

3. Desktop Components

3.1 Introduction

This chapter describes in more detail the visual components that are used to build the Desktop screens.

As described in Chapter 2, screens are composed of a number of panels, scripts and buttons that are assembled into named component types known as OCXs. OCXs are provided as a toolbox for application developers to use in building their applications.

Application developers select the OCXs that are appropriate for each application and Riposte controls others that maintain the consistent behaviour and appearance of the Desktop.

This chapter is organised as follows:

- A summary of OCX types.
- A summary of OCX usage on the Desktop.
- Descriptions and examples of OCX types.
- A composite screen that contains several OCXs.

3.2 Summary of OCX types and usage

The OCX types used are as follows:

- The Calendar and Clock OCX display the date and time in the stack estate when the stack does not contain any transactions. Application developers do not need to specify its use, as it is entirely controlled by Riposte.
- The Help OCX provides information about any screen object that the user selects. Information is displayed in a speech bubble with a yellow background. Application developers supply the text and the Help OCX controls how and where on the screen it is displayed. The Help OCX can be invoked by selecting the 'Info' button.
- Card and Button OCXs are used to offer options to the user. The Card OCX is a simple button that the user touches to make a selection. A Button OCX has an identical function but has a more complicated format with a tabbed caption.
- The Trans OCX is used for all panels that display information to the user, but cannot be altered or selected. It is normally displayed with a Card OCX to enable the user to react to the displayed information.
- The Script OCX is a panel that tells the user what data to enter and how to proceed. It is always displayed with one of the input OCX types: Calculator, Options or Message/Error.
- The Calculator OCX is a standard display format used to enter alphanumeric data.
- The Options OCX enables the user to make a selection from a list of alternatives.
- The Message/Error OCX gives information about a transaction or an error, and offers one or two courses of action.
- The List OCX provides a structured list format with navigation and search facilities. It has a number of uses, including the provision of Product Look-Up and Declaration lists.

Table 3-1 summarises how and where these OCXs are used. Section 3.3 gives more details and an illustration of each type.

The OCXs and their position and usage on the Horizon Desktop are as follows:

<i>Estate (area of screen)</i>	<i>OCX Type</i>	<i>Usage</i>
Navigation	Card Help	Function and navigation buttons. Provides Help information for Card OCXs.
Stack	Calendar and Clock Button Help	Displayed when there are no transactions on the stack. Used for transactions on the stack and the Finish button. Provides Help text for Button OCXs.
Real	Trans Card Script Calculator Options Message/Error List Help	Output: to give information to the user. Used in conjunction with one or more Card OCXs, which provide the user with alternative responses. Menu and other option buttons. Input dialogues: right-hand instruction and display panels. Used in conjunction with Calculator, Options, Message/Error OCXs. Input dialogues: left input panels. Input dialogues: left option panels. Input dialogues: left message/error panels or single central message/error panel. For selecting items from and for updating lists. Provides Help text for all screen components.

Table 3-1 OCX types and uses

Each OCX has a complex set of properties, some of which may be specified by applications programmers. For example, the Trans OCX may use a number of different panel styles. This chapter gives a brief description of each OCX type and the guidelines for its use. Chapter 4 describes the panel and button styles that determine the appearance of OCXs.

3.3 Description of OCX types

3.3.1 Calendar and Clock OCX

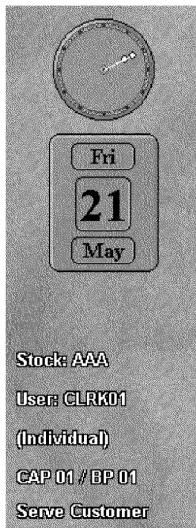


Figure 3-1 Calendar and Clock OCX

3.3.1.1 Description

The Calendar and Clock OCX display the date and time and additional reminders: the stock unit in use, the user, stock unit type, the current cash account and balance period and the current transaction mode. Their format and display are managed completely by the Desktop and are not under the control of application programmers.

3.3.1.2 Guideline

The Calendar and Clock OCX display the time and date. This OCX is displayed on the stack estate when there are no transactions on the stack and is not directly controlled by the programmer.

3.3.2 Help OCX

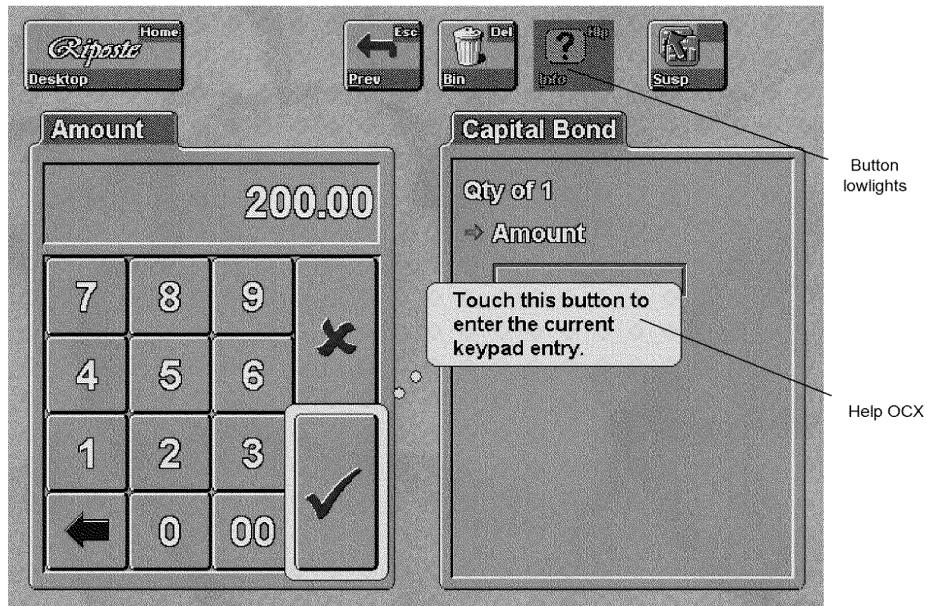


Figure 3-2 Help OCX

3.3.2.1 Description

The Help OCX is used to highlight a field and to display help text for the selected object on a yellow background, as shown in Figure 3-2. It is activated when the Info button is selected or invoked automatically on specified conditions.

See Chapter 9 for details of the Help OCX.

3.3.2.2 Guideline

Help text should be provided for all OCXs (with the exception of the Calendar and Clock OCX) and for each component that has a distinct function.

3.3.3 Card OCX



Figure 3-3 Card OCX

3.3.3.1 Description

The Card OCX is a simple form of command button. When it is selected, an event is triggered.

The Card OCX is used for all menu buttons and for option buttons on transaction screens like F1 - F5 in Figure 3-13. Each Card OCX displays a picture file, a caption and a key name. It may also have a shortcut key defined.

See Chapter 4 for details of styles that can be used in the Card OCX.

3.3.3.2 Guidelines

- All simple options are displayed using a Card OCX. Several Card OCXs can be displayed on one screen if there is more than one choice that the user can make.
- A Card OCX can display more than one icon and caption if it is being used for a sequence of related actions.
- If, when the Card OCX is selected, the user has to wait while the system processes the request, the user must be made aware of the fact. The Wait data type (egg-timer icon) is used to display an explanatory message: 'Checking for negative stock...', for example.

3.3.4 Button OCX



Figure 3-4 Button OCX

3.3.4.1 Description

The Button OCX is similar to the Card OCX but is more flexible and more complex; for example, it has more than one icon position. The Finish button displays a pound sign as well as the accounting sense of the transaction 'PAY' or 'TAKE'. The caption and key name are displayed at the top of the button on a tab that is capable of displaying a longer caption than is possible with the Card OCX.

3.3.4.2 Guideline

The Button OCX is used for transactions on the stack and for the Finish button. It may be used in other positions if it is necessary to display a longer caption than is possible with a Card OCX, or additional text fields.

3.3.5 Trans OCX

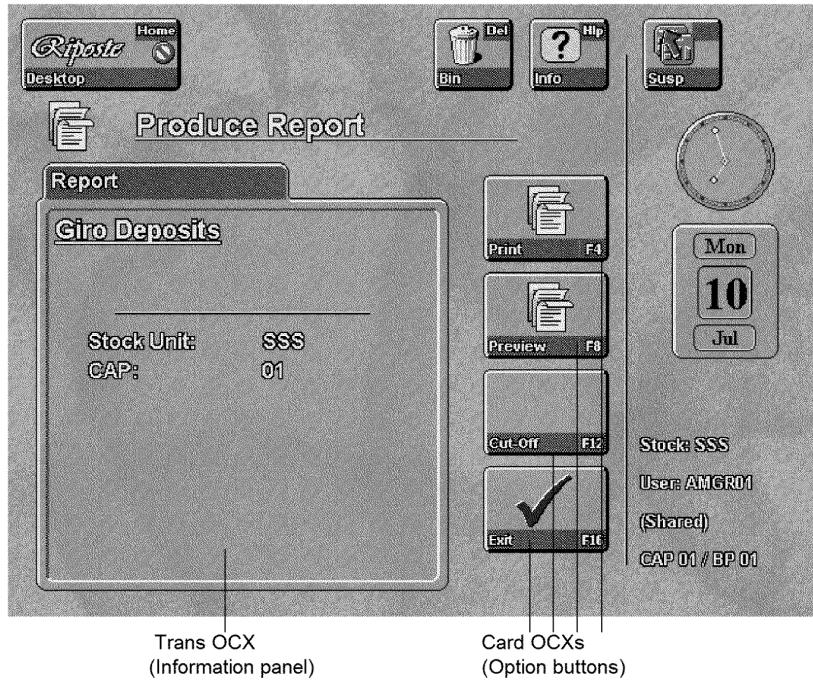


Figure 3-5 Trans OCX

3.3.5.1 Description

The Trans OCX is a panel that displays information to the user. It is for information only and cannot be selected or used for entering input. In Figure 3-5, the Produce Report panel is a Trans OCX and displays details of the report selection criteria.

See Chapter 4 for details of panel styles that can be used in the Trans OCX.

3.3.5.2 Guideline

The Trans OCX is used to display information clearly, at a point in a dialogue where the user needs to select options. It is used in conjunction with at least one Card OCX, which enables the user to respond to the displayed information.

3.3.6 Script OCX

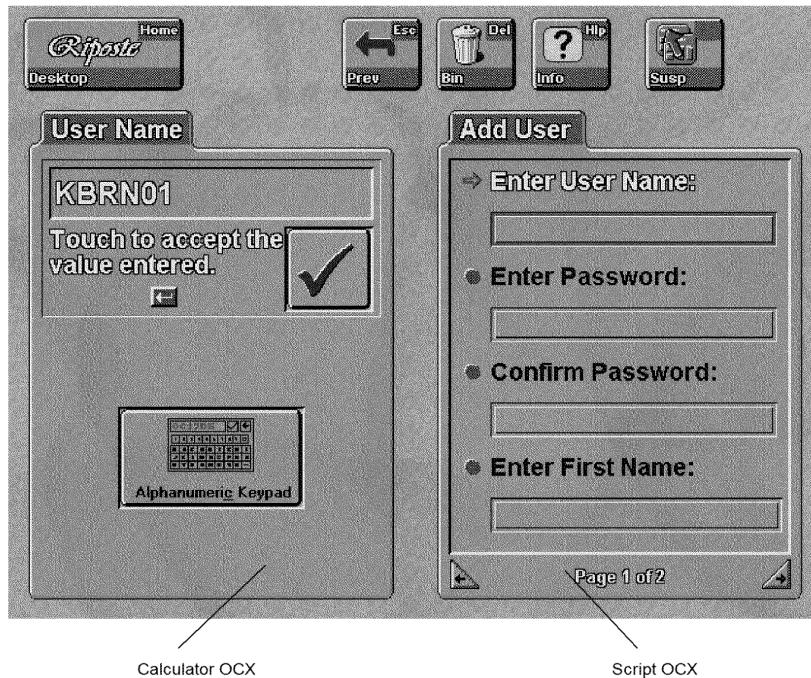


Figure 3-6 Script OCX (1)

3.3.6.1 Description

The Script OCX controls user input. It consists of a panel with a caption, prompts for user input, and areas that echo the data entered.

In Figure 3-6, the right-hand panel is a Script OCX. The name entered in the User Name field of the left-hand panel (Calculator OCX) is also displayed in the User Name field of the right-hand panel (Script OCX) when the user touches the tick or presses Enter.

Figure 3-7 illustrates how the Script OCX continues to display the completed Name field when the left-hand panel has changed to process the user's password.

When a number of actions have to be performed by the user, each action on the Script OCX is highlighted in turn.

When the user is asked to input data, the text of the Script OCX is kept as concise as possible and repeated on the Caption of the matching Calculator OCX.

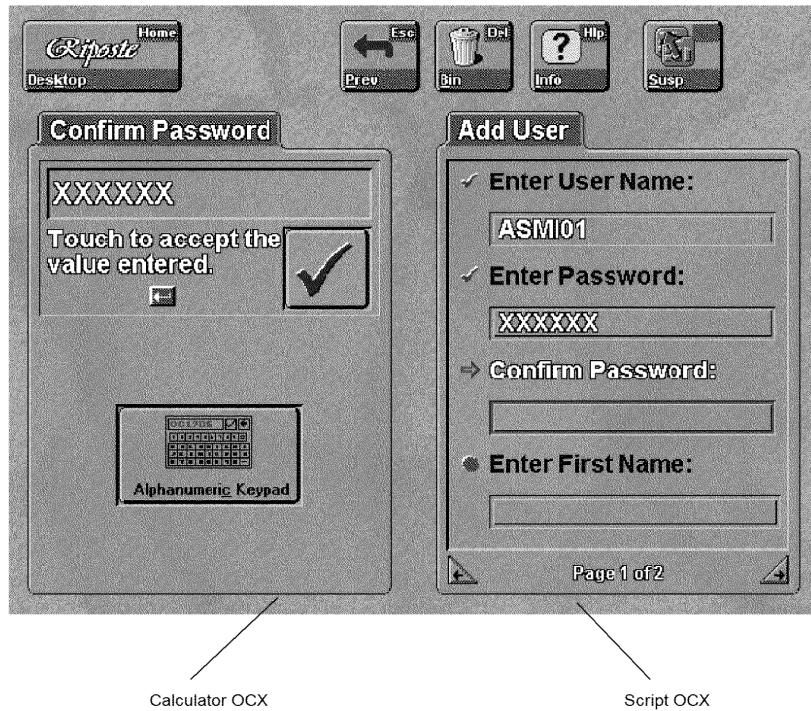


Figure 3-7 Script OCX (2)

The left-hand panel in Figure 3-7 is a Calculator OCX with a data type of Password. Each character entered by the user is displayed as an 'X' so that the contents of the field remains confidential.

3.3.6.2 Guideline

The Script OCX is used in conjunction with the appropriate input OCXs to guide the user step by step through a number of actions.

3.3.7 Calculator OCX

3.3.7.1 Description

The Calculator OCX enables users to enter the following data types:

- Alphanumeric
- Date
- Numeric
- Currency

Details of how each of these data types is handled are given in Chapter 5.

The Calculator OCX is normally used in conjunction with a Script OCX, which displays instructions and also the data that has been entered so far. The user is presented with a numeric or alphanumeric keypad, as appropriate. Figure 3-6 shows a Calculator OCX that accepts alphanumeric input; the OCX shown in Figure 3-8 is used for numeric input.

The Calculator OCX adjusts the size of the data input area to match the maximum size that is defined in the application. The associated **MaxLength** parameter is used by application developers to ensure that the input area exactly fits (if possible within the constraints of the panel size) the maximum length of the data to be displayed or input. Associated with the parameter is an audible indicator (bleep) that warns the user that maximum length has been exceeded and that the data that is being entered currently will be ignored. The bleep also warns a user who tries to delete more characters than are present in an input field.

The user enters the data; any mistakes can be corrected either by touching the cross, which removes all the entered characters, or by using the back arrow button to delete individual characters up to, and including, the mistake. There is no mechanism for correcting a single character in the middle of a field, other than by deleting all the characters that follow it.

When the user touches the tick (or presses Enter) to indicate that data entry is complete for the current field, the data field is validated. The nature of the validation depends upon the application.

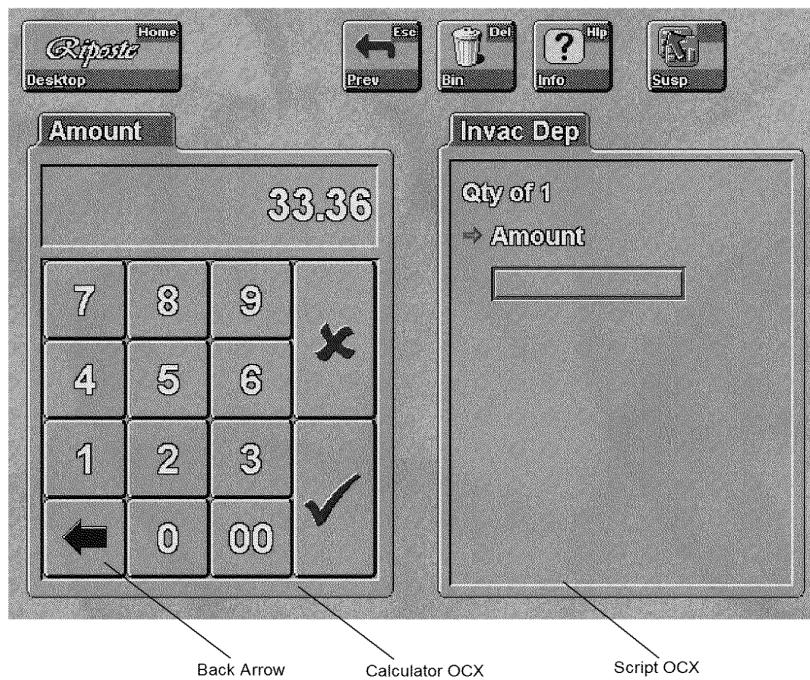


Figure 3-8 Calculator OCX

The Back Arrow deletes the last character entered. Figure 3-9 shows the effect on the Amount field when the '6' is deleted and a '4' substituted.