

Mark Prior

Personal Particulars

Name Mark Richard PRIOR
Telephone +61 414 725 855 [mobile]
E-mail mrp@mrp.net
Date of Birth 12-July-1961
Citizenship Australian and British
Education B.Sc (Ma) with Honours
Marital Status Single

Career Summary

Sep 2009 - present	Director	AusNOG Pty Ltd
Dec 2007 - present	Network Consulting; Photography	Mark Prior
Apr 2008 - Aug 2011	Asia Pacific Business Development Manager, Research & Education	Juniper Networks Inc.
Jan 2003 - Jun 2007	Network Architect; Chief Technology Officer	AARNet Pty Ltd
Nov 2001 - Nov 2002	Network Architecture Consultant	iagu networks
Sep 1996 - Sep 2001	Network Architect	connect.com.au pty ltd
Jun 1986 - Sep 1996	Senior Systems Programmer; Network Manager	University Computing Services, The University of Adelaide
Apr 1984 - Jun 1986	Computer Scientist	Integrated Silicon Design Pty Ltd
Mar 1983 - Nov 1983	Tutor/Demonstrator	Department of Computer Science, The University of Adelaide

Mark Prior

Notable Achievements

Role	Achievement	Value Realised
Director, AusNOG	Managed the AusNOG 2014, 2015 and 2016 programmes	Successfully sought presentations from international experts and coordinated the creation of a conference programme.
BDM, Juniper	Consulted with Dante on the design requirements for the European Commission sponsored Pan-Asian TEIN3 network and coordinated the sales activity with Juniper offices in Singapore and Hong Kong.	Having Juniper product used in the construction of a Pan-Asian network provided Juniper sales staff within the region opportunity to discuss Juniper's offerings as a case study with Dante's Asian partner networks.
	Presented on advanced technologies and use cases for Juniper products at a number of regional networking conferences.	Raised Juniper's profile among regional NREN managers.
Network Architect, AARNet	Lead the design and implementation of the AARNet3 national research network, including network builds in international locations.	The AARNet3 network has been longer lived than its predecessors and is largely architecturally unchanged for over 9 years.
	Initiated a programme of acquiring interconnection relationships with commercial Internet providers in order to reduce Internet transit costs.	Previously AARNet's Internet costs were solely dependent on traffic volumes and so highly flexible. By transforming the way that AARNet obtained Internet transit so that over 50% of traffic was obtained via "peering" not only reduced costs by that amount but also reduced the reliance on a single supplier.
Network Architect, connect.com.au	Created an IP address system to optimally assign IP number resources to customers.	Maximising use of the limited resource allowed connect.com.au to continue servicing customer requests for IP addresses while also persuading APNIC that we were good stewards of the resource and thus supporting our case for additional allocations.
	Created a routing configuration system for the NOC staff to allow them to create customer connections in a standardised manner.	Standardising configurations permitted easier troubleshooting of faults and sped up the provision of services to customers.

Employment History

Director at AusNOG Pty Ltd

September 2009 – present

AusNOG was established in 2007 to provide a technical forum for the exchange of information relating to provision of Internet services and related infrastructure services in the Australian telecommunications industry. The AusNOG board's primary focus is the organisation of an annual conference, the target audience of which is engineering staff associated with network design, management and provisioning of services within telcos, application and Internet service providers, and data centres.

For the past three years I have taken the lead for seeking out talks from local and international experts and creating a programme for the two-day conference that provides a broad range of talks of interest to the community.

Business Development at Juniper Networks, Inc

April 2008 – August 2011

I joined Juniper as an APAC subject matter expert specialising in the Research and Education (R&E) vertical in Juniper's Asia Pacific theatre (the theatre's regions were ASEAN, ANZ, Greater China, India, Japan and [South] Korea). The vertical was composed of organisations managing National Research and Education Networks (NREN), Universities, not for profit Research organisations and K12 School Systems. In practice I concentrated primarily on the NRENs and Universities as they provided the greatest opportunity for large-scale equipment purchases.

The role assisted the Enterprise sales executives to understand the particular demands of the sector and so helped them to match the business requirements of these organizations with the solutions that Juniper could offer. This was particularly important for the NRENs as they were managed out of the Enterprise teams even though their equipment requirements were more likely to mirror those of a second tier service provider.

I presented on Juniper solutions and industry trends at sector events, such as the APAN conference, as well as attending workshops and meetings with individual customers and potential customers.

I also worked with field marketing, education services and product management to provide programmes of interest to the sector.

I tracked developments within the sector globally so that I could provide technology advice to customers as well as product management and assisted in providing introductions between R&E organizations that were attempting to solve similar problems or were interested in similar research topics.

Chief Technology Officer at AARNet Pty Ltd

January 2003 – June 2007

AARNet is Australia's National Research and Education Network, a specialist Internet Service Provider owned by the Universities and CSIRO that provides network services to the Research and Education community. Most of Australia's 38 Universities used AARNet as their sole provider of commodity Internet access as well as providing access to other international NRENs such as Internet2 in the United States.

I joined AARNet to provide technical expertise for the refresh of the AARNet network and became a member of the team that ran that RFP process. At that time AARNet simply linked regional networks in each state using an Optus supplied ATM service that provided them with little control over the network. As well as working on the design for an AARNet owned and

Mark Prior

managed network and subsequently the evaluation of the equipment to realise it I was also involved in the discussions with the receiver for Nextgen Networks that resulted in AARNet entering a partnership with Leightons to purchase Nextgen and building its own nationwide DWDM optical network.

The new network required the selection, design and build out of new points of presence (POPs), including 5 new international POPs. During the build phase of the network I developed equipment configurations and tried to introduce processes developed at Connect to aid in the automation of network configuration.

I was the AARNet technical contact for the TEIN project, a EU sponsored project to enhance intra-Asian R&E connectivity.

As the peering coordinator for AARNet I successfully transformed AARNet from an organisation that purchased 100% of its Internet access from a single transit provider (Optus) to one that acquired more than 50% of its traffic via peering in Australia, Europe (DE-CIX, AMS-IX and LINX) and the west coast of the United States.

As a member of the senior management team I was also involved with the strategic planning for the organization.

Network Architect at iagu networks

November 2001 – November 2002

I joined iagu networks to help it grow from a single person company. iagu networks was a small network integration company that provided security consulting expertise, often to other integrators. As a result of its size I was often called upon to perform a pre-sales role when we were liaising with prospective customers.

iagu's focus was security in the SME market and so the opportunities were limited to use my networking skills. The activities more often involved configuring CPE routers in support of VPNs or building FreeBSD based firewalls.

Network Architect at connect.com.au Pty Ltd

September 1996 – September 2001

I provided specialist networking support to the Director of Network Services and strategic planning advice to connect.com.au (Connect) management. I also provide high-level technical support to the network engineers of the Network Operations Team.

Connect was a Cisco Powered Network and I was primarily responsible for Connect's routing architecture and its use of address space (IPv4 and IPv6).

Connect had a dedicated development team but as their skills were primarily Unix system related I often found myself doing some small development tasks for the Networks group that needed networking skills. These tasks included prototyping new customer traffic accounting systems (using cisco's Netflow), multicast engineering and router configuration management. Configuring peering sessions to external providers and peers and provide consulting to customers wishing to multi-home using a BGP based configuration. Liaison with Connect's customers in Adelaide and provide (limited) pre and post sales support to the sales team.

Technical Specialist at the University of Adelaide

June 1986 – September 1996

I was originally employed as a VMS systems programmer but became the Unix Specialist when the University's central systems started migrating from VMS to Unix (initially SunOS 3.2). Finally I effectively became the University's Network Manager as well as being a Senior Open Systems Support Specialist and Project Manager for the South Australian Academic Research and Development Network (SAARDNet) when the University deployed one of Australia's first

Mark Prior

cisco Systems routers (in 1989) and became the South Australian hub for the recently formed AARNet.

I designed and project managed the original microwave based installation of SAARDNet and also acted as technical liaison to the SAARDNet Board of Management and for SAARDNet to the other (academic) regional networks and the AVCC (Australian Vice Chancellors Committee).

I was also part of the team that ported the VMS based text editor "Ludwig" to Unix (Ultrix).

Computer Scientist at Integrated Silicon Design Pty Ltd

April 1984 – June 1986

During the time of my employment ISD were developing a suite of mask level VLSI design tools as well as being the agent for a design suite from the Microelectronics Center of North Carolina (MCNC). I was chiefly responsible for the design and development of their network extraction tool as well as porting the MCNC suite from Unix to VAX/VMS. I produced software releases and provided software support to ISD's customers. I also evaluated the company's software and hardware requirements.

Associations

Member of the ACM (Association for Computing Machinery) since 1983.

Member of the IETF (Internet Engineering Task Force) since 1992.

Publications

RFC 1562: Naming Guidelines for the AARNet X.500 Directory Service

RFC 2007: Catalogue of Network Training Materials

RFC 2650: Using RPSL in Practice

Skills

Network Design

BGP, OSPF, ISIS, IPv6, MPLS, QoS, VLAN

Vendor Agnostic – Experience with Cisco, Juniper, Brocade, HP

Network Build

Greenfield sites

Enhancing operational networks

Domestic & International locations

Network Troubleshooting

Programming

Perl

Develop tools to configure and manage network elements;

Develop tools to support analysis of traffic patterns

Certifications

Juniper: JNCIP-M #00377

Cisco: CCNA