SIEBEL® eBUSINESS APPLICATIONS

SIEBEL PERSONALIZATION ADMINISTRATION GUIDE

SIEBEL 2000

VERSION 6.1

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Contents

Introduction

Who Should Use This Guide

This guide describes how to implement the Personalization feature in your Siebel application. Specifically, it discusses the Personalization Administration screen and its views.

The audience for this guide consists of:

Marketing Administrators	Persons responsible for setting up and maintaining a marketing department; duties include designing and managing campaigns, product marketing information, and product distribution lists.
Siebel Application Administrators	Persons responsible for planning, setting up, and maintaining Siebel applications.
Siebel System Administrators	Persons responsible for the whole system, including installing, maintaining, and upgrading Siebel products.
Database Administrators	Persons who administer the database system, including data loading; system monitoring, backup, and recovery; space allocation and sizing; and user account management.
Siebel Application Developers	Persons who plan, implement, and configure Siebel applications, possibly adding new functionality. A developer is typically someone from the Information Services department.
Installers	Persons responsible for setting up Siebel systems for initial use. An installer is typically a system administrator, a database administrator, or someone from the Information Services department.
Configurators	Persons responsible for planning, implementing, and configuring Siebel applications. A configurator is typically a consultant or someone from the Information Systems department.
Web Masters	Persons responsible for a company's web site or its web strategy.

To use this guide, you should have an understanding of:

- Siebel Tools and using it to configure your Siebel application
- The structure of your Siebel application, such as the names of the views, applets, and fields you want to use for Personalization
- Boolean expressions, to write personalization rules

How This Guide Is Organized

This guide provides information necessary to implement, configure, and monitor Personalization in your Siebel applications, with particular detail provided for both application and client/server administration.

NOTE: Your Siebel implementation may not have all the features described in this guide, depending on which software modules you have purchased.

Additional Documentation

The following documentation also provides information on the topics addressed in this guide.

Siebel Basics

Siebel Release Notes and *Siebel System Requirements and Supported Platforms*

Siebel .COM Applications Guide

Configuring Siebel .COM Applications

Siebel Tools Guide

Siebel Client Installation and Administration Guide

Siebel Applications Administration Guide

- The documents *Siebel Basics* and *Siebel Release Notes* provide you with important information about your Siebel application before you being using it.
- The guides *Siebel .COM Applications Guide* and *Configuring Siebel .COM Applications* describe the .COM applications. If you plan to deploy Personalization on a .COM application, you should read these books in conjunction with this one.
- The *Siebel Tools Guide* describes how to modify your Siebel application.

- The *Siebel Client Installation and Administration Guide* describes how to install all the Siebel clients, including the thin clients, and describes how to modify the .CFG file. You should read the *Siebel Client Installation and Administration Guide* in conjunction with this one.
- The *Siebel Applications Administration Guide* provides information on implementing your Siebel application.

This guide does not provide information about general software concepts, such as records and queries, or about using Windows. Neither does it provide instructions for basic navigation of Siebel applications. For this kind of information about Siebel applications, refer to *Siebel Basics*.

Administrators and developers, such as marketing administrators, call center administrators, and application developers, should also read the *Siebel Applications Administration Guide* for information on how to set up and maintain Siebel applications features.

You will find information about Siebel Technical and Professional Services in the *Guide to Siebel Global Services*.

For copies of these documents, please use Siebel Books Online, accessible via the Worldwide Services tab on the Siebel Systems Web site (www.siebel.com). Through Siebel Books Online, you can order additional Siebel documentation and copies of the *Siebel Bookshelf for Siebel eBusiness Applications* CD-ROM.

Another source of information is the *Siebel Online Help*.

Contacting Siebel Technical Support

Do you know how to access Siebel Technical Support? It is crucial that you understand the requirements for getting support. This will ensure the best experience possible. If you have questions, please don't hesitate to contact us.

To maximize your knowledge of Siebel products and your return on investment:

- You must attend Siebel training to become a "designated contact."
- Your trained designated contacts provide technical support to your users. Siebel Technical Support provides support directly to your "designated contacts" only.

To provide efficient and timely support, and to empower you in the process:

- Siebel Technical Support is primarily Web-based, accessed via Siebel SupportWeb (http://supportweb.siebel.com). Please submit new service requests to us through SupportWeb, where you can also search the knowledge base for solutions.
- Designated contacts receive read/write access to SupportWeb. All other project team members at your company receive a read-only account to ensure they can reap the benefits of the support knowledge base.

To register for Siebel training, please access http://www.siebel.com/education/ and choose Siebel Customer Technical Education. Questions on the above can be directed to Siebel Technical Support at:

eBusiness Customers:	support@siebel.com
MidMarket Edition Customers:	swasupport@siebel.com or:

Americas: eBusiness: 800.214.0400 or 650.295.5724 MidMarket: 800.354.1571

London:	+44.1784.494.949	Tokyo:	0120.606.750 (Japan domestic only), +81.3.5469.3811 (Outside of Japan)
Munich:	+49.89.95718.400	Singapore:	+65.320.8533 (main number)

Please submit technical issues and updates to Siebel SupportWeb (http://supportweb.siebel.com). If you do not have a SupportWeb account, please email us at the relevant email address above. We appreciate your business and look forward to working with you to ensure 100% customer satisfaction.

Siebel Welcomes Your Comments

To help us with future versions, we want to know about any corrections or clarifications that you would find useful. Please include in your message:

- The title and version of this guide
- Your name, company name, job title or functional area, phone number, and email address

Write to us via regular mail or email at:

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We appreciate your feedback.

Personalization Administration 1

About Personalization

Personalization allows you to define rules to dynamically show and hide views, applets, and content during a user's experience with the Siebel application. It also lets you track and respond to users' actions on a website. Personalization leverages Siebel's configure once, deploy anywhere architecture, allowing you to deploy personalized experiences for all users—customers, employees, and partners—across all channels. Personalization includes the following features in your Siebel application:

- User profile, allowing you to manage information about users so you can personalize their experience.
- Extensions to the descriptions of your content, such as products, literature, or any Siebel business component so you can target it for certain users.
- The ability to dynamically track and respond to user interactions on a website or traditional client.
- The ability to turn views and applets on and off at display time, based on personalization targeting rules.

An example of personalization is a website home page that reflects customers' interaction with a call center, such as the status of a recent order, up-to-the-second answers to their service requests, and personal product catalogs. This personalized information gives customers the feeling the page was created just for them, to meet their needs.

On a website, other benefits of personalization include:

- Making your website easier to use, thus creating a compelling user experience which brings customers back.
- Providing a portal-style home page gives users a unified view of critical information.
- Increasing revenues by better understanding and responding to customer needs.
- Improving customer service.
- Saving your customers' time.
- Increasing customer loyalty.

Personalization means showing users what they want and need to see, greeting them by name, sending them emails addressed to them, having them enter profile information, and showing them “their” orders. It is a distinction of communicating one-to-one, as opposed to everyone.

Content targeting refers to showing users information—content—they want and need to see in your Siebel application. These rules can be created by business users at run time using Siebel Personalization.

Business Scenarios

The following scenarios describe some of the ways you can use personalization. Some of the scenarios describe functionality that requires configuring your Siebel application.

New User Registration and Business–to–Consumer *e*Commerce

An individual consumer, for example, Henry Kim, wants to purchase a personal computer product over the web from a company called PCS Computing. The consumer browses the home page of the PCS website that is powered by Siebel *e*Sales, and decides to register his profile on the PCS Computing website.

He is asked a series of profiling questions that are implemented using Siebel *e*SmartScript. The consumer provides his name, addresses (bill to and ship to), email address, birthday, gender, industry, and company name and answers several questions regarding the primary usage for the computer product, including whether it will be used for home or business purposes. The consumer is asked to enter a username and password that he can use to later logon, and then enter the password twice to confirm.

Based on registration, the user is presented with a welcome salutation on his own personal home page. The personal home page displays content that is targeted at this specific consumer.

The personal home page has a salutation at the top of the page, welcoming the user, and presenting today's date (Welcome, Henry Kim. Today is November 1, 1999). The personal home page includes several applets, including both information that is not specific to the individual as well as information that is targeted to this type of consumer.

The general information includes a high level description of PCS Computing's business. The general information also includes a high level product catalog and description of PCS Computing's key product lines, with hyperlinks that allow the consumer to drill down for more details.

The consumer-specific information includes an applet with PCS Computing's Recommended Products that PCS suggests that the consumer should consider. The specific product recommendations are based on the fact that the consumer is a 45 year old male working in high-tech. Based on this, PCS has recommended four different high end desktop computer configurations that include a complete multimedia kit and a large 21" monitor.

If the customer is interested in more information about these selections, he can drill down on any of the four selections to browse specific details of the product catalog. Or, he can simply pick one selection, put this in his shopping cart, and check-out, by placing an order on-line using either a credit card or direct billing.

Subsequent Business–to–Consumer *e*Commerce

After the holiday season, the same consumer returns to the PCS Computing website. Upon logon, the user is presented with a revised version of the personal home page. The salutation welcomes back the consumer (Welcome back, Henry Kim, Today is January 5, 2000), and presents today's date.

Now, however, the personal home page has changed, showing the consumer more targeted content. First, there is a new applet that displays Prior Orders, the date submitted, and the order status. Second, there are new product recommendations such as Microsoft Office, since the customer did not purchase an office productivity suite with his home PC.

Business–to–Business *e*Commerce

Sam Smith is a procurement manager for AK Parker Inc. and is interested in purchasing 275 portable computers from PCS Computing. AK Parker is an existing customer, allowing Sam to logon to the PCS website and view his own personal home page.

Since PCS has added a new ship to location, Sam clicks on the Profile view and is able to name and add the new ship to address. Since the new ship to location is in Kansas, the contents of Sam's personal home page change. On Sam's personal home page, there are a number of applets that display targeted information. These include My Company's Orders, displaying all of the recent orders and order status that AK Parker has submitted to PCS. There is another applet that displays My Orders, that only shows the orders that Sam himself has submitted on behalf of AK Parker Inc.

Sam sees the salutation on the personal home page ("Welcome Sam Smith of AK Parker Inc. Today is November 29, 1999"). Sam reviews the Product Recommendations applet, and notices that two different Kansas Service Packages are recommended based on the new ship to address. He also is able to browse the "New" indicators on the Recommended Products applet to see what new computing devices PCS Computing is bringing to market.

One–to–One Customer Service

Alan Donovan is the IT manager for AK Parker Inc. His company has a long history of buying from PCS Computing. Based on his company's recent purchase of 275 laptops and 100 Pentium III Windows 2000 devices, Alan needs immediate service from PCS.

Alan has recently experienced problems upgrading his 275 laptops to Windows 2000, so that the desktops and laptops will all run one O/S with one network. Alan decides to logon to the Internet self-service site on PCS.com (powered by Siebel *e*Service) and get immediate assistance.

When Alan logs into the system, he is presented with his own personal home page. This page greets Alan with "Welcome back Alan Donovan. Today is February 15, 2000." He notices that there is a new applet that is titled Windows 2000 FAQs. This lists a searchable library of all FAQs to date that have been logged about Windows 2000 with PCS technical support. This is displayed based on AK Parker's recent decision to purchase Windows 2000, and also based on the outstanding service request that is HIGH priority that is related to the Windows 2000 product.

Alan then reviews the applet titled AK Parker's Service Requests to review the updates to his outstanding issues. The list is sorted in priority order, with the highest priority open service requests at the top. Alan sees that there is new information about this request, and drills down to see the details of the updates. Attached to this service request is a new Solution, posted by the PCS technical support call center. As Alan clicks on this, he is able to get an immediate answer to his outstanding issue.

If this is not the right solution, Alan can click on the view bar to Contact a Service Agent.

Business Partner Segmentation

PCS has a multi-tiered reseller system, to provide optimal service and support to different sized accounts. Large corporate accounts of over $200,000 of business are handled by Platinum resellers, while accounts in the $100,000 - 200,000 range are handled by Gold resellers, with Bronze resellers handling accounts that have generated 0 - $100,000 to date.

PCS has implemented Siebel Workflow and Assignment Manager to perform intelligent lead routing to match the right customer with the right business partner. Since AK Parker recently purchased more computing products, they are now being serviced locally by a Platinum reseller (where in the past, they had purchased just over $100,000 in products, thereby assigning them to Gold reseller).

Chris Peters works for Kingston Systems, the local Platinum reseller for PCS Computing in Northern California. Chris receives an email alert, telling him that he now has a new corporate account to call on. The account is called AK Parker Inc. They have just ordered new products and become a platinum account.

Chris clicks on the email, and sees that it is personalized to his name and address and summarizes the latest account activity from AK Parker. He clicks on the embedded URL, which navigates him to the PCS Partner Portal, built using Siebel *e*Channel. The PCS Partner Portal allows reseller, partners, and dealers to browse customer information and product information, access the FAQ and Solutions database to solve customer problems, generate quotes, and take orders, all through a standard web browser.

As Chris logs in, he is greeted with the following salutation: "Welcome back to the PCS Partner Portal. Today is March 1, 2000." As he browses the rest of the page, he notices that he has been immediately directed to the Account Detail Orders view for AK Parker. The Account Detail Orders view shows three applets on the screen. Two are standard, the account form applet that shows the basic account information for AK Parker, and a child Orders list applet showing the latest orders from AK Parker and their order status. The third applet, however, is tailored to this situation, and shows Upsell and Cross-sell Recommendations. It displays the products and services first that Kingston Systems might approach AK Parker with.

The top selling product/service is an extended service warranty, the single most profitable part of Kingston Systems business. This is recommended based on the fact of the computing products that PCS has purchased, and based on the fact that they have not yet purchased extended service. Chris dials the phone and generates the service quote, preparing for an easy high margin sale.

Later, after making the sale, Chris can go back to his personal home page on the partner portal. He reviews his personal home page that summarizes all of his top opportunities, accounts, contacts, activities, and can review new products released by PCS. He can also review Company and Competitor *e*Briefings that combine customer information and external content from external data sources using Siebel *e*Briefings.

Administering Personalization

There are many aspects to configuring personalization, as shown in Figure 1-1 on page 1-10:

- Content tagging

  Content tagging means using or adding content attributes that describe the content. For example, your product definitions in your Siebel application might include a description of industry focus or value classification.

  Content tagging is done in the appropriate administration view. For products, you would use the Product and Product Administration views.

- User profile definition

  User profiling means gathering information about a user; the information is used in evaluating personalization rules. To follow the example above, user profiling could keep track of the industry a customer is focused on. This profiling information can come from a website interaction, a call center interaction, or through analysis in Siebel Marketing.

  In the dedicated client, user profiling can be done in the Contact screen.

- Business rules administration

  In the Siebel client, you create rules which govern what views, applets, and content are shown to which users. These rules are written in an intuitive "if-then" syntax and allow you to make changes to the business logic without having to call an application programmer. Rules can be written to examine either the attributes of tagged content or users, or the actions of users in the system. User actions can include where they click on a website, or what information they are asking about in a call center application.

  NOTE: These rules are not administered or written in Siebel Tools. Instead, they are managed from the Siebel client.

- Association of business rules to Siebel views, applets, and content

  Business rules are associated with Siebel views and applets at run time, and only the views, applet, and content matching the rules are shown to the appropriate user.

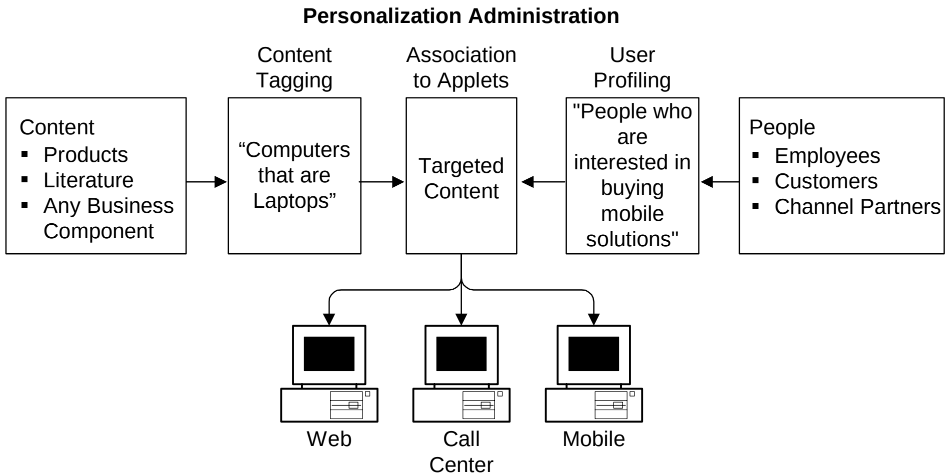

Figure 1-1. Configuring Personalization

Tasks for Administering Personalization

Changing the .CFG File

In order to use Personalization on the connected client, you must change the parameter EnablePersonalization from FALSE to TRUE. This parameter is located in the .CFG file. You may choose to change this parameter only in the .CFG file of the person who is administering personalization, or, if you want personalization rules for your dedicated clients, you will change this parameter in everybody's .CFG file.

NOTE: This parameter defaults to TRUE for .COM Applications.

For more information on .CFG files, see the *Siebel Client Installation and Administration Guide*.

Views View

Use this view to set up personalization rules that determine whether or not a view is shown. The basis for the rules can include a user's profile attribute, time or date, or anything else.

To create rules for view personalization

1. Choose Screens → Personalization Administration → Views.

   The View Personalization view appears.

2. Select a view.

3. Enter a Start Date and End Date for which the view will be displayed.

4 Create a rule for the selected view in the Condition Expression field; for more information, see "Condition Expressions" on page 1-27.

The expressions are simple Boolean expressions, entered as text. The expressions used for dynamic display may call reference user profile attributes. Attributes may be compared with constants and other attributes. AND and OR conjunctions are supported.

The expressions use the same internal mechanism as the Siebel query language. Access to user profile attributes is made through the GetProfileAttr function, which takes the attribute name as an argument. GetProfileAttr can be used in expressions to compare values in the content records with values in the user profile or to compare values in the user profile to constants. For more information on this function, see the *Siebel Object Interfaces Reference*.

Applets View

Use this view to set up personalization rules that determine whether or not an applet is shown, based on a user's profile attributes. Also use this view to determine what data, or content, is displayed in the applet, if it is shown.

Where personalization really makes an impact on the customer is through its effect on content. What customers notice when they visit a Siebel personalization-powered channel is that what they see is personalized to them. Thus, every customer interaction is completely different, and personalized. No two users will find their experience the same.

In your Siebel application, personalization rules are dynamically evaluated at display time to affect the content of applets. No additional Siebel Tools configuration or work is necessary; out-of-the-box, all Siebel applets are fully capable of accepting personalized content.

Applets can be set to display based on user profile attributes. Thus, special applets can be shown to users for whom they are most relevant. For example, you can gather user attributes about whether or not the user is a business or a consumer. Then, a credit card entry applet can be shown for "consumer" users, while "business" users are offered an applet to pay by purchase order.

To create rules for applet personalization

1. Choose Screens → Personalization Administration → Applets.

   The Applet Personalization view appears.

2. Choose Edit → Add New Record.

   An empty row is added to the list.

3. Select an applet in the Name field; there is a picklist of all applets in the repository.

   If you want to find the name of an applet from inside the application:

   a. Start the Siebel dedicated client.

   b. Navigate to the applet you want to personalize.

   c. Choose Help → About View.

      Alternatively, you can use Siebel Tools to determine the name of the applet you want to personalize.

4. Enter a Start Date and End Date for which the applet will be displayed.

5. Create a rule for the selected applet in the Condition Expression field.

   The expressions are simple Boolean expressions, entered as text. The expressions used for dynamic display may call reference user profile attributes only. Attributes may be compared with constants and other attributes. AND and OR conjunctions are supported.

   The expressions use the same internal mechanism as the Siebel query language. Access to user profile attributes is made through the GetProfileAttr function, which takes the attribute name as an argument. GetProfileAttr can be used in expressions to compare values in the content records with values in the user profile or to compare values in the user profile to constants. For more information on this function, see the *Siebel Object Interfaces Reference*.

NOTE: The Condition Expression field determines whether or not the applet is displayed. It does not determine what content the applet displays, if the Condition Expression evaluates to TRUE and the applet is shown. See the section “To create rules for applet content personalization” to use personalization to determine what content is displayed.

To create rules for applet content personalization

1. Choose Screens → Personalization Administration → Applets.

   The Applet Personalization view appears.

2. Select the applet for which you would like to personalize content; if it does not exist, add it.
3. Select the Rules Set applet.
4. Choose Edit → Add New Record.

   An empty row is added to the list.

5. Complete the fields; fields are described in the following table.

Field	Comments
Condition Expression	A condition expression to determine if the rule set should be evaluated. For more information, see “Condition Expressions” on page 1-27.
End Date	The date the rule set will stop evaluating.
Rule Set Name	A rule set must already exist before you can select it. For more information on creating rules sets, see the section “Rules View.”

Field	Comments
Sequence	The order in which rule sets are evaluated. Rule sets will evaluate in sequence until a rule set returns more than zero records. At that point, it stops, and returns that result. In other words, the personalization engine is "OR"ing the rule sets. This is different from rules, where all the rules are evaluated. In this case, the personalization engine is "AND"ing the rules.
Start Date	The date the rule set will start evaluating.

Rules View

Use this view to set up personalization rules that determine what data is displayed in an applet, depending on a user's profile attributes, content attributes, or both.

Aspects of this rule creation interface include:

- Simple expressions—rules are entered as simple expressions and can be managed by combining groups of rules into rule sets. All rules take the form of "if an expression is true, then show this content, and hide this content."
- Begin and end dates—rule sets can be given begin and end dates for execution. This makes creating a set of rules for Christmas recommendations which only are evaluated from November to December extraordinarily easy. Without intervention, the rules simply start evaluating when they are needed, and are skipped when they are not.

- Attribute values and rules can be continuously updated without updating the .SRF or bringing down any servers.

  However, rules for a particular view or applet are read when the object is loaded, so any new rules created since the object was loaded will not be available to that user until the server is restarted. For more information on refreshing the server, see "Refreshing the Object Manager" on page 1-34.

  Content attributes are loaded each time the appropriate business component is executed and user profile attributes are loaded each time the user establishes a new connection to the object manager. If users edit their profile on the User Profile business component, when they choose save these profile attributes will be written to the database. In other words, the attributes are refreshed when users update their profile through the User Profile Business Component.

You can use rules for many reasons. Table 1-1 shows some examples of how you might use rules and personalization.

Table 1-1. Examples of Goals Achieved Using Rules and Personalization

Goal	Example
Profiling	When a person views Home Equity Loan information set "Dwelling Status" to "Home Owner."
User segmentation	Mark attribute "Big Spender" TRUE if total purchases are above $10,000.
Content targeting	Show all news stories whose Region is "Mid-West" to anyone whose Region is "Mid-West."
Actions	If users have the attribute "FirstTime Visitor," show them the "welcome" applet.

To create a rule set

1. Choose Screens → Personalization Administration → Rules.

   The Personalization Rules view appears.

2. Choose Edit → Add New Record.

   An empty row is added to the list.

3. Enter the name of the new Rule Set.
4. Select a Start Date and End Date for which the Rule Set is to be in effect.
5. Make sure the Active field is selected.

   Unselecting the Active field is a quick way to “turn off” a rule set, without adjusting the start and end dates.

To create rules for a rule set

1. Choose Screens → Personalization Administration → Rules.

   The Personalization Rules view appears.

2. Select the rule set for which you are creating rules.
3. Select the Rules applet.
4. Choose Edit → Add New Record.

   An empty row is added to the list.

5. Enter the Condition Expression; for more information, see “Condition Expressions” on page 1-27.

6 Complete the fields; some fields are described in Table 1-2.

Table 1-2. Selected Fields in the Rules Applet (Sheet 1 of 2)

Field	Comments
Active	Flag indicating whether the rule is being evaluated or not. Checked means it will be evaluated. This is a quick way to turn off a rule without changing the start and end dates.
End Date	The date on which the rule should stop being applied.
Exclusion Expression	The same as inclusion expression, except that records that evaluate to true are *not* shown. This is used to describe what not to show a user, instead of what to show.
Inclusion Expression	Any expression that can evaluate to true or false for a given record. It is written in the format of search specification that would normally be put on business components or applets in Tools. For example: ■ GetProfileAttr(“Target Industry”) = [Industry Focus] would return records for which the value of the business component field Target Industry matched the value of the profile attribute called Industry Focus. ■ [Product Line] LIKE “*enti?m*” would return all records where the Product Line field contained the string “enti?m” (such as “The Pentium I Line” and “Pentiums”) ■ EXISTS ([Product Component] = “4 Meg Ram”) would return all records in which the MVG Product Component referred to a child record with the value “4 Meg Ram”. Additional functions: ■ GetProfileAttr(“profile attribute”) returns the value of the profile attribute (1.2) referenced in quotes. ■ InList(“value”, “comma delimited list”) checks to see if value occurs one or more times in a comma delimited list. Example: InList([Product ID], GetProfileAttr(“Product Seen”)) returns TRUE if the current record's Product ID field is in the profile attribute comma delimited list Product Seen. Used in an Inclusion Expression, it would return the products whose IDs were in the profile attribute called Products Seen.
Invoke Method	Method to invoke on the business component, if the condition expression evaluates to true and the rule type is Invoke Method.

Table 1-2. Selected Fields in the Rules Applet (Sheet 2 of 2)

Field	Comments
Invoke Method Context	Parameter to pass the business component. You can only pass one argument.
Name	Name for conveniently referring to the rule.
Rule Type	The type of rule. Choices include: Expressions—the most common type of rule, which will evaluate the Inclusion Expression and the Exclusion Expression to determine what records to return. BusService—A rule which will invoke a business service. Invoke Method—A rule which will invoke a method on the business component to which the applet refers, or on the application.
Sequence	Number describing the order in which the rules should be evaluated. Execution begins with the rule with the lowest sequence number (such as 1). Rules with the same sequence number are executed in random order. Rules are evaluated in sequence until all rules are evaluated. The union of all rules is returned to the underlying business component (associated with the applet these rules apply to) as additional search spec. Any search spec, and/or visibility on that business component remains and are only augmented by the rules. The sequence is especially important for Salutation applets, as it defines the order of the text in the salutation.
Service Context	Parameter to pass to the Service Method. While a business service may take many name/value pair parameters, you can only pass one parameter—called Context—from personalization.
Service Method	Method to invoke on the Service Name.
Service Name	Name of the business service to invoke, if the rules evaluates to true and the rule type is BusService.
Start Date	The date on which the rule should begin being applied.

Events View

Use this view to create events which are tracked in your Siebel application. When an event occurs, it calls an action set. For more information on action sets, see "Actions View" on page 1-23.

When an event occurs, the personalization engine performs a configurable action. These actions modify content attributes and/or user profile attributes, thus potentially causing personalization rules to fire. This process is shown in Figure 1-2.

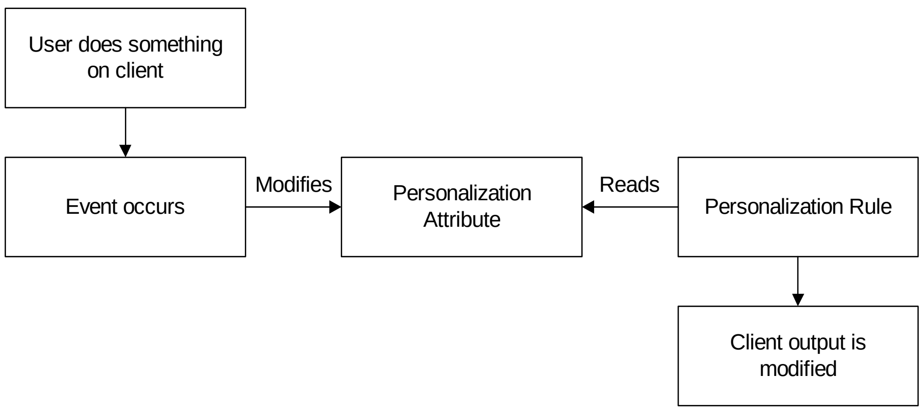

Figure 1-2. Events, Actions, and Content Changes

NOTE: This event doesn't "cause" rules to fire. However, modifying attributes, which rules refer to, can cause rules to evaluate different content.

Using this event framework, it would be possible for the personalization engine to watch for customers to remove products from their shopping carts on a website and, when they do, recommend a substitute product they might want to consider.

The events are all specific to well-known objects in the system and are defined by:

- **Object Type.** The type of object the name refers to: Application, Applet, BusComp.
- **Object Name.** The name of the object. This is the name as defined in Tools.

- **Event Name.** The specific event the object supports. The set of events is different for different object types.
- **Action.** What action is taken when the event occurs. You define this in the Personalization Actions view.

Since most actions just set or modify user profile attributes, the most common will be the simple set expressions. These store information that will later be used to tailor content through the various dynamic facilities described below. For more complex behavior, the extension language can perform arbitrary processing and possibly set user profile attributes in a more complex manner. Calls to services allow common functionality to be invoked easily.

To create events

1. Choose Screens → Personalization Administration → Events.

   The Personalization Events view appears.

2. Choose Edit → Add New Record.

   A blank row appears.

3. Enter the Condition Expression; for more information, see "Condition Expressions" on page 1-27.
4. Select the Event; for more information, see "Events" on page 1-28.
5. Complete the fields; they are described in Table 1-3.

Table 1-3. Selected Fields in the Personalization Events View (Sheet 1 of 2)

Field	Comments
Action Set Name	The action set that will run when the event occurs.
Alias	A list of previously defined Event Aliases. Selecting an event alias automatically fills in the Object Type, Object Name, and Event as they were filled out in the Personalization Event Aliases view. For more information, see "Event Aliases View" on page 1-22.

Table 1-3. Selected Fields in the Personalization Events View (Sheet 2 of 2)

Field	Comments
Object Name	The name of the specific object you are watching for an event on. For example, if the object type is BusComp, then you could select Opportunity as an object name. If the object type is Application, then you could select Siebel *e*Sales. **1** Start the Siebel dedicated client. **2** Navigate to the applet you want to personalize. **3** Choose Help → About View. Alternatively, you can use Siebel Tools to determine the name of the applet you want to personalize.
Object Type	Required. The type of Siebel Object for which to watch for an event. Possible values are: Application. Siebel application object Applet. Siebel applet object BusComp. Siebel business component
Sequence	For some events which are exactly the same (same object type, object name, and event), the sequence controls in what order the action sets are fired. One event can fire multiple actions sets.
Sub-Event	An options parameter for the event. For InvokeMethod, the name of method you wish to invoke. For SetFieldValue, the name of the field which is being set.

Event Aliases View

Use this view, as an experienced administrator, to set up, ahead of time, a series of event aliases which refer to specific Siebel object events. Give these events useful names which make referring to them easy and more intuitive. Event aliases are just short-cuts for events.

To create event aliases

1 Choose Screens → Personalization → Event Aliases.

The Personalization Event Aliases view appears.

2 Choose Edit → Add New Record.

A blank row appears.

3 Select the Event; for more information, see "Events" on page 1-28.

4 Complete the fields; they are described in Table 1-4.

Table 1-4. Selected Fields in the Personalization Event Aliases View

Field	Comments
Name	Name for conveniently referring to the event. For example, you might name the event "Add to Cart".
Object Name	The name of the specific object you are watching for an event on. For example, if the object type is BusComp, then you could select Opportunity as an object name. If the object type is Application, then you could select Siebel *e*Sales. For example: Application: "Siebel eSales" Applet: "Recommend Product List Applet" BusComp: "Recommend Products"
Object Type	Required. The type of Siebel Object for which to watch for an event. Possible values are: Application. Siebel application object Applet. Siebel applet object BusComp. Siebel business component
Sub-Event	An options parameter for the event. For InvokeMethod, the name of method you wish to invoke. For SetFieldValue, the name of the field which is being set.

Actions View

Use this view to define actions. Actions are triggered when an event occurs. They modify profile attributes when an event occurs.

The following actions are supported for all events:

- **Simple attribute set expressions.** Simple expressions that set user profile attributes. These are: setting to a constant value, auto-increment, auto-decrement, increment by a constant, and decrement by a constant.
- **Service InvokeMethod call.** A service will be loaded (if not already) and the specified method will be called. The call will be automatically set up with the event state as arguments. Services can be written in C by Siebel developers, or in SVB or JavaScript by VARs or customers.

To create an action set

1. Choose Screens → Personalization Administration → Actions.

   The Personalization Actions view appears.

2. Choose Edit → Add New Record.

   An empty row is added to the list.

3. Enter the name of the new Action Set.
4. Select a Start Date and End Date for which the Condition Expression is to be in effect.
5. Make sure the Active field is selected.

   Unselecting the Active field is a quick way to “turn off” a rule set, without adjusting the start and end dates.

To create actions for an action set

1. Choose Screens → Personalization Administration → Actions.

   The Personalization Actions view appears.

2. Select the action set for which you are creating actions. If the action set does not exist, create it.
3. Select the Actions applet.
4. Choose Edit → Add New Record.

   An empty row is added to the list.

5 Enter the Condition Expression; for more information, see "Condition Expressions" on page 1-27.

6 Complete the fields; some fields are described in Table 1-5.

Table 1-5. Selected Fields in the Actions Applet (Sheet 1 of 2)

Field	Comments
Action Type	The type of action. Choices include: Attribute Set—the most common type of action, which will perform an action on a user profile attribute. BusService—An action which will invoke a business service. InvokeMethod—An action which will invoke a method on the object (applet, business object, or application) which caused the event to occur.
Active	Flag indicating whether the rule is being evaluated or not. Checked means it will be evaluated. This is a quick way to turn off a rule without changing the start and end dates.
BusService Context	Parameter to pass to the BusService Method. While a business service may take many name/value pair parameters, you can only pass one parameter—called Context—in personalization.
BusService Method	Method to invoke on the BusService Name.
BusService Name	Name of the business service to invoke, if the rule evaluates to true and the rule type is BusService.
End Date	The date on which the action should stop being evaluated.
Invoke Method	Method to invoke on the business component, if the rule evaluates to true and the rule type is Invoke Method.
Invoke Method Argument	Parameter to pass the business component. You can only pass one argument.
Name	Name for conveniently referring to the action.
Sequence	Number describing the order in which the action should be evaluated. Execution begins with the action with the lowest sequence number (such as 1). Actions with the same sequence number are executed in random order. Actions are evaluated in sequence until all actions are evaluated.

Table 1-5. Selected Fields in the Actions Applet (Sheet 2 of 2)

Field	Comments
Set Attribute	The user profile attribute to perform the action on.
Set Expression	The expression to perform the set operator. This can be any expression which evaluates to something that the Set Operator can use. The administrator has access to all fields on the Business Component for the event which caused this action to occur (only if a Business Component caused the event to occur; if another event, such as an application event, occurs, then no fields are available): ■ Set: must evaluate to a single value. ■ Increment: must evaluate to an integer. ■ Decrement: must evaluate to an integer. ■ Add List: must evaluate to a single value. ■ Remove List: must evaluate to a single value.
Set Maximum	For attributes which are numbers this creates a maximum value over which the attribute cannot rise.
Set Minimum	For attributes which are numbers this creates a minimum value under which the attribute cannot fall.
Set Operator	One of five choices: ■ Set: sets a user attribute to an explicit value. Example: set DidLogin to “Yes”. ■ Increment: increment a user attribute by an integer (default value, if Set Expression is blank, is 1). Example: increment PagesView by 1. ■ Decrement: decrement a user attribute by an integer (default value, if Set Expression is blank, is 1). Example: decrement PagesView by 10. ■ Add List: add a value to a comma delimited list. Example: add the name of the current product to the list of products viewed. ■ Remove List: remove a value from a comma delimited list.
Start Date	The date on which the action should begin being evaluated.

Condition Expressions and Events

Condition Expressions

The Condition Expression is the same as in previous sections. This is a Siebel expression which evaluates to TRUE or FALSE, and determines whether the rule should be fired or not (for example, GetProfileAttrAsInt(“Number of Visits”) > = 7) would be true if that profile attribute is greater than 7.

Write the expression in the format of a search specification that would normally be put on business components or applet. For more information on search specifications, see *Siebel Tools Guide*. The following additional functions are available:

- GetProfileAttr
- InList
- GetNumBCRows
- BCHasRow

Condition Expressions are evaluated once, at display time. The expressions are evaluated as follows:

- If the expression is blank, the view is shown.
- If the expression evaluates to true, the rule is evaluated.
- If the expression is false, the rule is not evaluated.

There are also QBE functions similar to GetProfileAttr that return the resulting information in a different format. These functions include:

- GetProfileAttrAsInt
- GetProfileAttrAsNum
- GetProfileAttrAsDate
- GetProfileAttrAsTime
- GetProfileAttrAsDateTime

For example, GetProfileAttrAsDate would return the profile attribute formatted as a date. This allows you to do date comparisons, whereas GetProfileAttr returns information as text.

NOTE: You need to quote non-numeric values. To avoid interpretation of a value, such as a phone number, as a number, you need to quote it. Also, do not include punctuation in a phone number.

Events

The event you select depends on the Object Name or Object Type you are watching for.

Applet Events

The following event choices appear for an Applet Object Type:

- DisplayApplet—when an applet is shown (any client).
- DisplayRecord—when a record is shown in an applet (any client).

Application Events

The following event choices appear for an Application Object Type:

- Login—when a user logs in to the Siebel application, from any client.
- Logout—when a user logs out of the Siebel application (any client).
- WebSessionStart—when a user starts a web session through the Siebel Web Engine (SWE client only). May not be a WebLogin event because users can start web session without logging in (through a cookie).
- WebLogin—when a user logs in to a web session through the Siebel Web Engine using the login form, or a URL login. Does not fire for cookie logins.
- WebTimeOut—when a user web session ends without a user explicitly logging out.
- SetAttribute—when a user sets a profile attribute (any client).

Business Component Events

The following event choices appear for a Business Component Object Type:

- Query—when a QBE query is run on a BusComp.
- ChangeRecord—for each record in the BusComp. Warning: there may be many more records in a Business Component than are displayed in an applet. ChangeRecord does not imply the record was shown in an applet.
- NewRecord—when a new record is created in a BusComp.
- CopyRecord—when a record is committed after being copied.
- SetFieldValue—when a field value is written to a BusComp.
- Associate—when an addition is made to an association list such as when a contact is added to the Opportunity/Contact View.
- InvokeMethod—when a method is invoked on a business component.
- WriteRecord—when a record is written to a business component.
- DeleteRecord—when a record is deleted from a business component.

User Profile and Content Attributes

You can use two kinds of attributes for personalization: content and user profile. These are discussed in the following sections.

User Profile Attributes

A rich repository of customer information needs a rich language for describing customers. User profile attributes allow organizations to track the relevant pieces of information about the customers with which they interact. These attributes contain both intrinsic information about users and information collected dynamically during their use of the system.

User profile attributes are configurable in Siebel Tools. They are stored separately for each user and can be accessed easily and very quickly by the system.

Personalization rules and actions are expressible through all Siebel channels.

Profile attributes live in the base tables or in extension tables of the contacts and employees tables. They appear as fields on the Contact and Employee business components so they can be manipulated by the user interface as other attributes.

This allows applets to be used to edit the attributes and picklists, and other specialized UI controls can operate on the fields because they are of a defined type. Content attributes can be text, numbers, boolean variables, or dates.

Employees have the following profile attributes:

- Attributes associated with that user.
- Attributes associated with that user's organization.

  For more information on organizations, see the *Siebel Applications Administration Guide*.

Contacts have the following profile attributes:

- Attributes associated with that contact.
- Attributes associated with a contact's account.

Personalization attributes are updateable through all Siebel clients, including:

- Through the web. Self–administration of a user's own attributes.
- Through a connected client.

  A call center employee can administer the profile attributes of another user (primarily a contact who has called in).

- Through a mobile client.

  A field or sales representative administers the profile attributes of other users (primarily a contact they are visiting with) and then synchronizes the changes back to a corporate database.

Types of User Profile Attributes

Several types of profile attributes exist in a user profile. User profile attributes may be dynamic or persistent:

- Dynamic attributes are set and modified by actions the user takes while navigating the system, and are never written to the database.

  They allow real time modification of the user experience. They are related to the state of the user, as determined when they were entered. The registration process that creates the contact in the first place may also automatically enter intrinsic attributes.

  Add a dynamic attribute by setting its value. There is no need to “declare” or “create” a dynamic profile attribute.

  Dynamic attributes are retrieved the same way as static attributes, using GetProfileAttr(). If the attribute is not set (or does not exist) for a given user, it will return nothing (“”), but will not give an error message.

  Dynamic profile attributes may be different for all users. When a dynamic profile attribute is set, it exists for that user only. This works because of how dynamic attributes are set and retrieved, which ensures that no errors will occur if an administrator references dynamic attributes that don't exist, or sets a value on one that does not exist.

- For persistent attributes, when the connection is closed (the session ends), updated values are written out to the appropriate record of the contact or employee business component. They are used to store customer information and personalize across user sessions, thus allowing the site to “remember” important profile attributes.

  User profile attributes may be persistent, but they are not always synchronously written to the database. When a new session is initiated, the attributes for that user are loaded. When the session is terminated, the current state of the attributes is saved. This allows access to attributes to be extremely fast when building pages, but provides persistence between sessions.

The only exception is when persistent attributes are updated “manually” by the user. In this case, the changes will be made at that time. Also, a user’s attribute changes will not take effect immediately when they are updated via an “action”. In other words, user attributes are written to the database if current users update their own profile attributes using the User Profile business component. Updates to profile attributes caused by Personalization Actions are written to the database at the end of a user’s session.

- Continuous profile attributes are fields in business components.
- All fields are available for Personalization rules, even if they are not displayed on an applet.
- Continuous profile attributes can only be added using Siebel Tools by adding columns to business components (usually utilizing extension tables).

Setting User Profile Attributes

Customer attributes can be set from any number of different channels:

- Implicit versus explicit—attributes can either be set by explicitly asking users for a value, or implicitly by evaluating their actions. For example, users may be explicitly asked for their age on a web form, and a field representative could record a customer’s home ownership implicitly based on visiting the home.
- Direct versus indirect—attributes can be set either by users themselves, or on their behalf by an employee.

Content Attributes

One aspect of personalization is deciding what to show to users. Content attributes allow your organization to describe the data in your Siebel installation so that you can filter it.

You can leverage existing Siebel data; any column in the Siebel database—both Siebel and customer-defined—is available to the personalization rules engine for evaluation at run time.

You can extend Siebel data or add descriptions to data. These content attributes are added as extension columns, and exposed through the standard Siebel business object interfaces to the personalization rules engine.

For example, a company may want to use the personalization engine to recommend products to customers on their website. Using content attributes they can add attributes to their products such as industry served, appropriate geography, or age guidelines.

Content attributes live in the base table or in extension tables of the table for the type of content they support. They are configured as ordinary fields of the appropriate business components, so they may be manipulated like any other data. This allows applets to be used to edit the attributes and picklists and other specialized UI controls to operate on the fields because they are of a defined type.

Content attributes are fully persistent and are not changed by the system at run-time. Because they are exposed as fields, no special UI constructs are necessary and it is expected that the editing screens for the normal content information will be enhanced in Tools to include the new content attributes. Creating a new persistent attribute is the same process as creating any new field.

To create a new persistent content attribute

1. An available column is added to the base table or a column of the appropriate type is chosen from the appropriate extension table.
2. The new field is configured on the appropriate business component.
3. Any applets or SmartScripts that will be used to edit this information are configured to access the new fields.

Once the new .SRF has been compiled and distributed, these new persistent attributes can be set through the normal client platforms for intrinsic attributes (particularly for content attributes).

Managing Your Personalization Rules, Events, and Actions

Use the Actions menu to do the following:

- Export
- Import
- Refresh

Exporting Your Personalization Rules, Events, and Actions

Selecting this menu option will export personalization rules, events, and actions for importing into another Siebel environment.

Importing Your Personalization Rules, Events, and Actions

Selecting this menu option will import personalization rules, events, and actions from a file generated by previously exporting.

Refreshing the Object Manager

Selecting this menu option will cause the current object manager to flush all personalization rules, events, and actions and re-load them from the database. A user can update rules without affecting the rules the server is currently using. Selecting this option causes the rules in memory to be flushed, and replaced by the rules in the database that the administrator has been working on. This is equivalent to stopping and restarting the object manager.

NOTE: This menu option only works on the current object manager.
