

# APN Remap Table Configuration Mode

**Important** Beginning with Release 16 for SGSN only, an APN Remap Table associated with an IMEI profile overrides a remap table associated with an operator policy. This means activation will be rejected if a local default APN configured, in an APN Remap Table associated with an IMEI profile, cannot be used. This will occur even if a valid local default APN is available in an APN Remap Table associated with an operator policy.

A maximum of 1,000 APN remap tables are supported, and each APN remap table supports a maximum of 100 APN remap entries. Multiple tables can be defined and stored but an operator policy and/or IMEI profile each only support association with a single (one) table per policy/profile configuration. The APN remap table associated with an IMEI profile will be used in IMEI override scenarios.

## Command Modes

APN Remap Table Configuration mode provides the commands to configure parameters for multiple features related to Access Point Name (APN) handling, such as: Default APN, APN Remap, and Wildcard APN. APN remap table is a key element of the Operator Policy feature and a table is not usable (valid) until it has been associated with an operator policy (see the *Operator Policy Configuration Mode Commands*) or an IMEI profile (see the *IMEI Profile Configuration Mode Commands*).

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

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


- apn-remap network-identifier, on page 2
- apn-remap non3gpp-char-apn, on page 4
- apn-remap operator-identifier, on page 5
- apn-selection-default, on page 7
- blank-apn, on page 11
- cc, on page 12
- description, on page 13
- end, on page 14

• exit, on page 14
• wildcard-apn, on page 14

# apn-remap network-identifier

Creates an entry in the APN remap table and provides the ability to override the network identifier part of the APN requested by the UE.

**Product**

MME

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

**Syntax Description**

```
apn-remap network-identifier apn_net_id { new-ni new_apn_net_id
subscription-failure reject  [ orig-apn ] | operator-identifier apn_op_id
{ new-ni new_apn_net_id | value-for-ni-wc new_apn_net_id { new-oi new_apn_op_id
| value-for-oi-mcc mcc | value-for-oi-mnc mnc } [ orig-apn ] + } |
value-for-ni-wc new_apn_net_id [ orig-apn ] }
no apn-remap network-identifier apn_net_id
```

**no**

Deletes the specified APN remap entry from the APN remap table.

**network-identifier *apn_net_id***

Identifies the "old" APN network identifier that is being mapped for replacement.

*apn_net_id* is a string of 1 to 62 characters, including digits, letters, dots (.) and dashes (-). Additionally, one wildcard character ( * ) can be included anywhere within the string.

**subscription-failure**

Subscription failure for requested APN.

**reject**

Specifies the rejection with cause code Unknown or Missing APN.

**new-ni *new_apn_net_id***

Identifies the new (target) network identifier to use when no wildcard character is included in the "old" APN network identifier.

*new_apn_net_id* is a string of 1 to 62 characters, including digits, letters, dots (.) and dashes (-).

**orig-apn**

Enables MME to send the original APN (UE requested APN) in the ATTACH_ACCEPT or ACTIVATE_DEFAULT_BEARER_REQUEST message to the UE. This is an optional keyword.

If this keyword is not configured, then remapped APN is sent back to UE.

**value-for-ni-wc *new_apn_net_id***

Identifies the information to replace the wildcard in the new APN network identifier when a wildcard character is included in the "old" APN network identifier.

*new_apn_net_id* is an alphanumeric string of characters, including dots (.) and dashes (-). This string replaces the wildcard (*) specified in the *apn_net_id*. The two strings together must not exceed 62 characters.

**operator-identifier *apn_op_id* { new-ni *new_apn_net_id* | value-for-ni-wc *new_apn_net_id* { new-oi *new_apn_op_id* | value-for-oi-mcc *mcc* | value-for-oi-mnc *mnc* } [ orig-apn ] + }**

Identifies the "old" APN operator identifier that is being mapped for replacement.

*apn_op_id* is a string of 1 to 18 characters including digits, letters, and dots (.). The entry must be in the following format, where # represents a digit: MNC###.MCC###.GPRS.

Optionally, either one or two wildcard characters ( * ) can be entered. Wildcard characters can be used in place of one # or three # -- for example MNC12*.MCC*.GPRS.

The following options can be configured:

- **new-oi** *new_apn_op_id*: Identifies the new (target) operator identifier to use when no wildcard character is included in the "old" APN operator identifier. *new_apn_op_id* is a string of 1 to 18 characters including digits, letters, and dots (.). The entry must be in the following format, where # represents a digit: MNC###.MCC###.GPRS.
- **value-for-oi-mcc** *mcc*: Identifies the information to replace the wildcard in the new APN operator identifier when a wildcard character is included in the MCC portion of the "old" APN operator identifier; for example MNC###.MCC*.GPRS.
- **value-for-oi-mnc** *mnc*: Identifies the information to replace the wildcard in the new APN operator identifier when a wildcard character is included in the MNC portion of the "old" APN operator identifier; for example MNC*.MCC###.GPRS.

## Usage Guidelines



**Important** Entries in the APN remap table are only valid if the table is associated with an operator policy. The same table can then be associated with an IMEI profile as IMEI-specific remap entries are not supported.

This command defines mapping entries in the APN remap table which supports a range of APN overrides. Mapping can be done one-to-one:

- a "new" APN network identifier (NI) can be mapped to override an "old" APN network identifier (NI) or an "old" APN operator identifier (OI)
- a "new" APN operator identifier (OI) can be mapped to override an "old" APN network identifier (NI) or an "old" APN operator identifier (OI)

Mapping can also be done with wildcards in the "old" APN entry mapped to wildcard replacements to dynamically create "new" APN network/operator identifiers.

**Related Commands:** APN override can also be based on charging characteristics. This type of override mapping is defined with the **cc** command, also part of this configuration mode.

### Example

A one-to-one APN NI remap entry is illustrated by:

```
apn-remap network-identifier 123abc.com new-ni 333CBC.com
```

Create an entry with a wildcard so that part of an incoming APN NI will be replaced - for example, incoming *xyzabcpqr.com* becomes *xyzinternet2pqr.com*.

```
apn-remap network-identifier xyz*pqr.com value-for-ni-wc internet2
```

Replace any incoming APN NI with a new APN NI.

```
apn-remap network-identifier * value-for-ni-wc newnet.com
```

# apn-remap non3gpp-char-apn

This command enables MME to remap the UE requested APN, containing non-3GPP characters, to an operator defined APN.

**Product**

MME

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

**Syntax Description**

```
apn-remap non3gpp-char-apn new-ni new_apn_net_id [ orig-apn ]
no apn-remap non3gpp-char-apn
```

#### no

Disables remapping of UE requested APN with non-3GPP standard characters.

#### new-ni *new_apn_net_id*

Identifies the new (target) network identifier to use when non-3GPP characters are included in the UE requested APN.

*new_apn_net_id* is a string of 1 to 62 characters, including digits, letters, dots (.) and dashes (-).

**orig-apn**

Enables MME to send the original APN (UE requested APN) in the ATTACH_ACCEPT or ACTIVATE_DEFAULT_BEARER_REQUEST message to the UE. This is an optional keyword.

If this keyword is not configured, then remapped APN is sent back to UE.

## Usage Guidelines



**Important** Entries in the APN remap table are only valid if the table is associated with an operator policy. The same table can then be associated with an IMEI profile as IMEI-specific remap entries are not supported.

This command enables MME to remap all UE requested APNs containing non-3GPP characters to the configured new-ni APN.

This CLI is applied only if the UE sessions are not rejected by the new configuration options **policy attach reject-non3gpp-char-apn** and **policy pdn-connect reject-non3gpp-char-apn** under the mme-service. If the UE requested APN contains non-3GPP characters and the **apn-remap non3gpp-char-apn new-ni** CLI command is configured, then this CLI takes precedence over any other matching criterion for APN remapping.

**Related Commands:** APN override can also be based on charging characteristics. This type of override mapping is defined with the **cc** command, also part of this configuration mode.

### Example

The following command enables remapping of UE requested APN with non-3GPP standard characters to 333CBC.com:

```
apn-remap non3gpp-char-apn new-ni 333CBC.com
```

# apn-remap operator-identifier

Creates an entry in the APN remap table and provides the ability to override the operator part of APN requested by the UE.

## Product

MME

SGSN

## Privilege

Security Administrator, Administrator

## Command Modes

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

## Syntax Description

**apn-remap operator-identifier** *apn_op_id* **{ new-oi** *new_apn_op_id* **| value-for-oi-mcc** *mcc* **[ value-for-oi-mnc** *mnc* **] | value-for-oi-mnc** *mnc* **[**

```
value-for-oi-mcc  mcc ] }
no apn-remap operator-identifier apn_op_id
```

**no**

Deletes the specified APN remap entry from the APN remap table.

**operator-identifier *apn_op_id* { new-oi *new_apn_op_id* | value-for-oi-mcc *mcc* [ value-for-oi-mnc *mnc* ] | value-for-oi-mnc *mnc* [ value-for-oi-mcc *mcc* ] }**

Identifies the "old" APN operator identifier that is being mapped for replacement.

*apn_op_id* is a string of 1 to 18 characters including digits, letters, and dots (.). The entry must be in the following format, where # represents a digit: MNC###.MCC###.GPRS.

Optionally, either one or two wildcard characters ( * ) can be entered. Wildcard characters can be used in place of one # or three # -- for example MNC12*.MCC*.GPRS.

The following options can be configured:

- **new-oi** *new_apn_op_id*: Identifies the new (target) operator identifier to use when no wildcard character is included in the "old" APN operator identifier. *new_apn_op_id* is a string of 1 to 18 characters including digits, letters, and dots (.). The entry must be in the following format, where # represents a digit: MNC###.MCC###.GPRS.
- **value-for-oi-mcc** *mcc*: Identifies the information to replace the wildcard in the new APN operator identifier when a wildcard character is included in the MCC portion of the "old" APN operator identifier; for example MNC###.MCC*.GPRS.
- **value-for-oi-mnc** *mnc*: Identifies the information to replace the wildcard in the new APN operator identifier when a wildcard character is included in the MNC portion of the "old" APN operator identifier; for example MNC*.MCC###.GPRS.

**NOTES**:

The first **apn-remap** command above remaps "company.com.apn.epc.mnc456.mcc123.3gppnetwork.org" to "starent.com.apn.epc.mnc987.mcc654.3gppnetwork.org".

The second **apn-remap** command above remaps "starent.com.apn.epc.mnc456.mcc123.3gppnetwork.org" to "starent.com.apn.epc.mnc234.mcc543.3gppnetwork.org".

Wildcards characters (*) can be used in the existing operator identifier.

## Usage Guidelines

**Important** Entries in the APN remap table are only valid if the table is associated with an operator policy. The same table can then be associated with an IMEI profile as IMEI-specific remap entries are not supported.

This command defines mapping entries in the APN remap table which supports a range of APN overrides. Mapping can be done one-to-one:

- a "new" APN network identifier (NI) can be mapped to override an "old" APN network identifier (NI) or an "old" APN operator identifier (OI)

- a "new" APN operator identifier (OI) can be mapped to override an "old" APN network identifier (NI) or an "old" APN operator identifier (OI)

Mapping can also be done with wildcards in the "old" APN entry mapped to wildcard replacements to dynamically create "new" APN network/operator identifiers.

**Related Commands:** APN override can also be based on charging characteristics. This type of override mapping is defined with the **cc** command, also part of this configuration mode.

### Example

A one-to-one APN OI remap entry is illustrated by:

```
apn-remap operator-identifier MNC423.MCC222.GPRS new-oi MNC123.MCC456.GPRS
```

Replace any incoming APN OI with a new APN OI *MNC123.MCC456.GPRS*:

```
apn-remap operator-identifier MNC*.MCC*.GPRS value-for-oi-mnc 123
value-for-oi-mcc 456
```

# apn-selection-default

Enables and configures or disables the Default APN feature for use when the normal APN selection process fails.

**Product**

MME

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

**Syntax Description**

```
apn-selection-default { context-id context_id_value |first-in-subscription[
 orig-apn ] | lowest-context-id  [ orig-apn ] | network-identifier apn_net_id
 [ fallback-apn network-identifier apn_net_id |
fallback-to-first-in-subscription | prefer-single-subscription |
reject-blank-apn | require-dns-fail-wildcard [ orig-apn ] |
require-subscription-apn ] + }
no apn-selection-default { context-id context_id_value |
first-in-subscription | lowest-context-id | network-identifier apn_net_id
}
```

#### no

Delete the configuration statement and disable the default APN feature.

**context-id *context_id_value***

Specifies the usage of APN in subscription record with context ID matching the PDN type if normal APN selection fails. context_id_value must be an integer between 1 and 15.

**first-in-subscription [ orig-apn ]**

Specifies that the first APN in the subscription record matching the requested PDN type is used as the default APN. This applies when normal APN selection fails and if the UE APN is absent and the defined default APN is not a match.

For the SGSN, "first-in-subscription" means the first record from the list of records sent from the HLR (in the same order) with PDP type matching the requested PDP type. With this configuration, if the first record is a wildcard APN it is expected that the wildcard APN be configured. If not, the activation will be rejected.

For MME, if the default APN in the subscription data matches the requested pdn-type, then the default APN is used. Otherwise, the first record from the list of records (apn-list) sent from the HSS with PDP type matching the UE-requested PDP type is selected. The apn-list is sorted according to apn-name.

**orig-apn**: Enables MME to send the original APN (UE requested APN) in the ATTACH_ACCEPT or ACTIVATE_DEFAULT_BEARER_REQUEST message to the UE. This is an optional keyword.

If this keyword is not configured, then re-mapped APN is sent back to UE.

**lowest-context-id [ orig-apn ]**

Specifies that the subscription APN with the lowest context-ID in the subscription record matching the PDN type is used as the default APN when normal APN selection fails.

With this configuration, if the record with the lowest context-ID is a wildcard APN, then it is expected that the wildcard APN has already been configured. If not, the activation will be rejected.

If both **apn-selection-default lowest-context-id** and **apn-selection-default first-in-subscription** options are configured, whichever command was executed (configured) first will be the behavior used.

Starting with Release 14.0, MME also supports use of this keyword.

For MME, if the default APN in the subscription data matches the requested PDN type, then the default APN is used. Otherwise, the **lowest-context-id** from the list of records (apn-list) sent from the HSS with a PDP type matching the UE-requested PDP type is selected.

**orig-apn**: Enables MME to send the original APN (UE requested APN) in the ATTACH_ACCEPT or ACTIVATE_DEFAULT_BEARER_REQUEST message to the UE. This is an optional keyword.

If this keyword is not configured, then remapped APN is sent back to UE.

**network-identifier *apn_net_id***

Specifies the network identifier will be used as the default APN name. *apn_net_id* is a string of 1 through 62 characters, including digits, letters, dots (.) and dashes (-).

In 21.4 and later releases, this keyword is enhanced to support S4-SGSN.

Any of the following optional keywords can be used with **network-identifier** as qualifications.

**fallback-apn network-identifier *apn_net_id***

SGSN only.

Specifies a dummy APN to be used when the default APN is not present in the subscription so that the activation does not fail. With this keyword configured, the context is activated with a dummy APN and the GGSN displays a static page for this APN, instructing the subscriber to subscribe for appropriate services.

*apn_net_id* is a string of 1 to 62 characters, including letters, digits, dots (.) and dashes (-).

**fallback-to-first-in-subscription**

SGSN only.

Uses the APN from the first subscription record when the configured default APN is not available.

**prefer-single-subscription**

SGSN only.

Uses the APN from the subscription record if it is the only record available and normal APN selection fails.

**reject-blank-apn**

SGSN only.

Disables use of the default APN if a blank APN is received.

**require-dns-fail-wildcard [ orig-apn ]**

MME only.

Enables the default APN to be used if the DNS query fails with the requested APN.

**orig-apn**: Enables MME to send the original APN (UE requested APN) in the ATTACH_ACCEPT or ACTIVATE_DEFAULT_BEARER_REQUEST message to the UE. This is an optional keyword.

If this keyword is not configured, then remapped APN is sent back to UE.

In 18.2 and later releases: The **require-dns-fail-wildcard** keyword is also supported by the MME.

In releases prior to 21.4: The **require-dns-fail-wildcard** keyword is not supported for S4-SGSN.

In 21.4 and later releases: The **require-dns-fail-wildcard** keyword is supported for S4-SGSN.

**require-subscription-apn network-identifier *apn_net_id***

SGSN only.

If defined, this APN name must also be included in the subscription data for the default APN feature to function.

*apn_net_id* is a string of 1 to 62 characters, including letters, digits, dots (.) and dashes (-).

## Usage Guidelines

The default APN feature will be used in error situations when the MME or the SGSN cannot select a valid APN via the normal APN selection process. Within an operator policy, an APN remap table with a default APN can be configured for the MME/SGSN to:

- override a requested APN when the HSS/HLR does not have the requested APN in the subscription profile.
- provide a viable APN if APN selection fails because there was no "requested APN" and wildcard subscription was not an option.

The default APN feature can also be used in the event of a DNS query failure with the selected APN, if:

- the **wildcard-apn** command is configured, (requirement only for SGSN)
- a wildcard subscription is present,
- the **require-dns-fail-wildcard** keyword is included with the **apn-selection-default** command then the configured default APN will be used when the DNS query is retried.

In all of the instances outlined above, the MME/SGSN can provide the default APN as an alternate behavior to ensure that PDP context activation is successful.



**Important** For SGSN ONLY - Beginning with Release 16, customers already using an APN remap table that is associated with an IMEI profile **will have to change the existing configuration** to enable the default APN remapping associated with an operator policy rather than the one associated with an IMEI profile. For example, if an existing configuration forced all matching IMEI in a defined IMEI range to use xxx.net APN, the configuration needs to be changed to an APN remap table configuration similar to what is shown below:

Old APN remap table associated with an IMEI profile:

```
apn-selection-default network-identifier xxx.net
```

For a configuration to accomplish the same remapping function, change the APN remap table **associated with an IMEI profile** to the following:

```
apn-remap network-identifier * new-ni xxx.net
```



**Important** For SGSN ONLY - With Release 16, an APN remap table associated with an IMEI profile overrides a remap table associated with an operator policy. This means activation will be rejected if a local default APN configured, in an APN remap table associated with **an IMEI profile**, cannot be used. This will occur even if a valid local default APN is available in an APN remap table associated with **an operator policy**.

For SGSN ONLY - Beginning with Release 16, the following *sample* configuration will enable the operator to bypass APN remapping for a specific IMEI range:

```
config
   operator-policy name OpPol1
      associate call-control-profile OpPol1CCprof1
      associate apn-remap-table RemapOpPol1
      imei-range first start_imei last ending_imei [ sv IMEI_sv ] imei-profile
 name IMEIprof1
      exit
   imei-profile name IMEIprof1
      associate apn-remap-table remapIMEIprof1
      exit
   apn-remap-table  remapIMEIprof1
      exit
   apn-remap-table  RemapOpPol1
      apn-selection-default network-identifier NewAPN.net
      end
```

### Example

The following command enables the default APN feature for APN *HomeNet1* in an APN remap table associated with an operator policy:

**apn-selection-default network-identifier HomeNet1**

For SGSN only - Beginning with Release 16, if the APN remap table is associated with an IMEI profile, for a configuration to accomplish the same remapping function as noted in the sample above, then use syntax similar to the following:

**apn-remap network-identifier * new-ni** *xxx.net*

The following command, in an APN remap table associated with an operator policy, enables use of a default APN selected on the basis of lowest context-ID if the APN is not contained within the subscription:

**apn-selection-default lowest-context-id**

The following command enables use of a default APN if the DNS query fails:

**apn-selection-default network-identifier HomeNet1 require-dns-fail-wildcard**

# blank-apn

Enables the Blank APN feature and defines the APN that will be used when no APN is requested. This command is specific to SGSN.

**Product**

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

`[local]`*`host_name`*`(apn-remap-`*`table_name`*`)#`

**Syntax Description**

**blank-apn network-identifier** *apn_net_id*
**no blank-apn**

#### no

Removes the APN NI from the APN remap table configuration and disables the Default APN feature.

#### network-identifier *apn_net_id*

Identifies the APN network identifier (NI) that will be used when no APN is requested.

*apn_net_id* is a string of 1 to 62 characters, including letters, digits, dots (.) and dashes (-).

**Usage Guidelines**

Use this command to enable the Blank APN feature.

### Example

The following command creates an entry that supplies the *starnet.com* as the APN network identifier whenever a request does not include an APN:

```
blank-apn network-identifier starnet.com
```

# cc

This command maps an APN override based on charging characteristics.

**Product**

MME

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

**Syntax Description**

**cc behavior** *bit_value* **profile** *index_bit* **apn-remap network-identifier** *apn_net_id* **new-ni** *new_apn_net_id* **[ orig-apn ]**
**no cc behavior** *bit_value* **profile** *index_bit* **apn-remap network-identifier** *apn_net_id*

#### no

Disables the configured cc-based remapping behavior.

#### behavior *bit_value*

Specifies the value for the charging characteristic behavior bit.

*bit_value* is a hex value from 0x0 to 0xFFF.

#### profile *index_bit*

Specifies the index for the charging characteristic profile.

*index_bit* is an integer from 1 through 15.

Some of the index values are predefined according to 3GPP standards:

- **1** for hot billing
- **2** for flat billing
- **4** for prepaid billing
- **8** for normal billing

**apn-remap network-identifier *apn_net_id***

Identifies the "old" APN network identifier that is being mapped for replacement.

*apn_net_id* is a string of 1 to 62 characters, including letters, digits, dots (.) and dashes (-).

**new-ni *new_apn_net_id***

Identifies the "new" APN network identifier that is being mapped to.

*new_apn_net_id* is a string of 1 to 62 characters, including letters, digits, dots (.) and dashes (-).

**orig-apn**

Enables MME to send the original APN (UE requested APN) in the ACTIVATE_DEFAULT_BEARER_REQUEST message to the UE. This is an optional keyword.

If this keyword is not configured, then remapped APN is sent back to UE.

**Usage Guidelines**

Use this command to enable APN remapping only when the charging characteristic value in the subscription record associated with the requested APN matches the value configured for the **new-ni**.

The new APN NI must be part of the subscription data so that the charging characteristic associated with the new APN NI will be used for activating the context. If there is not one associated, then the general charging characteristic will be used.

**Example**

The following command associates a new APN NI *locals1* with a set of charging characteristics:

```
cc behavior 0xF profile 4 apn-remap network-identifier homer1 new-ni
locals1
```

# description

Defines a string that describes this APN remap table.

**Product**

MME

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(apn-remap-table_name)#
```

**Syntax Description**

**description** *description*
**no description**

**no**

Removes the description configuration from this APN Remap Table configuration.

***description***

Specifies descriptive text to be associated with the APN remap table as an alphanumeric string of 1 through 100 characters. The string may include spaces, punctuation, and case-sensitive letters if the string is enclosed in double quotation marks (").

**Usage Guidelines** Define information that identifies this particularly APN remap table.

**Example**

```
description "APN_remap1 replaces all MNC1## Ids."
```

# end

Exits the current configuration mode and returns to the Exec mode.

**Product** All

**Privilege** Security Administrator, Administrator

**Syntax Description**

```
end
```

**Usage Guidelines** Use this command to return to the Exec mode.

# exit

Exits the current mode and returns to the parent configuration mode.

**Product** All

**Privilege** Security Administrator, Administrator

**Syntax Description**

```
exit
```

**Usage Guidelines** Use this command to return to the parent configuration mode.

# wildcard-apn

Enables or disables the Wildcard APN feature and define the default APN to be used whenever a wildcard APN is included in the subscriber record.

**Product** MME

SGSN

**Privilege**

Security Administrator, Administrator

**Command Modes**

Exec > Global Configuration > APN Remap Table Configuration

**configure > apn-remap-table** *table_name*

Entering the above command sequence results in the following prompt:

`[local]host_name(apn-remap-table_name)#`

**Syntax Description**

**wildcard-apn pdp-type { dual-ipv4v6 | ipv4 | ipv6 | ppp } network-identifier** *apn_net_id*
**no wildcard-apn pdp-type { dual-ipv4v6 | ipv4 | ipv6 | ppp }**

**no**

Disables the wildcard-apn definition from the configuration.

**pdp-type {dual-ipv4v6 | ipv4 | ipv6 | ppp }**

Specifies the PDP type.

- **dual-ipv4v6**- for a dual PDP context association with one IPv4 address and one IPv6 address/prefix (SGSN only)
- **ipv4** - for an IPv4 context
- **ipv6** - for an IPv6 context
- **ppp** - for a PPP context

**network-identifier*apn_net_id***

Identifies one of the APN network identifiers specified via the **apn** command in the Operator Policy configuration mode.

*apn_net_id* is a string of 1 to 62 characters, including letters, digits, dots (.) and dashes (-).

**Usage Guidelines**

This command is used to define a wildcard APN with the type of PDP context and the APN's network identifier (NI). This wildcard APN would be used when an APN is not identified.

The command should be repeated per PDP type, as needed, to enable wildcard APN for two or more of the PDP types.

The wildcard APN configured with the dual PDP IPv4v6 context will be used in the following scenarios:

- the UE requested a PDP type of IPv4v6
- the UE did not request any specific APN
- the subscription includes wildcard APN with PDP type as IPv4v6.



**Important** Wildcard APN feature configuration is only valid if the APN remap table is associated with at least one operator policy. The same table can then be associated with an IMEI profile as IMEI-specific Wildcard APN is not supported.

### Example

Use this command to enable an APN wildcard for PDP type IPv4 and NI *homer1*:

```
wildcard-apn pdp-type ipv4 network-identifier homer1
```