



*The Adaptive DNS Company™*

BLUECAT TRAINING

## BlueCat Fundamentals DDI eLearning

BlueCat Training empowers your team with hands-on training that keeps pace with the design and deployment of your BlueCat solution. BlueCat experts design training courses to address the comprehensive needs of your IT organization. Our training offerings equip your staff with the skills needed to optimize your BlueCat solution and realize its full potential.

The BlueCat Fundamentals eLearning training course focuses on managing the DNS Integrity solution including BlueCat Address Manager and the way DHCP and DNS services are managed. The course assumes that attendees have a general understanding of networking concepts as well as a strong grasp of concepts related to DHCP, DNS and IPv4 addressing. BlueCat Fundamentals eLearning may be viewed on LearningSPACE, BlueCat's Learning Management System. The eLearning format of this course allows students to access content from any location at any time.

# INTRODUCTION TO DNS INTEGRITY

## INTRODUCTION TO ADDRESS MANAGER

- Understand the way Address Manager manages IPAM data
- Introduction to Redundancy Systems, Role-based Administration, Compliance and Auditing

## NAVIGATING THE SYSTEM

- Understand the Components of the Address Manager UI including Tabs and Breadcrumbs
- Use the Search Functionality
- Restore Data
- Use Table Filtering to Filter IPAM Data

## UNDERSTANDING BLOCKS AND NETWORKS

- Manage the IPv4 Address Space using Blocks and Networks

## MANAGING IPV4 ADDRESSES

- Allocate and Change the State of IP Addresses
- Manage Gateway Addresses

## CONFIGURING DHCP IN ADDRESS MANAGER

- Create and Resize DHCP Ranges
- Create DHCP Reserved Addresses
- Assign DHCP Deployment Roles and Deploy DHCP
- Configure DHCP Validation

## MANAGING DNS ZONES AND DEPLOYMENT

- Create and Manage DNS Forward and Reverse Zones
- Understand DNS Deployment Roles and Deploy DNS
- Configure DNS Delegation

## MANAGING DNS RESOURCE RECORDS

- Create and Manage DNS Resource Records
- Understand DNS Referential Integrity

# MANAGING THE IP ADDRESS SPACE

## IP MODELING TOOLS

- Use Various Tools to Manipulate the IP Address Space

## NETWORK TEMPLATES AND IP GROUPS

- Assign Settings to Networks using Network Templates
- Use Network Templates when Partitioning a Block
- Assign Granular Access Rights using IP Groups

## IPV6 MANAGEMENT

- Understand IPv6 Addresses and IPv6 Abbreviations
- Understand the Global and Local address spaces
- Create IPv6 Blocks and Networks and Assign IPv6 Addresses

# MANAGING DHCP

## DHCP DEPLOYMENT OPTIONS

- Configure DHCP Deployment Options
- Understand Deployment Option Inheritance
- Configure DHCP Custom and Raw Options

## DHCP ADVANCED FEATURES

- Configure Shared Networks
- Work with Vendor Profiles, Match Classes and MAC Pools

## DHCP FAILOVER

- Understand Failover Architecture and States
- Configure DHCP Failover

# MANAGING DNS

## DNS DEPLOYMENT OPTIONS

- Configure DNS Deployment Options
- Create Access Control Lists

## RECURSIVE DNS

- Enable DNS Servers to Accept Recursive Queries
- Configure Global Forwarding, Stub Zones and Forwarding Zones

## MANAGING DNS VIEWS

- Understand the Purpose of DNS Views
- Use Match Clients to Control Access to Views
- Understand the way Queries are Handled in a Multi-View Configuration

## ADVANCED DNS TOPICS

- Manage Other DNS Servers
- Use Published Interfaces

## ACTIVE DIRECTORY INTEGRATION

- Configure Address Manager to Support DNS for Active Directory
- Manage Multiple Active Directory Zones

## DYNAMIC DNS (DDNS)

- Understand how DDNS Works
- Add Security to DDNS

## DNS LOGGING

- Use Logging to Interpret Information in a DNS Query
- Enable Query Logging and Logging Channels

# SERVER ADMINISTRATION

## GENERAL ADMINISTRATION

- Configure Global Settings
- Set Passwords for Operating System Accounts
- Configure Services such as SNMP and NTP

## GETTING THE SYSTEM READY

- Connect to the Administration Console (CLI)
- Create Device to Manage Multi-Homed Devices
- Create Device Types to Categorize Devices

## USER MANAGEMENT

- Create Local User and Group Accounts
- Configure LDAP Authentication and Import LDAP Groups
- Configure Access Rights

## DATA MANAGEMENT

- Work with Database Replication
- Use Database Tools
- Back Up and Restore the Address Manager Database

## MONITORING AND TRACKING

- Configure Address Manager Monitoring
- View the Event List and Event Details
- View and Search Transaction History
- Configure and Schedule Reports
- Configure Notification Groups
- Download Address Manager Log Files

## OBJECT TAGS AND DEVICES

- Use Object Tags to group and Organize IPAM Data
- Create Devices to Manage Multi-Homed Devices

## MANAGING BLUECAT DNS AND DHCP SERVERS

- Upgrade BlueCat DNS/DHCP Servers
- Manage BlueCat DNS/DHCP Server Patching
- View and Manage BlueCat DNS/DHCP Server Logs

# ADDITIONAL TOPICS

## IP RECONCILIATION

- Understand the BlueCat Discovery and IP Reconciliation Model
- Schedule and Run IP Discovery
- Configure an IP Reconciliation Policy
- Reconcile Discovered IP Addresses

## CROSS-OVER HIGH AVAILABILITY (XHA)

- Understand XHA
- Configure, Upgrade and Repair an XHA Cluster

# DNS SECURITY TOPICS

## WHAT IS DNSSEC?

- Understand Cache Poisoning Attacks
- Understand DNSSEC Resource Records
- Understand How Zone Signing Keys and Key Signing Keys are Used to Sign Zone Data
- Understand Zone Signing
- Understand Secure Delegation

## CONFIGURING DNSSEC

- Configure Authoritative DNSSEC
- Configure Recursive DNSSE
- Configure Secure Delegation
- Configure Zone Rollover

## RESPONSE POLICY ZONES (RPZ)

- Understand Response Policies and Response Policy Zones

## BLUECAT THREAT PROTECTION

- DNS Phishing Attacks
- Threat Protection and DNS Feeds
- Troubleshoot Threat Protection

# DNS INTEGRITY UPDATES

## WHAT'S NEW IN ADDRESS MANAGER 8.0

- Network Data Visualization
- VLAN Tagging
- Response Policy Zone Reports
- x.509 Authentication
- Pre-Deployment Validation
- Windows DHCP Failover

## WHAT'S NEW IN ADDRESS MANAGER 8.1

- UN/LOCODE Support
- F5 Server Integration
- History Data Management
- Secure Backup Support and more

## WHAT'S NEW IN ADDRESS MANAGER 8.2

- Password Policies
- Blocking DNS Option Inheritance
- Server Groups
- DNS-based Authentication of Named Entities
- Secure Backup Support and more

## WHAT'S NEW IN ADDRESS MANAGER 8.3

- BlueCat DNS Server Slave Notifications
- SNMP Enhancements for Address Manager Replication and Database Backups
- Support for CAA Resource Records

## Get Started Today

Visit <https://www.bluecatnetworks.com/training/> or email [learn@bluecatnetworks.com](mailto:learn@bluecatnetworks.com) to inquire about our course schedules and to obtain more information about our training offerings.

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