

NGFW (Next Generation Firewalls)





Agenda:

- Introduction
- What is NGFW?
- History of Firewalls.
- NGFW vs Traditional Firewall
- NGFW Features.
- Packet Flow in NGFW.
- Intrusion Prevention (IPS)
- Advantages and disadvantages of NGFW.
- Best Practices and Hardening.
- NGFW VS WAF
- What is Sohobcom?
- Sohobcom Services

Introduction:

- A Next-Generation Firewall (NGFW) is a modern network security device that combines traditional firewall capabilities with advanced features.
- Goes beyond IP and port filtering to inspect applications, users, and content
- Designed to handle today's complex, encrypted, and cloud-based traffic
- Provides both real-time prevention and contextual awareness
- Essential for businesses facing advanced persistent threats (APTs), ransomware, and cloud risks



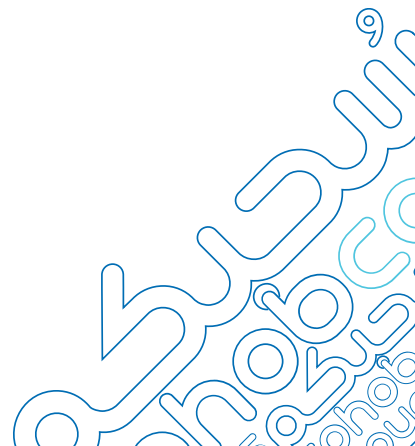
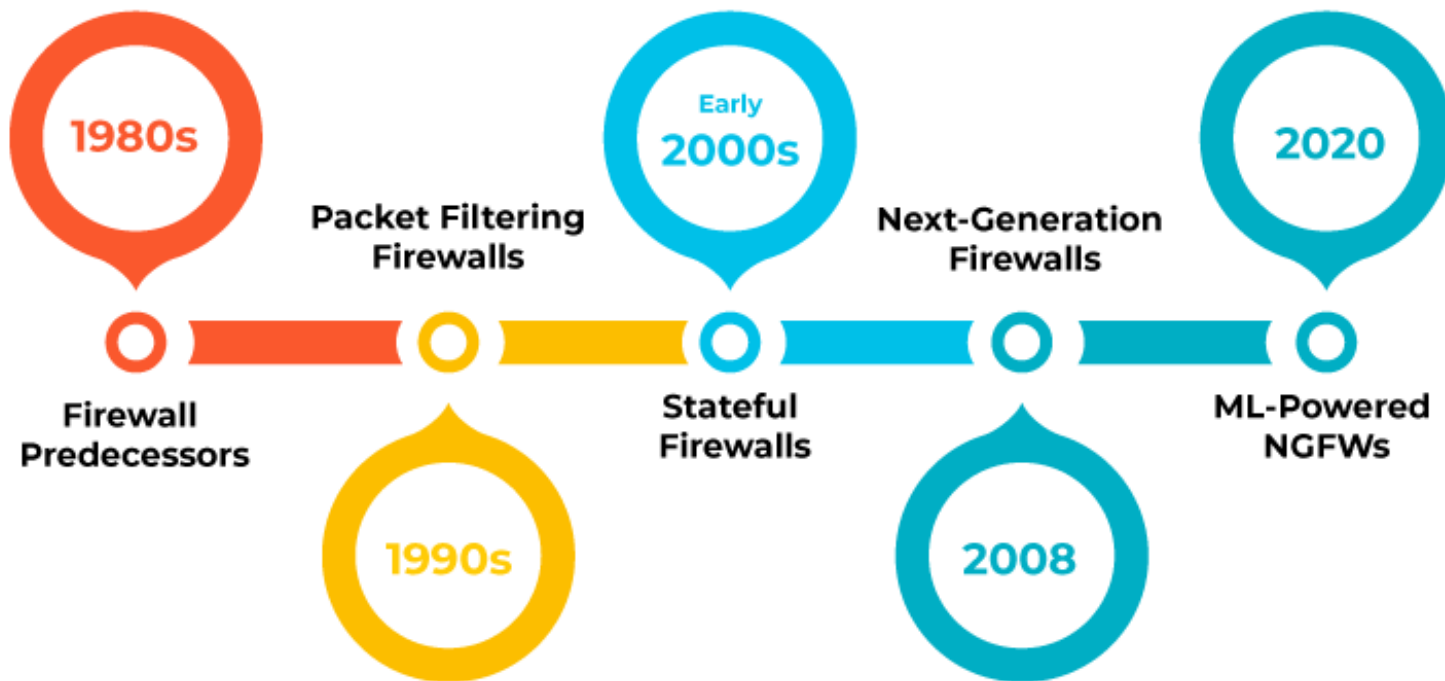
What is NGFW?

- NGFWs are firewalls enhanced with deep security intelligence and control features.
- Deep Packet Inspection (L2–L7) of network traffic
- Application and user-aware policy enforcement
- Integrated Intrusion Prevention System (IPS), anti-malware, and URL filtering
- TLS/SSL decryption with policy-based control
- Real-time threat intelligence and automatic response mechanisms

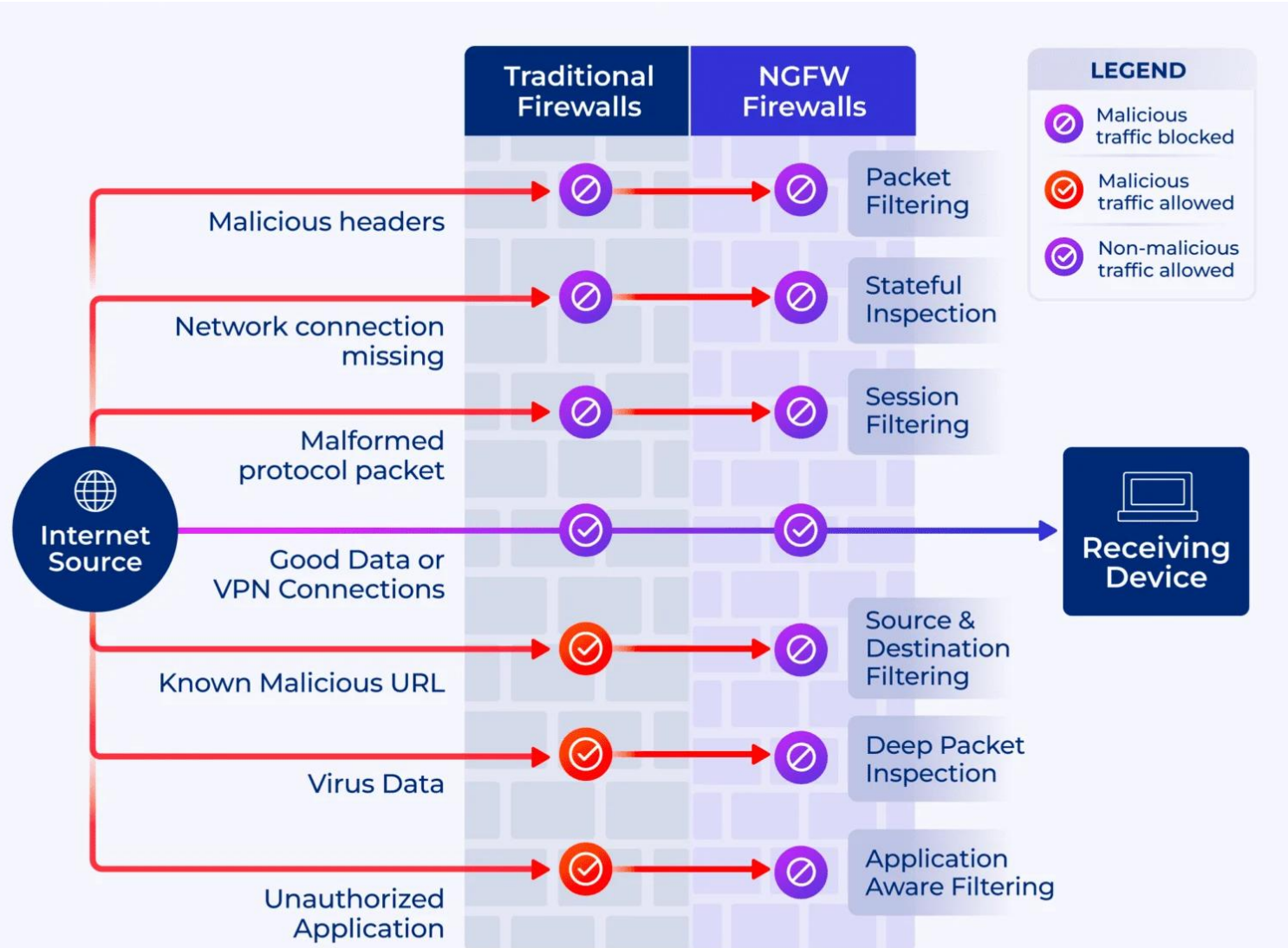


History of Cloud Computing:

The History of Firewalls



• NGFW vs Traditional Firewall



•Traditional Firewall:

Basic filtering (IP, port); limited visibility; no app/user awareness; weak against modern threats.

•NGFW:

Deep inspection (L2–L7); identifies apps & users; built-in threat prevention; handles encrypted traffic; ready for cloud & remote work.

Summary: NGFWs offer smarter, adaptive protection—far beyond what legacy firewalls can provide.



• NGFW Features.

Deep Packet Inspection

Integrated IPS

TLS/SSL Inspection



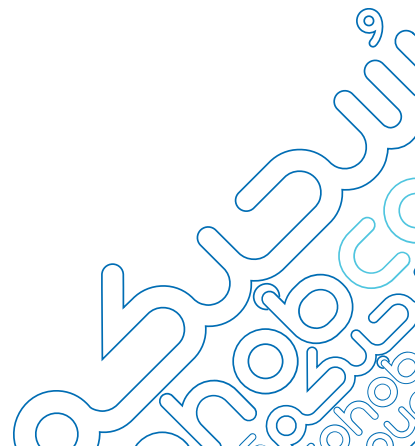
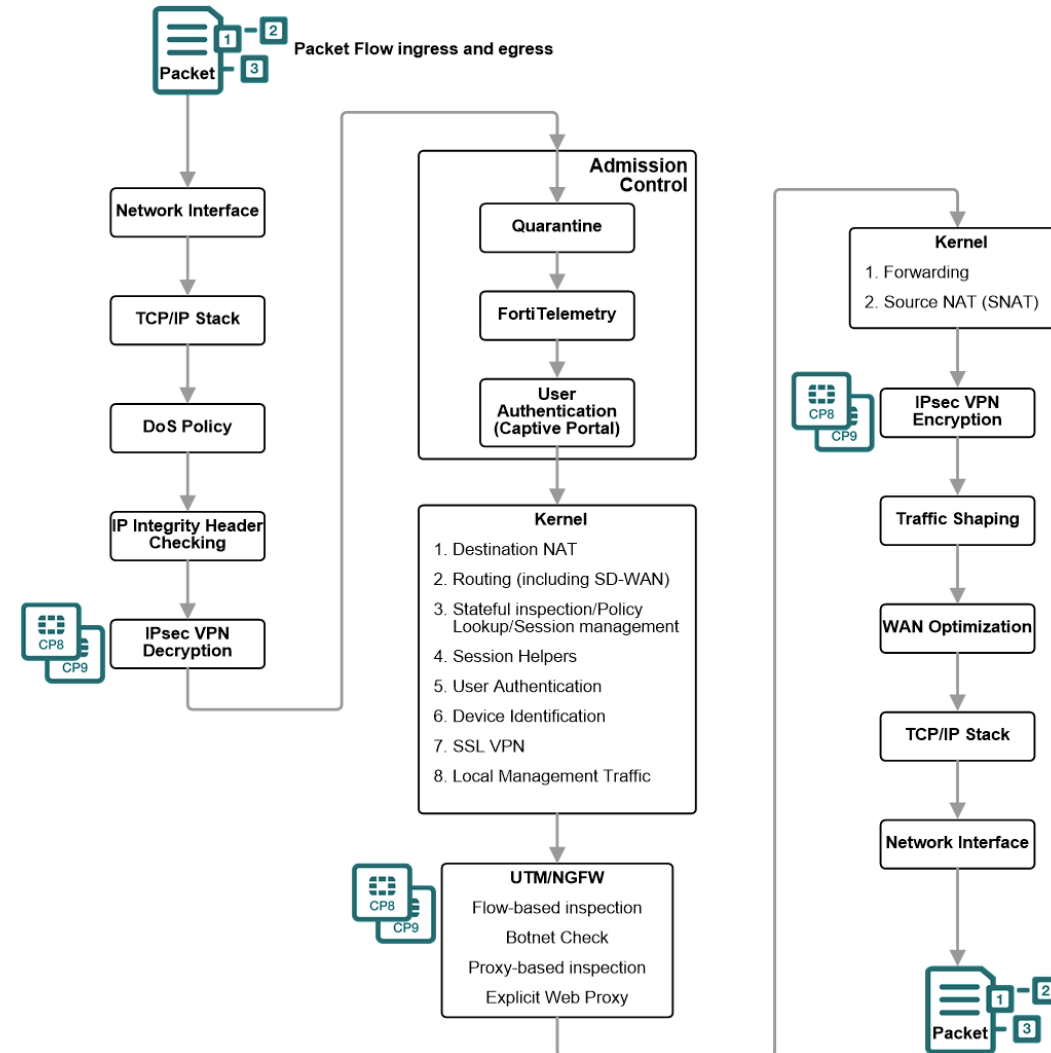
Application Control

Web Filtering & DNS Filtering

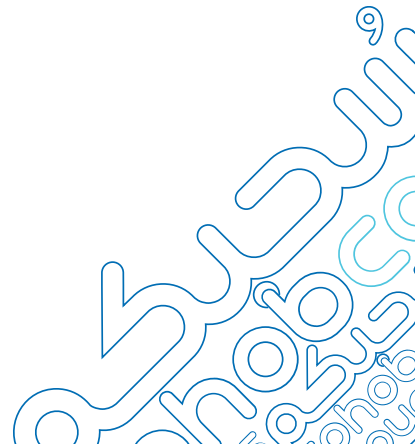
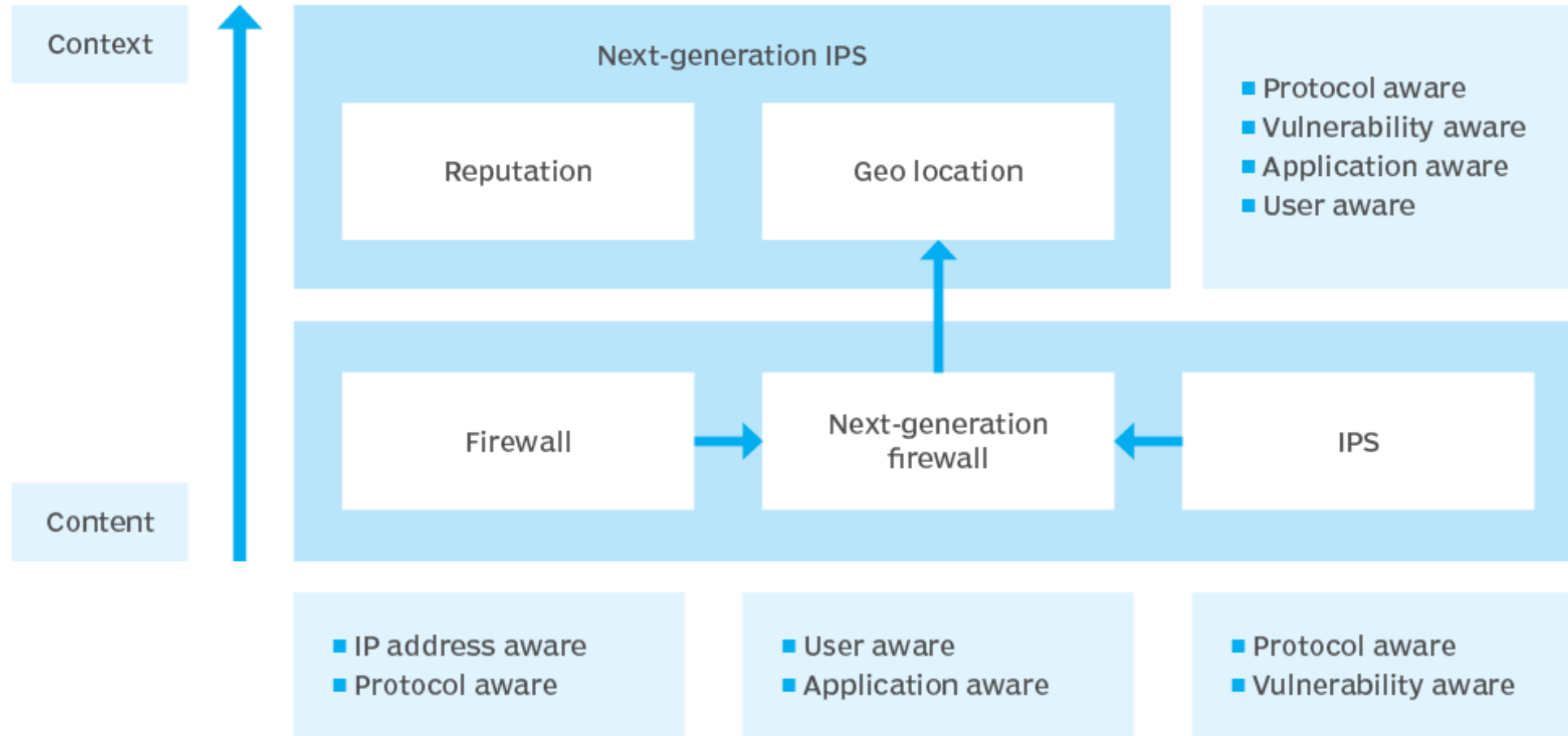
SD-WAN Support



Packet Flow in NGFW.



Intrusion Prevention (IPS)



• Advantages and disadvantages of NGFW

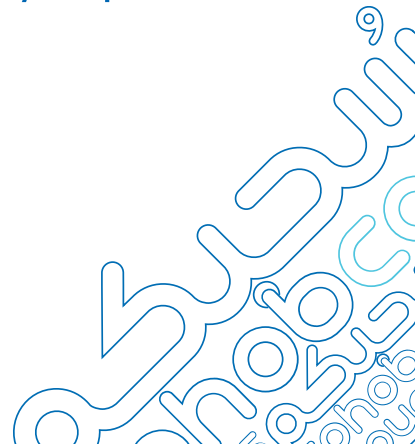


☑ Benefits

- **Advanced Security:** Multi-layer inspection (L2–L7), threat intelligence, built-in antivirus & ransomware protection
- **Cost-Effective:** Replaces multiple tools, reduces bandwidth waste, lowers long-term TCO
- **Faster Networks:** Eliminates multiple bottlenecks, preserves end-user speed
- **Modern-Ready:** Handles encrypted traffic, remote users, cloud apps, BYOD devices

⚠ Challenges

- **Policy Complexity:** May block legitimate access (e.g., home VPN), needs manual tuning
 - **Upfront Costs:** High initial investment, offset by long-term savings
- Bottom Line:** NGFWs are essential for today's threats—offering stronger protection, efficiency, and visibility, despite initial complexity.

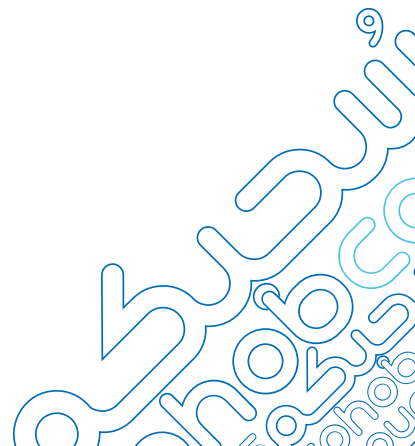


Best Practices and Hardening.

- ✓ Design the Firewall Deployment
- ✓ Set Firewall Rules
- ✓ Set Explicit Drop Rules
- ✓ Keep Audit Logs
- ✓ Block Default Traffic
- ✓ Restrict Zone Access
- ✓ Create Secure User Accounts
- ✓ Define a Change Management Strategy
- ✓ Specify Source and Destination IP Addresses
- ✓ Test the Firewall
- ✓ Update Firewall
- ✓ Perform Regular Firewall Security Audits



• NGFW VS WAF

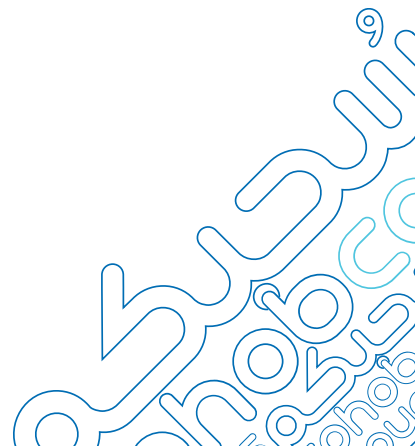




Sohobcom is Yemen's national cloud service provider. It is offering a multi-tenant cloud platform for managing virtualized resources tailored for private and hybrid clouds.

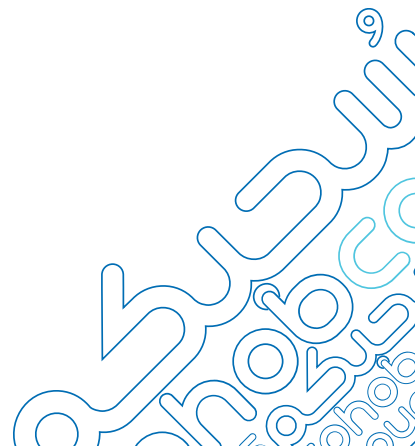
Key Features:

- **Resource Management:**
 - Centralized management of virtual machines (VMs), networks, and storage.
- **Virtualization Technology:**
 - Utilizing VMware vCloud Director for efficient resource management.
- **Advanced Security:**
 - Implementation of NGFW , SDN Solutions such as ACI & NSX.



Sohobcom Services

- ERP as a Service.
- Email as a Service.
- Firewall as a Service.
- WAF as a Service.
- Disaster Recovery as a Service.
- Backup as a Service.
- Co-location as a Service.
- Virtual Data Center (VDC) as a Service.
- Cloud Virtual Private Server as a Service.
- Cloud Web Hosting as a Service.
- Domain Name as a Service.



Thank You
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