

Self-Service in the Network

What You Will Learn

This white paper, intended for business decision makers, describes how organizations and businesses can harness the power of self-service in the network to improve their customer care. Covered topics include:

- The “classic” self-service deployment model versus self-service in the network
- Why self-service in the network is important and beneficial
- How Cisco customers have benefitted from deploying self-service in the network

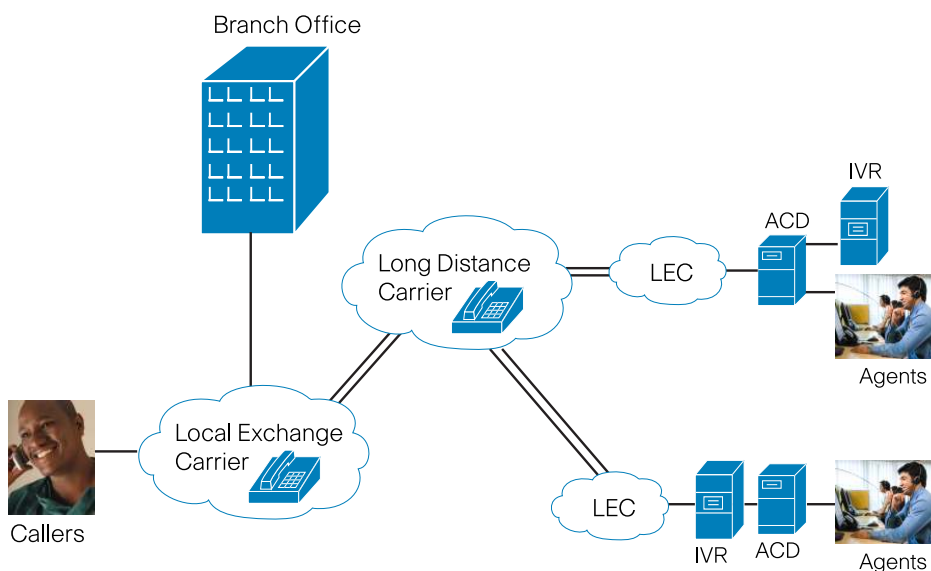
Background

IP has become the overwhelming standard for new unified communications deployments, even as businesses and organizations with older time-division-multiplexing (TDM) equipment and networks are migrating to IP at an ever-increasing rate. The convergence on IP has brought significant change to customer care in that customer contact no longer need be restricted just to “call centers”; rather, customer care can now occur across an entire network of IP-based customer-service resources. Self-service applications play a vital role within such a network, allowing businesses and organizations to harness the power of IP to provide speech- and video-enabled self-service in ways that were not possible before—including deployments that are simply services in the network. This article shows how network-based self-service delivers benefits to both callers and the providers of customer care

The “Classic” Self-Service Deployment Model

Consider the classic deployment model for enterprise self-service systems—as “farms” of interactive-voice-response (IVR) ports in one or more data centers. A caller dials a toll-free or free phone number, and the call is routed through the public switched telephone network (PSTN) to a self-service system in a data center. The caller typically performs some amount of self-service and then either hangs up (hopefully satisfied with the self-service) or is routed to live assistance. There is nothing intrinsically wrong with this scenario, and it works especially well in cases where the self-service system is located with or near live assistance at a contact center. It is also worth noting that the classic self-service farm or data-center deployment model is not tied solely to TDM architectures, because the same model is often used on IP networks.

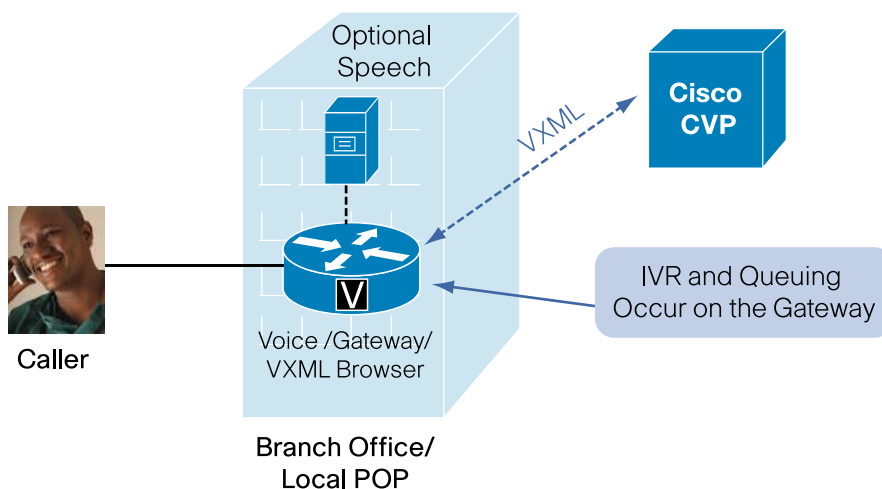
Figure 1 shows an example of a classic self-service IVR deployment.

Figure 1. Classic Self-Service Deployment Model

The classic self-service model begins to break down, however, in scenarios where subsequent live assistance may be required at **multiple, distributed sites** such as retail store locations, branch offices, or dispersed automatic call distributors (ACDs). In such cases it is inefficient for callers to be routed to a distant self-service system—only to be subsequently routed back to a local branch office or to a different ACD site. Placing a traditional IVR self-service system at each branch-office location or ACD site is one way to address the problem of inefficient routing, but that introduces significant expense and introduces the new challenge of maintaining and updating the self-service applications at all the sites (which may number in the hundreds or thousands).

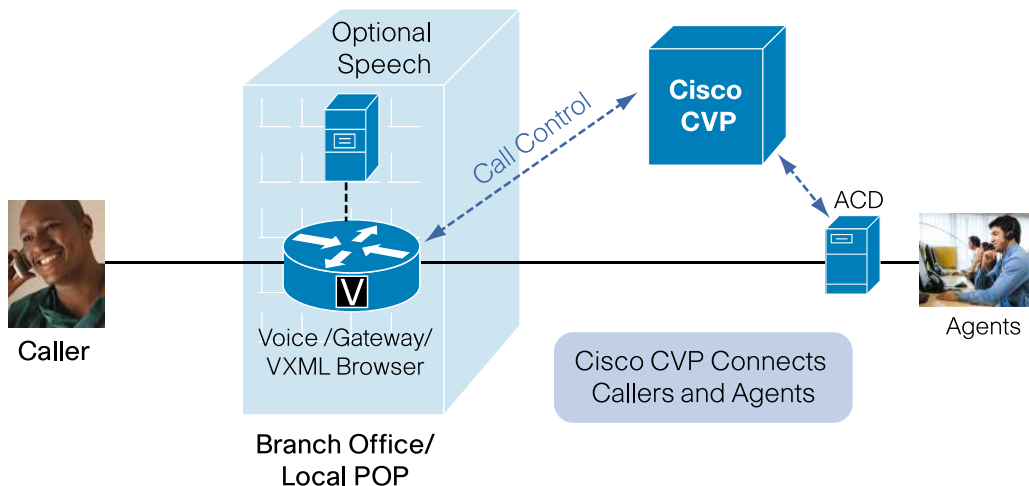
Self-Service in the Network

Deploying self-service in the IP network offers a much better way to provide improved customer care in these scenarios—while saving costs. Specifically, self-service can be delivered through Voice Extensible Markup Language (VoiceXML) browsers deployed at many locations, under the central control and management of one or more VoiceXML application servers located in a data center (or at any convenient site). The VoiceXML browsers do not necessarily introduce significant added expense to the solution because they take advantage of existing voice gateways that in many cases are **already present** in the network. Figure 2 depicts an example of self-service deployed in this manner with Cisco® Unified Customer Voice Portal (CVP).

Figure 2. Self-Service in the Network

With this improved model, a caller can dial a local number and receive self-service from the VoiceXML browser at the **nearest network location**, which could be at a local branch-office site. If live assistance is required at the branch office, the call can remain there, but it could also be routed to another branch office or to the contact center to maintain service levels or to offer the caller specialized assistance. Figure 3 illustrates how Cisco Unified Customer Voice Portal uses its call-control function to connect callers with agents in this deployment model. Note how efficient the call flow is: The call is first treated at a local voice gateway, and then is routed directly to the next service point—in this case an agent. Cisco CVP itself is never in the call path; it is only in the signaling path.

Figure 3. Call Routing in the Network Self-Service Model



Again, it is critical to note that with Cisco CVP the self-service is provided at the **most efficient location** (saving costs), while retaining full flexibility to route elsewhere if required. In addition to the cost savings, businesses and organizations—and their customers—benefit from self-service applications with similar branding and behavior across all locations and access points. If necessary, applications can be updated globally (for example, for a nationwide promotion) while still allowing for unique logic at the branch-office level (for example, store hours need to be updated at only one branch office).

Customer Success

Many businesses and organizations are enjoying the advantages of self-service on the network. One of the earliest deployments of this type is a U.S. nationwide retailer with more than 400 local stores that deployed Cisco CVP in this fashion. The retailer's customers report increased satisfaction from having to call only one number (the number of their local store), from easily being able to speak to someone in that store if necessary after self-service, and from having their questions answered more quickly (because their call can be routed to another branch office or to a national contact center to keep hold times down and provide specialized assistance). For its part, the retailer now enjoys **higher customer retention** even as reduced telephony carrier routing costs have **lowered operating expenses**.

In another example, a global high tech company with more than 100 ACD sites and more than 6000 agents deployed Cisco CVP self-service applications on the network to provide technical support. Callers to the company receive self-service treatment locally on the nearest network gateway while retaining the option to be routed to any technical support agent. Call treatment at the “edge” of the network using Cisco CVP has reduced this company's telephony carrier costs by more than 50 percent, while the decoupling of the self-service from the ACD sites has reduced caller on-hold times by providing more routing options to contact-center agents.

Conclusion

Although these examples focused on branch-office retail and multiple ACD sites, the inherent flexibility and efficiency of network-based self-service offer benefits to other deployment models as well, with or without a formal contact center.

Cisco Unified Customer Voice Portal provides award-winning speech- and video-enabled self-service using this network-based model, delivering proven, cost-effective solutions to businesses and organizations.

For More Information

For more information about Cisco Unified Customer Voice Portal, please visit: www.cisco.com/go/cvp.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, CCSI, Cisco Eos, Cisco HealthPresence, Cisco IronPort, the Cisco logo, Cisco Nurse Connect, Cisco Pulse, Cisco SensorBase, Cisco StackPower, Cisco StadiumVision, Cisco TelePresence, Cisco Unified Computing System, Cisco WebEx, DCE, Flip Channels, Flip for Good, Flip Mino, Flipshare (Design), Flip Ultra, Flip Video, Flip Video (Design), Instant Broadband, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn, Cisco Capital, Cisco Capital (Design), Cisco.Financed (Stylized), Cisco Store, Flip Gift Card, and One Million Acts of Green are service marks; and Access Registrar, Aironet, AllTouch, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Lumin, Cisco Nexus, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, Continuum, EtherFast, EtherSwitch, Event Center, Explorer, Follow Me Browsing, GainMaker, iLYNX, IOS, iPhone, IronPort, the IronPort logo, Laser Link, LightStream, Linksys, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, PCNow, PIX, PowerKEY, PowerPanels, PowerTV, PowerTV (Design), PowerVu, Prisma, ProConnect, ROSA, SenderBase, SMARtnet, Spectrum Expert, StackWise, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0910R)