Location: Kurgan, Russia.

Education: BS+ degree in computer science, graduated from Kurgan State University in 2001.
Netology: https://github.com/a-prokopyev-resume/devops-netology

Objective: Looking for an opportunity to work remotely as a freelance mentor or script developer with DBA and partially DevOps skills set.

Summary and preferred fields of work _____

1) Linux administration, DBA
2) Writing scripts for syntax unification of CLI tools and utilities
3) Scripting IaC, building custom OCI container images
4) Mentoring students and reviewing their homeworks

Skills _____

IaC, SCM & Deployment: Ansible, Terraform
Orchestration: K0S, Docker Swarm & Compose, OpenNebula
Public cloud: Linode, Yandex (YC), GCP
Security: Firehol, ARM single boards, PKCS11 and U2F hardware, LKRG, etc.
Task Tracker: Redmine
DBMS on Linux: IBM Db2, PostgreSQL, MSSQL
DBMS libs & tools: nHibernate & DevArt Entity Developer, Peewee ORM
Storage: HBA, iSCSI, OpenZFS
OS: RHEL, Debian, Ubuntu, Alpine
Monitoring: Zabbix (Helm Chart)
Scripting: Bash, Xonsh (Python), JavaScript / TypeScript (only server side), SQL, RegEx, Perl one liners
GUI: DevExpress WinForms (on Linux WINE)
Reporting: MS Access, MS SSRS, C1Report, C1FlexReport

Work Experience _____

The most Popular Online Education Platform N1
EXPERT COACH

*Kurgan, Russia,
remotely part-time at home
2022 March – now*

Inspected (and coached) over four thousand of students' homeworks in the fields of Linux Administration (VPN, IPv6, DNS, DHCP, Bash, RegExp, etc.) and some DBA homeworks. Now also helping DevOps students.

Customer from SP,RU
FREELANCE DEVELOPER

*Kurgan, Russia,
remotely part-time at home
2021 June – 2021 July*

- Created Ansible playbooks to deploy and configure linuxserver.io SWAG containers as reverse proxies connected to a backend by Wireguard in another container. Docker Compose orchestration was used.
- Created OCI container images for GUI applications like LibreOffice Base with SSH, VNC, and X11 access.

Pension Fund of Russia
DBA, LINUX ADMINISTRATOR

*Kurgan, Russia,
onsite full-time
2004, February – 2020, February*

Installed, configured, and managed the following servers serving federal region load including upgrades:

- Two storages with NFS and iSCSI blocks.

- Control & boot server: Debian, Firehol+bridging, DNS, PXE, schedules for tens of custom remote automatic maintenance tasks for other servers.

- Backup server: SystemRescueCD(Gentoo), made autostart scripts for configuring LiveCD after each reboot (network, mounting, sharing Samba+NFS), about 24 Tb of physical space presented as 12Tb of redundant logical mirrored space.

- Regional Component of ASV DBMS: VMWare ESXi, RedHat EL, IBM Db2:
  Fine-tuned Db2 DBMS according to the best practices, database size over 300 Gb
  Wrote scripts for convenient user TUI for running vendor's application scripts and script for automatic installation of new versions of the custom application.

- Regional Component of ASV: VMWare ESXi, RedHat EL, IBM WebSphere.

- Remote Electronic Information Exchange: VMWare ESXi, Firebird, database size over 200 Gb.

- Mail server: Devuan v3+QEMU+KVM, Debian v7, PostgreSQL, Dovecot, Postfix, RSPAMD, Firehol.

- Other servers of a workmate (I had a role of an emergency reserve admin): RedHat Linux, IBM TSM.

EPM Solutions, USA, CA

Kurgan, Russia, remotely part-time in the evening at home

FREELANCE DEVELOPER

2003 June – 2013 August

Developed an online education application for authoring and organizing interactive courses on automatically prepared Windows desktops featured by MS Project Server Web Access and related tools.

- Iteratively collected requirements of the company for the required system.

- Designed data and database models, a class hierarchy for the models.

- Developed custom subscription management using tokens with very flexible subscription terms.

- Developed web GUI for student users (with RDP web access to PWA sessions) and desktop GUI (with RDP web access too) for learning course makers and subscription managers.

- Developed services for provisioning required user's resources by definitions in the database and corresponding templates providing IaC on demand by current specifications in the database.

- Made installation program for deployment to the main control servers.

- Continuously added new features and made adjustments when requested by the company.

Used tools: hosted MS Project Server environment, VB.NET, MyGeneration, nHibernate, DevExpress, XMLRPC, WebForms, JavaScript, JSON, WinForms, SOAP, Web services, Eazfuscator obfuscator, Enigma Protector, Git, MSSQL, InnoSetup, Web Terminal Services, Redmine tracker, MS SSRS (reporting), automation of MS Office, ADS, SharePoint, PSI(PS API).

Customer from USA, CA

Kurgan, Russia, remotely part-time at home

FREELANCE DEVELOPER

2000 April – 2003 May

www.usaleonline.com, www.kissmatchmaker.com websites, and related software tools for a convenient search experience (for a good deal & match).

- Developed KissMatchmaker.com with the following features: Login, member join, member control panel,

placing bio, 5 different search forms and flexible search engine generating complex SQL statements automatically, ASP component for multi-page results rendering with navigation, resizing uploading pictures.
Used Tools: ASP, ADO, VBScript, JavaScript, and MSDE (free Microsoft SQL Server).

- Created GUI admin interface: editor for all drop-down values used on web pages. Created stress tests scripts and self-diagnostic features.
  Used Tools: VB6, ADO, Microsoft SQL Server (Free MSDE).

- Created the user interface for membership payments. Integrated PayPal payment processing service into the website. Created admin reports for the paid invoices and totals. Made encryption for credit card information recurring payments and database connection parameters.
  Used tools: ASP, VBScript, JavaScript, VB6, ADO, Microsoft SQL Server (Free MSDE), PayPal ActiveX.

- Created web admin control panel. Created template engine.
  Used tools: ASP, VBScript, JavaScript, VB6, ADO, Microsoft SQL Server (Free MSDE).

- Created ASP pages for displaying help. Wrote help content.

- Developed installation program for KissMatchmaker.com. Developed configuration scripts for IIS, default permissions, database, mail server, scheduled tasks.
  Used tools: Windows Installer, VBScript, ADO, ADSI, Microsoft SQL Server (Free MSDE), SQL-DMO.

- Moved the features common for all classified ad systems to the separated module implemented as COM library written in VB6. Used tools: VB6, ADO, Microsoft SQL Server (Free MSDE).

- Developed a marketplace website www.usaleonline.com which was based on the www.kissmatchmaker.com engine. Created ad placing, search and search results forms specifically for each of several ad categories. The system consisted of about 80 ASP pages.
  Used tools: VB6, VBScript, ASP, ADO, Microsoft SQL Server (Free MSDE).

- Configured Microsoft IIS and Windows 2000 on the production server according to MS best practices.
  Used Tools: MSDN, Firewall, VBScript for IIS tweaking.

- Created custom conversion tool from ASP to VB6 code which used regular expressions to parse the VBScript code. The tool automatically generated required VB6 project and class files and ASP files wrappers containing only a call to the COM DLL. This custom tool was very unique at that time because generated VB code for included asp files only once. This allowed to limit the size of DLL file to 1M compared to ASP Lightning could generate a larger file if it would be able to pass without errors. The conversion added a level of protection for the system because it was not possible to get the source code of ASP files remotely even if the server was eventually hacked. An additional advantage was the execution speed because native code executes about 10-30 times faster than interpreted VBScript. Both KissMatchmakerc.com and UsaleOnline.com have been converted to VB6 using the above tool. Used tools: VB6, regular expressions.

- Made deep research of about 20 existing software copy protection products and methods. Protected the developed software.
  Used tools: "PC Guard for Win32".

- Created data extraction, collection, and conversion tool. Its previous version was used to collect lists for all dropdowns of the websites and build a tree-like structure to store the information. Capable to visit sites using corresponding plugins and emulate the behavior of a human when collecting information using IE sessions.
  Used tools: VB.NET, ADO.NET, Microsoft SQL Server 2000 (Free MSDE), IE DOM, Regular Expressions.

My Personal Hobby Projects _____

DEVELOPER

Kurgan, Russia
in the evening at home

2000 – Present

- **Aulix.Common7** library as a wrapper for DevExpress GUI and nHibernate ORM.

  Used tools: PostgreSQL, MSSQL, IBM Db2, nHibernate, ADO.net, C#, VB.NET, .NET 5, Mono, XML-RPC, DevExpress for WinForms, ASP.NET WebForms, Bash, Git.

- **Aulix Agreement Generator** to create complex juridical documents (multilayer document assembly tool).

  Used tools: C#, VB.NET, Aulix.Common7, PostgreSQL, git.

- **Aulix.UTILS** is a set of many scripts to make my home hobby more productive and pleasant, making it easier to work with my servers and VPSs.

  Used tools: Bash, Perl, Ansible, many userspace programs and services from Linux distributions like Firehol, ZFS, SSH.

  A few examples:

  supersend.sh – a utility for automatic ZFS replication for backups and synchronization.
  rsync.sh – a utility to simplify work with the rsync tool.
  apm.sh – a utility to simplify work in a unified way with package managers in different distributions.
  keys.sh – a utility for managing SSH keys, verification, etc.
  Many more, hundreds of small scripts, tens of significant for me scripts.

Certificates _____

Available in my LinkedIn profile: https://www.linkedin.com/in/alexander-prokopyev-dev

Interests _____

1) Information, network, physical, and health security
2) Evaluation, comparing, and selection of good ready software products and effective methods of solving problems & tasks
3) Performance optimization

Social networks:
https://forum.rutoken.ru/search/advanced/   **sanyo**
https://support.nitrokey.com/search?expanded=true&q=%40sanyo
https://www.linux.org.ru/people/sanyo1234/profile