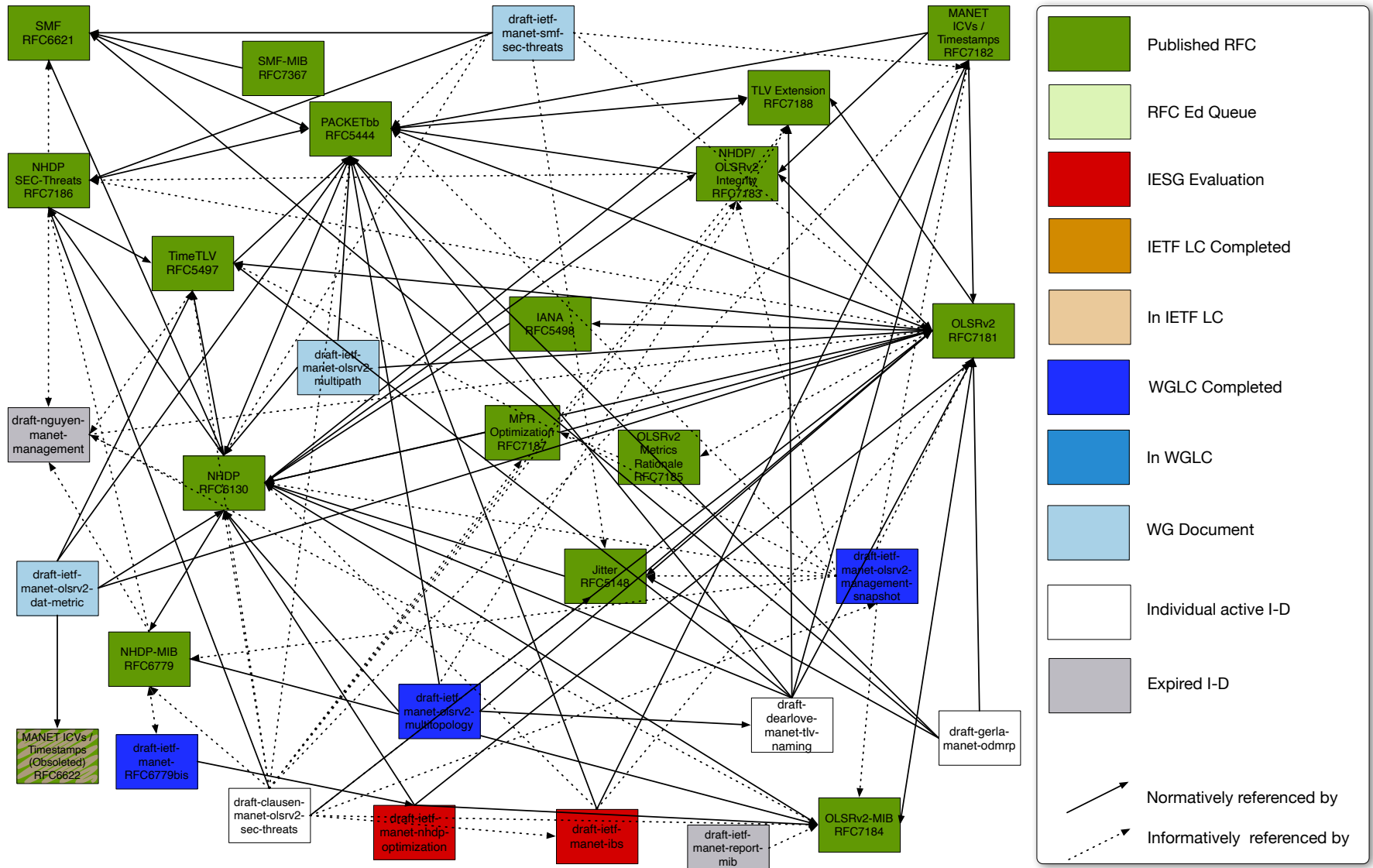


This Slide is Getting Silly

(Will try to come up with something better for IETF'92)



draft-ietf-manet-ibs

Christopher Dearlove

(Update from the document shepherd
on the process - not the author, and not on the I-D)

Brief History

draft-dearlove-manet-ibs-00 (June 2014):

- Presented in Toronto (IETF 90).

draft-ietf-manet-ibs-00 (July 2014):

- As per tradition, exactly identical to draft-dearlove-manet-ibs-00

draft-ietf-manet-ibs-01 (July 2014):

- Example in Appendix A independently verified by Ben Smith (LIX, France)

draft-ietf-manet-ibs-02 (July 2014):

- Educational material rephrased, IANA section tightened

WGLC of draft-ietf-manet-ibs-02 (August 2014):

- Revision WGLCed
- Suggestions from Jiazi Yi, Ulrich Herberg received

draft-ietf-manet-ibs-03 (September 2014):

- Comments resulting from WGLC, document shepherd review, considered.

IETF LC of draft-ietf-manet-ibs-03 (October 2014):

- No comments, except GEN-ART

GEN-ART review (Martin Thomson) received (October 29, 2014):

- See "Current Status" -- Resulted in a DISCUSS by RTG AD

What Is This?

- Presented in IETF90, tutorial slides here
<http://www.ietf.org/proceedings/90/slides/slides-90-manet-2.pdf>
- A brief reminder, though:
 - Defines Identity Based Signatures for RFC5444-style packets/messages:
 - Authority creates master secret, publishes corresponding master public key.
 - Each router derives "public key" from identity, submit to authority, which generates corresponding private key.
 - Each router can now sign messages using private key, include signature, "public key"
 - Can be verified by any router in possession of "master public key"
 - Authority can be off-line (out of harm's way) during network operation
 - Approach in this I-D based off of RFC6507

Current Status

(By shepherd, not author)

- Telechat for 14/11/25 -- was 14/10/30 (IESG overload)
- SEC-DIR review requested by SEC-ADs, not received (yet)
- GEN-ART review by Martin Thomson (Thank you, Martin!)
 - Currently, Adrian holds a DISCUSS
 - Essentially, GEN-ART review is "a security review"
 - Poses the question "Is RFC6507 suitable for std. track specs"?
- Significant, and constructive, back-and-forth discussion between Authors and Reviewer - incredibly nice to see.
- From the shepherd's (*possibly subjective*) understanding:
 - I've consulted cryptologists who seem to think *"this I-D is OK"*
 - Martin says to not be a cryptographer (nor is the shepherd, FWIW)
 - Confusion (IBS vs PKI) and comfort (level of trust in authority)
 - Seems to be a more generic concern about "the viability of IBS" than a concern about its application in MANET routing (and in this I-D)

Next Steps

- At this point - get the SEC-ADs involved:
 - Generic concerns about IBS are *very* out-of-scope for MANET (and for RTG)
 - Really looking for one of three answers:
 - IBS works, this I-D uses it OK
Reduces the problem to "Does Adrian trust the SEC-ADs? ;)
 - IBS works, this I-D abuses it this way....
 - Oops, IBS is broken.
 - Stephen Farrel (SEC-AD) will look at it before telechat

draft-ietf-manet-nhdp- optimization

Christopher Dearlove

Thomas Clausen

Brief History

draft-dearlove-manet-nhdp-optimization-00 (February 2014):

- Presented at London (IETF 89).

draft-dearlove-manet-nhdp-optimization-01 (July 2014):

- Editorial, MIB considerations added (see next slide)

draft-ietf-manet-nhdp-optimization-00 (July 2014):

- As per tradition, exactly identical to draft-dearlove-manet-nhdp-optimization-01

draft-ietf-manet-nhdp-optimization-01 (August 2014):

- MIB considerations factored out into independent I-D, as per advice from RTG-AD, nits

draft-ietf-manet-nhdp-optimization-02 (August 2014):

- Submitted same day as -01 to fix editorial glitch

WGLC of draft-ietf-manet-nhdp-optimization-02 (August 2014):

- Much discussion summarized: a single WG participant unhappy that others did not provide performance result

draft-ietf-manet-nhdp-optimization-03 (September 2014):

- Fixed a brain-fart (a "False" that should be "True")

IETF LC of draft-ietf-manet-nhdp-optimization-03 (October 2014):

- Adrian Farrel noted that a *slight* security gain might be called out in Security Considerations section

What Is This?

- Presented in IETF89, tutorial slide here, (page 18-24)
<http://www.ietf.org/proceedings/89/slides/slides-89-manet-7.pdf>
- A Brief Reminder, though:
 - Small, optimization to NHDP.
 - Multiple implementations, observed to be useful.
 - Code-footprint minimal
 - Retain 2-hop information when a 1-hop link is considered "lost" due to low link quality.
 - Allows immediate re-use of 2-hop link when 1-hop link-quality goes back above threshold.
 - Retains interoperability with non-optimized NHDP implementations.
 - No inconveniences, security issues, etc.

Current Status

- Telechat for 14/11/25
- SEC-DIR review by Charlie Kaufman (Thank you Charlie)
 - Identified the same possible (small) improvement security that Adrian had also raised
- GEN-ART review not received
- IANA: No Actions
- Adrian and Barry have balloted YES/NO-OBJECTION

Next Steps

- Need the attention of another 8 ADs
- Telechat for 14/11/25, so on track for that
- Then, the usual: RFC Editor, ...

draft-ietf-manet-rfc6779bis

Bob Cole

Ian Chakeres

Ulrich Herberg

Thomas Clausen

Brief History

draft-clausen-manet-rfc6779bis-00 (July 2014):

- Content already presented as part of draft-ietf-manet-nhdp-optimization

draft-ietf-manet-rfc6779bis-00 (August 2014):

WGLC of draft-ietf-manet-rfc6779bis (August 2014)

draft-ietf-manet-rfc6779bis-01 (November 2014):

- Fixed IDNITS (Obsoletes RFC6779 -> Obsoletes 6779 in header)

What Is This?

- The (small) update to the NHDP MIB module, incurring due to draft-ietf-manet-nhdp-optimization
 - From Section 1.1:
 - “Specifically, the MIB module for [RFC6130], specified in this document, captures the new information and states for each symmetric 2-hop neighbor, recorded in the Neighbor Information Base of a router”

Current Status

- WGLC completed
- Shepherd: Christopher Dearlove

Next Steps

- Awaiting document shepherd write-up
- Publication request, then the usual cycle (AD, IESG, IANA, ...) of reviews
- Probably will/should get a MIB doctor review, also.

draft-ietf-manet-olsrv2- management-snapshot

Thomas Clausen
Ulrich Herberg

Brief History

draft-clausen-manet-olsrv2-management-snapshot-00 (November 2013):

- Presented at London (IETF 89).

draft-clausen-manet-olsrv2-management-snapshot-01 (February 2013):

- Presented at London (IETF 89).

draft-ietf-manet-olsrv2-management-snapshot-00 (April 2014):

- Contrary to tradition, not exactly identical to draft-clausen-manet-olsrv2-management-snapshot-01
- Fixed a typo, and we could cite RFCs rather than I-Ds ;)

draft-ietf-manet-olsrv2-management-snapshot-01 (July 2014):

- Comments from David Harrington, Jurgen Schenwalder (OPSdir)
- Many editorials, clarifications, added section on typical communications patterns, ...

WGLC of draft-ietf-manet-olsrv2-management-snapshot-01 (July 2014):

- Added section on security considerations

draft-ietf-manet-olsrv2-management-snapshot-02 (August 2014):

- Added section on security considerations, fixing IDNITS

draft-ietf-manet-olsrv2-management-snapshot-03 (September 2014):

- Detailed Document Shepherd review received, fixing numerous points, clarifications

What Is This?

- Presented in IETF89, tutorial slide here: <http://www.ietf.org/proceedings/89/slides/slides-89-manet-9.pdf>
- A Brief Reminder, though:
 - Request during IESG evaluation of RFC6779 (Benoit Claise, Ron Bonica)
 - Describes how MANETs are managed:
 - How, what, and why OLSRv2-based networks are typically managed and monitored
 - Reflexive, not prescriptive
 - Thus, how known, as of today MANETs are managed, only.

Current Status

- WGLC completed
- Shepherd: Christopher Dearlove

Next Steps

- Awaiting document shepherd write-up
- Publication request, then the usual cycle (AD, IESG, IANA, ...) of reviews

draft-ietf-manet-olsrv2- multitopology

Christopher Dearlove

Thomas Clausen

Brief History

draft-dearlove-manet-olsrv2-multitopology-01 (July 2013):

- Presented at Berlin (IETF 87).

draft-dearlove-manet-olsrv2-multitopology-02 (December 2013):

- Routing MPR willingness per metric/topology, Attached network number of hops per metric/topology, IANA.

draft-ietf-manet-olsrv2-multitopology-00 (After acceptance as WG draft, February 2014):

- Same as previous draft - Aim is Experimental RFC.

draft-ietf-manet-olsrv2-multitopology-01 (June 2014):

- RFC# for OLSRV2 et. al.; Security Considerations; Editorials.

draft-ietf-manet-olsrv2-multitopology-02 (June 2014)

- Added "Motivation and Experimentation" section, as "strongly suggested" (*nudge* *nudge* *wink* *wink*) by our AD.

WGLC Issued (July 1 - July 14)

draft-ietf-manet-olsrv2-multitopology-03 (July 2014)

- Folded in feedback received from Juliusz Chroboczek Henning Rogge (FGAN) during WGLC, for clarifications to the text (thanks, guys!) and added acknowledgements section.

draft-ietf-manet-olsrv2-multitopology-04 (July 2014)

- Fixed an idnit (reference error)

What Is This?

Not rehashing a tutorial of this protocol extension - but, if you are looking for one, then it happened at IETF87 in Berlin:

- <http://tools.ietf.org/wg/manet/minutes?item=minutes-87-manet.html>
- <http://www.ietf.org/proceedings/87/slides/slides-87-manet-2.pdf> (slide 12 and forward).

Current Status

- WGLC Completed.
- Believe that all issues raised during WGLC have been reflected.
- AD Evaluation::Point Raised (*damn!*) - on IANA
 - Clarification of some allocations, text, etc - OK
 - The I-D "defines a new Type Extension 1, with a new name MPR_TYPES"...
...made AD go "*I don't think you can do this!*"
- More precisely, Adrian observed:
 - Current registrations of {packet,message,address block} TLV Types:
 - Associate a name to the TLV Type
 - Allocates a "sub registry" for Type Extensions for that TLV Type.
 - A *Full Type* (TLV Type, Type Extension) does not have a name, other than that of the TLV Type - e.g., (7,*) is MPR_WILLING [RFC7181]
 - This I-D tries to name:
 - (7,0) MPR_WILLING
 - (7,1) MPR_TYPES
 - And, not only is that unprecedented in [RFC5444] registries, IANA also doesn't have a place for recording such information.
- So, "back to the authors to chew on"
 - We've chew'ed, thought, discussed, and produced draft-dearlove-manet-tlv-naming, to resolve this matter

Next Steps

- Get Adrian to issue IETF LC, which requires
 - Fixing the various minor issues he's raised (easy)
 - Fixing the major IANA issue on previous slides:
 - Adopt draft-dearlove-manet-tlv-names
 - WGLC (what we hope will be) draft-ietf-manet-tlv-names
 - Issue Publication Request for (what we hope will be) draft-ietf-manet-tlv-names
 - Advancing (what we hope will be) draft-ietf-manet-tlv-names and draft-ietf-manet-olsrv2-multitopology together
- For all this, and much more, tune in to the ~~next episode of soap~~ set of slides in this presentation

draft-ietf-manet-tlv-naming

Christopher Dearlove

Thomas Clausen

Brief History

draft-dearlove-manet-tlv-naming-00 (november 2014):

- Motivated by the issue raised by Adrian for draft-ietf-manet-olsrv2-multitopology
- Introduced in Hawaii (IETF 91)

What Is This? (1/2)

- AD of draft-ietf-manet-olsrv2-multitopologu: Evaluation::Point Raised (*damn!*) - on IANA
 - Clarification of some allocations, text, etc - OK
 - The I-D "defines a new Type Extension 1, with a new name MPR_TYPES"...
...made AD go "*I don't think you can do this!*"
- More precisely, Adrian observed:
 - Current registrations of {packet,message,address block} TLV Types:
 - Associate a name to the TLV Type
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 - A *Full Type* (TLV Type, Type Extension) does not have a name, other than that of the TLV Type - e.g., (7,*) is MPR_WILLING [RFC7181]
 - This I-D tries to name:
 - (7,0) MPR_WILLING
 - (7,1) MPR_TYPES
 - And, not only is that unprecedented in [RFC5444] registries, IANA also doesn't have a place for recording such information.

What Is This? (2/2)

- Essentially, the document does 3 things:
 - Clean up existing TLV Type IANA registrations by:
 - Where all Type Extensions "make sense for a given type, and its name" (such as LINK_METRIC), no changes to the IANA registries or names are made.
 - Where not all Type Extensions "make sense for a given type, and its name" (such as MPR_WILLING), change the IANA registries:
 - The description for the allocated TLV type be "Defined by Type Extension"
 - The Type Extension registries created with the TLV Type be renamed "Type XX {Packet | Message | Address Block} TLV Type Extension"
 - Each allocated TLV Type Extension be given a name
 - Updates [RFC5444] Expert Review Guidelines to enforce the above for new registrations - so, "Updates 5444"
 - While updating the IANA registries, also make reservations (which we forgot to make in RFC7181) for experimental values for MPR Address Block TLV Type Extensions

Current Status

- Individual I-D
- Submitted this Monday, as part of the resolution process for draft-ietf-manet-olsrv2-multitopology

Next Steps

- Repeat from draft-ietf-manet-olsrv2-multitopology slide-deck:
 - Adopt draft-dearlove-manet-tlv-names
 - WGLC (what we hope will be) draft-ietf-manet-tlv-names
 - Issue Publication Request for (what we hope will be) draft-ietf-manet-tlv-names
 - Advance (what we hope will be) draft-ietf-manet-tlv-names and draft-ietf-manet-olsrv2-multitopology together
- Would very much like to ask the WG chairs to call for adoption of this I-D *"some time last week"* 😜

OLSRv2-Maintenance Status

Document	Doc. age (days)	Document Type	Main Hold-up	WG/IETF Call End	Awaiting which action	Next Step Comments
IBS	67	WG document	AD	2014/11/25	Point Raised - Discussion	GEN-ART review (Martin Thomson) to be resolved
NHDP-Optimization	66	WG document	IESG Evaluation	2014/11/25	Telechat	
OLSRv2-DAT	94	WG document	Authors		No Information Available	
OLSRv2-Mgmt-Snapshot	56	WG document	Shepherd	2014/8/12	Shepherd Write-Up Being Produced	Shepherd: Chris Dearlove Straw man write-up provided by authors
OLSRv2-MP	14	WG document	WG Chairs		WGLC Being Issued	Solicited 3 weeks WGLC @IETF91
OLSRv2-MT	112	WG document	References		AD: publication requested, needs review	AD raised IANA TLV name concerns, hence awaiting advancement of TLV-Names
RFC6779bis	0	WG document	Shepherd	2014/8/21	Shepherd Write-Up Being Produced	Shepherd: Chris Dearlove Straw man write-up provided by authors
SMF-SEC-THREATS	57	WG document	WG Chairs		WGLC Being Issued	Solicited 3 weeks WGLC @IETF91
OLSRv2-SEC-THREATS	90	Individual	WG Chairs		Adoption Call being issued	Solicited 3 weeks adoption call @IETF91
TLV-Naming	0	Individual	WG Chairs		Adoption Call being issued	
ODMRP	78	Individual	Authors			Needing PIM review WG Adoption?