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MacTCP: More Than One IP Gateway and AppleTalk Zones (11/93)

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TOPIC ---

Is there any reason why a network administrator couldn't have more than one
IP gateway in a given AppleTalk zone? Are the existence of AppleTalk zones
even an issue? I want to serve more than the 64 dynamic IP addresses my
gateway allows to Macintosh clients on the network segment. I propose to do
this by establishing two gateways each serving 64 addresses from different
ranges. What is the limitation of MacTCP on a given zone for Dynamic
addressing? Is there any? If so, does it differ by version of MacTCP?

DISCUSSION --

There is a limit of 1 DDP/IP gateway per zone. All versions of MacTCP have
the same limit, it's not really a limitation of MacTCP as much as it is of
the DDP/IP gateway. It's fairly involved but the bottom line is that the
DDP/IP gateway specification is not clearly defined and currently offers no
way to arbitrate requests from multiple gateways located in the same zone.

There are answers however, you could use a DDP/IP gateway that offers more
than 64 addresses such as a cisco router. The cisco imposes no limits on
the number of addresses you can configure other than those imposed by the
amount of physical RAM you have to accommodate the table. The other
solution for gateways with limited addresses would be to configure multiple
zones on the same cable (ddpip1, ddpip2, ddpip3, etc.) and place one
gateway in each zone. You could arbitrate which users used which gateways
or you could just tell them to use one of the gateways in any of the ddpip
zones. If one gateway was unable to give the Macintosh an address the user
could simply choose the next zone until they were able to get an IP
address.

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