ZYXEL
Your Networking Ally

ZyWALL Advanced VPN Firewall Sales Kit

Dec, 2017

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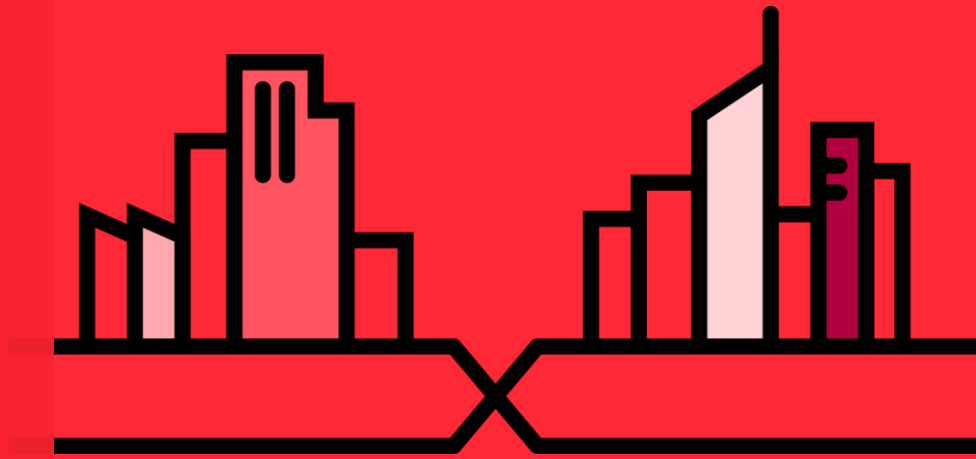
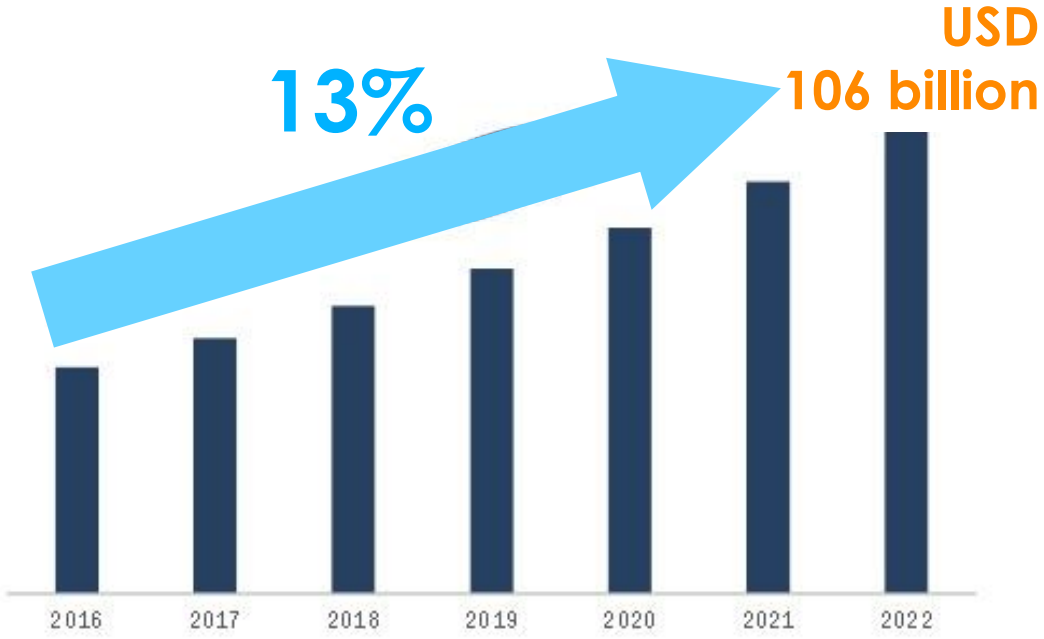
- Market Outlook
- Product Introduction
- Why ZyWALL VPN
- Feature Highlights
- License
- Ordering Information



GLOBAL VIRTUAL PRIVATE NETWORK (VPN) MARKET Forecast 2016-2022

The global VPN market is expected to reach at **USD 106 billion** by end of year 2022 with compound annual growth rate of **13%.**



Source
https://www.marketresearchfuture.com/reports/virtual-private-network-market

Why business need to adopt VPN?

Secure

Data breaches not only lead to compensation and regulatory fines, but can leave lasting reputational damage.

Mobility

VPN can provide a huge boost to productivity by ensuring that staff are not tethered to traditional office working times and locations.

COST

VPN can prove much more affordable than a physical private network. Rather than having to lease long distance network connections to achieve a secure transfer of data

Source :http://betanews.com/2015/12/21/what-you-need-to-know-about-vpns/

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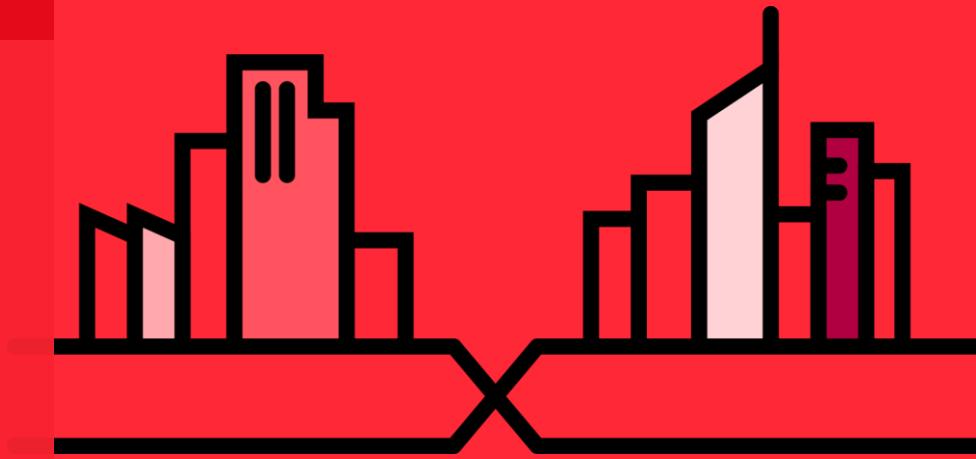
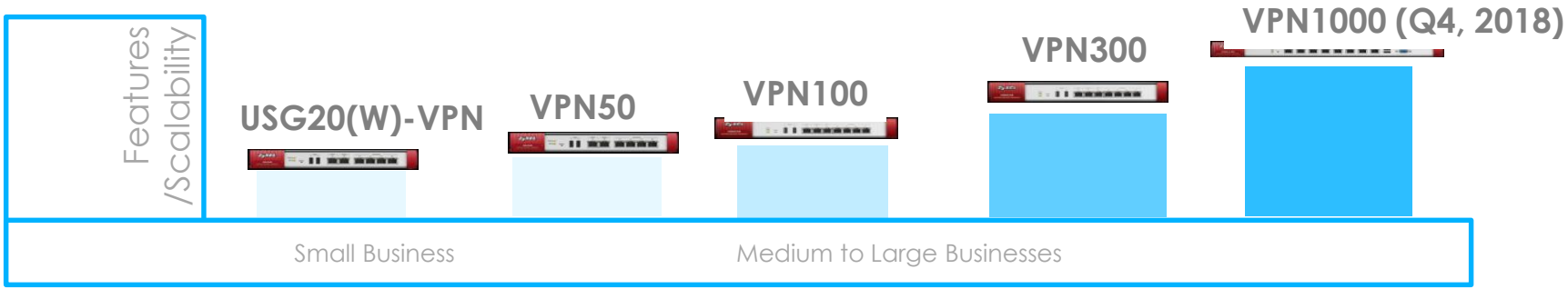


Product Matrix



Firewall throughput*	350 Mbps	800 Mbps	2,000 Mbps	2,600 Mbps	8,000 Mbps
VPN throughput*	90 Mbps	150 Mbps	500 Mbps	1,000 Mbps	1,500 Mbps
Max. TCP concurrent sessions	100,000	400,000	800,000	2,000,000	3,000,000
Max. # of VPN Tunnels	10	50	100	300	1000
# of SSL VPN (Incl./Max.)	5/15	10/50	10/100	50/300	500/1000
Mgmt. AP	-	4/36	4/68	4/132	4/260
Hotspot Management	-	-	Y	Y	Y
Facebook Wifi	Y	Y	Y	Y	Y
AWS APC	Y	Y	Y	Y	Y
Easy Mode	Y	Y	-	-	-

Hardware Configuration

USG20(W)-VPN

Reset Btn

LEDs :
PWR
SYS

LEDs :
SFP
WAN
LAN/DMZ

USB 3.0
Mobile 3G/3.5G, 4G

Power
12VDC

GbE
SFP:100/1000

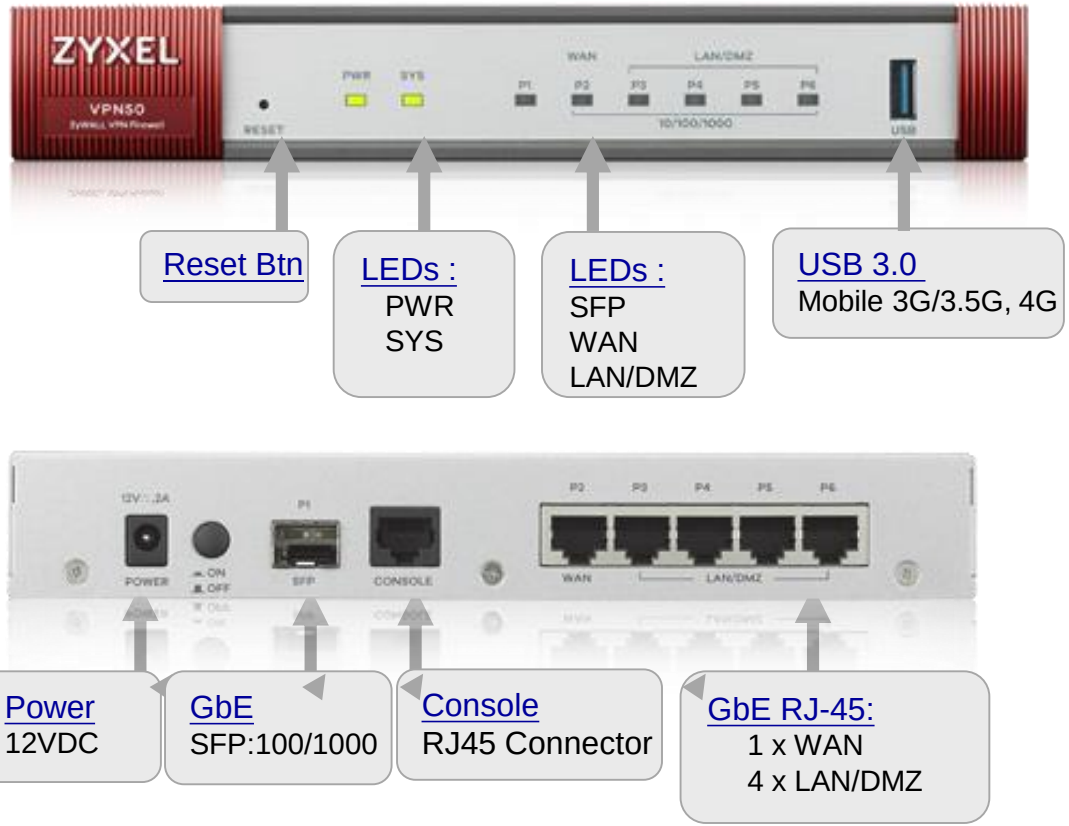
Console
RJ45 Connector

GbE RJ-45:
1 x WAN
4 x LAN/DMZ

USG20W-VPN supporting 3x3 Single radio 802.11 a/b/g/n/ac

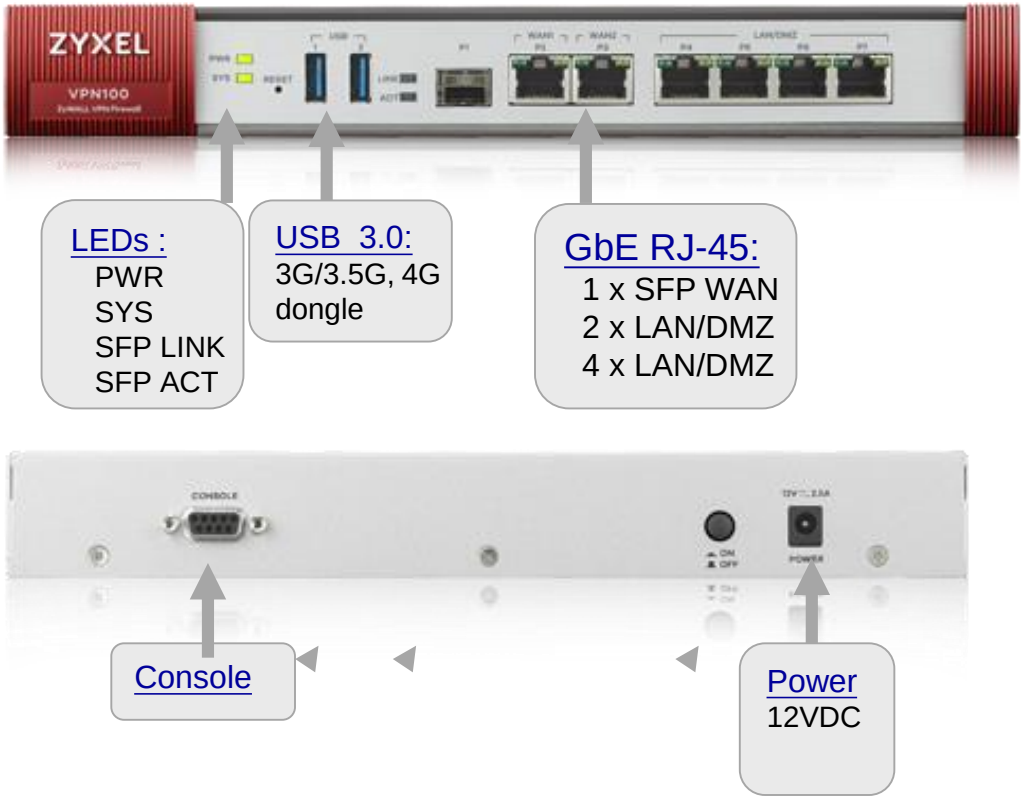
Hardware Configuration

VPN50



Hardware Configuration

VPN100



Hardware Configuration

VPN300

Migration to replace Non-UTM ZyWALL/USG

MB

SMB

Small Business

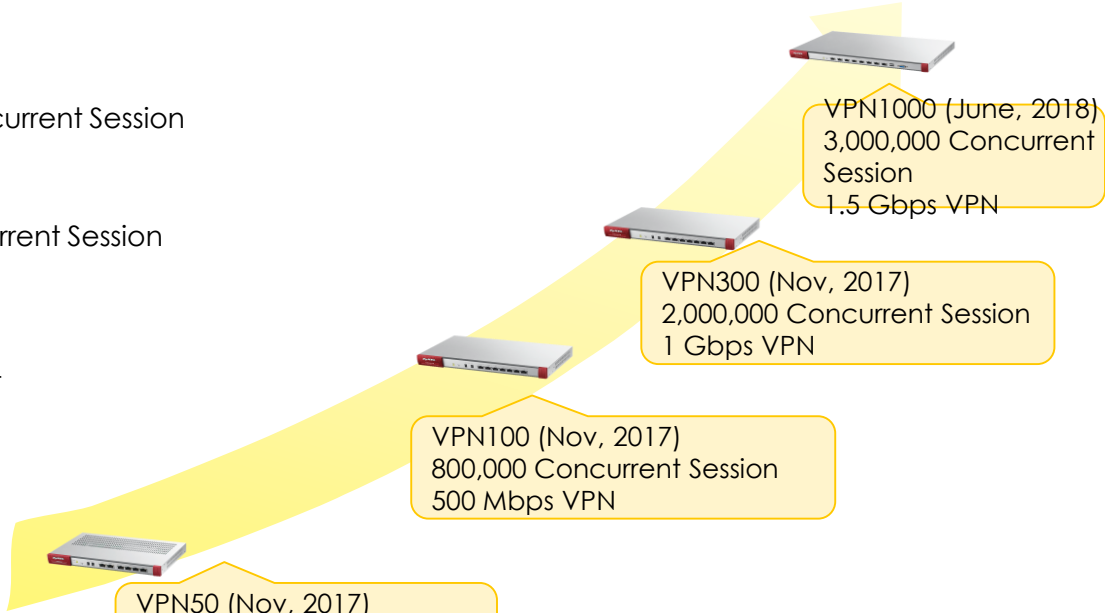
ZyWALL 1100
1,000,000 Concurrent Session
800 Mbps VPN

ZyWALL 310
500,000 Concurrent Session
650 Mbps VPN

ZyWALL 110
150,000 Concurrent Session
400 Mbps VPN

USG60-NB
100,000 Concurrent Session
180 Mbps VPN

USG40-NB
50,000 Concurrent Session
100 Mbps VPN



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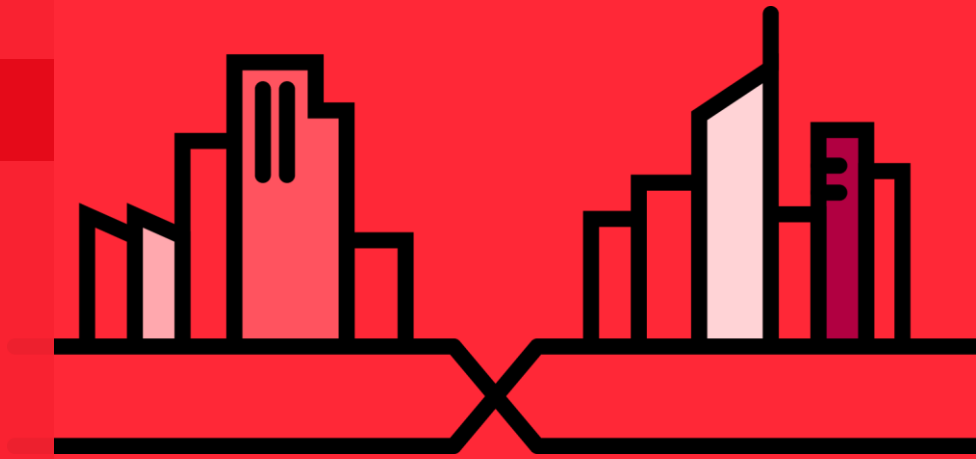


VPN50/100/300 Highlights

Easy, Secure, Faster VPN Access

Interfaces

SFP Interface
Upgrade to USB3.0

Capability

Higher VPN Tunnels
More APs support
(by Default & Max)

Performance

Higher Throughput
Better Concurrent Sessions
(up to 4 times of USG)

Usability

Easy Deployment
Tunnel health and statistics overview

Solution

Bundled 1 yr Free CF & Geo-Enforcer
Cloud CNM Family
AWS VPC
Facebook Wifi

One-year Free Security Service

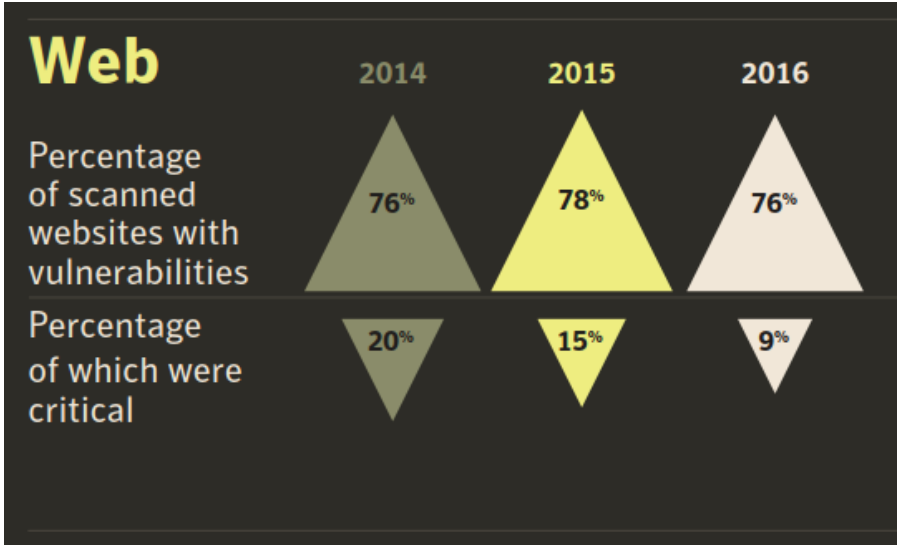
01

Websites are vulnerable

Content Filtering

Symantec said:

In 2016, up to **76%** of scanned website are found with malware or vulnerabilities



Source: Symantec 2017 Internet Security Threat Report

Google said:

Search Engine Land SEO SEM MOBILE LOCAL RETAIL GOOGLE BING SOCIAL MORE EVENTS

Google: Hacked sites increased 32% in 2016

Google is encouraging webmasters and site owners to verify their sites in Google Search Console to help both prevent and fix website hacks.

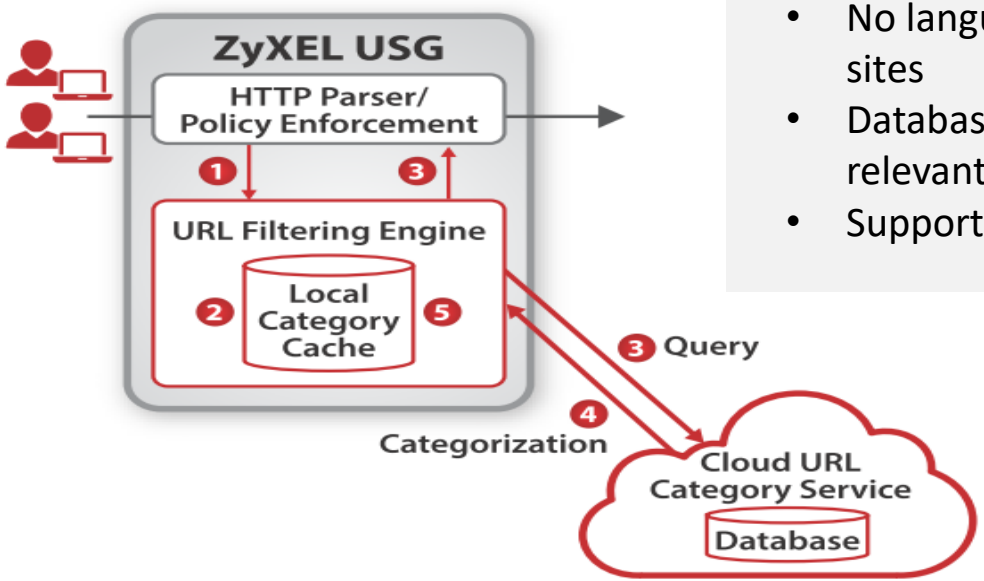
Barry Schwartz on March 20, 2017 at 1:11 pm

"Web Security" module is designed for protecting user when visiting websites…

One-year Free Content Filtering

Content Filtering

URL Filtering technology of Content Filtering service protects users and networks from accessing malicious or malware sites.

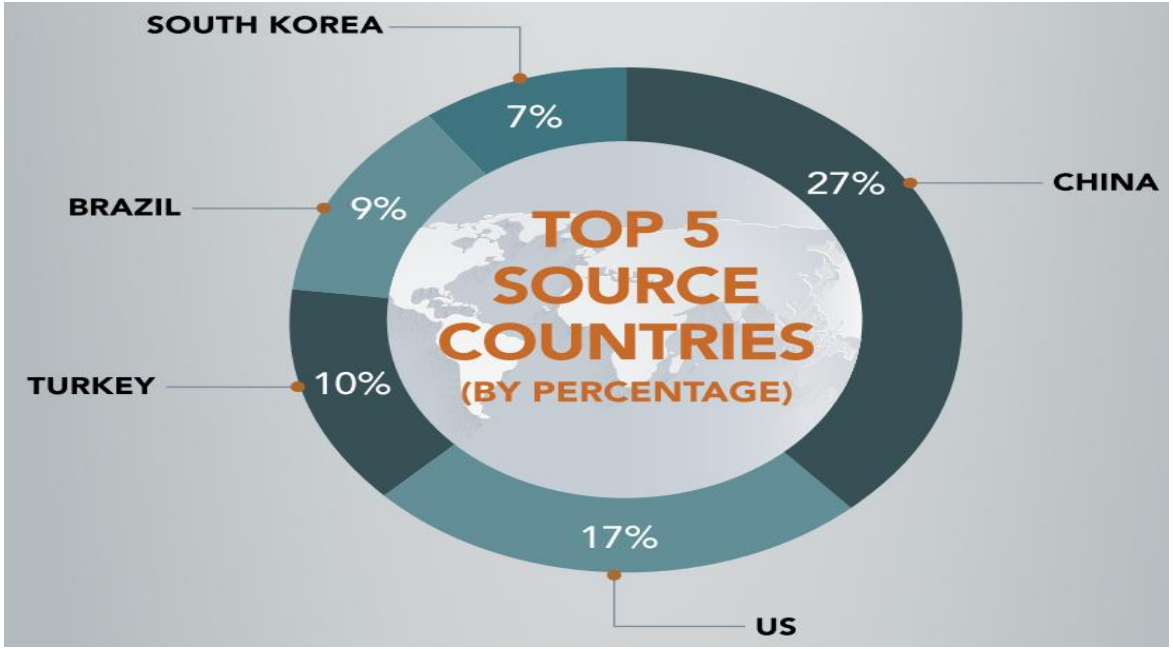


- 64 categories, 8 of which are security related
- No language constrains; vast coverage of global sites
- Database contains ~140 million of the most relevant URLs
- Supports http, https, ftp and other protocols

Top Attacking Countries

Geo Enforcer

By visiting websites or web resources in top attacking countries, the website might be infected and users could be installed with some malicious codes.



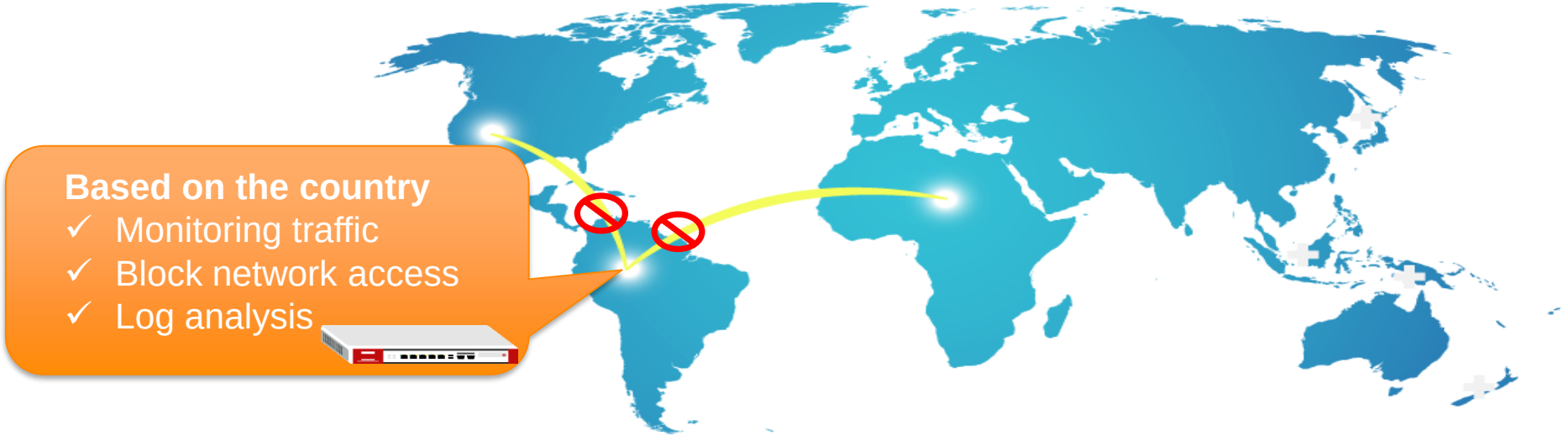
Source: Akamai Q1 2016 State of the Internet Security Report

One-year Free Geo Enforcer

Geo Enforcer

Maps IP addresses to Geo locations

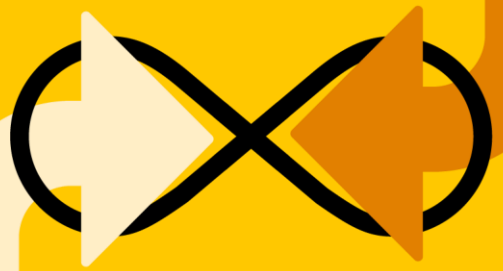
- Administrators can block top hacking countries and prevent users from visiting sources in certain countries
- For easy management and better understanding, IP addresses are also mapped into countries



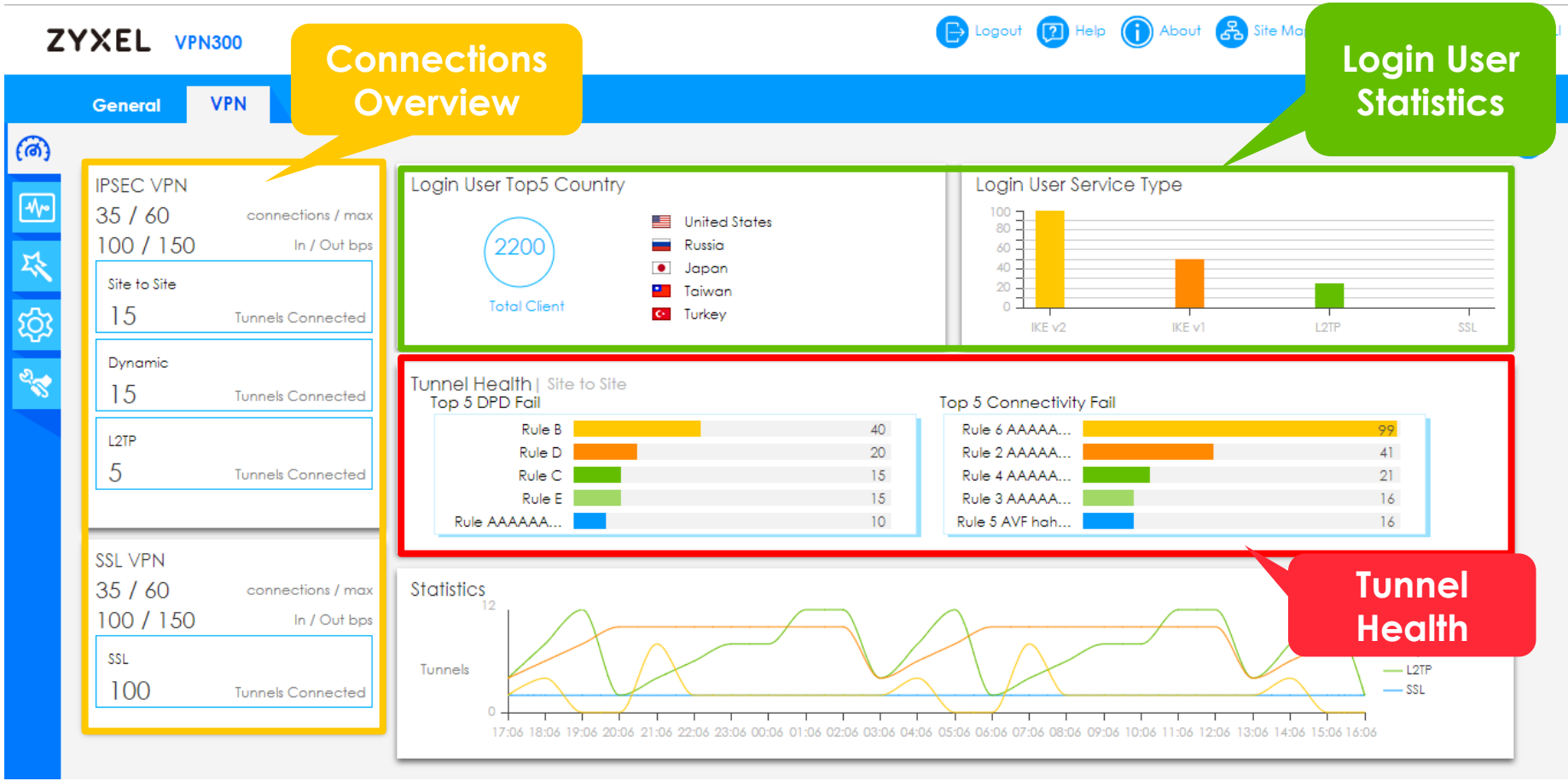
Easy to Use

- Dashboard
- iOS Provision

02



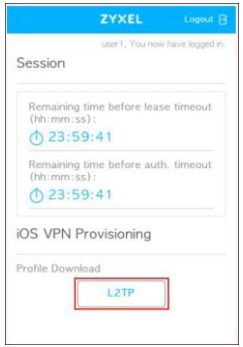
Dashboard – Intuitive, Simple, Visual

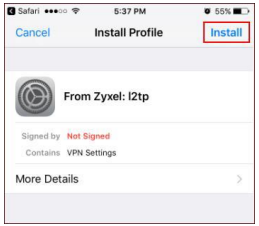


Easy iOS VPN Provision

VPN Firewall fully compatible with iOS built-in VPN Client

Easy iOS Provision





2. Download Profile

3. Install Profile

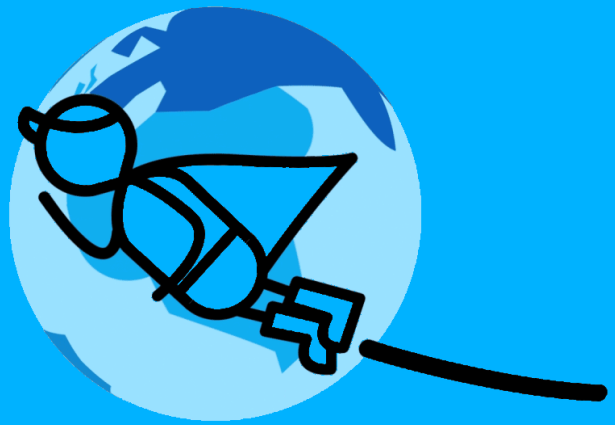
1. Set Up VPN Profile

✓ Easy Quick VPN

✓ Avoid Config Error

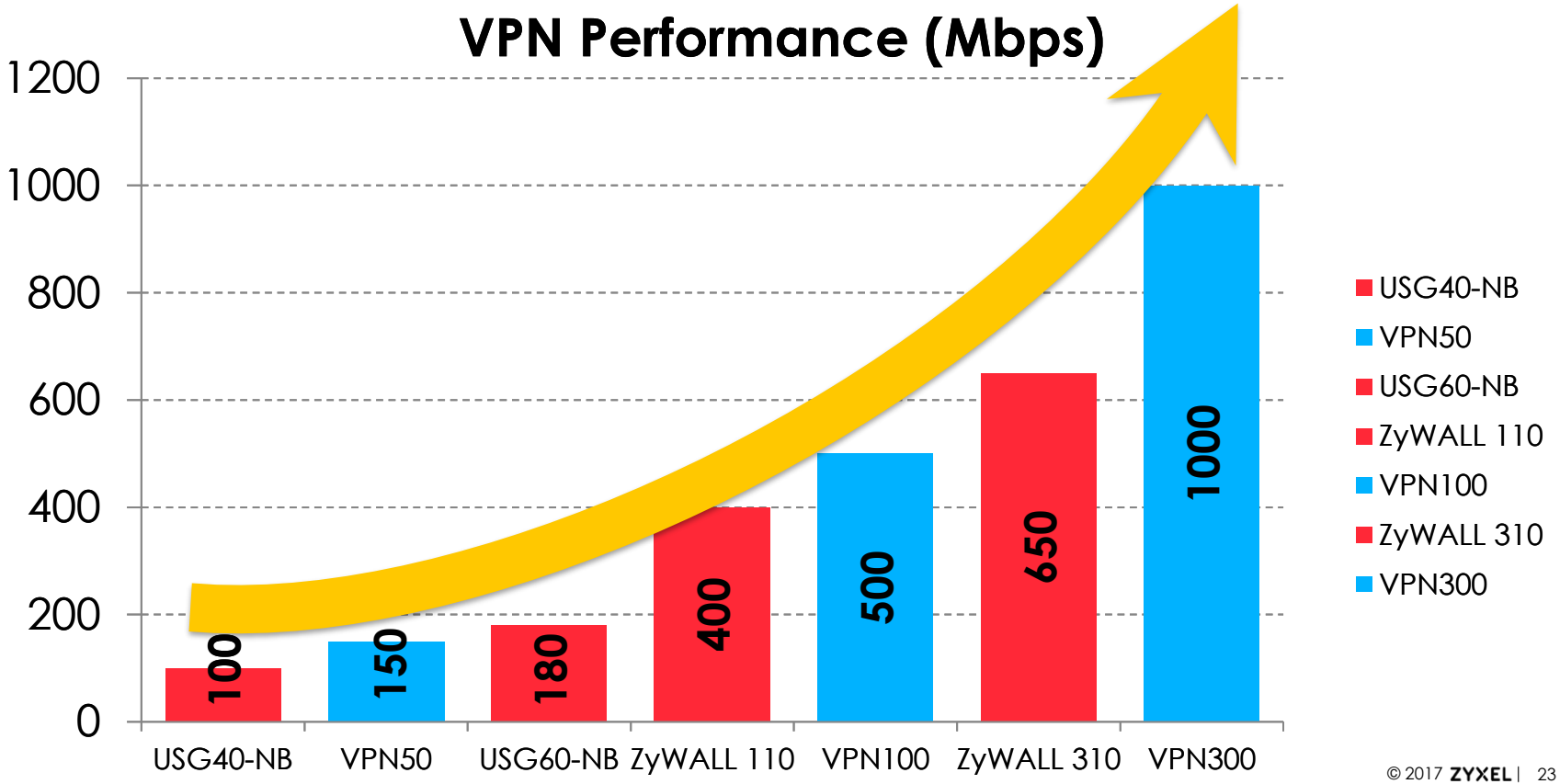
1. The iOS provision feature supports iOS 9.3 or above versions.
2. The iOS provision supports iOS mobile devices, not tablets.

Fast & Secure VPN



03

Ultra-high Performance



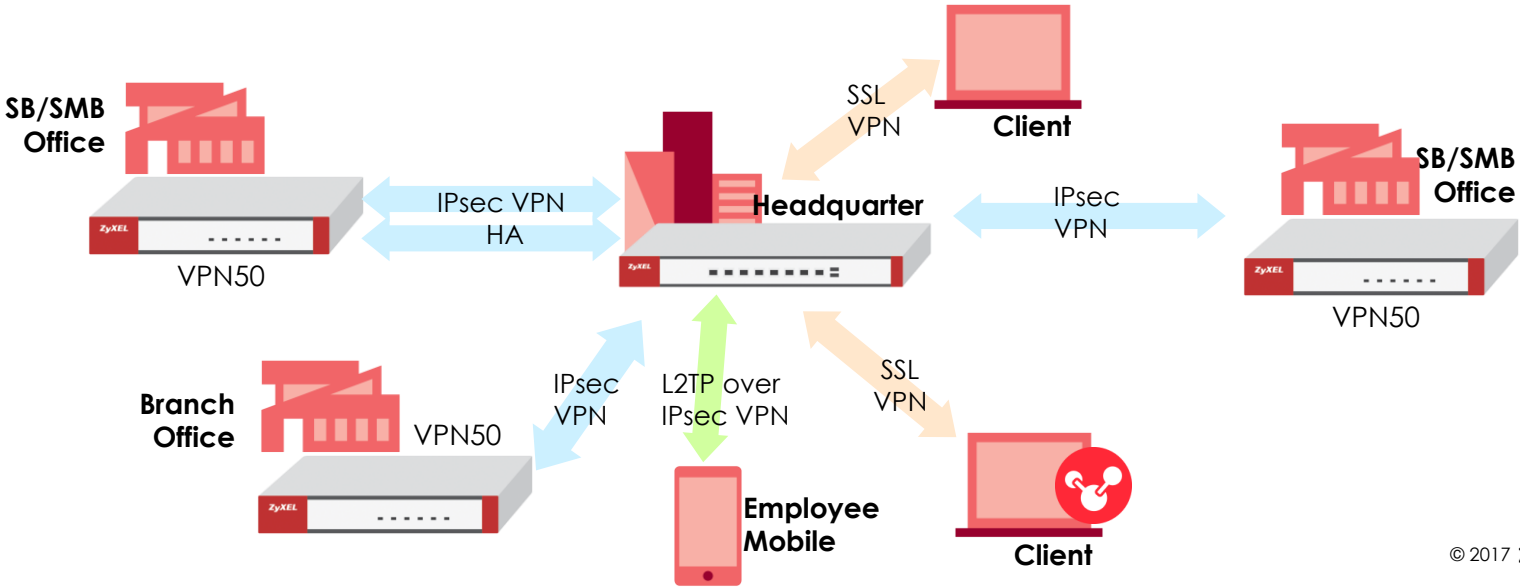
Secure VPN

Hybrid VPN

Hybrid technology support

SSL VPN IPSec VPN L2TP over IPSec VPN

For Wider Security Coverage



IKEv2 - Next Gen Encryption

EAP Authentication*

IKEv2

- ✓ Provides **mutual** authentication
- ✓ Establish **session key** between an EAP peer and server.

DoS Protection

IKEv2 can **prevent DoS attacks** from the network when it validates the IPsec initiator.

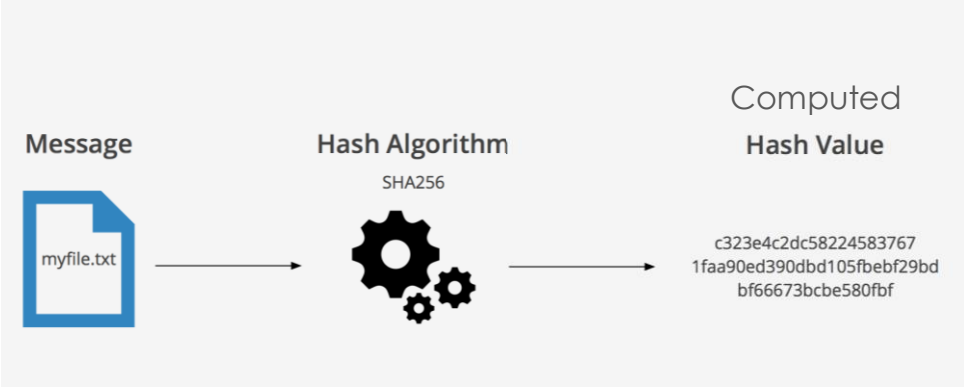
Safer Faster Hand-shaking

Better Resilience To Attacks

* EAP-IKEv2 is an EAP authentication method based on the Internet Key Exchange Protocol version 2 (IKEv2).

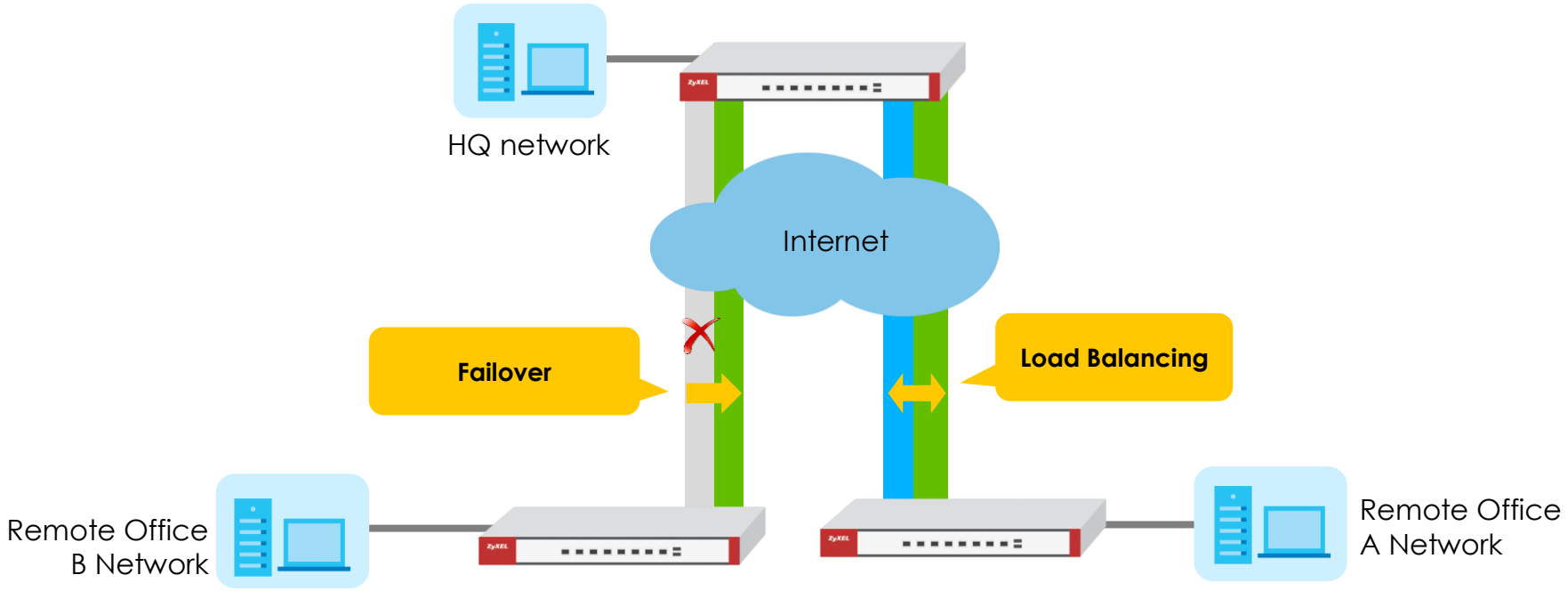
SHA2 Ensures Data Integrity

- **A Mathematical Computing Protection**



More Secure VPN Network

VPN High Availability



Failover benefits:

Minimal Down Time

Load Balancing benefits:

High Capacity

Boost Your Network Reliability

ZyWALL VPN Series to meet your need!

Multiple, Highly Secure Access

- IPSec/SSL VPN with secured hand-shaking by supporting IKEv2
- AWS VPN Verified Customer Gateway
- One year free Content Filtering for web security management

Non-Stop Service

- Multi-WAN Failover and VPN High Availability to ensure the connection
- HA Pro for failover service

Easy to Use

- Quick overview and monitoring with graphic Dashboard
- Easier iOS Provision in three steps
- VPN provision available from SB to MB scale

Comprehensive Connectivity

- Hospitality solution available from small shops to vertical
- Integrated AP Controller to help cross sales

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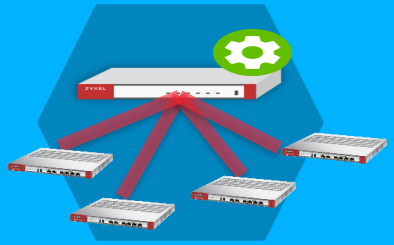
- AWS VPC
- SecuDeployer
- Facebook Wi-Fi

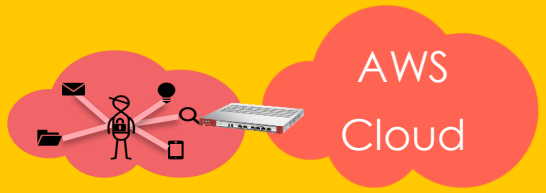
How ZyWALL VPN Elevates Business Capability



Enhance Deployment Capability

SecuDeployer

VAR/SI



Integrated Cloud Network

AWS VPC

On-Premise Network

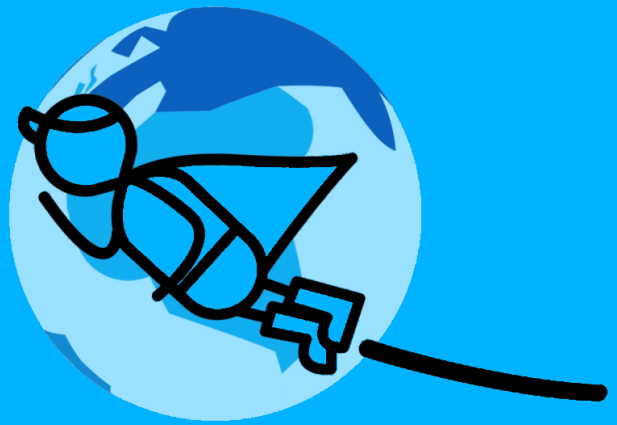
SMB

Customer Endorsements

Facebook WiFi

Hospitality

Cloud CNM SecuDeployer



Available since ZLD4.31 (Jan, 2018)

Cloud CNM Family

SecuReporter
Security Analysis and Reporting Service

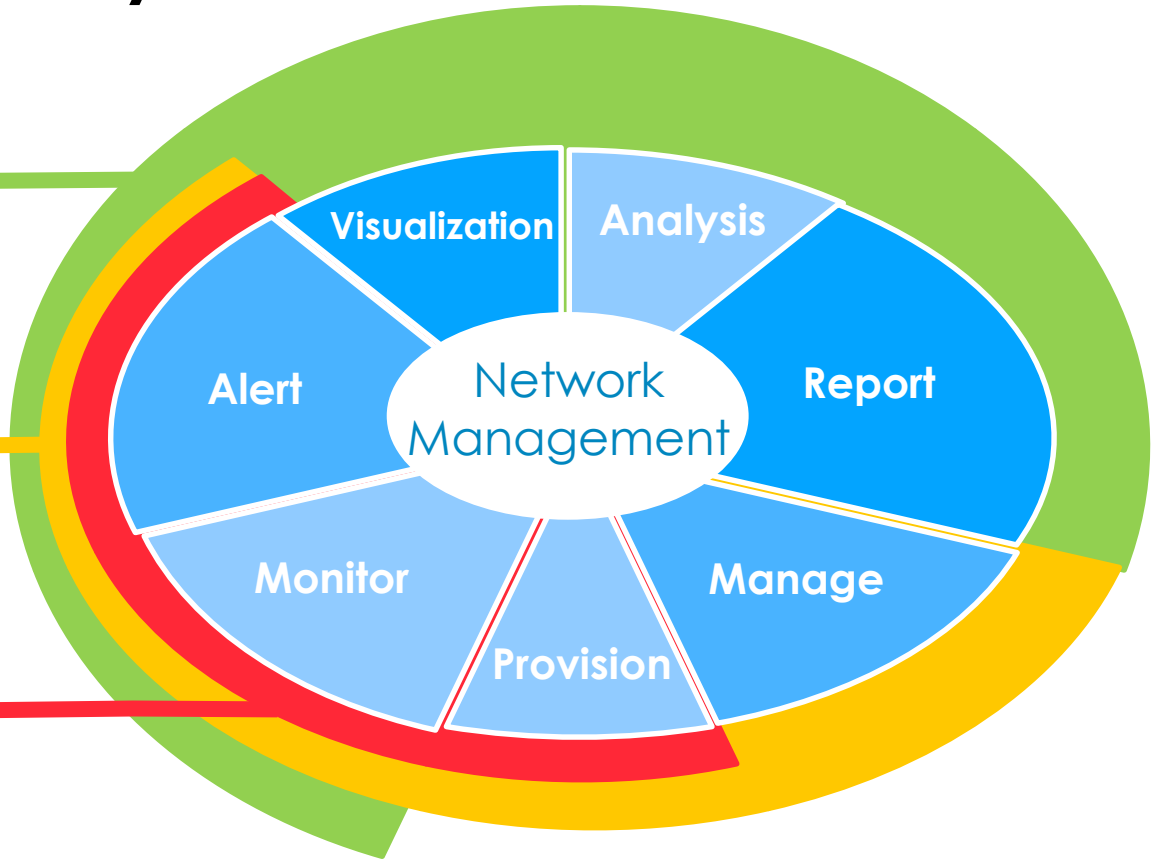
A Cloud Service

SecuManager
Security Management Appliance

A VM-based Software

SecuDeployer
Gateway Provisioning Functionality

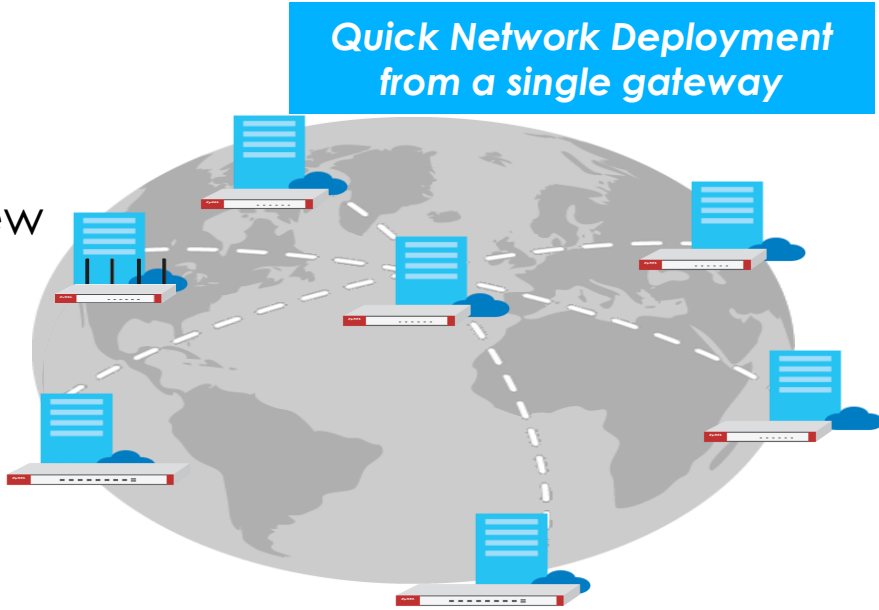
A Feature on Gateway



Make your Gateway A Provision Server

Beneficiary for SB/SMB Deployment

- ✓ Quick deploy 50 remote devices
- ✓ Easy Hub & Spoke IPSec VPN provision
- ✓ Device status monitoring - health overview
- ✓ Annual Server license on
  - USG/ZW110 above models
  - VPN100 above models

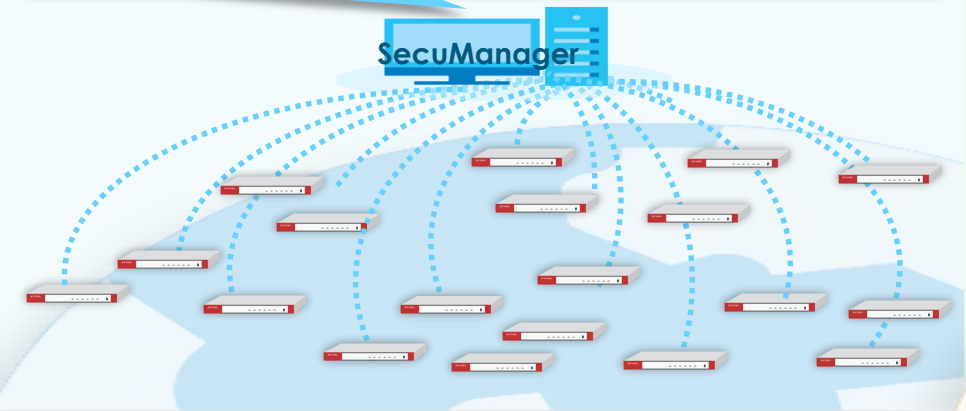


Note: SecuDeployer is a ZLD4.31 new feature only applicable on ZyWALL USG and VPN product lines.

How SecuDeployer Benefits VARs/SI

Advanced Manageability
For Large Scale Deployment

- ✓ VM required for large scale fulfillment
- ✓ Capable of device group management
- ✓ Comprehensive configuration via CLI script



Up to 1000 devices
Target for MSP/ISP

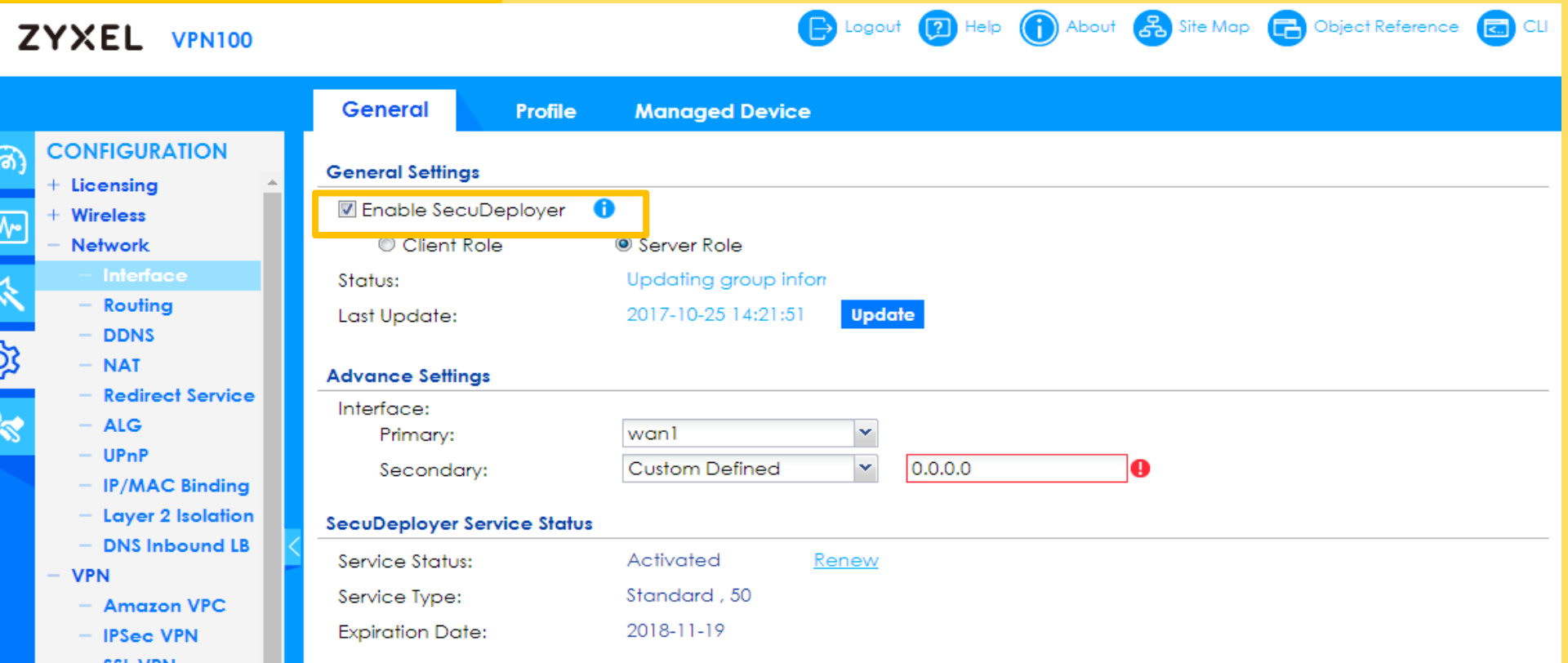
Quick and Easy
For Small Scale Deployment

- ✓ No extra HW requirement
- ✓ Auto Client List. Easy member setup
- ✓ Easy configuration for fixed scenarios

Up to 50 devices
Target for SB/SMB

Quick to Deploy

1. Enable
2. Member
3. Profile



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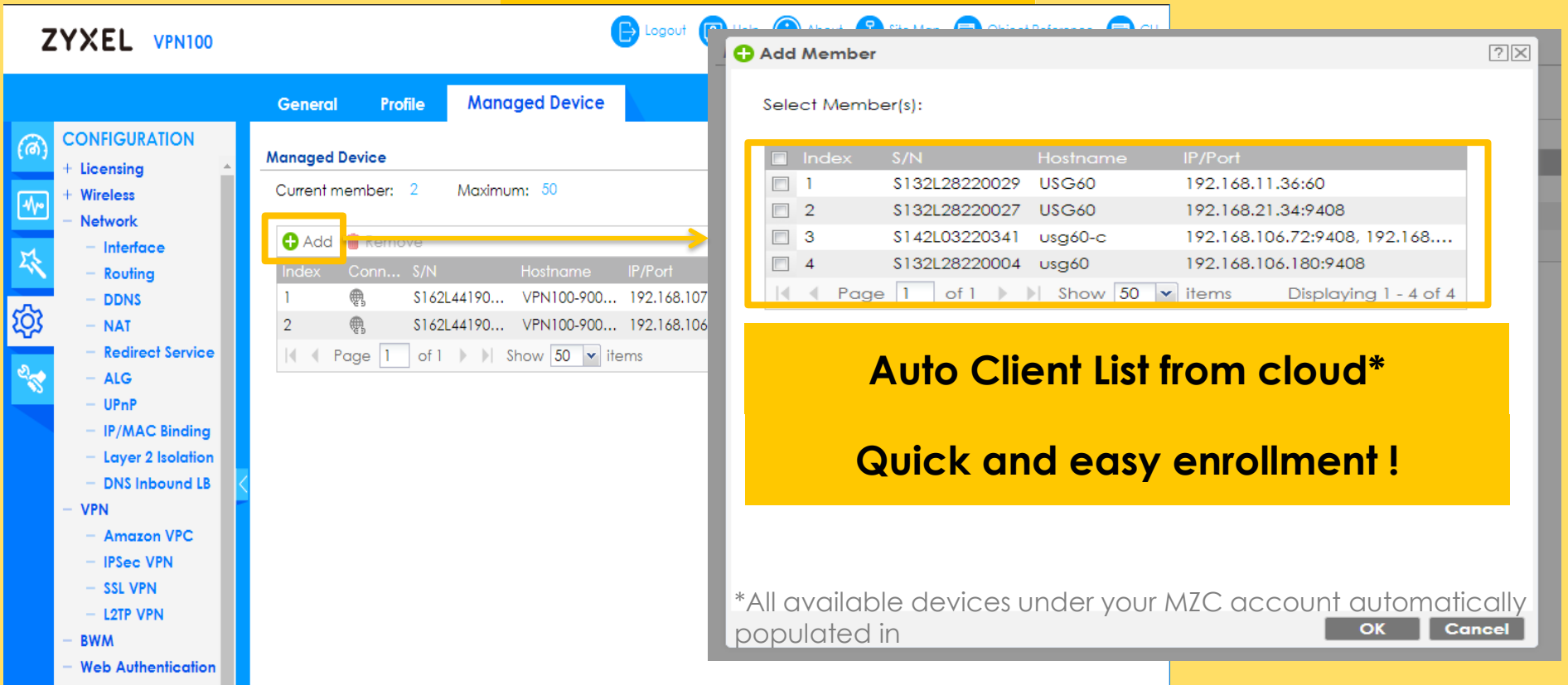
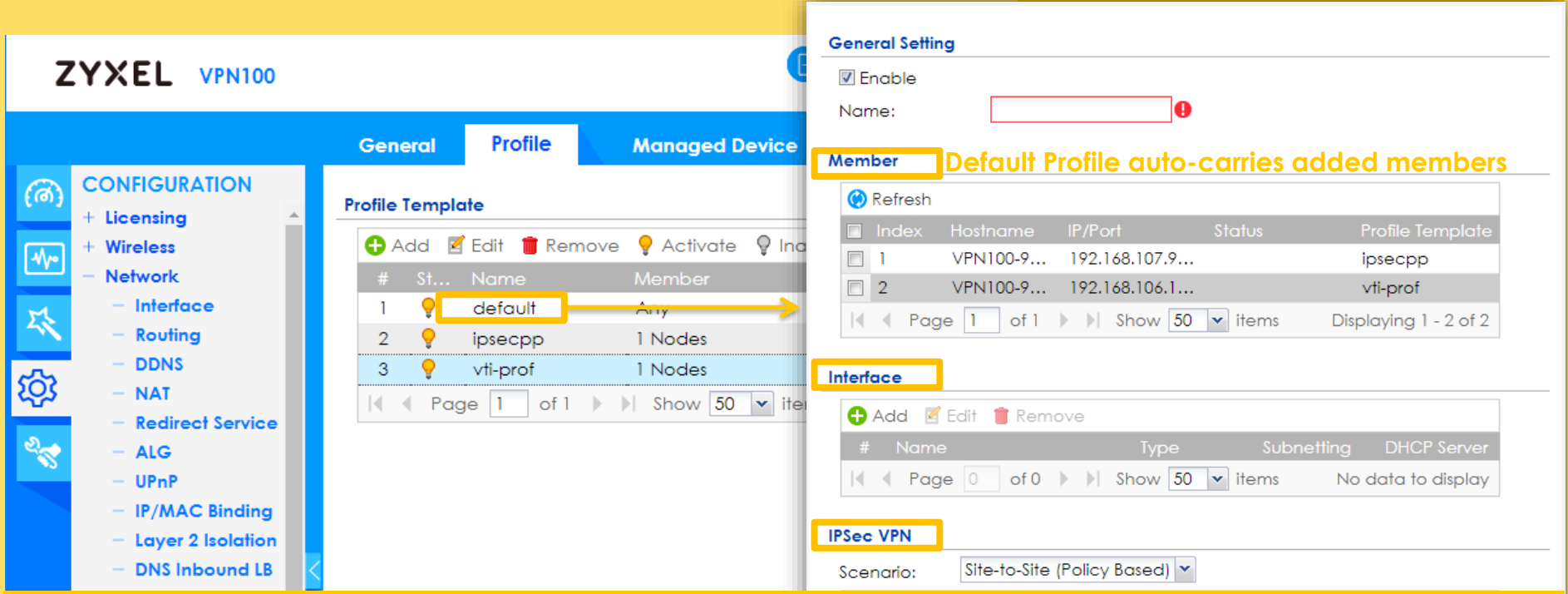


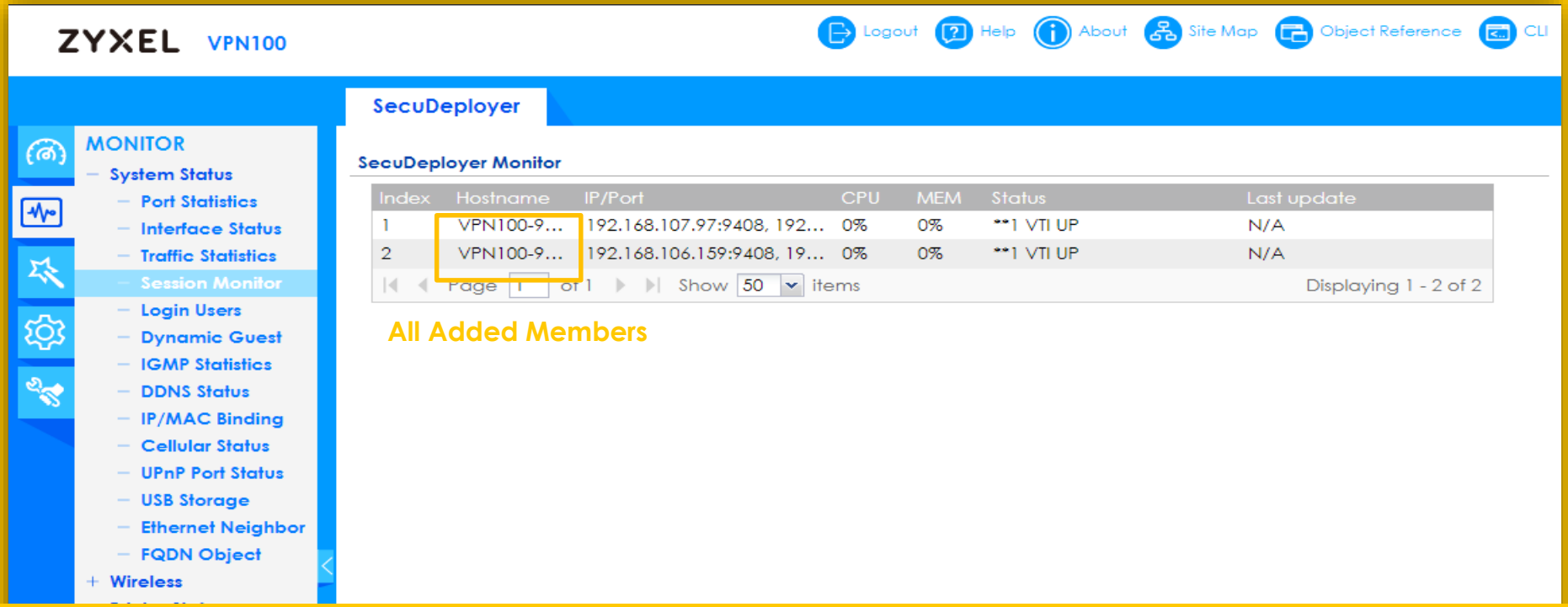
Quick to Deploy

1. Enable 2. Member 3. Profile



Simple Quick 3 Steps. Done!

Easy to Monitor



Monitor Tunnel Status and Device Health

After License Expiry

What to expect after SecuDeployer server license expires

- **Existing settings** remain as they are both on server and client gateways.
- **Monitor** function still remains for device health etc.
- **No provisioning** anymore
  - **Member**: Users cannot add members anymore
  - **Profile**: Users can still edit profile settings. The new settings can be saved but will not be applied until a valid license takes effect.
- **Client Gateways**
  - The client gateway will become out of server's management in below circumstances:
    - Client gateway reboots after server license expires.
    - Users click "Disable" SecuDeployer function after server license expires.

Quick to resume provisioning as soon as your license gets renewed

Supported Models *(Available since ZLD4.31)*

Model	USG20(W)-VPN	USG40 / USG40W	USG60 / USG60W	USG110 / ZW110	USG1100 / ZW1100	USG1900	USG2200-VPN
Server Role	No			Can be Server Provisioning Node 50			
Client Role	Can be Client					No	

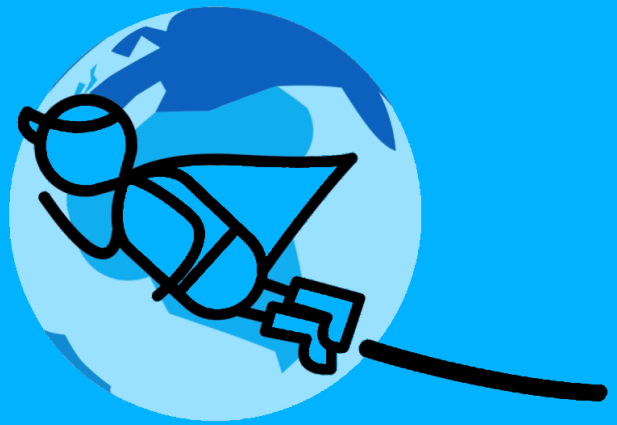
Model	VPN50	VPN100	VPN300	VPN1000 (Q4, 2018)
Server Role	No	Can be Server Provisioning Node 50		
Client Role	Can be Client			No

License Type: Time Based

License SKU	Duration	Applicable Models	Applicable Firmware Versions
Trial (Available once registration) Node Limit 2	30 days	NGUSG/ZyWALL 110 and up VPN100 and 100up	ZLD4.31
Annual – 1 year Node Limit 50	1 year		
Annual – 2 years Node Limit 50	2 years		

Note: SecuDeployer is a ZLD4.31 (Jan, 2018) new feature only applicable on ZyWALL USG and VPN product lines.

AWS VPC,
Amazon Web Service Virtual Private Cloud



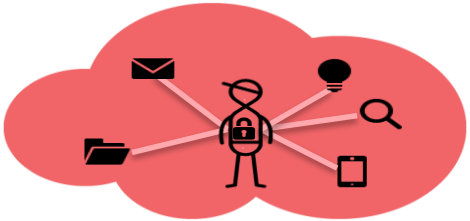
Transitioning your business to the could

Why the Cloud?

To achieve better IT speed, agility and profitability

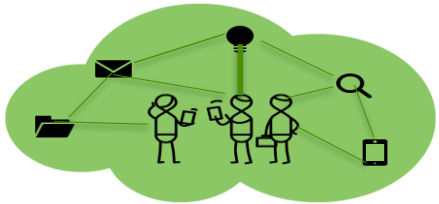
How to migrate?

Bridging the old and the new, taking advantage of key capital investments internally as well as optimizing operational expenses for cloud services



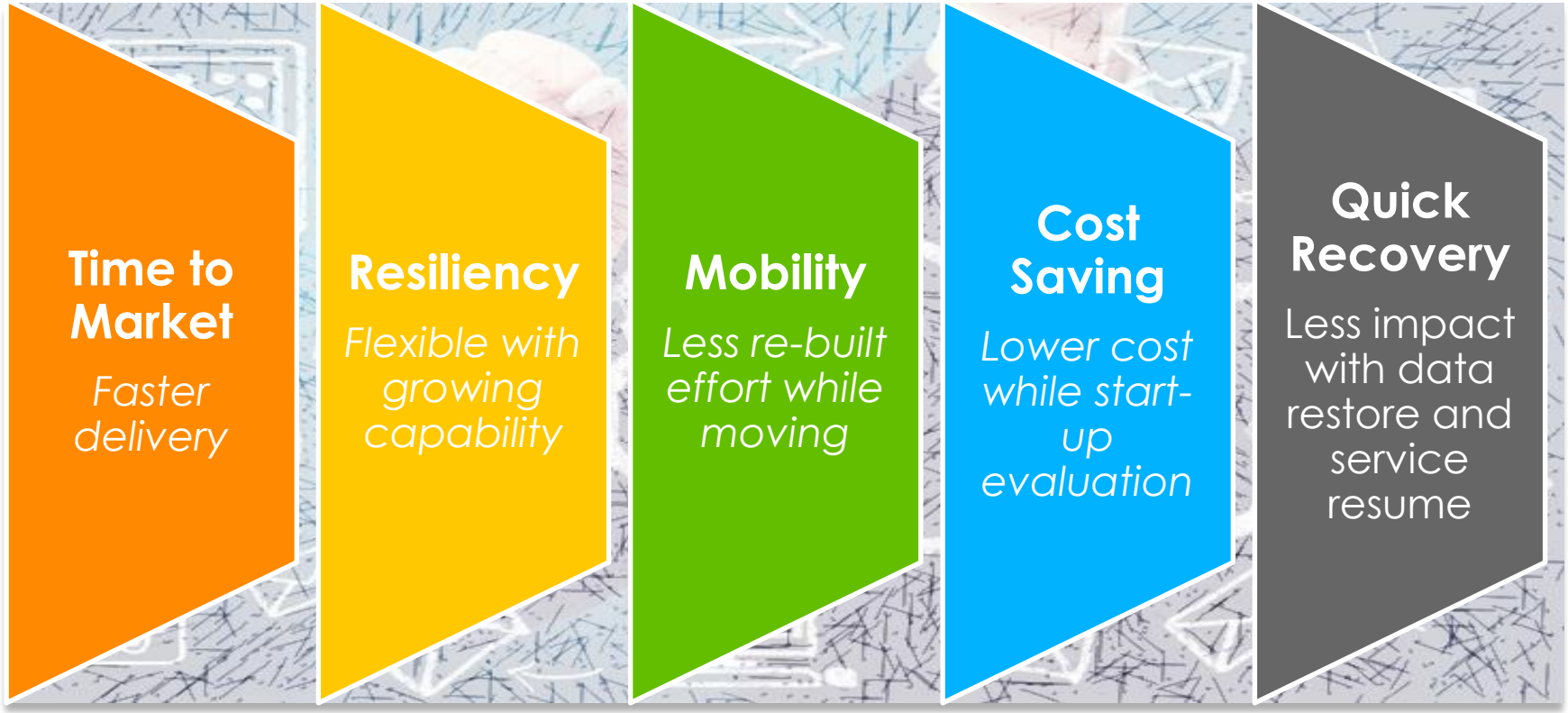
On Premise

Hybrid



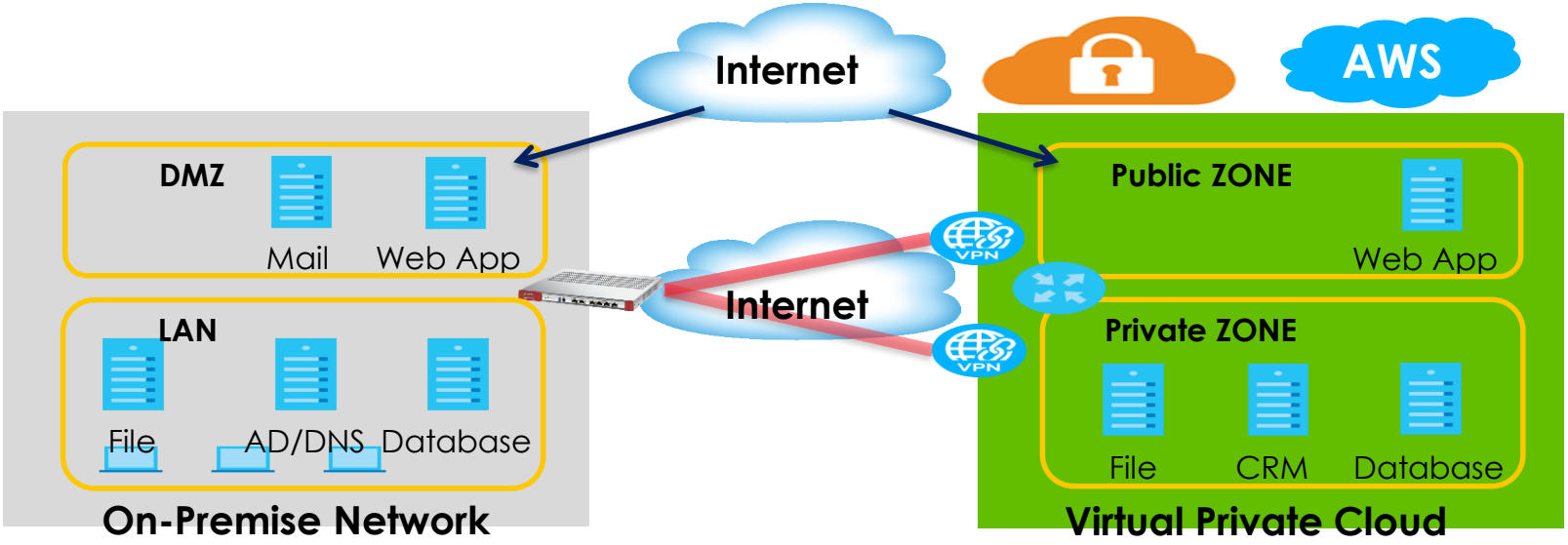
On Cloud

Benefits of Cloud



What is VPC ?

- A VPC is a sub-cloud, inside AWS public Cloud, and inside and isolated logical network. Other servers cannot see instances that are inside a VPC, namely, it's like a VLAN inside AWS infrastructure.

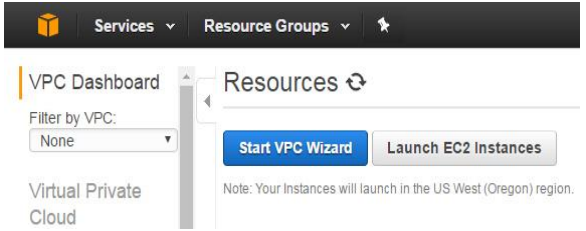


Make an Easy Connection

1

Step 1 Create VPC

Login Amazon VPC and Create VPC configuration file

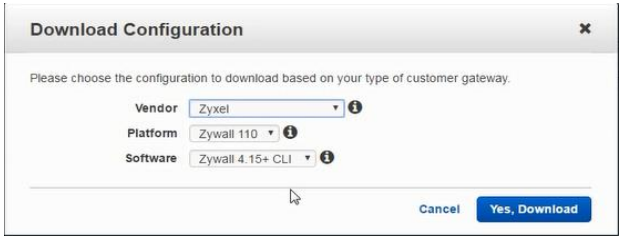


2

Step 2 Download VPC config

Download the VPC configuration file

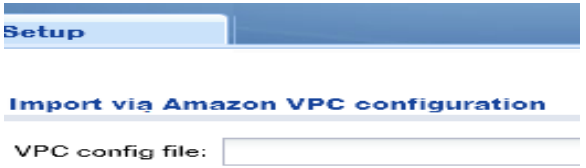
Static—ZLD4.20, Dynamic—ZLD4.30



3

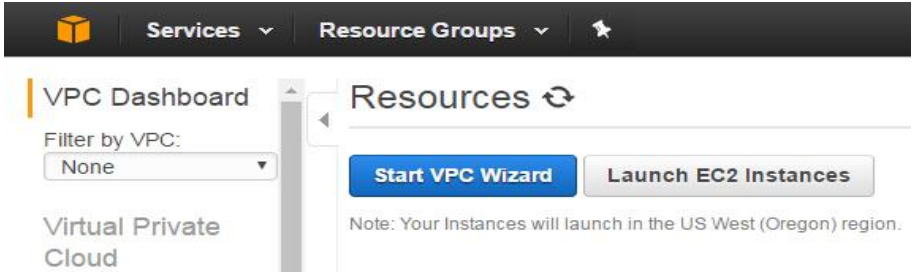
Step 3 Upload VPC config

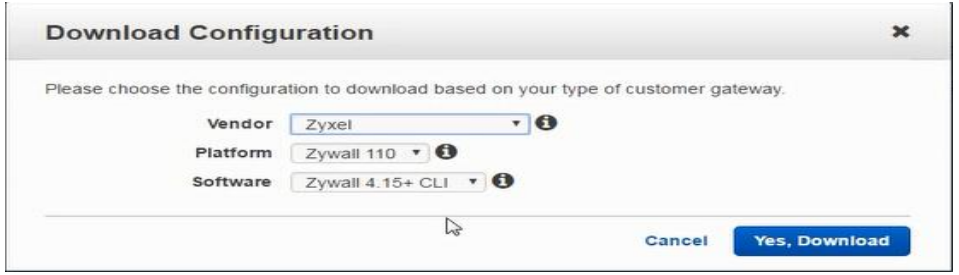
Go to ZyWALL Firewall device VPN GUI and upload VPC config file



ZyWALL Series as AWS VPC Customer Gateway

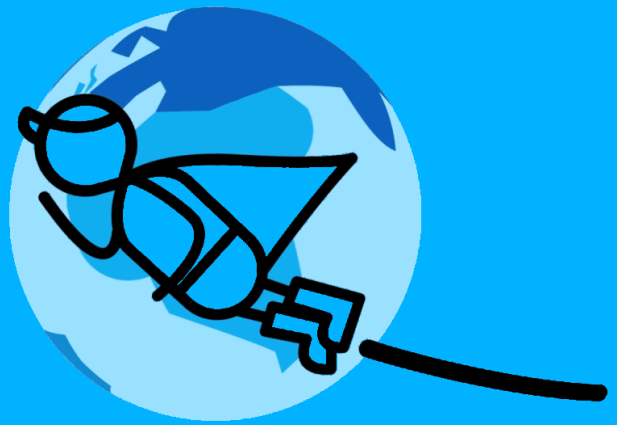
- Official verification and listed by Amazon is under progress



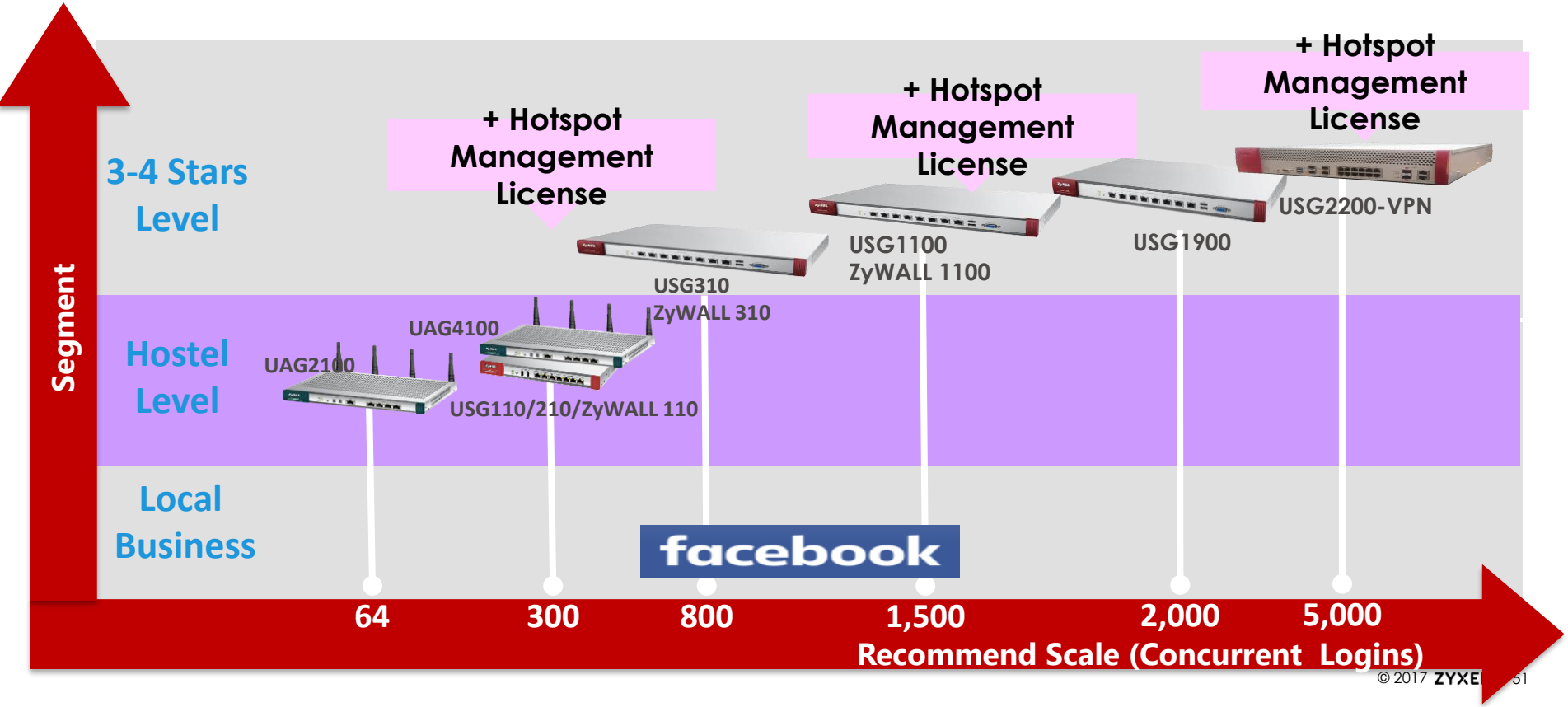


New Social Engagement

- ✓ Facebook Wi-Fi



Hotspot Solution Portfolio



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Comprehensive WiFi Hotspot Solution

Facebook Wi-Fi for Local Business

- Easy to use
- Free Marketing
- Reach more people

Hotspot Management for Retail & Hospitality business

- Multiple social logins
- Customized social engagement
- Billing capability

Elevate Your Business Profile

- Not just offer the Free Wi-Fi

- **Promote your business**

  Brand wifi service with your logo, Advertise your promotions and products

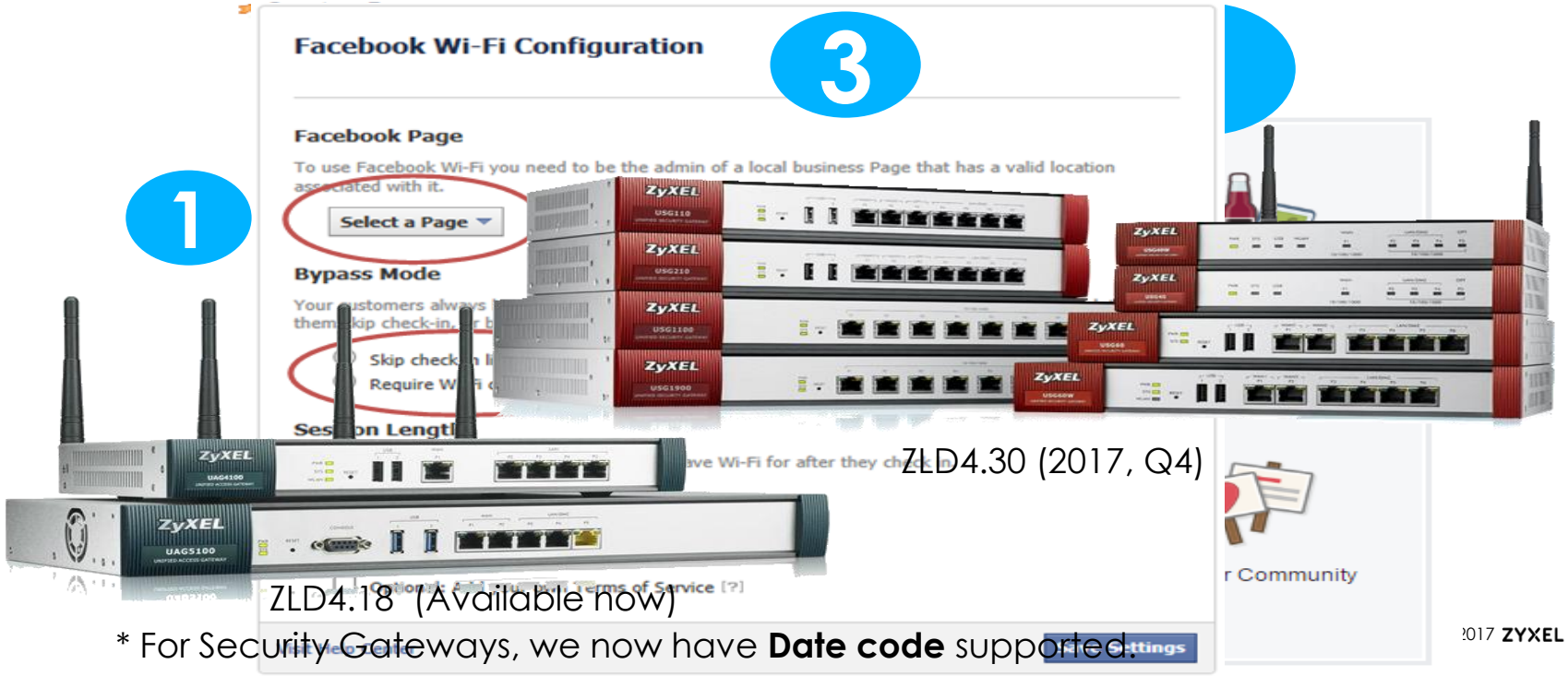
- **Engage with your customers**

  Collect customer data, target campaigns to specific customers

Easy to set up and Simple to use

1. **Get new Firmware with Facebook Wi-Fi supported**
2. Create your FB Page with a **valid address**
3. **Configure** FB Wi-Fi in Zyxel gateway GUI

< 3mins & Surf



ZLD4.30 (2017, Q4)

ZLD4.18 (Available now)

* For Security Gateways, we now have **Date code** supported.

How to Choose?

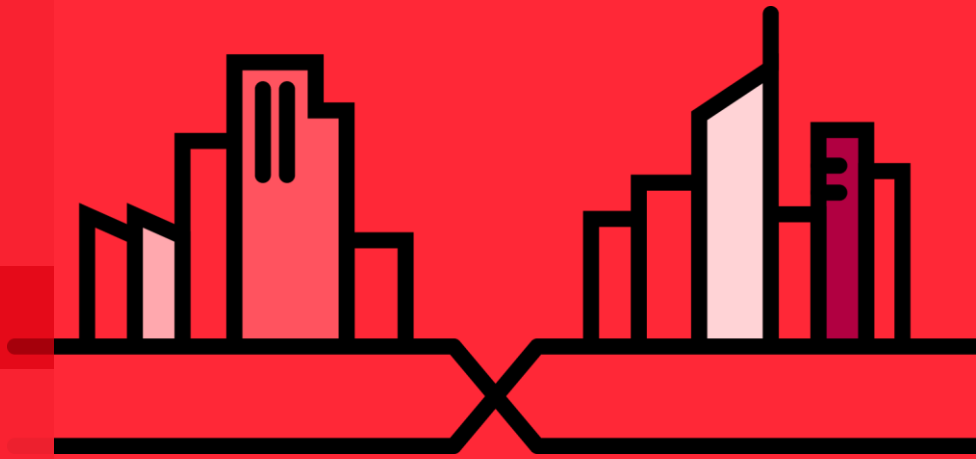
	Facebook Wi-Fi	Social Login (with Hotspot management license)
Supported Social login	Facebook	Facebook, Google, Twitter, …etc.**
Portal Page	Facebook Page	Customize your page on the cloud**
User info. Collect	N/A	Yes**
Advertising	Facebook Page Video*, images*	Social media page**, Video**, Web site
Target Customer	Local Business Restaurant B&B Café shop	Chain Store Convention Center/Mall Hotel
Benefits	• Easy to use • Offer free & paid marketing tool • Reach more people	• Multiple authentication methods • Support multiple social logins • Multiple type of Advertising • Comprehensive analytics

*: Paid service by facebook business

: Zyxel Hotspot Management integrated 3rd party paid service: **Purple Wi-Fi , **Socifi**

Table of Contents

- Market Outlook
- Product Introduction
- Why ZyWALL VPN
- Feature Highlights
- License Service
- Ordering Information



ZyWALL VPN Series

License subscription

Geo Enforcer

Content Filtering

Hotspot Management

SecuDeployer

AP Controller

Optional Security

Product	Content Filtering	Geo Enforcer
VPN50	1 year 2 years	1 year
VPN100 VPN300	1 year 2 years	1 year

Remark: VPN Series has been bundled with one-year free CF & Geo-Enforcer!

VPN, Connectivity & Industrial

Product	SSL VPN Tunnels	SecuExtender SSL VPN Client	IPSec VPN Client
VPN50	Add 5 Tunnels Add 10 Tunnels	For 1 client For 5 clients For 10 client	For 1 client For 5 clients For 10 clients For 50 clients
VPN100 VPN300	Add 5 Tunnels Add 10 Tunnels Add 50 Tunnels		

Product	Managed APs	Concurrent Device Upgrade	Hotspot Management	SecuDeployer *
VPN50	Add 2 APs Add 4 APs Add 8 APs	---	---	----
VPN100	Add 2 APs Add 4 APs Add 8 APs Add 64 APs	100 nodes	1 year / One-time	1year , 50nodes / 2year , 50 nodes
VPN300		100 nodes 300 nodes		

* SecuDeployer available by 2018, Q1

Accessories

VPN Client Software	Item	Description	Supported OS
	SecuExtender— IPSec VPN Client	IPSec VPN client software for the ZyWALL and USG Series with Easy VPN for zero configuration remote access	• Windows XP SP3 (32-bit) • Windows Server 2003 (32-bit) • Windows Server 2008 (32/64-bit) • Windows Vista (32/64-bit) • Windows 7 (32/64-bit) • Windows 8 (32/64-bit) • Windows 10 (32/64-bit)
	SecuExtender— SSL VPN Client	Secured VPN connection between device and USG/ZyWALL Series with lite setup for Windows and MAC OS	• Windows XP SP3 (32-bit) • Windows 7 (32/64-bit) • Windows 8/8.1 (32/64-bit) • Windows 10 (32/64-bit) • MAC OS 10.7 or later

Service Gateway Printer	Model	Feature	Supported model
	SP350E	• Buttons: 3 • Paper roll width: 58 (+0/-1) mm • Interface: 10/100 Mbps RJ-45 port • Power input: 12 V DC, 5 A max. • Item dimensions (WxDxH): 176 x 111 x 114 mm (6.93" x 4.37" x 4.49") • Item weight: 0.8 kg (1.76 lb.)	VPN100 VPN300 ZyWALL 110 ZyWALL 310 ZyWALL 1100 USG2200-VPN USG110/210/310 USG1100/1900 UAG2100/4100

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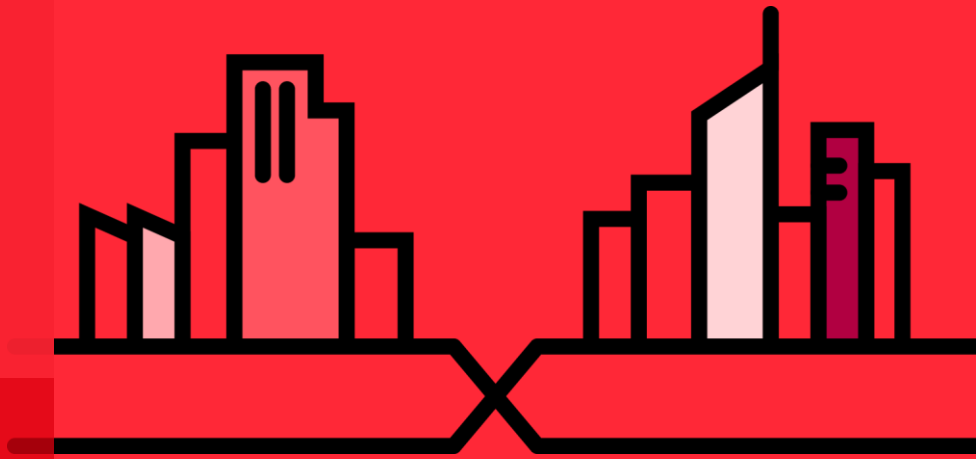


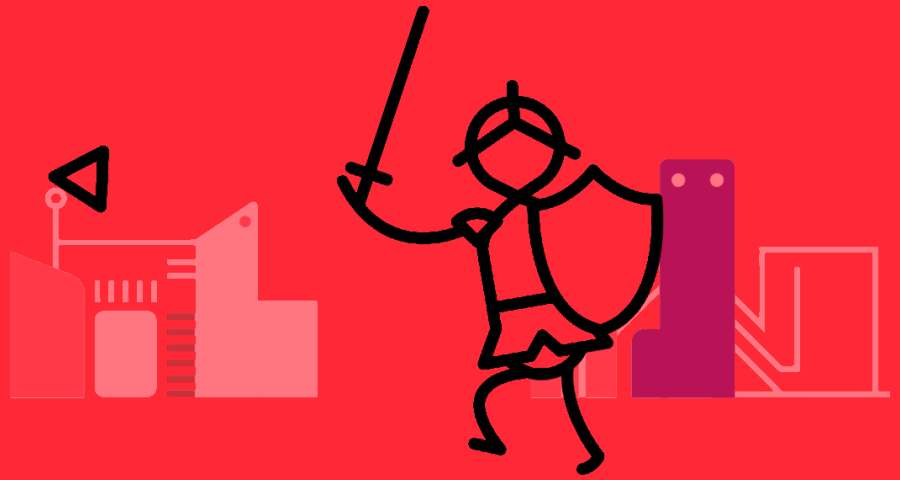
Ordering Information : VPN Firewall Series

	Part Number			EAN EU	UPC US
Model	EU	US	Russia		
USG20-VPN	USG20-VPN-EU0101F	USG20-VPN-US0102F	USG20-VPN-RU0101F	4718937590865	760559123642
USG20W-VPN	USG20W-VPN-EU0101F	USG20W-VPN-US0102F	USG20W-VPN-RU0101F	4718937590896	760559123659
VPN50	VPN50-EU0101F	VPN50-US0101F	NA	4718937598168	
VPN100	VPN100-EU0101F	VPN100-US0101F	NA	4718937598120	
VPN300	VPN300-EU0101F	VPN300-US0101F	NA	4718937598144	
USG2200-VPN	USG2200-VPN-EU0101F	NA	NA	4718937592142	760559123420

Ordering Information : ZyWALL Series

Product	Description	Model Name	Part Number			EAN EU	EAN UK
			EU	UK	US		
ZyWALL 110 Firewall/VPN appliance for SB	10/100/1000, 2 WAN, 4 LAN / DMZ ports, 1 OPT port, 2* USB	ZyWALL 110	ZYWALL110-EU0101F	ZYWALL110-GB0101F	ZYWALL110-US0101F	4718937573479	4718937573493
ZyWALL 310 Firewall/VPN appliance for SMB	8 Gigabit user-definable ports, 2* USB	ZyWALL 310	ZYWALL310-EU0101F	NA	ZYWALL310-US0101F	4718937573509	NA
ZyWALL 1100 Firewall/VPN appliance for Mid-large SMB	8 Gigabit user-definable ports, 2* USB	ZyWALL 1100	ZYWALL1100-EU0101F	NA	ZYWALL1100-US0101F	4718937573523	NA

Appendix A: What's New in ZLD4.30



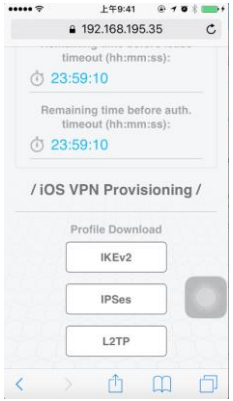
Enhanced Network Flexibility

- **FW Recovery Mechanism (ATP/VPN Series only)**
  - Once failure encountered, use another partition to bootup
- **Security Management**
  - Enforce the password complexity for all local accounts
  - Support password expiration for local **admin type** accounts
  - Change Logs Enhancements
- **Geo-Enforcer**
  - Geography control by session, Web Auth, Policy Route, BWM and Inbound Load balancing
- **Routing enhancement**
  - Proxy-arp
  - BGP, BGP over IPSec VTI
  - IGMP proxy over IPSec VTI

Usability & Service Related

Usability Focused

- **Remote Assistance**
  - Quickly enabled SSH for remote access if required
- **Speed Test CLI**
- **iOS Provision**
  - Easy setup on iOS devices with their mobile configuration file



Service Enhancement

- **Device HA Pro**
  - Synchronization Enhancements
    - Dynamic DHCP table
    - IP MAC binding table
  - GUI info for sync up status
  - Active/Passive device status
- **Hotspot Management**
  - Billing Replenish
  - GUI, wordings fine tune

AP Management

- **APC 3.0 support scope**
  - NXC 4.21
  - NXC 4.22
  - NXC 4.30
  - NXC 5.00
- **Key Enhancements**
  - Zymesh (Independent License)
  - 802.11r
  - AP Forward compatibility
  - AP NVGRE data tunnel
  - WAC5302 AP support
  - Schedule DCS/SSID
  - Add AP information & Station info on GUI

WAC5302D

Max. Managed APs Update

Model	Default Managed APs	Max. Managed APs	Support APs
USG40(W)	2	18	NWA3160-N NWA3560-N NWA3550-N NWA5160N NWA5560-N NWA5550-N NWA5121-NI NWA5121-N NWA5123-NI NWA5301-NJ NWA5123-AC WAC6503D-S WAC6502D-S WAC6502D-E WAC6553D-E WAC6103D-I WAC5302D-S
USG60(W)	2	18	
ZyWALL 110/USG110	2	34	
USG210	2	34	
ZyWALL 310/USG310	2	34	
ZyWALL 1100/USG1100	2	130	
USG1900	2	130	
USG2200-VPN	2	258→1026	
VPN50	4	36	
VPN100	4	68	
VPN300	4	132	
VPN1000 Q4'18(TBC)	4	260	

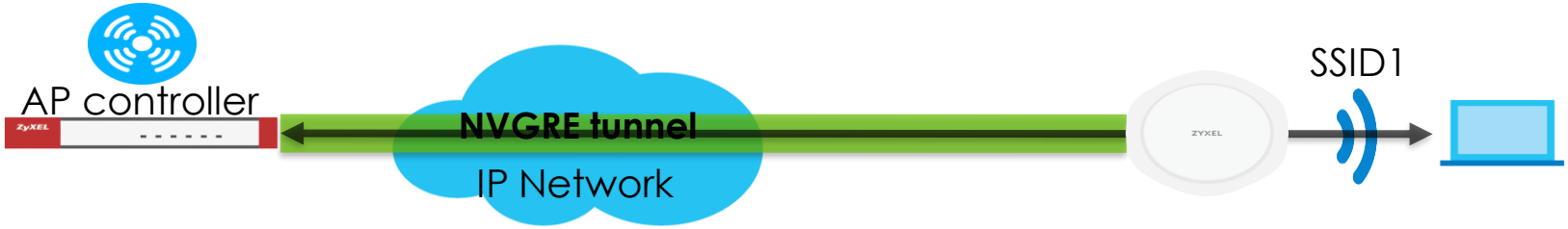
AP Forward Compatibility

Time-to-market for new APs support

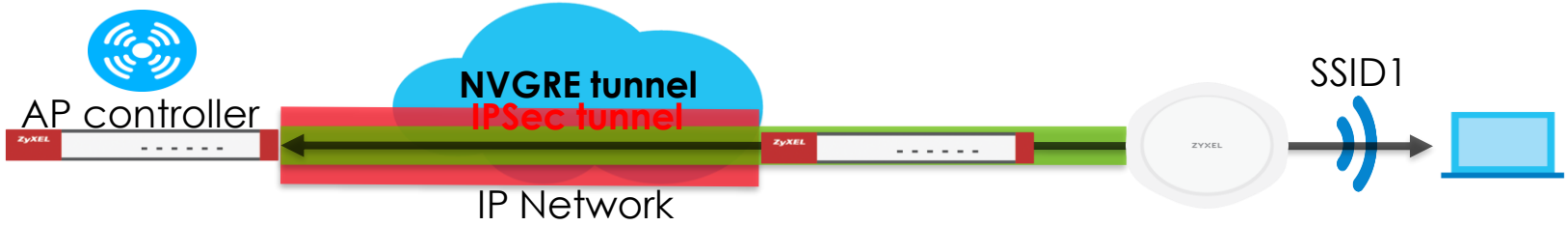
- New compatible APs in 2017- **WAC6303D-S**, **NWA5123-AC HD**
- Basic features support for compactible APs
  - SSID & VLAN tagging
  - Local bridge mode, no tunnel mode support
  - Security Access control
    - WEP, WPA/WPA2-PSK, WPA/WPA2-Enterprise
    - MAC filtering
    - MAC authentication
    - Blocking intra-BSS traffic
  - WMM, Rate limit
  - DCS
  - AP load balance

Scenario: AP Tunnel Mode

Case 1: AP tunnel to local controller



Case 2: AP tunnel to remote site controller over IPSec



Appendix B: Comparison Matrix

Feature Matrix among Series

	Feature	NG USG	VPN	Remark
Security License Service	App Patrol	V		
	IDP/ADP	V		
	AV	V		
	Content Filtering	V	V	
	Anti-Spam	V		
	Web Security			
	Application Protection			
	Geo Enforcer		V	NG USG GeoIP function is bundled with CF

	Feature	NG USG	VPN	Remark
VPN	IPSec VPN	V	V	
	SSL VPN	V	V	ATP with fixed qty
Connectivity	AP Controller	V	V	VPN supports 4 APs by default and higher max.
	AWS VPC		V	NG USG/ATP still be able to support by CLIs
	HA Pro	V	V	
	SecuDeployer	V	V	
Hospitality	Hotspot Management	V	V	
	Facebook Wifi	V	V	
	Concurrent Device Upgrade	V	V	
Others	EZ Mode	V	V	

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Your Networking Ally