ServiceNow Practice | Solution Brief

AI-powered service Ops with ServiceNow and Red Hat

AI & ML-based automation powered by ServiceNow Workflows and Red Hat Ansible

NTT DATA brings a solution that combines the power of ServiceNow's AIOps capabilities with Red Hat's robust enterprise solutions to predict and remediate IT issues before they impact users.

Modern IT organizations face numerous challenges that can hinder their operational efficiency and service delivery.

Some key Challenges:

Complexity in IT Infrastructure:

Without smart tools that can adjust and grow along with evolving needs, organizations risk falling behind in managing their IT setup, leading to inefficiencies and potential breakdowns in operations.

Integration Across Diverse Tools:

Failure to integrate disparate systems results in inefficiencies and data silos, hindering collaboration and decision-making processes within the organization.

Limited Auto Resolution Automation:

Insufficient automation and real-time data integration contribute to prolonged resolution times, resulting in increased Mean Time to Resolution (MTTR) and potentially severe consequences for the organization's reputation and bottom line.

Standalone AIOps tools:

Relying on standalone tools with manual setup and disjointed workflows leads to slower issue resolution and increased downtime, impacting productivity and customer satisfaction.

Proactive Incident Management:

Neglecting proactive systems means organizations are susceptible to disruptions that can interrupt services, resulting in dissatisfied customers and potential revenue loss.

" Experience seamless IT management as our solution predicts, analyzes, and autonomously resolves anomalies, all while simplifying operations by cutting through the noise from diverse monitoring systems management."

Our solution:

NTT DATA's AIOps solution, powered by ServiceNow and Red Hat Ansible Automation Platform, provides a robust framework for addressing these challenges through enhanced AI-driven operations and scalable infrastructure management.

Enhanced predictive AIOps in ServiceNow: Utilizes data-driven insights to anticipate and respond to potential incidents.

Automates the immediate deployment and configuration management of the IT infrastructure with Red Hat Ansible, allowing for quicker adaptations based on predictive insights.
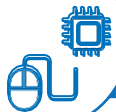
Boosts automation with Lightspeed: Increases prediction accuracy with cutting-edge Generative-AI technology for rapid code creation.
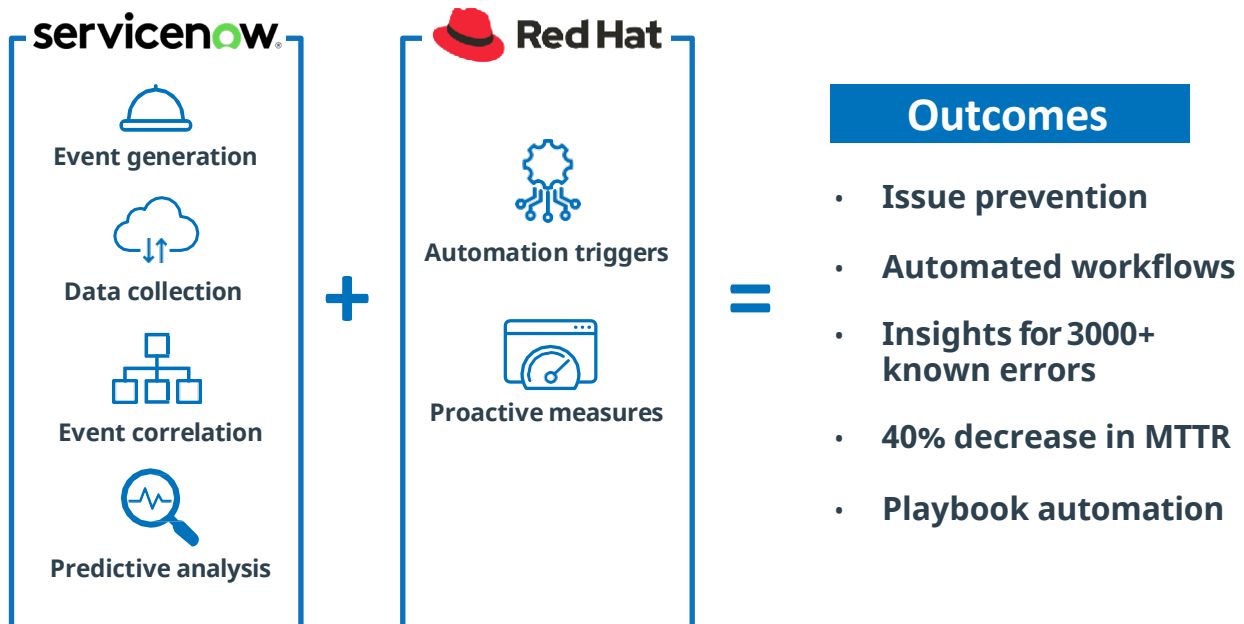
Facilitates the automation of monitoring tool deployment with Red Hat Ansible and self-healing processes responsive to ServiceNow's predictive alerts.

Solution architecture and features

- **Centralized management:** Provides a unified platform for managing all IT operations, enhancing control and visibility across the infrastructure.

- **Seamless integration with ServiceNow:** Ensures comprehensive connectivity with IT systems, promoting interoperability and efficient workflow automation.

- **Scalability with Red Hat:** Leverages the robust, scalable capabilities of Red Hat solutions to support business growth and adapt to changing operational demands.

- **Advanced AIOps functionalities:** Incorporates cutting-edge AI and ML technologies for predictive analytics, automated incident resolution, and operational intelligence.

Organizations adopting NTT DATA's AIOps solution can achieve significant enhancements in their IT operations management

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- Event generation
- Data collection
- Event correlation
- Predictive analysis

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Red Hat

- Automation triggers
- Proactive measures

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Outcomes

- Issue prevention
- Automated workflows
- Insights for 3000+ known errors
- 40% decrease in MTTR
- Playbook automation

Key deliverables

Automated Response and remediation to incidents affecting critical services using Ansible.

Real-time Monitoring and predictive alerts for potential service degradations using AIOps.

Enhanced visibility and control over the operational health of critical services through integrated dashboards in ServiceNow ITSM.

ServiceNow AIOps uses predictive analytics to foresee potential issues before they occur. When an issue is predicted, predefined Ansible Automation playbooks can be triggered to prevent the issue from impacting the business.

Transform your IT operations in less than 10 weeks

Weeks not Months: Within an 8-10 week timeframe for integrating ServiceNow ITSM with Red Hat Ansible using AIOps can yield significant improvements in IT operations efficiency and responsiveness.

Week 1-2: Identify critical services, integration setup and configuration

- Identify critical services
- Integration architecture design
- Ansible playbook configuration

Week 3-4: AIOps model training and initial deployment

- Data collection and analysis
- AIOps rule configuration
- Pilot testing

Week 5-6: Testing and optimization

- Systematic testing
- Performance tuning

Week 7-8: Launch and improve

- Launch critical services
- Enhance AI model
- Scale and expand

Value stats

95%
Reduction from events to alerts

40%
Reduction in mean time to resolution

90%
In productivity gains

30%
Fewer service desk requests that require human intervention

Use cases

Automated Incident Management

By integrating ServiceNow AIOps with Red Hat solutions, organizations can automate the detection, diagnosis, and resolution of IT issues. The AIOps platform can then analyze data from Red Hat environments to identify anomalies or incidents. Once an issue is detected, automated workflows trigger Red Hat Ansible Automation Platform to execute predefined scripts for immediate remediation, reducing downtime and manual intervention.

Optimize Cloud Operations

With Red Hat OpenShift operating in hybrid or multi-cloud environments, integrating ServiceNow AIOps can provide centralized visibility and operational control. This combination allows for the monitoring of applications and infrastructure across clouds, automating scaling, and deployment processes based on predictive analytics, thus optimizing resource utilization and performance.

Security Response and Compliance

Leveraging ServiceNow AIOps for security event management, in conjunction with Red Hat's secure and compliant infrastructure solutions, enables a proactive security posture. Automated workflows can be designed to respond to security alerts by initiating Red Hat Ansible playbooks that enforce security policies or rectify compliance drift, ensuring continuous compliance and rapid response to potential threats.

Service Management Integration

Integrating ServiceNow with Red Hat's solutions can streamline IT service management processes. For example, Red Hat Ansible can automate the provisioning of new services or the scaling of existing ones in OpenShift, while ServiceNow manages the service catalog, request management, and change management processes. This seamless integration ensures that IT services are delivered efficiently and in alignment with organizational policies and procedures

Key benefits and outcomes

Cost Reduction:
Streamlines operations and **reduces expenditures** through efficient resource management and automation.

Improved Compliance and Governance:
Standardizes processes across the organization to **enhance compliance** and **reduce risks**.

Enhanced Operational Efficiency:
Automates routine tasks and **optimizes workflows**, leading to fewer errors and **increased productivity**.

Faster Resource Provisioning:
Rapidly adjusts resources to meet operational demands, **enhancing responsiveness** and **reducing downtime**.

Reduced Incident Resolution Time:
Utilizes **predictive insights** to proactively address issues, minimizing their impact and frequency.

Next steps

We align with your internal team to develop a deep understanding of your project objectives and expectations.

Our expert consultants use in-person workshops to collect your baseline functional requirements.

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.

Visit us.nttdata.com/servicenow or email servicenowpractice@nttdata.com to learn more.

NTT DATA is a trusted global innovator of business and technology services, helping clients innovate, optimize and transform for success. As a Global Top Employer, we have diverse experts in more than 50 countries and a robust partner ecosystem. NTT DATA is part of NTT Group.

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