

Cambium Networks and RoamingiQ

Secure and Seamless Wi-Fi Connectivity

People everywhere crave secure, seamless Wi-Fi connectivity similar to their home environment. The RoamingiQ VAULT™ solution takes the user experience outside of the home to any public Wi-Fi network. Every time a user arrives to a familiar network, their device is automatically connected, secured, and identified. VAULT learns the location of where the device is connected, manages the network policies for that user, and accounts for all traffic until the device leaves the network. VAULT pre-shared keys (PSKs) or credentials can be used globally by any device joining the Wi-Fi network.

“VAULT is a software as a service solution that enables a better way of authenticating on IP-based networks. This unique connection occurs automatically without user intervention.”

Ed Neipris (Co-Founder & CTO)

Unique Capabilities of VAULT

- Aggregator of Wi-Fi Authentication Technologies
- Secure and Encrypted Wi-Fi Connectivity
- Single Sign-On Authentication Process
- Superior Wi-Fi Security via Personal Area Network (PAN)
- Universal Roaming Using Unique or Different SSIDs
- Frictionless Cellular Offloading
- User and Venue-based Policy Enabler
- Customizable (White Label) Management Interface
- Geo-Location by User Device
- Two-way Integration with All Core Network Devices

KEY FEATURES OF OUR SOLUTION

Global Subscriber Key: Each user is assigned a unique pre-shared key (PSK) that is available globally. VAULT enables an unlimited number of PSKs per SSID.

Secured Wi-Fi Networks: From discovery to association, all user traffic is secure and encrypted, avoiding man-in-the-middle attacks.

Easy Onboarding: One-time authentication to join a VAULT-enabled network. Seamless roaming and offloading occur naturally.

Wi-Fi Roaming Agreements: Enables roaming agreements between business partners. Detailed accounting, tracking, and reporting for traffic consumption.

Advanced API Integration: Flexibility to integrate with third-party management applications (CRM, SMS, PMS, NMS, RADIUS, LDAP, etc.) to manage subscriber Wi-Fi based keys. Popular integrations include Salesforce, PRTG, ConnectWise, and many others.

APPLICATIONS

VAULT™ in Multi-Dwelling Units

When integrated with Cambium Networks, VAULT enables a complete external radius server for the cnMaestroX ePSK feature – removing existing limitations on the number of PSKs it can manage. VAULT also enables a multi-level, cloud-based network management interface for MDU ownership groups.

Property Owner Benefits



Better Resident and Staff Experience

- Efficient onboarding of IoT and smart devices with standard manufacturer instructions
- Seamless connectivity across multiple properties



Management and Support Tools

- Property information and analytics on the same dashboard
- Simple resident management and support system for all properties



Increased Partnership and Revenue Opportunities

- Secure Wi-Fi roaming agreements with business partners
- Potential monetization of available Wi-Fi networks for cellular offloading



Resident Benefits



Move-in Ready Wi-Fi

- Future residents become familiar with the Wi-Fi experience before move-in
- Onboard new devices of any type, including headless and IoT without a support call



Resident Dashboard

- Intuitive dashboard to change passwords, manage devices and provide guest access
- Real-time access to bandwidth consumption (per device or overall)
- Effortless self-service support request tools



Enterprise-grade Security

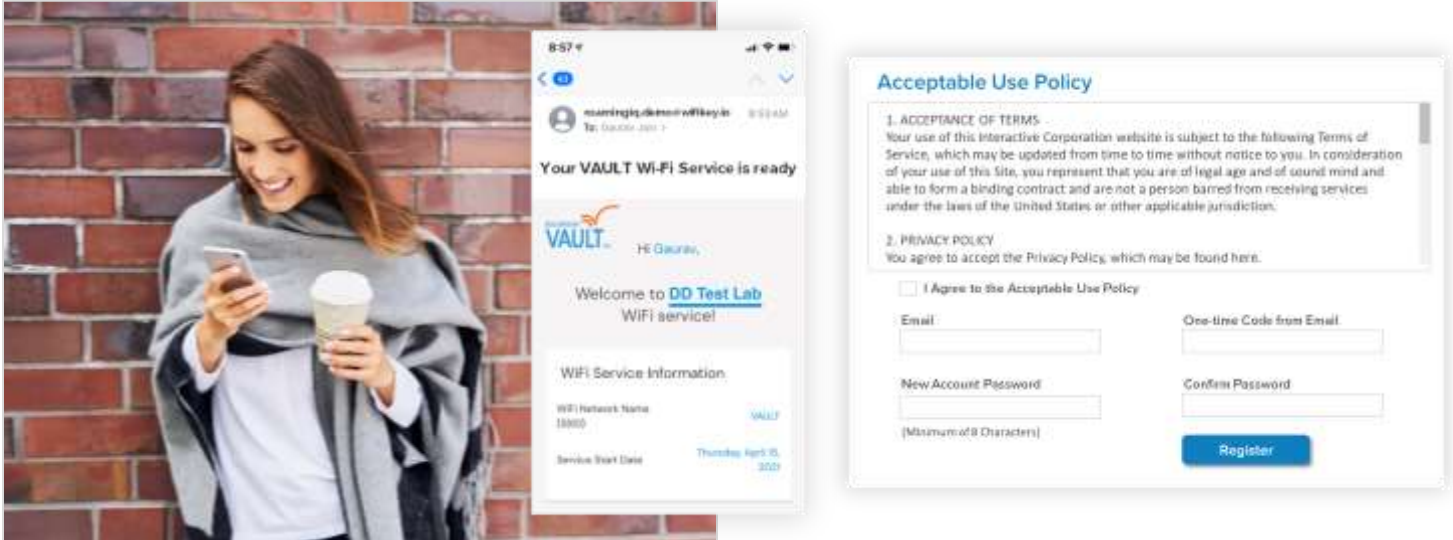
- VAULT automatically encrypts data without user intervention
- Residents are placed in a Personal Area Network (PAN), creating a secure “bubble” that follows them throughout the property
- Roaming between different properties with the same Wi-Fi PSK



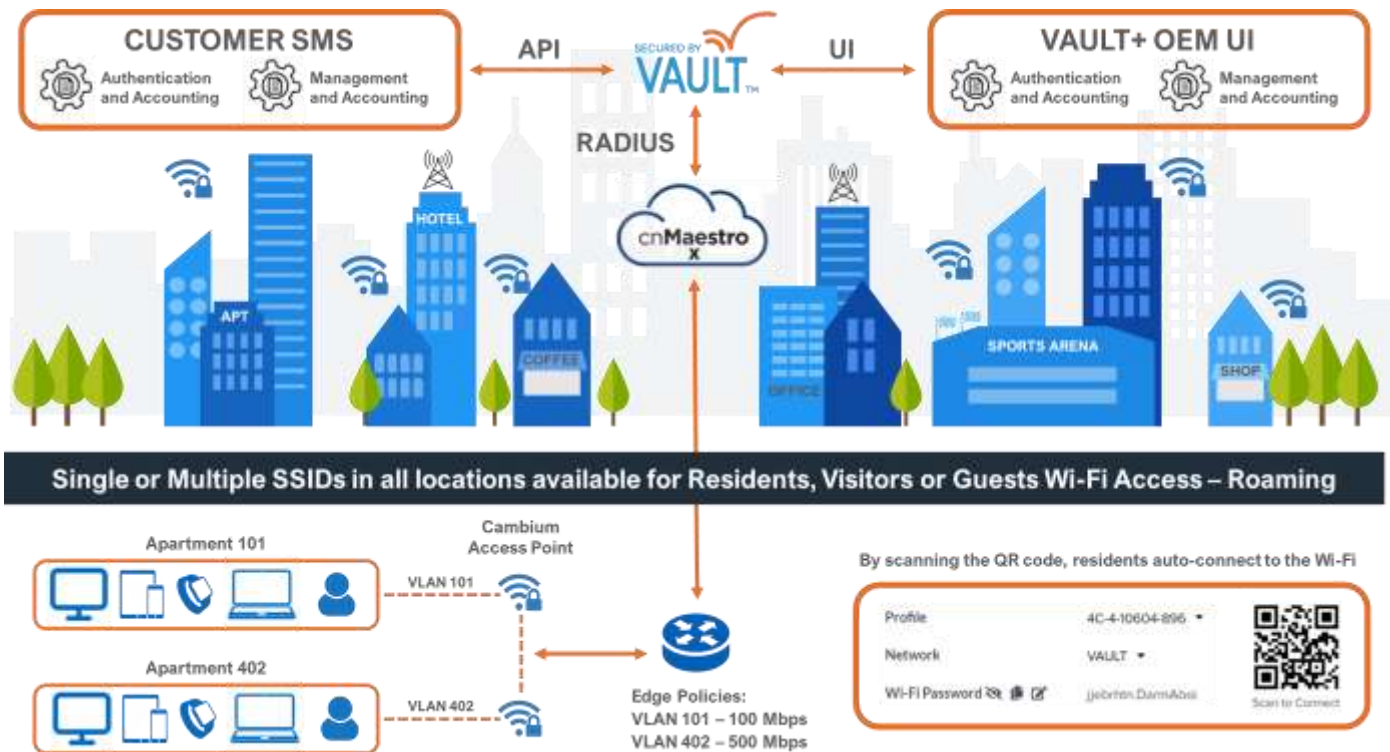
USE CASE AND FEATURES

Efficient Onboarding

Welcome email with link to verify credentials and confirm Acceptable Use Policy (AUP).



Network Diagram in Multi-Dwelling Units



Property Manager Dashboard

The Property Manager Dashboard provides a comprehensive overview of property operations. It features several key sections:

- Activity Summary:** Displays metrics such as 'New Residents Today', 'New Residents Next 7 Days', and 'Training Within 14 Days'.
- Service Status:** Shows counts for 'Assigned Units', 'Unassigned Units', and 'Pending NUP Acceptance'.
- Support Summary:** Tracks 'Open Tickets', 'Core Equipment Status', and 'Customer Premise Equip'.
- Recent Service Activations:** A table listing recent activations with columns for Unit ID, Name, Email Address, Status, Activated, and Expiring.
- Renew or Confirm Upcoming Expirations:** A table for managing upcoming expirations with columns for Unit ID, Name, Email Address, Status, Expiring, and Action buttons.

Annotations highlight key features:

- At-a-glance status of activity, including property overview:** Points to the Activity Summary section.
- Summary of support and equipment status:** Points to the Support Summary section.
- Multiple languages:** Located in the top right corner.
- Tablet-friendly quick buttons:** Points to the 'Add New Resident', 'Add New Guest', and 'Add/Modify Staff' buttons.
- Tools for managing service activations and expirations:** Points to the service activation and expiration tables.

Resident Wi-Fi Management Portal

The Resident Wi-Fi Management Portal allows residents to manage their network settings and monitor usage. Key features include:

- Manage Profiles:** A section for configuring network profiles, including profile name, network, and password, with a QR code for connection.
- Devices:** A section for managing connected devices, showing icons for various device types like smartphones and laptops.
- Cumulative Bandwidth:** A graph showing bandwidth utilization over time.
- Messages:** A section for interacting with support team messages.

Annotations highlight key features:

- Personal VLAN with IoT friendly tools and password controls:** Points to the Manage Profiles section.
- Manage connected devices:** Points to the Devices section.
- View bandwidth utilization:** Points to the Cumulative Bandwidth graph.
- Interact with Wi-Fi support team:** Points to the Messages section.

SUMMARY

RoamingIQ VAULT provides a competitive advantage when designing small to large scale Cambium Wi-Fi Networks. The integration with cnMaestro X external ePSK management feature enables unique, secured, and user-friendly Wi-Fi passwords. Free of scalability limits, VAULT also allows for seamless authentication, roaming and mobile offloading.

To learn more about Cambium Networks Enterprise Wi-Fi and Switching solutions, please visit: www.cambiumnetworks.com/wifi/

To learn more about RoamingIQ and VAULT, visit: roamingiq.com/