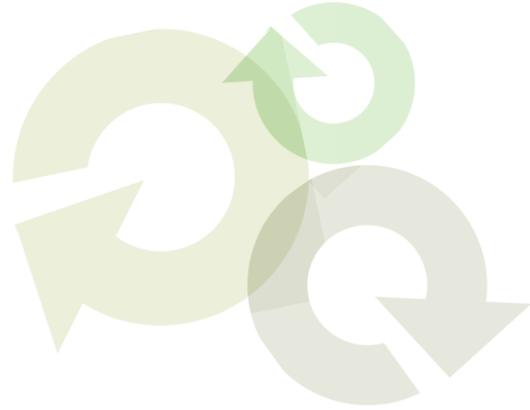




Solution Brief:



Cloud Computing: Breaking New Ground

**Making the Cloud Real, Making
Cloud-Enabled IT Management and
Security Real Simple**

*A discussion of advancements in hosted
solution technologies by Mark Shavlik*



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ABSTRACT:

Today there are hundreds of technologies that solve varied security and management problems, and new solutions are introduced daily to solve problems that have yet to be discovered. IT security and operations are drowning in this cycle of evaluating new products and vendors, performing the R&D to select the right product, purchasing this product, and integrating it with all of the other security technologies. Most companies remain insecure, not because they lack great technology but because they lack the time and money to deploy and manage it.

Enter the cloud. Instead of a business permanently hosting their own servers and applications, they can consume these IT services as needed from the cloud. Doing so lowers costs, reduces the total server count needed, ensures the latest software version is running, and automatically rebalances workload as usage ebbs and flows.

What is The Cloud?

Cloud computing (aka the cloud) refers to a computing platform in which various resources are provided as a service over a network. The network may be the Internet or it may be a smaller scale network such as a LAN or WAN. The services provided by the cloud are not owned by the users but rather are paid for as they are used, typically via some form of on-demand or subscription agreement.

The cloud services stack consists of:

- *Software-as-a-Service (SaaS): End user applications, delivered as a service rather than as on-premise software. Examples: gmail, Salesforce.com.*
- *Platform-as-a-Service (PaaS): Application platform or middleware-as-a-service on which developers can build and operate custom applications. Examples: Google App Engine, Amazon Web Services.*
- *Infrastructure-as-a-Service (IaaS): Computing, storage, and other IT infrastructure components delivered as a service rather than as dedicated capabilities. Examples: Akamai, Dell, VMware, EMC.*

Today, most uses of cloud computing revolve around some sort of business application. Shavlik Technologies, however, has other ideas.

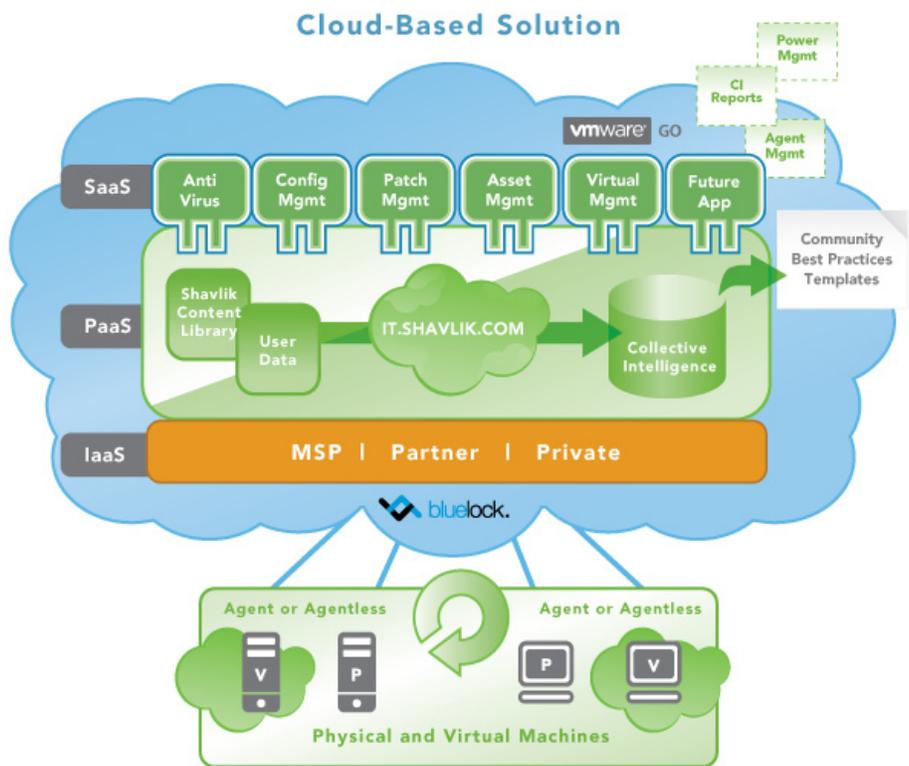
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How Shavlik Technologies Intends to Use the Cloud: IT Services

Shavlik Technologies is developing IT.Shavlik.com, a platform-as-a-service (PaaS) that will support businesses with simple, scalable, and elastic IT-enabled services. These services can be easily outsourced to reduce the costs associated with maintaining a secure network and data center infrastructure -- patching, virus protection, application control, spyware/adware protection, configuration management, asset management, and compliance auditing. The IT.Shavlik.com platform enables end users to fully leverage the benefits of technology while the business lowers its associated IT security and management costs by eliminating the dependency on specialized IT departments. The following figure illustrates this approach.



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Figure 1: From a single management console, an IT department can manage, control, and secure its computer systems using both IT.Shavlik.com applications and traditional premise-based management software.



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Benefits of Using IT-Enabled Services from the IT.Shavlik.com Platform

The IT.Shavlik.com platform provides real value to IT service organizations, including:

- *Lower costs: The service on demand model means IT departments pay only for what they use. There are no fixed costs associated with purchasing and maintaining on-premise servers and software. In addition, fewer administrators are able to manage many more machines, lowering the human cost.*
- *Scalability: Increase or decrease the services an IT department uses based on their organization's needs. Short-term spikes in demand for resources can be easily managed.*
- *Improved, on-demand service levels: Instant access to the services customers need when they need them.*
- *Up-to-date components: Because the components are accessed on a SaaS basis, updated components are available immediately to all applications.*
- *Grow as the needs of the organization grow: As new features are developed they are immediately available to customers. No need to wait for a new release of the product.*
- *Reduced infrastructure constraints: The physical infrastructure used to support computer systems are maintained off-premise on an as-needed basis.*
- *Complete coverage: Fully manage network assets with no coverage gaps between physical servers, desktops, laptops, or virtual machines.*
- *Rapid deployment: Provides the ability to rapidly deploy applications directly to the customer and be up and running immediately.*

Free time is also a key benefit. IT departments never have enough of it and it's the one thing they can't buy. Using the IT.Shavlik.com platform actually puts time back into the IT schedule. Instead of spending time on busy work such as routine maintenance, software updates, or recovering Exchange Servers, IT staff is free to concentrate on projects that actually help grow the business.

Extremely Flexible Architecture Provides Multiple Migration Strategies

Customers can migrate to the cloud platform at their own speed. If desired they can begin slowly in order to gain confidence in the solution. As they gain trust

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and understanding of the benefits of the cloud-based solution they can move additional managed items to the cloud as they see fit.

For example, IT departments may determine that it is not yet feasible to depend solely on the cloud to provide IT services to their entire network. This early in the game there are bound to be issues with trust, visibility, and control, as well as a natural hesitancy to make a full commitment to a promising but admittedly cutting edge technology. And yet time constraints and economic factors will continue to be a driving force behind the search for simpler and cheaper alternatives.

The solution? While organizations may not be ready to migrate their mission-critical servers from on-premise solutions to the cloud, they may be very interested in migrating less critical areas. For example, they may decide that their laptops and virtual machines are perfect candidates to offload to the cloud. These items, while a nuisance to manage, are often not mission-critical to a business and therefore might be a perfect item to offload to the cloud.

Use Collective Intelligence to Make the Most Use of Your Data

Many advanced Web 2.0-era components deliver additional benefits offered from 'collective intelligence.' Collective intelligence is the knowledge that is gained by a number of individuals acting as a group. Many popular Web sites and applications such as Flickr, Netflix, and iTunes currently employ collective intelligence models. But whereas these are retail applications whose purpose is strictly to generate profits, within IT.Shavlik.com the intelligence collected is geared for the good of the small business. The intelligence can be leveraged to recommend best practices, offer advice on optimizing the use of a product, or suggest time/cost saving IT-based services that might be right for a particular business or network environment. Collect intelligence levels the playing field for IT decision making. With the collective intelligence of thousands of different users, the smallest of IT departments can act with the confidence of Fortune 100 companies. Collective intelligence provides the knowledge of an extremely large IT staff without the burden of additional payroll expense.

Mix and Match as You Please

With Shavlik Technologies' cloud solution IT organizations can mix and match their IT security solutions in whatever fashion they want. Customers can:

- *Implement a solution consisting of only cloud computing applications*

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- *Implement a solution consisting of only on-premise applications*
- *Implement a blended solution with some IT services provided through the cloud and some provided using on-premise applications*

The beauty is that even though a customer may choose to mix and match their solutions, everything can be rolled up to the cloud and viewed from one location. With IT.Shavlik.com you get it all!

Leverage Both Solutions

The solutions themselves will be able to leverage each other. Shavlik's current award-winning on-premise technologies will be able to leverage the cloud technologies, and the cloud technologies will be able to leverage the on-premise technologies. The systems can work separately but will also be capable of working together. For example, a customer may choose to manage their laptops via the cloud and their servers via existing on-premise solutions. IT.Shavlik.com will be able to provide reports and audit trails on all systems, whether managed from the cloud or by an on-premise solution.

Shavlik Technologies is Uniquely Positioned to Deliver Cloud-Enabled Technology Right Now

Shavlik is uniquely positioned to deliver these key IT services from the cloud. We are able to move to a hosted solution immediately because we:

- *Leverage years of working with innovative agentless technology*
- *Have experience providing toolkit-based solutions to more than 20 technology partners*
- *Understand and emphasize the need for producing accurate audit records*
- *In effect have already used the cloud for many years. Our existing patch management, threat management, and configuration management products are built around the ability to update and distribute millions of data files immediately to our customers via the Internet.*

Benefits to Partners Using the IT.Shavlik.com Platform

Shavlik Technologies has a strong history of working with partners. Our current SDK and OEM partners can rapidly go from no product to a fully-integrated patching product in about 90 days. We have the same goal for partners who will use our IT.Shavlik.com platform to deliver their services. In some cases rapid



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deployment is hindered on the cloud because of proprietary situations—not so with IT.Shavlik.com. We intend to get you where you want to be quickly, thoroughly, and accurately. Simply put, Shavlik Technologies is ready right now to help you deliver IT-enabled services from the cloud.

IT.Shavlik.com is a very partner-friendly model. Our partners will be able to plug their custom applications into the IT.Shavlik.com platform and offer their services to their customers. An infrastructure partner could even host an entire platform and any application that will run on the platform, allowing them to provide a turn-key solution for managing IT services from the cloud.

And Don't Forget Government Applications

The United States Government is a long-time and loyal customer of Shavlik Technologies. They are also quickly becoming a big customer of cloud computing and virtualization solutions. We expect to continue this relationship by extending our Common Criteria and other certifications to the IT.Shavlik.com model as soon as it makes sense and is feasibly possible.

Summary

A new security and IT management platform, IT.Shavlik.com delivers IT services using a cloud services stack. This Platform-as-a-Service (PaaS) from Shavlik Technologies represents a major shift in the way IT organizations approach the management of their systems, allowing them to focus on and maximize the level of service they deliver to the organization rather than continually struggling to just keep the lights on while holding hackers and viruses at bay.

IT.Shavlik.com represents a revolution in which companies can leverage the benefits of cloud computing, such as affordable licensing and 'always available' software, while at the same time simplifying the critical issues of today, such as security and asset cost control. Shavlik Technologies will soon be delivering SaaS-based applications that plug into the IT.Shavlik.com platform for IT services such as patch management, configuration management, asset management, virtualization management, and virus, spyware, and adware protection. And we'll be making this technology available to our partners to build their own cloud solutions and to our larger customers for private cloud implementations.

The IT.Shavlik.com platform is the remedy to many of the IT headaches associated with the traditional on-premise software model. With no software or hardware to buy, install, maintain, or upgrade, cloud computing keeps growing in popularity with IT organizations that are being asked to do more with less in this difficult economic climate.

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