

# City and County of Denver adapts to remote work by automating with Red Hat



#### Software

Red Hat® Ansible® Automation Platform

#### **Partners**

Microsoft

ServiceNow

Like many governments worldwide, the City and County of Denver, Colorado, had to act quickly to respond to the COVID-19 pandemic. To support more than 15,000 employees working from home, the government sought to adapt its new collaboration tool, Microsoft Teams. By automating provisioning and scaling tasks with Red Hat Ansible Automation Platform, an agentless, human-readable tool, Denver supported 514% growth in Teams use and quickly launched a virtual emergency operations center (EOC) for government leaders to respond to the pandemic.



"During a very challenging, fast-moving situation, automation has helped create standard, repeatable processes."

#### Sean Greer

Director of IT Service Delivery, City and County of Denver

#### Government

15,000 employees

### **Benefits**

- Scaled to accommodate 514% increase in Microsoft Teams use and remote work
- Created COVID-19 virtual emergency operations center in days
- Established foundation for lean work approach



facebook.com/redhatinc @RedHat linkedin.com/company/red-hat

redhat.com



# Ensuring business continuity during a global pandemic

Denver, Colorado regularly scores high in rankings of America's most livable cities, boasting abundant access to nature and a thriving arts culture. With 700,000 residents currently, the city's population has grown 20% since 2010. The City and County of Denver manage and coordinate public services for residents and visitors, from waste and traffic management to recreation and property taxes.

This work became even more important—and more challenging—when the COVID-19 pandemic forced a rapid, long-term shift to remote work.

"When COVID-19 lockdowns began, we sent most of our employees home to work for the foreseeable future," said Sean Greer, Director of IT Service Delivery, the City and County of Denver. "Overnight, we had to connect our entire workforce to work through—and respond to—this time of uncertainty."

The city had recently migrated to Microsoft Teams, but remote work made using this tool's wide range of features to collaborate digitally even more important—especially as more and more meetings were shifted to Teams. To adopt a consistent tagging approach and standardized, repeatable processes for digital collaboration with Teams, Denver sought a robust IT automation solution.

# Simplifying remote work with process automation solution from Red Hat

The city decided to use Red Hat Ansible Automation Platform to automate provisioning, application deployment, and configuration management for its Microsoft Teams deployment. Denver had previously adopted Ansible Automation Platform and begun creating playbooks, but the pandemic presented an opportunity to try the technology to solve a critical production need.

"We'd done a lot of work, but this required us to move faster than we'd have liked," said Holly Troy, IT Automation Architect, City and County of Denver. "It was fortunate that, in addition to the playbooks we created, we had already built an API-based framework for communication between Ansible and Teams."

Ansible Automation Platform is an easy-to-use, agentless automation engine that uses human-readable playbooks to manage routine tasks and processes. Its Software-as-a-Service (SaaS) capabilities provide a more consistent automation user experience and collaboration to help teams solve more IT challenges at once.

"We can't predict the future, but we know we will face challenges related to hiring and resource availability. Being able to automate processes will be fundamental to supporting new, digital ways of working to solve these challenges."

#### Sean Greer

Director of IT Service Delivery, City and County of Denver



# Supporting timely response to COVID-19 challenges

#### Scaled to accommodate massive growth in remote work

Between March 2020 and February 2021, Denver experienced a massive increase in the number of Teams calls, use of the chat feature, and total number of users since the tool was introduced. Ansible Automation Platform has helped Denver rapidly adapt to support the net 514% increase in the use of this new collaboration approach.

Previously, it took Denver 20 minutes to manually create an individual Team, but with Ansible Automation Platform the same task takes less than one minute. With more than 1,300 Teams created, Denver has saved 372 work hours just by automating one of many tasks.

The city has also automated updates to its ServiceNow knowledge base articles with available IP (Internet Protocol) addresses, VoIP (Voice over IP) systems, and automating ticketing processes.

"Helping our teams communicate across multiple systems and deploy quickly was critical during this very challenging, fast-moving situation. Automation helped us respond by creating standard, repeatable processes," said Greer.

### Created COVID-19 virtual emergency operations center

Emergency operations centers (EOCs) are created to provide a temporary, central facility for government leaders to strategically enact emergency management or disaster management policies. Usually EOCs are physical locations, but quarantine and isolation guidelines led Denver to look for a digital solution.

"With automation, we were able to immediately create a virtual EOC, with 75% complete over the course of a weekend," said Evan Pfaff, Digital Transformation Engineer, the City and County of Denver. "Now that we've seen how to do it, in the future we can establish EOCs for situations like massive snowfall, with all the right people and documents included, in just 15 minutes."

## Established foundation for lean transformation

Like other governments worldwide, Denver faced hiring budget cuts due to the COVID-19 pandemic. In response, the organization committed to a lean approach focused on eliminating spending and resource waste and improving efficiency. Automation has helped Denver support this new approach by reimagining its business processes to save time and money.

"Whether it's managing lot infrastructure for the city's traffic systems or distributing patching systems and replacing another system, there's been a fundamental transformation in how users like our security team are making requests. They're open to doing things differently and challenging the way things have always been done," said Greer. "So instead of, for example, taking an entire weekend to create VPN access for them, their latest request only took half a day."

#### **About Microsoft**

Microsoft (Nasdaq "MSFT" @ microsoft) enables digital transformation for the era of an intelligent cloud and an intelligent edge. Its mission is to empower every person and every organization on the planet to achieve more. microsoft.com

# About ServiceNow

ServiceNow (NYSE: NOW) is making the world of work, work better for people. Our cloud-based platform and solutions deliver digital workflows that create great experiences and unlock productivity for employees and the enterprise. For more information, visit: www.servicenow.com.



# Sharing best practices for statewide improvements

After successfully using automation for remote work, Denver is now planning to create an automation Center of Excellence to find new use cases, promote successes, and gather the metrics to support change. As part of these efforts, the city is sharing the details of its IT automation success with other cities in Colorado, particularly to support emergency management efforts.

"We can't predict the future, but we know we will face challenges related to hiring and resource availability," said Greer. "Being able to automate processes will be fundamental to supporting new, digital ways of working to solve these challenges."

# **About the City and County of Denver**

Denver, the capital of Colorado, is a consolidated city and county. It serves as the financial, transportation, and distribution center of the Rocky Mountain region. Denver was officially formed on November 7, 1861. A non-partisan elected mayor, auditor, clerk and recorder, and 13-member city council govern Denver. denvergov.org



Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? Learn more.

# **About Red Hat**



Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.



facebook.com/redhatinc @RedHat linkedin.com/company/red-hat North America 1888 REDHAT1 www.redhat.com

Europe, Middle East, and Africa 00800 7334 2835 europe@redhat.com Asia Pacific +65 6490 4200 apac@redhat.com **Latin America** +54 11 4329 7300 info-latam@redhat.com