

A Few Tips to Reduce PowerPoint File Size

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What Causes File Bloat?

PowerPoint files (PPT) often grow to very large size. Perhaps it is not obvious why this occurs. Here are two of the most common reasons:

- 1 Graphics
- 2 Imbedded Objects

Graphics

Graphics (not graphs, but pictures or images) placed into your PPT are incorporated as-is. This means that you can get some idea of how many bytes each graphic will add by looking at its file size. Obviously one way to decrease the PPT's filesize is reducing the number of pictures. Taking this to the extreme destroys much of the “power” of PowerPoint. However, there are some ways to reduce their impact:

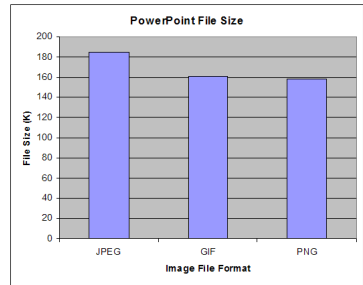
- Use compressed graphics file formats (JPEG, GIF, PNG for example).
- Crop the pictures to the vital portion of the picture.
- Rescale the image to more closely approximate the display size in your presentation.

Graphics

Here is an example. First, lets take a screen capture of a program you are working on (in this example you want to show the audience a program being used so you hit “PrtScn” to take a picture of the action).

On my computer and screen, taking this picture and dumping it unaltered into PowerPoint and saving the presentation resulted in a 185K file.

Taking that same image, pasting it into a graphics program, saving it in various file formats (JPG, GIF, PNG), and placing those images into a PowerPoint results in: 185K, 161K, and 158K for JPG, GIF, and PNG image formats respectively. (JPG and GIF often will switch order depending on what is in the image.)



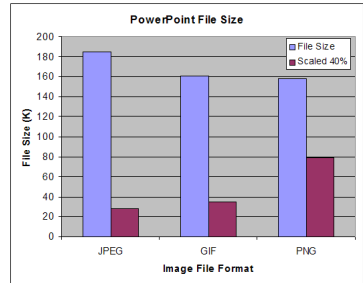
Graphics

The image we've been working with had to be scaled by 40% to fit into PowerPoint's slide format.

The next step is to rescale the images *in a graphics editor* to more closely match the size needed for PowerPoint.

Scaling each of the images to 40% of their original size and importing into PowerPoint resulted in the following file sizes: 28K, 35K, 79K for JPG, GIF, and PNG respectively.

If appropriate, cropping the image *in the graphics editor* would have similar effects. Simply by using our graphics editor before putting the image into PowerPoint, we have achieved up to a 85% reduction in the PowerPoint file size!



Graphics

Some notes:

- Image file compression does not come free. JPG and GIF formats throw some information away to achieve the compression. Usually the information lost is not significant and is undetectable, but sometimes it stands out. One frequent case where this happens is with lines and text.
- Manipulating images requires a program outside of PowerPoint. Microsoft Photo Editor and Paint are limited in the types of files they can produce and the control over the image. Paintshop Pro and Adobe Paintbrush are examples of tools with much greater image editing power.

Imbedded Objects

Imbedded objects are often inadvertently inserted into PowerPoint presentations.

For instance, you have a graph that you produced in Excel and want to display it on one of your slides. You highlight the graph in Excel, press the Copy button, go to PowerPoint and press the Paste button. You've just inserted the graphic image into your presentation – right?

Actually, no! You have imbedded a Microsoft Excel graphics object into your PPT. It contains not only the graphic image, but the supporting spreadsheet data behind it.

Imbedded Objects

If you really did not want to put the whole spreadsheet into the presentation (and if you send your presentation out to others and don't want them to have access to that data), then you have to take a few simple steps:

- Highlight the graph as you did before.
- Press the Copy button.
- Go to PowerPoint.
- On the menu select Edit→Paste Special
- Select the Picture (Windows Metafile) option

This procedure makes the graph an image and inserts the image into the PPT.

Imbedded Objects

Using the graphic several slides back, this procedure took the PPT from 35K to 30K for this simple example. In a slightly larger example the file sizes went from 78K to 35K – a 55% reduction. The savings will depend on how big the spreadsheet is that generates the graph.

Imbedded Objects

Excel isn't the only program that will do this, and graphs are not the only object in Excel that carry the spreadsheet with it. For instance, you often see a matrix of data from an Excel spreadsheet used in a presentation (like the one below). These can be produced in a reduced way (no future access to the data) using the same procedures we covered for graphs (Paste Special → Picture (Windows Metafile)).

| ID | stand | tree | dbh | height | htlc | crown | expansion |
|----|-------|------|------|--------|------|----------|-----------|
| 1 | 1 | 311 | 10.9 | 79.1 | 39.9 | 0.495575 | 1.359533 |
| 2 | 1 | 312 | 6.1 | 58.3 | 31.8 | 0.454545 | 0.583753 |
| 3 | 1 | 313 | 9.6 | 69.4 | 34 | 0.510086 | 1.229219 |
| 4 | 1 | 314 | 9.2 | 65.5 | 37.4 | 0.429008 | 1.179976 |
| 5 | 1 | 315 | 5.6 | 56.4 | 31.4 | 0.443262 | 0.439285 |
| 6 | 1 | 316 | 11.2 | 73.6 | 34.8 | 0.527174 | 1.38409 |
| 7 | 1 | 317 | 8.5 | 66.2 | 33.4 | 0.495468 | 1.081337 |
| 8 | 1 | 318 | 7.3 | 62.4 | 32.6 | 0.477564 | 0.868029 |
| 9 | 1 | 319 | 6.3 | 59.4 | 39.9 | 0.328283 | 0.636932 |
| 10 | 1 | 321 | 9.1 | 68 | 33.7 | 0.504412 | 1.166894 |

Imbedded Objects

Source programs to watch out for include:

- Microsoft Excel
- Microsoft Word
- Microsoft Publisher
- Microsoft Project
- Any program supporting Microsoft OLE (Object Linking and Embedding)

Miscellaneous Items

In closing, here are a couple of additional pieces of trivia:

- Putting an image on the Master slide *does not* reduce PPT file sizes over having a copy on every slide.
- Linking video into your presentation requires that the video clip file accompany the PPT wherever you take it – it *is not* imbedded in the file.
- Our experience has been that converting a PPT file to a PPS (PowerPoint Show) does not result in significant file size reductions.
- Less is more – the less visual clutter on the screen the clearer your presentation will be. A lot of file bloat is unnecessary window dressing.