qa-automation-assignment

What will be evaluated

- Completion of requirements
- Code quality & design
- Readability of tests, how easy it is to understand scope of test case
- How easy it is to run tests and to interpret results

Description

The **UniFi Network Application** is part of the UniFi ecosystem by Ubiquiti. It serves as a centralized management interface for UniFi Network devices, including gateways, switches, access points, and other network components. The application is designed to offer real-time monitoring, configuration, and management of network devices, making it a powerful tool for both home and enterprise networks.

The UniFi Network Application is used for various network management tasks:

- **Network Configuration:** Set up and configure network settings, SSIDs, VLANs, and more.
- **Monitoring and Analytics:** Track network performance, bandwidth usage, and device status.
- **Security Management:** Configure Firewall, VPNs and Threat Management.
- **Alerts and Notifications:** Set up alerts for network events, such as device disconnections or security breaches.
- and much more..

Self-hosting UniFi Network Application allows users to install and manage the UniFi Network Application on various operating systems and hardware setups. This method provides flexibility and customization options.

Task

As base for any testing with Network Application, we must first have automated way of installing selected version and complete the setup which involves few basic steps - specifying name/country and admin credentials (can use local admin to simplify flow). See "Additional Notes" below on tips how to get started and execute flow manually.

Part 1 - Setup Network application via Web UI.

After setup completion we would like to verify that:

- `Dashboard` page -> `Admin Activity` widget lists admin activity with admin name specified in setup step
- `Settings` page -> `System` tab -> `General` section -> `Country/Region` dropdown value matches configuration during setup

Part 2 - Setup Network application via API.

Use Part 1 as template to observe executed API calls:

- `POST /api/cmd/sitemgr` '{cmd: "add-default-admin", name: "admin", email: "network-admin@gmail.com", x_password: "password"}' - to create local admin
- `POST /api/set/setting/super_identity` '{name: "UniFi Network"}' - to set application name
- `POST /api/set/setting/country` '{code: "840"}' - to set country/region
- `POST /api/set/setting/locale` '{timezone: "Europe/Riga"}' - to set locale/timezone
- `POST /api/cmd/system` '{cmd: "set-installed"}' - to set configured state

After setup completetion we would like to verify that:

- `GET /api/self` returns admin with configured "name"
- `GET /api/s/default/get/setting/country` returns configured country "code"

Additional notes:

- There's big community of Network Application users and vast set of tools to run and customize it
- Community maintained docker image
- Official Network Server download links
- After you install the application, Web UI is available via http://127.0.0.1:8080/ or https://127.0.0.1:8443/
- Local admin credentials are available after choosing "Advanced Setup" flow

Recommended tools:

- Docker
- Selenium/Java
- Gradle/Maven

Submission

- Provide URL to a public repository or send project files as ZIP archive