

360AP Poly Packet Capture Service

Test Plan Name: **TAP_Poly_PCS_TestCases**

Introduction

- This test plan pertains to Poly Packet Capture Service (PCS) testing facilitates intercepting data packets that travel over a network. The network packets can validate, store, and analyze with test calls conducted between Poly phones utilizing the Tekvizion Automation Platform. To use this test plan effectively, the following steps must be followed:

Prerequisites:

- The Test Plan Required minimum of **3 Poly phones**.
- The Poly phones must have a minimum firmware version of **5.9.0 or higher** to be compatible with the 360 Automation Platform.
- **Digimap** should be configured in Poly phone as below.
 - ⇒ [2-9]11|0T|011xxx.T|[0-1][2-9]xxxxxxxx|[2-9]xxxxxxxx|[2-9]xxxT|*xx|+x.T|*xx.T
 - ⇒ Login to Poly phone-> Settings-> SIP-> Voice-> Ext1 -> Dial Plan.
- The **"Phone State Polling"** username and password should match the username and password configured in the TAP phone manager.
- Licensed Poly phones should be added by utilizing the "Add Phone(s)" button. In the "Add Phone" dialog, enter the details as follows:
 - Provide a Phone Name for the phone.
 - Select the vendor for the phone from the dropdown.
 - Enter the Username, Password, and IPv4 Address for the phone.
 - Enter the Remote Capture Username, Remote Capture Password, Remote Capture TLS Port, and Remote Capture Interface.
 - Enter the Line Number, Extension, DID, E164, and Uri.
 - Click 'Create'.
- **"Auto Answer"** should be disabled for all the respective Poly phones.
- **Default Transfer Type** should be "Consultative".
- **Rest API** should be enabled.
- **"Auto Answer"** should be disabled for all the respective Poly phones.

Packet Capture Services (Refer "360 Automation Platform User Guide Document -> Section No. 8.1.1.7.2

Trace Capture using Packet Capture Service"):

- To analyze the captured network packets, port mirroring concept is extensively used in test environment. Need to create a mirroring port on a switch and connect PCS to that mirroring port. The mirroring port helps to monitor all the traffic going through the rest of the ports configured to the mirroring port in that switch. This enables us to analyze the traffic between different network components. (Refer "360 Automation Platform User Guide Document -> Section No. 8.1.1.7.2 Trace Capture using Packet Capture Service")

Prerequisites:

To work with the Packet Capture Service, ensure that:

- i. You created a mirroring port on a network switch.
- ii. The PCS server monitors the mirroring port.
- iii. There are no duplicate packets and retransmissions in the network for the packet filtering to work as expected.
- iv. Required ports to be enabled in firewall. i.e.: Source-PCS, Destination-TAP, Port-80/443 (Refer "360 Automation Platform Release Notes Document -> Section No. 3 Hardware and Software Requirements)

Hardware and Software Requirements:

- The recommended system specifications for PCS are as follows:
- The recommended system specification to deploy Automation Platform for PCS collocated with Automation Platform is as follows:

CPUs	Memory
4 vCPUs	16GB

- The recommended system specification to deploy PCS in a standalone Linux machine with Automation Platform is as follows:

Model Name	CPUs	Operating System	Memory
Intel® Core™ i3-6100 CPU @ 3.70 GHz	4	CentOS Linux / CentOS Linux 7 (Core)	8GB

- To install a new Packet Capture Service (PCS), perform as follows:
 1. Navigate to 360 Automation Platform > Admin Panel > Packet Capture Service and download the Packet Capture Service Installer.
The PCS gets pointed to the same 360 AP computer from where you download the Packet Capture Service Installer.
You may install a Packet Capture Service (PCS), in one of the modes as follows:

- PCS standalone mode: Install the PCS installer in a separate Linux machine/VM.
 - PCS Co-located with 360 AP: Install the PCS installer on the same VM where you install the 360 AP.
2. Copy the downloaded Packet Capture Service Installer onto a CentOS Linux machine (VM or Computer).
 3. Navigate to the path where you saved the PCS Installer on to the system, for example, cd/tmp.
 4. Provide read-write permissions to the PCS Installer file using the command:
 - **chmod +x <filename of the PCS Installer>**
 5. Execute the PCS installer file using the command:
 - **./ <filename of the PCS Installer>**
- After installation, the PCS installer performs as follows:
1. Creates the Properties file, (if it does not exist) in the path <home/onPOINT/conf>, installs the Properties file, and then configures it to 360 AP.
 2. Installs the required dependent software as follows:
 - **Jdk v 1.8.0**
 - **TShark v 2.6.6**
- An instance of the Packet Capture Service appears on the “Packet Capture Service” screen with the details as follows:
- i. Once the properties file is pointed to TAP, PCS machine will be displayed in below navigation.
 - **Login to TAP -> Admin Panel -> Packet Capture Service.**
 - ii. Associated unique identifier listed under the “UUID” (Universally unique identifier) column.
 - iii. Interface “any” appears, by default under the “Interface” column. You need to change the interface, identify the interface that is connected to the mirroring port and select it from the drop-down list.
 - iv. Status of the PCS “Available” under the “Status” column.
 - An “Offline” status typically indicates a VM that is either shut down or lost connectivity to the 360 AP.

Broadworks_Services:

- In accordance with the **Test Plan**, the following BroadWorks services must be enabled for the corresponding Poly phone variables in order to conduct comprehensive testing.

Phone Variables	BWK Services
DUT	Calling Name Delivery, Calling Number Delivery, Three-Way Call
A	Calling Name Delivery, Calling Number Delivery, Three-Way Call
B	Calling Name Delivery, Calling Number Delivery