INTRODUCTION
Applications are getting more complex. Demand to develop faster is ever-increasing. This puts stress on infrastructure, IT teams, and processes. To be successful in this new business climate, IT organizations must adapt quickly and developers need to be more effective, efficient, and agile. Container application platforms combine agile development methods, cloud technologies, and coordinated processes to help organizations become more productive and responsive across multiple environments. They provide pre-built and packaged developer tools, runtimes, and automation for faster feedback and implementation cycles. Developers can focus on rapid, high-quality development—using familiar tools—while production teams can concentrate on quickly delivering new services and products to market.

As the demand for more IT agility continues to grow, many enterprises are compelled by the benefits of containers, but struggle to find the right path to containerization for their organization. The Automate Your Red Hat OpenShift Container Platform Deployment on HPE ProLiant Servers with Ansible Tower and HPE OneView solution is a fully integrated container offering that is ideal for enterprise deployments. With a validated deployment architecture, this secure solution improves workflows and gives organizations access to the latest cloud technologies without the overhead costs associated with running virtual machines. In a dense landscape of deployment possibilities, the Automate Your Red Hat OpenShift Container Platform Deployment on HPE ProLiant Servers with Ansible Tower and HPE OneView architecture provides a less risky solution proven to simplify IT.

RED HAT AND HPE
Red Hat and HPE work together to provide market-leading, industry-standard alternatives to proprietary operating environments. Red Hat and HPE jointly engineered solutions are uniquely open source and modular, and deliver greater cost-efficiency and flexibility than traditional, proprietary cloud platforms. Building on a Red Hat and HPE open platform means massive cost savings without compromising security, performance, or scalability, but more importantly frees customers from vendor lock-in. Together, Red Hat and HPE deliver:

• A comprehensive stack of physical and virtual application development and deployment infrastructure.
• A unique blend of open technology, price/performance efficiency, and enterprise credibility.
• An ongoing manageable and predictable software cost model.
THE SOLUTION ARCHITECTURE AT A GLANCE

Comprised of several bare-metal HPE ProLiant servers, configured for continuous integration and continuous delivery by Red Hat® OpenShift Container Platform running on top of them. With its OpenAPI architecture, HPE OneView allows easy integration with workflow and management tools and integrates with Red Hat Ansible Tower to automate deployments and accelerate deployment, so organizations can take advantage of container benefits sooner and with less risk. Validated, integrated components combined with expert services and support help you build agile, scalable, enterprise-grade OpenShift container-based applications tailored to your business needs. HPE and Red Hat verify this solution to be stable, reliable, secure, and interoperable, so that enterprises can deploy with confidence and flexibility. Through documented designs, deployment guidelines, and purpose-engineered configurations, the Automate Your Red Hat OpenShift Container Platform Deployment on HPE ProLiant Servers with Ansible Tower and HPE OneView solution for enterprise deployments incorporates these elements into a unified architecture framework, consisting of:

**Red Hat OpenShift Container Platform**

A fully integrated container application platform that lets organizations develop, deploy, and manage existing and container-based applications seamlessly across physical, virtual, and public cloud infrastructures. Built on proven open source technologies, OpenShift Container Platform helps application development and IT operations teams modernize applications, deliver new services, and accelerate development processes.

**Red Hat Ansible Tower**

A centralized application programming interface (API) for Ansible automation that offers users a visual dashboard, role-based access control, job scheduling, graphical inventory management, and real-time job status updates. Ansible Tower builds on the underlying Ansible automation engine by adding control, access, security, auditing, and delegation capabilities required in the enterprise.

**HPE OneView**

An infrastructure automation engine that eliminates manual processes, spurs IT collaboration, and increases the speed and flexibility of IT service delivery.
HPE ProLiant DL380 Servers
HPE’s family of ProLiant rack servers that provide the most comprehensive portfolio of versatile, high-performance, multiworkload compute hardware for the enterprise. HPE ProLiant DL380 servers deliver the flexibility and datacenter standardization required for intensive, critical workload compute capabilities.

HPE ProLiant DL360 Servers
HPE ProLiant DL360 servers that provide dense performance with ideal memory and input/output expandability for multiworkload compute capabilities within the datacenter.

Red Hat Satellite
A system management tool that enables users to provision, configure, and update systems to keep them running efficiently, securely, and in compliance with various standards. By automating most system maintenance tasks, Red Hat Satellite helps organizations increase efficiency, reduce operational costs, and better respond to strategic business needs.

SOLUTION BENEFITS
By deploying OpenShift Container Platform on HPE ProLiant Servers, organizations benefit from the unparalleled performance, scalability, and reliability of a proven, enterprise-ready container solution. Founded on industry leading products and award-winning services, Red Hat and HPE container offerings incorporate principal open source technologies and industry best practices. Deploying OpenShift Container Platform on HPE ProLiant Servers delivers a range of advantages to the enterprise, including:

Accelerated deployment allowing simplified deployment with a lightweight architecture optimized for enterprises.

Cost-effectiveness reducing costs associated with licensing and maintaining virtual machines.

Superior IT agility accelerating time to market with automation capabilities that extend down to the underlying bare-metal hardware to streamline operations.

Better IT reliability maximizing uptime to facilitate more productive development cycles.

Improved scalability scaling out as required to meet elastic demand.

Faster time to value eliminating vendor lock-in and providing lower-risk deployment for a more cost-effective solution.

Transformed IT provisioning delivering a proven, modular, open source architecture that relies on the infrastructure and software of industry-trusted vendors.

Life-cycle support providing extended enterprise support that covers all software and compute platforms.
LEARN MORE

Red Hat OpenShift container technologies can give you a competitive advantage in a quickly evolving market. With integrated, certified components, fast deployment, and enterprise support, the Automate Your Red Hat OpenShift Container Platform Deployment on HPE ProLiant Servers with Ansible Tower and HPE OneView solution delivers the agility, efficiency, and control you need to transform your IT organization into a valuable business asset.

See Automate Your Red Hat OpenShift Container Platform Deployment on HPE ProLiant Servers with Ansible Tower and HPE OneView reference architecture.

Learn more about the strategic alliance between Red Hat and HPE.

ABOUT RED HAT

Red Hat is the world’s leading provider of open source software solutions, using a community-powered approach to provide reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.