPP TS 29.521 [4].

The service allows consumers to register, deregister, and discover the binding information.

Binding Support Function Management Service Architecture

BSF Management Service is designed as a micro service that can be deployed in a standalone BSF.

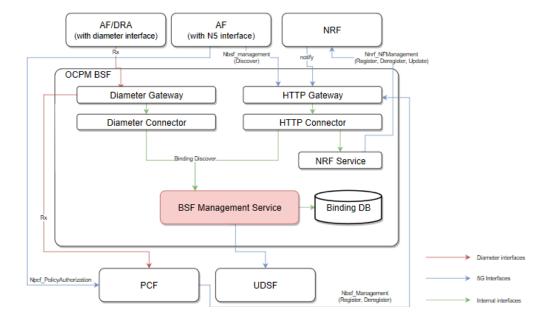


Figure 2-1 Service Management Architecture

Note:

BSF Management Service only supports storing, removing, and querying binding information from RDBMS, and additional storage options. For example, In-memory DB, and UDSF.



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Configuring Binding Support Function

This section provides information for configuring Binding Support Function.

Global Configurations

Table 3-1 provides information for configuring global configurations for BSF.

Table 3-1 Global Configurations

Field	Description
Enable Tracing	Enables tracing. Default Value : TRUE
	Data Type: Boolean
	Input: Switch
Enable Metrics	Enables metrics. Default Value : TRUE
	Data Type: Boolean
	Input: Switch

Configuring Service Management

Table 3-2 provides the details for configuring service management.

Table 3-2 Service Management

Field	Description	
Server Root URL	Indicates the URL for server root. Data Type: String	
	Input: Text	
Root Log Level	Indicates the status of root log level. Default Value: WARN	
	Data Type: String	
	Input: Select	
	The available options are:	
	 TRACE DEBUG INFO WARN ERROR ALWAYS 	
Log Level		



Table 3-2 (Cont.) Service Management

Field	Description
Logger Name	Indicates the name for the logger. Default Value : TRUE
	Data Type: String
	Input: Text
LEVEL	Default Value: TRUE
	Data Type: String
	Input: Select
	The available options are:
	• TRACE
	• DEBUG
	• INFO
	• WARN
	• ERROR
	• ALWAYS

Session Viewer

The Session Viewer displays detailed session information for a specific subscriber. Within the session viewer, you can enter query parameters to render session data for a specific subscriber. This section provides information about viewing the sessions.

To view the sessions:

- 1. From the navigation menu, under **BSF**, click **Session Viewer**. The Session Viewer page appears.
- 2. a. Enter the value of the following fields in the Address group:
 - IPV4 Address
 - IPV6 Prefix
 - IP Domain
 - MAC Address
 - **b.** Enter the value of the following fields in the **User** group:
 - SUPI
 - GPSI
 - **c.** Enter the value of the following fields in the **Slice Information** group:
 - DNN
 - S-NSSAI_SST
 - S-NSSAI_SD
- 3. Click **Query**. Information about the subscriber session(s) is displayed.

If session data is not available, the error is displayed along with No session found.

