Welcome to NANOG 58

- Dave Temkin NANOG PC Chair
- Betty Burke NANOG ED
- Guy Tal Verizon Terremark, Host and Connectivity Provider



Thank You to the Members of the Program Committee

- Philippe Couture
- Jim Cowie
- Greg Dendy (Vice Chair)
- Ryan Donnelly
- Chris Grundemann
- Greg Hankins
- Elisa Jasinska
- Anton Kapela
- Manish Karir
- Dani Roisman
- Michael Sinatra
- Tony Tauber
- Dave Temkin (Chair)
- John van Oppen



What to Expect at NANOG 58

- Tutorials
- General Session Content
- Tracks
- Socials



Roosevelt Space

- Open Seating / Break Area When not in General Session or Track
- ARIN Help Desk Thank you to ARIN
- RIPE Atlas Probes Thank you to Comcast, RIPE and our ED
- Survey Give Away Daily Presentation



Reminders

- Q&A and Microphone Guidelines
- Attendee Charter
 - http://nanog.org/governance/ attendance



Moment to Reflect

- We will miss
 - Robert Stratton ARIN CFO
 - Eric Shepcaro -Telx CEO



Volunteers supporting NANOG

- Board of Directors
- Program Committee
- Development Committee
- Communications Committee



Need Help?

- Nanog-support@nanog.org
- Speaker-support@nanog.org
- Nanog-eng@nanog.org
- Sponsor-support@nanog.org



- Staff Identification on Name Badge
- Board of Directors <u>Member</u> Red Ribbon
- Program Committee <u>Member</u>

 White Ribbon
- Development and Communications
 Committees <u>Member</u> Blue Ribbon



Thanks to our Host, Connectivity, Premium and Infrastructure Sponsors!

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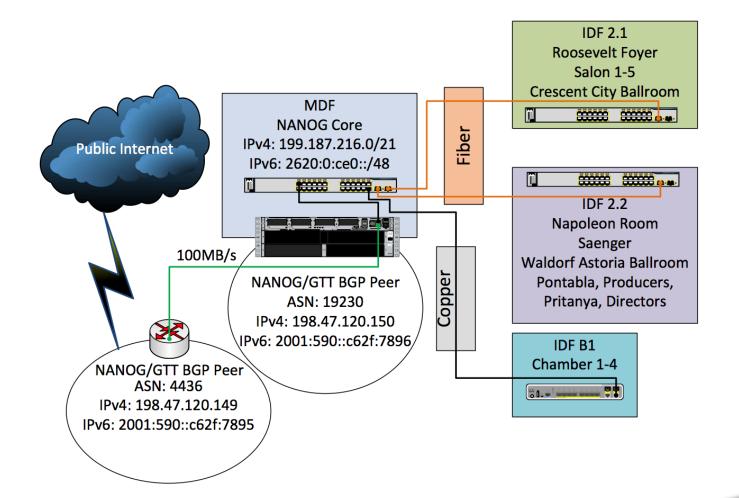


Special Thank You

- RIPE and Comcast
- Cisco and Juniper
- ARIN



Network at NANOG 58





NANOG 58 Opening Welcome



Guy Tal VP of Interconnection Services June 3rd, 2013

- Welcome to NANOG58 in New Orleans, LA
 - 6th time for Terremark hosting a NANOG event
- Recognize those that helped make it happen
 - GTT for providing the v4 and v6 transit



- Betty Burke and Terremark team for logistics coordination
- NANOG Steering and Program committees

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Obligatory Network Map



verizon North Virginia A **terremark**

Obligatory Datacenter Map



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Transferal of Ownership





Some Things Change...

- Rename the Brand
 - Terremark became Terremark a Verizon Company
 - Terremark a Verizon Company is NOW Verizon

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- Change in Leaders
 - Operations and Sales managed by *Terremark* leaders
 - Component of Verizon Enterprise Services
- Integration into VZ for back office services
 - Finance, HR, Legal, etc.



...And Others Stay The Same

Commitment to peering community and our customers

- 2013 **investment** in peering platforms globally
 - We operate three IXPs globally, Miami, Sao Paolo, Istanbul. Route Servers being installed
 - Miami is currently approaching 500 Gbps; fork-lifted Force 10 out, Brocade MLXs are in
- Carrier neutral culture **continues** in existing locations
- Operate highly connected data centers around the globe
- Develop and deliver innovative IT services that lead the industry
- Connect customers to customers



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NANOG Social June 4th



VERIZON TERREMARK INVITES YOU TO A
TRUE NEW ORLEANS NIGHT OUT

Tuesday, June 4th at 8:30 in the evening Mardi Gras Style parading begins from the Roosevelt Hotel to the French Quarter.

Join fellow network gurus on the steamboat Natchez

Board an authentic steamboat off the Mississippi River for dinner, cocktails, conversation, and casino tables.

Top 3 chip holders go home with prizes

Belkin Net Cam | Belkin ATTV Plus | Looxie 2 Vid Camera

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- For attending NANOG 58
- Visiting New Orleans
- Continued participation in BOFs and presentations

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Twitter: guyavital



Expanding the RIPE Atlas Program in North America

About RIPE

- RIPE Network Coordination Centre is the RIR for Europe, the Middle East, and parts of Central Asia
- Part of RIPEs activities other than the allocation of IPs and ASNs includes the "Collection and publication of neutral statistics on Internet development and performance"
- This is where the Atlas project comes in!

RIPE Atlas

- RIPE is building the largest Internet measurement network ever made
- Atlas consists of over 3000 probes around the globe
- These probes are used to measure Internet connectivity and reliability in real time
- This provides an unprecedented view of the Internet from all corners of the earth

What gets measured?

- Worldwide DNS (root server) performance and reachability
 - Which root server instance is each probe reaching
 - What is the RTT to that root instance
 - What is the performance of that server (UDP/TCP)
- General Internet performance & reachability
 - RTT to fixed destinations
 - Reachability of fixed destinations
- Other measurements have been created to measure specific events

Previous Atlas projects

- Status of de-bogon-ify-ing 128.0.0.0/16
- Effects of Hurricane Sandy
- AAAA Filtering
- IPv6 /48 filtering
- IPv6 reachability before and during W6L
- Measuring DNS inconsistency
- See here for more info

Using your Atlas probe

- Powered by USB (500mA or greater)
- Internet connectivity via Ethernet
- It will attempt to configure itself with DHCP
- Uses 4-6 Kbps of bandwidth (< 2GB/mo)
- Needs to be able to do: DHCP, DNS, HTTP (S), and ICMP at a minimum
- Users can define their own measurements (UDMs)
- RIPE Atlas FAQ is <u>here</u>.

Register your probe!

 Do not take one if it will just get shoved into a desk drawer!