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Government of India Ministry of Communications Department of Telecommunications National Centre for Communication Security



Ltr No. NCCS/SAS/TSTP/2021-22/22

dated at Bengaluru the 26th March 2025

Sub: List of Optical Network Terminal (ONT) protocols which are to be subjected to fuz testing

- 1. The clause 9.1 of "Optical Network Terminal (ONT)-PON family Broadband Equipment" ITSAR reads as follows:
 - "9.1 Fuzzing Network and Application Level

Requirement:

It shall be ensured that externally reachable services of ONU/ONT are reasonably robust when receiving unexpected input.

2. As per clause 3.6 of ITSAR, "by default the following services and their ports shall be initially configured to be disabled on the ONU/ONT by the vendor".

FTP, TFTP, Telnet, SNMP V2, LLDP/CDP, HTTP, SSH V1

Hence, no fuzzing test is required for these protocols

3. Based on the inputs received from different stakeholders during the interactions with them, till further orders, the list of protocols along with suggested suitable fuz test are as detailed below.

S NO	Name of the protocol	Suggested method of fuz testing
1	IGMP/MLD	Mutation based Fuzzing
2	IPv4	Mutation based Fuzzing
3	IPv6	Mutation based Fuzzing
4	IPv6ND	Mutation based Fuzzing
5	DHCP	Generation based Fuzzing
6	ARP	Mutation based Fuzzing
7	ICMP/ICMPv6	Generation based Fuzzing
8	HTTPS	Mutation based Fuzzing
9	CWMP (TR-69) CPE	Generation based Fuzzing
10	SNMP V3 and above	Generation based Fuzzing
11	SSH V2 and above	Generation based Fuzzing
12	WPA2	Generation based Fuzzing

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