

CASE STUDY

Blue Cross and Blue Shield of North Carolina Achieves 99.5% Uptime for Business-Critical Applications

BlueCross and BlueShield of North Carolina

CLIENT PROFILE

Site: www.bluecrossnc.com

Industry: Health Care

Headquarters: Durham, NC

Employees: 4,800

CHALLENGES

- Moving seven critical customer-facing, employee-facing, and provider-facing applications to the cloud.
- Ensuring the health, availability, and performance of applications to deliver a wow customer experience.

BROADCOM® SOLUTIONS

- DX APM
- DX ASM
- DX OI

BENEFITS

- Expanded scope and delivered full-fledged service observability and an executive dashboard for sharing service performance metrics for business-critical applications.
- With a goal of achieving 99.9% uptime within two years (by December 2023), the IT team made enormous progress before the end of 2022 by reaching 99.5% uptime.

AIOps and Service Observability Lead BCBS-NC to Their Goal of 99.9% Uptime Using DX SaaS

Blue Cross and Blue Shield of North Carolina (BCBS-NC) has been committed to making health care better, simpler, and more affordable since 1933. They have also been driving better health in North Carolina for generations, working to tackle communities' greatest health challenges. Today, BCBS-NC is a fully taxed, not-for-profit, North Carolina company with major operations centers in Durham, Fayetteville, and Winston-Salem. They employ about 4,800 North Carolinians and serve customers and communities of more than 3.81 million members, including almost 1.1 million customers that were served on behalf of other Blue Plans. BCBS-NC is an independent licensee of the Blue Cross and Blue Shield Association.

Challenges

BCBS-NC is a health insurance provider that aims to improve the health and well-being of their customers and communities.

Fortify Our Foundation, an executive-driven initiative, focuses the entire enterprise on achieving operational excellence, improving affordability, and increasing agility. A critical contribution from IT became, in broad terms, digitizing the customer experience.

For IT, this meant moving seven critical customer-based, employee-based, and provider-facing BCBS-NC applications to cloud, and ensuring that the health, availability, and performance of these applications deliver a wow customer experience. These applications provide services to employees, direct members, healthcare providers, US federal agencies (for example, Medicare), business channels, and agents.

Solution

BCBS-NC relies on DX Application Performance Management, DX App Synthetic Monitor, and DX Operational Intelligence for robust monitoring solutions, advanced analytics, and service observability across their application portfolio.

DX Application Performance Management (DX APM) is instrumental for monitoring the on-premises components of BCBS-NC applications. This includes Amazon Web Services (AWS), as well as the OpenShift container platform.

DX App Synthetic Monitor (DX ASM) helps BCBS-NC monitor user experience from multiple locations and assess the availability of applications or individual application components.

“ We have been using APM since the Wily days of 2008. We have seen the product evolve over the years, broadening its coverage to meet additional monitoring requirements. Now, with the analytics layer from DX Operational Intelligence to support our digitization strategy, we’re delivering that aspirational customer experience across our critical applications every day!

BOBBY DODSON, TECHNICAL SERVICE AND MONITORING OWNER AT BCBS-NC

DX Operational Intelligence (DX OI) provides advanced analytics and customizable dashboards. This gives IT Operations end-to-end visibility across IT domains. The service models that are defined in DX OI correlate to the service level indicators and error budgets that are based on the availability measured through DX ASM, along with the performance metrics that were measured using DX APM. This helps IT achieve uptime targets, collaborate more efficiently, and share results with business stakeholders.

Integrations with third-party IT service management technologies help streamline ticketing and issue remediation.

Together, the integrated AIOps solution supports the end-to-end digitization of R&D, operations, and the overall customer experience at BCBS-NC.

Figure 1: BCBS-NC Business Segments



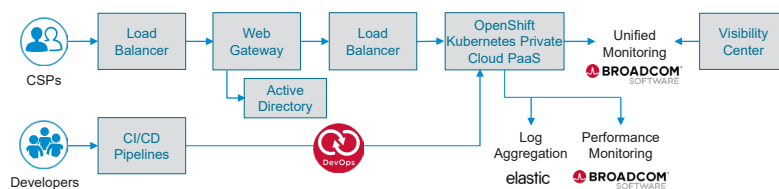
Environment

Using DX APM, BCBS-NC monitors Java, .Net applications, Node.js, AWS, OpenShift, and numerous other application platforms. Using the Universal Monitoring Agent, DX APM Infrastructure Agent, and thousands of deployed agents, BCBS-NC has deep and broad monitoring coverage.

In 2021, BCBS-NC migrated to DX APM SaaS after relying on DX APM classic for more than 14 years. During this time, BCBS-NC expanded monitoring coverage with Customer Experience Monitor and DX ASM.

DX OI provides BCBS-NC with the AIOps data lake, advanced analytics, and customizable dashboards. DX OI also includes integrations with DX NetOps, DX Unified Infrastructure Manager, DX APM for monitoring, and ServiceNow for ticketing.

Figure 2: BCBS-NC Environment



Results

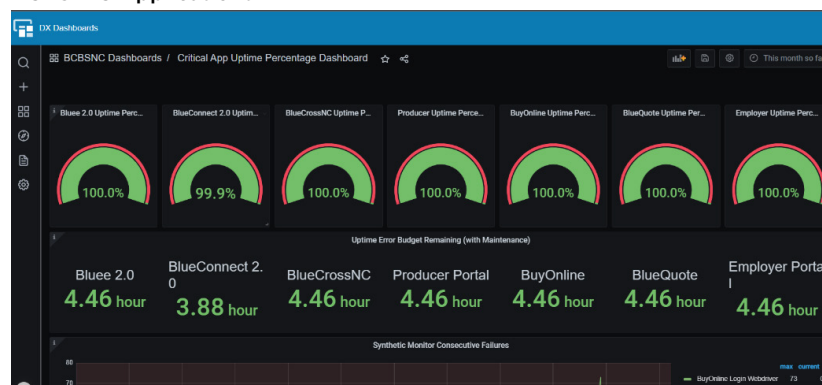
The CIO Uptime Initiative had established a goal of achieving 99.9% uptime within two years (by December 2023). Prior to the end of the first year, BCBS-NC had already reached a threshold of 99.5% uptime.

The IT Operations team leverages AIOps delivered through the DX SaaS platform to drive operational excellence for their cloud solutions. BCBS-NC executives track service performance using an intuitive dashboard which shows the seven critical applications that support customers, employees, health providers, and partners.

DX APM, along with DX ASM, provides monitoring coverage that expands as new technologies are adopted by IT teams across BCBS-NC.

DX OI's service observability capabilities have helped to establish a single contextual view across monitored environments and is critical in fostering collaboration across IT teams (for triage and remediation) and business stakeholders (for business alignment) by providing relevant information with needed context for each group.

Figure 3: DX Dashboard Showing Actual Error Budget (4.46 Hours) and Drawdown for BCBS-NC Applications



Key Contributors

BCBS-NC

- Bobby Dodson, Technical Service and Monitoring Owner
 - With more than 27 years in the application and infrastructure domain, Bobby is a seasoned specialist leading the monitoring teams at BCBS-NC. He owns the technical services that are critical for achieving operational excellence and digital agility.
- Hui Wang, Technical Service and Monitoring Owner
 - Hui has more than 30 years of experience in managing complex environments. He has led transformation initiatives at different teams, bringing business goals to the center. At BCBS-NC, Hui owns the technical services that are critical for achieving operational excellence and digital agility.

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- Sheenam Gupta, AIOps Product Management
 - Sheenam is the lead product manager for the DX OI and APM AIOps offerings. She is focused on successful product launches and value creation for AIOps customers.
- Srikant Noorani, Principal Engineering Architect
 - With over 25 years of experience in development and monitoring, Srikant is a hands-on architect with a passion for guiding customers through their digital transformation journey. He has been instrumental for many large APM and AIOps deployments.

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