

Merijntje Tak

Curriculum Vitae

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Professional experience

- 2023–Current **Lead DevOps Engineer**, *Logius*, Den Haag, NL.
Design and development of an on-prem data processing platform.
- Support development of architecture of a new data platform.
 - Implement Infrastructure as Code based on Ansible.
 - Design development and release process with CI/CD.
 - Deploy several data processing applications, such as Minio, PostgreSQL and Airflow on Kubernetes.
- 2022–2022 **DevOps Engineer**, *Shell plc.*, Rijswijk, NL.
Support and development of CI/CD pipelines and infrastructure.
- Support and development of CI/CD pipelines using Azure DevOps and Github.
 - Support and deployment of CD infrastructure on Azure Cloud.
 - Configuration management using Ansible and Azure DevOps pipelines.
 - Custom scripting using Python.
- 2021–2022 **DevOps Engineer**, *Royal Van Oord N.V.*, Rotterdam, NL.
Development of a cloud-based data management platform.
- Design a new Azure HDInsights based (Hadoop) platform for data analytics using Data Factory for ETL.
 - Design and write Ansible code for deployment of data pipelines based on Confluent Cloud and Elastic Cloud on Azure.
 - Consult on platform low level designs, standards and implementation.
 - Set up and maintain data processing jobs on Kubernetes using Helm and Ansible.
 - Implement Elasticsearch SSO using Azure Active Directory, deployed using Ansible.
 - Implement a CI focused development process using GitHub Actions.
 - Set up fully automated secret management using Azure Key Vault.

- 2017–2021 **Lead DevOps Engineer**, *Liberty Global B.V.*, Schiphol-Rijk, NL.
Development of a real-time big data processing platform.
- Lead the DevOps team in implementing the big data platform (30%). Duties included reporting, architecture, advising, prioritizing and incident management.
 - Developed a big data platform. It's currently scaled to over 600 physical servers, 2,000 data pipelines, and 1 million messages per second and hundreds of internal users.
 - Debugged and fixed performance bottlenecks in Apache Kafka, Elasticsearch, and Logstash when scaling to thousands of topics, millions of messages, and tens of thousands of shards.
 - Implementing Apache Kafka, Zookeeper, Spark, Elasticsearch, Logstash, Kibana, Mesos, Marathon, Chronos and HDFS.
 - Implementing interfaces between various big data components.
 - Operating the platform, troubleshooting component failures and (Python/Scala) Spark jobs.
 - Designing, coding and testing Ansible playbooks using GitHub as a VCS. Developed CI/CD and configuration management for all infrastructure components and data pipeline deployment using Jenkins.
 - Development of Docker containers.
 - Developing and implementing monitoring for various components (based on JMX, Nagios and Graphite with Grafana).
- 2014–2017 **Lead Technical Innovation Specialist**, *Ministry of Defence*, Den Haag, NL.
Concept development and experimentation (CD&E) for the Dutch armed forces.
- Identification, authentication and authorization technologies.
 - Intakes for new projects, technical advice and requesting approvals.
 - Designing and building several OpenStack clusters, including management scripts.
 - Cybersecurity (encryption, VPN/payload encryption, risk reduction).
 - Designing and implementing modules for Puppet and creating Docker containers.
 - Networking (LTE, satcom, ad-hoc WiFi).
- 2013–2014 **Chef and AWS Specialist**, *Ministry of Infrastructure and the Environment*, Den Haag, NL.
Automating deployment of a new middleware platform using Chef on AWS.
- Develop an Amazon Web Services orchestration tool.
 - Establish a development method for developing Chef cookbooks.
 - Designing a Chef platform and Jenkins pipelines.
 - Writing Chef cookbooks, chefspec and chef-workflow scripts.
 - Developing a deployment and release process for middleware applications (WSO2, Consul).
- 2013–2013 **DevOps Engineer**, *Digidentity B.V.*, The Hague, NL.
Digidentity is an identity management and Certificate Service Provider.
Maintaining 100 Ubuntu Linux instances in a highly versatile Agile DevOps environment
- Supporting developers in deploying and running custom built Ruby-on-Rails applications.
 - Writing Chef recipes for automating server and RoR application deployment.
 - Supporting and deploying web application servers.
 - Building and supporting database clusters.
 - Maintaining and supporting several root certificate authorities.

- 2012–2013 **Unix Engineer and Coordinator**, *Tele2 Nederland B.V.*, Diemen, NL.
Tele2 is a telco/ISP providing consumer DSL, 2/3G MVNO and enterprise services.
 Maintaining 1000 Unix servers and coordinating operational tasks within the Unix team in an Agile Scrum environment.
- Second and third level hardware and OS support on Linux, HP-UX and Solaris systems.
 - Maintaining a enterprise-level managed service and LAMP hosting environment.
 - Optimizing existing and new low-level operational and Scrum-related processes to be more flexible towards the organization.
 - Supporting Tomcat and other application servers.
 - Third line support for NetApp and HP 3PAR SAN storage systems.
 - Maintaining a mail platform for 100.000+ users.
 - Supporting application development teams with Unix and application expertise.
- 2011–2012 **Sr. Unix Engineer**, *T-Mobile Netherlands B.V.*, The Hague, NL.
Online Breedband is an ISP providing DSL service for approx. 300.000 customers.
 Supporting over 200 Solaris, Linux and FreeBSD instances in a 24x7 enterprise ISP and business environment.
- Second and third level hardware and OS support on Sun SPARC, Intel and VMware ESXi systems on a 24x7 on-call duty roster.
 - Moving critical business systems to different datacenters, while keeping 100% uptime.
 - Supporting customer facing ISP and provisioning services such as mail, DNS, webhosting, DHCP and RADIUS for 300K+ customers.
 - Designing and supporting platforms for business systems (CRM, DWH, billing, etc.).
 - Designing and supporting internal services such as LDAP, Jump/Kickstart, Nagios, Puppet and load balancers.
 - Managing and supporting storage systems based on NetApp, ZFS and Sun Fishworks technology.
 - Designing, implementing and delivering systems and applications for new projects next to improving current systems and applications.
 - Creating outlines for new processes and SLA's for working with new customers.
- 2009–2011 **Unix Engineer**, *Ziggo B.V.*, The Hague, NL.
Ziggo is a national cable operator, serving approximately 50% of the Dutch cable market.
- 2008–2009 **Support Services Engineer Back Office Management Systems**, *Ericsson Telecommunicatie BV*, Rijen, NL.
 Third line support on over 150 servers running management systems for cellular, fixed and core networks.
- 2008 **NOC Team Leader and System Administrator**, *Ericsson South Africa PTY LTD*, Cape Town, ZA.
 Leading a network operations team (10 FTE) and setting up and administering a fault and performance management system for a trail cellular network at Vodacom South Africa.
- 2007–2008 **System Administrator**, *Ericsson Telecommunicatie BV*, Rijen, NL.
 Desktop client support and first line Unix support for network operations.
- 2006–2007 **Radio Access Network Operator**, *Ericsson Telecommunicatie BV*, Rijen, NL.
 First line monitoring, fault management and maintenance for multiple cellular operators in Europe with approximately 23 million end users on a 24x7 rotational shift.

Education

Courses

- 2020 **Elasticsearch Engineer 1&2**, *Elastic*.
- 2015 **Archimate 2 Foundation**, *OpenGroup/BIZZdesign*, certified.
- 2015 **Ministry of Defence Cyber self study programme**, *Certified Secure*, certified.
- 2013 **The Exploit Laboratory: Black Belt Edition**, *Net-Square Solutions*.
- 2013 **Cisco Certified Network Associate (CCNA)**, *Cisco Systems*, certified.
- 2013 **The Exploit Laboratory**, *Net-Square Solutions*.
- 2012 **IBM Tivoli Identity Manager**, *IBM*.
- 2011 **Red Hat Certified Engineer (RHEL6)**, *Red Hat*, certified.
- 2011 **Red Hat Certified System Administrator (RHEL6)**, *Red Hat*, certified.
- 2011 **Solaris System Performance Management**, *Oracle*.
- 2010 **MX000 administration**, *Sun Microsystems*.
- 2010 **Performance tuning with DTrace**, *Sun Microsystems*.
- 2010 **VCA (operational safety awareness)**, *PBNA*, certified.
- 2009 **Logical domains and ZFS**, *Sun Microsystems*.
- 2008 **Analytical troubleshooting**, *Kepner-Tregoe*.
- 2007-2008 **Various technical courses (telecom)**, *Ericsson*.

Formal education

- 2012–2015 **Computer Science**, *The Hague University*, The Hague, NL.
Bachelor computer science.
- 1999–2006 **HAVO**, *Mgr. Frencken College*, Oosterhout, NL, *Graduated*.
High school, with elective subjects French, mathematics, physics, chemistry and IT.
Driver's License, European categories A and B (motorcycle and car).

Conferences

- 2015 **Chaos Computer Congress**, Hamburg, DE.
- 2015 **DEFCON**, Las Vegas, NV, USA.
- 2014 **Chaos Computer Congress (31C3)**, Hamburg, DE.
- 2014 **Hack In The Box**, Amsterdam, NL.
- 2013 **DEFCON**, Las Vegas, NV, USA.
- 2013 **Black Hat**, Amsterdam, NL.

Languages

- Dutch **Native**
- English **Fluent**

Professional and personal

Skills

Hardware

| | |
|------------|---|
| Sun/Oracle | Blade series, Enterprise series (including E25K), Fire series, T-series, X-series, M-series (including M9000), SunRay |
| HP | DL380 G3/4/5/6, 9000 D-Class |
| NetApp | FAS3240 |
| Cisco | ASA55xx, C2600, C2950, C3600, C3750, UCS blade system |

Software

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|--------------------------|---|
| Operating systems | Solaris on SPARC and x86, HP-UX: 11.23/31 on Itanium Linux: Red Hat Enterprise Linux, Fedora, CentOS, Debian and Ubuntu on x86 |
| Configuration Management | Chef, Puppet, Ansible, Terraform, Helm |
| CI/CD Pipelines | Azure DevOps, GitHub Actions, Jenkins |
| Scripting | Python, Base, Ruby, Perl |
| Cloud | AWS, Azure |
| PaaS | Azure Kubernetes Service, Apache Mesos, Docker |
| Revision control | Git, Subversion, GitLab, GitHub |
| Data processing | Apache Kafka, Kafka Connect, MQTT, Spark, Node-RED, Flume, Logstash |
| Database | Elasticsearch, MySQL, PostgreSQL, Carbon/Graphite, Redis, Cassandra |
| Volume management | Solaris Volume Manager, ZFS, MPxIO, NetApp ONTAP, Linux & HP-UX LVM |
| Web | Apache2, nginx, PHP, MySQL, Tomcat, Phusion Passenger |
| File systems | Azure Data Lake Gen2, Azure Blob Storage, NFS, UFS, ZFS, WAFL, GlusterFS |
| Virtualization | Sun LDOMs, Solaris Zones, VMware vSphere 4 & 5, Linux QEMU/KVM, Proxmox |
| Backup | Symantec NetBackup, Hitachi CommVault |
| Networking | Solaris IPMP, Vyatta, CrossBow, Open vSwitch |
| Clustering | Zookeeper, Solaris Cluster 3.1, Marathon, Chronos |
| Monitoring | BigSister, Hobbit, Nagios, Sun Management Center, Cacti, rrdtool, net-snmp, JMX, collectd |
| Enterprise monitoring | Ericsson OSS-RC, HP OpenView Operations, HP OpenView NNM |
| DNS | Bind9, PowerDNS |
| Mail | Postfix, Courier, Procmil, Dovecot, qmail |
| Identity Management | Azure Active Directory, Sun Java System Directory Server 5 and 6, Apache DS, openldap |