

PSX-S-IPC

1.Foundation:

Posterity PSX-S system is designed in the leading edge IMS technology. It provides a solid foundation for carriers to run their service provider businesses. It supports multi-point PSTN termination. Various value added applications developed on top of the PSX-S platform also enable the carriers to target broader market.

Posterity soft switch system adopts flexible modular design. It can work on a single server or a group of servers. Each subsystem can work independently. It can scale up and down with load balancing in network configuration and system deployment.

2.System Architecture

1).Call Server

The Call Server module processes all inbound calls intercepted by the PSX soft switch. It fulfills number translation, call routing, and all other call processing tasks.

2).SIP Server

The SIP Server module handles all SIP messages for the signaling of the calls, including end point registration, call establishment, call tear down, etc.

3).Virtual Media Server

The Virtual Media Server arranges the RTP packets to travel to the right direction and in the right order.

4).CDR Server

The CDR Server generates the CDR's for billing and statistics purposes.

5).Web Server

The Web Server provides a web based user interface for the enterprise user to configure, control, maintain, and manage the PSX soft switch.

6).Application Servers

An Application Server provides a specific value added service on top of the basic functionality of the PSX soft switch. It has an application programming interface (API) open for the enterprise users or any other third party software developers to add new features on demand. Examples of the application servers are Voice Mail Server, Conference Server, Interactive Voice Response (IVR) Server, and Call Center Server.

► Voice Mail Server

A voice mail server is an application software module that processes voice mail call flows.

► Conference Server

A conference server is an application software module that processes audio and video conference call flows.

► IVR Server

An IVR server is an application software module that processes the interactive voice response call flows.

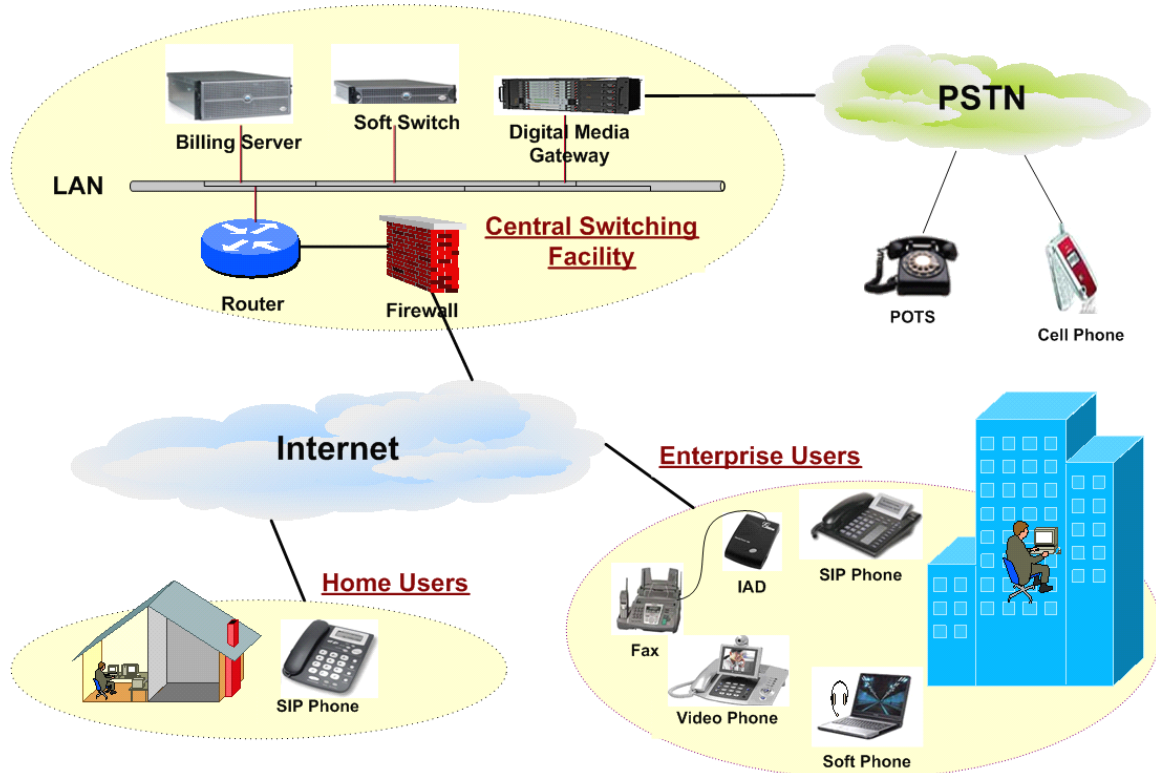
► Call Center Server

A call center server is an application software module that processes the call center call flows.

3. Network Structure

Soft switch and billing system: Connect to Internet via fiber broadband in carrier computer room. The bandwidth is calculated according to the number of concurrent calls.

Digital media gateway: It connects to Internet via fiber broadband in computer room or multiple related computer rooms in different areas so that PSTN termination takes place in local telecommunication department via digital media gateway.



Network Structure Diagram

4. Carrier Class Voice Service:

SIP to SIP

SIP to PSTN

PSTN to SIP

Video to SIP

SIP to video

5.Basic Features

Voice, Fax, and Video Communications

NAT Traversal

Calling Number Translation

Called Number Translation

Multiple Routing

Real Time CDR Generation

Caller ID

Call Waiting

Call Forwarding

Call Transfer

Call Blocking

Three Way Calling

Voice Mail

Multiple Server Ports

On Line Monitoring

Hacking Prevention

Billing to the Seconds

Flat Monthly Service Fee Billing

Prepaid Calling Card

Postpaid Monthly Invoice

Controlled System Access

Multi-Level Authorized Operation

Reseller Rating

Fraud Screening

Black List

On Line Billing Inquiry

6.Value Added Applications

One Number Service

Color Ring Back Tone

Alarm Service

Auto-Attendant

IVR Service

Audio Conference

Video Conference

Call Center

Call Back Service

Web 800 Service

Voice Message Broadcasting

7.Sample Customer List

China RailCom (Jinan)

Kingdom Communications

Shenzhen Kejie

Beijing JTTR

Wenzhou JetTone

China SatCom

Yolo Singapore

Shandong TelChina