

Virtual network infrastructure dependability: Expectations from the infrastructure layer?

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Virtualizing networking infrastructures gives an opportunity to simplify existing network architecture and consolidate multiple overlay networks, thus reducing the overall operational complexity. This typically requires a mechanism to share an underlying physical infrastructure among various network service instances. The responsibility for allocation and management of resources in the shared environment lies with the infrastructure layer.

Virtual network infrastructure dependability can be linked to the following characteristics of the infrastructure layer:

1. How effective is the infrastructure layer in managing resource requirements for respective virtual network service instances?
2. Can the virtual network service instances be notified about changes or failures in the underlying physical infrastructure?

These characteristics are key to preventing sudden disruption in network services.

In this session the discussion would be primarily focused on: What kind of resource management strategies and mechanisms can be adopted for the infrastructure layer? How can the virtual instance be notified of changes or failures at infrastructure layer? What kind of actions can be taken by virtual instances to avoid or minimize network service disruption?