

X-Magnifier add-on module

for X-Cart 4.1.1 or better

User Manual



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Company website: www.x-cart.com

X-Magnifier add-on module for X-Cart 4.1.1 or better

User Manual

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This User Manual is intended for X-Magnifier add-on module for X-Cart v. 4.1.1 or better. It covers most of the areas of the add-on module's installation and use and is applicable for both X-Cart GOLD and X-Cart PRO versions.

X-Magnifier add-on module for X-Cart 4.1.1 or better. User manual.

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Thank you for choosing X-Cart software solutions!

1 General Information

Get to know X-Magnifier by taking a look at the fundamentals:

- [What X-Magnifier Is](#)
- [How X-Magnifier Works](#)

1.1 What X-Magnifier Is

X-Magnifier is a commercial add-on module for X-Cart shopping cart software. It enhances delivery of image content in an X-Cart-based online store and provides enriched media experience to the store website visitors. Designed to facilitate presentation of high-resolution images on the Internet, X-Magnifier add-on module provides a Flash-based viewer that allows your store visitors to examine large images of your product items in detail and, possibly, even to save some time and traffic while doing so. Customers can freely zoom in and out on any area of an image, as well as drag the image around in the viewer work area to examine every detail of the item displayed. No image quality loss occurs during magnification, so your customers are provided the ultimate viewing experience at any magnification level.

X-Magnifier add-on module provides the following key features:

- Support for images of up to 2000 x 2000 px in size without image quality loss
- Smooth zooming and panning
- Unlimited number of zoomable images for any product in the store
- Skinnable image viewer, 2 skins included
- Resizable image viewer popup window
- Support for GIF, JPEG and PNG image formats
- Advanced tool for creating thumbnail icons
- Image repository located on the server file system
- Clear layout of all interface elements
- Ease of back-end administration

X-Magnifier add-on module is a valuable acquisition for any online store, but it is especially recommended for stores selling watches, jewelry items, home decorations, kitchen and tableware, cell phones and digital cameras, apparel and accessories, toys, antiques, artwork and various collectibles.

1.2 How X-Magnifier Works

X-Magnifier at a glance

The storefront part of the add-on provides an image viewer based on Macromedia Flash technology. The viewer allows website visitors to zoom and pan high-resolution images quickly and easily, regardless of connection speed. Images that can be displayed in the viewer are uploaded onto the server through X-Cart's administration back-end and are stored on the server file system in a multi-resolution tiled format which allows the user's browser to download only small amounts of data while an image is being panned within the viewer work area or zoomed to display an increasing level of detail.

Levels and tiles

The outstanding performance of X-Magnifier add-on module in displaying large high-resolution images even on a slow Internet connection is explained by the way these images are served to the user's web browser. Instead of providing to the browser an entire full-size large image, X-Magnifier gives the image away gradually in small portions.

After you upload an image into the store for the purpose of showcasing it in X-Magnifier viewer, this image is processed by the module in a certain way, which results in creation of *levels* and *tiles* for this image. Levels correspond to the magnification steps that the image will go through when being zoomed in the viewer. Tiles are small pieces of the image that will be loaded into the viewer at each magnification level.

The number of levels that is created for an image is defined dynamically and depends on the image size. The highest level corresponds to the largest scale at which a user will be able to view the image when zooming in.

The process of zooming and panning is as simple as switching between magnification levels and loading the necessary tiles. Whenever a user opts to change an image's zoom scale or to shift the image in the viewer work area, X-Magnifier calculates the magnification level at which the image needs to be displayed and allows the image viewer to load only those image tiles that represent portions of the image area selected by the user.

Flash technology ensures smooth transitions between the different magnification levels, so 'jumps' from one level to another are transparent to the user.

Each image tile loaded onto the user's computer is cached, so when the user chooses to return to an area of the image that he or she has already viewed, the tiles of that area do not have to be loaded from the server again, but are drawn from cache.

Due to that only a few tiles are loaded into the image viewer every time the user zooms or pans the image, load time and the amount of traffic consumed remain much smaller than they would be if the user's browser were loading entire large images.

Supported image formats and image size limitations

Source files for uploading into X-Magnifier can be in GIF, JPEG and PNG formats.

X-Magnifier does not have any limitations as to the file size of images that can be used. The file size of an image can be as large as you wish, as long as the server on which your store is running can handle it.

As to image dimensions, the maximum image size that X-Magnifier can handle without compression is 2000 by 2000 pixels. You can upload images of any size (which may be especially convenient when uploading pictures directly from your digital camera without resizing them in an external program), but all images larger than 4 megapixels will be automatically shrunk by the module to 2000 pixels along the maximum dimension.

Image repository

All the files produced by X-Magnifier as a result of processing an image that has been uploaded into the 'Images for X-Magnifier' section of your store are put into the directory `'/xcart/images/Z/ProductID/ImageID'`, where `'/xcart'` is the directory of your X-Cart installation, `'ProductID'` is a number representing the ProductID of the product for which the image was added and `'ImageID'` is a number representing the ID of the image as assigned by X-Magnifier add-on module (For example, `'/xcart/images/Z/63/1'` would be a folder containing image files for the first zoomable image of a product whose ProductID is defined as 63).

Every `'/xcart/images/Z/ProductID/ImageID'` directory in your store will contain the following elements:

- a set of JPEG image files containing image tiles for different magnification levels (The filenames of such files are defined in the format `n_x_y.jpg`, where `n` stands for the level number, `x` and `y` - for the coordinates the tile is supposed to have in the layer matrix);
- `level_0.jpg` - an image file providing the smallest scale representation of the image that a user will be able to see in the viewer;
- `thumbnail.jpg` - an icon that will represent the image in the image nav bar of X-Magnifier image viewer if more than one zoomable images are added for the product;
- `description.xml` - an XML file describing the structure of levels of the image.

Warning: Please note that the contents of the directory `/xcart/images/Z` must not be tampered with. Removing or editing any files in this directory may corrupt your image data.

When moving your X-Cart-based store to a new location, be sure to move the directory `'/xcart/images/Z/'` with it retaining the directory structure.

Image format conversion issues

Note that any GIF and PNG images that you upload for use in X-Magnifier as zoomable images are automatically converted to JPEG. Please be aware that format conversion may have an undesirable effect on images that have transparent areas: as JPEG format does not support transparency, image areas that used to be transparent in GIF and PNG will no longer look transparent after the images are processed by X-Magnifier. In GIF files, transparent areas become black, while PNG transparency may turn into shades of gray.

2 Installing and Uninstalling X-Magnifier

Find out the system requirements for X-Magnifier:

- [System Requirements](#)

Learn to install and uninstall X-Magnifier:

- [Installing X-Magnifier](#)
- [Uninstalling X-Magnifier](#)

2.1 System Requirements

Before trying to install the add-on module, make sure you have the following:

- **A web server with support for PHP 4.0.6 or better.**

Make sure the configuration file php.ini meets the following requirements:

safe_mode must be disabled.

file_uploads must be enabled.

register_long_arrays must be enabled (only for hosts using PHP5; not required for PHP4).

All these values are default.

Tip: For help on PHP configuration settings, visit <http://www.php.net>.

- **Access to a MySQL database.**

Make sure you have the following information:

- your MySQL server name,
- your database name,
- your username and password for access to the database.

- **X-Cart 4.1.1 or better** installed on the server.

- **GDLib 2.0 or better** installed on the server.

GDLib must be compiled with libJpeg (Ensure that PHP is configured with the option `--with-jpeg-dir=DIR`, where DIR is the directory where libJpeg is installed).

Note: GDLib is involved at the stage of preparing a new image for use with X-Magnifier, but it is not involved in zooming or panning of an image in X-Magnifier viewer. All GDLib does is convert images from the GIF or PNG formats to JPEG and cut them into tiles. This means that, after you have already uploaded some images for X-Magnifier into the store, deinstallation of GDLib from the server will not affect X-Magnifier's ability to show the previously uploaded and processed images in X-Magnifier viewer. However, you will not be able to upload any new X-Magnifier images without GDLib.

*** **Flash Player 8.0 or better** is required for viewing of X-Magnifier images on the client side. Users of systems on which the Flash Player is not installed will be offered to download it.

2.2 Installing X-Magnifier

To install X-Magnifier add-on module, follow these steps:

1. Ensure that the [system requirements](#) are met.
2. Obtain an X-Magnifier distribution package from the section Software distributives of *X-Cart File Area*. The package you need is contained in the archive file `x-magnifier-x.y.z.tgz`, where x, y, z are your X-Cart version numbers.
3. Decompress the distribution package archive to a local directory on your system using your favorite compression program (any archiver with support for TAR files).
4. Upload the resulting files to the server directory where your X-Cart is installed.
5. Point your browser at the location of your store with the addition of `/install-xmagnifier.php` to launch the Installation Wizard.

For example, if your domain name is `www.example.com` and your X-Cart-based store is installed in the directory `/xcart` off your web root, you should enter `http://www.example.com/xcart/install-xmagnifier.php` into your browser address line.

6. Follow the Wizard's instructions to install the add-on module at your site:

Step 1: License agreement.

This step provides a Software License Agreement for you to accept and requires you to enter your Auth code:

X-CART Gold X-Magnifier Installation Wizard
Step 1: License agreement
Version 4.1.9

Thank you for choosing X-Magnifier.
This wizard will provide you with the installation instructions and will handle most of the installation tasks for you.

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Auth code:

This is a protection from unauthorized use of installation script

I accept the License Agreement

< Back Next >

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Please read the Software License Agreement. If you agree to all of the terms of this agreement, select the 'I accept the License Agreement' check box.

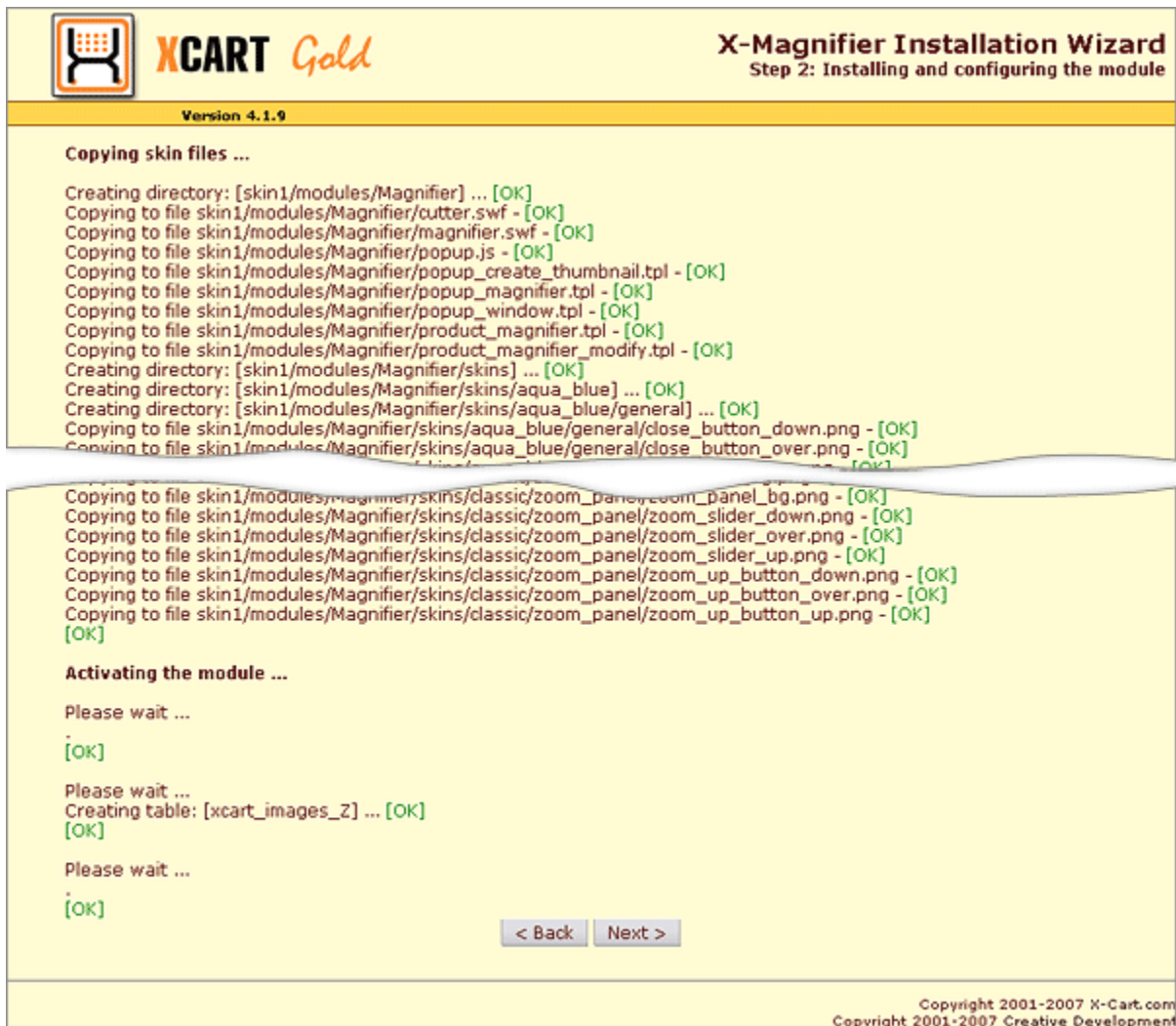
Note: By selecting the 'I accept the License Agreement' check box, you are consenting to be bound by this agreement. If you do not agree to the terms of the agreement, do not install the software.

Use the field 'Auth code' to enter your Auth code. Auth code is a special authentication code that protects your X-Cart installation. Such a code was issued to you when you first installed your X-Cart-based store. If you do not remember your Auth code, you can look it up in X-Cart's file include/install.php or in the 'Summary' section of your store's Admin zone.

Click the **Next** button.

Step 2: Installing and configuring the module.

The installation script will create a directory `skin1/modules/Magnifier` and copy the module files to that directory. It will also make changes to the database by creating the necessary database tables.



Click **Next** to proceed.

Step 3: Installation complete.

This is the final step of X-Magnifier installation. It notifies you that the module has been successfully installed and provides a link to the administration back-end of the store where you can enable and configure the module.



The screenshot shows the X-Magnifier Installation Wizard interface. At the top left is the X-Cart Gold logo. To the right, it says "X-Magnifier Installation Wizard" and "Step 3: Installation complete." Below the logo is the version number "Version 4.1.9". The main content area has a yellow background and contains the following text:

X-Magnifier module has been successfully installed

Before you proceed to use X-Magnifier module, please remove the install-xmagnifier.php installation script.
Warning! We strongly recommend you to remove X-Magnifier distribution package from your web directory to prevent unauthorized access to X-Magnifier source code.

1. **ADMINISTRATOR BACKOFFICE**
("Administration" :: "Modules")

X-Magnifier module can be enabled on the "Administration" :: "Modules" page.

Please note that you can change the style of your X-Magnifier viewer on the "General Settings" :: "Magnifier options" page.

At the bottom right, there is a copyright notice: "Copyright 2001-2007 X-Cart.com" and "Copyright 2001-2007 Creative Development".

2.3 Uninstalling X-Magnifier

To uninstall X-Magnifier, do the following:

1. Launch the Installation Wizard (Point your browser at the location of your store with the addition of / install-xmagnifier.php)
2. At the first step of the Installation Wizard (**Step 1: License agreement**), select the 'Un-install the module' radio button.

X-CART Gold X-Magnifier Installation Wizard
Step 1: License agreement
Version 4.1.

Thank you for choosing X-Magnifier.
This wizard will provide you with the installation instructions and will handle most of the installation tasks for you.

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New installation
 Uninstall the module

Auth code:
This is a protection from unauthorized use of installation script

I accept the License Agreement

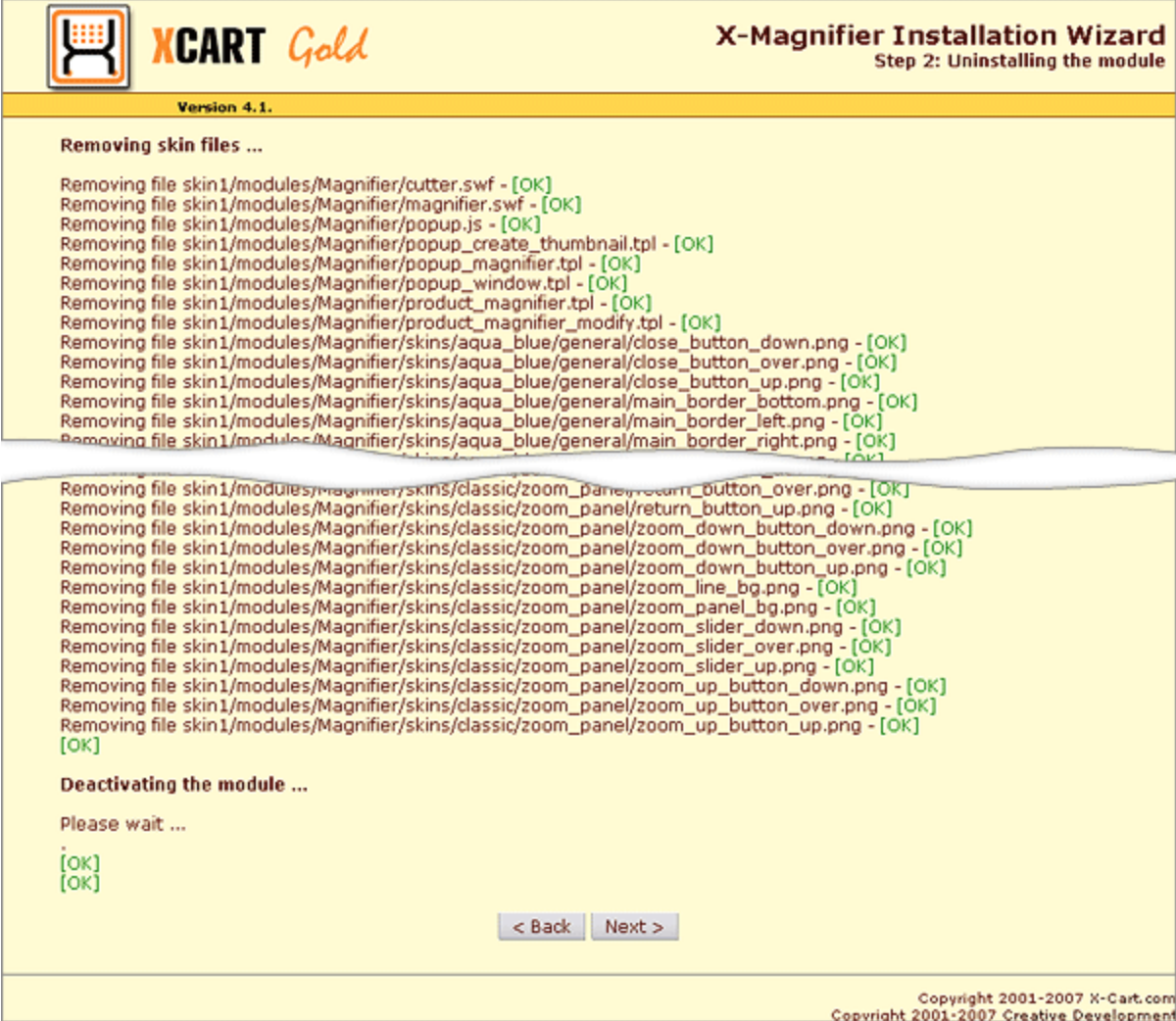
< Back Next >

Warning: The add-on module is already installed. If you proceed with the installation, all the database tables and template files used by the currently installed copy of the add-on module will be overwritten (existing data will be lost).

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Click the **Next** button.

3. The Installation Wizard will remove the module files and deactivate the module (**Step 2: Uninstalling the module**).



X-CART Gold X-Magnifier Installation Wizard
Step 2: Uninstalling the module

Version 4.1.

Removing skin files ...

Removing file skin1/modules/Magnifier/cutter.swf - [OK]
 Removing file skin1/modules/Magnifier/magnifier.swf - [OK]
 Removing file skin1/modules/Magnifier/popup.js - [OK]
 Removing file skin1/modules/Magnifier/popup_create_thumbnail.tpl - [OK]
 Removing file skin1/modules/Magnifier/popup_magnifier.tpl - [OK]
 Removing file skin1/modules/Magnifier/popup_window.tpl - [OK]
 Removing file skin1/modules/Magnifier/product_magnifier.tpl - [OK]
 Removing file skin1/modules/Magnifier/product_magnifier_modify.tpl - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/close_button_down.png - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/close_button_over.png - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/close_button_up.png - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/main_border_bottom.png - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/main_border_left.png - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/main_border_right.png - [OK]
 Removing file skin1/modules/Magnifier/skins/aqua_blue/general/main_border_top.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/return_button_over.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/return_button_up.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_down_button_down.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_down_button_over.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_down_button_up.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_line_bg.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_panel_bg.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_slider_down.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_slider_over.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_slider_up.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_up_button_down.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_up_button_over.png - [OK]
 Removing file skin1/modules/Magnifier/skins/classic/zoom_panel/zoom_up_button_up.png - [OK]
 [OK]

Deactivating the module ...

Please wait ...

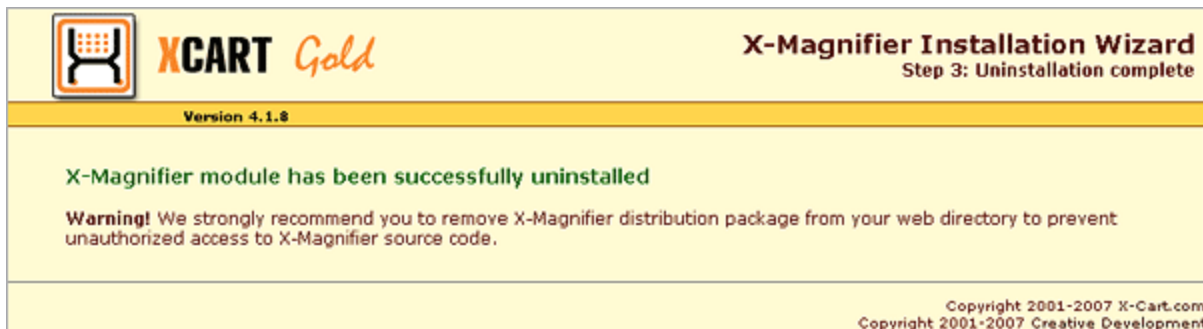
[OK]
[OK]

< Back Next >

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Click **Next** to proceed.

4. **Step 3: Uninstallation complete** is the final step of the uninstallation process. It notifies you that the module has been successfully uninstalled.



Please note that the Wizard will not automatically remove the directory `'/xcart/images/Z/'`. You will need to remove it manually.

Important: After uninstalling X-Magnifier, be sure to remove the module distribution package from your web directory.

3 Using X-Magnifier

Learn to use X-Magnifier:

- [Admin Interface](#)
- [Customer Interface](#)

3.1 Admin Interface

Find out how X-Magnifier can be activated and configured:

- [Enabling and Configuring X-Magnifier](#)

See how zoomable images can be added, edited and removed:

- [Managing X-Magnifier Images](#)

3.1.1 Enabling and Configuring X-Magnifier

Enabling X-Magnifier

After X-Magnifier add-on module is installed, you need to log into the Admin area of your store and enable it:

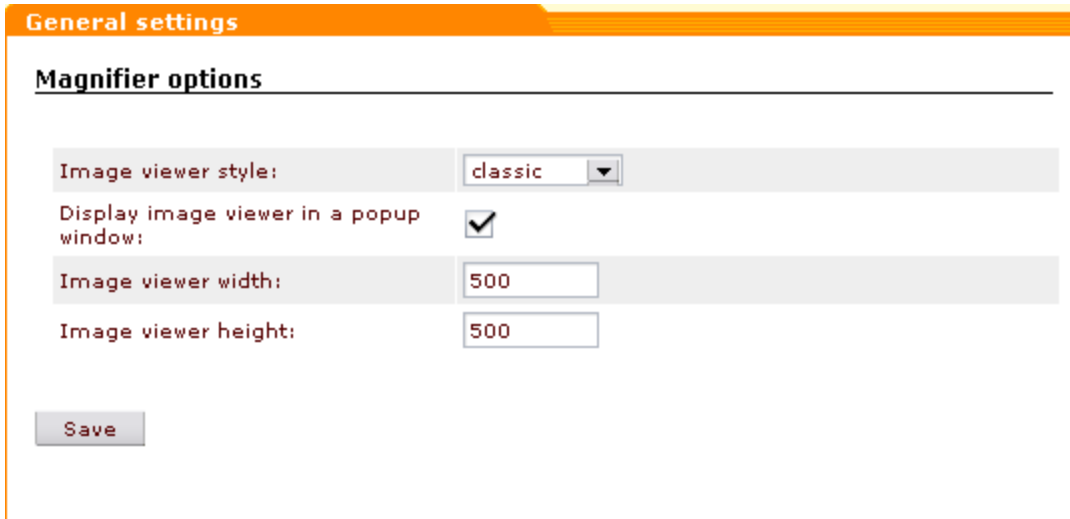
1. Go to the 'Modules' section of the store's administration back-end (Administration menu->Modules).

2. In the list of modules and add-ons, find the name 'Magnifier' and select the check box opposite it.
3. Click the **Update** button at the bottom of the list.

Configuring X-Magnifier

After activation, the add-on module needs to be configured:

1. Go to the section 'General settings/Modules options->Magnifier options':



The screenshot shows a configuration window titled "General settings" with a sub-section "Magnifier options". The settings are as follows:

Image viewer style:	classic
Display image viewer in a popup window:	<input checked="" type="checkbox"/>
Image viewer width:	500
Image viewer height:	500

A "Save" button is located at the bottom left of the configuration area.

2. Adjust X-Magnifier options:

- a) Use the option 'Image viewer style' to select a skin for your image viewer. You can choose one of the pre-designed skins provided with the module or create a skin of your own (More information is available in the chapter [Skinning X-Magnifier](#) of this manual)
- b) Select the check box 'Display image viewer in a popup window' if you wish the image viewer to be displayed in a popup window. Unselect if you wish the viewer to appear in a standard X-Cart dialog box. When displayed in a standard X-Cart dialog box, the image viewer work area is non-resizable.
- c) Use the options 'Image viewer width' and 'Image viewer height' to specify the size with which you would like the image viewer to open. When the image viewer is displayed in a popup window, the size defined by these options is used as the initial size of the image viewer frame (the size used before the user resizes the popup window in which the viewer is displayed). When the image viewer is displayed in a standard X-Cart dialog box, the size defined by these options is the only size available.

Important: The minimum size at which the image viewer can be displayed with all its elements fully visible is 420 x 420 pixels. It is not recommended to use widths and heights smaller than these values.

Note: Images being uploaded for use with X-Magnifier are sliced so that the size of their Level 0 images will fit the size of the image viewer work area corresponding to the image viewer size defined by the current values of the options 'Image

viewer width' and 'Image viewer height'. This means that if you change the values of the options 'Image viewer width' and 'Image viewer height' after having uploaded some images for X-Magnifier, the size of the previously created Level 0 images will no longer fit the work area displayed at the default size. This will not prevent normal operation of the module; however, if you wish all Level 0 images to be the same size as the default size of the image viewer work area, you might want to re-slice all your previously uploaded images. See the section [Re-slicing images](#) in the chapter 'Managing X-Magnifier Images' for details.

3. Click the **Save** button.

Important note on modules/Magnifier/config.php

Please do not change any values defined in the file modules/Magnifier/config.php except the value of '\$magnifier_sets["save_init_image"]' as it can cause a negative effect on the look of X-Magnifier image viewer and the functionality of X-Magnifier in general.

3.1.2 Managing X-Magnifier Images

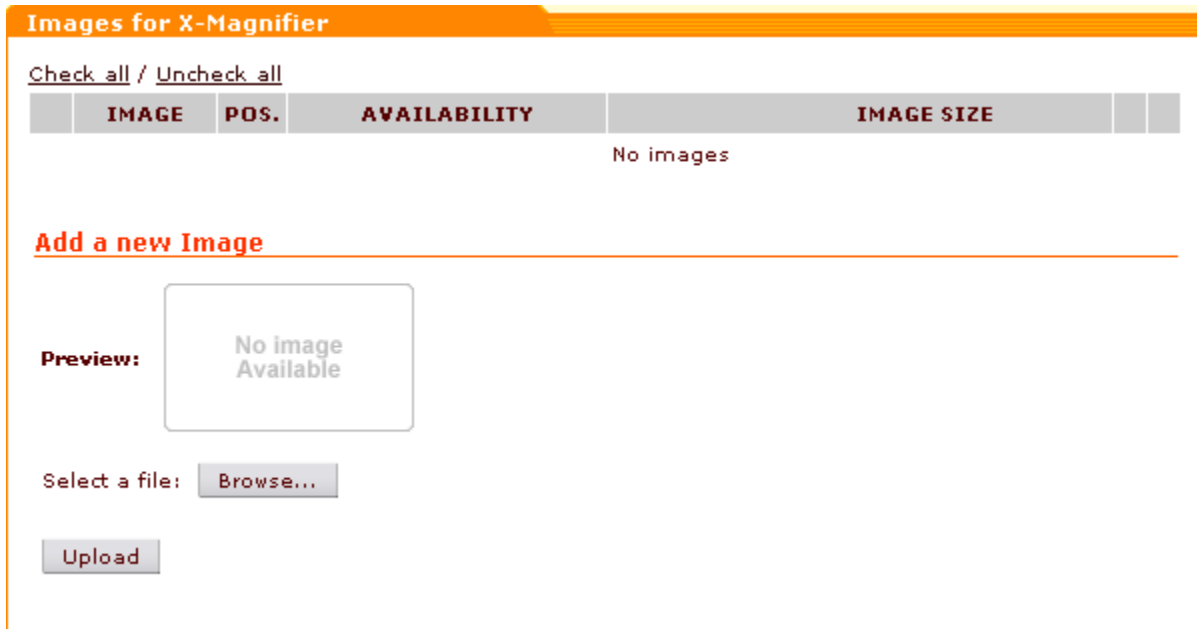
Uploading images

To upload a zoomable image for a product:

1. Find the product for which you wish to add an image and open this product for viewing/modification.
2. In the 'Product Management' section menu, click the link 'Images for X-Magnifier':

The screenshot displays the X-Cart Gold administration interface. At the top, the X-Cart Gold logo is visible on the left, and the user status 'master is logged in !' with a 'Log out' button is on the right. The main navigation menu on the left is divided into two sections: 'Management' and 'Administration'. The 'Management' section includes links for Users, Categories, Manufacturers, Wish lists, Orders, News management, Statistics, Shipping methods, Taxing system, Edit ratings, Countries, States, and Gift certificates. The 'Administration' section includes links for Summary, DB Backup/Restore, Import/Export, Membership Levels, Credit card types, Titles, Edit templates, Files, General settings, Images Location, Languages, Webmaster mode, Modules, Payment methods, Patch/Upgrade, HTML catalog, and Static pages. The main content area is titled 'Product Management' and 'Real chafer beetle decoration'. It features a breadcrumb trail: 'Main page :: Product Management :: Real chafer beetle decoration'. Below this, there are two columns: 'In this section:' and 'See also:'. The 'In this section:' column lists links for Product details, International descriptions, Product options, Wholesale prices, Upselling links, Detailed images, Images for X-Magnifier (highlighted with a mouse cursor), and Customer Reviews. The 'See also:' column lists links for Search for product, Add product, Categories, Manufacturers, and Orders. The 'Product details' section is active, showing a 'Product thumbnail' section with a recommended size of 50x50-150x150. A thumbnail image of a beetle is displayed, with 'Change image' and 'Delete image' buttons below it.

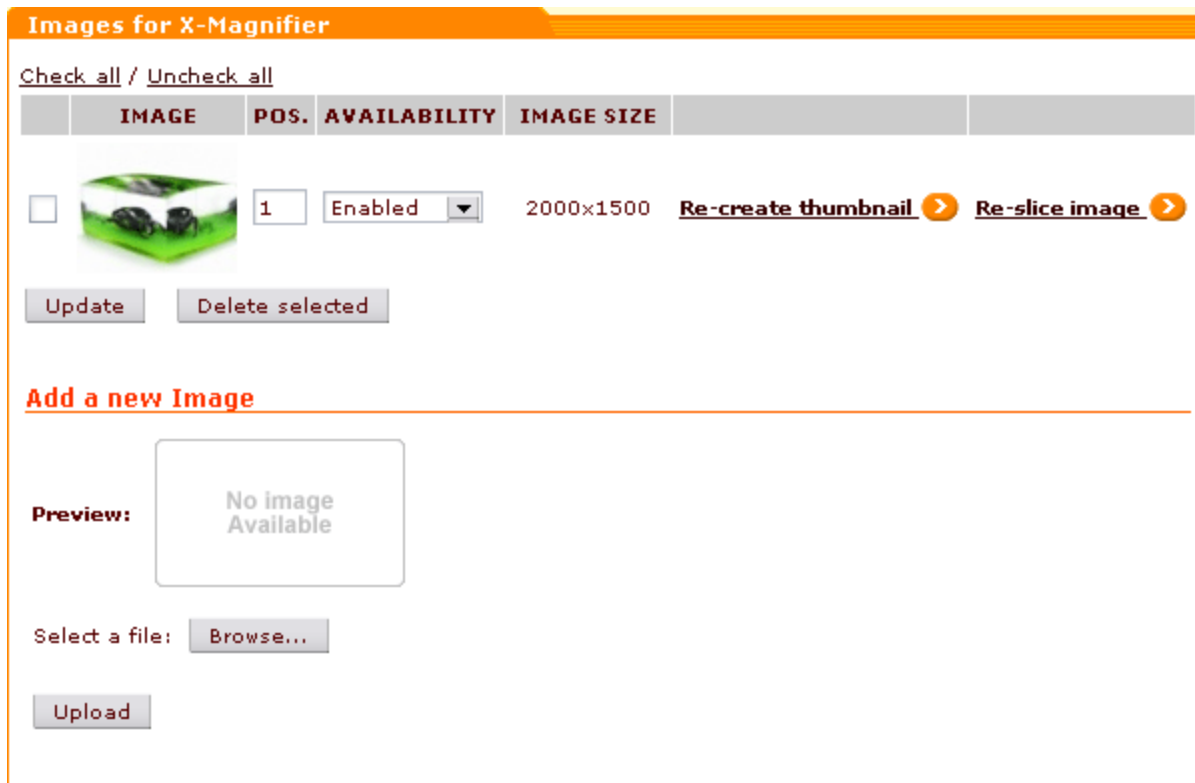
This should open a dialog box titled 'Images for X-Magnifier':



3. Select an image to be uploaded:

- a) In the 'Add a new image' section of the 'Images for X-Magnifier' dialog box, click the **Browse** button. A dialog box titled 'Image selection' opens in a new window.
- b) In the 'Image selection' dialog box, specify the location of your image file (Use an appropriate **Browse** button if the file is located on the server or on your local computer, or enter an image URL if the file is located on the Internet).
- c) Click on **Apply**. The desired image should appear in the Preview.

4. Click on **Upload**. The image should be added to the list of the product's images for X-Magnifier:



Enabling/Disabling X-Magnifier images

If you wish a certain image to become temporarily inaccessible to customers, disable this image.

To disable an image:

1. Open the 'Images for X-Magnifier' dialog box listing the desired set of zoomable product images.
2. In the list, find the image that needs to be disabled.
3. From the 'Availability' drop-down box opposite the thumbnail icon of this image, select the status *Disabled*.
4. Click the **Update** button to assign the new status to the image.

As soon as the status becomes assigned, you should see a confirmation message in an Information box.

To re-enable a previously disabled image, select *Enabled* from the 'Availability' drop-down box opposite this image and click the **Update** button.

Changing the order in which X-Magnifier images appear in the viewer

If a product has more than one zoomable images, it is possible to control the order in which these images appear in the image navigation bar of the viewer.

To change the order of X-Magnifier images:

1. Open the 'Images for X-Magnifier' dialog box listing the desired set of zoomable product images.
2. Adjust the values of POS. boxes for all the images by entering the desired position numbers.
3. Click the **Update** button for the changes to be applied.

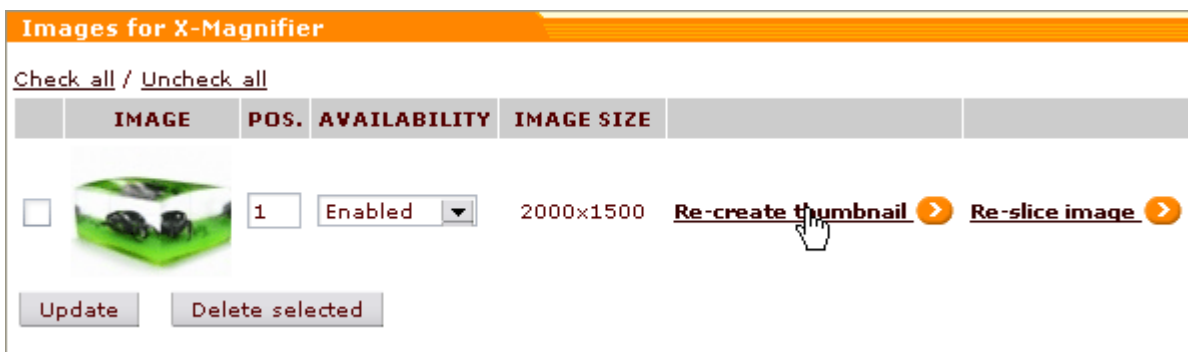
As soon as the position numbers are redefined, you should see a confirmation message in an Information box.

Creating thumbnail icons

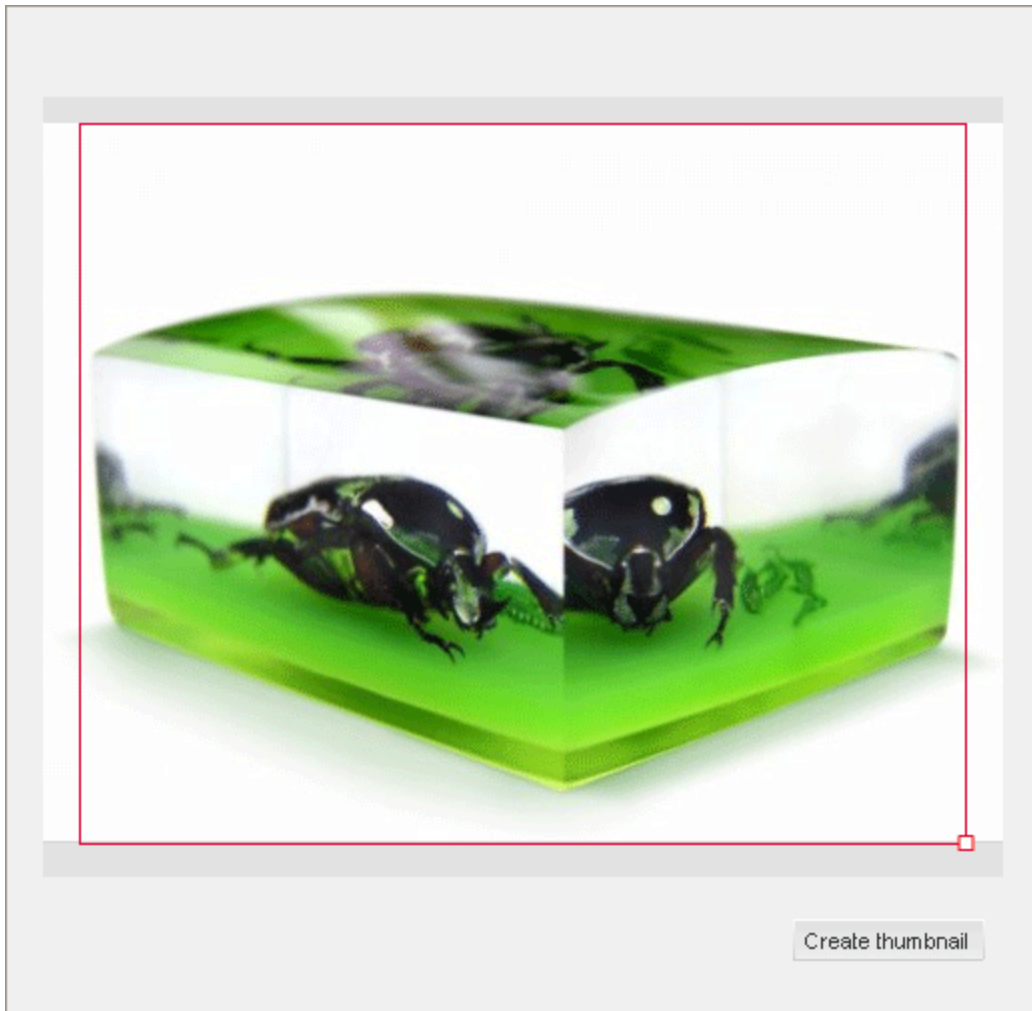
X-Magnifier provides a tool that allows you to create thumbnail icons for zoomable images.

To create or change an image thumbnail:

1. Open the 'Images for X-Magnifier' dialog box listing the desired set of zoomable product images.
2. Click on the link 'Re-create thumbnail' opposite the image for which you wish to create or change the thumbnail icon.



A popup window with the tool for thumbnail creation opens:



- Define the area that you would like to be displayed in the icon by dragging and resizing the red frame.



- Click the **Create thumbnail** button. The image thumbnail icon in the 'Images for X-Magnifier' list should be updated.

Images for X-Magnifier

[Check all](#) / [Uncheck all](#)

	IMAGE	POS.	AVAILABILITY	IMAGE SIZE		
<input type="checkbox"/>		1	Enabled ▾	2000x1500	Re-create thumbnail >	Re-slice image >

[Update](#) [Delete selected](#)

Re-slicing images

X-Magnifier allows you to re-slice uploaded images. This functionality can be used 1) to readjust the size of Level 0 images so they fit the image viewer work area after you change the size of the image viewer using the options 'Image viewer width' and 'Image viewer height'; 2) to restore lost or broken parts of zoomable images (tiles or xml data).

To re-slice an image:

1. Open the 'Images for X-Magnifier' dialog box listing the desired set of zoomable product images.
2. Click on the link 'Re-slice image' opposite the image that you wish to be re-sliced.

As soon as the selected image is re-sliced, you should see a confirmation message in an Information box.

Important: Re-slicing functionality is provided only for those X-Magnifier images for which the original image (the image that was originally uploaded into X-Magnifier) is stored on the system. Storing of original images can be enabled/disabled by adjusting the variable `$magnifier_sets["save_init_image"]` in X-Magnifier module configuration file `modules/Magnifier/config.php`. Storing of original images is enabled by default, which corresponds to the value of the variable `$magnifier_sets["save_init_image"]` set to "1". To store just image tiles, but not the original image, you can change the value of the variable `$magnifier_sets["save_init_image"]` to "0".

Re-slicing functionality is not provided for zoomable images uploaded in the previous version of X-Magnifier module.

Deleting X-Magnifier images

Zoomable images that you no longer wish to be displayed in your store can be deleted.

To delete one or more images:

1. Open the 'Images for X-Magnifier' dialog box listing the desired set of zoomable product images.
2. In the list, find the images that need to be deleted and select the check boxes to the left of their thumbnail icons.
3. Click the **Delete selected** button.

As soon as the selected images are removed, you should see a confirmation message in an Information box.

3.1.3 Skinning X-Magnifier

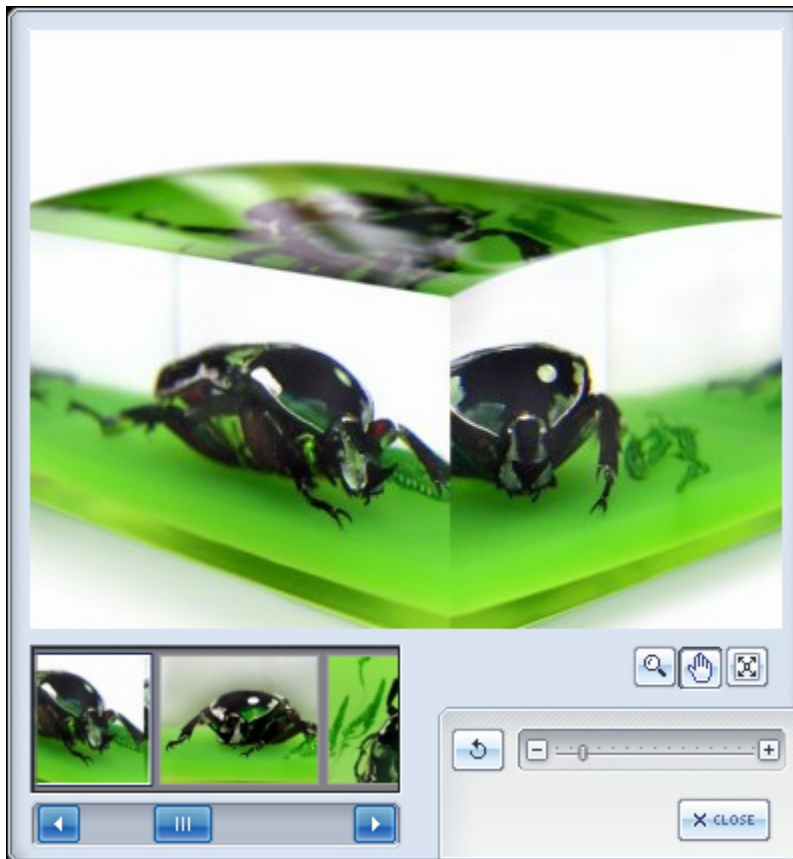
How skins are used in X-Magnifier

X-Magnifier allows you to change the style of your image viewer by changing its skins. Image viewer skins can be selected in the 'General settings/Modules options->Magnifier options' section of your store's Admin zone. You can use one of the pre-designed skins shipped with X-Magnifier add-on module or create your own skins matching your store design. Depending on the selected skin, the image viewer will load the appropriate graphic images for its visual elements.

The two pre-designed skins shipped with X-Magnifier are 'classic' and 'aqua_blue'. They provide the following image viewer styles:



'Classic' style



'Aqua blue' style

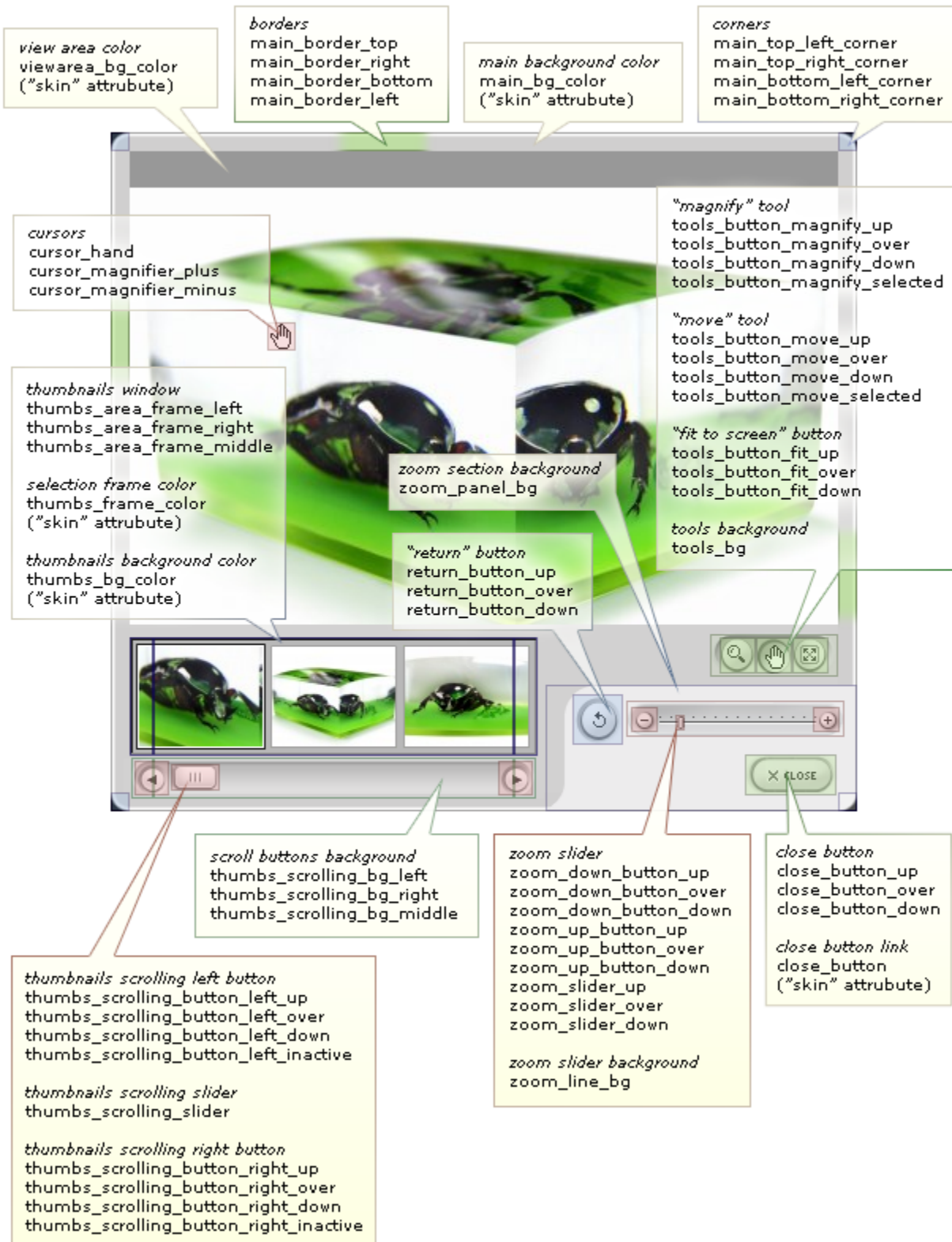
Where skins for X-Magnifier are stored

All skins for X-Magnifier viewer are stored in the directory 'skin1/modules/Magnifier/skins' (where 'skin1' is X-Cart skin directory). Every skin is stored in a separate folder and bears the name of the folder in which it is stored. Names of skin folders appear as skin names in the 'Image viewer style' drop-down box on the 'General settings/Modules options->Magnifier options' page.

Relations between image viewer interface elements and graphic files

Each skin folder contains graphic files depicting the parts of the image viewer interface and an XML data file. The XML data file describes the relations between the elements of the image viewer interface and their graphic files. Each interface element has a special name that is used in the XML data file to match this element with the corresponding graphic files.

All element names are shown in the picture below:



If you wish to change the appearance of a certain part of the viewer interface, you need to find the

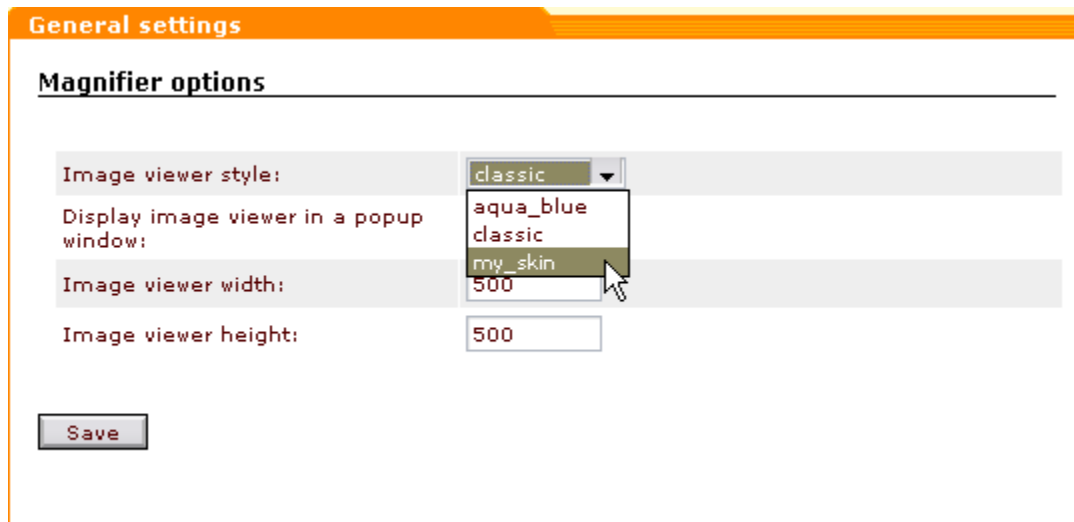
description of its elements in the XML file and edit the respective graphic files.

Customizing an X-Magnifier skin

To adapt X-Magnifier viewer appearance to the design of your store, you can create your own custom skin for X-Magnifier or modify one of the existing skins.

Customizing an existing skin is easiest of all:

1. In the X-Magnifier skins directory, clone one of the existing skins and give it a new name (for example, 'my_skin'). The new skin appears in the 'Image viewer style' drop-down menu on the 'General settings/Modules options->Magnifier options' page:



2. In the directory of the new skin, find the graphic files corresponding to the image viewer interface elements whose appearance needs to be changed (Use the XML file to find out the names of the necessary graphic files).
3. Download these graphic files to your local machine.
4. Modify the downloaded images as needed in your favorite image editor.
5. Upload the resulting images back to the directory of your custom skin replacing the old images.

After this you can use the new skin as usual.

Example:

Let us create an X-Magnifier image viewer skin that will use the same style of interface elements as the pre-designed 'classic' skin, but will be a different color (for example, pink).

We begin by creating a new skin directory ('pink') and copying the contents of the directory 'classic' into it.

For the sake of our example, we will just change the color of the image viewer 'Return' button. The

rest of the image viewer elements can be changed in a similar way, so you should be able to complete the task of changing the skin color easily after you get the idea.

If we look at the scheme provided in the section '[Relations between image viewer interface elements and graphic files](#)' earlier in this chapter, we'll find out that the 'Return' button element of the viewer interface includes, in fact, three elements corresponding to the different button states:

- *return_button_up* - the button is not pressed (normal state)
- *return_button_over* - the mouse pointer is over the button, but the button is not pressed yet ("hover" state)
- *return_button_down* - the button is pressed

Each of the named button states is rendered by its own graphic image. If we look into the XML file describing image file references for the elements of the image viewer interface for the 'classic' skin, we can find out, what image files correspond to the 'Return' button:

```
<return_button_up src='zoom_panel/return_button_up.png' />  
<return_button_over src='zoom_panel/return_button_over.png' />  
<return_button_down src='zoom_panel/return_button_down.png' />
```

The named PNG files provide the following images:



We download these images and modify them in an image editor. In our example, we just change the hue of all the images to make the button pink-ish:



Then we save the changes and upload the files back to the directory of our custom skin - 'pink'.

If we then apply the 'pink' skin to the image viewer using the option 'Image viewer style' in the section 'General settings/Modules options->Magnifier options', the 'Return' button will be different from what it used to be:



After we change the hue for all the other graphic files of the 'pink' skin, the image viewer will be as pink as this one:



Please be aware that it is also possible to change the background color against which the image viewer frame is displayed (corresponds to the color of the popup window pane and the color of the area of X-Cart's dialog box behind the image viewer). To understand why you would want to change the image viewer background color, please see the image above. This image is a screenshot of the contents of a popup window displaying an image viewer. Note the black areas around the corners of the image viewer frame. These areas are what you see of the window pane color behind the viewer frame. If you change the color of your image viewer frame like we did above, or change the background color of X-Cart's dialog boxes, the image viewer background color may look out of place. To change this color so it matches its surroundings and the color of your image viewer frame, edit the template `/skin1/modules/Magnifier/product_magnifier.tpl`. If you open this template file in a text editor, at the beginning you will find the following lines:

```
{if ($config.Magnifier.magnifier_image_popup eq 'Y' || $popup_mode eq "Y") && $js_enabled eq 'Y'}
  {assign var="use_popup" value="Y"}
  {assign var="flash_background" value="#000000"}
{else}
  {assign var="flash_background" value="#FFFFFF"}
{/if}
```

Here, the first definition of the variable "flash_background" determines the color of the popup window pane, the second one - the color of the dialog box area behind the image viewer. You can change the colors by editing the values of the "flash_background" variable.

3.2 Customer Interface

Find out how your customers can start X-Magnifier viewer in the Customer area:

- [Opening the Image Viewer](#)

Get an idea of X-Magnifier viewer controls:

- [Using the Viewer Controls](#)

3.2.1 Opening the Image Viewer

Depending on how the module is configured by the store administrator, the image viewer can be displayed either in a dialog box within the body of the 'Product details' page or in a separate (popup) window.

If the image viewer is configured to appear in a standard X-Cart dialog box, your store visitors will not need to do anything to open it - the viewer will be immediately available on the 'Product details' page of all products that have zoomable images.

If the image viewer is configured to appear in a popup window, store visitors will need to open it using the 'Click to zoom' link on the 'Product details' page:

The screenshot displays the X-Cart Gold storefront. At the top, there's a navigation bar with 'HOME', 'SHOPPING CART', and 'CONTACT US' buttons, along with the phone number 'CALL US: 1-800-555-5555 International: 500-555-5555'. A search bar is located below the navigation. The main content area is divided into three columns:

- Left Column:** Contains 'Categories' (Books, CD - DVD - Video, Computer hardware, Electronics, Games and toys, Gifts, Household, Men's clothes, Software, Sport), 'Bestsellers' (1. Real chafer beetle decoration), and 'Special'.
- Center Column:** Displays the product 'Real chafer beetle decoration'. It features a green beetle on a green background, a 'Click to zoom' link with a magnifying glass icon, and a 'SAVE 14%' badge. The product description reads: 'A great attention getter. A real green chafer beetle encased in acrylic. Metallic green against a bright green background. Beetle is viewable from both sides. Excellent color and detail. Stands 3 inches tall. Comes with an attractive gift box. Great for any nature lover. Will make a great conversation piece.' Below this is a 'Details' section with a table:

SKU	SKU183
Quantity in stock	6 item(s) available
Weight	0.50 lbs
Price:	\$8.99 (€ 7.82)
- Right Column:** Contains 'Your cart' (Cart is empty), 'View cart', 'Checkout', 'Wish list', 'Orders history', and 'Authentication' (Username, Password, Log in, Register, Recover password).

3.2.2 Image Viewer Controls

The image viewer provides a set of tools for exploring zoomable images.

The viewer interface looks like in the picture below:



The following tools are provided:




- Zoom tool - Allows you to zoom in and out on specific areas of an image. When selected, the mouse cursor icon changes to show a zoom tool: . Each time you click on the image, it will zoom larger by one step, keeping the point you click centered in the work area. To reduce the magnification scale, hold down the CTRL key (on Mac - APPLE key) while using the zoom tool. You will know the scale is going to be decreased if the mouse cursor icon looks like this: .
- Hand tool - Allows you to pan an image in the work area. When selected, the mouse cursor icon changes to show a hand pointer: . To pan an image, drag the hand pointer. As you pan beyond the

image edge, the view continues to pan until one of the image corners is positioned centrally in the work area. Please note that you can double click on any point of the image to bring this point to the center of the image viewer work area.

- Fit to screen button - Sets the zoom scale to the largest value that keeps the entire image fully visible in the work area. If the maximum level of the image is smaller than the work area, this tool sets the maximum available scale.
- Return button - Sets the zoom scale to the value of Level 0.
- Zoom bar - Allows you to zoom in and out on an image. Zooming can be done by clicking the plus / minus buttons or by dragging the slider.
- Close button - Closes the image viewer popup window. This button can be enabled or disabled depending on the settings of the selected skin; the link for this button is also adjustable.
- Image navigation bar - Allows you to select a zoomable image to be viewed in the viewer work area. It represents a scrollable row of image icons which you can mouse-click to get a view of the respective image. The navigation bar is provided only when there are more than one zoomable images to select from.
- It is also possible to change the zoom scale of images with the mouse wheel (available only on PC).

X-Magnifier add-on module for X-Cart 4.1.1 or better. User manual.

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