Towards recursive virtualization and programming for network and cloud resources
(draft-unify-nfvrg-recursive-programming-02)

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Outline

1. Updates
2. Relation to ETSI NFV
3. Extended Examples
4. Summary
Chairs’ feedbacks

Ramki and Diego:

Below are our thoughts on the "Unifying Carrier and Cloud Networks: Problem Statement and Challenges" draft. Link to draft: https://datatracker.ietf.org/doc/draft-unify-nfvrg-challenges/

- This draft lacks detailed implementation example(s)
- Our suggestion is to merge this draft with https://datatracker.ietf.org/doc/draft-unify-nfvrg-recursive-programming which delves deeper into implementation examples.
Updates in 02

- New
  - Sec 5: Relation to ETSI NFV

- Revised
  - Sec 6: Examples
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NFVO’s and VIM’s Functional Splits

**NFVO**
- Network service lifecycle management.
- Orchestration of NFVI resources across multiple VIMs, fulfilling the Resource Orchestration functions;

**VIM**
- Orchestrating the of NFVI resources (including the optimization of such resources usage), and
- managing the association of the virtualised resources to the physical compute, storage, networking resources.
The Recurring Abstraction / API
Orchestration Layouts Enabled by the Recurring Abstraction / API
The draft contains:

- motivational examples;
- definition of a *joint software and networking abstraction*;
- Yang data model of the Joint API (for virtualization and control);
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Extended Examples

Added virtualization view figures to all the examples

- Infrastructure reports
- Simple VNF Forwarding Graph deployment requests

VNF Benchmarking as a Service (VBaaS) – draft-rorosz-nfvrg-vbaas-00 – contains an example based on the proposal of this draft.
Summary

Status:

- Proof of Concept prototypes demonstrated at SIGCOMM 2015, EWSDN 2015, Globecom 2015 screen-cast coming

Next steps:

- Merge some of the remaining Unifying Carrier and Cloud Networks: Problem Statement and Challenges into this draft
- RG adoption?

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