Default TTL (Time To Live) Values of Different OS

Linux, Operating System, Unix, Windows
IP, Network, Ping, TTL

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TTL (Time To Live) is a timer value included in packets sent over networks that tells the recipient how long to hold or use the packet before discarding and expiring the data (packet). TTL values are different for different Operating Systems. So, you can determine the OS based on the TTL value. You can get the TTL value by pinging an address. Here is the output got by pinging "subinsb.com" on my system :

```
PING subinsb.com (108.162.199.61) 56(84) bytes of data.
64 bytes from 108.162.199.61: icmp_seq=1 ttl=57 time=503 ms
```

As you can see from the output, you got the TTL value. Since this website is hosted on a Red Hat system, it returned 57 which is close to 64 (TTL default value of Linux system). So, from this we can understand the OS of the remote system. Here are the default TTL values of different devices / Operating Systems :

Device / OS	Version	Protocol	TTL
AIX		TCP	60
AIX		UDP	30
AIX	3.2, 4.1	ICMP	255
BSDI	BSD/OS 3.1 and 4.0	ICMP	255
Compa	Tru64 v5.0	ICMP	64
Cisco		ICMP	254
DEC Pathworks	V5	TCP and UDP	30
Foundry		ICMP	64
FreeBSD	2.1R	TCP and UDP	64
FreeBSD	3.4, 4.0	ICMP	255
FreeBSD	5	ICMP	64
HP-UX	9.0x	TCP and UDP	30
HP-UX	10.01	TCP and UDP	64
HP-UX	10.2	ICMP	255
HP-UX	11	ICMP	255
HP-UX	11	TCP	64
Irix	5.3	TCP and UDP	60
Irix	6.x	TCP and UDP	60

juniper		ICMP	64
MPE/IX (HP)		ICMP	200
Linux	2.0.x kernel	ICMP	64
Linux	2.2.14 kernel	ICMP	255
Linux	2.4 kernel	ICMP	255
Linux	Red Hat 9	ICMP and TCP	64
MacOS/MacTCP	2.0.x	TCP and UDP	60
MacOS/MacTCP	X (10.5.6)	ICMP/TCP/UDP	64
NetBSD		ICMP	255
Netgear FVG318		ICMP and UDP	64
OpenBSD	2.6 & 2.7	ICMP	255
OpenVMS	07.01.2002	ICMP	255
OS/2	TCP/IP 3.0		64
OSF/1	V3.2A	TCP	60
OSF/1	V3.2A	UDP	30
Solaris	2.5.1, 2.6, 2.7, 2.8	ICMP	255
Solaris	2.8	TCP	64
Stratus	TCP_OS	ICMP	255
Stratus	TCP_OS (14.2-)	TCP and UDP	30
Stratus	TCP_OS (14.3+)	TCP and UDP	64
Stratus	STCP	ICMP/TCP/UDP	60
SunOS	4.1.3/4.1.4	TCP and UDP	60

Ultrix	V4.1/V4.2A	TCP	60
Ultrix	V4.1/V4.2A	UDP	30
Ultrix	V4.2 – 4.5	ICMP	255
VMS/Multinet		TCP and UDP	64
VMS/TCPware		TCP	60
VMS/TCPware		UDP	64
VMS/Wollongong	1.1.1.1	TCP	128
VMS/Wollongong	1.1.1.1	UDP	30
VMS/UCX		TCP and UDP	128
Windows	for Workgroups	TCP and UDP	32
Windows	95	TCP and UDP	32
Windows	98	ICMP	32
Windows	98, 98 SE	ICMP	128
Windows	98	TCP	128
Windows	NT 3.51	TCP and UDP	32
Windows	NT 4.0	TCP and UDP	128
Windows	NT 4.0 SP5-		32
Windows	NT 4.0 SP6+		128
Windows	NT 4 WRKS SP 3, SP 6a	ICMP	128
Windows	NT 4 Server SP4	ICMP	128
Windows	ME	ICMP	128
Windows	2000 pro	ICMP/TCP/UDP	128

Windows	Server 2003		128
Windows	XP	ICMP/TCP/UDP	128
Windows	Vista	ICMP/TCP/UDP	128
Windows	7	ICMP/TCP/UDP	128
Windows	Server 2008	ICMP/TCP/UDP	128
Windows	10	ICMP/TCP/UDP	128

I will update this table in the future when there's a release of new important OS whenever I get the time. You can get the short version of default TTL values by this table :

Device / OS	TTL
*nix (Linux/Unix)	64
Windows	128
Solaris/AIX	254

You can find it yourself by pinging localhost as mentioned by Gurubaran :

```
ping -4 localhost
```

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Hi Subin,

Default TTL value of Windows 10 is 128.

You can checkout by sending packets to local host

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Thanks. I have updated the post.

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What's the TTL of windows 10 mobile? Trying to figure out what TTL is outputed when using the hotspot... Or what's outputed in general.

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Santino • 4 years ago

Hi Mr. Siby, do you have any idea which could be the default TTL values of Alactel and Huawei routers? These are the two other main suppliers of high-end router next to Cisco and Juniper.

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Subin Siby Author → Santino • 4 years ago

I looked over Google and couldn't find it. Try pinging a Cisco and Alactel router

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