Server Automation

Secure, scalable server configuration and lifecycle management

Product Highlights

OpenText Server Automation is a complete and heterogeneous lifecycle management solution for enterprise servers. With Server Automation you can standardize, consolidate, and automate server operations in hybrid data centers by providing a single solution for OS provisioning, security patch management, audit and compliance, configuration management, script execution and centralized access across Windows®, Linux, and UNIX® platforms.

Leveraging OpenText Operations Orchestration software, Server Automation enables you to combine task automation with process automation. You can create workflows to automatically coordinate and sequence IT processes and sub-tasks for end-to-end management, helping reduce errors caused by manual hand-offs or configuration errors.

Key Features

OS Provisioning and Configuration

Thousands of out-of-the-box templates and workflows for bare-metal and virtual servers across multiple vendors.

Automated Patch Management

Policy based patch and software deployment with automatic remediation of detected vulnerabilities.

Internal and Regulatory Compliance Control

Out-of-the-box content for policies like CIS, SOX, PCI, HIPPA and more. Automatically remediate non-compliant resources.

Real-Time Reporting and Insights

Direct access to all server automation operational data through an open schema, for current and historical views in real-time.

Key Benefits

- Automate provisioning and OS patching for improved agility and minimized risk.

- Automate configuration change across on-prem, public and private deployments to decrease downtime and risk associated with manual configuration errors.

- Comply using a policy-based framework to quickly audit and remediate servers and software applications.

- Discover unmanaged servers and quickly bring them under management with total visibility.

Associated OpenText Products

- Server Automation Reporting SaaS

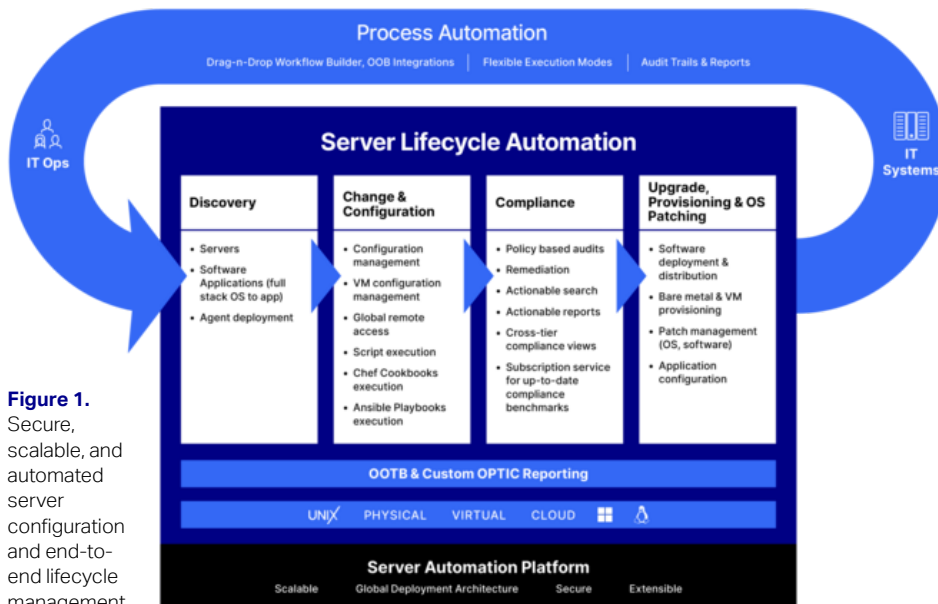- Operations Orchestration

- Hybrid Cloud Management X

Figure 1. Secure, scalable, and automated server configuration and end-to-end lifecycle management

Discovery

Single Tool to Manage Physical, Virtual, and Cloud Instances

Server Automation automates key operations of server, software and hardware discovery increasing the agent deployment rate.

Giving faster visibility into unmanaged servers, Server Automation performs a network scan to locate and identify agentless servers—determining what OS and version are running on them—and allows you to quickly bring them under management. Server Automation then registers all server infrastructure, including the server configurations and the software deployed on the server, on a scheduled basis.

Server Automation streamlines agent deployment to single or multiple servers, on-prem or cloud. The Agent Deployment Tool (ADT) consistently installs SA agents across any operating system, ensuring that the minimum requirements have been met and binaries are available.

Change and Configuration

Server Configuration Management Made Easy

By creating standards and automating key tasks for change and configuration management, you can simplify the management of large IT environments. 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 operations across your organization, regardless of location and domain skills. In this way, your IT infrastructure follows a defined standard.

Full End-to-End Lifecycle and Policy Management for VMs and VM Templates

Maintaining a single view, Server Automation extends existing capabilities to VM's and VM templates, providing full visibility into your hybrid, heterogeneous, distributed data centers.

Server Automation records the genealogy of VMs including how each VM was created and displays it in the virtualization view of the user interface.

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. Once identified, Server Automation provides comprehensive details about all your virtual assets.

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 Server Automation policy management capabilities to VM templates from any stage of its lifecycle and in turn, to all the VM's created from those templates.

Global Remote Access

The OpenText Global File System (OGFS) represents the Server Automation data model as a hierarchical structure of file directories and text files. The directory also contains subdirectories that reflect the contents such as file systems, registries, UAPI that can issue most Server Automation commands available in the GUI for all managed Windows, UNIX or Linux servers in a secure RBAC-permitted environment.

The OpenText Global Shell is a command-line interface to the OGFS which unifies the Server Automation data model and the contents of managed servers, including files, into a single, virtual file system. With the Global Shell, you can automate repetitive system administration tasks by running scripts and commands across multiple servers over a secure communication channel and keep track of the commands and responses issued in audit logs.

Scripts, Ansible Playbooks and Chef Cookbooks Execution

Script Execution allows you to automate the management and execution of scripts in the Server Automation client, with built-in versioning. It also allows you to organize your scripts in folders and define security permissions to control access of their contents across different users and user groups.

Script execution is centralized allowing you to run simultaneously across one or more servers (distributed scripts), immediately or scheduled to run later and can be executed directly on a server, or part of a software policy and executed during remediation. Audit trails of commands executed on managed servers are tracked and logged and can be viewed as consolidated results.

Server Automation infrastructure and policy-based management extends application delivery capabilities, configuration management and task automation to Ansible Playbooks and Chef Cookbooks. You can either execute existing Playbooks or by leveraging existing Cookbooks you can transition content quickly and efficiently from development to test to production without the need to maintain two separate configurations and agents.

Where the platform is not supported by Chef or Ansible, customers can utilize Server Automation's list of supported platforms.
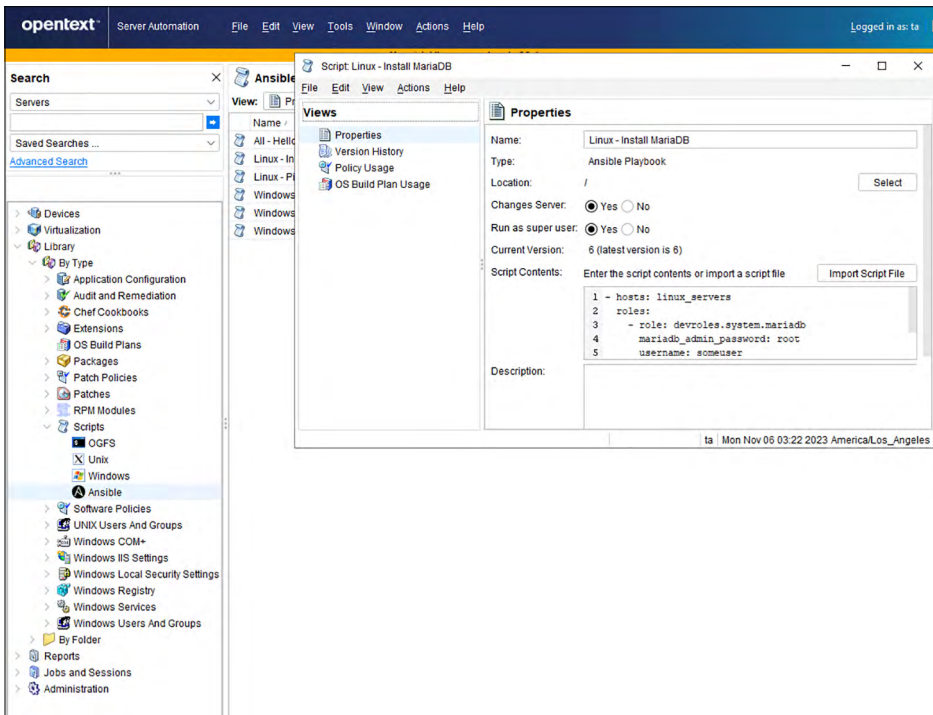
Figure 2. Category for Ansible where Playbooks can be created or edited

Compliance

Server Automation provides comprehensive compliance capabilities for helping you meet compliance requirements for your servers and applications. In Server Automation, audit and remediation allows you to identify which objects you want checked, where you want to check for them, and when you want to check them in your IT environment.

Server Automation lets you define audit rules and policies to help ensure that your managed servers are in compliance. With policies in place, you can run regularly scheduled audits to enforce them, or you can inspect and search execution reports and remediate on demand. When servers are found to be out of compliance—not configured according to your policies—you can remediate them to conform to policy standards in your organization.

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 or best practices to create strong policies that meet your specific needs.

The Security and Compliance service provides real-time feeds of vulnerability and compliance audit rules, giving you the latest vendor and best practice processes. Regulatory compliance policies PCI-DSS, SOX, HIPAA, DISA STIG, FISMA, ISO 27001 and best practices such as CIS. You can customize the compliance framework to proactively set policies and automatically audit your infrastructure for custom compliance requirements.

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

Upgrade, Provisioning and OS Patching

Policy-Based Software Update Distribution and Deployment

Server Automation lets you install software using software policies that ensure standardization and conformance across your enterprise. With full featured policy definition, you can explicitly control the sequence of install or uninstall of all object types (e.g., packages, scripts, patches, users, registry entries), and leverage attributes for region—or application-specific tailoring letting you parametrize them per your needs.

Server Automation enables incremental deployment, removal, and replacement; you can add software components to devices or groups (or update other Policies) and detach policies to remove software in a controlled manner (via uninstall option). You can have full control and oversight by tracking usage and compliance (standardization), knowing where software is correctly deployed, and reusing policies for deployment, updates, and compliance.

Heterogeneous Patch Management

With Server Automation patch management, you can identify, install, and remove Microsoft® Windows®, Linux, and UNIX® patches, and maintain a high level of security across managed servers in your organization. It 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. Server Automation also enables you to browse patches by operating system type, schedule patch downloads and installations so that patching occurs during

off-peak hours, set up email notifications, preview a patch installation, use policies and remediation to install patches, and export patch information to a reusable file format.

Physical and Virtual OS Provisioning
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. It 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 (identified per 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.

Application Configuration
With Server Automation you can manage configuration files, including XML configuration files, from a central location and easily propagate changes and updates across multiple servers in your data center. You can manage a single configuration file such as the /etc/hosts file on UNIX systems, or multiple complex configuration files associated with an application for example the configuration files associated with a large business application.

Scalable for Large Server Environments on or off Cloud
Server Automation has a robust architecture with enhanced security features that can scale from managing hundreds of servers in one data center to thousands of servers distributed across multiple data centers and remote locations. Each core server can support thousands of servers, and multiple core servers can be meshed to manage your entire enterprise.

Server Automation also supports satellite servers for automating the operations for small clusters of servers in remote offices. The Multimaster feature facilitates real-time, event-based synchronization among geographically distributed data centers. You get a unified view of your IT environment, and authorized users can safely access any server at any location. Multimaster also replicates the latest state of a server for disaster recovery.

With the continued adoption of public cloud both through IT initiatives as well as shadow IT, Server Automation administrators can deploy the Server Automation agent, a satellite, or the full SA infrastructure into the public cloud, realizing the same benefits of Server Automation's policy-based management model.

Process-Powered Server Automation
Using the integration with OpenText Operations Orchestration, customers can combine task automation with process automation. This integration enables you to automate any actions in Server Automation, deliver on key process-based initiatives such as IT Infrastructure Library (ITIL) and interact with any third-party systems. 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 Server Automation and Operations Orchestration, you get 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 sub-tasks, thus improving your overall compliance management.

Server Automation Reporting SaaS
Easily Access All Server Automation Data in Real Time
With Server Automation Reporting SaaS, you can leverage the open schema of the OPTIC Data Lake to extract data for near real-time dashboarding and reporting using OPTIC One or third-party Business Intelligence (BI) tools. The OPTIC Data Lake simplifies the collection, normalization and storage (in a single datastore) of data from Server Automation, and other OpenText domains including Operations Bridge, NNMi and Network Automation, and process data that is high in volume and velocity.

Reports can be used out-of-the-box and viewed in OPTIC One or can be customized giving you the flexibility to tailor reports by persona. OPTIC One delivers unified workflow across capabilities and domains, and gives consistent drill-down behavior in one centralized user interface where you see the operations and administration workflow of all capabilities.

Current and historical reporting provides a view of the cause of job failures and server event data. Job completion rates reported in real-time, and historical views to any day and time, provide a system-of-record that stores data long-term to meet audit and regulatory needs.

Access Data Using Your Preferred Business Intelligence Tools
If you have Tableau or Power BI as your business intelligence tool of choice, a BYOBI (Bring your own BI) integration that comes out of the box with Server Automation Reporting SaaS enables you to extract data from the OPTIC Data Lake to create customized reports and dashboards using your familiar reporting solutions.

Take Advantage of SaaS for Faster Time to Value and a Lower TCO
Reporting as a service allows you immediate access and a fast track to all your Server Automation operational data. The OpenText hosted SaaS solution delivers automatic version upgrades, hosting infrastructure, security, maintenance, and management—with the flexibility to scale with your needs. On-premises implemented Server Automation data (server inventory, patch, compliance audit, software compliance scan data and more) can be forwarded to Server Automation Reporting SaaS using the lightweight Server Automation Dataminer component—enabling access to all your production data within 24hrs.

Learn more about Server Automation Reporting SaaS here.

Learn more at
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