

IMEI Profile Configuration Mode

Essentially, an IMEI profile is a template which groups a set of device-specific commands that may be applicable to one or more IMEIs. The same IMEI profile can be associated with multiple IMEI ranges and multiple operator policies.

An SGSN supports a total of 1000 IMEI profile configurations.

Command Modes

The IMEI profile configuration mode defines a set of parameters controlling the SGSN behavior when a Request is received from a device in the specified IMEI (International Mobile Equipment Identity) range. An IMEI profile is a key element in the Operator Policy feature and an IMEI profile is not used or valid unless it is associated with an IMEI range and this association is specified in an operator policy (see the *Operator Policy Configuration Mode Commands* chapter elsewhere in the *Command Line Interface Reference*).

Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-imei-profile-profile_name)#
```

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, on page 2
- blacklist, on page 2
- description, on page 3
- direct-tunnel, on page 4
- ggsn-address, on page 4
- ignore-pdp-data-inactivity, on page 5
- pdp-activate, on page 6

associate

Associate an APN remap table with this IMEI profile.

Note that an APN remap table can be associated with an IMEI profile before the table has actually been created/configured.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-imei-profile-profile_name)#
```

Syntax Description

associate apn-remap-table *table_name*
no associate apn-remap-table

no

Disables the configured remap table association.

table_name

Define the name of an APN remap table that is to be associated with this IMEI profile for call routing based in IMEI.

Usage Guidelines

Use this command to associate an APN remap table with this IMEI profile. With such an association, it is possible to override an APN call-routing based on an IMEI.

For example, with the APN exceptions defined in an APN remap table (refer to the *APN Remap Table Configuration Mode* chapter), a blank APN or an incorrect APN could be overriden. So during PDP Activation for in incoming call, the call could be rerouted based on an IMEI in the range defined for the IMEI profile.

Example

Associate the APN remap table 'remapHO' (remaps all calls with blank APNS to the head-office) to this IMEI profile:

associate apn-remap-table *remapHO*

blacklist

Blacklist all mobile devices that fit the IMEI definitions associated with this IMEI profile.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-imei-profile-profile_name)#`

Syntax Description

`blacklist`
`remove blacklist`

remove

Including this keyword with the command, removes the blacklist command from the IMEI profile configuration.

Usage Guidelines

Blacklists subscribers whose devices bear IMEI that match the defined IMEI range for this profile.

Example

Use this command to black list all subscribers with IMEI that fall within the range set for this IMEI profile:

`blacklist`

description

Define a descriptive string relevant to the specific APN profile.

Product

SGSN

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-imei-profile-profile_name)#`

Syntax Description

`description` *`description`*
`remove description`

remove

Removes the configured description from this APN profile.

description

Enter an alphanumeric string of 1 to 100 alphanumeric characters. The string may include spaces, punctuation, and case-sensitive letters if the string is enclosed in double quotes (").

Usage Guidelines Define information that identifies this particularly APN profile.

Example

Indicate that this IMEI profile *IMEIprof1* is to be used for customers in the United Kingdom and that the profile:

```
description "IMEIprof1 defines routing actions based on IMEI for customers in the UK."
```

direct-tunnel

Instruct the SGSN to enable/disable a direct tunnel between the RNC and the GGSN based on the IuPS service configuration.

Product SGSN

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-imei-profile-profile_name)#
```

Syntax Description

```
direct-tunnel check-iups-service
no direct-tunnel
```

no direct-tunnel

This command instructs the SGSN to disable the direct tunnel function between the GGSN and the RNC.

Usage Guidelines Direct tunnel is enabled by default on the GGSN and often on the RNC. This leaves it to the SGSN's configuration to actually enable or disable a direct tunnel.

With the SGSN, the options for configuring a direct tunnel are complex -- enable/disable on the basis of APNs, or RNCs, or GGSNs, or on the basis of the IMEI range. Refer to the *SGSN Administration Guide* for configuration details.

Example

Assuming the IuPS service configuration has enabled DT for associated RNCs, then use this command to enable DT from the RNC to the GGSN associated with this IMEI profile:

```
direct tunnel check-iups-service
```

ggsn-address

Identify the target GGSN for traffic being managed by this IMEI profile.

Product SGSN

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-imei-profile-profile_name)#`

Syntax Description **ggsn-address** *IPv4/IPv6_address*

IPv4/IPv6_address

Enter the IP address of the target GGSN. Enter the address in either standard IPv4 dotted decimal format or in standard IPv6 colon notation format.

Usage Guidelines Use this command to define the IP address of the target GGSN to be associated with this IMEI profile.

Example

The following command identifes the address of the GGSN associated with this IMEI profile as 209.165.200.225

ggsn-address *209.165.200.225*

ignore-pdp-data-inactivity

On executing this command the SGSN ignores PDP Data Inactivity configuration under the APN profile for one or more matching IMEIs.

Product SGSN

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-imei-profile-profile_name)#`

Syntax Description
ignore-pdp-data-inactivity
remove ignore-pdp-data-inactivity

remove

This command is used to disable or remove the option to ignore PDP data inactivity from the IMEI profile.

Usage Guidelines

The SGSN supports options to configure PDP Data Inactivity detection duration and actions to be performed on timeout under the APN-Profile. The following configurable actions are supported under APN-Profile in case of PDP Data Inactivity detection in the PDP context:

1. De-activate all PDPs of the subscriber
2. De-activate all PDPs of the bundle (all linked PDPs)
3. Detach the subscriber. This action is triggered when:
   - Data in-activity is detected for all PDPs
   - Data in-activity is detected for any of the PDPs

On the Detection of the PDP Data Inactivity, depending on the configuration option the SGSN either de-activates the PDP or detaches the subscriber.

The **ignore-pdp-data-inactivity** CLI is added to provide an option under the IMEI-Profile to ignore PDP Data Inactivity configuration for one or more IMEIs. On configuring this CLI, the SGSN ignores the application of in-activity configuration (configured in the APN-Profile) for a specified set of IMEI's.

Note The IMEI range or set of IMEI's are mapped to specific IMEI-Profile using the CLI configuration option under Operator-policy.

Example

Use this command to ignore PDP Data Inactivity configuration under the APN profile for one or more matching IMEIs.

ignore-pdp-data-inactivity

pdp-activate

This command enables the operator to configure the SGSN to reject Secondary PDPActivation Requests from the UE based on IMEI range.

Product

SGSN

Privilege

Administrator

Command Modes

Exec > Global Configuration > IMEI Profile Configuration

configure > imei-profile *profile_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(config-imei-profile-profile_name)#`

Syntax Description

`[ remove ] pdp-activate { drop | restrict } secondary-activation access-type { gprs | umts }`

remove

Removes the configured value and returns the pdp-activate configuration to the default 'not configured' state.

drop

This keyword causes the GSN to ignore the Request.

restrict

This keyword instructs the SGSN to reject Secondary PDP Activation Requests.

access-type { gprs | umts }

This keyword instructs the SGSN to ignore or reject Secondary PDP Activation Requests on the basis of the UE's access network type:

- **gprs** : from a 2G network.
- **umts** : from a 3G network.

Usage Guidelines

The SGSN administrator can use this command to configure the IMEI profile in the operator policy to either ignore or reject Secondary PDP Activation Requests from UEs based on an IMEI range and UE access-type.

Restricting secondary PDP activation based on the IMEI (in the IMEI profile) takes precedence over secondary PDP activation that might be configured in the call control profile.

Example

Enable rejection of Secondary PDP Activation Requests for 2G callers:

```
pdp-activate restrict secondary-activation access-type gprs
```