

With VoIP and cloud communications being fast developed and widely used, enterprises are able to deploy the telephone solution based on distributed PBX communications or cloud/hosted communications networks at a lower cost. To prevent the interruption of calling and call-related services when the headquarters server or cloud/hosted server disconnects, the New Rock local survivability branch exchange (LSBX) is designed to be deployed at local offices or branches to handle the calls instead of the disconnected server. After the connection recovers, the calling services will be switched to the headquarters server or cloud/hosted server again.

New Rock MA50-LS provides local voice access through FXO interfaces (2-8) and SIP user registration (50-200), enterprises can choose according to their needs.



MA50-LS

8 FXO, 4FXS/4FXO, 6FXS/2FXO

50-200 SIP users (License control)

Built-in 4G Internet module

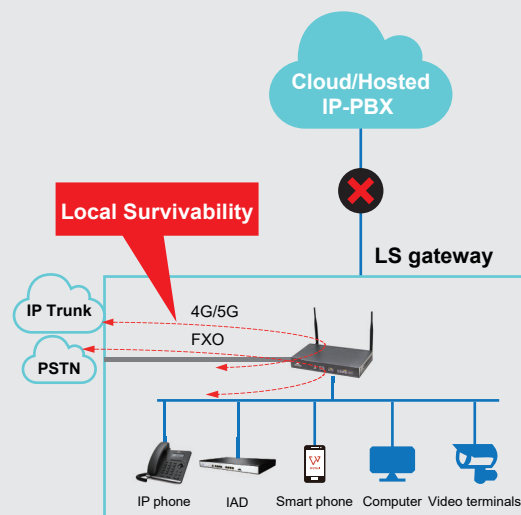
Advantages

- Access to a reliable local line (PSTN line) through its FXO port.
- Powerful survivability: PSTN fail-over upon network disconnection, power redundancy, network port redundancy, dual-system hot backup, etc.
- Rich local voice features: auto attendant, call forwarding, call transfer, high-speed fax, emergency call, 3-way calling.
- Enhanced security: TLS/SRTP encryption, white/black list, brute force log-in prevention, etc.
- Configuration and management with Web GUI or network management system.

Applications

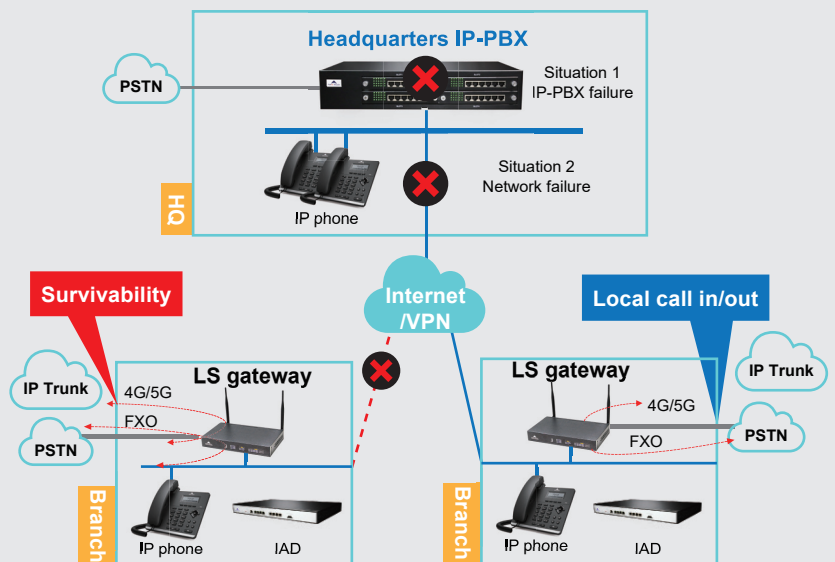
Cloud/Hosted IP-PBX

- Users' legacy lines connect to cloud PBX
- Obtain local survivability from LSBX when cloud PBX is down



Headquarters & Branches

- Branches' local PSTN trunks can be used by users in the headquarters, turning a long distance call to a local call
- Branches obtain survivability from LSBX when disconnected with headquarters PBX



— Cloud/Hosted PBX connected: both the LSBX and head-quarter's IP PBX handle calls

- - - Cloud/Hosted PBX disconnected: the LSBX handles all calls

Specifications

Protocols

Call control	SIP, IMS
Network	TCP/IP, HTTP, DHCP server, DHCP client, PPPoE client end DNS client end (A/SRV record), RTP/RTCP, STUN/NTP client

Media

Codecs	G.711 (a/μ), G.729a
DTMF	In-band audio, RFC2833, SIP-INFO
Fax	G.711 pass-through, T.38 T.38 compliant Group 3 Fax Relay Maximum fax rate of 33,600 bps (pass-through/T.38 V3)

Voice

Calling	Outbound/inbound calling of IP terminals
Call barring	Internal, local, domestic, international, prohibited
Call forwarding	Unconditional, on busy, or no answer
Call transfer	Blind, or consultant
Auto switchboard	Auto attendant, greeting, background music
DID to hunt group	Sequential order, Round-robin order or simultaneous ringing; queue

Security

Encryption	HTTPS, SSH, TLS/SRTP
Device management security	Support user hierarchical authorization management
VPN client	L2TP, OpenVPN
Link redundancy	Support 4G and wired broadband as backup to ensure uninterrupted network communication
Routing features	NAT conversion, DHCP service, DNS proxy, static route, virtual server, DMZ, IP and MAC binding, QoS bandwidth guarantee

Local Survivability

Voice proxy	Be able to set 2 proxy servers with UDP/TCP/TLS transmission
OPTIONS heartbeat detection	Be able to set a detection interval
Emergency call	Maximum 4 numbers
Call authentication	Prevent unregistered users to make calls

Remote management

Device management	New Rock UMS, third-party element management systems (SNMP, TR-069, TR-104 and TR-106)
Auto provisioning	Download configuration file via TFTP/FTP/HTTP/HTTPS; Obtain ACS address via DHCP option 66 or redirection

Configuration	Bulk import/export
Version upgrade	Remote upgrade via Web
Administration and maintenance	Telnet, SSH

Hardware

Voice ports	2-8 FXO, main combination: 6S/2, 4S/4, 8FXO
4G module	FDD-LTE, TDD-LTE, providing fast LTE WAN link, different modules can be selected according to user requirements to support different network standards
Network ports	2 x 10/100/1000M adaptive Ethernet ports 1×LAN port 1×WAN/LAN port (support WAN port and LAN port switching)
SIM card	1.8V/3.0V Adaptive
CPU	880MHz
RAM	256MB
Flash	16MB
Internal storage	16GB
Weight (net)	1.2kg
Power	12 VDC/1.5A
Mounting	Desktop/ Rackmount
Power consumption	18W
Operating conditions	Temperature: 0°C to 40°C, Humidity: 10% to 90% RH (non-condensing)
Storage conditions	Temperature: -40°C to 70°C, Humidity: 5% to 90% RH (non-condensing)