# Methodology for VNF Benchmarking Automation

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# Why the draft was updated? Which issues was it trying to address?

- ❏ Main changes to approach automation, as discussed in IETF 101
    - ❏ New title: "Methodology for VNF Benchmarking Automation"
- ❏ We do not aim to explore all possible VNF benchmarking methodologies
    - ❏ VNF Developer/Vendor is responsible to specify target metrics and specific benchmarking methodology (able to be automated)
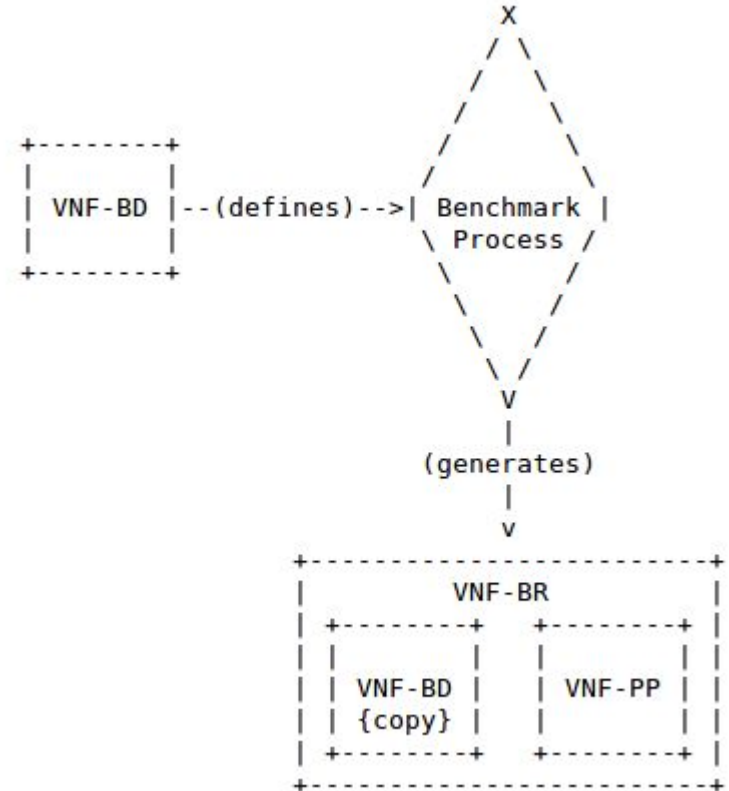

- ❏ New Contributors: Manuel Peuster and Holger Karl (Paderborn University)

# Which are the major technical changes?

❖ VNF might be composed of components (VNFC)
❖ Defined VNF Benchmark Report (VNF-BR) composed of:
➢ VNF Benchmark Descriptor (VNF-BD)
■ Procedures Configuration
■ Target Information
■ Deployment Scenario
■ Topology
■ Requirements
■ Parameters
➢ VNF Performance Profile (VNF-PP)
■ Execution Environment
■ Measurement Results

# VNF benchmarking process inputs and outputs

- Automated Benchmarking Procedures

  - Orchestration

  - Management/Configuration

  - Execution

  - Output

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  |         |                 /           \
  | VNF-BD  |--(defines)-->| Benchmark |
  |         |                 \ Process /
  |         |                  \       /
  +---------+                   \     /
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                               (generates)
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                                   v
  +---------------------------------------+
  |              VNF-BR                   |
  |   +---------+      +---------+        |
  |   |         |      |         |        |
  |   | VNF-BD  |      | VNF-PP  |        |
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# Which issues are unresolved? Which issues needs further discussion.

- Expand and clarify "5.3 Automated Benchmarking Procedures"
  - How each step is clearly defined by automated procedures
- Detail each item as subsection in "5.4 Particular Cases"
  - How deployment scenario and procedures might change in each item
- Discuss a general recommendation to automate upcoming VNF benchmarking methodologies

# What is still missing in the draft? Future plans for the draft?

★ Detail Agent/Monitor interfaces with Prober/Listener
★ Explain actions each component might take on messages /data
  ○ e.g., Manager might validate Agent/Monitor results and demand new trials
★ Specify possible issues of the automation approach in VNF Benchmarking
★ In parallel, we develop an information model that represents a VNF-BR
  ○ Focus on the demonstration of draft ideas following reference implementations:
    ■ Gym and tng-bench
★ Adjust draft in conformance with RFC2119