Viasat™

VIASAT NETAGILITY™

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Virtual mobile SD-WAN /SD-LAN networking platform

Stay connected virtually anytime, anywhere using any network

The Viasat NetAgility™ Virtual Router (NVR) is a flexible, virtual software-defined networking (vSDN) platform that bridges disparate networks and distributed cloud resources to enable robust and resilient connectivity across the battlespace, even in disconnected, intermittent, limited (DIL) environments. The NVR transcends the traditional Primary/Alternate/Contingency/Emergency (PACE) approach by simultaneously routing or bonding packets over all available communications links, providing a powerful, responsive solution for hub-and-spoke topologies (Figure 1). The same NetAgility™ vSDN router platform also enables automated failover mesh networking across disparate edge networks (Figure 2).

The NVR features an intuitive setup and software-based, hardware-agnostic deployment that can run on modern and legacy platforms as well as virtualized and cloud environments. This enables deployment across diverse platforms such as VMware and KVM across standard x86 platforms, bare metal installation on Single Board Computers (SBC) and System on Chip (SoC) ARM-based host systems, and Cloud deployments such as Amazon Web Services (AWS), Microsoft Azure, Google Cloud, Oracle, and others. This enables the NVR to extend from edge to cloud across existing fielded platforms, as well as smaller edge compute platforms, including soldier wearables, low SWaP IoT devices, and our rugged, small-form-factor NetAgility™ Mobile Router (NMR) devices.

Management of devices is conducted through Viasat's NetAgility™ Orchestrator, which supports remote configuration and monitoring of all NetAgility™ devices.

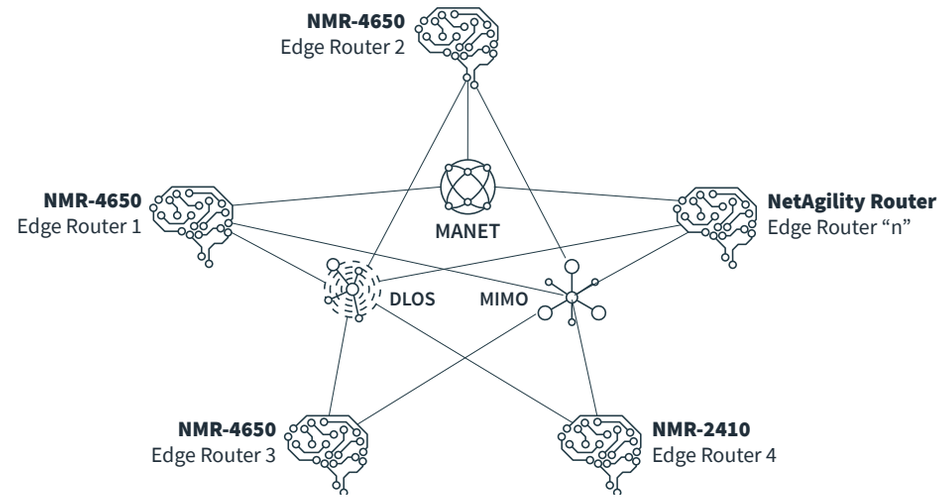
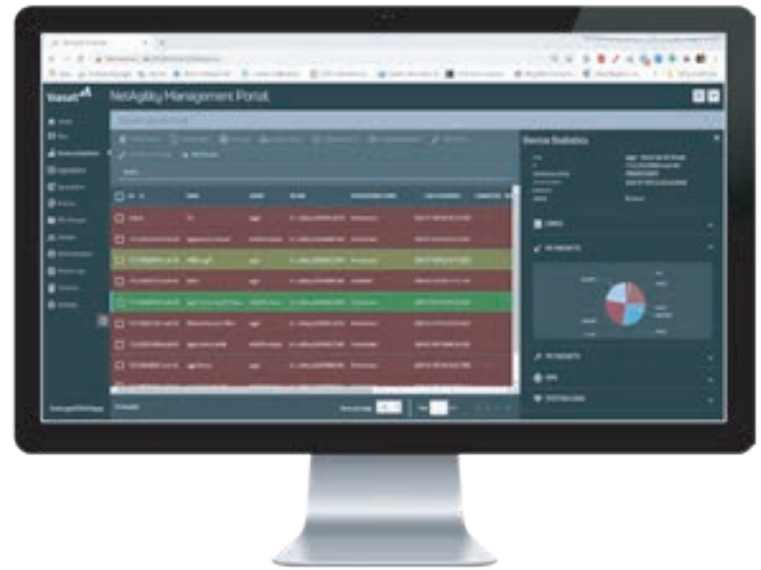


Figure 1: NetAgility™ automated failover intelligent mesh for situational awareness and comms in distributed environments of mixed LOS networks.

Viasat NetAgility™ At-a-Glance

- Multiple communications paths for transport-agnostic seamless connectivity across SATCOM, wireless, beyond line-of-sight (BLOS), dismounted line-of-sight (DLOS), Mobile Ad-Hoc Network (MANET), line-of-sight (LOS), and tactical radios
- Centralized Orchestrator for unified management
- SD-WAN/SD-LAN operations in both lower and upper tactical network environments for disconnected operations
- Radio, electronic warfare (EW), cyber, and network environmental-aware management and routing; distributed cloud for disconnected ops; artificial intelligence/machine learning (AI/ML) for touchless operations



VIRTUAL PLATFORM SPECIFICATIONS	
Platform	**Operating Environment**
x86	ESXi VMware; KVM; Container
ARM	Bare Metal; Container
Cloud	AWS, Azure, Google, OpenStack
SUPPORTED NETWORKING AND PROTOCOLS	
TCP/IP	OSPF
BGP	DHCP
DNS	Commercial VPN Tunnels
TACTICALLY SPECIFIC PROTOCOLS/FEATURES	
Radio Aware Routing	GPS/CoT location
UDP/ESP Packet Mgmt	Mesh VPN
Type-1 Crypto Routing	SATCOM Acceleration
MANAGEMENT INTERFACES	
SNMPv3	Northbound APIs for SIEM integration
Log Mgmt	Alerting
Status/Health Mon	Router Mgmt
ORDERING INFORMATION	
Part Number	1350874
Description	NVR-1000 (Router SW)

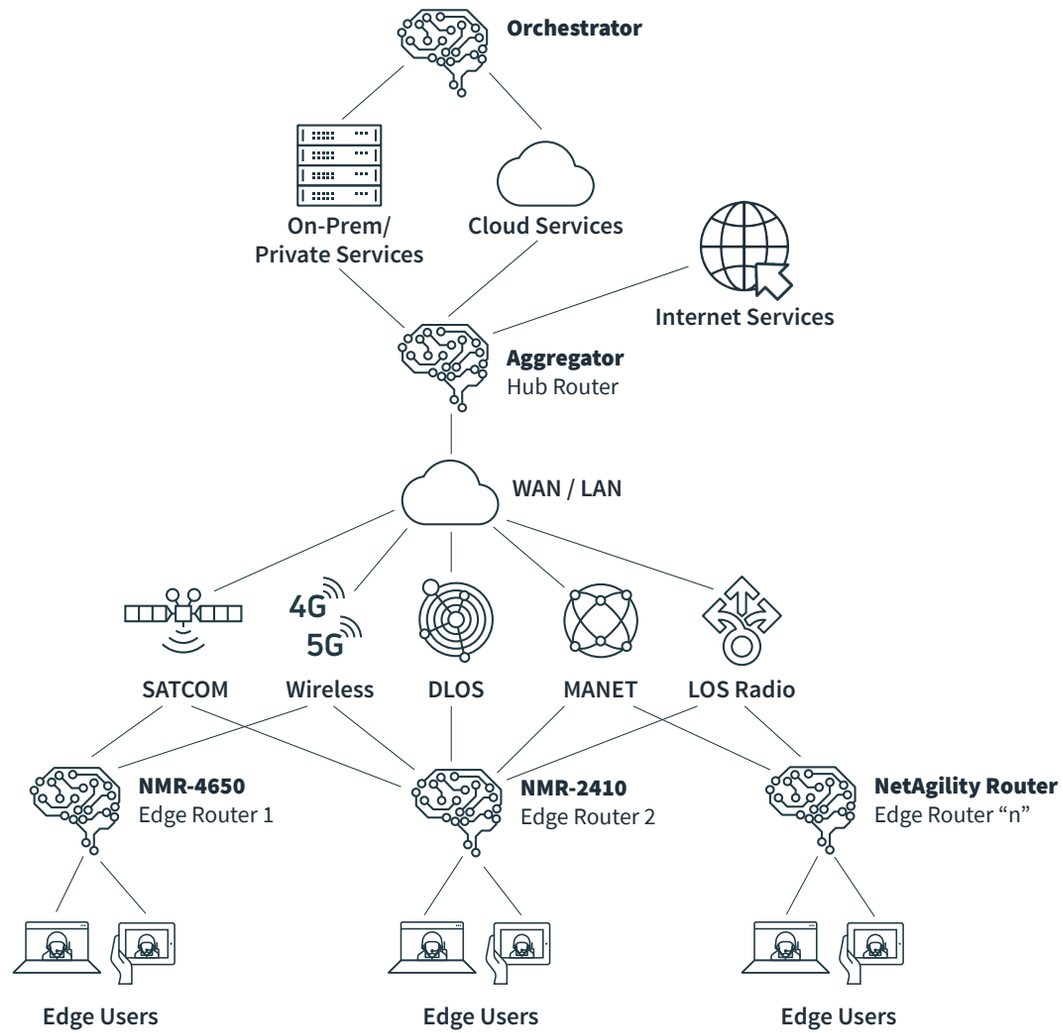


Figure 2: NetAgility™ multi-transport, multi-platform, and multi-cloud resilient bonded networks for optimized data sharing and services access.

NETAGILITY™ SCALING (NODES, BANDWIDTH) VS. COMPUTE RESOURCE REQUIREMENTS				
Routing Bandwidth	100 Mbps	200 Mbps	1 Gbps	5 Gbps
vCPUs	2	4	6	8
RAM (GBs)	4	4	8	16
Storage (GBs)	10	20	30	30

NetAgility™ October 2024