



## NTSR Pool Configuration Mode Commands

MME restoration is a 3GPP specification-based feature designed to gracefully handle the sessions at S-GW once S-GW detects that the MME has failed or restarted. If the S-GW detects an MME failure based on a different restart counter in the Recovery IE in any GTP Signaling message or Echo Request / Response, it will terminate sessions and not maintain any PDN connections.

As a part of this feature, if a S-GW detects that a MME or S4-SGSN has restarted, instead of removing all the resources associated with the peer node, the S-GW shall maintain the PDN connection table data and MM bearer contexts for some specific S5/S8 bearer contexts eligible for network initiated service restoration, and initiate the deletion of the resources associated with all the other S5/S8 bearers.

The S5/S8 bearers eligible for network initiated service restoration are determined by the S-GW based on operator's policy, for example, based on the QCI and/or ARP and/or APN.

The benefit of this feature is that it provides support for the geo-redundant pool feature on the S4-SGSN/MME. In order to restore session when the MME receives a DDN, the S-GW triggers restoration when the serving MME is unavailable, by selecting another MME and sending DDN. This helps in faster service restoration/continuity in case of MME/S4-SGSN failures.

This mode is used to configure a pool of IP addresses associated with a pool ID and pool type (either MME or S4-SGSN) for Network Triggered Service Restoration (NTSR).

### Command Modes

Exec > Global Configuration > NTSR Pool Configuration

**configure > ntsr pool pool-id id > pool-type type**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-ntsr-pool)#
```



### Important

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

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- [peer-ip-address, page 4](#)

 end

# end

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

<b>Product</b>	All
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<b>Privilege</b>	Security Administrator, Administrator
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<b>Syntax Description</b>	end
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<b>Usage Guidelines</b>	Use this command to return to the Exec mode.
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# 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.

# peer-ip-address

Configures a pool of IP addresses associated with a pool ID and pool type (either MME or S4-SGSN) for Network Triggered Service Restoration (NTSR).

## Product

S-GW

## Privilege

Administrator, Security Administrator

## Command Modes

Exec > Global Configuration > NTSR Pool Configuration

**configure > ntsr pool pool-id id > pool-type type**

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-ntsr-pool) #
```

## Syntax Description

**[ no ] peer-ip-address { ipv4-address ipv4\_address | ipv6-address ipv6\_address**

**no**

Removes the specified IP address configuration.

**ipv4 ipv4\_address**

Specifies an IPv4 address to use with an associated NTSR pool ID and pool type (either MME or S4-SGSN).

**ipv6 ipv6\_address**

Specifies an IPv6 address to use with an associated NTSR pool ID and pool type (either MME or S4-SGSN).

## Usage Guidelines

Use this command to configure a pool of IP addresses associated with a pool ID and pool type (either MME or S4-SGSN) for Network Triggered Service Restoration (NTSR).

Before using this command, operators must configure an NTSR pool ID and pool type by executing the **ntsr pool** command in Global Configuration Mode

## Examples

To configure a an IPv4 address associated with a pool ID and pool type (either MME or S4-SGSN) for Network Triggered Service Restoration (NTSR).

**peer-ip-address ipv4-address 1.1.1.1**