Transmission of IPv6 Packets over IEEE 802.11 Networks operating in mode Outside the Context of a Basic Service Set (IPv6-over-80211-OCB)

draft-ietf-ipwave-ipv6-over-80211ocb-11.txt

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- Overview of changes
- The Changes
- Unresolved issues:
 - request or not request a Group ID from IANA?
 - is ND adapted for OCB, or not?

Overview of changes 1/2

- Since September, and further during Last Call the draft was reviewed by 7 persons: José Santa Lozano, Sri Gundavelli, Sandra Céspedes, François Simon, Abdussalam Baryun, Margaret Cullen, Michelle Wetterwald
- Draft went from version -05 to -11
- Changes are listed in the ChangeLog section of the draft (section ChangeLog will disappear later).

Overview of Changes 2/2

- Technical changes
- Changes about Authorship
- Changes about References
- Changes about Terminology
- Changes that moved Sections
- Changes about Security

Technical Changes

- o Added text suggesting LLs may be easy to use on OCB, rather than GUAs based on received prefix.
- o Removed the text speculation on adoption of the TSA message.
- o Clarified that the ND protocol is used.
- o Added some text about how two STAs discover each other.
- o Added mention of external (OCB) and internal network (stable), in the subnet structure section.
- o Added phrase explaining that both .11 Data and .11 QoS Data headers are currently being used, and may be used in the future.
- o Removed the per-channel IPv6 prohibition text.
- o Removed the statement that suggests that for routing purposes a prefix exchange mechanism could be needed.
- o Removed text requesting a new Group ID for multicast for OCB.
- o Added a clarification of the meaning of value "3333" in the section Address Mapping -- Multicast.
- o Added note stating that the manner in which two STAtions set their communication channel is not described in this document.
- o Added a time qualifier to state that the "each node is represented uniquely at a certain point in time."
- o Shortened the paragraph on forming/terminating 802.11-OCB links.

Changes about Authorship

- o Updated the affiliation of one author.
- o Updated the authorship and expanded the Contributors section.

Changes about References

- * Added an informational reference to ETSI's IPv6-over-GeoNetworking.
- * Added more references to IETF and ETSI security protocols.
- * Updated some references from I-D to RFC, and from old RFC to new RFC numbers.
- * Added reference to multicast extensions to IPsec architecture RFC.
- * Added a reference to 2464-bis.
- * Removed FCC informative references, because not used.
- o Updated references of 802.11-OCB document from -2012 to the IEEE 802.11-2016.
- o In the LL address section, and in SLAAC section, added text and refs to 7217 opaque IIDs and 8064 stable IIDs.
- o Removed refs to RFC3963, RFC4429 and RFC6775; these are about ND, MIP/NEMO and oDAD; they were referred in the handover discussion section, which is out.
- o Updated a reference from individual submission to now a WG item in IPWAVE: the survey document.
- o Moved the draft tsvwg-ieee-802-11 to Informative References.

Changes about Terminology

o Added new OBU term, improved the RSU term definition, removed the ETTC term, replaced more occurences of 802.11p, 802.11 OCB with 802.11-OCB.

- o Added term definition for WiFi.
- o In the term definition "802.11-OCB" added a note stating that "any implementation should comply with standards and regulations set in the different countries for using that frequency band."
- o In the RSU term definition, added a sentence explaining the difference between RSU and RSRU: in terms of number of interfaces and IP forwarding.
- o Replaced "with at least two IP interfaces" with "with at least two real or virtual IP interfaces".
- o Added a term in the Terminology for "OBU". However the definition is left empty, as this term is defined outside IETF.
- o Added a clarification that it is an OBU or an OBRU in this phrase "A vehicle embarking an OBU or an OBRU".
- o Checked the entire document for a consistent use of terms OBU and OBRU.
- o Clarified what it means "No association needed".
- o Added note clarifying that in Europe the regional authority is not ETSI, but "ECC/CEPT based on ENs from ETSI".
- o Added note saying that "'p' is a letter identifying the Ammendment".

Changes that moved Sections

- o Moved the packet capture example into an Appendix Implementation Status.
- o Added a IANA Consiserations section, with content, requesting for a new multicast group "all OCB interfaces".
- o Moved the EPD description to an Appendix on its own.
- o Moved the tutorial section of OCB mode introduced to .11, into an appendix.
- o Removed text "This section may need to be moved" (the "Reliability Requirements" section). This section stays there at this time.
- o Removed refs to RFC3963, RFC4429 and RFC6775; these are about ND, MIP/NEMO and oDAD; they were referred in the handover discussion section, which is out.

Changes about Readability

- o Lengthened the title and cleanded the abstract.
- o Reformulation of some phrases for better readability, and correction of typographical errors.
- o Significantly shortened the Address Mapping sections, by removing text copied from RFC2464, and rather referring to it.
- o Added figure captions, figure numbers, and references to figure numbers instead of 'below'. Replaced "section Section" with "Section" throughout.
- Shortened the paragraph on forming/terminating 802.11-0CB links.
- Substituted lower case for capitals SHALL or MUST in the Appendices.

Changes about Security

o Added the risks of spoofing and hijacking.