

Consolidated comments with responses on LASG 802c PAR and CSD

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From 802.3

802.3 comments P802c, PAR & CSD

Amendment: Local MAC Address Usage

PAR, no comments.

CSD, General — The CSD does not seem to have been updated recognizing the potential for use of the local address space for other needs like privacy. For example, thought not technically the focus of Compatibility, the project as an addition to Std 802 will provide the architecture for compatible operation of multiple local address administration techniques / local address administration functions. Thus, make it easier for other projects to be compatible with Std 802 addressing.

We reworded need on the PAR to make it more clear that there is a need to support multiple local MAC address administrations.

CSD, Broad Market — While probably sufficient justification, there are other ephemeral devices under consideration perhaps it is considered that these things are encompassed by IoT, but the list of IoT devices are mostly longer lived than single use. Single use examples include things like medication compliance devices, disposable personal sensors, etc., enhance Broad Market, and should be addressed before massive numbers of globally unique addresses are consumed by these devices.

Accept – we added “single use medical-devices

CSD, Distinct Identity —IEEE Std 802 does not sufficiently describe local address administration (there is less in 2014 there was in 2001). There are small pieces of local address use in limited environments, but not a general architecture. The response should highlight that the amendment will facilitate compatibility and interoperability of emerging recommendations for local address utilization for networking technologies using 802 addressing.

The first part was very similar to an accepted comment from 802.11 and we used that text. The latter part seems to be a better fit for Broad Market potential where we added:

The amendment will facilitate compatibility and interoperability of emerging recommendations for local address utilization for networking technologies using 802 addressing.

From 802.11

802c- Amendment: Local Media Access Control (MAC) Addressing, [PAR](#) and [CSD](#)

- 2.1 Expand Acronym “MAC” – “Media Access Control (MAC)”
- 5.2b Change “local address space” to “local MAC address space”
- 5.4 – Change “unique addresses” to “unique MAC addresses” –
- Change “local address” to “local MAC address”-
3 places.
 - Agree with all except it is Medium Access Control

802c- Amendment: Local Media Access Control (MAC) Addressing, [PAR](#) (cont)

- 5.4 – Problem statement not clearly defined in the need statement. “While we agree that the number of IoT devices may use more of the Local MAC Address space, please explain in the need section why the Local MAC Address space requires the simultaneous use of Multiple Local MAC Address Administrators.”
 - Accept (but need is 5.5), see following slide
- 6.1b – CID is not defined and is only used once...just spell it out “Company Identifier”
 - Accept
- 5.2b and 6.1b – “Company ID” – Should be “Company Identifier” (2 instances)
 - Accept

- Currently, globally unique MAC addresses are assigned to most IEEE 802 end stations and bridge ports. Increasing use of virtual machines and Internet of Things (IoT) devices could exhaust the global MAC address space if global MAC addresses are assigned. **These applications could use local MAC address space, but in that case some applications require independent address administration (e.g. virtualization systems and protocol specific address mappings).** This project will provide conventions and enable protocols that will allow multiple stations or servers to automatically configure and use local MAC addresses **without conflict when multiple administrations share a local address space.** Such protocols will allow virtual machines and IoT devices to obtain a local MAC address without centralized local MAC address administration.

802c- Amendment: Local Media Access Control (MAC) Addressing, [CSD](#)

- Compatibility – Just say “Yes”, delete the rest.
 - accept
- Distinct Identity – Suggested change: “There are no guidelines for using the Local MAC Address space in existing standards.”
 - Accept
- Technical Feasibility – Check the cited standard (possibly incorrect citation format) and include the full name of standard inline or as a note.
 - Accept
- Economic Feasibility – change “...local address distribution or claiming...” to “...local MAC Address distribution or claiming...”
 - Accept

From Paul Nikolich

From Paul Nikolich

- 5.5 Need for Project.
Please consider appending "when multiple administrations choose to share a local address space" to the sentence "This project will provide conventions and enable protocols that will allow multiple stations or servers to automatically configure and use local addresses." to clarify the intended application of the amendment.

The sentence then reads as follows:

"This project will provide conventions and enable protocols that will allow multiple stations or servers to automatically configure and use local addresses when multiple administrations choose to share a local address space."

– Accept

From Roger Marks

<http://www.ieee802.org/1/files/public/docs2015/lasg-marks-p802c-csd-comments-01.pdf>

Comment: Coexistence

- The response “A CA document is not applicable because this project does not use wireless spectrum.” could be understood to mean that the standard is not applicable to wireless networks.
- Proposed change:
 - A CA document is not applicable because ~~this project does not use wireless spectrum~~ **the standard has no effect on wireless coexistence.**
 - Accept

Comment: Broad Market Potential (1)

- The slide refers to:
 - the local address space
 - the Local MAC address space
 - the MAC address space
 - the Local Address space
- It would be better to use consistent language.
- Should follow the language of the PAR, which does not refer to “the local address space” as if there were only one of these; many local spaces exist, each of these being local.
- Suggested remedy: change each of the four instances to “local address space”.

– Accept

Comment: Broad Market Potential (2)

- The final paragraph is orthogonal to the topic of broad market potential and does not support it. Also, it is out of sync with the PAR in stating a priority (“first step”) on Company ID arrangements.
- Suggested remedy: delete final paragraph of CSD Broad Market Potential.
 - Deleted and replaced with something more to the point

Comment: Distinct Identity (1)

- “Distinct Identity” says “There is no other standard that defines a guideline for use of the Local Address space.”
- However, CSD says “Fibre Channel over Ethernet (FCoE) has standardized a protocol...”
- Suggested remedy: change “standard” to “IEEE standard”.
 - Accept

Comment: Distinct Identity (2)

- “Distinct Identity” says “There is no other standard that defines a guideline for use of the Local Address space.”
- Suggested remedy: change “the Local Address space” to “local address space” to match language in the PAR.
 - Accept

Comment: Technical Feasibility

- The response twice refers to:
 - the Local Address space
- Suggested remedy: change “the Local Address space” to “local address space” to match language in the PAR.
 - Accept
- Note: The response focuses on the technical feasibility of an assignment protocol and sidesteps the feasibility of the PAR topic. The same is true of the Economic Feasibility response.