

## GAME EXTRACTOR

Extensible Archive Editor

<https://www.watto.org/extract>

### Overview:

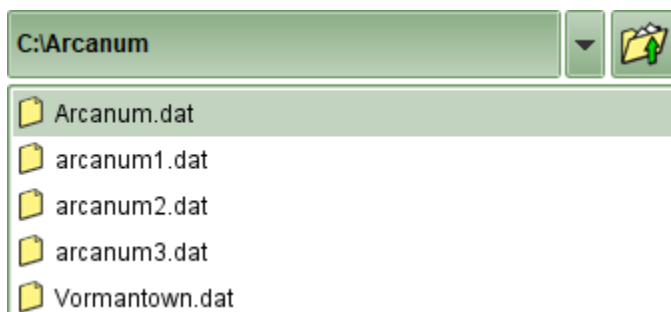
The Image Investigator tool allows you to display unknown files as images. More correctly, if you find a file that you suspect might be an image, you can use the Image Investigator to display the data as an image. This tutorial will guide you through the basics of using the Image Investigator for this purpose.

### Guided Steps:

1. Open Game Extractor.
2. Click the **Open Archive** button, or choose menu → File → Read Archive → **Open Archive**.



3. The Open Archive SidePanel will be displayed on the right. Double-click on the game archive that you want to open. In this tutorial, *Arcanum.dat* is the archive we're opening.



4. The archive will be opened, and the FileList will be populated in the main Game Extractor window. The FileList shows all the files that are in the game archive. For this example, we suspect the file *Slide\Bane.bmp* might be an image file, so we're going to investigate it.

	File Path	Compressed Size	Decompressed	Offset	Description
	Slide\Alexander.bmp	221826	481078	8854415	Bitmap Image
	Slide\Automaton.bmp	231156	481080	9076241	Bitmap Image
	Slide\Bane.bmp	240337	481080	9307397	Bitmap Image
	Slide\BatesCastle.bmp	258258	481078	9547734	Bitmap Image
	Slide\Bentley.bmp	323235	481078	9805992	Bitmap Image

5. Click to select the file you want to investigate, then click the **Hex Viewer** button, or choose menu → File → Preview → **Hex Viewer**



- The Hex Viewer SidePanel will be displayed on the right. In here, we can click some of the fields to identify a potential Image Width (value **800**) and Image Height (value **600**), and can see something that looks like a table of **4-byte color values** starting at offset **54**.

	<input type="radio"/> Hex	<input checked="" type="radio"/> Characters	<input type="radio"/> Bytes
00 (0)	B	M	8 W □
08 (8)			6 □ (
10 (16)			□ □ X □
18 (24)			□ □
20 (32)			□ □
28 (40)			□ □
30 (48)			ÿ ÿ
38 (56)	ÿ		ÿ ÿ ÿ ÿ ÿ ÿ
40 (64)	ÿ		ÿ ÿ ÿ ÿ ÿ ÿ
48 (72)	ÿ		ÿ ÿ ÿ ÿ ÿ ÿ
50 (80)	ÿ		ð ÿ ÿ ÿ ÿ ÿ
58 (88)	ÿ		û ÿ ÿ ÿ ÿ ÿ
60 (96)	ÿ		ÿ ÿ ÿ ÿ ÿ ÿ
68 (104)	ÿ		ñ ÿ ÿ ÿ ÿ ÿ
70 (112)	ÿ		æ ÿ ÿ ÿ ÿ ÿ
78 (120)	û		ð ÿ ÿ ÿ ÿ ÿ

- Now that we have the values we want to use, click the **Image Investigator** button, or choose menu → Preview → **Image Investigator**



- The Image Investigator SidePanel will be displayed on the right. We can enter the values that we found earlier (Data Offset = **54**, Width = **800**, Height = **600**), and choose one of the Image Data Formats (we think that it's a table of **4-byte color values**, so let's try **RGBA**). In this tutorial, we're not choosing a paletted image format, so all the Palette Details fields are ignored. Click the **Generate** button and see what we have.



9. In this case we seem to have a pretty good image. However, we can quickly change some of the values if we think it might be slightly wrong.

If you're currently typing in the *Data Offset* field and press the **Enter** key, the image will be regenerated, so you can continuously change the Data Offset until you find the right value.

Similarly, pressing the **Up** or **Down** arrow keys on the *Image Data Format* will cycle through the possible values and regenerate the image, so you can easily check all the different formats available.

### Further Information:

There are many other ways to perform the tasks in this tutorial, and other advanced features that you can use, such as...

- If you choose a Paletted image format, you can also specify the details of the color palette (if it's in the same file), or can choose a default Grayscale color palette.
- If you want to use the Image Investigator tool for a file on your PC (for example, if the image files are stored separately instead of being in an archive), you can drag the files into a new blank archive, and then investigate them using this same process.

Refer to the **Help** within Game Extractor, or open the <help/index.html> file in your web browser, for further information.