#### 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 - <u>Content</u>

- 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-nvacp-req)
  - draft-kreeger-nvo3-hypervisor-nve-cp
  - draft-ashwood-nvo3-operational-requirement
- There are a number of unresolved issues with these drafts

- 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 faceto-face (editing) meetings during IETF-88

- 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 draftkreeger-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-nvecp 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

- 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.

- 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?

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  - Current content related to management requirements is TBD
  - Remove this section at some point?

- 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?

- 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

- 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

- 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