



Career Path of a Network Professional

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Questions for the Panelists

- Share a pivotal moment in your career path which has led to your current job
- What qualifications or experience are you looking for in a candidate now, which had the tables been turned you would not have been able to satisfy early in your career?
- Tell us about any significant mentorship experience you've received, or current mentorship which you now give, relevant to your career.

Andree Toonk - Introduction

- Current role:
 - *Manager network engineering at OpenDNS (Now Cisco)*
- Current responsibilities:
 - *At OpenDNS I'm responsible for our global Network architecture, development, implementation and operations of the OpenDNS network infrastructure. Managing all aspects: automation, transit, peering, anycast, DDOS, routing, dc, etc.*

Andree Toonk – Trajectory

■ Relevant Education:

- *Bachelor Electrical Engineering.*
- *University of Amsterdam, System and Network engineering*

■ Career Path:

- *1996 - Selling lots of Dutch Gouda cheese.*
- *1998 - Helpdesk for dial-up ISP (Het Net, Netherlands).*
- *2000 - Junior sys-admin at ISP (part-time student job)*
- *2003 - Internship at Amsterdam Internet Exchange (AMS-IX)*
- *2005 - Graduated and started working at network group at SARA, Amsterdam, working on SURFnet network (Internet2 in NL)*
- *2007 - Moved to Canada. Got a job at The University of British Columbia as Network Engineer / Architect working on regional research network called BCNET*
- *2008 - Started BGPmon as a hobby project*
- *2012 - Started as Network Engineer at OpenDNS, now managing team of network engineers responsible for Cisco cloud security & OpenDNS*
- *to be honest, networking was just a backup plan.. selling cheese is my real passion. Maybe one day again! ;)*

Anna Claiborne - Introduction

- Current Role:
 - *PacketFabric: Co-founder/SVP Software Engineering*
- Current Responsibilities:
 - *Oversee all activities related to systems and software development, product development, and product management.*

Anna Claiborne - Trajectory

■ Relevant Education:

- *BS Genetics (relevant?)*
- *3 credits short of Minor in Computer Science (bit more relevant)*
- *Introduced to the Unix command line and talk command around 3rd grade, BBS thereafter*
- *Played a lot of Wolfenstein, Doom, and Descent*

■ Career Path:

- *1994 – Worked part time at a bank fixing Windows 3.11/NT computers. Ended up managing all telecom lines.*
- *1998 – Started software company and built a variety of web applications, including MediCal billing app.*
- *2000 – Joined Tower Records web dev team and made it into the top producing “store” in the company.*
- *2004 – Started DDoS mitigation company Prolexic. It was a brand new industry and sounded fun at the time.*
- *2008 – Joined Terremark to work on a variety of projects, ended up taking over as Security PLM.*
- *2011 – Joined start-up 6connect to run engineering for IP/DNS/Resource management, orchestration, and automation.*
- *2015 – Started PacketFabric to automate networking.*

Jared Mauch – Introduction

- Current role:
 - *IP Development - NTT Communications - Global IP Network*
- Current responsibilities:
 - *Research new technologies, architect solutions for network, liaison with internal groups, work with standards body groups, monitor industry trends, high-end customer support troubleshooting and root cause analysis. Team of hardware testing, software testing, new equipment qualification. Fixer of many things.*

Jared Mauch - Trajectory

■ Relevant Education:

- *No formal computer education; Basic, Quick-basic, 8086 assembler, 2 years of pascal in high school, taught self C*
- *Mentoring from senior staff for many years*

■ Career Path:

- *1992 - read Cuckoos Egg - became interested in UNIX, systems security*
- *1992 - Found 2 local dial-up unix systems, taught self unix.*
- *1994 - elected to board of directors of arbornet.org 501(c)3, one of the public access unix systems*
- *1995 - started working full time as UNIX sysadmin for CICNet, one of the regional networks; took on network role as well*
- *1996 - Contributed to many open-source projects*
- *1998 - Unix and network admin for growing midwest ISP (dial-up, dsl) Voyager.net VOYN*
- *2000 - Joined what is now AS2914, NTT Communications as operations engineer*

Kat Parsons - Introduction

- Current Role

- *Interconnection Specialist, Microsoft*

- Current Responsibilities

- *Work with companies who connect to the Microsoft global network, specializing in Internet Exchanges.*

Kat Parsons - Trajectory

■ Relevant Education:

- *Introduction to computers class at a Liberal Arts College*
- *On the job training and self study for technical certifications*

■ Career Path:

- *1999, started working in a NOC, second shift*
- *2002, worked for start ups and assorted jobs after “Dot-Com Bubble”*
- *2003, Worked as a IT consultant*
- *2005, Spent 8 years working as an Network Engineer at a Children’s Hospital*
- *2013, Joined Akamai as a Network Engineer*
- *2016, Joined Microsoft as a Interconnection Specialist (Career Change)*

Jason Schiller - Introduction

■ Current Role:

- *Google Network Operations*

- *Network Imagineer*

 - Standard network upgrades -> new design creation, validation, deployment, automation

- *Chief Numberista*

 - Oversee the numbers strategy for Alphabet

■ Additional Responsibilities:

- *NRO NC / ASO AC - Council Member*

- *IANA Numbering Services Review Committee - Committee Member*

Jason Schiller - Trajectory

■ Relevant Education:

- *American University - 1996*
 - International Relations - School of International Service
 - Environmental Studies - College of Arts and Sciences
 - Philosophy - College of Arts and Sciences

■ Career Path:

- *1995 - Lab Assistant - American University - Anderson Computing Center*
- *1996 - LAN Analyst - American University - University Computing Center*
- *1997 - Network Support Specialist - Georgetown University and GUMC*
- *1998 - WAN Engineer - ManorCare*
- *1998 - Internet Systems Engineer - UUNET - High Speed Installation*
- *2000 - Sr. Internet Network Engineer - UUNET - Network Engineering*
- *2011 - Network Imagineer - Google NetOps*

Kobi Hsu- Introduction

■ Current Role:

- *Only tangentially relevant here – big data, grid computing, systems engineering+ops for a research group*

■ Previous Role:

- *Member of Technical Staff, NetOps, Groupon*

■ Previous Responsibilities:

- *Network/datacenter expansion, monitor and operate the network within all Groupon datacenters, network architecture, integration, troubleshooting, saying no.*

Kobi Hsu – Trajectory

■ Relevant education:

- *No formal initial computer education... except that one semester of Pascal in high school.*
- *On-the-job sink-or-swim, lots of shoulder surfing and learning by osmosis.*
- *Went back to UMD a decade ago to get a degree. (shortest path to a degree was in Geospatial Information Systems. Degree still gathering dust, except for checking boxes.)*

■ Career Path:

- *1993: Lab Aide @eng.umd.edu (Sun, Dec, HPUX, Mac labs)*
- *1994: (Summer job in accounting at Digex) Jumped ship to be NOC staff, NACR@SURA.net*
- *1995: BBN acquisition of SURAnet, moved into Network Engineering for a network that was built of three distinct regional networks. Lead for IP Allocation.*
- *1998: Consulting Engineering for Juniper Networks, primarily embedded at UUnet.*
- *2001: Peering Manager at Abovenet/MFN*
- *2007: Tech staff at UMD Institute for Advanced Computer Studies*
- *2011: Systems Engineering for a small NLP startup that got acquired by 3M*
- *2013: Network Engineering at Groupon*

Dave Siegel - Introduction

■ Current Role:

- *Vice President of Product Management
MPLS, Internet Services, Managed Services, Hybrid WAN/SD-
WAN at Level 3*

■ Current Responsibilities:

- *P&L ownership of products. Set product requirements, create expansion plans, product improvements, set pricing strategy and pricing, manage costs, drive customer experience improvements, negotiate peering contracts and large customer contracts*

Dave Siegel – Trajectory

■ Education:

- *some college (ECE), executive training courses in Finance and Business Strategy, on the job training*

■ Career Path:

- *1992: Founded RTD (ISP, Unix & Network Consulting, customer software development, creators of UTA, User Tracking and Accounting for ISPs)*
- *1995: Director of Engineering for Net99 during this time. Built engineering and operations teams, and managed network during transition from NSFnet to the NAPs*
- *1996: Siegel Internet Engineering: a consulting and customer software development company for ISP's.*
- *1997: Sr. Backbone Engineer, Frontier Globalcenter*
- *2000: Director, Global Network Design & Implementation, Global Crossing*
- *2001: VP, IP engineering, Global Crossing*
- *2003: VP, Network Architecture & Long Range Planning, Global Crossing*
- *2004: Director, Product Development, Global Crossing*
- *2006: Vice President, Product Management, Global Crossing*
- *2011: Sr. Director, Product Management, Level 3*
- *2014: Vice President, Product Management, Level 3*

Dani Roisman - Introduction

- Current role:

- *Network Operations Executive IBM Bluemix Infrastructure (SoftLayer)*

- Current responsibilities:

- *Run department which monitors and operates the network within all SoftLayer datacenters and the associated global backbone.*

Dani Roisman – Trajectory

■ Relevant Education:

- *No formal computer education except one semester of Pascal in high school*
- *On-the-job one-on-one training from senior staff, and self-led learning through books*
- *Some employer-funded certification*

■ Career Path:

- *1995 - started working part-time jobs fixing computers at small offices*
- *1996 - One-man network/server/desktop technician for small game company*
- *1997 - Took helpdesk position at Sony Pictures which developed into:*
 - *Solaris sysadmin position for Columbia Tristar websites*
 - *Network engineering gear for the EverQuest and other Sony Online games*
- *2005 - Joined up with Peak Web Consulting to fix/expand/build other people's networks*
- *2009 - Took over management of the networking org at The Planet, which became Network Ops at SoftLayer -> IBM*