

#### **RIPE NCC Update**

Andrew de la Haye COO

Andrew de la Haye | April 2016 | ARIN 37

#### There's A Lot Going On...

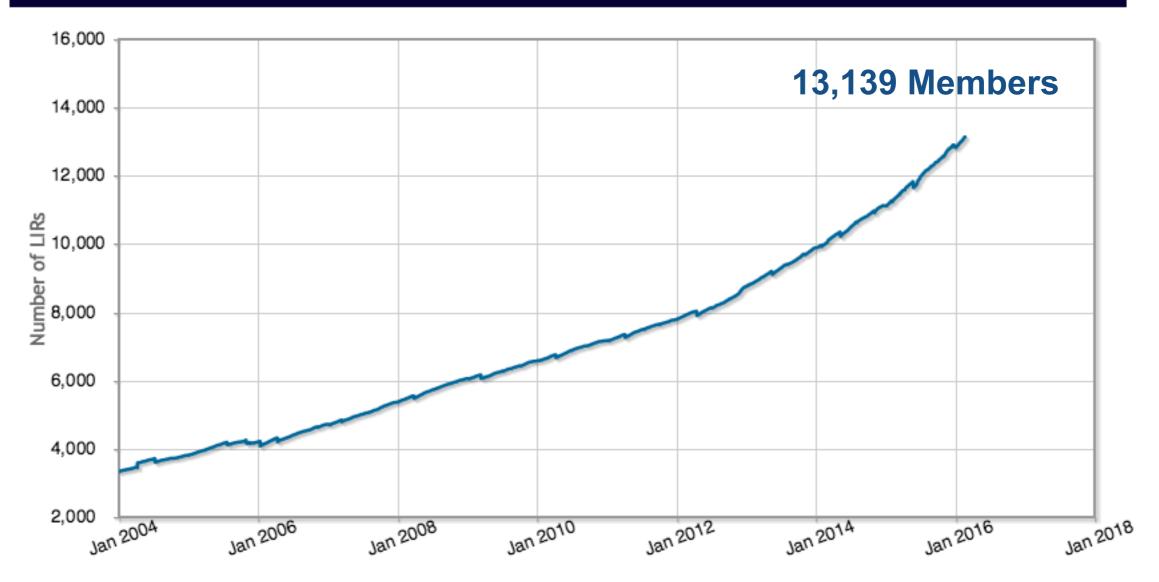


- A growing, changing membership
- A more regional approach
- Inter-RIR transfers
- Assisted Registry Checks
- RIPE NCC Academy
- And much more!

#### **Growing Membership**



#### **Total Number of LIRs**



#### Who Are These New Members



- Our membership is changing from simply ISPs, Telcos and NRENs
- Increasingly we're seeing IT services, manufacturers, enterprise networks
- How will we introduce them to RIPE and encourage them to participate
- Looking at how we categorise these organisations in our membership demographics
- RIPE NCC Survey in 2016 will try and gather their priorities and perspectives

#### **More Engagement With Members**



- Holding lightweight "member lunches" in cities where our staff already have another engagement
- Meetings last 2-3 hours and attract 20-30 members
- Typically we attract members who don't come to RIPE Meetings
- Members get an update on the latest news and a chance to meet with us in person - we get valuable feedback on their priorities

### ...And a More Regional Approach



- An office in Dubai, staff in Moscow
- MENOG, ENOG, SEE Meetings and one-off regional meetings
- Supporting NOGs and other forums wherever we can
- Translation project to make key documents available in local languages
- Monthly policy updates in Russian and Arabic

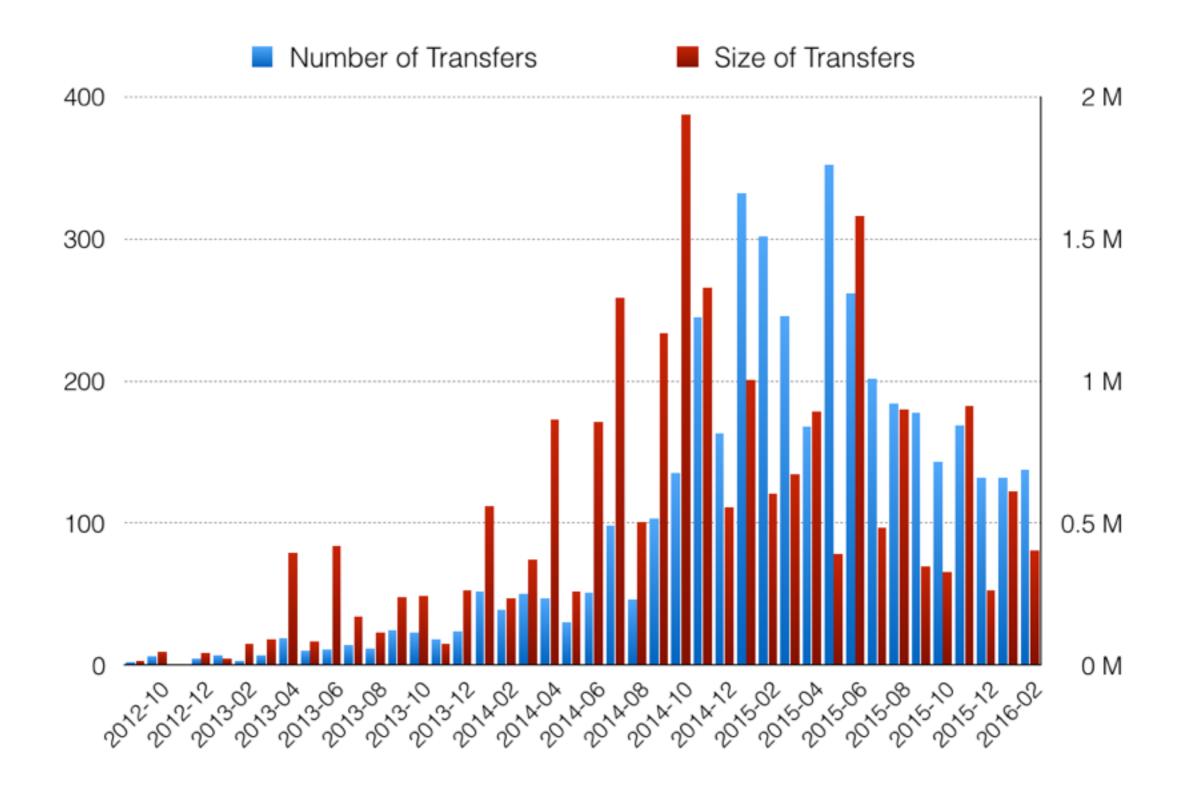
#### **Resource Transfers**



- All Internet number resources can be transferred within the RIPE NCC service region
- Number of IPv4 transfers increasing
  - 919 in 2014 2,701 in 2015 402 in 2016
- But less addresses transferred overall in 2015 than in 2014
  - 9.65m vs 8.69m (1.3m 2016)
- Some IPv6 (74) and ASNs (188), mostly when all of an LIR's resources are transferred

#### **Completed IPv4 Transfers**





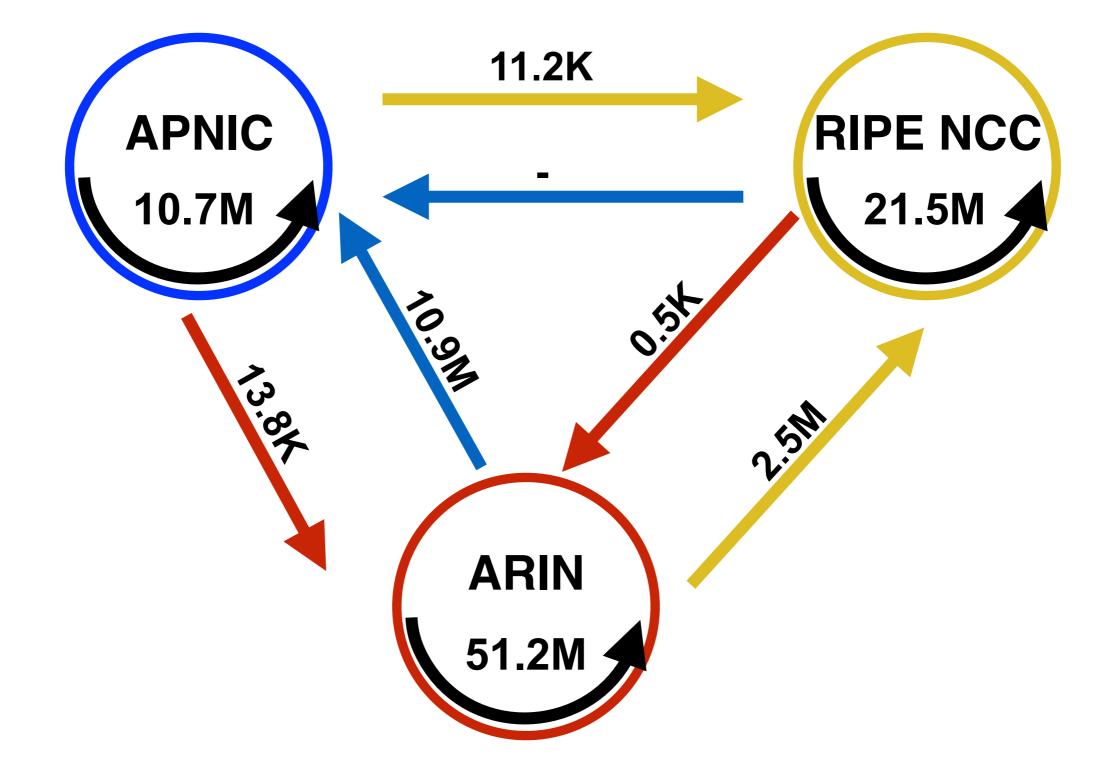
#### **Inter-RIR Transfers**



- Policy was implemented in September 2015
- Since then we've seen 19 inter-RIR transfers:
  - 45 address blocks
  - 1 outgoing to ARIN
  - 14 from ARIN, 4 from APNIC
- ASNs can also be transferred with APNIC

#### **Inter-RIR Transfers**





Note: March 2016

#### **Address Hijacking**



- Increased hijacking activity since IPv4 depletion reached
- 134 cases investigated in 2015
- Mostly targeting legacy and Provider Independent (PI) resources
- Sophisticated methods: re-registering expired domains, forged documents
- Urging our members to update their registry data to protect their resources

### Improving Members' Registry Data



- Assisted Registry Check (ARC) started in 2014
- A lightweight check of members' registry data conducted over the phone, with emails to follow-up
- Emphasis on adding value by helping members resolve issues, explaining policies
- A replacement of our previous audit activity

#### **ARC: Some Numbers**



"One of the RIPE NCC's key responsibilities is to maintain the accuracy and quality of the RIPE Registry"

Maintainer Password Recovery

**Routing Consistency** 

rDNS Consistency

182

485

594

2,200+ ARCs completed so far		То	ols & S
			LIR Por
95% of ARCs resulted	l in LIR data		RI
update!			IPv
	Action Taken	LIRs Helped	Trair
	LIR Portal Admin Privileges	537	
	LIR Contact Details	1132	
	Billing Issues	160	
	LIR Resource Registration	1194	
	PI Resource Registration	174	

Tools & Services Discussed		LIRs Helped	
1	LIR Portal / IP Analyser	699	
	RIPEstat	956	
	RIPE ATLAS	290	
	IPv6 RIPEness	371	
Rs Iped	Training Courses	1594	

Question Answered	LIRs Helped	
RIPE / RIPE NCC / PDP	211	
IPv4 Policy	1399	
IPv6 Policy	1142	
Transfers	374	

#### **RIPE Atlas**



- 9,400 connected probes and 177 RIPE Atlas anchors
- Not far from our goal of 10,000 probes!
- Find out how others are using RIPE Atlas:
  - <u>https://labs.ripe.net/atlas/user-experiences</u>

#### **RPKI Update**

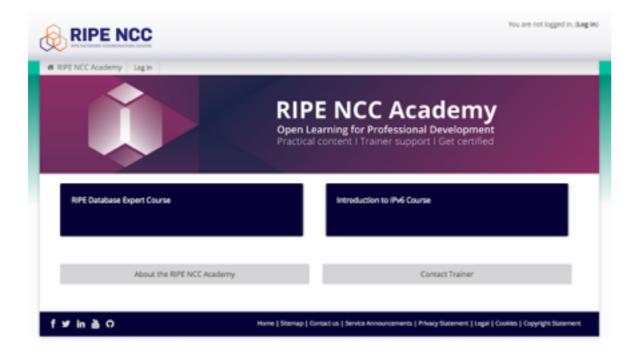


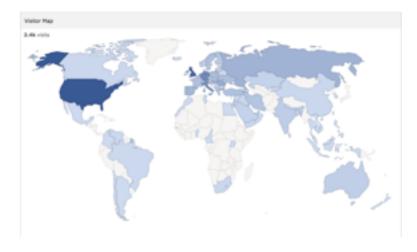
- 3,400+ members have requested a certificate
- Members have created ROAs covering:
  - 2,800 unique ASNs
  - 13,920 IPv4 prefixes, covering more than nine /8s of address space
  - 2,117 IPv6 prefixes; more than 11,771 /32 blocks
- All address space can now be covered
  - Including PI and legacy (contractual relationship)
- Increase in operational usage

#### **RIPE NCC Academy**



- Our new online learning platform
- Trainees can complete courses in their own time and be certified for their knowledge
- Complements existing courses and webinars already on offer





#### Join us in Copenhagen!





## RIPE 722 23 - 27 May 2016 Copenhagen, Denmark

Andrew de la Haye | ARIN 37 | April 2016



# Questions



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