

RIPE Labs

IPv6 CPE survey



Disclaimer

This does not reflect any opinions of my employers or the RIPE NCC



What is RIPE Labs ?

- RIPE Labs is a platform designed by the RIPE NCC for network operators, developers and industry experts to expose, test and discuss innovative Internet-related tools, ideas and analysis that can benefit the RIPE community and RIPE NCC members.



Why the IPv6 CPE Survey ?

- Lots of people still claim IPv6 is impossible without spending a fortune on CPE
- Or they think there aren't any CPE at all that can do native IPv6
- This was a self fulfilling prophecy
- If nobody asks for it, vendors will drop it



What is a CPE ?

- For the purpose of this document a CPE is any box that sits in between the users home network and that of the service provider. It may contain specific interfaces for *DSL or docsis, but it can also be a simple NAT router to be placed behind the SP provided box.



It's just a guide

- This only provides a high level overview
- Every setup has it's own specific details
- Limited to devices which are available in retail or relatively low numbers
- Solutions which are supported by a vendor
- Loads of open source hacks exists
 - To complicated for Joe Average
 - Endless possibilities
- Your mileage may vary !!!!!



The matrix

- We asked vendors to provide the initial info
- Various status values:
 - No
 - Claimed by vendor
 - Broken
 - Buggy
 - Confirmed



The matrix (2)

	AVM (FRITZ!Box)	Draytek	Zyxel	Juniper (ScreenOS)	Juniper (JUNOS)	Cisco	D-Link
Hardware version required	7270, 7570	Vigor 2130 series, vigor 120	All models released in 2010	All	All	Most SOHO boxes	Most new boxes
Minimum software level required	"Labor" only	2130:v1.3.0 120:v3.2.4.3	Per model, check vendor	6.1	10.2	12.4T or 15	see notes
Status	Beta	General deployment	Beta	General deployment	Early deployment	General deployment	General deployment
WAN layer 2							
Docsis 3.0	vendor	no	no	no	no	-	-
ADSL 2+	confirmed	120 only	vendor	confirmed	confirmed	confirmed	no
VDSL	confirmed	no	vendor	no	vendor	-	no
Ethernet	confirmed	vendor	vendor	confirmed	confirmed	confirmed	vendor
FTTx	-	vendor	vendor	no	no	-	no
WAN Layer 3							
PPPoA	confirmed	no	vendor	no	vendor	confirmed	no
PPPoE	confirmed	confirmed	vendor	confirmed	confirmed	confirmed	vendor
RFC1483/bridge	vendor	no	vendor	no	no	vendor	no
RFC1483/routed	-	-	vendor	vendor	vendor	vendor	no
Plain IP	-	vendor	vendor	confirmed	confirmed	confirmed	no
WAN address acquiring							
PPP link local only (unnumbered)	confirmed	confirmed	vendor	confirmed	confirmed	confirmed	confirmed
SLAAC	confirmed	vendor	vendor	vendor	vendor	confirmed	vendor
DHCPv6 IA_NA	-	vendor	vendor	vendor	vendor	vendor	vendor
DHCPv6 IA_PD	confirmed	confirmed	vendor	no	no	confirmed	vendor
LAN							
Manual addressing on LAN interface	no	-	-	confirmed	confirmed	confirmed	-
SLAAC	confirmed	confirmed	vendor	confirmed	confirmed	confirmed	vendor
DHCPv6 server	no	vendor	vendor	vendor	vendor	vendor	vendor
DHCPv6 prefix delegation	no	-	-	-	-	vendor	-
Static routing towards LAN	no	confirmed	-	-	-	confirmed	development
Firewall							
Configurable	confirmed	confirmed	vendor	confirmed	confirmed	confirmed	development



The comments

- Provide some specific details on features
- Contain user feedback and test results



You can help!

- This is a community effort
- We can only test on a specific setup
- Provided we have the hardware
- We need your feedback
- We try to update it every 3 - 4 months based on feedback received from users and vendors
- No feedback means no updates



I'm a vendor can you list me ?

- Contact the author via [marcoh<at>marcoh.net](mailto:marcoh@marcoh.net)
- Or contact via labs.ripe.net
- Provide basic info and we'll list you



I'm a user and I have feedback

- Please use the comment system
- Everybody can immediately read it and respond to it
- Remember: what works for us, may be broken for you and vice versa.



Can you also do this on...

- Firewall appliances
- Software routers
- ...
- Unfortunately I can't
- But you can !
- Contact us and I'm sure we can help to publish.



Questions ?

(<http://labs.ripe.net/Members/mirjam/ipv6-cpe-survey-updated>)



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RIPE NCC

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the vendors

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