Collecting Packet Drop Logs in Cisco SD-WAN cEdge Environments

Contents

Introduction

Prerequisites

- Requirements
- Components

Background Information

Steps

Introduction

This document describes the process of collecting Packet Drop Logs, a critical step in diagnosing and resolving issues related to packet loss or server inaccessibility.

Prerequisites

Requirements

Cisco recommends that you have knowledge of the Cisco Software-Defined Wide Area Network (SD-WAN).

Components

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, ensure that you understand the potential impact of any command.

Background Information

Logs must be collected before performing any action in order to resolve the issue.

By accurately capturing and analyzing these logs, network professionals can pinpoint network bottlenecks and take corrective action to improve reliability and performance across the organization.

Steps

1. Identify the branch and hub from where the applications can not be accessed.



2. Collect the mentioned command outputs in order to check if control connections and BFD sessions are up.

terminal length 0

show clock

show sdwan software

show sdwan control connections

show sdwan bfd sessions | in <remote-ip> ***remote-IP of destination tunnel***

show sdwan bfd sessions table | in <remote-ip>

show sdwan bfd summary

show ip route

show ip route vrf <>

Also check for interface output drops **show interface <interface-name>**.

3. Check for hardware platform drops, collect 2-3 samples with 10 seconds interval.

show platform hardware qfp active statistics drop

show platform hardware qfp active feature ipsec datapath drops

show platform hardware qfp active feature sdwan datapath statistics

show platform hardware qfp active feature bfd datapath statistics

4. Take cflowd output from Hub and Spoke while accessing application.

show sdwan app-fwd cflowd flows table | in <src-or-dst ip address>

5. Packet trace on both Hub and Spoke simulataneously.

packet trace on both hub and spoke

debug platform condition ipv4 <ip> both
debug platform packet-trace packet 2048 fia-trace data-size 4096
debug platform condition start

show plat packet summary

debug platform condition stop

show plat packet packet all decode

6. Collect admin-tech on both Hub and Spoke from https://www.cisco.com/c/en/us/support/docs/routers/sd-wan/216954-how-to-collect-an-admin-tech-in-an-sd-wa.html.