



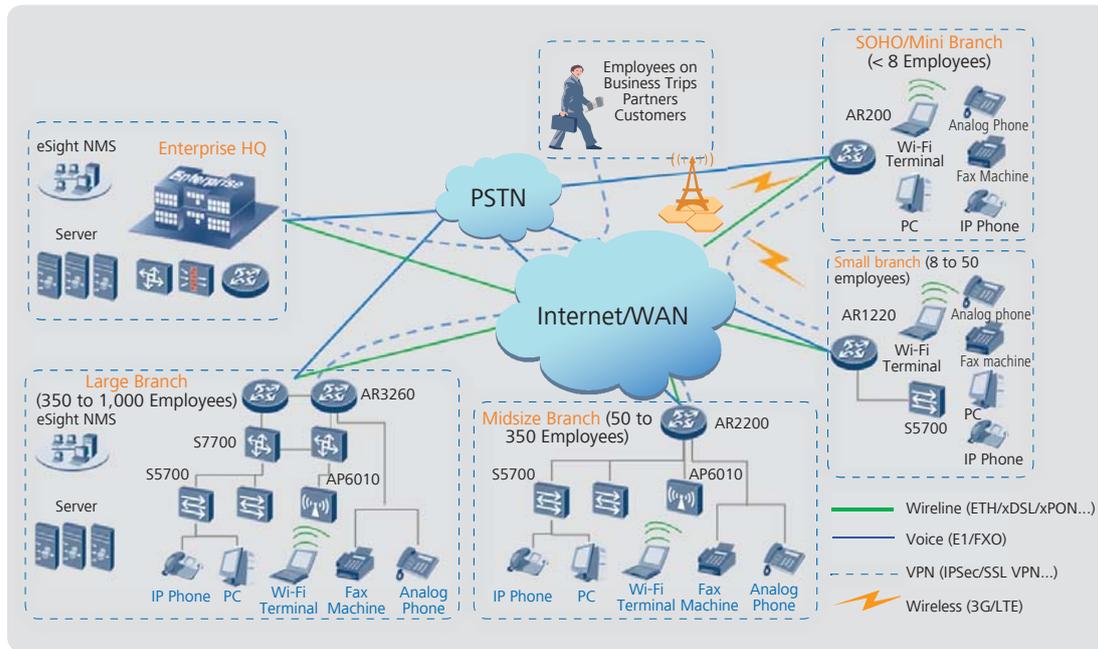
## Huawei Enterprise Branch Access Solution

Driven by continuous business growth, enterprises have established widely dispersed branch offices and business ties with more partners and customer groups. According to statistics published by respected organizations, more than 70 percent of enterprise resources are located in branch offices, and more than one-third of employees work at remote sites. Enterprises worldwide are increasingly turning to WAN or Internet resources to help them carry out management and business activities, such as internal and external communications and business expansion.

In response to customer demands, Huawei has launched comprehensive enterprise branch solutions.

Flexible Branch Access	Reliable Remote Interconnection	Converged Data and Voice Services	Rich Valued-Added Applications
			
Integrated Access Solution	VPN Interconnection Solution	Converged Voice Services Solution	Value-Added Service Solution

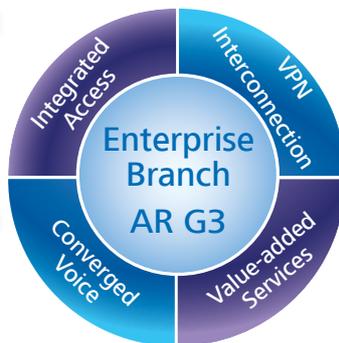
## Overall Network Topology



## Solution Highlights

- Supports any-media uplink interfaces and any-size branch access to meet enterprise requirements for branch interconnection and LAN egress.

- Provides comprehensive data and voice functions to meet enterprise HQ and branch needs for converged, efficient and intelligent OA.



- Uses a complete set of VPN technologies to ensure that employees at branches and on business trips can securely and reliably access enterprise network resources.

- Sets up an open service platform to provide branches with a variety of value-added services and applications, such as WAN optimization.

# Enterprise Branch Integrated Access Solution

## Solution Highlights

### Any-Network Interconnection:

- Provides abundant interfaces, including GE/FE, xPON, PoS, xDSL, E1/T1, PRI/BRI, SA/AS and 3G/LTE to connect to any network.

### Any-Standard 3G:

- Supports 3G USB Dongle, 3G cards (supporting antenna distance extension), WCDMA, TD-SCDMA and CMDA2000, and allows a smooth transition to LTE.

### Reliable Access:

- Allows free combinations of uplinks into backup groups, uses VRRP for router backup and supports BFD, NQA, and routing convergence technologies to quickly locate faults and implement service switchover, ensuring stable network operation.

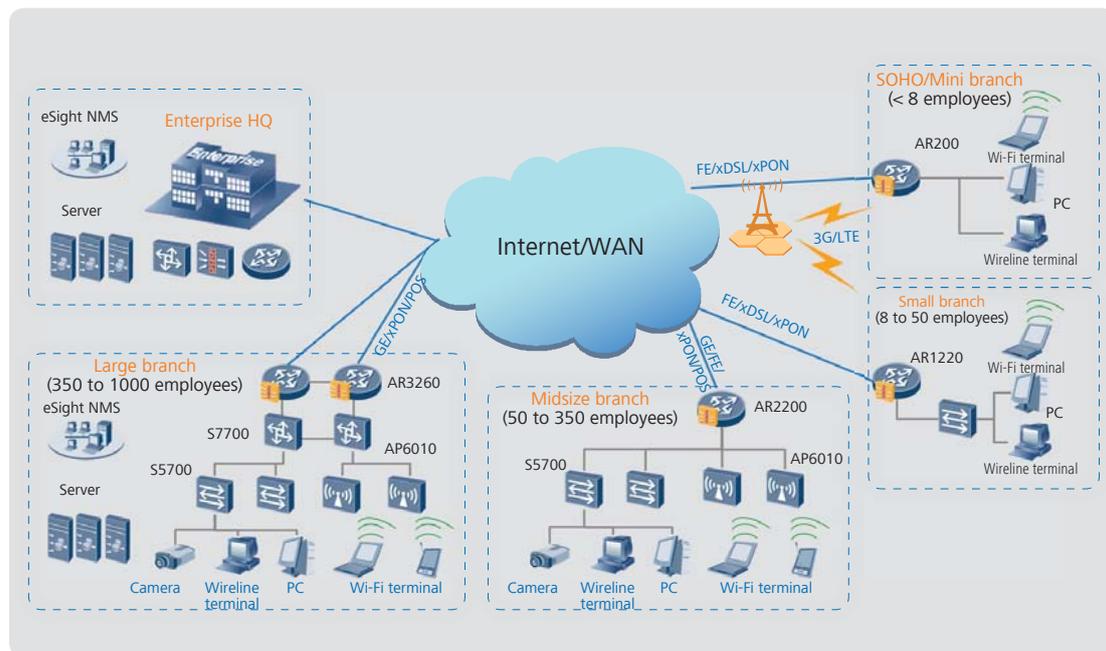
### Secure Access:

- Provides a variety of security protection functions such as firewall, IPS/IDS, URL filter, antivirus and DPI to ensure access security.

### High-Speed Access:

- Adopts a third-generation multi-core and switching network architecture for higher forwarding performance (double the industry average) and supports WAN optimization to achieve high-speed access.

## Overall Network Topology





## Equipment Options

Branch Size	Egress Gateway	Aggregation/ Access Switch	Wi-Fi Access	NMS	
Large Branch (350 to 1,000 Employees)	 AR3260	 S7700 (Aggregation Switch)	 S5700 (Access switch)	 AP6010 (AR G3 with AC Functionality)	 eSight (Standard Edition)
Midsized Branch (50 to 350 Employees)	 AR2240  AR2220	 S5700	 AP6010 (AR G3 with AC Functionality)	 eSight (Compact Edition)	
Small Branch (8 to 50 Employees)	 AR1220	 S5700	AR G3 with fat AP Functionality	AR G3 with Embedded Web NMS	
SOHO/ Mini Branch (< 8 Employees)	 AR200  AR150	AR G3 with Embedded FE Ports	AR G3 with fat AP Functionality	AR G3 with Embedded Web NMS	





## Equipment Options

Branch Size	Egress Gateway	IPSec Forwarding Performance	License	NMS
Large Branch (350 to 1,000 Employees)	 AR3260	2000 Mbps (SRU80)	<ul style="list-style-type: none"> <li>Users must purchase the valued-added service package for security services before using DSVPN, SSL VPN, EVPN, and PKI functions.</li> <li>Licenses for DSVPN and SSL VPN must be also purchased on demand.</li> </ul>	eSight (Standard Edition)
Midsize branch (50 to 350 Employees)	 AR2240 AR2220	1,000 Mbps (AR2240+SRU40)/ 500 Mbps (AR2220)		eSight (Compact Edition)
Small Branch (8 to 50 Employees)	 AR1220	200 Mbps		AR G3 with Embedded Web NMS
SOHO/ Mini Branch (< 8 employees)	 AR200 AR150	100 Mbps (AR200)/ 60 Mbps (AR150)		AR G3 with Embedded Web NMS

# Enterprise Branch Converged Voice Services Solution

## Solution Highlights

### Cost-Effective Converged Gateway:

- Provides abundant WAN/LAN cards and voice modules, while delivering rich valued-added services (such as voice/fax mailboxes) through the x86 platform. One device can meet the desired voice functions, reducing investment.

### Multiple Product Choices:

- Offers multiple product options to meet diverse network requirements (SOHO, small/midsize/large branch, and HQ).

### Any-Scenario Voice:

- Provides complete voice functions such as PBX, SIP AG, BEST local survivability, and power-off survival.
- Ensures reliable coupling between voice functions and the network.
- Supports IPv6.

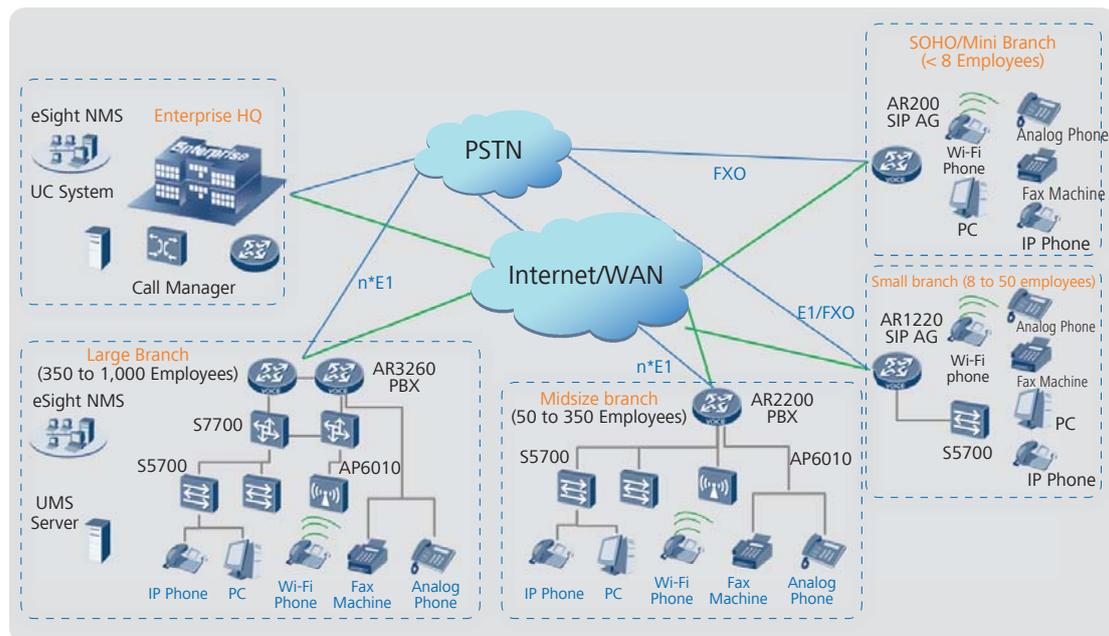
### Industry-Wide Recognition:

- Miercom tested and certified and supports registration of up to 6,000 users and 2,000 concurrent calls.
- Microsoft Lync certified and successfully interconnects with Huawei UC and IBM Sametime to provide comprehensive UC applications.

### Broad Application:

- In the Bangladesh e-Government IT transformation project, Huawei AR G3 devices are used as converged data and voice gateways at 10,626 branch nodes.

## Overall Network Topology





## Equipment Options

Branch Size	Egress Gateway	Aggregation/ Access Switch	Wi-Fi Access	POTS Access	UMS	NMS
Large Branch (350 to 1,000 Employees)	 AR3260	 S5700 (Aggregation Switch) <small>S5700 (Access Switch)</small>	 AP6010 (AR G3 Functioning as an AC)	 16/32FXS (AR WSIC)	 X86 Card (AR WSIC)	 eSight (Standard Edition)
Midsized Branch (50 to 350 Employees)	 AR2240  AR2220	 S5700	 AP6010 (AR G3 functioning as an AC)	 16/32FXS (AR WSIC)	 X86 Card (AR WSIC)	 eSight (Compact Edition)
Small Branch (8 to 50 Employees)	 AR1220	 S5700	AR G3 with Fat AP Functionality	 16/32FXS (AR WSIC)	 X86 Card (AR WSIC)	AR G3 with Embedded Web NMS
SOHO/ Mini Branch (< 8 Employees)	 AR200  AR150	AR G3 with Embedded FE Ports	AR G3 with Fat AP Functionality	AR G3 with Embedded POTS ports	Provided by Enterprise HQ	AR G3 with Embedded Web NMS

# Enterprise Branch Value-added Service Solution

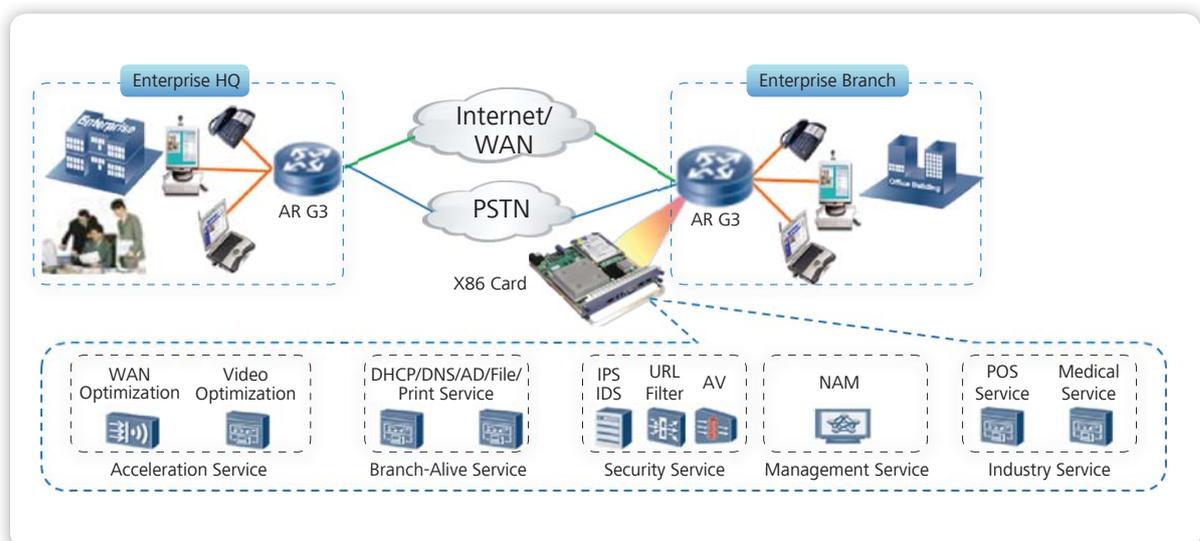
## Solution Highlights

### Improved Branch Service Experience:

- Introduces WAN optimization and IPS/IDS applications to help address enterprise challenges (such as network bandwidth constraints, network security threats, and HQ service unavailability) and improve service experience.

### Reduced Network Costs:

- Provides an integrated solution through "AR G3 devices + OSP cards," reducing capital and operating expenditures. According to statistics, Huawei's solution slashes maintenance expenses by up to 26 percent compared with independent server deployments.



- Data Optimization
- Transmission Optimization
- Application Optimization

**WAN Optimization Controller (WOC)**

- Uses WAN optimization for WAN interconnection, reducing CAPEX and OPEX.
- Huawei partners with Riverbed to provide comprehensive WAN optimization solutions for enterprise branches.

**Value-Added Voice Services**

The AR G3 OSP module can be loaded with valued-added components, such as voice/fax mailbox, conversation recording, voice conferencing, and billing components, to meet enterprise requirements for integrated, value-added network and voice applications.

**IPS/IDS**

Huawei works with industry-leading security vendors to provide IPS, IDS, and other deep network/data security protection components. These components ensure communication and information security for enterprises.

## Equipment Options

Branch Size	Egress Gateway	OSP	Value-Added Services	NMS
Large branch (350 to 1000 employees)	AR3260	X86 card (AR WSIC)	Bundle with OSP cards and sell value-added service components on demand, including WAN optimization, value-added voice service and IPS/IDS components.	eSight eSight (Standard Edition)
Midsized branch (50 to 350 employees)	AR2240 AR2220	X86 card (AR WSIC)		eSight eSight (Compact Edition)
Small/Mini branch (< 50 employees)	AR1220	X86 card (AR WSIC)		AR G3 with embedded web NMS