While many businesses are adopting virtualization technology to optimize their resources, this model also brings additional complexity. Today’s virtualized infrastructures are anything but simple, and the potential threats for the proliferation of security and regulation breaches are rapidly growing.

### Challenges of running a virtualized infrastructure

**Virtual machines (VM) involve different deployment and management processes**

When a virtualized server is deployed in your organization, it is not managed in the same way as a physical server. The special deployment creates the need for special networking and security settings, hence requiring a greater degree of coordination among server, network, storage and security administrators.

**Complexity of infrastructure and settings**

Complexity is usually the enemy of security, and today’s virtualized infrastructures are anything but simple, between virtual I/O, custom-built hardware appliances for virtual environments, and virtual software being used in situations that was once hardware specific.

**Lack of visibility and compliance**

Unlike physical servers, virtualized servers operate in “darkness”. The ease of creating a new virtual machine or moving from one server to the next on a hypervisor creates a management “black hole”. With little or no visibility into your virtual domain, your organization is vulnerable to security and regulation breaches.

**Inadequate controls for administrative access**

Under the virtualized infrastructure, the network and security teams are no longer to be found in the driver’s seat. This weakening of administrative control leads to an impaired view of your network access control.

### KEY FEATURES:

- A centralized framework to manage and control all virtual assets in the organization
- 100% real time visibility of your virtual layers
- Enforcement of network access policies and regulatory compliance
- Customized enforcement and remediation
- Changed management workflow including approval and confirmation of each new virtual machine
- Transparent and flexible deployment without performance degradation
- Advanced audit and reporting engine

THINK YOU KNOW YOUR VIRTUAL NETWORK?

Think again.
Portnox Solution

The Portnox for Virtualization module is a network access management solution that enables organizations to securely deploy and manage their virtual infrastructure. Using Portnox allows you to stretch your access management to include all the network's virtual layers and gain complete network management and seamless control from within a single framework. This simple and scalable solution is implemented without the need to deploy a dedicated virtual or physical host and routes all your virtual machines via that device, similar to the limited port mirroring approach.

Once activated, network and security teams are back in the driver's seat, gaining full VM visibility and enforcement capabilities. The Portnox dashboard presents real-time guest machine availability and usage statistics which alerts your network team of any security practice breach, empowering IT and executives to minimize risk and maximize ROI.

How it works?

The Portnox for Virtualization module defines a virtual switch using the API provided by the hypervisor vendor (e.g., VMware, Citrix, Microsoft). Portnox assigns a 'standard port' on the virtual network switch for every virtual machine (VM).

With Portnox for Virtualization solution, the access of every new virtual device is defined and managed in an identical manner to a physical network connection.

Using the API provided by the hypervisor vendor (e.g., VMware, Citrix, Microsoft), Portnox assigns a 'standard port' on the virtual network switch for every virtual machine (VM).

Now, virtualization is an integral part of your network and access management routine.

This figure illustrates how virtual networking aligns with a classic access switch as it appears under the Portnox dashboard.

Minimum Portnox System Requirements:

<table>
<thead>
<tr>
<th>SOFTWARE</th>
<th>HARDWARE*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating System:</strong></td>
<td>1 CPUs Dual Core Xeon 3.x</td>
</tr>
<tr>
<td>• Microsoft Windows Server 2008 R2</td>
<td>• Min of 4GB RAM</td>
</tr>
<tr>
<td><strong>Database:</strong></td>
<td>• 72 GB of disk space</td>
</tr>
<tr>
<td>• Microsoft SQL server 2005</td>
<td>• Single network adapter 100/1000</td>
</tr>
<tr>
<td>• Microsoft SQL server 2008 R2</td>
<td>* Available also as virtual appliance</td>
</tr>
</tbody>
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