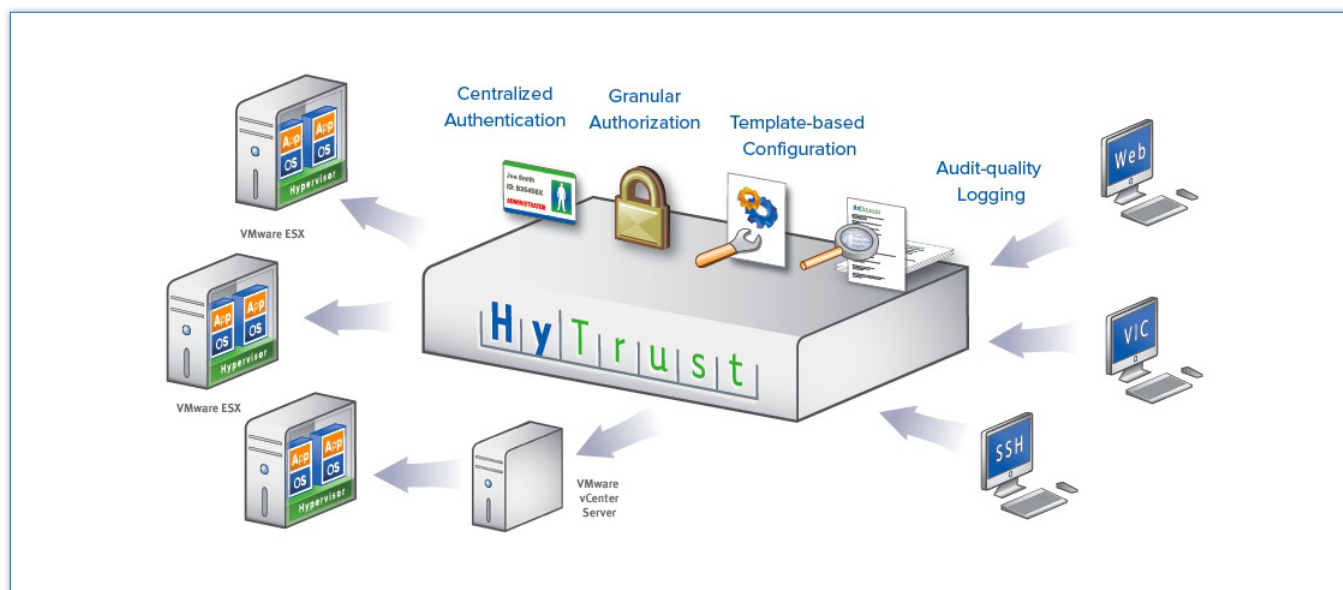




## HyTrust™ Appliance Product Overview

HyTrust™ Appliance offers IT managers and administrators of virtual infrastructure a centralized, single point of control for hypervisor configuration, compliance, and access management. Organizations can achieve all the benefits of virtualization without losing control. By combining best practices, processes, and controls of physical infrastructure security into a comprehensive solution for virtual infrastructure, HyTrust enables virtual infrastructure to achieve the same level of operational readiness as that of existing physical infrastructure.

### Key Capabilities:



### Centralized authentication and fine-grained authorization

Controlling who gets access to the hypervisor is just as important as controlling what they can do once there. HyTrust Appliance resides in the network and intercepts all management traffic bound for the hypervisor, no matter what protocol or access method is used. Once users have been authenticated, activities are then permitted or denied according to granularly defined roles. HyTrust Appliance offers tight integration with existing directory servers (Microsoft ActiveDirectory or LDAP) and can also import roles directly from VMware vCenter Server.

### Template-based configuration and remediation

HyTrust eliminates the errors and guesswork of hypervisor configuration by offering one-click assessment and remediation. As a result, an entire datacenter of hypervisors can be quickly and easily evaluated against pre-built frameworks (e.g. C.I.S. Benchmark or VMware Best Practices) or even custom user-defined benchmarks (i.e. those defined by your organization as the basic configuration requirements for compliance). If any problems are detected, only HyTrust provides the ability to instantly remediate the issue across the entire virtual infrastructure.

### Audit-quality logging

As the centralized, single point of control for the hypervisor, the HyTrust Appliance offers unprecedented visibility into both the current state of virtual infrastructure, as well as changes over time. HyTrust provides granular, user-specific logs and alerts that may be used for monitoring, forensic analysis, and regulatory compliance—a far cry from the troubleshooting logs currently available directly from the hypervisor. Acting as the central repository, HyTrust also eliminates the need to manually collect and correlate logs across disparate systems. HyTrust logs are readily consumable by your existing log management solution.



## Key Features:

**Centralized pass-through authentication:** Serves as an authentication proxy for all virtual infrastructure access methods, including SSH, programmatic APIs, and Virtual Infrastructure Client (VIC-to-ESX or VIC-to-vCenter) \* Natively integrates with Microsoft ActiveDirectory or LDAP \* HTTP Access

**Consistent, granular authorization:** Granular command-by-command authorization based on user privileges, object being manipulated, and environmental variables (e.g. protocol, source, etc.) \* Consistent access control enforcement for all access methods

**Centralized logging of access and activity:** Centralized logging for all servers and all methods of access \* Audit-quality user-level and command-level logs for compliance \* Industry-standard log format for integration with log servers or 3rd-party SIM / log management software \* Log reports by user and operation status \* Support for syslog and secure syslog

**Security posture assessment and remediation:** Assess the configuration of VMware ESX against industry guidelines (C.I.S. Benchmark or VMware Best Practices) or custom templates and instantly remediate non-compliant systems

**Monitoring & alerting:** Monitor the hypervisor configuration for changes and security policy violation

**Management integration:** The HyTrust web-based management interface may be accessed as a tab from within the VMware Virtual Infrastructure Client \* Virtual infrastructure access and role management may be imported from VMware vCenter Server \* User management integrated with LDAP or Microsoft ActiveDirectory \* HyTrust Appliance updates available via remote HyTrust service

**High availability:** Hardware appliance configured with redundant and highly available hardware elements \* Failover to a stand-by mode supported XACML-compliant policy engine: Policy definitions exported via industry standard markup language

**Minimally intrusive deployment:** No agents required on the host \* No change in user workflow \* No interruption to load balancing

## Product Specifications:

**Supported versions of Virtual Infrastructure:** VMware ESX 3.5 U2, vCenter 2.5

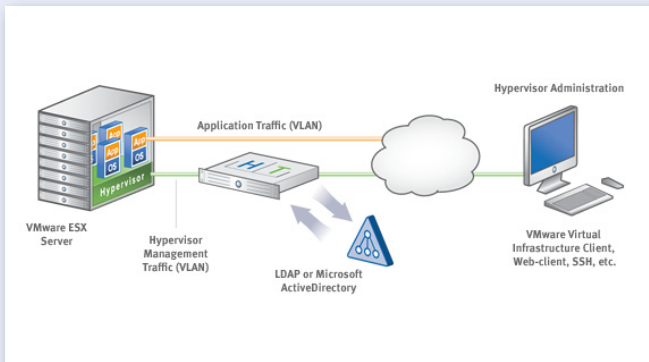
**Supported access protocols:** VMware VI SDK 2.5 or higher; VMware Virtual Infrastructure Client (VIC) 2.5 to VMware ESX or vCenter Server; Direct web access; Perl SDK; SSH

**Management and monitoring interfaces:** VMware VIC-integrated access control and security posture management; Secure appliance web console; SNMP; SMTP notification

**Virtual appliance specifications:** 64-bit virtual appliance; VMware VI3-compatible virtual appliance; Virtual network configuration as prescribed in documentation; *Memory:* 1GB RAM; Storage: 20GB; Network: 1 dedicated NIC (minimum)

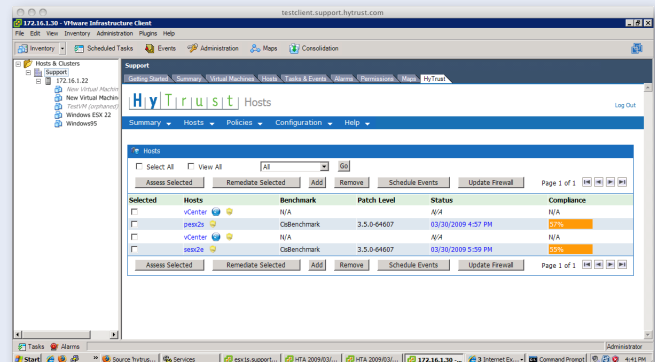
**Hardware appliance specifications:** Rack-mount 1RU physical appliance; *Dimensions:* 17.2" x 1.7" x 25.6"; *Weight:* 45 lbs; *Processor:* Quad core Intel Xeon; *Memory:* 4GB RAM; *Storage:* 500GB RAID 1; *Network:* 6 on-board 10/100/1000 Gigabit NICs; *Power supply:* 650W hot-swappable redundant

## Straightforward Appliance Deployment



HyTrust Appliance deploys inline for the host management traffic. Transparent bridge and proxy deployment modes are supported. HyTrust Appliance is available as a physical appliance or a virtual appliance.

## Leverage Existing Infrastructure



The HyTrust interface integrates seamlessly with the VMware Virtual Infrastructure Client. Administrators achieve a single point of control to access, configure, monitor, and manage virtual infrastructure operations.