

# **Engineering Department Report**

**Mark Kusters**  
**Chief Technical Officer**  
With a lot of help  
from **Cathy Murphy**



# Overview

- **Staff**
- **Operational Statistics**
- **Accomplishments**
- **Work in Progress**
- **What's Ahead**

# Staff

- Who is new? Me (Mark), Ron Henderson

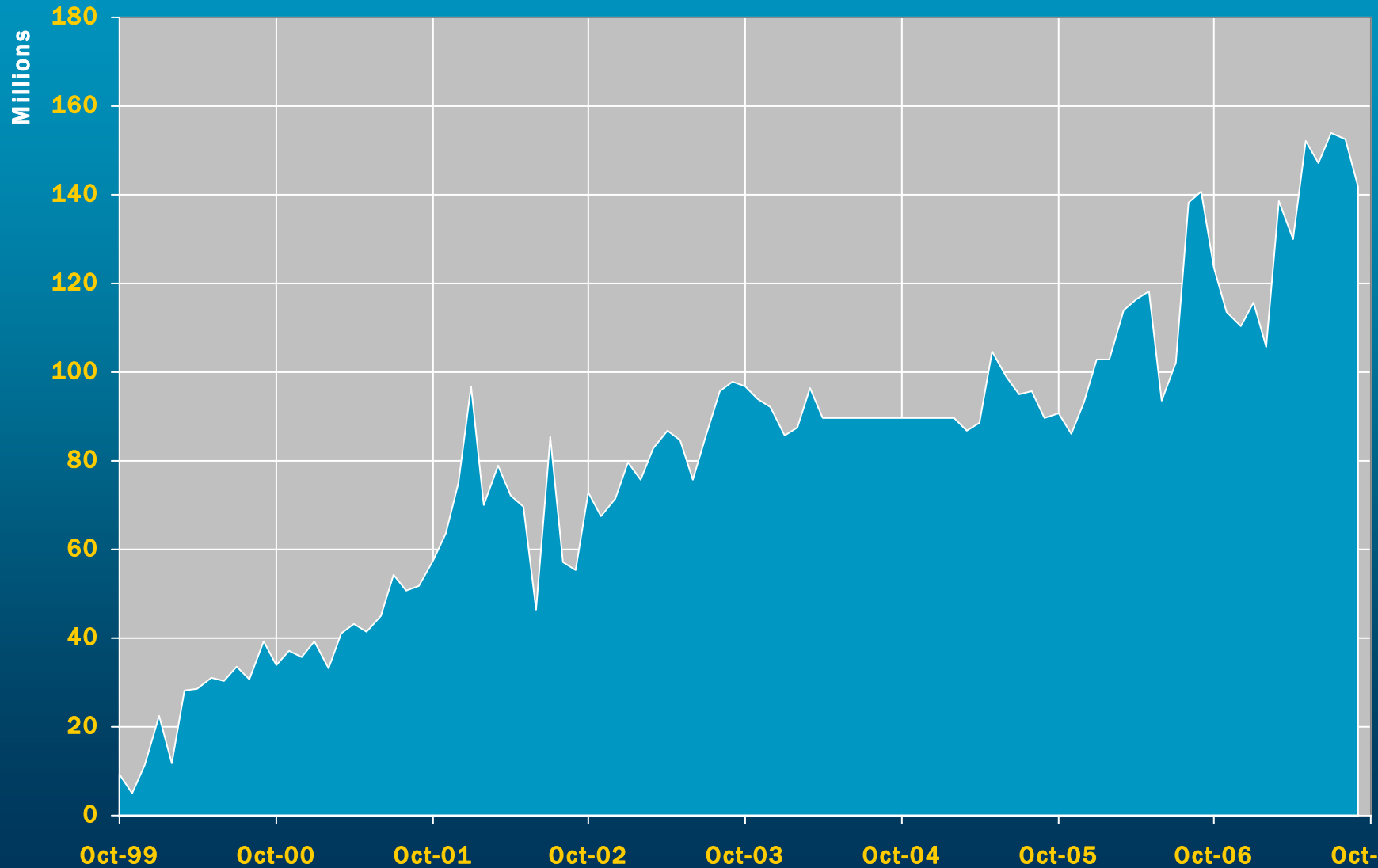
## Here in ABQ

- Mark Kosters
- Cathy Murphy
- Matt Ryanczak
- Ray Stark
- Ron Henderson
- Tim Christensen

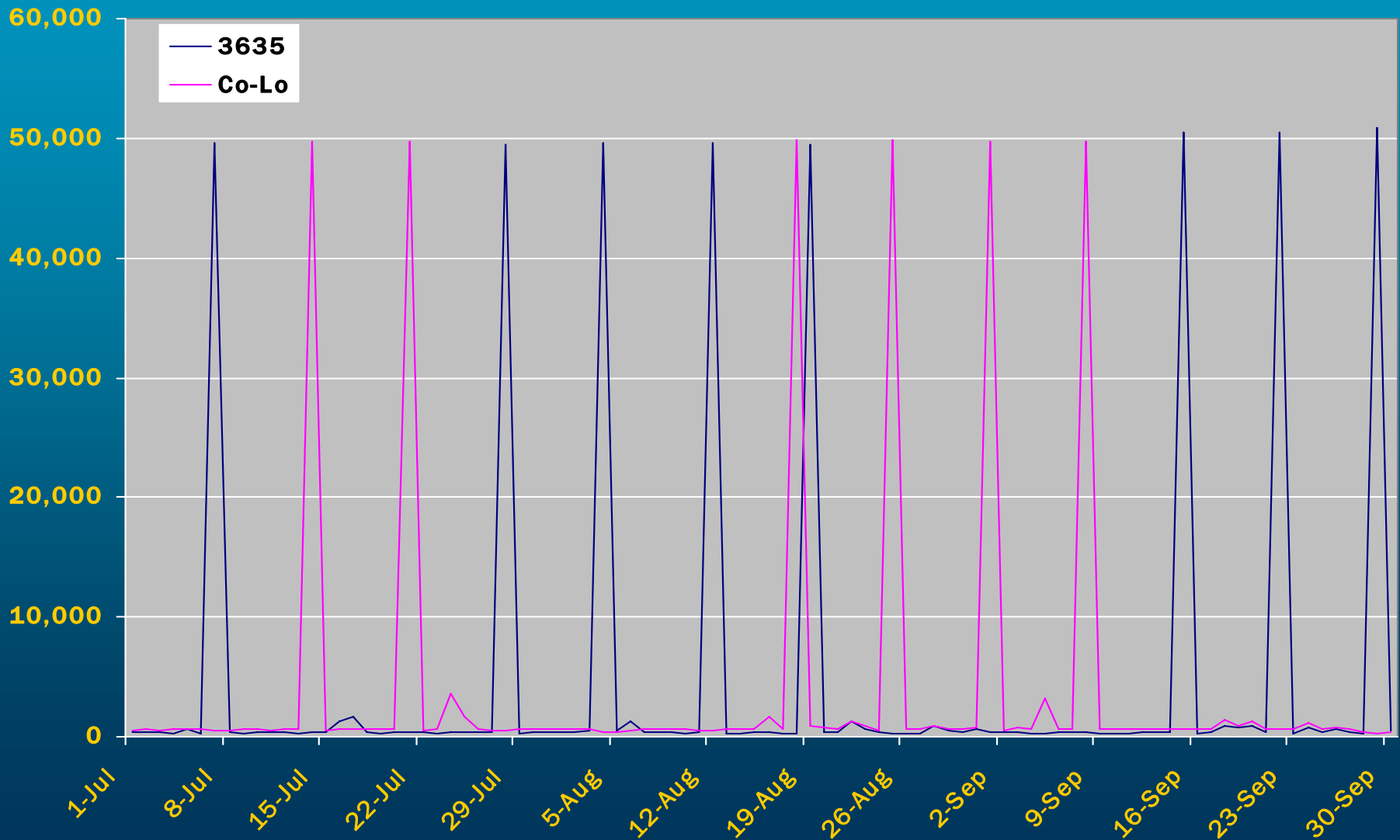
## Holding the Fort

- Abram Thielke
- Adam Guyot
- Darren Kara
- Matt O'Donnell
- Matt Rowley
- Michael O'Neill
- Ming Yan

# WHOIS query load



# Routing Registry Query Load

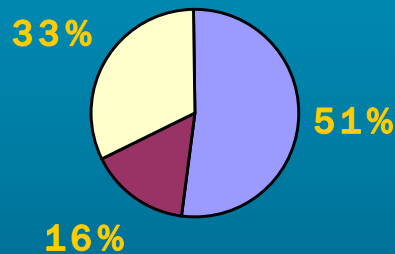


# Origin/OriginAS v. Route Views

	IRR		WHOIS	
Routes checked	7,715		11,695	
Origin Found	5,269	68%	10,645	91%
Origin Not Found or Incorrect	1,949	25%	895	8%
Route Not Found	497	7%	155	1%

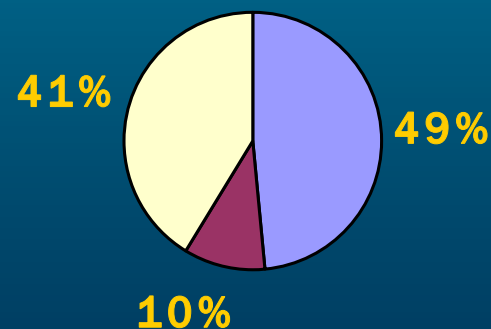
# Utilization Reporting

## Utilization by Network Count

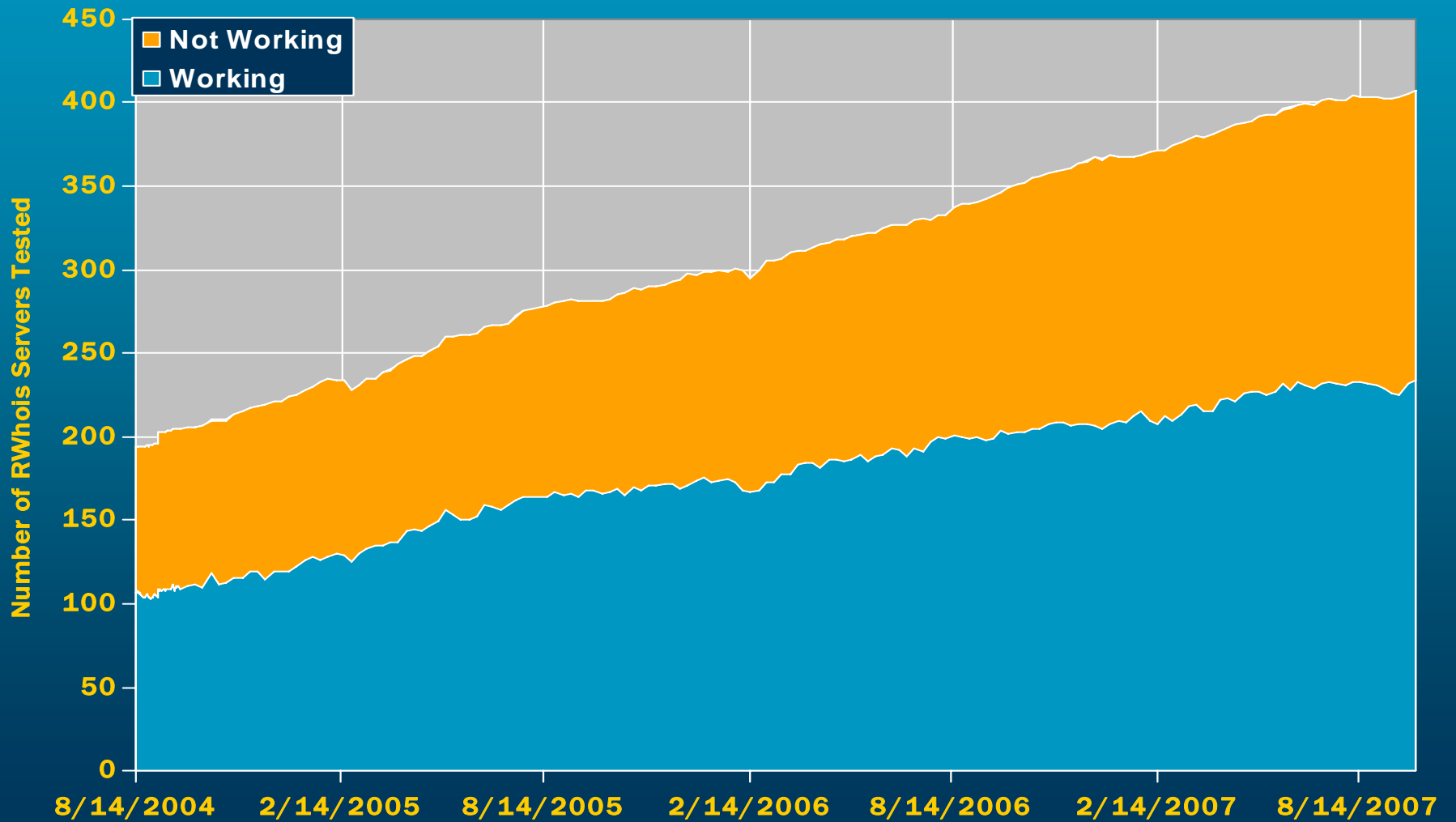


- Allocations using SWIP
- Allocations using RWhois
- Allocations w/o utilization data

## Utilization by Node Count

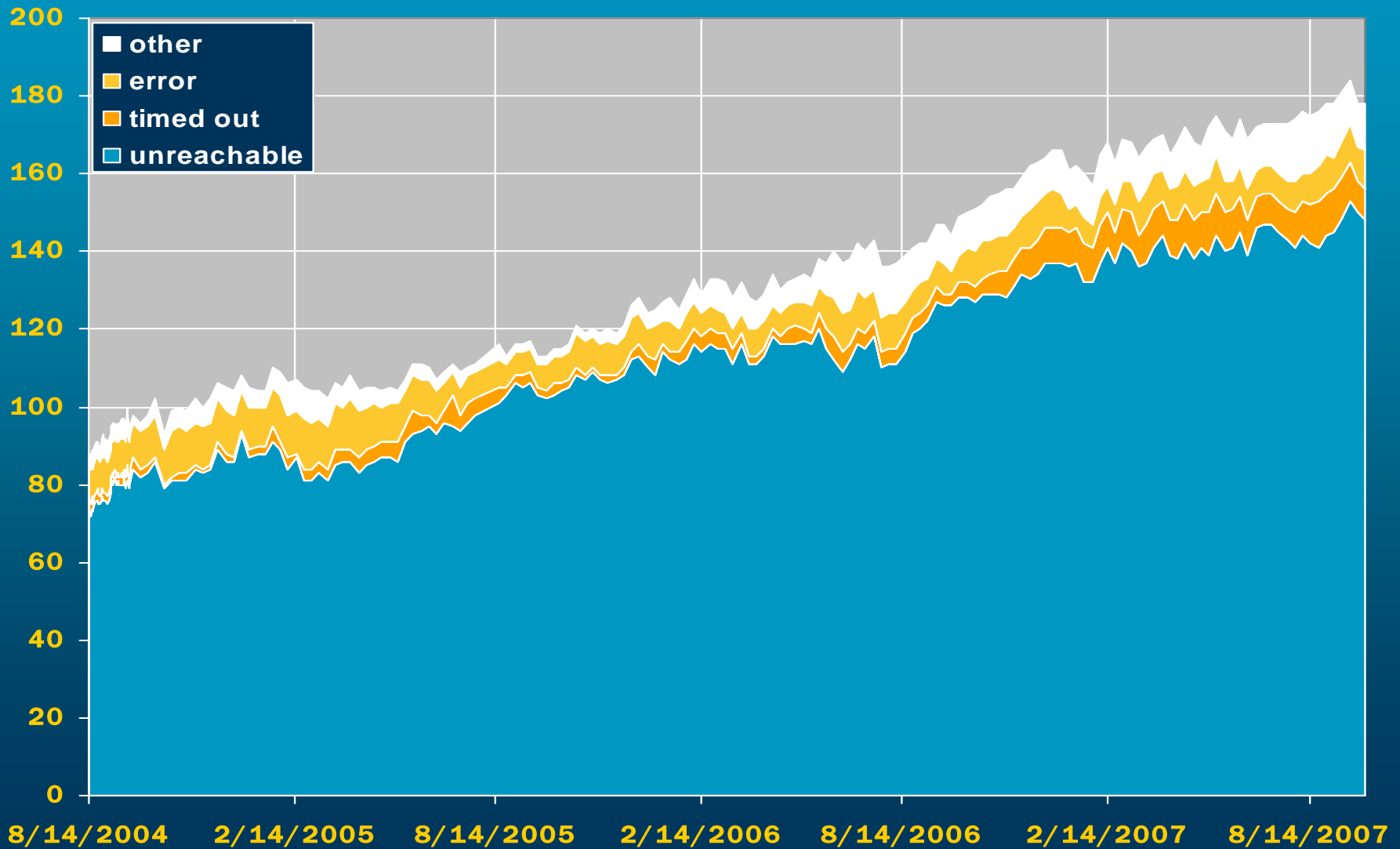


# RWhois Server Monitoring

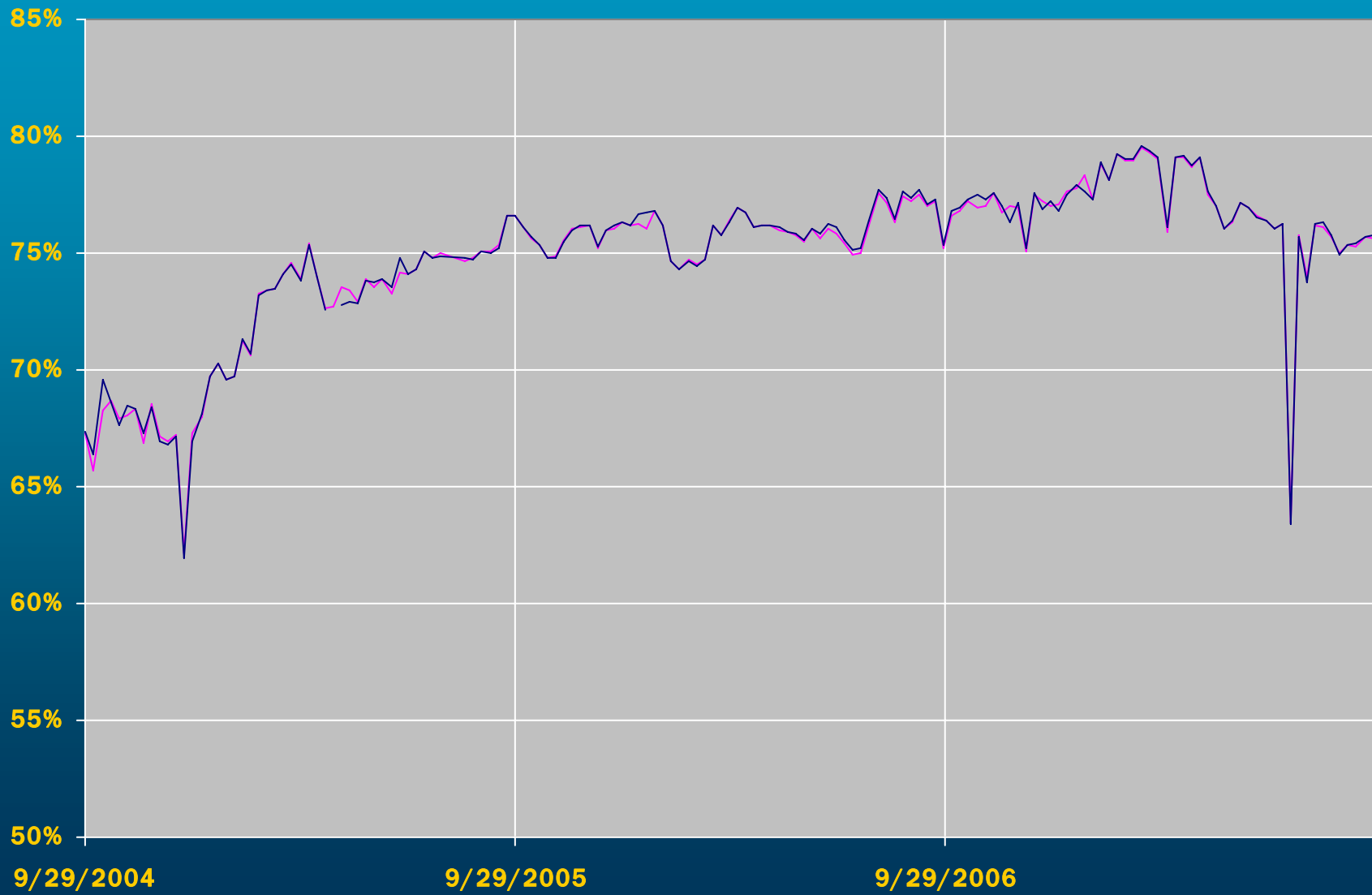




# RWhois Servers Not Working



# Valid RWhois Referrals



# Accomplishments

- Rebuilt and deployed a new secondary DNS infrastructure
- Enhanced In-house Registration Tools and detailed processing statistics
- Implemented PGP Authentication for Registration processing
- Implemented Lame DNS testing system
- Participated in PCI audit
- Implemented Template revisions

## Work in Progress

- Internal authentication changes
- Formalizing data storage requirements and improving data accessibility
- Application and database migrations due to hardware upgrades and OS changes
- Resource Certification (ResCert) design work continues

# What's Ahead?

- **Changes to support the new revenue recognition methodology**
- **Infrastructure improvements for greater redundancy**
- **Follow-up tasks from PCI audit**
- **Customer interface improvements**

A large hot air balloon launch at dawn. The balloon is partially inflated and is being lifted by a crowd of people. The scene is illuminated by the warm light of the rising sun, creating a golden glow. The text "Thank You" is overlaid in a large, white, bold font across the center of the image.

# Thank You