About Hummingbird Deployment Wizard

With Hummingbird Deployment Wizard, you can create a web-deployable installation of any HostExplorer product that includes an automatic connection to a host. This feature leverages the capabilities of the modular Hummingbird Connectivity architecture to give administrators more control over managing an end user's desktop while reducing the amount of resources required to maintain them.

This product has the following components:

Hummingbird Deployment Wizard Lets you create or edit deployment projects, which describe everything needed to deploy a HostExplorer product from a web server. When you build a deployment project and place it on a web server, the end user can access the HostExplorer product from the specified URL. You can also use Deployment Wizard to specify which custom Package Assemblies can be generated as packages and made available for deployment. In addition, you can use the wizard to specify any existing package files that should be deployed.

Index Page Wizard Lets you create or edit HTML indexes that contain links to multiple projects on a single web page.

Projects Update Wizard Lets you select deployment projects that you want to upgrade from one product version to another, so that the generated directory structure and contents contain the new or changed files.

Hummingbird Deployment Packager Lets you create and view custom Package Assembly (.dpa) files that define how package files are deployed. These assembly files can contain extra documents, data, and applications that administrators want to deploy along with the HostExplorer product. For more information, see Deployment Packager Help.

Related Topics

About Deployment Projects

HTML Indexes

Updating a Deployment Project

Updating DLL files

For deployed installations of HostExplorer products to work properly on end user machines, these machines must have the correct minimum version of certain dynamic-link library (DLL) files installed in their system folders. See the *HostExplorer Release Notes* for exact versions and more information on options regarding this process.

The Hummingbird Deployment Wizard CD supplies a utility (SysUpdate.exe) that you can use to ensure that end users have the correct versions of these files. If you distribute SysUpdate.exe to the end users through Microsoft SMS or any desktop management product, users can place this executable in any folder on their machines. When they double-click the executable, any absent DLL files are installed to their system folders. If their system folders contain older versions of these files, the executable replaces the older versions with the minimum required versions.

This executable (SysUpdate.exe) guarantees that all required system files are installed properly before users access a deployment project. Users may be required to reboot if one or more of the DLL files are already present and in use on their machines.

Key Features

Hummingbird Deployment Wizard lets you generate a web page that you can make available to end users. When you create a deployment project, the generated web page contains a session link. When an end user clicks the link, an installation of the HostExplorer product downloads to their machine in the form of package files and initiates a session on that machine with the settings that are specified in the session profile. You can also create an HTML index, which contains links to multiple sessions on one web page.

The following topics describe key features of Deployment Wizard:

- Maintaining Control Over Display Session Options
- Deploying Customized Packages
- Updating a Deployment Project
- Combining Projects on a Single Web Page

Related Topics

About Hummingbird Deployment Wizard
About Deployment Projects

Maintaining Control Over Display Session Options

When you use Deployment Wizard to create a deployment project, you can disable certain session options to have direct control over what features end users can access in a HostExplorer product session. All options that you do not disable remain available to end users.

The portion of Deployment Wizard that lets you disable options is designed to mirror the Session Profile dialog box of HostExplorer. For more information about this dialog box and its settings, see HostExplorer Help.

You can also tailor an existing session profile directly in Deployment Wizard.

Related Topics

Deploying Customized Packages

Updating a Deployment Project

Combining Projects on a Single Web Page

Deploying Customized Packages

Using the Hummingbird Deployment Packager tool, available with Hummingbird Deployment Wizard, you can create and edit your own customized Package Assemblies. These assemblies describe how items, such as components, applications, and documents, are built into packages (by the Deployment Runtime component) and installed on an end user machine. You can then use Deployment Wizard to specify which Package Assemblies and/or existing package files are available for deployment, and at what point during the deployment process they should be installed on the end user machine with the rest of the HostExplorer product packages.

For example, you can package an uninstaller program that, once deployed, automatically uninstalls an older version of the HostExplorer product on all end users machines before the new version is installed.

Related Topics

Maintaining Control Over Display Session Options

Updating a Deployment Project

Combining Projects on a Single Web Page

Updating a Deployment Project

When creating a deployment project for the first time, Deployment Wizard saves the project in Hummingbird Neighborhood. The next time you use the wizard, you can re-open the project and make changes. This feature enables centralized distribution of new versions on demand.

For example, if you want to make different session options available to end users, you can make the appropriate changes to the project and resave it. If you want to preserve the original project, you can save the new one with a different name.

After deploying the project, users automatically have access to the updated deployment project settings and features the next time they launch the associated session.

If you install an update patch of a HostExplorer product on your machine and redeploy a deployment project, the updated HostExplorer product components are included in the deployment project.

Related Topics

Maintaining Control Over Display Session Options

Deploying Customized Packages

Combining Projects on a Single Web Page

Combining Projects on a Single Web Page

After creating multiple deployment projects, you can make all of them accessible on a single, wizard-generated, web index page. You can then distribute a single URL that contains multiple session links.

When you use this feature, your settings are saved in Hummingbird Neighborhood so that you can edit them at a later time.

Related Topics

Maintaining Control Over Display Session Options
Deploying Customized Packages
Updating a Deployment Project
Distributing the Project or Index URL

Getting Started

You can launch Hummingbird Deployment Wizard from Hummingbird Neighborhood by double-clicking New Deployment Project. When you have created several projects, you can use the Index Page Wizard to create an HTML index that contains links to multiple projects on a single web page. You can also use the Projects Update Wizard to select deployment projects that you want to upgrade from one version to another.

Related Topics

The Deployment Wizard Process

How Deployment Projects are Saved

About Deployment Projects

About Deployment Projects

If you choose (on the Deployment Project Information page) to create and save a deployment project, Deployment Wizard takes the information you provide and produces a completed deployment project.

A deployment project consists of the following elements:

- Settings and file options specified by you while using Deployment Wizard. The wizard saves this information in package (.dpf) files.
 - For example, if you specify a 3270 host in Deployment Wizard, this information is saved in the .dpf file. This file ensures that only 3270 modules are installed on end user machines when they click the wizard-generated web page.
- A Package Assembly (.dpa) file, which describes all HostExplorer components, regardless of the settings in the deployment project.
- HostExplorer product components, as well as any components, applications, and documents that you have specified to be packaged, so that they can be installed on an end user machine. Deployment Wizard builds .dpf files to contain this code, drawing the code from the HostExplorer product installation on the administrator's machine.
- A generated web page (an .htm file) that combines all of these components. When an end user clicks the link on this web page, the necessary .dpf files are installed in order to start a HostExplorer product session.

To create a deployment project, use Deployment Wizard to create a web page (with associated component packages), and then place the web page on a server and distribute the URL to specific users.

The specified users access the web page and click the link to access a deployed HostExplorer product session. If any component installations or updates are necessary, they happen at this time. The HostExplorer product does the following:

- Automatically launches a session as an ActiveX control or Active document, using the end user's browser window as a container.
- Automatically connects to the host that you specified in Deployment Wizard.
- Enables only the HostExplorer product menu commands and session options that you specified in the wizard.

The first time an end user clicks a particular session link, the Deployment Runtime component installs the necessary components on the their machine. If the end user has previously clicked a session link, the Deployment Runtime component determines if any component updates are necessary and makes those changes before launching the session.

Related Topics

Getting Started

How Deployment Projects are Saved

HTML Indexes

How Deployment Projects are Saved

Deployment projects consist of many different components. Use the following information as a guideline for how they are saved:

- Package files, a Package Assembly file, and the generated web page are saved in the output folder specified in Deployment Wizard. You can make the output folder a local folder, a shared folder, or a Samba or NFS file system. If you do not specify the output folder to be your web server's HTML directory path, you need to copy or FTP the output files to that location before downloads can take place.
- A separate .wdp file is saved in the Hummingbird Neighborhood location specified in Deployment Wizard. This file contains a copy of all the settings you specify, along with a pointer to the output folder. The .wdp file is saved in Hummingbird Neighborhood so that you can easily access it to make changes.

Every time you make changes to a project, Deployment Wizard updates both the .wdp file and all of the output files.

Related Topics

The Deployment Wizard Process

The Deployment Process

Distributing the Project or Index URL

HTML Indexes

If you choose to create an index page, Deployment Wizard lets you specify multiple existing deployment projects. It then generates a single web page (an .htm file) that contains multiple links, one for each project. You can distribute this single URL to end users.

In addition to the .htm file, Deployment Wizard saves each HTML index as an .hip file in Hummingbird Neighborhood, so you can reopen and edit the index within the Wizard.

Related Topics

Using the Index Page Wizard

Distributing the Project or Index URL

The Deployment Wizard Process

Creating a deployment project involves using two parts of Hummingbird Deployment Wizard:

- **Deployment Wizard**—Lets you create or edit deployment projects, which let users access Hummingbird products from a specified URL on a web server. You can also use the Deployment Wizard to specify which Package Assemblies are to be deployed.
- **Deployment Packager**—Lets you create and view custom Package Assembly files (.dpa files), which define how package files are deployed. These assembly files contain extra documents, data, and applications that an administrator may want to deploy along with the HostExplorer product.

The Deployment Wizard process consists of the following steps:

Step 1: Selecting a Project for Deployment

Step 2: Specifying Deployment Project Information

Step 3: Providing Connection Information

Step 4: Specifying Auxiliary Files and Deployment Settings

Step 5: Customizing Your Packages

Step 6: Assigning Custom Actions

Step 7: Enabling Features

Step 8: Providing Web Server Information

Step 9: Specifying Installation Settings

Step 10: Providing Metering Information

Step 11: Previewing Your Choices

Related Topics

The Deployment Wizard Process

Using the Projects Update Wizard

The Deployment Process

Step 6: Assigning Custom Actions

Step 1: Selecting a Project for Deployment

The Deployment Project Selection screen lets you select from a list of projects available for deployment.

The following are project types that can be deployed by Deployment Wizard:

- HostExplorer—Lets you deploy a HostExplorer project.
- Connectivity Secure Shell—Lets you deploy a Connectivity Secure Shell project, which is used for a Secure Shell (SSH) connection. The Secure Shell option is available only if you purchased and installed Connectivity Secure Shell.
- 5250 Data Transfer—Lets you deploy a 5250 Data Transfer project, which is used to transfer files between a PC and a 5250 host.
- Hummingbird FTP—Lets you deploy a Hummingbird FTP project, which is used to transfer files between a PC and an FTP server.

Note: Connectivity Secure Shell projects contain only the Connectivity Secure Shell Management Console and tunnel(s). To create Secure Shell-enabled HostExplorer or Hummingbird FTP deployment projects, select HostExplorer or Hummingbird FTP in the Deploy Project Type box.

Related Topics

About Deployment Projects

Combining Projects on a Single Web Page

Step 3: Providing Connection Information

Step 2: Specifying Deployment Project Information

The Deployment Project Information screen lets you work with an existing deployment project or create a new project.

To create a new project:

- 1. If necessary, clear the Use an Existing Deployment Project box.
- 2. In the When Finished, Save Project list, select a save method.
- 3. In the Project Name box, type a new name for the project, or accept the suggested name.

Note: Do not use "%" in the project name.

Click Next to specify connection information.

To make changes to an existing project:

1. Select Use An Existing Deployment Project and click the project in the tree below. The project tree displays only those projects of the type selected on the Deployment Project Selection screen.

Note: Deployment projects are stored as .wdp files in Hummingbird Neighborhood.

- 2. In the When Finished, Save Project list, select a save method.
- 3. If you do not want to overwrite the original project, type a new name in the Project Name box.

Click Next to specify connection information.

Related Topics

How Deployment Projects are Saved

The Deployment Wizard Process

Step 3: Providing Connection Information

Step 3: Providing Connection Information

The Profile And Language Selection screen lets you do the following:

1. Select a session profile to provide connection information, or create one in Hummingbird Neighborhood. Click the Refresh button to update the directory tree after creating a new profile.

Note: If you select a Hummingbird FTP project to deploy, both Hummingbird FTP profiles and 5250 Data Transfer profiles display in the session profile area.

2. Choose one or more deployment languages and one default language to include with the deployment package.

Selecting a Session Profile

A HostExplorer product session profile is a file that contains connection information such as host domain name/IP address, host terminal type, and security settings.

The following are session profile types that can be deployed by Deployment Wizard:

- Display session profiles—Used to display information from a host. Display session profiles are created in HostExplorer.
- Printer session profiles—Used to print information from host computers (3270 and 5250 only). Printer session profiles are created in HostExplorer.
- FTP session profiles—Used to transfer files between a PC and an FTP server. FTP session profiles are created in Hummingbird FTP.
- 5250 Data Transfer session profiles—Used to transfer files between a PC and a 5250 host. 5250 Data Transfer session profiles are created in 5250 Data Transfer Wizard.
- Connectivity Secure Shell session profiles—Used for a Secure Shell (SSH) connection. Connectivity Secure Shell session profiles are created in Connectivity Secure Shell Management Console.

Note: You can also create new profiles in Hummingbird Neighborhood.

To use a session profile to build the project:

Select a session profile from the Select a Session Profile area. The host name for the selected profile appears in the profile details area. The profile types that display in the tree depend on the type of project you select to deploy. For example, a Connectivity Secure Shell project displays only CSS profiles.

Note: If you select a Hummingbird FTP project to deploy, the tree displays both FTP profiles and 5250 Data Transfer profiles.

To make changes to session profile settings:

1. In the Select a Session Profile area, right-click on a profile name and click Properties. The Session Profile dialog box opens.

2.	Make the desired changes, and then click OK to close the dialog box.

Choosing Language Options

The Language Options area shows a list of available user interface languages that you can include in the deployment package. This area lets you create or change the language selection for a profile and set the default language.

To choose deployment languages:

- 1. In the Language Options area, select one or more languages to be made available to the user.
- 2. In the Default Language box, select one language to be the default.
- 3. If desired, select Create Language Chooser Shortcut and specify a location for the shortcut.

Click Next to specify auxiliary files and deployment options.

Related Topics

The Deployment Wizard Process

Step 2: Specifying Deployment Project Information

Step 4: Specifying Auxiliary Files and Deployment Settings

Step 4: Specifying Auxiliary Files and Deployment Settings

The Auxiliary Files And Deployment Settings screen lets you embed auxiliary files in the deployment project and choose different deployment options.

Auxiliary files are individual files that are used by HostExplorer products to save a variety of settings not contained in a session profile, such as color schemes, macros, file transfers, toolbars, and translation tables. Each time you modify any of these settings, the system automatically creates an auxiliary file. Deployment Wizard displays all previously created auxiliary files. By including these files in your project, you can extend the functionality of the HostExplorer product installation for end users.

To choose auxiliary files:

- 1. In the Select Auxiliary Files area, expand the desired category.
- 2. Click the desired file(s). You can choose multiple files from multiple categories. You can choose all of the files in a category by selecting the initial check box for that category.

Note: A project can display multiple toolbars. In the Select Auxiliary Files area, select only the toolbars that you want to display.

To specify how HostExplorer is deployed:

In the Deploy HostExplorer Session As list, choose one of the following options:

- Active Document—Allows the application hosted in an Active Document to share the user interface with the Active Document hosting the application (for example, Internet Explorer). This option provides end users with the HostExplorer toolbar and menu (available for display sessions only).
- ActiveX Control—Displays a host session to an end user and allows interaction with the host. This option provides end users with the HostExplorer toolbar but not the menu bar.

HostExplorer Window—Displays the session to the end user in the HostExplorer window instead of in a browser. If this option is selected, all components are installed on first access. The end user cannot install components on demand.

To specify how HostExplorer appears for end users:

If you chose ActiveX Control in the Display Session Using list, specify the following options:

- 100% Browser's Content—Uses the end user's entire browser window to display HostExplorer.
- Session Position/Size—Sizes HostExplorer in the end user's browser window to the dimensions you specify (in pixels). The Top and Left settings determine the position of the top left corner of the HostExplorer user interface. The Width and Height settings determine the size of the user interface. After HostExplorer is deployed, the user can modify the size and position of the browser window. When the user closes the window and opens it again, the browser appears in the same size and position.

Note: Netscape browsers do not support the Session Position/Size option. The HostExplorer terminal occupies the full screen in Netscape.

To hide the web browser toolbar when HostExplorer is deployed:

- 1. In the Deploy HostExplorer Session As list, select Active Document.
- 2. Select Hide Browser Toolbar box.

Click Next to customize your own software packages.

Related Topics

The Deployment Wizard Process

Step 3: Providing Connection Information

Step 5: Customizing Your Packages

Step 5: Customizing Your Packages

The Hummingbird Deployment Packager tool lets you create and edit Package Assemblies (.dpa files), which can be later built as package (.dpf) files. The Package Assemblies describe the contents of package files, as well as where the packages are to be installed on the users' machines.

Note: For more information about using Deployment Packager, see Deployment Packager Help.

On the Custom Packaging screen, you can specify custom assembly files that you have created using the Deployment Packager tool, as well as package files that were previously generated or given to you. The Deployment Runtime component can generate these assemblies into packages and deploy them (as well as existing packages) to remote desktops. When the project is deployed, the custom packages are installed, along with the rest of the packages, on the end user's machine.

To specify the custom packages that are available for deployment:

- 1. Click the Add a Package button.
- 2. Select the .dpa, .dpf, or stand-alone file that you want to make available for deployment and click Open.

Note: To create . dpa files, use the Deployment Packager tool, which is accessible by clicking the Run Deployment Packager button.

3. Repeat steps 1 and 2 for each custom package that you want to make available.

Click Next to define and assign custom actions to be run at deployment time.

Related Topics

The Deployment Wizard Process

Step 4: Specifying Auxiliary Files and Deployment Settings

Step 6: Assigning Custom Actions

Step 6: Assigning Custom Actions

On the Deployment Custom Action Information screen, you can select and create custom actions, and assign these actions to certain conditions. For example, you can use this screen to make sure that a specific package is deployed after the user downloads the webdeployable installation of the HostExplorer product, or you can run a specific program before an upgrade.

To define a new custom action:

- 1. Click the New Custom Action button. The Custom Action Properties dialog box opens.
- 2. Specify custom actions and trigger properties in the dialog box. The options that display depend on your selection in the Custom Action Type box and on which trigger type you choose.

Note: For more information, see <u>Custom Action Properties Dialog Box</u>.

Click OK to return to the Deployment Custom Action Information screen.

To edit the properties of a custom action:

- 1. Click the Edit Selected Custom Actions button. The Custom Action Properties dialog box opens.
- 2. Modify the properties in the dialog box as necessary.
- 3. Click OK to return to the Deployment Custom Action Information screen.

To make certain custom actions unavailable for deployment:

- 1. In the Custom Actions Assignments area, select the custom action that you want to remove.
- Click the Delete Selected Custom Action button. The selected action is removed from the list.

Click Next to enable or disable features.

Related Topics

<u>Custom Action Properties Dialog Box</u> <u>Naming Conventions for Windows Registry Keys</u>

Step 7: Enabling Features

The Enable Features screen lets you specify the session options and features that are available for end users. By default, all session options and features are selected. You must clear a check box in order to disable a menu or option.

Tip: This screen applies only to display sessions (not printer sessions).

The left pane of this screen lists the HostExplorer product menus and lets you disable commands within these menus. If you disable an entire menu category, each command within that category contains a sub-check box called Display In Menu. If you leave Display In Menu selected, the command appears in the end user version of HostExplorer, but it appears dimmed. If you clear Display In Menu, the command disappears in the end user version of HostExplorer.

The right pane of this screen lists all session options. The tree in this pane mirrors the structure of the Session Profile dialog box in HostExplorer. For full descriptions of these items, see the HostExplorer Help.

Click Next to specify web server information.

Related Topics

The Deployment Wizard Process

Step 6: Assigning Custom Actions

Step 8: Providing Web Server Information

Step 8: Providing Web Server Information

The Web Server Information screen lets you identify the following:

- information about your organization and web images
- information for the HTML page that the wizard generates at the end of the process
- output directory information that determines where Deployment Wizard places the generated files

The information that you enter on this screen results in the following URL for the output . htm file:

http://ServerAddress/HTMLVirtualDirectoryPath/HTML

where:

- ServerAddress is the address for the server on which you have placed the index file. This server address does not need to be the same as for your deployment projects.
- HTMLVirtualDirectoryPath is the name of the directory path that points to the web server directory in which you have placed the index file. This directory path must be the same as that of the deployment project.
- HTMLFileName is the file name of the generated . htm file. You supply this name in the HTML File Name box on the Web Server Information screen.

This URL is a reference to the project HTML page, and all other required components (for example, .dpf files, images, and JavaScript files).

Note: Images do not have to be in the same directory as the project files. If images are not in the same directory, make sure that you specify the path in the Image Virtual Directory box.

To specify your web images directory and organization name:

 In the Image Virtual Directory box, type the name of the virtual directory that points to your web images. If you mapped your output directory on the web server to a Windows drive letter, you can use the mapped drive letter when specifying a path in the Image Virtual Directory and HTML Directory Path boxes of Deployment Wizard.

If you leave the Image Virtual Directory box blank, the images are automatically placed in the specified output directory. Consequently, all of the generated files and images are in the same area. If you did not map your output directory on the web server to a drive letter, you must copy or FTP the files to the web server.

2. In the Organization box, type the name of your organization. The Deployment Wizard uses this string to identify your deployment project uniquely in the event that your end users have access to projects deployed by other organizations.

To specify web page settings:

- 1. In the HTML Page Title box, type a string. This string appears in the title bar of the browser when end users access the web page. It is also used as an identifying string on any HTML index page to which you add this project.
- 2. In the Background Image File Name box, specify an image (if desired) for Deployment Wizard to use as a watermark for the web page. Click the Browse Image Files button to search for an image. Any web-compatible graphic format is acceptable. If you leave the Image Virtual Directory box blank, the wizard automatically copies this background image file to the directory specified in the HTML Directory Path box.

Note: For the background image to appear, you must have selected Active X Control and Specific Terminal/Position Size in the Deployment Settings area. For more information, see Step 4: Specifying Auxiliary Files and Deployment Settings.

To specify project output settings:

- 1. In the HTML File Name box, specify the name of the .htm file that Deployment Wizard generates to contain the session link.
- 2. In the Project Destination Path box, specify the directory in which you want all of the wizard-generated content (all of the .dpf files and the

.htm file) to be placed. This directory can be a local folder, a shared folder, a network location, or a Samba or NFS file system. Click the Select An HTML Directory button to search for a directory.

If you make the output directory a location different than your web server, you need to FTP the generated files (and any image files you have used for the background) to the appropriate web server directory before you can make the URL available to end users.

Click Next to specify installation and signature settings.

Related Topics

The Deployment Wizard Process

Step 7: Enabling Features

Step 9: Specifying Installation Settings

Step 9: Specifying Installation Settings

The Installation Settings screen lets you specify how the web-deployed version of the HostExplorer product installs on an end user's machine.

To change the installation settings:

- 1. In the Program Files Installation Type list, select one of the following options:
 - All Users—Applies the installation settings to everyone using the computer.
 - Per-User—Applies the installation settings to one user only.

Note: To create a deployment project that installs on a client machine with a user account that has limited software installing rights, set the Installation Path Type to Use Specified Installation Path and change the value to:

\$USERWINAPPDATA\$\Hummingbird\Connectivity\Web Deployment

- 2. In the Component Installation list, select one of the following options:
 - Install All Components on First Access—Downloads all required code modules to the end user's machine as soon as they click the session link.
 - Install Components on Demand—Downloads only essential code modules when an end user initially clicks the session link. Additional code modules download automatically when the end user accesses particular features.

Note: This feature is not available if you select HostExplorer Window in <u>Step 4:</u> <u>Specifying Auxiliary Files and Deployment Settings.</u>

- 3. In the Installation Path Type list, select one of the following options:
 - Use Default Installation Path—The web-deployed HostExplorer product is installed on the end user's machine in the Hummingbird\Connectivity\Web Deployment directory where the program files are installed.
 - Prompt User for Installation Path—The end user is prompted to browse to an installation directory on their machines.
 - Use Specified Installation Path—Enables the Path box in which you

can specify a directory where the web-deployed HostExplorer product is to be installed on the end user's machine.

Note: After the end user downloads a web-deployed version of the HostExplorer product, you cannot change the installation path. Therefore, if two deployment projects are deployed—each containing a different installation path—the first project downloaded to the end user takes effect.

- 4. In the Settings Path Type list, select one of the following options:
 - Use Default Settings Path—The files which contain the specified HostExplorer product settings are installed on the end user's machine in the Hummingbird\Connectivity\Web Deployment\Organization directory where the user files are installed.
 - Use Specified Settings Path—Enables the Path box in which you can specify a directory where the HostExplorer product user files will be installed on the end user's machine. See Replacers for a list of replacers that you can use to specify the installation path.

Note: There can be only one user settings path for each organization. If you want different deployment projects to use separate user settings paths, assign each project a unique organization name.

5. If desired, select Create Shortcut, and then specify or browse to a location for the shortcut.

Click Next to specify metering settings.

Related Topics

The Deployment Wizard Process
Step 10: Providing Metering Information
Updating a Deployment Project

Step 10: Providing Metering Information

The Metering Settings screen lets you specify whether the web-deployed version of the HostExplorer product on an end user's machine will use metering. Host Access Services includes Metering Serveras part of its setup process.

Tip: For more information about Metering, see the *HostExplorer User's Guide*.

To specify Metering Server options:

- 1. Select the Add Metering Client box to have Metering Client installed on the end user's machine. The metering client informs the metering server if a product is installed on the user's workstation.
- In the Retry Count and Retry Interval boxes, enter the number of times you want the end user's machine to attempt to connect to Metering Server and the number of seconds between connection attempts.
- 3. In the Metering Server URL box, type the URL of the Metering Server. The following is an example of the URL syntax:

http://machine:port/metering/HumMetering.hmcm

where *machine* is the name of the machine on which metering server is installed, and *port* is the number of the port.

Click Next to view a summary of all the choices you made up to this point.

Note: A Metering deployment package assembly (.dpa) file is available in the HostExplorer/Assemblies folder. See <u>Step 5: Customizing Your Packages</u> for more information about selecting custom packages to make available for deployment.

Related Topics

Step 9: Specifying Installation Settings
Step 11: Previewing Your Choices

Step 11: Previewing Your Choices

The Summary screen displays all your selections made to this point. It lists the names of each Deployment Wizard screen with the settings you configured.

The information on this screen is not directly editable. If you want to make any changes to the settings, click Back until you arrive at the appropriate screen and make your changes, and then click Next until you arrive at the Summary screen once again (which reflects your changes).

You can save the information as a .txt file by clicking the Save Summary button at the top right of the screen.

Click Build to create the deployment project. Deployment Wizard saves all your choices in a .dpf file, which is downloaded to the end user's machine and generates a web page in the form of an .htm file.

Related Topics

The Deployment Wizard Process

Updating a Deployment Project

Distributing the Project or Index URL

Summary Screen

Using the Projects Update Wizard

You can use Projects Update Wizard to upgrade from one version of selected deployment projects to another without having to manually apply changes to all of the individual profiles in the project. To update a deployment project, launch the wizard by doing the following:

To launch the Projects Update Wizard:

To open the Projects Update Wizard, double-click New Deployment Project in Hummingbird Neighborhood. Select Projects Update Wizard in the Wizard Type box on the Deployment Wizard Welcome screen.

The Projects Update Wizard process consists of the following steps:

- Step 1: Selecting Deployment Projects to Update
- Step 2: Previewing Your Choices

Step 1: Selecting Deployment Projects to Update

The Select Deployment Project to Update screen lets you choose the deployment project(s) that you want to upgrade

On this screen, the Projects Update Wizard lists all deployment projects previously created and saved in Hummingbird Neighborhood. Select the check box beside each project that you want to update.

Click Next to view a summary of all the choices you made up to this point.

Related Topics

The Deployment Wizard Process

Step 2: Previewing Your Choices

Step 2: Previewing Your Choices

The Summary screen displays all your choices made to this point. It lists the names of each Projects Update Wizard screen along with the settings you configured on them.

The information on this screen is not directly editable. If you want to make any changes to the settings, click Back until you arrive at the appropriate screen and make the changes, and then click Next until you arrive at the Summary screen again (which then reflects the changes).

You can save the information as a .txt file by clicking the Save Summary button at the top right of the screen.

Click Build to update the specified deployment project(s). The wizard saves all your choices in a .wdp file on your machine, including data files in a .dpf file which is downloaded to the end user's machine. It also generates a web page in the form of an .htm file.

Related Topics

The Deployment Wizard Process

Step 1: Selecting Deployment Projects to Update

Summary Screen

Using the Index Page Wizard

To create an Index Project, launch the Index Page Wizard by doing one the following:

- Double-click New Deployment Project in Hummingbird Neighborhood. Select Index Page Wizard in the Wizard Type box on the Welcome screen.
- On the Windows Start menu, navigate to the Hummingbird Connectivity program group, point to Administrative Tools, and click Index Page Wizard.

The Index Page Wizard process consists of the following four steps:

- Step 1: Specifying Index Information
- Step 2: Selecting a Deployment Project
- Step 3: Specifying HTML Page Information
- Step 4: Previewing Your Choices

Step 1: Specifying Index Information

The HTML Index Project Information screen lets you provide overall HTML index information. You can choose to update an existing index or create a new index.

To create a new index:

- 1. Clear the Use An Existing Index Project box.
- 2. In the When Finished, Save Project list, specify a save method.
- 3. In the Project Name box, type a name.

Click Next to proceed to the next step.

To update an existing index:

- 1. Select Use An Existing Index Project and select the index project in the area below. Existing indexes are stored as . htm files in the output directory you specified when you first created the index, and as . hip profile files in Hummingbird Neighborhood.
- 2. If you do not want to overwrite the original index, type a new name in the Project Name box.
- 3. In the When Finished, Save Project list, specify a save method.

Click Next to specify the deployment project(s) you want included in the HTML index.

Related Topics

<u>Using the Index Page Wizard</u>
<u>Step 2: Selecting a Deployment Project</u>

Step 2: Selecting a Deployment Project

The Select Deployment Project screen lets you choose the deployment project(s) that you want included in the HTML index.

On this screen, the wizard lists all deployment projects previously created and saved in Hummingbird Neighborhood. Select the check box beside each project you want included in the index.

Click Next to specify information for the HTML page of the index.

Note: If you change options in a selected deployment project, you must regenerate the index page for the links to work.

Related Topics

Using the Index Page Wizard

Step 1: Specifying Index Information

Step 3: Specifying HTML Page Information

Step 3: Specifying HTML Page Information

The HTML Page Information screen lets you identify a background image and other information for the HTML index page that the wizard generates at the end of the process.

When you are finished creating an index, the wizard places it (an .htm file) in the output directory you specify. You can then move the .htm file to any web server directory.

To specify a background image (optional):

- 1. In the Image Virtual Directory box, specify the virtual directory that points to your web images. If you do not specify an image virtual directory, the wizard defaults to the HTML directory path.
- 2. In the Background Image File Name box, specify a graphic for the wizard to use as a watermark for the page. Any web-compatible graphic format is acceptable. If you leave the Image Virtual Directory box blank, the wizard automatically copies this background image file to the directory specified in the HTML Directory Path box.

To make output choices:

- 1. From the Display Sessions In list, choose whether you want the end user's version of HostExplorer to display in the same browser window as the index page or in a new browser window.
- 2. In the HTML Page Title box, specify a title to appear in the title bar of the browser window containing the HTML page.
- 3. In the HTML File Name box, specify a name for the wizard-generated . htm file.

Note: Most web servers support the default name of Index.htm, so if you specify the name Index in the HTML File Name box, you do not need to add Index.htm to the URL address in the web browser.

4. In the HTML Directory Path box, specify the directory in which you want to place the .htm file. This directory can be a local folder, a shared folder, a network location, or a Samba or NFS file system. You can click the Select An HTML Directory button to search for a

directory.

Note: Make sure that the output directory for the index page is the same as the output directory specified for the associated deployment project(s).

If you make the output directory a location different than your web server, you need to copy or FTP the generated files and subfolders to the web server before you can make the URL available to end users.

Click Next to view a summary of all the choices you made up to this point.

Related Topics

Using the Index Page Wizard

Step 4: Previewing Your Choices

The Deployment Process

Distributing the Project or Index URL

Step 4: Previewing Your Choices

The Summary screen displays all your choices made to this point. It lists the names of each Index Page Wizard screen along with the settings you configured on them.

The information on this screen is not directly editable. If you want to make any changes to the settings, click Back until you arrive at the appropriate screen and make the changes, and then click Next until you arrive at the Summary screen again (which reflects the changes).

You can save the information as a .txt file by clicking the Save Summary button at the top right of the screen.

Click Build to create the HTML index. Based on your specifications, the wizard generates a web page (an .htm file) and places a link on this page to each deployment project you specified during the process. You can find the generated .htm file in the output folder that you specified in step 3.

Related Topics

Using the Index Page Wizard

Step 3: Specifying HTML Page Information

Summary Screen

The Deployment Process

The deployment process consists of the following two steps:

- Issuing the URL for the project or HTML index.
- Keeping track of the output files created by the wizard. You need to move the output files to a web server directory if you did not specify one when using the wizard.

Related Topics

Distributing the Project or Index URL

Handling Output Files for Deployment Projects

Handling Output Files for HTML Indexes

Distributing the Project or Index URL

When you are finished with the wizard, you can deploy the project by distributing the URL for the project or HTML index to end users.

Note: End users can access a deployed HostExplorer session if they already have version 6.2 or 8.0 of HostExplorer installed on their machines. Make sure that you tell users they cannot access a deployed HostExplorer session if version 7.x of HostExplorer is already installed.

Related Topics

The Deployment Process

Handling Output Files for Deployment Projects

Handling Output Files for HTML Indexes

Handling Output Files for Deployment Projects

For deployment projects, the wizard places all generated files in the output folder that you specify in the HTML Directory Path box on the Web Server Information screen. You have two options with this specification:

- You can make the output folder a non-web server directory, such as a folder on your local machine. If you choose this option, you need to copy or FTP all of the generated files from this output folder to the web server directory.
- You can map the output directory on your web server to a Windows drive letter, and specify the relative path (with the drive letter) in the HTML Directory Path box. If you choose this option, you do not need to copy or FTP any generated files, since the wizard automatically places them in this location.

Related Topics

The Deployment Process

Handling Output Files for HTML Indexes

For HTML indexes, the wizard places the . htm file for the index in the output directory that you specify in the HTML Directory Path box on the HTML Page Information screen. As with deployment projects, you have two options with this specification:

- You can make the output folder a non-web server directory. If you choose this option, you need to copy or FTP the index . htm file to a web server directory.
- You can map the output directory on your web server to a Windows drive letter, and specify the relative path (with the drive letter) in the HTML Directory path box. If you choose this option, you do not need to copy or FTP any files, since the wizard automatically places them in this location.

For all of the links in the HTML index page to work, all of the specified deployment projects must be in the same output directory as the index page.

Related Topics

The Deployment Process

Issuing the URL for Deployment Projects

Issuing the URL for an HTML Index

Issuing the URL for Deployment Projects

You can place the project files in any web server directory. Internally, HTML files and deployment components use relative URLs to locate other objects, enabling you to move the deployed files to another web server without having to edit anything.

Note: Images do not have to be in the same directory as the project files. If images are not in the same directory, make sure you specify the path in the Image Virtual Directory box.

Copy the output files (preserving the directory structure) to the HTML Virtual Directory Path. The project URL that you distribute to end users is as follows:

http://ServerAddress/HTMLVirtualDirectoryPath/HTML

where:

- ServerAddress is the server address (domain name or IP address) of your web server.
- HTMLVirtualDirectoryPath is the name of the directory path that you created for the HTML files.
- HTMLFileName is the file name of the generated . htm file that contains the download link to the project. Enter this name in the HTML File Name box on the Web Server Information screen.

For example, if you place the project files in a PROJ\Finance directory, then enter the following URL:

http://ServerAddress/PROJ/Finance/HTMLFileName.htm

Related Topics

The Deployment Process

Handling Output Files for HTML Indexes

Issuing the URL for an HTML Index

Issuing the URL for an HTML Index

The HTML index page must be in the same output directory as the specified deployment projects. For example, if you create deployment projects for 3270 and VT, and you select both of those deployment projects in the Index Page Wizard, the two deployment projects must be in the same output directory as the index page.

Note: If the index page and specified deployment projects are not in the same directory, links in the generated index page may be broken. A warning message appears asking whether you want to continue.

The wizard constructs the following URL:

http://ServerAddress/HTMLVirtualDirectoryPath/IndexFilewhere:

- ServerAddress is the address for the server on which you've placed the index file. This server address does not need to be the same as for your deployment projects.
- HTMLVirtualDirectoryPath is the name of the directory path that points to the web server directory in which you have placed the index file. This directory path must be the same as that of the deployment project.
- IndexFileName is the file name of the generated index . htm file.

 You supply this name in the HTML File Name box on the HTML Page Information screen.

Related Topics

The Deployment Process

Issuing the URL for Deployment Projects

FTP Process

FTP Process

For deployment projects, if you need to FTP the wizard-generated files from your output folder to a web server directory, make sure you include all of the following files:

- All of the package (.dpf) files, the Package Assembly (.dpa) files, and any .cab or .jar files for the project (located in a subfolder called hepackages).
- The . htm file for the project.
- Any images you specified for the project. If your web server has a separate folder for images, FTP these images to the correct folder.

For HTML indexes, FTP the following files:

- The . htm file for the index.
- The background image for the index (if any). If your web server has a separate folder for images, FTP these images to the correct folder.

Hummingbird provides an FTP program that you can operate from within Hummingbird Neighborhood. .

Note: When copying files from the output folder to a web server directory, you must preserve the original directory structure.

Related Topics

The Deployment Process

Issuing the URL for an HTML Index

Step 8: Providing Web Server Information

Replacers

The following list consists of special strings that, when processed by the Deployment Runtime component, are replaced by their appropriate values on the end users' machines.

In addition to providing Deployment Runtime replacers, Hummingbird supports the replacement of standard Windows environment variables with the appropriate values.

Replacer	Represents	Example
\$PROGRAMFILES\$	The Program Files directory.	c:\Program Files
\$USERNAME\$	The name of the user logged into the PC.	john.public
\$APPDIR\$	The HostExplorer installation directory.	c:\Program Files\Hummingbird\Connectivity\ <i>vei</i>
\$SYSDIR\$	The Windows system directory.	c:\winnt\system32
\$WINDRIVE\$	The drive on which Windows is installed.	c:
\$ORGANIZATION\$	The organization that you specified in the Web Server Information screen of the Deployment Wizard.	Hummingbird Ltd.
\$USERDIR\$	The path to the user directory where the user files are	c:\Documents and Settings\john

stored,

where user is the name of the user logged into the PC.

\$PROFILEDIR\$ The path to

the Profile directory where the user files are stored on the user's machine. c:\Documents and Settings\john\Application Da

\$USERWINAPPDATA\$

The path to

c:\Documents and Settings\john\Application Da

the Application Data

directory where the user files are stored.

\$ALLUSERWINAPPDATA\$ The path to

the

c:\Documents and Settings\All Users\Applicati

Application
Data
directory
where the
"All User"

files are stored.

\$DESKTOP\$ The path to

the Desktop on the user's machine.

c:\Documents and Settings\john\Desktop

Note: Unlike the Windows environment variables, the Deployment Runtime replacers are consistent across Windows platforms.

Related Topics

Step 9: Specifying Installation Settings Item Properties Dialog Box

Naming Conventions for Windows Registry Keys

The following naming conventions should be used when specifying Windows registry keys and values in the Custom Action Properties dialog box of the Deployment Wizard.

Registry Keys When specifying a registry key in the Key To Check box, make sure that you use the following convention for the registry path:

RegistryHive\RemainingRegistryPath

where:

- RegistryHive is one of the following supported registry hives:
 - HKEY_CLASSES_ROOT
 - HKEY_CURRENT_USER
 - HKEY_LOCAL_MACHINE
- RemainingRegistryPath is the series of nested keys that follows the registry hive.

For example, HKEY_CURRENT_USER\Software\ProgramA.

Registry Values When specifying a registry value in the Value To Query and Compare To boxes of the Custom Action Properties dialog box, make sure that you use the following convention:

RegistryHive\RemainingRegistryPath\Value

where:

- *RegistryHive* is one of the following supported registry hives:
 - HKEY_CLASSES_ROOT
 - HKEY_CURRENT_USER
 - HKEY_LOCAL_MACHINE
- RemainingRegistryPath is the series of nested keys that follows the registry hive.
- \blacksquare Value is the contents contained within the last key in the nested

hierarchy of registry keys.

For example, $HKEY_CURRENT_USER\Software\ProgramA\Version$.

Related Topics

Step 6: Assigning Custom Actions

General Accessibility

Hummingbird products are accessible to all users. Wherever possible, our software adheres to Microsoft Windows interface standards and contains a comprehensive set of accessibility features.

Access Keys All menus have associated access keys (mnemonics) that let you use the keyboard, rather than a mouse, to navigate the user interface (UI). These access keys appear as underlined letters in the names of most UI items. (If this is not the case, press Alt to reveal them.) To open any menu, press Alt and then press the key that corresponds with the underlined letter in the menu name. For example, to access the File menu in any Hummingbird application, press Alt+F.

Once you have opened a menu, you can access an item on the menu by pressing the underlined letter in the menu item name, or you can use the arrow keys to navigate the menu list.

Keyboard Shortcuts Some often-used menu options also have shortcut (accelerator) keys. The shortcut key for an item appears beside it on the menu.

Directional Arrows Use the directional arrows on the keyboard to navigate through menu items or to scroll vertically and horizontally. You can also use the directional arrows to navigate through multiple options. For example, if you have a series of radio buttons, you can use the arrow keys to navigate the possible selections.

Tab Key Sequence To navigate through a dialog box, press the Tab key. Selected items appear with a dotted border. You can also press Shift+Tab to go back to a previous selection within the dialog box.

Spacebar Press the Spacebar to select or clear check boxes, or to select buttons in a dialog box.

Esc Press the Esc key to close a dialog box without implementing any new settings.

Enter Press the Enter key to select the highlighted item or to close a dialog box and apply the new settings. You can also press the Enter key to close all About boxes.

ToolTips ToolTips appear for all functional icons. This feature lets users use Screen Reviewers to make interface information available through synthesized speech or through a refreshable Braille display.

Microsoft Accessibility Options

Microsoft Windows environments contain accessibility options that let you change how you interact with the software. These options can add sound, increase the magnification, and create sticky keys.

To enable/disable Accessibility options:

- 1. In Control Panel, double-click Accessibility Options.
- 2. In the Accessibility Options dialog box, select or clear the option check boxes on the various tabs as required, and click Apply.
- 3. Click OK.

If you installed the Microsoft Accessibility components for your Windows system, you can find additional accessibility tools under Accessibility on the Start menu.

Technical Support

You can contact the Hummingbird Technical Support department Monday to Friday between 8:00 a.m. and 8:00 p.m. Eastern Time.

Hummingbird Ltd. 1 Sparks Avenue, Toronto, Ontario, Canada M2H 2W1				
	Canada and the USA	International		
Technical Support:	1-800-486-0095	+1-416-496-2200		
General Enquiry:	1-877-FLY-HUMM	+1-416-496-2200		
Main:	+1-416-496-2200			
Fax:	+1-416-496-2207			
E-mail:	support@hummingbird.com			
FTP:	ftp.hummingbird.com			
Web Support:	<pre>support.hummingbird.com/customer</pre>			
Web Site:	www.hummingbird.com			

Custom Action Properties Dialog Box

In the Custom Action Properties dialog box, you can define and edit custom actions, such as running a program or deploying a package, and assign these actions to certain conditions.

To define a custom action that runs a specific program:

- 1. Click the New Custom Action button. The Custom Action Properties dialog box opens.
- 2. In the Name box, type a name for the new action.
- 3. In the Custom Action Type list, select Run A Program.
- 4. In the Path box, type the path and name of the executable. You can click the Browse button to browse for the file.
- 5. In the And Pass This Information box, you can specify a command line that is used by the program once it is executed.

Note: The And Pass This Information box is optional.

- 6. Select the Enable This Custom Action check box if you want this action to be enabled for this deployment project. Otherwise, clear the check box.
- 7. In the Trigger Type list, select one of the following types of events that triggers the action that you have just defined:
 - New Installation—The first time that HostExplorer is installed on the end user's machine, the defined action is triggered.
 - Registry Key Exists—If the specified registry key already exists in the Windows Registry, the defined action is triggered. Specify the registry key in the Key To Check box.
 - Registry Key Does Not Exist—If the specified registry key does not exist in the Windows registry, the defined action is triggered. Specify the registry key in the Key To Check box.

Note: For more information, see Naming Conventions for Windows Registry Keys.

Compare Registry Value—If the comparison that you specified in the Comparison Type drop-down list exists between the registry key value that you specify in the Value To Query box and the value that you specify in the Compare To box, the defined action is triggered.

- 8. Select Execute Before Any HostExplorer Components Install box if you want the program to execute before the HostExplorer packages are downloaded to the end user's machine. For example, you can select this box if you specified an uninstaller that is to install a previous version of HostExplorer, and you want it to do this before the current version of HostExplorer is downloaded.
- 9. Click OK to return to the Deployment Custom Action Information screen.

To define a custom action that deploys a package:

- 1. Click the New Custom Action button. The Custom Action Properties dialog box opens.
- 2. In the Name box, type a name for the new action.
- 3. In the Custom Action Type list, select Deploy A Package.
- 4. Next to the Package box, click the Browse button to open the Available Packages dialog box which displays the package (.dpf) files and/or assembly (.dpa) files that you made available using the previous Custom Packaging screen.
- 5. Select the package file or assembly file that you want to make available for deployment and click OK.
- 6. Select the Enable This Custom Action check box if you want this action to be enabled for this deployment project. Otherwise, clear the check box.
- 7. In the Trigger Type list, select the type of event that triggers the custom action. For descriptions of these event types, refer to step 7 in the previous procedure.
- 8. Select Execute Before Any HostExplorer Components Install box if you want the custom package to be deployed before the HostExplorer packages are downloaded to the end user's machine.
- 9. Click OK to return to the Deployment Custom Action Information screen.

Related Topics

Step 6: Assigning Custom Actions

Summary Screen

Click the link that corresponds to the screen you currently have visible.

<u>Summary Screen—Creating Deployment Projects</u>

<u>Summary Screen—Creating an HTML Index of Projects</u>

<u>Summary Screen—Updating Deployment Projects</u>

Item Properties Dialog Box

In the Item Properties dialog box, you must specify where the source files for the installation are located, where the packages will be installed, and whether or not to replace the file at the time of installation.

To access this dialog box, click Item Properties on the Item menu, or double-click an item in the main area of the Deployment Packager window.

Location Options

Source File—Specifies the path and name of the file that will be deployed. To refer to a list of replacers that you can use to specify the path, see <u>Replacers</u>

Destination—Specifies the location where the file will be installed on the remote desktop. To refer to a list of replacers that you can use to specify the path, see <u>Replacers</u>

Installation Options

Replace this File—Specifies how the deployed file will replace an existing file (if any) at installation time on the remote machine.

Always—Always replace the existing file when the deployed file is installed.

When Version is Newer—Only replace the existing file when the version of the deployed file is more recent.

When Version or Date is Newer—Only replace the existing file when the version or the date of the deployed file is more recent.

When Date/Time is Newer—Only replace the existing file when the date/time of the deployed file is more recent.

Never—Never replace the existing file when the deployed file is installed.

Register this Item—Specifies whether or not to register the package item at installation time.

Related Topics

Step 5: Customizing Your Packages