

AppleTalk Commands

This chapter 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.

<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 [**broadcast-deny** | **broadcast-permit**]

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

cable-range [**broadcast-deny** | **broadcast-permit**]]

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.

<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.
broadcast-deny	(Optional) Denies access to broadcast packets if the conditions are matched.
broadcast-permit	(Optional) Permits access to broadcast packets if the conditions are met.

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.

<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 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 } nbp seq
    { type | object | zone } string
no access-list access-list-number { deny | permit } nbp seq
    { type | object | zone } string

```

To define an AppleTalk access-list entry for a particular NBP named entity (**object**), class of NBP named entities (**type**), or NBP named entities belonging to a specific area (**zone**), use the **access-list nbp** global configuration command. To remove an NBP access-list entry from the 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 conditions are matched.
permit	Permits access if conditions are matched.
<i>seq</i>	A number used to tie together two or three portions of an NBP name tuple and to keep track of the number of access-list nbp entries in an access list. Each command entry must have a sequence number.
type	Characterizes <i>string</i> as the portion of an NBP name that identifies a category or type of named entity.
object	Characterizes <i>string</i> as the portion of an NBP name that identifies a particular object or named entity.
zone	Characterizes <i>string</i> as the portion of an NBP name that identifies an AppleTalk zone.
<i>string</i>	A portion of an NBP name identifying the type , object , or zone of a named entity. The name string can be up to 32 characters long and it can include special characters from the Apple Macintosh character set. To include a special character, type a colon followed by two hexadecimal characters. For an NBP name with a leading space, enter the first character as the special sequence :20.

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**

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

To define the default action to take for access checks that apply to NBP packets from named entities not otherwise explicitly denied or permitted, use the **access-list other-nbps** global configuration command.

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

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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.
<i>interval</i>	Interval, in milliseconds, between AppleTalk ARP transmissions. When used with the probe keyword, the default interval is 200 milliseconds. When used with the request keyword, the default interval is 1000 milliseconds.

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

To specify the number of 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. When used with the **probe** keyword, the default value is 10 retransmissions. When used with the **request** keyword, the default value is 5 retransmissions. Specifying 0 selects the default value.

appletalk arp-timeout *interval*
no appletalk arp-timeout [*interval*]

To specify the interval at which entries are aged out of the ARP table, use the **appletalk arp-timeout** interface configuration command. 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 aurp tickle-time [*seconds*]

To set the AURP last-heard-from timer value, use the **appletalk aurp tickle-time** interface configuration command. To return to the default last-heard-from timer value, use the **no** form of this command.

seconds Time-out value, in seconds. This value can be a number in the range 30 to infinity. The default is 90 seconds.

[no] appletalk aurp update-interval [*seconds*]

To set the minimum interval between AURP routing updates, use the **appletalk aurp update-interval** global configuration command. To return to the default interval, use the **no** form of this command.

seconds AURP routing update interval, in seconds. This interval must be a multiple of 10. The default is 30 seconds.

AppleTalk Commands

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

To enable an extended AppleTalk network, 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.

<i>cable-range</i>	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.
<i>network.node</i>	(Optional) Suggested AppleTalk address for the interface. The argument <i>network</i> is the 16-bit network number, and the argument <i>node</i> 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 client-mode

To allow users to access an AppleTalk zone when dialing into an asynchronous line via the router's auxiliary port, use the **appletalk client-mode** interface configuration command. To disable this function, 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.

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

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.

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

appletalk domain-group *domain-number*
no appletalk domain-group [*domain-number*]

To assign a predefined domain number to an interface, use the **appletalk domain-group** interface configuration command. To remove an interface from a domain, use the **no** form of this command.

domain-number Number of an AppleTalk domain. It can be a decimal integer from 1 through 1000000.

[no] appletalk domain *domain-number* **hop-reduction**

To reduce the hop-count value in packets traveling between segments of a domains, use the **appletalk domain hop-reduction** global configuration command. To disable the reduction of hop-count values, use the **no** form of this command.

domain-number Number of an AppleTalk domain. It can be a decimal integer from 1 through 1000000.

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[no] appletalk domain *domain-number* **name** *domain-name*

To create a domain and assign it a name and number, use the **appletalk domain name** global configuration command. To remove a domain, use the **no** form of this command.

<i>domain-number</i>	Number of an AppleTalk domain. It can be a decimal integer from 1 through 1000000.
<i>domain-name</i>	Name of an AppleTalk domain. The name must be unique across the AppleTalk internetwork. It can be up to 32 characters long and 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 domain *domain-number* **remap-range** {**in** | **out**}

cable-range

no appletalk domain *domain-number* **remap-range** {**in** | **out**}

[*cable-range*]

To remap ranges of AppleTalk network numbers or cable ranges between two segments of a domain, use the **appletalk domain remap-range** global configuration command. To disable remapping, use the **no** form of this command.

<i>domain-number</i>	Number of an AppleTalk domain. It can be a decimal integer from 1 through 1000000.
in	Specifies that the remapping is performed on inbound packets, that is, on packets arriving into the local interenterprise network. All network numbers or cable ranges coming from the domain are remapped into the specified range.

out	Specifies that the remapping is performed on outbound packets, that is, on packets exiting from the local interenterprise network. All network numbers or cable ranges going to the domain are remapped into the specified range.
<i>cable-range</i>	The argument specifies the start and end of the cable range, separated by a hyphen. The starting network must be the first AppleTalk network number or the beginning of the cable range to remap. The number must be immediately followed by a hyphen. The ending network must be the last AppleTalk network number or the end of the cable range to remap.

[no] appletalk eigrp-splithorizon

To configure split horizon, use the **appletalk eigrp-splithorizon** interface configuration command. To disable split horizon, use the **no** form of this command.

[no] appletalk eigrp-timers *hello-interval hold-time*

To configure the AppleTalk Enhanced IGRP hello packet interval and the route hold time, use the **appletalk eigrp-timers** interface configuration command. To return to the default values for these timers, use the **no** form of this command.

<i>hello-interval</i>	Interval between hello packets, in seconds. The default interval is 5 seconds. It can be a maximum of 30 seconds.
<i>hold-time</i>	Hold time, in seconds. The hold time is advertised in hello packets and indicates to neighbors the length of time they should consider the sender valid. The hold time can be in the range of 15 to 90 seconds. The default is 45 seconds.

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[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 a 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 ARP table entries from incoming packets, 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 IP Talk encapsulation on an interface that already has a configured IP address, use the **appletalk iptalk** interface configuration command. To disable IP Talk encapsulation, use the **no** form of this command.

<i>network.node</i>	AppleTalk network address assigned to the interface. The argument <i>network</i> is the 16-bit network number, and the argument <i>node</i> is the 8-bit node number. Both numbers are decimal.
<i>zone</i>	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 IP Talk, use the **appletalk iptalk-baseport** global configuration command. To return to the default UDP port number, use the **no** form of this command.

<i>port-number</i>	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.
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appletalk lookup-type *service-type*
no appletalk lookup-type [*service-type*]

To specify which NBP service types are retained in the name cache, use the **appletalk lookup-type** global configuration command. 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 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*]

To allocate IP addresses to dynamic MacIP clients, use the **appletalk macip dynamic** global configuration command. 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 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*]

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

<i>ip-address</i>	IP address, in four-part dotted decimal notation. It is suggested that this address match the address of an existing IP interface.
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 the Apple Computer, Inc. specification <i>Inside AppleTalk</i> .

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

To allocate an IP address to be used by a MacIP client that has reserved a static IP address, use the **appletalk macip static** global configuration command. 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> .

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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 configuration 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.

| **[no] appletalk protocol { aurp | eigrp | rtmp }**

| To specify the routing protocol to use on an interface, use the **appletalk protocol** interface configuration command. To disable a routing protocol, use the **no** form of this command.

aurp	Specifies that the routing protocol to use is AURP. You can enable AURP only on tunnel interfaces.
eigrp	Specifies that the routing protocol to use is Enhanced IGRP.
rtmp	Specifies that the routing protocol to use is RTMP. RTMP is enabled by default.

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.

<i>network-number</i>	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.
<i>zone-name</i>	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.

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[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.

[no] appletalk route-redistribution

To redistribute RTMP routes into AppleTalk Enhanced IGRP and vice versa, use the **appletalk route-redistribution** global configuration command. To keep Enhanced IGRP and RTMP routes separate, use the **no** form of this command.

[no] appletalk routing [eigrp router-number]

To enable AppleTalk routing, use the **appletalk routing** global configuration command. To disable AppleTalk routing, use the **no** form of this command. If you omit the keyword and argument, this command enables AppleTalk routing without enabling Enhanced IGRP. In this case, the routing protocol used is RTMP.

eigrp (Optional) Specifies the Enhanced IGRP routing
router-number protocol. The argument *router-number* can be a decimal integer from 1 to 65535. It must be unique in your AppleTalk Enhanced IGRP internetwork.

[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. By default, the router sends routing updates.

| appletalk static cable-range *cable-range* **to** *network.node* [**floating**]
 zone *zone-name*
| no appletalk static cable-range *cable-range* **to** *network.node*
| [**floating**] [**zone** *zone-name*]

To define a static route on an extended network, use the **appletalk static cable-range** global configuration command. To remove a static route, use the **no** form of this command.

<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.
 to <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.
 floating	(Optional) Specifies that this route is a floating static route, which is a static route that can be overridden by a dynamically learned route.
 zone <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.

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

network-number 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.

to *network.node* AppleTalk network address of the remote router. 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.

floating (Optional) Specifies that this route is a floating static route, which is a static route that can be overridden by a dynamically learned route.

zone *zone-name* 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.

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.

<i>update-interval</i>	Time, in seconds, between routing updates sent to other routers on the network. The default is 10 seconds.
<i>valid-interval</i>	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).
<i>invalid-interval</i>	Time, in seconds, that the route is retained after the last update. The default is 60 seconds (three times the valid interval).

[no] appletalk virtual-net *network-number zone-name*

To add AppleTalk users logging in on an asynchronous line and using PPP encapsulation to an internal network, use the **appletalk virtual-net global configuration** command. To remove an internal network, use the **no** form of this command.

<i>network-number</i>	AppleTalk network address assigned to the interface. This is a 16-bit decimal network number in the range 0 to 65279. The network address must be unique across your AppleTalk internetwork.
<i>zone-name</i>	Name of a new or existing zone to which the AppleTalk user will belong.

AppleTalk Commands

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

To configure a ZIP reply filter, use the **appletalk zipreply-filter** interface configuration command. To remove a 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.

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 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.

AppleTalk Commands

ping appletalk *network.node*

To check host reachability and network connectivity, use the **ping appletalk** user EXEC and privileged 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 appletalk** 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 AARP cache, use the **show appletalk arp** privileged EXEC command.

show appletalk aurp events

To display the pending events in the AURP update-events queue, use the **show appletalk aurp events** privileged EXEC command.

show appletalk aurp topology

To display entries in the AURP private path database, which consists of all paths learned from exterior routers, use the **show appletalk aurp topology** 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** EXEC command.

show appletalk domain [*domain-number*]

To display all domain-related information, use the **show appletalk domain** EXEC command.

domain-number (Optional) Number of an AppleTalk domain about which to display information. It can be a decimal integer from 1 through 1000000.

show appletalk eigrp neighbors [*interface*]

To display the neighbors discovered by Enhanced IGRP, use the **show appletalk eigrp neighbors** EXEC command.

interface (Optional) Displays information about the specified neighbor router.

show appletalk eigrp topology [*network-number* | **active** | **zero-successors**]

To display the AppleTalk Enhanced IGRP topology table, use the **show appletalk eigrp topology** EXEC command.

network-number (Optional) Number of the AppleTalk network whose topology table entry you want to display.

AppleTalk Commands

active	(Optional) Displays the entries for all active routes.
zero-successors	(Optional) Displays the entries for destinations for which no successors exist. These entries are destinations that the router currently does not know how to reach via Enhanced IGRP. This option is useful for debugging network problems.

show appletalk globals

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

show appletalk interface [brief] [type number]

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. It can be one of the following types: asynchronous, dialer, Ethernet (IEEE 802.3), Token Ring (IEEE 802.5), FDDI, HSSI, Virtual Interface, ISDN BRI, ATM interface, loopback, null, or serial.
<i>number</i>	(Optional) Interface number.

show appletalk macip-clients

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

show appletalk macip-servers

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

show appletalk macip-traffic

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

show appletalk nbp

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

show appletalk neighbors [*neighbor-address*]

To display information about AppleTalk routers that are directly connected to any of the networks to which this router is directly connected, use the **show appletalk neighbors** 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.

AppleTalk Commands

show appletalk remap [**domain** *domain-number* [{**in** | **out**}
[{**to** | **from**} *domain-network*]]]

To display domain remapping information, use the **show appletalk remap** EXEC command.

domain <i>domain-number</i>	(Optional) Number of an AppleTalk domain about which to display remapping information. It can be a decimal integer from 1 through 1000000.
in	(Optional) Displays remapping information about inbound packets, that is, on packets entering the local segment of the domain.
out	(Optional) Displays remapping information about outbound packets, that is on packets exiting from the local segment of the domain.
to	(Optional) Displays information about the network number or cable range to which an address has been remapped.
from	(Optional) Displays information about the original network number or cable range.
<i>domain-network</i>	(Optional) Number of an AppleTalk network.

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

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

<i>network</i>	(Optional) Displays the routing table entry for the specified network.
<i>type number</i>	(Optional) Displays the routing table entries for networks that can be reached via the specified interface type and number.

show appletalk sockets [*socket-number*]

To display information about process-level operation in the sockets of an AppleTalk interface, use the **show appletalk sockets** 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.

show appletalk static

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

show appletalk traffic

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

show appletalk zone [*zone-name*]

To display the entries in the zone information table, use the **show appletalk zone** 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.

AppleTalk Commands

show smrp forward [**appletalk** [*group-address*]]

To display all entries or specific entries in the SMRP forwarding table, use the **show smrp forward** EXEC command.

appletalk (Optional) Displays SMRP forwarding table entries for all AppleTalk networks. Currently SMRP services are supported over AppleTalk only.

group-address (Optional) SMRP group address. All members of a group listen for multicast packets on this address.

show smrp globals

To display global information about SMRP—such as whether SMRP is enabled and running and settings for timers, most of which are used internally—use the **show smrp globals** EXEC command.

show smrp group [**appletalk** [*group-address*]]

To display all entries or specific entries in the SMRP group table, use the **show smrp group** EXEC command.

appletalk (Optional) Displays SMRP group table entries for all AppleTalk networks. Currently SMRP services are supported over AppleTalk networks only.

group-address (Optional) SMRP group address.

show smrp neighbor [appletalk [network-address]]

To display all entries or specific entries in the SMRP neighbor table, use the **show smrp neighbor** EXEC command.

- appletalk** (Optional) Displays SMRP neighbor table entries for all AppleTalk networks. Currently SMRP services are supported over AppleTalk networks only.
- network-address* (Optional) Network address of the neighbor router.

show smrp port [appletalk [type number]]

To display all entries or specific entries in the SMRP port table, use the **show smrp port** EXEC command.

- appletalk** (Optional) Displays SMRP port table entries for all AppleTalk networks. Currently SMRP services are supported over AppleTalk networks only.
- type* (Optional) Interface type.
- number* (Optional) Interface number.

show smrp route [appletalk [network] | type number]

To display all entries or specific entries in the SMRP routing table, use the **show smrp route** EXEC command.

- appletalk** (Optional) Displays SMRP route table entries for all AppleTalk networks. Currently SMRP services are supported over AppleTalk networks only.
- network* (Optional) SMRP network range.
- type* (Optional) Interface type.
- number* (Optional) Interface number.

AppleTalk Commands

show smrp traffic [**all** | **group** | **neighbor** | **port** | **route** | **transaction**]

To display all entries or specific entries in the SMRP traffic table, use the **show smrp traffic EXEC** command.

all	(Optional) Displays SMRP traffic for SMRP groups, neighbors, ports, routes, and transactions.
group	(Optional) Displays SMRP traffic for SMRP groups.
neighbor	(Optional) Displays SMRP traffic for neighbors.
port	(Optional) Displays SMRP traffic for ports.
route	(Optional) Displays SMRP traffic for routes.
transaction	(Optional) Displays SMRP traffic for transactions.

smrp protocol appletalk [**network-range** *beginning-end*]

no smrp protocol appletalk [**network-range** *beginning-end*]

To make SMRP multicast services available over AppleTalk for a specific interface, use the **smrp protocol appletalk** interface configuration command. To disable SMRP over AppleTalk for a specific interface, use the **no** form of the command.

network-range	(Optional) SMRP network range for the interface. We recommend that you do not specify an SMRP network range. When you omit the range, the router software uses the AppleTalk cable range configured for the interface as the SMRP network range. If you specify a range, it must fall within the SMRP network range of 1-65535.
<i>beginning-end</i>	(Optional) The beginning and end of the SMRP network range for this AppleTalk network. If you specify a range, it must fall within the SMRP network range of 1-65535.

[no] smrp routing

To enable the use of the multicast transport services provided by the SMRP, use the **smrp routing** global configuration command. To disable SMRP services for all interfaces, use the **no** form of this command.