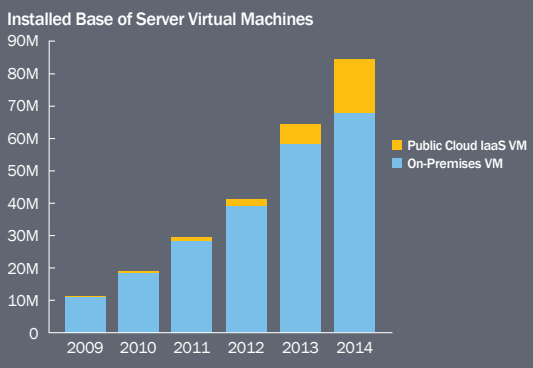
IntellaTap-VM
Virtual Network Monitoring

Features

- Flexible virtual network monitoring
- Eliminate intra-VM blind spots
- Low impact (no VM or agent)
- Unified virtual and physical visibility
- Filter traffic and track migrations
- Easy to use centralized management
- Use existing monitoring tool farm
- Microsoft Hyper-V and Linux KVM compatible

High Growth of Server Virtual Machines



Source: Gartner, Four Trends Changing Server Virtualization Decisions, March 2015

Complete Virtual Network Visibility

Data center growth and capacity constraints has resulted in wide spread use of virtual machine deployments across servers for cost savings and data center efficiency. However, large amounts of intra-VM traffic (or east-west traffic) creates significant blind spots that can be complex to monitor across an elastic virtual environment and evolving network.

IntellaTap-VM provides virtual network monitoring of intra-VM traffic with a low impact native Microsoft Hyper-V and Linux KVM solution that requires no agent or VM. The centralized monitoring system combines point-and-click VM selection with configurable traffic filters to tap only VM traffic of interest for monitoring, increasing bandwidth and resource efficiency. IntellaTap-VM is part of APCON's unified virtual and physical monitoring solution, providing complete network visibility using the existing monitoring tool farm, staff and diagnostics processes.

Microsoft Hyper-V KVM

Compatible with Microsoft Hyper-V and Linux KVM

The Solution

The IntellaTap-VM virtual network monitoring solution works together seamlessly to provide easy to use point-and-click monitoring of virtual machine traffic of interest. The solution includes:

TITAN centralized management provides administration of the IntellaTap-VM monitoring solution. IntellaTap-VM communicates to standard hypervisors to easily identify and enable taps of virtual machine traffic, set traffic filters, follow migration events, and forward traffic over unidirectional GRE tunnels to monitoring systems. No custom agents or VMs are required, for minimal impact on server resource and ongoing maintenance.

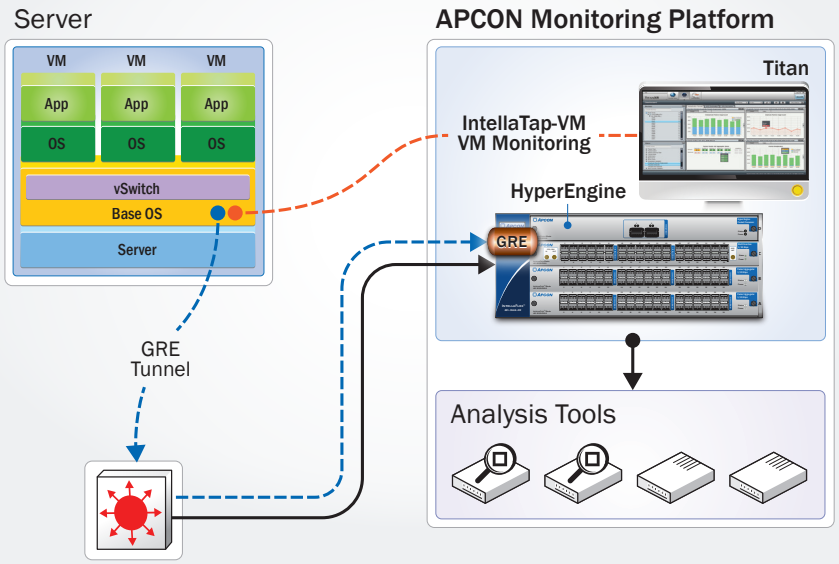
IntellaTap-VM virtual taps forward filtered virtual traffic to either **INTELLASTORE II+** network monitoring appliance or **HyperEngine** packet processor for high speed GRE decapsulation. They also aggregate multiple streams of virtual traffic, forward traffic to one or more monitoring tools. Together they are part of APCON's unified virtual and physical monitoring solution, which enables complete network visibility and improve monitoring tool efficiency.

Centralized Management

Unified physical and virtual network monitoring requires centralized management that's easy to use. Titan management is server software with secure browser access to authorized users, providing a single screen point-and-click graphical experience for IntellaTap-VM virtual tap configuration, virtual machine traffic status and forwarding of virtual network traffic to monitoring tools, which enables complete network visibility and improve monitoring tool efficiency.

Low Impact

Alternative solutions that require dedicated VMs, allocated processors, and custom software can have significant impact to resources and maintenance across server farms. Titan ad the IntellaTap-VM virtual tap solution communicates directly with standard Microsoft Hyper-V and Linux KVM virtual environments including Red Hat, CentOS, Ubuntu and more. IntellaTap-VM does not require custom server software or dedicated resources, and is designed to easily scale with network growth.



Filtering Traffic of Interest

IntellaTap-VM taps and filters virtual machine traffic natively in servers. Users can select a traffic filter for each IntellaTap-VM virtual machine tap on the server, to only forward traffic of interest across the physical network, reducing the impact on valuable server and physical network resources.

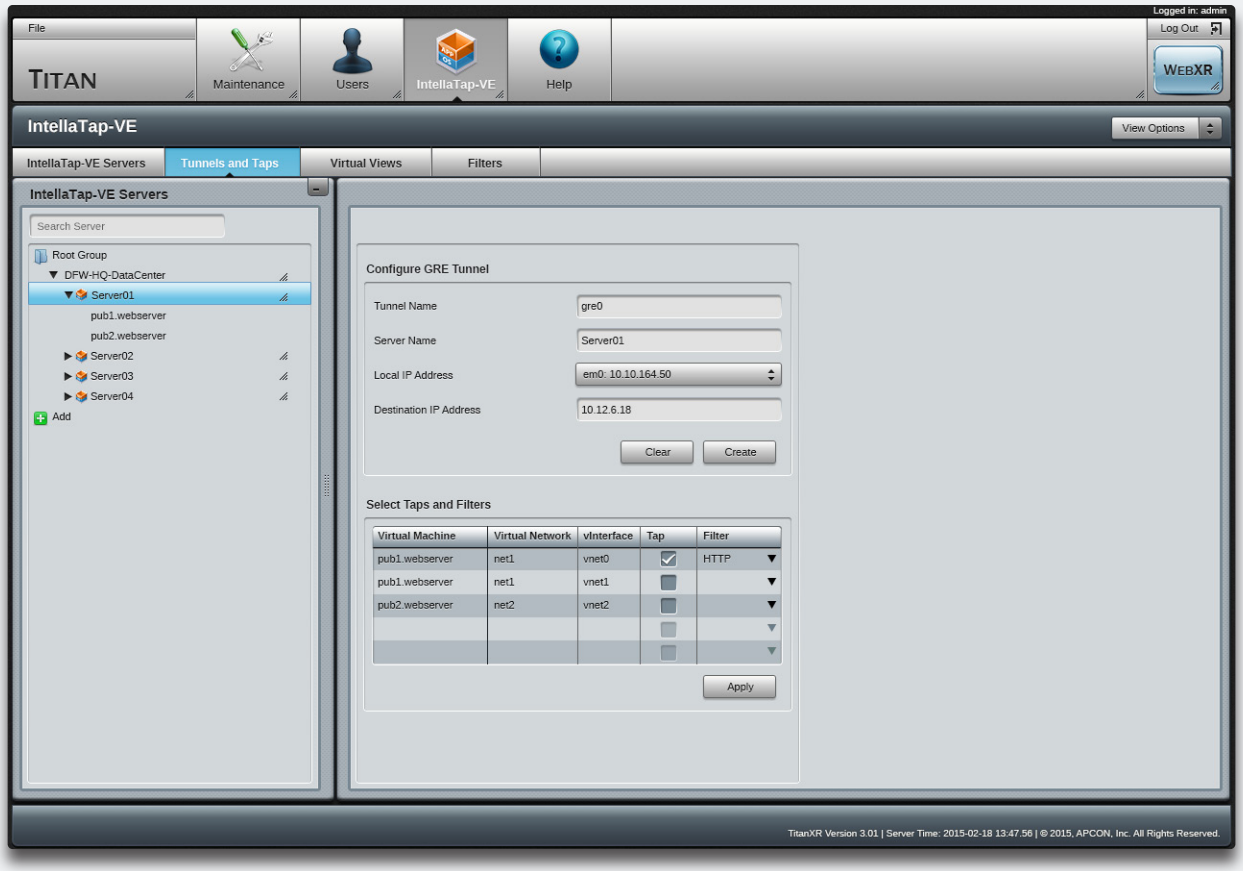
Existing Tool Farm

Enterprises have significant investment in security and diagnostic tools, resources and expertise to keep networks safe and running well. APCON's unified virtual and physical network monitoring solution can direct all traffic of interest to one or multiple tools, so monitoring experts have complete visibility across the entire network.

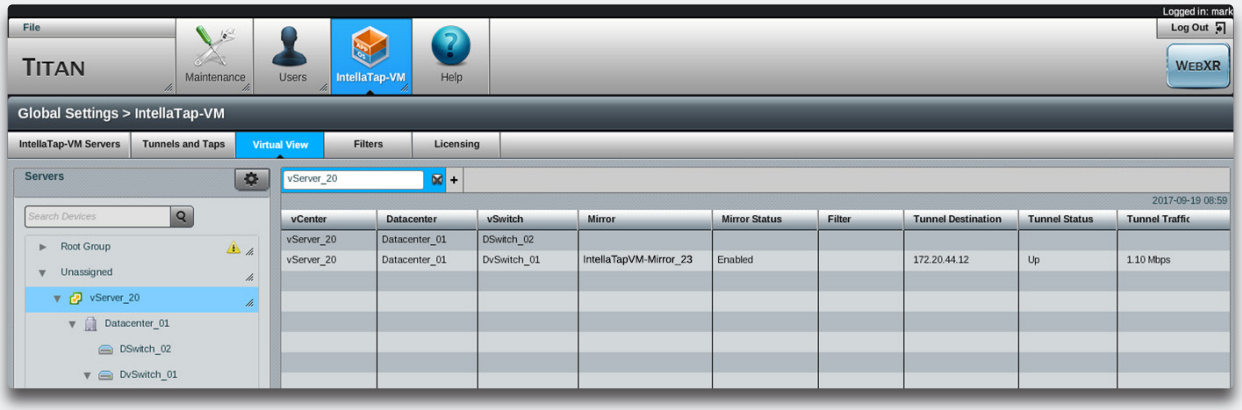
INTELLASTORE II+ Monitoring Appliance (top) and HyperEngine Packet Processor

GRE Tunnel Endpoints

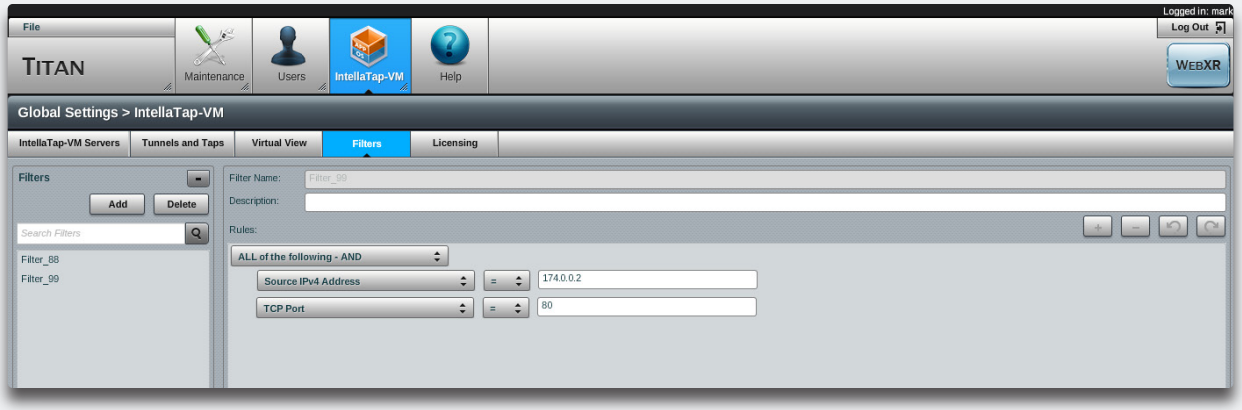
IntellaTap-VM virtual taps use GRE tunnel encapsulation to unidirectionally forward VM traffic of interest across the physical network to APCON monitoring systems. **INTELLASTORE II+ Monitoring Appliance** and **HyperEngine Packet Processor** provide high speed GRE decapsulation and aggregation of up to 10Gb, 100Gb or 200Gb processing and forwarding of virtual network traffic to one or more monitoring tools.



Easily find, configure and enable IntellaTap-VM virtual taps and traffic filters to monitor VM traffic of interest.



View IntellaTap-VM virtual tap status including virtual machine status, traffic filter, and bandwidth of monitored traffic.



Easily configure Filters so virtual taps only forward VM traffic of interest.

Why Choose APCON?

APCON's strategic advantages separate the IntellaFlex XR network monitoring switch from the competition:

Innovation

- Modular switch design based on large enterprise data center requirements
- Advanced graphical user interface
- Unique multi-switch management software
- Common software and hardware across all chassis simplifies operations
- Unified virtual and physical network monitoring

Reliability/Redundancy

- Redundant controller cards and power supplies
- Separate data and control plane architecture maintains connections during controller swap
- Hot-swappable power supplies, blades, controllers, transceivers

Port Density and Scalability

- Five sizes of chassis from 1RU to 14RU
- Up to 504 ports in 14RU
- Up to 5.04 Tbps throughput capacity

APCON Monitoring Solutions

IntellaTap-VM virtual monitoring is part of APCON's market leading enterprise data monitoring solutions. APCON features easy to use graphical interfaces and common software across high available, scalable modular physical switches and centralized software with unified physical and virtual monitoring that scales to monitoring the world's largest datacenters.

IntellaTap-VM Information

Part Numbers

9100	Titan Management Software License
9110	Titan IntellaTap-VM License (per server)
3033-S14	IntellaStore® II+ Appliance (up to 10 Gbps GRE)
3033-E02	HyperEngine Packet Processor (up to 200 Gbps GRE)

TitanXR Specifications

Scalable to large network environments

- IntellaTap-VM Virtual Monitoring License (per server)
  - Standard Microsoft Hyper-V and Linux KVM compatible
  - Tested Linux: Red Hat, CentOS, Ubuntu (KVM)
  - Tested Microsoft: Windows Server 2012 R2 (Hyper-V)
  - Automatically follows VM migration events
  - Virtual taps forward traffic using unidirectional GRE tunnel encapsulation
- Switch Management License (per switch)
  - IntellaFlex XR firmware v5.05.1 or higher
  - IntellaPatch 3000 firmware v4.35.4 or higher
- Up to 100 users with 25 concurrent users
- Stores 10,000 events and last 100 login details
- Xeon multi-core hyper-threading processing, 2.0GHz or greater
- Minimum 32GB RAM and 2TB disk space
- For Windows: Server 2012 or Server 2008, or Windows 7 (64-bit) in server-based setup
- For Linux: CentOS v6.x

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