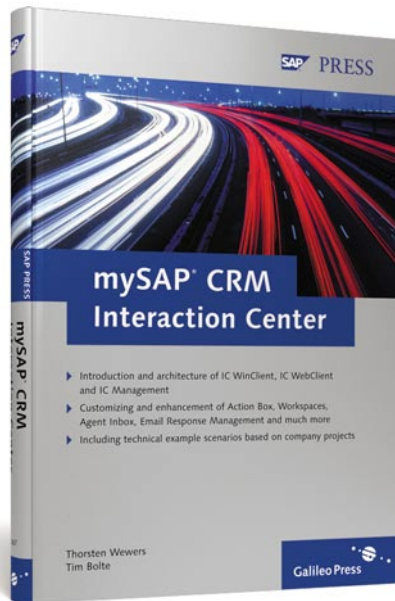


Thorsten Wewers, Tim Bolte

mySAP CRM Interaction Center



SAP PRESS

Contents

Preface	9
1 Introduction	11
1.1 mySAP CRM and Interaction Centers	11
1.2 Structure	13
2 Concept and Evolution	15
2.1 History of Current Applications in mySAP CRM Interaction Center	15
2.2 Business Scenarios and Processes	21
2.2.1 Scenarios and Processes for CRM	21
2.2.2 Special Use of mySAP CRM Interaction Center	24
2.3 Technical Concept and Components	28
2.3.1 Solution Concept	28
2.3.2 Overview of Technical Components	34
3 Technical Principles	39
3.1 Preliminary Note	39
3.2 Interaction Center WinClient	39
3.2.1 Framework and Architecture	39
3.2.2 Basic Functions	43
3.2.3 Process and Master Data Integration	46
3.2.4 Integrating Communication Channels	50
3.2.5 Supporting Functions	54
3.3 Interaction Center WebClient	60
3.3.1 Framework and Architecture	60
3.3.2 Basic Functions	66
3.3.3 Process and Master Data Integration	71
3.3.4 Integrating Communication Channels	77
3.3.5 Supporting Functions	81
3.4 Interaction Center Management	86
3.4.1 Email Response Management System	86
3.4.2 Managing the Interaction Center Operation	90
3.4.3 Interaction Center Analytics	99

4 Selected Customization and Extension Options 105

4.1	Overview	105
4.2	Creating a Workspace with Subscreen in IC WinClient	106
	4.2.1 Introduction	106
	4.2.2 Implementing the Workspace Class	107
	4.2.3 Implementing the Subscreen	111
	4.2.4 Customizing	112
4.3	Creating a Workspace With Enjoy Control in IC WinClient	115
	4.3.1 Introduction	115
	4.3.2 Implementing the Workspace Class	116
	4.3.3 Customizing	120
4.4	Using Hidden Components in IC WinClient	122
	4.4.1 Introduction	122
	4.4.2 Implementing the Workspace Class	122
4.5	Using the Action Box in IC WinClient	127
	4.5.1 Introduction	127
	4.5.2 Implementation Steps	127
	4.5.3 Extending the BOR Object	128
	4.5.4 Customizing	132
4.6	Using the Transaction Launcher in IC WebClient	135
	4.6.1 Introduction	135
	4.6.2 Creating the URL	135
	4.6.3 Integrating the URL	137
	4.6.4 Customizing the Generated Class	138
4.7	Extending the Business Partner Search in IC WinClient by New Search Fields	140
	4.7.1 Introduction	140
	4.7.2 Implementing Searchable Fields	141
	4.7.3 Implementing Complex Searches	145
4.8	Extending the Business Partner Search in IC WebClient by New Search Fields	147
	4.8.1 Introduction	147
	4.8.2 Settings in Customizing and Defining a Customized View and Repository	147
	4.8.3 Extending View, Controller, and Context	148
4.9	Fact Sheet Enhancement	157
	4.9.1 Introduction	157
	4.9.2 Creating and Customizing Info Blocks	157
	4.9.3 Customizing the Fact Sheet	163
4.10	Executing Workitems in IC WinClient	166
	4.10.1 Introduction	166
	4.10.2 Implementing the Object Method	167

4.11	Extending the Agent Inbox	172
4.11.1	Introduction	172
4.11.2	Extending the Inbox Customizing	172
4.11.3	Extending the Inbox Workflow	176
4.11.4	Extending the Business Object	178
4.12	Alerts in IC WebClient	181
4.12.1	Introduction	181
4.12.2	Settings in Framework Customizing and Defining a Customized View and Link Repository	181
4.12.3	Customizing the Alert Definition	182
4.12.4	Triggering the Alert	188

5 Selected Examples From Customer Projects 195

5.1	Overview	195
5.2	Support Help Desk Based on IC WinClient	195
5.2.1	Customer and Problem	195
5.2.2	Project Description	196
5.2.3	Solution Outline	199
5.2.4	Benefits of the Project Implementation	205
5.3	Interaction Center Analytics for a Support Help Desk	205
5.3.1	Customer Objective	205
5.3.2	Solution Description	206
5.3.3	Benefits of the Project Implementation	213
5.4	Consumer Care Based on IC WebClient	213
5.4.1	Customer and Problem	213
5.4.2	Project Description	214
5.4.3	Solution Outline	218
5.4.4	Benefits of the Project Implementation	228
5.5	Employee Interaction Center Based on IC WinClient	228
5.5.1	Customer and Problem	228
5.5.2	Project Description	228
5.5.3	Solution Outline	229
5.5.4	Benefits of the Project Implementation	231
5.6	Sales Advisory Services for Supporting the Sales Process	232
5.6.1	Customer and Problem	232
5.6.2	Project Description	232
5.6.3	Solution Outline	233
5.6.4	Benefits of the Project Implementation	242
5.7	Integration of a Third-Party Telephony Bar in IC WinClient	242
5.7.1	Customer and Problem	242
5.7.2	Project Description	243
5.7.3	Solution Outline	244
5.7.4	Benefits of the Project Implementation	249

6	Summary and Future Outlook	251
A	The Authors	253
	Index	255

Preface

Interaction centers are the key area through which enterprises work directly with their customers; the customer, in turn, expects to receive support regarding all issues across all the business areas of the enterprise. This can happen only if an interaction center can be integrated with other applications and individually adapted and extended to user processes.

The solution mySAP CRM Interaction Center fulfills these requirements. Our intention with this book is to provide consultants, project managers, and decision makers in SAP customer enterprises with comprehensive insight into ways for meeting project-specific requirements, beyond the information provided by the SAP help and standard documentation. At the same time, a less technical chapter presents numerous customer projects that illustrate the bandwidth of possible implementations of this solution.

This book could not have been published as you see it without committed support from many people. We would like to thank our colleagues at ecenta AG, who helped us compile the extension options of SAP CRM Interaction Center and in processing the examples from customer projects: Christian Matz, Jens Höfer, Jörg Hopmann, Dr. Johann von Saldern, and Dr. Klemen Cas. Without their text contributions and ABAP programs, this book would not have come into existence. The "heart and soul" of this project, who kept together all files, graphics, formats, and pieces of paper, was Katrin Willnat, who even managed to decipher our handwriting.

For excellent care and support from the publishing and editorial sides, we would like to thank Stefan Proksch, Florian Zimniak, and John Parker of SAP PRESS.

In particular, special thanks go to our wives Laura and Dagmar, who showed patience and understanding for this book, despite the small amount of time we had left for our private lives even before this project.

Wiesloch, Germany
November 2005

Dr. Thorsten Wewers

Mannheim, Germany
November 2005

Dr. Tim Bolte

3 Technical Principles

mySAP CRM Interaction Center includes IC WinClient, IC WebClient, and processes for Interaction Center Manager. This chapter concisely describes the technical principles of these applications.

3.1 Preliminary Note

This chapter introduces the technical basics of Interaction Center WinClient, Interaction Center WebClient, and the functionality for the Interaction Center Manager role. Our goal here is to give you a foundation for understanding the enhancement options of the solution. Throughout this book, selected enhancements are described in detail using real-life examples (see Chapter 4) and the context of project descriptions (see Chapter 5).

In contrast to the descriptions in the system documentation, the Implementation and Installation Guides, the SAP Help Portal (<http://help.sap.com>), and the contents of SAP Solution Manager, this chapter points out certain central functions and provides technical details about these functional areas. As an additional source for further information, please refer to the *IC WebClient Cookbook*, the latest version of which can be found in the SAP Service Marketplace (<http://service.sap.com>) in the Installation Guides section.

In addition to descriptions of technical principles structured by main components, you will find at the end of each section lists or tables with technical information, including transactions or SAP notes relevant to the respective area.

3.2 Interaction Center WinClient

3.2.1 Framework and Architecture

The IC WinClient configuration begins with *framework customizing*. During this process, you will define the layout of the user interface and also assign individual areas of the layout (slots) to components. The standard system contains two L-shaped layouts, one with and one without a call state. The schematic structure of these are illustrated in the left-hand and right-hand parts of Figure 3.1.

Layout and component mapping

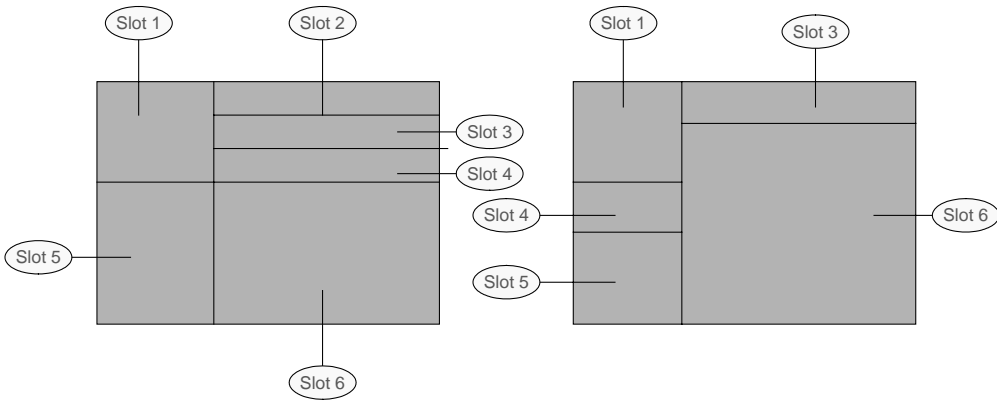


Figure 3.1 Schematic IC WinClient Layout With (Left) and Without (Right) Call State

Components and slot assignment

With SAP CRM Release 5.0, the additional vertical layout has been used in the standard version for the client switch functionality. The individual slots are assigned visible components, e.g. workspaces. Some slots are permanently assigned to certain components (1 = Business partner search, 5 = Navigation area, 6 = Application area), other components can be used flexibly in the remaining three slots (see Table 3.1).

Visible Component	L-Shaped With Call State	L-Shaped Without Call State
Broadcast messaging	2, 3, 4	3
Call state	2, 3, 4	–
Quick keys	2, 3, 4	3
Reminder scripting	2, 3, 4	3
Lean action box	2, 3, 4	4 (variant 0004 or 0005), 3

Table 3.1 Visible Components and Possible Slot Assignments

Visible and hidden components

One distinguishing feature of IC WinClient is that, apart from the visible components, there are hidden ones that are active in the background. Some visible components, like the action box, require an associated hidden component.

The functional characteristics of individual components are determined by the IC WinClient profile. One configuration profile can be associated to each component. An IC WinClient profile also references a particular framework. This means that through the IC WinClient profile, all configuration settings required to start the application with certain characteristics are known. This is effected via transaction code CIC0.

From a technical point of view, the application launch is carried out via the central function module `CIC_START_FRAMEWORK`, which is used for initiating all the necessary steps. The procedure within this function module is as follows:

1. The function module `CIC_INITIALIZE_FRAMEWORK` is called, where the IC WinClient profile (function module `CIC_GET_ORG_PROFILES`) is determined first, then the framework layout and corresponding component profiles. The visible components are assigned to their slots, and the hidden ones are written to an internal table.
2. Components are created, components subscribe to events, receiver components for events are determined, and the functions to be executed are defined. The individual steps are carried out sequentially, first for the hidden, then for the visible components.
3. The framework itself subscribes to events.
4. The events for reading the components' configuration data (Event `CO_GLOBAL_CONFIG_MOD`) are triggered.
5. All components are opened.
6. Visible components are enabled.
7. The framework screen is called.
8. Visible components are disabled.
9. All components are closed.

This procedure illustrates that the communication between individual components and the framework is carried out through events at runtime, after the application has been started.

One special type of event is the OK code. This event is called by the framework, and all parts of the framework using OK code processing have to subscribe to this event. To make sure that the OK code event handlers of individual framework parts are called only when OK codes relevant to them are to be processed, they can register for specific OK codes.

The contents of the navigation and application areas (Slots 5 and 6) after application startup can be defined via a common profile for both areas (Customizing activity **Define Profile for Automatically Created Workspaces**, Transaction `CRMC_CIC_WSP3`). Both areas can be populated with several workspaces in the form of tabs. A list of all workspaces included in a standard system is available either via **F4** help or via Transaction `CRMC_CIC_WSP0`. This transaction also enables you to add cus-

customer-specific workspaces (see SAP note 516843 and Sections 4.2 and 4.3).

Assigning a toolbar

The IC WinClient profile can be assigned a special profile for the application toolbar and thus a special toolbar configuration (GUI status) using Transactions CICU and CICN. For that purpose, the framework used must be assigned the obligatory hidden component CIC_TOOLBAR. An extended GUI status (PF777) has been available since mySAP CRM Edition 2004, which provides the choice of two additional pushbuttons for changing the presentation of the navigation and application areas at runtime: With one of the pushbuttons, you can toggle the application area between full screen and standard display; the other pushbutton enables you to expand the navigation area to full screen width. In order to enable these pushbuttons, the framework used must be assigned the hidden component LAYOUT_SWITCH.

Technical Information

Transaction	Description
CIC0	Start the application
CIC0	Define IC WinClient profiles
CRMC_CIC_FW_MAINTAIN	Define Framework ID and Parameters
CRMC_CIC_TITLE_TEXTS	Maintain Window Titles
CRMC_CIC_WSP3	Define Profiles for Automatically Created Workspaces
CRMC_CIC_WSPO	Define customer-specific workspaces
CICU and CICN	Define Toolbars and GUI Status

Table 3.2 Customizing Transactions of the Framework

Function Group/Class	Description	Package
CIC0	CIC framework	CICA
CIC2	CIC framework customizing	CICA
CL_CCM_WORKSPACE_MANAGER1	CIC workspace manager	CCMA
CL_CRM_CIC_AREA_COMPONENT	CIC workspace display	CRM_CIC_COMPONENTS

Table 3.3 Function Groups and Classes of the Framework

Function Group/Class	Description	Package
CL_CCM_WORKSPACE_FACTORY2	Factory for workspaces	CCMA
CL_CCM_WORKSPACE2	Implementation of IF_CCM_Workspace	CCMA

Table 3.3 Function Groups and Classes of the Framework (cont.)

SAP Note	Description
516843	How to create a customer-specific workspace?

Table 3.4 SAP Note on the Framework

3.2.2 Basic Functions

The basic functions of IC WinClient are represented by the Action Box and Context Menu components and in the Business Data Display.

Business Data Display

The business data display can be represented as a tab in the navigation area. In this display, you can list all objects called during an interaction. For SAP CRM objects called with their IC WinClient standard screens, this listing in the business data display is carried out automatically. At the end of an interaction, the content of the business data display is deleted, and the objects listed therein are linked via the document flow to the interaction process documenting the interaction. In this way, all linked objects from the business data display are listed in the contact history underneath the interaction at the next call of the interaction.

Associating objects with the interaction process

Action Box

The action box is presented to the user as a pushbutton bar with sub-menus whose appearance and scope of functionality can be configured in a very flexible way. The three most important purposes of the action box are calling workspaces, calling BOR methods, and calling HTML pages. The scope of functionality of the action box is configured in the Customizing Transaction EWFC0.

Calling workspaces, BOR methods and HTML pages

If a workspace is called via the action box and if no tab exists for it yet, the workspace is added to the application area as another tab. If there already was a tab for the workspace, it will be placed in the foreground.

Calling objects from other systems

The action box call of a BOR method provides a high degree of flexibility during configuration. With the BOR method, it is possible to access all BOR objects of SAP applications with their corresponding methods. For objects from other systems than SAP CRM, all you need to do is to store information about the target system for the 'jump', i.e. the Remote Function Call (RFC). This is carried out by maintaining the logical system, which is described in the SAP note 363097. In order to avoid that the user has to log on separately to the target system during processing, a *trusted RFC connection* is required between the CRM and the target system. It is possible to transfer data from the business data display and to return data to it after processing in the target system.

Calling the R/3 order with data forwarding

For example, from IC WinClient, an R/3 order for the customer identified in IC WinClient can be created for order entry in the familiar R/3 interface, and the order number can then be returned into the business data display. For this purpose, the BOR object of the R/3 order, BUS2032, needs to be called with the CREATEWITHDIA method. Besides order type and data on the sales organization, the customer identified in IC WinClient can be transferred in the data flow as the ordering party. For this purpose, in the data flow for the document partner, the constant AG is transferred as the partner role, and the customer is set as follows (see also Figure 3.2):

```
&<DESKOBJ>BUS1006005.CUSTOMERNO&.
```

DESKOBJ means that an object is to be forwarded from the business data display. The CRM object BUS1006005 is a CRM object for the business partner and contains a mapping of the R/3 customer number.

Transaction <== Interaction Center (IC) WinClient						
Target element	D	P	C	Target comp.	Data source	Log. system
Document Partner	<input type="checkbox"/>	1		Partner function	AG	QW8CLNT812
		1		Customer	&<DESKOBJ>BUS1006005.CUSTOMERNO&	
		1		Item (SD)		

Figure 3.2 Data Flow from IC WinClient to the Transaction

Data return

For importing the document number in the business data display, the BOR object BUS2032 needs to be entered in the return data flow as target element, and &<*MAINOBJ*> as data origin (see Figure 3.3). Thus, the R/3 document number is transferred to IC WinClient as a standard attribute of the BOR method used. Further methods of modeling the data flow are discussed in detail in SAP note 322517.

Interaction Center (IC) WinClient <== Transaction						
Target element	D	P	C	Target compo...	Data source	Log. system
BUS2032	✓	1	☒		&<*MAINOBJ*>&	QW8CLNT812

Figure 3.3 Data Flow from the Transaction to IC WinClient

One BOR object of special interest is the object TSTC. It enables calling every transaction from any SAP system. For this purpose, you need to select the EXECUTE method and maintain the transaction code in the data flow as a constant.

Calling SAP transactions

From the action box, you can call any HTML pages—intranet, Internet or even user-defined pages—and these are then displayed in a workspace in the application area. To this end, an entry has to be created in Transaction CICAM, which references the address of the HTML page. Additionally, browser options for the workspace can be determined there, and page call parameters to be transferred from IC WinClient (external parameters) can be maintained. From the HTML page, you also can start action box calls (internal parameters). For this purpose, you need to create a corresponding action box in Transaction EWFC1, and this requires programming in the HTML page.

Calling HTML pages

Context Menu

The context menu is used to enable calling of objects from the business data display. The maintenance of the context menu is similar to that of the action box in that they are using the same technology. For every object, you can define several methods that can be provided at runtime by means of a right-click. The context menu is used for purposes other than the business data display. The interaction history with the customer, which is assigned to the navigation area in the IC WinClient profiles of the standard Customizing, accesses the context menu as well. Thus, it is possible to jump from a customer's history to any objects listed in the business data display during a previous interaction with the customer.

Calling linked objects

Technical Information

Tables 3.5, 3.6, and 3.7 provide further background information on IC WinClient basic functions.

Transaction	Description
EWFC0	Action box profile
CRMC_CIC_COMP_ACTION	Define Context Menus
CICAM	HTML configuration
EWFC1	HTML action box

Table 3.5 Customizing Transactions for the Basic Functions

Function Group/Class	Description	Package
CCM2_HIDDEN_ACTION_BOX	Hidden action box	CCMA
CRM_CIC_SLIM_ACTION_BOX	Lean action box	CRM_CIC_COMPONENTS
EB*	Action box	CCMA&CCMB
EW*	Action box	CCMA&CCMB
CRM_CIC_TRIGGER_WORKSPACE	Context menu	CRM_CIC_FRAMEWORK
CL_CRM_CIC_COMPONENT_ACTIONS	Context menu	CRM_CIC_COMPONENTS
CL_CRM_CIC_COMPONENT_OBJECT	Context menu	CRM_CIC_COMPONENTS
CL_CRM_CIC_BD_DISPLAY_WS	BDD workspace	CRM_CIC_COMPONENTS
CL_CRM_CIC_BDD2	BDD	CRM_CIC_COMPONENTS

Table 3.6 Function Groups and Classes of Basic Functions

SAP Note	Description
363097	How to setup Logical Destination for Action Box RFC
128447	Trusted/Trusting systems
322517	CIC: Action Box data flow customizing with the BDD

Table 3.7 SAP Notes on Basic Functions

3.2.3 Process and Master Data Integration

IC WinClient accesses master data and processes on the CRM server. All settings defined there apply to IC WinClient and can be re-used. IC Win-

Client also provides specific features in both areas, and these are explained in the following sections.

Master Data Integration

With regard to master data, the search and display of business partners is the main function of IC WinClient, for which Slot 1 of the framework is reserved. The search can be carried out either manually or in an automated way via an *Automatic Number Identification (ANI)* within *Computer Telephony Integration (CTI)*. Business partner data can be changed and created as well. Components or products installed at a business partner, for example on a particular server, can be displayed. These extended functions are available with the business-partner search workspace. This workspace is an HTML representation which stands for flexible customizing (Transaction CRM_CIC_SEARCH_RULE). Apart from the search profiles delivered in the standard system, you can create your own by flexibly adapting the standard search profiles. Using search attributes in Customizing, you can configure, for instance, which HTML layout to use, and whether to limit the search to specific business-partner roles and/or relationship categories. You also can configure for which partner functions the identified business partners are forwarded to transaction processing or with which priority which function modules are used for searching different fields in business partner tables (see Figure 3.4).

Search and display
business partners

You can define several settings for creation of business partners. For example, you can predefine in which business partner role or with what partner category business partners are created from IC WinClient. Another Customizing setting controls whether this pre-assignment may be changed by the user.

Creating business
partners

Apart from industry-specific HTML templates, the standard version contains two standard layouts. CRM_CIC_SEARCH_DISPLAY is the standard proposal for a customer search in SAP CRM, while CRM_CIC_EMP_SEARCH_DISPLAY is the standard proposal for an employee search in an Employee Interaction Center. Both templates are stored in the SAP Web Repository and can be accessed via Transaction SMW0.

Besides business partner data, IC WinClient allows for the display of product-related information. This can be the presentation of product information which is displayed in a separate workspace for a specific product which is used, for example, in an order. Alternatively, installation components of a specific customer can be searched in a workspace and then presented. Further workspaces are available in the standard system for serialized products (*iObjects*).

Display of product
information

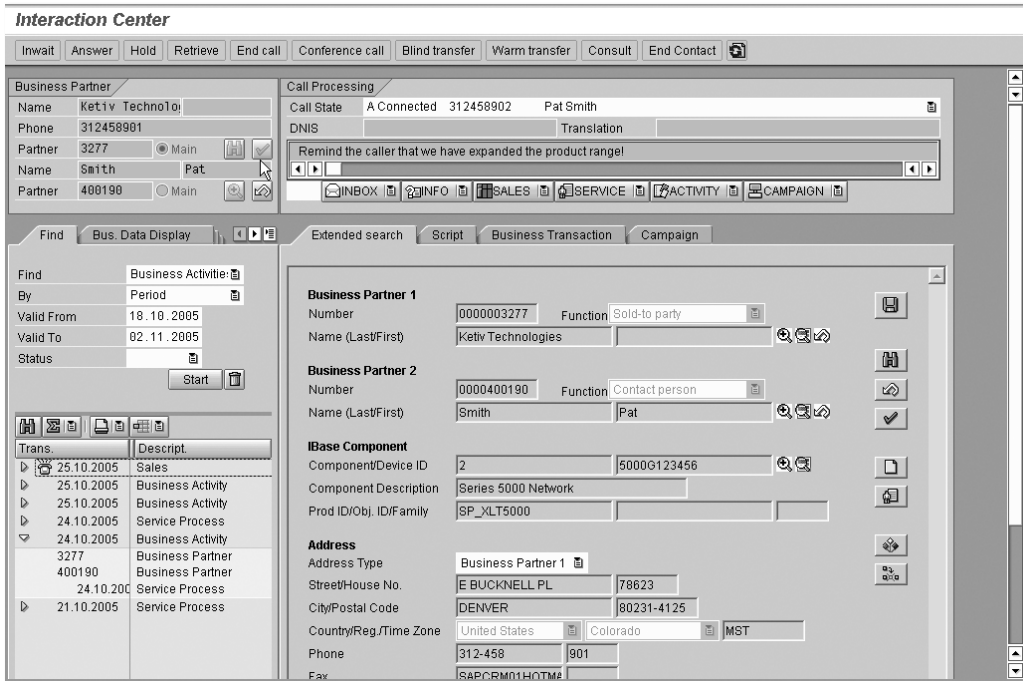


Figure 3.4 Business Partner Search in IC WinClient

Fact sheet Another option for re-using master data functions is provided by the fact sheet. The fact sheet can contain master data on the business partner from SAP CRM, processes from SAP CRM and SAP R/3 as well as data on the business partner from the SAP Business Information Warehouse. This can be configured in the **Master Data** area of the SAP Implementation Guide (SAP Reference IMG) via the Customizing activity **Customer Relationship Management • Master Data • Business Partner • Business Partner – Cockpit and Fact Sheet • Define Info Blocks and Views**. The access to this fact sheet depends on the role. The fact sheet can be called in IC WinClient in a special workspace. For this purpose, the workspace `ACTIVITY_SALES_SUMM` needs to be assigned to the desired workspace profile through Transaction `CRMC_CIC_WSP3`.

Process Integration

Interaction documentation

Interactions are documented in IC WinClient via a CRM process. You can specify which CRM transaction type—and thus which business transaction category—has to be used for documenting the interaction. You can choose different transaction types for different interaction channels. Irrespective of this setting, the user can create follow-up transactions of any

kind at runtime. Consequently, the Customizing definition only specifies the transaction type of the interaction record. All transaction categories are represented in the transaction workspace of IC WinClient in a slightly simplified way compared to CRM Enterprise. For the interaction record, you can define more settings in Transaction CRMC_CIC_ACTO (see Figure 3.5).

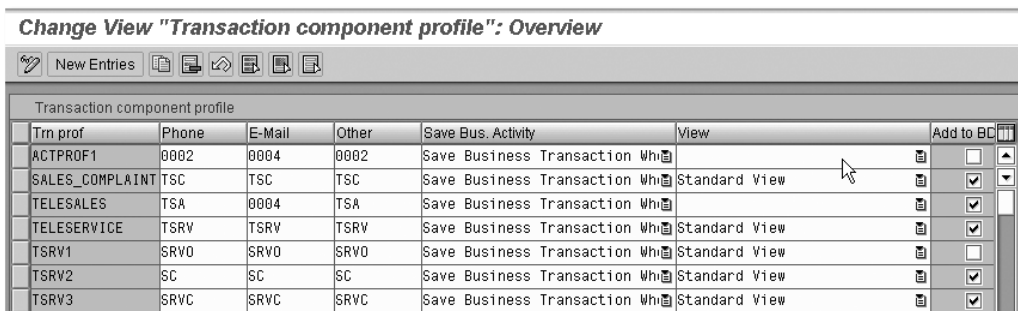


Figure 3.5 Customizing of Business Transactions for IC WinClient

It is possible to choose whether a detail view or a view focused on contact data is initially displayed when calling the transaction workspace. The user can switch these views at runtime. You also can configure the method of proceeding with the interaction record after ending the interaction. Several options are available:

Settings for the interaction record

- ▶ Always save
- ▶ Save when user makes changes
- ▶ Save on request (when user makes changes)

For transactions opened in the transaction workspace, it can generally be specified whether they should be transferred automatically to the business data display or whether the user should perform this task manually by clicking on a pushbutton.

Technical Information

Transaction	Description
CRMC_CIC_SEARCH_RULE	Define Profiles for Search Strategy
CRMC_CIC_SEARCH_CNTR	Define Customer-Specific Search Control
SMW0	SAP Web Repository

Table 3.8 Customizing Transactions for Process and Master Data Integration

Transaction	Description
CRMC_CIC_WSP3	Define Profiles for Automatically Created Workspaces
CRMC_CIC_ACT0	Define Profiles for Transaction Workspaces

Table 3.8 Customizing Transactions for Process and Master Data Integration (cont.)

Function Group/Class	Description	Package
CCM1	Contact search and display	CCMA
CRM_CIC_BP_SUB	BP search subcomponent	CCMA
CL_CRM_CIC_BP_SEARCH	CIC BP search	CRM_CIC_COMPONENTS
CL_CRM_CIC_BP_EMP_SEARCH	Employee search	CRM_CIC_COMPONENTS
CL_CRM_CIC_SALES_SUMMARY	Sales Summary Workspace for CIC	CRM_CIC_COMPONENTS
CL_CRM_CIC_ONEORDER_MAINTAIN	One Order (maintain)	CRM_CIC_ORDER

Table 3.9 Function Groups and Classes of Process and Master Data Integration

SAP Note	Description
758426	HR-ALX: Enhancement of the ALE value distribution

Table 3.10 SAP Note on Master Data Integration

3.2.4 Integrating Communication Channels

Telephone, email, fax, and letter

IC WinClient provides the option to integrate several interaction channels. The SAP CTI interface SAPphone is used for the communication channel "Telephony," the SAPconnect interface for integrating asynchronous interaction media like email or fax, and SAP ArchiveLink for inbound letters. Interactions received via SAPconnect are displayed in the agent inbox of IC WinClient.

Computer Telephony Integration

The integration of Telephony in IC WinClient according to standard requires the connection of an external CTI or communication management software to SAPphone. In IC WinClient, you need only select the

corresponding framework (*Telephony-enabled*) and assign one visible and two hidden components. The visible component is the call state (CALL_STATE); the hidden ones are the CTI and call-center components. If the telephony integration should be tested without IC WinClient or in IC WinClient with simulated telephone calls, you can do so via the SAP-phone test transaction SPHT.

Assigning the CTI component essentially enables the use of the telephony pushbuttons in IC WinClient (see Figure 3.6). In Transaction CICY, you can also define if and how it is possible to log on to the switch via IC WinClient. Additionally, in Transaction CICW you can assign CTI queue names of the telephony system to individual CTI queue profiles of IC WinClient. In the administration menu, individual queues obtain descriptive texts (Transaction CICV). The logon to the queues assigned to a profile can be carried out in an automated way or manually by the agent. If logon to queues should not take place via IC WinClient, the entries in Customizing remain empty.

Softphone Controls

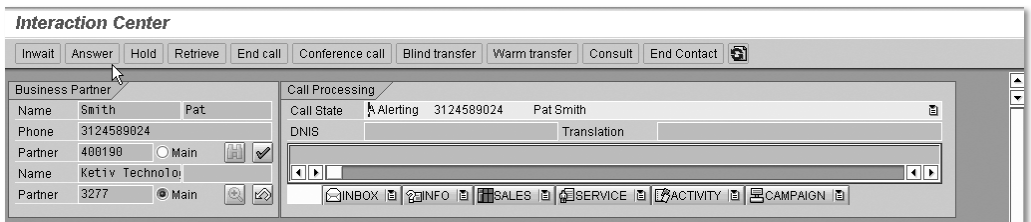


Figure 3.6 Call State and Telephony Pushbuttons in IC WinClient

By assigning the call center component, the processing of *call-attached data* is enabled. In this way, it is possible to identify callers via their telephone number in IC WinClient and automatically search and display the corresponding business partner data. If the telephony system includes an *Interactive Voice Response* (IVR) that already collects caller-identification data before the call is transferred to a live agent, it is possible to also use data other than the caller's telephone number during business-partner search. The configuration of the call-center component is carried out through Transaction CICG.

Call-attached data

With these components, IC WinClient also enables voice-data forwarding ('screen transfer'). To this end, all data is transferred from the business data display to telephony. Together with the call, it is then available to the receiving IC WinClient session as call-attached data on accepting the forwarding, and is visible in the business data display there.

Screen Transfer

Agent Inbox

Universal group inbox

In the agent inbox of IC WinClient, emails, faxes, and scanned letters as well as work items and planned activities can be received (see Figure 3.7). Since SAP CRM Release 5.0, there has been the additional option to place any type of CRM processes in the agent inbox of an agent group for processing, something that previously had been possible only via an enhancement on project basis. The agent inbox is designed as a group inbox: For example, all emails sent to a central email address of a company can be routed to the appropriate agent group and are then listed in the agent inbox of that particular group. This routing is done using SAP Business Workflow. Global settings for receiving messages (e.g. assigning routing rules, or determining which communication types are processed with what priority or whether CRM processes for inbound messages should be created automatically) can be defined in Transaction `CRMC_CIC_MAIL_GLOBAL`. You create and send messages via the email editor of IC WinClient, which provides various functions such as the maintenance of several sender addresses.

Flexible workflow support

For routing, the standard system includes the workflow template 14000004, which is assigned workflow standard tasks for email (14007925), fax (14007926), and letter (14007927). The template can be called via Transaction `PFTC`. The connection between an inbound message, for instance an email, and this workflow is made by assigning the BOR object `CICSUPRT2` to the central email address via Transactions `SO28` and `CRMC_CIC_MAIL_ADDR`. In its method `RECEIVE`, the BOR object `CICSUPRT2` triggers the event `MAILRECEIVED` (see Transaction `SWO1`), which is assigned to the standard workflow as the triggering event. The agent group is assigned to the workflow in Transaction `CRMC_CIC_MAIL_WF`. As a prerequisite, a node for receiving emails must have been created in SAPconnect via Transaction `SCOT`. Additionally, the agent inbox profile maintained in Transaction `CRMC_CIC_MAIL_IBXPRF` needs to be assigned to a workspace in the IC WinClient profile being used, and the agent inbox use must be enabled for it (Transaction `CRMC_CIC_EXT_INB_ACT`).

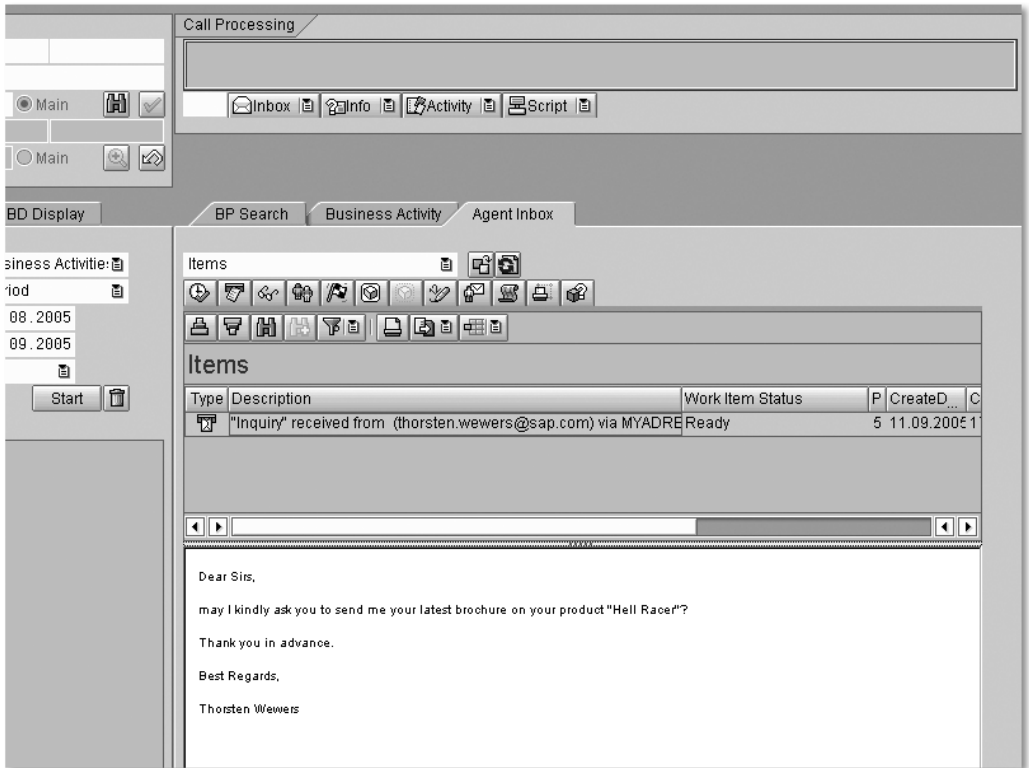


Figure 3.7 Agent Inbox

Technical Information

Transaction	Description
CICG	Define Call Center Profile
CICY	CTI administration
CICW & CICV	CTI queue
SPHA	SAPphone administration
SPHB	SAPphone system administration
SPHT	SAPphone test environment
CRMC_CIC_MAIL_GLOBAL	Global settings for agent inbox
SCOT	SAPconnect administration
PFTC	Maintain workflow tasks and templates
CRMC_CIC_MAIL_ADDR	Address Maintenance

Table 3.11 Customizing Transactions for Integrating Communication Profiles

Transaction	Description
SO28	Maintain Recipient Distribution
CRMC_CIC_MAIL_WF	Assign Agent for Email Handling
CRMC_CIC_WSP_EDITOR2	Define Editor Profiles
CRMC_CIC_MAIL_IBXPRF	Define Inbox Profiles
CRMC_CIC_EXT_INB_ACT	Activate Agent Inbox

Table 3.11 Customizing Transactions for Integrating Communication Profiles (cont.)

Function Group/Class	Description	Package
CCM5	CTI	CCMA
CCM6	Call center component	CCMA
CCMM4	Agent inbox	CCMA
CL_CCM_EMAIL*	Agent inbox classes	CCMA & CRM_CIC_COMPONENTS

Table 3.12 Function Groups and Classes for Integrating Communication Channels

SAP Note	Description
488344	Using IVR to identify Business Partner in CIC
601806	Checklist Agent Inbox Setup
697014	Support of letters in the Agent Inbox

Table 3.13 SAP Notes for Integrating Communication Channels

3.2.5 Supporting Functions

Scripting, alerts,
and Knowledge
Search

The main supporting functions in IC WinClient are scripting, alerts, and Knowledge Search. Additionally, broadcast messaging can be used in IC WinClient, which is discussed in more detail in the section about Interaction Center Management (see Section 3.4.2).

Interactive and Reminder Scripting

Interactive
scripting

Interactive Scripts are displayed in their own workspace in IC WinClient (see Figure 3.8). They represent a sequence of questions and answering options. Interactive scripts provide possibilities beyond defining a tree structure for such a series of questions and answers.

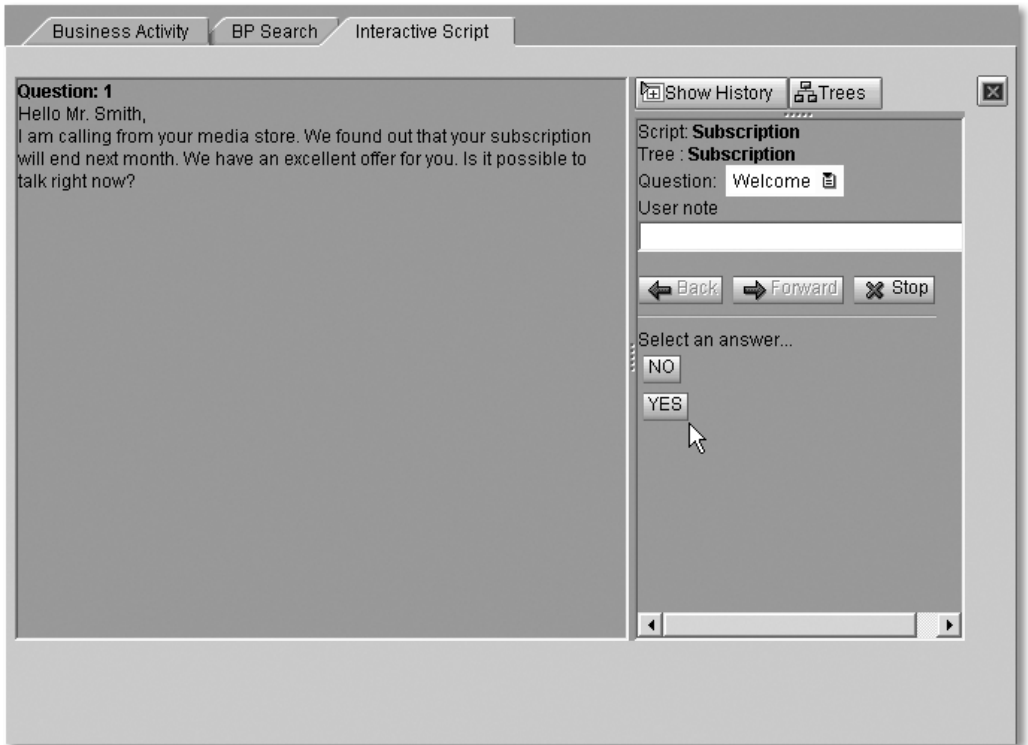


Figure 3.8 Interactive Script in IC WinClient

When selecting a certain answer, you can either simply navigate to the next question or trigger a script action. Available action types are events for stopping the script (STOP_SCRIPT) or for exiting to another script (EXIT_TO_SCRIPT <script id>). However, you can also trigger any OK code in IC WinClient or make an action-box call upon selecting an answer. This enables the integration of all workspaces configured in the action box into the interactive script. Interactive scripts can be modeled with a graphical tool in Transaction CRMM_TM_SCRIPT. Scripts created in this tool are then assigned via Transaction CICTMSCRPPROF to a script profile, which in turn needs to be assigned to the desired IC WinClient profile via its workspace or action box profile.

In addition to interactive scripts, IC WinClient also provides reminder scripting. This enables prompts of simple information texts or texts with variables during certain agent actions in IC WinClient. A list of all possible actions is available through Transaction CICA. Via Transaction CICK, these actions can then be assigned to a reminder scripting profile that in turn needs to be assigned to the desired IC WinClient profile. For these

**Reminder
scripting**

information texts to be displayed, you also need to assign a hidden component besides the visible component in the framework (see Figure 3.9).

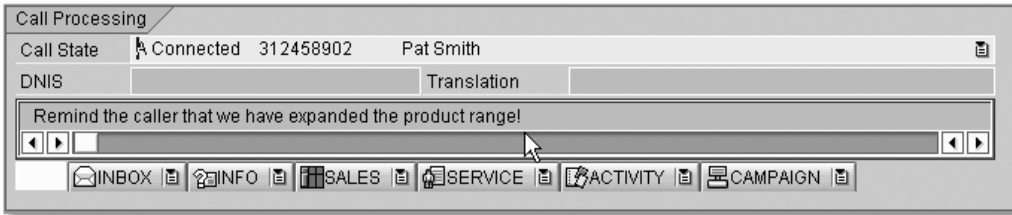


Figure 3.9 Reminder Script in IC WinClient

Alert Modeler

Provisioning of Extended Notes

The alert modeler gives you the option to provide agents with extended notes in the form of text. For this purpose, either the text display of reminder scripting or the broadcast messaging display is used (see Figure 3.10). However, the alert modeler provides other functions that influence the interaction to a far greater extent than the mere display of a text message. The application can, for example, automatically trigger an action-box call when a certain situation occurs or a special event is triggered.

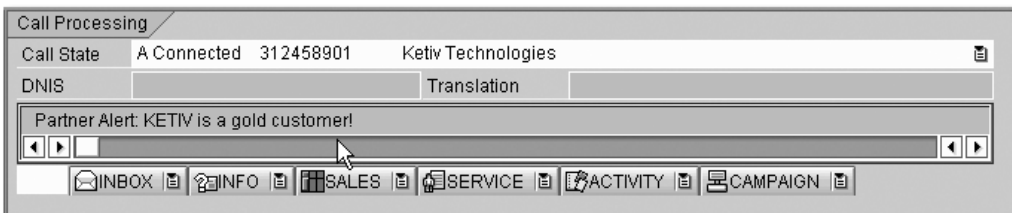


Figure 3.10 Alert in IC WinClient

The main purpose of the alert modeler is to grant access to the individual components of IC WinClient and also to data from the CRM server or even from an SAP BW. Within the alert modeler Customizing, you then can choose to create rules based on this data and to assign the execution of these rules to individual events. The resources available to the alert modeler (data objects, events, methods) are stored in a meta model whose XML definition can be displayed and changed via Transaction CRMC_CIC_AM_META. The modeling of the rules based on the resources stored in the meta model is carried out in Transaction CRMC_CIC_ALM_PROFILE in JavaScript. For the alerts to be executed at runtime, at least the hidden component ALRT_MODLRX must be assigned to

the IC WinClient framework used, and an alert modeler profile must be assigned to this component in the IC WinClient profile.

There is a special Customizing for access to extended business-partner data. In Transaction CRMBW_CIC_ATTRIBUTES, you define which additional data for business partners is to be accessed. This can be either data from marketing attributes or from SAP BW queries. In Transaction CRMC_CIC_BP_PROFILE, the selected extended business-partner data is then assigned to a special query profile that also determines how this data will be accessed, whether, for example, by reading the data synchronously or asynchronously. Via the IC WinClient profile, this query profile must then be assigned to one of two additionally supplied hidden components (COMPANY_PROF for organization-related data or CONTACT_PROF for person-related data), which needs to be incorporated in the used framework for this purpose.

Knowledge Search

With SAP CRM Release 4.0, the CRM-proprietary search engine *Interactive Intelligent Agent* was replaced in IC WinClient and in CRM Enterprise with the Software Agent Framework and made usable for a knowledge-based search functionality. The Software Agent Framework uses the SAP NetWeaver technology TREX as a search engine, so that the IC WinClient benefits from future developments in this area. Using the Software Agent Framework, the contents of the well-known solution database are indexed by TREX. Therefore, when changing from previous releases, the customer can easily access solution database contents already created.

**Software Agent
Framework**

With Knowledge Search, Interaction Center agents can comfortably access the solution database (see Figure 3.11). They can search for symptoms and solutions via user-defined texts or via predefined attributes. For a better structure of free-text queries, they can choose to add exclusion keywords. In this case, the Software Agent Framework subdivides large output lists whose keywords can be used for another quick restriction of the search. Output lists are displayed with probability values.

Selected solutions can be taken over into service orders or processed as response emails. It is also possible to gather feedback about the solutions provided by the solution database from the Interaction Center agents.

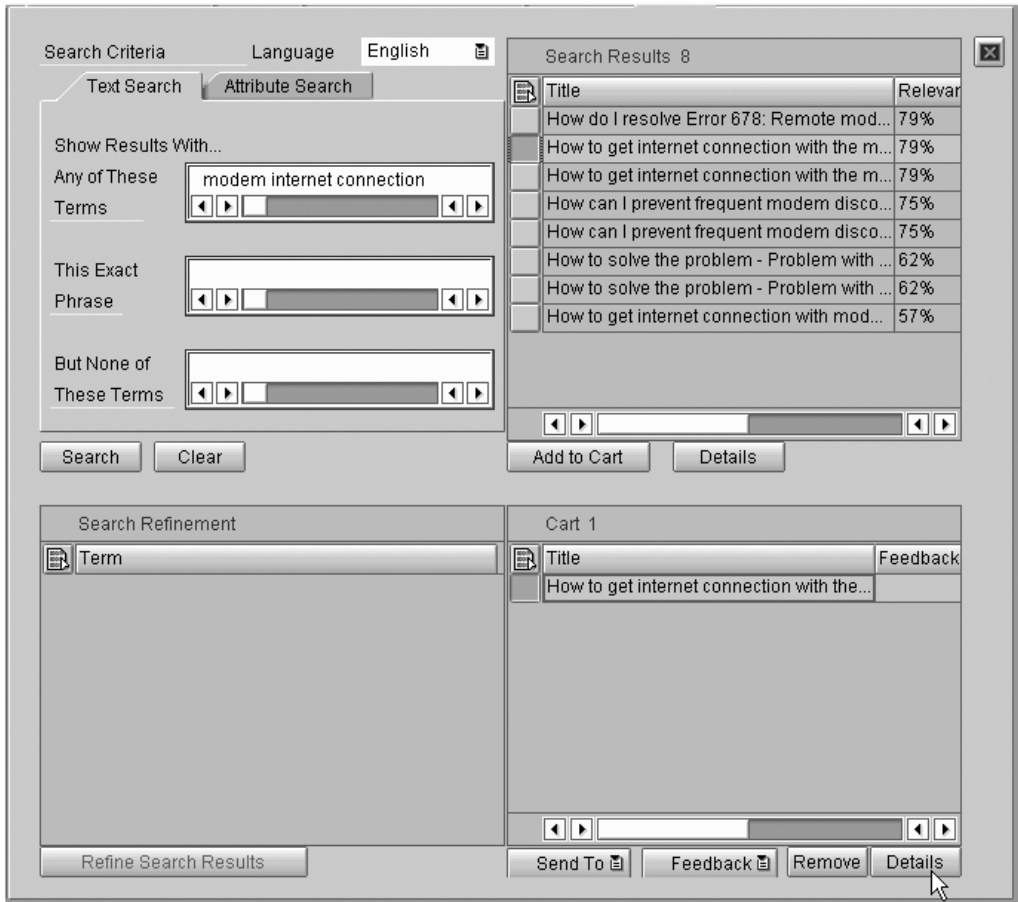


Figure 3.11 Knowledge Search in IC WinClient

Technical Information

Transaction/IMG Activity	Description
CICK	Define Reminder Scripting Profile
CICA	Define Customer-Specific Logging/Scripting Activities
CIC9	Maintain Script Texts
CIC2	Maintain Variables
CRMM_TM_SCRIPT	Maintain interactive script structure
CICTMSCRPPROF	Define Interactive Scripting Profile

Table 3.14 Customizing Transactions for Supporting Functions

Transaction/IMG Activity	Description
CRMC_CIC_AM_PROFILE	Alert modeler editor
CRMC_CIC_AM_META	Edit the alert-modeler meta model
CRMC_CIC_BP_PROFILE	Define Retrieval Profiles for Business Partner Attributes
CRMBW_CIC_ATTRIBUTES	Process BW Attributes for Business Partner
IMG • CRM • Enterprise Intelligence	Configuration of Software Agent Framework and Solution Database

Table 3.14 Customizing Transactions for Supporting Functions (cont.)

Function Group/Class	Description	Package
CCM7	Agent scripting	CCMA
CRM_TM_SCRIPTDISP	Telemarketing visible scripting	CRM_TELEMARKETING
CRM_TM_SCRIPTPROC	Telemarketing script processor	CRM_TELEMARKETING
CL_CRM_CIC_ALERT_MODELERX	CIC Alert Modeler Component	CRM_CIC_COMPONENTS
CL_CRM_CIC_BP_PROFILES	CRM CIC BP Profiles	CRM_CIC_COMPONENTS
CL_CRM_CIC_BP_PROFILES_CONTACT	CRM CIC BP Profiles	CRM_CIC_COMPONENTS
CL_CRM_CIC_CRB*	Component request broker	CRM_CIC_COMPONENTS

Table 3.15 Function Groups and Classes of Supporting Functions

SAP Note	Description
418175	CIC Reminder Scripting: List of Activities
449269	Maintaining Scripting variables
437722	Exposing data objects to the Alert Modeler
501941	Calling multiple functions in one Alert Modeler rule
656321	Replacement of Interactive Intelligent Agent
662550	Launching the Indexes Application (Software Agent Framework)

Table 3.16 SAP Notes on Supporting Functions

Index

A

- ABAP 60
- ABAP configuration 183
- Account identification 71
- Acknowledgment of receipt 174
- Action box 29, 40, 43, 55, 56, 116, 127, 132
- ActiveX Control 78, 116, 244
- Activity 30, 75
- Activity clipboard 29, 68, 69
- Activity monitor 93
- Activity price, internal 25
- Activity type 74, 168
- Address book 78, 80
- Agent
 - responsible 199
- Agent inbox 30, 32, 52, 77, 78, 88, 172, 215, 230, 248
- Alert 18, 33, 63, 83, 181
 - chat notification 83
 - documents, related 83
 - Reminder 83
 - solution, automatically proposed 83
- Alert modeler 56
- Alert parameter 185
- Alert profile 184
- ALV grid control 116
- ALV tree control 116
- Analysis
 - business 99
 - interaction 99
- Analytic CRM 86, 99, 206
- APPEND structure 145, 150
- Application area 40, 41, 106, 115, 166
- Application integration 242
- Application toolbar 42
- Approval 166
- Architecture 251
 - open 12
- ArchiveLink 30, 77, 173
- Authorization, structural 204
- Automatic Number Identification 47, 71, 142
- Availability check 23

B

- Back office 196, 211, 229
- Basic telephony 31
- Bid creation 22
- Breadcrumbs 63
- Broadcast messaging 19, 33, 34, 40, 56, 90
- BSP application 64, 91, 147, 149, 182, 233
- Business Add-In 73
- Business Data Context 29, 69, 83
- Business Data Display 29, 43, 49, 51
- Business layer 60
- Business object 29, 66
- Business Object Builder 128
- Business Object Layer 60, 70, 75, 234
 - Entity 235
 - Wrapper 70
- Business Object Repository 29, 172
 - method 43, 167
 - object 52, 79, 169
 - object attribute 128
 - object method 127
 - release status 131
 - virtual object attribute 128, 178
- Business partner 97, 106, 125, 157, 165, 181, 211
 - category 47, 72
 - relationship 47
 - role 47, 72
 - search 40, 47, 71, 140
- Business process 11, 21, 24
- Business Process Outsourcing 25
- Business scenario 21, 251
- Business Server Page 60
- Business transaction 251
- Business transaction search 205
- Business-to-business scenario 72
- Business-to-consumer scenario 72
- BW content 99

C

- Call appointment 22
- Call center component 51
- Call Center Telephony 31

- Call ID 99
- Call list 17, 22, 23, 31, 34, 92, 181
- Call state 39
- Call time 19
- Call-attached data 31, 51, 92, 246
- Callback function module 200
- Callback method 109, 119
- Calls
 - number 19
- Campaign 192
- Campaign management 17
- Capacity load 23
- Capacity planning 19
- Case Management 28, 84, 94, 214, 231
- Catalogue 94
- Categorization 203
- Category 97
- Category Editor 94, 236
- Certification 31
- Change document 127, 211
- Change history
 - business partner 206
 - status 206
- Characteristic, industry-specific 47
- Classification 23, 87, 94, 233, 242
- Classification hierarchy 34
- Client switch functionality 40, 230
- Code 94
- COM component 224
- COM4ABAP 224
- Communication channel, asyn-
chronous 30
- Communication management
 - software 31, 33, 50, 77, 91, 92, 99
- Compilation of indexes 94
- Complaint 213
- Complaints and returns management 23
- Component
 - customer-specific 124
 - hidden 41, 122, 199, 246
 - technical 27
 - visible 40, 112, 120, 244
- Component configuration 112, 120
- Computer Telephony Integration 31, 47, 71, 242
- Connection ID 99
- Connection volume 99
- Consultation 166
- Consumer care 213, 228
- Contact statistic 99
- Container 29, 176
- Content management 69, 204, 230
- Context 61, 65, 147, 149, 241
- Context area 63, 71, 83, 95
- Context menu 29, 45
- Context node 61, 65, 147, 149, 155, 241
- Controller 60, 147, 149, 181
 - Custom 62, 65, 154, 188
 - Replacement 64, 147, 181
- Cost sensitivity 24
- Costs of customer service 15
- Credit card number 145
- Credit memo 23
- Credit scoring 23
- Critical success factor 208
- CRM business transaction 74, 78, 97, 127, 166
- CRM case 75, 78
- CRM enterprise 49, 57, 67, 75
- CRM order 24, 30
- CRM process 46, 52, 71
- CRM server 28, 30, 56, 60, 71
- Cross-selling 17, 22
- CTI queue 51
- CTI queue profile 51
- Customer feedback 22
- Customer information 22
- Customer Interaction Center 16
- Customer Interaction Hub 11
- Customer life cycle 21
- Customer namespace 142, 147, 181
- Customer Relationship Management 11, 17
- Customer Service 23
- Customer Service Hub 11
- Customer service technician 23
- Customer-specific customization demands 12

D

- Data binding 61, 149, 151
- Data Dictionary 145, 150
- Data flow 44, 68, 133
 - bidirectional 29
- Data model 30, 75, 155, 235, 241

- Data traffic 75
- Default text 88
- Default view 62
- Default workspace 115, 120, 169
- Delegation 131
- Delta handling 60
- Derivation (in ABAP classes) 148
- Design Time Repository 63, 181
- Development class 34
- Dialer, automatic 31, 92
- Document flow 43, 69
- Drilldown characteristic 210
- Dynpro 106

E

- Easy Enhancement Workbench 218
- Email 19, 25, 30, 32, 52, 57, 77, 78, 83, 86, 94, 173, 204, 213, 225, 229, 233, 243
 - address 30
 - editor 52
 - filtering 87
 - template 34, 88
- Email Response Management System 19, 24, 27, 80, 86, 99, 100, 172
 - context 97
 - Service Manager 87
- Employee Interaction Center 24, 25, 47, 72, 228, 230
- Employee self-service 25
- End contact 118
- Enterprise Services Architecture 252
- Entity 60
- ERP sales order 78
- Escalation 166
- Escalation time 27
- Evaluation 28, 210
- Event 28, 41, 55, 56, 84, 238
 - subscription 108, 122, 200
 - terminating 185
 - triggering 185
- Event handler 108
- Event parameter 108
- Expert 236
- Express notification 174
- Extension, without modification 64
- Extractor 213

F

- Fact base 87
- Fact sheet 48, 73, 157
 - multiple columns 163
 - one column 158
- Fax 19, 32, 52, 78, 173, 213
- Flexibility 252
- Follow-up 22
- Follow-up activity 204
- Follow-up document 198, 206
- Form 213, 233
- Forwarding 23, 166, 215
 - automated 34
 - processes 97
 - rules-based 28
- Framework 28, 39, 51, 56, 65, 106, 117, 124, 156, 244
 - profile 64
- Framework profile 147, 219
- Free text search 57, 84
- Front office 196, 211, 229
- Fuzzy search 94

G

- Generic Interaction Layer 60, 156, 218
- GenIL Model Browser 150
- Group inbox 52, 79
- Group responsible 199
- Groupware 78, 80
- GUI status 42
- GUI-Container 117

H

- Handler class 68
- Help desk 23, 24, 195
- HR outsourcing 228
- HR system 72
- HTML 157
 - control 29, 117
 - editor 80, 88
 - page 43, 45
 - template 142, 145
- HTML Business Tag Library 60
- Human Capital Management 25

I

- IC event 107, 117, 122
- IC WebClient 18, 29, 35, 60

- IC WebClient Cookbook 39
- IC WebClient Workbench 147, 150, 155
- IC WinClient 17, 29, 34, 39
- IC WinClient profile 40, 115, 120, 141, 145
- IMG structure 173
- Implementation 21
- Implementation effort 231
- Implementation Guide 39
- Inbound process 22
- Inbound workflow 215
- Incident management 27
- Index page 66
- Info block 157, 163
- Info mail 213
- InfoProvider 207, 209
- Information Help Desk 24
- Information integration 167
- Information Technology Infrastructure Library 26
- InfoSource 99
- Inheritance 64, 149
- Installation component 47, 72, 196, 199
- Installation Guide 39
- Installed base 196
- Integrate third-party systems 12
- Integrated Communication Interface 31, 32, 71
- Integration 29, 224
 - client-side 244
 - with SAP R/3 229
- Integration gap 25
- Interaction 15, 29, 48, 74, 213
 - channel 77
 - context 28
 - history 23
 - preparation 22
 - statistics 99, 206
 - wrap-up 22
- Interaction Center 17
 - agent 15
 - Management 21, 23, 86
 - Manager 19, 37, 82, 86
 - marketing 21, 22
 - profile 28
 - reporting 23
 - sales 21
 - service 21, 23
 - workforce management 19, 86
- Interaction history 45, 216
- Interaction record 49, 75, 224
- Interactive Intelligent Agent 57
- Interactive scripting 33, 54, 82
- Interactive scripting editor 95
- Interactive Voice Response 51, 71
- Interface, server-side 30
- Internet 135
- Internet page 45
- Internet Transaction Server 68
- Intranet 135
- Intranet page 45
- Invoicing 27
- iObjects 47, 73, 218
- IT help desk 26

J

- Java applet 249
- JavaScript 56, 60, 225, 241, 249

K

- Key performance indicator 91
- Knowledge database 196, 197, 212, 214
- Knowledge management 23, 34, 93

L

- Language dependency 144
- Layout 39, 142, 146, 214, 234
 - L-shaped 39
- Lead management 22, 97
- Lead qualification 82
- Letter 19, 52, 78, 173, 213
- Logistics services 242
- Lotus Notes 78, 80

M

- Maintenance contract 197
- Manager dashboard 23, 33, 91
- Manager self-service 25
- Marketing attribute 22, 57, 218
- Marketing campaign 92, 181, 213, 216
- Master data 30, 46, 71, 203
- Messaging IFrame 60
- Microsoft Outlook 78, 80
- Microsoft Telephony Application Interface 31

Microsoft Word 80, 88, 225
Midsized company 231
Model 151
Model extension 156
Model View Controller concept 60, 65
Monitoring 19, 86, 90
Multi-channel Integration 77
Multi-document scenario 74
Multiple back ends, support 230

N

Navigation 83
 area 40, 41, 63, 106
 bar 29, 66, 137, 241
Navigational link 181, 185
Non-SAP solution database 224
Non-SAP system 29, 157

O

Object directory entry 140
Object link 29, 69, 75
Object type 168
Object, individual 218
Objection handling 83
ODS object 99
OK code 41, 55, 132
One-document scenario 75
Online Service System 34
Opportunity management 22
Order 30
Order receipt 22
Organization model 204
Organization, responsible 97
Organizational management 214
Organizational structure 28, 199
Outbound process 22
Outbound telesales 24

P

Package 34
Page attribute 61
Partner function 47, 74
People-Centric User Interface (People-Centric UI) 67, 166
Personalization 66, 91
Planned call 93

Planning activity 52
Presentation layer 60
Priority 97
Problem management 27
Problem message 27
Process 66
 business 19
 competence 18
 interaction 43, 68, 74, 99
 modeling 23, 95
 standard 24
 transactional 29
Process Integration 48
Product 73, 97
 serialized 47, 73
Product information 47
Product proposal, automated 17, 22
Project sales 22
Prospect data, qualification of 22
Pull mode 32, 77
Push mode 32, 77, 244, 247

Q

Query service 60
Queue 214, 244
Quick key 40
Quick search 79

R

R/3 object 68
R/3 order 24, 44
R/3 system 27, 67
Real-time monitoring 23
Record, interaction 49
Reminder scripting 40, 55
Remote Function Call 31, 44
Reporting 19, 25, 28, 205, 231
Response
 for customer 198
 internal 198
Response time 27, 196
Return On Investment 251
Routing 243
Routing rules 52
Rule editor 19, 28, 88
Rule engine 87
Rule modeling 87

Rule services 87
Runtime framework profile 64
Runtime Repository 63, 181

S

Sales cycle analysis 22
Sales order 75
Sales process 232
SAP .NET Connector 224
SAP Business Information Warehouse
48, 56, 73, 99, 157, 196
SAP Business Workflow 19, 28, 32, 52,
86, 172, 203, 231, 243
SAP BW queries 57
SAP client 26
SAP CRM 48, 73
SAP CRM Internet Customer Self
Service 204
SAP Enjoy Control 106, 115, 245
SAP Enterprise Portal 19, 33, 86, 91,
94, 213
SAP ERP 18
SAP Exchange Infrastructure 27
SAP Help Portal 39
SAP Implementation Guide 105
SAP NetWeaver 11, 57, 251
SAP R/3 18, 48, 73, 157
SAP Service Marketplace 39
SAP Solution Manager 21, 39
SAP standard text 225
SAP Web Application Server 18, 30, 60
SAP Web Repository 47, 143
SAPconnect 30, 32, 52, 77, 87, 172
SAPphone 30, 50, 92
SAPphone test transaction 51
Scratch pad 63
Script, interactive 18, 19, 22, 33, 34, 54,
82, 99
Search object 156
Search profile 141
Search type 142
Search, knowledge-based 17, 23, 33,
57, 84, 251
Search, linguistic 94
Self-service 25
Sender address 52
Separation of UI and application logic
76

Server polling 60
Service contracts 27
Service employee 196
Service history 23
Service level 19, 99
Service Level Agreement 27, 203, 231
Service Manager 87
Service order 57, 75, 198, 206
Service process 196
Service processing, integrated 205
Service quality 15, 24
Service ticket 27, 34, 75, 94, 231
Shortcut 66
Simple Mail Object Protocol 32
Simple Mail Transfer Protocol 32
Simple Object Access Protocol 249
Slot 39
Software Agent Framework 57, 72, 84,
93
Solution database 23, 33, 34, 57, 84,
93, 214, 224, 236
Solution time 196
Spell check 88, 225
Standard response 78, 94
Standard task 79, 89, 174
Starting IC WinClient 41
Statistics interface 31, 99
Status 97, 212
Status schema 203
Subscreen 107, 110
System
logical 44, 68, 72, 132

T

Tab 112
Tab ID 112, 120
Team selling 22
Telemarketing 17
Telemarketing campaign 22, 100
Telephone 77, 204, 229, 233
Telephone call 213
Telephone number 30
Telephony pushbutton 51
Telesales process 22
Template 214, 224
Text Edit Control 116
Text modules 34
Thin client architecture 19

Ticker 90
Toolbar 63, 118
Tooltip 185
Transaction category 74, 127
Transaction launcher 29, 67, 135
 class 135
Transaction type 48, 74
Transaction workspace 127, 167
Transfer phone calls 247
Transport 140
TREX 57, 72, 84, 94
Trouble ticketing process, multilevel
 27
Troubleshooting 196
Trust relationship 44
TYPED_CONTEXT 61

U

Uniform Resource Locator 68, 135, 224
Universal queueing 19, 32, 77, 249
Universal routing 19, 32, 77
Up-selling 17, 22
URL parameter 135, 138

V

Value chain 252
View 60, 147, 151, 181, 238, 241
View area 62
View controller 65
View set 62, 241
Virtual Private Network 60
Voice data forwardings 51

W

Wait time 19
Web browser 60
Web chat 32
Web form 19, 87

Web service 60
WebChat 77, 78
Wildcard 84
Wizard 68, 135, 184
Work area 63, 71
Work item 25, 52, 78, 166, 248
Work mode 32
Workflow 206, 248
Workflow Inbox 166
Workflow standard tasks 52
Workflow template 52, 79, 89
Worklist 77, 204, 215, 230, 235
 integrated 25
Workspace 40, 41, 43, 48, 54, 122, 205,
 230
 buttons of 118
 class 107, 116
 container 107
 create 107
 customer-specific 42, 112, 120
 delete 107
 execute 107
 interface 107
 lifetime 108
 methods in a 107
 parallel process 107
 pushbuttons 107
 text 107
 toolbar 109
 visibility of 108
Workspace Manager 169
Wrapper class 245

X

XML 32, 56, 157
XPath 225
XSLT program 71, 92