# Edge Resolver

Immediate DNS resolution in hybrid and multicloud environments

Intelligent hybrid and multicloud DNS resolution

As network teams adopt hybrid cloud and private DNS-supported services, they must provide the most optimal resolution path to resources across virtual and on-premises networks. To help private endpoints access those resources, admins typically create an avalanche of manual conditional forwarders. But without automated DNS data discovery, admins cannot keep up because manual forwarders can't adapt to the resolution needs of private endpoints. A hybrid and multicloud solution can restore order by simplifying zone discovery and namespace management under one DNS map, improving DNS reliability for critical apps and services.

The solution: BlueCat Edge Resolver

Edge Resolver, a feature of BlueCat Edge, is an advanced solution for optimizing DNS resolution in hybrid and multicloud environments. It seamlessly connects DNS data from cloud-native and on-premises networks into one reliable map of DNS. It allows network teams to manage a single forwarding rule, providing consistent and efficient resolution, all while adapting to changes to provide the most direct resolution path. Edge Resolver automates zone discovery and ensures real-time accuracy to deliver reliable DNS for critical applications and services.
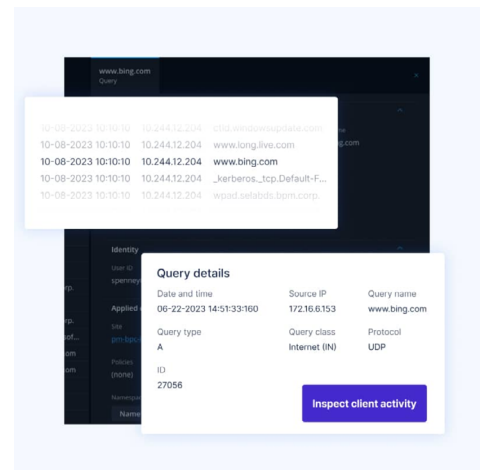
Benefits

✓ **Simplified DNS resolution**
Unify DNS zones from multiple cloud and on-premises environments, creating a single, cohesive, and intelligent DNS resolution system that reduces configuration complexity.

✓ **Increased reliability**
Know exactly where each DNS zone resides, regardless of delegations, eliminating multiple query steps and speeding up resolution for delegated zones and multi-hop queries.

✓ **Hybrid and multicloud awareness**
Edge Resolver continuously polls for changes in DNS data, ensuring real-time accuracy and seamless resolution in fast-paced hybrid and multicloud networks.

✓ **Accelerate configuration**
Edge Resolver eliminates the need to manage multiple forwarding rules; discovered zones or changes are automatically resolved within a single namespace, saving time and boosting efficiency.

Resolving a query using Edge Resolver

As seen in Figure 1, see next page, employees or applications make their first hop query to BlueCat Edge for resolution. Edge will use a single namespace that forwards to the Edge Resolver service to access the always updated map of zones across on premises and cloud vendors. Finally, Edge Resolver delivers a direct resolution path without complex manual conditional forwarding rules.

Edge Resolver breaks down discovery barriers to DNS resolution for endpoints. It surmounts routing conflicts to resources and prioritizes cloud-native or on-premises DNS resolvers based on the origin.
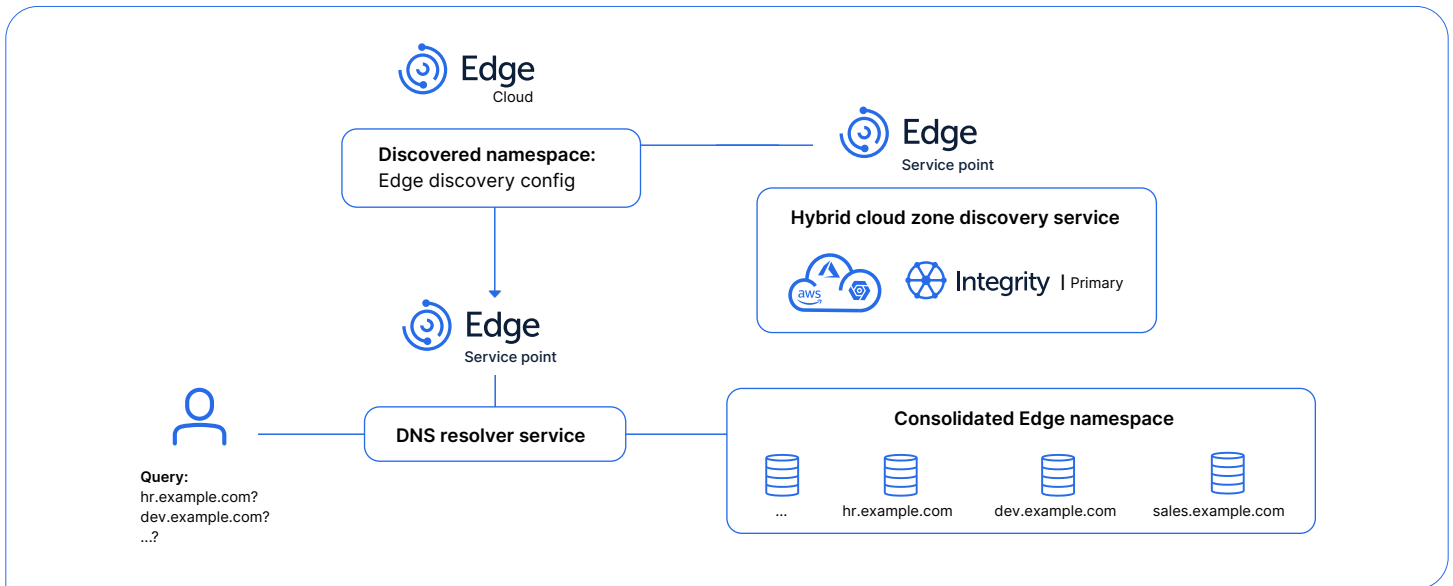

Figure 1. Resolving a query using Edge Resolver

Features

Multi-environment discovery
Continuously discover DNS zones across on-premises, cloud, and third-party services, delivering optimal DNS responses based on client location and more.

Direct resolution path
By knowing exactly where each DNS record resides, Edge Resolver skips unnecessary recursive steps, significantly reducing DNS resolution times.

Adaptive cache
Clients receive tailored answers based on their location, user profile, and other relevant factors, which reduces latency and improves network efficiency.

Seamless cloud integration
Built for hybrid environments, Edge Resolver integrates with AWS, Azure, and Google Cloud, allowing users to manage DNS records across multiple platforms.

Continuous polling
Edge Resolver polls for changes to DNS zones, updating its map instantly as environments shift and evolve.

Next steps
Learn how Edge Resolver can restore order and improve DNS reliability on your network.

Contact us

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