

Understand Roaming Client Performing Two Internal DNS Updates

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Introduction

This document describes the behavior of Cisco Umbrella Roaming Client performing two internal DNS updates.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on Cisco 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

You notice in your server's DHCP or DNS logs that a computer with the Cisco Umbrella roaming client installed is performing two Dynamic DNS (DDNS) updates within a few seconds of each other.

Explanation

Windows is designed to perform a Dynamic DNS update whenever a network's IP or DNS settings are modified.

The design of the Umbrella roaming client causes the IP of the local client to be modified. First, the Umbrella roaming client backs up the DHCP-delegated (or statically-set) DNS servers to a local .txt file. Then, the Umbrella roaming client binds itself to 127.0.0.1 and changes the DNS settings. This takes place for each network that has connectivity.

When the Umbrella roaming client changes the DNS settings, Windows performs a subsequent DDNS reregistration shortly after the original DDNS query is made and before the Umbrella roaming client takes over.

Additional Information

There is no action for you to take. This behavior is innocuous in nature, and this article is for informational purposes only. Currently, there are no plans to attempt to avoid the second DDNS call when the Umbrella roaming client changes the DNS settings as no side-effects of this behavior have been noted.

For more information on how DDNS works on Windows, please reference this Microsoft article: [Understanding Dynamic Update](#).