Curriculum Vitae - Dag Wieërs - Linux Engineer

Personalia

Full name
Dag Johan Maarten Wieërs

Location
Ghent, Belgium, Europe

Phone
+32 478 436 299

Email
dag@linux.com

Most recent résumé and work
http://dag.wiee.rs/cv/
http://github.com/dagwieers
http://linkedin.com/in/dagwieers

Expertise and availability

Dag is an experienced/certified **Linux/DevOps system engineer** with a focus on Open Source software and Red Hat Enterprise Linux (RHEL), CentOS or Scientific Linux. With more than **22 years of experience**, he is one of the Linux pioneers in Belgium and known within the Red Hat, CentOS and Ansible communities.

Skills include:

- deploy, migrate, secure and manage Linux-based infrastructure
- design and implement system tools; package software
- improving hardware support; engaging vendor management
- capacity planning, troubleshooting and performance tuning
- hardening, security auditing, incident handling, ethical hacking
- automating using Ansible, Python and DevOps tools with attention to detail, documentation, standardization, procedures and policies

Dag is a freelancer **available for contract work** near Ghent, BE.

Work experience

Dagit May 2007 → now (+10.1 years)
Freelance contractor
Providing advice, functional design, technical implementation, documentation and support services.
Incl. D square/Trendminer, FedICT, KULeuven, MIVB, Nanopixel, Virtwo, Belgian Federal Police, Grondwettelijk Hof

Cisco Dec 2016 → now (4 months)
Ansible Automation Engineer *(Fixed-term assignment)*
I work for the Cisco TAC support services on LAB automation.
- Heavy integration for Ansible using Windows targets
- Automation and integration with AD, MSSQL, SCVMM, Openstack, ACI, CIMC, etc.
- Frontend and API development driving Ansible

Telenet Jan 2016 → Dec 2016 (1 year)
Ansible Automation Engineer *(Fixed-term assignment)*
I worked directly for the Yelo (OTT) and Digital TV operations team, responsible for integrating changes and rolling out new releases.
- Organizing Ansible/Git workflow and process for Yelo and Digital TV
- Knowledge transfer and training
- Ansible core/module/plugin/role development

KBC Securities May 2016 → Nov 2016 (7 months)
Senior Linux System Engineer
- Ansible automation (incl. inventory and module development)
- GitLab installation and migration
- Red Hat OSS (Keycloak) setup
- Red Hat Satellite 6 management
- Red Hat OpenShift Container Platform integration (Docker, Kubernetes)

ING Jun 2015 → Dec 2015 (7 months)
Linux System Engineer *(Fixed-term assignment)*
I was part of the *agile* infrastructure engineering team (IaaS).
- Assessed threats, vulnerabilities and compliance of existing RHEL deployments
- Authored a RHEL Operational Security Guidelines (OSG) and RHEL design document
- Involved in the migration of HP-UX and Linux systems to the ING Linux infrastructure

Hewlett-Packard May 2010 → Jun 2015 (5.2 years)
Linux System Developer / Engineer / Architect
Worked for various small and large HP projects and RFP processes.
- Troubleshoot SAN/multipathing performance problems, best practices
- Assessment and design of Linux reference architecture
- Red Hat Satellite design and implementation
- HP-UX ksh to Linux migration best practices
- Aided in various Linux-related business projects
- Identified Linux competencies throughout the organization

Incl. Belgian Federal Police, Dexia Technology Services, Atos Worldline, SWIFT, BNP Paribas Fortis, Proximus / Belgacom

Proximus / Belgacom Jan 2013 → Jun 2015 (2.6 years)
Linux System Engineer / Solution Architect
- Design and implementation of a monthly security patching cycle for 3500+ Linux systems
- Introduced emergency patch process in accordance with Change Management Office
- 10-point plan of action to improve the reliability of the Linux environment
- Auto-process coredumps, panics and crashes
- Red Hat Satellite redesign and integration
- Centralized syslog, clean-up of system/vendor facilities and severities and massive reduction of system events
- Assessment of possible attack vectors and potential advanced persistent threats
- 15-point plan of action to improve state of security and security practices
- Integration of Ansible for provisioning, (firmware) patching, connectivity testing and general maintenance, using Red Hat Satellite, vSphere, HP iLO, CMDB, Infoblox, etc., including Ansible module development
- Design and implementation of secured autonomous jumphosts with 2-factor authentication and idle timeout detachment
- RHEL7 refactoring for new system deployments
- Evaluation of Red Hat IdM (IPA), Gitlab and Jenkins
- 3rd level support, troubleshooting and design work
- Authored extensive roadmap with required changes and activities for UNIX/Linux Engineering

BNP Paribas Fortis May 2012 → Dec 2012 (7 months)
Domain Architect Linux *(Fixed-term assignment)*
- Solaris-to-Linux migration project
- Designed a RHEL6 standard operating environment (SOE)
- Implementation and automation using Ansible configuration management
- Integration with PXE/kickstart, HP Asset Manager/CMDB, VMware vSphere, RHEV/KVM, RHN, HP hardware, IBM Tivoli Monitoring, TSM, CommVault backup, Veritas Cluster Server, etc.
- Authored various Ansible modules and core changes
- Involved with TCO and ROI calculations for the migration
- 3rd level support, troubleshooting and design work

Belgian Federal Police May 2010 → Jul 2011 (1.3 years)
Linux System Developer *(Fixed-term assignment)*
- Implemented disaster recovery solution based on Relax-and-Recover
- Improvements to installation scripts, packaging and Webmin modules
- Automation and integration work
- Designed/implemented a samba/anti-virus solution
- 3rd level support, troubleshooting and design work

AXA Technology Services Nov 2007 → Mar 2010 (2.5 years)
Linux System Engineer
- Linux migration of Belgian data center to Germany
- Designed and implemented of modular framework and infrastructure for Linux and VMware ESX, used for deploying, retrofitting and validating Linux servers
- Tool for testing, troubleshooting and monitoring connectivity issues
- Implementation of various business projects
- Vendor management and problem management
- 3rd level support, troubleshooting and design work

EMC Jul 2007 → Dec 2007 (6 months)
Linux System Engineer *(Short part-time assignment)*
- Implementation of infrastructure for Novell SLES Linux deployment for technical development workstations
- Integration with Active Directory, NIS, ClearCase and VMware

Punch Telematix Jun 2007 → Sep 2007 (4 months)
Linux System Engineer *(Short part-time assignment)*
- Design and implementation of a technical documentation and versioning system
- Packaging for Novell SLES Linux
- General troubleshooting and automation

Euroclear Dec 2005 → May 2007 (1.5 years)
Unix System Engineer
- Deployment of Unix systems and services
- Design and implementation of management infrastructure (configuration, documentation and change management)
- Packaging for Solaris, AIX, Linux and VMware
- Custom software development
- 3rd level support, troubleshooting and design work

IBM internship 1999; Sep 1999 → Dec 2005 (5.5 years)
Unix System Engineer
- Implementation of outsourced business projects
- Packaging for Linux and AIX
- Implementation of various system and network services
- General in-house troubleshooting
- Design and implementation of Linux-based hosting infrastructure
- Developed a comprehensive resource and availability monitoring framework
- Responsible for capacity planning
- Linux-based firewall management framework

Linux and GPFS Consultant
- Designed and implemented solutions for automatic deployment of Linux clients, Point-Of-Sale systems, network services, clusters and big parallel storage systems for digital media projects,
- Linux GPFS specialist and all-round whiz-kid

incl. Real Software, VRT, EVS, RVA, Cortal Consors Bank, KBC

Mind Linux Solutions Oct 1999 → Apr 2001 (1.6 years)
Founder / Business Unit Manager
- Taking care of various parts of the organization, including sales and marketing
- Experience with project-management and pre-sales for a small (15 headcount) consultancy company.

Consultant
- Linux and Open Source consulting and training for several customers in on-site projects varying between 1 and 3 weeks.

SISA Software / Winsome summer job 1996-1997
Consultant
- Analysis and design of an off-line website generation program (further developed as WebEngine) and web-scripting
- Implementation of business projects, mostly web-based and database-driven

System Administrator
- Design, implementation and operational management of Linux infrastructure and routers

Provinciale Bibliotheek Limburg voluntary 1996-1997
System/Network Administrator
- Maintenance of 12 public Internet terminals (based on Windows 95) and an ISDN Internet connection

Internet Trainer
- Individual training and training in group regarding computer use, the Internet, search-engines and popular websites

Strengths and skills

Overall

- Analytical - ability to quickly learn and understand from self-study or analysis
- Structured - good understanding of project management and change management
- Thorough experience in Unix system administration, advanced automation and orchestration
- Thorough experience in configuring and deploying systems in a scalable and coherent manner
- Owner of various best practices regarding Linux system and application deployments, system maintenance and documentation, system security and Enterprise Linux in general
- Experience in developing and marketing products using the Internet and Internet communities
- Experience in project management and leading technical teams

Communication

- Direct communication skills - does not overpromise or underdeliver
- Team player - listen, share, cooperate and learn together as a team
- Presentation skills - experience with presenting for large groups in international settings
- Agile practices - experience with Agile methodologies for infrastructure management

Systems architecture

- Experience with designing Standard Operating Environments (SOE) and automating Unix-to-Linux projects
- Experience with designing Linux security standards and processes to harden existing environments
- Experience with designing Linux life cycle management and security patch management processes
- Experience with designing infrastructure for systems management, troubleshooting, monitoring and automating environments

Systems engineering

- Excellent knowledge of Red Hat Enterprise Linux internals, security best-practices, performance tuning and troubleshooting
- Excellent experience with enterprise automation and orchestration using Ansible and Red Hat Network Satellite and integrating with enterprise CMDB solutions
- Thorough experience with Red Hat kickstart and post-installation mechanisms for rapid mass deployment
- Thorough experience with building packages and automating enterprise software deployment
- Thorough experience in designing and implementing a multi-customer monitoring and reporting infrastructure
- Yearly attendance of various specialty conferences on Systems Architecture and Systems Engineering to discuss designs, implementations and tools in detail
- More than 15 years of operational experience in Unix environments
- Experience with vendor management and problem management (important track-record of design changes in numerous vendor software)

Operating systems / Software

- Excellent knowledge of Linux (since 1994) including Red Hat Enterprise Linux, Scientific Linux, CentOS, Fedora (but also SLES, Ubuntu, Debian, …)
- Excellent troubleshooting skills for debugging kernel, system or application issues
- Experience with various Unix systems including AIX, HP/UX and Solaris, mostly related to packaging, automation and troubleshooting. Limited hardware knowledge
- Thorough experience with configuration management tools (Ansible and Puppet) and inventory management
- Experience with managing and integrating with virtualization solutions, including OpenVZ, RHEV/KVM and VMware vSphere
- Experience with clustering, load-balancing, fail-over and disaster recovery techniques
- Experience with firewalling, virtual private networking and network intrusion detection (NIDS)
- Thorough experience in compiling, installing, and configuring of Unix system software, e.g. NFS, Samba, lpd and cups, Postfix, Amavisd, Bind, DHCP, XFree86, Apache, ssh, ntpd, Snort, Dante, RRDtool, Nagios, Webmin, Relax-and-Recover, KVM, …
- Experience with GPFS clustering and SAN environments (eg. for large digital media environments)
- Experience with various markup languages (HTML, SGML, DocBook, XML, CSS, AsciiDoc, Markdown)
- Experience with filtering, troubleshooting and programming TCP/IP network protocols
- Experience with managing and troubleshooting SQL servers (MySQL, PostgreSQL, DB2 and some Oracle) and applications using SQL

Programming languages

Active

Lua since 2006, Python since 2002, SQL since 1997, PHP since 1996, JavaScript since 1995, Bash and Unix shells since 1994, C since 1994, Perl since 1994

Passive

C#/Mono 2003 - 2005, RPG/400 1997 - 1998, Visual Basic 1997, Java 1996 - 1999, x86 Assembler 1992 - 1996, Pascal 1991 - 1999, Basic 1988 - 1990

Languages

- **Dutch**: native
- **English**: fluently spoken and written
- **French**: basic spoken and limited written
- **German**: limited

Education

Training and certification

Red Hat certified - verify
- Red Hat Enterprise Performance Tuning (RH442)
- Red Hat Certified Engineer (RHCE) - Scored 100%
- Red Hat Certified Administrator (RHCSA) - Scored 100%

Certified Ethical Hacker (CEH) - view
Certified Information Systems Security Professional (CISSP)
Process Communication Model (PCM) training

ITIL v3 Foundation (ILFN) certified - verify 5534051.20471350
PRINCE2 Foundation (PRI2F) certified - verify 5534051.20487125
Linux Professional Institute certified - verify
- LPI Certification level 3 (LPIC-3) - Senior level
- LPI Certification level 2 (LPIC-2) - Advanced level
- LPI Certification level 1 (LPIC-1) - Junior level

International conferences

Since 1997 I frequently attend international conferences related to Linux, Open Source, system and network security, systems architecture, RHEL, automation, programming, configuration management, monitoring, DevOps, hacking, etc.
On a yearly basis I usually attend FOSDEM, CfgMgmtCamp, LOADays, FrOSCon, T-DOSE and various Red Hat conferences.

Public speaking

On various occasions I have presented about different Linux and Open Source topics, including at the following conferences:
- **IoT Tech Day**, Utrecht, NL 2017
- **CfgMgmtCamp**, Ghent, BE 2014, 2017
- **FOSDEM**, Brussels, BE 2007 - 2009, 2017
- **Red Hat Tech Day**, Brussel, BE 2017
- **T-DOSE**, Eindhoven, NL 2007 - 2012, 2016
- **FrOSCon**, Bonn, DE 2007 - 2009, 2016
- **NLUUG**, Utrecht, NL 2014, 2015
- **Ansible Meetup**, Utrecht, NL 2015
- **LinuxTag**, Berlin, DE 2008, 2012, 2014
- **FlossUK**, UK 2012 - 2014
- **LOADays**, Antwerp, BE 2012, 2013
- **ODF Plugfest**, Brussels, BE 2012
- **LinuxCon Europe**, Prague, CZ 2011
- **LibreOffice Conference**, Paris, FR 2011
- **Linux Symposium**, Tokyo, JP 2009
- **JRSL**, Buenos Aires, AR 2008
- **NLLGG**, Utrecht, NL 2008
- **LinuxWorld Expo**, Brussels, BE 2008
- **LinuxWorld Expo**, Utrecht, NL 2007
- **Linuxconf.eu**, Cambridge, UK 2007

Technical writing

IBM Redbook Residency, Poughkeepsie, NY May 2005
> Co-written an IBM Redbook about the design and implementation of GPFS (General Parallel File System) in a digital media (broadcasting) environment. [SG246700]

IBM Redbook Residency, Austin, TX Nov 2002
> Co-written an IBM Redbook about the design and implementation of a Linux-based deployment in a branch banking environment. [SG246813]

Formal education

Hogeschool PXL, Hasselt 1996 → 1999
> Applied Computer Science (~ Bachelor degree)

Universiteit Hasselt, Diepenbeek 1994 → 1996
> Computer Science, 1st year

Heilig Hartcollege, Heusden-Zolder 1988 → 1994
> Latin-Greek, Latin-Mathematics and Science-Mathematics

Additional activities

- CoderDojo mentor, fostering children's enthusiasm for Scratch programming and Arduino electronics engineering
- Timelab ADEM project member, writing firmware for an embedded air-quality monitoring device for bicycles
- Author of various Open Source software projects including:
  - **ansible-provisioning**: *set of modules and methodology for physical/virtual staging and management using Ansible*
  - **dstat**: *flexible real-time system resource monitoring tool* (ships with RHEL)
  - **vmguestlib**: *python library to access performance counters from within VMware guests*
  - **mrepo**: *manage repositories and synchronize from various sources, incl. Red Hat Network*
  - **dconf**: *make hardware and software configuration snapshots for troubleshooting and comparison*
  - **asciidoc-odf**: *convert AsciiDoc markup directly into formatted ODF documents* (used for this CV)
  - **unoconv**: *convert office documents from one format to another using OpenOffice/LibreOffice filters* (used for this CV)
  - **renumid**: *efficiently renumber UIDs/GIDs on file systems*
  - **wiipresent**: *using Wii remotes as a remote control device*
- Contributor to various Open Source projects including:
  - Ansible, Relax-and-Recover, OpenELEC, XBMC/Kodi, AsciiDoc, docbook2odf, Proxytunnel, scannedonly, etc.
- Member of the ELRepo project providing kernel module packages (hardware drivers) *used by many international companies and organizations using RHEL, Scientific Linux or CentOS*
- Ex-maintainer of RPMforge RPM repository with more than 5000 Open Source software RPM packages for RHEL, Scientific Linux and CentOS *used by many international companies and organizations*
- Ex-teammember of the CentOS core team