Configure Windows Server to Forward DNS Requests to Umbrella

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Introduction

This document describes how to configure Windows Server to forward DNS requests to Umbrella for enhanced client protection and logging.

Overview

Windows Server can protect clients using a network identity by acting as a DNS forwarder. Domain Controllers or any other server with the DNS role may send DNS to Umbrella from a registered network.

Configuration Steps

1. Open **DNS Manager** (dnsmgmt.msc).
2. Right-click on the server name in the tree and select **Properties**.
3. Select the **Forwarders** tab.
4. Click **Edit...** and enter the Umbrella DNS server IP addresses.
5. Click **OK** in the Edit Forwarders window. The entries display in the list of forwarders.
6. Uncheck the box labeled **Use root hints if no forwarders are available**.



Best Practice Notes

- Ensure **Use root hints if no forwarders are available** remains unchecked. If checked, Umbrella protection and logging become inconsistent. For example, if a domain fails DNSSEC validation or is subject to a DDoS mitigation event, the Windows DNS server can consider Umbrella unresponsive and attempt direct recursion using root hints, bypassing Umbrella.

- Use only Umbrella as forwarders. Do not configure any third-party resolvers. Umbrella can only log and protect DNS queries it receives.

- For redundancy, configure all four Umbrella anycast IP addresses as forwarders as shown in the previous screenshot.

- If using Umbrella Sites and Virtual Appliances, point to a local Virtual Appliance as a forwarder instead of Umbrella anycast addresses.

    - Avoid request loops: If a Virtual Appliance lists your server as one of its local DNS servers, do not add that Virtual Appliance as a forwarder.
    - A Virtual Appliance only sees the IP address of the DNS server, not the addresses of individual clients it serves.
    - If using Active Directory Integration with the Virtual Appliance, add the Windows DNS server

IP as an exception. Navigate to **Deployments > Sites and Active Directory > Service Account Exceptions** in the Umbrella Dashboard and add the DNS server IP. This prevents incorrect attribution of user identities to server traffic.

- Do not add Umbrella servers to the **Root Hints** tab. Umbrella DNS servers are recursive resolvers and do not serve as roots for iterative lookups. Adding them as root hints results in undesirable behavior and bypass Umbrella protection and logging.