LAURENT GEHLEN

LINUX SYSTEMS EXPERT AND DEVOPS

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Skills

Operation System Linux

Standards definition, integration of Linux systems in a global infrastructure and implement the application requirements.

Security of Unix environment

Point of contact for the security topics on Unix, solution-oriented with an Unix expertise mind set.

Scripting and DevOps

Automation scripts, Description Infrastructure as Code, development of command-line tools and web interface.

Knowledge

- Red Hat / Debian / SLES
- Fedora / Ubuntu / OpenSUSE
- Satellite / Foreman / Pulp3
- AWS
- RHEV / KVM
- bind & dhcpd
- Apache / nginx
- MySQL
- DRBD
- Sendmail / Postfix
- NFS
- IPTables / IPFilter
- SELinux
- AD integrations
- Fail2Ban
- Kerberos
- Pen-tests
- nmap
- Shell script (Bash/KSH)
- Ansible / Chef
- Git / Subversion
- GitLab-CI
- Python
- PHP
- Agile / Scrum

Experience

Linux SME - UCB

08/2023 - 05/2024 (Current)

Consultant NSI sa

As Linux expert, I'm responsible for design and implementation of the Global Linux (RedHat) environment. I develop, automate and maintain configurations, deployment and maintenance utilities. I document procedures and practices.
I also manage the integrations of business applications and help the applications owners. Furthermore, I had to lead the operational team in India.

Linux Specialist - IBA

11/2018 - 06/2023

Consultant Huxley IT

My first mission as consultant!

The goal was to automate the deployment of the IT rack which is shipped with the proton therapy solution. This deployment consist of hardware provisioning, building a virtualisation layer, installing the operating systems (Debian, OpenSUSE, SLES and Windows) with all the applications on top of it.

Automation and orchestration is done using Ansible. From the deployment of the bootstrap server (dhcp, PXE tftp boot, dns, mirror of distro repos), the switches' configuration (VLANs and IP helper), the generation on the fly of response files (kickstart/autoyast/preseed/unattend), the disks' encryption management, the ESXi nodes' provisioning followed by the complete VMware cluster build, the SAN's configuration and volumes presentations, the installation of prerequisite services for the business application (NFS, NTP, Samba,...).
All that automated deployment was also adapted to rebuild an entire IT infrastructure for treatment centre in a virtual environment (Proxmox). That allowed us to put in place a CI processes to test our changes, but also provide a cheapper environment for developers and QA testers that they are able to reprovision on demand.

DevOps - StepStone
09/2016 - 10/2018

Infrastructure Ops

As part of the Operations team, I participate into day to day tasks like systems upgrades (aptly, apt-dater). On the other hand, as DevOps I'm working in project mode to improve the infrastructure service.
By designing and deploying managed tools my goal is to provide automated and foundation services to my team but also to Devs and DevOps of other teams.

Freshly arrived at Stepstone, I directly took part in the main project: migration of the production platform from our regional data-center to AWS. I was in charge of the shared storage of the back-end servers (NFS + DRBD) and also of the DNS migration (Route53 + pdnsd).
Then, I proceed into the review of servers inventory tool (Django, Python, MySQL). Improvement of the content by data consolidation, extension of data model: ownership and patching groups definitions, API's extension: writing of Quality Check and input (apt-dater, ansible, ...) views.
I was also working on the implementation of Ansible for config management and the beginning of provisioning on AWS and Nutanix (KVM).

Unix Designer - GDF-Suez Electrabel
10/2007 - 08/2016

Expert System Designer

Within the IT department of GDF-Suez, I am the Linux expert, in charge of all technical Linux related matters/applications. In addition, I fulfil the role of security officer's relay for the Unix team. Below is a detailed, but not exhaustive list of tasks I carry out as part of my job:

Tech Watch: Testing new hardware and technologies, new OS versions, and new applications (System oriented).

3rd Line Support: Performing Root Cause Analysis of complex issues, providing solutions for challenging problems and following up cases with providers/suppliers.

Development / Scripting: Automizing tasks (KickStart files, installation scripts, ...), improving tools by writing plug-ins, and developping tools for internal usage (like management web interfaces or 'wrapper scripts').

Operational Tasks: Operating production for complex or undocumented tasks, implementing new tools and services for Operations (like Cobbler, MediaWiki, SVN Repo, or several web interfaces)

Technical Writing: Drafting official documentation (like Standards, conventions, and Production Hand Books) but also more personal documents (like HowTo, Cheat Sheet and Notes)

Project: Maintaining close contact with the customers and application owners, but also interacting with the other teams, and delivering documentation (See 'Tech Writing' > 'PHB') and implementations.

Student training - Fabelec S.A.
02/2007 - 06/2007

Linux Admin Trainee

I started my training at Fabelec with a software upgrade on the entire existing Linux infrastructure. Afterwards, my task was to design a new turnkey mail service suitable for small and medium-sized enterprise. I defined the architecture and automated the full installation and the entire configuration. The objectivd was to be able to deploy easily a mail server on the client site with only an ISO, an internet connection and an answer sheet provided by the customer.

Education

A series of Red Hat Trainings:

- RHCE Rapid Track Course (RH300)
- Red Hat Enterprise Virtualization (RH318)
- Red Hat Enterprise Security Network Services (RHS333)
- Red Hat Enterprise Deployment and Systems Management (RH401)
- Red Hat Server Hardening (RH413)
- Red Hat Enterprise Performance Tuning (RH442)
- Automation with Ansible (DO407)

Graduate from the Haute École of Brussels (HEB)

- Bachelor, Computer and Information Sciences - Network and Telecom (2004-2007)

Certifications

Certified ScrumMaster - Scrum Alliance
CSM

Exam: 08-10-2015
Validity: 30-09-2017

Description: A Certified ScrumMaster® helps project teams properly use Scrum, increasing the likelihood of the project's overall success. CSMs understand Scrum values, practices, and applications and provide a level of knowledge and expertise above and beyond that of typical project managers. CSMs act as «servant leaders,» helping the rest of the Scrum team work together and learn the Scrum framework. CSMs also protect the team from both internal and external distractions.

Link: www.scrumalliance.org/certifications/practitioners/certified-scrummaster-csm

Red Hat Certified Engineer
RHCE

Exam: 10-10-2014
Validity: 10-10-2017

Description: An RHCE® certification is earned by a Red Hat® Certified System Administrator (RHCSA) who has demonstrated the knowledge, skill, and ability required of a senior system administrator responsible for Red Hat Enterprise Linux® systems. Professionals holding this certification have continually helped their companies with successful deployments and migrations.

Link: www.redhat.com/training/certifications/rhce/

Red Hat Certificate of Expertise in Server Hardening
RHCOE Server Hardening

Exam: 04-12-2015
Validity: 04-12-2018

Description: An IT professional who has earned the Red Hat® Certificate of Expertise in Server Hardening has demonstrated the knowledge, skills, and abilities needed to understand and apply standards-based best practices to secure Red Hat Enterprise Linux® systems against unauthorized access.

Link: https://www.redhat.com/en/services/certification/rhcoe-server-hardening

Red Hat Certified Virtualization Administrator
RHCVA

Exam: 30-03-2012
Validity: 01-10-2017

Description: The RHCVA certification is for system administrators whose responsibilities require them to have the skill and knowledge to deploy and manage virtual hosts in production environments using Red Hat® Enterprise Virtualization.

Link: www.redhat.com/training/certifications/rhcva/

Novell Certified Linux Administrator
CLA

Exam: 21-01-2011
Validity:

Description: The Novell Certified Linux Administrator is a certification for day-to-day administration of installed SUSE Linux Enterprise Server networks.

Link: www.novell.com/training/certinfo/cla/

Linux Professional Certification Level 1
LPIC-1

Exam: 07-02-2009
Validity: 07-02-2014

Description: The Linux Professional Institute Certification (LPIC) program is designed to certify the competency of IT professionals using the Linux operating system and its associated tools. It is designed to be distribution neutral, following the Linux Standard Base and other relevant standards and conventions.
It is first IT certification program to be professionally accredited by the National Commission For Certifying Agencies.

Link: www.lpi.org/linux-certifications/programs

Languages

French
Mother tongue

English
Proficiency

Dutch
Working knowledge

Others

Hobbies

- Linux and Free Open Source Sofrware
- Sports (Ultimate Frisbee, Field Hockey, Climbing, Biking, Dancing)
- DIY

Social / Community Involvement

- Scouts leader from 2001 to 2007 (Certification as a children's activities instructor/holiday camp monitor)
- SeRoM Wiki Administrator
- My GitHub Profil