

Chapter 29

Summary of Access Configuration Statements

The following sections explain each of the access configuration statements. The statements are organized alphabetically.

accounting-port

Syntax	accounting-port <i>number</i> ;
Hierarchy Level	[edit access radius-server <i>server-address</i>]
Description	Configure the port number on which to contact the accounting server.
Options	<i>number</i> —An accounting port number on which to contact the accounting server. Most RADIUS servers use port number 1813 (as specified in RFC 2866).
Usage Guidelines	See “Configure RADIUS Authentication for L2TP” on page 514.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

address

Syntax	address <i>address-or-prefix value</i> ;
Hierarchy Level	[edit access address-pool <i>name</i>]
Description	Configure the IP address or prefix value for clients.
Options	<i>address-or-prefix value</i> —An address or prefix value. The remaining statements are explained separately.
Usage Guidelines	See “Configure the Address Pool” on page 498.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

address-pool

Syntax	address-pool <i>pool-name</i> { address <i>address-or-prefix value</i> ; address-range <low <i>lower-limit</i> > <high <i>upper-limit</i> >; }
Hierarchy Level	[edit access]
Description	Allocate IP addresses for clients.
Options	<i>pool-name</i> —Name assigned to an address pool. The remaining statements are explained separately.
Usage Guidelines	See “Configure the Address Pool” on page 498.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

address-range

Syntax	address-range <low <i>lower-limit</i> > <upper <i>upper-limit</i> >;
Hierarchy Level	[edit access address-pool <i>name</i>]
Description	Configure the address range.
Options	<i>low lower-limit</i> —The lower limit of an address range. <i>high upper-limit</i> —The upper limit of an address range.
Usage Guidelines	See “Configure the Address Pool” on page 498.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

authentication-order

Syntax	authentication-order [<i>authentication-methods</i>];
Hierarchy Level	[edit access profile <i>name</i>]
Description	Set the order in which the JUNOS software tries different authentication methods when verifying that a client can access the router. For each login attempt, the software tries the authentication methods in order, from first to last.
Options	radius—Verify the client using RADIUS authentication services. password—Verify the client using the information configured at the [edit access profile <i>profile-name</i> client <i>client-name</i>] hierarchy level.
Usage Guidelines	See “Configure the Authentication Order” on page 493 and “Configure the Authentication Order” on page 504.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

client

Syntax	client <i>name</i> ;
Hierarchy Level	[edit access profile <i>name</i>]
Description	Configure the peer identity.
Options	<i>name</i> —A peer identity.
Usage Guidelines	See “Configure the Client” on page 505.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

client-address

Syntax	<i>client-address</i> { secret <i>password</i> ; }
Hierarchy Level	[edit access radius-disconnect]
Description	Configure the host sending disconnect requests to the RADIUS disconnect server.
Options	<i>client-address</i> —A valid IP address configured on one of the router interfaces.
Usage Guidelines	See “Configure the RADIUS Disconnect Server for L2TP” on page 516.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.
See Also	secret on page 531

framed-ip-address

Syntax	framed-ip-address <i>address</i> ;
Hierarchy Level	[edit access profile <i>profile-name</i> ppp]
Description	Specify a framed IP address.
Options	<i>address</i> —The IPv4 prefix.
Usage Guidelines	See “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration .

framed-pool

Syntax	framed-pool <i>framed-pool</i> ;
Hierarchy Level	[edit access profile <i>name</i> ppp], [edit access group-profile <i>name</i> ppp]
Description	Configure the address pool.
Options	<i>framed-pool</i> —References a configured address pool.
Usage Guidelines	See “Configure the PPP Attributes for a Group Profile” on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration .

group-profile

Syntax	group-profile <i>name</i> ;
Hierarchy Level	[edit access], [edit access profile <i>name</i> client <i>name</i>]
Description	Configure the group profile or associate a client with a group profile.
Options	<i>name</i> —(Optional) Name assigned to the group profile.
Usage Guidelines	See “Configure the Group Profile” on page 499, “Configure the Layer 2 Tunneling Protocol for a Group Profile” on page 500, “Configure the PPP Attributes for a Group Profile” on page 501, and “Reference the Group Profile” on page 507.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

idle-timeout

Syntax	idle-timeout <i>seconds</i> ;
Hierarchy Level	[edit access profile <i>name</i> ppp], [edit access group-profile <i>name</i> ppp]
Description	Configure the idle timeout for a user.
Options	<i>seconds</i> —The number of seconds a user can remain idle before the session is terminated. Range: 0 through 4,294,967,295 seconds Default: 0
Usage Guidelines	See “Configure the PPP Attributes for a Group Profile” on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration

interface-id

Syntax	interface-id <i>interface-id</i> ;
Hierarchy Level	[edit access profile <i>name</i> ppp], [edit access group-profile <i>name</i> ppp], [edit access group-profile <i>name</i> l2tp], [edit access profile <i>name</i> client <i>name</i> l2tp]
Description	Configure the interface identifier.
Options	<i>interface-id</i> —is the identifier for the interface representing an L2TP session configured at the [edit interfaces interface-name unit <i>local-unit-number</i> dial-options] hierarchy level. For more information about the interface ID, see the <i>JUNOS Internet Software Services Interfaces Configuration Guide</i> .
Usage Guidelines	See “Configure the Layer 2 Tunneling Protocol for a Group Profile” on page 500, “Configure the PPP Attributes for a Group Profile” on page 501, “Configure L2TP Properties for a Profile” on page 507, and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration .

keepalive

Syntax	keepalive <i>seconds</i> ;
Hierarchy Level	[edit access profile <i>name</i> ppp], [edit access group-profile <i>name</i> ppp]
Description	Configure the keepalive interval for an L2TP tunnel.
Options	<i>seconds</i> —The time period that must elapse before the JUNOS software checks the status of the PPP session by sending an echo request to the peer. Range: 0 through 32,767 seconds
Usage Guidelines	See “Configure the PPP Attributes for a Group Profile” on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

lcp-renegotiation

Syntax	lcp-renegotiation;
Hierarchy Level	[edit access group-profile <i>name</i> l2tp], [edit access profile <i>name</i> client <i>name</i> l2tp]
Description	Configure LNS so it renegotiates LCP with the PPP client.
Usage Guidelines	See “Configure the Layer 2 Tunneling Protocol for a Group Profile” on page 500 and “Configure L2TP Properties for a Profile” on page 507.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

local-chap

Syntax	local-chap;
Hierarchy Level	[edit access group-profile <i>name</i> l2tp], [edit access profile <i>name</i> client <i>name</i> l2tp]
Description	Configure the JUNOS software so that the LNS ignores proxy authentication Attribute Value Pairs (AVPs) from the LAC and reauthenticates the PPP client using a CHAP challenge. When you do this, the LNS directly authenticates the PPP client.
Usage Guidelines	See “Configure the Layer 2 Tunneling Protocol for a Group Profile” on page 500 and “Configure L2TP Properties for a Profile” on page 507.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

I2tp

I2TP (group profile)

Syntax I2tp {
 interface-id *interface-id*;
 lcp-renegotiation;
 local-chap;
 maximum-sessions-per-tunnel *number*;
 }

Hierarchy Level [edit access group-profile *name*]

Description Configure the Layer 2 Tunnel Protocol for a group profile.

The remaining statements are explained separately.

Usage Guidelines See “Configure the Layer 2 Tunneling Protocol for a Group Profile” on page 500.

Required Privilege Level admin—To view this statement in the configuration.
 admin-control—To add this statement to the configuration.

I2TP (profile)

Syntax I2tp {
 interface-id *interface-id*;
 lcp-renegotiation;
 local-chap;
 maximum-sessions-per-tunnel *number*;
 ppp-authentication (chap | pap);
 shared-secret *shared-secret*;
 }

Hierarchy Level [edit access profile *name* client *name*]

Description Configure the L2TP properties for a profile.

The remaining statements are explained separately.

Usage Guidelines See “Configure L2TP Properties for a Profile” on page 507.

Required Privilege Level admin—To view this statement in the configuration.
 admin-control—To add this statement to the configuration.

maximum-sessions-per-tunnel

Syntax	maximum-sessions-per-tunnel <i>number</i> ;
Hierarchy Level	[edit access group-profile l2tp], [edit access profile <i>name</i> client <i>name</i> l2tp]
Description	Configure the maximum sessions for a Layer 2 tunnel.
Options	<i>number</i> —Maximum number of sessions for a Layer 2 tunnel.
Usage Guidelines	See “Configure the Layer 2 Tunneling Protocol for a Group Profile” on page 500 and “Configure L2TP Properties for a Profile” on page 507.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

pap-password

Syntax	pap-password <i>password</i> ;
Hierarchy Level	[edit access profile <i>name</i>]
Description	Configure the PAP password.
Options	<i>password</i> —PAP password.
Usage Guidelines	See “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

port

Syntax	port <i>port-number</i> ;
Hierarchy Level	[edit access radius-server <i>server-address</i>], [edit access radius-disconnect],
Description	Configure the port number on which to contact the RADIUS server.
Options	<i>number</i> —Port number on which to contact the RADIUS server. Default: 1812 (as specified in RFC 2138)
Usage Guidelines	See “Configure RADIUS Authentication for L2TP” on page 514 and “Configure the RADIUS Disconnect Server for L2TP” on page 516.
Required Privilege Level	system—To view this statement in the configuration. system-control—To add this statement to the configuration.

ppp

ppp (group profile)

```
Syntax  ppp {
        framed-pool framed-pool;
        idle-timeout seconds;
        interface-id interface-id;
        keepalive seconds;
        primary-dns primary-dns;
        primary-wins primary-wins;
        secondary-dns secondary-dns;
        secondary-wins secondary-wins;
    }
```

Hierarchy Level [edit access group-profile *name*]

Description Configure PPP properties for a profile name.

The remaining statements are explained separately.

Usage Guidelines See “Configure the PPP Attributes for a Group Profile” on page 501.

Required Privilege Level admin—To view this statement in the configuration.
admin-control—To add this statement to the configuration.

ppp (profile)

```
Syntax  ppp {
        framed-ip-address address;
        framed-pool framed-pool;
        idle-timeout seconds;
        interface-id interface-id;
        keepalive seconds;
        primary-dns primary-dns;
        primary-wins primary-wins;
        secondary-dns secondary-dns;
        secondary-wins secondary-wins;
    }
```

Hierarchy Level [edit access profile *name* client *name*]

Description Configure PPP properties for a profile name.

The remaining statements are explained separately.

Usage Guidelines See “Configure the PPP Properties for a Profile” on page 509.

Required Privilege Level admin—To view this statement in the configuration.
admin-control—To add this statement to the configuration.

ppp-authentication

Syntax	ppp-authentication (chap pap);
Hierarchy Level	[edit access profile <i>name</i> client <i>name</i> l2tp]
Description	Configure PPP authentication.
Options	chap— The Challenge Handshake Authentication Protocol. pap— The Password Authentication Protocol.
Usage Guidelines	See “Configure the Password Authentication Protocol Password” on page 508.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

primary-dns

Syntax	primary-dns <i>primary-dns</i> ;
Hierarchy Level	[edit access profile <i>name</i> ppp], [edit access group-profile <i>name</i> client <i>name</i> ppp]
Description	Configure the primary domain name server.
Options	<i>primary-dns</i> —An IPv4 address.
Usage Guidelines	See “Configure the PPP Attributes for a Group Profile” on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration

primary-wins

Syntax	primary-wins <i>primary-wins</i> ;
Hierarchy Level	[edit access group-profile <i>name</i> ppp], [edit access profile <i>name</i> client <i>name</i> ppp]
Description	Configure the primary Windows Internet name server.
Options	<i>primary-wins</i> —An IPv4 address.
Usage Guidelines	See “Configure the PPP Attributes for a Group Profile” on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.


profile

Syntax	profile <i>name</i> { client <i>name</i> chap-secret <i>data</i> ; }
Hierarchy Level	[edit access]
Description	Configure PPP CHAP.
Options	<i>name</i> —Mapping between peer identifiers and CHAP secret keys. This entity is queried for the secret key whenever a CHAP challenge or response is received.
Usage Guidelines	See “Configure the Challenge Handshake Authentication Protocol” on page 491, “Configure the Profile” on page 503, “Configure L2TP Properties for a Profile” on page 507, and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

radius-disconnect

Syntax	radius-disconnect { <i>client-address</i> { secret <i>password</i> ; } }
Hierarchy Level	[edit access]
Description	Configure a disconnect server which listens on a configured UDP port for disconnect messages from a configured client and processes these disconnect messages.
Options	<i>client-address</i> —A valid IP address configured on one of the router interfaces. The remaining statements are explained separately.
Usage Guidelines	See “Configure the RADIUS Disconnect Server for L2TP” on page 516.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

radius-disconnect-port

Syntax	<code>radius-disconnect-port port-number;</code>
Hierarchy Level	[edit access]
Description	Specify a port number on which to contact the RADIUS disconnect server. Most RADIUS servers use port number 1700.
Options	<code>port-number</code> —The server port to which disconnect requests from the RADIUS client are sent. The L2TP Network Server (LNS), which accepts these disconnect requests, is the server.
	NOTE: The JUNOS software accepts only disconnect requests from the client address configured at the [edit access radius-disconnect client <i>client-address</i>] hierarchy level.
	The remaining statements are explained separately.
Usage Guidelines	See “Configure the RADIUS Disconnect Server for L2TP” on page 516.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

radius-server

Syntax	<code>radius-server server-address { accounting-port number; port number; retry number; secret password; timeout seconds; }</code>
Hierarchy Level	[edit access]
Description	Configure RADIUS for L2TP. To configure multiple RADIUS servers, include multiple <code>radius-server</code> statements. The servers are tried in order and in a round-robin fashion until a valid response is received from one of the servers or until all the configured retry limits are reached.
Options	<code>server-address</code> —Address of the RADIUS authentication server. The remaining statements are explained separately in this chapter.
Usage Guidelines	See “Configure RADIUS Authentication for L2TP” on page 514.
Required Privilege Level	system—To view this statement in the configuration. system-control—To add this statement to the configuration.

retry

Syntax	<code>retry number;</code>
Hierarchy Level	[edit access radius-server <i>server-address</i>]
Description	Number of times that the router attempts to contact a RADIUS authentication server.
Options	<i>number</i> —Number of times to retry contacting a RADIUS server. Range: 1 through 10 Default: 3
Usage Guidelines	See “Configure RADIUS Authentication for L2TP” on page 514.
Required Privilege Level	system—To view this statement in the configuration. system-control—To add this statement to the configuration.
See Also	timeout on page 531

secondary-dns

Syntax	<code>secondary-dns secondary-dns;</code>
Hierarchy Level	[edit access group-profile <i>name</i> ppp], [edit access profile <i>name</i> ppp]
Description	Configure the secondary domain name server.
Options	<i>secondary-dns</i> —An IPv4 address.
Usage Guidelines	See “Configure the PPP Attributes for a Group Profile” on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

secondary-wins

Syntax	<code>secondary-wins secondary-wins;</code>
Hierarchy Level	[edit access group-profile <i>name</i> ppp], [edit access profile <i>name</i> ppp]
Description	Configure the secondary Windows Internet name server.
Options	<i>secondary-wins</i> —An IPv4 address.
Usage Guidelines	See Configure the PPP Attributes for a Group Profile on page 501 and “Configure the PPP Properties for a Profile” on page 509.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

secret

Syntax	secret <i>password</i> ;
Hierarchy Level	[edit access radius-server <i>server-address</i>], [edit access radius-disconnect <i>client-address</i>]
Description	Configure the password to use with the RADIUS server. The secret password used by the local router must match that used by the server.
Options	<i>password</i> —Password to use; can include spaces.
Usage Guidelines	See “Configure RADIUS Authentication for L2TP” on page 514 and “Configure the RADIUS Disconnect Server for L2TP” on page 516.
Required Privilege Level	system—To view this statement in the configuration. system-control—To add this statement to the configuration.

shared-secret

Syntax	shared-secret <i>shared-secret</i> ;
Hierarchy Level	[edit access profile <i>name</i> ppp]
Description	Configure the shared secret.
Options	<i>shared-secret</i> —The shared secret key for authenticating the peer.
Usage Guidelines	See “Configure L2TP Properties for a Profile” on page 507.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

timeout

Syntax	timeout <i>seconds</i> ;
Hierarchy Level	[edit access radius-server <i>server-address</i>]
Description	Configure the amount of time that the local router waits to receive a response from a RADIUS or TACACS+ server.
Options	<i>seconds</i> —Amount of time to wait. Range: 1 through 90 seconds Default: 3 seconds
Usage Guidelines	See “Configure RADIUS Authentication for L2TP” on page 514.
Required Privilege Level	system—To view this statement in the configuration. system-control—To add this statement to the configuration.

traceoptions

Syntax	traceoptions { flag all; flag authentication; flag chap; flag configuration; flag radius; }
Hierarchy Level	[edit access]
Description	Configure access tracing options.
Options	flag—Tracing operation to perform. To specify more than one tracing operation, include multiple flag statements. all—All tracing operations authentication—All authentication module handling chap—All CHAP messages and handling configuration—Reading of configuration radius—All RADIUS messages and handling
Usage Guidelines	See “Trace Access Processes” on page 494.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.

user-group-profile

Syntax	user-group-profile <i>name</i> ;
Hierarchy Level	[edit access profile <i>profile-name</i>]
Description	Apply configured PPP group profile to PPP users.
Options	<i>name</i> —Name of a PPP group profile configured at the [edit access group-profile <i>name</i>] hierarchy level.
Usage Guidelines	See “Apply a Configured PPP Group Profile to a Tunnel” on page 510.
Required Privilege Level	admin—To view this statement in the configuration. admin-control—To add this statement to the configuration.