

# Introduction to DR-3000



CenOS5.0 Access Controller  
with VPN Gateway

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# Product Overview



**CERIO's DR-3000 CenOS5.0 System Access Controller** is designed for applications in which a compact, cost-effective " **all-in-one**" networking solution is required. CERIO AP Controllers included **4 Ethernet Port**, AP controller in a desktop-mount enclosure.

This device centralized configuration and management model enables the controllers to be **deployed, monitored, and controlled** without local IT staff. The controller is a full-featured Wireless LAN Giga Ethernet security controller that **aggregates up to 60/128 access points (APs), built-in 5000 local accounts /5000 on-demand accounts** and delivers centralized control and security for wireless deployments.

## Access Controller

- Full-featured Wireless LAN Giga Ethernet security controller
  - ✓ DR-3000 Max up to **60/128** access points
- Provide Local Account up to **5000** accounts

## Centralized AP Management / Control

- AP Group management –maintain a set of setting templates that simplify the task to assign the same setting to multiple
- AP-Automatic configuration and provisioning
- Automatic Channel Assignment and power setting for controlled Aps
- Provides MAC address Control list of client stations for each managed Aps
- Provide centralized remote management via HTTP/SNMP interface
- Support Roaming – Intra-Switch , Inter-band , Inter-Switch



## AP Monitoring

- Monitor AP Status
- The number of associated clients to the AP
- Load balancing based on number of users and utilization
- AP User Statistic –Maintain all wireless clients connection history and depict statics in diagrams

## Radio Management

- Automatic Channel Assignment and power setting for controlled APs
- Supports multiple BSSID up to 8 per Radio

## Bandwidth Management

- IEEE802.11p Class of Service/Quality of Service (CoS /QoS)
- IEEE802.11e Wi-Fi Multimedia (WMM)
- Upload and Download Traffic Management



## Wireless Security / Encryption

- WPA / WPA2 personal and enterprise
- IEEE802.1X network login user authentication (EAP-MD5/TLS/TTLs )
- RADIUS server authentication (RFC2618)

## Authentication

Single sign-on (SSO) client with authentication integrated into the local authentication environment through local/domain, LDAP(AD), PoP3, RADIUS, 802.1x and Guest

## Authorization

Authorization : access control to network resource such as protected network with intranet, internet, bandwidth, VPN, and full stateful packet

## Accounting

- Provides billing plans for pre-setting / on-demand accounts
- Support local on-demand and external RADIUS server
- Contain 10 configurable billing plans for on-demand accounts

## Easy

Supports user-friendly interface, simple and convenient, avoid the complex setting process so that users can quickly and easily complete settings.

## Security

Supports user-friendly interface, simple and convenient, avoid the complex setting process so that users can quickly and easily complete settings.

## Stable

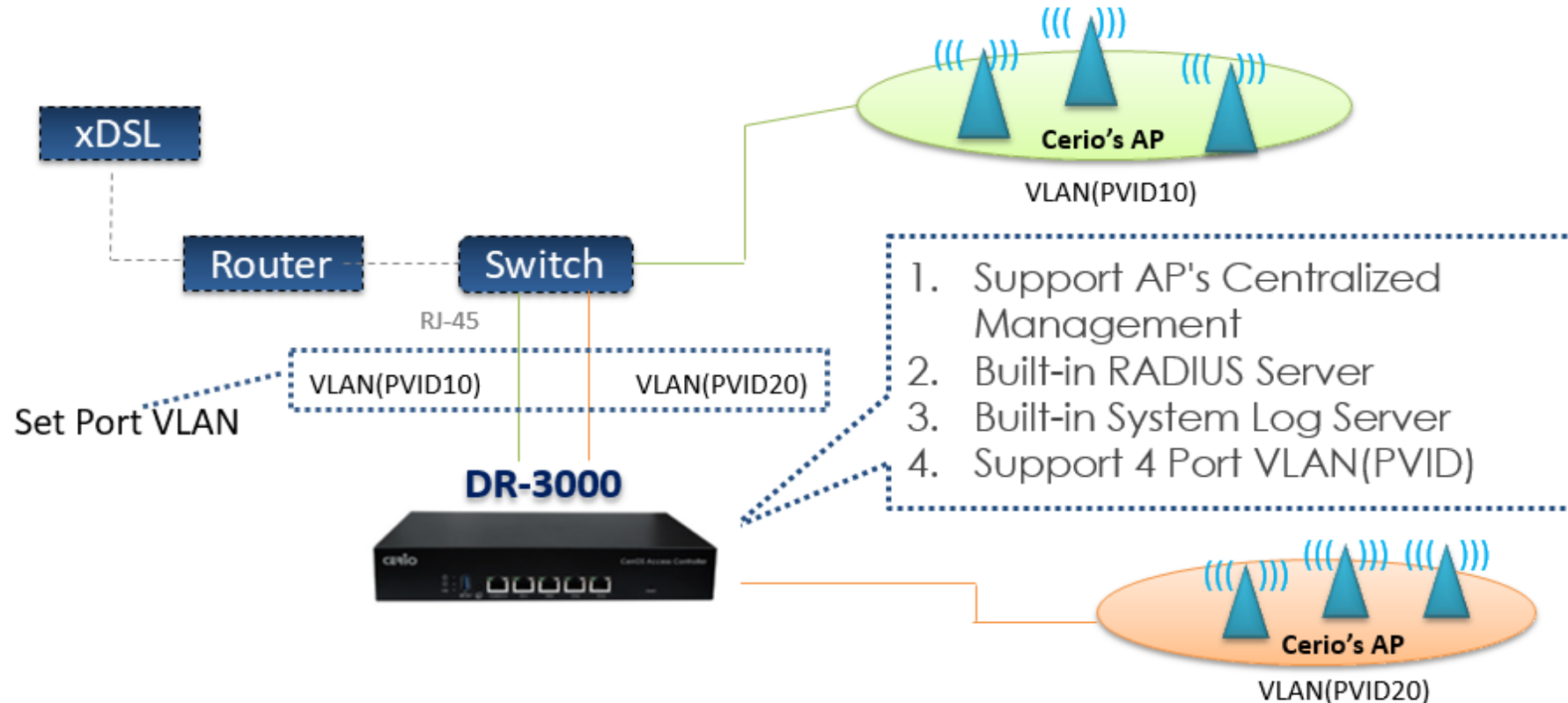
Supports Protocols Traffic Management to maintain the equipment under best condition for long time operation.

## Reliable

The equipment provides high stability and reliability with a complete management function, administrator do not need to worry about equipment anomalies

## 1. Control Mode

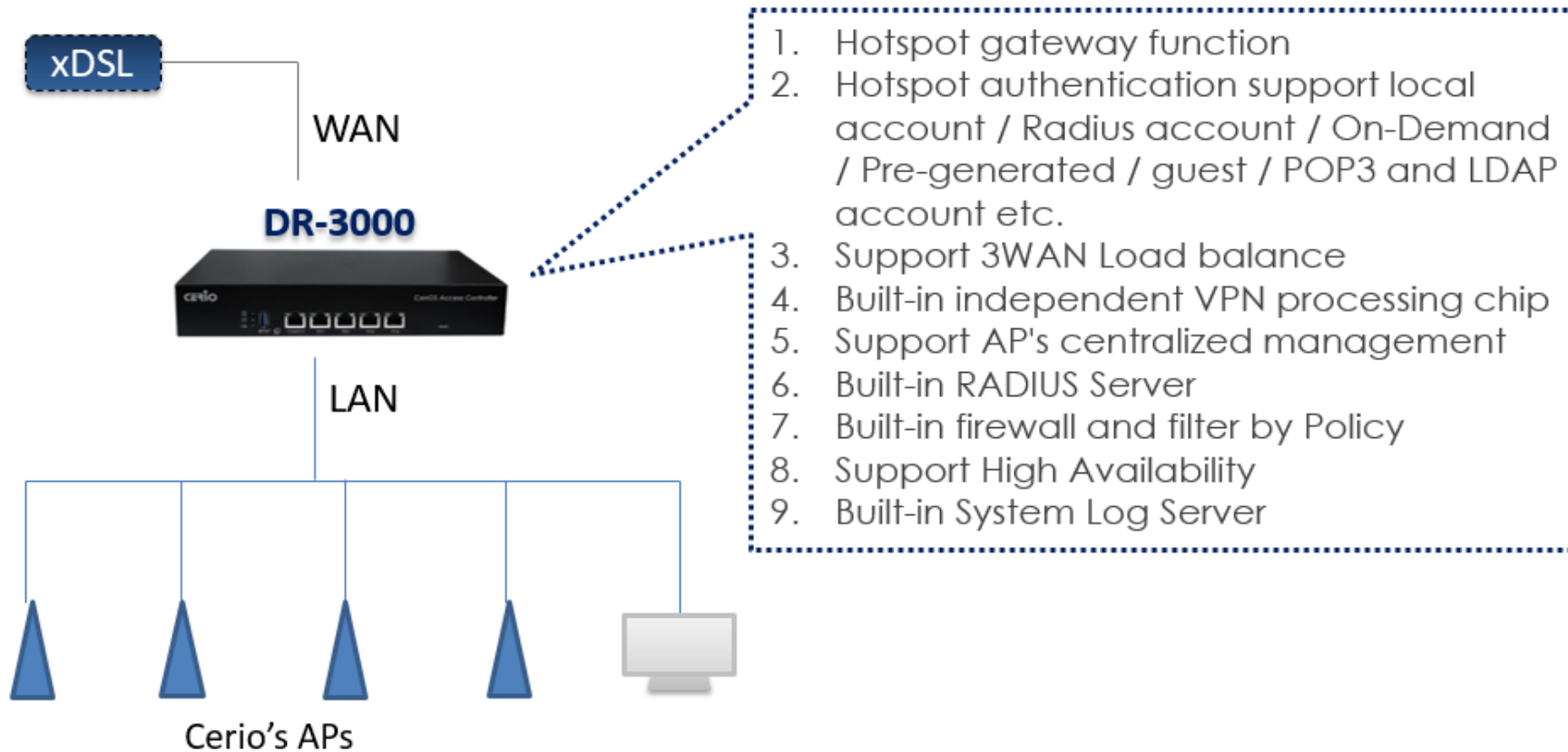
Through DR-3000 **Control Mode**, all CERIO's Managed Access Points are managed through a unified Web interface. It can manage up to **128** unit access points.





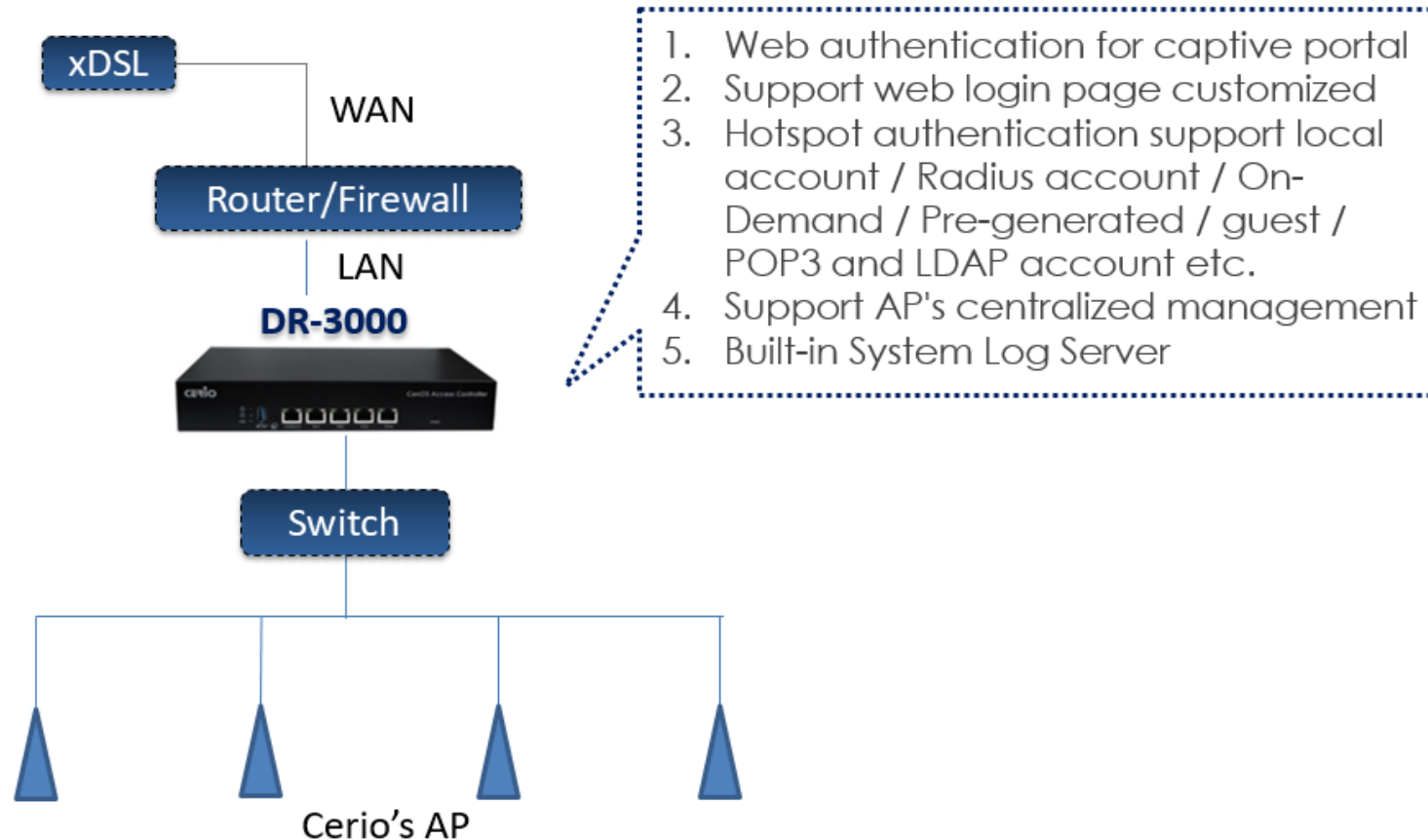
## 2. Router Mode

If you don't have a Router / Firewall device in your environment, but you want to build a web hotspot application, you can use DR-3000 set at **Router Mode** to meet requirements.



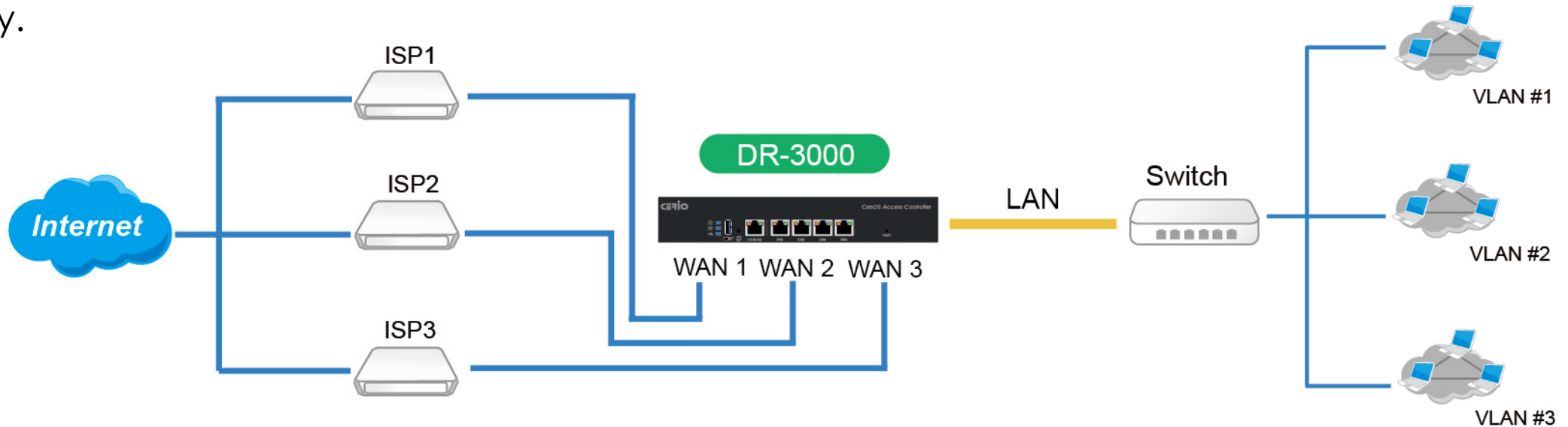
### 3. Captive Portal Mode

If you already have a Router / Firewall device in your environment, but you want to build a web hotspot application, you can use DR-3000 set at **Captive Portal Mode** after Router / Firewall device to meet requirements.



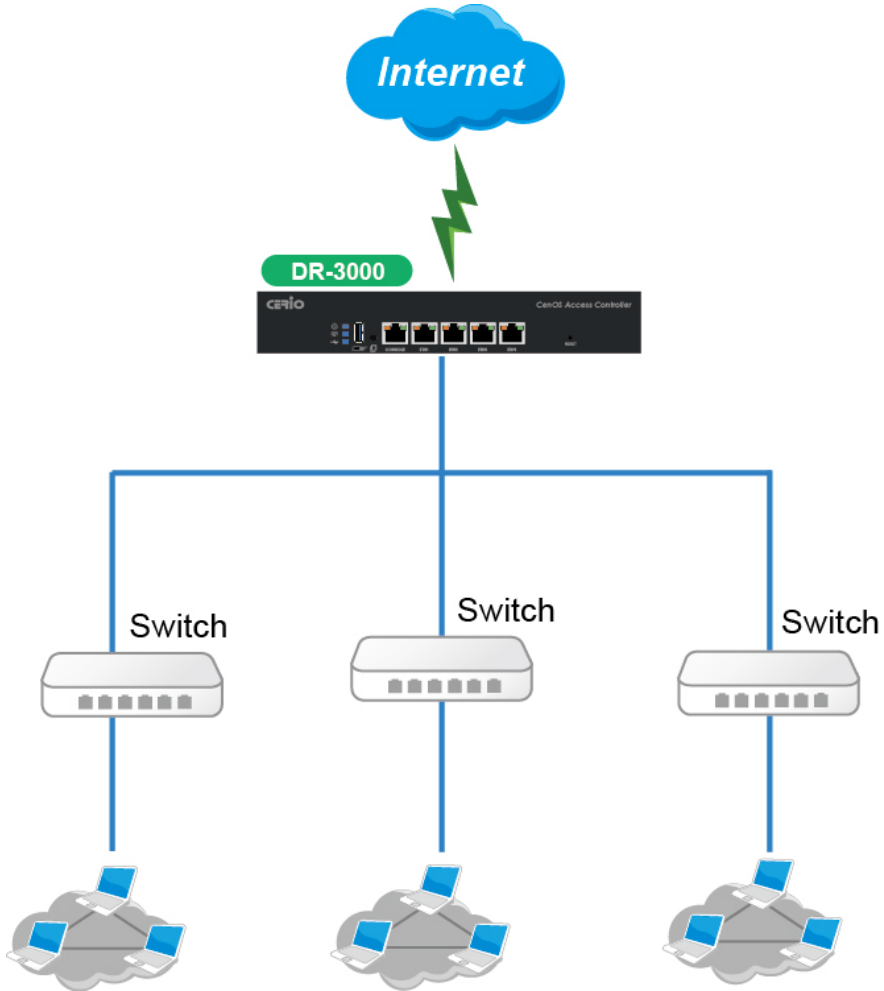
## Multi-WAN Support Outbound Load-Balancing

With real-time load balancing and Optimum Route algorithm, DR-3000 intelligent router engine directs each session or connection to the best available link. It also supports policy-based routing, persistent routing, and traffic scheduling to effectively adapt your business policy into your network policy.

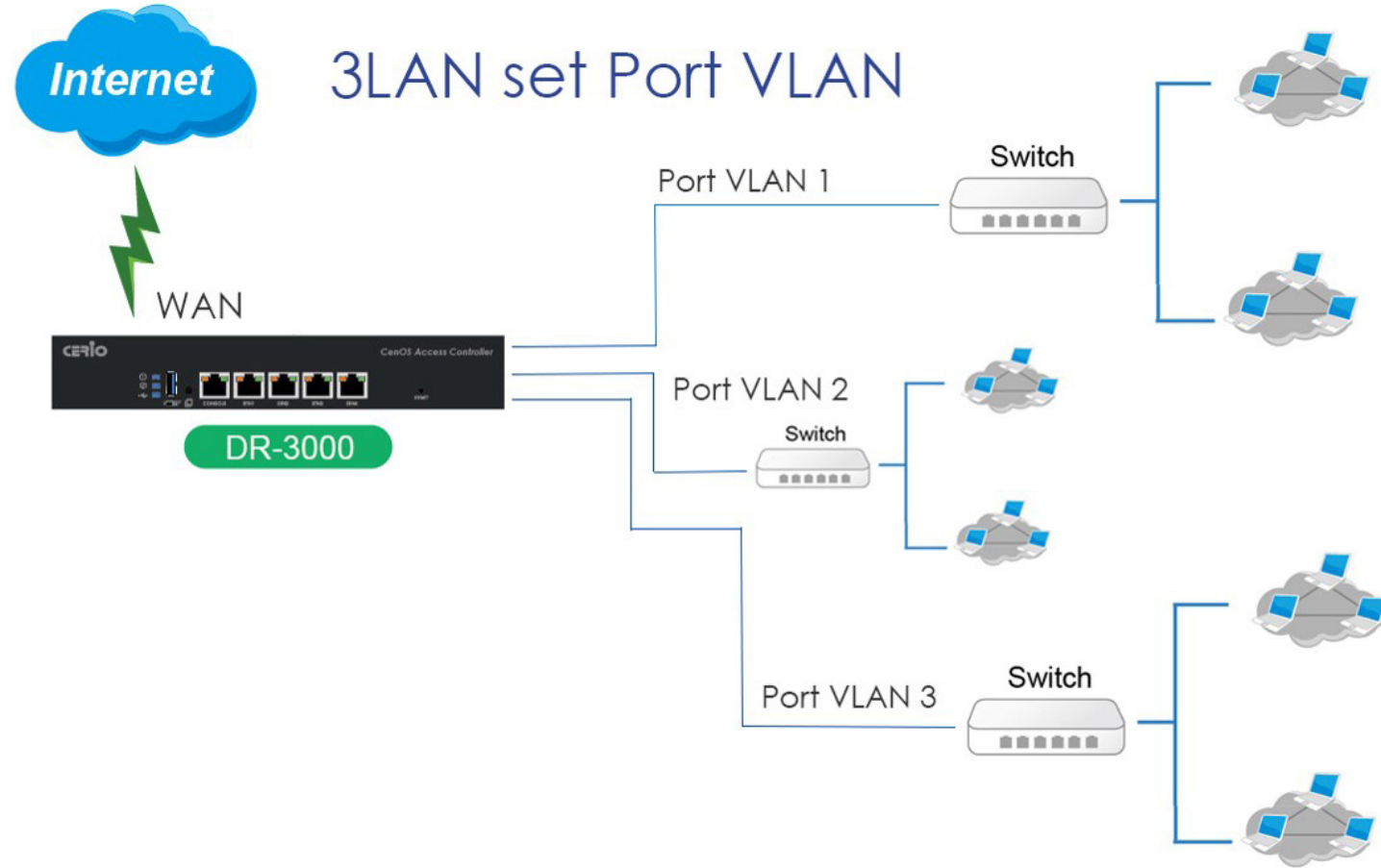


- ✓ Outbound Load Balancing
- ✓ Load Balancing support assign weight, line speed weight and WAN by priority
- ✓ The LAN port also support Tag VLAN function

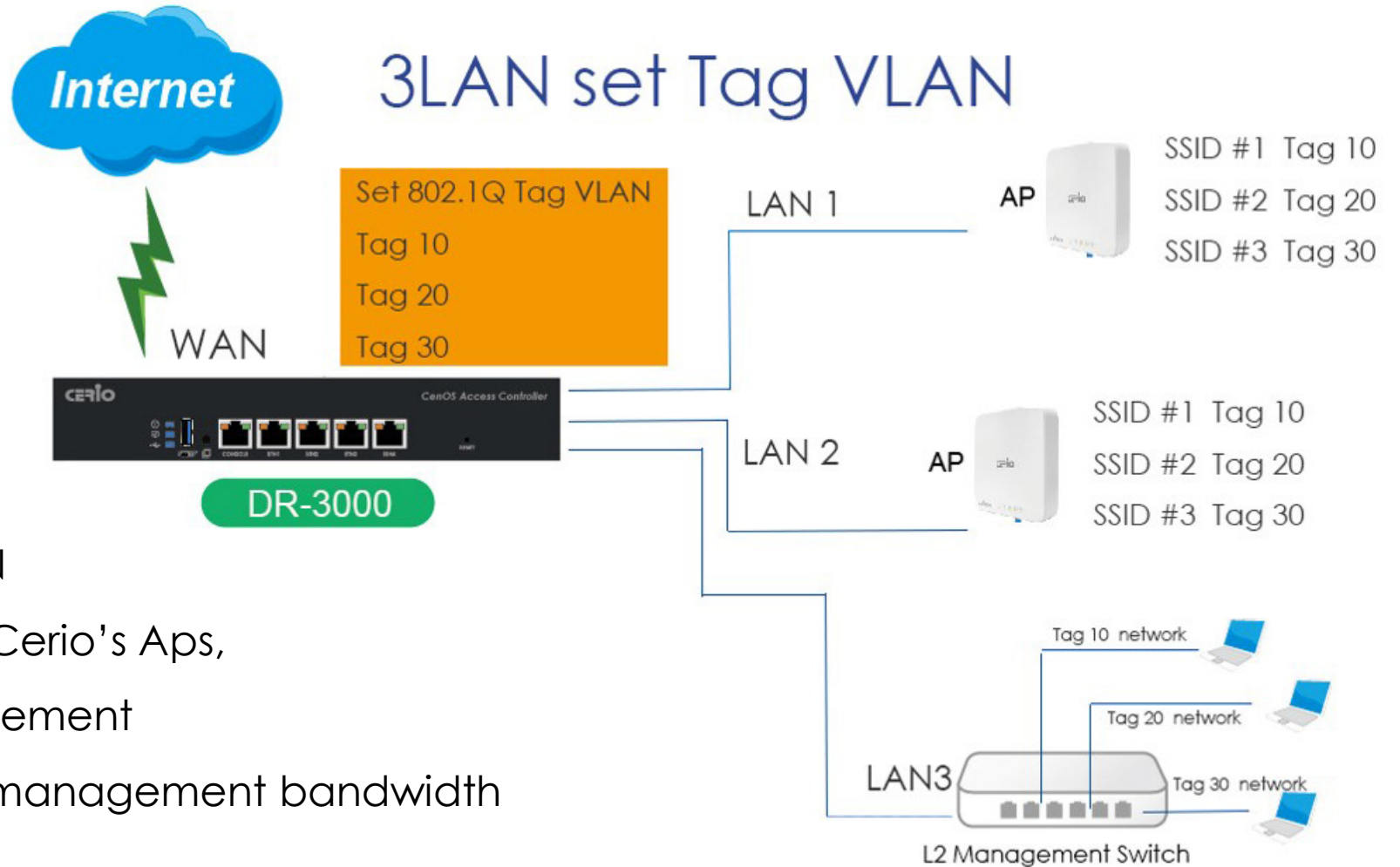
## ① 1WAN + 3LAN AP Management



## ② 1WAN + 3LAN Port VLAN Application



## ③ 1WAN + 3LAN Tag VLAN Application



- ✓ Build-in up to 8 of 802.1Q VLAN
- ✓ Centralized Management for Cerio's Aps,
- ✓ Support Multi-VLAN AP Management
- ✓ Configuring QoS on VLANs to management bandwidth

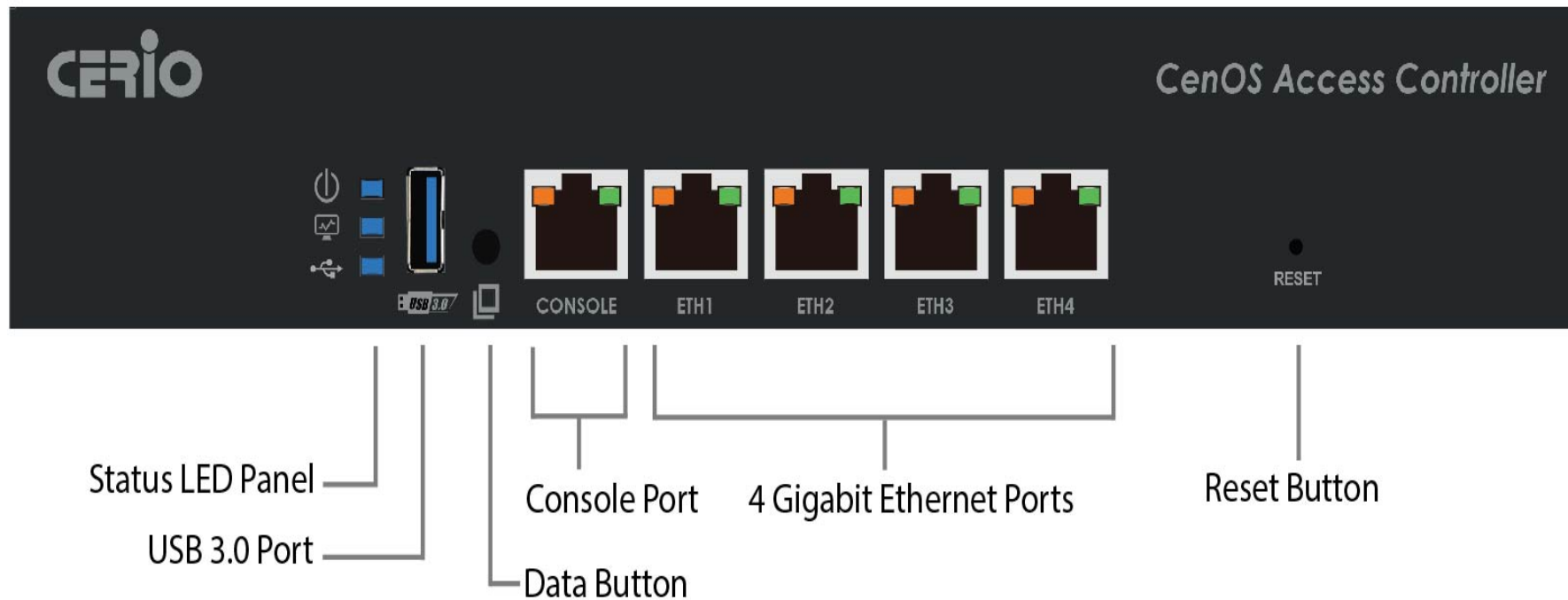
# VPN Tunnel & HA (High Availability) — CERIO

CERIO's DR-3000 **Multifunction VPN Router** is an **easy-to-use, flexible, high-performance** device well suited for small businesses. Now with web filtering, the new DR-3000 delivers highly secure, broadband, wired connectivity to small offices and remote employees. It can also be used either as a standalone router for flexible deployments, offering investment protection as your business needs evolve.



Support **HA(High Availability)** function makes the hardware and software components that provide redundancy and reliability for network communications.

- ✓ Support system data backup and recovery in USB 3.0 interface
- ✓ Support Console Port management, administrator can connection console port to maintain system.
- ✓ Support hardware reset to default button.



**CERIO**

# CenOS Account Ticket Generator



**CERIO CenOS Account Ticket Generator** kits containing a Thermal Printer and Network Control Server provides instant ticketing for users, CenOS Account Ticket Generator kits is designed for ease of use account generation via Network Control Server from the built-in On-Demand billing plan from CERIO CenOS Access Controller and then prints the account ticket via **Thermal Printer** or **QR Code Thermal Printer** for wireless Internet access in public locations ranging from places **such as airports, hotels, conventions, and coffee shops, Hotspot application.**

Network Control Server

Thermal Line  
Receipt Printer

SP-800-PRINTER

CenOS Account Ticket  
Generator POS System

Network Control Server

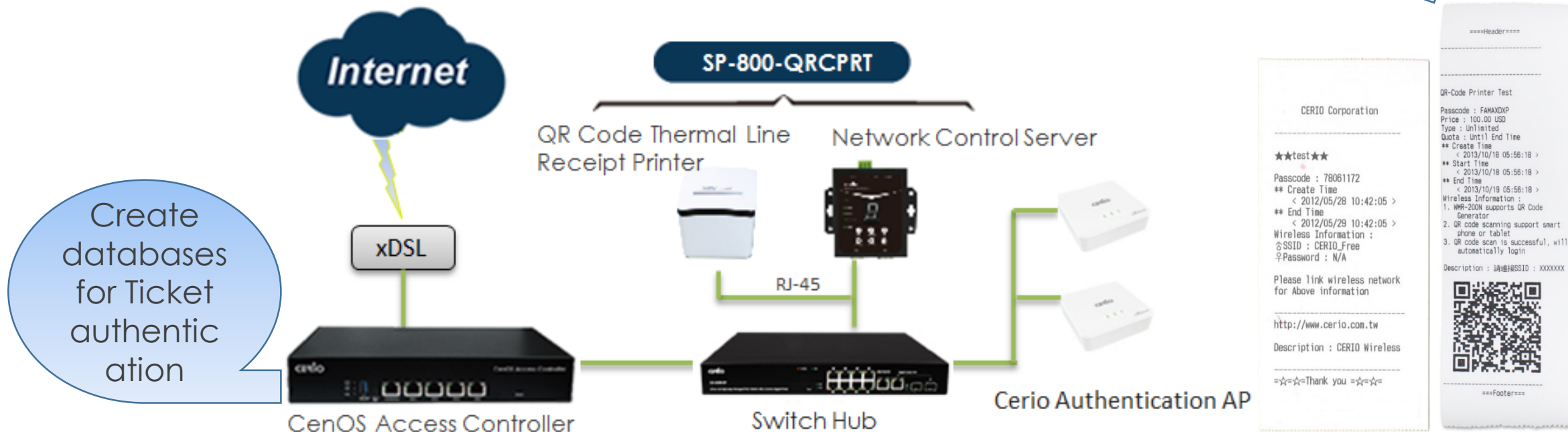
QR Code Thermal  
Line Receipt Printer

SP-800-QRCPRT

CenOS Account Ticket  
Generator QR Code POS System

**DR-3000** built-in log databases, system can storage space account information of the session/ authentication and Support E-mail notification.

Ticket Sample

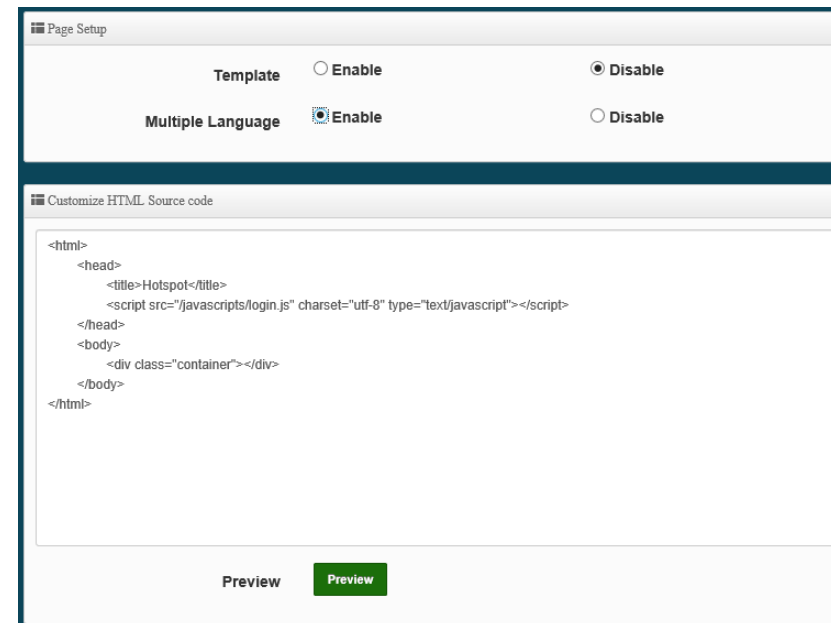


Create databases for Ticket authentication

## Customized Login Page



## Customize through HTML Code



## Authentication Log List

#	Event Time	AP IP	VLAN ID	Username	User IP	User MAC	Event
1	2015-01-01 08:01:39	192.168.2.254	0	test	192.168.2.10	8c:4d:ea:02:c6:ec	LOGIN
2	2016-11-21 12:56:50	192.168.2.254	0	danny	192.168.2.10	8c:4d:ea:02:c6:ec	LOGIN
3	2016-11-21 12:57:28	192.168.2.254	0	danny	192.168.2.10	8c:4d:ea:02:c6:ec	LOGOUT
4	2016-11-21 12:57:37	192.168.2.254	0	test	192.168.2.10	8c:4d:ea:02:c6:ec	LOGIN
5	2016-11-21 13:02:22	192.168.2.254	0	danny	192.168.2.10	8c:4d:ea:02:c6:ec	LOGIN

Authentication Log List

# What we do



## Innovation & Design

Our R&D team continues to incorporate the newest wireless protocols and features to make our products perfect for enterprise deployment.



## Wireless Solutions

Our Field Application Engineers and Specialists have unparalleled experience providing the perfect solution for any wireless projects (e.g. Hotels, Long Distance PTP Backhaul, Universities)



## Software Development & Design

Our software provides a high featured and easily operated User Interface and also supports centralized AP Management for convenient device deployment.



## Outstanding Customer Service

CERIO's customer service staff are experts on our products and possess clear and patient communication skills.

# Contact Information

**CERIO**

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*Amplify your Wireless Network*