

LINUX

I have experience with several flavours including: Debian, RedHat, Mandriva, and Centos. Good knowledge of IPTABLES Bash scripting and many open source packages e.g. Samba, Apache, Nginx, Exim, Dovecot, Squid, Webalizer, Nagios, openssl

AWS

I have experience with EC2, VPC, ELB, DynamoDB, Cognito, S3, Cloudwatch, Autoscaling groups, Route53, Lambda, API Gateway, IAM, EFS, RDS

CISCO

I have extensive experience with a wide variety of Cisco products; implementing wide and local area networks as well as data centre systems. UCS, ASA, NxOS, IOS, Aironet access points, VPN, NAT, MPLS, RSTP, LACP, OSPF, BGP, EIGRP, IPv6, QoS, DHCP

SDWAN: I designed and deployed a full SDWAN solution for paysafe globally

Perl: I am very capable in perl. The netbanx platform is written exclusively in perl and I have helped debug issues on numerous occasions. It is my preferred language for small scripts.

Python: I have very competent with python I migrated a WEB bookings application from perl standalone to Python in AWS. I wrote a CI/CT/CD system for Paysafe puppet deployment.

AWS: Considerable EC2 experience. Cloud migration projects using S3, EC2, Cognito, Dynamodb, ELB, Lambda, Route53, CloudWatch, cloudfront ApiGateway and IAM

Git: I am very familiar with git and often help others when they manage to get their checkout in a mess

Splunk: I can write complex searches including joins to extract information required by the business. I am often asked by my colleagues to write searches for them.

Ansible: I use Ansible extensively for configuration of servers and cisco network equipment.

Puppet: I have in-depth experience with puppet. The entire netbanx platform was managed using puppet. I am also very familiar with rspec-puppet for unit testing of puppet modules. I am a great proponent of test driven development.

Atlassian Suite: I am very familiar with Jira, Confluence, and Bitbucket. Use of bitbucket for code reviews and I am familiar with Jira admin creating projects and workflows etc. I have completed a Jira admins course and I migrated productmadness' atlassian suite to AWS.

Docker: I am familiar with docker. I use it for rapid prototyping.

vmware/ESX: Paysafe's production and corporate systems ran on vmware as I played an active role in the deployment of new projects and debugging I am very familiar with the product.

F5 BIGIP: I am familiar with F5 setup in HA also. I am experienced in writing iRules and monitors

MySQL: Database creation, Replication, analysing slow queries, decoding bin logs and relay logs; again Netbanx uses a MySQL backend.

IPv6: I have studied IPv6 as part of Cisco training courses and done research on my own time to ensure I am ready for the inevitable. I completed the first IPv6 installation for Paysafe. using OSPF for routing. I also produced an internal study and proposal for how we could offer IPv6 connectivity for any customer that needed it. This included an internal testing facility.

ESX: I am very familiar with VSphere and ESX virtualisation.

UCS: UCS Deployment and Maintenance.

Kubernetes: some familiarity

Terraform: Very experienced using terraform on AWS (V0.12)

CERTIFICATIONS / QUALIFICATIONS

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|---|-------|------|
| Certified solutions architect (Associate) | AWS | 2019 |
| CCNP Switch Exam | Cisco | 2014 |
| CCNA | Cisco | 2012 |
| BA (Hons first-class) Mathematical Sciences | OU | 2004 |

COURSES

| | | |
|--------------------------|--|------|
| Kubernetes Microservices | udemy.com | 2018 |
| python 3 Deep Dive | udemy.com | 2018 |
| Mastering Ansible | udemy.com | 2018 |
| Lean Kanban foundation | Agile Mindset | 2014 |
| DCUFI | Global Knowledge | 2013 |
| DCUCI | Global Knowledge | 2013 |
| DCUCT | Global Knowledge | 2013 |

EMPLOYMENT HISTORY

2019 Productmadness

Senior systems Administrator

Productmadness lost two key IT staff at the end of 2018 and needed an engineer takeover with no handover and minimal documentation to audit their estate ready to handover to permanent staff once hired.

I have upgraded their jira, Confluence, Curucible and crowd servers to the latest version by building new servers in parallel and migrating the data. The new servers were provisioned using Ansible. I then migrated the entire atlassian suite to AWS using multi AZ and pilot-light DR in case of regional outage. The entire AWS infrastructure was built using terraform and ansible. I built a server-less application to trigger crucible updates following commits to github. I Built monitoring for their ESX estate using Grafana. Secured corporate servers by switching to HTTPS. Deployed Okta MFA for access to corporate services. Managed cloudflare CDN for corporate services. Migrated from Sophos to Cylance AV using JAMF scripts. Reviewed production AWS configuration and saved \$9,000 per month in AWS charges.

2018 Proevents Cloud migration project

This project involved moving an old LAMP program running on a stand alone server into AWS. I converted the code from Perl to Python, changed the database backend to Dynamodb in order to save costs. Converted from java script to HTML5 with JQuery. Used Cognito for user authentication. The server pool is auto scaling using AWS scripting. Code updates are deployed using Ansible.

**2015 - 2018 Paysafe holdings UK Ltd
(formally Netbanx Ltd)**

Infrastructure Architect

I Helped design and build 3 Data-centres and participated in the design of a fourth. I have been pivotal in the design and deployment of the SDWAN solution which has dramatically improved office connectivity while reducing overall costs by 50%.

I planned and supervised the deprecation of TLS1.0 and 1.1 for the production platform. For this migration I used docker machine on AWS for rapid prototyping of an NGINX proxy to deal with outbound TLS connections.

Improved acquirer route selection to increase redundancy and reduce downtime.
Planned and debugged the Global 802.1x deployment.

I was one of the primary support engineers for the UPP platform which processes \$22Billion annually. The UPP Platform is built using puppet from bare metal on RHEL servers and VMs. I was a key member of the team that wrote the puppet code to achieve this, I still help maintain it and train new staff on its principles. Deployment is CI/CT/CD using a python script which was 100% my innovation and implementation.

I conducted IPv6 research for paysafe and produced a detailed report on how we could offer IPv6 and test the facility. I built a parallel IPv6 stack for the Cambridge office for this purpose. My report also contained explanations for network and server engineers on how IPv6 works.

2012 - 2015 Netbanx Ltd

Senior Network and Systems admin

During my time a Netbanx I have been supporting production systems in North America and Europe. Played a major roll in the puppet-isation of the companies production systems re-design of the stack structure to support zero downtime releases.

I designed and implemented the corporate office move from Mount pleasant house to the vision park in Histon. This project was 6 months in planning and execution however we kept down time for the users to a single weekend effectively 0 working hours were lost.
Adapted office network to use VMPS to allow user mobility.