Introduction

The Web is a powerful tool to help your company promote and market its products to a global customer base. One of the golden rules of eCommerce is that images are essential to the shopping experience. A corollary to this rule is that lack of images or poor quality images will have an enormously detrimental effect on the visual impact of your site and your sales.

CommerceCM includes a sophisticated Image Manager which will allow you to manage many of the images used to complement your site and help your customers understand and want to purchase your products. Specifically, Image Manager provides a facility for you to manage images for products, alternate shots of products, fabrics or swatches, departments, and Site Ads. These different types of images are known in Image Manager as Image Categories.

Note: Image Manager in CommerceCM does *not* manage images that will be used in SiteCM pages (e.g. images used in About Us, FAQ, etc). These images are managed through SiteCM.

Background

Image Categories

Before Images are set up, Image Categories are setup for you by ideaLEVER (based on your design). Virtually all CommerceCM Implementations will use Product and Department Image Categories. Some may also use the Product Relation Image Category to support additional product images such as fabrics, swatches, on model or lifestyle shots, or alternate views of your product. As well, many CommerceCM Implementations utilize the powerful Site Ad Manager to manage one or more SiteAds at various locations throughout the site. Site Ads are image-based and the images to drive these Site Ads will be uploaded through Image Manager. Finally, some CommerceCM Implementations may have one or more custom categories (e.g. Logos) set up for use with Image Manager.

Process of Uploading Images

When you upload an image via Image Manager, Image Manager does a lot more than simply copy the image file to the Web and make it available to your CommerceCM Implementation. For example, when a Product Category image is uploaded, Image Manager takes the source image that is being uploaded and creates *all* the different versions of this image that will be required. The different versions may include:

- image for product on Department Page

- image for product on Product Detail Page

- extra large image for product which is accessible via Product Detail page

-   image for product on Basket Page

Image Manager will create copies of the source image in the appropriate size and quality for each area where an image is required.

About Image Quality and File Formats

As discussed, source images uploaded into Image Manager will be used to create the *actual* images used by your site. As such, the quality of the source images will impact how images will appear on your site.

Image quality is a complicated issue and depends on many factors including the dimensions of the image (pixel by pixel measurement) and the pixel depth (also known as dpi). The filesize of an image can be an indication of an image's quality. For example, if an image is 400 x 600 pixels and the filesize is only 30kB (kilobytes), the image will likely not be of good quality. It may be fine for display on the Web in its native form, but it will likely not be a good source image from which to create other images of different sizes.

A digital camera may produce an image with a filesize of over 1MB and dimensions 1600 x 1200. A more sophisticated digital camera may produce an image with dimensions that are five times this large and a filesize approaching 50MB. Neither of these images in their native form would be suitable for the Web. However, the 1MB image may be a perfect source image from which Image Manager can create all required versions of the image for your site.

Note: Image Manager may have difficulty loading *extremely* large images. You may encounter out of memory errors.

A more complete discussion on image quality could easily extend across many pages. The purpose here is to provide a high level discussion that will provide the background required to work intelligently with Image Manager. A good rule of thumb is that it is always best to start with higher quality (larger dimension) images and let Image Manager take the quality down to make your images "web-ready." Starting with lower quality images will create grainy and unappealing images. The best way to learn is to test your images out in your Staging environment.

Regarding file formats, the two most common formats in use on the Web are JPEG (Joint Photographic Experts Group) and GIF (Graphical Interchange Format). JPEGs are excellent for photographic images, but will generally not work as well graphs, charts and explanatory illustrations because the text may appear fuzzy, especially at low resolution. GIFs will be more suitable in these instances.

Image Manager can also accept TIFF (Tagged Image File Format) and will convert to JPEG. TIFF files are usually very high quality with high DPI and are generally used for hardcopy print work (e.g. brochures).

About Aspect Ratio (Shape)

Aspect ratio is a fancy term for the width-to-height ratio of an image. For example, an image that is 1600 x 1200 (height x width) will have an aspect ratio of 1200/1600 or 0.75. Conversely, an image that is 1200 x 1600 (height x width) will have an aspect ratio of 1600/1200 or 1.33.

As discussed earlier, when you upload an image into Image Manager, the source image will be converted into one or more web-ready images for use by your site.

It is important to realize that each variant image will be configured with a specification resolution. The figure below shows an example of a product image specification.

```
Basket Ima (50, 44)
Large (280, 244)
Medium (100, 87)
Small (150, 131)
Thumb (120, 104)
ExtraLarge (450, 392)
```

From this, we know the product's basket image will be 50 x 44 (Height x Width). This means the aspect ratio for this image is 0.88. It's important to note that all other variants of this product image (small, medium, large, thumb and extra large) all have exactly the *same* aspect ratio.

When obtaining/creating source images for upload into CommerceCM, there are three basic rules to follow:

1. The source image used for this product image should have an aspect ratio very close to the actual aspect ratio being used.

2. The source image should have dimensions larger than the largest dimension which will be used by any image variant.

An image with a different aspect ratio may be used, but Image Manger will adjust the size of the image such that the longest dimension of the source image is adjusted to match the longest dimension of the target image. The shorter dimension will be adjusted accordingly in order to preserve the aspect ratio of the source image. *Image Manger will not stretch, skew or pad any images.*

Aspect ratios are either less than 1.00 or greater than 1.00 – sometimes called portrait and landscape aspect ratios respectively. While it is important to use a source image with an aspect ratio that is very close to the target image's aspect ratio, it is especially important to use a source image which has the same portrait/landscape value as the target image.

Where to Get Source Images

There are many ways to create/obtain images for use on your site. Here are some examples:

Digital camera	You or a professional photographer can use a digital camera to create original product images. In this way, you will have complete control over the orientation of your product in the picture and the background color and can ensure it is well-suited to your CommerceCM Design.

Request from manufacturer	If you are reselling products that are manufactured by another company, you can submit a request to the manufacturer that they send you product images for use on your site.
Copy from other sites	If you are reselling products that are manufactured by another company, you may be able to copy images from the Manufacturer website, or from another reseller's website.
IstockPhoto (or similar)	IstockPhoto.com and other similar sites sell stock royalty-free images for very low prices. Images are categorized and indexed allowing users to quickly find the types of images they are looking for.
Use of a Graphics program	You (or a graphic designer) may use a graphics program to create, edit or in someway enhance images for use with CommereCM. For images such as SiteAds this process will be fairly common.

Landing Page

The Landing Page for Image Manager is divided into several sections. The **Quick Stats** section gives you an "at-a-glance" summary of the Image Categories you are using and a count of the images you have already loaded into each category. The figures below show two examples of the Quick Stats section.

Quick Stats

Category	Image Count
Department	112
MVA Images	1
Product	359
Product - Alternate	39
Product Relations	181
SideNav Ad 2	8
SideNav Ads	16
SKU Images	0
Top Logo	1

Quick Stats

Category	Image Count
Bottom Site Ad	1
Department	2
Home Page Nav Ad	1
Main Site Ad	1
MVA Images	1
Product	2266
Product - Alternate	0
Product Relations	0
Right Site Ad	1
SKU Images	0

Clicking directly on the Image Category will populate the list at the bottom of the page with all the images that have already been loaded into that Image Category.

The **Upload New Image** provides the mechanism for adding new images into CommerceCM. You select the Image Category, name the Image, browse to your source image, and then click the Continue button.

Upload New Image

Category:	[▼]
Image Name	[ ]
File	[ ] [Browse...]

[CONTINUE >>]

Image Categories are configured when your CommerceCM instance is configured by ideaLEVER (and will be particular to your CommerceCM Implementation). Uploading an image to the Product Category will produce a very different effect from uploading an image to a Site Ad category, since product images may have several variants (basket, product detail, large view etc) and generally a Site Ad image has one and only one variant. The Image Name is how the image will be subsequently referenced by other parts of CommerceCM. For example, it might make sense to name product images by their equivalent product name.

The bottom of the page provides a tool to search for images by name (or a portion thereof) as well as the table to list images for review and edit.

Image Edit Page

Once an image is loaded into Image Manager, it may edited by clicking directly on the Image Name. In the figure below, the table lists all USD-based Site Ads (a custom category for this client) so of course any of the images could be edited by clicking directly on the Image Name.

US Ads Images   4 Records ;   Page: [1 ▼] of 1   Items Per Page : [100 ▼]

expand all [+]	Image Name	H	W	Delete	EN-US
[+]	USClassicAD			🗑	■
[+]	US Summit Ad			🗑	■
[+]	US Prestige Ad			🗑	■
[+]	US Metro Ad			🗑	■

4 Records ;   Page: [1 ▼] of 1   Items Per Page : [100 ▼]

The Image Edit Page is shown in the figure below.

The Image Edit page does not allow you to actually edit the image (as you would with a graphics program for example). It does allow you to view the current image in all it's variant forms, replace the image with a new image, manage variants of the image (more on this later) and edit the Alt-Text associated with the image.

All the image variants of the image may be viewed using the Image Preview control shown below.

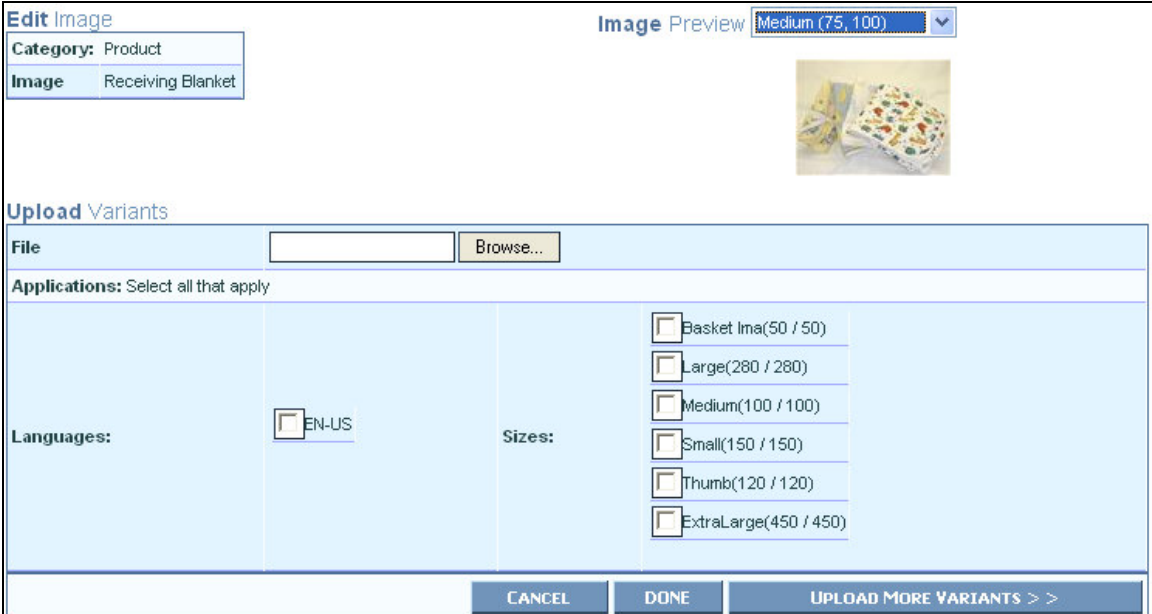An existing image may be replaced with a new version using the Replace Image control shown below.

If custom variants of the image have been created, they can be overwritten or kept based on the radio button selected. Clicking on the Browse button allows you locate the new file that is to be uploaded into Image Manager.

Manage Variants

For most CommerceCM Implementations, the Manage Variants functionality provides a mechanism to allow for one image to map to *different* images (or variants). A classic example is with product images. When a product is listed on a department page, the shopper typically hsees a thumbnail image of the product. However, when the shopper becomes interested in the product and clicks on it, the product detail page is displayed. In most CommerceCM implementations, the product image used on the product detail page will be larger (sometimes much larger) than the product image on the department page. For this reason, it may make sense to use a *different* image for the product image on the product detail page. The Manage Variants functionality provides a tool to support this requirement.

The figure below shows the Manage Variants interface.

We can now carry forward our example of using a different image (variant) on the product detail page. To accomplish this, use the Browse button to find the image for the product detail page (ensuring the source image is larger than the dimensions for which it will be used!).

Select the appropriate checkboxes to apply the variant to. In our case, we might select Large (primary image used on the product detail page) and Extra Large (the zoom image used on the product detail page).

To complete the upload of the variant(s), click the Upload More Variants button.

Managing Variants with Multiple Languages

If your CommerceCM Implementation uses multiple languages, variant images may assist with customizing aspects of your site for the multiple languages. A classic example is with Site Ads. Although Site Ads are implemented as images, they will almost always contain

written text within the image that outlines what is being offered (e.g. "Free Shipping"). If the second language being used is French, unless you create an image variant for this SiteAd, the French Language shopper will be presented with an English Language Site Ad.

To remedy this, click into Manage Variants for the SiteAd image and upload the variant (French Language) image for all applicable languages. In the figure below, we see a CommerceCM implementation with six languages in total (three versions of French and three versions of English). In this case, the French Language image for "Free Shipping" or "Livraison Gratuite" should be uploaded for the FR-CA, FR-FR and FR-AU languages for all sizes (there is only one size) of the Site Ad image.