

**ANDREY STEPANCHAK**  
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**SUMMARY:**

Talented Systems Engineer/DevOps Architect with 21 years of very strong **Linux** and **Windows Server** experience.  
Strong **shell (bash, ksh), Go, Python, Ruby, PowerShell and vbscript** programming skills.  
Working knowledge of **VMware** and **KVM** environment and strong experience in enterprise virtualization implementation.  
Expert level experience in IT infrastructure monitoring using New Relic, **NAGIOS, Prometheus, Sensu, Grafana, ZABBIX, CACTI, OVO, GFI** and **ZENOSS**.  
Experience in utilizing ELK stack.  
Strong knowledge of automation and configuration management tools: **Bladelogic, Puppet, Ansible, Terraform, Spacewalk**.  
Experience in using containerization techniques and tools in production cloud environments such as **Kubernetes, Docker**.  
High level expertise in cloud technologies with experience in real production usage of **AWS, GCP, Azure, DigitalOcean** and **OpenStack** cloud environments  
Strong experience with **Linux/UNIX** and **Active Directory** integration.  
**Mongo, Oracle, PostgreSQL, MySQL, InfluxDB** and **MS SQL Server** database systems administration with strong production experience.  
Solid skills in **TCP/IP** and **iSCSI** protocols.  
Very strong experience in computer hardware management.  
Master's degree from Bauman Moscow State Technical University (MSTU).

**SKILLS:**

<b>Operating systems:</b>	<b>Red Hat Enterprise Linux, CentOS, Fedora, Debian GNU/Linux, Ubuntu, Solaris, Windows 2003/2008/2012 Server, Windows XP, Windows 7, Windows 8, SGI IRIX, Sonic OS, Mac OS</b>
<b>Virtualization software:</b>	<b>VMWare ESXi, vCenter, vMotion, KVM, oVirt</b>
<b>Cloud environments:</b>	<b>AWS, GCP, Azure, Digital Ocean, OpenStack</b>
<b>Micro services and orchestration:</b>	<b>Docker, Kubernetes, OpenShift</b>
<b>Programming languages:</b>	<b>C, C++, Perl, Java, Python, Ruby, Go, PHP, VBScript, awk, Korn / C / bash shell scripts, SQL</b>
<b>Web/Application</b>	
<b>Servers and Java:</b>	<b>Apache, Tomcat, JBoss, Weblogic, Websphere</b>
<b>Networking:</b>	<b>TCP/IP, DNS, DHCP, NFS, NIS, Domain Management and Active Directory, LDAP, SSL Certificates, VPN, Citrix, IDS/IPS, iSCSI</b>
<b>Hardware:</b>	<b>DELL PowerEdge, HP Blade Servers, Compaq ProLiant, FOUNDRY/BROCADE switches, DELL PowerConnect 6248 switches, SonicWALL firewall, Barracuda Spam and Virus firewall, Sun Fire X4600, Sun StorageTek 6540 array, Enterprise 4500/420r , Hitachi H9200 array, SAN and NAS hardware, Sparc servers and workstations, Ultra servers and workstations, laptop hardware, SGI (Origin 200, Indy/Indigo2, O2, Octane2, Fuel), Power Mac G3/G4/G5 and some older models, Backup Tape Libraries, Wireless Routers, Ethernet hubs and switches, KVM switches, KVM-over-IP</b>
<b>Databases:</b>	<b>Oracle 11g, 10g and 9i, Microsoft SQL Server, MySQL, Postgresql, Mongo, InfluxDB</b>
<b>Automation and Configuration management:</b>	<b>Puppet, Ansible, Terraform, Jenkins, Gitlab CI/CD, Azure DevOps, BMC BladeLogic, Spacewalk and Satellite servers.</b>

## EXPERIENCE:

*Feb, 2020 – Dec, 2022*

**IT-One (IT1), Moscow, Russia**

Position: **Technical Expert (remote role)**

Work on projects in various technological areas for the storage and processing of BigData:

- Monitoring Hadoop, HDFS
- Switching from Zabbix to Prometheus and Alertmanager, and Grafana
- Gitlab as a repository and CI / CD, Jenkins as CI / CD
- Active use of the practice of Docker containers, implementation of Kubernetes and transfer of applications to k8s clusters
- Using Puppet as IaC, implementing Saltstack
- Monitoring Apache Flink, Kafka, Streaming applications, Zookeeper, Ambari as management and monitoring tools.

*May, 2020 – Feb, 2021*

**Rebrein, Worldwide**

Position: **DevOps Teacher, part time (remote role)**

- Design and implement DevOps online learning and testing system including the following theoretical and practical themes: Hadoop, Apache Ignite, Redis, Memcached, HAProxy, Percona, MySQL, PostgreSQL.
- Mentor the students online, design and run Zoom video sessions for big audiences.

*March 2020 - May 2020*

**Globus AI, Stavanger, Norway**

Position: **DevOps Engineer (remote role)**

- Automated the existing manual build and deploy process using Azure DevOps and Pipelines.
- Installed and configured Apache Kafka messaging broker including Admin, Consumer, Stream, Producer и Connect API tune-ups.

*September 2018 – March 2020*

**Coudinfrastack, Prague, Czech Republic**

Position: **DevOps Engineer (remote role)**

- Provided DevOps projects support in the Openstack Cloud environment using Puppet as main tool to utilize IaaS as long as Foreman, Ansible, Git and Jenkins as CI/CD tool. Actively used SENSU, Grafana and ELK for the monitoring and analysis of different data. Supported CephFS clusters as a primary storage solution. Created a backup suite with a monitoring solution in SENSU for MySQL/Galera and MongoDB clusters.
- Designed and implemented an architectural plan to move existing Openstack Cloud projects to AWS and Google Cloud Platform (GCP).
- Designed a multi zone Kubernetes cluster to migrate the containerized applications developed in Python by the company's Development team.
- Managed Kafka server, brushed up the API services for Kafka, created some new configurations for it.
- Designed and managed the OpenShift Kubernetes cluster infrastructure and containers stack.

*September 2017 – September 2018*

**SkuVault, Louisville, Kentucky, US**

Position: **DevOps Engineer (remote role)**

- Designed and implemented the new Foundation DB clusters for different staging of software development platforms in order to improve workload in the GCP infrastructure.
- Created new alarms as well as improved the existing ones in the company's Grafana system.
- Documented the dedicated server infrastructure.
- Created new and improved existing Jenkins jobs.
- Helped to clean up a Jira DevOps backlog by prioritizing and completing a significant amount of tickets.
- Deployed and managed RabbitMQ and Kafka message broker servers.

- Participated in the development of Django and Celery Applications directly to the Kubernetes cluster using raw Kubernetes manifests and Helm package manager.
- Helped the developers' team to deploy Flask Python web Applications to the AWS and GCP cloud platforms.
- Designed and implemented a CI pipeline for deploying of Django based Python applications.
- Helped with Docker, Kubernetes and Helm package manager implementation from scratch as well as providing a good documentation on the management protocols of the containerized applications architecture.
- Performed security scans on the company's server infrastructure including AWS, GCP and dedicated servers and hardened the systems by removing the world open services and hiding them into the internal VLANs.
- Helped to design the AWS and Google Cloud container registry and filled in the images for container deployments.

*September 2016 – September 2017*

**Severstal, Russian Federation**

Position: **DevOps Engineer (remote role)**

- Designed and implemented the load balancing system for eCommerce software projects. Used tools such as NGINX Plus, Puppet Enterprise. The load balancing system allowed balancing customer's traffic between Production and pre-Production releases of the eCommerce software. Puppet Enterprise configuration management system used to allow the interactive change of parameters of load balancing tasks as well as to keep the configurations intact. Also, the HA option of NGINX Plus was implemented using the keepalived package.
- Implemented and managed New Relic platform to monitor and optimize a workflow of the eCommerce application designed using Hybris SAP.
- Designed and implemented the new architecture for transferring the eCommerce project to AWS Cloud Platform including CI/CD process.
- Implemented the VMware infrastructure optimization using the vRealize Operations (vROPS).

*September 2015 – September 2016*

**Home Box Office (HBO)** 120A E 23<sup>rd</sup> Street, New York, NY 10010

Position: **Staff Engineer**

Position summary:

As a part of the Media Infrastructure Technology group, design and maintain computer systems which enable Studio and Broadcast Production workflows, which center around the creation, editing and end processing for delivery of broadcast and distribution-ready media assets. Use commercial off-the-shelf systems and integrate hardware with internally developed software, architect solutions to meet the requirements of production operations working across many departments. Bring a high level of Unix/Linux expertise and work with digital video and transcoding in a broadcast environment.

- Maintain, support, troubleshoot and update Zenoss monitoring infrastructure
- Support and troubleshoot Aspera high-speed file cloud infrastructure
- Deploy and maintain VMware computer instances
- Design, optimize and support workflow systems with interdepartmental groups and equipment
- Provide systems support to the HBO Communications Center, HBO Studio East and HBO Studio West facilities
- Generate performance reports
- Documentation of new and existing infrastructure
- Communicate with vendors for updates and troubleshooting
- Support and maintain some datacenter operations

*August 2015 – September 2015*

**VMTurbo** Valhalla, NY

Position: **Senior Systems Administrator / Consultant**

Position summary:

Provide consulting service for the company in order to fix and improve existing infrastructure

- Troubleshoot and upgrade RedHat OpenStack cloud environment
- Improve data transfer service between the local and overseas data center
- Analyze and document data center infrastructure
- Move data center from local environment to co-location center

*March 2014 – August 2015*

**Walker Digital Table Systems LLC** 1 High Ridge Park, Stamford, CT 06905

Position: **Senior Linux Engineer**

Position summary:

Design and implement physical and virtual environments for Perfect Pay Baccarat table systems based on Phase Jitter Modulation technology. Support the production environments remotely. Implement automation and configuration management technologies to provision and control the environment. Monitor and update the systems according to the current security recommendations and patching policy. Design the embedded version of the environment.

- Design and implement **RHEL** and **CentOS kickstart** scripts for bare metal, virtual hosts and guests provisioning
- Design and support **VMware** and **KVM** virtualization infrastructure
- Implement **Spacewalk** and **Cobbler** for **kickstart** provisioning and updates control of **RHEL** and **CentOS** servers
- Support **Puppet** configuration management of **RHEL** and **CentOS** environment
- Support **Jenkins** systems for **JAVA** deployments of Perfect Pay software on **RHEL** and **CentOS** platforms
- Use **bash**, **Perl** and **Python scripting** for all automation and configuration tasks
- Implement **NetApp SAN** storage system to integrate into the existing environment
- Support **QNAP NAS** storage systems
- Perform **Data Center** operations such as moving servers, upgrades of the hardware, monitoring of the hardware

*May 2011 - February 2014*

**The New York Times** 620 8<sup>th</sup> Ave, New York, NY 10018

Position: **Linux / UNIX Systems Engineer**

Position summary:

Carry out Systems Administration of assigned servers to increase Customer satisfaction; participate actively in allocation, use and support of IT resources. Standardize and extend Systems Administration methods across all **RHEL**, **CentOS** and **Solaris** OS platforms. Build, move or replace servers for new projects; data center moves, and phase out obsolete servers. Actively implement VM technologies on the existing IT infrastructure.

- Create new project plans and proposals. Perform cost analysis, design network diagrams
- Actively use, manage and improve current **LDAP** implementation
- Support existing **Puppet** configuration management environment
- Participate in the ongoing and new **E-commerce** projects
- Support current **Amazon EC2/Nimbul** environment
- Participate in a **Zabbix** transition project for monitoring transfer from current **Nagios/Cacti** environment
- Support current **SVN** implementation
- Support the migration of collaboration system from **SharePoint and Wiki to Confluence**
- Actively use and improve **Jira** project and ticketing tracker implementation
- Follow decommission procedures and possibly re-use the physical servers for **RHEL** OS
- Create and follow change requests and work orders
- Keep integrity of **CMDB** by creation new records and keeping the existing records up to date
- Schedule maintenance windows with customers. Periodically review status of agents and updates and fixes/patches on **RHEL** and **CentOS** servers
- Answer to service calls, document every incident and perform statistical analysis to prevent similar issues
- Identify virtualization candidates and create/propose a virtualization project
- Help EMS team to implement **BMC Bladelogic** infrastructure; create, test and use new Bladelogic jobs using scripting technology
- Review provisioning of **VM** and zoning procedures, test in a lab environment and follow up with all ongoing projects
- Provision servers using developed procedure and management tools
- Participate in the **on-call rotation** schedule

*August 2010 to April 2011*

**EcoSys Management, LLC** 800 Westchester Avenue, Rye Brook, NY 10573

Position: **Technical Solutions Architect - Consultant**

Position summary:

Act as a technical solutions architect working with both in-house clients and external customers in the implementation, support and on-going management of company's systems and sophisticated enterprise software in heterogeneous environments. Maintain servers for support, demos, development and testing. Assist customers with implementations in large and diverse IT infrastructures.

Primary responsibilities:

- Create, upgrade, backup and recover the back-end application database in **Oracle** and **MS SQL** environments
- Install and configure front-end Java application servers such as **Tomcat, JBoss, Weblogic and Websphere**
- Deploy and upgrade the enterprise software on QA, Development, Training and Support virtual machines
- Respond to the trouble tickets; coordinate the troubleshooting procedures with the team according to the ticket's priority
- Maintain and upgrade **VMware** infrastructure; move, clone and create new virtual machines within several VMware ESX servers; periodically review, decommission and recycle old virtual machines
- Configure, update, monitor and troubleshoot server **hardware, Windows, RHEL, Ubuntu** and **Solaris** operating systems, and back-end applications using **ZENOSS monitoring** software
- Configure, monitor and document network devices
- Review and re-organize the **SAN** environment in order to optimize the performance of VMware infrastructure and cleanup space on the storage devices
- Manage and monitor company backup system based on **Symantec Backup Exec** 2010 software; review backup schedules and selection lists; rotate off site tape backup media, maintain backup-to-disk folders on SAN hardware
- Help in migration to Exchange 2010 server
- Provide users support in the company SharePoint 2010 environment
- Support the version control system in **Ubuntu Linux** and **SVN** environment
- Manage company **VoIP** phone system, create new users, install phones and troubleshoot the system
- Use **LiveMeeting** and **LogMeIn** systems to troubleshoot problems remotely

The infrastructure owned:

- **RHEL and Ubuntu Linux** servers, **Solaris 10** servers
- **Windows 2003** and **2008** servers
- **Microsoft SQL and Oracle 11g, 10g** and 9i database servers
- **VMWare ESX** servers, vCenter and Workstation software
- **DELL/EMC iSCSI SAN** hardware
- **HP** and **DELL** network switches
- Datacenter **hardware** such as **DELL** Rack mounted servers, KVM accessories
- **SonicWALL** and **FireBox** firewall appliances
- **ZENOSS** alerts system

*February 2008 - August 2010*

**Progenics Pharmaceuticals, Inc.** 777 Old Sawmill River Road, Tarrytown, NY 10591

Position: **Systems Administrator**

Position summary:

Configure, update, monitor and troubleshoot server hardware, operating systems, and back-end applications. Configure, monitor and document network devices; assess and implement patches and configuration changes. Manage group policy objects; test and implement changes as needed. Deploy application and operating system updates to end user systems and servers. Design, implement and maintain security systems. Assist with end-user hardware and software support functions.

Primary responsibilities:

- Configure, update, monitor and troubleshoot server **hardware, RHEL** and **Solaris** operating systems, and back-end applications using **GFI** and **NAGIOS**; create change management documentation
- Configure, monitor and document network devices; assess and implement patches and configuration changes
- Support and configure internal applications; work on implementation of new systems
- Manage and optimize **Active Directory** and group policy objects; test and implement changes as needed; implement and manage **LDAP** for **AD** integration and interoperability of UNIX systems with **Active Directory**
- Deploy application updates to end user systems and servers
- Work with DBA team on administering of **Microsoft SQL Server** and **Oracle 10g** database systems, design and implement the upgrade from Oracle 9i to **Oracle 10g** including moving from Windows to **RHEL** and **Solaris** platforms plan

- Develop new solutions to improve workflow, security and up-time using **scripting**/programming techniques such as **shell (bash, ksh)** and Perl scripting on UNIX platforms as well as **vbscript** programming on Windows OS systems
- Assist with end-user **hardware** and software support functions
- Setup and design a company's backup solutions based on **Symantec Backup Exec** server and **Spectra T120** tape library
- Design and implement the **SAN** transition plan in order to move databases and shared file systems as well as users data from old **NAS** infrastructure to new **SAN** hardware based on **iSCSI** protocol

The infrastructure owned:

- **RHEL** servers
- **Windows 2003** and **2008** servers, Windows 2000 servers
- **Microsoft SQL** and **Oracle 10g** and 9i database servers
- **VMWare ESX** servers, **Red Hat Linux KVM** servers
- HP LeftHand **iSCSI SAN** hardware and **NAS** servers
- **FOUNDRY/BROCADE** switches
- Data center **hardware** such as DELL Rack mounted servers, KVM accessories
- Tape library **hardware** such as Spectra Logic T-120 with LTO-3 drives
- **SonicWALL** firewall
- **Barracuda Spam** and Virus firewall
- **GFI** alerts system

*April 2007 - January 2008*

**eWayDirect, Inc.** 200 Pequot Avenue, Southport, CT 06890

Position: **Senior Systems Administrator**

Workload split as follows: 25% day-to-day operations, 75% infrastructure.

Position summary:

Manage, update and troubleshoot server hardware at co-located data center. Perform systems administration tasks for servers based on **RHEL** and **Debian Linux** and **Solaris** operating systems. Design and implement a load-balancing schema for DNS and HTTP network traffic. Upgrade company network hardware. Move server infrastructure to a new location. Design and implement VPN. Keep company IT documentation up to date using internal Wiki pages.

The infrastructure owned:

- Mix of **Linux**/Intel, Solaris/Sun and Solaris/x86 servers
- Storage and **RAID** arrays: installation and management of Sun StorageTek 6540 array, Hitachi H9200 using ILOM and CAM software, utilizing of Sun SDP service
- Switches (configured with VLANs): DELL PowerConnect 6248 configured with VLANs
- Load balancers: CoyotePoint 450 with mix of HTTP, HTTPS, DNS and SSH/SFTP clusters

Types of applications housed by servers:

- Firewall and DNS servers: Sentry firewall, BIND9 and tinydns/dnscache servers
- Email servers: qmail, exim, sendmail
- Apache Web servers
- **Oracle** and MySQL servers
- Java Application servers

Tasks performed:

- OS installations (**Linux**, **Solaris**, Windows, Mac OS X), using kickstart and jumpstart.
- OS upgrades and patches
- Configure firewall rules
- Configure and manage DNS
- Backup and disaster recovery
- IT security including company VPN implementation and network monitoring



- Administer corporate services such as email, websites and other web-based applications
- Write/modify **scripts** to monitor infrastructure and platform
- Support of day-to-day operations
- Documentation of infrastructure and procedures
- Data center operations including maintenance, disaster recovery, **hardware** upgrades and moving production to new location

*June 1998 to April 2007*

**Albert Einstein College of Medicine of Yeshiva University,**

**Department of Biochemistry**

1300 Morris Park Avenue, Bronx, NY 10461

Position: **Systems Manager**

- UNIX Administration of **Red Hat Enterprise Linux** v3 and v4, Red Hat 7.x - 9, Fedora, IRIX 6.5.x, AIX and Solaris 2.x - 9, including setup, tuning and securing of NIS and NFS, improving of departmental backup policy, installation and support of backup **hardware** (EXABYTE VXA-2 and Dell PowerVault tape libraries, several single tape drives) and software (Veritas NetBackup, NovaNET Backup, Arkeia) with periodical testing of data for restorability, improving and implementing of security policy based on OpenSSH, passwords monitoring tools, network traffic capture tools (Ethereal), port scanners (Nessus), firewall (iptables and ipchains) implementing as well as using tcp wrappers software
- Support of various Windows 2000/XP and Macintosh workstations and laptop computers
- Installation, configuring and support of departmental SMTP server based on sendmail
- Windows 2000/2003 Servers Administration
- Installation and support of departmental website including web programming using Java, Perl, PHP, Python
- Installation and Support of departmental FTP server as well as SAMBA server
- Troubleshooting and resolving of problems in over 300 user's environments
- Implementation of RAID technology on the main server as well as system hard drives mirroring for fast disaster recovery on all mission critical servers
- Writing, testing and installation of **scripts** to automate administration tasks including 24/7/52 log files monitoring and emergency notification
- Installation of new **hardware** including network connection and configuration
- Setup and Web monitoring of UPS systems on all critical servers
- Installation and license support of common software products including Microsoft, Adobe, Corel as well as scientific products in the biochemical area including molecular modeling and crystallographic calculations (Insight II, O, CCP4, SHARP, Gaussian, ChemDraw, Kaleidagraph etc.)

#### **CERTIFICATION:**

- **Certified SonicWALL Security Administrator. CSSA Professional for Network Security Essentials, November 4, 2008.**
- **RedHat Certified Engineer (RHCE), June 2003**

#### **EDUCATION:**

**Bauman Moscow State Technical University (MSTU), Russian Federation**

**1990**

Master of Science in Electrical Engineering (MS)

REFERENCES are available upon request.