



## ZyWALL USG2200-VPN VPN Firewall

ZyXel's USG2200-VPN has been built on a powerful multi-core platform to deliver high performance that helps growing businesses to overcome challenges during expansion. In order to satisfy the needs for always-online communications, USG2200-VPN features multi-WAN load balancing/failover and a comprehensive mobile broadband USB modem support list for WAN backup operations. In addition, USG2200-VPN supports IPSec load balancing and failover to provide additional resiliency for the most mission-critical VPN deployments.

### Benefits

#### Safer, more reliable VPN connections

Faster processors today have vastly boosted the capabilities of attackers to decrypt VPN tunnels. Legacy VPN cryptographic algorithms like Message Digest 5 (MD5) and Secure Hash Algorithm 1 (SHA-1) are no longer sufficient to guarantee secure outbound communications. With supports to the more advanced Secure Hash Algorithm 2 (SHA-2), the VPN Firewall provides the safest VPN connections in its class to ensure maximum security for business communications.

The complete range of ZyXel VPN Firewall delivers reliable, non-stop VPN services with dual-WAN failover and fallback support. With two WAN connections—one primary and one for redundancy—the ZyXel VPN Firewall



Up to 25.0 Gbps Firewall Throughput



Up to 3,000 VPN tunnels capability



Robust hybrid VPN (IPSec/SSL/L2TP over IPSec)



More secure VPN connections with SHA-2 cryptographic



Auto-provisioned client-to-site IPSec setup with Easy VPN



Device HA Pro ensures smart handover



Hotspot management supported



Facebook WiFi, Intelligence social media authentication



automatically switches to the backup connection should the primary link fail, and automatically switches back to the primary connection once it is back online.

To support dynamic, mobile business operations in today's BYOD (bring your own device) business environments, the VPN Firewall offers unlimited business mobility with Layer-2 Tunneling Protocol (L2TP) VPN for mobile devices. The VPN Firewall supports L2TP/IPSec VPN on a wide variety of mobile Internet devices running the iOS, Android and Windows mobile platforms.

### Best TCO for access expansion

People expect network access regardless of time or location. As a result, hotspots are in demand in an ever-expanding assortment of locations. The USG2200-VPN integrated with Zyxel AP Controller technology enables users to manage APs from a centralized user interface. In addition, Zyxel Hotspot Management delivers a unified solution for business networks with user-friendly tools like Billing System, Walled Garden, Multiple Authentication, 3rd Party Social Login and User Agreement. With ZyWALL USG2200-VPN, businesses can now deploy or expand a managed WiFi network with minimal effort.

### Swift and secure firmware upgrades

Locating firmware updates — not to mention identifying correct versions for your device and managing their installation — can be a complex and confusing ordeal. The ZyWALL VPN Firewall Series solves this with its new Cloud Helper service. Cloud Helper provides a simple step to look for up-to-date firmware information. New firmware is immediately made available upon release from our official database to ensure its authenticity and reliability.

### Stay secure and Up-to-Date with OneSecurity

Zyxel provides frequent and timely updates in response to the latest security threats and advisories through OneSecurity — our free online service portal. OneSecurity offers informative network security resources and the know-how to assist businesses and IT administrators in keeping their network operations safe in the digital age. Information and resources can be found with one click via the GUI of ZyWALL USG Series and VPN Series products. IT staff can quickly and easily catch up on the latest threats, and then proceed to walkthroughs and troubleshooting protocols with the help of easy-to-follow FAQs — all provided to help users secure their networks and simplify management of our UTM products.

## ZyWALL VPN Series Quick Finder



Model	USG20(W)-VPN	ZyWALL 110	ZyWALL 310	ZyWALL 1100	USG2200-VPN
Description	SB		SMB		MB
<b>Firewall throughput (Mbps)</b>	350	1,600	5,000	6,000	25,000
<b>Max. concurrent sessions</b>	20,000	150,000	500,000	1,000,000	1,500,000
<b>VPN throughput (Mbps)</b>	90	400	650	800	2,500
<b>Max. concurrent IPSec VPN tunnels</b>	10	100	300	1,000	3,000
<b>Content filtering (CF 2.0)<sup>*1</sup></b>	Yes	Yes	Yes	Yes	Yes
<b>Amazon VPC<sup>*2</sup></b>	Yes	Yes	Yes	Yes	Yes
<b>Device HA Pro</b>	-	Yes <sup>*1</sup>	Yes <sup>*1</sup>	Activate once registered	Activate once registered
<b>Hotspot Management<sup>*1</sup></b>	-	Yes	Yes	Yes	Yes
<b>Facebook WiFi</b>	Yes	Yes	Yes	Yes	Yes

\*1: With Zyxel service license to enable or extend the feature capacity

\*2: ZyWALL/USG still be able to support by CLIs

## Subscription Services

The ZyWALL VPN Series provides a complete feature set to perfectly fit different business requirements as well as to enable the maximum performance and security with an all-in-one appliance. Comprehensive network modularity also empowers IT professionals to customize the system to meet their individual needs.



Anti-Spam



Content Filtering 2.0



Hotspot Management



Device HA Pro

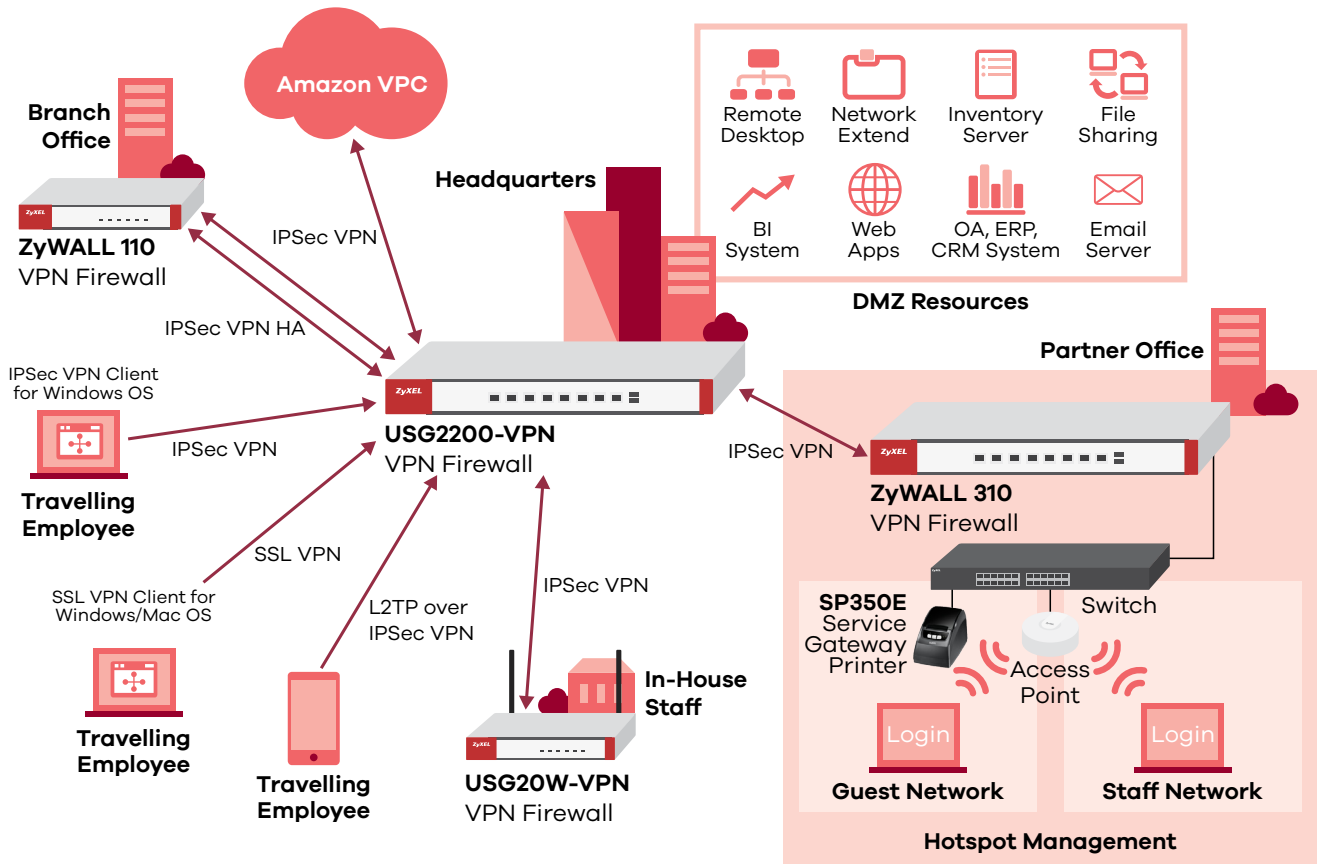
## Key Applications

### VPN application


- Branch offices, partners and home users can deploy Zyxel USGs/ZyWALLs for site-to-site IPsec VPN connections
- Branch offices/In-house staff can additionally deploy IPsec VPN HA (load balancing and failover) for always online VPN connectivity
- Remote users can securely access company resources with their computers or smartphones via SSL, IPsec and L2TP over IPsec VPN
- The headquarter USG/ZyWALL can also establish an IPsec VPN connection with Amazon VPC for secured access to a variety of cloud-based applications

### Hotspot Management

- High speed internet access
- Tier of service
- Log record for regulatory compliance
- Premium security control
- Various Network access control ( free or paid access, social login)



# Specifications

<b>Model</b>	<b>USG2200-VPN</b>	
<b>Product photo</b>	VPN Firewall 	
<b>Hardware Specifications</b>		
<b>Interfaces</b>	12x GbE (configurable), 4x SFP (configurable), 2x 10G Combo	
<b>USB ports</b>	2	
<b>Console port</b>	Yes (DB9)	
<b>Rack-mountable</b>	Yes	
<b>Fanless</b>	-	
<b>System Capacity &amp; Performance<sup>1</sup></b>		
<b>SPI firewall throughput (Mbps)<sup>2</sup></b>	25,000	
<b>VPN throughput (Mbps)<sup>3</sup></b>	2,500	
<b>Max. TCP concurrent sessions<sup>4</sup></b>	1,500,000	
<b>Max. concurrent IPsec VPN tunnels<sup>5</sup></b>	3000	
<b>Concurrent SSL VPN users (default/max.)<sup>6</sup></b>	250 / 1,000	
<b>VLAN interface</b>	128	
<b>Concurrent devices logins (default/max.)<sup>6,7</sup></b>	2,000 / 5,000	
<b>WLAN Management</b>		
<b>Managed AP number (default/max.)<sup>6</sup></b>	2 / 1026	
<b>Security Service</b>		
<b>Anti-Spam<sup>6</sup></b>	Yes	
<b>Content Filtering (CF 2.0)<sup>6,8</sup></b>	Yes	
<b>Key Software Features</b>		
<b>VPN</b>	IKEv2, IPsec, SSL, L2TP/IPsec	
<b>SSL (HTTPS) inspection</b>	Yes	
<b>EZ Mode</b>	-	
<b>Hotspot Management<sup>6</sup></b>	Yes	
<b>Ticket printer support<sup>9</sup> / Support Q'ty (max.)</b>	Yes (SP350E) / 10	
<b>Amazon VPC</b>	Yes	
<b>Facebook WiFi</b>	Yes	
<b>Device HA Pro</b>	Yes (Activate once registered)	
<b>Link Aggregation (LAG)</b>	-	
<b>Power Requirements</b>		
<b>Power input</b>	2 x AC-DC redundant power supply 110-240V AC, 50/60 Hz, 2.5 A max.	
<b>Max. power consumption (watt)</b>	119	
<b>Heat dissipation (BTU/hr)</b>	406.045	
<b>Physical Specifications</b>		
<b>Item</b>	<b>Dimensions (WxDxH)(mm/in.)</b>	438.5 x 500 x 89/ 17.26 x 19.69 x 3.50
	<b>Weight (kg/lb.)</b>	3.3/7.28
	<b>Packing</b>	
	<b>Dimensions (WxDxH)(mm/in.)</b>	795 x 600 x 215/ 31.3 x 2362 x 8.46
	<b>Weight (kg/lb.)</b>	18.12 (with DUT)/39.95
	<b>Included accessories</b>	<ul style="list-style-type: none"> <li>• Power cord x 2</li> <li>• Rack mounting (slide) kit</li> </ul>

Model		USG2200-VPN
<b>Environmental Specifications</b>		
<b>Operating</b>	<b>Temperature</b>	0°C to 40°C/32°F to 104°F
	<b>Humidify</b>	10% to 90% (non-condensing)
<b>Storage</b>	<b>Temperature</b>	-30°C to 70°C/-22°F to 158°F
	<b>Humidify</b>	10% to 90% (non-condensing)
<b>MTBF(hr)</b>		280,490
<b>Certifications</b>		
<b>EMC</b>		FCC Part 15 (Class A), IC, CE EMC(Class A), RCM, BSMI
<b>Safety</b>		LVD (EN60950-1), BSMI

Note:

\*: This matrix with firmware ZLD4.31 or later.

\*1: Actual performance may vary depending on network conditions and activated applications

\*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).

\*3: VPN throughput measured based on RFC 2544 (1,424-byte UDP packets).

\*4: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.

\*5: Including Gateway-to-Gateway and Client-to-Gateway.

\*6: With Zyxel service license to enable or extend the feature capacity.

\*7: This is the recommend maximum number of concurrent logged-in devices.

\*8: SafeSearch function in CF2.0 need to enable SSL inspection firstly and not for small business models.

\*9: With Hotspot Management license support.

## Features Set

### Software Features

#### Firewall

- ICSA-certified corporate firewall
- Routing and transparent (bridge) modes
- Stateful packet inspection
- User-aware policy enforcement
- SIP/H.323 NAT traversal
- ALG support for customized ports
- Protocol anomaly detection and protection
- Traffic anomaly detection and protection
- Flooding detection and protection
- DoS/DDoS protection
- RPS-enabled for desirable performance in chaotic environments

#### IPv6 Support

- Dual stack
- IPv4 tunneling (6rd and 6to4 transition tunnel)
- IPv6 addressing
- DNS
- DHCPv6
- Bridge
- VLAN
- PPPoE
- Static routing
- Policy routing

- Session control
- Firewall and ADP
- IPSec VPN
- Content Filtering 2.0
- Anti-Spam

#### IPSec VPN

- Authentication: SHA-2 (512-bit), SHA-1 and MD5
- Encryption: AES (256-bit), 3DES and DES
- Supports generating SHA2 Certificate
- Support route-based VPN Tunnel Interface (VTI)
- Key management: manual key, IKEv1 and IKEv2 with EAP
- Perfect forward secrecy (DH groups) support 1, 2, 5, 14
- IPSec NAT traversal
- Dead peer detection and relay detection
- PKI (X.509) certificate
- VPN concentrator
- Simple wizard support
- VPN auto-reconnection
- VPN High Availability (HA): load-balancing and failover
- L2TP over IPSec
- GRE and GRE over IPSec

- NAT over IPSec
- Zyxel VPN client provisioning
- Support iOS L2TP/IKE/IKEv2 VPN Client provision

#### SSL VPN

- HTTP, FTP, SMTP, POP3 and IMAP4 protocol support
- Automatic signature updates
- No file size limitation
- Supports Windows and Mac OS X
- Supports full tunnel mode
- Supports 2-step authentication
- Customizable user portal

#### SSL Inspection

- Certificate Trust Chain validation
- Support both inbound and outbound inspection
- Support Content Filtering 2.0
- Support TLS 1.0/1.1/1.2
- Visible bypass list

#### Unified Security Policy

- Unified policy management interface
- Supported UTM features: Anti-Spam, Content Filtering 2.0, firewall (ACL)
- 3-tier configuration: object-based, profile-based, policy-based
- Policy criteria: zone, source and destination IP address, user, time

## WLAN Management

- Support AP controller version 3.0
- Supports auto AP FW update
- Wireless L2 isolation
- Scheduled WiFi service
- Dynamic Channel Selection (DCS)
- Client steering for 5GHz priority and sticky client prevention
- Auto healing provides a stable and reliable coverage
- IEEE 802.1x authentication
- Captive portal Web authentication
- Customizable captive
- Multiple SSID with VLAN
- Supports ZyMesh
- Support AP Forward Compatibility

## Hotspot Management

- Integrated account generator, Web-based authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- User agreement login
- SP350E Service Gateway Printer enables oneclick account and billing generation
- Built-in billing system
  - Time-to-finish accounting mode
  - Accumulation accounting mode
- Supports PayPal online payment
- Marketing tool
  - Advertisement link
  - Walled garden
  - Portal page
- Billing Replenish

## Networking

- Routing mode, bridge mode and hybrid mode
- Ethernet and PPPoE
- NAT and PAT
- VLAN tagging (802.1Q)
- Virtual interface (alias interface)
- Policy-based routing (user-aware)
- Policy-based NAT (SNAT)

- Dynamic routing (RIPv1/v2 and OSPF)
- DHCP client/server/relay
- Dynamic DNS support
- WAN trunk for more than 2 ports
- Per host session limit
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization
- Bandwidth limit per user
- Bandwidth limit per IP
- GRE
- BGP

## Zyxel One Network

- ZON Utility
  - IP configuration
  - Web GUI access
  - Firmware upgrade
  - Password configuration
  - Location and System support
- Smart Connect
  - Discover neighboring devices
  - One-click remote management access to the neighboring Zyxel devices

## Authentication

- Local user database
- Microsoft Windows Active Directory integration
- External LDAP/RADIUS user database
- XAUTH, IKEv2 with EAP VPN authentication
- Web-based authentication
- Forced user authentication (transparent authentication)
- IP-MAC address binding
- SSO (Single Sign-On) support

## System Management

- Supports generating SHA2 Certificate
- Role-based administration
- Multiple administrator logins
- Multi-lingual Web GUI (HTTPS and HTTP)

- Command line interface (console, Web console, SSH and telnet)
- Cloud CNM SecuManager\*

\* Cloud CNM SecuManager management service requires license purchase. For more details please refer to web site

- SNMP v1, v2c, v3
- System configuration rollback
- Firmware upgrade via FTP, FTP-TLS and Web GUI
- Dual firmware images
- Supports Cloud Helper portal page
- RADIUS authentication
- WiFi Multimedia (WMM) wireless QoS
- CAPWAP discovery protocol

## Mobile Broadband

- WAN connection failover via 3G and 4G\* USB modems
- Auto fallback when primary WAN recovers

\* For specific models supporting the 3G and 4G dongles on the list, please refer to the Zyxel product page at 3G dongle document.

## Device High Availability Pro (HA Pro)

- Device failure detection and notification
- Supports ICMP and TCP ping check
- Link monitoring
- Configuration auto-sync
- Dedicated Heartbeat Link
- Instant handover
- NAT/Firewall/VPN Sessions synchronization

## Subscriptional Services

- Content Filtering 2.0
- Anti-Spam

## Logging/Monitoring

- Comprehensive local logging
- Syslog (to up to 4 servers)
- Email alerts (to up to 2 servers)
- Real-time traffic monitoring
- Built-in daily report
- Advanced reporting with Vantage Report

## Service

### VPN Service

Product	SSL VPN Tunnels	SSL VPN Client <sup>*1</sup>	IPSec VPN Client
<b>USG2200-VPN</b>	Add 5/10/50 tunnels	For 1/5/10 client(s)	For 1/5/10/50 client(s)

\*1: Support OS: MAC OS 10.7 or later

### Security

Product	Content Filtering 2.0	Anti-Spam
<b>USG2200-VPN</b>	1 year/ 2year	1 year/ 2year

1. Licenses can be easily activated, renewed and managed at myZyxel
2. License bundles may vary according to region. Please contact your local sales representative for more information.
3. USG2200-VPN provides Content Filtering 2.0 and Anti-Spam services with 30-day trial.

### Connectivity & Vertical Solution

Product	Concurrent Device Upgrade	Hotspot Management	Managed APs
<b>USG2200-VPN</b>	100/300/1000 nodes	1 year/One-Time	Add 2/4/8/64 APs

## Access Point Compatibility List

Product	Unified AP		Unified Pro AP	
<b>Models</b>	<ul style="list-style-type: none"> <li>• NWA5121-NI</li> <li>• NWA5121-N</li> <li>• NWA5123-NI</li> <li>• NWA5301-NJ</li> </ul>	<ul style="list-style-type: none"> <li>• NWA5123-AC</li> <li>• WAC5302D-S</li> <li>• Forward Compatible APs*</li> </ul>	<ul style="list-style-type: none"> <li>• WAC6502D-E</li> <li>• WAC6502D-S</li> <li>• WAC6503D-S</li> </ul>	<ul style="list-style-type: none"> <li>• WAC6553D-E</li> <li>• WAC6103D-I</li> <li>• Forward Compatible APs*</li> </ul>
<b>Functions</b>				
<b>Central management</b>	Yes		Yes	
<b>Auto provisioning</b>	Yes		Yes	
<b>Data forwarding</b>	Local bridge		Local bridge/Data tunnel	
<b>ZyMesh</b>	Yes		Yes	

\*: From APC3.0, commercial gateways supporting APC technology are able to recognize APs with FW release higher than APC3.0 as Forward Compatible APs. Resellers can introduce newly-available Zyxel APs with basic features supported without upgrading any new controller firmware.

## Accessories

### SecuExtender Software

Item	Description	Supported OS
<b>IPSec VPN Client*</b>	IPSec VPN client software for the ZyWALL and USG Series with Easy VPN for zero-configuration remote access	<ul style="list-style-type: none"> <li>• Windows XP (32-bit)</li> <li>• Windows Server 2003 (32-bit)</li> <li>• Windows Server 2008 (32/64-bit)</li> <li>• Windows Vista (32/64-bit)</li> <li>• Windows 7 (32/64-bit)</li> <li>• Windows 8 (32/64-bit)</li> <li>• Windows 10 (32/64-bit)</li> </ul>
<b>SSL VPN Client*</b>	Secured VPN connection between PC/MAC and ZyWALL Firewall	<ul style="list-style-type: none"> <li>• Windows XP</li> <li>• Windows 7 (32/64-bit)</li> <li>• Windows 8/8.1 (32/64-bit)</li> <li>• Windows 10 (32/64-bit)</li> <li>• MAC OS 10.7 or later</li> </ul>

Notes:

\*: A 30-day trial version of IPSec VPN client and SSL VPN client for MAC OS can be downloaded from official Zyxel website. To continue using the application, please contact your regional sales representatives and purchase a commercial license for the application.

### Service Gateway Printer

Model	Feature	Supported Model
<b>SP350E</b>	<ul style="list-style-type: none"> <li>• Buttons: 3</li> <li>• Paper roll width: 58 (+0/-1) mm</li> <li>• Interface: 10/100 Mbps RJ-45 port</li> <li>• Power input: 12V DC, 5A max.</li> <li>• Item dimensions (WxDxH): 176 x 111 x 114 mm (6.93" x 4.37" x 4.49")</li> <li>• Item weight: 0.8 kg (1.76 lb.)</li> </ul>	<ul style="list-style-type: none"> <li>• VPN100</li> <li>• VPN300</li> <li>• USG110</li> <li>• USG210</li> <li>• USG310</li> <li>• USG1100</li> <li>• USG1900</li> <li>• USG2200-VPN</li> <li>• ZyWALL 110</li> <li>• ZyWALL 310</li> <li>• ZyWALL 1100</li> <li>• UAG2100</li> <li>• UAG4100</li> </ul>



Note: Hotspot management licenses required

### Transceivers (Optional)

Model	Speed	Connector	Wavelength	Max. Distance	DDMI
<b>SFP10G-SR*</b>	10-Gigabit SFP+	Duplex LC	850 nm	300m (328 yd)	Yes
<b>SFP10G-LR*</b>	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
<b>SFP-1000T</b>	Gigabit	RJ-45	-	100m (109 yd)	-
<b>SFP-LX-10-D</b>	Gigabit	LC	1310 nm	10 km (10936 yd)	Yes
<b>SFP-SX-D</b>	Gigabit	LC	850nm	550m (601 yd)	Yes

\*only USG2200-VPN supports 10-Gigabit SFP+

### Direct Attach Cables (Optional)\*

Model	Connector	Cable Length
<b>DAC10G-1M</b>	SFP+ to SFP+	1m (39.37 inch)
<b>DAC10G-3M</b>	SFP+ to SFP+	3m (118.11 inch)

\*only USG2200-VPN supports SFP+ interface

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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