



Getting Familiar with UFM's Data Model

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Overview of Data Model

UFM enables the fabric administrator to manage the fabric based on discovery data collected from the fabric. This data is mapped into model elements (objects) available to the end user via UFM REST API and UFM Web UI.

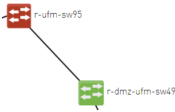
UFM Model Basics




The fabric managed by UFM consists of a set of physical and logical objects, including their connections. The Object Model has a hierarchical object-oriented tree structure with objects as the tree elements. Each object defines an abstraction for physical or logical fabric elements.

Physical Model

The Physical Model represents the physical resources and connectivity topology of the Network. UFM enables discovery, monitoring and configuration of the managed physical objects.

Physical Objects

Icon	Name	Description
N/A	Port Object	Represents the external physical port on switch or on Host Channel Adapter (HCA). A port is identified by its number. UFM provides InfiniBand standard management and monitoring capabilities on the port level.
N/A	Module Object	Represents the Field Removable Unit, Line card, and Network card on switch or HCA on host. For NVIDIA Switches, Line and Network Cards are modeled as modules.
	Link Object	Represents the physical connection between two active ports.
N/A	Cable Object	Represents the physical cable or the transceiver connected to one of the link edges.

Icon	Name	Description
	Computer Object	Represents the computer (host) connected to the Fabric. The UFM Agent installed on the host provides extended monitoring and management capabilities. Hosts without agents are limited to InfiniBand standard management and monitoring capabilities.
	Switch Object	Represents the switch chassis in the Fabric. A Switch object is created for every NVIDIA Switch. Switches of other vendors are represented as InfiniBand Switches and limited by InfiniBand standard management and monitoring capabilities.
	Rack Object	Represents the arbitrary group of switches or computers. When linked devices are shown as a group, the link is shown between the group and the peer object.

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