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## Professional Profile

An experienced CCNP certified IT professional with 15 years’ experience with extensive knowledge of design, architecture and support work within the IT industry.

I have experience working for multiple large IT focused businesses, with both service provider and enterprise backgrounds delivering all levels of provisioning, support and troubleshooting techniques to businesses, along with managerial and leadership skills.

## Technical Expertise

* Expert knowledge in Routing & Switching
* Cisco ACI & other SDN technologies
* Cisco ASA & FirePower Firewalls
* RIPE Administration
* Huawei Routers & Switches
* IP Transit & Peering
* Juniper Routers & Firewalls
* Fortigate Firewalls
* Palo Alto Firewalls
* Cisco ACE / F5 BIG-IP & NetScaler Loadbalancers
* MPLS Networks & Design
* BGP
* Cisco Nexus
* Cisco ASR’s
* OSPF, EIGRP, RIP
* QoS (MQC,CBFWQ,MLS)
* Catalyst VSS
* IDS/IPS Deployments
* Aruba Wireless & Clearpass
* SNMP & Monitoring Solutions (OpenNMS / NNM / OpsView / Cacti / Prometheus)
* Docker / Container Technologies
* VPNv4
* Linux & Bash Scripting
* STP/VTP
* Datacentre Technologies such as (VXLAN, FabricPath, OTV)
* WAN/LAN Technologies
* VoIP (Cisco & Broadsoft)
* IPSEC VPN’s
* ESX – VmWare
* ELK Deployments (IDS/Machine Learning)

## Career Summary

**October 2017 – Current Sky Betting and Gaming**

**Lead Network Engineer (Technical Lead)**

I currently work as a Lead Network Engineer at Sky Betting and Gaming. I am technically responsible for maintaining the availability of the entire Sky Bet network infrastructure, ensuring all designs and implementations are delivered to a high standard and that every service maintains a high level of availability to support the business and its growth.

I have worked recently on a Core Network refresh replacing legacy Catalyst and Nexus infrastructure to new Cisco ACI spine and leaf architecture enabling a Software-Defined approach to networking to support the fast & agile environment of SkyBet. This enables the business to deliver services fast and provides the correct environment to support future automation and virtualisation and container technologies to support the growth of the SkyBet business, as part of this work I was also heavily involved in the new DC build, which includes decisions around cabinet layouts, ToR/EoR deployment decisions and structured cabling designs to support a brownfield migration and a future proofed design that allows the business to expand

I work closely with business owners to ensure we are continuing to meet the demands of our internal and external customers ensure our new services meet their requirements, I am also responsible for the network technical roadmap, to ensure all our services remain on the latest technology and using business leading technologies.

During this role, some of the achievements were

* Deployed a QoS solution that supported the business’s VoIP Telephony solution across multiple sites
* Deployed and Migrated legacy Core Network in production Sky Bet DC onto a Cisco ACI SDN solution providing a non-blocking spine & leaf architecture to provide upto 120G throughput per leaf, this consisted of Cisco Nexus hardware
* Setup SkyBet LIR with RIPE and migrated RIPE assets across to SkyBet as part of the BSKYB seperation
* Involved in the SkyBet DC re-fit including things like cabinet layouts and spec, structured cabling, DC cooling and power distribution
* Office Network designs to support multi-vrf solutions for things like Staff WiFi / Guest Internet / IoT
* IP-Transit solution to support 50Gbit of Internet throughput, supporting load sharing such as ECMP/Multipath
* DDoS solution using Prolexic/Akamai to protect SkyBet IP Transit services
* Implemented Corporate WAF solution to protect SkyBet users via a content filtering service (Umbrella/Zscaler)
* AWS Transit-VPC solution to

**Responsibilities**

* Provide and contribute towards budget requests and business cases
* Define strategic roadmaps for all Networking & Security infrastructure
* Technical Design Authority for all SkyBet Network Services
* Key influencer in all Infrastructure designs and deployments
* Responsible for ensuring stability and operational availability of all network services.
* Present designs and business cases to key stake holders and gain buy-in

**Jan 2016 – October 2017 Sky Betting and Gaming**

**Senior Network Engineer**

I currently work as a Senior Network Operations Engineer at Sky Betting and Gaming. I am responsible for maintaining the availability of the entire Sky Betting and Gaming network infrastructure along with implementing new equipment and systems to improve the reliability and availability of the infrastructure. I also have input and visibility of new designs/solutions due to go live, which requires me liaising with Technical Architects and Lead Engineers.

During this role, I also was involved in the following projects

* DC Relocation, moving one of our DR Datacenters to a new DC facility in the UK, this required detailed level of planning and tactical network connectivity to support the migration away from the legacy DC. We deployed Cisco ACI here as a greenfield deployment
* Deployed a SkyBet MPLS network whilst migrating away from BSKYB to support and provide a network capable of expanding the business in the UK and around Europe
* Upgrade Internet Edge to Multi 10Gbit IP-Transit peerings
* Implement a DDOS Solution to protect our IP-Transit services
* Involved in Deploying an Aruba Wireless solution

**Responsibilities**

* Ensure all network equipment is secure and complies with Internal and External audit requirements such as PCI
* Post Incident Review to determine root-cause and understand how our network can be better monitored/designed to prevent such failures re-occuring
* Ensure Maximum Network Availability
* Monitor network performance and recommend improvements and upgrades where necessary
* Work closely with other tribes to understand new products or enhancements to existing services and what
* Working with Suppliers and third parties to resolve incidents and implement service improvements
* Proactively seek improvements to current infrastructure
* Deliver processes & technical solutions on a wide range of technologies

**July 2014 – December 2015 Redcentric PLC**

**Network Project Engineer (Service Delivery & Design)**

I worked as a Network Project Engineer at Redcentric PLC. This involves designing, provisioning and deploying new customer solutions utilising a UK Core MPLS Network. As part of a new project I would first be handed a high level network proposal from our Pre-Sales team. I would then evaluate the suggested solution and design a low-level network diagram, including my suggestions for the type of media and devices that are necessary to fulfil the requirements.

Once the customer has agreed the solution, I was responsible for rolling out the deployment, creating documentation and supporting other colleagues such as field engineers, who are also involved in delivering the project.

My job required having a vast amount of Cisco Networking and Security knowledge, ranging from CCNP to CCIE. I pride myself on having an assertive and professional work ethic and being able to confidently liaise with other technical consultants and engineers.

I am respected as a senior in my team, and therefore I take the lead on the majority of our larger contracts.

**Responsibilities**

* Designing customer solutions – This involves working with clients to ascertain their requirements and make suggestions for improvements where necessary.
* Perform initial template builds for large deployments so other engineers can progress the delivery and roll out the solution.
* Analysing any data and diagrams that have been put together by our pre-sales team to ensure that all the technical and customer requirements have been met in the most effective way.
* Train and mentor other members of staff, including an off-shore team based in India and new on-shore recruits.
* Deploy large scale network deployments for multi-million pound contracts.
* Currently assigned as Lead Technical Engineer for 4x multimillion pound deals ranging from (2-7 million) these include Government, NHS and Corporate contracts
* Involved Internally for developing and testing new products relating to network and security services
* Responsible for ensuring jobs are resourced appropriately and that deadlines are met
* Work with allocated Project Managers to ensure a solution is delivered according to agreed deadlines and SLA’s
* Working with VoIP project engineers to ensure that the network is adequate to support any VoIP solutions for example QoS
* As part of the company merge of InTechnology and Redcentric I was involved in the initial migrations and designs of migrating customers from existing legacy equipment across to the new core network as part of a business asset consolidation project.

**Knowledge & Experience**

* Advanced Knowledge of deploying WAN and MPLS services to customers
* Configuring MPLS-VPN’s on a large national core network
* Configuring and suggesting improvements to our Core network to aid customer deployments.
* Vast knowledge of MPLS networks and how to deploy services on them.
* ASR’s / PE Routers / P routers / CE routers
* Extensive Knowledge of BGP
* Deploying Load Balancer Solutions such as Cisco ACE and more recently Citrix Netscalers
* Deploying enterprise grade firewalls for customers ranging from Cisco ASA’s to Palo Altos
* Deploying IDS/IPS solutions for customers.
* Providing IDS/IPS reports to customers and making suggestions to their environment.
* Installing Content Filtering solutions for customers using Next Generation Firewalls
* Product Development
* Detailed network documentation
* Specify and Design network and security equipment based on a customer’s requirements

**April 2013 – July 2014 InTechnology PLC**

**Senior Network & Security Engineer (3rd Tier Support Team)**

I worked as a Senior Network & Security Engineer on a 3rd Tier specialist support team at InTechnology PLC. This role involved supporting live customer solutions, troubleshooting network and security problems, and carrying out regular maintenance upgrades of customer network and security equipment.

Predominantly I would work on customer faults ranging from low priority to critical, which provided me with skills such as working well under pressure and working within tight time constraints. I was a senior engineer on this team; therefore, I acted as an escalation point for all major issues.

I was also responsible for carrying out any network or security changes required by the customer, such as firewall changes (creating VPN tunnels and routing changes).

**Responsibilities**

* Fault finding 3rd line network problems – including testing a proposed fix and then rolling it out if successful
* Liaising with existing customers to implement and design new solutions or additions to existing services
* On call for 3rd line Network/Security products and solutions
* Training other members of staff
* Escalation point for other team members
* Carrying out firewall changes
* Working with 3rd Tier VoIP specialist engineers to troubleshoot any VoIP faults that over-lapped into a network fault
* Creating (scripts) / (programs) to help speed up maintenance??? Or troubleshooting?
* Creating documentation for other colleagues to use

**Knowledge & Experience**

* Cisco PIX/ASA experience to a CCNP Security level
* Cisco IOS experience and knowledge to CCNP R&S level.
* Cisco NX-OS, XE, XR Software (Nexus and ASR’s)
* Excellent knowledge of MPLS & VPN technologies
* Routing Protocols like BGP/OSPF/RIP/EIGRP
* Mesh/Hub +Spoke MPLS VPN’s
* CCNA Certified
* Juniper (JUNOS) knowledge
* Cisco ACE Load-Balancers
* Excellent understanding of Linux Operating systems

**March 2008 – April 2013 InTechnology PLC**

**Support Technical Team Manager (2nd Tier Support Team)**

In this job I was responsible for managing and motivating a technically skilled team of 16 people, who have a vast amount of knowledge on all InTechnology’s services which include Cisco devices / Networking / VoIP / Firewalls / MPLS networks and Data Services, such as exchange and data backup.

I was also responsible for ensuring the team were continually meeting SLA’s defined in the Customer Service Plan for all products and services. I personally trained the members of the team to improve their technical knowledge and skills, this included product based training (new and existing), skill based training, troubleshooting using a methodical approach, finding, implementing and testing a solution, understanding terminologies and configuration. All of which I have either self-taught or attended training (in-house or external).

Other responsibilities include

* Point of escalation for technical problems and customer faults
* The “go to” person for all DSL related queries.
* Identify improvements within the support department to aid staff and improve customer satisfaction
* Ensure the support team are working to ITIL standards
* Managing and maintaining an office & media network on a multi-million pound motor yacht, including IPSEC VPN tunnels, TV/Satellite streaming, secure data backup, wireless connectivity, NAS storage and cisco networking equipment.
* Writing scripts

**Knowledge / Experience**

* Trained a team of 16 2nd line analysts to be more advanced in their diagnosis resulting in a 20% increase in their fix percentages over a period of 6 months. This involved cross training people with higher skilled engineers and also training 1st line engineers to ensure the right information is gathered to ensure the 2nd line engineer has all available information to diagnose and resolve the issue.
* Performed testing of IOS and ADSL firmware versions on cisco routers to ensure they are compatible with BT’s infrastructure. This was fault driven due to stability issues with the 20CN and 21CN BT broadband technologies.
* Developed, built and maintained an SNMP monitoring server which polls devices and collects DSL statistics such as (SNR / Attenuation / Speeds / network throughput) this was created to aid with fault diagnostics
* Worked with the Operations Systems Support Team to develop and integrate DSL diagnostics and fault logging within the Incident Management system. This feature meant that certain processes were automated therefore making the task less time consuming and resolved faults more efficiently.
* Developed script, which automatically verifies and if necessary upgrades the IOS and firmware versions on Cisco networking devices. This was carried out on 5000+ Cisco nodes across the InTechnology estate saving weeks of manual work
* Developed a program which validates current bandwidth usage against the total bandwidth that is allocated on each core LNS. The program automatically load balance by re-distributing any high usage end-points keeping the concurrent usage even across all locations.
* Created a monitoring tool that ensures any DSL solutions are using the same LNS. The DSL bonded technology requires this configuration to be able to effectively load balance traffic across both DSL lines. The monitoring tool will pro-actively relocate any DSL lines that are not using the same core device.

## April 2007 – March 2008 InTechnology PLC

## Support Technical Team Leader (2nd Tier Support Team)

## Supervised a team of 3 people working continental 12 hour shifts, I was responsible for

## Performing 2nd/3rd line support for all InTechnology services in and out of hours

## Managing and resolving Major Incidents affecting a large amount of customers. Including resolving the incident in hand as effectively and efficient as possible, ensuring any affected customers were updated on a regular basis.

## Performing yearly reviews for my team

## Developing new processes to improve my team’s overall efficiency and improve customer satisfaction

## Training staff on all InTechnology products

## Training staff on Cisco technologies and fault-finding techniques

## Training staff on Windows Servers including Exchange, Active Directory

* Escalation point the 1st Line support team, my team and all InTechnology customers out of hours
* Including all of the duties within the “Support Analyst” role

**July 2006 – April 2007 InTechnology PLC**

## Support Analyst (2nd Tier Support Team)

## Worked as a 2nd line support engineer as part of a 24x7 operation team.

Responsibilities within this role included

## Working with and resolving issues with DSL Technologies (ADSL / SDSL), and LES technologies (Ethernet/Fibre 10/100/1GB circuits)

## Fault finding on Cisco Routers / Switches & Firewalls

## Experience working with MPLS network’s

## Good understanding of VRF's/VLAN's

## Good understanding of routing protocols such as RIP/BGP

* Good understanding of Linux operating systems

## Microsoft Server 2003

## Managed Exchange Servers

## Managed Active Directory Servers

## Managed Backups Services (Evault & Asigra)

## Meeting SLA's for different priority faults

## Working to ITIL standards

* VoIP - Broadsoft

## November 2005 – July 2006 InTechnology PLC

## Desktop Support Technician

Worked as an Internal Desktop Support Engineer, providing IT and Network related support to 200+ users at InTechnology.

Responsibilities within this role included

## Maintaining internal cisco switches, setting up new VLAN’s and switch ports

* Organising desk moves and ensuring the relevant network patching and switch configuration was setup, and in place prior to the desk move to ensure minimal downtime

## Maintaining internal systems such as exchange 2003, active directory, blackberry servers, NTFS file servers, Print Servers, Antivirus Server

## Managing and prioritising tickets to ensure internal user issues are resolved according to SLA's

## Repairing faulty PC's and laptops (such as memory replacements, hard drive replacements, motherboard upgrades, CPU replacements)

## Qualifications & Expertise

* CCNP R/S Certified
* CCNA R/S Certified
* Advanced Cisco ACI experience
* CCNP Security experience
* F5 BIG-IP
* Juniper Routing & Firewalls
* Palo Alto
* Citrix Netscaler
* Microsoft Server 2003 certified (MCP)
* ITIL V3 certified
* Service Desk Institute certified
* Time Management training (Q&A)
* Management Training including, Time Management, Prioritisation, dealing with difficult situations (Q&A)
* How to become a leader (Q&A)
* NVQ Level 3 in Information Technology (Leeds College of Technology)
* GNVQ in IT (A Level)
* Maths / English / Science (B-C at GCSE level)

## Other details

# Driving licence Full Clean UK Driving license

**Interests include** Football, IT & Network & Security

**ISO/PCI** Use to working in an ISO 27001,ISO 9001,PCI-DSS / SOX organisations

References

Technical and Personal references are available on request