Virtual Network Management Model for Data-Center Operations and Management

draft-okita-opsawg-vnetmodel-04

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1 What’s needed for DC-network management?

- **Background**
  - Emerging data-center (DC) and cloud services
  - Utilization of server virtualization technologies

- **Problems**
  - Difficult management of topology of the DC-network including virtualized servers because of the difference of management information between servers and network devices

- **Requirements**
  - Standard way to describe DC-network topology

- **Proposal**
  - An information model that can represent the physical/virtual resources and topology of the DC-network
  - XML-based datamodel implementation example that is added at the -04 draft
  - An item of the dcops (DC operations) activity
2 What is the opsawg asked to discuss?

• What is the essential information to manage DC networks?
  ➢ Management information about physical topology and virtual topology seems essential to identify the customers that are affected by a device/link failure.
  ➢ How about the management information about VPNs?
  ➢ How about the traffic statistics information?

• What is the appropriate method to describe the management information about DC networks?
  ➢ MIB-based datamodel which is widely deployed to the Internet?
  ➢ XML-based datamodel like NETCONF datamodels?
  ➢ CIM-based abstract datamodel like DMTF’s SMASH and SNIA’s SMI-S?
A virtual network expands by server-virtualization. Management information of switches and servers are different.