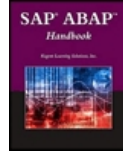# Chapters to Go

SAP ABAP Handbook

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Chapter 2: The Logon Process of the SAP System

Overview

Similar to any application software or system, the mySAP ERP system provides an authorization mechanism to ensure that only authenticated and authorized users access the system. The authentication mechanism of the mySAP ERP system requires you to log on to the system using your login name and password before you can start working on the mySAP ERP system. This process of verifying the users based on the login names and passwords is called user authentication. With a mySAP ERP system, the login name and the password are provided by the system administrator. However, you can change the password afterwards for security purposes.

You can log on to the mySAP ERP system by using the SAP Logon Screen. This screen also allows you to perform various activities related to the SAP logon process. For example, you can add and configure SAP servers that you need to connect to during the logon process. You can also create and manage shortcuts to various functions of the mySAP ERP system. While creating these shortcuts, you can specify the logon settings for these functions. In addition, you can customize or change your password to log on to the mySAP ERP system.

In this chapter, you learn about the logon process in the mySAP ERP system. The chapter starts by explaining the steps to start the mySAP ERP system through the SAP Logon screen. Next, you learn how to maintain the SAP Logon screen by adding, modifying, and deleting one or more mySAP ERP systems. You also explore how to create and manage shortcuts, which facilitate you to access a transaction screen, report, or a system command directly in the SAP system. Then, you learn how to configure the settings in the SAP Logon screen, such as the language in which you want the screen of SAP Logon to appear and whether you want to display the SAP Logon screen with wizard. In addition, you explore how to change the password to log on to the mySAP ERP system. Finally, the chapter discusses various ways to log off of the mySAP ERP system.

Starting the SAP System

The SAP Logon screen can be accessed by either selecting the SAP Logon option from the start menu or double-clicking the SAP Logon shortcut (⬚) icon from the desktop. Perform the following steps to start an SAP system from the Start menu from your Windows OS:
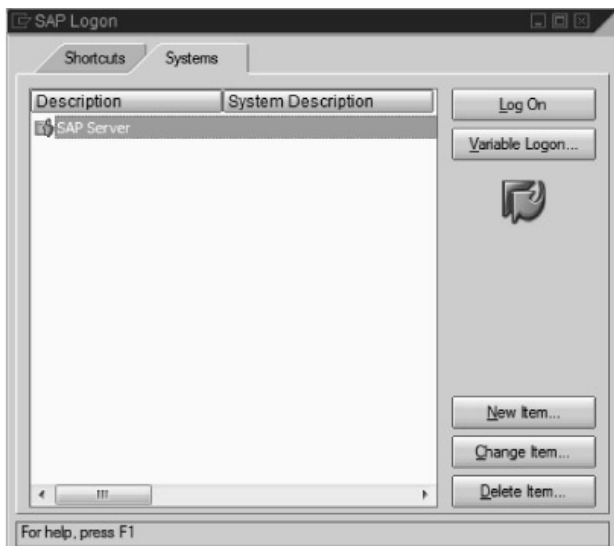
1. Start > All Programs > SAP Front End > SAP Logon (⬚), as shown in Figure 2.1:
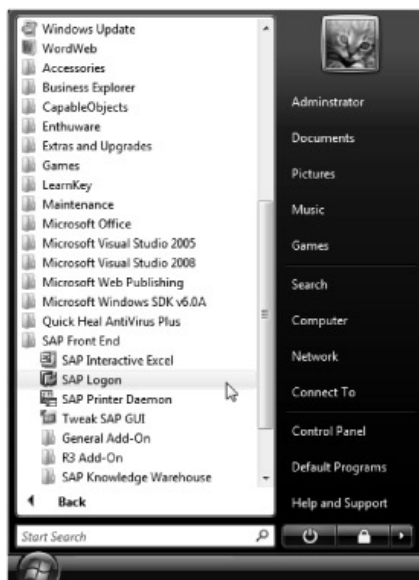
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Figure 2.1: Selecting the SAP logon option

The SAP Logon screen appears, as shown in Figure 2.2:

Figure 2.2: The SAP logon screen

2. Click the `Log On` button on the `SAP Logon` screen (see Figure 2.2).

The `SAP` screen (first screen of the SAP system) to enter the logon details appears, as shown in Figure 2.3:

Figure 2.3: The SAP screen for entering the logon details

The `SAP` screen comprises the following fields:

- **Client—** Enter the client number.

- **User—** Enter the user ID.

- **Password—** Enter the password provided by your system administrator.

- **Language (optional)—** Set the language in which you want to display screens, menus, and fields.

  Note Notice that as you enter the password, asterisks appear in the field rather than the characters that you type. As a security measure, the system does not display the value entered in the Password field.

3. Enter the values in all the fields of the `SAP` screen; for instance, we have entered the client ID as 800, user name as KDT, and the password as sapmac, as shown in Figure 2.3. Now, press the `ENTER` key. The `SAP Easy Access` screen appears, as shown in Figure 2.4:
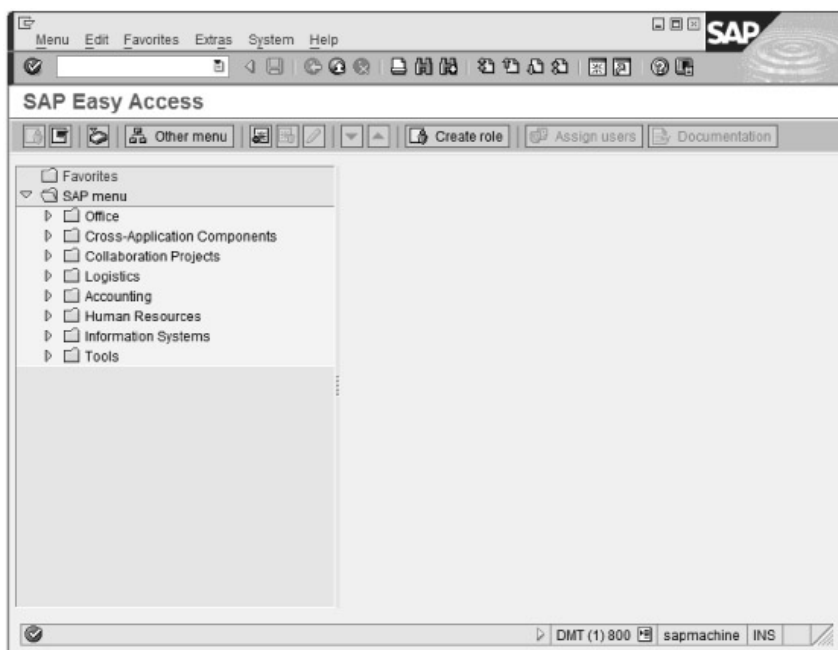
Figure 2.4: The SAP easy access screen

The `SAP Easy Access` screen serves as a gateway to work in `SAP` and contains all the development tools provided by SAP. However, before starting to work in this screen, you need to understand that the `SAP Logon` screen (see Figure 2.2) of an SAP system can be modified on the basis of user requirements. It has to be noted that the changes done on the SAP Logon are not reflected at the front end; they affect only the internal processing of the SAP system.

Maintaining the SAP Logon Screen

The `SAP Logon` screen is used to log on to an SAP system. It is a window-based program, which acts as a mediator between the SAP system and the SAP GUI interface. By default, the `SAP Logon` screen contains the following two tabs (see Figure 2.2):

- **Systems—** Allows the user to add a SAP server or a group of servers as well as edit or delete an existing server in the list of servers.

- **Shortcuts—** Allows you to create, delete, or edit the shortcut of a particular screen in the list of shortcuts.

The `SAP Logon` screen, within the `Systems` tab, is maintained by performing the following operations:

- **Adding a New Entry—** Adds a new server to the list of servers.

- **Modifying the Entry—** Modifies the properties of a server.

- **Deleting the Entry—** Deletes a server.

Now, let's discuss each operation in detail, one by one.

Adding a New Entry

In the `SAP Logon` screen, the `Systems` tab displays a list of servers. You can add a single instance of a server as well as a group of servers in this list. Perform the following steps to add a single server:

1. Click the `New Item` (New Item...) button on the `SAP Logon` screen (see Figure 2.2). The `Create New System Entry Wizard` appears, as shown in Figure 2.5:
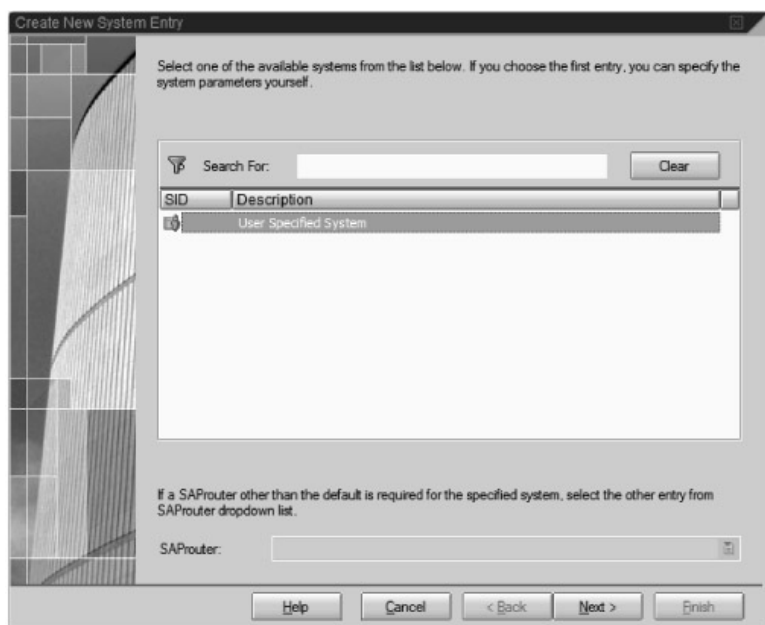
Figure 2.5: The create new system entry wizard

The `Create New System Entry wizard` contains a list of all the SAP servers. In our case, only a single instance of the server is displayed. Note that in the case of multiple servers, the first entry in the list appears as selected by default.

2. Select the server that you want to add and click the `Next` button (see Figure 2.5). A screen that accepts the system connection parameters appears, as shown in Figure 2.6:

3. Select `Custom Application Server` or `Group/Server Selection` from the drop-down list of the `Connection Type` field. In this case, we have selected the `Custom Application Server` option.
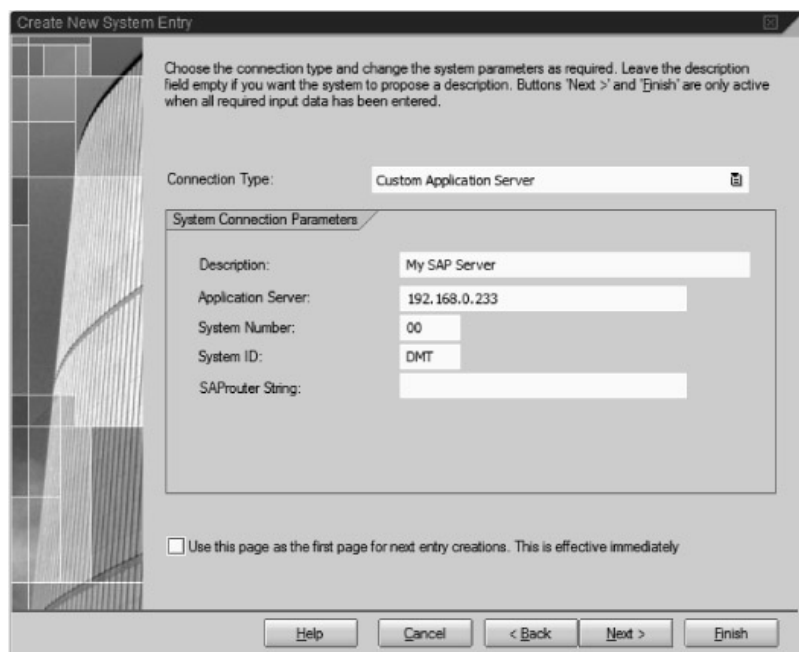
Figure 2.6: Showing system connection parameters

In addition, the `System Connection Parameters` group box contains the following fields:

- **Description—** Specifies a short description of the system entry. It is an optional field.

- **Application Server—** Specifies the name of the host computer on which the required server is hosted.

- **System Number—** Specifies the system number.

- **System ID—** Specifies the system ID of the SAP system that you want to connect to.

- **SAProuter String—** Specifies an SAProuter string if an SAProuter is required. It is an optional field.

4. Enter the values in all the fields of the `System Connection Parameters` group box. For instance, we have given the `Description` as My SAP Server, `Application Server` as 192.168.0.233, `System Number` as 00, and `System ID` as DMT, as shown in Figure 2.6.

5. Click the `Next` button (see Figure 2.6). The `Choose Network Settings` screen in the `Create New System Entry Wizard` appears, as shown in Figure 2.7:

6. Click the `Next` button (see Figure 2.7) in the `Choose Network Settings` screen. The screen to specify the Language Settings and Upload/Download Encoding appears, as shown in Figure 2.8:

7. Click the `Finish` button to complete the process (see Figure 2.8).
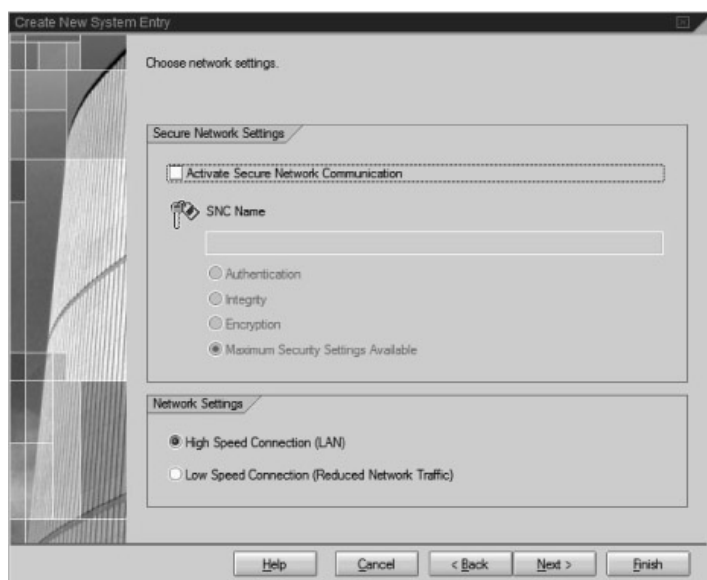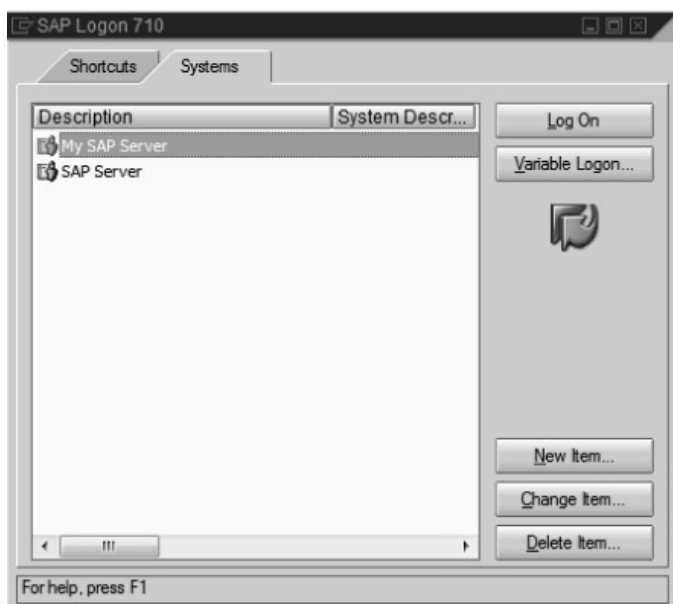

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Figure 2.7: The choose network settings screen
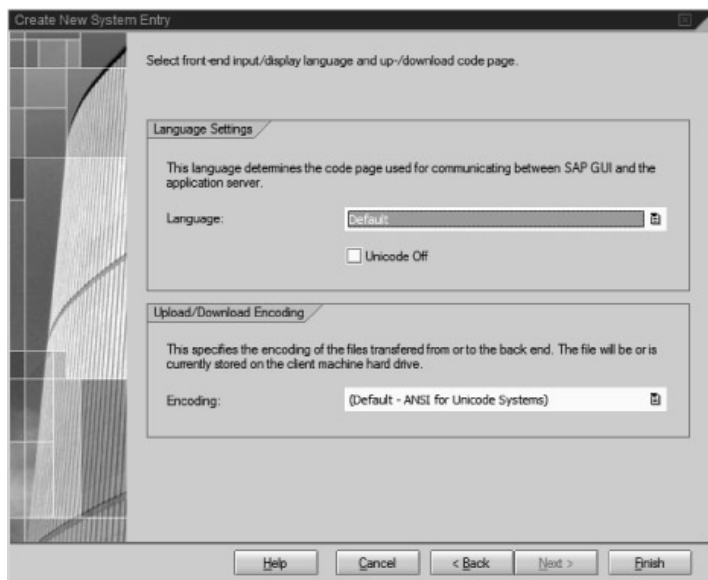
© SAP AG. All rights reserved.

Figure 2.8: The language settings and upload/download encoding screen

A new item, My SAP Server, is added in the Systems selection list, as shown in Figure 2.9:

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Figure 2.9: Showing the new server entry

Modifying the Entry

In the `SAP Logon` screen, you can modify the configuration settings of an existing SAP server entry, such the description and the address of the server. Perform the following steps to modify the configuration settings of an SAP server:

1. Select an SAP server whose properties you want to change. Here, we are using the My SAP Server, which is already selected in the servers list of the `SAP Logon` screen (see Figure 2.9).

2. Click the `Change Item` button (see Figure 2.9). The `System Entry Properties` dialog box appears (Figure 2.10).

3. Enter "New link to SAP Server" in place of My SAP Server in the `Description` field, as shown in Figure 2.10:

4. Click the `OK` button (see Figure 2.10) or press the ENTER key to complete the process.

Figure 2.10: The system entry properties dialog box

Notice that the name of the item My SAP Server is changed to New link to SAP Server, as shown in Figure 2.11:
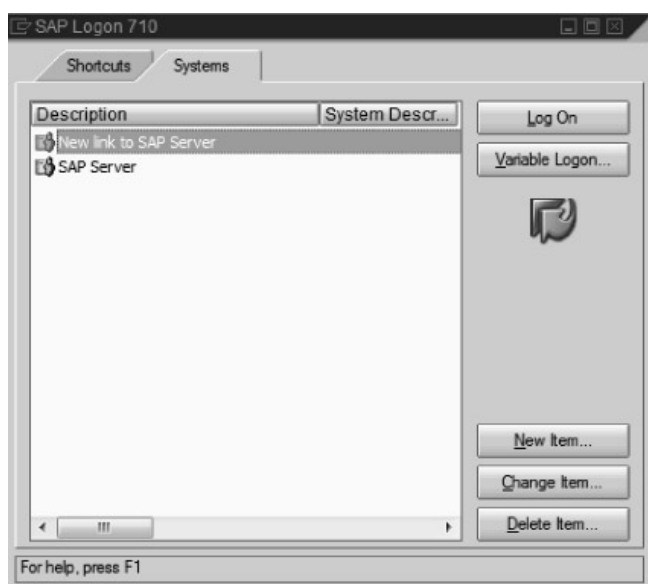
Figure 2.11: Showing the modified description

Deleting the Entry

Perform the following steps to delete an item from the servers list:

1. Select the SAP server that you want to delete. Here, we proceed with the already selected item "New link to SAP Server" (see Figure 2.11).

2. Click the Delete Item button (see Figure 2.11). The Saplogon API dialog box appears, asking for confirmation, as shown in Figure 2.12:

3. Click the `Yes` button (see Figure 2.12) to delete the selected item. Notice that the New link to SAP Server item is now deleted from the SAP selection list.
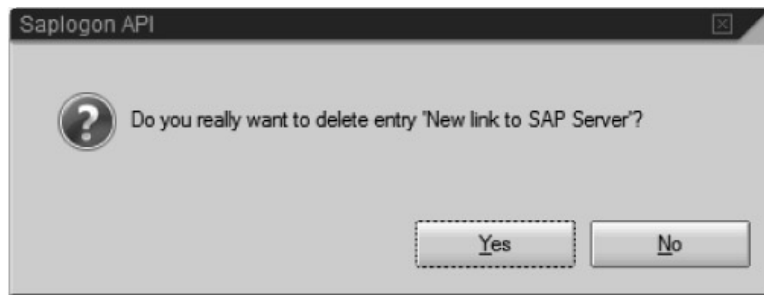
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Figure 2.12: The Saplogon API dialog box

Now, let's learn how to create and use various shortcuts to open different screens of the SAP system.

Creating and Using SAP Shortcuts

Shortcuts are components of the SAP GUI and are used to access the most frequently used functions or transactions directly. In actuality, you can use SAP shortcuts to start an SAP transaction, view a report, or perform system command execution directly from your Microsoft Windows desktop or the `SAP Logon` screen. Afer the shortcuts are created, they appear as regular icons on the desktop of your computer.

Creating SAP Shortcuts

An SAP shortcut can be created only on computers running on the Windows operating system. The SAP shortcut file type is registered automatically in the Windows registry after the successful installation of an SAP GUI. The basic requirements to create an SAP shortcut are as follows:

- An SAP user ID from your system administrator
- A password
- The transaction code for the screen for which you want to create an SAP shortcut

The following are the three ways to create an SAP shortcut:

- Creating an SAP shortcut from the desktop
- Creating an SAP shortcut from a specific screen
- Creating an SAP shortcut in the SAP Logon screen

Creating an SAP Shortcut from the Desktop

Perform the following steps to create an SAP shortcut from the desktop:

1. Right-click anywhere on the desktop. A context menu appears. Select `New > SAP GUI Shortcut`.

An SAP shortcut icon, `New SAP GUI Shortcut`, appears on the desktop, as shown in Figure 2.13:

Figure 2.13: New SAP GUI shortcut icon

2. Enter a name for the shortcut (for instance, MySAPLogon), and press the ENTER key. A new shortcut to the SAP Logon file is created on the desktop with the name MySAPLogon.

Now, let's edit the properties of the shortcut to the SAP Logon file.

1. Right-click the shortcut file (MySAPLogon) and select the Edit option.

The SAP Shortcut Properties dialog box appears, as shown in Figure 2.14:

2. Enter a title in the Title field. In Figure 2.14, we have entered ABAP Editor.

3. In the Type field, select the type of shortcut from the following options:

- Transaction

- Report

- System command

Figure 2.14: The SAP shortcut properties dialog box

In this case, we have selected Transaction (see Figure 2.14).

4. Enter a transaction command (for instance, se38) in the Transaction field, as shown in Figure 2.14.

5. In the System Description field, select SAP Server from the drop-down list, as shown in Figure 2.14.

   Note In this case, the default System ID is DMT.

6. Now, enter the client number in the `Client` field, say, 800 (see Figure 2.14).

7. Enter the name of the user (for instance, KDT) in the `User` field and the desired language (for instance, EN-English) in the `Language` field, as shown in Figure 2.14.

> **Note** The system automatically uses your Windows user ID if you leave the User field blank. The Password field is deactivated for security reasons. This field can be activated by administrators only.

8. Finally, click the `OK` button and the desired shortcut is placed on your desktop.

Creating an SAP Shortcut from a Specific Screen

Perform the following steps to create an SAP shortcut from a specific screen in the SAP system:

1. Open the screen in which you want to create an SAP shortcut. In this case, we have opened the initial screen of Screen Painter (by using the `SE51` transaction code), as shown in Figure 2.15:
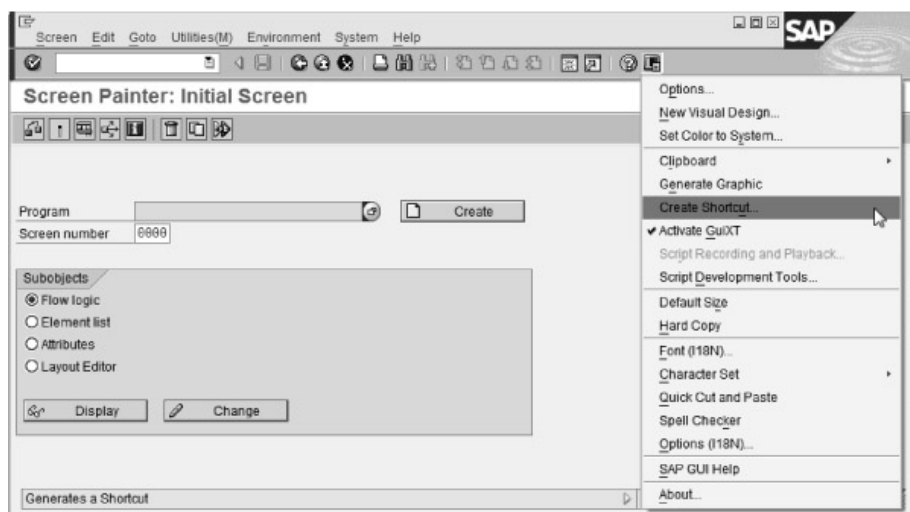
> **Note** Use the SE51 transaction command to open Screen Painter.

2. Click the `Customize Local Layout` (icon) on the standard toolbar and then select the `Create Shortcut` option, as shown in Figure 2.16:
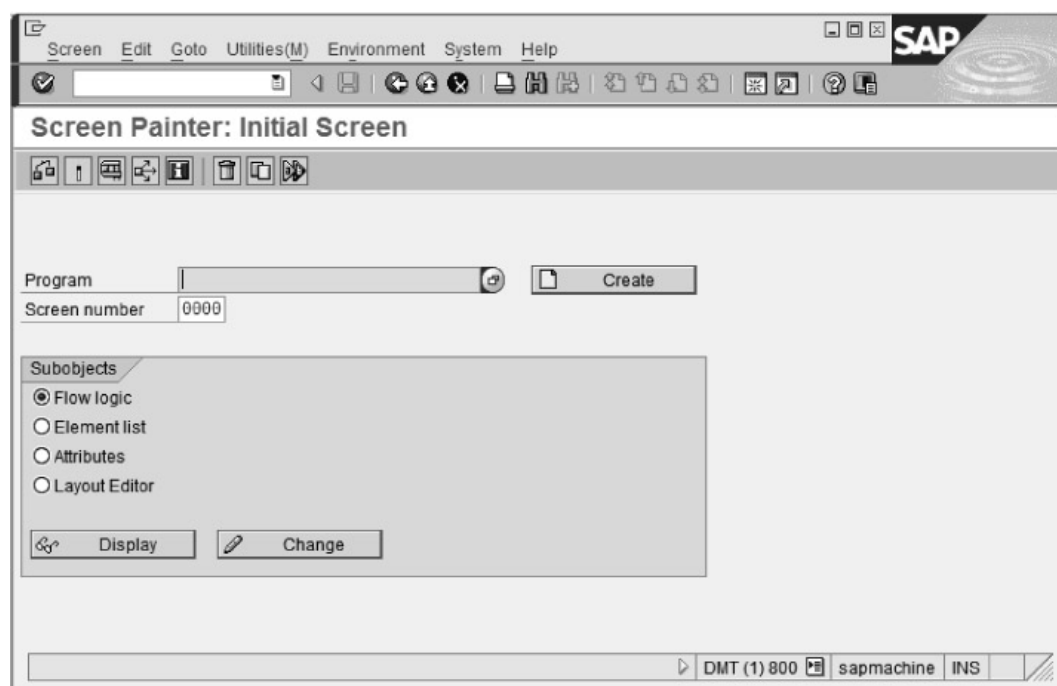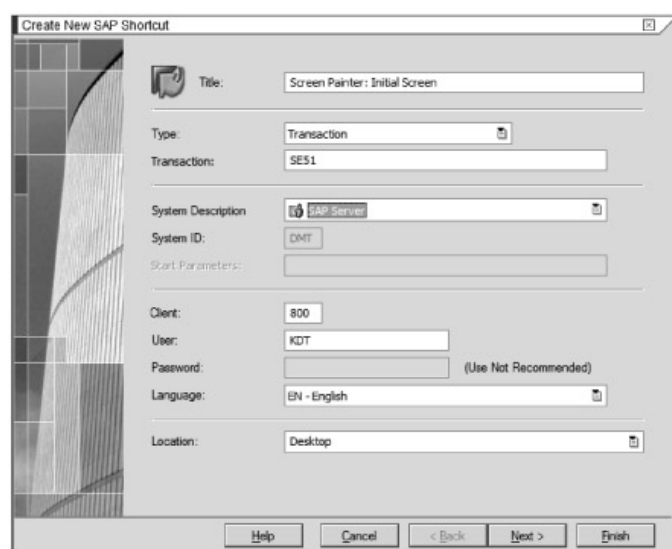

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Figure 2.15: Initial screen of screen painter

Figure 2.16: Selecting the create shortcut option

The `Create New SAP Shortcut Wizard` appears, as shown in Figure 2.17. Ensure that the information filled in the `Title`, `Type`, `Transaction`, `Client`, `User`, and `Language` fields is correct. You can also modify the values specified in these fields. Here, we have modified the `System Description` field.

Figure 2.17: Modifying the system description field

3. Select the `System Description` as SAP Server, as shown in Figure 2.17:

4. Click the `Next` button. The next screen appears, as shown in Figure 2.18:

5. Click the `Finish` button. The `SAP GUI Shortcut` dialog box appears, as shown in Figure 2.19:

6. Click the `OK` button, as shown in Figure 2.19, to complete the process.

   The DMT Screen Painter shortcut appears on your desktop.
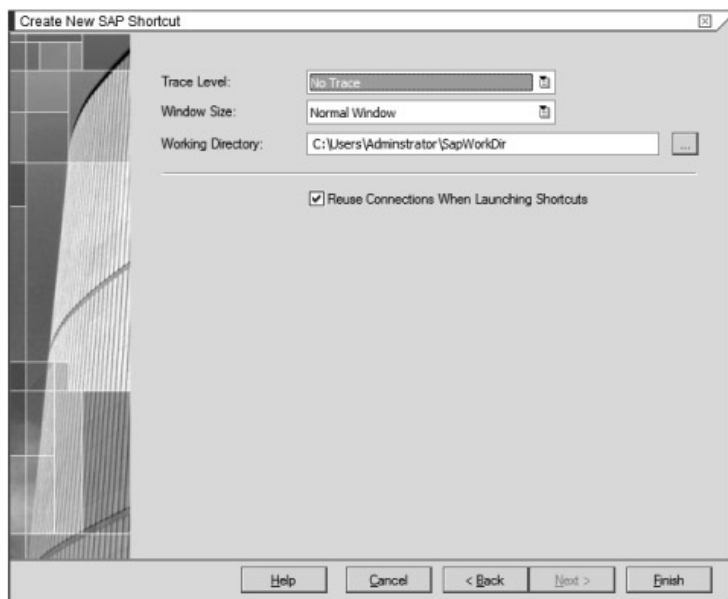
Figure 2.18: Showing the properties of the new shortcut

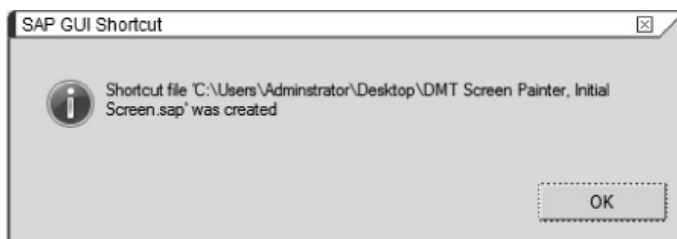**Figure 2.19:** The SAP GUI shortcut information box

Note The system automatically saves the shortcut file with the .sap extension in the desktop directory.

Creating an SAP Shortcut in an SAP Logon Screen

We can also create an SAP shortcut in an SAP Logon screen. The `Shortcuts` tab of the `SAP Logon` screen allows us to create, edit, or delete a shortcut with the help of the following buttons:

- **New Item—** Helps create shortcuts that allow you to start SAP transactions, run reports, or execute system commands directly after logging on to the defined system.

- **Change Item—** Edits an existing shortcut in the shortcuts list.

- **Delete Item—** Deletes an existing shortcut from the shortcuts list.

- **Log on—** Allows to log on to an SAP system through the created SAP shortcut.

The user can log on to an SAP system in the following ways:

- By selecting an entry in the shortcuts list and pressing the `Log On`button

- By selecting an entry in the shortcuts list and pressing the ENTER key

- By double-clicking an entry in the shortcuts list

Perform the following steps to create a new shortcut in the SAP Logon screen:

1. Click the `Shortcuts` tab on the `SAP Logon` screen, as shown in Figure 2.20:

   **Note** You can add already created SAP shortcuts (present on your desktop) to the shortcuts list just by dragging

and dropping their icons in the SAP Logon screen.

2. Click the `New Item` button, as shown in Figure 2.20. The `Create New SAP Shortcut` dialog box appears (see Figure 2.21).

3. Enter "Menu Painter Shortcut" in the `Title` field, "`System` Command" in the `Type` field, "`/ nSE41`" system command in the `Command` field, "SAP Server" in the `System Description` field, "800" in the `Client` field, and "KDT" in the `User` field. Click the `Next` button of the `Create New SAP Shortcut` dialog box, as shown in Figure 2.21:
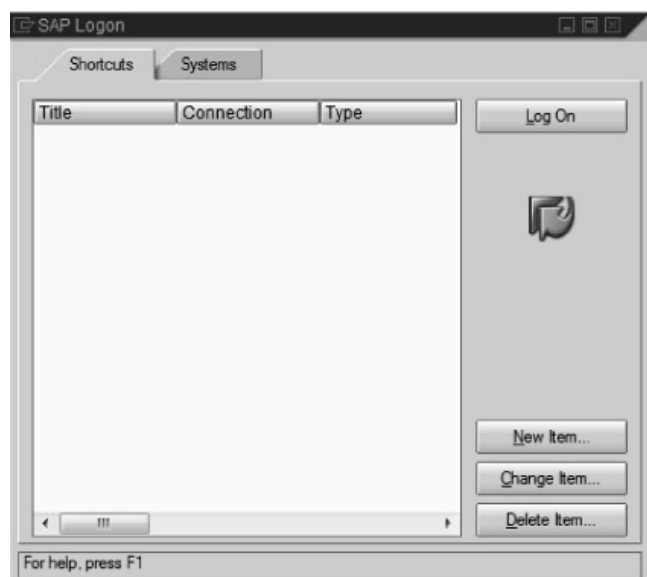
Figure 2.20: The shortcuts tab
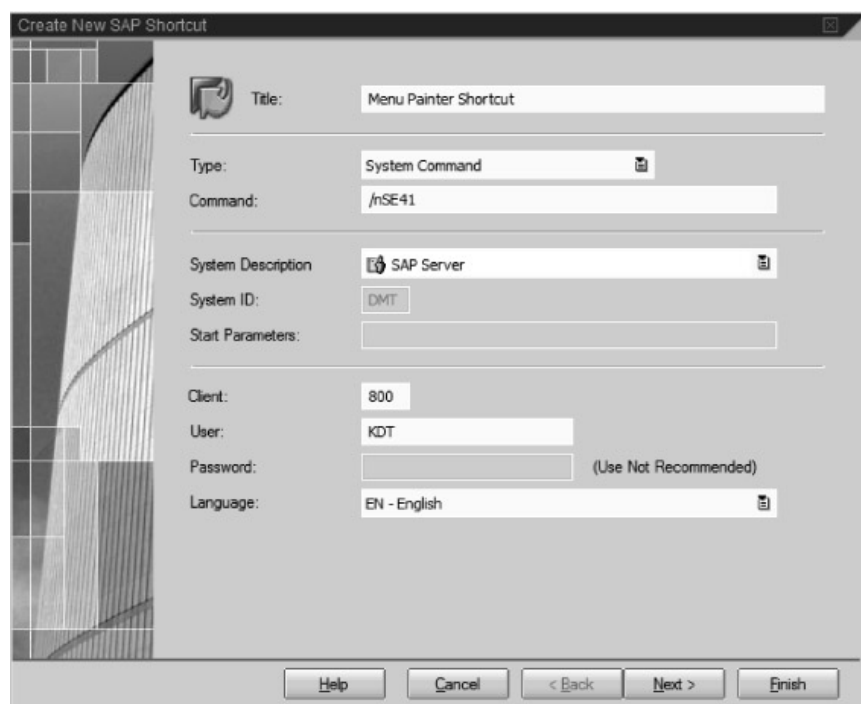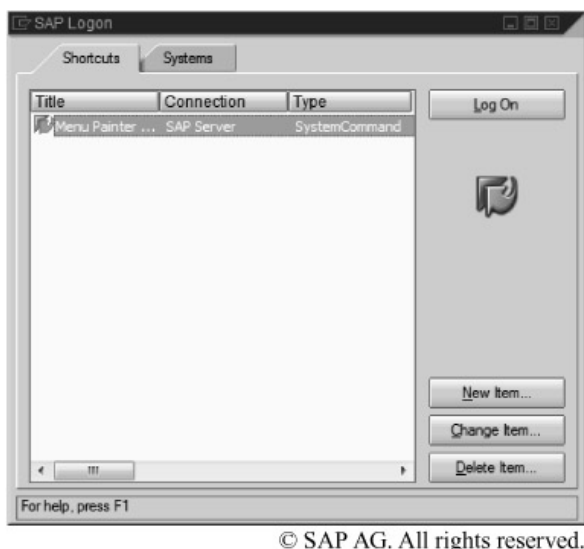
Figure 2.21: The create new SAP shortcut wizard

Note that the `Create New SAP Shortcut Wizard`, shown in Figure 2.21, is similar to the `Create New SAP Shortcut Wizard`, shown in Figure 2.17. There fore, on clicking the `Next` button, you get a screen similar to that shown in Figure 2.18.

4. Click the `Finish` button. A new shortcut is displayed in the `Shortcuts` tab, as shown in Figure 2.22:

Figure 2.22: Showing the new shortcut

The user can modify the properties of this shortcut by using the `Change Item` button or delete it by using the `Delete Item` button.

Using SAP Shortcuts

Once an SAP shortcut is created, it can be used easily by just double-clicking it. Note that to be able to work on an SAP system, the user must have an SAP user name and password provided by the system administrator. An SAP shortcut can be used in the following contexts:

- With no SAP session running

- With an SAP session running

A session is an SAP system instance opened by a user. Multiple sessions can be started when the user has to work on more than one task at a time. All these sessions (screens) of SAP can be kept active or open simultaneously; consequently, the user saves time navigating from one screen to another. Each session is independent of the others, that is, an operation performed on one session does not affect the other sessions.

   Note The system administrator specifies the maximum number of sessions (up to 6) that can be opened at a single time.

Now, let's see how to use an SAP shortcut, both with and without a session running.

With No SAP Session Running

If no SAP session is running on the computer, the SAP system displays a dialog box requesting the user name and password for security purposes if you access a shortcut. A dialog box with the name corresponding to the created shortcut appears.

Perform the following steps to use a shortcut when an SAP session is not running:

1. Double-click the SAP shortcut assigned to any specific screen. In this case, we have used the shortcut (Menu Painter Shortcut) that we created in the "Creating an SAP Shortcut in SAP Logon" section.

The `Menu Painter Shortcut` dialog box appears, as shown in Figure 2.23.

Figure 2.23: The screen painter dialog box

2. Enter the user name and password given by the system administrator in the `User Name` field and `Password` field, respectively. In this case, the user name is KDT and the password is sapmac. However, for security reasons, the password is encrypted, as shown in Figure 2.23:

3. Click the `Log On` button or press the `ENTER` key to start the SAP session.

To change or view your shortcut definition, right-click in the opened dialog box (Figure 2.23), outside the title bar, input fields, or buttons. A context menu appears. Click the `Open` option to view and the `Edit` option to make changes in the .sap shortcut file.

> **Note** If you have not entered the password, only the `Edit` option is activated. However, after you enter even the first character of the password, both the `Open` and `Edit` options are activated.

With an SAP Session Running

To use a shortcut when an SAP session is already running, double-click the SAP shortcut for the task that you want to perform. If an application is already running, a new SAP session is started; otherwise, the current SAP session starts the task. The following are the ways to use a shortcut while an SAP session is running:

- **Drag and drop the shortcut from your desktop to the currently running SAP session**—The SAP system displays the defined transaction or report.

- **Drag and drop the shortcut, while pressing the CTRL key, from your desktop to the currently running SAP session**—The SAP system displays the defined transaction or report in a new session.

- **Drag and drop the shortcut, while pressing the SHIFT key, from your desktop to the currently running SAP session**—The SAP system displays the properties of the shortcut.

> **Note** If an SAP shortcut is created using the System command `/NTCD` (`/N` plus the transaction code), the task is executed only in the current SAP session.

Configuring the SAP Logon

In this section, we discuss how to configure various settings of the `SAP Logon` screen, such as the language of the `SAP Logon` screen and the path of configuration files, within the `SAP Logon Configuration` dialog box. For that, click the ( ) icon present at the top-left corner of the `SAP Logon` screen and select `Options`, as shown in Figure 2.24:

Figure 2.24: Selecting options

The SAP Logon Configuration dialog box appears, as shown in Figure 2.25:

Figure 2.25: The SAP logon configuration dialog box

In the SAP Logon Configuration dialog box, you can specify or change various setting options.

Table 2.1 describes the options of the SAP Logon Configuration dialog box:

Table 2.1: Settings of the SAP logon configuration dialog box

| Option	Description
Language	Helps select the language in which the user needs to display the SAP logon. To use this option, the SAP Logon language file must be installed by the system administrator.
Message Server Timeout in Seconds	Specifies the time the SAP Logon screen waits for a response from the R/3 Message Server. The default value is 10 seconds.
With Wizard	Specifies whether or not you want to work in SAP Logon with the wizard. The SAP logon screen needs to be

	restarted for the settings to be effective.
Confirmation of Deletion of List Box Entry	Specifies whether you want to display a warning before deleting a system or logon group from the SAP Logon.
Disable System Edit Functions	Specifies whether you want to prevent logon entries from being changed.
Configuration Files	Shows a list of configuration files (.ini files) that can be opened by double-clicking.
Activate SAP GUI Trace Level	Specifies whether you want to define and activate a network trace (SAP GUI trace). Selecting this check box enables the user to select the level of tracing. If the user selects level 2 or 3, an additional log file is generated that records all incoming data in an encrypted binary code.
Additional Data Hexdump in Trace	Specifies whether you want to list additional memory areas in the SAP GUI trace. This check box is activated only when level 2 or 3 is selected.
Additional Command Line Arguments	Specifies additional SAP GUI command line arguments, for instance, /WAN is used when a low-speed connection is required for all your SAP systems.

After setting the properties in the `SAP Logon Configuration` dialog box, click the `OK` button to return to `SAP Logon` screen.

Changing the Password

Initially, the system administrator provides you with a password to log on to the SAP system. However, it is recommended to change your password when you log on for the first time for security purposes. You can even set the time interval after which you would like to change your SAP password. The SAP system itself prompts you to change your password after the specified period of time. Perform the following steps to change the password:

1. Open the `SAP` screen by clicking the `Log On` button of the `SAP Logon` screen.

2. Enter the data in the `Client`, `User`, and `Password` fields on the `SAP Logon` screen (shown previously in Figure 2.3).

3. After entering the values in the required fields, click the `New` password button on the application toolbar, as shown in Figure 2.3, or press the F5 key. The `SAP` dialog box appears, as shown in Figure 2.26:

4. Enter the new password in the `New Password` field and retype it in the `Repeat Password` field (see Figure 2.26).

5. Click the `Confirm` (✔) icon to save your new password, as shown in Figure 2.26.
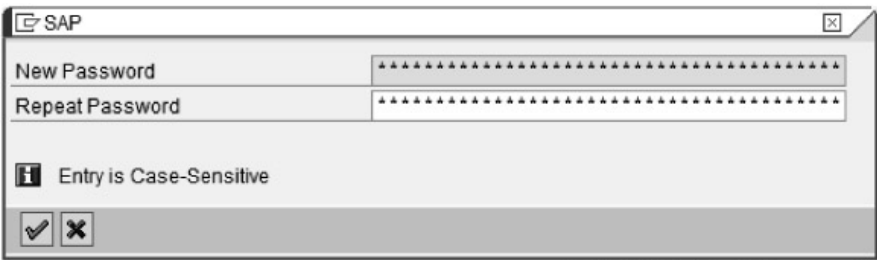
Figure 2.26: Displaying the SAP dialog box

The following are some rules and restrictions that one must follow while creating a password:

- A password should not exceed eight characters and should not be less than three characters.

- A password should not begin with any of the following characters:

  ○ A question mark (?)

  ○ An exclamation mark (!)

  ○ A blank space

- Three identical characters, such as 333

  - Any sequence of three characters contained in your user ID (for instance 'man' if your word user ID is Friedman)

- A password can have a combination of the following letters and numbers:

  - The letters a through z

  - The numbers 0 through 9

  - Punctuation marks

- While creating a password, do not use the following:

  - The words pass or init as your password

  - Any of the last five passwords you have used

  Note If SAP, passwords are not case-sensitive. For example, the password blueSky is the same as Bluesky or BLUESKY.

Table 2.2 lists some examples of valid and invalid passwords:

Table 2.2: Valid and invalid passwords

| Valid Password	Invalid Password
Kashvi	!exercf (begins with an invalid character)
Tanu=8	Sssb (contains three identical characters)
6yuto	Ap (contains less than three characters)

Logging Off of the SAP System

After completing your work on the SAP system, you need to save the necessary data and log off of the system. Perform the following steps to log off of the SAP system:

1. Click the Log off icon on the standard toolbar, as shown in Figure 2.27:

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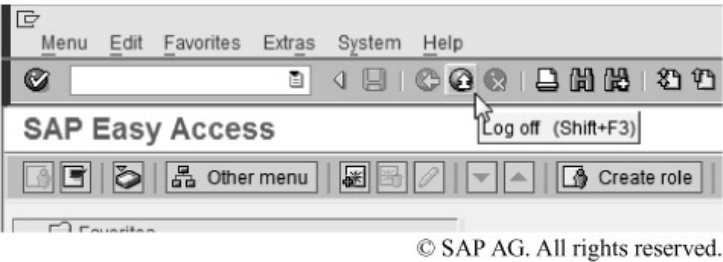
Figure 2.27: Clicking the log off icon

If there is any unsaved data, a dialog box appears, asking for confirmation, as shown in Figure 2.28:

© SAP AG. All rights reserved.
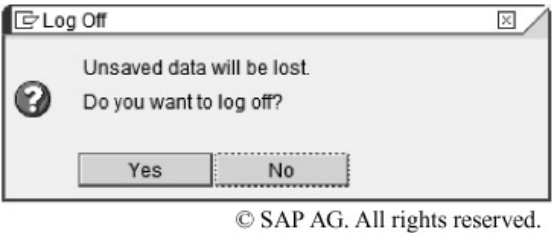
Figure 2.28: The log off dialog box

2. Click the Yes button if you want to log off without saving the unsaved data; otherwise, click the No button.

There are two other alternate methods to log off of the SAP system. One of them is by selecting the `Log off` option from the `System` menu, as shown in Figure 2.29:
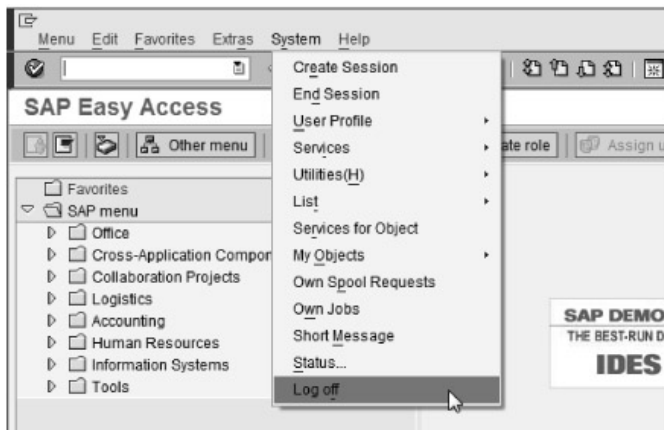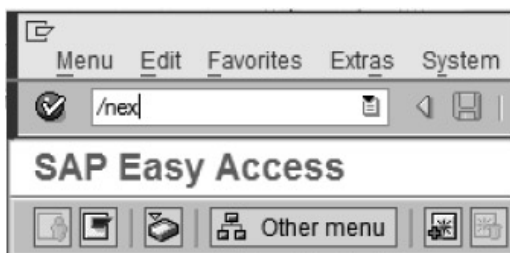

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Figure 2.29: Log off option on the system menu

The `Log off` dialog box appears (see Figure 2.28).

In the second method, you can exit directly from the SAP system, without any confirmation, by typing the `/nex` transaction command in the command field and pressing the `ENTER` key, as shown in Figure 2.30:

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Figure 2.30: Logging off using the transaction code

The `SAP` screen immediately disappears.

Summary

In this chapter, you have learned how to log on to the SAP R/3 system. You have also explored the steps to open the initial screen of an SAP system and maintain the SAP logon information by adding, changing, and deleting the instances of the SAP server. In addition, the chapter described how to create and use the shortcuts for various purposes, such as to log on or to open a particular screen. Next, you learned how to edit the configuration settings of the SAP system. Finally, you learned how to modify the password and log off of the SAP system.