Troubleshoot Policer Surpassed a Threshold

Contents

Introduction

Policer Surpassed a Threshold

ICSeverity

Impact

Description

SyslogMessage

MessageSample

ProductFamily

Regex

Recommendation

Commands

Introduction

This document describes the PUNT_INJECT facility code responsible for punting packets and how to troubleshoot when the policer surpasses a threshold.

Policer Surpassed a Threshold

ICSeverity

5 - Notice

Impact

No service impact.

Description

PUNT_INJECT is the facility code, which refers to the part of the system that is responsible for punting packets. Punting typically means that packets are being sent from the fast path (hardware processing) to the slow path (software processing) for special handling. This could be due to various reasons such as features that are not supported in hardware or packets that require additional inspection or processing that the hardware cannot perform. DROP_PUNT_CAUSE suggests that a packet that was supposed to be punted (sent to the CPU for processing) has been dropped due to a specific cause. This could be expected behavior as this protects the control plane of the device.

SyslogMessage

MessageSample

Mar 26 09:00:22 <> %PUNT_INJECT-5-DROP_PUNT_CAUSE: punt policer drops packets, cause: for-XXX (0xb) fro

ProductFamily

- Cisco 4000 Series Integrated Services Routers
- Cisco 900 Series Integrated Services Routers
- Cisco Cloud Services Router 1000V Series
- Cisco ASR 1000 Series Aggregation Services Routers

Regex

N/A

Recommendation

- 1. Check the router's CPU and memory usage to see if there is an overload that could be causing packets to be dropped: Router# show processes cpu Router# show processes cpu history Router# show processes cpu sorted Router# show memory Router# show processes memory Router# show memory summary Router# show memory statistics.
- 2. Review the router's configuration to ensure that features requiring punt injection are correctly set up and that there are no conflicting settings: **Router# show running-config**.
- 3. Consider the traffic pattern and types of packets being punted to determine if they are as expected, or if there is unusual traffic that could be causing issues. Review the policer to confirm if a drop is expected or not: Router# show platform hardware qfp active infrastructure punt statistics type per-cause Router# show platform hardware qfp active infrastructure punt statistics type inject-drop.

Commands

#show version
#show logging
#show platform hardware qfp active statistics drop
#show platform hardware qfp active infrastructure punt statistics type per-cause
#show platform hardware qfp active infrastructure punt statistics type inject-drop
#show platform software process list 0 summary
#show clock