

# World IPv6 Day Access Networks

**Speakers: David Freedman, Jan Žorž**

**Content: Speakers et al....**

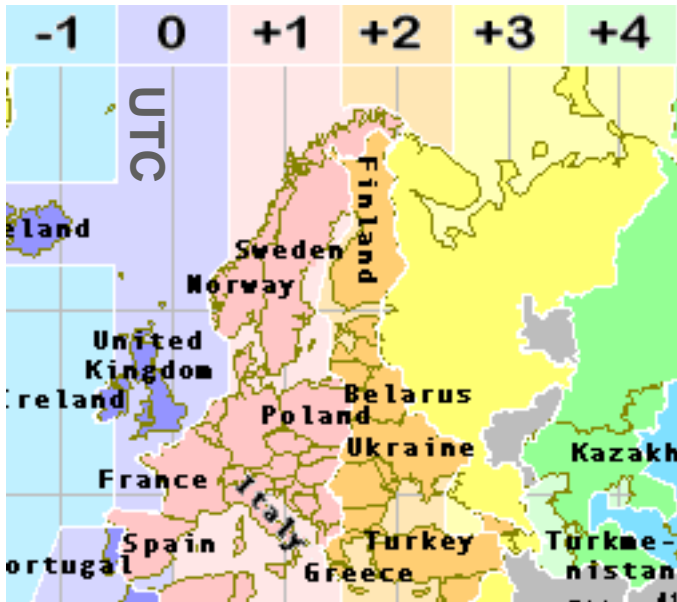


# Who are you?

<b>Class A</b>	<b>Operator has production quality, generally available IPv6</b>
<b>Class B</b>	<b>Operator has some IPv6 deployed, perhaps as a trial or with limited support.</b>
<b>Class C</b>	<b>Operator has no IPv6 deployed.</b>
<b>Japan</b>	<b>Out of Scope, see Randy</b>



# When is it in our region?



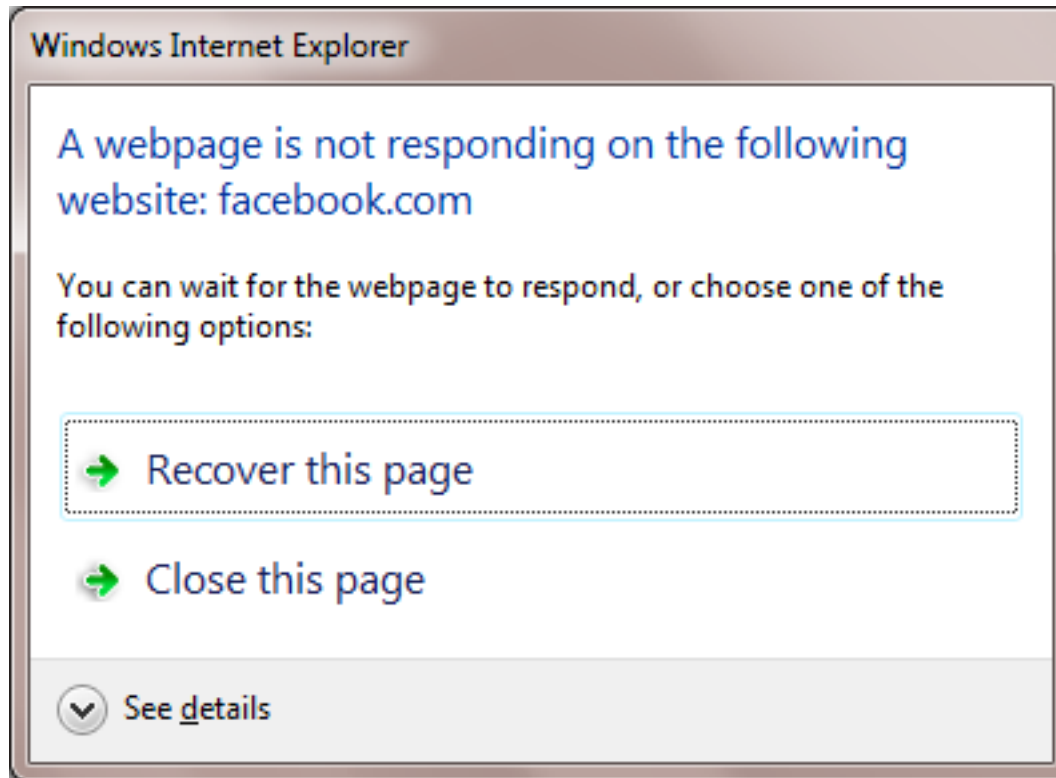
Map not intended as accurate representation of NCC region

- A working day, it runs from 00:00 until 23:59 UTC
- What is your user mix, mainly residential, business or both?
- What will your users care about during the day? What will their day look like?
- How will they experience their brokenness?



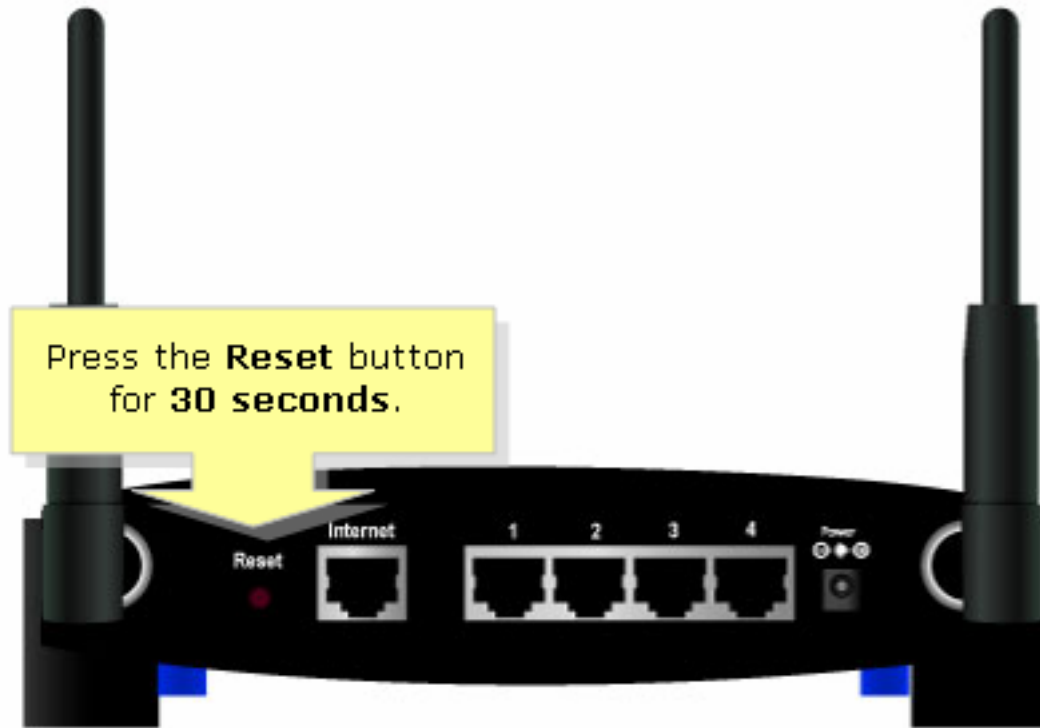
# What would my mother do?

Probably call me



# What would my mother do?

Assuming I ignore her, next reboot the router



# What would my mother do?

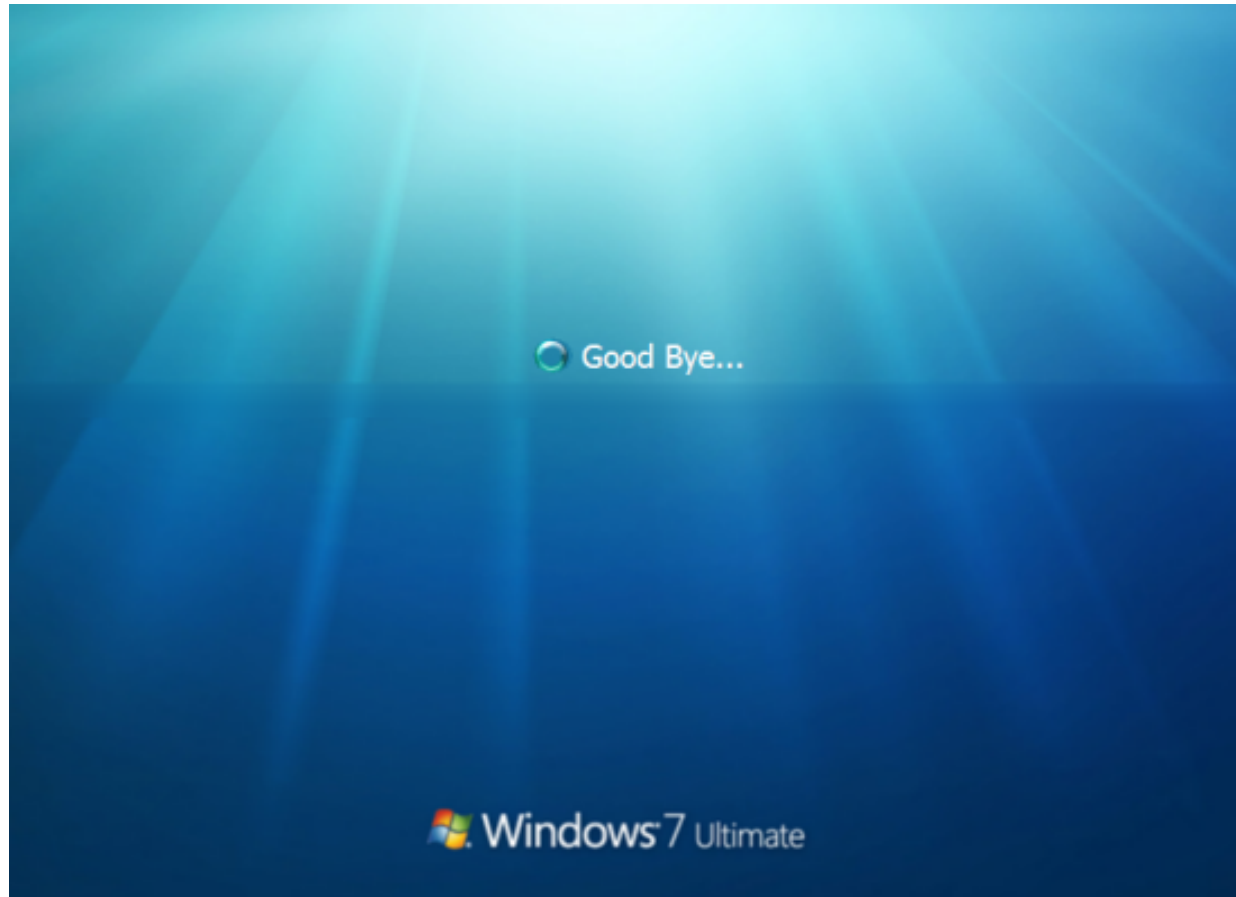
And then run an antivirus scan

**System is secure**  
System is being actively protected  
No action required

Files & Folders	Emails	Internet & Network	External Drives & Devices
<ul style="list-style-type: none"><li>✓ Virus Protection</li><li>✓ DNAScan</li></ul>	<ul style="list-style-type: none"><li>✓ Email Protection</li><li>✓ Spam Protection</li></ul>	<ul style="list-style-type: none"><li>✓ Firewall Protection</li><li>✓ Phishing Protection</li></ul>	<ul style="list-style-type: none"><li>✓ Autorun Protection</li><li>✓ Scan External Drives</li></ul>

# What would my mother do?

And finally, defeated will head to bed



# How will they be broken?

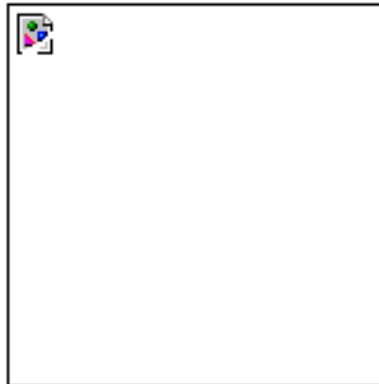
## Fake Connectivity

- Well meaning RA
- Ill meaning RA (Rogue)



## Bad Connectivity

- Bad autotunnelling
- Bad ALG/IPS
- DPI Rate limiting
- MTU Issues
- Geolocation issues





# How do you prepare?



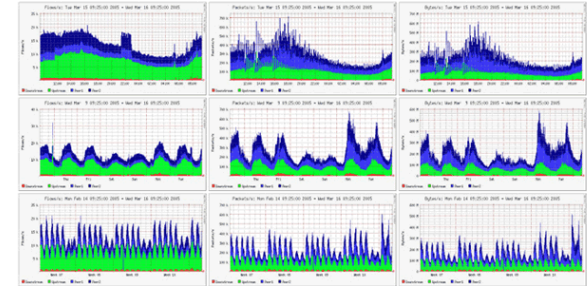
## Document

Your processes, for you and your customers



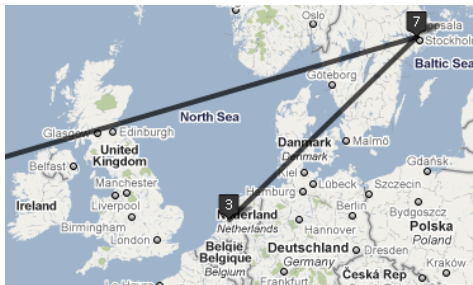
## Publicise

Both internally and externally, consider mass communication



## Skim

Your flow data for Protocol 41 / UDP 3544, identify potentially affected users.



## Find

Autotunnel anycast relays  
Where will this traffic be going?



## Triage

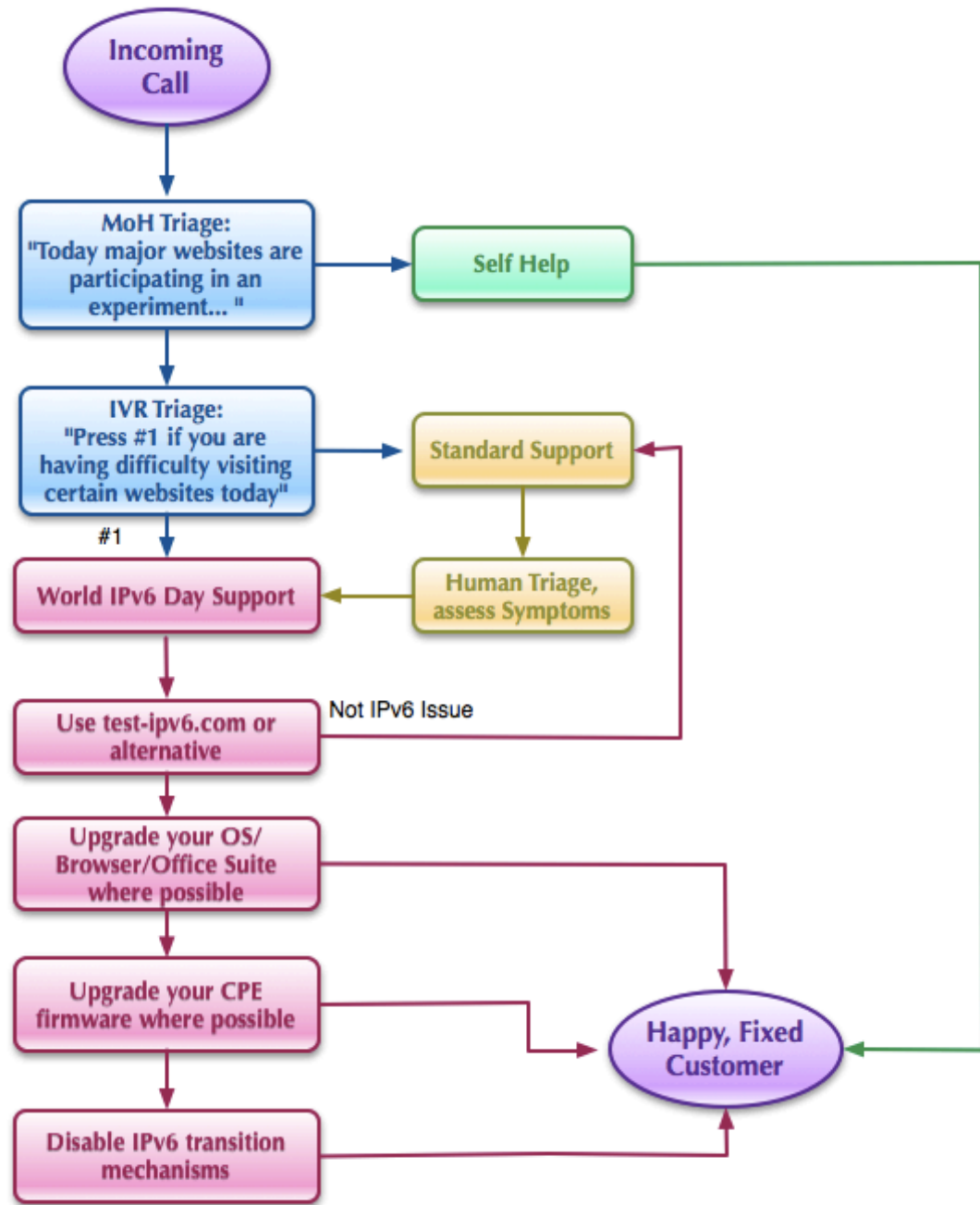
Consider setting up dedicated teams for the day and using your PBX IVR/MoH to route to them



## Collate

Vendor knowledge base articles, screenshots, procedures, support numbers etc..

# An example process flow....



# Conclusion

- **Don't bury your head in the sand**
  - As an access provider, regardless of your size or IPv6 maturity, your users are likely to have issues
- **Have a plan**
  - Having a plan is better than not having a plan!
- **Tell your users in advance**
  - Have them prepared, mark the date in their diaries, have them check themselves, this means less calls for you on the day!
  - Don't forget about your dependents (i.e resellers)
- **Finally, be prepared**
  - Unlikely you can sit back and relax if you provide public access!

