

INVENTION DISCLOSURE

Invention Title:

Virtualized Hosted PBX

Invention Summary:

This invention proposes a radical new way to deliver hosted PBX service. The MSO provides a Web Portal where potential business customers can order new business communications services. Once ordered, the service is automatically and immediately deployed to customer devices. The service-delivery platform (SDP) uses emerging technologies such as SDN and WebRTC to enable delivery of services to programmable customer-owned equipment, thus eliminating the cost of providing MSO-owned equipment. The SDP is virtualized in the cloud to achieve dramatic cost reductions. The SDP provides a simple high-level API that customers and 3rd-party partners can use to develop compelling new services.

Invention Description:

Unlike traditional hosted PBX service where the service provider provides dedicated phone devices to the business customer, this service is delivered to customer-owned devices such as smart-phones, laptops, and smart-TVs. Service delivery uses Web-based design patterns to achieve scale at a very low cost. This in turn enables the service provider to offer the service at very low subscription rates (say, a couple of orders of magnitude less expensive than today's rates).

Other compelling aspects of this service:

- customer activates the service automatically via a Web portal
- customer can tailor the service to their needs (e.g., call-center defines their own call distribution algorithm)
- provides realtime multimedia, including HD voice and video, and text messaging
- provides multi-way voice/video conferencing with screen-sharing (no need to subscribe to a separate conferencing service)
- supports calls to/from the global telephone network
- provides access from the Web (i.e., users browsing the company's Web page can easily and seamlessly establish realtime multimedia sessions with company agents)
- supports seamless transfer of active sessions between devices (e.g., from my mobile phone to the mic/camera/smart-TV on my office wall)
- supports seamless handover of active smartphone sessions between Wi-Fi and macro cellular

Invention Commercial Value/Customers:

The customer can tailor the service to exactly what they want/need. Order-to-deployment interval is drastically reduced. Customer can develop their own unique applications, plus obtain compelling new applications from the 3rd-party app development community.

Invention Differences:

Existing solutions use specialized/dedicated single-purpose devices in both the service provider and enterprise network to deliver services; e.g., 3GPP IMS (many moving parts), PacketCable Multi-Media, Enterprise SIP Gateway, SIP phones. This invention delivers services via off-the-shelf general-purpose devices, thus reducing cost to the MSO. It also utilizes proven Web-based technologies for providing high-availability and scale, thus reducing complexity to the MSO. Both of these items should dramatically decrease the cost and time-to-market for smaller MSOs that are contemplating the expensive jump to an IMS-based solution.