#### Australia IPv6 Summit 2012



#### **IPv6: Convince Your Boss**

#### Tom Limoncelli, Google NYC

Google Confidential and Proprietary

### Overview

- I. Project Size:
  - Big vs Small
- 2. How to convince your boss about:
  - Anything
  - IPv6
- 3. Examples

### Project Size



# The big convert-everything-now IPv6 project



### Why this fails

• "Chicken Little" has no credibility

- Big projects have many stakeholder
- Each stakeholder is a risk:
  - Management approval
  - Aversion to risk
  - "We don't have the resources"

- DNS/DHCP
- Routers
- Servers
- Firewalls
- and more!

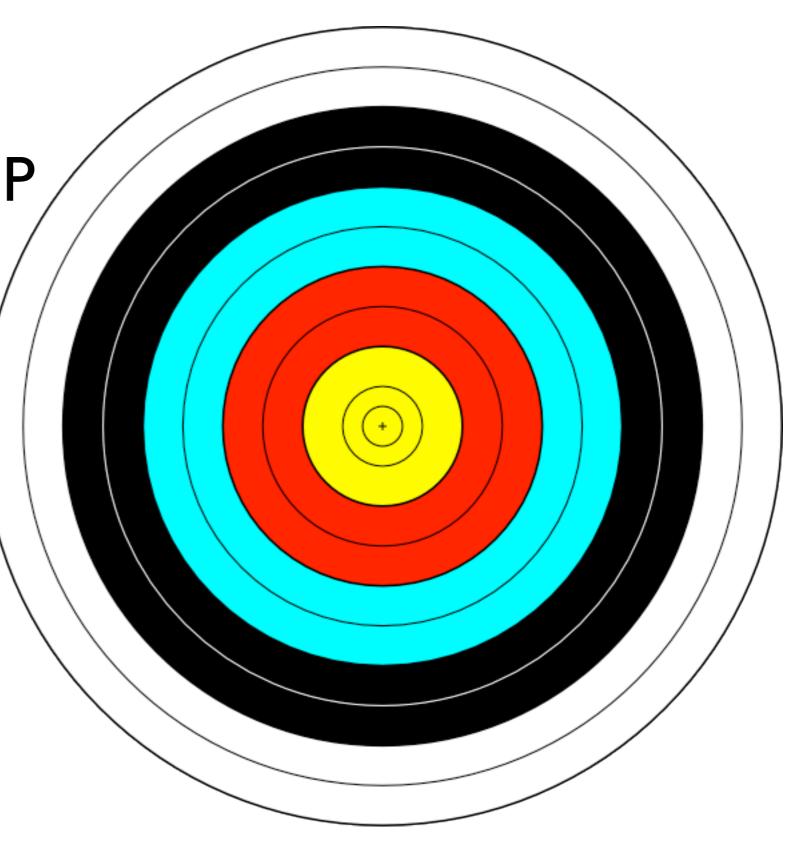
DNS/DHCP

Routers

Servers

Firewalls

• and more!

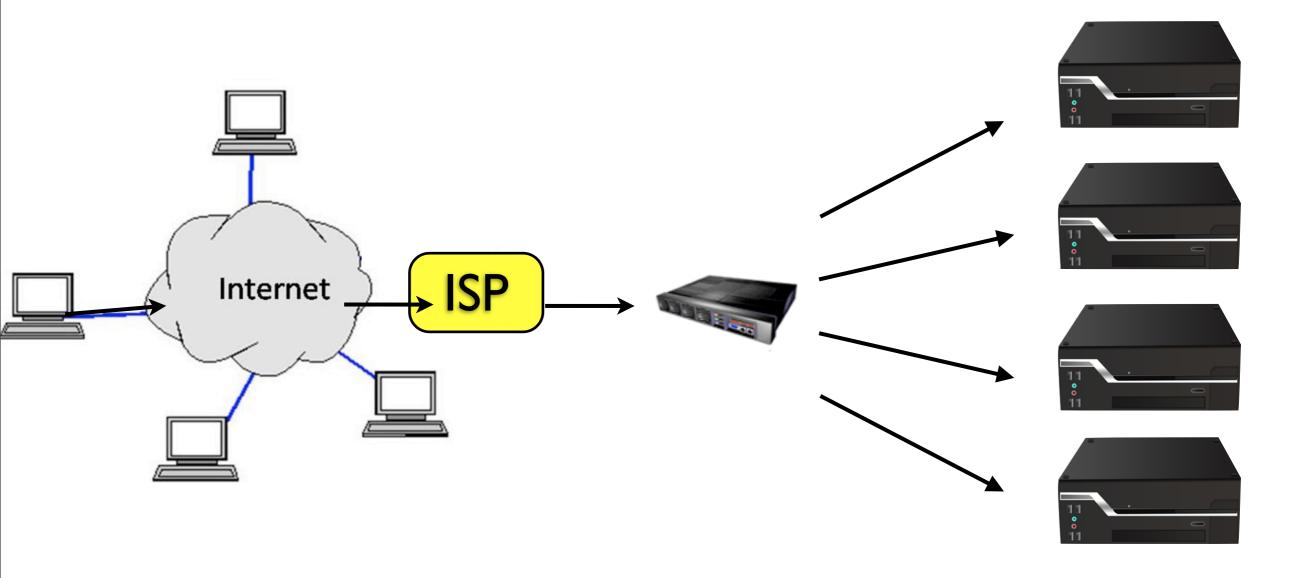


### "Solve One Thing"

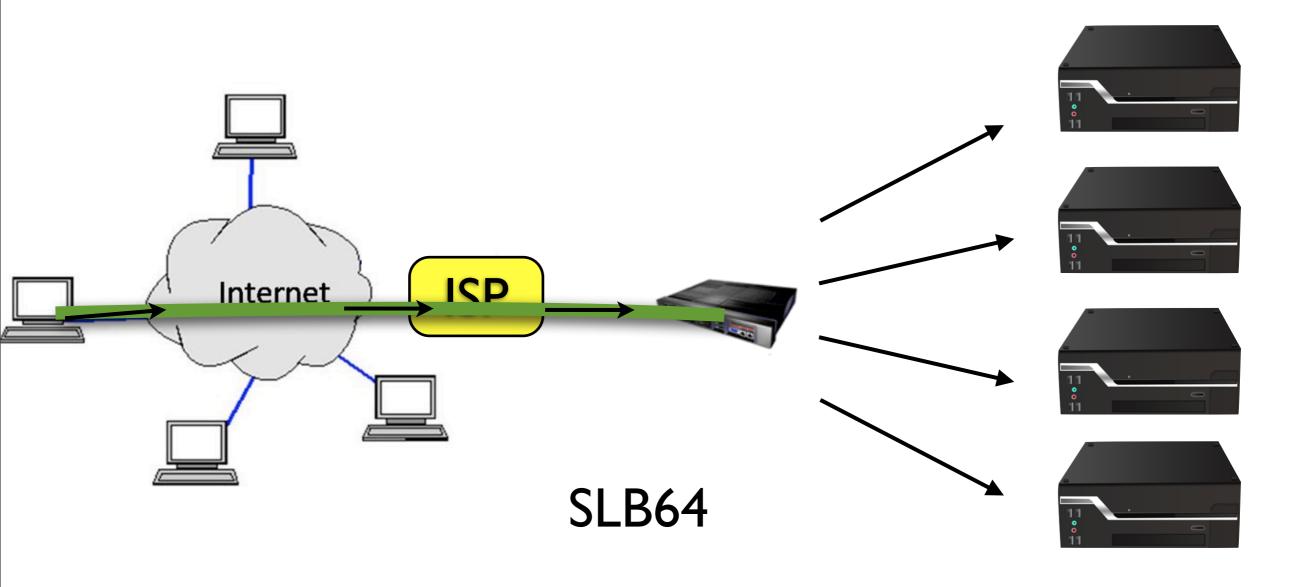
"Boss, I'm not one of those crazy IPv6 people. I just want to solve one specific problem."

### Example: Enable IPv6 access for our external website.

## The path from our ISP to our load balancer



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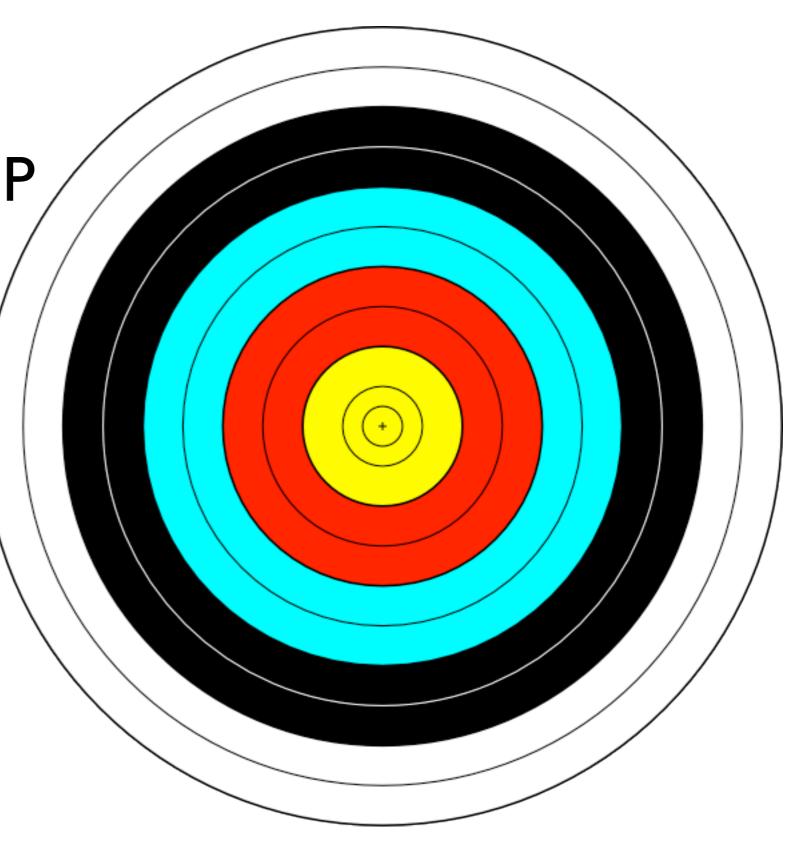
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Early success builds confidence.
Small steps lead to bigger initiatives.

### Convince your boss about anything

#### Undeniable Value

#### Express plans in terms of:

- the benefit
- financial benefits and losses

- "feature vs. benefit"
  - feature: "what will be done"
  - benefit: "what we gain"

#### **Problem:**

Salespeople are spending 3 hours a day uploading customer datasets rather than selling.

"Let's buy a new, faster, server"

"2-3 more hours per day selling"

### Management's Priorities for Technology Investment



1. Revenue.

A financial return. Making money from customers.

2. Increasing scarce productivity.

(Especially if demand exceeds the supply)

3. Cutting costs.

(Especially if company is struggling)

4. Competitive advantage.

(Especially if company trails its competitors)

5. Tech for the sake of tech.

http://www.harihareswara.net/sumana/2010/08/23/1

Worst

# IPv6's Undeniable Value

#### 1. Revenue:

- Improve latency (and therefore increase pageviews) for CGN users.
- Improve revenue of geotargeted advertisements to CGN users.

http://searchenginewatch.com/article/2182163/World-IPv6-Launch-What-it-Means-for-Content-Owners-SEO

http://news.cnet.com/8301-17939\_109-10271949-2.html

#### I. Revenue:

- •Make our website faster (and therefore increase pageviews) for CGN users.
  - Improve revenue of geotargeted advertisements to CGN users.

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http://news.cnet.com/8301-17939\_109-10271949-2.html

#### 2. Increasing scarce productivity:

• Fix IPv6 compatibility issues in our products before our customers find them.

#### 3. Cutting costs:

- IPv6 Deployment is cheaper when you aren't in a rush.
  - Do it now, not when "under pressure to meet an unexpected customer demand"
  - Consultants can smell fear.

#### 4. Competitive Advantage:

• First to market with IPv6-compliant products.

- 5. Tech for the sake of tech:
  - IPv6 is totally awesome.

# Undeniable Value © Google

# Undeniable Value (a) Google

 Improve revenue of geotargeted advertisements to CGN users.

# Undeniable Value (a) Google

- Improve revenue of geotargeted advertisements to CGN users.
- Improve latency (and therefore increase pageviews) for CGN users.

# Undeniable Value © Google

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- Enable developers to make IPv6-compatible products (Yes, we do ship desktop apps!)

# Undeniable Value © Google

- Improve revenue of geotargeted advertisements to CGN users.
- Improve latency (and therefore increase pageviews) for CGN users.
- Enable developers to make IPv6-compatible products (Yes, we do ship desktop apps!)
- "We are an Internet-based company and IPv6 permits the internet to continue to exist."

# Undeniable Value (a) Google

- Improve revenue of geotargeted advertisements to CGN users.
- Improve latency (and therefore increase pageviews) for CGN users.
- Enable developers to make IPv6-compatible products (Yes, we do ship desktop apps!)
- "We are an Internet-based company and IPv6 permits the internet to continue to exist."
- Vint Cerf said so.



### Quantify: Make it measurable

- Salespeople will bring in \$500/day more.
- Improve revenue from CGN users by \$8/user.

### The "So what?" Game

### Success Stories

# The minimum change to provide IPv6 access to our external web presence.

- Improve revenue of geotargeted advertisements to CGN users.
- Improve latency (and therefore increase pageviews) of CGN users.

# Use IPv6 on LTE phones to eliminate IPv4 "NAT keep-alive" transmission.

Improves battery life of mobile phones.

# Save money on the inevitable IPv6 deployment.

Consultants charge more the closer to a deadline. Like Y2K but deadline is "soft".

- When a big customer demands it.
- IPv6 use reveals a bug or security issue.
- Customers require it for internal reason.
- Customers require it for external compliance.

### The internet can continue to exist!

## The internet can continue to exist!

GOOGLE	(2) (3) (2) (3) (3)
Neb Images Groups News Froogle	
Please print query clearly:	
Mail to: Google Search Request 1600 Amphitheatre Parkway	
Mountain View, CA 94043	
Please allow four to six weeks for results.	
	10 O T

#### Summary:

#### I: "One simple thing" > "do it all"

Build on the success of a small, well-defined project.

#### 2: Undeniable value:

Revenue.

Improve revenue of geotargeted advertisements to CGN users. Improve latency (and therefore increase pageviews) of CGN users.

2. Increasing scarce productivity.

Fix IPv6 compatibility issues before our customers find them.

3. Cutting costs.

IPv6 Deployment is cheaper when you aren't in a rush.

4. Competitive advantage.

First to market with IPv6-compliant products.

5. Tech for the sake of tech.

Don't go here.

#### Slides & links:

bit.ly/tom-ipv6

### Blog:

EverythingSysadmin.com