

Sr. Engineer, Operational Technology (OT)

Location: Onsite – Heathrow, FL/ Onsite – Project Site/ Hybrid / Remote

About Prevalon

Prevalon Energy LLC (Prevalon), a Mitsubishi Power Americas and EES joint venture, is a leading global energy storage technology and services company that is empowering companies to deploy flexible energy solutions and accelerate a more sustainable energy future.

With 10 years of global battery energy storage experience and over 4 GWh of utility-scale battery energy storage projects deployed, Prevalon develops an end-to-end integrated battery energy storage solution that delivers throughout the entire lifecycle of your project and ensures performance.

Working with our customers to develop a solution to meet the demands of their energy system today and into the future, we are grounded by the principles of commitment, reliability and expertise to guide our decision making, design philosophy, and relationship building.

Our Culture and Values

Responsibility

Safety is at the core of everything we do. From the well-being and health of people to the quality of the products we develop and implement, sustainability is the foundation of our operations. Our expertise guides our decision-making and design development, and lives at the core of our mission.

Community

People are the focus and heartbeat of what we do. We prioritize the well-being of our customers, employees, and communities we work with. Through teamwork, collaboration, and open communication, we work together to continuously innovate.

Innovation

We value and encourage creativity in the ways we work and are always forward thinking. We embrace diversity of thought and adapt to emerging trends and technologies. We recognize the importance of respecting traditions but not beholden by them.

Accountability

We are focused on taking responsibility and ownership for our actions and decisions. We deliver on promises in a transparent and reliable manner. We are accountable in our commitment to sustainable practices and products.

Job Summary

An Energy Management System (EMS) Operation Technology (OT) Engineer is responsible for creating and maintaining OT EMS networked systems such as virtual machines, network switches, WAN Firewalls, local firewalls and Azure cloud network. In addition to equipment deployments, this position will also manage and maintain the cloud infrastructure, utilized by the production support team for fleet diagnostics.

Essential Duties & Responsibilities

Essential duties and responsibilities are included, but are not limited to the following:

- Lead OT systems initial build and development in accordance with system design.
- Lead OT systems commissioning, including Factory Acceptance Tests (FATs) and other setup and configuration activities.
- Lead network segmentation deployments such as VLANs and DMZ in accordance with system design.
- Lead the Implementation of OT Cybersecurity controls on Linux and Windows servers such as hardening baselines.
- Lead Patch assessment activities on Operating systems, Firmware and applications.
- Triage system incidents, restore services and contribute to fixing OT issues on production sites, including post incident reviews and documentation.
- Provide guidance to L1 and L2 OT engineers on troubleshooting or making changes to production environments.
- Develop and maintain Ansible Playbooks for system administration task automation, package installation and system configuration.
- Develop and maintain Foreman/Satellite and WSUS systems for the system administration and maintenance of production systems.
- Implement and validate OT cybersecurity such as configuration to OS-level firewalls.
- Drive root cause analysis and corrective actions for significant incidents.
- Plan and coordinate lifecycle software and hardware replacements when necessary.
- Coordinate project deliverables with SCADA Engineers and OT Engineers.

- Provide troubleshooting support to SCADA servers or network equipment during operational events or commissioning events.
- Provide support for changing server hardware components such as memory sticks, hard drives, or any PCI cards or server power supplies.
- Provide support on reviewing network architectures when changes are needed and documenting them on a change control log.
- Maintain & Configure Virtual Machines using Hypervisors to provision Linux and Windows servers.
- Support hardware installation efforts including mounting equipment on server rails, running ethernet cables and fiber optic cables, and certifying communication using cable testers.

Knowledge, Skills, & Abilities

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

- **Knowledge**
 - **Linux Server:** Advance navigation, file ownership/permission, systemctl, journalctl, package managers, Linux networking, firewall, tcp/ip tooling, NIC configuration, system unit management, syslog, service dependencies.
 - **Windows Server:** File ownership/permission, logs, software management, firewall, windows networking.
 - **Virtualization:** Hypervisor management including account management, virtual networking.
 - **Scripting:** Bash for Linux and PowerShell/cmd for windows for system administration tasks such as moving files, creating services automating manual intervention, managing file systems.
 - **Networking:** IP addressing/subnets, default gateways, DNS, VLAN concepts, firewall rule design, validate one-way/bidirectional paths, network reliability (RSTP).
 - **Cloud Fundamentals:** IaaS.
 - **Operational:** Follow instructions, documentation and procedures, Visio, Excel and Word.
 - **Cybersecurity:** Hardening checklists, backup and restore procedures.

- **Hardware:** Capacity planning (CPU/RAM/Storage), RAID Levels configuration, NIC teaming, orderly shutdown and hardware monitoring.
- **SCADA:** Mult server/high availability architectures, data acquisition design (OPC-UA, MQTT), scan classes and polling optimization, SCADA gateway networks.
- **Historian:** Primary/Secondary, database modeling, points, SQL integrations.

- **Skills**

- **Operating Systems:** Linux and Windows Servers (2022/2025)
- **Scripting:** Bash, PowerShell, Python, TCL, Ruby.
- **Virtualization:** VMware, Hyper-V
- **Cloud:** Azure, considered other cloud platforms such as AWS, GCP.
- **Monitoring:** Syslog, PRTG/Grafana.
- **Networking tools:** Wireshark, tcpdump, PuTTY, WinSCP, WinMerge.
- **Version Control:** Git
- **Backup:** Veeam, Acronis.
- **Container:** Docker/Podman.
- **Protocols:** TCP/IP, Modbus, OPC-UA, MQTT.
- **Infrastructure Automation Tools:** Ansible, Puppet, Satellite/Foreman
- **Network Equipment:** Phoenix Contact, Moxa, Fortinet, Red Lion
- **Server Hardware Equipment.** Dell, Synology, Eaton KVM.
- **Cybersecurity Frameworks:** NERC CIPS, NIST 800-53.

- **Abilities**

- Lead cross functional OT-SCADA projects end to end.
- Operate effectively in a fast-paced agile environment, this being able to update on tasks, progress and blockers.
- Enforce prioritization based on instruction, reliability, security and business impact.

- Drive the automation and continuous implement for manual tasks such as system checks, system backups and changes.
- Be able to attend daily standup morning meetings and provide updates on tasks progress.
- Work with minimal supervision while providing high quality work and finish work on time.
- Manage multiple projects and tasks simultaneously, prioritizing by instruction, risk and business impact.
- Always maintain the highest degree of honesty and integrity.
- Be able to work in collaboration with other team members across different departments and resolve issues and align schedules, scope of work and quality.
- Protect confidential information by not disclosing it to or using it for benefit of 3rd parties.
- Comply with all EHS policies, practices and procedures reporting all unsafe activities to Management and/or Human Resources.
- Work in the global environment to maintain standards and latest practices.

Education & Experience

- Bachelor's degree in: Electrical Engineering, Computer Engineering, Computer Science, or equivalent, and 5-9 years of related experience.
- **Essential**
 - Depth experience in system administration activities.
 - Hands-on experience in BESS or Energy OT/SCADA systems.
 - Experience maintains OT asset inventory.
 - Experience commissioning OT systems for production ready environments.
 - Experience executing projects involving deploying or commissioning network L2 and L3 switches, firewalls, and Linux systems.
 - Depth understanding of OT/SCADA environments.
 - Strong understanding of industrial hardware.
 - Experience dealing with multiple OT protocols such as Modbus, DNP3, OPC-UA or MQTT.
 - Experience automating tasks using Python or other scripting language.

- **Preferred**

- Master's degree in Computer Science, Computer Engineering, Electrical Engineering or related field.
- Certs: CCNA / Industrial Networking
- Experience with historian analytics.
- Experience in developing scripts to automate system administration tasks.

Physical Requirements & Work Environment

The physical demands and work environment characteristics described herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

- **Physical Demands Matrix**

- The position requires constant sitting (desk/computer work).
- The employee will spend occasional time standing or walking for activities such as moving around the office and attending meetings.
- Rare lifting/carrying of up to 30 lbs. (e.g., server hardware).
- Frequent driving is required, for up to 50% of the workday, for a duration of 3-4 hours, generally related to travel to and from site visits.

- **Work Environment Conditions**

- Work is performed in a climate-controlled office with standard lighting and noise levels. During occasional site visits, the employee may be exposed to outdoor weather conditions and industrial noise levels requiring hearing protection and appropriate PPE. Site visits are primarily observational/supervisory; this position does not perform energized electrical work.

- **PPE Requirements (if applicable)**

- PPE: Standard office attire for daily work. When visiting sites, employer-provided PPE is required (hard hat, safety glasses, steel-toed footwear, high-visibility vest, and hearing protection as posted).

- **Travel Requirements (if applicable)**

- Expect 25% travel, mostly to Prevalon's HQ for initial configuration work of hardware.