IETF-88
Draft status: draft-ietf-nvo3-gap-analysis

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Current Status Update

– We presented the status of the combined individual draft (draft-gbclt-nvo3-gap-analysis) at IETF-87 in Berlin

– Working Group chairs polled the WG for adoption of the draft
  • Draft was adopted (20 September) and reposted using new name (draft-ietf-nvo3-gap-analysis-00) on 25 September, 2013

– WG participants provided many comments on the draft during the poll:
  • The draft is currently skeletal, providing structure but little content
  • The draft structure is either wrong, or incomplete, especially with respect to providing gap analysis structure addressing control plane requirements
  • Miscellaneous other comments
Issues with addressing comments made to date - **Content**

– Currently taken from requirements drafts that were either already adopted, reasonably close to being adopted, or ultimately targeted for adoption by the NVO3 working group

  • draft-ietf-nvo3-dataplane-requirements
  • draft-kreeger-nvo3-overlay-cp (draft-ietf-nvo3-nve-nva-cp-req)
  • draft-kreeger-nvo3-hypervisor-nve-cp
  • draft-ashwood-nvo3-operational-requirement

– There are a number of unresolved issues with these drafts
Issues with addressing comments made to date – **Content** (continued)

– The data-plane requirements draft is a WG adopted draft, however:

  • Some wording issues and questions need to be resolved for requirements that may be unclear
  • It is not clear how to deal with many of the “soft requirements” – particularly as these are especially unclear in a number of cases
  • We expect to resolve these issues in one or more face-to-face (editing) meetings during IETF-88
Issues with addressing comments made to date – Content (continued)

– The control-plane requirements drafts are both clearly intended to become WG adopted drafts, however:
  • The status of the overlay (nve-nva) draft was somewhat murky
    – Last mailing list status on adoption poll (provided mid-July) for draft-kreeger-nvo3-overlay-cp was that the WG chairs were waiting for responses to IPR questions
    – There was otherwise consensus to adopt the draft
    – The draft name changed significantly
    – The WG -00 version was posted 31 July, and version -01 on 21 October (several changes between the two versions)
    – There have been extensive discussions about this draft running from the beginning of August, through the end of October
  • While it seems very likely that draft-kreeger-nvo3-hypervisor-nve-cp will be adopted eventually:
    – (AFAICT) no poll has been conducted to actually adopt it
    – There has been very little discussion about it on the mailing list since early-to-mid September
Issues with addressing comments made to date – **Content** (continued)

– There is a mismatch between CP drafts and the areas for CP functionality identified in the PS draft

  • PS draft attempts to identify 3 work areas for CP functionality
  • There are currently 2 CP requirements drafts
  • The CP drafts are evolving (e.g. – the overlay CP draft is now an NVE-NVA CP draft)
  • The GA draft should probably proceed based strictly on CP drafts

– The current state of the CP drafts makes it difficult to use concrete examples to work out the appropriate structure for documenting CP gap analysis.
Issues with addressing comments made to date — Content (continued)

– The operational requirements draft was not adopted as of 20 September, though it appears that it will be once suggested changes have been made
  • Current content relative to this draft is “TBD”
– So far, no management requirements draft appears on the horizon
  • As usual, management requirements should probably be defined, but it is hard to find someone with a clear enough idea of what they are to create a strawman draft proposal
  • Current content related to management requirements is TBD
  • Remove this section?
Issues with addressing comments made to date – *Content* (continued)

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  • As usual, management requirements should probably be defined, but it is hard to find someone with a clear enough idea of what they are to create a strawman draft proposal
  
  • Current content related to management requirements is TBD
  
  • Remove this section at some point?
Issues with addressing comments made to date – *Content* (continued)

– At the time of writing the individual draft, the security requirements draft’s adoption seemed questionable
  • The draft was adopted (20 September) and posted (22 September)
  • No content has been drawn from that draft as of yet
  • Uncertain as to how it will affect draft structure

– Security requirements: do we take them from:
  • draft-ietf-nvo3-security-requirements directly, or
  • security considerations sections of other requirements draft (presumed to be driven by overall security requirements of the above draft)?

– Is gap analysis required for security requirements?
Issues with addressing comments made to date – **Structure**

– Two major issues:

  • Structure used to represent gap analysis is currently based on DP requirements
    – This may be a problem in documenting gap analysis for other areas
    – Comments during adoption poll had a main focus on potential issues with capturing gap analysis for the control plane(s)
    – This is likely a result of the amount of discussion on the list related to control planes (verses management, operations, etc.)
    – Other areas may have similar problems

  • What areas/requirements actually need to be included in the gap analysis?
Issues with addressing comments made to date – *Structure* (continued)

– DP requirements based structure

• Current table headings are based on 5 potential (DP) solutions we feel should be included in the analysis

• If we agree that these are the solutions to consider, than we need to identify any gaps associated with each one

• In this respect, any of the (DP) solutions we consider that does not have one or more solutions associated with other requirements areas (e.g. – CP requirements) has a *gap* we need to document in this draft
Issues with addressing comments made to date – *Structure* (continued)

– Structure associated with different areas
  • Using CP requirements as an example, it is clear that one or more CP solutions may apply to multiple DP solutions
  • The relationship is likely not 1:1
  • It is the CP solutions that need to be analyzed against the CP requirements (not the DP solutions)
  • So, there are two levels of gap analysis that may need to occur for each area other than DP requirements
    – Is there one or more CP solutions potentially associated with each DP solution that may address all or some of the CP requirements (again using CP requirements as an example)?
    – How does each potential CP solution measure up against associated CP requirements (where CP is, again, used as an example)

– In some cases, this may require additional tables
Issues with addressing comments made to date – *Structure* (continued)

– What needs to be included in the gap analysis?
– Currently:
  - Operational Requirements (TBD)
  - Management Requirements (TBD)
  - Control Plane Requirements
  - Data Plane Requirements
– Do any of these sections not apply?
  - If we don’t have a management requirements proposal, at what point do we remove this section?
– Do we need a separate section to address Security Requirements (analysis)?
Next Steps

• Re-spin the draft attempting to address WG comments during adoption call, updates to NVO3 requirements drafts and list discussions
• Gain additional review and comments from WG participants
• Update as necessary to keep up with ongoing requirements changes and WG input
• After all requirements drafts reach a mature and stable state (ideally, past IESG review), get to WG last call, then IESG/IETF review and finally publish as a standards track RFC