

# Alcatel-Lucent OmniVista Cirrus 10

Simple, secure cloud-based network management.

Alcatel-Lucent OmniVista® Cirrus release 10, a new cloud SaaS Network Management solution offers advanced centralized Wireless visibility and configuration for Alcatel-Lucent Stellar Enterprise Access Points, is a scalable, resilient, secure, native, cloud-based network management system for unified access, offered as a subscription service. Relying on state-of-the-art microservices architecture and developed with the latest DevOps methodologies and tools, OmniVista Cirrus Release 10 facilitates your digital transformation. It allows you to respond to business needs such as real-time analytics, monitoring the Quality of Experience (QoE) for wireless Wireless User, zero trust access policies, micro-segmentation, and Internet of Things (IoT) total enablement, including identification of network-connected devices.

OmniVista Cirrus provides an easy-to-deploy, effective way to manage and monitor Alcatel-Lucent OmniAccess® Stellar Access Point infrastructure. It offers advanced analytics for proactive service assurance and Unified Policies Access Manager (UPAM), a Network Access Control (NAC) module that includes enterprise authentication, role management, policy capabilities for guest access, and BYOD. OmniVista Cirrus is designed to improve wireless user insights by providing detailed user QoE and behaviour analytics.

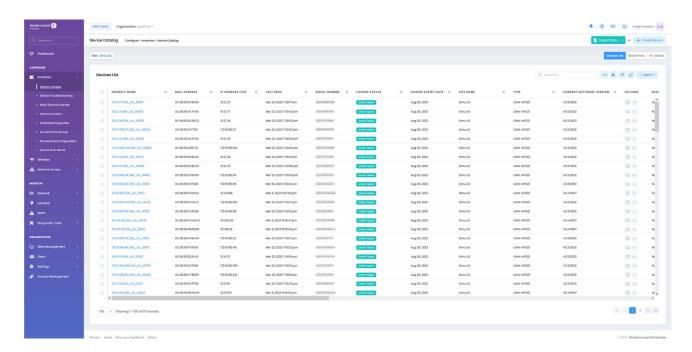
OmniVista Cirrus is a subscription-based service that facilitates alignment with your new business imperatives. Ease of purchasing, provisioning and ongoing daily operations are at the core of OmniVista Cirrus. Shifting to a cloud-based network management solution with OmniVista Cirrus simplifies digital transformation by reducing cost and administrative IT burden.

OmniVista Cirrus sets a new IT experience standard for simple yet powerful capabilities. It can scale and adapt to your business requirements. It offers advanced visibility and control over users and applications. By focusing on core IT operations, the comprehensive management OmniVista Cirrus solution makes it easy to improve application performance and troubleshoot issues in deployments with distributed locations and limited IT staff. OmniVista Cirrus protects your network infrastructure investment by adapting to changing business needs without the expense of "rip and replace".

OmniVista Cirrus, as a native cloud-based network management platform backed with a microservices architecture, delivers valuable outcomes such as continuous improvement without downtime, always up-to-date management platform, scalability and security. The automatic software update, including critical security patches, improves security and compliance.

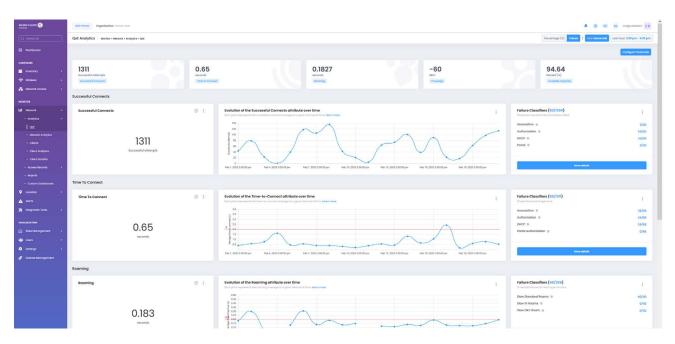
Features	Benefits
Investment protection	<ul> <li>Migrate Alcatel-Lucent Enterprise wireless devices from an on premises deployment to OmniVista Cirrus with minimal effort</li> </ul>
Operational simplification	<ul> <li>A streamlined procurement process; minutes from purchase to fully operational</li> <li>Simplified license schema, a single license covers all OmniAccess Stellar Access Points (APs)</li> <li>Provision OmniAccess Stellar APs in either CapEx or Network As A Service (NaaS) operating models for best cost flexibility</li> </ul>
Simplified IT	Continuous feature delivery simplifying IT operations, reducing costs
Multi-site management	<ul> <li>Provides centralised management of multiple virtual or physical sites</li> <li>Consolidates critical management information from across the entire network for a global and consistent network experience</li> </ul>
Multi-tenancy services	<ul> <li>Multi-client level with simplified network administration</li> <li>Easily control who has access to which client network and tenant with the appropriate role-based network administration credentials</li> <li>See all relevant management statuses, all-important network events and alerts from a single dashboard</li> </ul>
Highly scalable	<ul> <li>Cloud elasticity to support small to large cloud scalability, from small to large network deployments without network reconfiguration</li> <li>Designed to scale and adapt to your business transformation imperatives during the subscription</li> </ul>
Highly available	<ul> <li>Hosted in multiple regional data centres with best-in-class availability and resiliency</li> <li>Maximum availability is ensured with backup and redundant services and disaster recovery provided by each data centre</li> </ul>
Highly secure	<ul> <li>Cloud Software as a Service (SaaS) application hosted in SOC1 and SOC2 data centres</li> <li>OmniVista Cirrus with separation of out-of-band control plane (management traffic) and user data</li> <li>Secure communications with the highest level of protection using certificates ranging from a mutual cloud to device authentication</li> <li>Two-Factor Authentication (2FA) to secure network administration.</li> </ul>
Simplified onboarding and provisioning	<ul> <li>No IT manual intervention is required for AP onboarding. Zero-touch provisioning</li> <li>Minimal network expertise is required for initial enterprise network setup and daily operations, offloading IT resources</li> <li>Lower costs by enabling the deployment of new devices in minutes and without on-site support visits, eliminating repetitive tasks and on-site support visits</li> <li>Remote Access Points (RAP) and MESH topologies simplify configuration</li> <li>Stellar Access Point Wired access Port support</li> </ul>
Advanced monitoring and troubleshooting	<ul> <li>Network health and Wi-Fi assurance provide global network-wide visibility into key wireless performance for troubleshooting process and resolution</li> <li>Troubleshooting with alarm and event lists with historical and real-time data view</li> <li>Quickly identify potential Wi-Fi connectivity issues related to DHCP, DNS, authentification failures</li> <li>Gain visibility on wireless client health performance</li> </ul>
Integrated NAC	<ul> <li>Alcatel-Lucent UPAM integrates identity, policies and user/device roles in a single user interface, reducing the learning curve and minimising IT resources</li> <li>Enterprise 802.1x authentication with internal or external sources (RADIUS, AD, LDAP, Microsoft Azure AD)</li> <li>Extensive guest access and BYOD support for onboarding and managing visitor and employee personal devices</li> <li>Fully customisable captive portal with integrated credentials management for email, SMS, and social Login (Facebook, Microsoft 365, Rainbow™ by Alcatel-Lucent Enterprise)</li> <li>Guest self-registration option</li> </ul>
IoT enablement	<ul> <li>Seamless discovery and categorising of network IoT devices</li> <li>Automatic enforcement, with Access Role Profiles, providing micro-segmentation for Operational Technology (OT) networks</li> </ul>
Device software compliance	<ul> <li>Optimal OmniAccess Stellar AP firmware update, for security compliance and vulnerability management</li> <li>Device software version upgrade based on Scheduling, (best software version and AP group) reducing maintenance window</li> </ul>

# OmniVista Cirrus Catalog

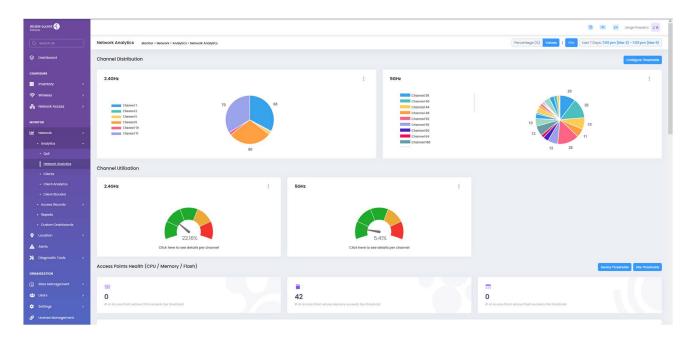


OmniVista Cirrus Catalog provides an overall overview of your network. A single point to control the status of all the network devices: license information, , Stellar AP model, connectivity, software release, location, etc.

# OmniVista Cirrus QOE Analytics Dashboard

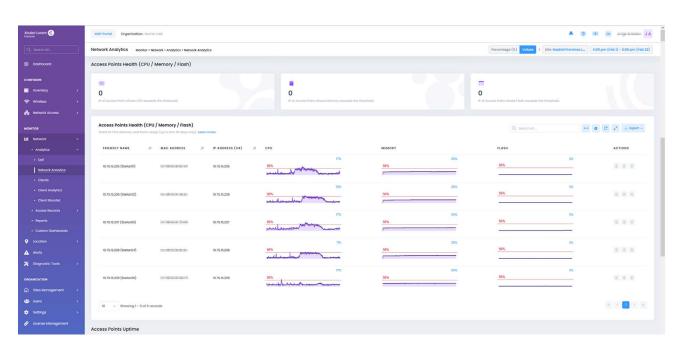


OmniVista Cirrus QoE Analytics shows the quality experienced by the connected clients. Successful connects, time to connect, roaming time, coverage, and available capacity trends allow for problem identification (i.e., DHCP server down) and troubleshooting starting point.



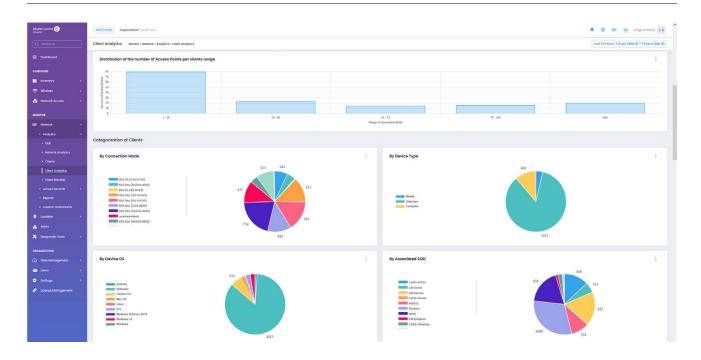
OmniVista Cirrus Network Analytics shows the channel distribution, utilization, and high-level view on Access Points Health. The customizable timeframe allows for monitoring of the WLAN network's health.

# OmniVista Cirrus Access Points Health



OmniVista Cirrus Network Analytics detailed view on Access Points Health. APs with KPIs persistently over the threshold may require investigation.

# **OmniVista Cirrus Client Analytics**



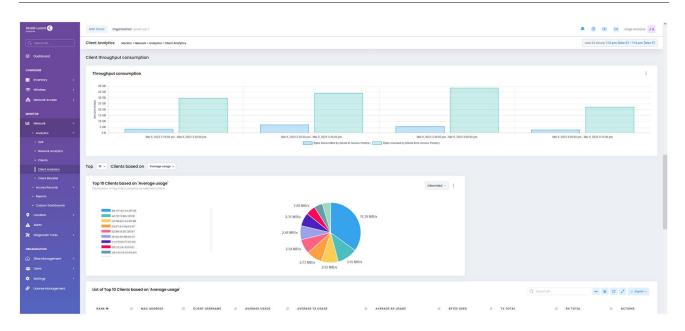
OmniVista Cirrus Client Analytics with detailed information about the connected clients: Device type, Operating System, Wi-Fi standard, SSID most used. IT can monitor and control which devices are allowed in the network.

# OmniVista Cirrus Heatmap



OmniVista Cirrus Heatmaps help IT identify areas with poor WLAN coverage or high client density. This information is valuable for capacity planning or business needs.

#### **OmniVista Cirrus 10 Client Analytics**



OmniVista Client Analytics shows connected clients' throughput consumption. Monitor and ensure devices receive a fair slice of the bandwidth.

# **Product specifications**

# Simplified ordering and activation

- Customer self-service sign-up for tenant registration and service activation
- Steamlined subscription process from license ordering to service activation

# Simplified deployment

- Plug-and-play. No need for IT staff on-site. Once the physical installation and cabling are done, the APs will use the Internet connection to self-provision. The IT staff can now comfortably configure the network.
- OmniAccess Stellar WLAN APs will automatically connect with the associated OmniVista Cirrus instance under the configured tenant
- New APs inherit all the configuration from the AP-Group, including radiofrequency and wireless security options
- Remote Access Points (RAP) and MESH configuration for APs are supported

# Security

 Traffic from the site to OmniVista Cirrus is limited to encrypted management and authentication

- Certificate-based authentication and encryption; simplified certificate generation
- RADsec for user and device authentication
- Layer 2 VPN encryption and tunneling services between an AP and OmniVista Cirrus
- Administrative management is secured over HTTPS/TLS
- Role-based multi-tenant administrator with extended granularity
- Firewall-friendly, eliminating complex security policies
- Strong password policies, including Two-factor authentication available at the tenant or the multi-tenancy level

#### **Multi-tenancy services**

- Allow Managed Service Providers (MSP) and large organisations to effectively manage and monitor multiple associated customers
- Advanced dashboard capabilities for multi-tenancy services including device inventory, alerts and status

- The multi-tenancy model operates under a hierarchical model, with Managed Service Provider on top, managing the tenants
- Multi-tenant architecture with secure account separation for each tenant with role-based administration per site

#### Cloud-native architecture

- Highly available micro-services architecture for large scale operations and maximum resiliency
- Unlimited number of instances; each instance capable of supporting several multi-tenants
- 100% programmable platform, fully extensible and open solution, through APIs, for network automation and seamless integration with third-party solutions
- Elastic growth from a single AP to thousands of APs per tenant
- Cloud velocity with new features incorporated seamlessly, without service disruption

# Wi-Fi real-time heatmaps

- Wi-Fi client density heatmaps: Identify high- and low-density areas on the site map, simplifying wireless coverage optimisation
- Wi-Fi coverage heatmaps: Identify good and poor coverage areas on the site map
- Enable smart capacity planning

#### Wi-Fi service provisioning

- Profile-based configuration
- SSID profile has all the information related to SSID: Name, encryption, authentication, device-specific PSK, general bandwidth limits, Quality of Service (QoS), tunneling capabilities and more
- Access Role Profiles (ARP): Contain all the information related to the profile to apply to a device connecting to the network including specific QoS, tunneling, VLAN, bandwidth and more
- Radio-Frequency (RF) profiles contain radio frequency settings such as allowed bands, regulatory domain settings, channels, association rates, short/long guard intervals
- Profiles apply for the configuration of all the functions of the WLAN network:
   AAA profiles, QoS unified policies, tunnel profiles, location profiles, period profiles and more
- AP-Group profile is the management entity for a set of APs with a combination of different SSID, ARP, RF and other profiles. All APs in the same group will inherit the AP-Group configuration

#### Configuration lifecycle

- Optimal device firmware selection, reducing IT involvement with automatic software deployment
- Alcatel-Lucent Operating System (AWOS) versions are advertised from OmniVista Cirrus as they are production released, ready-to-use and deploy, providing the latest features

#### **Unified management**

- Single user interface for managing OmniAccess Stellar APs and UPAM
- OmniAccess Stellar APs for wireless services provisioning and monitoring
- UPAM for centralised role-based access policies with built-in authentication
- Advanced guest and BYOD access mobility features, including configuration and monitoring
- Integrated captive portal with support for social login authentication (Facebook, Microsoft 365, Rainbow)

#### Dashboard

- Rich web-based dashboard, providing visibility and control anywhere from a central cloud application
- Multi-tenant dashboard with all managed tenants, their sites, admin users, devices associated with the tenant, licensing status, audit logs and alarms. An overall view of the tenant at-a-glance.
- Visual displays of critical network Key Performances Indicators (KPIs) over time

#### IoT enablement

- IoT inventory with end-point fingerprinting gives complete spectrum visibility of all connected devices across the network with complete contextual information
- Contextual information of all connected devices, including key attributes such as device type, vendor, hardware version, network location, and time information
- IoT enforcement with access role profiles automates secure network-wide access based on IoT classification
- Monitor and control network IoT devices with IoT analytics

#### Wi-Fi assurance

- Qualify the Wi-Fi user experience with QoE metrics such as time-to-connect, roaming time, coverage quality, authentication time among others
- Monitor threshold metrics and simplify troubleshooting: If authentication time increases, the external authentication source may be unavailable
- Troubleshooting and Root-Cause-Analysis (RCA): Failure counts per failure type, failure detection over time, threshold management, notifications and alarms
- Analyse client behaviour with client session metrics: When users connect, with which devices and for how long, websites most visited, client throughput consumption over time and more
- Monitor channels and bands, clients per AP, per band, per SSID, bandwidth consumption and more
- Live and historical client lists, blocklist clients among others
- Monitor authentication records to detect anomalies, user authentication failures, correct role assignments and more
- Monitor captive portal authentications, guest self-registration records, guest and BYOD devices, IoT devices and more
- Configurable duration for optimal data retention

# Diagnostic tools

- Define relevant network events and monitor them over time
- Define event responders for real-time notifications
- Access from OmniVista Cirrus to on-site APs using HTTPS or SSH
- One-click support gathering information for easy troubleshooting

# Open API

- OmniVista Cirrus is built as a native API platform
- Open approach for easy integration into ecosystem application solution
- The authenticated and encrypted API is open and stable, with extensive documentation and use cases
- Easy to integrate with other applications such as Rainbow

# Privacy and regulatory compliance

- OmniVista Cirrus is hosted in regional data centres based on customer location for data location and regulatory compliance, with high availability and disaster recovery
- Hosted in SoC 1 and SoC 2 compliant data centres
- · Energy-efficient data centres
- Compliant with applicable data privacy, security and regulatory framework in the United States, European Union and abroad
- Compliant with General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA)

# **Technical specifications**

# OmniVista Cirrus-supported devices

 All OmniAccess Stellar WLAN Access Points with minimum AWOS release 4.0.6 (excluding AP1101, AP1201H)

#### Minimum browser requirements

- Google Chrome minimum version 63
- Mozilla Firefox minimum version 56
- Microsoft Edge Chromium version 110

# **Ordering specifications**

SKU	Description
OVC-C-ESS-M	OmniVista Cirrus - Cloud SaaS Subscription Release 10 - Essential License - (Covers all supported OmniAccess
	Stellar AP models). Monthly Price per device. Min. 12 to 60 months max. duration.

# Included:

- OmniVista Cirrus Network Administration SaaS for all licensed devices
- Global Welcome Centre access for OmniVista Cirrus SaaS service and support

# Not included:

• Device hardware maintenance and support sold separately

