IBM Screen Customizer Version 2.0.60

Getting Started

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Contents

About this book

If you are viewing this documentation from the CD, some links may not function. You must install the product in order for all of the links to work.

Chapter 1. Introducing Screen Customizer

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

Components

There are three components:

Administrator
Captures host screens from an active host session and saves them as maps that can be modified in the Customization Studio. You can test customized screens and templates in the Administrator. The Administrator can be installed and run only on a Windows 95, 98, 2000 or NT workstation. It cannot be downloaded from a Web server.

Customization Studio (Studio)
Customizes host screens that were captured in the Administrator. The Studio is also used to set global defaults for font, colors, button styles, and other attributes, and save them in a template. The Studio can be installed and run only on a Windows 95, 98, 2000 or NT workstation and does not require a host connection. It cannot be downloaded from a Web server.

Client RunTime
Presents a default or customized graphical interface for host sessions. The Client is the interface used by end users to view screens customized in the Studio. It resides on a Web server or a client workstation.

With Host On-Demand, the Screen Customizer components run as Java applets in a browser.

Features

Main features of Screen Customizer:

Customize green screens
Convert a green screen into a graphical or Web-like user interface, with radio buttons, images, Web links, check and choice boxes, colors, and many other customization options. No changes are required to original host applications.

Global Variables
Save data from one screen and use it as information for another screen or to perform calculations.

Get-to-the-Point
Hide unnecessary screens so that users see only the screens that they need to see.

Web Links
Create buttons that launch custom URLs in a browser linking host applications to local or Internet Web pages.

Context-sensitive help
Create context-sensitive field help for host applications.

1

Valid values
Create a list of values that are valid for a field. Creating a list makes it easier for the user and minimizes errors.

Run user applet
Start a user-defined applet at the same time as the session, or at a later time. Applets can interact with a session using HACL, the Screen Customizer terminal bean, or the Custom Component Interface (CCI).

Add macro buttons
Add macro buttons to perform host-system functions, such as sending data to specific fields.

User groups
Create unique customizations for different groups of users.

Transfer files
Transfer files between your workstation and S/390 or AS/400 host systems.

What's New in Version 2.0.60

The following functions and enhancements have been added to Version 2.0.60:

Greek translation
Screen Customizer is translated into Greek.

Netscape 6.0 support
If you are running Screen Customizer 2.0.60 with Host On-Demand V6.0 on Netscape 6.0, the Client will be supported. If running the Customization Studio or Administrator, Netscape 6.0 is not supported and 1.1.8 Java Runtime Environment browsers should be used. Also, the Screen Customizer Component Interface (SCCI) and Screen Customizer bean are not supported in a Java2 Runtime Environment.

What's New in Version 2.0.3

The following functions and enhancements have been added to Version 2.0.3:

Hindi Studio/Hindi Cluster Support
Hindi support is available for Screen Customizer Client. With Hindi cluster support, you can use cursor movements to start a cluster, and the delete key to delete the cluster.

HostModeTabbing
When set to true, this HTML parameter specifies that Version 1 maps default to Host Mode tabbing. If the parameter value is set to false, Version 1 maps default to graphical component tabbing (non-Host Mode).

Launch emulator macro function
This macro function launches a native Host On-Demand macro file.

Multiple tags
To help distinguish between similar screens, you can now add up to two separate eight character tags per screen.

PageWindowUpdown
This new HTML parameter enables keyboard scrolling. In addition to using a mouse, a user can use the PageUp and PageDown keys to scroll a screen up and down, when the parameter value is set to true. When set to false, a user can use only a mouse to scroll the screen.

ReverseVideo

When the ReverseVideo HTML parameter value is set to true, the foreground and background colors of labels and text fields are reversed if the reverse video attribute has been set for the original host field.

Right-click for field help

This feature allows users to right-click on fields and click What Is It! to view field help descriptions or click Valid Values to see a list of valid field values.

Running Get-to-the-point

A new HTML parameter UpdateIncludesInitialScreen provides the following function: If the parameter value is set to true, and Every update is specified in the Get-to-the-point properties for a screen, Get-to-the-point runs on the initial screen as well. If the parameter value is set to false or is not specified, the initial screen and screen updates are separate.

Sorting and searching for Screen IDs

The Screen IDs panel now has sorting and searching capabilities. You can change the sorting attribute of the Screen IDs list by clicking the appropriate column header. To search for a specific string of characters in the Screen ID, type the string in the Find String field.

What's New in Version 2.0

The following functions and enhancements have been added to Version 2:

Global customization enhancements

Customizing screens is easier with the template enhancements. You can control the look and function of many different emulator screens at once by creating templates that can be automatically applied to screens without having to modify each screen individually.

Simplified screen capture process

The Administrator toolbar makes the process of capturing and customizing screens quick and easy. The toolbar buttons provide quick access to the functions you use every day when working with screens. There are buttons to capture a screen, start the Studio, and work with screen IDs.

Web link button improvements

Additional options have been added for Web link buttons. Text for links changes color when the mouse pointer is held over it, displaying a standard Web link. Settings can be saved for individual Web links.

Light pen support

Use your mouse as a light pen pointer when accessing host applications that require a light pen. Light pen fields can be displayed as check boxes or buttons, depending on the type of field.

Additional language support

Support for Hindi and Thai languages have been added.

AS/400 Subfiles

AS/400 subfiles are automatically converted into multi-column tables with button hotspots that send the appropriate commands for manipulating objects in the subfile list.

Auto install for AIX

Provides a graphical user interface for installing Screen Customizer on AIX. This makes it easy to select installation options and reduces possible installation errors.

Screen Customizer API
> The Custom Component Interface (CCI) allows you to interact with graphical objects on the screen. You can set properties for graphical interface objects and in some cases the data represented by the object (for example, button caption or choice options). The Screen Customizer API is documented in the CCI Reference included with the Host On-Demand Host Access Toolkit.

Screen Customizer bean
> Use Screen Customizer within your own applications or embedded directly into a Web page. The bean allows rapid application development with full capabilities to display customized screens. The Screen Customizer bean works with most of the current host access beans. It is documented in the *Host Access Beans for Java Reference* included with the Host On-Demand Host Access Toolkit.

Service bundler
> Provides an easy way to collect the information needed by IBM Service if there is a problem with Screen Customizer.

Chapter 2. Planning for Screen Customizer

To use the Screen Customizer Client or Administrator, you must have either Host On-Demand V6 installed. Screen Customizer depends on the transports provided by these products to connect to host systems. The Customization Studio can be used to customize screens without being connected to a host system and, therefore, does not depend on Host On-Demand.

Before installing Screen Customizer, Host On-Demand must be installed. If you need to reinstall Host On-Demand for any reason, you must reinstall Screen Customizer afterwards. If you don't, Screen Customizer might not run correctly and some functions could be missing.

You should not install a language for Screen Customizer if it has not been installed for Host On-Demand. If you install a language that was not installed for the base product, Screen Customizer will not work in that language.

If you are installing the full version of Screen Customizer on a Host On-Demand server, the Screen Customizer RunTime client replaces the default graphical user interface provided with Host On-Demand.

Required software

To install the Administrator or Client, you must have the following installed:
- Host On-Demand Version 6.0

If you are running Screen Customizer 2.0.60 with Host On-Demand V6.0 on Netscape 6.0, the default and custom Client will be supported. If running the Customization Studio or Administrator, Netscape 6.0 is not supported and 1.1.8 Java Runtime Environment browsers should be used. Also, the SCCI and Screen Customizer bean are not supported in a Java2 Runtime Environment.

Supported operating systems

Client

The Client can be installed on a Host On-Demand server or on a locally-installed client.

Supported operating systems to install the Client on a Host On-Demand locally-installed client include:
- Windows NT 4.0 with SP5
- Windows 2000
- Windows ME
- Windows 95 and Windows 98

Supported operating systems to install the Client on a Host On-Demand server include:
- Windows NT 4.0 with SP5
- Windows 2000
- Windows Terminal Server Version 4

- AIX (R) Version 4.2.x, 4.3.3, 4.3.4, and 5.1
- OS/2 (R) Warp Version 4 and OS/2 Warp Server for e-Business 4.5
- Novell NetWare Version 4.0, 5.0, and 6.0
- Sun Solaris Version 2.6, 7, and 8
- HP/UX 10.20 and 11.0
- RedHat Linux Version 6.2, 7.0, and 7.1
- SUSE 6.4, 7.0, and 7.1
- Caldera Version 2.3
- TurboLinux Version 6.0 and 6.1
- Unixware Version 7
- OS/400 (R) Version V4.4, V4.5, and V5.1
- OS/390 (R) Version 2.5, V2.6, V2.7, V2.8, V2.9, V2.10, V2.11, and V2.12

Administrator

Supported operating systems to install the Administrator on a Host On-Demand server or locally-installed client include:
- Windows NT Version 4.0 with SP5
- Windows 2000
- Windows ME
- Windows 95 and Windows 98

Customization Studio

Supported operating systems to install the Studio include:
- Windows NT Version 4.0 with SP5
- Windows 2000
- Windows 95 and Windows 98
- Windows ME

Supported browsers

The following browsers can be used to run Screen Customizer with Host On-Demand:
- Netscape Navigator 6.0
- Netscape Navigator 4.6 and 4.7.x
- Netscape Navigator 4.61 (OS/2)
- Mozilla
- Microsoft Internet Explorer 4.01 with SP1, 5.0, or 5.1, or 5.5

If running the Customization Studio or Administrator, Netscape 6.0 is not supported and 1.1.8 Java Runtime Environment browsers should be used. Only the runtime and custom Client will be supported in Netscape Navigator 6.0.

Screen Customizer doesn't always load completely under Netscape 4.6x/4.7. This is a browser problem. Hold the Shift key and click the Reload button. The applet will then reload successfully.

Packaging

Installation files are provided in the following formats:

- InstallShield for Windows NT, Windows 95, Windows 98, Windows 2000, and Windows ME
- ZIP for OS/2 and NetWare
- TAR for UNIX
- InstallManager for AIX
- Savefile for OS/400

For System/390, Screen Customizer Clients are provided on three different media:

- 6250 tape
- 3480 cartridge
- 4 millimeter cartridge

Included in the System/390 tape package is a Screen Customizer multiplatform CD.

Host requirements

OS/390

Some VTAM installations have an optimizer installed that can merge fields to enhance performance. This option must be turned off when you capture screens.

A field merge effect may also be caused by CICS and IMS applications that write the data stream directly, rather than utilizing BMS or MFS mapping systems. Screens similar in appearance may significantly differ in the number and length of fields, and this can cause problems associating customized maps to a screen.

Screen Customizer's default interface can accommodate such data streams, because it creates an interface instantly according to the data stream that is sent to the client. However, customizing such screens can be difficult because you have to account for all of the variations of the screen, and import the customization to all versions of the screen.

AS/400

The appearance of an error message or a copyright notice in 5250 sessions or the opening of AS/400 application subfiles causes detection of a change in the appearance of the screen by Screen Customizer. Therefore, to completely customize the application, each of these screens must be assigned a screen ID, and then be customized, or you can use tags.

Tags for these screens should identify a screen element that remains unchanged by the appearance of these items. Consequently, when the new screen items are sent, the customized map would just have the text of the error message or subfile

appear as part of the customized screen. Another option is to turn the subfile tables off for AS/400 subfile screens, which you can do in the Studio.

Chapter 3. Installing Screen Customizer

Screen Customizer includes:

- Client for Host On-Demand
- Administrator (Windows only)
- Studio (Windows only)

Migrating from ResQ!Net

Customizations created using ResQ!Net are saved by default in the **/hod/at2custom** directory, which has several subdirectories. For Screen Customizer, the equivalent directory is **hod/custom** which has all of the equivalent subdirectories (at2 has been removed).

If you are installing on a Windows system, migration is automatic. The setup program copies the contents of the ResQ!Net directories to the equivalent Screen Customizer directories. However, if you have customizations saved in directories other than the default directories, you must manually copy them to the new path. On non-Windows platforms, you must manually copy all customizations. The files in the following original ResQ!Net directories must be moved to the new Screen Customizer directories.

ResQ!Net Directory	Screen Customizer Directory
at2custom/at2hlp	custom/*lang*/help
at2custom/at2img	custom/img
at2custom/at2lst	custom/lst
at2custom/at2maps	custom/map
at2custom/at2ps	custom/ps
at2custom/at2ref	custom/ref
at2custom/at2wsp	custom/wsp

In addition, the following files must be renamed from the original ResQ!Net extension to the new Screen Customizer extension.

ResQ!Net Extension	Screen Customizer Extension	File Purpose
a2h	hlp	User-created field-level help
a2m	scm	Screen customization data
a2p	psd	Base screen data
a2b	tlb	Customized toolbar
a2l	lst	Valid-value list
a2r	ref	Reference file for field help and valid-value list
a2t	tpl	Template

Customizations saved in a directory other than **at2custom**, can be migrated by first renaming the at2* subdirectories within the alternate directory to the new subdirectory names and then by renaming the original file extensions to the new extensions.

Migrating from Version 1

In Version 2, profiles are no longer supported and have been replaced with global templates. When installing on Windows, profiles are automatically migrated from the default **custom/wsp** directory to the equivalent template name (with a .tpl extension) in the **custom/map directory**. Profiles that are not located in the default directory, for example, a user-defined directory **mycustom/wsp**, are not migrated automatically during installation. A profile migration utility is provided that migrates those profiles to the new template format. The migration utility must be started manually on both Windows and non-Windows systems.

If you are migrating from ResQ!Net, you must do those steps before migrating to Screen Customizer V2.

To start the migration utility manually, enter the following command (on one line):

```
java -classpath publish_dir\lib\scmigr.jar
com.ibm.hi.customizer.util.profile.ProfileMigrator ProfileDir=profile_dir TemplDir=template_dir
```

Installing Screen Customizer on Windows

You can install Screen Customizer on Host On-Demand V6.0. Installation detects the Host On-Demand version in the registry and will fail if it is not V6.0. You can then choose to install all the components (including the Administrator), the Client only, or the Customization Studio only. If Host On-Demand is not installed, you can install only the Studio.

To install Screen Customizer:
1. Insert the CD and wait for the start window.
2. Click Install.
3. Follow the directions in the installation windows. To install only one component, choose Custom install.

You can also run **setup.exe**, located in the win32 directory, to start the installation program.

Default installation directories

When you install the Client or Administrator on a Host On-Demand server, it is installed in the Host On-Demand *publish* directory (/hostondemand/hod/ is the default).

When you install the Client or the Administrator on a Host On-Demand locally-installed client, it is installed in the **hostondemand/lib** directory.

When you install the Studio only, it is installed in the **c:/Program Files/IBM/Screen Customizer** directory.

.If you cache Host On-Demand with the default version of Screen Customizer enabled and then install the full version of Screen Customizer, the cached client might not run correctly.

Installing the Client on OS/2

You can install only the Client on OS/2. It must be installed in the Host On-Demand server *publish* directory so that it is available to client workstations.

To install the Client:

1. Insert the CD.
2. Change to the Host On-Demand *publish* directory.
3. To extract the Client files, run the following command:

   ```
   unzip -d [cd_rom]:\zip\client.zip
   ```

4. To extract the documentation file:

   ```
   unzip -d [cd_rom]:\zip\doc.zip
   ```

* *unzip* is your unpacking program. It must support long filenames.
* *-d* is the parameter that recreates the zipped directory structure.
* *[cd_rom]* is the CD-ROM drive letter.
* *ZIP* is the directory on the CD.

Installing the Client on Novell NetWare

You can install only the Client on Novell NetWare. It must be installed in the Host On-Demand server *publish* directory so that it is available to client workstations.

To install the Client:

1. Insert the CD.
2. Change to the Host On-Demand *publish* directory.
3. To extract the files, run the following command from the Host On-Demand publish directory:

   ```
   unzip -d [cd_rom]:\zip\client.zip
   ```

4. To extract the documentation file:

   ```
   unzip -d [cd_rom]:\zip\doc.zip
   ```

* *unzip* is your unpacking program. It must support long filenames.
* *-d* is the parameter that recreates the zipped directory structure.
* *[cd_rom]* is the CD-ROM drive letter.
* *ZIP* is the directory on the CD.

Installing the Client on AIX

You can install only the Client on AIX. It must be installed in the Host On-Demand server *publish* directory so that it is available to client workstations.

You can install the Client two ways:

* Graphical interface
* Silent mode using a response file

Using the graphical interface

To install the Client using the graphical interface:

1. Mount the CD-ROM drive and insert the CD.
2. Change to the root directory of the CD and enter **setupaix.sh**.
3. Click Install Product.
4. Follow the directions in the installation windows.

Installing the Client on UNIX

You can install only the Client on UNIX operating systems. The Client must be installed in the Host On-Demand server *publish* directory so that it is available to client workstations.

1. Insert the CD and mount it.
2. Change to the Host On-Demand *publish* directory.
3. Untar the client.tar file (includes the English files) and install the Client base files into the HOD directory. This step assumes that the tar files are in the **/cdrom/tar** directory.

   Run the following command from the publish directory:

   ```
   tar -xf /cdrom/tar/client.tar
   ```

   For each additional language that you want to install:

   ```
   tar -xf /cdrom/tar/sc_lang.tar
   ```

   For example, **tar -xf /cdrom/tar/sc_ko.tar**.
4. To extract the documentation file (includes all languages):

   ```
   tar -xf /cdrom/tar/doc.tar
   ```

Installing the Client on OS/400

1. Shut down Host On-Demand by issuing the following command:
   ```
   ENDHODSVM
   ```
2. Insert the Screen Customizer CD.
3. Run the following command:
   ```
   RSTLICPGM LICPGM(5648D76) DEV(OPT01)
   ```
   - RSTLICPGM starts the OS/400 installation program
   - LICPGM(5648D76) is the Screen Customizer program number to install
   - DEV(OPT01) is the source device for the CD
4. Start Host On-Demand by issuing the following command:
   ```
   STRHODSVM
   ```

Installing the Client on OS/390

For information about installing Screen Customizer on OS/390, refer to the Program Directory supplied with the OS/390 Program Product.

Installing in silent mode on Windows or AIX

A silent installation installs Screen Customizer without displaying any windows or asking for input. To perform a silent installation of Screen Customizer, you must first create a response file that contains the information required on the installation windows. Sample response files are provided and are located in the platform

specific **\instmgr** directory: server1.iss on Windows and install.script on AIX. They contain the default installation options. You can use those or create your own. Once a response file is created, start the silent installation.

> When you install in silent mode, there is no indication that installation is in progress or that it is complete.

Windows

Recording a response file

1. Go to the **\win32** directory on the CD.
2. Run the following command:

   ```
   setup.exe -r -f1d:\responsefile_path\response_filename.iss
   ```

- d:*responsefile_path* is the drive letter and the path where you want the response file to reside.
- *responsefile_name*.iss is the name of the response file.

For example:

```
setup.exe -r  -f1d:\tmp\server1.iss
```

Installing in silent mode

1. Go to the **\win32** directory on the CD.
2. Run the following command:

   ```
   setup.exe -s -f1d:\responsefile_path\responsefile_name
   ```

For example:

```
setup.exe -s -f1d:\temp\server1.iss -f2d:\temp\server1.log
```

AIX

Recording a response file

1. Go to the **/instmgr/** directory on the CD.
2. Run the following command:

   ```
   instaix.sh -r /responsefile_path/responsefile_name.script
   ```

- *responsefile_path* is the directory path where you want the response file to reside.
- *responsefile_name*.script is the name of the response file.

Examples:

```
instaix.sh -r  ./tmp/install.script
/cdrom/instmgr/installaix.sh -r /tmp/install.script
```

Installing in silent mode

1. Go to the **/instmgr/** directory on the CD.
2. Run the following command:

   ```
   instaix.sh -p /responsefile_path/filename
   ```

Examples:

```
instaix.sh -p ./tmp/install.script
 /cdrom/instmgr/installaix.sh -p /cdrom/instmgr/AIX/install.script
```

Options supported in silent mode

-r	Records a response file.
-s (Windows) -p (AIX)	Runs a response file and installs.
-f1 *path\responsefile_name*	Defines the name for the response file, in both record and run modes. The path and filename must be 43 characters or fewer. There must not be a space between parameter and value. The filename extension must be **iss** for Windows and **script** for AIX.
-f2*path\log_file_name*	Defines the log file and can be used in run mode to create a file that contains a history of an installation. The path and filename must be 43 characters or fewer. There must not be a space between parameter and value.

The target system's configuration **must** be the same as that of the source system (the system on which the response file was created). For example, if the source system has a previous installation of Screen Customizer, the target system must have the same. If the source system installed Screen Customizer on the D drive, the target system must also have a D drive.

Format of the silent mode installation log file

If an installation is not successful, the log file might indicate the reason. The format of a log file is as follows:

```
[InstallShield Silent]
Version=v6.00.000
File=Log File
[Application]
Name=\Screen Customizer
Version=2.00.000
Company=IBM
[ResponseResult]
ResultCode=0
```

Result code values

The ResultCode indicates whether or not the installation was successful. Possible values are:

0	Successful
-1	General error
-2	Mode not valid
-3	Required data not found in the response file
-4	Not enough memory available
-5	File does not exist
-6	Cannot write to the response file
-7	Cannot write to the log file
-8	Path to the response file is not valid
-9	Not a valid list type (string or number)
-10	Data type is not valid
-11	Unknown error during setup

-12	Dialogs are out of order. Since the dialog order depends on what other related products were already installed on the workstation, the target system must have the same products.
-51	Cannot create the specified folder
-52	Cannot access the specified file or folder
-53	Selected option is not valid

Common problems:
- The server1.iss or install.script file is not in the directory specified by the -f1 option.
- You changed the name or location of the response file and did not specify the new name or location when you ran the setup.exe command to install the code.
- There is not enough space on specified target drive to install the code.
- You are installing or uninstalling Screen Customizer and you are not logged on the target system with Administrator authority.
- There is an error in the syntax of the setup.exe command.

Chapter 4. Starting Screen Customizer

After installing Screen Customizer, you are ready to start customizing your host application screens. The online help provides detailed information about customizing screens. The information here is intended to help you start Screen Customizer and to provide some guidance and overview information for the steps involved in customizing screens.

Screen Customizer doesn't always load completely under Netscape 4.6x/4.7. This is a browser problem. Hold the Shift key and click the Reload button. The applet will then reload successfully.

Basic steps for customizing screens

The basic steps for customizing host screens are listed here. These steps are described in detail in a file named getstart.html located in the help directory. To access the basic customization steps, click Start > Programs > IBM Screen Customizer > Information Library > Basic Customization Steps. These steps might not apply to your environment and don't describe all of the Screen Customizer functions. These are only the basic steps and are provided to help you understand and get started with Screen Customizer.

1. Start the Customization Studio.
2. Create templates.
3. Start an Administrator session.
4. Capture the screens that you want to customize.
5. Go back to the Studio and customize individual screens (maps) created in the Administrator.
6. Test and apply the customized screens with the templates in the Administrator.
7. Distribute the customized screens.

Starting the Customization Studio

To start the Customization Studio:

- From the Start menu, click Programs > IBM Screen Customizer > Customization Studio.
- From an Administrator session, click File > Customize Screen or File > Customize Template.

The Studio is used to create templates and to customize your host screens. You can create templates to be applied globally to all host screens or to a specific host screen. A template allows you to add objects to the area surrounding the host screen. You can customize the colors, fonts and button styles for the entire screen. During runtime, the template is applied to all host screens, whether they have been customized or not. When customizing screens and templates, you should not place objects on top of other objects; they may not appear as desired at runtime. Also, when customizing a template, you should be careful not to move the area reserved for the host screen over any objects in the template, as they may not

appear as desired either. Web-links and images are exceptions because web-links are designed to be placed on top of images, if desired.

After capturing host screens in the Administrator, use the Studio to customize them. Captured screens are assigned IDs and saved as map files. Each screen, or map, can be opened in the Studio and customized. Changes made to screens in the Studio apply only to the screen ID with which they are associated.

You cannot use many of the Administrator or Studio functions 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.

Starting the Administrator

You can use the Administrator with Host On-Demand. After starting it, the available functions are the same.

You cannot load the Administrator through a Web server, it must be loaded from the local file system. If the local system is a Host On-Demand server, a user account, **customadmin**, is created in the HOD group. This can be administered through the Host On-Demand Administration applet and used like any other user account. Any type of session, including printer, VT and CICS sessions, can be added to the account. Preferences are saved in **HOD.customadmin.user** in the **\private** directory.

The Administrator runs live sessions to host applications. Screens that are to be saved for customization are identified in these sessions. A screen ID must be assigned to each screen; these IDs are added to a screen database file called screen.db. Host screens are captured (saved) as Screen Customizer maps that serve as the starting point for customization in the Studio. Both the screen database and the screen maps are saved in the **\custom\maps** directory.

You can run the Administrator on more than one system to capture screens. If users need customized screens from both systems, the contents of the screen databases from both Administrator systems can be merged using the merge database utility provided.

Starting the Administrator with Host On-Demand

Starting the Administrator from the Start menu opens the standard icon interface, which is similar to the Host On-Demand interface.

To use the Administrator, configure and start a host session:
1. Click Start > Programs > IBM Screen Customizer > Administrator.
2. Click Add Sessions.
3. Right-click a session and select Copy.
4. Configure the session properties and make sure that Screen Customizer is set to Administrator on the Screen tab.
5. Click OK.
6. Start the session by either double-clicking the icon or right-clicking it and selecting Set Up Bookmark. When you set up a bookmark, the session starts

and you are reminded to create a bookmark. The next time you want to start the session, select the bookmark. The Screen Customizer default GUI screen for the host session appears.

Previously defined sessions might not be enabled for Screen Customizer. Right-click the session and select Properties. Click the Screen tab and select Administrator for the Screen Customizer field.

To use the interface that is similar to the ResQ!Net Administrator interface, load HODCustomAdminBasic.html in a browser.

Starting Screen Customizer and a Host On-Demand session simultaneously

You can have both interfaces running synchronously so that changes made on one screen can be seen on the other. This is useful for troubleshooting purposes or to make sure you are viewing the appropriate screen. To do this, you must configure a Host On-Demand session and specify the Administrator as a startup applet:

1. Start a Host On-Demand client.
2. Right-click a session icon and select Properties.
3. Click the Advanced tab.
4. From the Auto-Start selection list, select Applet.
5. In the Auto-Start Name field, type `com.ibm.hi.customizer.CSynchHOD`.
6. Click the Screen tab and disable Screen Customizer.
7. Click OK.

Double-click the icon to start both Host On-Demand and Administrator sessions. The Administrator can also be started from Host On-Demand's Run Applet window by entering the same class name as above.

Applet file names for Host On-Demand
The following applets are provided to use with Host On-Demand:

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

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

Chapter 5. Creating and using templates

You can set overall defaults for several attributes of host screens so that you don't have to customize them for each screen. These changes can be saved in a template to apply to host screens. A template can contain objects that you might need for numerous screens in the area surrounding the host screen. For example, if you know that you want all of your host screens to have the same image, navigation buttons, a Web link button, and a customized toolbar, you can create one template with those objects and apply it to all of the screens. You can then capture the screens that you want to customize individually.

To create a template, in the Studio click File > New Template. A blank screen appears with an area reserved for the host screen. You can change the size of the host screen area and you can move it around but you cannot add objects to it. There are a few options, such as colors, fonts, and button styles that can be applied to the entire screen when specified in the template, unless they are overridden by a specific setting in the customized screen.

Templates are saved in the **map** directory with the map files (captured screens). A default global template named sc_global.tpl, is applied automatically to all host screens that do not have a specific template associated with them. When you create a template, use the default name. If you use a different name for the global template, add the template parameter to the HTML file (Host On-Demand) used to start the Client.

Chapter 6. Capturing screens

One of the primary purposes of the Administrator is to capture screens and turn them into maps. Screen Customizer creates a screen signature based on the screen structure, allowing you to set up a unique ID for each host screen. Without an ID, you cannot customize a screen.

Screen information is saved as a .scm file (*screenid*.scm) in the **/custom/map/** directory and is referred to as a map. If you save a map as a file with a name different from its screen ID, or in a different directory, the customization changes are not recognized, unless the directory's name is specified in the startup HTML file. Screens are also saved as **psd** files in the **/custom/ps** directory. The psd file contains a presentation-space footprint that is used by the Studio when the screen is customized.

Before you capture screens, you should erase any data in the input fields, otherwise this data becomes the default input for that field in the Customization Studio.

There are several ways to capture screens using the Administrator toolbar:

- To capture all of your screens while in the Administrator and customize them later, for each screen you want to capture: enter a screen ID and a description on the toolbar and click Capture.
- To capture the current screen and immediately customize it, enter a screen ID and a description and click Customize.
- To capture a screen, give it a screen ID and extended description, or assign a tag, and then optionally customize it in the Studio, click Properties.

Screen IDs and tags

A host screen is recognized by:

- **Screen Structure**
  - Size and positions of all fields on the screen
  - Total number of fields on the screen
- **Tag**
  - Differentiates between screens that have the identical structure by interrogating the contents of a screen field that is designated as the tag
  - Allows unique screen IDs to be assigned for different modes of the same screen
- **Built-in screen IDs**

  If an application provides IDs for its screens, you can use them. To do so, set the parameters IDFlag, IDFlagPos, IDPos in the Administrator and Client HTML files for Host On-Demand.

Assigning IDs

A screen ID is used to identify the host screen and must be 4 characters long. Screen IDs must be unique. Optionally, you can give the screen a description, which can be viewed in the Screen IDs window. Use a description to help you

identify what the screen contains. You can also add an extended description by clicking Properties on the Administrator toolbar.

Adding a tag

Most screens are unique and have at least one field that makes them different from any other. For those screens, you can assign a unique ID to use as a reference for the screen. If screens are identical except for field text, you can add a tag to the ID so that each version of the screen can be identified and customized separately.

To add a tag for a screen, click Properties on the Administrator toolbar and then click the Tag tab.

You can also use tags in the reverse manner, to have a single customization for several screens that have different structures, for example, sub-file areas or error messages can change the structure of a screen. If you have such a screen, find a protected field that remains the same in every version of the screen, select up to eight characters of it and define it as a tag. Setting a tag for a screen with a changeable structure, in effect, gives each structure of the screen a different ID.

When multiple screens share the same system-assigned screen ID

If a single system-assigned screen ID in the host application applies to more than one screen, you must take this into account when customizing. This may happen if the host screens run in different modes (for example, Create, Review, and Update). Shared IDs may also occur on menu screens that have the same structure. In these cases, you must assign a tag to each form of the screen.

Moving a screen ID database

Because all user-created screen IDs are saved in a screen.db file, you must copy this file along with the customization files when transferring screens to a different location (for example, to the Host On-Demand server for distribution). The screen.db file is located in the /custom/map directory. Read the Merge Screen Database online help for more information on merging multiple screen.db files.

Chapter 7. Customizing screens (maps) and applying templates

Once a screen is captured, it can be customized in the Studio. If you assign an ID to a screen from the Administrator toolbar, and then click Customize, the Studio opens with the screen you just captured. Only one screen or one template can be opened in the Studio. You cannot customize both, or more than one screen, at the same time. When using both the Studio and Administrator at the same time, you should avoid changing or removing screen IDs and/or descriptions for screens after they have been captured. Unpredictable results can occur if this is attempted

To choose a screen to customize, click File > Open Map.

Some of the customization features include:
- Add facilities that allow the user to automatically navigate through the screens
- Add, copy, resize, and move existing screen objects
- Change the tab order
- Create new labels and text fields and edit existing ones
- Hide existing screen objects
- Create buttons, check boxes, choice boxes, frames, image buttons, list boxes, radio buttons, valid values buttons, and Web link buttons
- Convert input fields to check boxes, radio buttons, choices, and lists
- Convert labels to buttons
- Add macro to automatically navigate users through the screens (Get-to-the-Point)
- Redirect action keys
- Remap the keyboard
- Add customized buttons to the toolbar
- Pass data from screen to screen, combine screens and do calculations using global variables
- Add context-sensitive help and valid values lists

Information about the features in the list above can be found in the online help.

Screen modes and customization

Host applications can have more than one mode for the same screen. For example, the same screen might appear in Create, Review, or Update modes. Even though the screen structure is the same for a screen in all modes, the status of specific fields may be different depending on the screen mode. For example, in one mode, the screen might have one or more specific fields displayed as labels, but a different mode of the same screen might have these fields displayed as input fields.

If your host application has screens running in different modes, carefully consider what changes you make before making them. To capture screens separately, use a tag. To use the same customization for all instances, be familiar with the host application because a field could have a changeable appearance. Know the status of the fields on the different host screens in all the modes these screens might

have. For example, a label can appear empty and you will want to delete it or move it. However, that label might contain information such as an error message at a different time in the application.

Importing from other maps

For screens that have common objects, you can customize the common part of the screen once and then export (copy) all or parts of the customization.

You can import any calculations from a screen to any other screen. This ensures consistency across screens, and also saves time during customization. Use the online help for steps on importing objects from maps.

Creating screen customizations for user groups

You can create unique sets of customizations for different groups of users. The default directory for customization is **custom**. It contains the following subdirectories: *lang*/help, map, img, lst, ref, and ps. To prepare different customizations, you can create a new directory at the same level as the custom directory. You have to set the parameter in the Administrator and Studio applet files before you save and customize, otherwise the screens are saved in the default directory. Save the customized screens in the new directory and then specify that directory name in the client HTML file for Host On-Demand with the subdir parameter. If no value is set, then the user receives customizations from the default directory, /custom. If a value is set, then the user receives the customizations from the directory specified as the parameter's value.

Applying templates

Templates can be applied in the Studio by clicking Screen > Template Options:
- Select **Show with global template** to see the screens with the global template.
- Select **Show with specified template** to see the screens with a specified template.
- Select **Do not show template** to see the screens without the template.
- Select **Only apply template colors and fonts** to exclude all customizations specified in a template except for colors and fonts.

Chapter 8. Testing customized screens and templates

Customized screens and templates can be viewed in the Administrator. If you have a session running, when you access the host screens that you've customized, the screens contain the changes you made, including the template (if one was created). If you have the Administrator and Studio running together and have just customized a screen, you must click Actions > Refresh to see the customizations.

To see a screen in a different template, click Test > View with different template. To use another template for your global template, change the usetemplate parameter in the Client file (that starts the customized session).

Get-to-the-Point and Web-link buttons do not work in the Administrator; you must use the Client to test them.

Chapter 9. Copying the customized files to other platforms

Customized screens can be placed on the Host On-Demand server or a network drive for distribution. The Administrator and Studio are supported only in a local environment (either a Host On-Demand server or local client install). Therefore, you cannot load the Administrator through a Web server; it must be loaded from the local file system. Customization must be done on an Administrator and Studio running on one of the supported Windows platform (Windows 95, Windows 98, Windows 2000 or Windows NT 4.0) and then moved to the non-Windows server.

Using customized files on a non-Windows Screen Customizer RunTime Client (Host On-Demand)

After installing the Screen Customizer RunTime Client on a non-Windows server (OS/400, UNIX, Sun, Netware, or OS/390), copy the customized files created by the Studio on the Windows platform to the non-Windows server:

1. On the non-Windows server, display the contents of the Host On-Demand *publish/*custom directory. Verify that the custom directory contains the following subdirectories: lst, map, ps, and ref.

2. If these subdirectories do not exist, create them. Make sure the subdirectories have the same permissions as the custom directory.

3. Transfer the contents of each subdirectory from the Studio workstation to the corresponding server directory. Files must be transferred in binary.

Make sure the user and group names of the files that were copied are correct, and that the files are readable by that user, group, or both. This ensures that customized maps transmitted by FTP or copied from another machine will be recognized by the client viewing screens.

The default *publish* directory on the server is `/hostondemand/hod` . For AS/400, the default is `qibm/proddata/hostondemand/hod` .

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.

Chapter 10. File extensions and directories

This table shows the various types of Screen Customizer files and where they are stored.

Extension	Purpose	Host On-Demand Directory
hlp	User-created field-level help	%publish%/custom/%lang%/help
scm	Customization information	%publish%/custom/map
psd	Screen capture - text, field attributes, color	%publish%/custom/ps
lst	Valid-value lists	%publish%/custom/lst
ref	References to field help & valid-value lists	%publish%/custom/ref
tpl	Templates for customization	%publish%/custom/map
img	Images (.gif, .jpg)	%publish%/custom/img
kbt	Macro	%publish%/custom/map
ccf	Screen customization preferences	

Notes:
- %publish% is the Host On-Demand subdirectory published on the Web server.
- %lang% is the locale directory, for example, en for English or jp for Japanese.

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