MOCK - Firewall Rule Matching

Last updated: December 1st, 2023

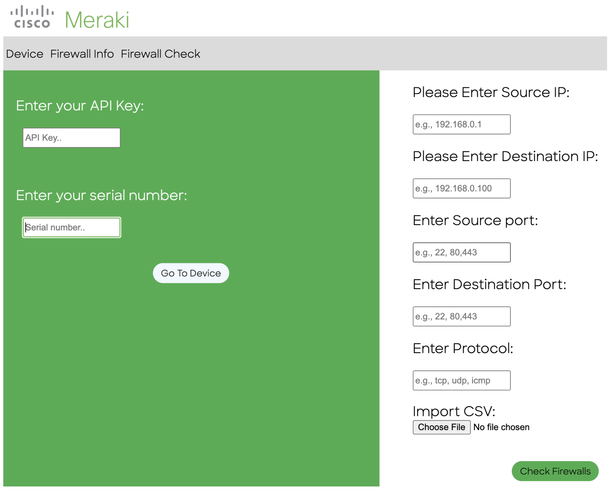
Introduction

Firewall Test Policy Matching is a feature that allows you to view the expected traffic flow of packets as they are processed by the firewall. This tool can be used to ensure expected behavior of firewall policies and help troubleshoot traffic flow related issues. This feature is currently only available for Layer 3 firewall policies. This tool also allows for a bulk importation from a .CSV file in order to test multiple parameters on a single network. This tool is available with on MX firmware release ID.10T and newer.

Quick Start Guide

To use Firewall Test Policy Matching Tool:

1. Navigate to ideoproject.net
2. Click on "Begin"
3. Enter API Key & Serial Number.
   ***Wait for tool to display desired network*
4. Click on "Go to Device" and click "Test Firewall Policy"
5. Enter desired parameters and then click the "Start" button.
   ***Source & Destination IP are required*
6. Click " Check Firewalls" and wait for the browser to produce desired results.



Display ALL Rules

To review current policies , enter API Key and Serial Number to retrieve the desired network. Once the network name has populated choose "Display ALL Rules". To return to policy matching tool click "Go to Device"

Example:

comment	policy	protocol	srcPort	srcCidr	destPort	destCidr	syslogEnabled
VLAN tag testing	deny		Any	[IPv4Network([redacted]), IPv6Network([redacted])]	Any	[IPv4Network([redacted]), IPv6Network([redacted])]	false
Protocol/Port testing	allow		80	[IPv4Network([redacted])]	80	[IPv4Network([redacted])]	false
Protocol/Port testing 2	deny		80	[IPv4Network([redacted])]	80	[IPv4Network([redacted])]	false
ICMPv4 test	deny		Any	[IPv4Network([redacted])]	Any	[IPv4Network([redacted])]	false

Bulk Policy Check

1. Format .csv file with the following parameters "description, src_port, src_ip, dest_ip,

   dest_port, protocol"

2. Upload file into browser using the "Import CSV" section

3. The program will return a .csv file with verdicts for all of the parameter sets

ICMP traffic	172.16.1.1	172.16.2.1	icmp	allow
VLAN 2 to 3 isolation	172.16.1.2	172.16.2.2		deny
HTTP	80 172.16.1.3	172.16.2.3	80 tcp	allow
IPv6 Test	2001:1111:1001::1	2001:1111:1002::1		allow

Parameters

For the best results with the Firewall Test Policy Matching tool, it is important to filter for a specific traffic flow you are targeting. The following filters can be configured:

Filter	Accepted Parameters
Source IP	Address to test traffic flow FROM (e.g. 192.168.1.0) (IPv6 supported)
Destination IP	Address to test traffic flow TO (e.g 172.16.1.0) (IPv6 supported)
Source Port	Port number (e.g., 80)
Destination Port	Port number (e.g., 80)
Protocol	IP protocol used

Decision	Definition
Allowed	The flow has been allowed
Denied	The flow has been denied