



# Juniper Mist Access Assurance

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# What is Network Access Control (NAC)?

## Concepts



### Authentication Authorization (AAA)

- 802.1X / MAB
- Identify a User or a Device
- Determine User/Device Role
- Assign VLAN / Policy based on User Identity



### Client Profiling

- Passive Fingerprinting
- Device Type / Manufacturer visibility
- OS version visibility
- Using device fingerprint during AAA



### Posture Compliance

- Determine endpoint health and compliancy (antivirus, firewall, patches/updates etc)
- Agent-based or Agent-less
- Leverage Posture compliance status in AAA



### Zero Trust Network Access

- End-Point agent tunnels user traffic to the Cloud
- Cloud POPs classify end-user traffic and enforce network policies
- Today ZTNA exists outside of traditional NAC as a standalone concept



### Client Onboarding

- App-based on Portal based end-user device provisioning with 802.1X (certificate) or MPSK credentials
- Built-in PKI (cert) infrastructure

# What's Wrong with NAC Solutions Today?

Cisco ISE, Aruba Clearpass, Forescout NAC require professional services or a dedicated NAC IT expert

**Solutions are complex and brittle**

*Impossible to manage without breaking*

**Cumbersome troubleshooting and lack insights**

*No end-to-end visibility*

**Lack agility and scale**

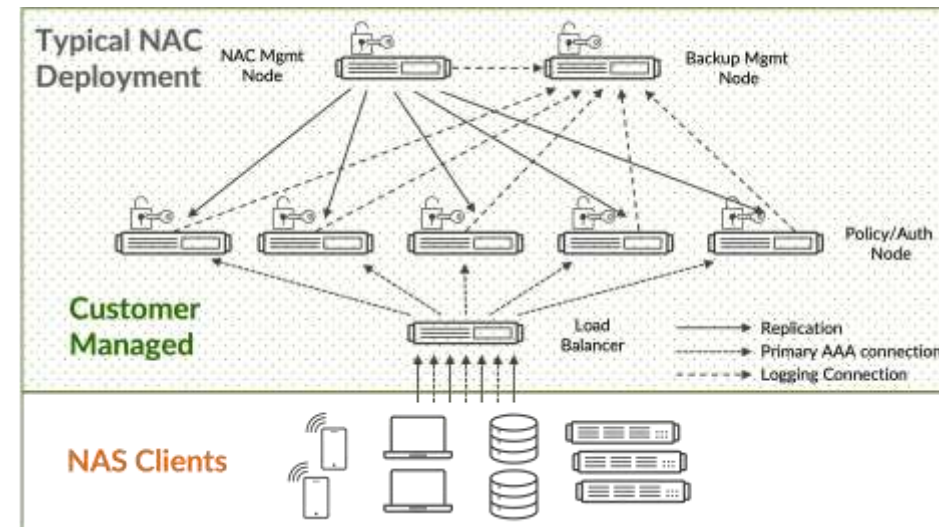
*Legacy LDAP and on-prem directories*

**Requires downtime**

*Maintenance, feature updates & security patches*

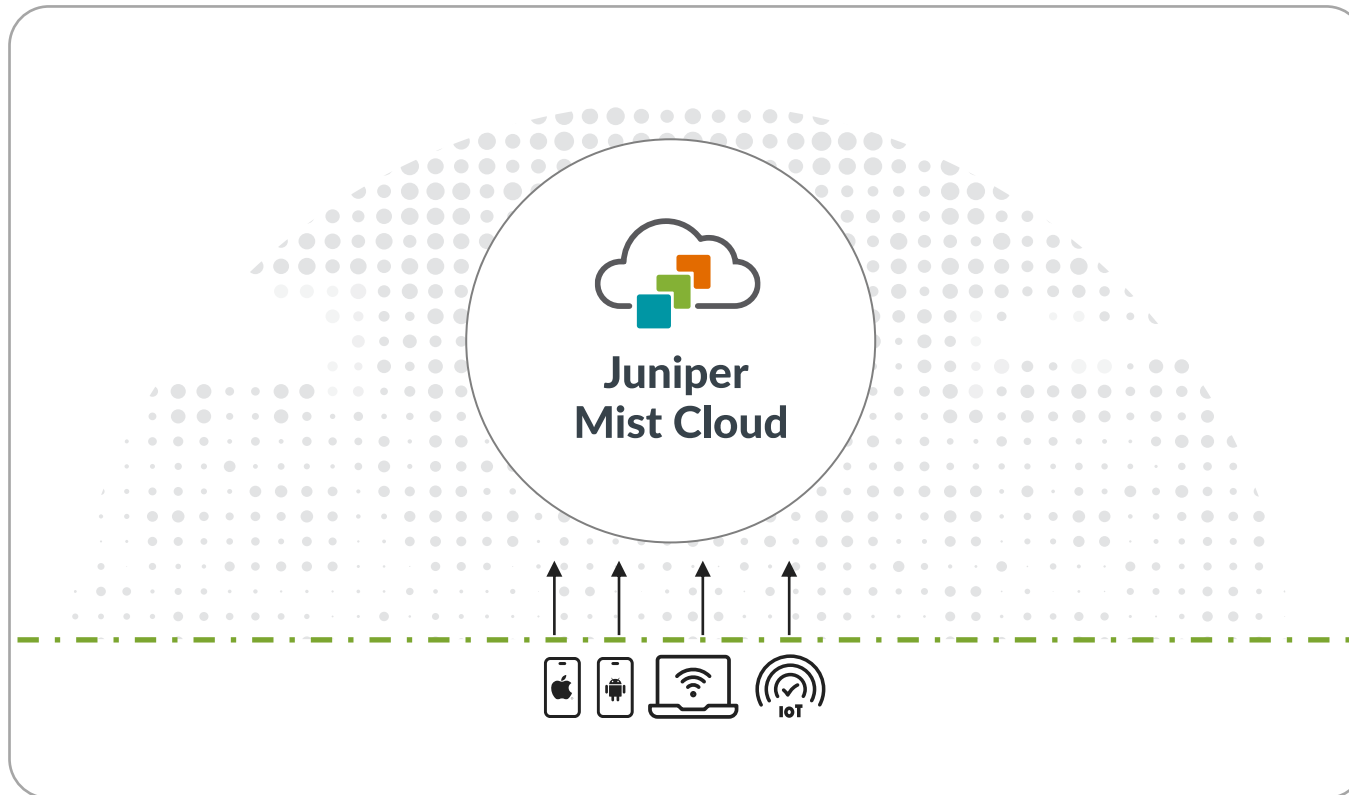
## Current NAC Customer Responsibility

- 1) Design for service redundancy
- 2) Design for high availability
- 3) Design for scale
- 4) Manually scale up or down
- 5) Maintain server hardware / VM servers
- 6) Perform upgrades / security patches



# Juniper Mist Access Assurance

## *Moving to the integrated cloud*



- ✓ **Microservices-based** Cloud NAC service natively integrated into network operations.
- ✓ **IT-friendly Day 0-2 operations** fully integrated into the network, continuously validating end-user experience.
- ✓ **AI-driven** network operations extended to network access control.
- ✓ **Periodic hitless feature updates** security patches and vulnerability fixes without downtime planning.
- ✓ **Geo-awareness, high-availability** Intrinsicly available with the Juniper Mist Cloud.

# High availability, High Reliability & Site Survivability

- All previously known clients (regardless of the auth method) get authenticated and full policy gets applied (VLANs, GBP tags, Roles, etc)
- New clients are authenticated and applied default critical service policy

## Why does it matter?



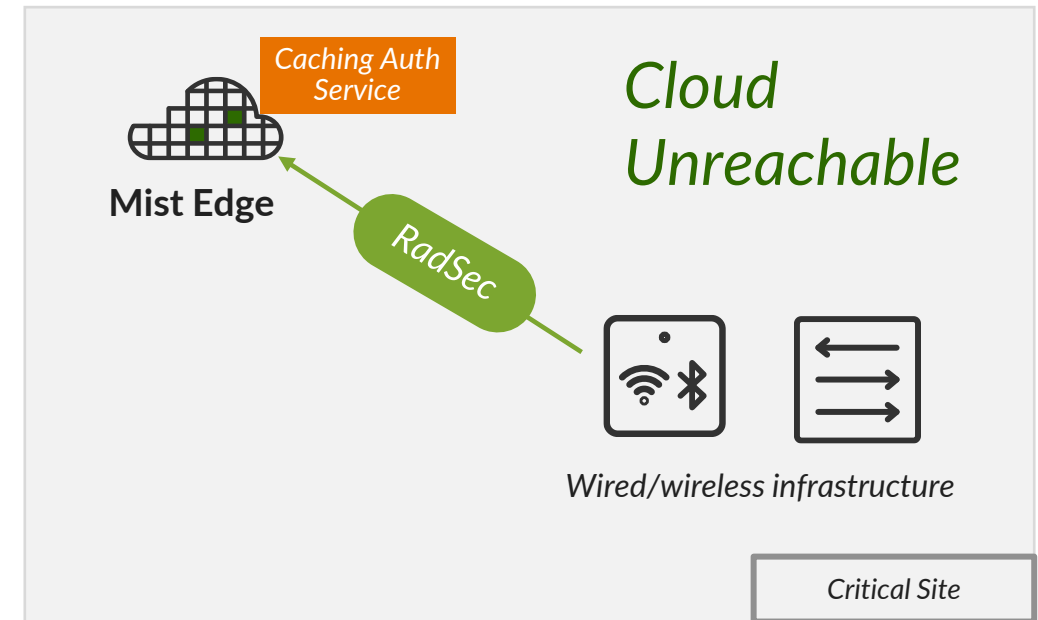
Cloud Microservices are used for the heavy lifting of authentication and authorization services.



Mist Edge provides a local on-premises point of presence for site survivability functions.

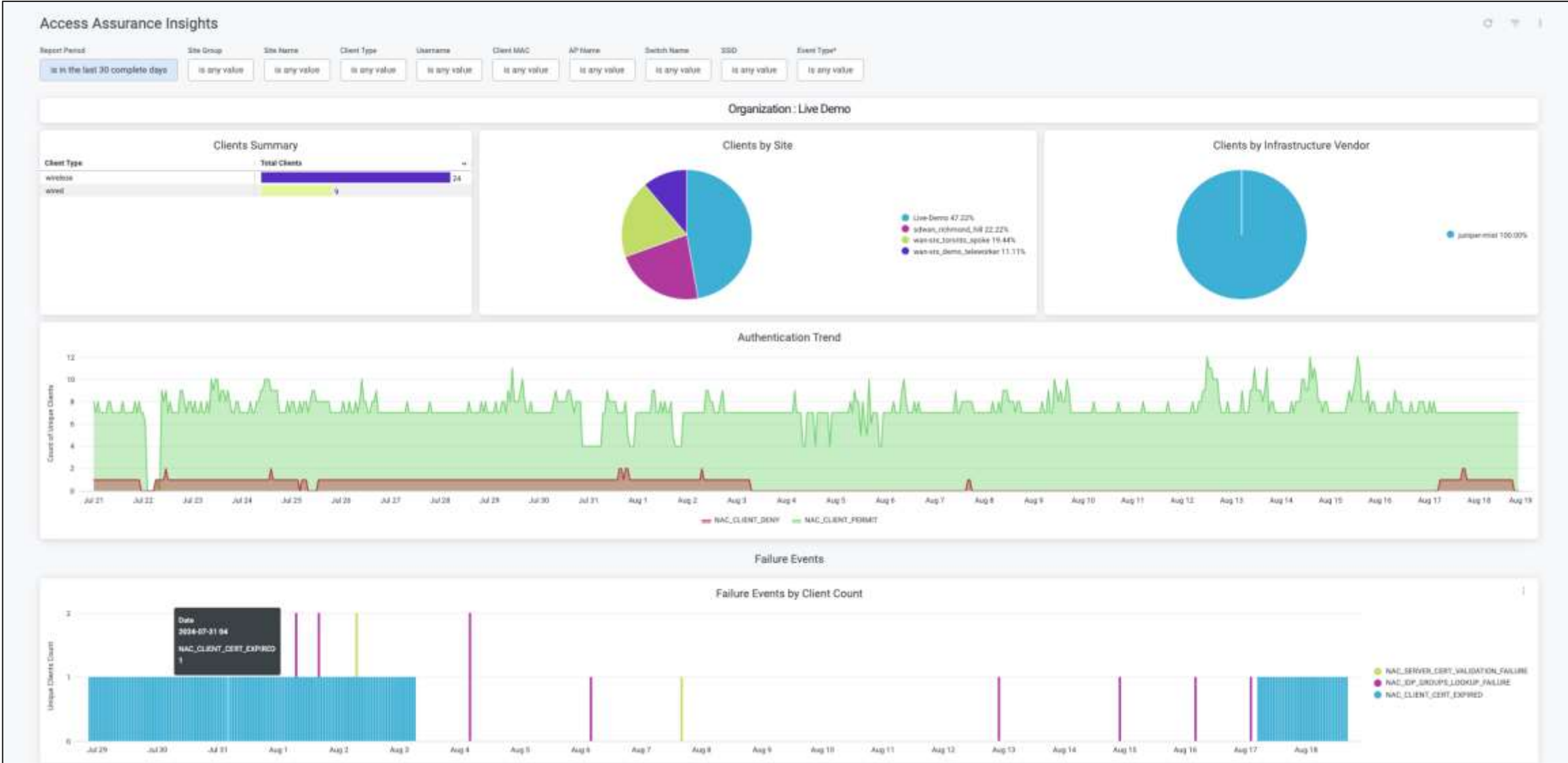


Lean operations on the Mist Edge side.

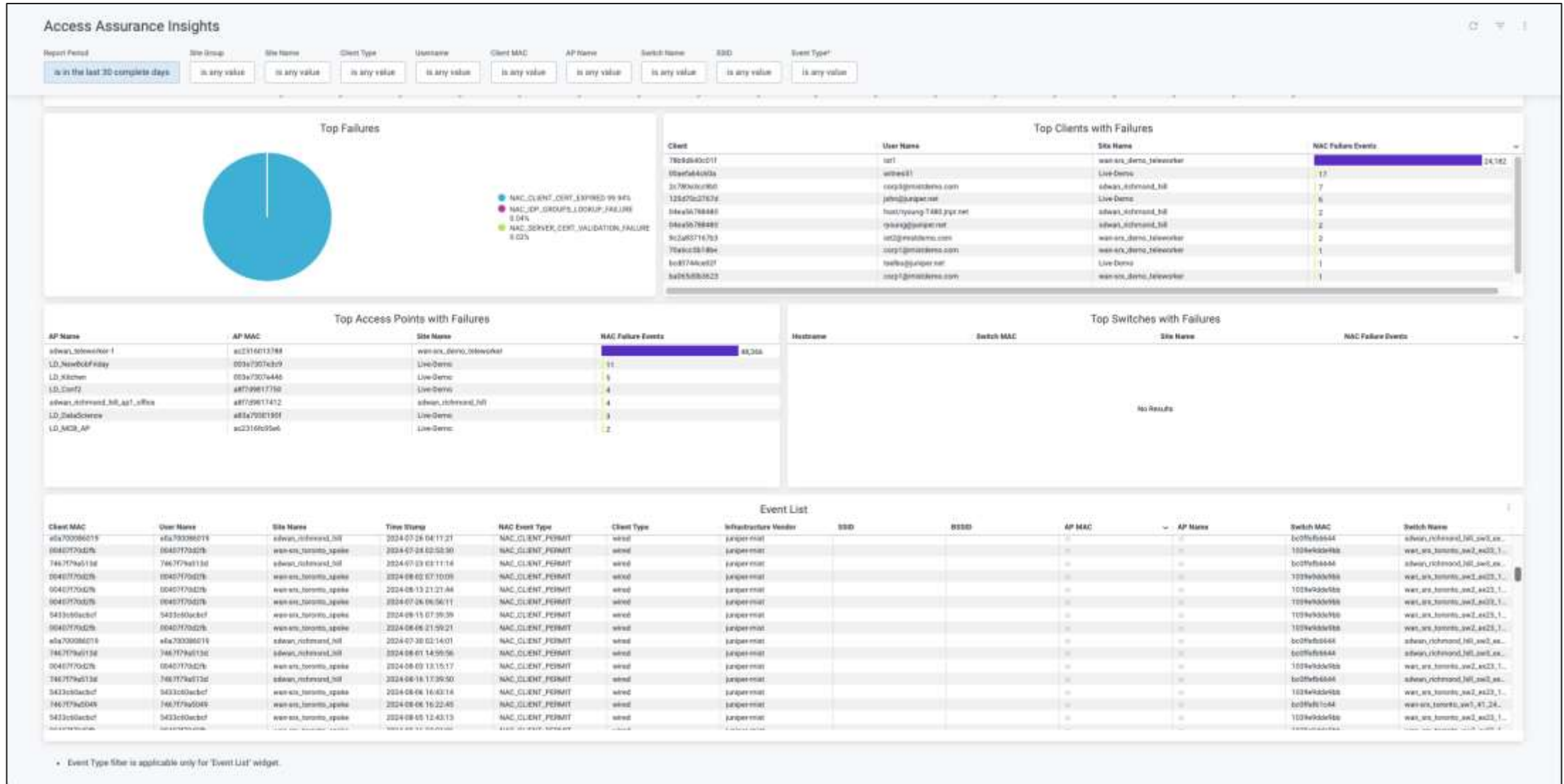




# Access Assurance Insights in Premium Analytics



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# Thank you

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