



Managing Virtual Environments

Overcome the Virtual Visibility Gap

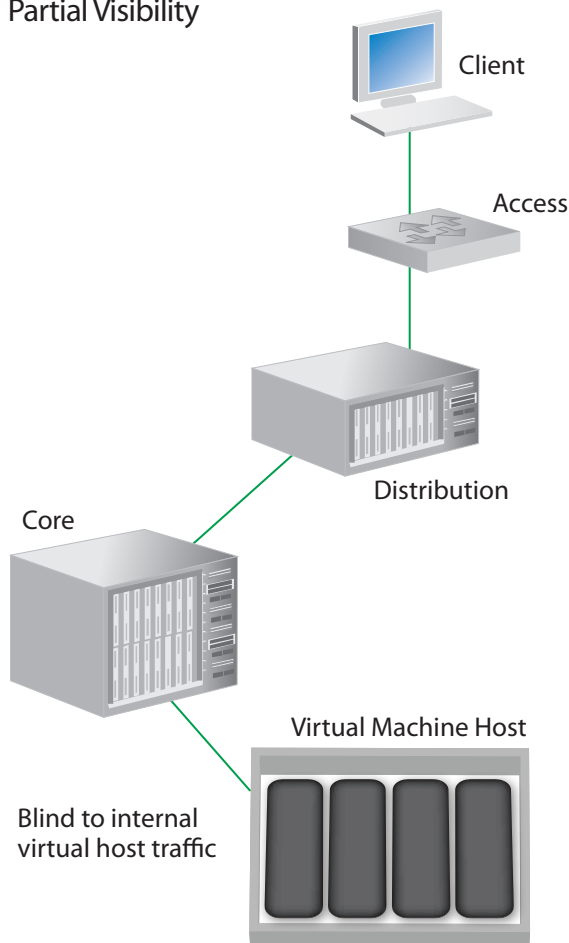
The benefits of virtualized networks are clear: reduced costs and greater efficiency. But these benefits can only be realized with proper management tools. Nearly three-quarters of companies do not have proper virtual monitoring tools in place according to Network Instruments' State of the Network Global Study. This leaves the majority of networks blind to virtual traffic.

Our Observer® platform solves these issues by offering complete visibility and analysis into both virtual and physical environments. It provides an integrated view of virtual traffic traversing physical networks, between different virtual machine hosts, or between virtual machines on the same host. All virtual traffic flowing within the virtual machine host can be sent to a GigaStor™ appliance for back-in-time analysis, or to the Observer Reporting Server for enterprise-wide performance reporting.

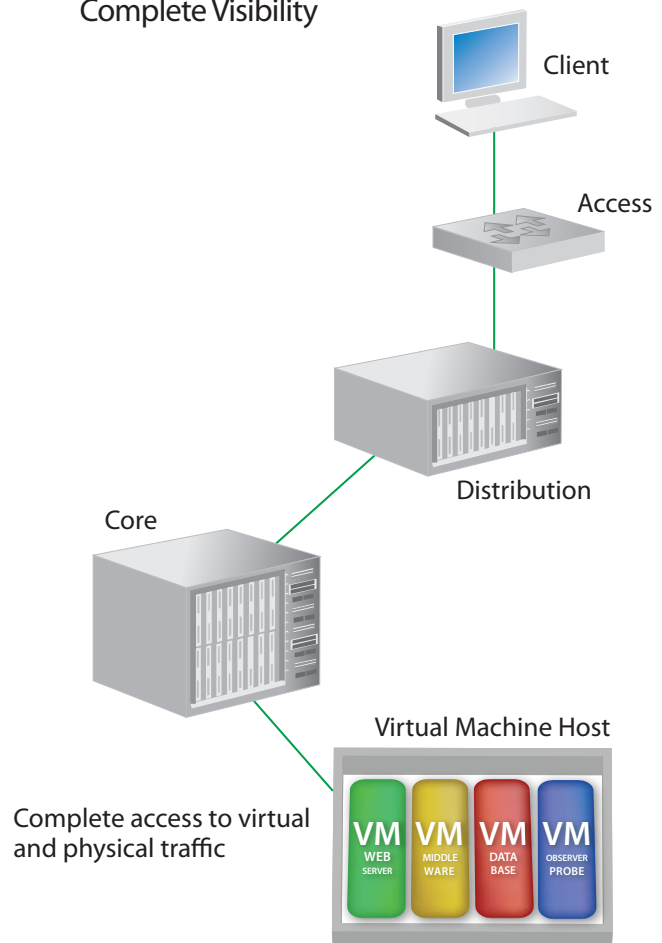
Primary benefits:

- Gain insight into virtual-machine-to-virtual-machine communications for performance management and threat mitigation
- Manage virtual network performance in relationship to overall application and network performance

Partial Visibility



Complete Visibility



Accessing Virtual Traffic

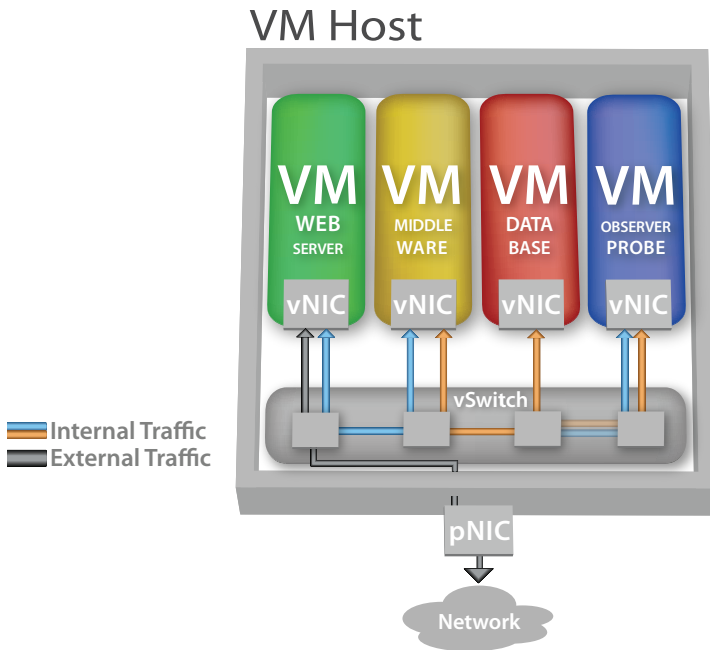
By using traditional analysis tools and a SPAN session or TAP, network teams can analyze all traffic traveling from the virtual host to the physical world and vice-versa. But what about the critical communications running *between* virtual machines within the host?

With traditional monitoring methods, network professionals are left in the dark.

Depending upon your network environment and visibility needs, the Observer platform offers different configurations to achieve optimal virtual performance monitoring.

Real-Time Internal Host Analysis

To monitor all virtual machines in a host, run a Network Instruments® software probe on a new virtual machine within the host. By setting the vSwitch on the virtual host to promiscuous mode, all traffic passing through the virtual switch will be visible to that probe.



Limited analysis with software probes

Advantage:

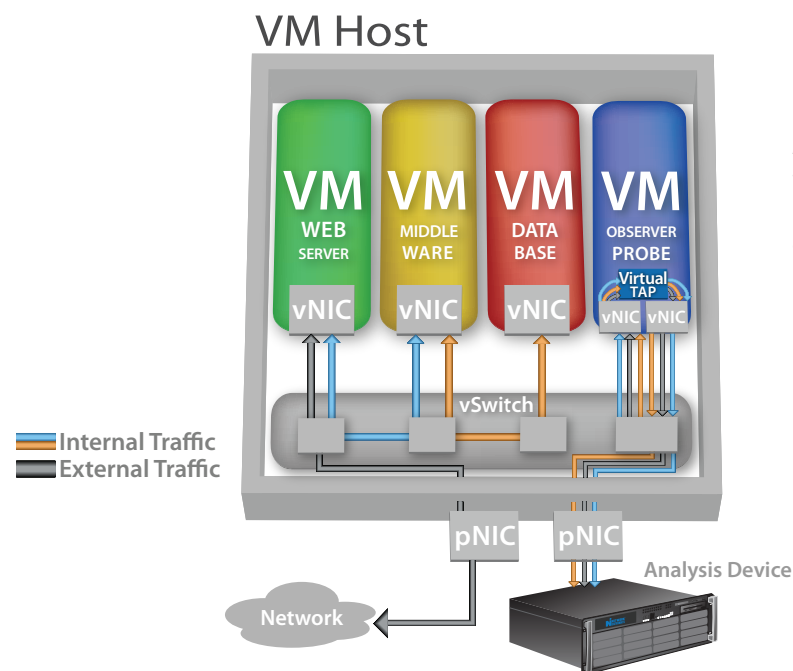
- Gather metrics and analyze internal host performance via an external Observer console

Limitations:

- Cannot use external devices such as retrospective network analyzers
- Unable to integrate physical and virtual network views

Integrated Performance Analysis

The Virtual TAP technology included with the Network Instruments Multi- and Expert Probe solves the challenges of limited visibility and analysis capabilities. The Virtual TAP creates and pushes copies of all internal host traffic out to GigaStor or other purpose-built devices.



Full visibility with Virtual TAPs

Advantages:

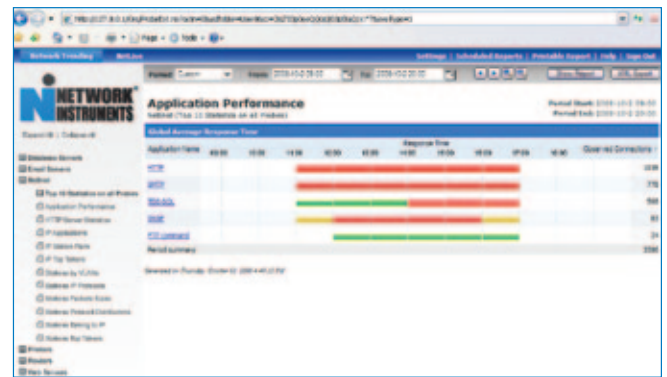
- Apply retrospective and real-time analysis to virtual and physical performance problems
- Manage application performance regardless of network environment

Observer's In-Depth Visibility

The Observer analysis platform simplifies and speeds troubleshooting in physical and virtual environments by providing a comprehensive approach to tracking application performance and network resources enterprise-wide, quickly identifying problems, and drilling down to resolve them.

Observer Reporting Server (ORS)

- Monitor performance enterprise-wide across virtual and physical environments
- Organize reporting by business unit, function, application, or virtual resources
- Drill into individual virtual or physical network elements for quick resolution



Application Performance



GigaStor Interface

GigaStor

- Capture and save up to 288 TB of data for later review
- Rewind the network to review and troubleshoot intermittent performance issues
- Obtain long-term analysis of application and network performance for capacity planning
- Reconstruct data streams for compliance and security investigations



Pinpoint Delay Source with Observer's Experts

Observer Console

- Ensure on-time application delivery and quickly resolve problems with Experts
- Utilize over 600 Experts to quickly isolate and resolve problems
- Monitor application communications, errors, and response times
- Gain application-specific details across the enterprise
- Track unified communications and VoIP through virtual and physical environments



Monitor Multi-Tiered Service Availability

Link Analyst®

- Automatically discover, map, and monitor virtual and physical resources
- Monitor the underlying host operating system and server
- Identify the source of problems by network, system, or application
- Ensure infrastructure and route availability

