Linux and network

Since 2008

Linux (Ubuntu / Debian) and network are my two focus areas where I spend the vast majority of my time and efforts because they are tied so heavily together, in this area I work on everything from small in-house NFS systems to critical production HA / security core systems.

I work well within complex infrastructures often foreseeing consequences in one area due to changes in another by keeping a "bird's eye" view on the infrastructure through experience and detailed documentation that is either available from the get go or created myself.

Scripting and programming

Since 2010

I am frequently asked why I invest so much time into scripting and programming, where I also haven't met another SYSADM at my own level of skill in this area.

Through scripting and programming I have learned a lot about how processes are created, executed and destroyed which in turn gives be a better understanding of the software aspect of the operating system to better securing security, stability and optimization.

I believe in automating everyday tasks or services that can include but are not confined to:

- Backup
- Encryption / Compression
- User / service administration
- Tunnel creation and destruction
- Deployment

This frees up time for myself and colleagues and creates everyday structure and consistency that leads to less error prone recursive tasks.

Data crunching and monitoring

We generate a lot of data that needs to be handled either to serve a client, examine for security purposes, process through another service such as ElasticSearch, use for monitoring or something else.

Without having scripting / programming skills this would quickly become an enormous task, to satisfy this need I use

- Bash
- Sed
- AWK
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- Java

Visual presentation

Through scripting / programming I frequently create diagrams for data visualization and statistics to foresee bottlenecks, security issues within the infrastructure.

I use these tools to help me in my decision making for structuring my upcoming tasks and prioritization.

Scripting

•HTML   •CSS   •JS

Programming

•Java

•JSP

•SQL

Technical skill tree
- **OS**
  - Ubuntu
  - Debian
  - ZFS
  - EXT
  - Link bonding
- **Network**
  - VSLM
  - VLAN
  - TCP/IP
  - IPv4
  - IPv6
  - High availability
  - Cisco
  - IGP
- **Web servers**
  - Apache
  - Nginx
  - Tomcat
- **Security**
  - Iptables
  - Shorewall
  - Fail2Ban
  - VPN
  - SSH
  - IDS
  - IPS
    - Encryption
- **Monitoring**
  - Nagios
  - Zabbix
- **Programming**
  - Java
  - JSP
- **Scripting**
  - HTML
  - CSS
  - JS
  - Bash
  - Sed
  - Awk
- **Misalanious**
  - Raid
  - DHCP
  - Bind9
  - NAT
  - PAT
  - Postfix
  - MySQL
  - Backup
  - NFS
  - SAMBA
  - SSHFS
  - XenServer

- Virtualization