DATA SHEET

Cloudpath™

COMPRISED OF:
- An all-inclusive license package
- User-based license which includes all features

DEPLOYMENT OPTIONS:
- On-site virtual server
- Public cloud-managed instance

LICENSE OPTIONS:
- Enterprise perpetual
- 1-year subscription
- 3-year subscription
- 5-year subscription
- Education licenses
- White Glove Service (remote deployment)

LICENSE INCLUDES:
- Maintenance and support
- Reporting

Ruckus Cloudpath Enrollment System (ES) software is a security and policy management platform that enables IT to easily and definitively secure the network, secure users and secure wired and wireless devices.

Cloudpath software consolidates and simplifies the deployment of multiple services that are typically disparate and complex to manage: Certificate Management, Policy Management and Device Enablement.

The only integrated security and policy management platform that delivers:
- Cloud-managed deployment option
- Multi-tenancy
- User-based licensing, not device-based
- Pre-boarding (remote automated onboarding)
- Chrome extension to automate Chromebook onboarding
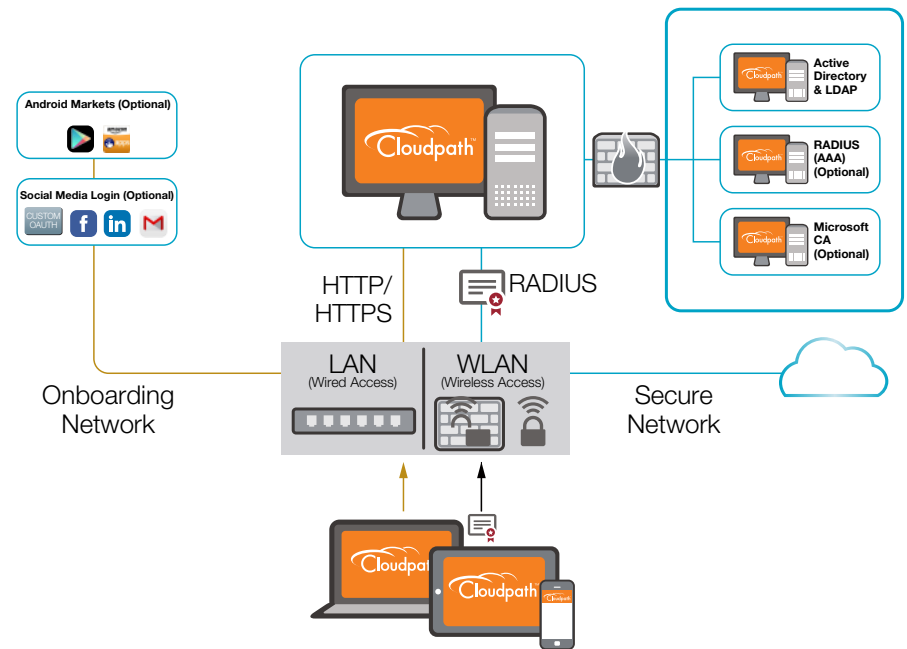
In the Cloudpath architecture, new devices join the network via open SSID or wired connection, at which point the user is redirected to the Cloudpath ES portal. Cloudpath software authenticates and authorizes the user; then configures the device with a certificate or a profile and secure networks. The software then moves the device to the secure SSID or the secure wired network. The device authenticates using the certificate or installed profile and Cloudpath software processes the RADIUS authentication.

Devices may also enroll over the web; allowing users to activate devices at a physically separate location. Devices then securely join the network when in its vicinity.

Cloudpath is available as both an on-premises virtual instance or as a cloud-managed deployment, each with equivalent functionality.

Certificate Management

Cloudpath ES software includes a built-in, comprehensive Certificate Authority (CA) that enables any IT department to create and manage its own Public Key Infrastructure (PKI). A built-in RADIUS server and user database greatly simplifies installation and setup and helps in tying policies with certificates. In addition to built-in capabilities, APIs and other mechanisms enable Cloudpath software to easily integrate with existing external CA, RADIUS and user database infrastructures.

Policy Management

Cloudpath ES software provides IT with a simple, workflow-based policy management portal that can be used to establish granular policy-based access control for all users and all devices. The policy engine identifies client and user privileges and applies the correct policies to each user and each device. The software works together with policy enforcement points to ensure policies are properly exercised.

Device Enablement

Cloudpath ES software makes possible portal-based, self-service onboarding for end users and their devices and further enables pre-boarding for users and devices prior to their arrival at a given location. To ensure the network is properly protected, administrators can control which devices are allowed to join the network and can ensure the requisite on-device enforcement, such as enabling a firewall, installing certain applications, or updating anti-virus software.

KEY FEATURES AND BENEFITS

CERTIFICATE AUTHORITY

- Support for both "user" and "device" certificates
- Certificates improve network security by replacing unsecure approaches: passwords, pre-shared keys and MAC authentication
- Multiple certificate sources including built-in Public Key Infrastructure (PKI), Microsoft CA and InCommon
- In multi-tenant mode, enables a unique CA for each tenant
- Certificate Templates for tying policies and certificates

SECURE ACCESS

- Devices connect over secure WPA2-Enterprise via 802.1x authentication with EAP-TLS, PEAP access methods
- Supports all wired and wireless devices, including IoT (headless) devices
- Supports employees and guests as well as employee-owned, BYOD devices

WPA2-Enterprise (802.1X)

Client Authentication	Over-The-Air Encryption	Network Authentication

ACCESS CONTROL

- Push dynamic Access Control Lists (ACL) to wired or wireless infrastructure via RADIUS Vendor-Specific Attributes (VSA)

- Perform automatic device posture check and remediation via dissolvable/temporary agent, ensuring that all devices seeking access meet minimum requirements

- Supported posture check includes checks for the latest OS patches, antivirus and antispyware packages with current definition file variables (e.g., version, date), anti-malware packages, registry settings (e.g., key, value), patch management, PIN-lock on mobile devices, application presence, firewall settings and more.

SELF-SERVICE ONBOARDING WITH PRE-BOARDING

- Simple workflow for user policy creation, customizable look-and-feel and branding for self-service onboarding portal which enables end users to easily manage their own access and devices, removing that burden from IT

- Pre-boarding enables end users to onboard their device(s) from anywhere they can access the internet, such as home or hotel, before arriving onsite to access the network.

- Filters enable location-policy or dynamic policies during onboarding

- Supports enterprise-owned device onboarding, BYOD onboarding and guest device onboarding
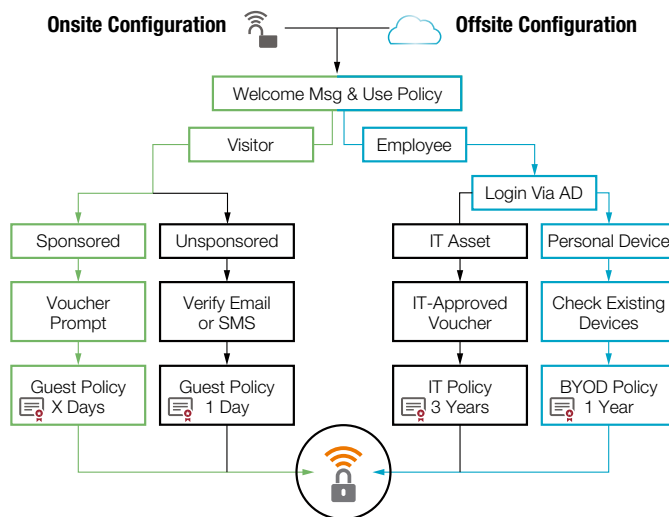

Sponsored Guest Enrollment

AUP Accepted 11/1/2014

Jim Johnson
Sponsored By Bob Smith
jim@company.com

Personal Device
Device Type: laptop
OS: Windows 7
Ownership: Personal

Policy: Guest
Expires: Jan1, 2015

Cancellable by Sponsor

Onsite Configuration — **Offsite Configuration**

Welcome Msg & Use Policy
- Visitor
- Employee

Sponsored — Unsponsored

Login Via AD
- IT Asset
- Personal Device

Voucher Prompt — Verify Email or SMS

IT-Approved Voucher — Check Existing Devices

Guest Policy X Days — Guest Policy 1 Day

IT Policy 3 Years — BYOD Policy 1 Year

BYOD Enrollment

AUP Accepted 11/1/2014

Bob Smith
Identity: Active Directory
Groups: BYOD-Enabled

Personal Device
Device Type: Nexus 7
OS: Android 4
Ownership: Personal

**Policy: BYOD**
Expires: Nov1, 2015

Monitor AD Account Status
Notify 7 Days Before Expiration
Revoke if unseen for 14 Days

POLICY MANAGEMENT

- Implement granular per-user, per-device policies such as VLANs and application-based access to ensure a secure, well-performing network

- Administrative portal allows IT to easily construct arbitrarily complex access policies

- Via APIs, Cloudpath software easily and automatically integrates with policy enforcement points such as switches, firewalls and content filters
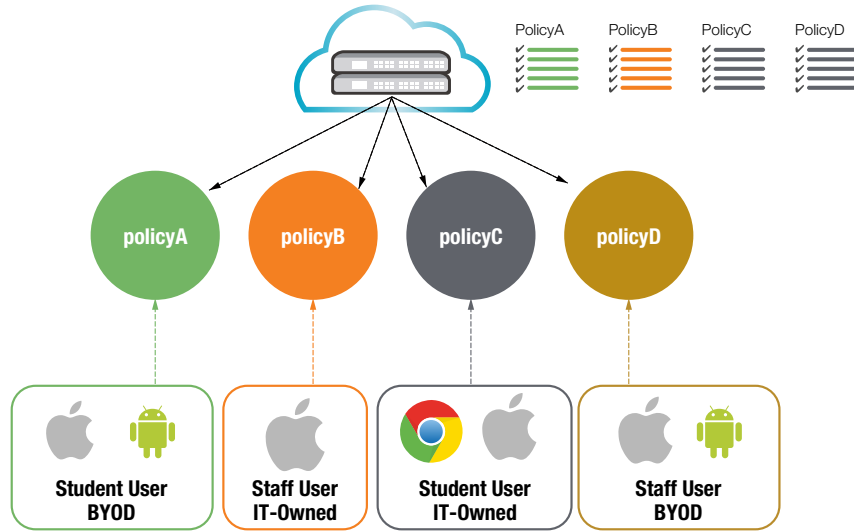
GUEST ACCESS
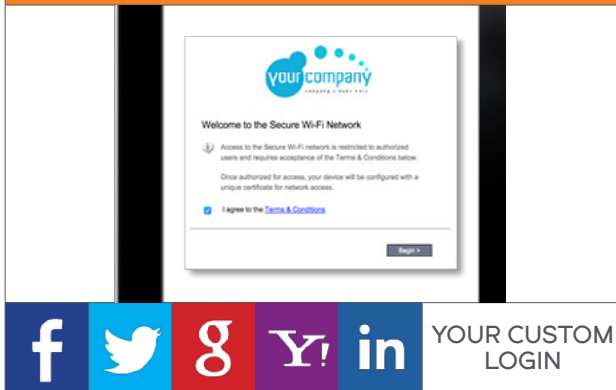
- Extend secure Wi-Fi to visitors of all varieties, onboarding guests onto WPA2-Enterprise wireless networks without IT involvement

- Implement a variety of traditional authentication and authorization options, including sponsorship and self-verification, as well as integration of secure Wi-Fi with external identity services, such as Google, Facebook, and LinkedIn

- Tracks guests across the network for security and compliance demands and full guest auditing. Time limits, account expirations, and SMS verification offer additional security controls.

REPORTING

- Provides granular visibility into users and devices accessing the network, when they access, how they access and how long they access

CHROMEBOOK INTEGRATION

- Distribute certificates to managed Chromebooks using the Google Admin Console. A Cloudpath extension detects Chromebook authorization, automatically queries the certificate and installs it in the Chromebook Trusted Platform Module (TPM).

- Enables initial Chromebooks setup via user-driven, IT-driven, or distributor-driven approaches
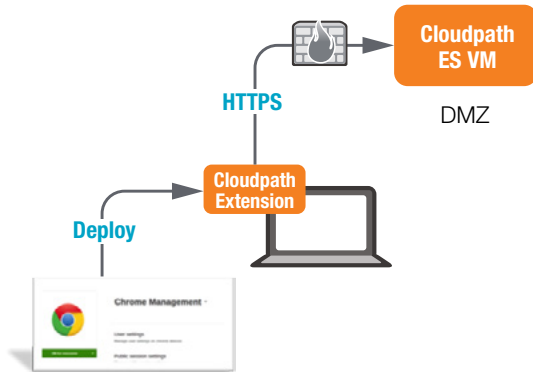
Chromebook certificate distribution using Cloudpath integrated PKI
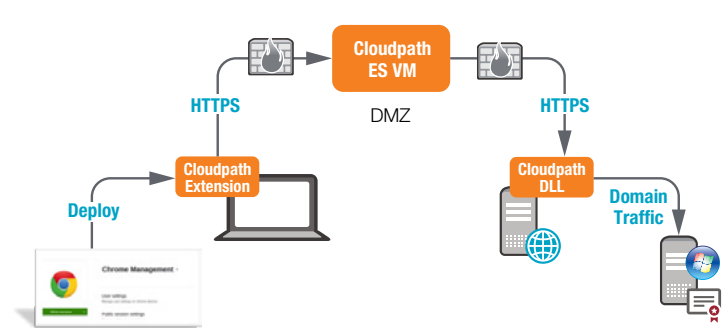
Chromebook certificate distribution using Cloudpath with Microsoft CA

SPECIFICATIONS
Cloudpath Enrollment System v5.0

Deployment options:

- Cloud-managed (public cloud)
- On-premises virtual (VMWare)

Redundancy and Multitenancy:

- VM-based Cloudpath ES can be deployed as a standalone server or as a cluster both in active-active mode or as a star-hub for data replication and redundancy.
- Cloudpath ES provide a multitenant mode which enables MSPs to host multiple tenants within the same system

Certificate Infrastructure (PKI):

- Built-in Certificate Management System
- Unique CA for every tenant within the multi-tenant mode.
- Ability to connect to external PKI
- Standalone or subordinate to integrate with existing PKI
- Certificate templates that integrate with policy
- Supports OCSP with automatic revocation

RADIUS:

- Supports Dynamic VLANs, ACLs, and more
- Streamlined for EAP-TLS, PEAP and MAC Filtering
- Built-in RADIUS server
- Ability to connect to an external RADIUS infrastructure
- RADIUS accounting

Onboarding:

- Customizable self-service onboarding
- Vendor neutral
- Wired or wireless access
- Supports BYOD, guests, IT assets & IoT devices
- Integrates with existing MDM and NAC products

Visibility and Reporting:

- Per-device and per-user visibility and control
- Association between user, device, certificate and policy
- RADIUS accounting

Authentication and Protocol:

- 802.1X (EAP methods: EAP-TLS, PEAP, DPSK)
- Web authentication
- Non-802.1X (mac-auth)
- EAP-SIM configuration for iOS
- Support HS2.0 R1 and HS2.0 R2 via OSU (Online Signup Server)
- Radius CoA
- OAuth 2.0
- DPSK configuration for Ruckus WLAN

User Identity Support:

- Microsoft Active Directory
- RADIUS via PAP
- Any LDAP-compliant directory
- OAuth 2.0 for Social login
- Novell
- Internal user database

Device Support:

- Android 4.3 and higher
- iOS (iPhone, iPad, iPod · Touch) 6.0 and higher
- Chrome OS
- Windows XP and higher
- Mac OS X 10.7 and higher
- Ubuntu 12.04 and higher
- Fedora 18 and higher
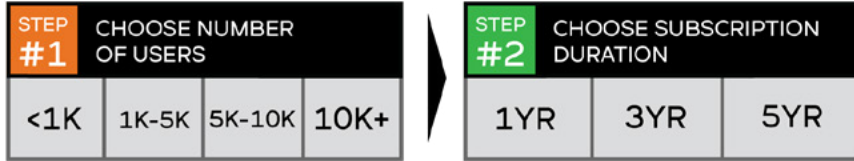- Windows Phone 8.1
- Blackberry

SMS and Email:

- Native integration with Twilio and CDYNE
- Ability to configure any custom SMS gateway
- Built-in SMTP server or configure SMTP server
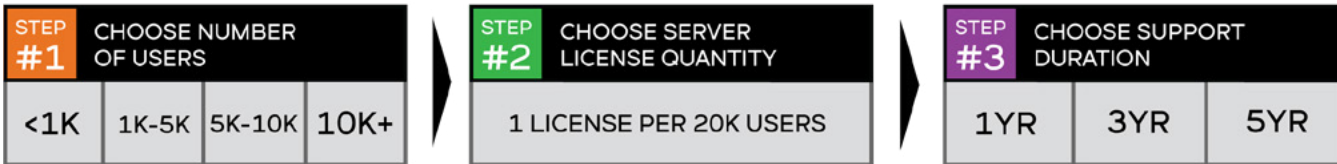
SUBSCRIPTION
(SUPPORT INCLUDED)

Cloud

On-Premises (VM)

- Licensed by user, not device
- Total user count tiers provide voume discount
- User license quantity will dictate # of servers (1, 2, 4 & option to add more for scalability)
- Separate list price for Education (worldwide)

PERPETUAL LICENSE

- Licensed by user, not device
- Total user count tiers provide voume discount
- User license quantity will dictate # of servers
- Separate list price for Education (worldwide)

ORDERING GUIDANCE

1. Determine if you are looking for a cloud or on premise solution and if a subscription or perpetual license is desired.
2. Determine the number of users (not devices) in your environment including guests.
3. Choose the SKU that is most appropriate based on subscription duration and user count.
4. Add optional white glove service for remotely assisted deployment