

Understand DNS Changes after Installing Umbrella Roaming Client

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Introduction

This document describes DNS changes that happen after installing the Umbrella Roaming Client.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on Umbrella Roaming Client.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Overview

After you install the Cisco Umbrella Roaming Client, you notice that the IP address gets changed to localhost or 127.0.0.1, otherwise known as the loopback interface. This is normal and expected behavior.

The Umbrella Roaming Client runs as a local service which is used as a local resolver and DNS forwarder, encrypting and authenticating requests using the DNSCrypt protocol. Requests are then forwarded to Umbrella's anycast IPs, with the replies returned to the host through the loopback interface. This essentially makes the Umbrella roaming client a DNS Proxy, which is why you see the DNS change to localhost/127.0.0.1. The DNSCrypt protocol makes all of your transactions secure.

Resolve Internal Hosts when Using Umbrella Roaming Client

You can still resolve internal hosts by adding these domains in the Dashboard:

1. Navigate to **Deployments > Configuration > Domain Management > Internal Domains**.
2. Select the **Add** icon.

Add New Bypass Domain or Server

When you add a domain, all of its subdomains will inherit the setting. If 'example.com' is on the internal domains list, 'www.example.com' will also be treated as an internal domain.

Domain Type

Internal Domains External Domains & IPs

Domain

Description

Applies To

All Sites ✕ All Devices ✕ ∨

CANCEL

SAVE

Domain_Management-5.jpg

When you add a domain to this list, the Umbrella Roaming Client sends these domains to the internal DNS server set by DHCP settings or internal DNS servers statically set prior to starting the Roaming Client service. For more information, read the Umbrella documentation on [adding Internal Domains to the Roaming list](#).

Impact of Changing DNS away from Localhost

The Roaming Client notices that the DNS servers have changed note down the internal DNS server that has been set. It uses these new DNS servers for internal DNS resolution and set DNS back to localhost to resume normal operation of the service.