USE CASE BRIEF | NETWORKING

infoblox

# Business Continuity and Disaster Recovery

## Keep Critical Network Services Online and Resilient, No Matter What

### IMPACT SUMMARY

**Minimizes Downtime**
Automatically responds to failures to keep critical network services online and available.

**Reduces Risk**
Minimizes manual processes and configuration errors—the leading cause of outages—while ensuring consistent operations and compliance.

**Accelerates Troubleshooting**
Maintains authoritative, enterprise-wide IP address mapping and context to quickly identify affected endpoints when investigating network issues and security events.

**Enables Flexible Resiliency**
Frees organizations to choose the optimal model for providing critical network services at each site: physical, virtual or infrastructure-free, as-a-service delivery.

**44%**
fewer cloud outages

**38%**
faster recovery

**Up to 82%**
faster troubleshooting and problem resolution

## INTRODUCTION

For modern businesses, it has never been more important to preserve uninterrupted access to mission-critical applications and services—and the network that keeps them online. Yet as organizations expand across hybrid and multi-cloud environments, assuring non-stop availability has become increasingly complex. That is especially true for foundational network services like DNS and DHCP, which every user, device and application depend on to stay connected.

Nevertheless, many enterprises continue to overlook these critical network services in their business continuity and disaster recovery strategies, leaving them vulnerable to outages and expensive service disruptions. To succeed in a business landscape increasingly dominated by cloud and AI, companies need a more resilient, secure and automated digital foundation—one that preserves non-stop availability for critical services, recovers quickly from disruptions and empowers them to innovate with confidence.

## CHALLENGE

Every business application and transaction depends on critical network services like DNS, DHCP and IP address management (IPAM), collectively known as DDI. Most users and customers never even think about these foundational services running deep inside the network—unless they stop working. If that happens and the organization has not taken steps to ensure resiliency, applications go dark, collaboration tools stop working and business effectively grinds to a halt.

### Network Outages, Expensive Downtime

When foundational network services like DNS and DHCP fail, the results can be catastrophic: business disruption, failed compliance audits and potentially millions in lost revenues. Large businesses lose more than $1.4 million per hour of downtime,[1] and in one recent study, 100 percent of IT leaders surveyed reported outage-related revenue losses in the past year.[2] Yet the damage can extend well beyond the outage event itself. In another survey of large retailers and consumer brands, 64 percent said that outages damaged their reputation and caused customers to lose confidence in their brand.[3]

### Slow, Error-Prone Recovery

Traditional recovery processes require engineers to manually rebuild services under pressure—an approach that is slow, stressful and prone to mistakes. Disparate tools and limited visibility make it hard to know which services are down or where to begin, prolonging downtime and increasing costs. When businesses rely on manual spreadsheets and other homegrown tools to keep track of IP addresses, for example, recovery can take hours. In fact, organizations without enterprise-grade critical network services have cloud outages 44 percent more often and take 38 percent longer to recover.[4]

### Fragmented Visibility Across Environments

With critical network services distributed across data centers, branch sites, clouds and SaaS platforms, most organizations lack a unified view. This fragmentation makes network changes and troubleshooting more difficult, impedes automation and increases both costs and risk of configuration errors—the leading cause of outages.[5] In fact, organizations using outdated DNS and DHCP approaches spend 612 hours annually troubleshooting outages caused by network issues.[6]

## SOLUTION

Infoblox helps organizations achieve nonstop resiliency for the critical network services that keep business applications up and running. By automating failover, simplifying management and providing end-to-end visibility across hybrid, multi-cloud environments, Infoblox helps businesses drive down the costs and risk of network service disruptions.

### Enterprise-Grade Resiliency

Infoblox provides mature high-availability capabilities—including DNS anycast, DHCP failover and DNS Traffic Control (DTC) global server load balancing—to eliminate single points of failure and automate failover. If primary DNS services fail, for example, DTC immediately detects the outage and reconfigures the network, automatically redirecting traffic to keep critical business applications online, without manual intervention.

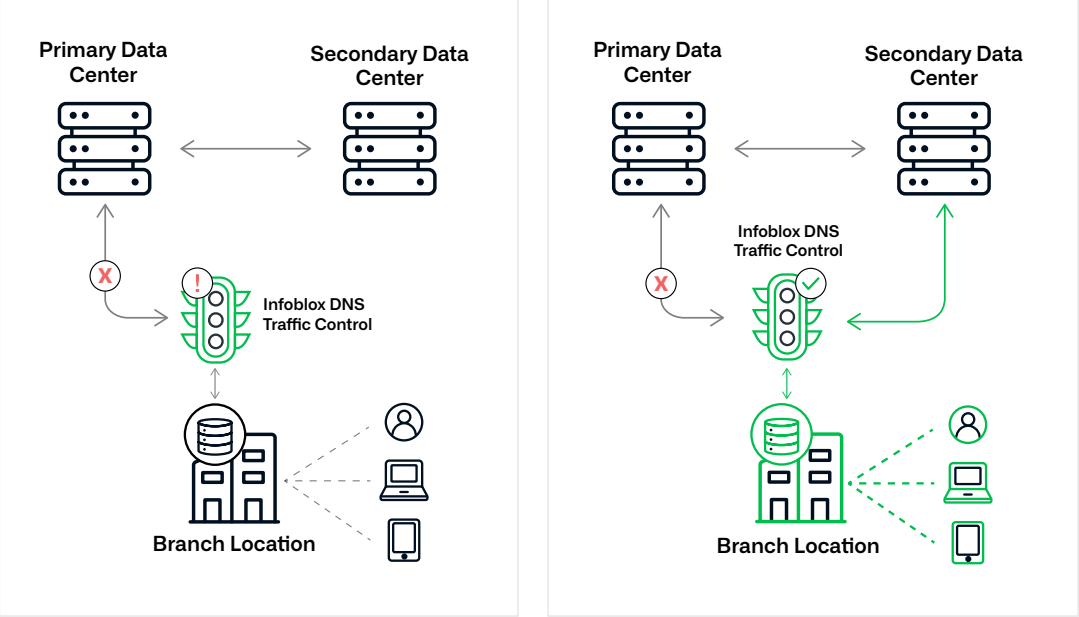


*Figure 1. Automated failover with DTC global load balancing*

## Visibility for Faster Troubleshooting

Infoblox provides pervasive real-time visibility into IP addresses and network services across hybrid and multi-cloud environments—valuable features under normal conditions, but essential during an outage. With capabilities like universal IP address mapping and DHCP fingerprinting, network teams can instantly identify which services are affected, pinpoint root causes and restore operations faster, all from a single dashboard. In fact, organizations using Infoblox troubleshoot issues up to 82 percent more quickly and recover from failures with far less stress and effort.

## Eliminate Single Points of Failure

In addition to the internal DNS that keeps corporate networks connected, businesses also depend on external DNS to keep their websites, email and other internet-connected applications online. Many rely on SaaS or cloud providers to handle these public-facing services, but even the largest external DNS provider can have outages. Infoblox helps businesses add redundancy to external DNS, ensuring that their websites and other public-facing apps are always available to users and customers, even if their primary external DNS provider has a catastrophic outage.

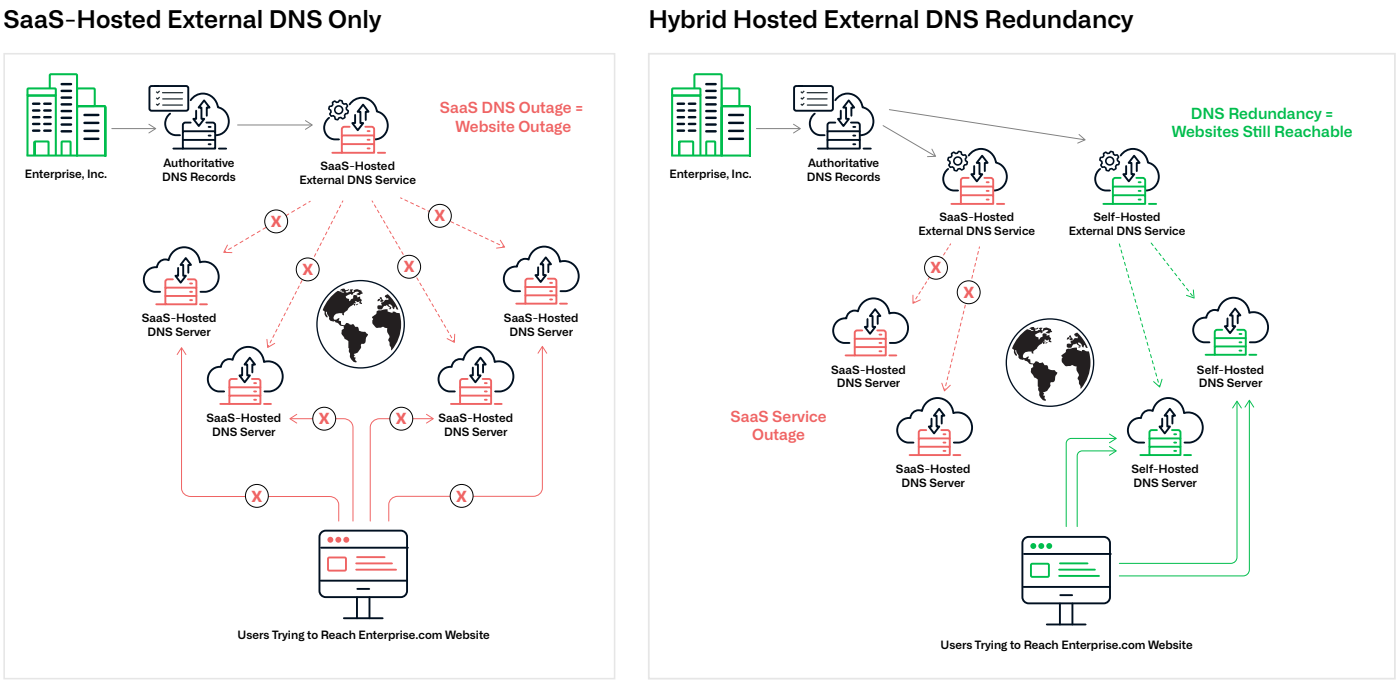


*Figure 2. Ensuring high availability for websites and apps with redundant external DNS*

## Flexible Deployment Options

Infoblox offers flexibility in how organizations handle resiliency and high availability of critical network services at remote sites. Businesses can choose cloud-based, infrastructure-free DNS/DHCP as-a-service to eliminate the need for on-site equipment, use physical or virtual appliances at key sites to ensure local survivability or combine both approaches.

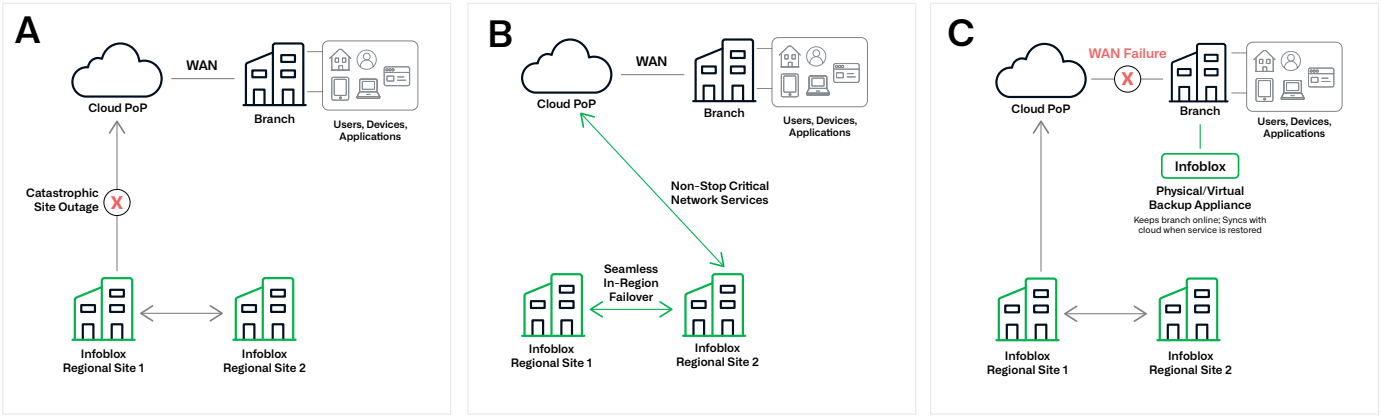


*Figure 3. Non-stop resiliency during an outage (A), with infrastructure-free (B) and local survivability (C) options*

## KEEP CRITICAL APPLICATIONS ONLINE AND RESILIENT

When it comes to other critical services like security and access control, most business leaders would never rely on antiquated software offerings, manual spreadsheets or homegrown tools to protect their users and customers. Yet too many do exactly that for the DNS and DHCP services connecting every device and application—not realizing they are leaving the business exposed to significant risk. By taking steps to modernize and protect foundational network services, businesses can reduce outages and downtime, streamline compliance and ensure that, no matter what surprises the future holds, they are ready to respond.

### Success Across Real Customer Implementations

- A global energy provider faced daily outages due to the outdated Windows Server deployments they were relying on for DNS and DHCP, which required frequent patching. By adopting a modern, enterprise-grade platform for these foundational network services, they achieved 99.99 percent uptime.
- A large national wholesaler lost its primary data center to a fire, but operations continued uninterrupted. Thanks to a fully prepared, geographically separated Infoblox instance with DTC, the failure was detected immediately, and application traffic was automatically rerouted. The business remained online and productive, with full recovery requiring only minor modifications to a few DNS records.
- A major international airline suffered a fiber cut at its core reservation hub during peak travel hours, threatening to disrupt tens of thousands of customers and crew. Instead, its Infoblox deployment used DNS anycast to identify the nearest surviving locations and automatically redirect traffic, with zero impact to customers.

## KEY CAPABILITIES

**Enterprise-grade DNS and DHCP resiliency,** with proven high-availability capabilities to keep critical network services online and resilient.

**Automated failover and recovery** to eliminate manual errors and quickly restore service.

**Fast troubleshooting**, with universal IP address mapping and DHCP fingerprinting to pinpoint root causes and speed investigations.

**Comprehensive visibility** into critical network services across the hybrid, multi-cloud environment from a single dashboard and API.

**Flexible delivery options** to provide the right level of resiliency at every site, whether via physical, virtual or infrastructure-free as-a-service solutions.

1 The rising costs of downtime, Blau, Adam, BigPanda, April 25, 2024.
2 "The State of Resilience 2025" Reveals the True Cost of Downtime, Weiss, David, Cockroach Labs, October 29, 2024.
3 Internet Disruptions Cost E-Commerce Retailers Millions Annually, Forrester, March 28, 2023.
4 9 Pitfalls of Choosing an Insufficient DDI Strategy, Enterprise Strategy Group, February 2025.
5 Uptime Institute's 2022 Outage Analysis Finds Downtime Costs and Consequences Worsening, Uptime Institute, Business Wire, June 8, 2022.
6 Infoblox Authoritative IPAM for DNS and DHCP, Tolly Report, Tolly Group, June 2022.

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Infoblox unites networking, security and cloud with a protective DDI platform that delivers enterprise resilience and agility. We integrate across hybrid and multi-cloud environments, automate critical network services and preemptively secure the business—providing the visibility and context needed to move fast without compromise.

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