Executive summary

HP Server Automation Premium aka HP Server Automation Virtual Appliance is a simplified and lighter version of the HP Server Automation (HP SA) product for server configuration management. An important system management and IT automation tool, it simplifies the setup and reduces the time needed to manage the physical and virtual servers in a data center throughout their lifecycle. It uses an open source PostgreSQL database pre-installed and pre-configured and is packaged in a virtual machine (VM) format. It is targeted specifically for small to medium-size deployments, and customers will be able to manage the entire lifecycle of servers for up to 3000 servers.

What is HP Server Automation (HP SA) Premium?

Part of the HP Automation and Cloud Management Solutions, HP Server Automation Premium aka HP Server Automation Virtual Appliance (SAVA) is a single HP Server Automation (SA) core packaged as a virtual machine. This offering completely simplifies the setup required for HP Server Automation and reduces the setup time to under an hour. SAVA is targeted specifically for small to medium-size deployments and with SAVA, customers will be able to manage the entire lifecycle of servers for up to 3000 servers.

SAVA is used to provision and manage servers through their entire lifecycle. SAVA uses resources such as OS build plans and scripts to run deployment jobs. With SAVA, patch administrators can establish patch policies to install and maintain patches for supported operating systems running on managed servers. With SAVA, compliance managers have visibility across the managed servers to see which servers are out of compliance and can then remediate non-compliant servers to bring them back into compliance, based on policies created within SA.
Key features of HP Server Automation Premium

Physical and virtual OS provisioning
HP Server Automation OS provisioning provides the ability to provision operating system baselines onto bare metal and virtual servers quickly, consistently, and with minimal manual intervention. HP SA automates the entire process of provisioning a comprehensive server baseline, which typically consists of installing a base operating system and default OS configuration, applying the latest set of OS patches, the exact list depends on the applications running on the server, installing widely shared system software such as Java Virtual Machines and executing pre-installation or post-installation scripts that configure the system with values such as a root password.

HP SA provides the ability to create and manage VMs and VM templates. By setting up a well-defined process of deploying, managing, and deleting VMs and VM templates, you can control VM sprawl and VM compliance drift. HP SA helps significantly in managing this process by bringing HP SA policy management capabilities to VM templates from any stage of the lifecycle. For example, if you already have VM templates, HP SA can attach ongoing patch policies to these templates, which provides that all virtual machines derived from templates are always kept up to date and do not drift from the parent template.

Customer example: reduced time to provision a full stack server from operating system to patches and applications from two days to 60 minutes

Multi-vendor patch management
In HP Server Automation Premium patch management enables you to identify, install, and remove Microsoft® Windows and Linux (see support matrix for full list of platforms supported) patches, and maintain a high level of security across managed servers in your organization. HP SA automates the key aspects of patch management, while offering a fine degree of control over how and under what conditions patches are installed. By automating the patching process, patch management can reduce the amount of downtime required for patching. HP SA also allows you to schedule patch activity, so that patching occurs during off-peak hours.

These features and capabilities enable you to browse patches by a certain operating system, schedule patch downloads and installations, set up email notifications, preview a patch installation, use policies and remediation to install patches, and export patch information to a reusable file format.
Customer example: reduced security patch deployment for Microsoft Windows patches from two days to three minutes

Comprehensive and customizable compliance management
HP Server Automation provides comprehensive compliance capabilities for helping you meet compliance requirements for your servers, storage\(^2\), and applications.

At the core of the compliance engine is a powerful framework for defining operating system, patch, application, and configuration policies. You can create, share, and enforce policies across distributed environments. You can create the policy framework based on your existing policies and supplement it with industry best practices to create strong policies that meet your specific needs. The Security and Compliance Service from HP BSA Essentials provides real-time feeds of vulnerability and compliance audit rules, giving you the latest vendor and best practice processes.

Additionally, HP Server Automation provides out-of-the-box regulatory compliance reports, including Payment Card Industry (PCI), Data Security Standard (DSS), the Sarbanes-Oxley Act (SOX), Health Insurance Portability and Accountability Act (HIPAA), and other regulations. You can customize the compliance framework to proactively set policies and automatically audit your infrastructure for custom compliance requirements.

With policies in place, you can run regularly scheduled audits to enforce them. For example, the server administrator could audit the storage configurations to make sure that dual paths to storage resources have been established, thus decreasing the risk of a single point of failure.

To provide an up-to-date view of how servers comply with pre-defined policies, the compliance dashboard displays status and provides actionable links, helping you remediate out-of-compliance servers.

Customer example: reduced time to perform security audit from 32 weeks to two days.

Server configuration management made easy
By creating standards and automating key tasks for server provisioning and configuration management, you can simplify the management of large IT environments. HP Server Automation also enables multiple groups to collaboratively manage and share best practices to promote infrastructure consistency and compliance. For example, domain expert teams can create baseline infrastructure configuration standards and policies and then share them with IT administrators across your organization, regardless of location and domain skills. In this way, your IT infrastructure follows a defined standard.

\(^2\) Visibility into storage area networks requires HP Storage Essentials version 6.1.1 or higher.
Customer example: reduced time to deploy software from two weeks to two hours

**“Single view” virtualization management**

HP Server Automation provides full visibility into your hybrid, heterogeneous, distributed data centers, providing you with:

- Genealogy of VMs—SA records how each VM was created and displays it in the virtualization view of the SA client. You can also perform searches on how VMs were created.

- Search capabilities for VMs by virtual characteristics—Advanced search allows you to locate VMs, VM templates, hypervisors, clusters, resource pools, and data centers by cluster properties, resource pool properties, number of processors, datastore, hypervisor, memory creation method, power state, and many other criteria.

- Visibility into all virtual assets—SA provides comprehensive details about all your virtual assets—data centers, resource pools, clusters, hypervisors, virtual machines, folders, datastores, and network elements. You can see and manage all your hypervisors and VMs.

- Full end-to-end lifecycle and policy management for VMs and VM templates—SA provides you with the ability to create and manage VMs and VM templates. By setting up a well-defined process of deploying, managing, and deleting VMs and VM templates, you can control VM sprawl and VM compliance drift. SA helps significantly in managing this process by bringing SA policy management capabilities to a VM template, from any stage of the lifecycle. For example, if you already have VM templates, SA can attach ongoing patch policies to this template, so that any VMs created from this template automatically derive the SA policies that were set on the template.

**Easy-to-use user interface**

The server explorer facilitates easy browsing of individual servers, server groups, storage, operating systems, patches, and applications. All administrator actions are stored and digitally signed in a central data repository for performing compliance and IT reporting. With a record of all changes and real-time server, local storage, and business application views, HP Server Automation provides deep visibility and increased control for your business service.

The global shell and Microsoft® Windows® PowerShell interfaces allow you run automation scripts easily and with enhanced security features across multiple servers at once. The command-line interface is a UNIX® shell such as bash that runs in a terminal window. The global shell unifies the HP SA data model and the contents of managed servers, including files, into a single, virtual file system. HP SA users can open a global shell session from within the HP SA client. If you have the required permissions, in the global shell, you can view and modify the file systems of managed servers. By accessing the global view of the file system, system administration scripts can run iteratively on groups of servers.
Deliver comprehensive integrated solution capabilities to your business with out-of-the-box integrations with HP Automation and Cloud Management Solutions

HP Server Automation is tightly integrated with HP Operations Orchestration, HP Database and Middleware Automation, HP Network Automation, and HP Storage Essentials. Together they automate key IT processes across your environment and give you deep visibility into your network, database, and SAN storage infrastructure for comprehensive service management.

Foundation for cloud

Integrating with HP Cloud Service Automation, HP Server Automation can be used to manage a hybrid cloud environment, regardless of where resources are located. With a common toolset for cloud and traditional IT management, audit and compliance, multi-vendor and multi-hypervisor support, HP Server Automation provides a comprehensive, unified solution for managing the service lifecycle across heterogeneous environments.

Process powered server automation

With the integration with HP Operations Orchestration, customers can combine task automation with process automation. This integration enables you to deliver on key process-based initiatives such as IT Infrastructure Library (ITIL). It also enables you to dramatically improve your efficiency by removing the manual hand-offs between teams and reducing the overall margin for error. With HP Server Automation and HP Operations Orchestration, you get numerous out-of-the-box workflows to implement ITIL processes such as change management, incident management, and release management. Plus, you can enforce, document, and log your processes and subtasks, thus improving your overall compliance management.

Actionable insight “the scoop” into the status of IT Automations

HP Automation Insight provides a Data Warehouse and Business Intelligence platform for Automation and Cloud operational uses cases. Understand product operations for HP Server Automation, such as how many jobs were run, are the servers compliant, time between non-compliant report and remediation. Out of the box reports focused on Provisioning and Patch management, ongoing Compliance and hardware/software inventory. Utilizing the HP Vertica solution for scale and performance, you can report on the status of IT Automation, no matter the number of servers in Traditional IT or Cloud environments.

Integrated with HP ProLiant Servers

HP Server Automation supports easy and end-to-end provisioning of HP ProLiant servers including the latest HP ProLiant Gen8 Servers by enabling its advanced PXE-less capabilities and by using HP Server Automation OS build plan (OSBP) feature to directly interact with HP ProLiant Server Integrated Lights-Out (iLO) engine. This integrated approach simplifies HP ProLiant server provisioning and reduces both time and cost required to manage the data center.
**How does HP Server Automation Premium edition differ from the Ultimate edition?**

The primary feature differences between HP SA Premium and HP SA Ultimate are in the table below:

<table>
<thead>
<tr>
<th>Feature</th>
<th>HP SA Premium 10.0</th>
<th>HP SA Ultimate 10.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SA cores</strong></td>
<td>Single core only</td>
<td>Many configurations (see support matrix)</td>
</tr>
<tr>
<td><strong>Form factor</strong></td>
<td>Virtual appliance (ESXi 5.0 or above only)</td>
<td>Full install required</td>
</tr>
<tr>
<td><strong>Database support</strong></td>
<td>PostgreSQL 9 (embedded)</td>
<td>Oracle</td>
</tr>
<tr>
<td><strong>Scale</strong></td>
<td>3000</td>
<td>Unlimited</td>
</tr>
<tr>
<td><strong>Managed platform</strong></td>
<td>Windows® and Linux only (x64 only)</td>
<td>All platforms (see support matrix)</td>
</tr>
<tr>
<td><strong>Multimaster support</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Satellite support</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>OS provisioning</strong></td>
<td>OS build plans only</td>
<td>OS build plans and OS sequences</td>
</tr>
<tr>
<td><strong>Software management</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Patching</strong></td>
<td>Windows and Linux only</td>
<td>All supported platforms (see support matrix)</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>Windows and Linux only; security and compliance from HPLN will be supported</td>
<td>All supported platforms (see support matrix)</td>
</tr>
<tr>
<td><strong>Virtualization management</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td>Closed appliance with no SSH or root access</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Recovery management</strong></td>
<td>Hypervisor based</td>
<td>Via multimaster</td>
</tr>
<tr>
<td><strong>Localization</strong></td>
<td>Simplified Chinese, Japanese</td>
<td>Simplified Chinese, Japanese</td>
</tr>
</tbody>
</table>
Is there an option to upgrade from SA Premium to SA Ultimate edition?

As the needs grow, HP Server Automation Premium customers can indeed upgrade to HP Server Automation Ultimate edition. Since this involves a change in database and may require a different implementation topology as per SA Ultimate best practices, HP Professional Software Services is required for performing this upgrade from SA Premium to SA Ultimate.
HP Software Professional Services

HP Software Professional Services offers a comprehensive portfolio of cloud and automation consulting services, from strategic advisory, through software implementations to education and solution management.

• HP SA Foundation—deploys HP Server Automation into customer environment, using out-of-the-box functionality to support core use cases such as provisioning, patching, and compliance scanning. This is a fixed-scope, fixed-price offering delivering rapid value through the use of standard, out-of-the-box (OOB) features

• HP QuickPacks—are pre-packaged content modules that accelerate value realization by allowing customers to deploy preconfigured software policies, saving them the cost and time needed to design them independently. These modules save customers time and money and allow them to increase quality and reliability by leveraging proven and tested policies

• Education and solution management—enabling customer success and solution adoption by providing the user training and post implementation services needed by customer staff to increase their productivity with the solution set

Automated server configuration management you can trust

Adopting cloud computing allows your organization to meet unprecedented demand for resources, applications, and services. But without a unified server configuration management system the complexity of interacting with multiple hybrid environments can be overwhelming. HP Server Automation allows enterprise IT groups to adhere to service-level agreements by better controlling processes, providing flexibility and scalability, and enabling innovation.

Next steps

To find out more about how IT can better manage hybrid data center environments and build a stronger partnership with business stakeholders, contact your HP Software representative or HP preferred partner. For more information on HP Server Automation to help you get up and running quickly, go to hp.com/go/serverautomation.

Get started quickly—in as little as two hours
Download the trial version of HP Server Automation