

# ForeScout CounterACT™



## Virtual Appliance

Technology Brief



ForeScout CounterACT is an automated security control platform that delivers real-time visibility and control of all devices on your network. Since introduced in 2005, CounterACT has been available as a physical appliance with various models that meet the needs of different size organizations and office locations. In 2011, ForeScout began selling a virtual appliance version of ForeScout CounterACT. This document explains the benefits, use cases, and technical deployment considerations of ForeScout CounterACT Virtual Appliance.

The virtual appliance form factor provides a number of benefits for organizations who are taking advantage of virtualization in their enterprise:

- Product procurement and distribution is easier, especially for organizations that have remote sites. The virtual appliance uses existing on-site hardware, which means that physical appliances no longer need to be shipped across national borders.
- IT costs may be reduced for all the traditional reasons why virtualization has become popular—more efficient utilization of rack space and energy.
- Hardware maintenance is simplified because organizations can leverage their existing, standardized hardware.
- You can take advantage of VMware's native support for failover using vMotion. If the host on which ForeScout CounterACT is running encounters issues, vMotion can automatically move the CounterACT virtual appliance to a new VM host – no RMA required.
- Licenses are scalable, which gives you performance flexibility. You can purchase an upgrade from one CounterACT Virtual Appliance license to the next level license (e.g. from a license that covers 500 devices to a license that covers 1000 devices).

Here is a brief comparison of the two form factors:

	<b>Virtual Appliance</b>	<b>Physical Appliance</b>
Price	Slightly lower than physical appliance	–
Models	Identical to physical appliance	–
Remote deployment	No hardware to ship. Just identify an ESX server, apply VM resource reservation, and install CounterACT Virtual Appliance software	Ship box, rack mount appliance, turn it on
Hardware maintenance	Utilizes your existing hardware maintenance processes	If hardware fails, utilize ForeScout's advance replacement process.
Hardware flexibility	Utilize any standard VM-certified hardware	None
Management	Unified management of multiple appliances through CounterACT Enterprise Manager	Unified management of multiple appliances through CounterACT Enterprise Manager
Performance flexibility	Flexible, just increase hardware resources and purchase an upgrade license	Fixed performance
High availability	Leverages VMware	Leverages separate ForeScout HA appliance

## Compliance and Access Control for Virtual Environments

The virtual environment is typically more dynamic than physical environments, and virtual machines can appear on your network quite easily and possibly without IT knowledge. ForeScout CounterACT gives you real-time visibility and control over your virtual environment, such as VMware, Microsoft and Citrix. CounterACT tells the physical location of virtual machines, and whether any virtual machine guest hosts on your network are non-compliant with your security policies.

ForeScout CounterACT is an excellent complement to VMware vShield. The domain in which vShield operates is limited to a VMware environment. The domain in which ForeScout CounterACT operates is a superset of that environment. CounterACT provides visibility and network access control over everything touching the network that has an IP address – multiple types and brands of virtual machines; multiple types of physical operating systems (Windows, Mac, Linux, iOS, Android, Blackberry, etc); and various kinds of network devices that have no operating systems (wireless access points, routers, hubs, cameras, machinery, etc.). That said, ForeScout CounterACT is not a replacement for vShield because vShield includes many functions that CounterACT does not, such as application provisioning, resource reservations, and load balancing. As such, CounterACT will not serve as a replacement for vShield, but as a complement.

## Model Specifications

Supported operating systems

- VMware ESX and ESXi 3.5 update 5
- VMware ESX and ESXi 4.0 update 2
- VMware ESX and ESXi 4.1 update 1

Hardware requirements

ForeScout CounterACT Virtual Appliance Model Number	Endpoint license	CPUs	GHz/CPU	RAM	Disk
VCT-R	100	1	1	1 GB	80 GB
VCT-100	500	2	1.5	1.5 GB	80 GB
VCT-1000	1000	2	2	2 GB	80 GB
VCT-2000	2500	2	3	4 GB	80 GB
VCT-4000	400	4	3	6 GB	80 GB

## Installation Notes

Complete installation instructions are included with the product. But here are a few things to think about as you consider whether the virtual appliance form factor is right for you.

- CounterACT Virtual Appliance officially runs on VMware ESX or ESXi version v3.5 and above. The solution requires resource reservations for processor, memory and storage, relative to the respective model requirements. See table above.
- The server that ForeScout CounterACT Virtual Appliance runs on needs to have a connection to the span port of a switch that monitors all traffic on your network. This is no different from the requirement of a physical appliance, but it is worth noting in case you are thinking of installing the CounterACT Virtual Appliance in a datacenter that is not near to the most appropriate switch.
- If you wish to take advantage of VMware's native support for high availability, the server that functions as a backup to the primary server also needs to have a suitable connection to the span port of the above-mentioned switch and should be configured accordingly.
- You may mix physical and virtual appliances in the same network environment. The two form factors work perfectly well together. Policies and reports are configured identically in the two different form factors, and ForeScout Enterprise Manager can manage both form factors without any complication.
- ForeScout CounterACT Enterprise Manager, which manages multiple physical and virtual appliances, is also available as a virtual appliance.
- ForeScout CounterACT (both physical and virtual appliance form factors) supports Cisco Nexus virtual switches. CounterACT can control the network access of virtual machines connected to Nexus switches using the commands—"disable switch port" and "assign to VLAN" – as are used with physical switches. And CounterACT learns the same kinds of information – what ports are connected, which ports are on and which are off, what MAC addresses are tied to each port – from Nexus switches as CounterACT learns from physical switches. As of the time of this writing (October 2011), CounterACT does not support other brands of virtual switches. If your environment contains other brands of virtual switches, please contact a ForeScout sales representative to determine compatibility.

