

VIO-4000 Series Top Features & Benefits

In this document we offer the top five features and benefits and top five value propositions for Virtensys' VIO-4000 series of I/O Virtualization appliances.

Top 5 Features and Benefits



Simplified Deployment **Wire Once – Provision @ Will:**

Once servers are physically connected to the VIO-4000 Series, any server can have I/O provisioned within a few clicks. Adding I/O is non-disruptive and can be done “on-the-fly”.



Centralized Management **Capability:**

I/O provisioning is done centrally within the I/O Virtualization (IOV) appliance. This means the server's port profile/persona is not associated with the server or physical adapter inside the server, allowing the ability to “disaggregate” I/O management from the server.



Reduction in Cabling **Infrastructure:** (4:1 from a server perspective, 8:1 from an appliance to switching layer)

By leveraging IOV, all protocols/traffic can be carried over a single medium, allowing administrators to reduce the physical complexity and lower the costs of supporting multiple I/O adapters, which have an impact on power/cooling and density.



Zero-Touch Server Configuration:

With Virtensys, servers are presented a virtual instance of a physical I/O adapter, there are no additional server software or drivers needed.

Once connected to the VIO-4000 Series, all I/O administration is done through a simple, easy-to-use management utility, eliminating the physical interaction with the server.



Standards-based Technology **Approach:**

PCI Express (PCIe) is a well-known and understood standard server technology -- Virtensys leverages PCIe to extend the I/O capabilities of the server, where traditional I/O adapters (10 GbE NICs, 8 GB HBAs, RAID Controllers) are virtualized and presented to many servers within a data center environment.

What you get with Virtensys' VIO-4000 Series IOV Appliance:

Increased Standardization:

I/O connectivity can be deployed and managed centrally, allowing administrators to “standardize” the way I/O is deployed. This can be leveraged to any standard x86 rack mount server -- regardless of make, model or brand.

Improved Resource Utilization:

Administrators are often looking to do more with less, this can be easily achieved through I/O consolidation and sharing. I/O can be used more efficiently and Quality of Service (QoS) can be applied to guarantee that servers get what they need, when they need it.

Reductions in TCO via I/O Consolidation:

A lower Total Cost of Ownership (TCO) can be realized by reducing the number of I/O adapters per server (4:1 from a server perspective, 8:1 from an appliance to switching layer perspective). Savings come from deploying fewer I/O adapters, less cabling and less power to the servers and fewer access layer switch ports.

Servers become Agnostic to the Network/Storage:

Many organizations are seeking “investment protection”, which means supporting multiple protocols and technologies in the data center today, and being able to migrate non-disruptively to new ones as they emerge. Having the ability to remove specific I/O adapter technology from within a server is a major benefit -- allowing the server to become “agnostic” to network/storage.

Freedom of Choice:

Decisions on what type of I/O a server uses no longer means choosing one I/O adapter technology over another, nor being limited by what you can physically fit inside a server slot. This means being able to provision I/O to a server on-demand, enabling a more dynamic and flexible computing environment that can change at any time.