mDNS for kWAAS

The mDNS for kWAAS feature implements the multicast Domain Name System (mDNS) Service Discovery protocol, provides the API layer to the network, and enables Kernel-based Virtual Machine Wide-Area Application Services (kWAAS) devices to easily discover wide-area services advertised by other Cisco IOS devices.

This concept module provides a brief overview of mDNS service discovery for kWAAS and IP networking on mDNS for kWAAS.

Information About mDNS for kWAAS

Overview of Service Discovery on mDNS for kWAAS

Software modules within the Cisco software need to be able to discover services of interest. These services are announced via the multicast Domain Name System (mDNS) Service Discovery protocol. The Layer 2 domain DNS helps with the auto-discovery of these services with its capability of multicasting and decentralizing the mDNS service discovery.

mDNS service discovery is performed using IP multicast. IP multicast is the process of sending multiple IP data packets to a receiver in a single transmission.

The multicast Domain Name System (mDNS) for kWAAS implements the mDNS Service Discovery protocol, provides the API layer, and enables kWAAS to easily discover wide-area services advertised by other Cisco IOS devices.

After service discovery, the mDNS Service Discovery protocol lets you retrieve information about the cached mDNS resource records, the different mDNS requests in queue, and the mDNS statistics about the packet relays.

Note The mDNS for kWAAS feature is enabled by default on Cisco devices. There are no configuration tasks, and this feature cannot be disabled.

Overview of IP Networking on mDNS for kWAAS

The mDNS for kWAAS feature utilizes the service discovery protocol, which provides a way to announce and discover services on the local network, thereby enabling wireless Cisco software device clients to access services advertised in a different IP network.

multicast Domain Name System (mDNS) performs DNS queries over IP multicast. mDNS supports zero configuration IP networking. Zero configuration IP networking consists of processes that let you devise an automated IP network, without the need for any intervention by a network administrator. The zero configuration IP networking method does not need any special configuration servers.

As a standard, mDNS uses multicast IP address 224.0.0.251 as the destination address and 5353 as the UDP destination port.

Note   The mDNS for kWAAS feature is enabled by default on Cisco devices. There are no configuration tasks, and this feature cannot be disabled.

Additional References for mDNS for kWAAS

Related Documents

Related Topic	Document Title
Cisco IOS commands	*Cisco IOS Master Command List, All Releases*
WAN commands	Cisco IOS Wide-Area Networking Command Reference
Cisco Wide-Area Application Services	• *Cisco Wide Area Application Services Quick Configuration Guide* • *Cisco Wide Area Application Services Configuration Guide*
Wide-Area Networking Overview	*Wide-Area Networking Configuration Guide: Wide-Area Application Services*

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	http://www.cisco.com/support

Feature Information for mDNS for kWAAS

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for mDNS for kWAAS

Feature Name	Releases	Feature Information
mDNS for kWAAS	Cisco IOS XE Release 3.9S	The multicast Domain Name System (mDNS) for kWAAS implements the mDNS Service Discovery protocol, provides the API layer to the network, and enables Kernel-based Virtual Machine Wide-Area Application Services (kWAAS) devices to easily discover wide-area services advertised by other Cisco IOS devices. The following commands were introduced or modified: **debug mdns, show mdns cache, show mdns requests, show mdns statistics.**