Counterchanged, per Bend
3 Cross Botony in Chief
Lozenge Shaped Design (for Ladies)
Per Quarter Division
3 Lions Heads Erased in wide Bend
Getting Started

Go to http://inkwellideas.com/coat_of_arms/order/download.shtml to download the latest version of the Coat of Arms Design Studio. Installation instructions and screenshots are shown there. Once installed, you should see a window like this:

Coat of Arms Design Studio main screen. Here, the user has clicked in the green square to show the pop-up menu in the center of the screenshot.

The first thing you'll want to do is click the Update License button. A prompt will appear asking for your license number. If you purchased the software in person, it is on the inside back cover of this booklet. If bought on-line, the license code is emailed to you. Enter the number, click “OK”, and the pro features are available.

The quickest way to start is to just click the Green Square in the center of the shield. Doing so creates a pop-up menu of things you may add to the shield: ($$$ notes a pro-version only feature.)

- Add a Creature – Adds a creature charge such as a dragon, lion, eagle, etc.
- Add a Symbol – Adds any other type of charge such as an sword, castle or cross.
- Add an Ordinary – This allows you to add ordinaries (a chief across the top of the shield, bars (horizontal lines), bendlets (diagonal stripes), etc.)
- Add a Division – Allows you to divide the shield and give each section a color.
- $$$ Add an Image – Import your own PNG image with this. It may then be positioned & re-sized.
- $$$ Add a Supporter – Add creatures (the same ones as in “Add a Creature”) to the sides of the shield.
- $$$ Add Mantling – Adds decorative designs to the sides or a helm or torse above the shield.
General

Background
To change the overall shield's background, click the (initially white) box in the upper right of the Coat of Arms Design Studio window. “Background Color or Fur” is just above the box. This will open a color selector. (See the next item.)

Color Chooser
A colored box serves as the Coat of Arms Design Studio's color chooser. The box's color represents the element's current color. So the initially white background box signifies that the shield's background is initially white.

To change the item's color, click the box. A pop-up window will appear.

The color chooser pop-up.

The large left section allows one to choose among many of colors. However, the right section uses authentic heraldic colors and furs. The 10 colors under “Tinctures” are the 10 most common heraldic colors. In addition to colors, a few patterns were commonly used in a coat of arms. These patterns were called furs (they were based on the patterns of fur coats/cloaks). Using the tinctures and furs is preferred.

When you select a color, the “Selected” box changes to that color. If you select a fur, the name of the fur appears in the box. To see what a particular fur looks like, you'll need to select it, click “Save”, then see it in use.

Blue Squares w/Arrows
Once you add a charge (creature or symbol), image, supporter, or mantling, you'll likely see a square with a thin blue line and arrow icons in the corners. This is an alternate way to position and scale these objects. However, it is less precise than using the Width, Height, Horizontal, and Vertical right sidebar selectors (see page 8) so using those controls is preferred. Another set of alternate controls is planned.

Editing a Previously Added Element
To go back to a previously added element and edit it, click the green square. Once an object is added to the design, an edit option is added to the green square's pop-up menu. Note: If an object is a child of a particular division section (see “Children of Divisions” on page 5) click that green square to edit it. Once you select an object to edit, the controls on the right side are set with the current values of that object.
Clicking the green square after adding an element allows one to edit or reorder objects.

Reordering Elements
Once more than one item is added to the design, the green square pop-up menu includes an option to reorder the objects. (See the diagram immediately above.) Choose “Reorder objects” and a dialog like the one below will appear:

The reorder objects dialog.

To use the dialog, select the appropriate row in the table and click the “Move Selected Up” or “Move Selected Down.” The list in the table shows the order that the objects are stacked in the shield design. Objects on the top of the list's table are above the other shield elements. You may need to click “Close” to see the changes take effect. Click “Close” when finished.

Deleting Objects
If the object you wish to delete isn't the current object you're editing, select the object for editing. (See “Editing a Previously Added Element” on page 3.) Then, click the “Delete Object” button in the bottom right corner.
Add/Edit a Division

Divisions divide the shield in several different ways, based on the chosen division.

The controls for editing a division are:

**Select Division:** Use this drop-down selector to pick a division (per pale = two sides split vertically; per fess = two sides split horizontally; per quarter = shield divided into four quarters; many more)

**Main and Border Color Selectors:** These color selectors allow you to change a division section's color or a section's border color. (Color selectors are detailed on page 3.)

**Border Width:** Set the ordinary's border width using this spinner. 0 turns the border off.

**Resize objects to fit division:** When checked, all percentages for any child elements (see below) will be scaled to fit within the division section's area.

The example to the left does not have “Resize objects to fit division” checked, the example to the right does have it checked.

Children of Divisions

An important feature of the Coat of Arms Design Studio is that shield elements may be added to a specific part of a division. This allows a charge to be cut off when it is part of a division to support one form of marshalling. (See the bear in the left image above.) For more on marshalling, see page 16.

To add an object to a specific part of a division:

1. Click one of the smaller green squares. Divisions which may have children will add green squares to the shield. These new squares are centered in the middle of the appropriate section of the division.

2. Choose the desired child object type from the pop-up menu.

3. Edit it as you would any other shield element.

*Divisions may have child divisions.*
Add/Edit an Ordinary

Ordinaries are simple geometric figures added to the shield.

Ordinaries have fixed positions, so they have fewer controls. The controls for an ordinary are:

Select Ordinary: Choose among all ordinaries in the software.

Main Color: All ordinaries have one main color. (Color selectors are detailed on page 3.)

Border Color: This color selector allows you to set the border color. If the border width is 0, this color will not be seen.

Counterchange: Like charges, ordinaries may be counterchanged. Counterchanging is used in conjunction with a division to recolor the ordinary with colors opposite the division. So if a division is blue and white, the portion of the ordinary on the blue division side will be white and the portion of the ordinary on the white division side will be blue.

Border Width: Set the width of a line border around the ordinary using this spinner. “0” turns off the border.

Number: Some ordinaries allow you to set a number of them. You may set the number of these ordinaries. (See the “bars” example in the diagram above.)
Add/Edit a Creature or Symbol

Creatures and symbols in the Coat of Arms Design Studio are how heraldic charges are placed, positioned, re-sized and colored. There were simply too many charges in the system, so they were split between creatures and symbols. (Symbols is better defined as anything that isn't a creature.)

Therefore the instructions for adding and editing creatures & symbols are the same. First select “Add a Creature” or “Add a Symbol” in the pop-up as seen on page 2. Next, you'll see a dialog like this one:

**New Charge Wizard** allows you to pick a creature/symbol, arrangement and initial position.

Simply pick the creature/symbol you wish to add using the first drop-down selector. Small images of each are shown next to most charge’s names in the list.

The second drop-down selector lets you choose how to position the charge. The default option is to place one copy of the charge in the center. Other layouts (most with more than one copy of the charge) are possible. Small icons next to each option show each layout.

The “Copy the charge for each location in the arrangement” must be checked for multiple copies of the charge to be added. This makes the copied charges linked. When linked, some properties (rotation, flipped, colors) will change for each linked charge when any one charge’s property is changed. If the “Copy” checkbox is unchecked, a single copy is added and you must add each individually. If unchecked the final drop down list is also enabled. (You may not select the 3rd drop down if the “Copy the charge...” checkbox is checked.)

This 3rd drop-down (again, it is only enabled if the “Copy the charge...” checkbox is unchecked) allows you to set which of the locations selected in the second drop down to use for this charge. So if the checkbox is unchecked and the arrangement is set to “Two in Fess” you will see icons which let you pick which of the two places in Fess to initially position this charge.

To keep this example simple, pick a charge with just the “centered” arrangement. If you are adding a creature change and then choose “Leopard Rampant” you'll see a screen like this:

(See diagram on next page.)
The software's main screen with a charge ("Leopard Rampant") selected.

When you add a new object, it is set as the currently editable object. The right sidebar has a number of controls to edit the current object:

**Creature:** This drop down allows you to change the selected creature. If you chose a symbol charge, the label will be "Symbol" and the selector would allow you to change to another symbol.

**Width/Height:** All charges have a base size which is roughly (but not exactly) the same. If you intend to have the charge take up most of the shield, 80% for each is usually close. If you have multiple charges to place you'll want different values. You may set width and height to between 1% and 400%.

**Horizontal & Vertical:** These selectors determine where the charge will be centered from -200% to 200%. 50% centers it in the shield horizontally, but because of a typical shield's shape, 45% looks best when centering vertically.

**Rotation:** The charge may be rotated clockwise, between 0 to 359 degrees.

**Flip:** A charge may also be flipped horizontally, vertically or both with this list.

**Colors (Body, Main, Secondary, Tongue, Tooth, etc.):** Each charge has at least one aspect which may be colored. (Color selectors are detailed on page 3.)

**Counterchange:** Use this in conjunction with a division to counterchange the charge. (See the bottom-left sample on the front cover.)
Add an Image

This feature is only in the pro version.

Even though the Coat of Arms Design Studio comes with over 200 graphics, you may need something that isn't built-in. To fill this need, the software can import any .png image. (Many common or simple graphics editors can read an image in another format (such as .jpg or .gif) and let you save it as a .png.)

As with any other shield element, you add an image by clicking a green square and selecting the appropriate option from the pop-up menu.

The controls that appear in the right sidebar when you choose “Add Image” from the pop-up menu.

After selecting “Add an Image”, click the “Browse” button (in the right sidebar) to find the .png image on your computer. The selected file is noted in the “Image file:” textfield. The “Clear” button is used to remove the image and clear the textfield.

The remaining controls are identical to those in the “Add/Edit a Creature or Symbol” section (pages 8) except a .png image may not be recolored, so the color controls don't exist here.
Add/Edit a Supporter or Mantling (includes Helms, Torse, etc.)

Add/Edit a Supporter
This feature is only in the pro version.

Supporters are figures placed on either side of the shield, usually depicted holding the shield up. Often they are creatures, but sometimes they may be other objects. (See a couple of examples on the front cover.)

To add a supporter, click the green box and choose “Add a Supporter” from the pop-up menu. The edit options match those of the “Add/Edit a Creature or Symbol” section, except for counterchanging (which doesn't apply to supporters.)

Add/Edit Mantling (includes Helms, Torse, etc.)
This feature is also only in the pro version.

Mantling is a decorative object (typically ivy or cloth) surrounding the shield. However, this menu option also allows you to add a helm and/or torse (twisted fabric laid atop the helm) above the shield.

In the Coat of Arms Design Studio, add mantling by clicking the green box and then choose “Add Mantling.” As with adding supporters, the edit options here match those of the “Add/Edit a Creature or Symbol” section, except for counterchanging (which doesn't apply to mantling.)
Menu Items

**File Menu**

**New:** Clears out the design so you may start over.

**Load:** Allows you to reload a previously saved design.

**Save:** Save the design in a custom format that allows you to edit it later.

**Export Image:** Saves the design as a standard image (.png) file. When you select this in the pro version, a new window appears allowing you to enlarge the image. (You may change the width using a control at the top of the window. The height scales proportionally. Then click the window’s “Save” button. A larger image will look better when printed. Finally, give the image a filename.

- If you are not using the pro version, the image is not enlarged and this menu item simply prompts for a filename.

**Tools/Options Menu**

**Set Name/Motto:** Opens a window which lets you set a font and add some text in a scroll near the bottom of the design. To eliminate the scroll, delete the text.

![A design with a scroll for a name or motto.](image)

**Set Shield Shape:** Change the shape of the shield. Note: a lozenge shape was reserved for ladies.

**Include Space for Supporters & Helm:** If using the pro version, you can toggle this setting on/off. When on, the shield's size is diminished to give room for supporters, mantling, and a helm.

**Help**

**Instructions:** Provides a link to these instructions.

**Questions/Critiques:** Provides an email address for reporting issues.

**About:** Version and copyright information.
Notes/Rules of Heraldry

1. A coat of arms was bestowed to an individual, not a family. So anyone paying $5 or $10 for “their” coat of arms is typically just getting the first coat of arms with the same family name that the seller could find. Some countries, such as Poland, allowed ALL members of their Clan to use the Arms but normally only direct male-line descendants are allowed to use a form of the Arms. *One must do detailed research to know if you are related to the person who was granted a specific coat of arms.*

2. Metals vs. Colors: Or (yellow) and argent (white) were considered “metals” representing gold and silver respectively. Other colors were called “colors.” Since heraldry started on the battlefield as a form of recognition, placing a metal on a metal or a color on a color did not show well and was confusing.

3. Coats of Arms are described from the point of view of the wearer (i.e. back to front.) Then they are described from top to bottom and left to right.

Definitions

A full list of terms is impossible to fit here but below are some more common terms.

**Charge:** Any emblem or device occupying the field of a shield. In the Coat of Arms Design Studio, if a charge is an ordinary or division, it is called that specifically.

**Counterchange:** Changing a charges' colors to be the opposite of the division below the charge. (See the bottom left example on the front cover.)

**Division:** A partitioning of the shield into sections where typically alternating sections have alternate colors.

**Fur:** Patterns sometimes used in place of colors. They are named “furs” because the patterns were based on the look of fur coats/cloaks.

**Lozenge:** A diamond shape crest reserved for ladies.

**Mantling:** Drapery or ivy tied to a helm above the shield.

**Marshalling:** Unifying two ancestor's arms. Over time, this practice evolved.

- At one point this was done by cutting the ancestor’s arms in half (usually per pale, a.k.a. via a vertical line) and joining them, a process known as dimidation.

- Later, the two halves were compressed to fit each whole parent coat in each half and then joined in a process called impalement.

- Marshalling could also be done by quartering (where the shield is divided into quadrants) and elements from the ancestors’ arms are placed in the quarters. More detailed rules for specific placement of elements in each quarter exist.

- Inescutcheon: A small shield placed in front of the main shield.

**Ordinary:** Simple geometric designs added to the shield; some may take charges.

**Supporter:** Figures on either side of the shield, usually depicted holding the shield.