Welcome to IBM Screen Customizer Help

To display the Table of Contents, click on the Acrobat Reader toolbar.

Click any help topic in the Table of Contents to the left.

Click **Basic Customization Steps** for an overview of how to customize host screens and templates.

Click in the top, right corner of any help topic to return to this overview.

When you see this icon in the help:	The associated information:
	Displays how to use help.
	Supplements important points in the main text.
	Provides hints to help apply the techniques and procedures described in the main text.

Introducing Screen Customizer

The IBM Screen Customizer for Host Integration (Screen Customizer) provides a graphical user interface for IBM Host On-Demand or IBM Personal Communications 3270 and 5250 sessions. Extensive customization capability is provided that does not require programming or modification of host applications.

There are three components:

- **Administrator** - is an active host session that lets you capture screens for customization by the Customization Studio, and test customizations made using the Customization Studio.

  The Administrator can be installed and run only on a Windows 95, 98 or NT workstation. It cannot be downloaded from a Web server.

- **Customization Studio** - lets you create customized versions of host screens captured by the Administrator. It enables you to add helpful objects (such as Web-link buttons, radio buttons, and choice boxes) to your host screens and to global templates, which creates extra, customizable space around your host screens and can be easily applied to all of your screens and updated.

  The Studio can be installed and run only on a Windows 95, 98 or NT workstation and does not require a host connection.

- **Client** - resides on a Web server or a client workstation and presents a default or customized graphical interface for host sessions. The Client is usually integrated with a Host On-Demand session but can be started independently.

To install the Administrator or Client, you must have Host On-Demand installed. The installation program detects which product you have and installs the appropriate files. Installation steps are provided in the Installation Guide.

Related topics:

- Basic Customization Steps
- Introducing the Customization Studio
- Introducing the Administrator
- Administrator Help Contents
- Customization Studio Help Contents
- Client Help Contents

Introducing the Administrator

The Administrator lets you do the following:

Capture screens for customization by the Customization Studio.

Test customizations made using the Customization Studio.

Modify settings for this host session. You can set up this session for the following:

- Show/Hide the toolbar, keypad, hotspots, menu buttons and status bar
- Customize the toolbar by adding buttons
- Set file transfer defaults
- Set host screen colors
- Remap the keyboard
- Set the tab-movement mode
- Set the appearance of menu, valid-value, image and Web-link buttons

> **Attention:**
> The Administrator or Studio functions will not work properly if the Host On-Demand cached client is installed.
> To remove the cached client, follow the appropriate procedure in the *Host On-Demand Getting Started Guide*.

Related topics:

- Basic Customization Steps
- Introducing the Customization Studio

Introducing the Customization Studio

A major benefit of adding a graphical interface to your host application is the flexibility to change the appearance and functionality of the screens. The Customization Studio (Studio) allows detailed screen customization which can be placed on the Web server (Host On-Demand), or a network drive (Personal Comminications) for distribution. The Customization Studio can be accessed from an Administrator session or by clicking Start > Programs > IBM Screen Customizer > Customization Studio.

The Customization Studio allows you to customize any host application screen on both the screen and object levels. Changes to templates made in Customization Studio apply to all screens using that template. This makes it easy to update many screens at once.

Using the Customization Studio, you can:

- Create templates to customize many screens at once
- Change the appearance of screens and individual objects
- Copy, resize, and move existing screen objects
- Reset the tab order
- Create new labels and text fields and also edit existing ones
- Delete or hide existing screen objects
- Create buttons, check boxes, choices, frames, image buttons, lists, radio buttons, valid values buttons, and Web link buttons
- Convert input fields to check boxes, radio buttons, choices, and lists
- Convert labels to macro buttons
- Move and change the colors and fonts of multiple fields simultaneously
- Add facilities that allow the user to automatically navigate through the screens
- Redirect action keys
- Add customized buttons to the toolbar
- Pass data from screen to screen using global variables
- Manage the location of the files you create during the customization process
- Erase customizations
- Add help (valid values lists and help descriptions)

Related topics:

- Basic Customization Steps
- Introducing the Administrator

Basic Customization Steps

Welcome to the IBM Screen Customizer for Host Integration. Follow the steps to the left to get started with screen customization. The readme contains late-breaking product information.

1.Create a global template

With Screen Customizer V2.0, you can create a template that can be automatically associated with all of your host screens--customized or not. This template allows you to specify the area reserved for your host screen as well as providing additional space for buttons, Web-links, and other custom objects. Using a global template, you can also specify the color, font, and button styles for all of these screens.

Best of all, whenever you customize this template, all changes are automatically applied to all screens associated with that template. You no longer have to modify each screen individually, as you did with Screen Customizer V1.0; you simply customize a template and all screens will be displayed with these customizations at run time.

To create a global template:

1. Click Start > Programs > IBM Screen Customizer > Customization Studio.
2. Customize the template by changing the position of the host screen area on the display, adding objects, such as buttons and web links around the host screen area, and defining common colors, fonts, and keyboard remappings to be used for the display.
3. Click File > Save As
4. Type sc_global.tpl to have this template used as the default global template and click Save.

[More information](#)

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2. Start an Administrator session

The Administrator is an active host session that is used to capture host screens so that they can be modified in the Customization Studio. It is also used to test customizations.

1. Click Start > Programs > IBM Screen Customizer > Administrator or click [here](#).
2. Click Add Sessions, then right-click on the type of session you want to use and click Copy (you can use only 3270 or 5250 sessions with Screen Customizer).
3. Configure the session and click OK.
4. Double-click the icon to start the session.

[More information](#)

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3. Capture screens to be customized

1. In the Administrator session, go the the screen that you want to customize.
2. On the Administrator toolbar, click the Customize button or click File > Customize Screen.
3. Type a screen ID and, optionally, a description.
4. Click OK.

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4. Customize the screen and save it

Use the Studio to customize individual host screens. You can create graphical interfaces that hide complexity, provide user friendly objects (such as buttons, radio buttons, check boxes, choice boxes, and images) and link to Web data.

How you customize the screen is up to you; there are many possibilities. Following are some common tasks that can be done with the Studio.

1. Hide any fields or data that the user doesn't need. Be careful not to hide elements that you may need for your customization.

    a. Choose View > Fields. This will show all fields on the screen.

    b. Select all fields that you want to hide by holding down the Control key and clicking on the fields with the left-mouse button.

    c. Right-click on any of the selected fields and choose Hide.

2. [Convert input fields to objects](#). For example, if your screen contains an input field that accepts only the values 1, 2, and 3 which correspond to 'Create a New Account', 'Query Account Information', and 'Change Account Information', consider converting this field to a choice.

    a. Right-click on the input field and select Convert > to Choice.

    b. Right-click the choice and click All Properties.

    c. In the Set Item field, type a brief description of the first function followed by a '~' and the corresponding number to be sent to the original host input field. For example, type:

        ```
        Create a New Account~1
        ```

    d. Click Add.

    e. Repeat the above steps for the other choices. At run-time, the choice displays the descriptions and when a selection is made, the value after the '~' is placed in the host input field.

    f. If one of the values is frequently used, make it the default by highlighting it in the list.

    g. Click OK to finish setting the Choice properties.

    For a different presentation of the same input field options, try using a [list](#). The decision to use one over the other is a matter of style and space considerations. If there are only a few valid values, you could also use [radio buttons](#) or a [button](#) corresponding to each possible choice.

3. Add buttons to perform common functions. Use buttons to send text to various host input fields and to execute common host commands, for example, Enter or F1.

    a. Click Create > Button and then click the left mouse button to place the button on the screen.

    b. Right-click the button and click All Properties.

    c. Type a new caption.

    d. Click the Macro tab.

    e. Type *Hello world* in the Edit Source field and click Add. The text appears in the Field Values box.

    f. Select the text in the Field Values box. Notice that the Link to Input Field or Parameter

list box on the right becomes enabled.

g. Select the input field in the Link to Input Field or Parameter list where you want the text sent.

✏️ If necessary, repeat the previous three steps to send text to other input fields.

h. Select a function, such as Enter, in the Function Key list to send to the host at the end of the macro.

i. Click OK or Apply.

If you want to add an image to a button or change the color of the button, use an Image button instead. If you want your button to open a URL in a browser, use a Web-link button.

4. Modify the layout of the customized screens. Move, align, and resize objects to create a cleaner, more user-friendly interface. Read Moving an object and the subsequent sections for more information on moving, aligning and resizing objects.

5. When you are done, save the screen customizations by clicking File > Save.

More information

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5. Test your customized screen

Return to the Administrator. If you named your template sc_global.tpl or if you customized an individual screen, your customizations will automatically be applied to the screen you are working on. If you named your template something else, you need to do the following to have your customizations appear:

1. Click Test > View with different template.
2. Click Enable.
3. Type the name of the template.
4. Click OK.

✏️ Get-to-the-Point and Web-link buttons appear but are not operational in the Administrator.

More information

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6. Apply the global template

If you named your template sc_global.tpl, it will automatically be applied to all screens globally. If you named your template something else, apply the template by adding a parameter to the HTML you use to start Screen Customizer.

More information

Understanding templates

With Screen Customizer V2.0, you can use templates to specify and easily update much of the customization of host screens. These templates can be associated with many host screens at once--customized or not. They allow you to specify the area reserved for host screens as well as provide additional space for buttons, Web-links, and other custom objects. Using templates, you can also specify the colors, fonts, and button styles for these screens.

Certain attributes can be overridden for specific host screens and objects.

Best of all, whenever you customize a template, all changes are automatically applied to all screens associated with that template at run time. Templates can be used in two ways: globally or associated with specific screens.

The default global template is called sc_global.tpl and is applied automatically to all host screens that do not have a specific template associated with them. Templates by other names can be used, but setting them up as the global template requires that you edit the HTML file used to start the program.

You can create other templates for other situations. For instance, if your users used two applications--a database application and a timecard application--you could set up the global template for the application with the most screens and create another template for the other application. To use another templates, you must specify that template for each screen involved.

In addition, you can still use templates to manually import objects and settings into specific screens. Click here for more information.

Profiles are no longer supported. Templates contain much of the information that was previously stored in profiles. Information from existing pre-Screen Customizer V2.0 profiles should have been migrated to templates during installation.

To customize a template to be applied globally to all screens, follow these general steps:

1. Start the Customization Studio.
2. Create a template, customizing it as you require.
3. Apply the template to screens.

After you have applied a template globally, you can override that template for a given screen, using Template Options.

Related topics:

- Applying a template
- Changing templates
- Creating a template
- Customizing a template
- Opening a template

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Related topics:

- [Basic Customization Steps](#)
- [Introducing the Customization Studio](#)

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Related topics:

- Basic Customization Steps
- Introducing the Administrator

Converting an object

The Convert option allows you to convert text fields into check boxes, radio buttons, choices, and lists; and labels into buttons, check boxes, radio buttons, choices, and lists (created objects are not convertible). Converted objects use common settings from the object-parent, but all new properties are empty.

1. Click or tab to the object you want to convert.
2. Click Edit > Convert > the new object (for example, to Checkbox).

To change values of a converted object:

1. Right-click the object.
2. Select the object property you want to change or select All Properties to see the object's current properties.
3. Make changes to the properties and click OK.

If an object was converted and you want to undo the conversion, click View > Objects. Find the object-parent (from the list of objects), which was hidden during the original conversion. Delete the converted object and click Show to show the originally converted object-parent.

Adding a list

Lists, much like check boxes and choice boxes, can be added to replace input fields that have a certain number of Valid Values. A list graphically displays a list of strings and is scrollable if necessary. In addition, a user can change the size of the list.

To create a list:

1. Click Create > List.
2. Place the list on the screen by clicking the left mouse button.
3. Right-click the list to change the properties.

Changing list settings

1. Right-click the list and select Settings.
2. Select the input field you want to link the list to. The current value of the selected field is displayed in the Linked Field Value box.
3. Click OK.

Adding a host link

1. Right-click the list and select Host Link.
2. To add a character string to the list of values, type this string into the Set Item box and click Add.
3. To replace a string, select it from the list of values, type the new string in the Set Item box and click Replace.
4. To remove a string, select it from the list of values and click Remove.
5. To clear all values, click Clear All.
6. Click OK.

   If you are creating a list for Internet Explorer 4.0 users, you must adjust the list size to the font size of the list item. Otherwise, the list might appear in an unusual form and be disabled. It is recommended that you set the height of the list to at least two selected font sizes and width to the length of the longest entry.

Annotated translations of values for list boxes

This feature allows you to set up list boxes to display a description that is different than the value sent to the host. For example, the user sees the word "Italian Lira", but the only characters "ITL" get sent to the host.

To add annotated translations of values for list boxes:

1. Click Create > List.
2. Right-click the List box and select Settings.
3. In the Set Item box, type a description, a tilde (~), and a name. For example, `Italian Lira ~ ITL`.
4. Click Add. Click Apply.
5. Click the Host Link tab.

6. Select a type of Link to Host field (All, Unprotected, or Protected).
7. Select the Position, Row, Column, and Length of the Linked Field Value. The selected field will blink on the screen.
8. Click Apply.
9. Click OK.
10. Click File > Save.
11. Open an Administrator session.
12. Click Assist > Refresh. The name appears in the linked field.

Adding a radio button

Radio buttons can be added to the interface to replace an input field. These are useful for input fields that accept one value from a short list of possible values. For example, if the host requires the user to input a yes or no, two radio buttons can be used as the input field. Radio buttons let you set a default setting. For example, you can set Yes as the default. Radio buttons are very similar to check boxes.

To create a radio button:

1. Click Create > Radio Button.
2. Place the button on the screen by clicking the left mouse button.
3. Right-click the radio button to change its properties.

Changing radio button settings

1. Right-click the radio button and select Settings.
2. Select a field from the Link to Host Field box and its caption appears in the Linked-Field Value box. The Link to Host Field shows all the input fields, which are displayed according to their position, row, column, and length. The length of the field is shown to indicate the maximum size of the string it can accept. When you select a field it will blink on the screen.
3. Set the number of radio buttons in the Number of Buttons box (default is 2, maximum is 48).
4. Set the number of rows and columns in the Layout group of text boxes. A sample radio button layout, which is below the "Number of Columns" label in the Set Radio Button Properties window, will reflect the selected number of rows and columns. You can also select the number of columns and rows by dragging the bottom right corner of the sample radio button layout.
5. Click OK.

Adding a button

Buttons can be added to replace function keys. Most host applications have a list of commands and their associated shortcut keys at the bottom of the application screen. Instead of using function keys to move through the screens, you can use PF keys for buttons. The PF keys are still valid. Even though lists of PF keys are turned into hotspots, adding buttons is still valuable. Clicking buttons is faster, more intuitive and more convenient than searching through the list of PF keys for the proper function. Buttons can be placed anywhere on the screen, so users do not have to search through the list of PF keys on the bottom of the screen. You can also add Buttons to execute new functions.

To add a button:

1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. To change the properties of the button, right-click the button and select All Properties.

Adding a disconnect session button

You can add a button to log the user off of the host system. This is very important in cases where the standard exit keys keep the session connected, wasting LUs on the host.

To add a disconnect button:

1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. Right-click the Button and select Macro.
4. Select the predefined Close window command from the Select Source or Event list (<C_W> - Close window).
5. Click Add.

   If you click the Disconnect Button in a session window, it will close the connection.
6. Click OK.

Adding a button to launch a macro file

To add a button that launches a macro file:

1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. Right-click the Button and select Macro.
4. Select the predefined Launch Macro File command from the Select Source or Event list (<P_M> - Launch Macro File) and indicate the Macro File that should be launched.
5. Click Add.
6. Click OK.

Click here for information about creating and updating a macro file.

Adding a start new session button

To add a button that starts a new session:

1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. Right-click the Button and select Macro.
4. Select the predefined Start New Terminal Session command from the Select Source/Event list (<N_S> - Start New Terminal Session).
5. Click Add.
6. Click OK.

When you click Start New Terminal Session button, it starts a new host session using the same configuration as the first session.

Adding a run user applet button

To add a button that runs a user-created class:
1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. Right-click the Button and select Macro.
4. Select the predefined Run User Applet command from the Select Source/Event list (<R_A> - Run User Applet).
5. Optionally, add the name of the class file to run. If no class is specified, when the button is clicked, a dialog appears that prompts for the class.
6. Click Add.
7. Click OK.

When you click the Run User Applet button, the appropriate class will be constructed using the default constructor, and the init() method will be called.

Classes which are run using the Run User Applet command must implement a default constructor and the com.ibm.eNetwork.ECL.ECLAppletInterface. The interface definition can be found in the Host Access Class Library (HACL) reference of either Host On-Demand or Personal Communications.

Adding a file transfer button

To add a button that shows either the send, receive or defaults window for File Transfer:
1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. Right-click the Button and select Macro.
4. Select one of the predefined File Transfer commands from the Select Source/Event list (<S_F> - Send files to host, <R_F> - Receive files from host, <F_D> - File-transfer defaults).
5. If the button is a toolbar button or an image button, add the appropriate image to the button by right-clicking the button, selecting General, and completing the tab. The following images are provided:
   - ft_send16.gif - Send Files
   - ft_recv16.gif - Receive Files
   - ft_def16 - File Transfer Defaults
6. Click Add.

7. Click OK.

When you click the File Transfer button, the appropriate window will be displayed.

Adding an image button

Image buttons add the same functionality as a regular button, but you can add an image to the button. You can change the colors of image buttons from the default gray to almost any color. This is useful if you are putting your application on the Web and allowing your clients to access it remotely.

To create an image button:

1. Click Create > Image Button. The image button appears anchored to your mouse pointer.
2. Place the button on the screen by clicking the left mouse button.
3. Right-click the image button to change the properties.

Changing image button settings

1. Right-click the image button.
2. Click the General tab.
3. Enter a caption to appear on the image button.
4. Choose the position of the caption in regard to the image on the button.
5. To select an image, click Browse and select an image and click open or enter the name of an image from the /custom/img directory and click View.
6. Click Delete Image to remove an existing button image.
7. Click Top, Center, Bottom to position the caption within the button. Click Blend with Image to superimpose the caption in the image.
8. Click OK.

Adding a Web-link button

A Web-link button brings users directly from the host application to the Web. The button must be linked to a Web site and can also be linked to a field on the screen. Web-link buttons can either link to a fixed Web site, or data from the screen can be used to create dynamic links.

To create a Web-link button:

1. Click Create > Web-link Button.
2. Place the Web-link button on the screen by clicking the left mouse button.
3. Click the right mouse button to change the properties of the Web-link button.

Changing a Web-link button caption or image

1. Right-click the Web-link button and select General.
2. Enter a caption for the tool tip in the Statusbar Tip field.
3. Enter a caption for the Web-link button in the Enter Caption field.
4. Choose the position of the caption for the button.
5. Optionally, insert an image on a Web-link button.

   If you want to erase an existing button image, click Delete Image.
6. You can see how your Web-link button will look from the Set Web-link Button Properties window. Change the position of the caption to see how it looks in each position.
7. Click OK.

Selecting a URL address and linking a button to a specific field

To link a button to a specific field, right-click the Web-link button and select Macro.

Web-link Buttons must have something input directly into the Edit Source box for them to work, regardless of whether all users are automatically being sent to the same Web site or information is being taken from the screen and being used as part of the URL address. This is so that if all users are automatically sent to the same Web site, then that Web site's URL address must be entered into the Edit Source box. In order to use dynamically changing host output or the user's own input to determine the Web address, the partial URL address is used to activate the Link to Host Field box. A partial URL address can be anything from the base part of an address (http://www.) or an actual homepage (http://www.ibm.com/) to a forward slash (/), a period (.), or a "dot com" (.com).

Putting data directly into the Edit Source field

There are two ways to input data directly into the Edit Source Box:

- Type the whole URL address directly in the Edit Source box and click Add. The value appears in the Command Line Parameters field.
- Insert data from a Client HTML file and click Read HTML. Select the HTML and click Open, and variables are displayed in the Select Source list box. Select the data from the Select Source list box and the parameter's name are immediately displayed in the Edit Source box. Click Add and the data appears in the Command Line Parameters field.

Make sure you have already set a URL address as a parameter in the HTML or parameter file.

Linking the Web-link button to a field

You can take information from any field (user-defined or a system-defined field) on the screen and use it as another part of the URL address.

Fields can be linked to partial Web site addresses only from the Command Line Parameters field, so there has to be at least one partial address selected in the Command Line Parameters field before you can link the button to a field. The list contains the command line represented as a list of its parameters shown in their real order. A parameter can be some text or symbol or an HTML parameter name as well as a global variable. There can be more than one partial address in the Command Line Parameters field. When there is more than one address in the Command Line Parameters field, the Web-link Button will read all of the partial addresses from top to bottom, and construct the URL address in this order as well. The URL address is interpreted in this order: top partial address in the Command Line Parameters field-Field linked to this address, second partial address in the Command Line Parameters field-Field linked to this address.

For more information on using fragments and variables in URLs, click here.

HTML parameters can be selected from the Select Source list. To fill the Select Source window with the list of available HTML parameters, open the proper HTML file by clicking Read HTML.

To add a new parameter to the Command Line Parameters list, enter it in the Edit Source field and click Add.

To replace a parameter, select it from the Command Line Parameters window, change it in the Edit Source field and click Replace. If you click Add instead of Replace, the modified parameter will be added to the end of list without replacing the old one.

All of the input fields are listed in the Link to Host Field field. Click the partial address in the Command Line Parameters window that you would like to link. Then, click the host field you want to link the partial address to. This field will blink on your screen. The value from this field is what is going to be added to the URL address and includes an equal sign (indicating that this is a parameter).

For example, if you type **http://www** in the Edit Source field (as the partial address), and then link the button to a label that reads *ibm.com*, your Web-link Button will point to the URL address *http://www.=ibm.com.*

To prevent the equal sign from being added, add a blank line to the command-line parameters list and then link the blank line to the host field. Or, you can enter the full URL for the Web-link button.

This is an example of how a Web-link Button can be used. A more useful way to use a Web-link button is to use data from the host to determine which URL address the user is going to be sent to. An example of this is in the next section.

Since the Command Line Parameters field reads information from top to bottom, you may find it necessary to reorder or change the information in this field to make the Web-link button functional:

1. Click Insert to insert a value from the Edit Source field in between two already existing values in the Command Line Parameters field.
2. Highlight the value and click Remove if you want to remove the value.
3. Replace allows you to change variables for the same link. Click the variable in the Command Line Parameters field. Click the new variable in the Select Source field and click Replace.
4. Click Remove All to remove all selected variables and links.
5. Click Apply to save the changes, and OK to save the changes and exit.

Example of using a Web-link button

You have a mainframe program that acts as an inventory ordering system for a cup supplying company. There is a screen titled "Mug Orders" that contains three user input fields, three host output fields and their associated labels: "What Type," "What color," and "What material." There is also a button labeled "Send Order."

The Valid Values for the "What Type" field are 'coffee' or 'tea'. When the user inputs a word into the "What Type" field, that exact word is reproduced in the associated host output field. The Valid Values for the "What Color" field are 'yellow,' 'green,' or 'red.? The Valid Values for the "What Material" field are 'Ceramic' or 'Styrofoam.' In both the "What Color" and "What Material" fields, the system interprets the user's input and translates it into a number which it outputs in the associated host output field. For example, if the user inputs information for a ceramic green tea mug, the output in the host fields are tea (tea) 2 (green) and 1 (ceramic).

There have been many problems with mug orders lately, and you have deduced that the problems are caused by people not knowing exactly what they are ordering. You believe that if you could show people a picture of what they are ordering before they actually send the order, that 90% of the mistakes will be corrected.

You know that all of the pictures are on your Web site (homepage: www.mug.com) according to their system-defined values (for example, a ceramic green tea mug can be found under www.mug.com/tea/2/1). You would like to link a Web-link button to the fields on this screen. Once you set up the Web-link button, users will be able to click it and go directly from the mainframe application to the specific URL address that is dependent on what they input on the screen. Then they can see what they are ordering before they actually send the order, and the problem with the mug orders will be solved.

Creating a Web-link button example

1. Click Create > Web-link Button.
2. Position the Web-link Button on the screen.
3. Right-click the button.
4. Click the Macro tab. You can only link data that is already in the Command-Line Parameters box. The only way to get data into the Command Line Parameters box is through the Edit Source box.
5. Type www.mug.com/ into the Edit Source box, and then click Add. That value is added into the Command Line Parameters box.
6. To link the button to a field, highlight the value in the Command-Line Parameters box, and then choose the field from the Link to Host Field box. You want to link this data with the host field associated with the "What Type" input field. You can memorize the row and column position of the field, or you can move the Get-to-the-Point window aside to see which field is blinking (the field that you select in the Link to Host Field Box will blink on the screen).
7. Enter a slash '/' into the Edit Source box, and click Add. The value is now added to the Command Line Parameters box. Click Add again, and that same value is added to the Command-Line Parameters field again.
8. Select the top forward slash (/) in the Command Line Parameters box, and link it to the host field associated with the "What color" input field.
9. Select the second forward slash and link it to the host output field associated with the "What Material" input field. You have to be careful that everything is in the correct order, or else the URL address may be invalid. Items are read from top to bottom and left to right in the Command-Line Parameters box. The URL address is built starting with the first item in the Command-Line Parameters box, then the data from the associated linked field, then the

second item in the Command Line Parameters box, and then the data from the associated linked field.)

10. Click Apply to save the changes to the macro tab or OK if you have finished. Click OK to close the Web-link Button.

Using a Web-link button to request a separate window browser

Web-link buttons open the requested URL in either the active session or in a new browser session, which can be closed after it is used. A new browser window is always opened when using Personal Communications.

1. Open the Client HTML file in a text editor.
2. Add the parameter, NewWindow, for determining how a new document will open. If the NewWindow value = false when you click the Web Link button, the link is opened in the active session browser window. If the NewWindow value = true, a new browser window is opened. true is the default value. Save your changes and close the browser.
3. Click File > Customization.
4. Click Create > Web-link Button.
5. Right-click the Web-link Button and select Macro.
6. In the Edit Source box, type the URL address of the browser you would like to use.
7. Click Add.
8. Click OK.
9. Click File > Save.
10. Open the Client to view the parameter change.
11. Click the Web-link Button. The new browser window opens.

Moving an object

Using the keyboard

1. Click the object you want to move.
2. Hold the Shift key and use the arrow keys to move an object.

OR

1. Click the object you want to move.
2. Move the mouse to the place on the screen where you want to move the object.
3. Press the m key on your keyboard and the object moves to the new location.

Using the mouse

1. Click the object you want to move.
2. Drag and drop the object to the new location.

When you move an object with the mouse, only the frame of the object is moved when the mouse button is held down. When you drop it, the whole object moves from its original location to its new location.

Customizing individual host screens

You can use templates to specify the areas reserved for host screens and to control the custom objects around that screen. You can also customize individual host screens themselves.

Also, a template sets the default settings for all screens. However, you can override specific settings for individual screens. For example, if you want a specific screen to appear with a different background color, you can change the background color for that screen only. Other settings will continue to be controlled by the template. Only this element will continue to override the template settings.

It is recommended that you use a template to set general settings and then make exceptions for individual screens.

To customize individual screens:

1. Using the Administrator, begin a session containing the screens you want to customize.
2. Go to a screen you want to customize.
3. Click File > Customize Screen and give the screen an ID.

    The Customization Studio appears with the screen displayed inside its window.
4. Customize the screen. (See Related Topics below for some objects you can add.)
5. Click Save.
6. Click Exit.

Related topics:

- Changing screen colors
- Changing the font
- Controlling tabbed elements
- Customizing the toolbar
- Guiding users through screens (Get-to-the-Point)
- Redirecting action keys
- Remapping the keyboard
- Setting tab order
- Setting the tab key movement

Applying a template

If you named your global template sc_global.tpl, your template is already applied automatically by default. However, if you did not name your global template sc_global.tpl or want to apply a different template, you must edit a file manually to apply that template to Screen Customizer. The procedure is different depending on whether you are using Screen Customizer with Host On-Demand or Personal Communications.

If you use different host screen sizes, you may want to set up a template for each supported host screen size.

If you are using Screen Customizer with Host On-Demand and want to apply a template globally to all screens:

1. Edit the HTML file you use to start Screen Customizer.
2. Add the following in the parameters section:

   `<PARAM NAME=template     VALUE=xxxxxxx.tpl>`

   where *xxxxxxx* is your template name

   For example, you could add the following to HODCustom.html to use a template named "personnel":

   `<PARAM NAME=template     VALUE=personnel.tpl>`
3. Restart Screen Customizer using that HTML file.

If you are using Screen Customizer with Personal Communications and want to apply a template globally to all screens:

1. In the private subdirectory, edit the parameters file.
2. Add the following:

   `"template=xxxxxxx.tpl"`

   where *xxxxxxx* is your template name

   For example, you could add the following to a parameters file to use a template named "personnel":

   `"template=personnel.tpl"`
3. Restart Screen Customizer using that parameters file.

After you have applied a template globally, you can override that template for a given screen, using Template Options.

Related topics:

- Customizing the host screen area

Inheriting appearance settings

In Screen Customizer, the color, font, and certain other appearance customizations you see on your screen are determined according to the following inheritance hierarchy:

1. Objects
2. Screens or maps
3. Templates
4. User preferences

Inherited settings are not resolved until run-time. Therefore, what appears in the Studio may not be what appears in the client.

This means that customizations on the object level override those on the map level, customizations on the map level override those on the template level, and customizations on the template level override user preferences. Checking Inherit causes any customizations made on the next level to be used.

For instance, if an administrator uses the Customization Studio to create a Web-link button and sets the font to SansSerif, SansSerif will be the font for that button regardless of what fonts are set on the map or template level. However, if an administrator does not set the font for the Web-link button but instead checks Inherit Font, the font used for that button will be whatever font the administrator sets for the map.

If the administrator checks Inherit Font for the Web-link button as well as for the map, the font is then determined by whatever font the administrator specifies in the template. If the administrator checks Inherit Font on the button, map, and template level, only then is the font determined by the user preferences.

By default, object, map, and template properties are automatically set to "Inherit"; therefore, if you do not make any changes, user preferences are enabled.

Changing templates

You can specify that a screen use a [global template](#), a different template, or no template at all. You can also specify that a screen use only the colors and fonts from a template.

Specifying a different template

To use a template other than the global template with this screen:

1. Click Screen > Template Options.
2. Click Show with specified template.
3. Type the name of the different template.
4. If you want the screen to use only the template's colors and fonts, check Only apply template colors and fonts.
5. Click OK.

Specifying no template

To specify that a template not be used with this screen:

1. Click Screen > Template Options.
2. Click Do not show template.
3. Click OK.

Specifying a global template

By default, all newly mapped screens are configured to show the global template if one is defined.

To apply a global template to this screen:

1. Click Screen > Template Options.
2. Click Show with global template.
3. If you want the screen to use only the template's colors and fonts, check Only apply template colors and fonts.
4. Click OK.

Importing and exporting from a template

To import any or all of the objects you created:

1. Open the map or template where you want to import the customization to.
2. Click File > Import > from Template.
3. Select the template from which you would like to export the customization and click Open. The template appears in the Export window behind the original screen.
4. Go to the newly opened template and select the appropriate options from the Select menu.
5. Click File > Export.
6. Click File > Close. The customization imported from the template appears on the original map or template.

For similar screens, you can customize the common part of the screen once and then export the customization. Open the screen where you want to import the customization. Click File > Import and open the customized map. Select all objects on the map that you want to have on your screen and export them. Close the screen that you are exporting from.

Creating a template

Templates are extremely versatile. With them, you can manually or automatically customize specific screens or all screens globally.

To create a template:

1. Click File > New Template.

    A blank screen appears where you can position the host screen area within the template, create objects, and otherwise modify this template for use with other screens.

2. Customize the template. (See Related Topics below for some objects you can add.)

    Do not delete the host screen area. This is where the host screen appears.

    If you want your users to be able to customize their own screen colors and fonts, check the Use Default Color and Use Default Font boxes.

3. Click File > Save As to give your template a name and save it.

    If you name your template sc_global.tpl, your template will be applied globally by default. However, you must close and reopen any sessions you have open for this template to take effect.

Related topics:

- Adding a button
- Adding a checkbox
- Adding a choicebox
- Adding a frame
- Adding an image
- Adding an image button
- Adding a label
- Adding a list
- Adding a radio button
- Adding a textfield
- Adding a valid-values button
- Adding a Web-link button
- Changing screen colors
- Changing screen font
- Controlling tab-key movement
- Customizing the host screen area

Customizing a template

Templates are extremely versatile. With them, you can manually or automatically customize specific screens or all screens globally.

Creating and customizing a new template

To create and customize a new template:

1. Start the Customization Studio
2. Click File > New Template.

    A blank screen appears where you can create objects and otherwise modify this template for use with other screens.

3. Customize the template.

    Do not delete the host screen area. This is where the host screen appears.

4. Click File > Save As to give your template a name and save it.

Editing or customizing a previously created template

Customizing a previously created template changes every screen that uses that template automatically at run time.

To customize a previously created template:

1. Using the Administrator, open a screen that uses the template you want to modify.
2. Click Customize screen to start the Customization Studio.
3. Click File > Customize Template.
4. Customize the template. (See Related Topics below for some objects you can add.)

    Do not delete the host screen area. This is where the host screen appears.

5. Click File > Save.

Related topics:

- [Adding a button](#)
- [Adding a checkbox](#)
- [Adding a choicebox](#)
- [Adding a frame](#)

Opening a template

Templates are saved as *.tpl files in the /custom/map directory. To open a template:

1. Click File > Open Template.
2. Select a template and click Open.

To view the changes in context with a particular host screen, return to the Administrator and click View > Refresh. If the modified template is not the current template, select the modified template by clicking Test > View with different template.

Related topics:

- [Applying a template](#)
- [Basic Customization Steps](#)
- [Changing templates](#)
- [Creating a template](#)
- [Customizing a template](#)

Applet file names

The following applets are provided for Host On-Demand:

HTML file	Description	Use with	Type
HOD*.html	Any Host On-Demand client. Provides an icon interface for starting client sessions. (Recommended)	Host On-Demand	Client
HODCustomAdmin.html	Provides an icon interface for starting administrator sessions. (Recommended)	Host On-Demand	Administrator
HODCustomClientBasic.html	Basic interface for starting client sessions. (Replaces ATTAppletH.html)	Host On-Demand	Client
HODCustomAdminBasic.html	Basic interface for starting administrator sessions. (Replaces ATTAdminH.html).	Host On-Demand	Administrator
CustomStudio.html	Applet for starting Customization Studio. (Replaces ATTStudio.html).	Host On-Demand and Personal Communications	Studio

To use the interface similar to ResQ!Net, load the Basic HTML files, for example, HODCustomClientBasic.html.

Parameter list

Below is a list of parameters, descriptions, default values, and for which files they can be used:

- **PCOMM** - Personal Communications parameter file
- **Basic** - HODCustomAdminBasic.html and HODCustomClientBasic.html
- **HOD** - Host On-Demand applet files

For easier comprehension, this table uses the values true and false consistently. However, using 0 for false and 1 for true is also valid and HTML files using these values will continue to work.

Parameter name	Description	Default value	Use for
host	Sets the TCP/IP address of the host you want to use as a default to connect to the TN3270/TN5250 Server or the Personal Communications profile name.	none	Basic
port	Sets the default TCP port used by the applet when connecting to the server.	23	Basic
screenSize	Sets the screen size.	<table><tr><td>Terminal Types</td><td>Values</td></tr><tr><td>3270 24x80</td><td>2 (default)</td></tr><tr><td>3270 32x80</td><td>3</td></tr><tr><td>3270 43x80</td><td>4</td></tr><tr><td>3270 27x132</td><td>5</td></tr><tr><td>5250 24x132</td><td>6</td></tr></table>	Basic
sessionType	Sets the session type.	<table><tr><td>Terminal Types</td><td>Values</td></tr><tr><td>3270</td><td>1 (default)</td></tr><tr><td>5250</td><td>2</td></tr><tr><td>CICS</td><td>4</td></tr></table>	Basic
template24x80	The default template to be used for all 24x80 host screens	none	Basic, PCOMM, HOD
template32x80	The default template to be used for all 32x80 host screens	none	Basic, PCOMM, HOD
template43x80	The default template to be used for all 43x80 host screens	none	Basic, PCOMM, HOD
template27x132	The default template to be used for all 27x132 host screens	none	Basic, PCOMM, HOD
template	The default template to be used for all screens if no template for the specific screen size is set. Can be used by itself to set the default template for all screens regardless of host screen size. Click here for more general information about templates.	sc_global.tpl	Basic, PCOMM, HOD
PageWindowUpdown	When set to true, enables keyboard scrolling. This means that, in addition to using a mouse, a user can use the PageUp and PageDown keys to scroll a screen up and down. When set to false, a user can use only a mouse to scroll the screen. **Note:** This feature is for 3270 only and will override settings for Page Up and Page Down on the keyboard remap.	false	Basic, PCOMM, HOD

Autoconnect	Sets the option to make the user connect to an administrator specified host or to a user defined host. If autoconnect is enabled, the user can still connect to another host by entering the parameters in the session configuration window and starting a session. To keep the user from doing that, edit the HTML file and set the length and height of the applet to 1.
	
	To bring up sessions that are automatically connected to a particular host, add the following lines to HOD.html:
	
	`<PARAM NAME=Host    VALUE=yourhostname>`
	`<PARAM NAME=AutoConnect   VALUE=true>`
	`<PARAM NAME=GUIEmulation  VALUE=true>`
	Also change the code parameter in the applet tag to:
		false (default) if you want the user to choose which host to connect to. true - if you want to connect the user to specific host.	Basic

	`CODE="com.ibm.eNetwork.HOD.SessionLauncher.class"` This will allow your session to connect automatically to the designated host. If AutoConnect is set to FALSE, the session will start in the disconnected state.		
SSL	Enables SSL communications to the host.	false (default) - if you want to disable SSL communications. true - if you want SSL enabled.	Basic
TNEnhanced	Enables TN3270E functions.	true (default)- if you want to enable TN3270 Enhanced functions. false - if you want to disable TN3270 Enhanced functions.	Basic
LastIndex	Sets the highest number parameter that can be defined. This does not set the maximum amount of parameters, but the highest number you can assign to a parameter. To set more parameters than the amount in Last Index, reset the Last Index parameter. You can add parameters up to and including the number you have as a value in Param Name=Last index. Parameters following "LastIndex" line (Prm1, Prm2, Prm3..) can be used for the Get-to-the-Point facility or Web Link buttons. These parameters are global variables. The usage of these parameters reduces redundant input and allows for easier changes. For example, if parameter 11 is used in multiple Web Link Buttons, and you need to change it at some point in the future, then modifying this parameter is much faster than modifying multiple hard-coded strings in Web Link Buttons.	100	Basic, PCOMM, HOD
subdir	Sets the name of the directory that contains user specific customization. During installation, two directories are created: /custom and /com. You create directories for special customizations that can be sent to specific users or user groups. These directories can include some or all of the /custom subdirectories (help, image, lst, maps, and ref). If no value is set, then the user receives customization from the default directory, /custom. If a value is set, then the user receives the customization from the directory specified as the parameter's value.	none	Basic, PCOMM, HOD
IDFlag	Sets the prefix string used in identifying your Screen IDs. Typically, an eight-character string identifies screens: the first 4 characters of which are constant (prefix) and last 4 are unique (ID). If your application doesn't have screens that can be identified by a prefix, ignore all parameters containing "ID."	Screen ID	Basic, PCOMM, HOD
IDFlagPos	Sets the absolute position, where the screen ID flag is located.	none	Basic, PCOMM, HOD
IDPos	Sets the absolute position where the screen ID itself is located.	none	Basic, PCOMM, HOD
NewWindow	Opens Web-links in a new browser window if the param value=true. If the param value=false, no new browser window is opened. 1 is the default value. **Note:**When you are using Screen Customizer with Personal Communications, Web-links always open in a new browser window regardless of this parameter's values.	true	Basic, HOD
DecimalSeparator	Character that separates the result of a mathematical operation when it is rounded to a decimal place in the Global Variables Facility	decimal point (**.**)	Basic, PCOMM, HOD
lookupfile	Sets the name of the look-up table file for the Global Variables Facility.	lookup.xml	Basic, PCOMM, HOD
useHostColors	Use host-defined text colors instead of default text colors.	true	Basic, PCOMM, HOD

Parameter	Description	Default	Clients
CustomURL	Allows you to change the user's directory Website to indicate on which server the user-customizable components reside. **Note:** If you are using the CustomURL parameter to copy customized panels from a server other than the one you are currently using, the panels will not appear unless you follow these procedures: ● Enter this parameter in the HOD.html file on the server that will use the other server's customized panels: `<PARAM NAME=CustomURL  VALUE="http://webserver">` where *webserver* is the name of the server with customized screens. ● If you are using OS/2 as the server containing the customized screens, you must copy the entire custom directory to the Web server directory (\www\html). ● If you are using an IIS Web server, you must put the entire custom directory in inetpub\wwwroot.	none	Basic, PCOMM, HOD
AllowProportionalFonts	Allows you to used proportional fonts	false (default)- allows you to select fixed fonts only. true - all fonts are allowed.	Basic, PCOMM, HOD
RestrictedClient	Allows you to restrict the the functions available to help functions (What is it?, Values, and About), language specific functions (Show DBCS input and SO/SI), and disables the close function to prevent the session window from being closed accidentally (buttons with a close macro function will still work, however) if the parm value is true (default is false).		Basic, PCOMM, HOD
TypeAhead	Allows you to type information for the next screen (if the param value=true).	true	Basic, PCOMM, HOD
ColorPrint	Allows you to change the print screen default to color (if the param value=true).	false	Basic
SSLServerAuthentication	Enables server authentication for SSL connections.	The 'SSL' parameter must be true. The default value is false.	Basic, PCOMM, HOD
Disable	File transfer	FILEXFER3270 or FILEXFER5250	Basic, PCOMM, HOD
DisableSubfiles	Disables subfiles for any screens that are not mapped (if the param value=true), regardless of whether or not templates are active. This parameter has no effect on mapped screens because the mapped screen's settings override the DisableSubfiles HTML parameter. Note, however, that subfiles are automatically turned "off" for maps created with versions of Screen Customizer predating V2.0.	false	Basic, PCOMM, HOD
ReverseVideo	If param value=true, reverses the foreground and background colors of labels and text fields when the reverse video attribute has been set for the original (uncustomized) host field.	false	Basic, PCOMM, HOD
UpdateIncludesInitialScreen	If param value=true, selecting Every Update on the Get-to-the-point Settings screen includes Initial screen as well as Every Update.	false	Basic, PCOMM, HOD
HostModeTabbing	If param value=true, specifies the version 1 maps will default to Host Mode tabbing. If param value=false, specifies that version 1 maps will default to graphical component tabbing (non-Host Mode).	false	Basic, PCOMM, HOD
GUIEnterKey	If param value=true, enables the enter key to execute the function associated with a button, a Weblink button, an Image button, or a Valid Value button. If param value=false, sends the enter key to the host for processing. **Note:** When you are using the this parameter to allow the Enter key to be executed like a button click, you need to make sure you turn Host-Mode tabbing off in the Tab-Key control setting. This action will allow you to tab to any buttons so that the Enter key can then be used.	false	Basic, PCOMM, HOD

Using fragments and variables in URLs

For Web-link buttons, you can also manually enter URL fragments into the Edit Source box and add them to the Command Line parameters list.

You can construct dynamic URLs where part of the URL is a variable based on global variables, a label on the screen, or even text from a text field that the user has entered. There are two ways to insert screen data into the URL. If you connect the Command-line parameter directly to the host field, the macro inserts an equal sign (=) between the parameter and the user-supplied text. If you connect the URL fragment in Command-line parameter to a blank line and then connect the blank line to a host field, the macro does not insert an equal sign between the parameter and the user-supplied text.

To insert screen data with an equal sign:

1. Double-click a Web-link button and select Macro.
2. In the Edit Source box, type the URL you want to access.
3. Click Add.
4. In the Link to Host Field box, select the host field you want to link this URL to. Usually, this is a blank area where the user can enter text.
5. Click OK.

For example, if you wanted to add a Web-link button where users could check to see if there were any new IBM products that they wanted. To do this, you would complete the following:

1. Add a Web-link button.
2. Double-click the button and select Macro.
3. In the Edit Source box, type www.ibm.com/products/?v.
4. Click Add.
5. In the Link to Host Field box, select the command line host field.
6. Click OK.

Using this button, users could then type the product they were interested in and click the Web-link button and the button would launch a new web browser window with information on their product (www.ibm.com/product/?v=product).

To insert screen data without an equal sign:

1. Double-click a Web-link button and select Macro.
2. In the Edit Source box, type the URL you want to access.
3. Click Add.
4. In the Edit Source box, type a space.
5. Click Add.
6. In the Link to Host Field box, select the host field you want to link this blank space to. Usually, this is a blank area where the user can enter text.
7. Click OK.

Example?

In both cases, you can also link the parameter to an item on the screen, a label, or a text field.

You can also insert Global Variables read from an HTML:

1. Create a Web-link button.
2. Double-click the button and select Macro.
3. Click 'Read HTML' to load HTML parameters into the Select Source box. The parameters will then appear in the Select Source box.
4. Select and add the parameters to the Command-Line Parameters box.
5. Click OK.

For example, if you click Read HTML, and select an HTML file with the following lines in it:

```
<Param name=LastIndex    value=5>
<Param name=Prm1         value=http://www.ibm.com/>
<Param name=Prm2         value=java>
```

The Select Source box will display two new parameters which can be used to create or amend a URL for a Web-link button. You could select Prm1 from the Select Source box and Add it to create a web link button that simply opens the URL http://www.ibm.com/. Note that the HTML used by the client must contain the above applet parameter lines for Prm1 *and* LastIndex. The Prm*x* values can be inserted or appended into the URL just like values from a linked label or textfield.

Changing screen colors

To use the default colors, check Use Default Color.

To use custom colors and change a color on the screen:

1. Click Screen > Appearance > Colors.
2. Clear Inherit Color.

   Checking this box means the color settings will be inherited from another level.

3. Select either Foreground (text) or Background.
4. Select a field type.
5. Select one of the colors available from the Basic Color palette or create a unique color and add it to the palette. To create a custom color:
   1. Click a color and then adjust the numbers that represent the color by clicking the arrows or entering a number. Color changes are reflected in the selected field box.
   2. Click Add to Custom Colors.
   3. Click one of the blank Custom Colors boxes. Now you can use this color for other objects on the screen.

      To create a sixth custom color, you have to overwrite one of the other custom colors on the palette. Objects that use the overwritten color retain their color, but that color is no longer available.
   4. Click Apply to apply changes.
6. Repeat the steps above for every type of field that you want to change.
7. Click Defaults to return to the default colors.
8. Click Apply to apply changes. Click OK to apply changes and return to the current screen.

Changing the font

1. Click Screen > Appearance > Font.
2. Clear Inherit Font.

   Checking this box means the font settings will be [inherited](#) from another level.

3. Choose from the Font and Size lists. Your changes are reflected beneath the Sample heading.
4. If you want to use these type styles, click Bold, Italic, or both.
5. Click OK.
6. The screen is resized to accommodate your changes.

True type fonts can appear proportional or not. It is better to use a font that is not proportional so that every letter will have the same width.

Controlling Tab-keys

You can control the objects that can be tabbed to.

Host Mode

> Check this box to have the tabbing behavior follow that of the host. When the Host Mode box is checked, you can tab only to visible input fields. When the Host Mode box is cleared, you can tab to other graphical components--such as hotspots, menu buttons, and other customized components.

Exclude Hotspots

> Check this box to remove hotspots from the tabbing order.

Exclude Menu Buttons

> Check this box to remove menu buttons from the tabbing order.

Using the Customization Studio, you can further customize the tabbing order. This ability is only available if the Host Mode box is cleared.

Related topics:

- How to set tab order

Customizing the toolbar

To add or change a button on the toolbar, click Screen > Customize Toolbar.

- To add a new button to the toolbar, click Add New.
- To insert a new button in the toolbar before another button, click Insert New.
- To change the properties for a button, select the button and click Properties.

Adding status bar text or image

To add status bar text or an image to a toolbar button:

1. Click the button on the toolbar.
2. Click the General tab.
3. Enter text for the button status bar tip.
4. To add an image to the button:
    1. Click Browse, select an image, and click open or enter the name of an image with a *.gif or *.jpg extension and click OK. Images must be located in the /custom/img directory.
    2. Click Delete Image to remove the image from the Toolbar Button.
5. Click OK to save and exit.

Adding a macro to a toolbar button

To modify the toolbar button macro:

1. Right-click the toolbar button.
2. Click the Macro tab.
3. To assign a macro, follow the steps for the Macro button.

Adding global variables to a toolbar button

To modify global variables for a toolbar button:

1. Right-click the toolbar button.
2. Click the Read/Write tab.
3. Enter the name of the parameter (global variable) in the parameter fields.

    Do not use parameters that are already preset in the startup HTML file or Parameters file if you do not want to overwrite them. The parameters in the startup HTML file are global parameters with values that are preset at startup.
4. Click OK.

Switching toolbar buttons

To switch the locations of two buttons:

1. Click Screen > Customize Toolbar.
2. Click one button.

3. Click Replace.
4. Click another button. The two buttons will switch places in the toolbar.

Removing toolbar buttons

To remove a button:

1. Click Screen > Customize Toolbar.
2. Select the button and click Remove.
3. To remove all the toolbar buttons, click Remove All.

Guiding users through screens

Get-to-the-Point can be added to an interface to automatically navigate the user through different screens. It can be used as an automatic log on, or an automatic log off button, but there are many other instances where it can be utilized. Get-to-the-Point can also be added to a series of screens of a Web enabled application to hide screens which require redundant input. It can automatically input data and execute function keys for the user. Get-to-the-Point can even dynamically input data that is user-specific, if used in conjunction with a Client HTML file for Host On-Demand or a parameter file for Personal Communications.

Get-to-the-Point is configured on a screen by screen basis. Every screen that you want to bypass has to have Get-to-the-Point. Get-to-the-Point has no associated button, frame or input field. To see if Get-to-the-Point is configured for a screen, click Screen > Get-to-the-Point. The Set Get-to-the-Point Properties window appears where you can see the macros that are set up and if it has already been activated. Get-to-the-Point and Web Link buttons only work in the Client.

> When you are customizing screens on an iSeries, it is difficult to enable Get to the Point on screens having subfiles. To solve this difficulty, click Screen > Appearance > Subfile Tables > Always Off. This disables subfiles for the screen being customized and allows you to then enable Get to the Point in the normal manner.

Frequently used Get-to-the-Point options are:

- Automatically enter data into fields (you can pre-enter the data or have this data dynamically extracted from an HTML or parameter file).
- Execute assigned functions.

To enable Get-to-the-Point:

1. Click Screen > Get-to-the-Point.
   Get-to-the-Point is not an object so there is no button for you to resize or position on the screen.
2. Click the Settings tab.
3. Check On/Off to enable Get-to-the-Point (a check mark enables Get-to-the-Point).
4. Check Suppress Display to prevent users from seeing screens that are bypassed.
5. Click a Controlling Events. Get-to-the-Point can be activated on entrance (Initial Screen), on Every Update, and on exit (Transition to New Screen).

> If you want to Every Update to include Initial Screen as well, add the UpdateIncludesInitialScreen parameter to your HTML file.

Adding a macro

To link data to certain fields (field values) and functions, add a macro. Data (values and events) can be inserted manually or from an HTML or parameter file.

1. Click Screen > Get-to-the-Point.
2. Click the Macro tab.
3. You can either insert data manually or from a Client HTML file or parameter file.
   - To insert data manually, enter a value in the Edit Source field and click Add. The value appears in the Field Values field.
   - To insert data from a Client HTML or parameter file:
     1. Click Read HTML.
     2. Select the Client HTML and click Open. Variables are displayed in the Name/Tag/Default Value field.
     3. Select the data from Name/Tag/Default Value field. Your selection is displayed in the Edit Source field.
     4. Click Add. The data appears in the Field Values field.

Below is a partial example of Client HTML file used by Get-to-the-Point.

```
<PARAM NAME="LASTINDEX" VALUE="100">
<!-- ALL THE PARAMETERS BELOW ARE USED FOR Get-to-the-Point UTILITY  -->
<!-- PRM 1,2,3,4,11,15,21,31,41,SUBDIR ARE USED AS AN EXAMPLE -->
<PARAM NAME=PRM1 VALUE="LCMN">
<PARAM NAME=PRM2 VALUE="TAG~">
<PARAM NAME=PRM3 VALUE="33333">
<PARAM NAME=PRM4 VALUE="TAG">
<PARAM NAME=PRM15 VALUE="L APPLID=CICSTES1">
<PARAM NAME=PRM11 VALUE="0000">
<PARAM NAME=PRM21 VALUE="21">
<PARAM NAME=PRM31 VALUE="31F">
<PARAM NAME=PRM41 VALUE="41DD">
<PARAM NAME="SUBDIR" VALUE="XXXXXXXX">
```

The first line in this example shows the maximum number of Get-to-the-Point parameters that can be used in the program. The parameters can be entered into Client HTML dynamically from any script (for example, Perl script) or manually.

1. In the Field Values box, select the data that you would like to link.
2. Click the input field you want to link it to.
3. To automatically send a function key to the host, select a function key from the scroll list and click Apply to save.
4. To change information that you have already added to the Field Values field or linked to specific fields on the screen:
    1. Highlight the value and click Remove to remove the value.
    2. Click Replace to change variables for the same link. Click the variable in the Field Values field.
    3. Click the new variable in the Name/Tag/Default Value field and click Replace.
    4. Click Remove All to remove all selected variables and links.

Adding read/write parameters

The Read/Write tab enables you to:

- Automatically combine screens. You can choose a caption from one field on one screen and automatically insert it as a caption in a second field on another screen.
- Automatically navigate the user through the second screen. This helps the user to avoid retyping the same information over and over again.

1. Click Screen > Get-to-the-Point.
2. Click the Read/Write tab.
3. In the To Write To parameters field, enter the name of the parameter (global variable), for example, Prm5. The parameters in the startup HTML or a parameter file are global parameters with values that are preset at startup.
4. Click OK.
5. Click File > Save to save the map.
6. Click File > Open Map.
7. Select the map that you would like to pass the data to.
8. When the map is opened, select the object in which you want the data to be displayed. Use an existing object or create a new one.
9. Click File > Close.
10. Right-click the Object. The Set Object Properties window appears.
11. Click the Read/Write tab.
12. In the To Read From parameters field, type the parameter name from step #3.
13. Click OK.

14. Click File > Save to save the map.
15. Click File > Close.
16. Restart a session. When you view the second screen, you will see the data from the first one displayed in the selected object.

Example of using Get-to-the-Point

Your host application has three screens that you would like to bypass. On the first screen, the only input required from the user is a user name and then the pressing of the F4 key. On the second screen, there is only a company logo and no input is needed from the user. On the third screen, the only required input is a user name (the same one as on the first screen) and a two digit password. After the password is entered, the user must press the F4 key. Users find these screens redundant and management would rather not publicize the fact that their password consists of only two characters. So you want to try and bypass these three screens. Your manager has also asked if it is possible for the user to simply see the new company logo while the screens are bypassed.

1. Open the first screen that you want to bypass.
2. Click Screen > Get-to-the-Point.
3. Click the Settings tab.
4. Make sure that there is a check mark next to the On/Off option.
5. To show only the logo, put a check mark next to the Suppress Display option. If there is a check mark next to this option, the user will not know that any screens are being bypassed.
6. Select Initial Screen as the Controlling Events. This means that Get-to-the-Point is enabled when the screen is first recognized and handles all input, including the function key, on this screen.
7. Click the Macro tab. This is where the fields that are on the original host screen are linked to their inputs and required function keys.
8. The only required input from the user is a user name and then the pressing of the F4 key. In the Edit Source field, enter the name Kevin and click Add. Kevin is added to the Field Values field. To link this input to a field, highlight the word and link it to the proper field from the Link to Input Field field (to see which field you have highlighted from the Field Values field, move the Set Get-to-the-Point Properties window, and see which field is blinking on the screen). To add a function key to be pressed after this linked field, choose a function key from the function key scroll menu.
9. Click Apply to save and OK to exit.

Now you are ready to add Get-to-the-Point to the next screen.

The second screen only has a logo and requires no user input. However, you do not want users to see the bypassed screens, only the logo. Navigate to this screen and then click Screen > Get-to-the-Point. Make sure that the check box next to the On/Off option is checked. Click Initial Screen as the Controlling Events. Leave the Suppress Display option unchecked so that the logo will be visible. Leaving this option unchecked allows users to see the contents of the screens that they are bypassing. In this case, the contents of the screen is a company logo. You do not have to do anything on the Macro tab because there are no required input fields. Therefore, there is no need to link data with fields and function keys.

Add Get-to-the-Point to the third screen. The only required input from the user is the user name (same as on the first screen), a password, and then the pressing the function key F4 after entering the other information.

1. Go to the next screen and click Screen > Get-to-the-Point.
2. Enable Get-to-the-Point on the Settings tab.
3. Check the Suppress Display option (to hide this screen leaving the logo on the user's screen).
4. Check the Initial Screen option for Controlling Events.
5. Click the Macro tab. Instead of entering the users name (Kevin) into the Edit Source field, use the Client HTML file to add this data (you have to make sure to set up the user's name as one of the parameters).
6. Click Read HTML.
7. Select the Client HTML file from the root directory and click Open. The parameter names and values are displayed in the Select Source/Event field.
8. Double click parameter 50 (it assumes you set this value to be the word Kevin) which you will see it in the Edit Source field.
9. Click Add to add the parameter to the Field Values field.
10. Highlight it and choose a field from Link to Input Field to link it to that field. You do not have to link a function

key here because you still have to add the password to the screen before you any function keys are activated.

To add the two-digit password to the screen, type 11 (Kevin's password) into the Edit Source field (you could also use the Client HTML file to add this data, but it is faster to enter it).

11. Click Add to add it to Field Values. Highlight the number 11 in Field Values, and link it to an input field by highlighting that field in Link to Input Field.
12. Choose a function key and click Apply and then OK to exit.

You may have noticed that there is no object associated with Get-to-the-Point. There is no button to place on the screen, and nothing to resize. Get-to-the-Point is a screen-based function, which means that there is no way of seeing Get-to-the-Point on the screen. There are two ways to see if Get-to-the-Point is activated on the screen.

- In the Customization Studio, click Screen > Get-to-the-Point. Click the Settings or Macro tab. If there is data in Field Values on the Macro Tab or if the defaults on the Settings tab have been changed and the On/Off option is checked, then Get-to-the-Point is activated on this screen.
- Start a session. All of the functions and features are active (you would know that Get-to-the-Point is active by recognizing the host screens that were bypassed).

Redirecting action keys

To redirect an action key:

1. Click Screen > Redirect Action Keys.
2. Select a function from the Redirect Action Keys list.
3. Select a function from the Function Key list.
4. Click Add. The selected Function Key appears next to the selected Redirected Action Key.
5. Click OK to save your changes and to close the Redirect Action Keys window.
6. Save the changes in the map.

To remove a selection:

1. Click Screen > Redirect Action Keys.
2. Select the Redirected Action Key you would like to remove.
3. Click the Remove Button.
4. Click OK.
5. Save the changes in the map.

Remapping the keyboard

Remapped keys are processed before redirected keys.

To remap a key:

1. Start from a host session window.
2. Click Screen > Remap Keyboard.
3. Click Add.
4. Press the key or combination of keys that you want to remap.

   You can remap the following single keys: the function keys, the scroll keys, and the nonnumeric keys on the keypad. You can also remap combinations of keys, such as Control+C, Shift+Alt+A, Alt+Shift+Ctrl+B.
5. Choose a function for the key.
6. Click OK

Repeat this procedure for any other keys you want to remap.

To remove a key from the list, click a key in the Remap Keyboard window, and click Remove.

Setting tab order

You can reset the tab order to reflect changes you have made to the structure of the screen and the field positions. A tab can be set to move to an input field or a button.

To change a tab order:

1. Click Screen > Set Tab Order. The Set Tab Order window displays all of the visible fields on the screen and assigns each field a number in the tab order. To view hidden fields, click Show Hidden Fields. Red numbers are fields too small to fit the whole number so the fields are temporarily enlarged.

2. Enter the sequence number in the Next Tab to be Set to start from. This is the number that will begin the tab order for the field you click in the next step.

3. Hold down the Ctrl key and click the field you would like to start changing the order from (this field is assigned the number from the Next Tab to Set field).

4. Hold down the Ctrl key and click the next field in the sequence.

5. To assign the Next Tab to be Set back to 1, click Reset. Fields are changed back to what they were before you changed them.

6. To eliminate a field in the tab order, select the field and click Skip.

7. Click OK.

For this function to be active in run-time mode, the Host Mode option for Tab Key Control in the Administrator must be cleared.

Use the Set Cursor option in the Get-to-the-Point Macro tab to set the cursor to the correct field after you have resequenced a tab order. If you don't set this option, the cursor will move to the first field set by the Host, regardless of the number assigned to it.

Controlling tab-key movement

On host applications, the Tab key moves the cursor from one input field to the next whereas, in a Windows environment, pressing the Tab key can move the cursor to input fields and onto objects such as buttons and menu items. In customized host screens, from which unnecessary fields might have been removed, you usually want the cursor to move between all the objects on the screen, as in a Windows environment. You can set several preferences for tab key movement.

To set the preferences:

1. Click Screen > Tab-Key Control.

2. To set the Tab key so that it can move to any object (such as buttons, radio buttons, and checkboxes,as it would in Windows mode), clear the Host Mode box.

   The Hotspots and Menu Buttons check boxes are activated. You can choose to exclude Hotspots and Menu Buttons from the Tab sequence by clicking the appropriate box.

   To set the Tab key so that it can move only to input fields (host mode), click the Host Mode box.

3. Click OK.

Customizing the host screen area

You can change the area reserved for the host screen one of two ways:

- By right-clicking the area and selecting one of the predefined screen sizes
- By dragging the one of the corners or sides of the area to increase or descrease the size of the area

If the area is not large enough to display the entire host screen, the host screen will appear with scrollbars.

Adding a check box

Check boxes can be added to replace an input field. They are especially valuable when the input in a particular field has to be one item from a short list of Valid Values. For example, if your host application has a field that requires the user to enter an age from a list of valid ranges, it is easier to have a check box associated with this range. Adding check boxes reduces invalid inputs and makes it easier for the user.

To add a check box:

1. Click Create > Checkbox.
2. Place the check box on the screen by clicking the left mouse button.
3. Right-click the check box and select a property or All Properties to change the properties.

Linking a check box to a host field

1. Right-click the check box and select Settings.
2. Enter a caption or change the current one.
3. Link the check box to the proper input field by selecting it from the list of host fields displayed on the right. Input fields are displayed by their position, row, column, and length on the host screen. The length of the input field is displayed to indicate the maximum size of the string it can accept.
4. The selected field blinks on the screen.
5. Set the initial state (default) of the object as checked or unchecked (one check box can be set as the default to save time for users).
6. Set the Strings to be sent to host. These are strings to be sent to the linked input field during a session depending on the state of the check box.
7. Click OK.

Adding a choice box

A list of choices can be added to the interface as input fields. Choice boxes can be used to replace input fields that accept one value from a short list of possible values. For example, a host field may require a one-letter input that represents the first letter of a word from an associated label. You can replace the input field and the associated label with a choice box. The user chooses the input from the choice box and it is sent to the host.

1. Click Create > Choice.
2. Place the choice box on the screen by clicking the left mouse button.
3. Right-click the choice box to change the properties.

Changing choice box settings

1. Right-click the choice box and select Settings.
2. Add items to the choice list by entering them in the Set Item field and then clicking Add.
3. Click OK.

Annotated translations of values for choice boxes

This feature allows you to set up choice boxes to send a value to the host that is different than what is displayed. For example, the end user sees the word "Italian Lira", but only the characters "ITL" get sent to the host.

To set up annotated translations of values for choice boxes:

1. Click Create > Choice.
2. Right-click the choice box and select Settings.
3. In the Set Item box, enter a description, a tilde (~), and a name. For example, `Italian Lira ~ ITL`
4. Click Add.
5. Click Apply.
6. Click the Host Link tab.
7. Select a type of Link to Host field (All, Unprotected, or Protected).
8. Select the Position, Row, Column, and Length of the Linked Field Value. The selected field will blink on the screen.
9. Click Apply.
10. Click OK.
11. Click File > Save.
12. Open an Administrator session.
13. Click Actions > Refresh.
14. Select the description from the choice list box and the value appears in the linked field.

Adding a frame

Frames can be used to group objects. For example, if you replace an input field with a set of radio buttons, you may want to surround the group of radio buttons with a Frame to show the user that these buttons are related.

To add a frame:

1. Make sure the space on the screen is clear for the Frame. To clear space, hide fields by selecting them and clicking Edit > Hide.
2. Click Create > Frame. Your mouse pointer changes.
3. Using the mouse, draw a frame on the screen.
4. Click View > Frames to change the properties of the Frame.

Editing frames

The Frame Properties window can only be accessed from the List of Frames. A frame can not be selected as an active component on the screen just by clicking on it.

1. Click View > Frames to edit any of the frames on the screen. The List of Frames window is displayed.
2. Select the frame you want to edit. Your selection appears on the customization screen with the sizing handles. You can only edit one frame at a time.
3. Click Move or Resize.
4. Click Up, Down, Left, and Right to move or resize the frame. To resize, click Up and Left to minimize the frame and Down and Right to enlarge the frame.
5. Click Show or Hide to show or hide a frame on the screen.
6. Click Delete to delete a frame.
7. Click Properties.
   1. Click the General tab.
   2. If required, enter a caption.
   3. Choose the position of the caption by selecting from the Set Caption Alignment group.
   4. Choose the Frame style from the Set Frame Style group.
   5. Click OK.
8. When finished, click Close.

Adding an image

Images can be inserted to add visual appeal to your host application. Host applications are character-based programs and most images are made out of characters. You can add images to the screen or replace old green screen style images. Images can be used to clarify things on the screen and can be used in place of labels. Only image files with a .gif or .jpg extension are recognized and must be located in the /custom/img directory.

To create an image:

1. Click Create > Image.
2. Select the image (*.gif or *.jpg) that you want to insert from the custom/img directory, and click Open.
3. The image appears anchored to your mouse pointer.
4. Place the image on the screen by clicking the left mouse button.

Changing an image

1. Right-click the image and select General.
2. To select an image, click Browse, select an image, and click Open or enter the name of an image.
3. Click Delete Image to remove the image.
4. Click OK to save and exit.

Adding a label

Label fields can be added to the host screen to replace or augment the host protected fields. They can also be used to add color to the screen. Adding a Label (or editing an existing Label's caption) can clarify a confusing screen. Labels can be used to describe input fields, or to display valuable information on the screen. For example, if you are Web enabling your application, you can put the phone number of your help line on the bottom of the screen to show users where to call if they need help.

To create a label:

1. Click Create > Label.
2. Place the label on the screen by clicking the left mouse button.
3. Right-click the label to change the properties.

Adding a text field

Text fields can be added to the interface as input fields. They can be used to replace other Text fields or to replace previously customized objects. For example, you replace an input field with a group of radio buttons. During a review of the application, you notice that the screen with the radio buttons looks too busy and would be more effective using the text input field. Instead of searching through all of the hidden objects, you can add a text field and link it to the original text field.

To make an input field protected, create a label, link it to the input field and then hide the input field.

To create a text field:

1. Select Create > Text Field. A Text Field appears and is anchored to the mouse pointer.

2. Place the text field on the screen by clicking the left mouse button.

3. Click with the right mouse button to change the properties of the Text Field.

Adding valid values and field help

You can provide the user with field help descriptions and valid values lists. You can create a reference file to use help created for one field or many fields without retyping help or valid values files.

Valid values buttons can also be created to help the user navigate through the host application. You can either add valid values to the field itself, or insert a valid values button near the field to display the valid values list. If you give your valid values buttons the same look, users can recognize and use them to get help.

To create help or valid values:

1. Click the input field where you would like to attach help or valid values.

2. Select File > Edit Field Help or File > Edit Valid Values.

   ❍ To add field help, enter the help text in the window that appears.

   ❍ To add a valid values list, enter the value followed by a tilde (~) and its description. In the Valid Values window, characters before the tilde appear as the value and characters after the tilde appear as the description. Every valid value with its description is displayed on a separate line. In the Client, you can highlight a value in the valid values list as a default value. Click Copy, and the value appears in the proper field. As an alternative, you can create a valid values button and position it next to the field to give the user help.

   If your keyboard is set to US(International), the tilde(~) does not display until the next character is typed. However, if the next character includes a tilde accent, then the accented character is displayed.

3. Click Save. The file name contains a screen ID followed by row and column positions of the field. If you would like to use this file as a reference file later on, save it as a more appropriate name using the Save As button. Make sure that the valid values file is saved in the /custom/lst directory and that the field help file is saved in the /custom/*lang*/help directory.

4. Close the window.

The field help appears as What is it? and the valid values list appears as Valid Values in the Administrator or Client.

To view field help, do one of the following:

- Right-click the field and click What Is It!

- Click the field you with which you need help and do one of the following:

   ❍ Click Help > What Is It?

   ❍ Click the What Is It? button on the toolbar.

Click Close after you have read the help.

To see a list of valid values, do one of the following:

- Right-click the field and click Valid Values.

- Click the field you with which you need help, and do one of the following:

   ❍ Click Help > Values.

   ❍ Click the Valid Values button.

A text box displays a list of Valid Values for this field if one is available. If you have a Valid Values

button next to the input field, you can click on it to view the list of Valid Values available for this field. Every valid value appears on a separate line. If a description of a value is available, then you will see a value followed by a tilde "~" symbol and description.

To use a value:

1. Click the value you wish to use.
2. Click Copy.

Select an item in the list and click Copy to enter the value into the field

.

Creating a reference file

1. Click the input field where you want to attach a reference file.
2. Click File > Edit Reference File. Enter the name of the file that contains the valid values list or the field help description with the appropriate extension. If you want this file to refer to the valid values list and the field help description, enter the names of the files on separate lines.
3. Make sure that the reference file is saved in the /custom/ref directory with the extension *.ref.
4. Click Save.

Adding a caption or image

1. Right-click the Valid Values Button and select General.
2. Enter a caption that you want to appear as a tool tip for this button.
3. Click Set Image to insert an image (*.gif or *.jpg) on top of a Valid Values Button. This image must be saved in the /custom/img directory. If you want to change an existing button image to a default image, click the Default Image Button.
4. You can see how your Valid Values button will look from the Valid Values Button Properties window. You can also change the view from Standard to Dynamic.
5. Click OK.

Accommodating DBCS input

If you want to see double-byte-character-set (DBCS) characters on the host screen, you must set a DBCS host code-page in the session configuration window. This option, and the corresponding button on the toolbar, as well as the Display SO/SI button on the toolbar, are displayed only when you have set a DBCS code-page.

To display the DBCS input field, click View > Show DBCS Input.

Customizing buttons

You can customize the appearance of menu buttons as Ball, Standard, or Dynamic. For Valid Value and Image buttons, the appearance can be either Standard or Dynamic. Web-Link Buttons can be viewed as Standard, Dynamic, or Label.

To select the appearance of a button, click View > button type (for example, Menu Buttons), > style (for example, Standard).

Selecting Inherit means that the appearance of these buttons will be inherited from other levels.

Showing hotspots

Click View > Show Hotspots to show or hide hotspots. Many keyboard functions that appear only as text on your screen are automatically converted to Hotspots. Clicking on a hotspot performs the same operation as pressing the corresponding function key on the keyboard. That corresponding function appears as a label on a Hotspot button.

Showing menu buttons

Click View > Show Menu Buttons to show or hide menu buttons. If Show Menu Buttons is enabled, menu options that appear on the screen are automatically converted to buttons. In order for a screen to be recognized as a menu screen, it must meet certain requirements, for example, it has to have only one input field, the word **menu** must appear, the word **select** must appear before the list of options, and there must be a number in front of each option. Clicking on a menu button selects the corresponding menu option.

File Transfer

You can transfer files between your workstation and zSeries systems running MVS/TSO, VM/CMS or MVS/CICS. You can also transfer files between your workstation and the Integrated File System (IFS) of OS/400 V3R7 or later.

- [Transferring files](#)
- [Working with transfer lists](#)
- [Setting the default transfer options](#)

Transferring files

1. Start a session with the host.
2. Make sure that the correct [host system](#) and other options have been specified.
3. Click Transfer > Send Files to Host or Receive Files from Host on the menu bar, or the Send or Recv button on the toolbar.

   When sending a file to an MVS/TSO host partitioned data set, the data set must already exist on the host.

4. Fill in the names of the PC and host files. You can click a Browse button to find a PC file or an OS/400 file. When you click in the box for the target file, a filename is automatically generated.
   If you want to transfer an existing list of files, click Open List and choose the list.
5. Set the [transfer](#) mode.
6. If you want to change any of the [transfer options](#) (parameters), click Options.

   The change applies only to file that is currently in the Add File to Transfer List box.

7. Click Add to List; the filenames and transfer mode appear in the list box.
8. If you want to transfer several files, repeat steps 4 - 7.
9. To transfer the files in the list, click Send or Receive.
10. To save the list, click Save List and enter a name for the list.

    A list can be used only for the purpose for which it was created; that is, you cannot use a send list to receive files and, likewise, you cannot use a list created for MVS/TSO for VM/CMS transfers. The reason is that the options are often specific to host type and direction of transfer.

Working with file transfer lists

You can update or delete lists when the Send or Receive windows are open.

Updating a transfer list

1. Click Open List and select the list you want to update; its contents appear in the Transfer List box.
2. If you want to change an entry in the list, select the entry; its parts are displayed in the Add

File to Transfer List box.
3. Make the changes and click Update in List.
You can also add files to the list.
To remove a file from the list, select it and click Remove.
4. Click Save List.

Deleting a list

- Click Delete List, select the list you want to delete, then click OK.

More about file transfer

For zSeries, file transfer uses the IND$FILE (SBCS) or APVUFILE (DBCS) program; for iSeries, no extra software is required.

The interface is the same in all cases except that, for OS/400, there is a button that lets you browse the IFS.

You can transfer a single file or a list of files and you can save the list for repeated use. You can also modify and delete lists. The same interface is used in all cases.

File transfer will work only if the host system screen has a command line available.

Setting file transfer default options

Each host system has its own transfer options.

- General
- MVS/TSO
- VM/CMS
- CICS
- OS/400

To get to the default options: on the menu bar, click Edit > Preferences > File Transfer Defaults.

Then do the following:

- On the General tab, set the correct host system for this session. If the host system is incorrect, transfer will fail because the wrong options are used. Change the other parameters as necessary.
- To change any of the file transfer options, click the tab for the appropriate host system. For OS/400, VM/CMS and CICS, the first option must be preceded by an open parenthesis ' **(** '.
- Click OK when you finish.

MVS/TSO

- Text send options
- Text receive options

- [Binary send options](#)
- [Binary receive options](#)
- [Default transfer mode](#)
- [Clear before Transfer](#)

VM/CMS

- [Text send options](#)
- [Text receive options](#)
- [Binary send options](#)
- [Binary receive options](#)
- [Default transfer mode](#)
- [Clear before Transfer](#)

CICS

- [Text send options](#)
- [Text receive options](#)
- [Binary send options](#)
- [Binary receive options](#)
- [Default transfer mode](#)
- [Clear before Transfer](#)

OS/400

- [Text send options](#)
- [Text receive options](#)
- [Binary send options](#)
- [Binary receive options](#)
- [Default transfer mode](#)

General

The general settings for each host type include:

Host Type

> The type of host to which this session will connect. This determines which set of default options are used.

Timeout (in seconds)

> This option specifies the length of time (in seconds) that the workstation waits for a response from the host. Only numeric characters 0-9 are allowed. The acceptable range is from 20 to 65535 or 0: (if you specify 0, a timeout will not be set). The default is 30.

If the host does not respond within this time, the file transfer is canceled, and you receive an error message. You might need to increase the value if you have a slow connection.

PC Code-Page

The code-page is a table that translates EBCDIC codes to PC 1-byte codes, or vice versa, when files are transferred. The default corresponds to the host code-page that was set in the session configuration.

Pause

The number of seconds to pause between each transfer.

Arabic or Hebrew only

Host-File Orientation

This option applies if the session is configured for an Arabic or Hebrew host code-page and specifies whether the host files you transfer will be saved, in left-to-right or right-to-left format. The default is Left-to-Right.

PC-File Orientation

This option applies if the session is configured for an Arabic or Hebrew host code-page and specifies whether the PC files you transfer will be saved, in left-to-right or right-to-left format. The default is Left-to-Right. This Option is available only for Screen Customizer over Host On-Demand.

PC-File Type

This option applies if the session is configured for an Arabic or Hebrew host code-page and specifies whether the PC files you transfer will be saved, in the format in which they are saved (Implicit) or in the format in which they should be displayed. The default is Implicit. This Option is available only for Screen Customizer over Host On-Demand.

Symmetric Swapping

This option applies if the session is configured for an Arabic or Hebrew host code-page and affects the brackets during file transfer. If symmetric swapping is enabled, brackets are reversed from the source to the target. For example, **(** is replaced by **)** and **)** is replaced by **(**. If symmetric swapping is not enabled, the brackets are not reversed.

Arabic only

Lam-Alef Expansion

This option applies if the session is configured for an Arabic host code-page. When receiving files from the host, the character *Lam_alef* is expanded into two characters, *Lam* followed by *Alef*. This option is available for Windows PC code-page 1256 and AIX ISO code-page 1089. The default is to do expansion.

Lam-Alef Compression

This option applies if the session is configured for an Arabic host code-page. When sending files to the host, the characters *Lam* followed by *Alef* are compressed into one character, *Lam_alef*. This option is available for Windows PC code-page 1256 and AIX ISO code-page 1089. The default is to do compression.

Numerals Shape

This option applies if the session is configured for an Arabic host code-page. When sending files to the host, Numerals Shape will specify one of the following:

❍ Nominal: all numerals are Arabic numerals

- ❍ National: all numerals are Hindi numerals
- ❍ Contextual: numerals appear Arabic after English text, or numerals appear Hindi after Arabic text

Round Trip

> This option applies if the session is configured for an Arabic host codepage. If this option is enabled when transferring files, if numerals are preceded by Arabic characters, the numerals exchange places with the Arabic characters.

OS/400 only

file transfer destination address

> This option specifies the actual final destination address of the host to be used for the file transfer.

file transfer User ID

> You must log on to an OS/400, specifically to do file transfer, even if you are already logged on to a display or printer session. The user ID that is specified here will be used to pre-fill the user ID field in the logon window when you initiate a file transfer.

Text send options (MVS/TSO and VM/CMS)

The following options are used (by default) when sending files in text mode. For VM/CMS, remember to type an open parenthesis '**(**' before the first option.

Options include:

ASCII

> Use this option for text files and for files that you want to be converted from ASCII to EBCDIC. This is valid for SBCS countries and Taiwan and Korea. PC 1-byte codes are converted into EBCDIC codes. For DBCS, inserts shift in/shift out (SI/SO) characters into DBCS fields.

JISCII

> This option is valid for Japanese DBCS sessions only and converts 1-byte codes to EBCDIC and 2-byte codes to IBM Kanji. JISCII inserts shift in/shift out (SI/SO) characters into DBCS fields.

CRLF

> Carriage Return and Line Feed. CRLF (x'0D0A') is not removed from the end of each line. It is used as the delimiter of each record. EOF (x'1A') is removed from the end of a file.

NOSO

> This option is valid only for DBCS and only when used with the JISCII or ASCII option. NOSO prevents the conversion of SO (x'0E') and SI (x'0F') before and after the DBCS field. It also prevents the conversion of RS (x'1E') and US (x'1F') to SO (x'0E') and SI (x'0F').

APPEND

> The transferred file will be appended to an existing host file that has the same name (and type and mode for VM/CMS), if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

NEW

> The transfer stops if the file already exists. This option can be used to protect against accidentally erasing an existing file.

RECFM

Record Format. This option is not valid when APPEND is specified. Otherwise, you can choose one of the following options:

- Default - The record format is automatically selected by the host system.
- Fixed - Specifies the number of bytes in each host record.
- Variable - When sending a file to VM/CMS, you can conserve host disk space by specifying a record format of variable.
- Undefined - This option is available for MVS/TSO only.

LRECL

Logical Record Length. This is not valid if APPEND is specified. Otherwise, you can choose one of the following options:

- Fixed - Specifies the number of bytes in each host record.
- Variable - The logical record length is the length of the longest record in the file; the maximum value is 32767.

The record length of a file sent from a PC to the host system might exceed the logical record length specified here. If so, the file transfer program divides the file by the logical record length.

To send a file containing long records to the host system, specify a length that is long enough to allow complete records to be sent.

BLKSIZE(n)

This option applies only to TSO and only when you are creating a new data set. The (n) value represents the block size in bytes.

SPACE

This option applies to TSO only. This value is the amount of space to be allocated for a new TSO data set.

Quantity

Units of space to be allocated initially. You must specify this value when the SPACE parameter is used.

Increment

Units of space to be added each time new space is required.

The following parameters are only valid when the SPACE parameter is specified, and are mutually exclusive of each other.

AVBLOCK(n)

Average block length used as the unit size by the SPACE parameter. The (n) value is the block length in bytes.

TRACKS

Specifies the unit of space is a track.

CYLINDERS

Specifies the unit of space is a cylinder.

For other options that might be available to you, see your system administrator.

Text receive options (MVS/TSO and VM/CMS)

The following options are used (by default) when receiving files in text mode. For VM/CMS, remember to type an open parenthesis '**(**' before the first option.

Options include:

ASCII

> Use this option for text files and for files that you want to be converted from EBCDIC to ASCII. This is valid for SBCS countries and Taiwan and Korea. EBCDIC codes are converted to PC 1-byte codes. For DBCS, removes SO/SI characters from DBCS fields.

JISCII

> This option is valid for Japanese DBCS sessions only and converts EBCDIC code to 1-byte codes and 2-byte codes to IBM Kanji. JISCII removes shift in/shift out (SI/SO) characters from DBCS fields.

USER

> This option is valid only for DBCS and only when used with the ASCII (JISCII) and SO options. If USER is specified, SO (x'0E') and SI (x'OF') will not be converted to RS(x'1E') and US(x'1F').

CRLF

> Carriage Return and Line Feed. CRLF (x'0D0A') is added at the end of each record.

> EOF (x'1A') is added at the end of the file. If APPEND is specified, EOF is removed from the end of an existing file and is added at the end of an appended file.

NEW

> The transfer stops if the the file already exists. This option can be used to protect against accidentally erasing an existing file.

SO

> This option is valid only for DBCS and only when used with the JISCII or ASCII option. It allows the conversion of SO (x'0E') and SI (x'0F') to RS (x'1E') and US (x'1F').

APPEND

> The transferred file will be appended to an existing PC file that has the same name (and type and mode for VM/CMS), if one exists. If APPEND is not specified, the transferred file overwrites the existing PC file.

For other options that might be available to you, see your system administrator.

Binary send options (MVS/TSO and VM/CMS)

Options include:

APPEND

> The transferred file will be appended to an existing host file that has the same name (and type and mode for VM/CMS), if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

NEW

> The transfer stops if the file already exists. This option can be used to protect against accidentally erasing an existing file.

RECFM

Record Format. This is not valid when APPEND is specified. Otherwise, you can choose one of the following options:

- ❍ Default - The record format is automatically selected by the host system.
- ❍ Fixed - Specifies the number of bytes that will be in each host record.
- ❍ Variable - When sending a file to VM/CMS, you can conserve host disk space by specifying a record format of variable.
- ❍ Undefined - This option is available for MVS/TSO only.

LRECL

Logical Record Length

This is not valid if APPEND is specified. You can choose one of the following options:

- ❍ Fixed - Specifies the number of bytes that will be in each host record.
- ❍ Variable - The logical record length is the length of the longest record in the file; the maximum value is 32767.

The record length of a file sent from a PC to the host system might exceed the logical record length specified here. If so, the file transfer program divides the file by the logical record length.

To send a file containing long records to the host system, specify a length that is large enough to allow complete records to be sent.

BLKSIZE(n)

This option applies only to TSO and only when you are creating a new data set. The (n) value represents the block size in bytes.

SPACE

This option applies to TSO only. This value is the amount of space to be allocated for a new TSO data set.

Quantity

Units of space to be allocated initially. You must specify this value when the SPACE parameter is used.

Increment

Units of space to be added each time new space is required.

The following parameters are only valid when the SPACE parameter is specified, and are mutually exclusive of each other.

AVBLOCK(n)

Average block length used as the unit size by the SPACE parameter. (n) is the block length in bytes.

TRACKS

Specifies the unit of space is a track.

CYLINDERS

Specifies the unit of space is a cylinder.

For other options that might be available to you, see your system administrator.

Binary receive options (MVS/TSO and VM/CMS)

Options include:

APPEND

> The transferred file will be appended to an existing host file that has the same name (and type and mode for VM/CMS), if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

NEW

> The transfer stops if the file already exists. This option can be used to protect against accidentally erasing an existing file.

For other options that might be available to you, see your system administrator.

Text send options (CICS)

Options include:

Binary

> Use this option for files that you do not want to be converted from ASCII to EBCDIC.

ASCII

> Use this option for text files and for files that you want to be converted from ASCII to EBCDIC. This is valid for SBCS countries and Taiwan and Korea. EBCDIC codes are converted to PC 1-byte codes. For DBCS, ASCII inserts shift in/shift out (SI/SO) characters into DBCS fields.

JISCII

> This is valid for Japanese DBCS sessions only and converts EBCDIC code to 1-byte codes and 2-byte codes to IBM Kanji. JISCII inserts shift in/shift out (SI/SO) characters into DBCS fields.

CRLF

> Carriage Return and Line Feed. CRLF (x'0D0A') is not removed from the end of each line. It is used as the delimiter of each record. EOF (x'1A') is removed from the end of a file.

For other options that might be available to you, see your system administrator.

Text receive options (CICS)

Options include:

Binary

> Use this option for files that you do not want to be converted from EBCDIC to ASCII.

ASCII

> Use this option for text files and for files that you want to be converted from EBCDIC to ASCII. This is valid for SBCS countries and Taiwan and Korea. EBCDIC codes are converted to PC 1-byte codes. For DBCS, ASCII removes shift in/shift out (SI/SO) characters from DBCS fields.

JISCII

This option is valid for Japanese DBCS sessions only and converts EBCDIC code to 1-byte codes and 2-byte codes to IBM Kanji. JISCII removes shift in /shift out (SI/SO) characters from DBCS fields.

CRLF

Carriage Return and Line Feed. CRLF (x'0D0A') is added at the end of each record.

EOF (x'1A') is added at the end of the file.

For other options that might be available to you, see your system administrator.

Binary send options (CICS)

There are no options that are applicable.

Send Binary (CICS)

There are no options that are applicable.

Text send options (OS/400)

Options include:

ASCII

Use this option for text files and for files that you want to be converted from ASCII to EBCDIC. This option is valid for SBCS countries and Taiwan and Korea. PC 1-byte codes are converted into EBCDIC codes. For DBCS, inserts SO/SI characters into DBCS fields.

JISCII

This is valid for Japanese DBCS sessions only and converts 1-byte codes to EBCDIC and 2-byte codes to IBM Kanji. JISCII inserts shift in/shift out (SI/SO) characters into DBCS fields.

UNICODE (encoding)

This option lets you send text files (saved in UNICODE) to the host and converts the data from UNICODE to EBCDIC. You can specify either UCS2 or UTF8 as the encoding option. If neither is specified, the default, UCS2, is used.

CRLF

Carriage Return and Line Feed. CRLF (x'0D0A') is used as the delimiter of each record. This option is applicable only for the record-based files in the QSYS library system.

NOSO

This option is valid only for DBCS and only when used with the JISCII or ASCII option. NOSO prevents the conversion of SO (x'0E') and SI (x'0F') before and after the DBCS field. It also prevents the conversion of RS (x'1E') and US (x'1F') to SO (x'0E') and SI (x'0F').

APPEND

The transferred file will be appended to an existing host file that has the same name, if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

NEW

The transfer stops if the file already exists. This option can be used to protect against accidentally erasing an existing file.

DSTADDR(dstaddr)

This option specifies the destination address of the host to be used for the file transfer.

USERID(usr)

This option specifies the user ID to be used for the file transfer.

PASSWORD(pwd)

This option specifies the password to be used for the file transfer.

SRC

This option specifies the OS/400 file type to be used for the transfer. If the host file does not exist, then a new file is created with the file type "OS/400 Source physical file". This option is applicable only for the files in the QSYS library file system.

DTA

This option specifies the OS/400 file type to be used for the transfer. If the host file does not exist, then a new file is created with the file type "OS/400 Physical data file". This option is applicable only for the files in the QSYS library file system.

SAVF

This option specifies the OS/400 file type to be used for the transfer. If the host file does not exist, then a new file is created with the file type "OS/400 save file". If this option is specified, then the transfer mode must be BINARY. Also, this option is applicable, only for the files in the QSYS library-file system.

LRECL(n)

This option specifies the logical record length when creating a file on the OS/400. It can have the following values:

- ❍ An integer from 1 through 32766 when **Host File Type** is set to **Source physical file**.
- ❍ An integer from 1 through 32754 when **Host File Type** is set to **Physical data file**.
- ❍ It is ignored when **Host File Type** is set to **Save file**.

For other options that might be available to you, see your system administrator.

Text receive options (OS/400)

Options include:

ASCII

Use this option for text files and for files that you want to be converted from EBCDIC to ASCII. This is valid for SBCS countries and Taiwan and Korea. EBCDIC codes are converted to PC 1-byte codes. For DBCS, ASCII removes shift in/shift out (SI/SO) characters from DBCS fields.

JISCII

This is valid for Japanese DBCS sessions only and converts EBCDIC code to 1-byte codes and 2-byte codes to IBM Kanji. JISCII removes shift in/shift out (SI/SO) characters from DBCS fields.

UNICODE (encoding)

This option lets you receive text files from the host and converts the data from EBCDIC to UNICODE. You can specify either UCS2 or UTF8 as the encoding option. If neither is specified, the default, UCS2, is used.

USER

This option is valid only for DBCS and only when used with the ASCII (JISCII) and SO options. If USER is specified, SO (x'0E') and SI (x'OF') will not be converted to RS(x'1E') and US(x'1F').

CRLF

Carriage Return and Line Feed. CRLF (x'0D0A') is added at the end of each record. If APPEND is specified, EOF is removed from the end of an existing file and is added at the end of an appended file. This option is applicable only to record-based files in the QSYS library system.

SO

This option is valid only for DBCS and only when used with the JISCII or ASCII option. It allows the conversion of SO (x'0E') and SI (x'0F') to RS (x'1E') and US (x'1F').

APPEND

The transferred file will be appended to an existing host file that has the same name, if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

NEW

The transfer stops if the file already exists. This option can be used to protect against accidentally erasing an existing file.

DSTADDR(dstaddr)

This option specifies the destination address of the host to be used for the file transfer.

USERID(usr)

This option specifies the user ID to be used for the file transfer.

PASSWORD(pwd)

This option specifies the password to be used for the file transfer.

For other options that might be available to you, see your system administrator.

Binary send options (OS/400)

Options include:

APPEND

The transferred file will be appended to an existing host file that has the same name, if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

DTA

The option specifies the OS/400 file type to be used for the transfer. If the host file does not exist, a new file is created with the file type "OS/400 Physical data file". This option is applicable only for the files in the QSYS library-file system.

LRECL(n)

This option specifies the logical record length when a file is created on the OS/400. It can have the following values:

❍ An integer from 1 through 32766 when **Host File Type** is set to **Source physical file**.

❍ An integer from 1 through 32754 when **Host File Type** is set to **Physical data file**.

It is ignored when **Host File Type** is set to **Save file**.

For other options that might be available to you, see your system administrator.

Binary receive options (OS/400)

Options include:

APPEND

> The transferred file will be appended to an existing host file that has the same name, if one exists. If APPEND is not specified, the transferred file overwrites the existing host file.

For other options that might be available to you, see your system administrator.

Default transfer mode

Options include:

TEXT

> This option sets the default transfer mode to be Text (for text only files).

BINARY

> This option sets the default transfer mode to be Binary. Binary files are files stored as a series of numbers and symbols that only computers can read. Applications and pictures are examples of binary files.

Clear before Transfer

This option sends a Clear Presentation Space command before transferring a file. You should not change this setting unless you have a good reason because in nearly every case, CMS and CICS require that this command be sent, whereas TSO and OS/400 do not.

Using a light pen

To switch light pen mode on or off, click Screen > Appearance > Light Pen Fields or click the Light Pen button. Then click the appropriate option.

Use Default means that the availability of this feature will be determined by defaults set on other levels.

Some host applications use a light pen as a pointer and operator. If you switch light pen mode on, you can use your mouse as a light pen.

When light pen mode is switched on, all light pen fields appear as either check boxes or buttons. You can select these fields using a mouse. Light pen mode does not deactivate your mouse.

Default shortcut keys for the Screen Customizer Administrator

To access functions that are often used, the following default shortcut keys are available.

Because menu items and shortcut keys can be remapped using the Keyboard Remap function, shortcut keys might be different than what is listed here.

Function	Shortcut key
Screen Properties	Ctrl+D
Capture	Ctrl+E
Copy	Ctrl+C
Customize Screen	Ctrl+Z
Customize Template	Ctrl+T
Cut	Ctrl+X
Exit	Ctrl+Q
Help Index	Ctrl+H
JumpNext	Ctrl+J
Paste	Ctrl+V
Print Screen	Ctrl+P
Receive File from Host...	Ctrl+R
Run Applet	Ctrl+U
Select All	Ctrl+A
Send File to Host...	Ctrl+S
View Screen IDs	Ctrl+I

Related topics

- Remapping the keyboard

Viewing the Administrator toolbar

Click View > AdminToolbar to show or hide the administrator toolbar.

the Administrator toolbar enables you to more easily capture screens by providing the following buttons:

Customize

Click this button to capture the current screen using the screen ID and description you entered on the tool bar, and then customize it using the Customization Studio.

Capture

Click this button to capture the current screen using the screen ID and description you entered on the tool bar.

Properties

Click this button to capture the current screen, give it a screen ID and extended description, and set up a tag, view its statistics, and then, optionally, customize it using the Studio.

Screen IDs

Click this button to view screen IDs. The IDs are displayed in the window, along with a description (if there is one), the number of fields on the screen, the tag and its position (if there is a tag). In this window, you can also delete screen IDs.

Viewing the toolbar

Click View > Toolbar to show or hide the toolbar. The toolbar consists of shortcut buttons that correspond to menu options. When you hold the mouse pointer over a button, a description for the button is displayed in the status bar.

If you want identifying text to appear under the toolbar buttons, Click View > Toolbar Text.

Viewing the status bar

Click View > Status Bar to show or hide the status bar located at the bottom of the screen. It displays the following (from left to right):

- Session information indicators (first letter indicates a type of control unit attachment, second letter indicates the connection type).
- Session name and status of the host. Session names are displayed as a letter (for example, A, B, C). "x[ ]" is displayed if the host is busy.
- Program message, tool tip or the meaning of the button being pointed at by the mouse.
- Message waiting indicator (for example, MW).
- Cursor mode (overwrite or insert).
- Cursor position (rows and columns).
- Screen ID.
- Security icon to show whether your session is secure.

Viewing the keypad

Click View > Keypad to show or hide the keypad, which is displayed at the bottom of your screen. The keypad contains buttons that correspond to the frequently used commands for host applications. Use the Next Pad button on the keypad to interchange the panels. The keypad for 3270 sessions is different from that for 5250 sessions.

Capturing screens

Before you can customize a screen, you need to capture it.

To capture a screen:

1. Using the Administrator, [start](#) a session that contains the screens you want to customize.

2. Go to the screen you want to customize.

3. From the Administrator Toolbar, choose one of three options, depending upon what you want to do:

   ❍ If you want to capture the current screen and immediately customize it, click **Customize**. If you do not enter an ID and, optionally, a description in the toolbar fields that are provided, you will be asked to do this before you proceed, and then the Customization Studio will appear in a new window.

   ❍ If you want to capture a screen quickly and customize it later, enter a screen ID and, optionally, a description in the appropriate fields on the toolbar and click **Capture**.

   ❍ If you want to capture a screen, give it a screen ID and extended description, set up a tag, view its statistics, and then, optionally, customize it using the Customization Studio, click **Properties**. A window then appears with several tabs that allow you to modify these things. When you are finished modifying, click Customize and the Customization Studio will appear in a new window or click OK to finish capturing the screen.

If you enter an incorrect or invalid screen ID, a message will appear instructing you on what to change.

You are now ready to use the Customization Studio to customize this screen.

Once a screen has been captured, it cannot be recaptured. The capture button is therefore dimmed. To change the screen ID, description, or any other extended information, you user must click Screen Properties and make the change from the resulting window.

Closing the Administrator

Before closing the Administrator, make sure all customization changes are saved.

To close the Administrator, click File > Exit for each session.

To disconnect a session without closing the Administrator, click Communication > Disconnect. The connection to the host will end for the selected session. However, the Administrator window for the disconnected session remains open. All other sessions will remain connected to the host.

Connecting to a host

Do one of the following:

- Click Communication > Connect.
- Click the Connect button on the toolbar.

Deleting or viewing a screen ID

To delete or view a screen ID:

1. Click File > Screen-IDs.
   The IDs are displayed in the window, along with whatever descriptions, field numbers, tags, and positions are available

   > You can change the sorting attribute of this list by clicking the appropriate column header: ID, Description, Fields, Tag1, Pos, Tag2, or Pos. If you click the column header again, you will change the order of the list, from ascending to descending or vice versa.

2. Find the ID you want to delete or view.
   You can to this either by scrolling through the list or by typing the character string you are looking for and clicking Find Next. You can change the field you are searching in by clicking ID, Description, Tag1, or Tag2.

3. To delete an ID, select it and click Delete. If you want to specify a new screen ID, use the Screen ID box on the Administrator toolbar to enter one.

Disconnecting from a host

On the session you want to disconnect, do one of the following:

- Click Communication > Disconnect.
- Click the Disconnect button.

The connection to the host will be terminated for the active session. However, the window for the disconnected session will remain open. All other sessions will remain connected to the host.

Exiting a session

On the session you want to exit, do one of the following:

- Click File > Exit.
- Click the Exit button on the toolbar.

The active session will be disconnected and its window will close. You can also disconnect a session without closing your emulator.

Getting help

Your administrator can provide you with two forms of context-sensitive help: descriptions of individual fields and lists of values that you can copy into appropriate fields.

To get information on an individual field, do one of the following:

- Right-click the field and click What Is It!
- Click the field with which you need help, and do one of the following:
    - Click Help > What Is It?
    - Click the What Is It? button on the toolbar.

Click Close after you have read the help.

To see a list of valid values, do one of the following:

- Right-click the field and click Valid Values.
- Click the field with which you need help, and do one of the following:
    - Click Help > Values.
    - Click the Valid Values button.

To use a value:

1. Click the value you wish to use.
2. Click Copy.

Printing screens

Do one of the following:

- Click File > Print Screen.
- Click the Print Screen button on the toolbar.

Setting tags

Adding tags is one way to help you and Screen Customizer identify screens. Most screens can be easily identified by their field structure. However, some screens may look and act similarly. In these cases, it may be helpful to add a tag to them to distinguish them further. Tags provide you with another way of identifying screens. You can add up to two tags to a screen.

To set a tag for a screen:

1. Click File > Screen Properties
2. Click the Tag tab.
3. In the Use Host Fields section, select the Host Field you want to use as your tag. You can limit which fields are shown in the Host Field listbox by selecting All, Protected, or Unprotected. When you select a field, its content will appear in the Contents box in the Tag-Selection Position section.
4. The tag can be up to eight characters. Choose the characters to be used as your tag by using your mouse to select them or by specifying their Start and End positions.
5. Click Select to set the tag. The tag will appear in the tag list box at the top.
6. Repeat this process if you want to add another tag to this screen. Note that you can add only two tags to a screen.

If you want to delete a tag:

1. Select the tag in the top list box.
2. Click Delete Tag.

To change a tag, delete the existing one, and replace it with the correct tag.

Using file transfer

File transfer is available for 3270 and 5250 sessions. Menu options are provided in the Administrator and the Clients, and you can create a macro button to start file transfer from a customized screen.

Setting file transfer defaults

It is important to set the correct defaults, such as the host type, so that users do not have to be concerned with them. Because file transfer settings are specific to a particular host type (MVS/TSO, VM/CMS, CICS, OS/400), they are not saved as part of the global customizations made in the Administrator. To save file transfer defaults, you must save them using the Host On-Demand icon interface (HOD.html) or the Host On-Demand Administrator (HODAdmin.html) for each individual session.

Hiding file transfer

To prevent users from trying to transfer files from screens that do not allow it, you can hide the menu options and toolbar buttons in customized screens. To do this, add the **Disable** parameter to the appropriate HTML file after you have set the file-transfer defaults. Even if you have removed file transfer from the menu and tool bars, you can add a macro button to a customized screen so that users can transfer files only where appropriate.

Using the Screen Customizer Bundler

The Service Bundler is a tool that the IBM Service team may ask you to run if you need help troubleshooting a problem. The Screen Customizer Bundler helps the Service team gather important information for debugging problems quickly.

You can start the Screen Customizer Bundler one of two ways depending on your operating system:

- For Windows 32-bit environments (when running Screen Customizer on Personal Communucations, for instance), click Start > Programs > IBM Screen Customizer > Utility > Service Bundler.

- For non-Windows environments when running Screen Customizer on Host On-Demand, invoke the following from a command line from the hod publish directory (usually, <hod-installpath>\HOD; a JRE is also required):

```
"\ <hod-installpath>..\bin\java -classpath .;\<hod-installpath>\scbundle.jar;
com.ibm.hi.customizer.util.bundler.SCBundler"
```

Testing customizations

You can use the Administrator to test the customizations you made to your templates and screens (maps) using the Customization Studio. This feature allows you view a template in context with a particular screen and see how other templates look with that screen.

To see what your customized templates look like click Test > View with different template.

To switch between viewing the original, unmodified and the customize screen, click Test > Show custom screens.

To run an applet:

1. Click Test > Run Applet, or click the Run Applet button on the toolbar.
2. Type the fully qualified name of the applet you want to run, and click Run.

Showing custom or default screens

This feature allows you to switch between viewing the screen with the default objects and viewing the customized screen. Viewing customized screen allows you to more easily fix any possible problems before your users actually see the customized screens.

To switch between the default interface and the customized version of the same screen, click Test > Show custom screens.

Viewing screens with a different template

You can use the Administrator to test the customizations you made to your templates using the Customization Studio. This feature allows you view a template in context with a particular screen and see how other templates look with that screen.

To see what your customized templates look like with this screen:

1. Click Test > View with a different template.
2. Click Enable.
3. Type the name of the template you want to view temporarily with this screen.
4. Click OK.

Running an applet

To run an applet:

1. Click Test > Run Applet, or click the Run Applet button on the toolbar.

2. Type the fully qualified name of the applet you want to run (for example, http://com.xyz.myapplet.class), and click Run.

3. Click Run.

Using customized screens with Host On-Demand

To use customized screens with Host On-Demand, enable Screen Customizer on the Screen tab of the appropriate Host On-Demand session configuration, then start the session. If the host screen is recognized, you will see the customized version; if not, you will see a default interface. To start sessions using the interface that is similar to the ResQ!Net interface, load HODCustomClientBasic.html.

Understanding bidirectional language functions

Understanding software requirements for bidirectional language support

To use bidirectional support, you need an Arabic operating system to support an Arabic Screen Customizer session and a Hebrew operating system to support a Hebrew Screen Customizer session.

Bidirectional support for Screen Customizer is supported for IBM Personal Communications starting release 5.0.1.

Listing tested platforms and browsers for Hebrew

For Screen Customizer clients, Administrator and Customization Studio:

Windows 95 Hebrew Enabled (for Screen Customizer client only)	Internet Explorer 5.01 Netscape Navigator 4.7 (English)
Windows 98 Hebrew Enabled (for Screen Customizer client only)	Internet Explorer 5.01
Windows 98 Hebrew Translated (for Screen Customizer client only)	Internet Explorer 5.01
Windows NT Workstation Hebrew Enabled	Internet Explorer 5.01 Netscape Navigator 4.7 (English)
Windows 2000	Internet Explorer 5.01 Netscape Navigator 4.7

Listing tested platforms and browsers for Arabic

For Screen Customizer clients, Administrator and Customization Studio:

Windows 98	Internet Explorer 5.0 (Arabic)
Windows 95	Internet Explorer 4.7 (Arabic)
Windows NT Workstation	Netscape Navigator 4.7 (English)
Windows 2000	Internet Explorer 5.0 (Arabic) Netscape Navigator 4.61 and 4.7

Configuring a workstation for Arabic or Hebrew

For Host On-Demand

To configure a workstation for Arabic or Hebrew, set the appropriate code page:

1. Right-click a 3270 or 5250 configured session icon.
2. Click Properties.
3. Select one of the following for the Host Code Page:
    - ❍ 420 Arabic Speaking
    - ❍ 424 Hebrew (new code)
    - ❍ 803 Hebrew (old code)
4. Click the Language tab and select BIDI options to enable copy and paste.

For IBM Personal Communications

1. Click Start > IBM Screen Customizer > Administrator (or Client)

   A list of the WS files in your Personal Communications \private directory is displayed.

   If you have WS files in any other directory, click Add Sessions and follow the directions on the window to add them to the list.
2. Select a WS file that contains parameters of IBM Personal Communications Hebrew or Arabic session.
3. Click Start or double-click the WS file to start the session.

   To start multiple sessions, select multiple WS files in the list.

For IBM Personal Communications you can't select BIDI options to enable copy and paste. In this case BIDI option 'Text Type' is always 'Logical', and option 'Text Orientation' is always 'Left to Right'. Click Properties.

Activating bidirectional language support

To activate bidirectional functions (language change, screen reverse, push, etc.), use the same bidirectional key combinations that Host On-Demand uses.

Language selection

> The key combination Ctrl+N or Ctrl+L allows you to change the language layer. If the language layer is Latin, pressing Ctrl+N changes the language layer to right-to-left (Arabic or Hebrew). If the language layer is right-to-left (Arabic or Hebrew), pressing Ctrl+L changes the language layer to Latin.

Screen reverse

> The key combination Ctrl+S reverses the screen image. If the screen orientation is left-to-right, pressing Ctrl+S reverses the screen image right-to-left. If the screen orientation is right-to-left, pressing Ctrl+S reverses the screen image to left-to-right.

> Screen reverse does not reverse the text in the operator information area.

> When the screen orientation is changed, the language layer is changed to the default language of the new screen orientation. If the screen is reversed to right-to-left, the current language is changed to right-to-left (Arabic or Hebrew). If the screen is reversed to left-to-right, then the language is changed to Latin.

> For an Arabic 3270 session, if the swapping of symmetric characters is enabled, the inversion of the screen causes directional characters to be replaced by their counterparts.

> If the swapping of numeric characters is enabled, the inversion of the screen causes Hindi numerals to be replaced by their Arabic counterparts and the Arabic numerals to be replaced by their Hindi counterparts.

The keys unique to bidirectional 3270 are:

Field reverse

> The key combination Ctrl+F toggles the field orientation to either opposite to or the same as the screen orientation. In most cases, the field direction is the same as the general screen direction. However, sometimes it is necessary to have a field whose direction is the opposite of the screen direction. The Field Reverse function allows such transitions. When this function is activated, the typing direction is reversed, but the existing text in the field and the screen image do not change. When activated, this function creates a temporary change that stays in effect as long as the cursor remains within the field, or until Field Reverse is activated again.

> If the function is activated while the cursor is at the beginning of a line or field, the cursor jumps to the end of the line or field, so that the reversed field begins logically from that position. Otherwise, the cursor remains in its position and allows natural and correct editing of existing texts whose direction is the opposite of the screen direction.

Auto field reverse

> The key combination Ctrl+R toggles the auto field reverse mode for the current screen orientation.

> Auto field reverse affects the automatic selection of the field orientation of unprotected fields:

> ❏ When auto field reverse is enabled, upon initial entry to an alphanumeric field, the field orientation will be set to right-to-left (for both left-to-right and right-to-left screen orientations).

> ❏ When auto field reverse is enabled, upon initial entry to a numeric field, the field

orientation will be set to left-to-right (for both left-to-right and right-to-left screen orientations).

❍ When auto field reverse is disabled, upon initial entry to a field (whether numeric or alphanumeric), the field orientation is always set equal to the screen orientation.

Push and end push

This function is activated by the key combination Ctrl+P and allows the entering and editing of text whose direction is opposite from the field direction. When this function is activated, the cursor orientation is reversed, the language layer is changed accordingly, and a push segment is created.

End push, activated by the Ctrl+O (the letter "O") key sequence, ends the push mode.

In Windows mode, push is also activated by the Shift+NumLock key sequence. End push is also activated by the Shift+Numpad/ key sequence.

When you end the push mode, the cursor jumps to the end of the push segment, and its direction changes to the original direction. You can also perform end push by pressing any field exit keys (for example, Cursor Up or Cursor Down) or an aid key (for example, Enter).

The push function has two secondary modes:

Boundary mode

This mode is activated upon entering push mode. In this mode, the cursor remains in its position, and the typing of additional characters pushes the text in the direction opposite from the field direction. To indicate this boundary mode, the cursor has a block shape.

Edit mode

This mode is activated when the cursor is moved from its boundary position into the push segment area. In this mode, you can edit the text within the push segment, while typing in the field's natural direction.

AutoPush

This function is activated by the key combination Ctrl+A and helps the terminal operator type mixed left-to-right and right-to-left text. When enabled, reversed segments are automatically started and ended, according to the entered character or the selected language layer. This mode relieves the operator from manually pressing Push, as it is automatically invoked.

❍ In right-to-left fields, typing a digit or a Latin letter causes the automatic initiation of push, without language change. Further Latin letters or digits will continue the push mode; any other character automatically terminates push mode. This feature allows you to type text with embedded numbers or Latin words without using push/end push.

❍ In left-to-right fields, typing a right-to-left character or special character causes the automatic initiation of push, without language change. Typing any digit or Latin character causes the automatic termination of the mode. This allows you to type Latin text with embedded Arabic or Hebrew words using language layer selection rather than push and end push.

The keys unique to bidirectional 5250 are:

Field reverse

This function is activated by the key combination Ctrl+F and toggles the field orientation to either left-to-right or right-to-left. The text in the field is not inverted. The cursor orientation is

set equal to the new field orientation, and the language layer is selected accordingly. If the cursor is in the first logical position of a field or line, when selecting field reverse function, the cursor skips to the other side of that field or line, which now becomes the first logical position. If the cursor was not in the first position of the field or line, when selecting field reverse function, the cursor remains in its position and allows natural and correct editing of existing text.

Close

This function is activated by the key combination Ctrl+C and is provided so that the data entered in one keying direction can be concatenated with the data that was previously entered in the opposite direction. It operates as follows:

❍ All embedded nulls are removed from the current line.

❍ Concatenated text is moved to the right boundary of the field (if the field direction is right-to-left) or to the left boundary (if the field direction is left-to-right).

❍ The cursor direction is set to the field direction.

❍ The language layer is set to the default for the field direction.

❍ If the screen orientation is now left-to-right, the cursor is positioned at the first null to the right of the concatenated text.

❍ If the screen orientation is now right-to-left, the cursor is positioned at the first null to the left of the concatenated text.

Base

This function is activated by the key combination Ctrl+B and is a toggle that activates or deactivates the automatic shape determination function for Arabic right-to-left text. It is valid only when processing right-to-left Arabic text. If it is pressed in a left-to-right field, an operator error 0027 results.

Customizing a screen

The Customization studio can handle user input in bidirectional languages. GUI components can have Arabic and Hebrew captions set, during customization.

Modify the HTML file CustomStudio_en.html to correctly display Arabic and Hebrew captions in the Studio.

To the above mentioned HTML file, add the HTML parameter CodePage = 420 for Arabic and 424 or 803 for Hebrew. A typical HTML parameter for Arabic looks like the following:

```
<PARAM NAME=CodePage      VALUE="420">
```

A typical HTML parameter for Hebrew looks like the following:

```
<PARAM NAME=CodePage      VALUE="424">
```

To specify a right-to-left customization for template, you need to modify CustomStudio_en.html to correctly display Arabic and Hebrew captions in the Studio and, afterwards, to apply the template to right-to-left screen in the Administrator and Client.

A typical HTML parameter for a right-to-left template looks like the following:

```
<PARAM NAME=template_isRTL          VALUE="true">
```

Customizing a screen as a right-to-left screen

To reverse a screen in the Administrator, follow these steps:

1. Open the screen you want to customize.
2. Press Ctrl+S to apply the screen reverse function, which changes the screen orientation to right-to-left.
3. Click File > Capture.
4. Click File > Customize to start the studio.

   Because you captured the screen in right-to-left mode, the capture will open as a right-to-left screen.
5. Customize your right-to-left screen.
6. Click File > Save Screen.

Using Arabic or Hebrew characters

To use Arabic or Hebrew characters, press Alt+(right)Shift before typing.

To use Latin characters, press Alt+(left)Shift before typing.

🖉 Arabic characters appear as rectangles on the screen when using Italic attributes.

Setting Arabic or Hebrew text as a caption

To set an Arabic or Hebrew caption to an object, follow these steps:

1. Right-click the object and select Caption.
2. Press Alt+(right)Shift to write Arabic or Hebrew Text.
3. Type a new caption or change a previous caption in the New field.
4. Click OK.

🖉 In runtime, screens always open in left-to-right mode, even if they were customized as right-to-left. You must reverse the screen (Ctrl+S) to change the screen to right-to-left mode.

Understanding bidirectional support for unlinked text fields

Unlinked text fields are those fields in a customized screen that are not necessarily connected with a host field. The unlinked text fields provide full bidirectional support. You can enter Arabic or Hebrew text in these fields using the same keyboard functions as in a 3270 linked field:

- Field reverse
- Push
- End push

- Automatic push initiation and termination (Autopush)
- Language change

In fields that are oriented right-to-left, you can use two levels of push. For the first level of push, you can enter left-to-right text in right-to-left-oriented fields. For example, you can type numbers within Arabic or Hebrew text. The second level of push does not allow you to enter left-to-right text in right-to-left oriented fields.

The Autopush mechanism controls the first level of push. You need to manually begin and end the second level of push.

Understanding the backward compatibility of bidirectional support

You can re-customize the screens that you already customized before bidirectional support was available.

Understanding Hindi support

Understanding supported platforms

Operating system

Hindi language is supported only on the Windows 2000 platform and only with Host On-Demand.

Hindi language is only supported for 5250 sessions.

Browser support

Any industry-standard browser is supported, such as Netscape 4.5, or later, or Internet Explorer 5.0, or later.

Web-server support

Any industry-standard Web server is supported, such as Lotus Go Web server, Apache or Microsoft IIS 4.0.

Understanding the Hindi language support overview

The Hindi language consists of the following:
- 38 consonants
- 15 vowels

- 14 matras
- 3 vowel modifiers
- 1 halant
- 1 nukta

Hindi language uses the Devanagari Script. All details regarding Devanagari Script are available from the description of the [Unicode Standard Version 2.0](#).

Use the following key combinations to type vedic overlay characters:

Character	Key combination (based on vedic overlay)
Udatta (U+0951)	Alt+Ctrl+F
Anudatta (U+0952)	Alt+Ctrl+D
Abbreviation Sign (U+0970)	Alt+Ctrl+, (comma)
Avagraha (U+093D)	Alt+Ctrl+. (period)
OM (U+0950)	Alt+Ctrl+/ (forward slash)

Understanding Hindi language character composition

Character composition is in accordance with the Unicode ligation rules and ISCII (Indian Standard Code Information Interchange) ligation rules. This is achieved through the implicit character composition feature of Windows 2000 operating system.

Using Hindi monospaced font for Windows 2000

Screen Customizer provides Hindi monospaced font (Devanagari MT Narrow).

To install the Devanagari MT Narrow font file, Devanagari MT Narrow.ttf, complete the following steps:

1. Download the font from the Host On-Demand CD or tape to your hard drive by right-clicking the link.
2. Click Start > Settings > Control Panel.
3. Double-click Fonts.
4. From the File menu, select Install New Font....
5. Find the file Devanagari MT Narrow.ttf wherever you saved it, then select it and click OK.

Installing Hindi support for Netscape Communicator

Edit the active font control file, \Program Files\Netscape\Communicator\Program\Java\Classes\font.properties, to accommodate the Hindi monospaced font. Add the following line to the font.properties file: Monospaced.0=Devanagari MT Narrow.

If the font.properties file does not include the Hindi character set, download font.properties from the server to replace the active font control file (font.properties). This file is located in the /samples/fonts/hindi directory.

Installing Hindi support for Internet Explorer

Host On-Demand uses Monospaced Devanagari font for a Hindi session on Windows 2000. To install Monospaced Devanagari font on the client:

1. Download the font file to the client in the Windows font directory.
2. Assign the browser registry entry HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Java VM\Font Alias\Courier the key value of Devanagari MT Narrow.

    The key font alias may not exist in your system. Use the following steps to create a font alias:

    1. Under the registry entry Java VM, create a KEY called Font Alias.
    2. For the KEY Font Alias, create a VALUE called Courier.
    3. For the VALUE Courier, update the data with the hindi font name Devanagari MT Narrow.
    4. Reboot your system.

Configuring a workstation for Hindi language

To configure a workstation session for Hindi, complete the following steps:

1. Right-click a configured session icon.
2. Click Properties.
3. Select 1137 Hindi Code Page for 5250 session.
4. Click OK.

Switching keyboards between Hindi and Latin

Language selection is activated by the key combination Ctrl+N or Ctrl+L, which changes the language layer. If the language layer is Latin, pressing the Ctrl+N key combination changes the language layer to Hindi. If the language layer is Hindi, pressing the Ctrl+L key combination changes the language layer to Latin.

Use the following key combinations in Screen Customizer.

Default key mapping	Language
Ctrl+N	Hindi
Ctrl+L	Latin

Understanding language shift status

Screen Customizer Hindi support indicates the language currently in use in the Operator Information Area (OIA). If keyboard support is in Hindi language mode, the indicator HI appears in the OIA. There is no indicator when the keyboard is in the default Latin mode.

Using cut, copy and paste support

Clipboard operations such as copy, cut and paste are supported.

Key combination	Function
Ctrl+C	Copy
Ctrl+X	Cut
Ctrl+V	Paste
Ctrl+A	Select all

Understanding the behavior of the arrow, Delete, and Backspace keys

The Insert, Delete, and Backspace keys have some special behaviors in Hindi sessions. This unexpected behavior is because the internal representation of the characters is different compared to what gets displayed on the screen.

Some of the terms used to describe these behaviors include:

Character

      The smallest component of written language that has semantic value

Glyph

      The shape that characters can have when they are displayed

A single glyph can correspond to a single character or to a number of characters.

Arrows

The cursor movement keys, such as the left and right arrow keys, are now capable of identifying composed character or Hindi glyphs and they move from one glyph to another.

Example

You type three characters: Devanagari letter KA, Devanagari sign Virama and Devanagari letter SSHA. These three characters form a single glyph Devanagari letter K.SSHA. If the cursor is positioned after this glyph and you want to move the cursor to the character before the Devanagari letter K.SSHA, you need to press the left arrow only once.

Delete

The Delete key identifies a glyph or composed character, and it deletes the glyph.

Examples

You enter the Devanagari letter KA followed Devanagari vowel sign I. The glyph corresponding to Devanagari vowel sign I is displayed before the glyph corresponding to Devanagari Letter KA. When you press the Delete key, the composed character KA is deleted.

In another example, you type three characters: Devanagari letter KA, Devanagari sign Virama and Devanagari letter SSHA. These three characters form a single glyph Devanagari letter K.SSHA. You reach the glyph Devanagari letter K.SSHA by pressing the right arrow key and when the cursor reaches Devanagari letter K.SSHA, you press the Delete key. The composed character or glyph K.SSHA is deleted.

Backspace

For certain composed characters, the expected character will not be deleted from the screen when the Backspace key is pressed.

Examples

You enter the Devanagari letter KA followed by the Devanagari vowel sign I. The glyph corresponding to the Devanagari vowel sign I is displayed before the glyph corresponding to Devanagari Letter KA. When you press the Backspace key, you may expect the Devanagari letter KA to be deleted from the screen. However, the glyph corresponding to Devanagari vowel sign I is deleted from the screen.

In another example, you type three characters: Devanagari letter KA, Devanagari sign Virama, and Devanagari letter SSHA. These three characters form a single glyph Devanagari letter K.SSHA. You reach the glyph Devanagari letter K.SSHA by pressing the right arrow key and, when the cursor crosses Devanagari letter K.SSHA, you press the Backspace key. Devanagari Letter SSHA is deleted, not the entire K.SSHA glyph.

Customizing a screen

The Customization studio can now handle user input in Hindi. GUI components can have Hindi captions set, during customization.

Modify the HTML file **CustomStudio_en.html** handle user input in Hindi, which will enable Hindi input in the Studio components. Add the HTML parameter CodePage = 1137 to the above mentioned HTML file.

A typical HTML parameter looks like the following:

```
<PARAM NAME=CodePage       VALUE="1137">
```

Using Hindi characters

In Screen Customization Studio, you can use both Hindi and Latin characters.

To use Hindi characters for user input, press Alt+(right)Shift.

To change back to Latin characters, press Alt+(left)Shift.

Setting Hindi text as a caption

To set Hindi caption to an object, follow these steps:

1. Right-click the object, and select Caption.
2. Press Alt+(right)Shift to type Hindi characters
3. Type a new caption or change a previous caption in the New field.
4. Click OK.

Understanding Hindi support for unlinked text fields

Unlinked text fields are those fields in a customized screen that are not necessarily connected with a host field. The unlinked text fields provide full Hindi support. You can enter Hindi text in these fields using the same keyboard functions as in a 5250 linked field.

Understanding the limitations of Hindi support

Following are limitations of Hindi support for Screen Customizer:

- VT and CICS emulations are not supported in this release.
- If a field in a 5250 session in Screen Customizer wraps to more than one line, Screen Customizer composes the first 80 characters and displays the composite string in the second line and each subsequent line as needed. The column length in Host On-Demand is fixed at 80 characters, so the end user cannot input more than 80 characters per row.
- Screen Customizer Hindi support is available only for Host On-Demand, and it supports only 5250 session type. Personal Communications support is not available.
- 3270 printer sessions and 5250 printer sessions are not supported for Hindi.
- RuleBasedBreakIterator, a software tool from IBM Cupertino Labs is used for Identification of Hindi Glyphs. Any limitations of this tool is applicable to our Hindi support.

Understanding Thai language functions

Understanding software requirements for Thai language support

To use Thai language support, you need a Thai operating system to support a Thai Screen Customizer session.

Thai support for Screen Customizer is not supported for IBM Personal Communications.

Listing tested platforms and browsers for Thai language support

For Screen Customizer clients, Administrator and Customization Studio:

Platform	Browser
Windows 95 Thai Edition, Windows 98 Thai Edition	Internet Explorer 4.0 / 5.0 Thai Netscape Communicator 4.5 or later
Windows NT 4.0 Thai Edition	Internet Explorer 4.0 / 5.0 Thai Netscape Communicator 4.5 or later
Windows 2000	Internet Explorer 4.0 / 5.0 Thai Netscape Communicator 4.5 or later

Using Thai monospaced font

Host On-Demand provides the Thai monospaced font Courier Thai for Windows Thai edition. To install the Courier Thai font file (courth.ttf):

1. [Download the file](#) to your client. Right-click the link to download the file.

2. Copy the file to the fonts folder located in the Windows control panel.

Host On-Demand provides the Thai monospaced font Thai Phuket for OS/2 Warp 4.0 Thai and AIX 4.3 Thai Edition.

Configuring Internet Explorer Thai

Microsoft Internet Explorer on Windows Thai Edition does not specify the correct font for Thai. To fix this:

1. Run regedit.exe.
2. Replace Courier with Courier Thai in the following registry entry:

    HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Java VM\Font Alias\Courier

Configuring Netscape Communicator

If the active font control file (font.properties) in Netscape Communicator (\Program Files\Netscape\Communicator\Program\Java\classes) does not include the Thai character set, do the following:

1. [Download font.properties.win](#) from the server. Right-click the link to download the file.
2. Replace the active font control file (font.properties) with this new font.properties file.

Thai font control file (f_th.prp) is provided for Netscape Communicator for OS/2 Warp 4.0 Thai.

No Thai font control file is provided with Netscape Communicator for AIX 4.3 Thai.

To display Thai on Host On-Demand using a Netscape browser, use Thai raster font (THA3270) for the font name.

Configuring a workstation for Thai

To configure a workstation session for Thai language, set the appropriate code page:

1. Right-click a 3270 or 5250 configured session icon.
2. Click Properties.
3. Select 838 Thai or 1160 Thai Euro for the Host Code Page.

Selecting Thai display modes

You can specify the character composition and alignment for your text windows by indicating the display composed mode on the Thai Display Mode window. The selected Thai display mode effects the fields that use monospaced font only. For the fields that use proportional font, Thai text is displayed in Mode 2 (composed mode without column alignment).

Specify one of the following modes:

Mode 1 - Non-compose mode

>   No character composition occurs in this mode.

Mode 2 - Composed mode

Thai characters are auto-composed in this mode. No column realignment is performed.

Mode 3 - Composed with space alignment

In this mode of composing, three consecutive spaces cause column realignment. The realignment occurs whenever the composing routine finds three consecutive spaces. If all fields have at least three trailing spaces, all fields of all records will be properly aligned.

Mode 4 - Composed with EOF alignment

In this mode of composing, the EOF character (hexadecimal 'EA') also causes column realignment. Whenever the composing routine finds a single EOF, it deletes the EOF and performs column realignment. If two consecutive EOFs are found, no realignment occurs, one EOF is deleted, and one EOF is treated as data.

Mode 5 - Composed with space and EOF alignment

This mode of composing performs the column realignment function of both mode 3 and mode 4.

Configuring Thai display mode

You can configure the Thai display mode from your session panel by doing the following:

1. Right-click a configured session icon.
2. Click Properties.
3. Select a Host Code Page for Thai.
4. Click on the Language tab.
5. Select Thai display mode from Thai Options.
6. Click OK.

You can also change the Thai display mode settings in an active session:

1. On the View menu, click Thai Display Mode.
2. Select Thai display mode from Thai Display Mode window.
3. Click OK.

Switching the keyboard between Thai and Latin

To switch the keyboard between Thai and Latin, use the following key combinations:

Shortcut key	Function
CTRL+N	Switch keyboard layout to Thai
CTRL+L	Switch keyboard layout to Latin

Understanding language shift status

Screen Customizer indicates the language currently in use in the Operator Information Area (OIA). If keyboard is in Thai language mode, the indicator TH appears in the OIA. There is no indicator when the keyboard is in the default Latin mode.

Understanding the limitations of Thai support

- Thai support for Screen Customizer is available for Host On-Demand only. Personal Communications support is not available.
- Thai support for Screen Customizer requires a version of the operating system that supports Thai.

Creating objects

You can create new objects or replace existing host fields. To create an object, click Create from the menu and choose the type of object.

Every object has properties associated with it. Right-click an object and select properties. The Properties window outlines the characteristics of the object that can be viewed and modified. It is organized by related functions, grouped by tabs. There are four tabs that define appearance: General, Font, Color, and Appearance. Macro, Settings, Host Link, and Read/Write tabs define the functionality of the object. Each properties window may include the following tabs:

- General/Caption - assigns a caption to the object. Can be used to translate screens into another language.
- Font - sets the font, and an object's style, and size
- Color - sets the object's background and foreground colors
- Macro - assigns data to be inserted into an input field and/or a function key to be executed
- Appearance - sets the position and size of the object
- Settings - links a created object to a host field
- Read/Write - reads data from the object on the screen and places it as a global variable or picks data from the global variable and writes it to the object on the screen
- Host Link - links a newly created text field to the host application field

All changes made in the Properties option are applied only to the chosen object.

When you are in a Properties window, click Apply to see the results of customization and OK to save and exit.

Changing captions

Captions can consist of any number of characters. To replace, partially substitute, add, or delete captions:

1. Right-click the object or host-field, and select Caption.
2. Type a new caption, or change a previous caption, in the New field.
3. Click OK.

To blend a segment of a host-field caption with a new caption:

1. Right-click the object or host-field, and select Caption.
2. In the Original box, highlight the segment of the host-field caption that you want to use.
(for example,

   ```
   RUNNING   OURVM87
   ```

3. In the New box, type over the characters you want to replace, including blanks.
(For example, WELCOME TO . The text in the New box would look like this

   ```
   WELCOME  TO    VM87
   ```

4. Click OK.

The resulting caption will be a blend of the new caption and the host caption; specifically, the caption will be formed by replacing the original caption with the new caption, but allowing the selected characters (or those specified in the from/to range) to be dynamically supplied by the host. This means, from the example, that the VM87 part of the caption will change when you access a different host. For example, if you accessed OURVM92, the caption would then change to

```
WELCOME  TO    VM92
```

Changing object font

1. Right-click an object, or group of objects, and select Font.
2. Clear Use Default Font.

    Checking this box means the font settings will be inherited from another level.

3. Select a Font, Style, and Size. Your changes are reflected beneath the boxes.
4. Click OK to save and exit. The screen is resized to accommodate the selected font.

Changing object colors

1. Right-click the object, or group of objects, and select Color.
2. Select either Foreground (text) or Background.
3. Select one of the colors available from the Basic Color palette or create a unique color and add it to a palette. To create a custom color:
    1. Clear Inherit Color.

       Checking this box means the color settings will be [inherited](#) from another level.
    2. Click a color and then adjust the numbers that represent the color by clicking the arrows or entering a number. Color changes are reflected in the selected field box.
    3. Click Add to Custom Colors.

       Colors added to Custom Colors will only be available for the current session. If you exit the Studio and restart it, the pallet will be reset to white.
    4. Click one of the blank Custom Colors boxes. Now you can use this color for other objects on the screen.

    To create a sixth custom color, you have to overwrite one of the other custom colors on the palette. Objects using the overwritten color retain their color, but that color is no longer available.
4. Repeat the steps above for each color you want to change.
5. Click Defaults to return to the default colors.
6. Click Apply to apply changes. Click OK to apply changes and return to the screen.
7. Click OK.

Adding a macro to an object

Macro buttons can be used to send information to multiple fields on the same screen. In addition, these buttons can send information to be stored in the global parameters for use in combining screens, or in support of the Get-to-the-Point facility.

To create multi-field macro buttons:

1. Click Create > Button.
2. Place the button by dropping it on the screen.
3. Right-click the Button and select Macro.
4. Enter a Keystroke string to be sent.

    You can either insert data manually or from a [Client HTML file](#) for Host On-Demand or a parameter file for Personal Communications.

    To insert data manually:
    1. Type a value in the Edit Source field.
    2. Click Add.

        The value appears in the Field Values box.

    To insert data from an HTML file:
    1. Click Read HTML.
    2. Select the Client HTML file.
    3. Click Open and variables are displayed in the Select Source or Event field.
    4. Select the data from the Select Source or Event box and it is immediately displayed in the Edit Source field.
    5. Click Add and the data appears in the Field Values field.

        Below is a part of an Client HTML file that a macro button uses:

        ```
        <PARAM NAME="LASTINDEX" VALUE=100>
        <!-- ALL THE PARAMETERS BELOW ARE USED FOR Get-to-the-Point UTILITY  -->
        <!-- PRM 1,2,3,4,11,15,21,31,41,SUBDIR ARE USED AS AN EXAMPLE -->
        <PARAM NAME=PRM1 VALUE=LCMN>
        <PARAM NAME=PRM2 VALUE=TAG~>
        <PARAM NAME=PRM3 VALUE=33333>
        <PARAM NAME=PRM4 VALUE=TAG>
        <PARAM NAME=PRM15 VALUE=L APPLID=CICSTES1>
        <PARAM NAME=PRM11 VALUE=0000>
        <PARAM NAME=PRM21 VALUE=21>
        <PARAM NAME=PRM31 VALUE=31F>
        <PARAM NAME=PRM41 VALUE=41DD>
        <PARAM NAME="SUBDIR" VALUE=XXXXXXXX>
        ```

        The first line of this example shows the maximum number of macro parameters that can be used in the program. The parameters can be entered in the HTML file dynamically from any script (for example, Perl script) or manually.

5. In the Field Values box:
    1. Select the data that you would like to link.
    2. Click the input field you want to link it to.
    3. Select a "Link to Parameter" in the list of host fields to send a value to a global variable.
6. Select the field you want to link the input to or link to a global parameter. To link the Button to the proper input field, use the list where all fields are displayed according to their position, row, column, and length on the screen. The length of the field is shown to indicate the maximum size of the string it can accept. The selected field will blink on the screen. If the Properties window is blocking certain fields, it can be moved.
7. Select a function key you want executed. This key will be obxected after data has been input into the selected field.
8. Repeat steps 4-6 to send more than one string. You can send as many strings as there are Text fields.
9. Click OK to save and exit.

- Set the parameter name in the Read/Write tab.

A macro button not only fills in fields, it can automatically send a function key to the host as well. After you have selected data from the Field Values box:

1. Select a function key from the scroll list.
2. Click Apply to save.

If you would like to change information that you have already added to the Field Values field, or linked to specific fields on the screen:

1. Highlight the value.
2. Click Remove if you want to remove the value.

To change variables for the same link:

1. Click Replace.
2. Click the variable in the Field Values field.
3. Click the new variable in the Select Source or Event field.
4. Click Replace.

To remove all selected variables and links, click Remove All.

Resizing an object

1. Right-click the object, or group of objects, and select Appearance.
2. Enter values in pixels for the Horizontal Position, Vertical Position, Width, and Height of the Button.
3. Click OK.

Adding a link to a host field

1. Right-click the object and select Host Link.

2. Select a host field to link to from the list of host fields on the right. This host field will blink on the screen. Current values for the selected host field is displayed in Linked Field Value.

3. Click OK.

Adding read/write function to an object

You can combine screens so that an object from one screen is displayed dynamically as an object in another screen. You can either read information from or write information to the global parameters in order to use this information on another screen. However, you cannot "read from" until you have "written to."

For example, a data entry clerk needs data from two different applications when speaking to a client. Usually the client must wait while the clerk navigates through two different applications. By adding a button, the customer's address (which is currently displayed on screen A of application 1) can be displayed on screen B of application 2, along with the information that is regularly displayed on this screen.

Parameters are accessible as long as you do not close all sessions.

To combine screens:

1. Start an Administrator session.
2. In the Administrator screen, select the object that you want to take data from (to pass to another screen).
3. Click File > Customization to open the Studio.
4. Right-click the object in the Studio window and select Read/Write.
5. In the Parameter to Write To field, enter the name of the parameter (global variable), for example, Prm5. The parameters in the startup HTML file or parameter file are global parameters whose value is preset at startup.
6. Click OK.
7. Click File > Save to save the map.
8. Click File > Open Map.
9. Select the map that you would like to pass the data to.
10. When the map is opened, select the object in which you want the data to be displayed. Use an existing object or create a new one.
11. Right-click the Object and select Read/Write.
12. In the Parameter to Read From filed, type the parameter name from step #6.
13. Click OK.
14. Click the File > Save to save the map.
15. Click File > Close.
16. Restart a session. When you view the second screen, you will see the data from the first screen displayed in the selected object.

Changing screen colors

The Color Remap option allows you to change the foreground and background colors for all screens in the host application. To change a color on the screen:

1. Click Edit > Preferences > Color.

2. Select the type of field for which you want to change the color.

3. Select either Foreground (text) or Background.

4. Select one of the colors available from the Basic Color palette or create a unique color and add it to the palette. To create a custom color:

   1. Click a color and then adjust the numbers that represent the color by clicking the arrows or entering a number. Color changes are reflected in the selected field box.

   2. Click Add to Custom Colors.

   3. Click one of the blank Custom Colors boxes. Now you can use this color for other objects on the screen.

   To create a sixth custom color, you have to overwrite one of the other custom colors on the palette. Objects that use the overwritten color retain their color, but that color is no longer available.

5. Repeat the steps above for each color you want to change.

6. Click Defaults to return to the default colors.

7. Click Apply to apply changes. Click OK to apply changes and return to the screen.

Accepting custom screens

To accept customized screens click View > Accept Custom Screens.

Viewing fields

Click View > Fields to see the positions of all objects on a screen. All objects on the screen have a border around them.

Changing the font

1. Click Edit > Preferences > Font.

2. Choose from the Font and Size lists. Your changes are reflected beneath the Sample heading.

3. If you want to use these type styles, click Bold, Italic, or both.

4. Click OK.

5. The screen is resized to accommodate your changes.

True type fonts can appear proportional or not. It is better to use a font that is not proportional so that every letter will have the same width.

Viewing screen information

Click Screen > Customization Info to view information about a specific screen.

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