Table 1: Datasets for Signature-based Cross-protocol Encrypted Proxy Traffic Classification Approach (SPTC)

Proxy Protocol	Shadowsocks						Vmess						Trojan						VLESS					
Proxy Config	TCP-TLS		Websoke-TLS		TCP-TLS(Mux=8)		TCP-TLS		Websoke-TLS		TCP-TLS(Mux=8)		TCP-TLS		Websoke-TLS		TCP-TLS(Mux=8)		TCP-TLS		Websoke-TLS		TCP-TLS(Mux=8)	
Webs	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets	Flows	Packets
www.huawei.com	4005	160053	4408	257180	998	197331	4002	155888	4403	256555	994	182216	3976	156994	4417	256227	996	184160	3971	157229	4391	256778	992	182318
www.intel.com	1992	288189	1994	392616	998	308837	1991	283660	1995	393943	999	295961	1989	287002	1990	395937	998	300464	1990	284257	1987	393013	997	295710
www.deepseek.com	1771	50437	2039	77184	715	82619	1749	48354	2017	75766	695	78366	1776	49719	2012	76282	696	78678	1748	48775	2033	76174	712	78327
www.nvidia.com	1500	1270175	1500	2322612	726	1429709	1498	1289991	1500	2386790	703	1294309	1500	1305513	1499	2392018	703	1299933	1499	1310498	1500	2393672	722	1299419
www.samsung.com	1923	158093	1960	226018	545	191129	1923	153670	1975	226819	542	178302	1922	158468	1964	228975	548	179227	1936	156528	1977	227371	542	177221
www.vivo.com	2020	631492	2042	1038314	1022	729016	2011	633872	2033	1054207	1028	681964	2023	635874	2041	1055553	1028	685688	2020	634736	2020	1058033	1021	680682
www.lenovo.com	5473	1922410	6159	3532743	1997	2323160	5317	1871418	6091	3499221	1994	2041663	5375	1888806	6094	3506621	2001	2044949	5406	1877416	6116	3505376	1996	2045483
www.dell.com	2995	237816	3008	279524	999	261841	3001	233286	3002	275651	1000	254989	2997	234731	3012	275909	1000	256168	2997	235686	3010	276142	1002	256575
www.aliyun.com	5221	1041505	5328	1634541	1646	1186418	5177	1035479	5335	1638643	1641	1120986	5204	1049059	5360	1639589	1630	1123243	5187	1044620	5311	1641528	1621	1121714
cloud.baidu.com	2089	1368378	2504	2361426	1009	1537723	2042	1367068	2508	2382145	1003	1413146	2086	1363962	2509	2367974	1002	1407162	2068	1354520	2503	2382517	1005	1414072
cloud.tencent.com	4918	437437	5588	688180	1499	531856	4867	433407	5593	688855	1500	488228	4905	435840	5612	690465	1500	486448	4842	432369	5599	688526	1499	487658
www.vmware.com	1693	269316	1678	350925	954	270884	1689	263353	1695	352489	959	264305	1682	261280	1690	351390	957	266369	1689	263003	1679	356167	964	263277
www.gitee.com	1514	1007693	1995	1703588	995	1112329	1500	1002670	1994	1698019	992	1044763	1517	1010377	1998	1716204	993	1046504	1508	1006332	1998	1699051	995	1041896
www.163.com	4380	256142	4644	355237	1998	396879	4326	250531	4717	355020	1999	383495	4236	250831	4830	360549	2002	383064	4248	250013	4746	354303	1998	381740
www.qq.com	6979	773262	7799	1262154	2229	972213	6939	764356	7798	1259081	2226	885696	6961	771574	7791	1267592	2226	886937	6957	767907	7771	1266102	2239	883485
www.10jqka.com.cn	2495	241597	2522	391729	1621	340897	2482	239169	2521	390612	1624	322536	2486	240248	2525	396040	1621	324703	2492	240338	2525	396160	1622	321375
www.sina.com.cn	4139	238297	4678	354311	2002	359130	4092	233343	4677	350711	1997	343495	4104	234511	4700	350470	2000	342577	4102	232865	4703	350195	1998	343132
www.sohu.com	4266	384680	4847	554779	2016	558713	4054	382633	4862	558297	2017	553943	4229	383201	4845	573275	2016	553004	4128	372173	4840	545926	2018	558737
www.jianshu.com	1547	58465	1569	79419	989	87965	1527	56820	1578	79678	986	85518	1536	57814	1577	80296	992	85842	1534	57239	1556	79306	992	85812
www.zhihu.com	2673	168855	2769	264130	1451	247520	2667	165949	2753	262391	1446	229938	2697	167412	2791	264081	1457	231392	2669	166739	2763	262227	1448	230685
www.gamersky.com	9731	587143	10056	683899	2005	676159	9594	584204	10023	677230	2008	668197	9618	583499	10108	681422	2005	668808	9568	582983	10078	678899	2006	667057
www.imdb.com	508	72564	659	79551	969	84092	502	71521	639	78716	955	82116	505	71239	728	79928	957	83189	504	70729	661	78187	955	81808
www.ctrip.com	7132	437874	7631	673365	2006	599551	7088	431910	7637	673716	2012	564599	7097	436090	7644	676472	2003	567091	7055	431141	7632	672161	2012	565633
www.lixiang.com	2534	996226	3355	1794204	1047	1128513	2443	998666	3317	1820567	1054	1048570	2465	1003766	3312	1826108	1047	1051264	2461	1006295	3325	1825995	1034	1046663
www.feishu.cn	4789	3057605	5199	5455388	1003	3484972	4773	3045072	5190	5436903	1005	3091853	4790	3064992	5201	5442209	1005	3090865	4772	3050507	5175	5434897	1003	3082948
Total	88287	16115704	95931	26813017	33439	19119456	87254	15996290	95853	26872025	33379	17599333	87676	16102802	96250	26951586	33383	17627729	87351	16034898	95899	26898706	33393	17593427

[1] The data collection was conducted from April 4 to April 8, 2025.