

AppleTalk Commands

This section describes the function and displays the syntax of each AppleTalk command. For more information about defaults and usage guidelines, see the corresponding chapter of the *Router Products Command Reference* publication.

access-list *access-list-number* { **deny** | **permit** } **additional-zones**

To define the default action to take for access checks that apply to zones, use the **access-list additional-zones** global configuration command. The default is to deny other access.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
deny	Denies access if the conditions are matched.
permit	Permits access if the conditions are matched.

access-list *access-list-number* { **deny** | **permit** } **cable-range**

cable-range

no access-list [*access-list-number* { **deny** | **permit** } **cable-range**

cable-range]

To define an AppleTalk access list for a cable range (for extended networks only), use the **access-list cable-range** global configuration command. To remove an access list, use the **no** form of this command.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
deny	Denies access if the conditions are matched.
permit	Permits access if the conditions are matched.

cable-range Cable range value. The argument specifies the start and end of the cable range, separated by a hyphen. These values are decimal numbers from 1 to 65279. The starting network number must be less than or equal to the ending network number.

access-list *access-list-number* {**deny** | **permit**} **includes**
cable-range

no access-list *access-list-number* [{**deny** | **permit**} **includes**
cable-range]

To define an AppleTalk access list that overlaps any part of a range of network numbers or cable ranges (for both extended and nonextended networks), use the **access-list includes** global configuration command. To remove an access list, use the **no** form of this command.

access-list-number Number of the access list. This is a decimal number from 600 to 699.

deny Denies access if the conditions are matched.

permit Permits access if the conditions are matched.

cable-range Cable range or network number. The argument specifies the start and end of the cable range, separated by a hyphen. These values are decimal numbers from 1 to 65279. The starting network number must be less than or equal to the ending network number. To specify a network number, set the starting and ending network numbers to the same value.

access-list *access-list-number* {**deny** | **permit**} **network** *network*
no access-list *access-list-number* [{**deny** | **permit**} **network** *network*]

To define an AppleTalk access list for a single network number (that is, for a nonextended network), use the **access-list network** global configuration command. To remove an access list, use the **no** form of this command.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
deny	Denies access if the conditions are matched.
permit	Permits access if the conditions are matched.
<i>network</i>	AppleTalk network number.

access-list *access-list-number* {**deny** | **permit**} **other-access**
no access-list *access-list-number*

To define the default action to take for access checks that apply to networks or cable ranges, use the **access-list other-access** global configuration command.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
deny	Denies access if the conditions are matched.
permit	Permits access if the conditions are matched.

access-list *access-list-number* {**deny** | **permit**} **within** *cable-range*
no access-list *access-list-number* [{**deny** | **permit**} **within** *cable-range*]

To define an AppleTalk access list for an extended or a nonextended network whose network number or cable range is included entirely within the specified cable range, use the **access-list within** global configuration command. To remove this access list, use the **no** form of this command.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
deny	Denies access if the conditions are matched.
permit	Permits access if the conditions are matched.
<i>cable-range</i>	Cable range or network number. The argument specifies the start and end of the cable range, separated by a hyphen. These arguments are decimal numbers from 1 to 65279. The starting network number must be less than or equal to the ending network number. To specify a network number, set the starting and ending network numbers to the same value.

access-list *access-list-number* {**deny** | **permit**} **zone** *zone-name*
no access-list *access-list-number* [{**deny** | **permit**} **zone** *zone-name*]

To define an AppleTalk access list that applies to a zone, use the **access-list zone** global configuration command. To remove an access list, use the **no** form of this command.

<i>access-list number</i>	Number of the access list. This is a decimal number from 600 to 699.
deny	Denies access if the conditions are matched.
permit	Permits access if the conditions are matched.

zone-name Name of the zone. The name can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20.

appletalk access-group *access-list-number*
no appletalk access-group [*access-list-number*]

To assign an access list to an interface, use the **appletalk access-group** interface configuration command. To remove the access list use the **no** form of this command.

access-list-number Number of the access list. This is a decimal number from 600 to 699.

appletalk address *network.node*
no appletalk address [*network.node*]

To enable nonextended AppleTalk routing on an interface, use the **appletalk address** interface configuration command. To disable nonextended AppleTalk routing, use the **no** form of this command.

network.node AppleTalk network address assigned to the interface. The argument *network* is the 16-bit network number in the range 0 to 65279. The argument *node* is the 8-bit node number in the range 0 to 254. Both numbers are decimal.

[no] appletalk alternate-addressing

To display network numbers in a two-octet format, use the **appletalk alternate-addressing** global configuration command. To return to displaying network numbers in the format *network.node*, use the **no** form of this command.

AppleTalk Commands

[no] appletalk arp [probe | request] interval *interval*

To specify the time interval between the retransmission of ARP packets, use the **appletalk arp interval** global configuration command. To restore both default intervals, use the **no** form of this command.

- probe** (Optional) Indicates that the interval specified is to be used with AARP requests that are trying to determine the address of the local router when the router is being configured. If you omit **probe** and **request**, **probe** is the default.
- request** (Optional) Indicates that the interval specified is to be used when AARP is attempting to determine the hardware address of another node so that AARP can deliver a packet.
- interval* Interval, in milliseconds, between AppleTalk ARP transmissions. The minimum value is 33 milliseconds. The default intervals are: **probe**—200 milliseconds, **request**—1000 milliseconds

[no] appletalk arp [probe | request] retransmit-count *number*

To specify the number of AppleTalk ARP (AARP) probe or request transmissions, use the **appletalk arp retransmit-count** global configuration command. To restore both default values, use the **no** form of this command.

- probe** (Optional) Indicates that the number specified is to be used with AARP requests that are trying to determine the address of the local router when the router is being configured. If you omit **probe** and **request**, **probe** is the default.
- request** (Optional) Indicates that the number specified is to be used when AARP is attempting to determine the hardware address of another node so that AARP can deliver a packet.

number Number of AARP retransmissions that will occur. The minimum number is 1. With the **probe** keyword, the default value is 10 retransmissions. With the **request** keyword, the default value is 5 retransmissions. Specifying 0 selects the default value. The default intervals are: **probe**—10; **request**—5.

[no] appletalk arp-timeout *interval*

Use the **appletalk arp-timeout** interface configuration command to specify the interval at which entries are aged out of the ARP table. To return to the default timeout, use the **no** form of this command.

interval Time, in minutes, after which an entry is removed from the AppleTalk ARP table. The default is 240 minutes, or 4 hours.

[no] appletalk cable-range *cable-range* [*network.node*]

Use the **appletalk cable-range** interface configuration command to enable an extended AppleTalk network. To disable an extended AppleTalk network, use the **no** form of this command.

cable-range Cable range value. The argument specifies the start and end of the cable range, separated by a hyphen. These arguments are decimal number from 0 to 65279. The starting network number must be less than or equal to the ending network number.

network.node (Optional) Suggested AppleTalk address for the interface. The argument *network* is the 16-bit network number, and the argument *node* is the 8-bit node number. Both numbers are decimal. The suggested network number must fall within the specified range of network numbers.

[no] appletalk checksum

To enable the generation and verification of checksums for all AppleTalk packets (except routed packets), use the **appletalk checksum** global configuration command. To disable checksum generation and verification, use the **no** form of this command.

[no] appletalk discovery

To place an interface into discovery mode, use the **appletalk discovery** interface configuration command. To disable discovery mode, use the **no** form of this command.

appletalk distribute-list *access-list-number* in **no appletalk distribute-list [*access-list-number* in]**

To filter routing updates received from other routers over a specified interface, use the **appletalk distribute-list in** interface configuration command. To remove the routing table update filter, use the **no** form of this command.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
in	Indicates that the filter applies to updates received by the router.

appletalk distribute-list *access-list-number* out **no appletalk distribute-list [*access-list-number* out]**

To filter routing updates transmitted to other routers, use the **appletalk distribute-list out** interface configuration command. To remove the routing table update filter, use the **no** form of this command.

<i>access-list-number</i>	Number of the access list. This is a decimal number from 600 to 699.
out	Indicates that the filter applies to updates transmitted by the router.

[no] appletalk event-logging

To log significant network events, use the **appletalk event-logging** global configuration command. To disable this function, use the **no** form of this command.

[no] appletalk free-trade-zone

To establish a free-trade zone, use the **appletalk free-trade-zone** interface configuration command. To disable a free-trade zone, use the **no** form of this command.

appletalk getzonelist-filter *access-list-number*

no appletalk getzonelist-filter [*access-list-number*]

To filter GetZoneList (GZL) replies, use the **appletalk getzonelist-filter** interface configuration command. To remove this filter, use the **no** form of this command.

access-list-number Number of the access list. This is a decimal number from 600 to 699.

[no] appletalk glean-packets

To derive AARP table entries from incoming packets (on AppleTalk Phase 1 networks only), use the **appletalk glean-packets** interface configuration command. To disable this function, use the **no** form of this command.

[no] appletalk ignore-verify-errors

To allow a router to start functioning even if the network is misconfigured, use the **appletalk ignore-verify-errors** global configuration command. To disable this function, use the **no** form of this command.

appletalk iptalk *network.node zone*
no appletalk iptalk [*network.node zone*]

To enable IPTalk encapsulation on an interface that already has a configured IP address, use the **appletalk iptalk** interface configuration command. To disable IPTalk encapsulation, use the **no** form of this command.

network.node AppleTalk network address assigned to the interface. The argument *network* is the 16-bit network number, and the argument *node* is the 8-bit node number. Both numbers are decimal.

zone Name of the zone for the connected AppleTalk network.

appletalk iptalk-baseport *port-number*
no appletalk iptalk-baseport [*port-number*]

To specify the UDP port number when configuring IPTalk, use the **appletalk iptalk-baseport** global configuration command. To return to the default UDP port number, use the **no** form of this command.

port-number First UDP port number in the range of UDP ports used in mapping AppleTalk well-known DDP socket numbers to UDP ports. The default is 768.

appletalk lookup-type *service-type*
no appletalk lookup-type [*service-type*]

Use the **appletalk lookup-type** global configuration command to specify which NBP service types are retained in the name cache. To disable the caching of services, use the **no** form of this command.

service-type AppleTalk service types. The name of a service type can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal numbers. For zone names with a leading space character, enter the first character as the special sequence :20. For a list of possible types, see the AppleTalk service types table in the *Router Products Command Reference* publication. The default is to retain ciscoRouter entries in name cache.

appletalk macip dynamic *ip-address* [*ip-address* | **zone**
server-zone]
no appletalk macip [**dynamic** *ip-address* [*ip-address*] **zone**
server-zone]

Use the **appletalk macip dynamic** global configuration command to allocate IP addresses to dynamic MacIP clients. To delete a MacIP dynamic address assignment, use the **no** form of this command.

ip-address IP address, in four-part dotted decimal notation. To specify a range, enter two IP addresses, which represent the first and last addresses in the range.

zone *server-zone* Zone in which the MacIP server resides. The argument *server-zone* can include special characters from the Apple Macintosh character set. To include a special character, specify a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20. For a list of Macintosh characters, refer to the Apple Computer, Inc. specification *Inside AppleTalk*.

appletalk macip server *ip-address zone server-zone*
no appletalk macip [**server** *ip-address zone server-zone*]

Use the **appletalk macip server** global configuration command to establish a MacIP server for a zone. To shut down a MACIP server, use the **no** form of this command.

ip-address IP address, in four-part dotted decimal notation. It is suggested that this address match the address of an existing IP interface.

zone *server-zone* Zone in which the MacIP server resides. The argument *server-zone* can include special characters from the Apple Macintosh character set. To include a special character, specify a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20. For a list of Macintosh characters, refer to the Apple Computer, Inc. specification *Inside AppleTalk*.

appletalk macip static *ip-address* [*ip-address* | **zone** *server-zone*]
no appletalk macip [**static** *ip-address* [*ip-address*] **zone** *server-zone*]

Use the **appletalk macip static** global configuration command to allocate an IP address to be used by a MacIP client that has reserved a static IP address. To delete a MacIP static address assignment, use the **no** form of this command.

<i>ip-address</i>	IP address, in four-part dotted decimal format. To specify a range, enter two IP addresses, which represent the first and last addresses in the range.
zone <i>server-zone</i>	Zone in which the MacIP server resides. The argument <i>server-zone</i> can include special characters from the Apple Macintosh character set. To include a special character, specify a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20. For a list of Macintosh characters, refer to Apple Computer, Inc. specification <i>Inside AppleTalk</i> .

appletalk name-lookup-interval *seconds*
no appletalk name-lookup-interval [*seconds*]

To set the interval between service pollings by the router on its AppleTalk interfaces, use the **appletalk name-lookup-interval** global configuration command. To purge the name cache and return to the default polling interval, use the **no** form of this command.

seconds Interval, in seconds, between NBP lookup pollings. This can be any positive integer; there is no upper limit. It is recommended that you use an interval between 300 seconds (5 minutes) and 1200 seconds (20 minutes). The smaller the interval, the more packets are generated to handle the names. Specifying an interval of 0 purges all entries from the name cache and disables the caching of service type information that is controlled by the **appletalk lookup-type** command, including the caching of information about our routers. The default is 0 seconds.

[no] appletalk permit-partial-zones

To permit access to the other networks in a zone when access to one of those networks is denied, use the **appletalk permit-partial-zones** global command. To return to the default behavior, which is to deny access to all networks in a zone if access to one of those networks is denied, use the **no** form of this command.

[no] appletalk pre-fdditalk

To enable the recognition of pre-FDDITalk packets, use the **appletalk pre-fdditalk** global configuration command. To disable this function, use the **no** form of this command.

appletalk proxy-nbp *network-number zone-name*
no appletalk proxy-nbp [*network-number zone-name*]

To assign a proxy network number for each zone in which there is a router that supports only nonextended AppleTalk, use the **appletalk proxy-nbp** global configuration command. To delete the proxy, use the **no** form of this command.

network-number Network number of the proxy. It is a 16-bit decimal number and must be unique on the network. This is the network number that will be advertised by the router as if it were a real network number.

zone-name Name of the zone that contains the routers that support only nonextended AppleTalk. The name can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20.

[no] appletalk require-route-zones

To prevent the advertisement of routes (network numbers or cable ranges) that have no assigned zone, use the **appletalk require-route-zones** global configuration command. To disable this option and allow the router to advertise to its neighbors routes that have no network-zone association, use the **no** form of this command.

[no] appletalk route-cache

To enable fast switching on all supported interfaces, use the **appletalk route-cache** interface configuration command. To disable fast switching, use the **no** form of this command. By default, enabled on all interfaces that support fast switching.

AppleTalk Commands

[no] **appletalk routing**

To enable AppleTalk routing, use the **appletalk routing** global configuration command. To disable AppleTalk routing, use the **no** form of this command. By default, disabled.

[no] **appletalk send-rtmps**

To allow a router to send routing updates to its neighbors, use the **appletalk send-rtmps** interface configuration command. To block updates from being sent, use the **no** form of this command. The default is to send routing updates.

appletalk static cable-range *cable-range* **to** *network.node* **zone**

zone-name

no appletalk static cable-range *cable-range* **to** *network.node*

[**zone** *zone-name*]

To define a static route on an extended network, use the **appletalk static cable** global configuration command. To remove a static route, use the **no** form of this command. By default, no static routes are defined.

<i>cable-range</i>	Cable range value. The argument specifies the start and end of the cable range, separated by a hyphen. These values are decimal numbers from 1 to 65279. The starting network number must be less than or equal to the ending network number.
<i>network.node</i>	AppleTalk network address of the remote router. The argument <i>network</i> is the 16-bit network number in the range 0 to 65279. The argument <i>node</i> is the 8-bit node number in the range 0 to 254. Both numbers are decimal.
<i>zone-name</i>	Name of the zone on the remote network. The name can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20.

[no] appletalk static network *network-number* **to** *network.node* [**zone** *zone-name*]

To define a static route on a nonextended network, use the **appletalk static network** global configuration command. To remove a static route, use the **no** form of this command.

<i>network-number</i>	AppleTalk network number assigned to the interface. It is a 16-bit decimal number and must be unique on the network. This is the network number that will be advertised by the router as if it were a real network number.
<i>network.node</i>	AppleTalk network address of the remote router. The argument <i>network</i> is the 16-bit network number in the range 0 to 65279. The argument <i>node</i> is the 8-bit node number in the range 0 to 254. Both numbers are decimal.
<i>zone-name</i>	Name of the zone on the remote network. The name can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20.

[no] appletalk strict-rtmp-checking

To perform maximum checking of routing updates to ensure their validity, use the **appletalk strict-rtmp-checking** global configuration command. To disable the maximum checking, use the **no** form of this command. The default is to provide maximum checking.

appletalk timers *update-interval valid-interval invalid-interval*
no appletalk timers [*update-interval valid-interval invalid-interval*]

To change the routing update timers, use the **appletalk timers** global configuration command. To return to the default routing update timers, use the **no** form of this command.

- update-interval* Time, in seconds, between routing updates sent to other routers on the network. The default is 10 seconds.
- valid-interval* Time, in seconds, that the router will consider a route valid without having heard a routing update for that route. The default is 20 seconds (two times the update interval).
- invalid-interval* Time, in seconds, that the route is retained after the last update. The default is 60 seconds (three times the valid interval).

appletalk zip-query-interval *interval*
no zip-query-interval [*interval*]

To specify the interval at which the router sends ZIP queries, use the **appletalk zip-query-interval** global configuration command. To return to the default interval, use the **no** form of this command.

- interval* Interval, in seconds, at which the router sends ZIP queries. It can be any positive integer. The default is 10 seconds.

appletalk zone *zone-name*
no appletalk zone [*zone-name*]

To set the zone name for the connected AppleTalk network, use the **appletalk zone** interface configuration command. To delete a zone, use the **no** form of this command.

zone-name Name of the zone. The name can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal characters. For zone names with a leading space character, enter the first character as the special sequence :20.

clear appletalk arp [*network.node*]

To delete all entries or a specified entry from the AppleTalk ARP (AARP) table, use the **clear appletalk arp** EXEC command. If no network node is specified, this command deletes all entries from the table.

network.node (Optional) Specific AppleTalk network address to be deleted from the router's AARP table. The argument *network* is the 16-bit network number in the range 0 to 65279. The argument *node* is the 8-bit node number in the range 0 to 254. Both numbers are decimal.

clear appletalk neighbor [*neighbor-address*]

To delete all entries or a specified entry from the neighbor table, use the **clear appletalk neighbor** EXEC command. If no neighbor address is specified, this command deletes all entries from the table.

neighbor-address (Optional) Network address of the specific neighboring router to be deleted from the neighbor table. The address is in the format *network.node*. The argument *network* is the 16-bit network number in the range 1 to 65279. The argument *node* is the 8-bit node number in the range 0 to 254. Both numbers are decimal.

clear appletalk route [*network*]

To delete all entries or a specified entry from the routing table, use the **clear appletalk route** EXEC command. If no network is specified, this command deletes all entries from the table

network (Optional) Number of the specific network the route is to.

clear appletalk traffic

To reset AppleTalk traffic counters, use the **clear appletalk traffic** EXEC command.

ping appletalk *network.node*

To check host reachability and network connectivity, use the **ping** user EXEC command.

appletalk Specifies the AppleTalk protocol.

network.node AppleTalk address of the system to ping.

ping [**appletalk**] [*network.node*]

To check host reachability and network connectivity, use the **ping** privileged EXEC command.

appletalk (Optional) Specifies the AppleTalk protocol.
network.node (Optional) AppleTalk address of the system to ping.

show appletalk access-lists

To display the AppleTalk access lists currently defined, use the **show appletalk access-lists** user EXEC command.

show appletalk adjacent-routes

To display routes to networks that are directly connected or that are one hop away, use the **show appletalk adjacent-routes** privileged EXEC command.

show appletalk arp

To display the entries in the AppleTalk ARP (AARP) cache, use the **show appletalk arp** privileged EXEC command.

show appletalk cache

To display the routes in the AppleTalk fast-switching table on an extended AppleTalk network, use the **show appletalk cache** user EXEC command.

show appletalk globals

To display information and settings about the router's AppleTalk internetwork and other parameters, use the **show appletalk globals** privileged EXEC command.

AppleTalk Commands

show appletalk interface [*brief*] [*type unit*]

To display the status of the AppleTalk interfaces configured in the router and the parameters configured on each interface, use the **show appletalk interface** privileged EXEC command.

brief	(Optional) Displays a brief summary of the status of the AppleTalk interfaces.
<i>type</i>	(Optional) Interface type identifier. One of the following: asynchronous, dialer, Ethernet (IEEE 802.3), Token Ring (IEEE 802.5), FDDI, High Speed Serial Interface, Virtual Interface, ISDN Basic Rate Interface, ATM interface, loopback, null, or serial.
<i>unit</i>	Interface number.

show appletalk macip-clients

To display status information about all known MacIP clients, use the **show appletalk macip-clients** privileged EXEC command.

show appletalk macip-servers

To display status information about a router's servers, use the **show appletalk macip-servers** privileged EXEC command.

show appletalk macip-traffic

To display statistics about MacIP traffic through the router, use the **show appletalk macip-traffic** privileged EXEC command.

show appletalk name-cache

To display a list of NBP services offered by nearby routers and other devices that support NBP, use the **show appletalk name-cache** privileged EXEC command.

show appletalk nbp

To display the contents of the NBP name registration table, use the **show appletalk nbp** privileged EXEC command.

show appletalk neighbors [*neighbor-address*]

To display information about a specified AppleTalk router or all AppleTalk routers that are directly connected to any of the networks to which this router is directly connected, use the **show appletalk neighbors** privileged EXEC command. If no neighbor address is specified, this command displays information about all AppleTalk routers.

neighbor-address (Optional) Displays information about the specified neighbor router.

show appletalk route [*network* | *unit type*]

To display the entries in the AppleTalk routing table, use the **show appletalk route** privileged EXEC command. If no network or unit type is specified, this command displays all entries in the routing table.

network (Optional) Displays the routing table entry for the specified network.

unit type (Optional) Displays the routing table entries for networks that can be reached via the specified interface.

show appletalk sockets [*socket-number*]

To display information about process-level operation in the sockets of an AppleTalk interface, use the **show appletalk sockets** privileged EXEC command. If no socket number is specified, this command displays information about all sockets.

socket-number (Optional) Displays information about the specified socket number.

AppleTalk Commands

show appletalk static

To display information the statically defined routes, use the **show appletalk static** privileged EXEC command.

show appletalk traffic

To display statistics about AppleTalk traffic, including MacIP traffic, use the **show appletalk traffic** privileged EXEC command.

show appletalk zone [*zone-name*]

To display the entries in the zone information table, use the **show appletalk zone** privileged EXEC command. If no zone name is specified, the command displays all entries in the zone information table.

zone-name (Optional) Displays the entry for the specified zone.