



# Always-on

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This chapter provides information on configuring an enhanced, or extended, service. The product Administration Guides provide examples and procedures for configuration of basic services on the system. It is recommended that you select the configuration example that best meets your service model, and configure the required elements for that model, as described in this Administration Guide, before using the procedures in this chapter.

This chapter contains the following topics:

- [Overview, on page 1](#)
- [Configuring Always-on, on page 2](#)

## Overview

Always-on is enabled for each subscriber individually through a local subscriber profile or a RADIUS profile. Always-on is disabled for all subscribers by default.

If Always-on is enabled for a subscriber, when the idle time-out limit is reached the subscribers IP/PPP session remains connected as long as the subscriber is reachable. This is true even if the airlink between the mobile device and the RN (Radio Node) is moved from active to dormant (inactive) status. When the idle timeout limit is reached, the PDSN determines Mobile Node availability using LCP keepalive messages. A response to these messages indicates that the "always-on" status should be maintained. Failure to respond to a predetermined number of LCP keepalive messages causes the PDSN to tear-down (disconnect) the subscriber session.



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**Caution**

When always-on is enabled, the subscriber must have an idle time-out period configured (default is 0, no time-out). Failure to configure an idle time-out results in the LCP keepalive messages never being sent and the subscriber session stays up indefinitely.

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The RADIUS attribute **3GPP2-Always-On** defined in a subscriber profile stored remotely on a RADIUS server can be used to enable Always-on for the subscriber. The attribute has two possible values, **inactive** and **active**. To enable Always-on, set the attribute to **active**.

For more information on the attributes, if you are using StarOS 12.3 or an earlier release, refer to the *AAA and GTPP Interface Administration and Reference*. If you are using StarOS 14.0 or a later release, refer to the *AAA Interface Administration and Reference*.

# Configuring Always-on

To configure Always-on for a subscriber:

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- Step 1** Configure Always-on as described in the [Configuring Always-on, on page 2](#).
- Step 2** Verify your configuration as described in the [Verifying Your Configuration, on page 3](#).
- Step 3** Save your configuration to flash memory, an external memory device, and/or a network location using the Exec mode command **save configuration**. For additional information on how to verify and save configuration files, refer to the *System Administration Guide* and the *Command Line Interface Reference*.
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## What to do next



**Important** Commands used in the configuration examples in this section provide base functionality to the extent that the most common or likely commands and/or keyword options are presented. In many cases, other optional commands and/or keyword options are available. Refer to the *Command Line Interface Reference* for complete information regarding all commands.

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## Configuring Always-on

Use the following example to configure Always-on:

```
configure
  context <context_name>
    subscriber name <subscriber_name>
    timeout idle <seconds>
    always-on
  end
```

Notes:

- *<context\_name>* must be the name of the destination context where the subscriber that you want to enable always-on is configured.
- *Option:* To configure the echo-retransmit-timeout setting to wait before sending a keepalive message to an always-on subscriber, in the Context Configuration Mode, enter the following command:  
**ppp echo-retransmit-timeout <milliseconds>**
- *Option:* To configure the echo-max-retransmissions setting to retransmit a Keepalive message to a subscriber, in the Context Configuration Mode use the following command:  
**ppp echo-max-retransmissions <num\_retries>**
- The optional echo-retransmit-timeout and echo-max-retransmissions settings apply to all subscriber sessions within the current context that have always-on enabled.
- *Option:* To configure the long duration timer for the subscriber, in the Subscriber Configuration Mode, enter the following command:

**timeout long-duration** <ld\_timeout> [ **inactivity-time** <inact\_timeout> ]

- *Option:* To configure the long duration timer detection to trigger long duration timer action for the subscriber, in the Subscriber Configuration Mode enter the following command:

**long-duration-action detection**

- *Option:* To configure the long duration timer action for sessions exceeding the long duration timer timeout or the idle timeout durations for the subscriber, in the Subscriber Configuration Mode enter the following command:

**long-duration-action disconnection** [ **suppress-notification** ] [ **dormant-only** ] +

## Verifying Your Configuration

To verify your configuration:

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**Step 1** Change to the context where Always-on was configured by entering the following command:

```
context <context_name>
```

**Step 2** View the subscriber's configuration by entering the following command:

```
show subscriber configuration username <name>
```

Output of the command displays the subscriber's configurations. Examine the output for the idle timeout and always-on fields.

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