



# PCC-Policy-Service Configuration Mode Commands



## Important

This configuration mode is supported from StarOS Release 12.1 onward.

## Command Modes

The PCC-Policy-Service Configuration mode provides a mechanism for the Intelligent Policy Control Function (IPCF) to manage the external interfaces required for policy authorization purpose between IPCF and PCEF Bearer Binding and Event Reporting Function (BBERF). The PCC-Policy-Service manages **Gx/Gx** based on the Diameter dictionary used.

Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

**configure** > **context** *context\_name* > **pcc-policy-service** *service\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```



## Important

The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).



## Important

For information on common commands available in this configuration mode, refer to the [Common Commands](#) chapter.

- [associate pcc-service](#), on page 2
- [diameter dictionary](#), on page 3
- [diameter origin end-point](#), on page 4
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## associate pcc-service

This command associates a pre-configured PCC-Service with a PCC-Policy-Service for IPCF configuration.

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### Product

IPCF

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### Privilege

Security Administrator, Administrator

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### Command Modes

Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

**configure** > **context** *context\_name* > **pcc-policy-service** *service\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

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### Syntax Description

**associate pcc-service** *pcc\_service\_name*  
**[no] associate pcc-service**

#### **no**

Removes/disassociate the configured PCC-Service from this PCC-Policy-Service instance configured for IPCF configuration.

#### ***pcc\_service\_name***

Specifies the name of a pre-configured PCC-Service configured in Context Configuration mode for IPCF configuration.

The *pcc\_service\_name* is name of a predefined PCC-Service instance and must be an alphanumeric string from 1 through 63 characters.

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### Usage Guidelines

Use this command to associate a pre-configured PCC-Service instance for IPCF configuration.




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#### Important

For more information on PCC-Service configuration, refer *PCC-Service Configuration Mode Commands*.

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### Example

Following command binds a PCC-Service named *pcc\_svc1* with in a PCC-Policy-Service.

```
associate pcc-service pcc_svc1
```

Following command removes an associated PCC-Service named *pcc\_svc1* from a PCC-Policy-Service.

```
no associate pcc-service pcc_svc1
```

# diameter dictionary

This command assigns a Diameter dictionary for **Gx/Gxa** messaging with a PCC-Policy-Service for IPCF configuration.

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**Product** IPCF

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**Privilege** Security Administrator, Administrator

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**Command Modes** Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

**configure > context** *context\_name* > **pcc-policy-service** *service\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

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**Syntax Description** **diameter dictionary** {**gxa-standard** | **r7-standard** | **standard**}  
**default diameter dictionary**

## default

Sets the Diameter **Gx** dictionary to default dictionary **standard** (3GPP Rel. 8 standard) for a PCC-Policy-Service instance configured for IPCF configuration.

## gxa-standard

Default: Disabled

Sets the Diameter **Gxa** dictionary to be used by a PCC-Policy-Service instance configured for IPCF configuration over **Gxa** interface to 3GPP Rel. 8 standard.

## r7-standard

Default: Disabled

Sets the Diameter **Gx** dictionary to be used by a PCC-Policy-Service instance configured for IPCF configuration over **Gx** interface to 3GPP Rel. 7 standard.

## standard

Default: Enabled

Sets the Diameter **Gx** dictionary to be used by a PCC-Policy-Service instance configured for IPCF configuration over **Gx** interface to 3GPP Rel. 8 standard.

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## Usage Guidelines

Use this command to configure the PCC-Policy-Service to determine which of the 3GPP dictionary to be used for **Gx** or **Gxa** interface messaging for policy and/or quota management.

## Example

Following command sets the PCC-Policy-Service to use 3GPP Rel. 8 standard dictionary for **Gx** interface and policy management related messaging in a PCC-Policy-Service.

```
default diameter dictionary
```

## diameter origin end-point

This command binds/associates a pre-configured Diameter host/realm (PCEF/BBERF) over **Gx/Gxa** interface with a PCC-Policy-Service to be used for subscriber service control and policy profile management.

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### Product

IPCF

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### Privilege

Security Administrator, Administrator

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### Command Modes

Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

**configure** > **context** *context\_name* > **pcc-policy-service** *service\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

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### Syntax Description

**diameter origin endpoint** *dia\_endpoint\_name*  
**no diameter origin endpoint**

#### **no**

Removes the associated Diameter Origin Endpoint configuration from PCC-Policy-Service instance configured for IPCF configuration.

#### **any**

Sets the PCC-Policy-Service instance to use any available PCEF/BBERF node for policy interfaces (**Gx/Gx-like**) support.

#### ***dia\_endpoint\_name***

The *dia\_endpoint\_name* is a predefined Diameter origin endpoint node and must be an alphanumeric string from 1 through 63 characters.

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### Usage Guidelines

Use this command to bind the PCEF/BBERF node over **Gx/Gx-like** interface by associating a pre-configured Diameter Origin Endpoint with a PCC-Policy-Service.

The Diameter origin endpoint must be a pre-configured instance in the Context Configuration Mode. For more information on Diameter origin endpoint configuration, refer *Diameter Endpoint Configuration Mode Commands* chapter.

### Example

Following command associates a pre-configured Diameter endpoint node configuration named *pcef\_1* with a PCC-Policy-Service for policy profile management.

```
diameter origin endpointpcef_1
```

Following command removes the pre-associated Diameter endpoint node configuration named *pcef\_1* with a PCC-Policy-Service.

```
no diameter origin endpoint
```

## ehrpd-access-bcm

This command configures the PCC-Policy-Service to accept the applicable Bearer-Control-Mode for eHRPD access over **Gxa** interface on IPCF.

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**Product** IPCF

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**Privilege** Security Administrator, Administrator

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**Command Modes** Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

**configure > context** *context\_name* > **pcc-policy-service** *service\_name*

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

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**Syntax Description** **ehrpd-access-bcm** {**as-requested** | **ue-nw** | **ue-only**}  
**default** **ehrpd-access-bcm**

### default

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from Application Server (AS) for eHRPD access over **Gxa** interface on IPCF node.

### as-requested

Default: Enabled.

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from Application Server (AS) for eHRPD access over **Gxa** interface on IPCF node.

### ue-nw

Default: Disabled.

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from UE and/or network element for eHRPD access over **Gxa** interface on IPCF node.

### ue-only

Default: Disabled.

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from UE only for eHRPD access over **Gxa** interface on IPCF node.

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### Usage Guidelines

Use this command to set the PCC-Policy-Service to accept the Bearer-Control-Mode request from AS or UE or Network for eHRPD access over **Gxa** interface on IPCF node.

**Example**

Following command sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from AS for eHRPD access over **Gxa** interface on IPCF node.

```
default ehrpd-access-bcm
```

Following command sets the PCC-Policy-Service to accept the Bearer-Control-Mode request only from UE for eHRPD access over **Gxa** interface on IPCF node.

```
ehrpd-access-bcm ue-only
```

## gprs-access-bcm

This command configures the PCC-Policy-Service to accept the applicable Bearer-Control-Mode for GPRS access over **Gx** interface on IPCF.

<b>Product</b>	IPCF
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration <b>configure &gt; context</b> <i>context_name</i> > <b>pcc-policy-service</b> <i>service_name</i> Entering the above command sequence results in the following prompt: <i>[context_name]host_name(config-pccpolicy-service)#</i>
<b>Syntax Description</b>	<b>gprs-access-bcm</b> { <b>as-requested</b>   <b>ue-nw</b>   <b>ue-only</b> } <b>default gprs-access-bcm</b>

**default**

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from Application Server (AS) for GGSN access over **Gx** interface on IPCF node.

**as-requested**

Default: Enabled.

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from Application Server (AS) for GGSN access over **Gx** interface on IPCF node.

**ue-nw**

Default: Disabled.

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from UE and/or network element for GGSN access over **Gx** interface on IPCF node.

**ue-only**

Default: Disabled.

Sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from UE only for GGSN access over **Gx** interface on IPCF node.

### Usage Guidelines

Use this command to set the PCC-Policy-Service to accept the Bearer-Control-Mode request from AS or UE or Network for GGSN access over **Gx** interface on IPCF node.

### Example

Following command sets the PCC-Policy-Service to accept the Bearer-Control-Mode request from AS for GGSN access over **Gx** interface on IPCF node.

```
default gprs-access-bcm
```

Following command sets the PCC-Policy-Service to accept the Bearer-Control-Mode request only from UE for GGSN access over **Gx** interface on IPCF node.

```
gprs-access-bcm ue-only
```

## max policy-sessions

This command configures the maximum limit of the policy sessions allowed in a PCC-Policy-Service instance on IPCF.

### Product

IPCF

### Privilege

Security Administrator, Administrator

### Command Modes

Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

```
configure > context context_name > pcc-policy-service service_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

### Syntax Description

```
max policy-sessions max_session
default max policy-sessions
```

### default

Sets the maximum policy sessions allowed in PCC-Policy-Service instance to default value of 10000 sessions.

### max\_session

Default: 10000

Specifies the maximum number of policy sessions configured in PCC-Policy-Service to allow to be connected in PCC-Quota service instance.

*max\_session* must be an integer between 0 and 4000000.

### Usage Guidelines

Use this command to set the maximum number of policy sessions allowed by a PCC-Policy-Service instance on IPCF.

**Example**

Following command sets the maximum number of policy sessions allowed in PCC-Policy-Service instance to 10000.

```
default max policy-sessions
```

## subscriber-binding-identifier

This command specifies the subscriber binding identifier to be used by **bindmux** for binding different subscriber session to PCC-Policy-Service on IPCF node.

<b>Product</b>	IPCF
<b>Privilege</b>	Security Administrator, Administrator
<b>Command Modes</b>	Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration <b>configure</b> > <b>context</b> <i>context_name</i> > <b>pcc-policy-service</b> <i>service_name</i> Entering the above command sequence results in the following prompt: <pre>[context_name]host_name(config-pccpolicy-service)#</pre>
<b>Syntax Description</b>	<b>subscriber-binding-identifier</b> { <b>imsi</b>   <b>msisdn</b>   <b>nai</b>   <b>sip-uri</b> } <b>default subscriber-binding-identifier</b>

**default**

Sets the subscriber binding identifier to default value; i.e. IMSI, to be used by **bindmux** for binding different subscriber session to PCC-Policy-Service on IPCF node.

**imsi**

Default: Enabled.

Sets the subscriber binding identifier as IMSI to be used by **bindmux** for binding different subscriber session to PCC-Policy-Service on IPCF node.

**msisdn**

Default: Disabled.

Sets the subscriber binding identifier as MSISDN to be used by **bindmux** for binding different subscriber session to PCC-Policy-Service on IPCF node.

**nai**

Default: Disabled.

Sets the subscriber binding identifier as Network Access Identifier (NAI) to be used by **bindmux** for binding different subscriber session to PCC-Policy-Service on IPCF node.



**sip-uri**

Default: Disabled.

Sets the subscriber binding identifier as SIP URI (Uniform Resource Identifier) to be used by **bindmux** for binding different subscriber session to PCC-Policy-Service on IPCF node.

**Usage Guidelines**

Use this command to configure the **bindmux** in PCC-Policy-Service instance on IPCF node to use specific subscriber identifier for binding different subscriber session to IP-CAN session.

**Example**

The following command sets the PCC-Policy-Service to use IMSI as subscriber binding identifier for IP-CAN session on an IPCF node.

```
default subscriber-binding-identifier
```

## subscription-id-absence-action

This command configures the PCC-Policy-Service instance to handle the Initial Credit Control Request (CCR-I) messages during initial authentication over **Gx** interface when CCR-I message received by IPCF node is without a valid Subscription-Id AVP (IMSI, NAI, E164 etc.).

**Product**

IPCF

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

```
configure > context context_name > pcc-policy-service service_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

**Syntax Description**

```
{default} subscription-id-absence-action initial-auth {continue | reject}
```

**default**

Sets the PCC-Policy-Service instance to reject the CCR-I message during initial authentication over **Gx** interface if received without a valid Subscription-Id AVP (IMSI, NAI, E164 etc.) on IPCF node.

**continue**

Default: Disabled.

Sets the PCC-Policy-Service instance to accept the CCR-I message and continue with the session if CCR-I is received without a valid Subscription-Id AVP (IMSI, NAI, E164 etc.) on IPCF node.

In this case, IPCF accepts the CCR-I message and will do the PCC provisioning as per the operator configuration in associated PCC-Service.

**reject**

Default: Enabled.

Sets the PCC-Policy-Service instance to reject the CCR-I message and continue with the session if CCR-I is received without a valid Subscription-Id AVP (IMSI, NAI, E164 etc.) on IPCF node.

In this case, IPCF will send CCA-I message with Result-code as **Permanent Error** and rejects the session establishment with PCEF.

**Usage Guidelines**

Use this command to configure the PCC-Policy-Service instance to handle the Initial Credit Control Request (CCR-I) message processing during the initial authentication over **Gx** interface if CCR-I message received by IPCF node has no valid Subscription-Id AVP.

**Example**

The following command sets the PCC-Policy-Service to reject the CCR-I request and terminations the session establishment with PCEF.

```
default subscription-id-absence-action initial-auth
```

## unsolicited-provisioning

This command is used to enable/disable the support for unsolicited time-of-day-based procedures to PCC-Policy-Service on IPCF node.

**Product**

IPCF

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > Context Configuration > PCC Policy Service Configuration

```
configure > context context_name > pcc-policy-service service_name
```

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-pccpolicy-service)#
```

**Syntax Description**

```
[no | default] unsolicited-provisioning time-of-day
```

**default**

Sets the support for unsolicited time-of-day-based procedures to default mode; i.e. disabled, in PCC-Policy-Service instance on IPCF node.

**no**

Removes the configured support for unsolicited time-of-day-based procedures in PCC-Policy-Service instance on IPCF node.

**Usage Guidelines**

Use this command to enable/disable the support for unsolicited time-of-day-based procedures to PCC-Policy-Service on IPCF node.

By default this command is disabled.

**Example**

The following command enables the unsolicited time-of-day-based procedures to PCC-Policy-Service on an IPCF node.

```
unsolicited-provisioning time-of-day
```

