

Autoconf on the WAN and DHCPv6 on the LAN

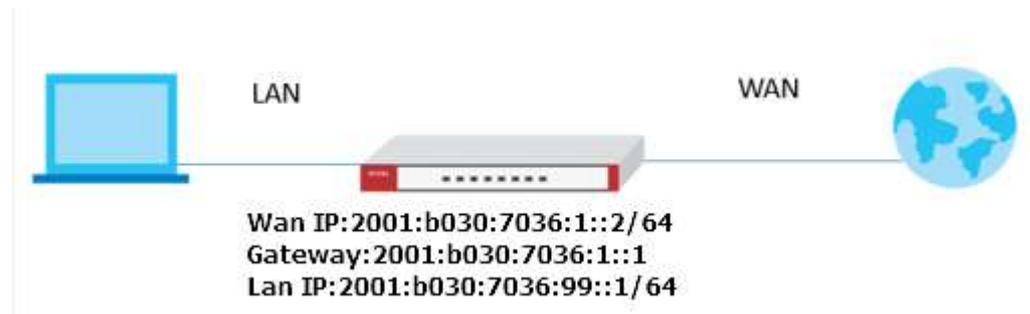
This example shows how to configure your ATP/USG Flex's WAN as Autoconf on the WAN and DHCPv6 on the LAN

In this scenario :

ISP assign the IPv6 address for wan subnet: 2001:b030:7036:1::2/64

Gateway: 2001:b030:7036:1::1

ISP assign IPv6 address for LAN Subnet: 2001:b030:7036:99::1/64



Note:

All network IP addresses and subnet masks are used as examples in this article. Please replace them with your actual network IP addresses and subnet masks. This example was tested using ATP/USG Flex (Firmware Version: 5.00)

Configure on the Wan IPv6 interface

In the Configuration > Ethernet > IPv6 Configuration section, double-click the WAN interface you want to modify.

Choose IPv6 View, Enable Interface and Enable IPv6. In IPv6Address Assignment text box, enable Stateless Address Auto-configuration (SLAAC)

Fill IPv6 address: 2001:b030:7036:1::2/64 on IPv6 Address/Prefix Length

Fill IPv6 Gateway IP: 2001:b030:7036:1::1

The screenshot shows the configuration page for an IPv6 interface. At the top, there are tabs for 'IPv6 View', 'Hide Advanced Settings', and 'Create New Object'. Below this, there are several sections:

- Enable Interface:** A checkbox labeled 'Enable Interface' is checked.
- General IPv6 Setting:** A checkbox labeled 'Enable IPv6' is checked.
- Interface Properties:** Fields include 'Interface Type' (external), 'Interface Name' (wan1), 'Port' (P2), 'Zone' (WAN), 'MAC Address' (BC:99:11:80:28:E3), and 'Description' (Optional).
- IPv6 Address Assignment:** A checkbox labeled 'Enable Stateless Address Auto-configuration (SLAAC)' is checked. The 'Link-Local Address' is fe80::be99:11ff:feb0:2be3/64. The 'IPv6 Address/Prefix Length' is 2001:b030:7036:1::2/64.
- Advanced:** A checkbox labeled 'Advanced' is checked. The 'Gateway' is 2001:b030:7036:1::1. The 'Metric' is 0.
- Address from DHCPv6 Prefix Delegation:** A table with columns '#', 'Delegated Prefix', 'Suffix Address', and 'Address'. The table is empty, and the footer shows 'Page 0 of 0', 'Show 50 items', and 'No data to display'.

On DHCPv6, select **Client**, then Enable **DUID as MAC**

DHCPv6 Setting

DHCPv6: Client

DUID: 00:03:00:01:BC:99:11:80:28:E3

Advanced

DUID as MAC

Customized DUID:

Enable Rapid Commit

Request Address

DHCPv6 Request Options

+ Add - Remove References

#	Name	Type	Value
No data to display			

IPv6 Router Advertisement Setting

Enable Router Advertisement

Advanced

Advertised Hosts Get Network Configuration From DHCPv6

Advertised Hosts Get Other Configuration From DHCPv6

Router Preference: Medium

Advanced

MTU: 1480 (1280-1500, 0 is disabled)

Hop Limit: 64 (0-255, 0 is disabled)

Advertised Prefix Table

+ Add Edit - Remove

#	IPv6 Address/Prefix Length
No data to display	

Configure on the Lan IPv6 interface

Tick Enable IPv6, then fill IPv6 address: **2001:b030:7036:99::1/64** which provide from ISP.

Select **Server** as DHCPv6. Enable **DUID as MAC**.

IPv6 View Hide Advanced Settings Create New Object

General Settings

Enable Interface

General IPv6 Setting

Enable IPv6

Interface Properties

Interface Type: internal

Interface Name: lan1

Port: P4, P5, P6

Zone: LAN1

MAC Address: 8C:99:11:80:28:E5

Description: ((Optional))

IPv6 Address Assignment

Enable Stateless Address Auto-configuration (SLAAC)

Link-Local Address: fe80::be99:11ff:feb0:2be5/64

IPv6 Address/Prefix Length: 2001:b030:7036:99::1 ((Optional))

Advanced

DHCPv6 Setting

DHCPv6: Server

DUID: 00:03:00:01:BC:99:11:80:28:E5

Advanced

DUID as MAC

Next, On the DHCPv6 Lease Options, add **2001:4860:4860::8888** as DNS server
 Add the **2001:b030:7036:99::10-2001:b030:7036:99::100** as Address Pool

+ Add corresponding
?
✕

Name:

Lease Type:

Interface:

DNS Server:

User Defined Address:

Next, Enable **Router Advertisement, Advertised Hosts Get Network Configuration From DHCPv6** and **Advertised Hosts Get Other Configuration From DHCPv6**

DHCPv6 Lease Options
+ Add **Remove** **References**

#	Name	Type	Value
1	DNS_1	DNS Server	2001:4860:4860::88...
2	Pool	Address Pool	2001:b030:7036:99...

Page 1 of 1 Show 50 items Displaying 1 -

IPv6 Router Advertisement Setting

Enable Router Advertisement

Advance

Advertised Hosts Get Network Configuration From DHCPv6

Advertised Hosts Get Other Configuration From DHCPv6

Router Preference:

Advance

MTU: (1280-1500, 0 is disabled)

Hop Limit: (0-255, 0 is disabled)

Advertised Prefix Table

+ Add **Edit** **Remove**

#	IPv6 Address/Prefix Length
No data to display	

Page 0 of 0 Show 50 items

Advance

Advertised Prefix from DHCPv6 Prefix Delegation

+ Add **Edit** **Remove** **References**

#	Delegated Prefix	Suffix Address	Address
No data to display			

Page 0 of 0 Show 50 items

Test Result

Test IPv6 [FAQ](#) [Mirrors](#)

Test your IPv6 connectivity.

[Summary](#) [Tests Run](#) [Share Results / Contact](#) [Other IPv6 Sites](#)

-  Your IPv4 address on the public Internet appears to be 61.222.75.14
-  Your IPv6 address on the public Internet appears to be 2001:b030:7036:99::11
-  Your Internet Service Provider (ISP) appears to be HINET Data Communication Business Group
-  Since you have IPv6, we are including a tab that shows how well you can reach other IPv6 sites. [\[more info\]](#)
-  HTTPS support on this web site is in *beta*. [\[more info\]](#)
-  Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

Your readiness score

10/10 for your IPv6 stability and readiness, when publishers are forced to go IPv6 only

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Connection-specific DNS Suffix . : 
IPv6 Address. . . . . : 2001:b030:7036:99::11
Link-local IPv6 Address . . . . . : fe80::54bd:62ba:463b:24a3%9
IPv4 Address. . . . . : 192.168.1.34
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : fe80::be99:11ff:feb0:2be5%9
                            192.168.1.1
```