

Resene EzyPaint Documentation (for older downloadable software)

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Please note:

Resene Paints Ltd is temporarily keeping the older downloadable Resene EzyPaint available for those who may have already started a project with the older version. This is the documentation for that older Resene EzyPaint version.

For all new projects we recommend using the new [online version](#).

The older downloadable Resene EzyPaint is designed to run on Windows XP/Vista and Mac OSX 10.3/10.4/10.5, it also runs on most versions of Windows 7 and 8.

1.0 Introduction

Resene EzyPaint is the next generation of virtual painting software and it allows you to virtually paint and style your home or building using thousands of colours from the Resene Total Colour System and extensive range of products from selected partners.

It has been designed with simplicity in mind and to be intuitive to use, but the following is a brief description of the features you can expect to work with, as well as useful tips to aid your virtual painting experience. For further information, refer to the readme file (readme.txt) and the video help file (video_help.html) on the CD (if the application was installed via CD).

These help files refer to the Installable (from CD or download) and online versions of the application. The installable version of Resene EzyPaint has more features than the online version, and it is recommended this version be used in preference to the online version. Where this documentation makes reference to features only available in the installable version of Resene EzyPaint, the text will be marked with **[Install Version Only]**.

1.1 EzyPaint overview

Resene EzyPaint is the name that all the components of the application sit under. There are four main components of the software: EzyPaint, ColorRite, EzyPath and Ezy3D. Briefly: -

EzyPaint – This component is where you actually paint images with colours/textures selected from the Resene colour charts as well as those of Resene EzyPaint partners. It allows you to view and save colour schemes or print them out for reference. Images can be selected from a large selection of Resene images, or **[Install Version Only]** users can import their own images to be painted with the aid of the EzyPath component.

ColorRite – This component allows you to view and search all of the Resene colour/texture ranges as well as those of selected partners. It allows several different means of selecting colours and viewing the details about them. Users are also able to construct their own colour palettes made up of any of the colours that are available to them.

EzyPath – **[Install Version Only]** EzyPath is the component that allows the user to define areas of an image that can be painted. Much like a traditional drawing package, EzyPaint allows 'Paths', and shapes within these paths to be drawn, which when viewed in EzyPaint can then be painted from the ranges displayed in ColorRite.

Ezy3D – **[Install Version Only]** The Ezy3D component allows a user to select from a range of 3D modelled images and apply a range of products to these images such as roofing, cladding, and wallpaper. These products can also be painted with the aid of the ColorRite component.

Several smaller components of the software are described in the appropriate section of the documentation.

1.2 Starting out/application tour



EzyPaint.exe

[Install Version Only] To start the Resene EzyPaint application, simply double click on the Resene EzyPaint application shortcut on the desktop (if this was selected on install) or in the directory the application was installed in. EzyPaint will now load displaying a splash screen informing the user that it is loading required assets into memory. After a brief time the user interface will appear.

The user interface is divided into three sections:



1.2.1 The Toolbar – At the very top of the application sits the toolbar. Here the user is able to manage projects, check for updates to the application, as well as find internet links to useful documentation.



1.2.2 The ColorRite window – Beneath the toolbar sits the ColorRite window. This window is designed exclusively for the use of ColorRite and is where the user views colour charts and palettes. Although ColorRite does not always have to be visible, this is the only component that appears in this section of the interface.



1.2.3 The EzyPaint window – The larger window at the bottom of the interface houses the other 3 major components depending on which component the user wants to use at that time. This includes EzyPaint, [Install Version Only] EzyPath and [Install Version Only] Ezy3D, all of which deal with image painting and manipulation.

The ColorRite and EzyPaint windows both have certain attributes in common. They are comprised of a central browser window where content can be viewed, and two sidebars on the left and right of this. Each of these sidebars have two tabs at the top that when clicked change the controls shown in the sidebar, and if appropriate the way the central browser window operates.

At the top left of the central browser window is a tab that displays the name of the contents of the browser window i.e. the name of a chart or image. To the side of this tab is a toolbar that holds commands for manipulating the contents of the browser window, and again the buttons held here change depending on the context of the browser contents. Further detailed descriptions of each of these toolbar buttons is described in the appropriate section.

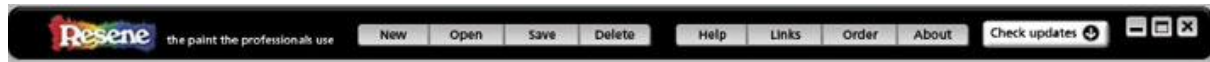
One button in these toolbars that is common to both the ColorRite and EzyPaint sections of the interface is the 'Sidebars' button, clicking this will hide or show the two sidebar panels, allowing the user to alter the size of the working area in the central browser window.

Along the top of the two main interface windows there is an icon and the name of the interface section. To the left of this icon is a triangular 'Twisty' button. If this button is clicked then that section is expanded or hidden to allow the user to work exclusively in the ColorRite or EzyPaint windows or to see both sections at the same time (the latter being how the application appears at start-up). Clicking combinations of the twisty buttons in the two main interface windows allows the user to define the layout of their work area.

[Install Version Only] To the right of the icon and section name of the window header is a 'Switch to...' button. Depending on the window this is situated in, it will change the content of the window to another interface i.e. Mini Palette or Ezy3D. More details on the 'Switch to...' button will be described in the appropriate section.

[Install Version Only] Lastly at the top of each of the two interface windows on the right hand side is the name of the current project. The project name is labelled as 'None' if no project has been saved or loaded. Further details on projects are given in the following section on the 'Toolbar'

2.0 The toolbar



The toolbar contains all the commands related to projects, updates and internet links. The elements on the toolbar are described left to right in the following sections.

2.1 The Resene Logo

Clicking this will open the [Resene website](#) in a new browser window.

2.2 The Project Buttons

[Install Version Only]

The concept of a project in Resene EzyPaint allows the user to save certain elements that they are working on so that they can be reloaded at a later point. Elements that are saved in a project include:

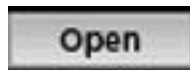
- All user defined palettes in ColorRite
- Images that have been loaded in that session using EzyPaint and Ezy3D
- Image notes
- All schemes that have been created for images using EzyPaint and Ezy3D
- Further details on these elements are given in the appropriate sections.

TIP: The concept of a project does NOT include any changes or updates made to an image using the EzyPath software. These changes are saved to an individual image data file using a separate save button located on the EzyPath interface. More details of saving EzyPath data are given in the 'EzyPath' section.

The project buttons on the toolbar allow the user to manipulate the projects that they are working on, and are as follows:



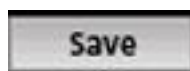
New – Creates a new project. Clicking this will create a new blank project clearing all the elements described in the previous section. At the top right of the ColorRite and EzyPaint windows the project name will be described as 'None'. If a user currently has loaded images or has created user palettes when this button is pressed, warning dialogs ask if they wish to save their current work and really create a new project. For more information on the save dialog see the 'Save' button information below.



Open – Opens a previously saved project. Clicking this button will display the 'Open project' dialog.



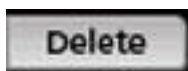
Here the user selects one of the projects from the list and presses 'Yes' to load it or 'No' to return to the project they were working on. If a user currently has loaded images or has created user palettes when this button is pressed, warning dialogs ask if they wish to save their current work. For more information on the save dialog see the 'Save' button information below.



Save – Saves the project currently being worked on. Clicking this button opens the 'Save project' dialog.



Here the user is asked to either select a current project name from the list or to type in a new project name in the text box. Pressing 'Yes' will save the current assets under that project name and display the project name at the top right of the ColorRite and EzyPaint windows. Pressing 'No' will return the user to EzyPaint without saving. If the user attempts to save over a project that currently exists they will be asked if they really wish to perform this action.



Delete – Deletes projects from the user's hard drive. Clicking this button opens the 'Delete project' dialog.



Here the user selects from a list of projects that have been saved on the user's hard drive. Pressing the Delete button will then ask the user if they really wish to perform this action. Pressing 'Yes' will then delete the project from the user's hard disk. Pressing 'No' from this or the main 'Delete project' dialog will return the user to the main interface without performing any actions. If the user deletes the project they are currently working on the project will be deleted and the interface will be cleared as if the user had selected the 'New' toolbar button.

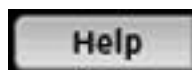
TIP: To copy a project, simply load the project in the interface and then save it under a different name. Both the original and the newly saved project will now contain the same

assets, but changing one will not change the other.

TIP: You may sometimes wish to send your projects to other people. There are several different types of project you may wish to send. If you wish to send just the colour palettes and are not concerned with the images in the project, you only need to send the project file itself. Project files can be found in the projects folder in the install directory usually C:\Program Files\Resene\EzyPaint5\XML\Projects (windows) or Applications:\Resene\EzyPaint5:XML:Projects (Mac). Copy the file with the name of the project you wish to send (with a .xml extension), and email this to the intended recipient. The recipient would copy this file in the same location on their machine and restart EzyPaint. Loading this project would then give the user access to the palettes that were created on the original computer. If you wish to include user imported images when sending a project to someone else, then you would also need to include the images and their corresponding data files. Images can be found in C:\Program Files\Resene\EzyPaint5\Images\Pictures\User (or Mac equivalent) and the corresponding data file in C:\Program Files\Resene\EzyPaint5\XML\Images\User (or Mac equivalent). File names in both of these locations are based on the name of the image that is displayed when viewing the project images in EzyPaint. Send this pair of files (or however many pairs of files that you wish to send, depending on how many project images you wish to include) along with the project file, and the recipient should just place these files in the same locations as they were copied from, restart EzyPaint, and then load the project to gain access to the images. If project images have schemes defined for them, they will initially appear with no thumbnail image on the recipients computer, however when the schemes are loaded a thumbnail will automatically be generated. NOTE: Images and image data files only need to be sent if the image is a user imported image. If the project images are from the standard Resene library of images, and the recipient has a full install of Resene EzyPaint, there is no need to send the image and associated data file as they will already exist on the recipients computer. In this case only the project file needs to be sent.

2.3 The Information Buttons

These are the next set of buttons on the toolbar, and these four buttons allow access to further information about Resene EzyPaint and other useful information. Pressing any one of these buttons will reveal an 'Info window' that drops down from the toolbar and covers the main area of the interface. The relevant information is contained in this window, which can be closed using the 'X' button at the top right of the info window or by clicking anywhere else on the interface. The buttons are:



Help – Here you will find links to help on Resene EzyPaint and painting tips. **[Install version only]** Select the 'Click to Launch the EzyPaint Help' to launch the EzyPaint help documentation. Select the 'Click to Launch the room by room paint guide' to launch a PDF document with detailed advice on painting different rooms of a house. This room by room

guide requires the Adobe Reader software to be installed on the user's machine, which can be downloaded from <http://www.adobe.com/products/acrobat/readstep2.html>.



Links – Here you will find links to Resene and EzyPaint partner companies.



Order – Here you will find links to pages that help you order samples.



About – This page displays information about the current version of Resene EzyPaint.



[Install Version Only] The Check Updates Button – The last major button on the toolbar is the 'Check updates' button. Pressing this button will close the application (checking if the user wishes to save first), and launch the EzyUpdate application. EzyUpdate is a separate application that can be launched from Resene EzyPaint as described or launched separately whilst Resene EzyPaint is not running by double clicking the EzyUpdate file contained in the install folder.

EzyUpdate will automatically update any components that have been installed on the users' machine by connecting to the internet and downloading updates to the application, colour charts and available images. The interface gives feedback on progress as it downloads. If there is an error connecting, the user will be informed and given a chance to retry or cancel the updating process. Once all the files have been downloaded and installed correctly, the user should exit the EzyUpdate application and run Resene EzyPaint once again, which will run using the updated set of files.

[Online Version Only] Get Full Verison Button - Links to the web page where the full version of the application can be downloaded.

2.4 The Application Buttons

[Install Version Only]

The last set of buttons on the toolbar control the application's state:



Minimise – Minimise the application to the taskbar/dock.



Maximize (Windows Only) – Maximize will expand the application, so that black fills the background of the screen, reducing distraction from other applications that may be running. Pressing this button whilst in full screen mode will reduce the application back to its original windowed state.



Quit – This button will quit Resene EzyPaint, asking the user if they wish to save a project beforehand.

3.0 ColorRite



The ColorRite component allows the user to view the entire colour and texture ranges of Resene and its selected partners, gather further information on these products, and create palettes based on these ranges. Basic window actions for ColorRite were described in a previous section i.e. clicking the triangular twisty next to the ColorRite/EzyPaint name will alter the amount of screen real estate that component takes up.

3.1 Colours/Textures sidebar

This sidebar on the left hand side of ColorRite is where the user selects which colours/textures they wish to be displayed in the central browser window. This consists of

two tabs: Colours (selected by default) and [Install Version Only] Textures. The controls displayed in the sidebar pane change are dependent on the tab selected.



3.1.1 The Colours tab – at the top of the sidebar window is a drop down list labelled 'Source'. Here the user is able to select the way in which they wish to select colours. The user should select one of these options from the list, use the controls below the source list to choose the colours they wish to view, and then load them into the main browser window using the 'Load...' buttons at the bottom of the sidebar window.

There are two 'Load...' buttons that work in slightly different ways. The first button 'Load in new' will display the colours to be loaded in a blank browser window, so only the results from that particular search of the colour data are shown in the browser. This is the most common way that colours are loaded.

The second of these buttons 'Load in current' can only be used in certain circumstances, namely when a 'User defined' palette is already loaded in the browser window. User defined palettes will be described in more detail in the following sections, but essentially these palettes allow any colours and textures to be added or removed from them. All other palettes are defined as static palettes that cannot be changed by the user i.e. a Resene colour chart cannot have colours added to it. In the case when a Resene chart or similar static palette is loaded in the browser, the user will not be able to add to it using the 'Load in current' button, as it will be disabled.

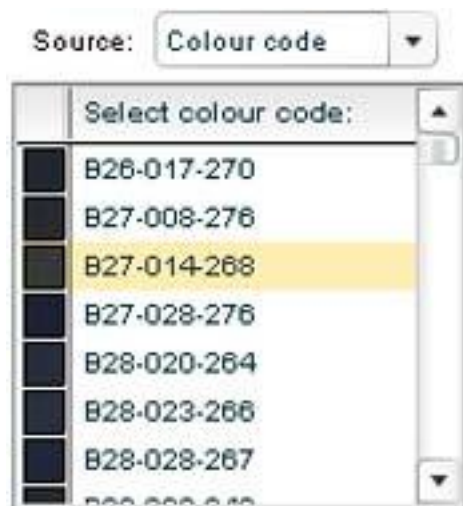
If the application does have a user defined palette loaded in the ColorRite browser window, the 'Load in current' button will be enabled, and the user will repeatedly be able to add new colours/charts to the same palette i.e. first load all the green colours into the palette, and then load a Resene chart into the same palette.



The content that is loaded into the ColorRite browser is of course determined by the data that is selected via the 'Source' drop down list and the controls that are associated with each option. The source types are as follows:



Colour Chart – This is the default option, and when selected all of the available charts are displayed in a list on the sidebar pane. Scrolling and selecting a chart, followed by loading it, will load the chart in the ColorRite browser window. The charts will appear in the ColorRite browser window with the same layout as they appear in the physical chart brochures, for easy product cross-referencing.

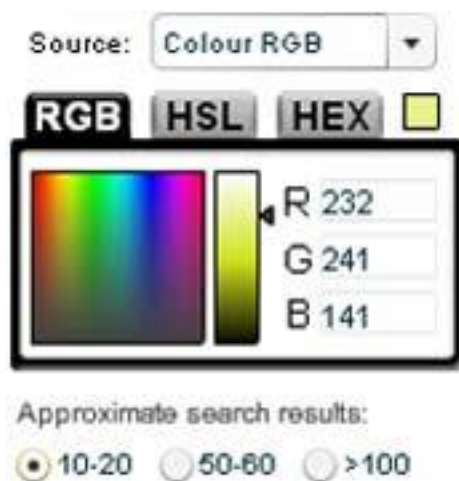


Colour code - This option when selected will display the 'Total colour codes' of all the Resene colours available. A small sample of the colour is also displayed in the list next to each code for visual reference. This sample can be extended by dragging the bar between the two column headers at the top of the list. Scrolling and selecting a colour code, followed

by loading it, will load the single colour represented by this code in the ColorRite browser window.



Colour name – This option when selected will display the colour names of all the available colours on all charts in the list on the sidebar. A small sample of the colour is also displayed in the list next to each name for visual reference. This sample can be extended by dragging the bar between the two column headers at the top of the list. Scrolling and selecting a colour name, followed by loading it, will load the single colour represented by this name in the ColorRite browser window.



Colour RGB – This option allows the user to select a colour from a colour picker and let the software find the closest colours from the Resene EzyPaint database. Click on a colour in the colour picker, then click in the range bar beside it to finetune the shade of the colour selected. The actual colour selected is shown in the square at the top right of the colour picker. The selected colour has its Red, Green and Blue values displayed in the text boxes next to the colour picker, and if the user already knows the RGB values of a colour they are interested in, they can input them directly into these boxes and the colour selected will be updated accordingly. Similarly if the user knows the HSL (Hue, Saturation, and Luminance),

or HEX (Hexadecimal) code of the colour they wish to select they can click on the appropriate tab at the top of the colour picker and type these codes directly into the text boxes for a similar result. Once the correct colour has been selected, the user needs to select an option for the amount of search results returned. These options are 10-20, 50-60 and >100. The more colours returned the further the colours towards the end of the search results will vary from the colour that was originally selected in the colour picker. Usually the default option of 10-20 is a sufficient amount of results. Once the load button has been pushed, EzyPaint will search through the entire list of all the available colours, to find the colour samples that most closely match the selected colour, and these results will be displayed in the main ColorRite browser window.



Source: Colour search ▼

Enter a search word below:

terracotta

Search within:

Colour names

Colour descriptions

Colour codes

Colour search – This option allows the user to type a search term in the displayed text box and to choose what data the search is compared against. These are:

- Colour names – the name of the colour e.g. 'Zinger'
- Colour descriptions – the descriptions associated with the colours e.g. 'Moody'
- Colour codes – The Total colour codes, and the older Resene codes if known

Search terms must be at least three characters in length, and should not contain common words like 'the' and 'Resene'. Search terms cannot contain non-alphanumeric characters except for spaces and the dash symbol '-'. Once the load button has been pushed, EzyPaint will search through the entire list of all the available colours to find the colour samples that match the search string in the specified fields, and the results will be displayed in the main ColorRite browser window.



Colour tone - This option when selected will display the tones of all the available colours on all charts in the list. Scrolling and selecting a colour tone, followed by loading it, will load the all the colours represented by this tone in the ColorRite browser window.



Colour type – This option when selected will display the types of all the available colours on all charts in a list on the sidebar i.e. blue. Scrolling and selecting a colour type, followed by loading it, will load the all the colours represented by this type in the ColorRite browser window.



Colour wheel – When this option is selected, the colour wheel controls will be displayed. Each colour has a range of different colours that when combined with the original, ‘complement’ it. Resene has suggested three complementary colours for each colour in their palettes, which shall be described in the following section. However the colour wheel allows the EzyPaint user to scientifically discover a colour’s complementaries and return results based on these calculations.

To use the colour wheel the user selects a base colour by either clicking in the outer colour ring, or by clicking and dragging the black handle in the colour ring. The central circle updates to reflect the base colour that has been selected. The user can then fine-tune the base colours shade, by clicking (or clicking and dragging) in the bar to the right of the colour wheel. Doing so once again updates the colour in the centre of the colour wheel.

Once the user is happy with the shade of colour that they wish to return complementary colours for, they then need to select the complementary type they are interested in: ‘Direct Complementary’ or ‘Split Complementary’.

Direct complementary (the default option) concerns itself with colours that are the exact opposite of the colour selected and the white handle in the colour wheel gives an idea of what sort of colours these will consist of.

Split complementary concerns itself with colours that exist on each side of the direct complementary colours. An idea of the type of colours the Split Complementary represents is shown by the two white and black handles on the colour wheel.

Once the user has chosen the colour they are interested in, as well as the complementary type, they should load the results into the ColorRite browser . EzyPaint will then determine the nearest colours in the charts to the chosen colour, as well as those that are nearest matches to the complementary colours.

The top row of colours displayed in the ColorRite browser are the nearest matches to the original selected colour, and the row underneath (or two rows underneath if Split Complementary was selected) display the nearest complementary matches.

Painting with a combination of the colours returned here can often lead to aesthetically pleasing results.

TIP: For those 'Source' methods that contain lists of data, the user can type directly into the lists the name of the item they wish to go to directly, and the list will scroll to that position e.g. in the colour name list, typing 'resene zo' will scroll the list to the Resene Zodiac colour.

TIP: For those 'Source' methods that search the colour ranges, the results shown will be taken from all Resene and partner charts. Some of the colours/textures only apply to certain product ranges i.e. colours for blinds cannot be used to paint a wall. When browsing these search results take note of the company that offers the colour to see if it is an appropriate match for the surface intended to be decorated.

TIP: (Windows Only) Double clicking an item in a 'Source' list will perform the same action as if the user had pressed the 'Load in new' Button.



3.1.2 The Textures tab – [Install Version Only] The Textures tab is accessed by clicking the appropriate tab at the top of the left hand side ColorRite sidebar. This tab allows access to the texture ranges that are offered from Resene and its partners. This tab works much in the same way as the colours tab described in the previous section except there are fewer 'Source' options. Namely:

- Texture chart – the name of the texture chart to load
- Texture name – the name of the texture to load
- Texture type – the type of the textures to load, Greyscale – for black and white textures that need to be also painted with a colour from the texture providers colour range; and Colour – Textures that already have a preset colour applied to the sample and cannot be painted with another colour.

- Texture search – works in an identical way to the colour search described in the previous section.

For more information on these methods of selecting textures refer to the documentation in the previous section.

3.3 The Mini Palette

[Install Version Only]



Along the top of the ColorRite interface, just above the current palette name tab on the browser window, is the 'Switch to Mini palette' button. Pressing this puts EzyPaint into mini palette mode where the interface is reduced to a small window, and whatever was displayed in the ColorRite browser window is now displayed in a traditional list box format.



Each row displays a swatch sample (except for textures, as the sample is too small for the list), the name of the colour, and the RGB value of the colour. Selecting a colour in the list automatically copies the RGB values to the clipboard, so that they can be pasted elsewhere.

The mini palette can be useful if you wish to view EzyPaint colour data while also using another application.

To return the application to its normal size, just press the 'Switch to EzyPaint' button at the top of the mini palette screen

3.4 The Details/Palettes sidebar

The Details/Palettes sidebar on the right hand side of the ColorRite interface operates in a similar manner to the Colours/Textures sidebar. Clicking on each tab will display the appropriate content in the sidebar window pane.



3.4.1 The Details tab – This is the default displayed tab and it simply displays a swatch of the colour that is currently selected in the ColorRite browser, as well as three Resene suggested complementary colours for the selected colour.

These suggested complementary colours differ from the complementary colours that are returned when using the colour wheel, as these colours are not necessarily calculated according to a formula. These are colours that have been specially selected by Resene that, from experience, often lead to pleasing colour combinations.

Each of these four swatches also contain an information button 'i', that when pressed reveals the information window with further colour details.



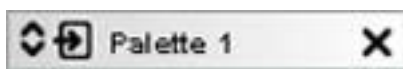
3.4.2 The Palettes tab – When this tab is selected, the contents of the sidebar displays the user palette controls in the sidebar pane. User palettes allow the user to define a set of colours or textures that they wish to refer to often. The range of colours can be updated and changed as the user sees fit, and the user is able to define any number of these palettes.

By default, one blank user palette exists in a new project called 'Palette 1'. Adding colours to the palette is a simply a case of dragging colours from the ColorRite browser over to the palette in the sidebar and dropping them in. All the colours dragged will then be represented in that tab by small square swatches, which can be selected and manipulated in the same way as the swatches in the main ColorRite window.

Hovering the mouse pointer over one of these colours will show a rollover box, displaying the name of the colour. To delete a colour from a palette simply select it and press the delete button on the keyboard.

The CTRL/CONTROL and SHIFT key selection methods as described in the ColorRite browser documentation also apply to the user palettes, which are useful for dragging/deleting several colours at once between palettes.

A user can create new blank palettes by clicking the 'Create new blank palette' button at the top of the palette sidebar. Doing so will add a new palette to the top of the palette control. If the contents of a palette is too big for the palette window use the inner scrollbar to navigate to the top and bottom. To scroll the entire set of palettes use the outer scrollbar.



Each user palette consists of the palette itself and the palette header bar containing some icons and the name of the palette. User palettes can have their names changed simply by

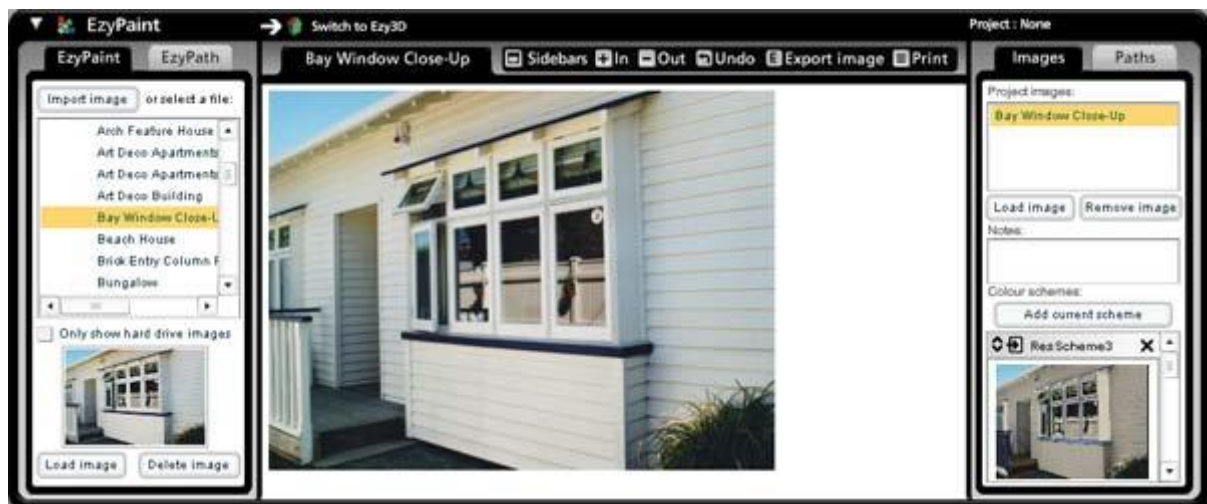
clicking the palette's name, typing a new one, and then pressing return. The double arrow icon on the left hand side of the user palette bar allows the palette to be expanded or contracted, allowing the user to define which palettes are visible.

The next icon in the user palette header (an arrow in a box) is the 'load in browser' button. This button loads the user palette in the main ColorRite browser window, allowing the user to view their palettes in a larger format and view information about them in the 'Info window'.

The last icon in the palette header bar is the delete icon 'X', which will permanently delete a palette from a project, by way of a confirmation dialog.

TIP: User palettes either displayed in the Palettes sidebar or in the main ColorRite browser window can have swatches copied between them using a drag operation. This will not delete the swatches from the original palette but will instead copy them to the new location. To perform a move operation rather than a copy, simply select the colours, drag to the new location, move the mouse back over to the original location where the colours will still be selected, and press the delete key on the keyboard to remove them.

4.0 EzyPaint



The EzyPaint component is probably the area where the user will spend the majority of their time. With the aid of the ColorRite and EzyPath components this is where the user can paint images, either from the library of provided images, or user imported images. Basic window actions for EzyPaint were described in a previous section i.e. clicking the triangular twisty next to the EzyPaint name will alter the amount of screen real estate that component takes up.



[Install Version Only] Along the top of the EzyPaint component title bar is a button labelled 'Switch to Ezy3D'. Selecting this button switches the interface to Ezy3D mode, where the user can load 3D modelled images and apply and paint products from Resene partners to them. Entering this mode completely hides the EzyPaint window and replaces it with the Ezy3D interface. To return to the EzyPaint window from Ezy3D simply select the 'Switch to EzyPaint' button along the top of the Ezy3D title bar. Detailed help on Ezy3D is given in the Ezy3D section of this documentation.

4.1 The EzyPaint/EzyPath sidebar

This sidebar on the left hand side of EzyPaint is where the user selects what tool they wish to use with an image: EzyPaint or [Install Version Only] EzyPath.



4.1.1 The EzyPaint tab – When the user first loads the application only the 'EzyPaint' tab will be displayed. The EzyPath tab only becomes available when an image has been either loaded or imported into the browser window. Selecting these tabs when they are available changes the set of tools available and the types of operations that can be carried out upon the image. This section is concerned with the EzyPaint component and further details on using the EzyPath tool will be detailed in the following section.

[Install Version Only] At the top of the EzyPaint left sidebar is an 'Import image' button and beneath this, a tree control that displays images that are already available to the user.



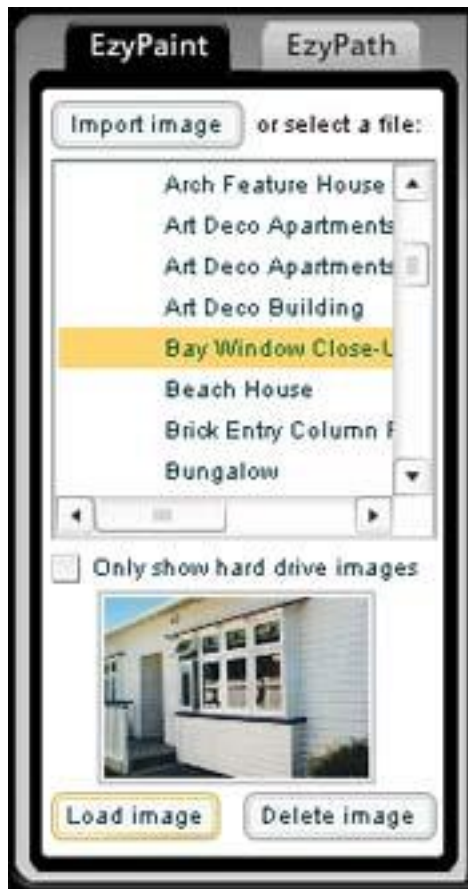
[Install Version Only] Import image – If a user wishes to paint an image they own, they are required to first import the image into the EzyPaint application. Pressing the 'Import image' button will display a file browse dialog where the user can select a JPEG image (.jpg extension) from their hard drive. After selecting an image, pressing 'Import' will attempt to import the image into the EzyPaint package for further manipulation.



[Install Version Only] Any imported images should be ideally 1600 pixels across by 1200 pixels down, but cannot be any larger than this size, indeed the user will be presented with a fail import message if this is the case. To remedy this, use an image manipulation application to resize the image so that it fits within these size boundaries as closely as possible (without distortion). Save this file under a new filename and repeat the [Install Version Only] import image process once again. After a successful import the image will be loaded into the EzyPaint browser window, and the name of the file will be added to the available images tree control under the 'My images' section.

[Install Version Only] After import the user will need to define areas or 'Paths' on the image that they wish to paint using the EzyPath tool before they are able to apply any colours to those images. The EzyPath tool is described in more detail in the EzyPath section.

Load an existing image – the user can select an image to load from the tree control that already has areas ‘pathed’ allowing these to be painted straight away. Using the tree control they can browse the various categories of images split into three fairly self-explanatory areas, Interiors, Exteriors and My Images.



Within the interior and exterior sections, further categories are available that can be expanded and explored. Selecting an image in the tree control updates the thumbnail viewer beneath it with a preview of that image. If the thumbnail preview is shown clearly without a text overlay, then this means that the image is currently available [Install Version Only] on the user's hard drive. If a message that reads 'Load from CD or web' is shown over the thumbnail then this means that although the image is available, it is not currently installed on the user's hard drive and needs to be installed before the image can be loaded.

[Install Version Only] If the user wishes to view the image tree control so that only those images that reside on their hard drive are listed, and not those that are available but need to be installed, they need only click the checkbox beneath the tree control labelled 'Only show hard drive images'. Similarly to display all of the available images regardless of their location, they should uncheck this box.

Beneath the preview window are two buttons, 'Load image' and [Install Version Only] 'Delete image'. The 'Delete image' button is only enabled if the image selected in the tree control is available to load from the user's hard drive. If this button is clicked EzyPaint removes the image and its data files from the hard drive. However the thumbnail will still

appear in the image tree control, but will be displayed with the 'Load from CD or web' message over the preview.

Pressing the 'Load image' button will attempt to load the image that is selected in the tree control and previewed as a thumbnail, in the browser window. [Install Version Only] If the image selected is available on the user's hard disk, the image will be loaded first, and if a data file defining 'paths' on the image exists, that file will then also be loaded. If the image does not exist on the user's hard drive, the EzyPaint application will attempt to install the image before loading it. Installation can occur in one of two ways, if the user has a copy of the EzyPaint installation disc inserted in their CD-Rom drive, the application will attempt to locate the image and its data file from disc and copy them to the install directory before loading the image in the browser window. If the user does not have the EzyPaint disc inserted, or the image is not available on the disc, then the application will attempt to access the internet and download the image and image data file from the Resene server. The download progress is displayed on a dialog box and can be cancelled at any time by pressing the 'Cancel' button. If installation is successful, the image and data file are loaded into the browser window, and the thumbnail preview window no longer displays the 'Load from CD or web' message as the image is now installed on the user's hard drive.

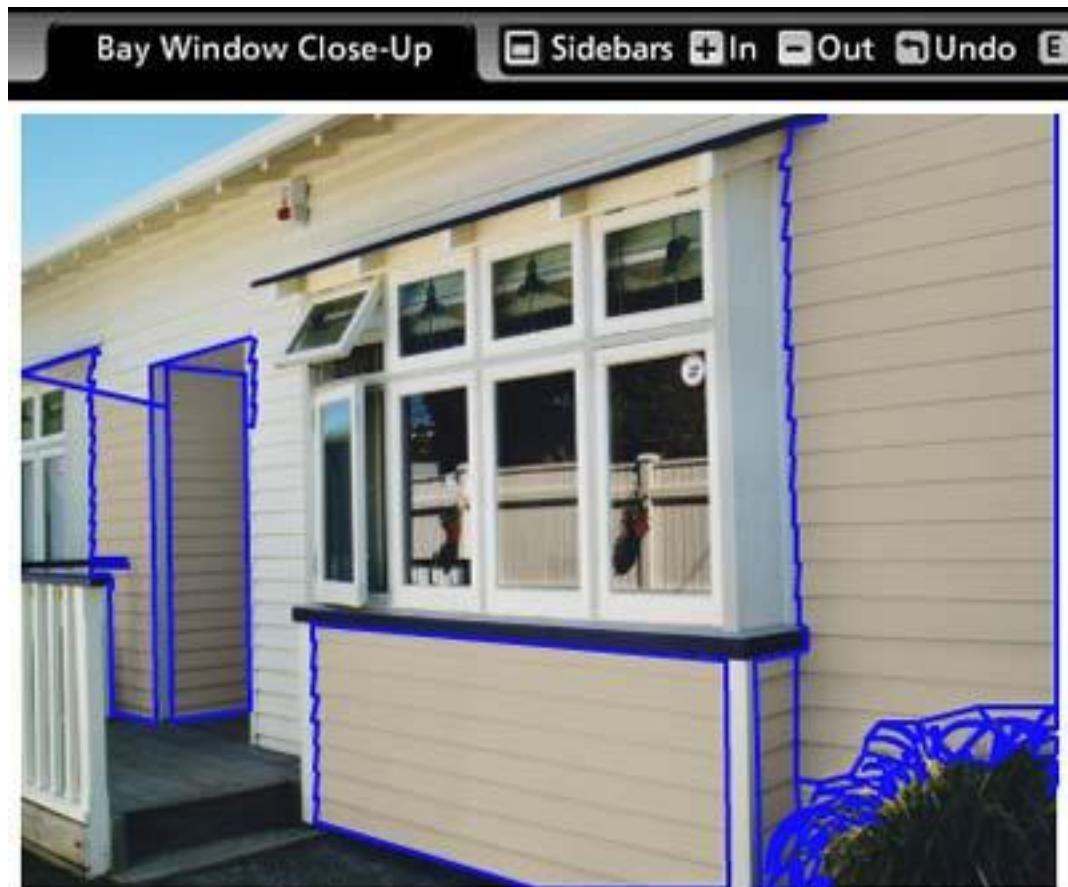
TIP: If you would rather use the keyboard to navigate this image tree rather than the mouse, use the left/right cursor keys to expand and contract image categories, and the up/down cursor keys to select the images. Pressing Enter when an image is selected will load the image in the browser.

4.2 The EzyPaint browser window

The generic properties of the browser windows of ColorRite and EzyPaint have already been discussed, but this section focuses on the features specific to EzyPaint.

When loading/importing images from the EzyPaint left sidebar, the image is displayed in the main browser window. The browser window can be scrolled around using the scrollbars if the content extends beyond the area given to the EzyPaint browser window. In this scenario the mouse scroll wheel can also be used to scroll vertically.

[Install Version Only] Each loaded image also requires a data file to be defined for it, representing the paintable areas or 'paths' of the image. If an image has been imported from a personal photograph collection, the user is required to use the EzyPath component to define these paths, however if the image loaded is a pre-pathed image these paths are already defined. These predefined images can also have their paths changed and updated by using the EzyPath component. Details on how to use the EzyPath tool is documented in the EzyPath section of the documentation.



Assuming the user loads an image from the list of predefined images, certain sections of the image will highlight with a blue outline and a floating text field when the mouse moves over the image displayed in the browser window. These highlights are the 'paths' that can be painted. If the user selects and drags a colour or texture from any palette that is displayed in the ColorRite browser window, user palettes pane, or details pane over to one of these highlighted paths and releases the mouse button, that path will then be repainted with the colour that was selected. This process can be repeated with many different colours/textures in any image paths, allowing images to be painted in thousands of combinations to match the user's tastes and requirements.

If the user clicks on a path that is highlighted while not dragging a colour/texture from ColorRite, the path details are then displayed in the right hand side bar on the 'Paths' pane. More details on the 'Paths' pane are discussed shortly.

TIP: If you wish to paint a path the same colour as another path, just select the path that has already had the colour applied, and then drag the colour displayed on the 'Paths' pane over to the new path and release the mouse.

Along the top of the EzyPaint browser window lies the name of the image that is currently loaded into the browser, as well as a toolbar with buttons to aid browser operations. The buttons in this toolbar are as follows:



Sidebars – has already been discussed, allows more room in the browser window by hiding or showing the two sidebars.

In/Out – These buttons allow the image to be zoomed in and out.

Undo – This button allows the user to remove and reapply the last painted colour or texture to an image path.

Export image [Install Version Only] – This button allows the user to export the image that is currently being viewed in the browser with all the colours and textures that they have applied to their hard disk for reference. The export process is exactly the same as the process detailed for saving out a sample of a colour from the information window in ColorRite, but typically takes a little longer to perform as the final exported image is of larger dimensions (800x600). The export operation makes use of a separate process called EzyEncoder which takes the image from EzyPaint and creates an image file pixel by pixel, which can often take time to render. Although the saved file may not appear immediately in the save location it will be placed there after EzyEncoder has finished creating the file.



Print – Requires a printer to be available to the machine EzyPaint is running on. This allows the user to print the image as it is currently displayed in the EzyPaint browser window. Once this button is pressed the user is presented with a dialog asking how they wish to print the image. Choosing one of the four print options followed by the 'Yes' button will print the image in the chosen fashion, namely:

Image and colour scheme – The image as it appears in the browser window is printed along with a table of all the paths that have been painted, and details about the colours/textures used in those paths.

Colour schemes only – Only the table of all the paths that have been painted, and details about the colours/textures used in those paths.

Testpot order list – A list of the testpots that can be ordered based off the colours that have been used to paint the image currently being viewed in the EzyPaint browser window.

Original image, painted image, scheme – Identical to the first print option except that the original image without any painted paths is displayed next to the painted image for comparison.

4.3 The Images/Paths sidebar

The Images/Paths sidebar on the right hand side of the EzyPaint interface displays either details on the image currently displayed in the EzyPaint browser, or information about the paths contained within that image. Clicking on one of these two tabs will display the appropriate content in the sidebar window pane.

4.4 The Images tab

This is the default displayed tab and it displays the images contained in the current project, notes on an image and the colour schemes for the currently displayed image.



The project images list box at the top of this pane displays all of the images that have been loaded in this session or project. As images are loaded from the left hand sidebar they are added to this project list so that they can easily be reloaded at a later point. Rolling over each image name in this list box will display a small preview thumbnail of the image for visual reference. Two buttons sit beneath the list box labelled 'Load Image' and 'Remove Image'. 'Load Image' will reload the currently selected image, while 'Remove Image' will

remove an image name from the list box. At least one image must be contained in the project images list box.

Beneath the project images controls is a small text area labelled 'Notes'. Here the user can type any information that they wish to associate with the image that is currently loaded. The last section of controls at the bottom of the Images pane is the 'Colour schemes' controls. A 'Colour scheme' captures a point in time when the image was painted a certain way, and should be created when the user thinks they may want to work on or view this paint combination again.

When an image that has paths predefined is first loaded in the EzyPaint browser, four colour schemes are also loaded. The first is always labelled 'Default' and this represents the image with no colours applied to it. The default colour scheme is always available and cannot be deleted. This scheme is useful when the user wishes to start painting the image again from scratch and wipe all painted areas of the image, so they contain the original colours.

Three other colour schemes are also loaded with the names ResScheme1, ResScheme2, and ResScheme3. These represent suggestions of colour scheme combinations and can be great starting points for the user's own creations. The user is also free to delete these colour schemes (as outlined below) if they do not wish them to be included in their projects.

The user can also add their own colour schemes to an image. When the user has painted an image in a desired fashion, they should press the 'Add current scheme' button above the colour scheme controls, and a new scheme will be added to the list of available schemes for that image.



The colour scheme controls work in a very similar fashion to those of the user palettes described in the ColorRite section of this documentation. Each colour scheme has a thumbnail representation of how the image looked when that scheme was created, and along the top of this thumbnail sits a control bar with the name of the scheme and several icons. Colour schemes can have their names changed simply by clicking the scheme name, typing a new one, and then pressing return. The double arrow icon on the left hand side of the colour scheme bar allows the palette to be expanded or contracted, allowing the user to hide schemes they are not currently interested in.

The next icon in the colour scheme header (an arrow in a box) is the 'load in browser' button. This button allows the colour scheme to be loaded onto the image currently being displayed in the EzyPaint browser window, so that they can be viewed again or refined further.

The last icon in the colour scheme header bar is the delete icon 'X', which will permanently delete a colour scheme from an image, by way of a confirmation dialog.

TIP: Ensure that you add a new scheme for the image you are currently working on if you

wish to save those colour selections before loading another image or another colour scheme. Otherwise the colour selections you were working with will no longer be available when you reload the image.

TIP: If you reload a colour scheme and make changes to it that you wish to keep, ensure you create a new colour scheme by clicking the 'Add current scheme' button so that these changes are preserved. If you are no longer interested in the scheme this new scheme was based on then just delete the older one.

All of the data held in this pane is saved if the user decides to save the project via the toolbar at the top of the interface as described in the Toolbar section of this documentation

4.5 The Paths Tab



When this tab on the sidebar is selected, the contents of the sidebar pane displays the paths that exist for the loaded image and details for each of them.

The list box at the top of the pane labelled 'Images paths' displays the names of all the paths that are contained in the image. Rolling over each of these image path names will highlight the path on the image itself contained within the EzyPaint browser.

Clicking on an image path name will select the path in the image paths list box and the 'Path details' box beneath the list will updated to reflect the details of that path. The same effect can be achieved by directly clicking on the highlighted path on the image itself.

The 'Path details' box holds several pieces of information about the path that can be viewed and changed.

Path name: This is the name of the path currently selected and it cannot be changed here ([Install Version Only] Path naming is carried out using EzyPath. See its documentation for more details).

Path colour: This displays the colour that the path is currently painted in. If the path is not currently painted, the colour block displays the 'Base colour' of the path and the label 'Original colour' this colour is essentially the original colour of that area of the image and does not specifically match any colour from the paint ranges. This colour is important as it helps to correctly paint a colour from the charts when one is applied. [Install Version Only] This base colour cannot be changed here, but it is set when defining the paths using the EzyPath tool. See the EzyPath documentation for more information on setting this. The RGB value of this colour is also displayed in brackets for the user's reference e.g. if they wish to find colours within the ranges that closely match the original colour, they can perform an RGB search using these values using the ColorRite Colour RGB option on the ColorRite Sidebar.

If a colour is applied to the path, then the colour displayed in this colour block is the same as the colour the path is painted, and the label below it represents the colour name. In this case the small 'i' information button is displayed on the colour block, similar to the swatches in the ColorRite component. Pressing this button will open the 'Info window' and display more detailed information on that colour.

If the user wishes to clear this colour from the path so that it is displayed as it was in the original image, they should press the 'Clear path' button, and the path will be reset to the original image colour once again. Pressing 'Undo' on the toolbar at the top of the EzyPaint browser window will reapply the last colour to the path once again.



Texture size [Install Version Only]: This drop down list only has an effect on the path if it has a texture applied to it rather than just a colour. It allows the user to set a size for any texture so that it more accurately represents the size the texture should be displayed at on that particular image path. The size options that can be selected range from very small to very large. It is recommended a user experiments with these values for each texture they apply to a path to find the best results.



Texture paint [Install Version Only]: One of two options can be selected here: 'Merge' or 'Replace'. Again this option only makes a difference when a texture is applied to a path, more specifically when a greyscale texture (one without colour) is applied to a path. Greyscale textures should have colours from appropriate charts added to them as they come in a range of colours and the greyscale texture is merely the base.

[Install Version Only] 'Merge' is the default option selected and means that when a colour is applied to a path that has a greyscale texture in it, the colour will always be applied to the texture. However in some cases it might be the case that the user wishes to wipe the texture completely from the path and simply paint in that selected colour rather than paint the texture itself. If the user therefore selects the 'Replace' option here, this latter behaviour will take effect. The user is free to switch between the two modes as they see fit.

TIP: If a greyscale texture and colour is applied to a path, the path colour details in this part of the interface will be split into two blocks, one displaying the texture and the other displaying the colour applied to it. The names of the texture and colour are not displayed by default, but hovering the mouse over each of these blocks will display the names appropriately. Each block will also have its own information button that can be clicked to display more information about each.



Paint: This option also consists of two options 'Transparent' and 'Solid'. Transparent is the default selected option and means that any colour or texture that is applied to that path will be merged with the original image so that areas of highlight, shadow and texture from the original image will be blended with the applied paint/texture. For the most part this is the desired option.

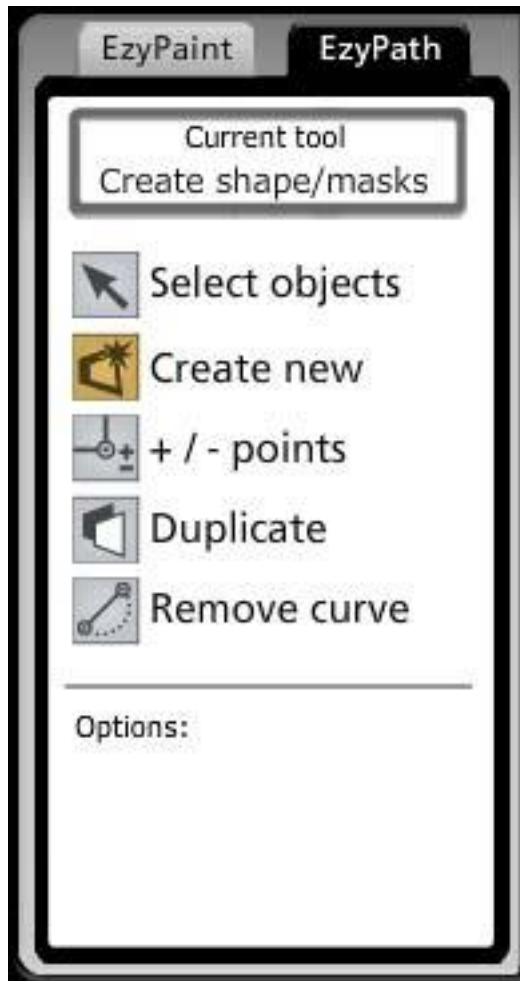
There is also a 'Solid' option which ignores the original image and paints a solid block of colour/texture when one is applied to the path. This could be useful if a path was created that represented an object that did not exist in the image e.g. a fence that is yet to be built.

5.0 EzyPath

[Install Version Only] The EzyPath component is probably the most complex component of the application and is where the user defines the distinct areas or 'Paths' of an image so that they can be painted using the ColorRite and EzyPaint components. It consists of a series of tools similar to that of a traditional drawing package that allow the user to 'draw' paths over the image itself.

The predefined images that come with the EzyPaint application can have their paths altered using the EzyPath tool, but a more likely scenario would be that the user imports an image from their own collection into EzyPaint, and then has to define the paths on that image from scratch.

Once an image is loaded in EzyPaint, the user should select the EzyPath tab on the left hand sidebar, and the controls in this section of the interface will change from the EzyPaint toolset to the EzyPath toolset.



It is important the user has a reasonable grasp on the concepts involved here before attempting to path an image as it will enhance their ability to path an image far more efficiently.

As has already been discussed, an image consists of several paths that represent a distinct area of an image i.e. a basin, a door, a wall etc. Each of these paths can be made up of one or more shapes as required. Splitting an image into these logical areas is fairly simple to grasp, however there is one more consideration that the user should take into account. EzyPaint and EzyPath make use of what is known as the 'Base colour' of a path, that is, the original colour of the area that is to be painted. This base colour is needed to correctly paint an image when a colour from the charts is eventually applied to it. If a logical area of an image e.g. a wall, consists of two different colours, then it should be split into two different paths, so that a separate base colour can be applied to each. If this action is not taken, then some strange and unexpected results can be encountered when that path is painted using ColorRite and EzyPaint. See the documentation on setting a base colour for a further discussion.

One last consideration to make is that if a path represents an object that exists in two or more different dimensions (but is the same colour, see paragraph above) i.e. a box that has a forward facing front, and a side that is on a different angle, then each of these sides should be made a separate shape within this path (rather than one large shape). This is because perspectives can be applied to individual shapes, which is required for when textures are applied to paths. A discussion of perspectives is given in the 'Paths sidebar' section of this documentation.

5.1 EzyPath tool selection sidebar

[Install Version Only] - This sidebar on the left hand side of EzyPath is where the user selects the tool they wish to help them define their current path. As a default, one path exists when an image is first imported into EzyPath, and these tools act on the current path until another one is created or selected. Details on how to create and define new paths is detailed further on in the 'Paths sidebar' section of this documentation.

There are five tools at the users' disposal in this pane, namely:

- Create new (default tool)
- Select objects
- Remove curve
- +/- points
- Duplicate

The currently selected tool is displayed at the top of the left hand sidebar, and options associated with each tool (if there are any) are displayed at the bottom of the sidebar. Details of each tool follows:



Create new tool– this is the default tool that is selected, and this tool along with 'Select objects' tool are the two tools that will be used most frequently. The create tool allows the user to define the shapes that make up the path. With this tool selected, the user can click on the image to place a black and white point marking a point on the outside of the object that is being traced. The user then clicks to add another point to the next logical point along the object and a red line is drawn between the two points. The user continues defining the outline of the object as best they can by adding more points as appropriate until they eventually close the shape by clicking on the FIRST point that they created. Doing so will complete the shape leaving a blue outlined shape left on the image.

The user can add further shapes to this path by clicking anywhere outside this shape that they created and repeating the same tracing process. However the user is also able to create a hole or 'mask' in a shape by clicking inside a shape they previously created. Doing so will create a blue and white point and by repeating the same process as they did for

creating the shape initially, the user can mark several points that will be joined by a blue line, until they eventually click back on the FIRST mask point once again and complete the hole in the shape. A good example of this is to initially create the shape of the outside of a window frame, and then create a mask inside this shape round the inside of the window frame, so that when the frame is painted using EzyPaint, the frame itself is painted, but the glass window inside it is not.

The user is free to create many shapes and masks on each single path until the path of an object is completely defined.



Select objects tool – Once a shape or series of shapes has been completed the user may need to select and move objects around on the image. If the user selects this tool and moves the mouse over shapes that they have created on the path, the mouse pointer will change to the select shape icon. Clicking a shape will then select it with a thick red line and all the points on the shape will be displayed. The user is also free to select a mask inside a shape, which will be displayed in a similar fashion but with a thick blue line. When a shape or mask is selected the 'Delete selected object' button at the bottom of the left hand sidebar becomes highlighted. If the user presses this button the selected shape/mask will be deleted from the path (the same effect can be achieved by pressing the delete button on the keyboard when a shape or mask is selected).

Above the 'Delete selected object' button are three checkboxes: 'Move points', 'Move lines' and 'Move shapes' the first two are selected by default but any combination of these three

options can be selected/deselected.

With the 'Move points' checkbox selected and a shape or mask on the image path also selected, moving the mouse over one of the point icons on a shape will change the cursor to the move point icon. Clicking and dragging a point on a shape allows it to be moved anywhere within the boundaries of the image. Releasing the mouse will relocate that shape's point and update the connecting lines on the shape. A similar effect is achieved when attempting to move a mask point, however in this case the mask point cannot be dragged beyond the rectangle that defines the boundary of the shape that it is creating a hole in.

With the 'Move lines' checkbox selected and a shape or mask on the image path also selected, moving the mouse over one of lines of a shape will change the cursor to the move line icon. Clicking and dragging a line on a shape allows the line to be curved between the two points that define the ends. Releasing the mouse will fix the curved line in that position. Mask curved lines work in the same way except they are limited by the shape that they are contained within. If the user decides that they do not wish a line to be curved after moving it, they should use the 'Remove curve' tool as described later in this documentation.

With the 'Move shapes' checkbox selected and a shape or mask on the image path also selected, moving the mouse over the shape itself will change the cursor to the move shape icon. Clicking and dragging a shape allows it to be moved anywhere within the boundaries of the image. Clicking and dragging a selected mask in a shape allows the mask to be moved anywhere within the boundaries of the shape that contains it.

TIP: To draw a curved object like a circle, use the create tool to mark four points or so evenly spaced round the object. The completed object will be joined by straight lines that intersect the object in the image, but by using the select tool the lines can then be curved outwards so that the edges of the shape match the image object.

TIP: To draw a line, just zoom in on an image object, and mark four points as if defining a rectangle, you can alter the thickness of the line by moving two of the four points using the select tool.



Remove curve

Remove curve tool – If a curved line has been created with the select objects tool, but the user later decides that they do not wish this line to be curved they should use this tool to remove it. If the user selects this tool and moves the mouse over a shape that they created on the path, the mouse pointer will change to the select shape icon. Clicking a shape will then select it with a thick red line. The user is also free to select a mask inside a shape also which will be displayed in a similar fashion but with a thick blue line. With a shape or mask selected, rolling the mouse over a curved line in this shape or mask will change the mouse pointer to the remove curve pointer. Clicking on the curved line will immediately remove any curve from this line and redraw the line between the two end points as a straight line.



+ / - points

+/- points tool – When a shape is created in a path, it may be that the user wishes to alter the number of points that that shape consists of, and to do so the ‘+/- points’ tool should be selected. If the user selects this tool and moves the mouse over shapes in the path, the mouse pointer will change to the select shape icon. Clicking a shape will then select it with a thick red line and all the points on the shape will be displayed. The user is also free to select a mask inside a shape also which will be displayed in a similar fashion but with a thick blue line. With a shape or mask selected, rolling the mouse over a line in this shape or mask will change the mouse pointer to the add point cursor. Clicking the mouse on the line will add an extra point on that line at the mouse position. If the mouse is rolled over an existing point in that shape or mask with this tool selected the mouse pointer will change to the remove point cursor. Clicking the mouse on this point will remove the point from shape and join the two points that were on each side of it by means of a straight line. Using this tool in conjunction with the select objects tool allows the user to reshape objects that have been drawn on the image path.



Duplicate

Duplicate – This tool is most likely the least often selected tool and it allows a shape or mask to be duplicated on a path e.g. if a window is drawn and several fairly identical windows exist, then this tool could be used to create copies of that window shape. If the user selects this tool and moves the mouse over shapes that they created on the path, the mouse pointer will change to the select shape icon. Clicking a shape will then select it with a thick red line. The user is also free to select a mask inside a shape also which will be displayed in a similar fashion but with a thick blue line. With a shape or mask selected, rolling the mouse over the selected shape/mask will change the mouse pointer to the duplicate shape cursor. Clicking and dragging the mouse will create a duplicate of that shape that can be dragged anywhere within the bounds of the image if it is a shape, or anywhere within the bounds of the containing shape if it is a mask. When releasing the mouse the duplicate shape or mask is locked into place. The position of the shape/mask, its points and lines can then be refined by using the select objects tool.

5.2 The EzyPath browser window

[Install Version Only]

The generic properties of browser windows have been discussed previously, but this section focuses on the features specific to EzyPath.

The image being pathed is displayed in the main browser window, and the browser window can be scrolled around using the scrollbars if the image extends beyond the area given to the EzyPath browser window. In this scenario the mouse scroll wheel can also be used to

scroll vertically.

The image acts as a drawing area that is used in conjunction with the tools that were described in the preceding section, and is the area where image paths are visually defined.

Along the top of the EzyPath browser window lies the name of the image that is currently loaded into the browser, as well as a toolbar with buttons to aid browser operations. The buttons in this toolbar are as follows:



Sidebars – has already been discussed, allows more room in the browser window by hiding or showing the two sidebars.

In/Out – These buttons allow the image to be zoomed in and out. These buttons are extremely useful when used in conjunction with the left hand sidebar tools, as they allow the user to zoom in closely on areas that are being pathed to more accurately delineate objects in the image.

Undo – This button will undo/redo the last performed action with the majority of tools, there are however a couple of operations where it will have little effect. If a shape is completed using the 'Create' tool, pressing this button will have no effect, however the shape can be deleted or altered using the toolset in the left hand sidebar as described in the previous section. Deleting shapes or paths cannot be undone either.

Preview – This button is here to give the user a visual aid as to what has been pathed on the image and how visible that path will be in the stacking order when it is painted. A discussion of paths and layers now follows to clarify this relationship.

EzyPaint employs a concept common to many painting applications called layers. Essentially layers are akin to sheets of paper that are stacked on top of the image. Anything drawn on a bottom layer is hidden by anything drawn on a layer that is above it. Each EzyPaint path represents a single layer so if a path that is low in the stacking order is painted and a path that is higher in the stacking order is also painted, and the two paths have shapes that overlap, then only the colour that appears on the higher stacked path will be displayed in that position.



Pressing the 'Preview' button on the EzyPath toolbar essentially displays all the paths as if they have been painted. Bright Green areas are areas of the image that are in the current path AND are visible. Blue areas are areas of the image that are covered by different paths other than the current one. Other than helping to view the paths relationship in the stacking order and what parts of the path are visible in that stacking position, this is a useful tool to briefly view what areas of the image have been covered by paths and those areas that are not. Any part of the image that shows through beneath the blue and green areas has not been covered by a path yet. The preview button is a toggle and pressing it again will switch the preview mode off. The preview mode also allows full functionality of the path definition toolset, so that drawing operations can still take place whilst this abstract representation of the image is displayed. A further discussion of paths and layers is given in the 'Paths Sidebar' documentation.



Save Paths – This button is used to save any work that has been carried out on the path definitions. It is important to note that the saving of path definitions files takes place on a per image basis and is separate to saving a project via the toolbar (which preserves ColorRite, EzyPaint and Ezy3D project data). After altering any path definitions, the user must ensure they are saved if they wish them to be reloaded by a new EzyPaint session. Switching between EzyPath and EzyPaint will also prompt the user to save the paths definition file if anything has been changed. Saving the paths will not prompt the user for a file name or location, as only one data file per image file exists and the path data is saved in the same location by default.

5.3 The Paths sidebar

[Install Version Only]

The Paths sidebar on the right hand side of the EzyPath interface displays only one tab concerning itself with the paths that are contained within that image.



The list box at the top of the pane labelled 'Image paths' displays the names of all the paths that are contained in the image. Clicking on an image path name will select the path in the image paths list box, and the shapes that are displayed over the image will update to only those shapes that are contained within that selected path. When selecting an image path in the list, the 'Path details' box at the bottom of the sidebar will also update to reflect the details of that path.

A discussion of paths as layers has already been described in this documentation, but this section of the interface is where this layering is controlled. By default one layer exists for each image, but new image path layers can be added to the image by pressing the 'Create new image path' button at the top of this sidebar. Doing so causes EzyPath to hide any shapes that were on the path that was being worked on, and a new path is added to the top of the image paths list, as well as default values to the path details box at the bottom of the sidebar. This path is now at the top of the layer stacking order and any shapes drawn on it will therefore appear on top of any other shapes on paths beneath it.

Beneath the image paths list are two buttons 'Move up' and 'Move down'. These buttons allow the user to control the path layer stacking order. By selecting the top path and pressing the 'Move down' button repeatedly the top layer can be moved to the very bottom of the stacking order, meaning that any shapes on that path when painted will appear under any shapes on paths painted above it.

This can be seen visually if say three paths are created and a shape that occupies roughly the same area of the image is created on each of these paths. If the user toggles the preview mode by clicking the 'Preview' button on the EzyPath browser bar, the three shapes are displayed, the green shape being the current layer and the blue shapes represent the other two layers. Moving the layer up and down using the 'Move up' and 'Move down' buttons reveals and hides the shapes relative to each other. So there is less of the green shape visible when the path is on the bottom layer than there is when this path occupies the top layer. This preview mode reflects how the shapes would actually be painted within EzyPaint.

TIP: You can make use of this layering technique to quickly path an image that you know will have all paths painted. Say you have a wall with a window frame on it and you wish to paint both, you would first create a layer and trace the outside boundary of the wall creating a path that encapsulates both the wall and the entire window. Then you would quickly create a mask inside that shape that roughly sits between the inside and outside of the window frame, so that the glass is not painted when we eventually paint using EzyPaint. There is no need to precisely trace this mask as it will be covered in the next path. Create a second path that will sit above the other path in the layer stacking order, and to this add a more carefully defined shape round the outside edge of the window frame. When complete add a mask that closely traces the inside edge of the window frame. Define base colours for both paths (see following section) and save the paths, then switch to EzyPaint and paint the wall with a colour from ColorRite. You will notice the rough edge of the mask that overlaps the window frame, however if we now paint the window frame path itself with another colour, this issue disappears as the window frame was traced properly and this path is above the wall layer in the stack, so anything painted on it appears on top of everything else, effectively blocking out the rough edge.

The 'Path details' box holds several pieces of information about the path that can be viewed and changed.

Path name: This is the name of the path currently selected and being edited. This is an editable text box so the name of the path can be changed here from the default value after it has been created.



Base colour – This base colour is important as it helps to correctly paint a colour from ColorRite when one is applied. The base colour in the colour box for a path is initially set to none. To set a colour, roll the mouse over the base colour box so that the interaction hand icon appears. Click and drag from this box and the colour sample dropper icon will appear. Drag the sampler over to the image path and release the tip of the sampler over the area that BEST represents the original colour of that path.



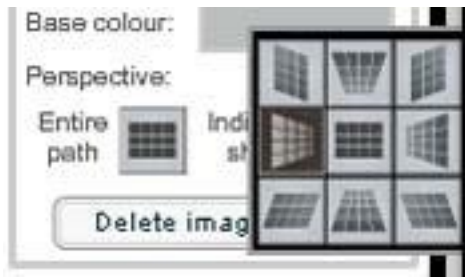
It is very important that this base colour is properly set up, otherwise some strange painting effects may occur when painting this path in EzyPaint. If the path in question has areas of shadow and/or highlight, these areas should not be used to select the base colour from. The base colour should represent the original image path colour under normal lighting conditions. If the colour of a path can only be seen in extremes of highlight and darkness, and no mid range colour representation is available, then it is advised to select the lighter colour as this will provide better results than selecting a base colour from areas in darkness. If you do notice some strange painting on a particular path then it is advised to switch from EzyPaint to EzyPath and select a more appropriate base colour setting for that path.

A path data file cannot be successfully saved if a base colour is not selected for every created path that contains at least one shape. If you get this error when attempting to save, select each path in the list to check that a base colour has been correctly specified for that path, and then retry.

Perspective – This is a setting that will only affect textures if they are applied to this path. Essentially each texture image that can be applied to a path is viewed from a 'head on' angle, however some aspects of an image being pathed may not exist in this same 'head on' plane e.g. a wall may appear to be getting smaller in the distance as we look at it in the image. The perspective tool attempts to give the user an 'approximation' of the plane that a path or a shape in the path exists on, so that if a texture is applied, a more realistic look can be achieved.

Perspectives can be set for an entire path or on individual shapes. If parts of the image that exist in the same path also exist in the same plane then the entire path can have a perspective applied. If however two parts of the image that exist on the same path exist on different planes, then they should be made into separate shapes and have their own individual perspectives applied.

To set a perspective for an entire path select the path in the image paths list, but do not select an individual shape using the select tool. Roll the mouse over the 'Entire path' block control and notice the cursor changes to the hand icon. Click the mouse, and a grid of nine possible perspectives will be displayed. Select the perspective that best represents the perspective of the object in the image, and that perspective will be set for the entire path.



To set a perspective on individual shapes in a path, select the path in the image paths list, and then select an individual shape using the select tool. Roll the mouse over the 'Individual Shape' block and notice the cursor changes to the hand icon. Click the mouse, and a grid of 9 possible perspectives will be shown, select the perspective that best represents the perspective of that shape in path, and that perspective will be set for that shape. Repeat this process for all the other shapes in that path as required, otherwise they will default to the perspective shown for the 'Entire path'. Be careful not to set the 'Entire path' perspective when setting perspectives for individual shapes, or all the shapes in that path will have their perspectives reset to this value.

While these nine representations of perspective cannot offer every single perspective angle, they do provide some good approximations that aid visualisation of textures.

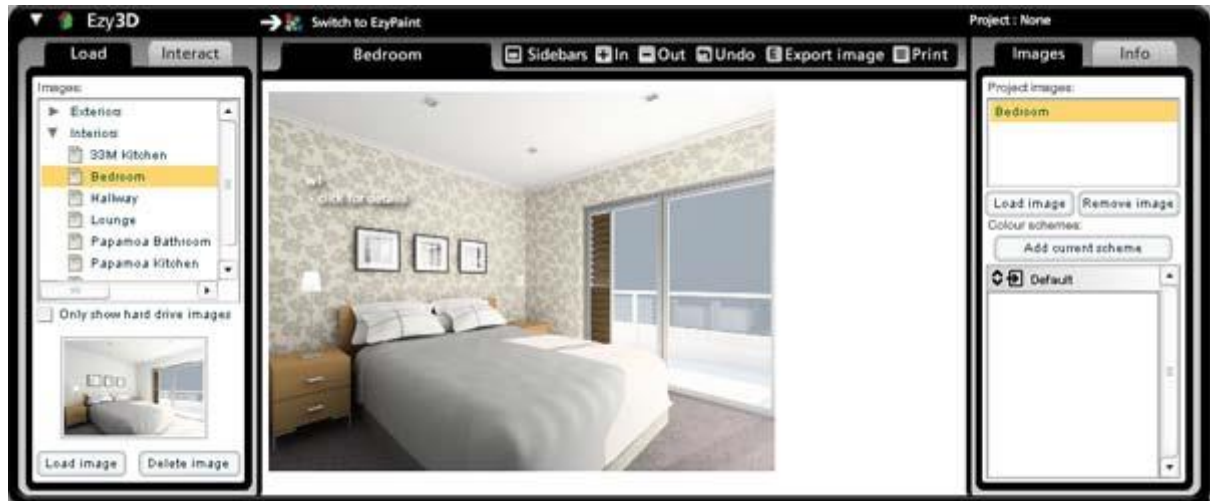
Delete image path – The last control available on the Path details dialog is the 'Delete image path' button, pressing this button will delete the current image path, via a dialog box asking for confirmation. This deletes the path along with any of the shapes that existed on this path. If the last path is deleted then it is removed in the same fashion as other paths, but a new blank path is added afterwards, as each image is required to contain at least one path.

TIP: If you accidentally delete a path or a shape from a path, do not save the path file, and exit EzyPaint. When you restart and reload the file it will be in the same state as it was when it was last saved before the mistake.

6.0 Ezy3D

[Install Version Only]

The Ezy3D Component produces next generation dynamics to building your perfect home. The creative 3D models designed with Ezy3D allow the user to build the selected home area to perfection with ease of use and provides specification documents custom to all products generated in the final model.



6.1 The Load/Interact sidebar



[Install Version Only] This sidebar on the left hand side of the Ezy3D interface is where the user can load and interact with images in Ezy3D.

6.1.1 The Load tab – When the user first loads the application only the ‘Load’ tab will be displayed. The Interact tab only becomes available when an image has been loaded into the browser window. Selecting these tabs when they are available changes the set of tools available and the types of operations that can be carried out upon the image.

From the Load tab the user can select a 3D model to load from the tree component. Selecting a model in the tree component updates the thumbnail viewer beneath it with a preview of that model.

If the thumbnail preview is shown clearly without a text overlay, then this means that the image is currently available on the user's hard drive. If a message that reads ‘Load from CD or web’ is shown over the thumbnail then this means that although the image is available, it is not currently installed on the user's hard drive and needs to be installed before the image can be loaded.

If the user wishes to view the image tree control so that only those images that reside on their hard drive are listed, and not those that are available but need to be installed, they need only click the checkbox beneath the tree control labelled ‘Only show hard drive

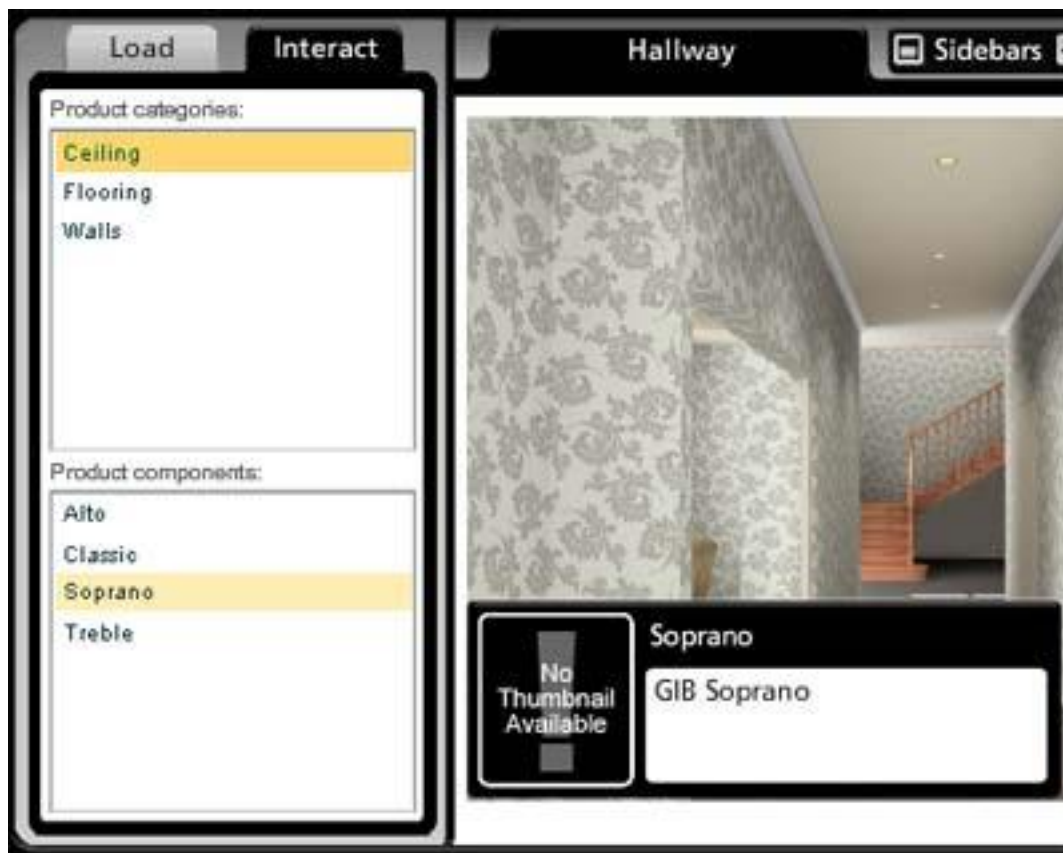
images'. Similarly to display all of the available images regardless of their location, they should uncheck this box.

The 'Delete image' button enables when the user selects a model from the tree component that is already stored on the user's hard drive. Selecting the 'Delete image' button will prompt the user to confirm deletion of the model and model components.

The 'Load image' button enables when the user selects a model from the tree component. Selecting the 'Load image' button on a model that has been downloaded to the user's hard drive will load the model into the main Ezy3D component view and update various components inside Ezy3D. Selecting the 'Load image' button on a model that has not been downloaded will prompt the user to download the model and model components.

If the user has decided to download the model and model components Ezy3D will display a modal notification to the user outlining the current download stage. When the download is complete the selected model will be loaded into the main Ezy3D component view and update various components inside Ezy3D. If the download fails the user will be notified via a modal notification specifying the error.

6.1.2 The Interact tab – This tab will only be made available for use once the user has selected a model to load and loaded it into the Ezy3D browser window.



The user can select a product category from the product categories list component. Selecting a product category updates the product components list component with product

models associated with the selected product category.

Moving the mouse over a product component loads a description box in the bottom left corner of the main Ezy3D component. The description box displays a thumbnail preview, product name and product description of the item the user has the mouse over.

Selecting a product component loads the product into the main Ezy3D component view for interaction. A notification tells the user that the Ezy3D component is loading the selected product.

6.2 The Ezy3D browser window

[Install Version Only]

The generic properties of the browser windows of ColorRite and EzyPaint have already been discussed and are very similar to those of the Ezy3D browser window.

When loading models from the Ezy3D left sidebar, the image is displayed in the main browser window. The browser window can be scrolled around using the scrollbars if the content extends beyond the area given to the window. In this scenario the mouse scroll wheel can also be used to scroll vertically.

Hovering over loaded product components in the Ezy3D browser window will display the name of that component and the words 'click for details'. Clicking on product components in the browser window will bring up the description box for that component as discussed in the previous section.

Areas of an image can be painted in a similar way to that of EzyPaint, by dragging and dropping colours from the ColorRite browser window. Products that have been applied to an image using the 'Interact' tab can also be painted using the ColorRite browser colours. While painting products allows users to experiment creatively, it is advised that the partner products may not be available in the colours that are applied, contact the appropriate partner for details. Some partners have specific charts included in ColorRite that represent their colour ranges, and it is best to use these to paint the appropriate partner products if they are available.

Clicking on a painted area, base image or product, displays a description box for that area/product. In the lower right hand corner of the description box is a 'Clear paint' button, which if pressed, will clear any paint that has been applied to the area concerned. This is useful if you wish to view the area again in its 'natural' state.

Along the top of the Ezy3D browser window lies the name of the model that is currently loaded into the browser, as well as a toolbar with buttons to aid browser operations. The buttons in this toolbar are as follows:



Sidebars – has already been discussed, allows more room in the browser window by hiding or showing the two sidebars.

In/Out – These buttons allow the image to be zoomed in and out.

Undo – This button allows the user to remove and reapply the last colour or texture that was added to a model.

Export image – This button allows the user to export the image that is currently being viewed in the browser with all the colours, textures and products that they have applied to their hard disk for reference. The export process is exactly the same as the process detailed for exporting an image from EzyPaint.



Print – Requires a printer to be available to the computer EzyPaint is running on. This allows the user to print the image as it is currently displayed in the Ezy3D browser window. Once this button is pressed the user is presented with a dialog asking how they wish to print the image. Choosing one of the four print options followed by the 'Yes' button will print the image in the chosen fashion, namely:

Image – The image as it appears in the browser window is printed.

Image, specifications – The browser image is printed along with a list of specifications for the products, paints and textures applied to the model, as detailed in the section on the Info tab.

Specifications – A list of specifications is printed.

Original, image, specifications – Identical to the second print option except that the original image without changes made is displayed next to the current image

6.3 The Images/Info sidebar

[Install Version Only]



The Images/Info sidebar on the right hand side of the Ezy3D interface displays either details on the image currently displayed in the Ezy3D browser, or information about the product partners for all of the products available for that image. Clicking on one of these two tabs will display the appropriate content in the sidebar window pane.

6.3.1 The Images tab – The components that make up this tab will only be made available once the user has loaded a model into the Ezy3D browser window.

Loading a model will update the project images list component with the model and visually style the model list with a highlight. Selecting a model from the project images list component will update the project images component visually by highlighting the selected model.

Selecting the 'Load image' button will load the model into the main Ezy3D component view, A modal notification will appear requesting if the user would like to continue with the previous session project from where they left it or start a new model project from scratch. If there is only one model listed in the project images list component then no interaction will occur.

Selecting the 'Remove image' button will remove the model from the project images list component and destroy the current session project data for that model. If there is only one model listed in the project images list component a modal notification will appear advising that the model cannot be removed from the project images list component.

As in the EzyPaint application, the bottom section of the Images tab controls the 'Colour schemes'. A 'Colour scheme' captures a point in time when the model displayed a certain combination of products and colours, and should be created when the user thinks they may want to work on or view this combination again.

The user can also add their own colour schemes to a model, by selecting the 'Add current scheme' button. This adds a new scheme to the scheme container component. The scheme container component automatically scrolls to the scheme added.

6.3.2 The Info tab – the 'Partner information' pane displays a list of all partner product models associated with the loaded model. Scrollbars visually activate once the text list has exceeded the size of the pane and the user can scroll through this text by selecting the up and down scroll arrows or by using the mouse scroll wheel.



The 'Website links' pane displays a list of links to all partner product website addresses. Selecting a partner product website address launches the user's browser with the partner

product website.

The 'Specifications' pane displays the loaded model information, partner product information loaded into the main Ezy3D component view and colours painted onto the partner product.