



L7VIEWER

## Deep Traffic Visibility for Virtualized Infrastructure

L7Viewer is a traffic analysis tool that provides complete visibility of all network traffic that crosses a virtualized infrastructure, up to Layer 7. It facilitates and accelerates common IT tasks such as VM migration, application upgrades, and root-cause identification for network and application issues.

### Key Features & Benefits

#### Exhaustive View of All Traffic

- Sees all network traffic up to Layer 7
- 2700+ protocols and applications recognized with their categories (video, email, P2P, etc.)
- Sees traffic from both known (sanctioned) and unknown (e.g. Shadow IT) applications
- Covers inter-VM traffic as well as traffic between any VM and external environment
- Includes traffic to / from VMs that may not be listed or described in inventory
- View per VM, hypervisor, physical link, IP address, and connection (L2-L4)

#### Easy-to-Use

- Auto-discovery of VMs, applications and hypervisors
- Dashboards presented according to use case
- Trend indicators & alarms
- Deployment and orchestration through VMware vCenter
- Can be used by any IT admin

#### Non-Intrusive

- Passive network monitoring, with no impact on application performance
- No significant bandwidth overhead or impact on CPU utilization
- Supports users without admin privileges

#### Visualization per tenant

Ability to visualize traffic for a single tenant

### The Challenge

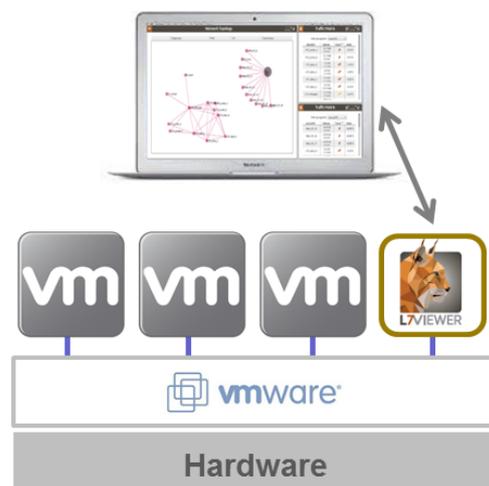
Today's typical virtualized IT infrastructure with dynamic, distributed resources and increasing inter-dependencies is highly complex to manage. A lack of visibility is often cited as the main problem by IT staff; it creates operational challenges which impact routine tasks such application upgrades or root-cause identification for trouble tickets.

### The Solution

L7Viewer provides a complete L2-7 view of all inter-VM traffic in the data center and between any VM and the external environment. It maps network traffic and displays the information in a way that's easy to understand, with a set of comprehensive filters for instant access to the data you need.

### Technical Implementation

- A lightweight probe VM on each hypervisor analyzes all traffic passing through the virtual switch
- The probe feeds an analytics node storing records in a database
- Deployment and orchestration through VMware vCenter
- An intuitive interface is used to browse detailed information on VM traffic across the data center



## Examples of Use Cases

Use Case	Challenge	Solution	IT Benefits	Business Benefits
<b>Safe VM migration and update</b>	To safely remove or update a VM or a virtualized server, it is crucial to have a complete view of all connections with the other VMs. This knowledge of application dependencies avoids operational issues at the time of the upgrade.	L7Viewer lists all inter-VM connections and dependencies for the application to be switched off. The IT admin can easily and safely control the migration procedure.	<ul style="list-style-type: none"> <li>- Safe VM migration / updates</li> <li>- Faster execution</li> <li>- No knock-on effect resulting from invisible dependencies</li> </ul>	<ul style="list-style-type: none"> <li>- Minimizes service disruption</li> <li>- Reduces internal resources (staff/time) required to carry out migrations and updates</li> <li>- Avoids downtime and operational bugs resulting from knock-on effect</li> </ul>
<b>Identification of idle VMs</b>	Inactive VMs can consume significant infrastructure resources in large data centers, increasing both opex and capex.	Use L7Viewer to identify VMs that are inactive at the application level. The L7 Viewer's displays in real-time which VMs are idle based on their traffic profile. The IT admin can decommission idle VMs and load servers with active applications.	<ul style="list-style-type: none"> <li>- Optimization of hardware resources</li> <li>- Optimization of virtual infrastructure operations</li> </ul>	<ul style="list-style-type: none"> <li>- Reductions in capex and opex</li> <li>- Higher margins on cloud services</li> <li>- Reduces energy wastage</li> </ul>
<b>Pinpointing root-cause of performance issues</b>	Sudden spikes of traffic can reduce overall application performance and be difficult to diagnose.	Use L7Viewer to quickly pinpoint e.g. the cause of the traffic spike. The IT admin can quickly take appropriate action.	<ul style="list-style-type: none"> <li>- Shorter Mean-Time to Resolution (MTTR)</li> </ul>	<ul style="list-style-type: none"> <li>- SLA compliance</li> <li>- Better QoS</li> <li>- Increases customer satisfaction</li> </ul>
<b>Detection of security policy violation</b>	Shadow IT or outside attackers may use non-standard ports to hide their traffic from the IT organization. This violation of the security policy is difficult to detect and constitutes a threat to the organization.	L7Viewer alerts on any application using ports that fall outside established security policies. The IT admin can immediately block non-authorized traffic and investigate potential breaches.	<ul style="list-style-type: none"> <li>- Reduces risk of security breaches</li> <li>- Better compliance with security policies</li> </ul>	<ul style="list-style-type: none"> <li>- Reduces risk of service disruption resulting from security breach</li> <li>- Lowers risk of brand damage</li> </ul>

### Additional usage areas:

- Efficient backups and disaster recovery planning through ability to map active and inactive servers
- Identify and group application VMs to optimize performance and enhance security
- Reduce security risks through detection of shadow IT
- Easy configuration of new firewalling rules, by observing traffic going through the firewall

### What's unique with the L7 Viewer?

- Most detailed visibility in the industry (2700+ protocols, from Layer 2 to 7)
- See traffic from both known (sanctioned) and unknown (e.g. Shadow IT) applications
- Covers inter-VM traffic as well as traffic between any VM and external environment
- Ability to filter per hypervisor, VM, IP, host, port, protocol, application
- Dashboards for specific use cases



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L7Viewer is a brand of Qosmos, the leader in IP traffic classification and network intelligence technology used in physical, SDN and NFV architectures. For more information: [www.qosmos.com/products/l7viewer](http://www.qosmos.com/products/l7viewer)