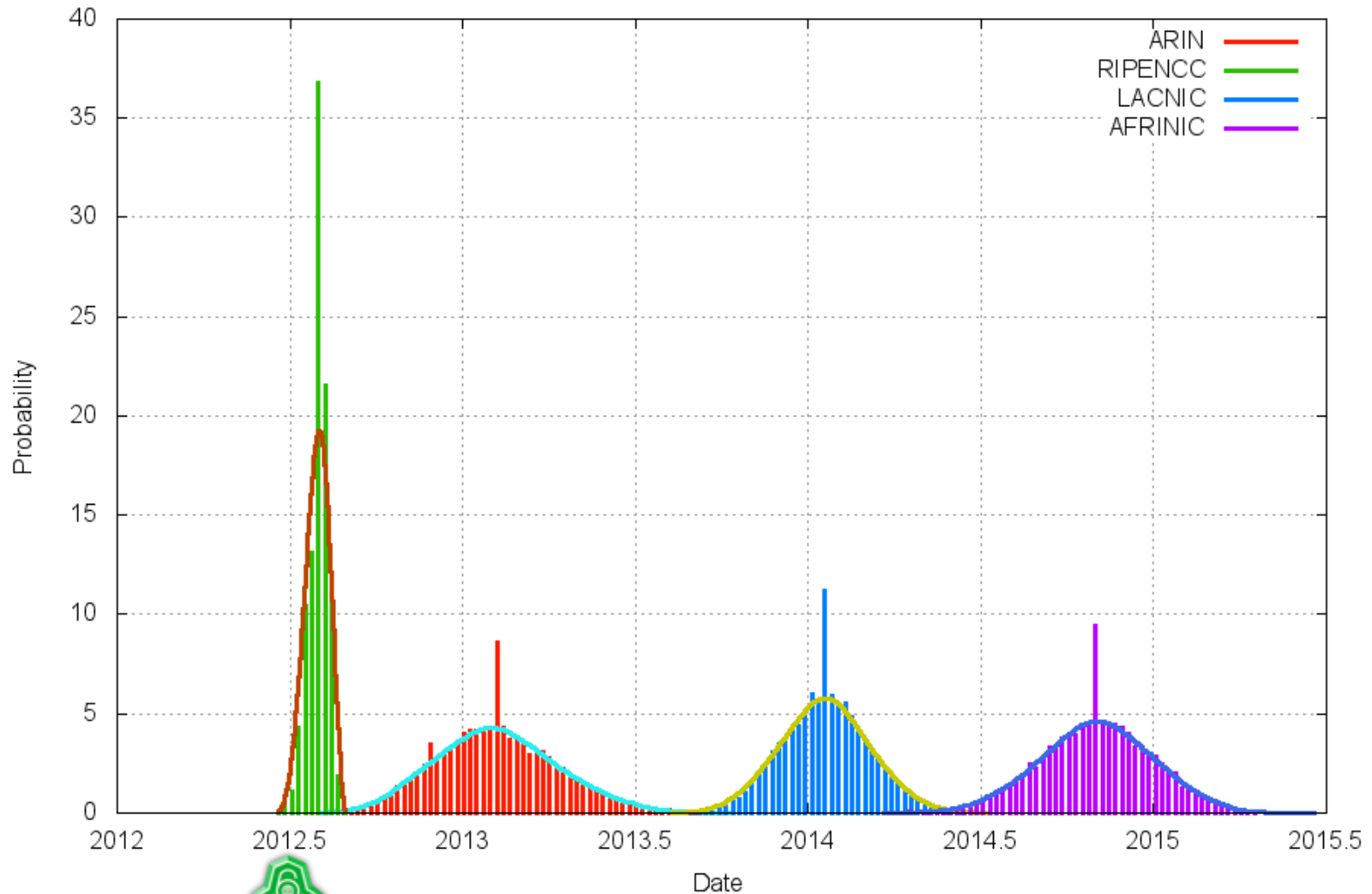


# The Future of the IPv6 Enterprise

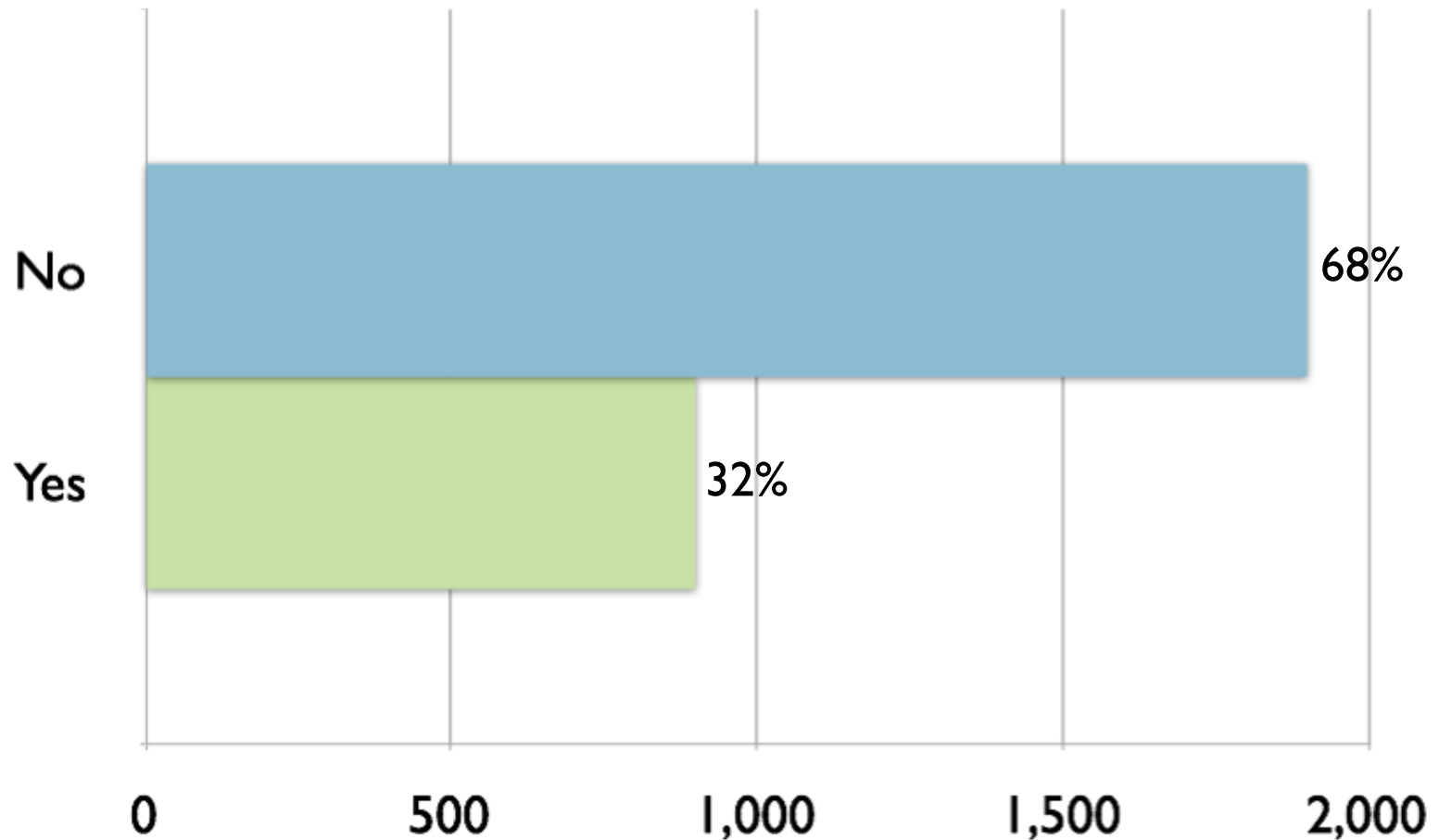
Tom Coffeen, IPv6 Evangelist

RIR IPv4 Address Run-Down Model - Variance Analysis

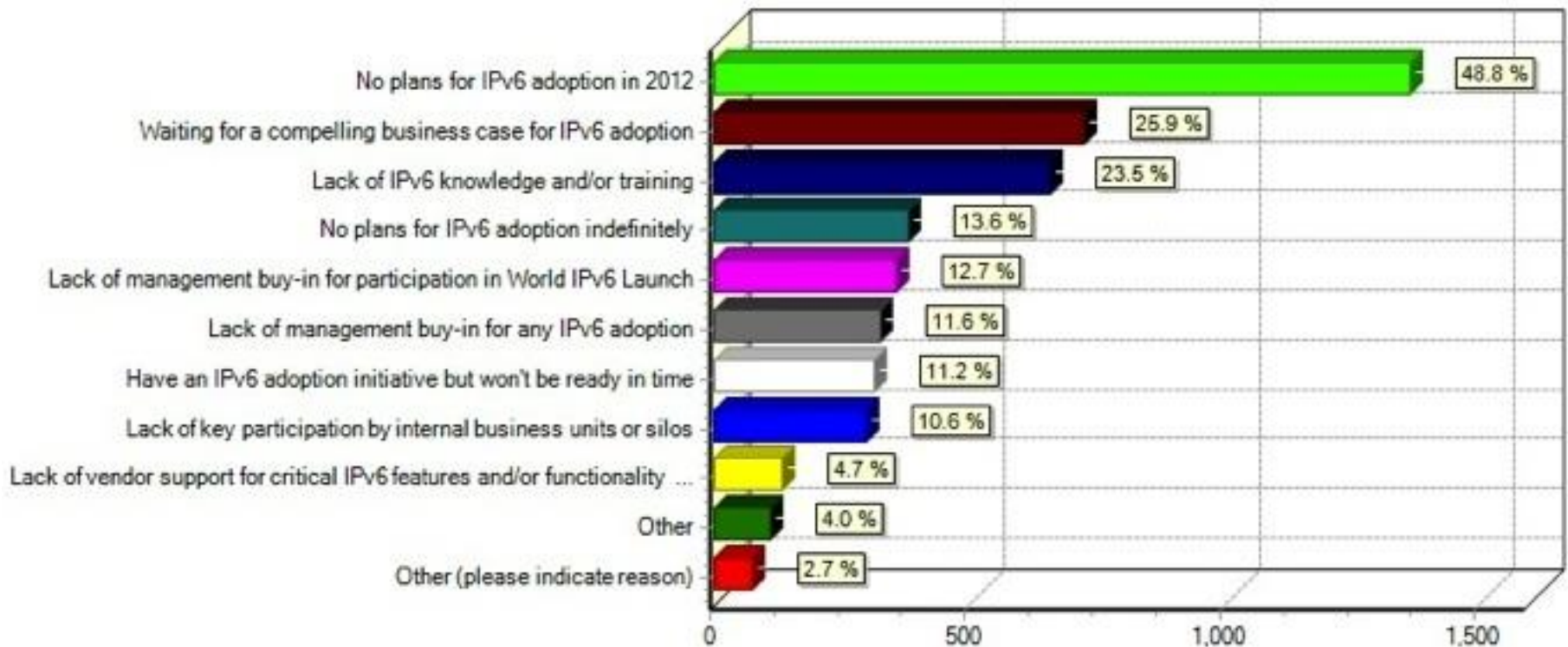


**What is the state of IPv6 adoption in the enterprise?**

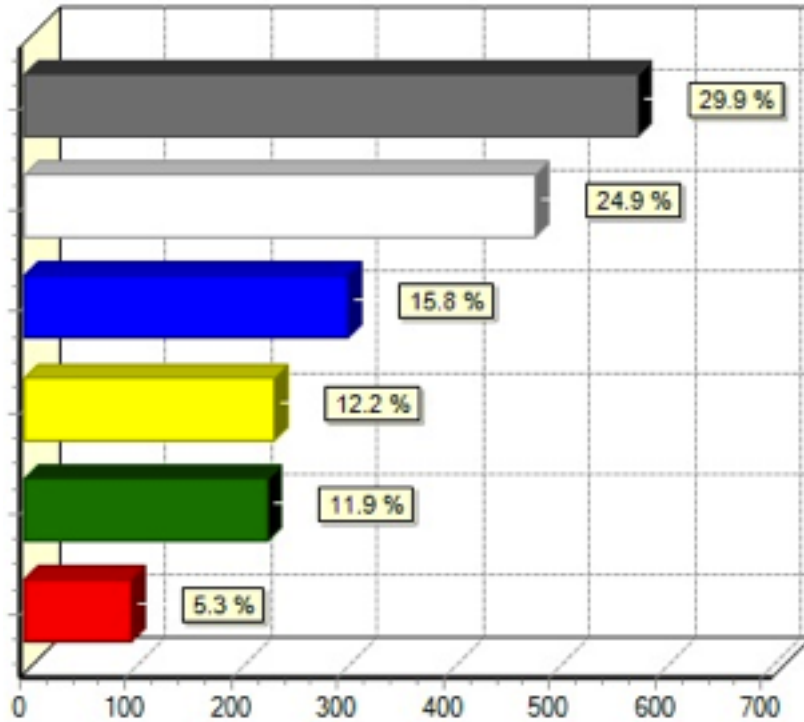
# Are you planning on participating in World IPv6 Launch?



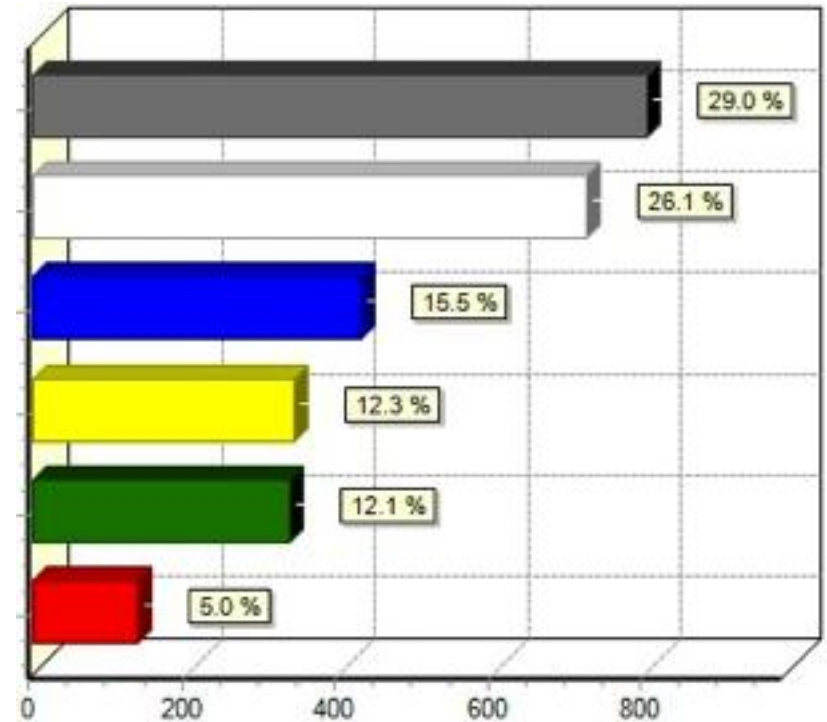
If your organization is **not** participating in World IPv6 Launch, please select the reasons.



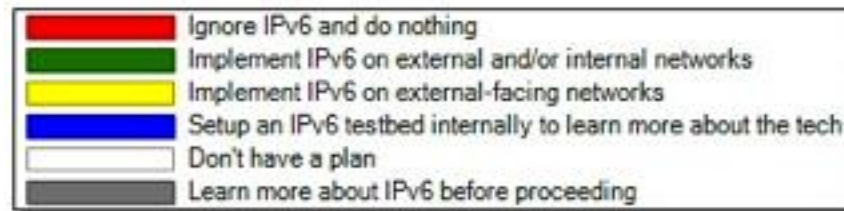
# What is your organization's current plan for dealing with IPv6?



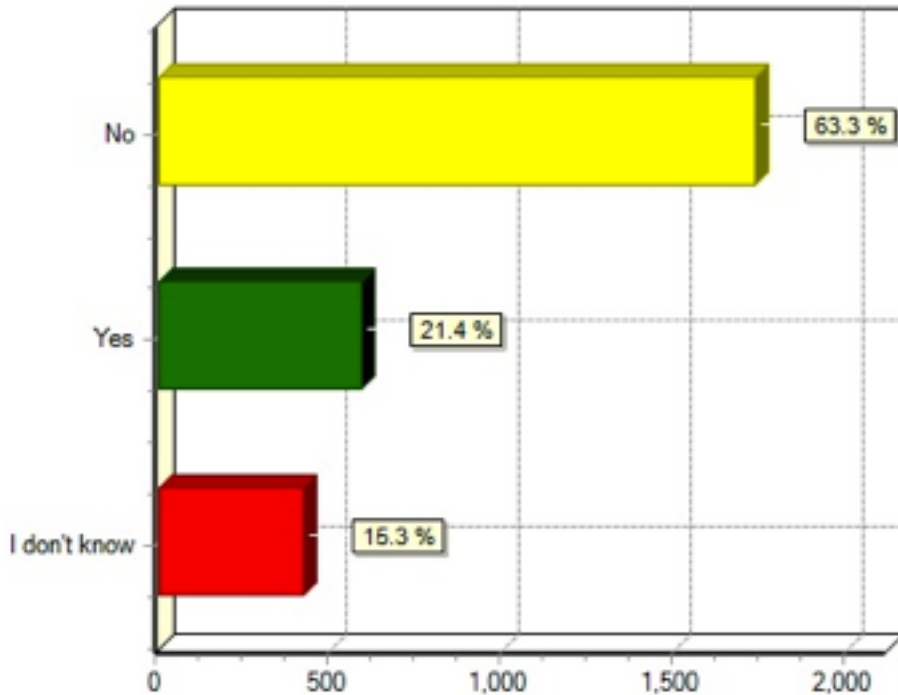
2011



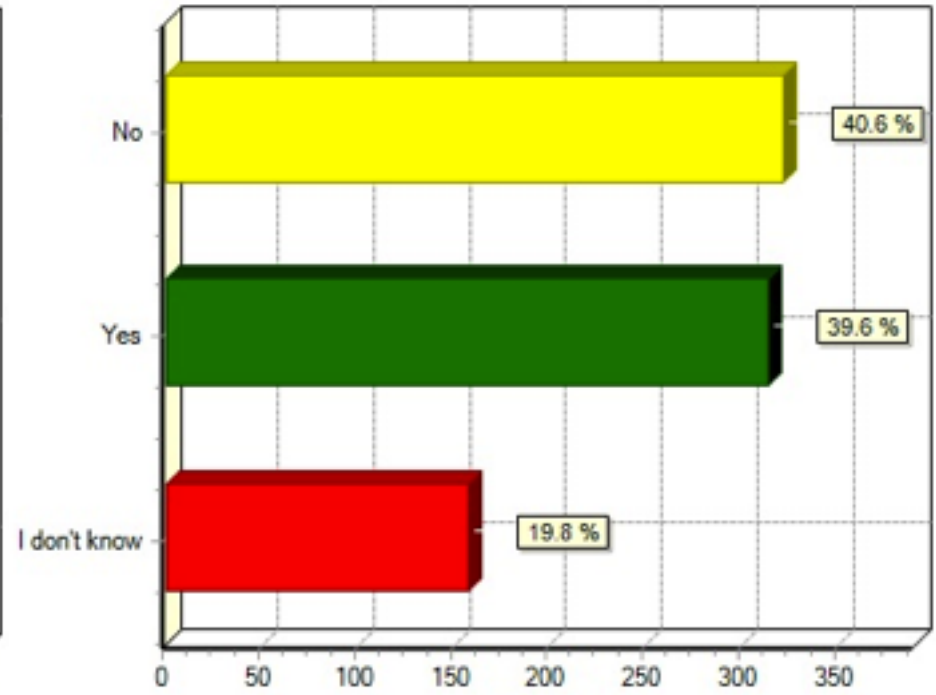
2012



# Has your organization dedicated resources to adopt IPv6?

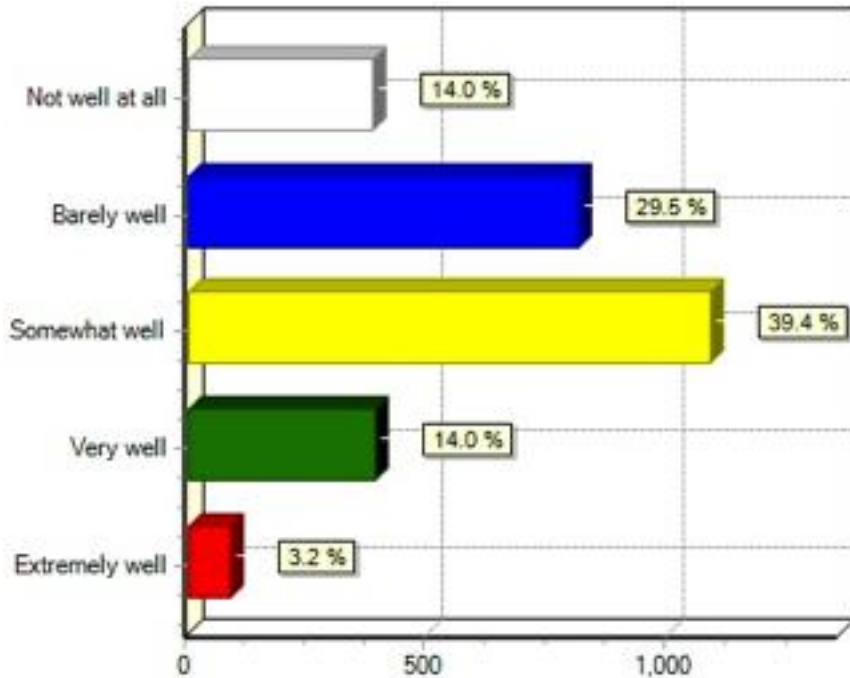


2012  
Enterprise

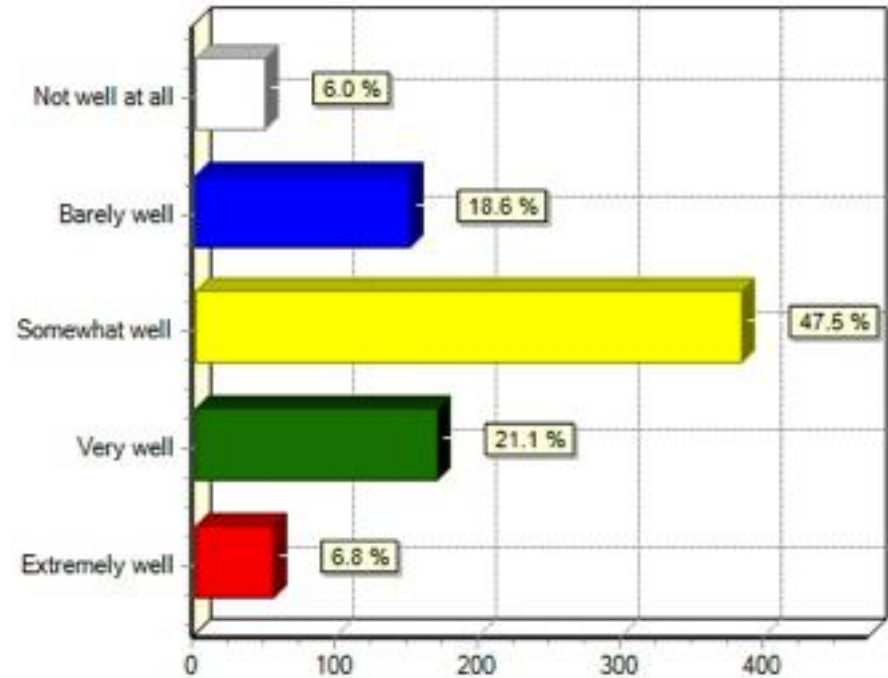


2012  
Service Provider

# How well educated is your organization's IT staff on IPv6?

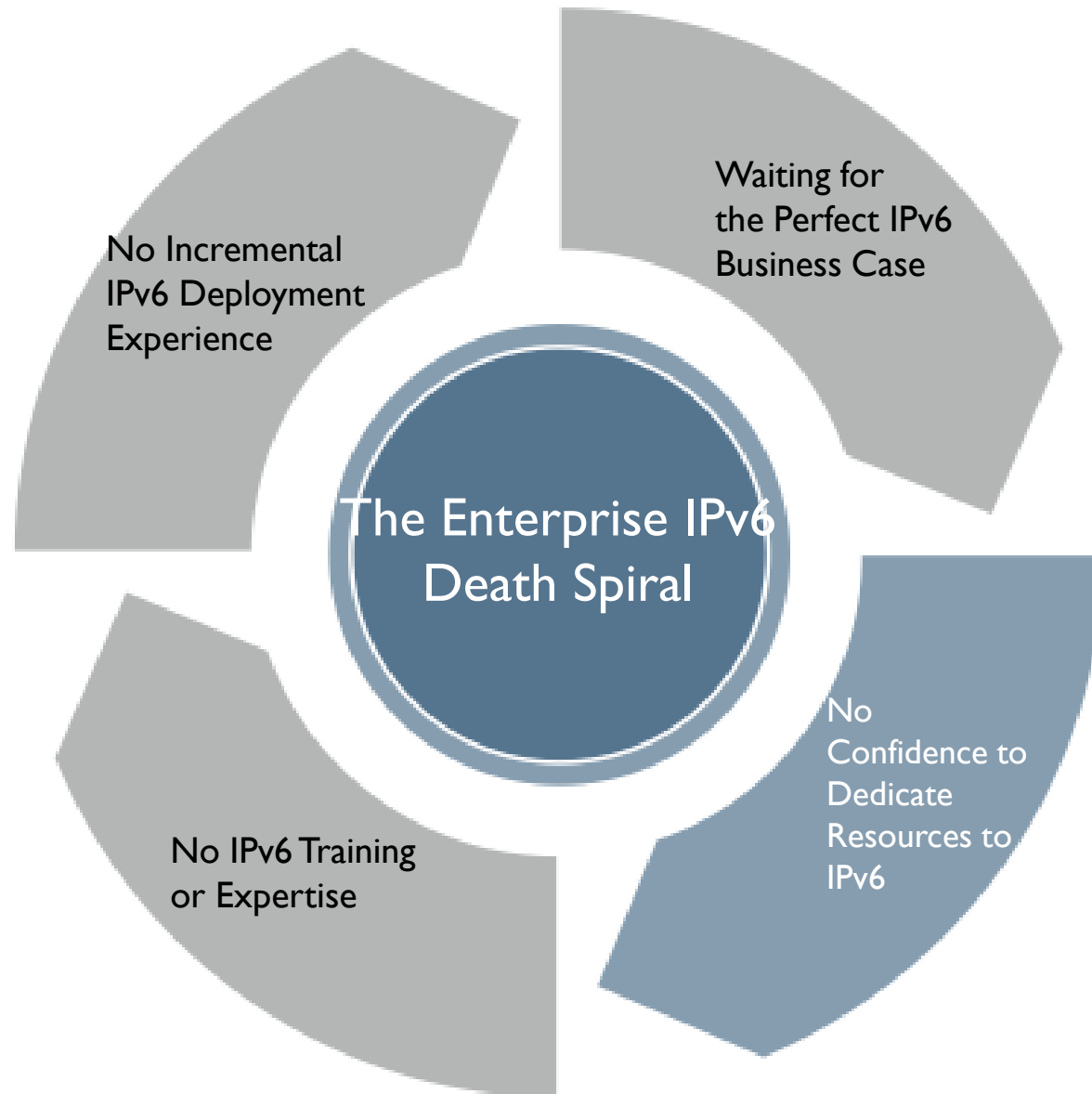


2012  
Enterprise



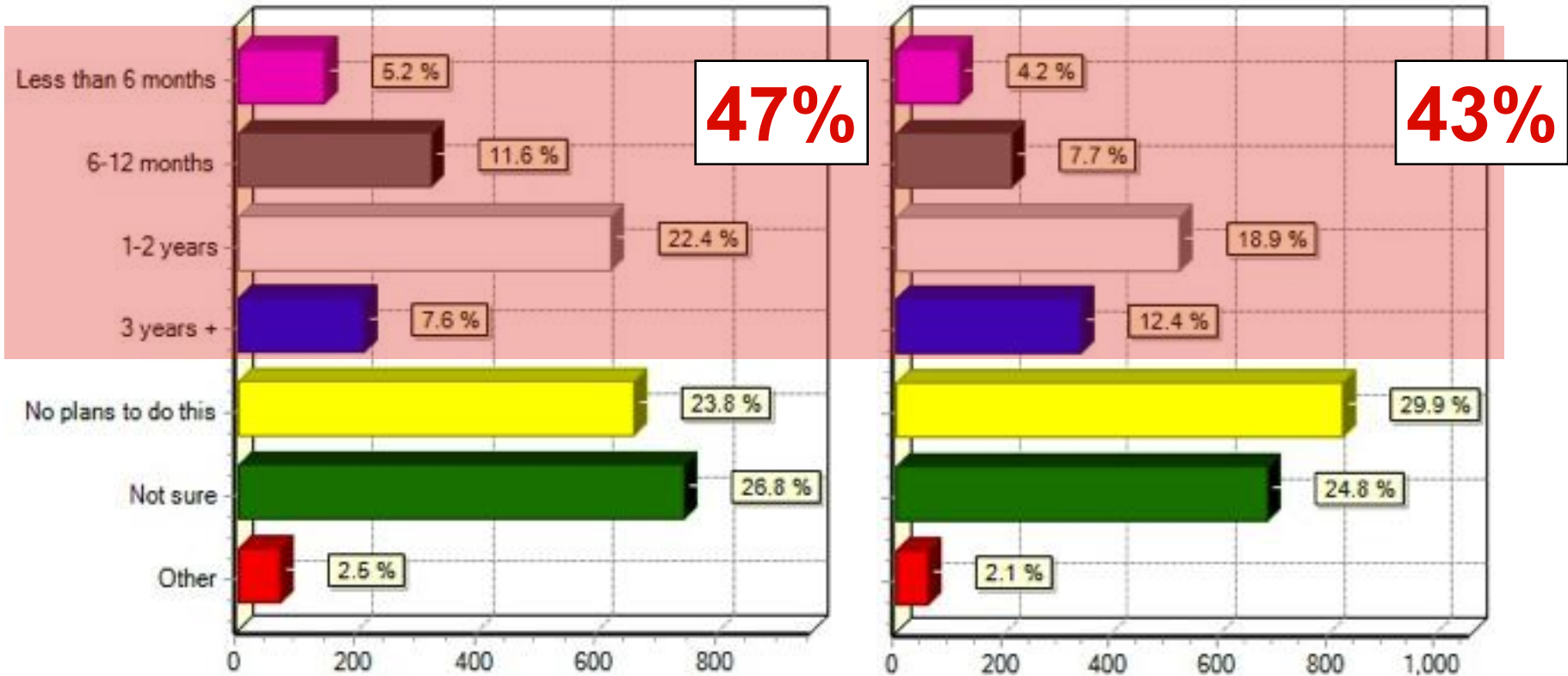
2012  
Service Provider







# What is your time frame for enabling IPv6 on your..



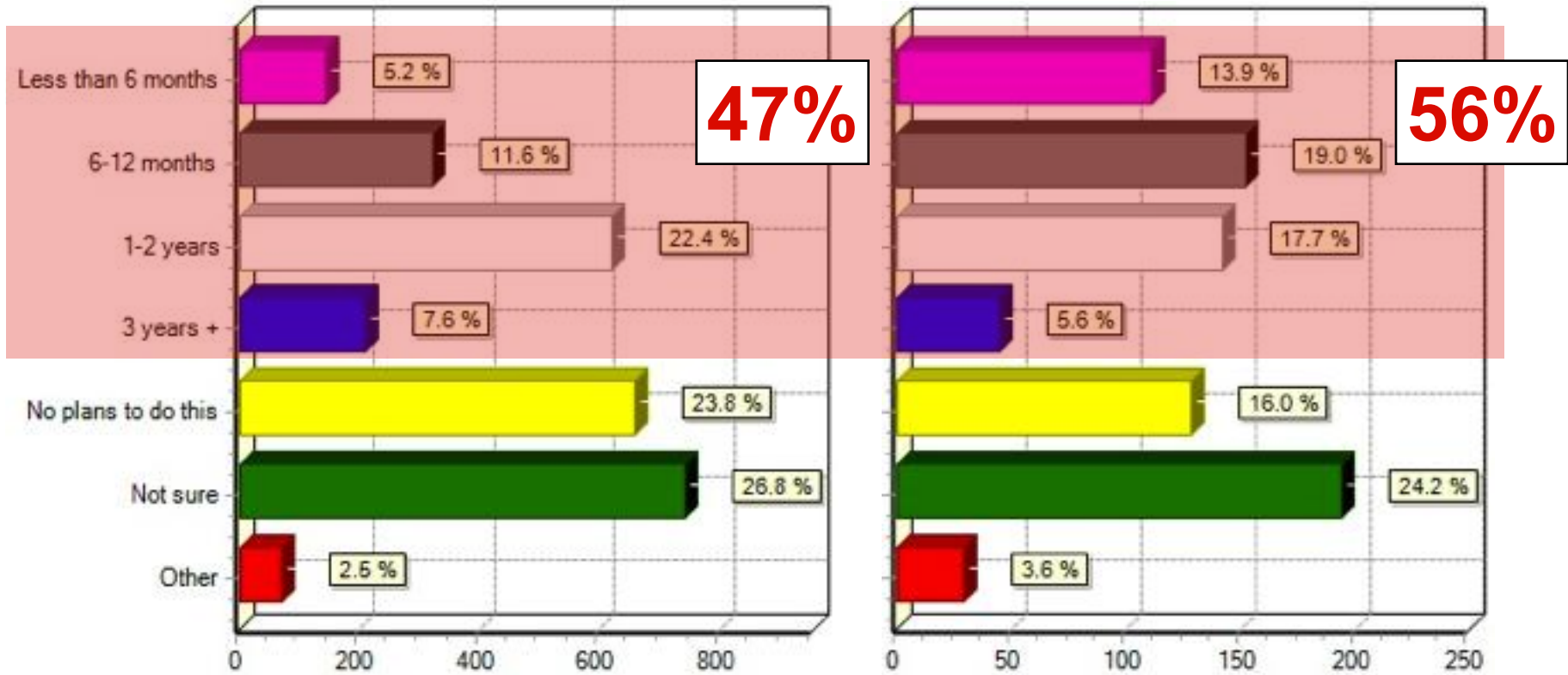
...external facing websites?

**Enterprise**

...internal network?

**Enterprise**

# What is your time frame for enabling IPv6 on your...



...external facing websites?

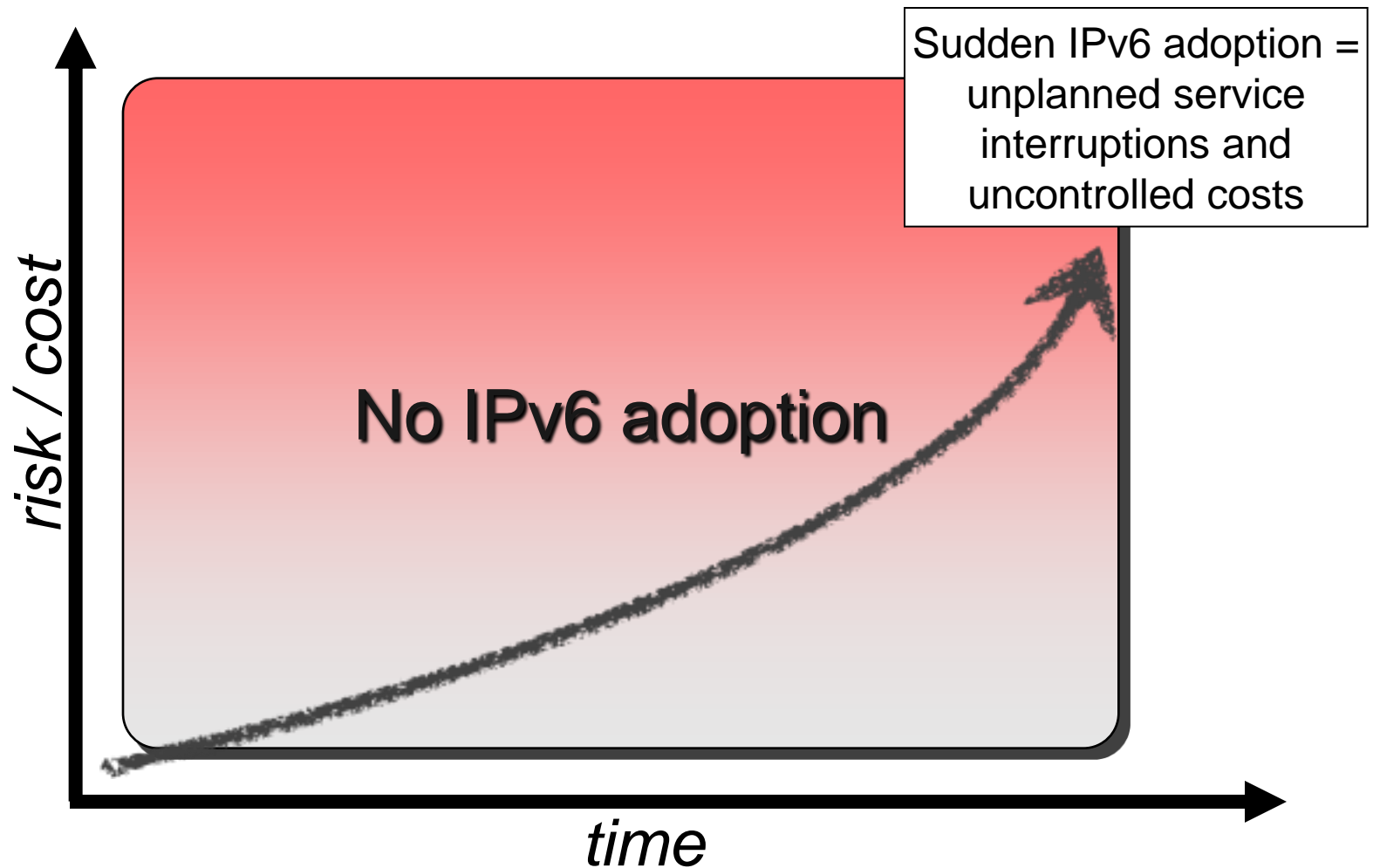
**Enterprise**

...external facing websites?

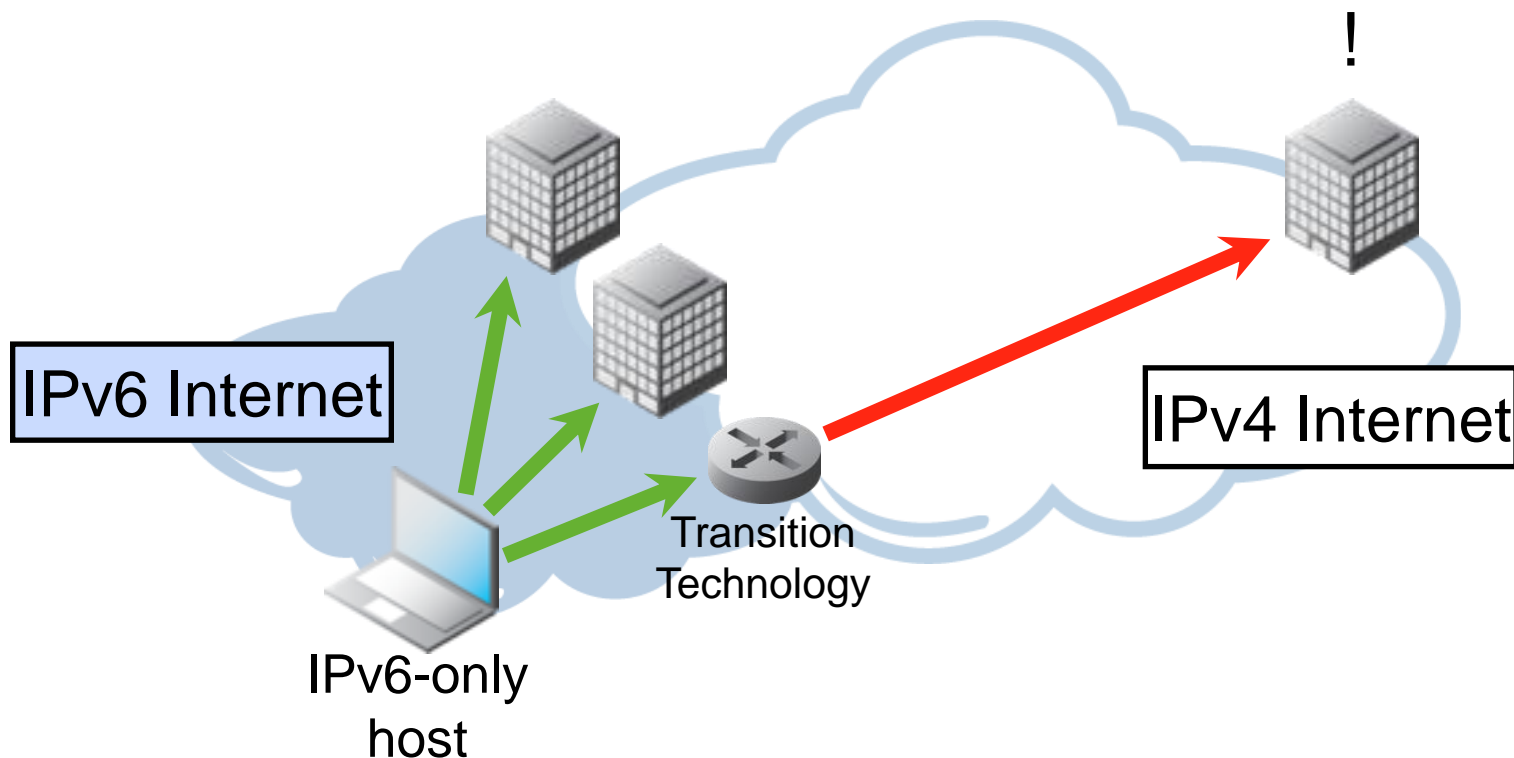
**Service Provider**

Why *enterprises* should care about IPv6 adoption...

# The threat to business agility and business continuity



# The threat to competitive advantage



# Don't blink! You'll lose customers...



**>250ms $\Delta$  = FAIL**



# /16 for sale!



\$12 per address × 65,536  
addresses = **\$786,432!**

# Why everyone else should care about IPv6 adoption in the enterprise...

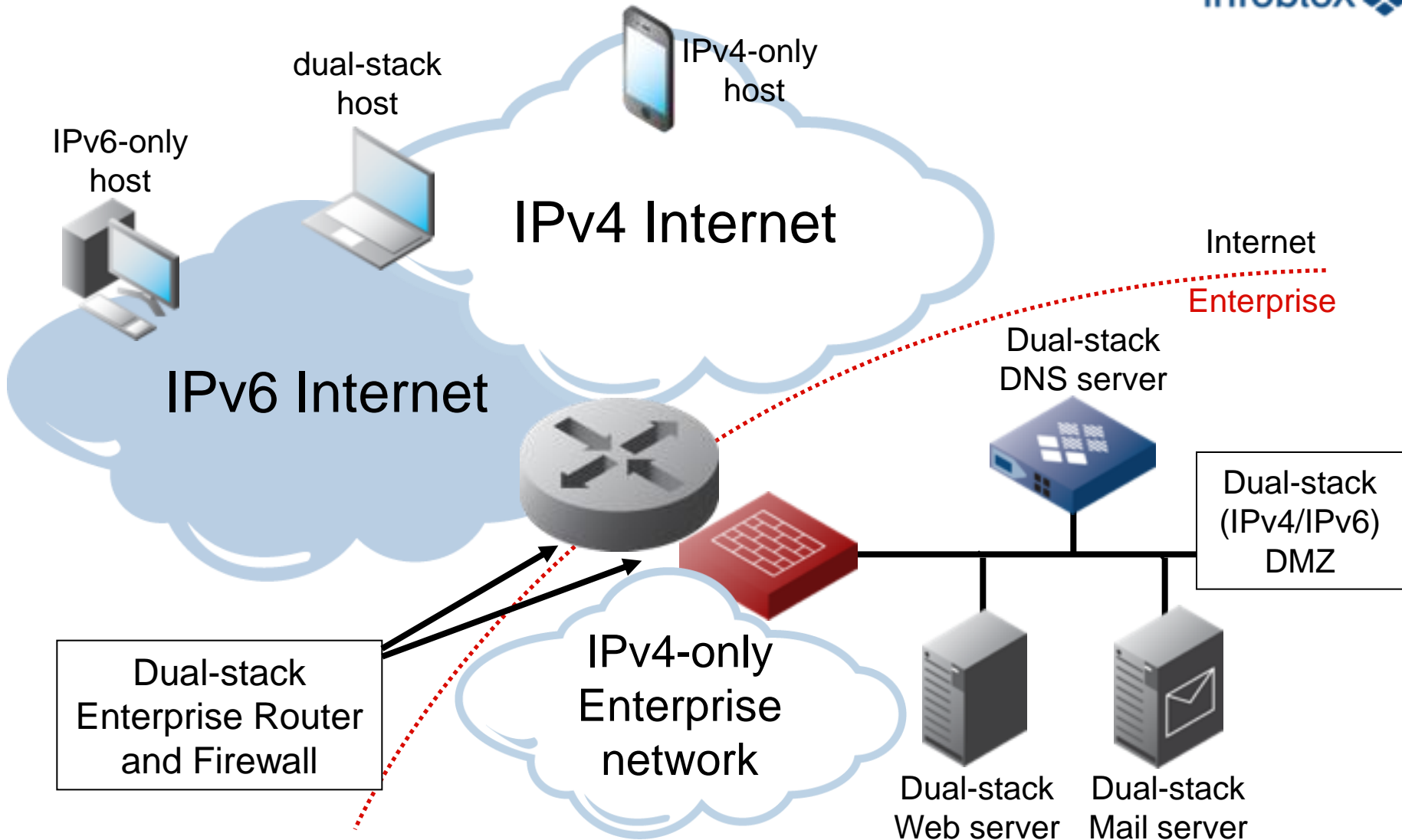
# The evolution of the Internet: enterprises will continue to play a role...

- Deprecation of NAT
- Availability of enterprise content over IPv6
- Evolution of IP address management & network configuration and change management
  - opportunity for automation and network virtualization
- Unification of IP address space
  - deprecation of private addressing
- Better adoption of the end-to-end model
- Evolution of security practice
- IPv4/IPv6 feature parity from vendors

## Deprecation of NAT at the enterprise edge

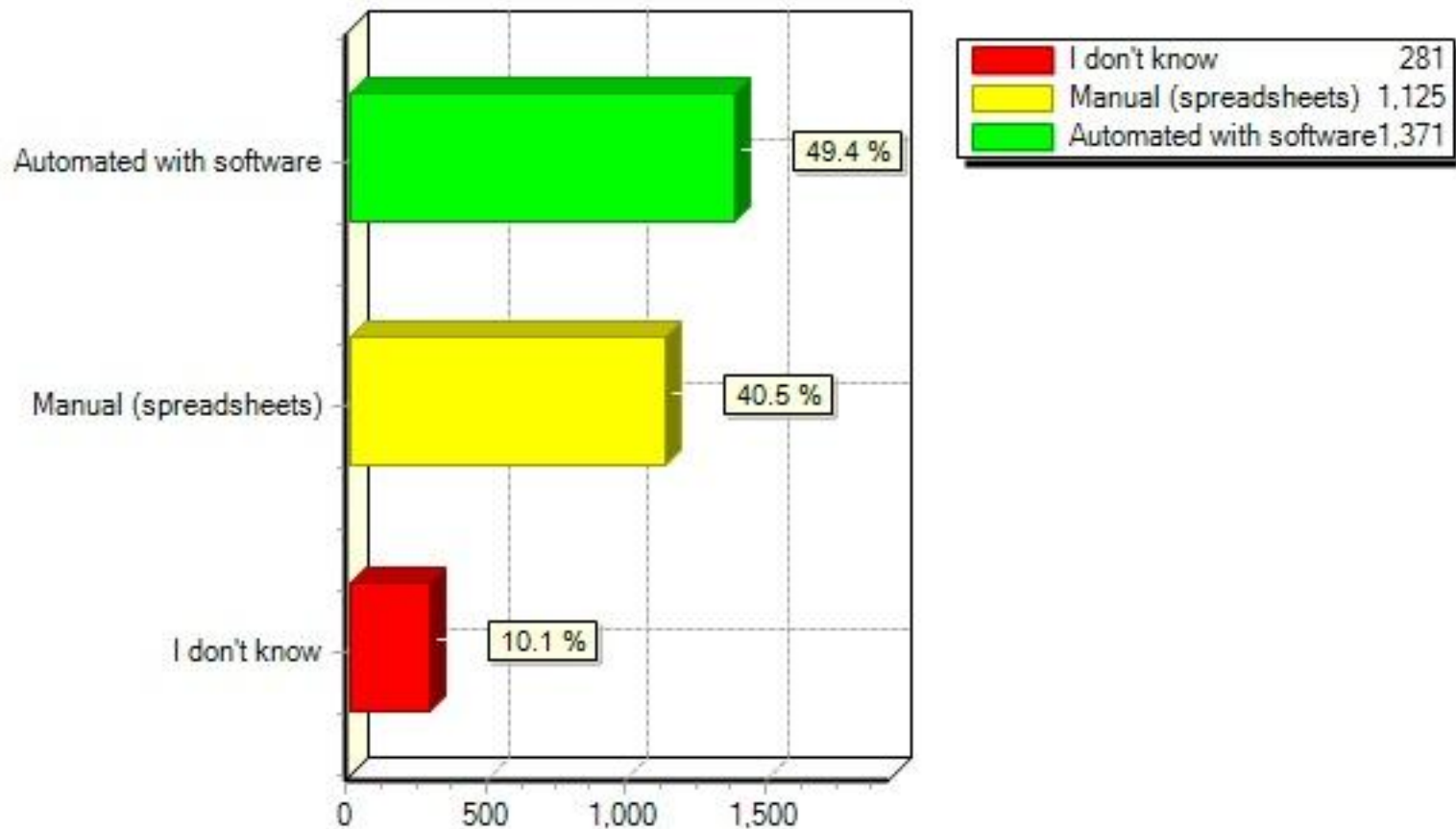


“They found a formula for translating network packets:  
This formula for translating network packets paid.  
Till in the end they could not change the tragic habits  
This formula for translating network packets made.”  
*-With apologies to Robert Graves*

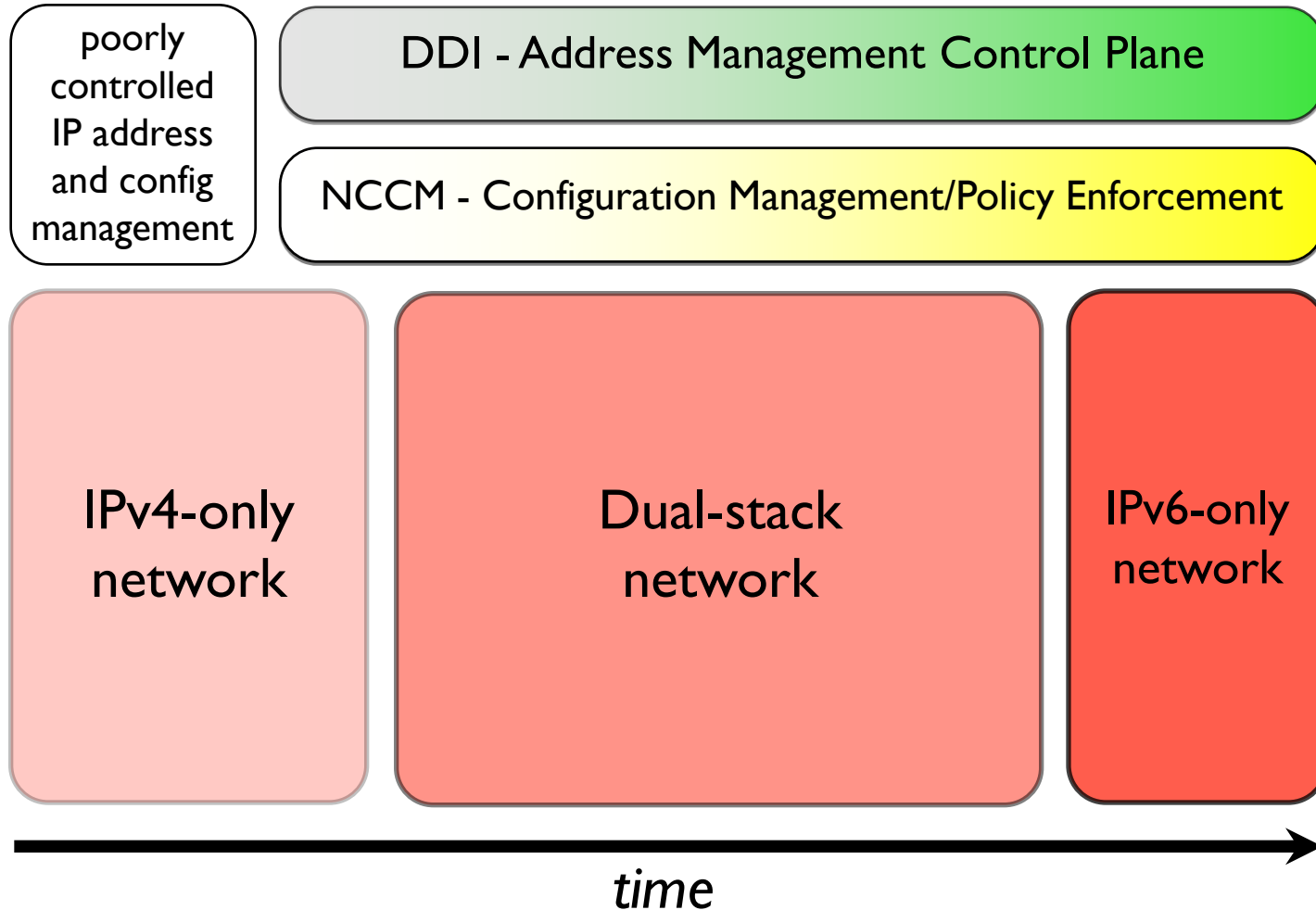


# Availability of enterprise content over IPv6

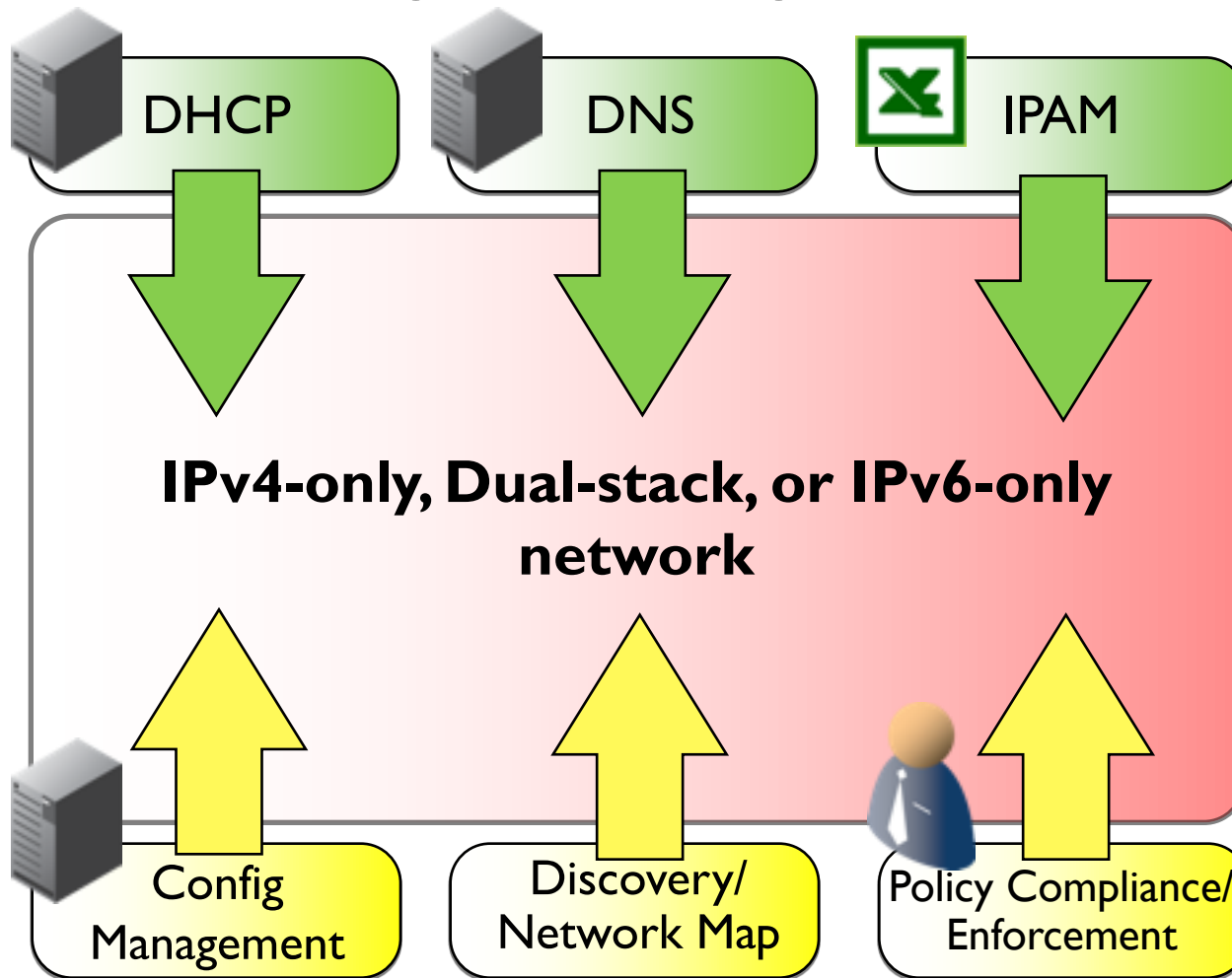
# How does your organization currently track its IP addresses?



# The evolution of IP address management

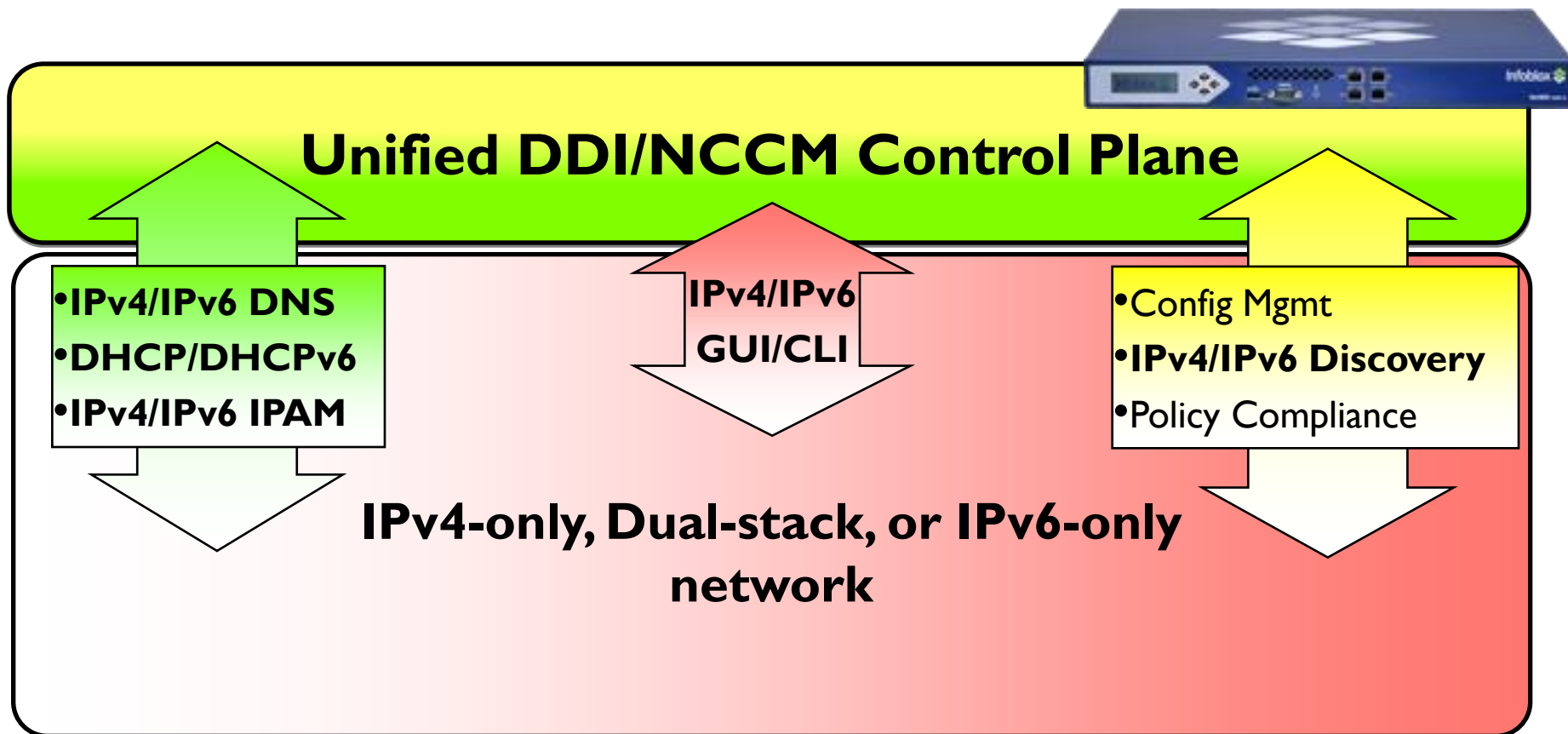


IPv6 compels the evolution of IP address management and network configuration management...





IP address management and network configuration management,  
evolved and IPv6 ready...





<http://www.infoblox.com/en/resources/ipv6-resource-center.html>

Continually updated resources for your  
IPv6 adoption initiative



Questions?

[tcoffeen@infoblox.com](mailto:tcoffeen@infoblox.com)

## References

- Geoff Huston's IPv4 Address Report: <http://www.potaroo.net/tools/ipv4/>
- “For Impatient Web Users, an Eye Blink Is Just Too Long to Wait”:  
[http://www.nytimes.com/2012/03/01/technology/impatient-web-users-flee-slow-loading-sites.html?\\_r=1](http://www.nytimes.com/2012/03/01/technology/impatient-web-users-flee-slow-loading-sites.html?_r=1)
- Amazon and Google latency results:  
<http://glinden.blogspot.com/2006/11/marissa-mayer-at-web-20.html>
- Stanley Kubrick's “A Clockwork Orange”: <http://www.imdb.com/title/tt0066921/>
- “Bankrupt Borders flogs 65,536 IP addresses at \$12 a pop”:  
[http://www.theregister.co.uk/2011/12/05/borders\\_flogs\\_ipv4\\_addys/](http://www.theregister.co.uk/2011/12/05/borders_flogs_ipv4_addys/)