



Ray One is a Next Generation Solution for the challenges of today.

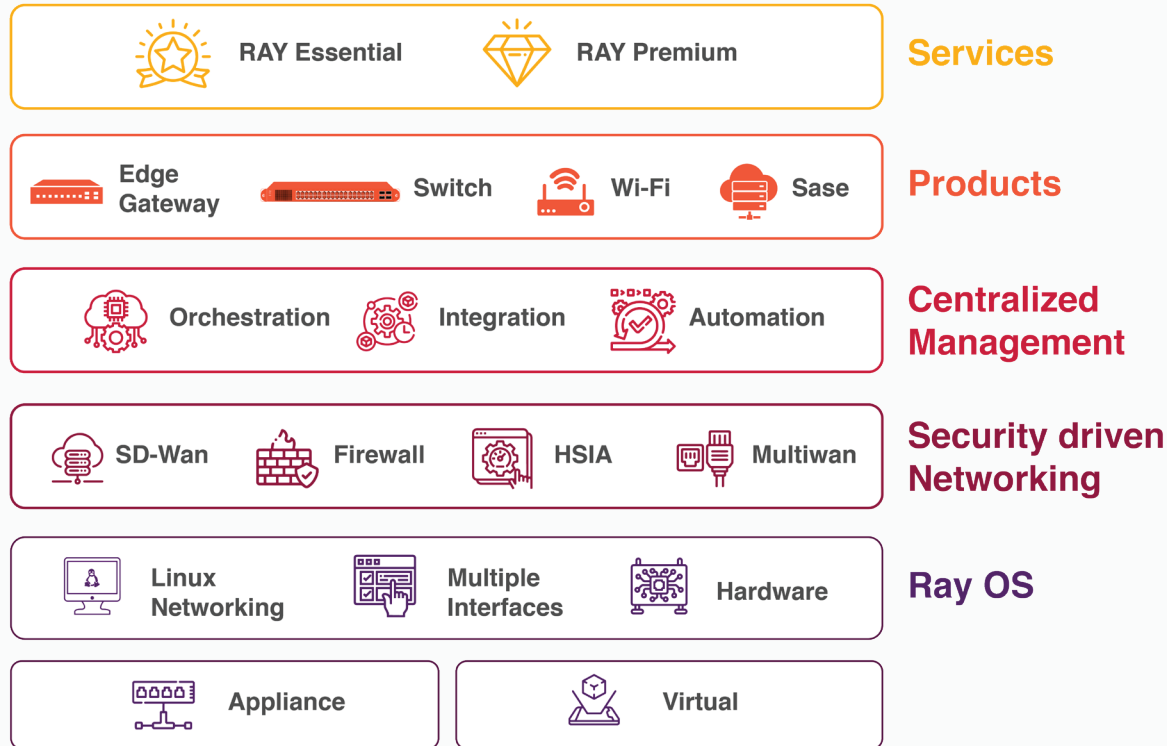
Ray One powers Unified Networking and Security across Networks, endpoints, and clouds in a purpose-built cloud-delivered infrastructure that scales.

It employs concepts of convergence to consolidate multiple point products including Cloud SWG, NG CASB, FWaaS, SD-WAN and ADEM, into a single integrated service provide comprehensive cybersecurity protection for all users, devices, and applications and across

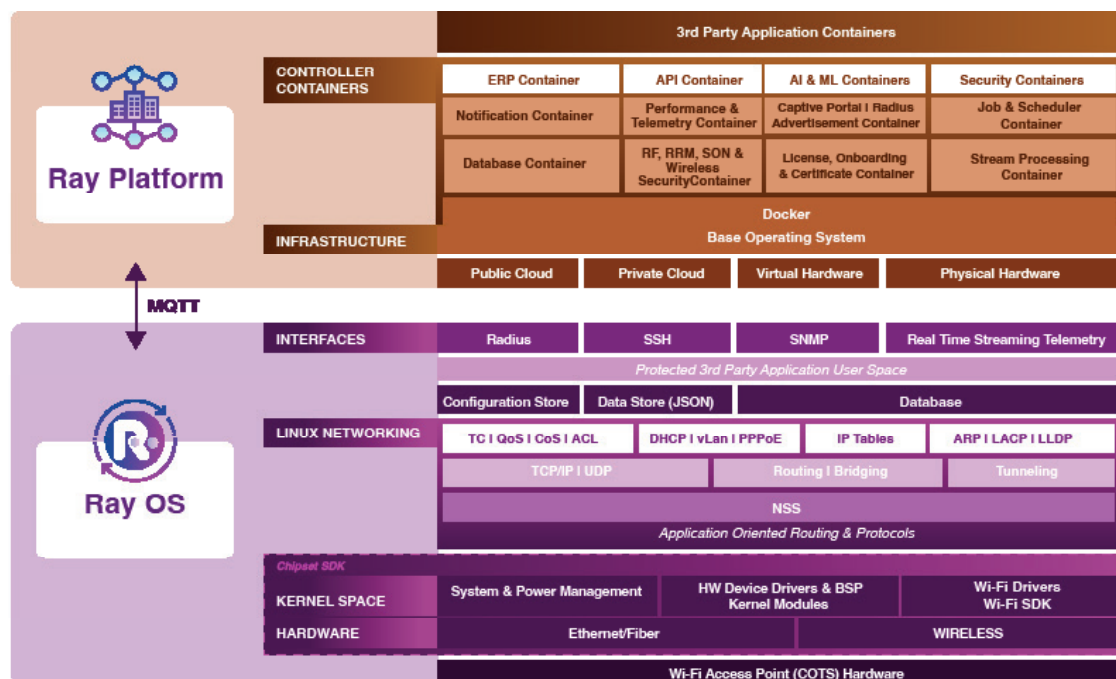
all network edges. It reduces network and security complexity while increasing organizational agility and ensuring compliance, emphasizes interoperability as well as analytics, intelligence, centralized management, and automation, and integrates with a broad ecosystem of technologies and vendors.

Ray One powered Edge Gateways, Switches and Wireless (Wi-Fi) devices are available to deploy on any network edge.

CORE COMPONENTS



RAY ARCHITECTURE



FEATURES

Adaption for changing business dynamics to address modern requirements funnel down to Network Architecture. Today Ray is being managed and delivered through cloud which enhances features like scalability, speed and flexibility. Enterprises with Ray are able to leverage powerful automated, zero touch, delivering on demand and a proactive business

approach. One Features help the enterprise to make intelligent decisions that adhere business goals and objectives.

SPECIFICATIONS	R6B-O
Secure SD-WAN	Ray One powers extremely Secure & Advanced SD-WAN with top-tier features like Application Identification & Control, Application-aware traffic control, and Performance Optimization Helping you enable remote working through a secure Access Client & ZTNA. Automatically optimize routing and rerouting of traffic based on WAN Link performance (latency, jitter, loss) in real time with zero impact.
Advance Networking	Ray One powers the most advanced and Secure enterprise-grade networking technology available for NAT, routing, and bridging across all the Edges even empowering Hybrid workforce. It includes Advance routing, Dual Stack Support, static, OSPF, BGP, and RIP with full 802.1Q VLAN support, Multicast, QOS Enablement and Traffic Classification and control amongst others.
Security	Ray One keeps the Enterprise secure even from Ransomware, Malware and even Zero Day threats through high-performance streaming deep packet inspection, next-gen IPS, web protection, DNS Filters, and app control. The powerful Enterprise policies help create Trust Zones in the Network. Ray One enables fast, coordinated detection and enforcement across the entire attack surface to counter the latest known and unknown threats in real time. The threat research is unified data sets feeding from networks, endpoints, and clouds, rich independent research, and comprehensive industry collaboration.
Cloud Architecture	Ray Always One Cloud is Microservices bring unparalleled agility, scale, resiliency. Ray makes it easy to add or remove new features by leveraging a microservices cloud architecture. New enhancements and bug fixes are delivered almost weekly without network disruption. Services scale up or down elastically when they're needed, eliminating the cost and complexity of monolithic hardware.
HSIA (Captive Portal)	Ray One powers 9 kinds of Captive Portal and Guest onboarding flows with advance features like WYSIWYG, Advertisement Server, Survey engine, Payment Gateway along, Multi Language support etc. The Wi-Fi Monetization makes Ray revenue centre for the enterprise. Guest Analytics helps to make data driven business decisions that help growth and revenue.
WAN Suite	Ray One powered Link Bonding taps into the bandwidth of multiple WAN sources to provide a single bonded data-pipe that enables higher speed and resiliency whilst being economical, fast, and easily configurable to suit any networking environment.

SPECIFICATIONS

DEPLOYMENT	
AWS Multi-Region Cloud	
Cloud In-Premise	
ZERO TOUCH CONFIGURATION	
Zero Touch Configuration	<ul style="list-style-type: none"> › Effortless setup via Web on https://cloud.ray.life/sessions/signup
	<ul style="list-style-type: none"> › Mobile Setup via QR code on Mobile App (Android and iOS)
	<ul style="list-style-type: none"> › Bulk Provisioning via CSV File
ARCHITECTURE	
Architecture Design	<ul style="list-style-type: none"> › Micro-Services based always available Cloud › Auto Scaling with virtually unlimited capacity › Multi-Region Deployment for High Availability
Security	End-to-End Encrypted control traffic with 256-bit Encryption
Privacy	<ul style="list-style-type: none"> › Encrypted storage of limited data › Enhanced Privacy option to personalize security
API	<ul style="list-style-type: none"> › Open Cloud with Built-in API › Integration into 3rd Party systems via REST API
Accessibility	Web Mobile App (Android & iOS)
Cluster Management	<ul style="list-style-type: none"> › Hierarchical Multi-Site Management › Unlimited number of Clusters in Hierarchy › Integrated Google Maps › Distributed management features to enable Multi-Cluster Management. › Cluster creation based on Logical location or Physical Location › Top-Down hierarchical access. Top Cluster user access to all Child/Sub Cluster.Configuration option at all levels of the Cluster Hierarchy. › Configuration option at all levels of the Cluster Hierarchy. › Publish the configurations at all levels of the Cluster Hierarchy. › Move the access points from within any site to another site with automatic settings update.
SNMP	SNMP v1/v2/v3
Capacity	Virtually Unlimited due to Microservices based AWS Cloud with Auto Scaling
User & Role Management	Role creation with Granular control on each action <ul style="list-style-type: none"> › View › Create › Edit › Delete › Publish User to Role Mapping

Notifications	Assign a user with a roler for each specific cluster. Real-time Push Notifications via <ul style="list-style-type: none"> › Email › Mobile App (Android & iOS) › Web Notifications › WhatsApp
Version Control	Version control for all Profiles including <ul style="list-style-type: none"> › Radio › Wireless LAN › Network › SD-WAN › Security and others
Audit Trail	Capture Audit Trail to capture detailed change to <ul style="list-style-type: none"> › Profiles › User Sessions › Access Points › RRM
Scheduled Tasks	Ability to perform changes in System instantly or Scheduled at a later date/time
Open Source	<ul style="list-style-type: none"> › Ray ONE can be used as an Open Source Wireless Controller for multi brand (3rd part OEM) open source access points. › Industry-standard & more secure protocols such as Open WRT, DD WRT, TR-069, SNMP/ SOAP/TCP HTTP/S etc supported. › Auto Configure and manage multi brand (3rd party OEM) Wi-Fi 5 and WiFi 6 Access Points.
Topology View	Create a Network Topology, a visualization of elements of WiFi, switching, Mesh links etc.
SD-WAN	
Native Application based SD-WAN with ZTNA Support	
SD-WAN components with <ul style="list-style-type: none"> › Centralized Network Orchestrator › Software Defined Network Controller › Analytic, Monitoring and Reporting Engine › Hub/Gateway device running in central locations › Edge devices running in the remote branch locations › Link Management, Statistics and Monitoring 	

SPECIFICATIONS

ENTERPRISE POLICY

Supported Policies

- › Time Policy
- › Speed & QoS Policy
- › Device Policy
- › Quota & FUP Policy
- › Concurrency Policy

BYOD Policy

Modes

- › Gateway Mode
- › Bridge & Firewall Mode

SSIDs and Encryptions

- › Open Network
- › PSK (WPA/WPA3)
- › PSK (Enterprise Authentication)
- › Captive Portal

SECURITY POLICY

- › Application Filtering
 - › DNS Filtering
 - › Web/URL Filtering
 - › Firewall Policy
- Real-time Security definitions - Malware, Phishing and SPAM

QOS

QoS throughput Traffic Prioritization

DPI

DPI function to identify the Applications

AUTHENTICATION

Authentication via

- › Built-in NAC
- › Radius-based Microsoft AD
- › Radius-based LDAP
- › Wireless Standards (WPA2/WPA3)
- › Captive Portals

TROUBLESHOOTING

Packet Capture

- › Over the Air Packet Capture
- › Wired Network Packet Capture

ROOT CAUSE ANALYSIS

SLA for Wireless and Wired Network Activities

Issue identification, Root cause analysis and Action suggestion

AUDIT & COMPLIANCE

DPI driven Traffic Analytics for

- › Top Applications
- › Top Domains
- › Top Flows

Traffic Analysis based on

- › Source & Destination
- › Protocols
- › Flows
- › Domains

IP Reputation check with Reputation score

VPN Detection

IOT SECURITY

- › Auto detect and categorize all IoT devices connecting to the Network.
- › Usage pattern of the IoT devices and suggest policies to be applied on the IoT devices.

FLOOR PLAN

Floor Plan GUI to show the deployment and coverage of each Access Point within the controller across all the sites.

SCHEDULED REPORT

Scheduled summary reporting on a Daily/Weekly/Monthly manner to all the key stakeholders.

RAY SUBSCRIPTIONS

ESSENTIAL	CONNECT	PROTECT	TOTAL
Cloud Subscription	Cloud Subscription	Cloud Subscription	Cloud Subscription
Essential Support	Essential Support	Essential Support	Essential Support
L3 Networking	L3 Networking	L3 Networking	L3 Networking
RRM	RRM	RRM	RRM
WAN Suite	WAN Suite	WAN Suite	WAN Suite
	SD-WAN	SD-WAN	SD-WAN
	SASE	SASE	SASE
		Network & Web Protection	Network & Web Protection
		Captive Portal	Captive Portal
			EYE
			INSIGHTS
			VIGIL
12 Months (Renewal required)	12 Months (Renewal required)	12 Months (Renewal required)	12 Months (Renewal required)
36 Months (Renewal required)	36 Months (Renewal required)	36 Months (Renewal required)	36 Months (Renewal required)
60 Months (Essential Lifetime)	60 Months (Essential Lifetime)	60 Months (Essential Lifetime)	60 Months (Essential Lifetime)

For More details on warranty visit: www.ray.life

USE CASES

▼ Smart Cities



▼ Warehouses



▲ Educational Institutions



▲ Public Wi-Fi/ Public Hotspots

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