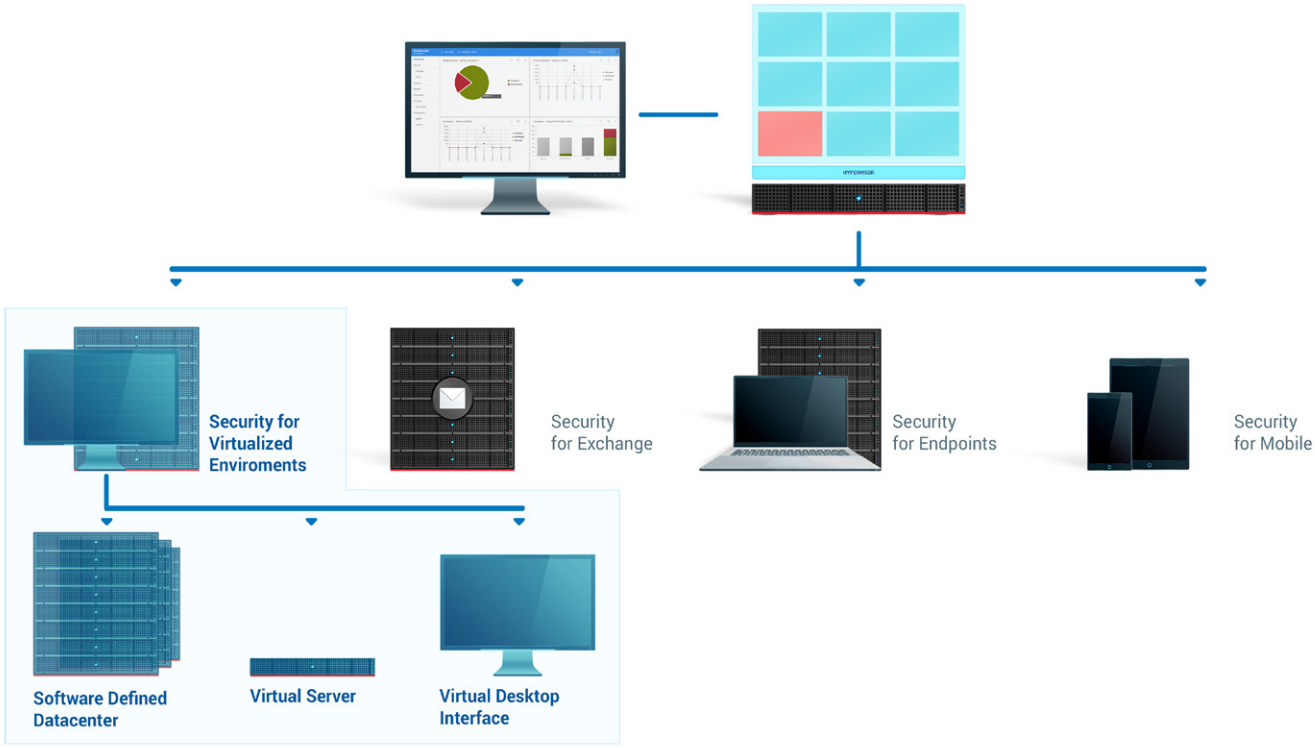
Bitdefender

GravityZone
Security for Virtualized Environments

Don't let your virtualization protection bog down your infrastructure. Security and performance can co-exist in the cloud and virtualized data centers. GravityZone offers a low-profile security service that helps businesses manage IT risks without losing the benefits of scalable infrastructure.

GravityZone is built from the ground up for virtualization and cloud to deliver business security services to physical endpoints, mobile devices, virtual machines in private, public cloud and Exchange mail servers.



Bitdefender GravityZone Enterprise Security for Virtualized Environments (SVE) is the most advanced virtualized datacenter security solution on the market when it comes to antimalware protection for virtual machines, optimizing not only consolidation ratios but also operational costs.

GravityZone SVE is designed as an enterprise solution capable of supporting the largest datacenters. Integration into a production environment is, however, beautifully simple, and the technology benefits can be harvested in a virtual environments of any size.

HIGHLIGHTS

Supports VMware, Microsoft Hyper-V, Citrix XenServer, Red Hat Enterprise Virtualization (with KVM) and others.

Protects virtual machines running Microsoft and major Linux distributions.

Leverages NSX in VMware deployments to deliver leading security that is specifically built for the Software-Defined Data Center.

Integrates deeply with unlimited instances of VMware vCenter, allowing security management policy based on objects such as resource pools, folders and distributed networking.

Eliminates single points of failure and bottlenecks while providing unparalleled availability of antimalware protection.

Delivers award-winning Bitdefender protection against malware within file systems, memory, processes and registry database, leaving no virtual machine behind.

TECHNOLOGY OVERVIEW

GravityZone SVE provides the option of delivering antimalware protection using security virtual appliances (Security Servers) functioning as centralized points of antimalware intelligence, without a traditional security agent installed in each VM. A traditional agent would require constant updates and monitoring and consume significant local resources to operate. Each VM connects to a Security Server to offload most antimalware functionality, covering file system, memory, process and registry scanning on both Windows and Linux

GravityZone SVE uses a multi-layered caching mechanism that contributes to leading performance. First, a local cache is maintained within each VM so objects are scanned only once. Second, a shared cache is maintained at each security server so that objects scanned on one VM are not scanned on another. Finally, a series of file block-level caches bring deduplication of scanning down to the level of file chunks, meaning that files with few differing blocks of interest to the antimalware engines on Security Server are not completely rescanned. The net result of these Bitdefender-exclusive technologies is the secret behind the performance achievements of GravityZone SVE.

The entire arsenal of award-winning Bitdefender threat protection technologies is built into the security engines and embedded into the virtual appliance architecture. With SVE, antimalware protection is more robust than ever, providing leading protection and highly available, instant-on protection for every VM in the datacenter.

Bitdefender GravityZone comes with a powerful mix of security technologies equipped to handle everything from your everyday malware to the most advanced targeted attacks. Thanks to technologies such as Advanced Threat Control, powerful anti-exploit, award-winning antispam or bleeding-edge content filtering, as well as its multi-layered anti-ransomware defense, Bitdefender ranks highest in independent test results, with an over 99% detection rate of new or unknown threat.*

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BITDEFENDER ENDPOINT SECURITY TOOLS – CENTRAL SCAN AT A GLANCE

For Security Server to access the file system of each VM, along with memory, registry and running processes and other required features, a supporting set of services delivered as Central Scan must be deployed to each VM. The characteristics of Central Scan are:

Low system impact:

- Less than 110 MB storage during runtime (including runtime cache)
- 10-20 MB local memory during runtime (on-access scanning)
- Peak CPU load of 1-2%, on a single virtual CPU for on-access scanning

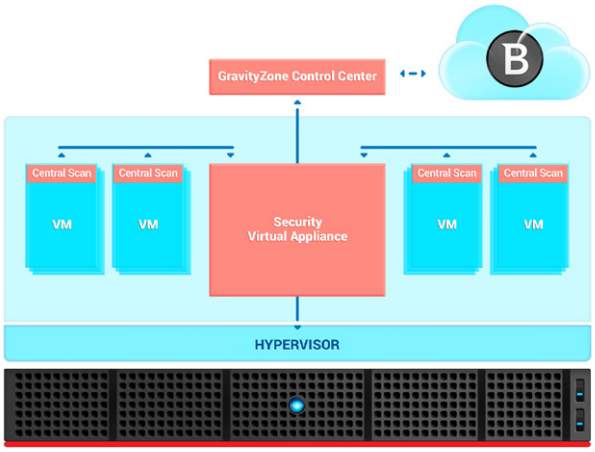
Primary functions:

- Establishes connection to an available authorized Security Server (virtual appliance), allowing local access to file system, registry, memory and processes.
- Switches connection to alternate Security Servers in case of slow response time or sudden unavailability.
- Manages local disinfection, quarantine and process blocking.
- Maintains local cache of scanned items for performance gains.
- Runs as a local service with all administrative privileges removed, guarding against attacks that attempt to shut-down protection locally.
- Optionally provides a User Interface inside the VM with desktop pop-up notifications.
- Deployment of Central Scan (available in both a Windows and Linux version) is simple and requires no reboot of the virtual machines, while deployment of Security Server likewise does not require a reboot of machines hosting VMs.
- Central Scan can also be baked into templates and VDI images to minimize management overhead.

GravityZone unique architectural design creates several advantages:

- Virtual Machines have no local antimalware scanning engines and definitions, and will always be protected by an available Security Server.
- Eliminates the possibility of AV Storms.
- Multi-level caching across individual VM and Security Server ensures unique files are scanned only once.
- Eliminates boot time performance and security gaps encountered as VMs start.
- No single point of failure in the protection, as Central Scan automatically connects or reconnects to an available Security Server, as defined by policy.
- Centralized protection without bottlenecks, since Central Scan can automatically switch to another Security Server with a faster response time.
- Non-persistent virtual machines are automatically protected and governed by the correct security policy (when Central Scan is installed on the image and the security policy is applied to a resource pool or folder, the VM instance will inherit the policy accordingly).

* AV-Comparatives Heuristic / Behaviour Tests, March 2015



- Increases VM density, as a consequence of reduced memory, disk space, CPU and I/O activity.
- VMs are invariably protected by the latest, up-to-date, technologies, even if restored to an older snapshot/backup or if booted after an extended period offline.
- No need to monitor AV installations on individual virtual machines after Central Scan has been installed.

Generates custom and powerful queries on the GravityZone database to obtain advanced analytics and insights into your network's security, via an easy to use graphical interface, that doesn't require advanced SQL knowledge to configure your queries (available for Enterprise Security on-premise products only)

UNSURPASSED PERFORMANCE

SVE was designed to solve the issues related to running AV in a virtualized environment and has been continuously improved, with a focus on protection, simplicity, performance and compatibility.

Our extensive performance testing proves that SVE has the lowest performance impact of all major AV solutions on the market, while also providing Bitdefender award-winning protection. As such, you should be able to reclaim up to 17% of your host's computing power and reduce latency compared to your current AV solution, while cutting operational cost due to a radical reduction in maintenance and monitoring.

OPTIONAL NSX INTEGRATION

When VMware NSX platform is leveraged, Bitdefender delivers leading guest introspection that is specifically built for the Software-Defined data center, by providing agentless protection, automated deployment and orchestration of security services in the virtualized environment.

FLEXIBLE LICENSING FOR DATACENTERS AND INDIVIDUAL VMS

GravityZone SVE introduces a simple licensing model as either per CPU socket in datacenter or VM-based purchasing options. VM licensing is split between virtual servers and VDI to comply with dynamic and highly virtualized infrastructures.

UNIFIED MANAGEMENT

GravityZone SVE is one of the security services delivered by GravityZone Enterprise Security unified platform and is managed through the Control Center web interface. In addition to VM security, GravityZone Enterprise Security covers physical workstations and servers (Windows, Linux, Mac), mobile devices (Android, iOS), and Exchange mail servers.

GravityZone consists of a unique architecture based on a turnkey virtual appliance that can be cloned as load requires, with each instance playing one or more roles. This simple yet powerful model give GravityZone the edge to horizontally scale to meet the demands of the largest environments as a single deployment.

For example, three appliances running the open-source, cloud-centric database included in GravityZone may run in San Francisco, with two in New York, while a similar number of communication servers are geographically dispersed where needed. GravityZone virtual appliances can also be configured as load balancers. As one geographic point grows, it's as simple as spinning-up more GravityZone virtual appliances, selecting the appropriate roles, and allowing the load of the existing deployment to flow onto the new appliances. This ground-breaking, cloud-based architecture provides customers fast and easy access to scale, maintenance, monitoring and reporting.

In a geographically dispersed environment, GravityZone brings datacenters together, delivering control of virtualized environments across heterogeneous hypervisors, physical endpoints (laptops, desktops, servers) and mobile device, simultaneously.

EVALUATING OUR SOLUTION

GravityZone SVE is an un-matched security solution that you can deploy and evaluate in your own environment in just a few hours, including the time it takes to download the GravityZone virtual appliance. No scripting is involved, as all the configuration is performed through the appliance CLI and the GravityZone intuitive web interface. This has led more than 85% of administrators who evaluate the Bitdefender SVE solution to recommend a purchase.

"For us, the key to passing the test would be the product's performance in our virtualized environment, how much the product would or wouldn't interfere with users' productivity and the responsiveness of the professional services team." Mikael Korsgaard Jensen, Server Manager, Herning Kommune, Denmark

"Since Bitdefender is a VMware Technology Alliance Partner, integrating with vShield and vCenter, it allows us to both increase our competitive advantage and differentiate our hosted VDI service by bundling it with best-in-class security of the hosted VDI environment." Jose Uribe, COO, Webhosting.net, USA

OS COVERAGE
WIDEST VIRTUALIZATION AND OPERATION SYSTEMS COVERAGE THROUGH TECHNOLOGY PARTNERSHIPS

VMware vSphere 4.1, 5.0, 5.1, 5.5, 6.0 with with VMware vCenter Server 4.1, 5.0, 5.1, 5.5, 6.0
VMware View 5.0, 5.1, 5.2, 5.3
VMware Workstation 8.0.6, 9.x, 10.x, 11.x
VMware Player 5.x, 6.x, 7.x
ESXi 4.1 (build 433742 or higher), 5.0 (build 474610 or higher), 5.1, 5.5, 6.0
vCenter Server 4.1, 5.0, 5.1, 5.5, 6.0
vCloud Networking and Security 5.5.1, 5.5.2, 5.5.3, 5.5.4
vShield Manager 5.0, 5.1, 5.5
vShield Endpoint
VMware Tools 8.6.0 build 446312 or higher

Integration with VMware NSX Requirements:
- ESXi 6.0 or later for each server
- vCenter Server 6.0 or later
- NSX Manager 6.2.4 or later
- VMware Tools 10.0.9 or later

Integration with Citrix:
Citrix XenServer 5.5, 5.6, 6.0, 6.2, 6.5, 7.0 (including Xen Hypervisor)
Citrix XenDesktop 5.0, 5.5, 5.6, 7, 7.1, 7.5, 7.6, 7.7, 7.8, 7.9,
Citrix XenApp 6.5, 7.5, 7.6, 7.8, 7.9,
Citrix VDI-in-a-Box 5.x

Microsoft: Hyper-V Server 2008 R2, 2012, 2012 R2 or Windows Server 2008 R2, 2012, 2012 R2 (including Hyper-V Hypervisor)
Linux: Red Hat Enterprise Virtualization 3.0 (including KVM Hypervisor)
Oracle: VM 3.0

OPERATING SYSTEMS COVERAGE

Windows
Workstation Operating Systems: Windows Vista (SP1, SP2), 7, 8, 8.1, 10, 10 TH2
Server operating systems: Windows Home Server, Small Business Server (SBS) 2008, 2011, Windows Server 2008, 2008 R2, 2012, 2012 R2

Linux:
Red Hat Enterprise Linux / CentOS 5.6 or higher
Ubuntu 12.04 LTS or higher
SUSE Linux Enterprise Server 11 or higher
OpenSUSE 11 or higher
Fedora 16 or higher
Debian 7.0 or higher
Oracle Solaris 11, 10 (only in VMware vShield environments)
Oracle Linux 6.3 or higher

Oracle Solaris 11, 10 (only in VMware vShield environments)

Try GravityZone now! Free trial and more information available on our website:
http://www.bitdefender.com/business/
CONTACT U.S. Business Sales by phone:
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Bitdefender

Bitdefender is a global security technology company that provides cutting edge end-to-end cyber security solutions and advanced threat protection to more than 500 million users in more than 150 countries. Since 2001, Bitdefender has consistently produced award-winning business and consumer security technology, and is a provider of choice in both hybrid infrastructure security and endpoint protection. Through R&D, alliances and partnerships, Bitdefender is trusted to be ahead and deliver robust security you can rely on.
More information is available at http://www.bitdefender.com/

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