

# BlueCat Infrastructure Assurance for Integrity

## DDI Day 2 Operations and Best Practices Automated

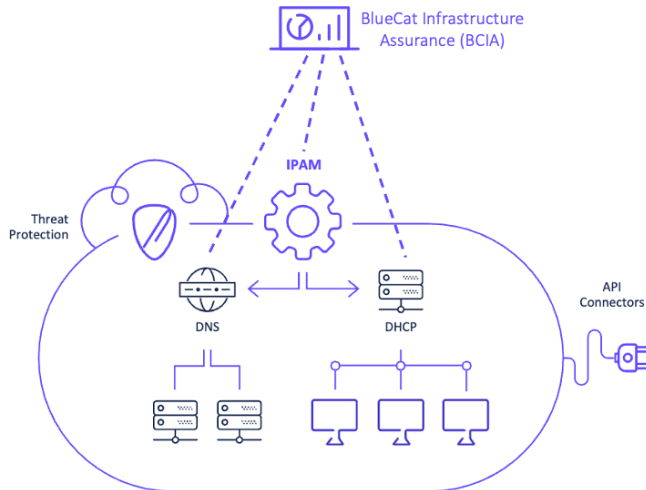
Without automation, IT operations teams would spend countless hours gathering diagnostics and device data to keep the DDI infrastructure up and running. IT teams that manage DDI infrastructures are often limited in staff which adds to the need for automation. The typical network administrator spends 70% of their time identifying and remediating known errors.

Over 72% of outages can be avoided if IT operations teams receive an advanced notice with respect to common issues stemming from hidden configuration skew, forgotten ongoing maintenance, or a combination of lack of adherence to vendor, industry, and High Availability best practices.

This solution brief presents how BlueCat Infrastructure Assurance for Integrity uniquely prevents problems and automates your daily operational tasks to ensure DDI service is always available.

## Solution Overview

BlueCat Infrastructure Assurance for Integrity automatically detects issues relating to DDI infrastructures and tells you how to remediate them. Think of it as a virtual network expert that can expand team skills and is on duty 24/7. IT operations teams can gain BlueCat-specific knowledge from the descriptions and recommended remediations built from real world experience of DDI experts. Effectively, we've automated BlueCat best practices to prevent costly disruptions, keeping service delivery available at all times.



## Stateful Health Checking

Continuously assess BlueCat Address Manager and BlueCat DNS/DHCP server's health by comparing expectations of device configuration against reality of current status. Sample common issues based on real experience:

- High disk space utilization
- High load average
- Clock set incorrectly
- Critical process(es) down - DHCP, psmd, nsmpd, named, java, dhcpmon, forom, bcn-nsupdate
- DNS / DHCP / Command server service down
- DNS queries failure is higher than expected
- BDDS has some service in manual override mode
- Notification processing falling behind DNS/DHCP going further out of sync with BAM
- Communication between BDDS device and BAM server not working
- Concurrent connections are too high
- Kernel connection limit has been modified
- Kernel connection tracking is nearing limit

## **Ensure High Availability**

Constant detection of HA unreadiness from cross-device inconsistencies including configuration and state.

- Alert if xHA service is down
- Alert if cluster or cluster member is down
- Alert if failover has occurred
- Identify xHA configuration is synchronized
- Ensure connectivity between the 2 DHCP failover servers
- Identify DHCP failover state changed

## **Ensure Successful Backup**

Proactively send notifications if backup is not successful.

- Backup is not configured
- Backup is disabled
- Backup failed: Another backup process is running
- Backup is using insecure protocol
- Local backup failed
- Remote backup failed
- Remoted backup is not configured

## **Ensure Successful Database Replication**

Proactively send notifications if replication is not successful.

- Database replication is disabled
- Database replication stopped
- Database replication latency nearing critical limit
- Database replication latency nearing warning limit

## Monitor Critical Services

DDI depends on many external services to get dynamic content updates.

- NTP service down
- NTP synchronization failure
- NTP server configured incorrectly

## Use Cases

- Automate the process to ensure a DDI cluster failover is seamless
- Validate best practices for alignment with configuration recommendations from BlueCat
- Avoid service outages and troubleshoot issues by following the remediation steps authored by BlueCat experts
- Consistent measurement of device configuration skew against locally-defined organizational standards

## Key Differentiators

There are three major differences between BlueCat and other network monitoring and management solutions:

1. BlueCat Infrastructure Assurance for Integrity continually and preemptively identifies many discrepancies so that problems can be avoided. When BlueCat Infrastructure Assurance for Integrity is deployed in an environment, customers immediately receive notifications about misconfigurations, and other best practices not being followed.
2. BlueCat Infrastructure Assurance for Integrity automates troubleshooting by detecting the symptoms of various potential problems to reduce downtime. The ability to automate previous known issues prevents the same problem from recurring.
3. Monitoring tools notify you of problems and they stop there. Indeni goes a step further by providing actionable remediation steps. These actionable insights provide a wealth of information and they can cut down the troubleshooting time. IT operations teams gain specific knowledge from the descriptions and recommended remediations built from real-world experience of BlueCat experts.

## **Solution Benefits**

- Achieving zero downtime. Proactively identify misconfigurations, High Availability inconsistencies, forgotten maintenance tasks and other best practices to avoid outages.
- Optimize the performance of the DDI infrastructure. Automation streamlines IT operations enabling network operations teams to deliver optimal DDI services at the desired quality to the business.
- Work more effectively. BlueCat Infrastructure Assurance for Integrity automation modules will surface useful and actionable information that will immediately facilitate people's work.

**Prevent network downtime by automating the daily operation with BlueCat Infrastructure Assurance for Integrity**