

Publishing draft-ietf-autoconf-adhoc-addr-model

RFC-to-be-5889

Approved in March

Shortly thereafter, Erik Nordmark posted a critical review to ietf@ietf.org

Various attempts to determine what to do, but got into real discussion only in June. In parallel, RFC editor did all the editing.

IETF Process for Late Discovery of Issues

We **do** accept input at any stage, but after approval the bar for changes is very high – basically we will only do anything if there is a clear error

RFC Editor, AUTH48 process is only for **minor editorial fixes** – any substantial change will have to be brought back to the working group

Judgment call if a new IETF Last Call is needed

No formal rules

My Ground Rules

1. We do **not** re-open any discussions that we already had earlier in the WG process
2. This matter is not decided by the authors, working group chairs, or ADs – we follow **working group consensus**
3. We try to do the right thing and **correct factual errors**, if any

Erik's Complaint

The document is unclear that many routing protocols do in fact successfully run with link local addresses

No argument about the conclusions – the complaint is about the arguments the document is presenting and the impression it gives

The scope of the document is unclear; is it about router addresses only or also about addresses for applications?

Suggested Changes (1/4)

Document title change to a "A router addressing model in ad hoc networks"

Suggested Changes (2/4)

Routing protocols running on a router may exhibit different requirements for uniqueness of interface addresses; some have no such requirements, others have requirements ranging from local uniqueness only, to uniqueness within, at least, the routing domain (as defined in [RFC1136]).

Configuring an IP address that is unique within the routing domain satisfies the less stringent uniqueness requirements of local uniqueness, while also enabling protocols which have the most stringent requirements of uniqueness within the routing domain. This suggests the following principle:

- o an IP address assigned to an interface that connects to a link with undetermined connectivity properties should be unique, at least within the routing domain.

Routing protocols running on a router may exhibit different requirements for uniqueness of interface addresses; some have no such requirements, others have requirements ranging from local uniqueness only, to uniqueness within, at least, the routing domain (as defined in [RFC1136]). Routing protocols that do not require unique IP addresses within the routing domain utilize a separate unique identifier within the routing protocol itself that must also be configured in some manner.

Nevertheless, configuring an IP address that is unique within the routing domain satisfies the less stringent uniqueness requirements of local uniqueness, while also enabling protocols which have the most stringent requirements of uniqueness within the routing domain. As a result, the following principle allows for IP autoconfiguration to apply to the widest array of routing protocols:

- o an IP address assigned to an interface that connects to a link with undetermined connectivity properties should be unique, at least within the routing domain.

Suggested Changes (3/4)

- o There is no mechanism to ensure that IPv6 link-local addresses are unique across multiple links, hence they cannot be used to reliably identify routers (it is often desirable to identify a router with an IP address).

- o There is no mechanism to ensure that IPv6 link-local addresses are unique across multiple links, hence they cannot be used to reliably identify routers, should this be necessary by the routing protocol for which IP address autoconfiguration is being provided.

Suggested Changes (4/4)

Therefore, autoconfiguration solutions should be encouraged to primarily focus on configuring IP addresses that are not IPv6 link-local.

Therefore, an autoconfiguration solution which provides a mechanism for assigning addresses with a wider scope than IPv6 link-local alone will be more generally useful than one that does not.

Consensus Call

My read of the working group list discussion is that the changes are acceptable (even if perhaps viewed is not absolutely necessary by all)