

Oracle® Communications

Cloud Native Binding Support Function User's Guide



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The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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What's New in This Guide

This section introduces the new/updated features in Oracle Communications Cloud Native Binding Support Function User's Guide.

New/Updated Features

There are no documentation updates in this guide. This guide has been republished as part of the bundled documentation offering for Cloud Native Core Release 2.2.0.

1

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

2

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.

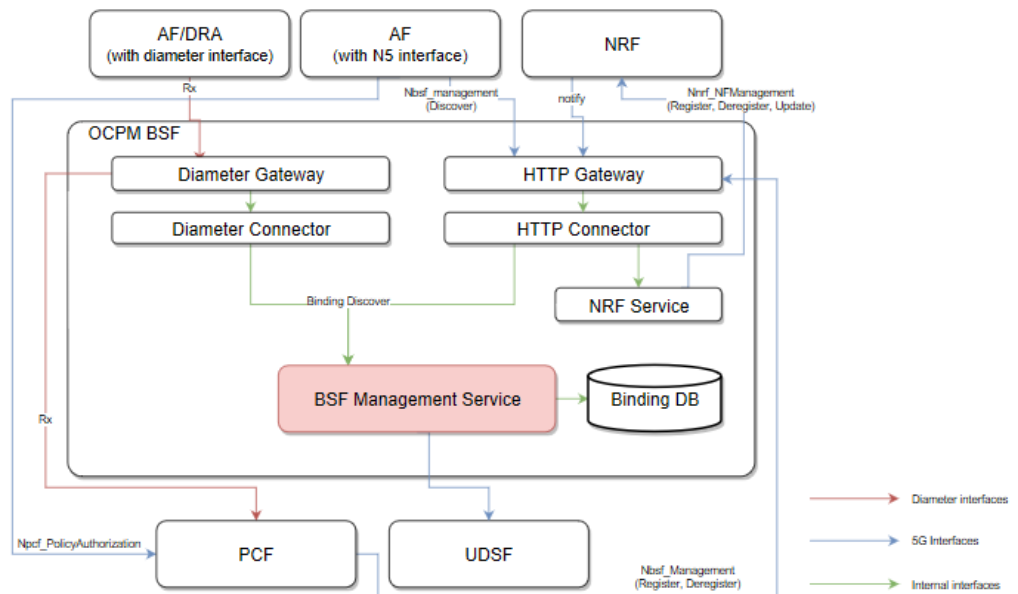
The service implements the Binding Support Management Service as defined in 3GPP TS 29.521 [4].

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.

3

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: <ul style="list-style-type: none">• 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: <ul style="list-style-type: none"> • TRACE • DEBUG • INFO • WARN • ERROR • ALWAYS

Configuring Diameter Peer

[Table 3-3](#) provides information about the diameter peer configuration.

Table 3-3 Diameter Peer Configuration

Field	Description
ID	Indicates the ID of the diameter peer. Data Type: String Input: Text
Name	Indicates the name of the diameter peer. Data Type: String Input: Text
Description	Provides the details of diameter peer. Data Type: String Input: Text
Diameter Realm	Indicates the diameter realm. Data Type: String Input: Text
Diameter Identity	Indicates the diameter identity. Data Type: String Input: Text
Initiate Connection	When enabled, initiates connection Data Type: Boolean Input: Switch

Table 3-3 (Cont.) Diameter Peer Configuration

Field	Description
Watchdog Interval	Indicates the Watchdog interval. Default Value: TRUE Data Type: Boolean Input: Switch
Transport	Indicates the transport details. Default Value: TRUE Data Type: Boolean Input: Select The available options are: <ul style="list-style-type: none"> • TCP • SCTP
Connections	Indicates the number of connections. Default Value: TRUE Data Type: Integer Input: Text
Max Incoming Streams	Indicates the maximum number of incoming streams. Default Value: TRUE Data Type: Integer Input: Text
Max Outgoing Streams	Indicates the maximum number of outgoing streams. Default Value: TRUE Data Type: Integer Input: Text

Configuring Diameter Route Table

Table 3-4 provides the details for configuring the diameter route table.

Table 3-4 Diameter Route Table

Field	Description
Name	Indicates the name of the diameter route table.
Description	Indicates the description for diameter route table.
Default Route	When enables, determines the default route.
User ID Type	Indicates the type of User ID. The available options are: <ul style="list-style-type: none"> • SUPI • MSISDN
User ID	Indicates the User ID.

Table 3-4 (Cont.) Diameter Route Table

Field	Description
Action	Provides the details of the action. The available options are: <ul style="list-style-type: none">• PROXY• RELAY• LOCAL
Server ID	Indicates the details of Server ID.
Save	Click to Save the Diameter Route Table.
Cancel	Click to Cancel the changes you made to Diameter Route Table