



CHAPTER 2

Solution Requirements and Process Flow

Scope

The Cisco Virtual Expert Management solution is a powerful, flexible communication solution that can address a variety of technical, business and associated service preferences. The intent of this document is to identify the components that were combined together and to validate specific “use cases” within a retail environment.

This document provides examples of products that were tested together. Lab validation testing is used to demonstrate how these components can combine to address the business problems that were identified in [Chapter 1, “Retail Business Challenge and Solution Overview.”](#) The current solution’s scope is restricted to specific products and use cases. However, the reader is encouraged to consider that certain products may already exist in a retailers environment that may potentially be substituted for similar functions. Other products and services could be included beyond this scope that could offer dramatic business value. In addition, the solution was restricted to certain use cases of store-to-store and store-to-contact center communication. Home-to-store and home-to-contact center were not tested due to resources and time constraints, but these scenarios would also be potential use cases for this solution. A complete list of components that were validated is available in [Chapter 3, “Solution Details.”](#)

Solution Requirements

Specific requirements are addressed within the scope of this solution:

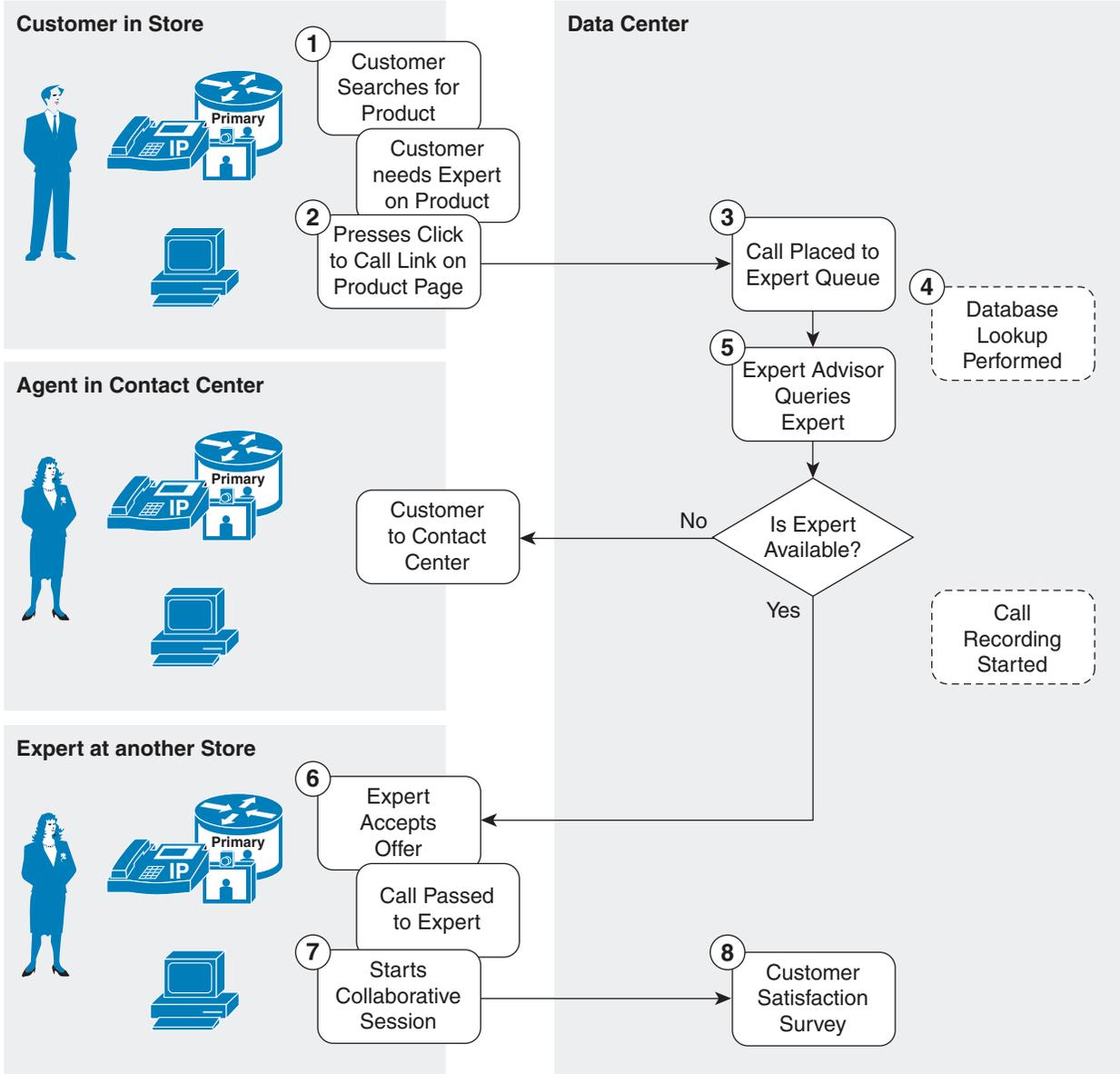
- **Audio and Video Conferencing** between the customer and expert—This solution provides several options to enable audio and video consultation between the customer and the expert. The quality of video and associated products are flexible to the needs of the retailer and allows for the capability of the solution to increase as the needs of the retailer increase.
- **Ability to define and search for multiple types of expertise**—This solution can intelligently and automatically search for any administratively predefined ranges of expertise.
- **Rich Collaboration**—Bidirectional document-sharing allows either the client or the expert to input information into relevant documents, web pages, or customer-related material.
- **Peripheral Device Sharing**—The solution provides the option to print shared documents or collateral locally or at another location of the customer's choice.
- **Multimedia Playback**—The solution provides the ability for the expert to play multimedia content (instructional videos, prerecorded material) for the customer.

- Self Assisted Model—The solution must be capable of being deployed at a retail location that would allow a customer the confidence to operate the Virtual Expert Management service without needing the assistance of a retail employee.
- Survey—The solution is capable of providing the customer with an optional, customized survey at end of session by directing them to an appropriate URL.
- Security—Secure interactions between customer and expert include many options for session encryption and privacy settings. These designs build on best practices for a secure enterprise architecture.

Solution Use Case Walk-Through

The customer enters the retail store featuring the Cisco Virtual Expert Management solution and approaches or is led to the Virtual Expert station. The Virtual Expert station would be located in a customer services area, an area where special product services are provided or in an isle next to the featured products (e.g., Wine selection). [Figure 2-1](#) shows the process flow of providing expert assistance to a customer.

Figure 2-1 Process Flow of Customer Connecting to an Expert



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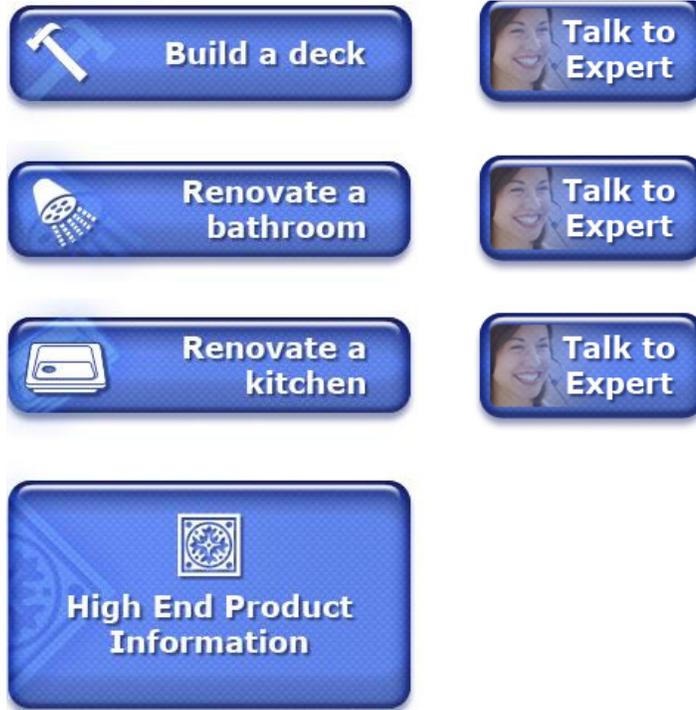


Note Dotted process steps are optional based on deployment scenarios and implemented solution components.

The following steps describe the flow in [Figure 2-1](#):

- Step 1** Using the virtual expert station, the customer searches for a product of interest. This web portal would typically be the retailer’s existing E-Commerce site, or a custom portal for a specific set of products or services.
- Step 2** Once the customer finds a product of interest that may need advanced configuration or additional professional services, there will be a link on that page enabling the customer to **Talk to Expert**. See [Figure 2-2](#)

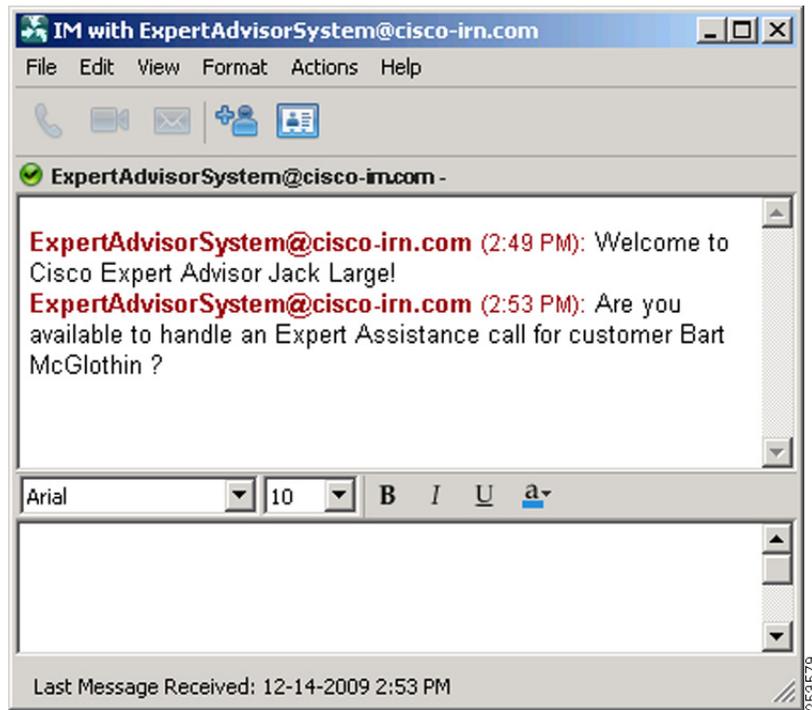
Figure 2-2 Link to Talk to Expert



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- Step 3** After the customer clicks on **Talk to Expert** button, the web portal server would use the Cisco WebDialer WSDL service to place a call from the kiosk/phone that the customer is at to the appropriate expert queue.
- Step 4** An optional step to include is database lookups for additional customer data or features such as desktop sharing. Once the customer is connected to the expert queue, the script could be configured to request additional information from the customer before processing the call. Typical information that would be requested from a customer includes customer home phone number, account numbers, and transaction numbers. This information allows the expert advisor locator system to retrieve additional information from a customer or systems database. In addition, the location of the customer can be determined by the phone number of the customer kiosk and referenced in a database that includes all VEM stations. This information is used to customize messages subsequently sent to the experts.
- Step 5** The expert advisor locator service sends out instant messages to one or many experts soliciting their assistance with a customer. If a database lookup was performed, this solicitation could include information such as the customer's name, annual purchasing, or last purchase. Expert selection is also based on queuing method (longest available agent, most skilled, or least skilled) or spatiality (closest match among numeric attributes).

If an expert is not available, queue scripting would typically include forwarding the call to a Customer Contact Center agent or answering service. See [Figure 2-3](#).

Figure 2-3 Expert Instant Messaging with Customer

An optional solution component is recording (enhance customer service, meet emerging legal requirements). The audio session between customer and expert can be recorded in several deployment scenarios. Currently, recording of video streams, desktop collaboration and TelePresence calls are not supported. Recordings using NICE are logged and stored for reporting and audits. See [Figure 2-4](#).

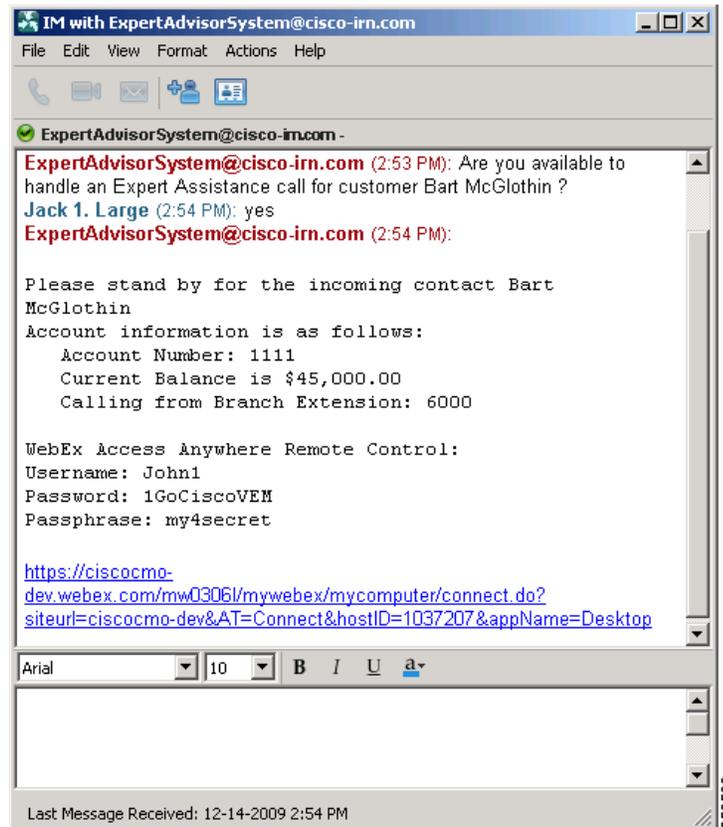
Figure 2-4 NICE Reporting

The screenshot displays the NICE Perform Business Analyzer web application. The interface includes a navigation menu on the left with options like Interactions, Evaluations, Audit Trail, Clips, and Packages. The main content area shows a table of results for a query titled 'Complete - Last 24 hours'. The table has columns for Type, Flag, Full Name, Complete Start Time, Complete Stop Time, Complete Duration, and Score. Three records are listed, all with a Type of 'Unmapped, User' and a Score of 0.

Type	Flag	Full Name	Complete Start Time	Complete Stop Time	Complete Duration	Score
Unmapped, User		Unmapped, User	12/14/2009 3:20:34 PM	12/14/2009 3:21:12 PM	00:00:38	
Unmapped, User		Unmapped, User	12/14/2009 2:53:30 PM	12/14/2009 2:54:21 PM	00:00:51	
Unmapped, User		Unmapped, User	12/14/2009 2:51:40 PM	12/14/2009 2:52:00 PM	00:00:20	

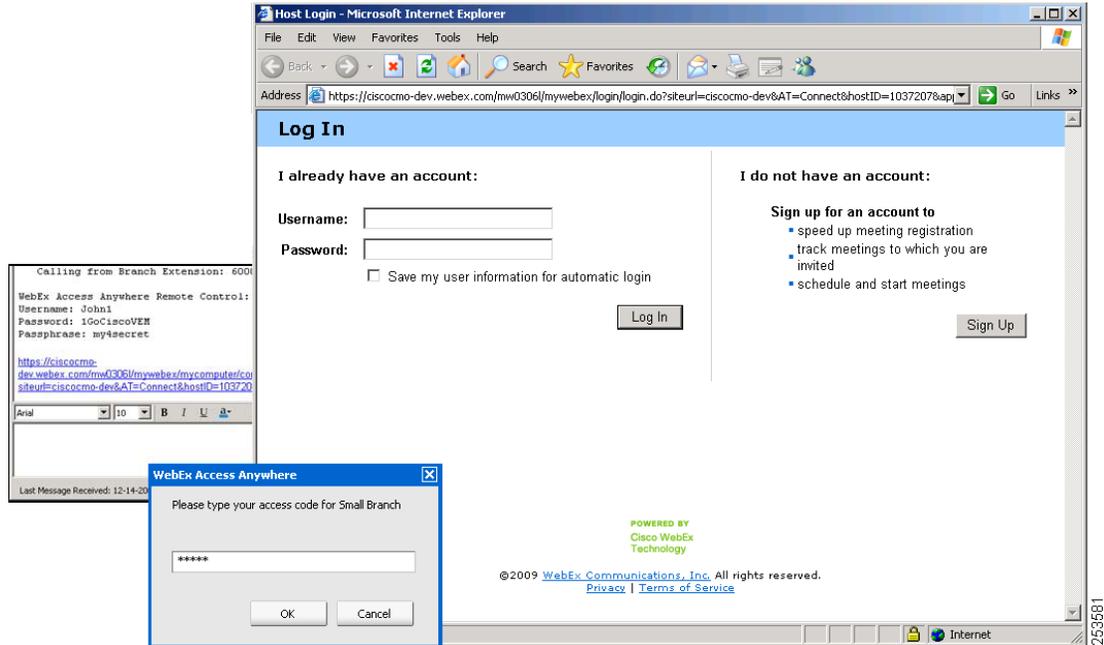
- Step 6** When an expert accepts a contact offer, the offers to the other experts are revoked. If a database lookup was performed, additional information could then be provided in the subsequent messages. See [Figure 2-5](#).

Figure 2-5 Customer Accepting Contact Offer



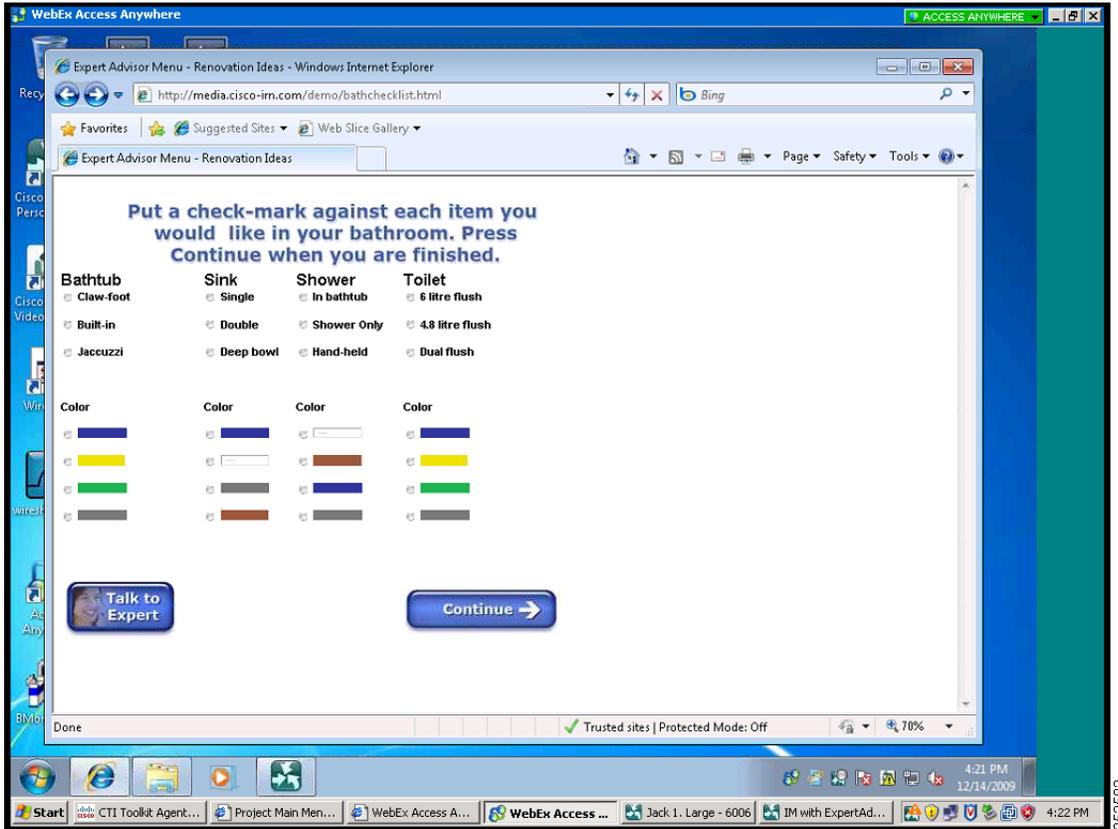
The expert advisor locator system then connects the expert and customer with voice and video. When additional collaboration is needed, a desktop sharing session can be started. Desktop sharing is available via several products. In this example, the expert is able to remotely control the customers desktop using WebEx Access Anywhere. The link for the session is provided in the acknowledgement message along with the necessary credentials. See Figure 2-6.

Figure 2-6 Expert Accessing the Customer Desktop



- Step 7** Once connected, both the customer and the expert are able to collaboratively control the virtual expert station desktop. The expert can direct the customer's browsing experience, help complete complex product web ordering forms, and provide the expert services that the customer needs, keeping the sale in the store. See Figure 2-7.

Figure 2-7 Customer and Expert Interacting



Step 8 Once the conversation is complete, the expert directs the customer's web browser to a satisfaction survey site.

