Interconnection Intents

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Motivation and objectives

• Interconnection today is conceived only as pure IP traffic interchange
• These environments are typically static, requiring long interactions for setting up any inter-provider connection
  • Manual operation of current interconnections prevents any flexibility
• Operators start deploying its own computing capabilities
  • Current model limits the capability of taking advantage of new advances like network virtualization and programmability
    • E.g., to realize composite services by combining cross-domain network, computing and storage resources
• New models for interconnecting SDN/NFV enabled networks are required
  • Automation for both the interconnection sessions and the service deployment on top of that is needed to reach the goal of flexibility
  • E.g., for deploying (or requesting) specific VNFs and service graphs
Summary of the draft

• Target: to leverage on IBN technologies to handle enriched interconnection requests (i.e., traffic interchange and beyond)

• Scenarios of applicability:
  • Interconnection of non-public to public Networks in 5G
  • Multi-domain Network-as-a-Service requests (see e.g. sec.4.4 in RFC8568)
  • Multi-domain Network Virtualization (draft-bernardos-nmrg-multidomain-01)

• Benefits:
  • Establish a common, normalized method among service providers for automated interconnection
  • Simple way of expressing enriched interconnection request further than pure IP traffic interchange
Next steps

• Keep developing IB capabilities for interconnection aspects
• Request comments and inputs for new versions
• Positioning this draft as one potential NMRG intent use case (WI#5)