### Andrew Crane Big Canoe, GA 770-355-9611 <u>fairalbion@gmail.com</u>

My specialty is information technology in general and, in particular, DDI (DNS [Domain Name System], DHCP [Dynamic Host Control Protocol] & IPAM [IP Address Management]). I managed systems in complex environments that provided external & internal DNS services, DHCP, and IPAM. I helped companies sort out their IP addressing schemes: public and private, and also their portfolios of internet domain name registrations.

#### Expertise

- Internet domain names: registrars, renewals, name server records.
- > Domain Name System (DNS) internal & external
- Working with Internet service providers to resolve end-user problems

#### ACCOMPLISHMENTS (2010s onwards)

- 2018-20 Deployed new (& upgraded existing) DDI management systems. Integrated systems (Retired) following acquisitions. Created how-to videos for junior staff.
- 2017-18 Built proof-of-concept caching recursive DNS servers on embedded systems -Unbound running on FreeBSD. Optimized low-bandwidth internet connections to improve latency-under-load performance
  - 2016 Rolled out new BlueCat-controlled DNS server cluster authoritative for several hundred zones, incl reverse space. Fixed deployment & zone sub-delegation issues. Documented DNS how-tos for customer support representatives. Researched & implemented SPF DNS records for 50-odd mail domains - cutting down email fromaddress forgeries. Implemented new network monitoring system (Intermapper). Troubleshot & fixed issues with XHA BlueCat DNS server clusters. Fixed slow name resolution problem through DNS tuning (Windows Server 2008 R2)
  - 2015 Managed migrations of appx 2,000 users to new email systems: multiple tenancies & domains. Implemented agency's transition from traditional Windows file sharing to Synology DSM-based private cloud. Diagnosed and fixed major network problem caused by unauthorized bridging device. Deployed new firewalls. Designed & rolled out new wireless network.
  - 2014 Managed migration of appx. 40 web sites/domains to new hosting hardware: managing DNS changes, communications with webmaster, sysadmins & users. Created screencast on URL filtering using open source techniques.
  - 2013 Managed emergency project of moving appx. 140 sites simultaneously to new centralized URL filtering systems. Installed low-cost open-source-solutions (squidGuard). Saved expense of licensing new proprietary systems. Migrated client from Windows Server 2003 to Server 2008 R2.
  - 2011 Implemented new network for client at new office location. Moved client firm to new ISP, migrating from POP/SMTP to ISP-hosted Exchange Server. Made needed changes to Windows clients, DNS records etc.

- DDI Systems management (DNS, DHCP, IP address management) – Infoblox & BlueCat
   Windows Active Directory – DNS, DHCP
- Windows Active Directory DNS, D
  Google Workspace (G Suite)

## **Andrew Crane** Big Canoe, GA 770-355-9611 fairalbion@gmail.com

### JOB HISTORY (2000s onwards)

ARRIS Inc., Suwanee, GA. December 2018 – March 2020 Staff IT Networks Engineer

> IT Level 4 position on Networks team. Reponsible for domain portfolio, IP addressing schemes, domain name systems and DHCP.

QTS REALTY TRUST, INC., Suwanee, GA, April 2016 - October 2016 Cloud DNS Engineer

Administer authoritative and recursive DNS infrastructure (BlueCat DDI)

> Commission & put in production authoritative **DNS** infrastructure

> Work with Windows & Linux admin teams on name resolution issues

### BOARD OF REGENTS, UNIVERSITY SYSTEM OF GEORGIA, Atlanta, GA 2014 - 2016 Senior Network Engineer

➤ Mentor & train IT administrators & technicians

> Oversee network infrastructure at four locations

➤ Migrate agency to new policy-based wireless network

➤ Run multi-tenanted hosted services for state's public libraries: DNS, email, mailing list, web.

Maintain & upgrade IT infrastructure

Setup network management systems (SNMP)

Provide second & third-level support for

Provide fourth-level resource for name

resolution issues escalated from support

Roll out new systems to replace recursive name server infrastructure.

IT administrators

teams

Created user training screencasts (Camtasia) to assist migration to new systems (VPNs / web-based email)

### PRINCIPAL, INTERLEAVE GROUP, INC. Johns Creek, GA, 1999 to 2014

- ► Information technology consulting for small businesses
- > Subcontracted as senior IT Operations resource at > Assist clients with migrations to new network Georgia Public Library Service
- > Deployment of smartphones using policy-based rules in corporate environment
- Implement centralized hardware monitoring systems (SNMP & WMI)
- service providers

Assist clients with deployment of new hardware: servers, network attached storage, switching hubs, Wi-Fi controllers & access points

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## PROFICIENCIES

- ➤ Firewall & Router configuration
- ➤ IP Address management & subnetting
- ➢ Windows, macOS, Linux

- ➢ Infoblox IPAM systems management
- > DHCP IP networking
- ➤ French (ILR Level 2)

# EDUCATION

Sevenoaks School Kent, England Advanced Level General Certificate of Education majors:

- ➤ Business Studies
- > French
- ➤ English