Blue Cross and Blue Shield NC builds platform for self-healing processes

Blue Cross and Blue Shield of North Carolina (Blue Cross NC) is working to make healthcare better, simpler, and more affordable. Having already invested in automating its IT infrastructure with Red Hat Ansible Automation Platform, Blue Cross NC used its subscriber benefits to extend the process with Red Hat Ansible Certified Content Collection for ServiceNow IT Service Management. In 2020 it embarked on a process of integration, with a goal of leveraging data in its ServiceNow configuration management database and augmenting it with data of its own. It decided to transfer its primary platform, so ServiceNow administrative tools were retained, but automation and integration tasks were handled by Red Hat Ansible Automation Platform, supported by Red Hat Technical Account Management.

Software

Red Hat Ansible® Automation Platform

Red Hat Ansible Certified Content Collection for ServiceNow ITSM

Service

Red Hat Technical Account Management

Durham, North Carolina ●

Headquarters

Insurance

4,900 employees

Benefits

▸ Reduced dependency on niche external support

▸ Supported the development of a self-healing process

▸ Enabled IT personnel to focus on higher priority tasks

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Adam Tate
Senior Infrastructure Design Engineer
Blue Cross NC

Identifying gaps in the database set-up

As a long-standing user of ServiceNow, health insurer Blue Cross and Blue Shield of North Carolina was using ServiceNow as its configuration management database (CMDB), a repository of the hardware and software in the organization's environment. However, Blue Cross NC found gaps in this set up, specifically when it wanted to leverage data in the CMDB and augment it with data of its own.

"Many of the servers either didn't exist in the CMDB or had incomplete data. We could only deploy part of what the customer team was asking us to deploy, and we were getting smacked by the process," said Adam Tate, Senior Infrastructure Design Engineer at Blue Cross NC. "We had to look for a way that we could query ourselves, determine what was already in the CMDB, and come up with an exception process for things that weren't."

Transitioning to a more flexible solution

Before using the Red Hat Ansible Content Collections, Blue Cross NC had to use two different ServiceNow developers to get the callouts to Ansible Automation Platform. As Blue Cross NC's environment grew, its team realized it would need a full-time ServiceNow developer experienced in Python, Javascript, and API calls. Lack of consistency and compatibility also caused issues, as did frequent software updates.

Blue Cross NC based its solution on Red Hat Ansible Certified Content Collection for ServiceNow IT Service Management (ITSM), supported by Red Hat Technical Account Management, to speed up the development of automation workflows. The process eventually involved using Tower to leverage existing ServiceNow APIs that would allow Blue Cross NC to use ServiceNow as an administrative tool, enable the use of existing workflows and approvals, but keep automation and integration work on the separate, more flexible, Ansible Automation Platform. "We took our expertise and kept that in Ansible Automation Platform, so we only needed to call ServiceNow to meet specific requirements of our change process," said Tate.

Enabling a more effective IT operation

Reduced dependency on niche external support

Using the Red Hat Ansible Certified Content Collection for ServiceNow ITSM, Blue Cross NC can update tickets, make necessary changes, and close tickets automatically. "This has made Blue Cross NC much more self-sufficient and less dependent on outside support," said Tate.

Even though Blue Cross NC's IT team manages a broad range of responsibilities and areas of expertise, it needed niche developer expertise to make its original ServiceNow solution work. Ansible Automation Platform enables the team to handle this work independently, using its existing broad expertise in automation.

Supported an automated 'self-healing' process

Blue Cross NC engineers are developing an automated 'self-healing' process that enables tasks such as memory or processor upgrades to be carried out without manual intervention. The process identifies when, for example, RAM is filled up or a CPU is running high. This creates a change ticket and triggers a job that fixes the issue, uploads feedback, and updates the ticket.

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Enabled IT personnel to focus on higher-priority tasks

Red Hat Ansible Certified Content Collection for ServiceNow has helped Blue Cross NC's IT personnel to focus on bigger, higher priority tasks. A significant development has been using patching to automatically start, stop, and validate services, which is proving to be a key benefit of the implementation of Red Hat Ansible Automation Platform. "We're jack-of-all-trades people. We learn something, and once it works, we take it and improve on it for the next project. We're trying to iterate and build frequently," said Tate.

Looking to new green pastures

Ansible Automation Platform has given Blue Cross NC scope to extend its benefits into new areas, which includes moving into Amazon Web Services and significantly expanding into AIX. "Our task now is to find out how we can move forward with whatever green pasture we can get to with those deployments," said Tate. "That was an early critical requirement for us."

One project is the development of a return-on-investment (ROI) indicator, which will enable engineers and developers to present the real-world results and benefits of automation within Blue Cross NC to senior managers. "We've taken existing templates and estimated the minutes saved per server that these templates run on," said Tate. "We can then establish the number of servers touched, multiply that by the minutes saved per server, and create a total value."

About Blue Cross and Blue Shield of North Carolina

Blue Cross and Blue Shield of North Carolina (Blue Cross NC) is committed to making healthcare better, simpler, and more affordable. Blue Cross NC serves its customers and communities of more than 3.8 million members, including approximately 1.1 million on behalf of other Blue Plans. Blue Cross NC is an independent licensee of the Blue Cross and Blue Shield Association. bluecrossnc.com

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