Microsoft Windows 2016 DNS Server for Wireless LAN Controller (WLC) Discovery Configuration Example

Contents

Introduction

When Cisco's Wireless Unified Architecture is deployed, the Cisco Aironet Lightweight Access Points (LAPs) can discover wireless LAN controllers (WLCs) using the DNS server when the WLC is in a different subnet than the LAP.

This document describes how to configure the Microsoft Windows 2016 DNS server for WLC discovery.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Basic knowledge of DNS servers
- Basic knowledge of the Control and Provisioning of Wireless Access Points (CAPWAP) protocol

Components Used

This document is not restricted to specific software and hardware versions.

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, make sure that you understand the potential impact of any command.

Conventions

Refer to [Cisco Technical Tips Conventions](#) for more information on document conventions.

Wireless LAN Controller DNS Discovery

The Lightweight AP (LAP) can discover controllers through your domain name server (DNS). For the access point (AP) to do so, you must configure your DNS to return controller IP addresses in response to **CISCO-LWAPP-CONTROLLER.localdomain**, where localdomain is the AP domain name. When an AP receives an IP address and DNS information from a DHCP server, it contacts the DNS to resolve **CISCO-CAPWAP-CONTROLLER.localdomain**. When the DNS sends a list of controller IP addresses, the AP sends discovery requests to the controllers.

The AP will attempt to resolve the DNS name **CISCO-CAPWAP-CONTROLLER.localdomain**. When the AP is able to resolve this name to one or more IP addresses, the AP sends a unicast CAPWAP Discovery Message to the resolved IP address(es). Each WLC that receives the CAPWAP Discovery Request Message replies with a unicast CAPWAP Discovery Response to the AP.

The next section describes how to configure the Microsoft Windows 2016 server for WLC discovery.

Configure

Configurations

1. Run '**mmc**' command from Windows start menu.