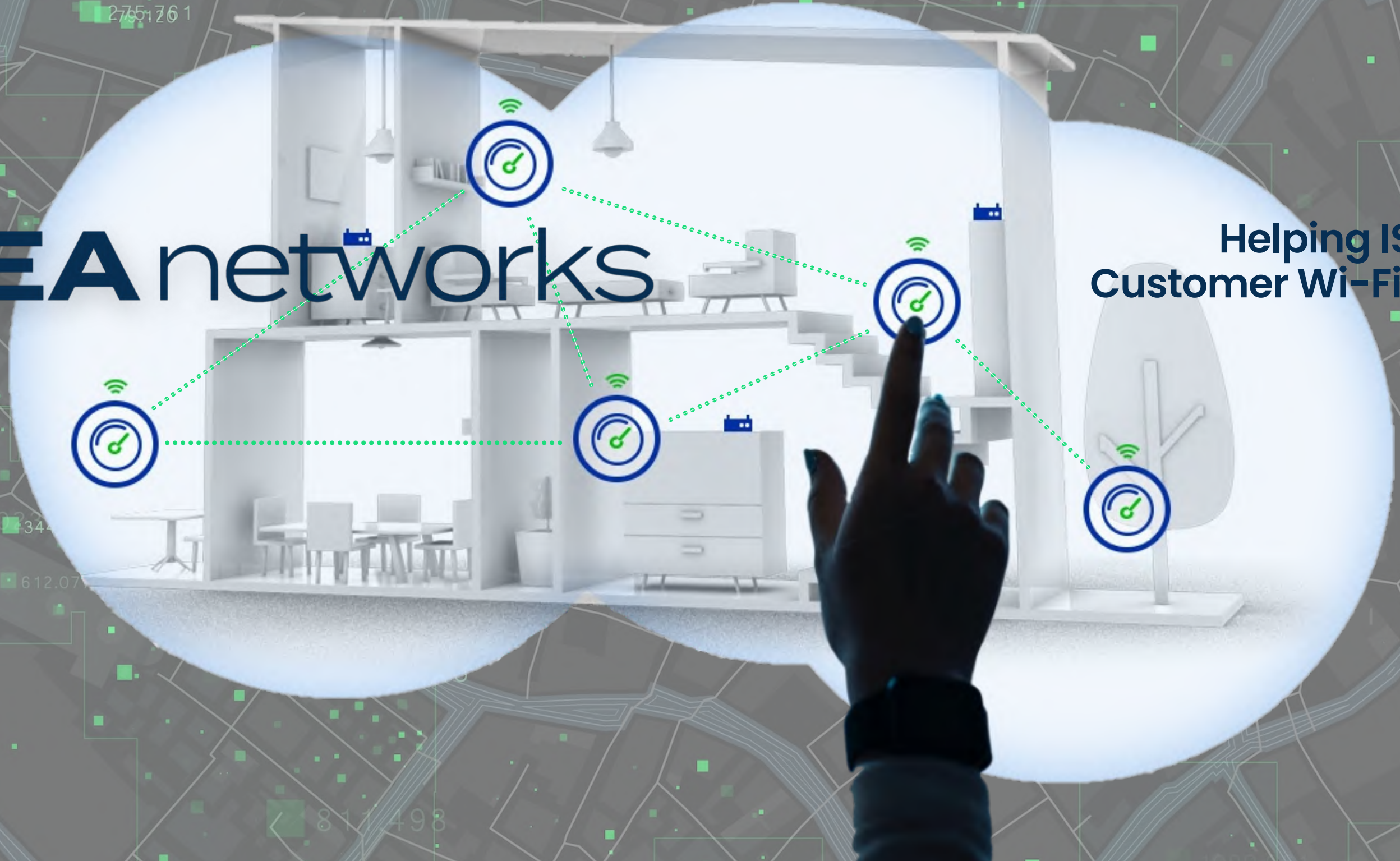**TEA** networks

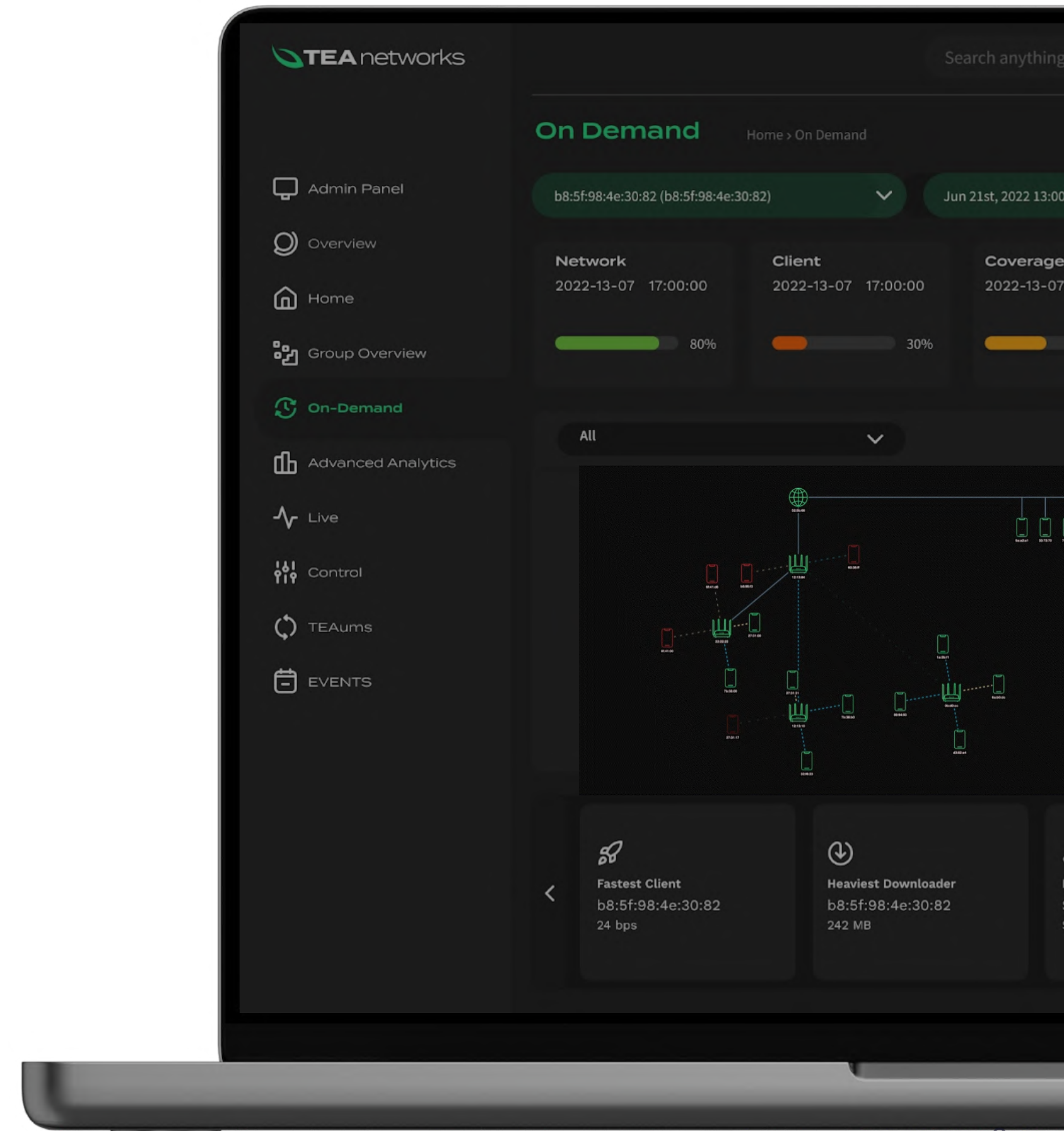**Helping ISPs to Exceed Customer Wi-Fi Expectations**

About us

TEA Networks, established in 2018, offers an innovative **AI-Ops solution** for **managing in-home Wi-Fi QoS**. We eliminate Wi-Fi operation complications for ISPs with **AI-based WiFi Assurance** that simply works.

Our advanced technology not only predicts potential Wi-Fi disruptions but also **proactively manages Wi-Fi connectivities** for an exceptional user experience while also identifying upsell candidates to boost ARPU.

As a true domain expert in Wi-Fi management technology, we are recognized as **the industry leader in providing mission-critical Wi-Fi QoS AI software solutions** to ISPs and CPE companies.

TEA networks

TEA locations

TEA Networks is here to serve you to **elevate your broadband offerings**.

Boston

Paris

Istanbul

Seoul

Taipei

Singapore

Established

Planned in FY24
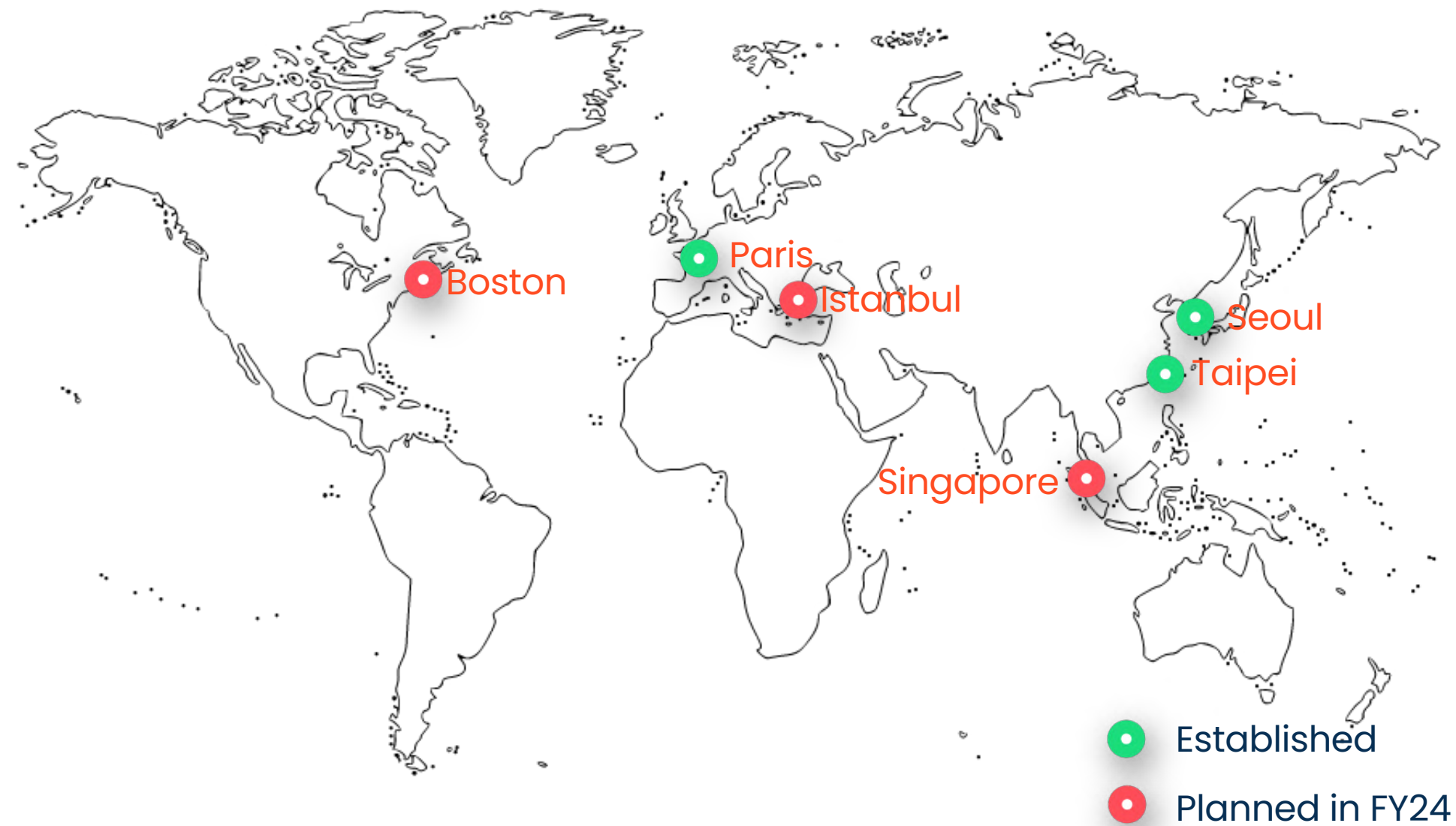
TEA networks

The problem

In-home Wi-Fi networks became not only common but also necessary for our comfort. We use Wi-Fi on our devices to connect to the world and losing this connection sometimes seem disastrous.
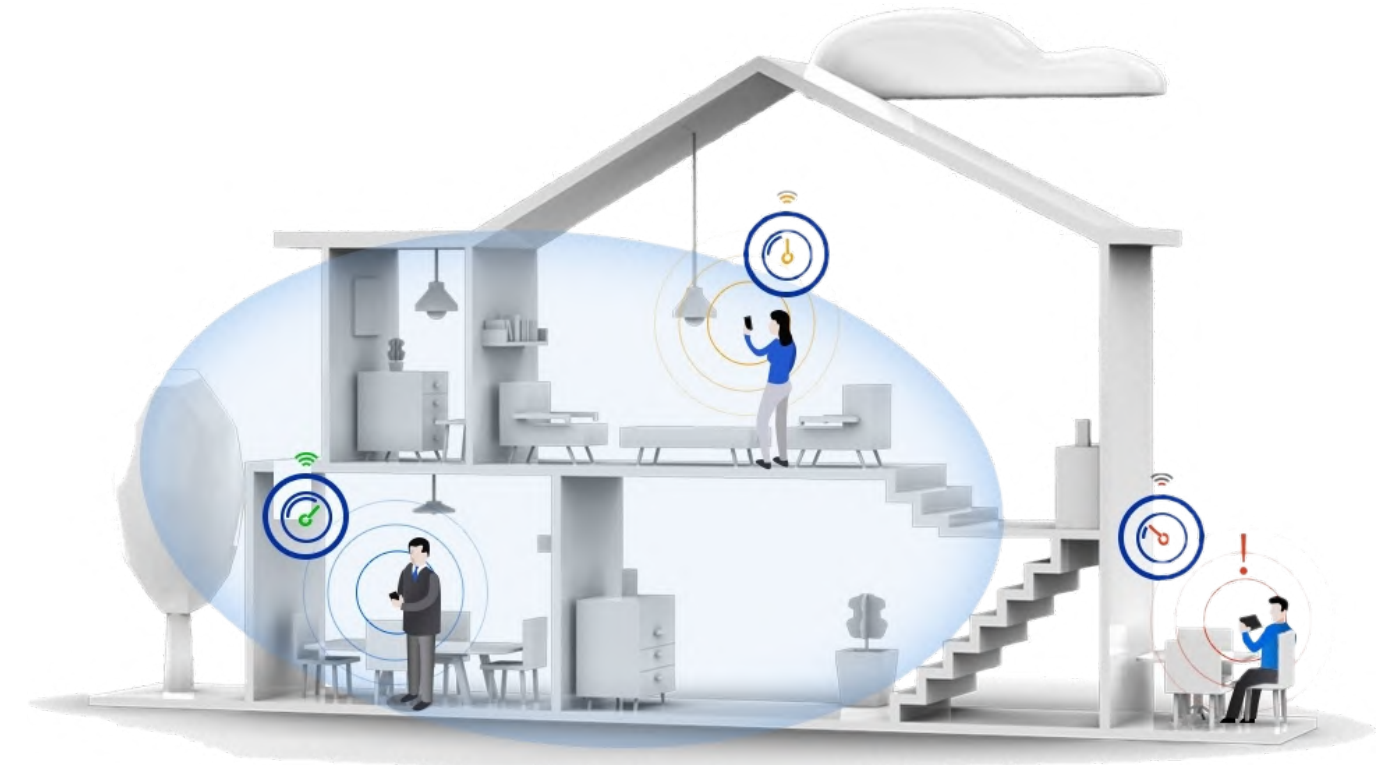
Data Consumption increasing Exponentially

High Expectation On High Speed Internet

Video Calls HD Contents Exploding

Connected Devices On the rise

Multiple CPEs to Maintain

Unapproved 3rd party Equipment

Problem

- Wi-Fi network environments are complex and difficult for ISPs to maintain and operate as the home gateway is the last terminating point for network visibility.
- ACS provides just standards-compliant Authentication, Authorization, and Accounting (AAA) services to network.

Challenge

- Providing Wi-Fi to the Whole Home
- Accessing data from partitioned hardware and software
- Delivering Faster Speeds
- Enabling Self-Management and Self-Healing

Negatives

26 min — Average length of customer support calls

**35 %** — Wi-Fi related calls require to send technicians

$2.6 Bn — Wi-Fi related support cost in the US and EU

Survey conducted by Nokia*
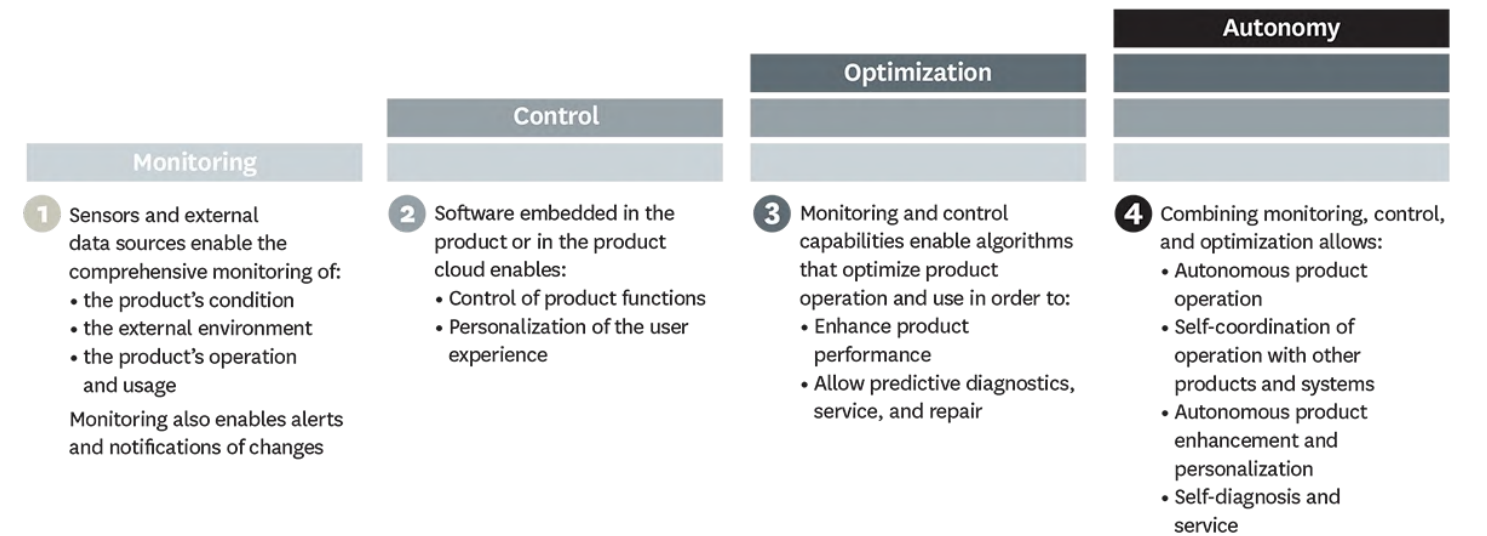
TEA networks

The solution

Our solution TEApot (TEA Predictive Optimization Technology) is an answer to Wi-Fi problems. Through real-time monitoring process, TEApot predicts failures and solves problems before they happen.

Underlying magic of TEApot
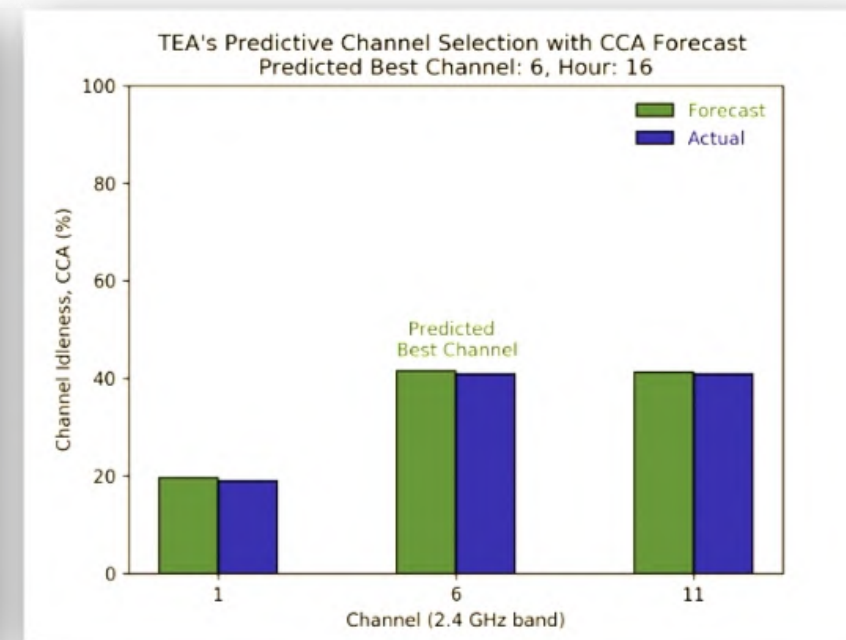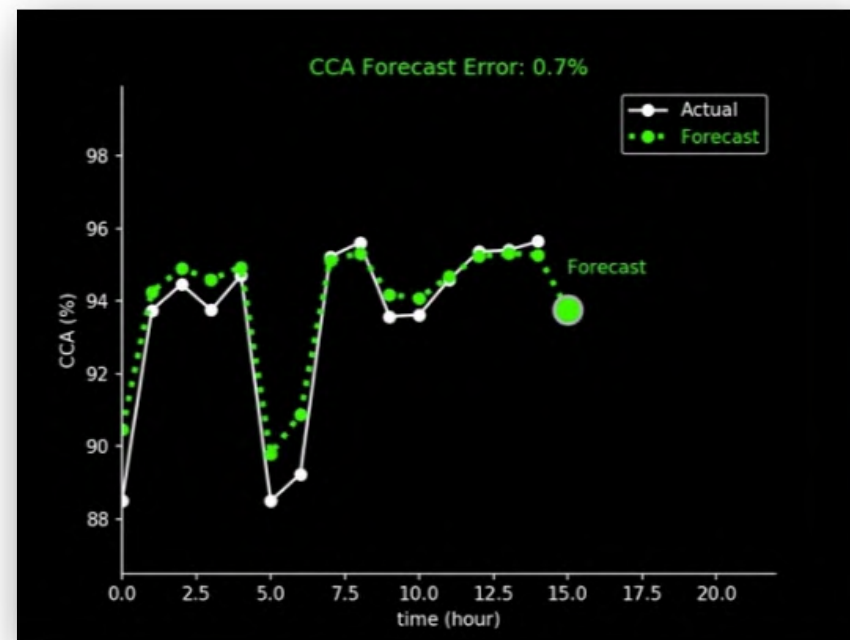
Efficient AI channel prediction calculates the best available Wi-Fi channels to operate 1 hour in advance and it helps manage the critical wireless infrastructure that predicts failures and solves problems before they happen.

Monitoring   Control   Optimization   Autonomy

Monitoring	Control	Optimization	Autonomy
1 Sensors and external data sources enable the comprehensive monitoring of: • the product's condition • the external environment • the product's operation and usage Monitoring also enables alerts and notifications of changes	**2** Software embedded in the product or in the product cloud enables: • Control of product functions • Personalization of the user experience	**3** Monitoring and control capabilities enable algorithms that optimize product operation and use in order to: • Enhance product performance • Allow predictive diagnostics, service, and repair	**4** Combining monitoring, control, and optimization allows: • Autonomous product operation • Self-coordination of operation with other products and systems • Autonomous product enhancement and personalization • Self-diagnosis and service

How TEApot work?

TEAdevice — Wi-Fi Raw Data · Intelligent Edge · Intelligent Edge Filtering Technique · Diagnostic Algorithm

TEAcloud — Purpose-Built AI · TEA Specific Model Action

TEAdash — Actionable Dashboard

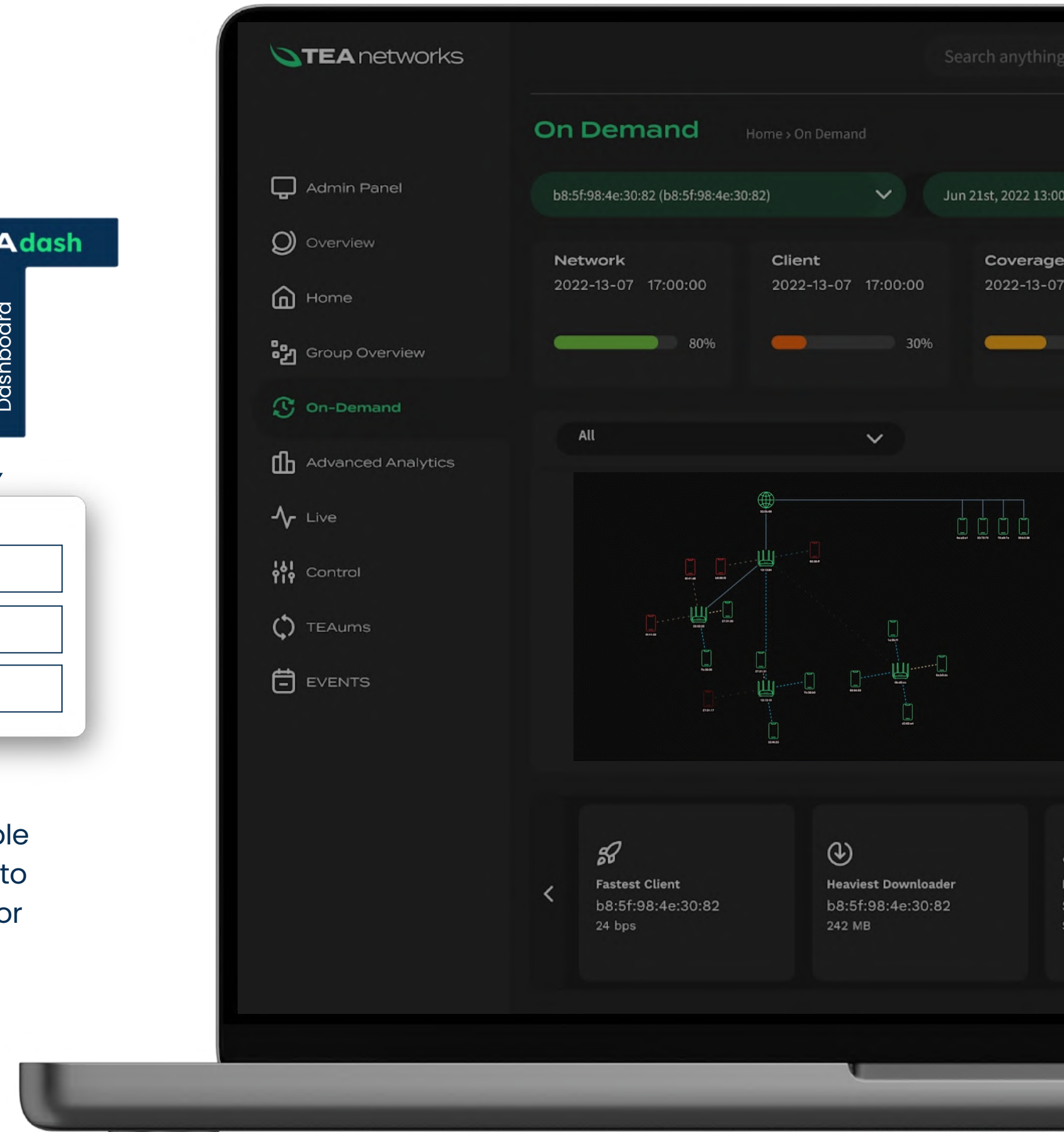| Action Tools	Investigation Tools	Discovery Tools
Automated Proactive Actions	Advanced Analytics	Anomaly Detection
Manual Actions	House Analytics	Expert System
Recommendations	Raw Data Analytics	Critical Events

Robust Performance

Best-In-Class performance by having Intelligent Edge on the devices that works tandem with the purpose-built AI cloud

Highly Scaleable

Any size of deployment and can be deployed on any cloud or on-prem with configurable data size modeling

Fully Customizable

Completely re-configurable for call centers personnel to company management for KPI measurements

TEAdevice

Highly responsive **embedded controller software module** that can be integrated on the gateways, routers, and APs (duration of integration is approximately ~8 weeks).

Chipset agnostic and provides interoperability between devices using different vendors' WLAN chipsets with your platform BSP.

Once integrated with TEAdevice, it forms an Wi-Fi EasyMesh networking and single point real-time activity management via TEAcloud In-home Wi-Fi environment with self-healing mechanism

Advanced Features include:
- *Band and Client Steering,*
- *Load Balancing,*
- *Mesh backhaul Optimization,*
- *Fault Recovery,*
- *Multi SSID Management with traffic separation,*
- *Client Access Control,*
- *Channel Optimization with DFS support*

TEAcloud

A single point real-time Wi-Fi management with the purpose-built AI Ops that automates maintenance for delivering long-term decision and policy making.

TEAcloud brings significant enhancements on self-optimization to improve the quality of user experiences with followings:

- Predict problems before they happen & optimize predictive channel selection
- Automate long-term analysis, pattern recognition and inter-network data correlation
    - Analyze historical performance to enable optimization with channel planning, steering optimization, support recommendations and performance tracking.
- Centralize management for enabling coordination among distributed nodes.
- Apply global optimization across multiple customers.

Fully containerized and can be deployed on any cloud or on-prem server.
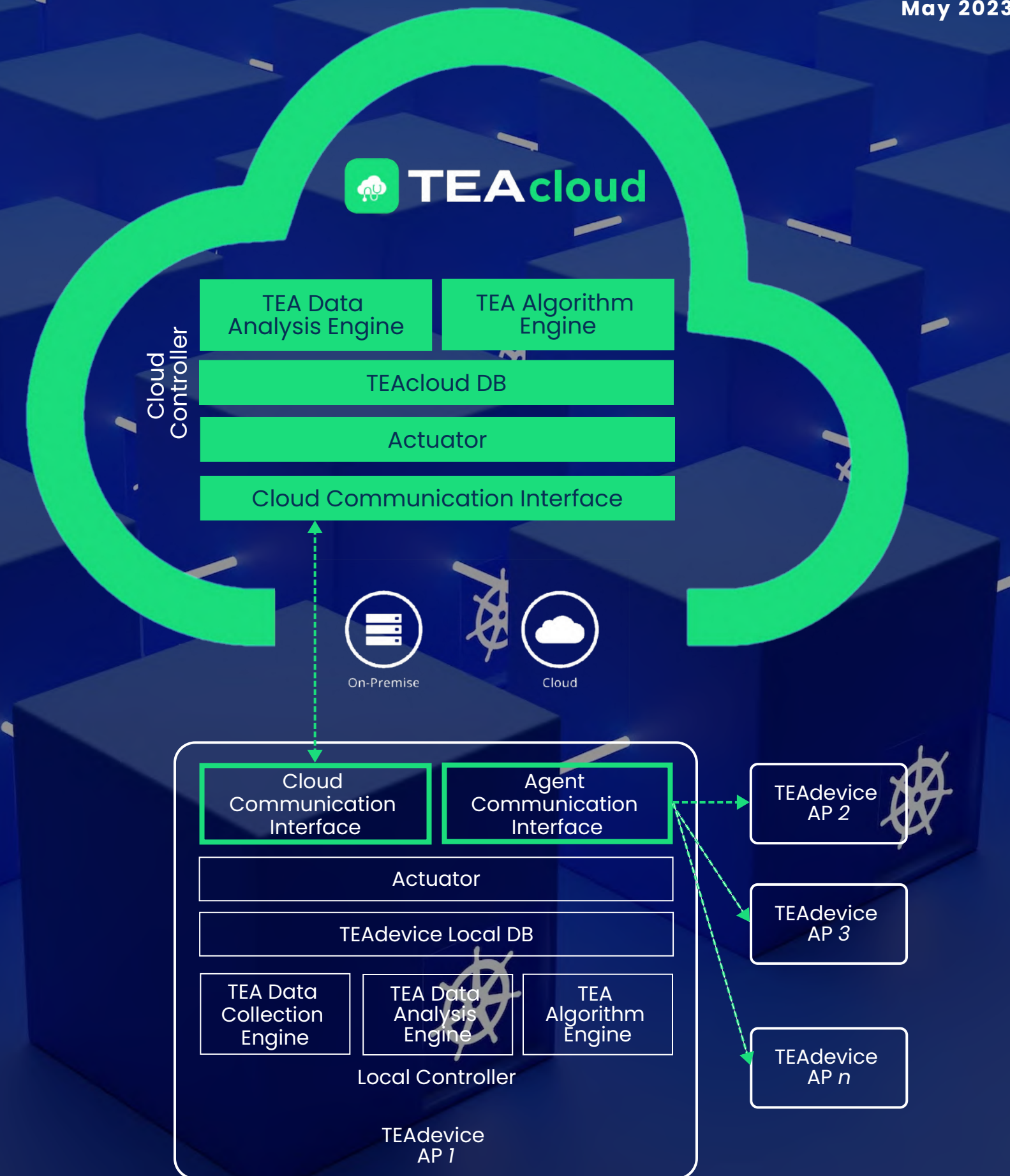
TEAdash

Interactive Actionable Insights with real-time and historical KPIs to display network health. High granularity and multi-layer support that shows real-time changes and replay past events and isolate subscriber's trouble conditions.

On-demand shows every change in the home network of past and current.

TEAdash offers intuitive device management through: advanced actionable dashboard that contains Wi-Fi management tools:

- *Discovery tools* - conducts daily anomaly detection with recommendation.
- *Investigation tools* - collects data for advanced analytics.
- *Action tools* - provide automated proactive actions and make recommendation with an Expert System that analyze problems with recommended actions.

We get you the best attention.

TEA networks