

AI Ops in Higher Education

DeIC conference 2022

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Driven by
Experience™

But first, why? What are (some of the) challenges in education?

Many types of devices

BYOD

IoT

Supporting at least two types of demographics (Students and teachers)

Improving students digital experiences to stay relevant and competitive

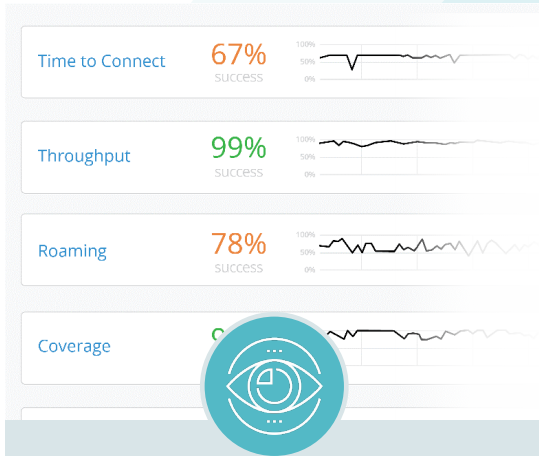
Small/understaffed IT teams

Security

Demand for digitalized education

AI-DRIVEN EDUCATION

Substantially Better



Client Level Visibility



AI-driven Operations and Support



Microservices Cloud for Agility



Digital Engagement with Virtual BLE

UNDERPINNED BY A 100% OPEN API DRIVEN ARCHITECTURE

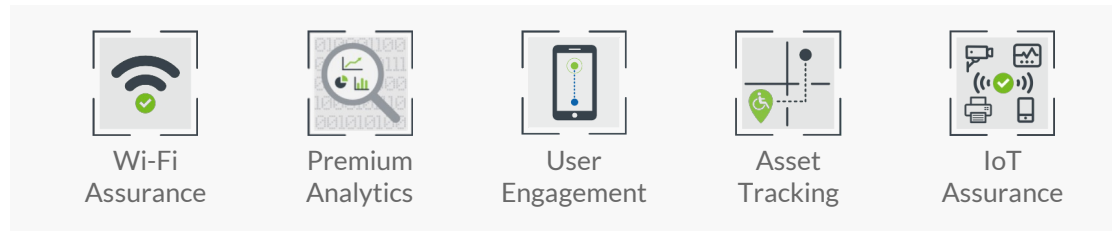
Delivered Across the Full Stack

MIST AP SERIES

Leader in Wireless LAN

Expand revenue opportunities. | Transform operations. | Deliver optimized and differentiated experiences.

- AI-driven automation and real-time insight into customer experience
- Simplified MSP network operations
- Cloud-based dashboard for easy, multiple organization management
- Rapid deployment of new customers
- Microservices cloud architecture for seamless updates
- Gartner Leading Indoor Location Services
- Part of a complete branch offering with differentiated and industry leading solutions



“85%
reduced site visits”
— Network and Cloud Architect

GAP

A LEADER

Wired & Wireless LAN
Access Infrastructure

Gartner

2021
MAGIC QUADRANT

Gartner names Juniper
furthest in Vision and highest
in Execution.

Marvis | Virtual Network Assistant (VNA)

Marvis Actions

Conversational AI interface

Driver Assist to recommend actions

- Track upgrades
- Fix misconfigured ports/VLANs
- Identify bad cables
- Find L2 loops
- Identify device compromise and risk to the network



AI-driven Operations and Support

The screenshot displays the MARVIS interface. At the top, there's a search bar with 'Natural Language' and 'Query Language' options. Below it, a central 'ACTIONS' hub shows 10 items connected to various network components: 5 Switch, 3 AP, 2 Authentication, DHCP, DNS, RF, Security, Clients, and 5 Missing VLAN (Low Power). Below this, the 'MISSING VLAN' section is active, showing a table of recommended actions:

ID	Info	Action	Date
MV-8	VLAN 248 is missing in 4 APs in 3 Switches at 2 Sites	Add VLAN 248 to the switches	Sep 23, 2019 04:50 PM
MV-1	VLAN 100 is missing in 2 APs in 1 Switch at 1 Site	Add VLAN 100 to the switch	Sep 27, 2019 02:34 AM
MV-12	VLAN 200 is missing in 2 APs in 2 Switches at 1 Site	Add VLAN 200 to the switches	Sep 30, 2019 01:35 AM

The right sidebar shows 'LATEST UPDATES' with three items: a 'RESOLVED ACTION' (AP Health), an 'AI VALIDATED' issue (Missing VLAN), and a 'REOCCURRING ISSUE' (Ethernet Error).

Delivered Across the Full Stack

Marvis | Virtual Network Assistant (VNA)

Marvis Actions

Conversational AI interface

Transforms how IT interacts with the full stack network

Streamlines operations and boosts experiences

Uses chat (NLP)

Provides deep understanding of issues



AI-driven Operations and Support

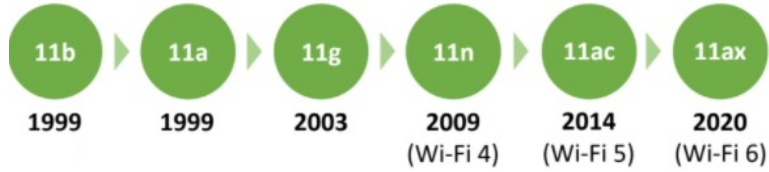
The screenshot shows the MARVIS interface with a dark blue header. A blue button in the top right corner says 'Troubleshoot ap Deeyo AP 1'. Below it, a light blue message box contains the text: 'Checking Deeyo AP 1. Here is what I found between September 1st ~ September 2nd:'. The main content area lists three issues, each with a blue title, a description, and a right-pointing arrow:

- Slow Association**: Clients of the AP had slow association due to transmission failure. The AP is currently online.
- AP Disconnect**: The AP was disconnected from cloud for a total of around 15 minutes due to switch down.
- Poor Coverage**: Due to weak signal strength.

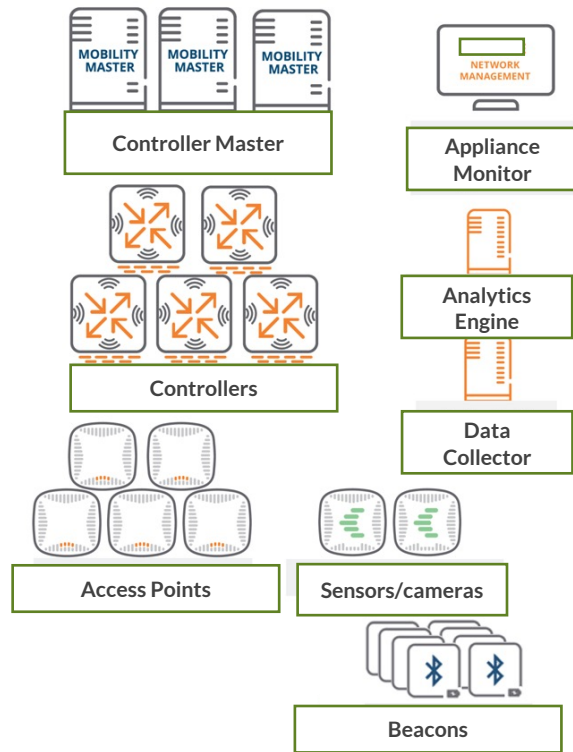
At the bottom right of the list are thumbs-up and thumbs-down icons. Below the list is a 'Message' input field with a close button. At the bottom, a light blue bar contains the text 'Choose an option' and five buttons: 'Troubleshoot device', 'Troubleshoot site', 'Device Search', 'Documentation', and 'Marvis Actions'.

Delivered Across the Full Stack

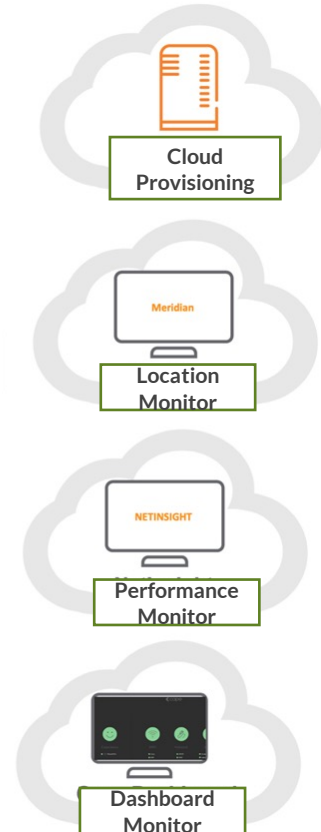
Complexity is the opposite of efficiency



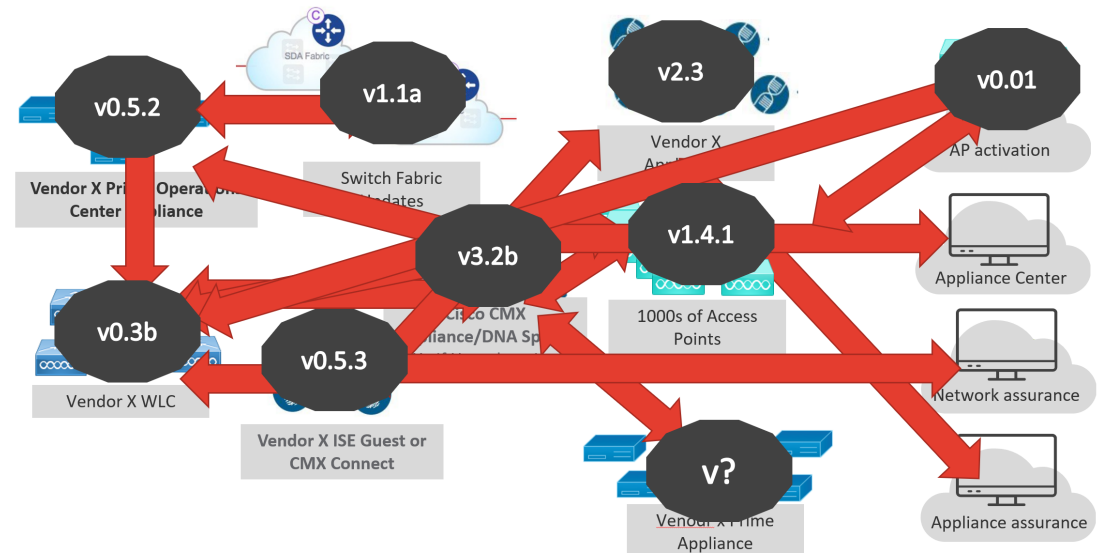
On Premise Boxes



Different Clouds






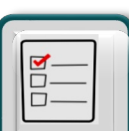


Too Many Dependencies

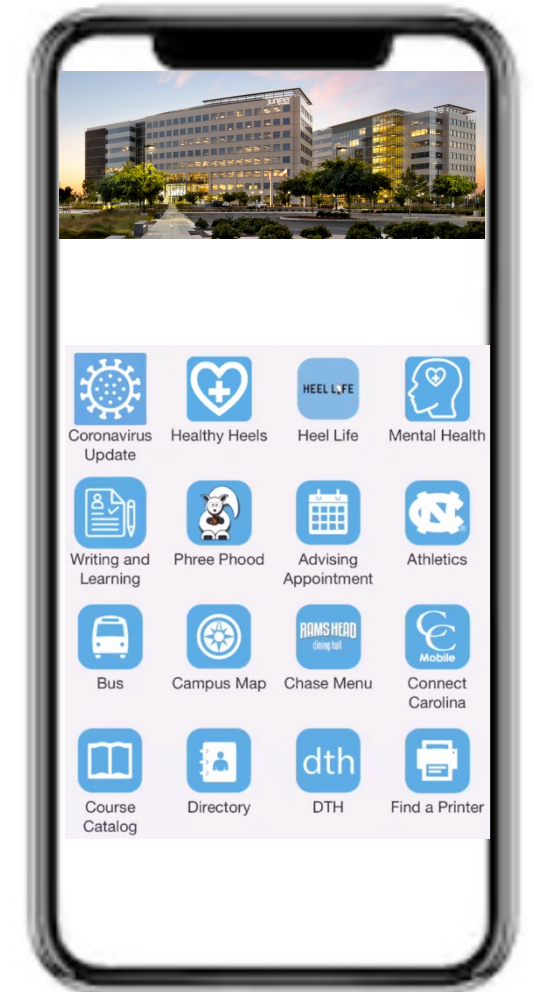




Augmenting the student experience with location services

Wi-Fi Should Be More Than Just An On-Ramp!

-  **Wayfinding** Campus directions, guided tours, instructor locator
-  **Tracing** Proximity notifications, contact tracing support
-  **Faculty** Roll call, Integration with LMS, Parent Updates
-  **Wellness** Student involvement, Tutoring activity
-  **Safety** Weather, Student Locator, Defibrillator
-  **Analytics** Asset Tracking, Library usage, Facility access



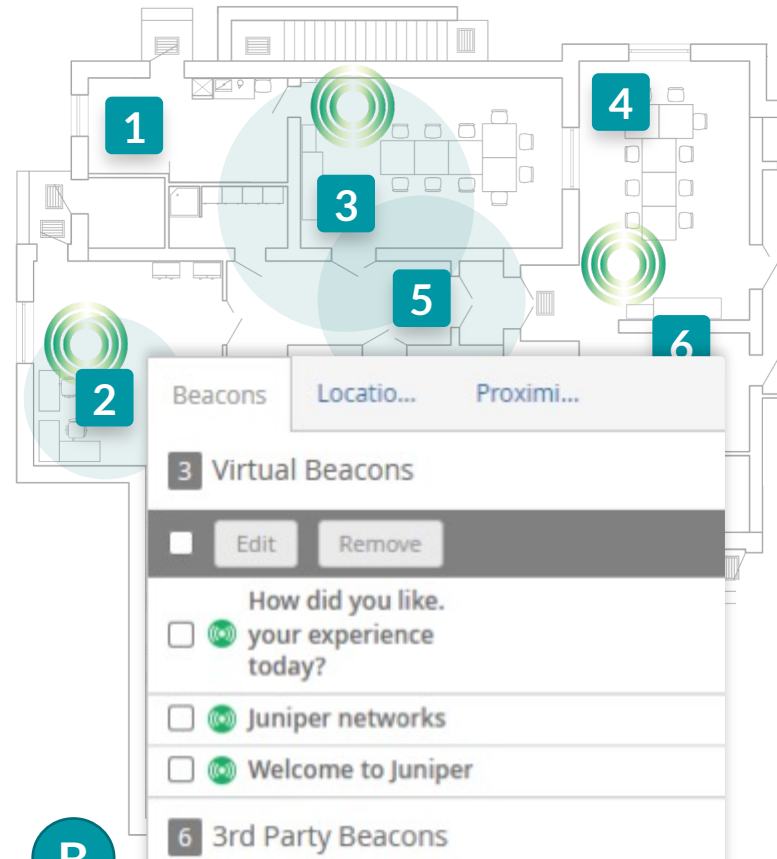
Transform Wi-Fi from a commodity to a strategic university asset!

How It Works



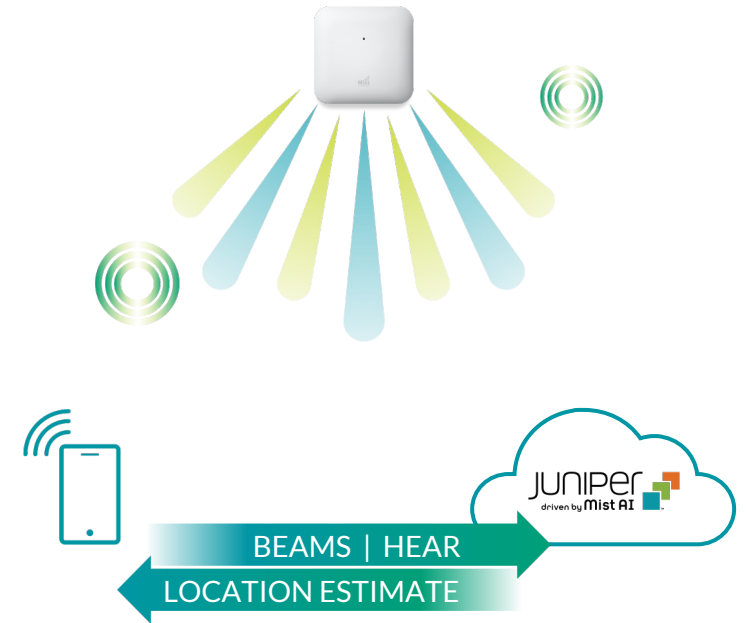
A

Scan and claim the Wi-Fi device to deploy industry leading Wi-Fi



B

Remotely pushout patented vBLE beacons via the Mist portal



C

Stream the highly accurate location-based telemetry



Thank you

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