IT Modernization
A Path Forward Leveraging IPV6

2017 North American IPv6 Summit
April 25-26, 2017

LinkedIn Headquarters
Sunnyvale, CA

My Journey

A little history from a CIO perspective…
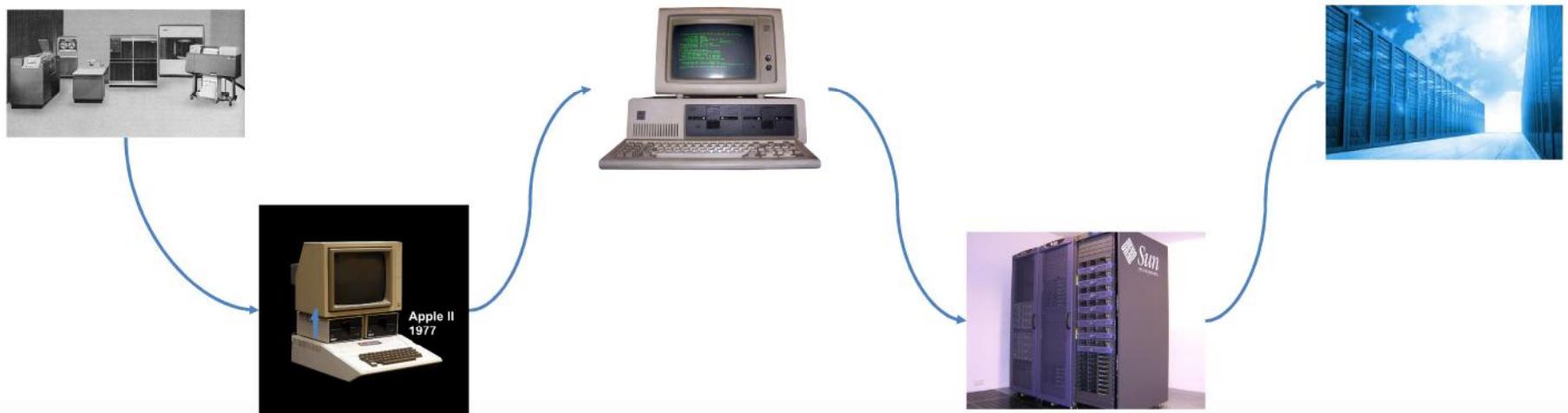
We now have a growing problem, and while it looks familiar, the solution is going to require intensive rethinking of the way we design and implement apps and infrastructure.
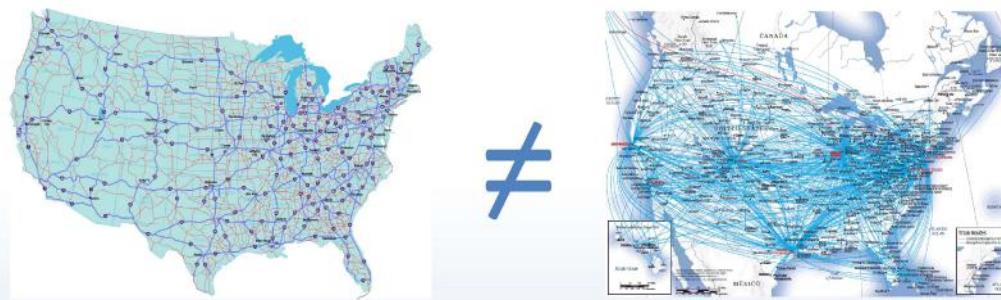
Tony's Rule(s)

For every $1.00 spent on apps and infrastructure, annual operating costs and maintenance expense will be in the range of 20-30%

Further, because the aggregated price/performance of technology doubles roughly every five years, systems and infrastructure that are more than 10 years old, have a net negative value compared to the upgrade or replacement alternative.

Lesson Learned: Get your organization on a continuous upgrade cycle – "sweating the asset" is unlikely to pay off compared to other alternatives.

The Cybersecurity Challenge

Tony's Rule(s)

Trying to design, develop, implement and support modern security concepts and practices to protect certain legacy systems is just like thinking that with enough bubble wrap and duct tape we can convert a '65 Ford Mustang into a vehicle as comfortable and safe as a contemporary vehicle. Effort and cost aside, it won't be pretty!

Lesson learned: Security by design wins out over security slapped on afterwards.

For Large Enterprise and Government

IoT is really the Internet of Everything….

More devices

More users

More traffic

→
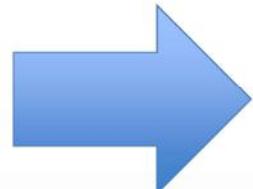
More IP addresses

More transparency/accountability

More manageability

Better performance

And the foundation is starting to look better!

IPv6 Capable Rate by country (%)
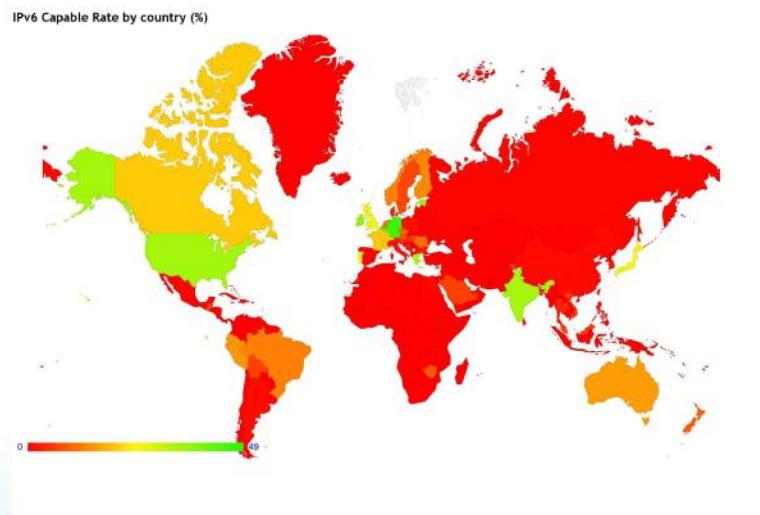
Multiple Components to the Future Roadmap for Large Enterprise (including Government)

Shared Microservices and Platforms	New IT governance paradigm needed
Hybrid Cloud	Remphasis on architecture & data
Legacy System API's	Both DevOps and traditional model
IPV6	Business and tech skill set paramount
Network micro segmentation	TBM as a standard practice
Cloud Services	CXO level engagement

The Federal Government can lead the way

Modernization of Government Act

Work done so far

Work Needed

Creates new funding mechanism
Encourages shared platforms
Favors modern architecture/tools

OMB/Fed CIO support
Comprehensive across all initiatives
Fix FAR language and train people
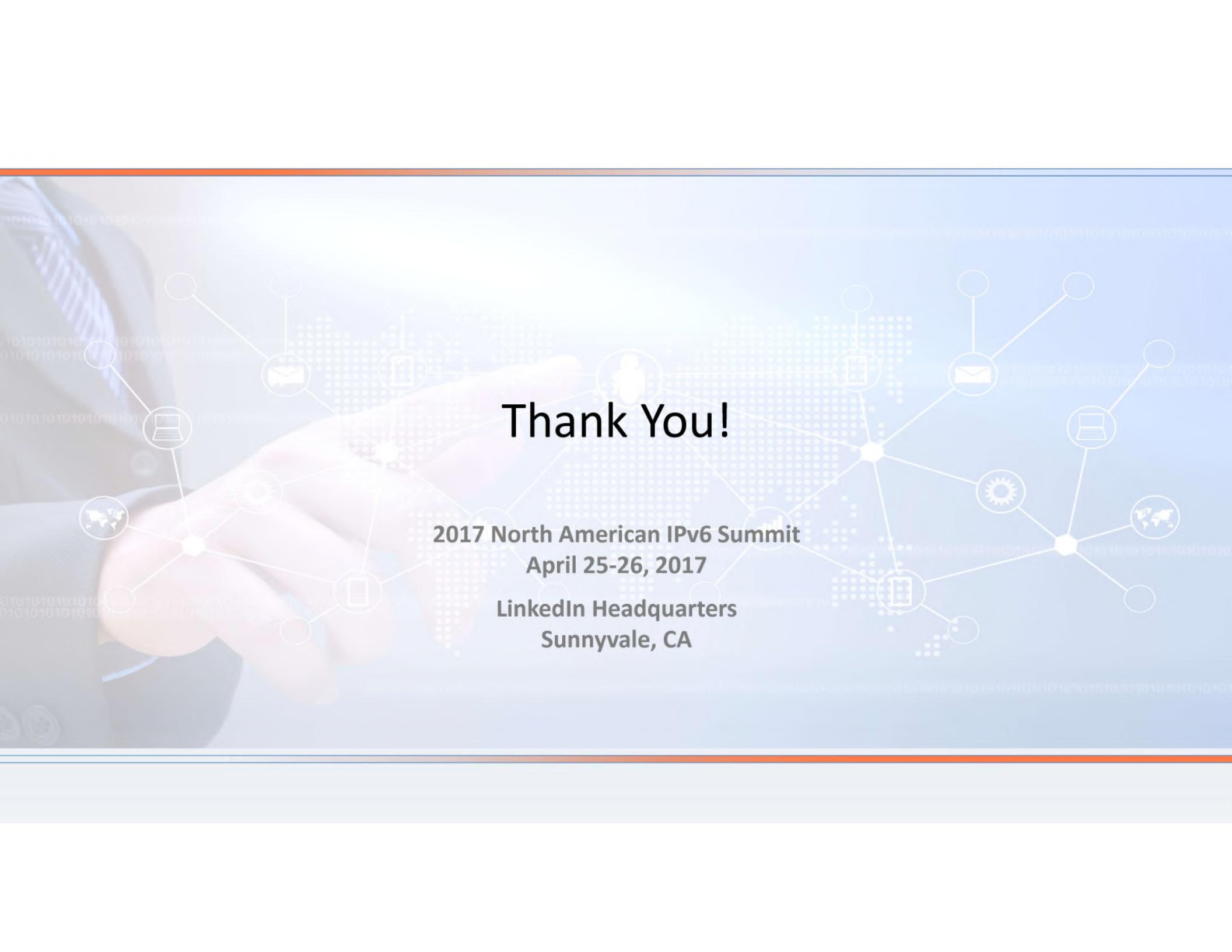
Thank You!

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