

How to Create a Digital Comix

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Title: How to Create a Digital Comix

Code: W7DH

Abstract: *Everybody* deserves a comic book and to go along with one of our most popular keynote addresses, a comix was conceived for a handout to any and all Leading Software Maniac (LSM) event attendees. We'll show you how to create your very own using Adobe Creative Suite software applications and Digital Anarchy plug-ins (Mac or PC).

Version: V1.0 (2010-01-09) Original

Objectives

Our software and project leadership training company needed something to be used as a “leave behind” for marketing collateral that would provide a visual and written message. The target readership includes all levels of software management, program managers, project managers, software developers considering management, and software executives.

A comix, aka comic book, was selected as just the right thing to produce based on material on a chapter regarding transitioning organizations to become more agile in my latest book *Principles of Software Development Leadership*. The title speaks for itself: “7 Deadly Habits of Ineffective Software Managers.” The project was kept simple: fixed four-pages, an easy read, and easy to print (its full page spread would fit on a legal-sized sheet of paper).

The artwork is to be used as follows (in priority order):

- *Seven Deadly Habits of Ineffective Software Managers* printed comix book promotional handout (includes all habits)
- PowerPoint presentation for training purposes (displayed by habit)
- Leading Software Maniacs web site (by habit to view or by the entire set of habits to download)

Planning the Project

First question asked:

Do I use pen and ink or software to design and create it or should it be completely digital?

I have used Adobe software products for years, so why stop using them now? We chose digital instead of the old manual, non-digital way. With so many cool computer-based tools to use, why in the world would you draw by hand when you have so many killer tools available to you?

First, the hardware used:

Hardware	Vendor	Why Use It?
Intuos4	Wacom	Tablet used to simulate pencil, marker, and brushes
Precision 490 (2-Quad CPUs) with Samsung dual LED widescreen monitors	Dell	Hardware system (PDF distilling takes a lot of horses!)
MacBook Pro 13" souped-up with a 320GB 7200 RPM Western Digital HD	Apple	Running Microsoft Windows 7 Ultimate (and, of course, Snow Leopard)

The origin for the art comes from a number of sources:

Source Material	Vendor	Why Use It?
Royalty-free photos	123rf.com	Great source
Royalty-free photos	iStockphoto.com	Great source
ArtRage 2.5	Ambient Design	Original image rendering and painting
Sketchbook Pro 2010	Autodesk	Original sketching

Finally, the tools used to transform the original cell art to a comix:

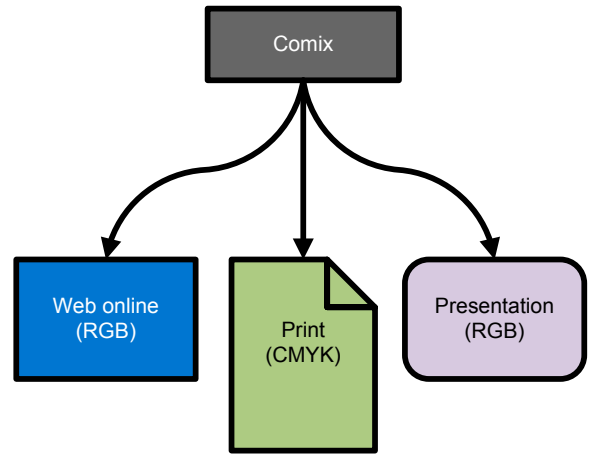
Software	Vendor	Why Use It?
Acrobat 9 Professional (AC)	Adobe	Post-process distilling and page cropping
Dreamweaver CS4 (DW)	Adobe	Publishing to the web
InDesign CS4 (ID)	Adobe	Comix layout
Illustrator CS4 (AI)	Adobe	Construction of cells
Photoshop CS4 (PS)	Adobe	Image composition and use of filters
ToonIt! 2.0 (TI)	Digital Anarchy	Plug-in for Photoshop—the secret sauce!
Visio 2007 (Windows only)	Microsoft	For storyboarding

Techsmith's Snagit and Microsoft's Visio were used to create the figures and images used in this document.

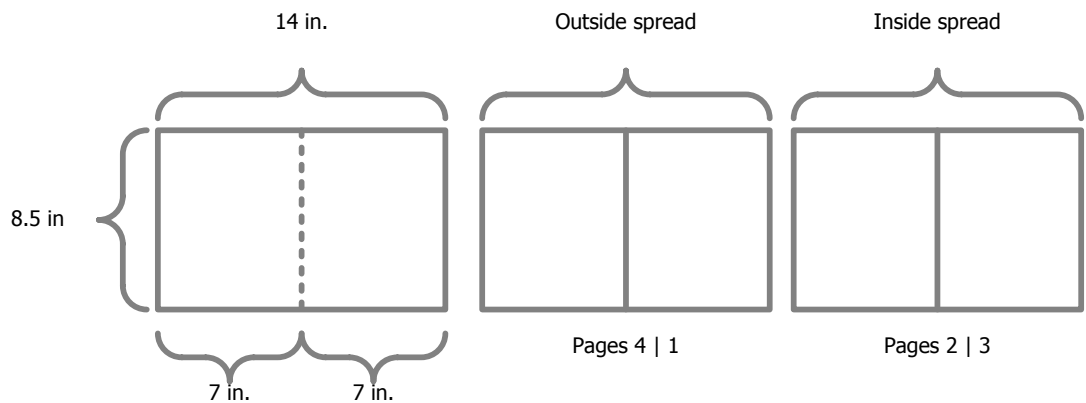
Maintaining a single-source approach is vital as long as you don't want to maintain separate, but almost the same artwork "masters."

A firm believer of not duplicating work, we needed to create the digital work with the following characteristics:

1. Recreated in stages easily original art to final layout (a layered, build-up approach)
2. Maintain the highest quality possible at any resolution (from 4-color separated to RGB)
3. Organize the project's artifacts so that artwork, frames, and text can be maintained and used separately (and, in the case of text, translated to different languages)
4. Provide last step processing for different destinations (print, document, and online) from a single source

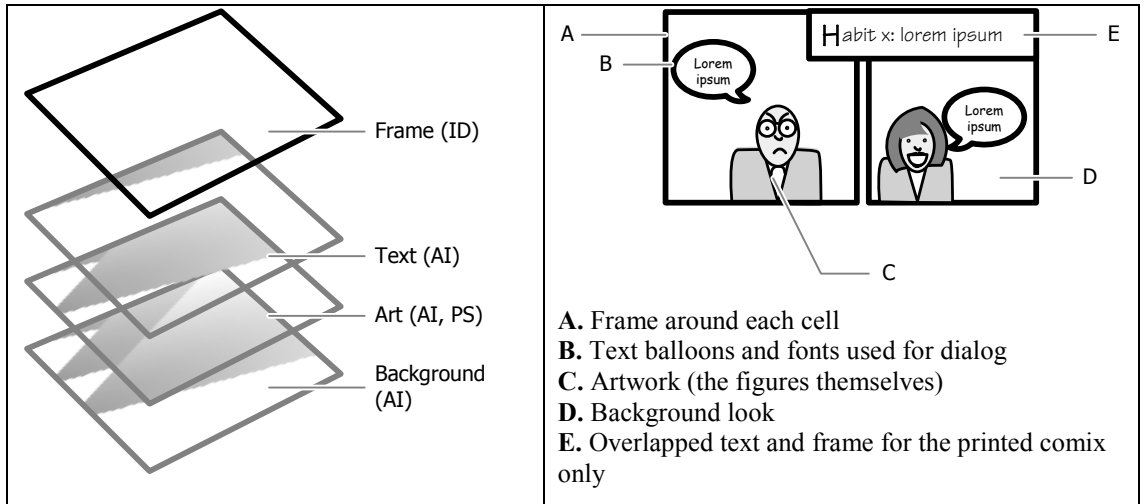


The overall layout was designed so that if somebody wanted to download and print the comix themselves, they could do that. The *layout spread* was designed with two comix pages on each side of legal paper:

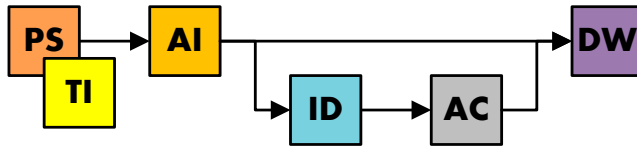


The *cell* is the holder for each and every comix picture. Since you'll want the cells to line up in an orderly fashion, you'll want to predefine a page into a grid system. We calculated several sizes ranging from XS (the smallest one) to XL (the title cell spans the width of a page and two rows). Where two cells are connected together, we represent them as two distinct cells with the same color used to connect the two. *Pretty sneaky?*

Within each cell, there is a hierarchy of layers that is composed of a stacking of art objects all designed to fit *exactly* into a preplanned cell:



Starting with the original artwork, this is the workflow (left to right):



Ready to go? Let's do it!

Create the Art with Photoshop and ToonIt!

We'll take habit 6's first cell as an example. We found the perfect low-resolution, royalty-free photo from www.123rf.com and using Photoshop, did the following:

1. Open the image in Photoshop. The image should be using the RGB color model (most plug-in filters don't work with grayscale or CMYK).
2. Copy the image from the Background layer (always a good idea just in case ...) and with the copied layer selected, click on **Filters > Digital Anarchy > ToonIt!**. (You'll have to have ToonIt! Installed in order for this to work properly.)
3. Select **Comic – basic** preconfigured setting and click **OK**.
4. You can modify the art with one of the image rendering applications we suggest like ArtRage or SketchBook Pro. It is a great idea to use Photoshop as the master file with each variation of the image kept in a separate layer.
5. Save the art as a Photoshop *.psd* file and then export it as a single-layer TIFF (*.tif*).



You're done with Photoshop!

Create the Cell with Illustrator

We have preconfigured a number of Illustrator templates (one per cell) with a number of layers that provide the flexibility for unique backgrounds, text layers (per language), and re-rendering. The template should be preset to use the CMYK, 4-color model.

1. Create the background color you desire (normally a simple gradient or bold single color is best).
2. Open the *.tif* image from the last step into a layer called **Template**. You'll notice that the image has a white background that will need to be removed and the art is "pixelated":



3. We'll convert the raster image into an illustration of editable shapes. Copy the image **Template** layer and select it. Choose the **Live Color** and select the **Color 16** option (actually I created my own 32-bit color preset). This effectively minimizes the color, groups similarly colored pixels together, and gives the artwork a woodcut (or pen and ink) drawing.



Once the raster image is turned into objects, it is still not separated into editable objects so that you can modify the artwork. Click the **Expand** button.

4. Select the artwork and then right-click and then **Ungroup**:



5. Now, you can start removing pieces and modifying the art using Adobe Illustrator's excellent drawing tools to whatever you want.



6. Once you have the drawing the way you want it, add depth with a drop shadow behind the characters by copying the art to another layer and combining it with the Pathfinder panel's **Unite** option, fill with black, and apply a shadow effect by clicking on **Effect > Stylize > Drop Shadow**:



7. Now let's enable all of the layers along with the **Frame** layer, save it, and export this for Microsoft Office (for PowerPoint or Word) and for the Web (foreground image).

Microsoft Office and Web output both use *.png* format which yields the best quality using the least amount of file space.

For high-quality print use, the PDF export to a *.pdf* will use CMYK.



Disable the **Frame** layer (background image) and export as a PDF for placement into the final comix layout with InDesign.

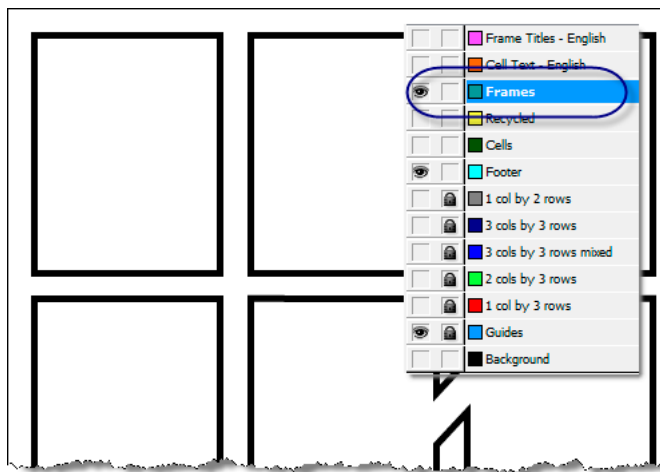
We're all done with Adobe Illustrator!

Prepare for Print with InDesign

Now that we have cells ready to go, let's bring up our InDesign template. First, the document must use the CMYK color model. Second, it is designed to work with a spread (rather than pages) based on these benefits:

1. Easy for folks to download and print both sides (front and back) on legal paper.
2. Easy for a printer – all they have to do is print and fold, no *imposition* mishaps ever!

The layout spread is shown with the **Frames** layer enabled only:

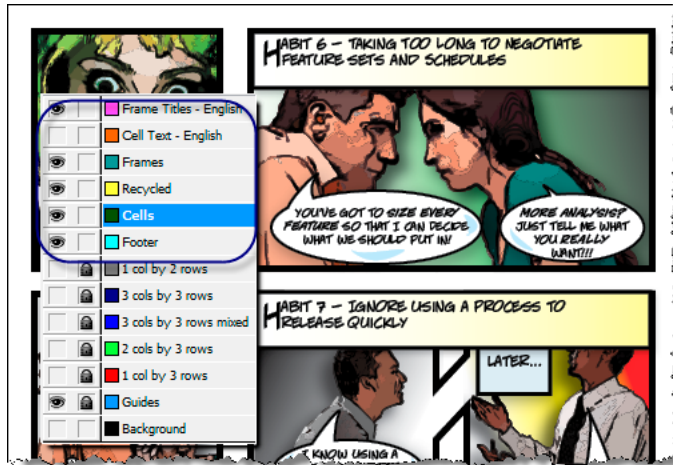


We'll place each of the finished cells exported as PDFs from Adobe Illustrator onto the **Cells** layer (we'll temporarily disable the **Frames** layer so you can see how the cells look):

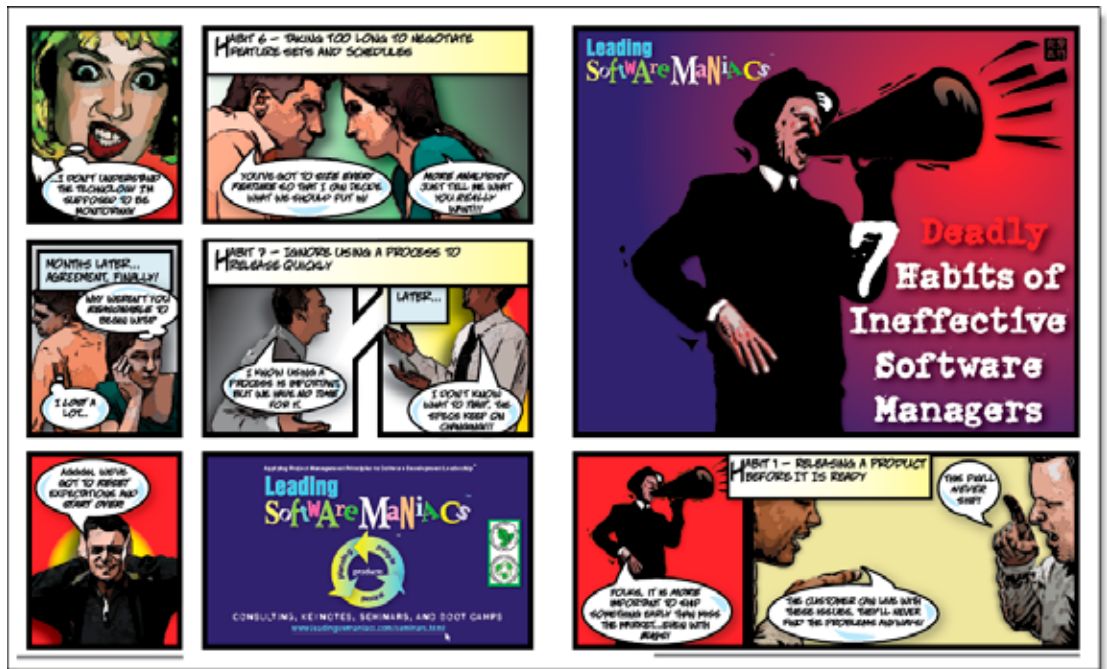


Finally, we'll re-enable the frames and create the overlapped text. Everything should now be ready for print:

And since we are friendly to our environment, we should use the post-consumable logo by enabling the **Recycled** layer—you'll notice the symbol on page 4 on the comix.



Finally, to print, select the **File > Adobe PDF Presets > [Press Quality]** and perform a **File > Save As** to create a high-quality PDF CMYK document. Depending on if you use color bleeds, you may wish to enable the .125 inch border around the layout.



Outside spread



Inside spread

You should be ready to go to print!

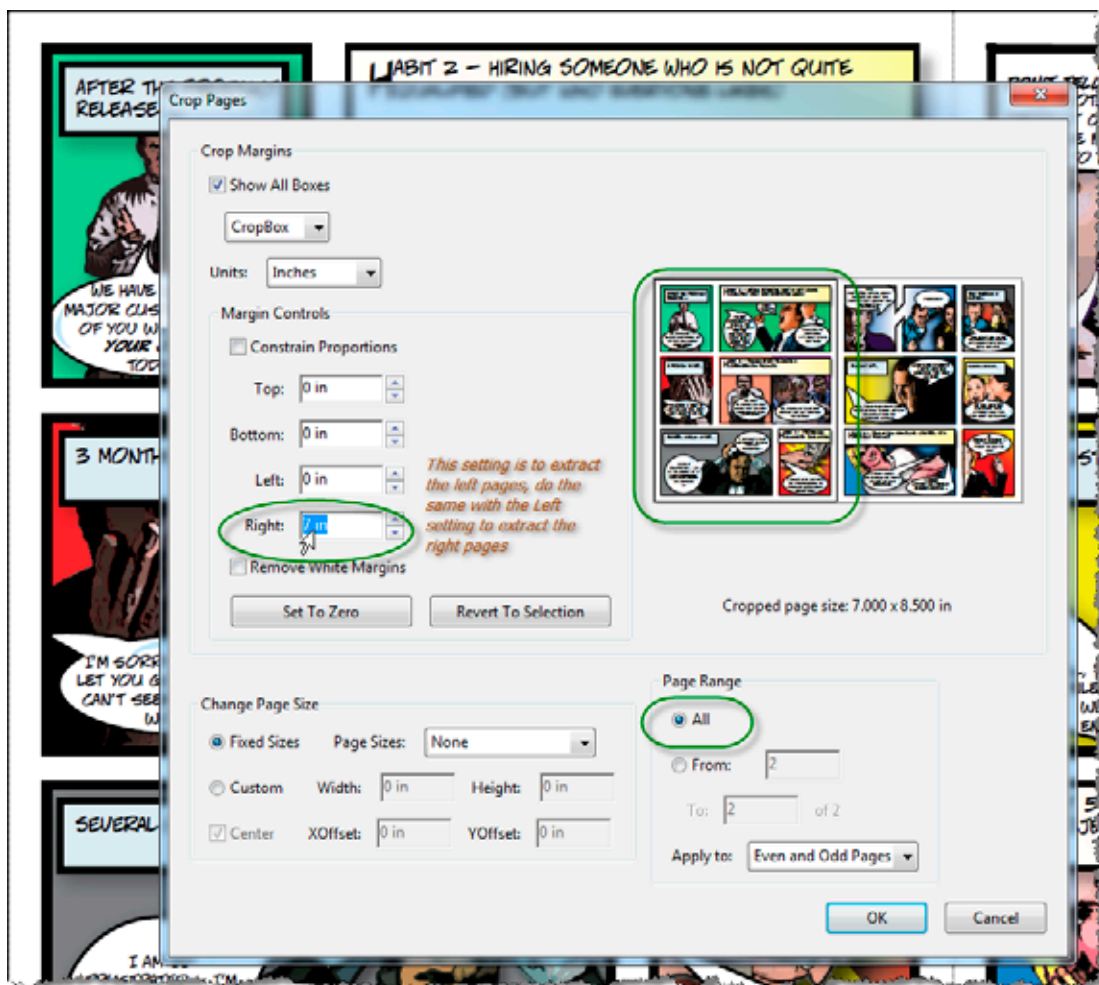
Note: You can also use the **[Smallest File Size]** PDF preset option to create a much-smaller, low-resolution PDF suitable for online display or download. You'll want to make sure to set the **Output** settings to **Convert to Destination** with the destination being the sRGB color model.

Preparing for Online Viewing

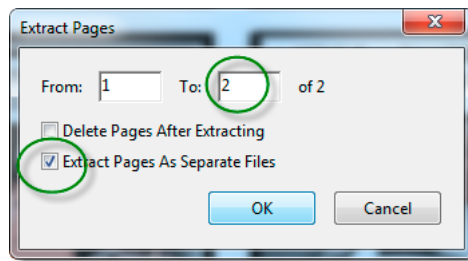
Let's use Acrobat for this part! For online use, there are two formats that make sense (you'll probably want both):

Spread (inside and outside): So that the user can download it as a PDF and print locally. For this, you'll want to simply use the CMYK PDF you created for the printer. Believe it or not, the file size difference between CMYK, RGB (high resolution), and Web Ready (low resolution) PDF isn't a lot. From Acrobat, you can always output *.jpg* (JPEG) files with the **File > Save As** command.

Individual Pages (4 individual pages): From within Acrobat, it is a very simple matter to divide the spread (14 by 8.5 inches) into half pages. Open the 2-page spread PDF you saved from InDesign and then perform the **Document > Crop Pages** command:



Select the Right to be half of the width, click **All** page range, and then **OK** to crop. This creates two pages (the left-hand ones). Then save the remaining cropped two pages into individual files with the **Document > Extract Pages** command:

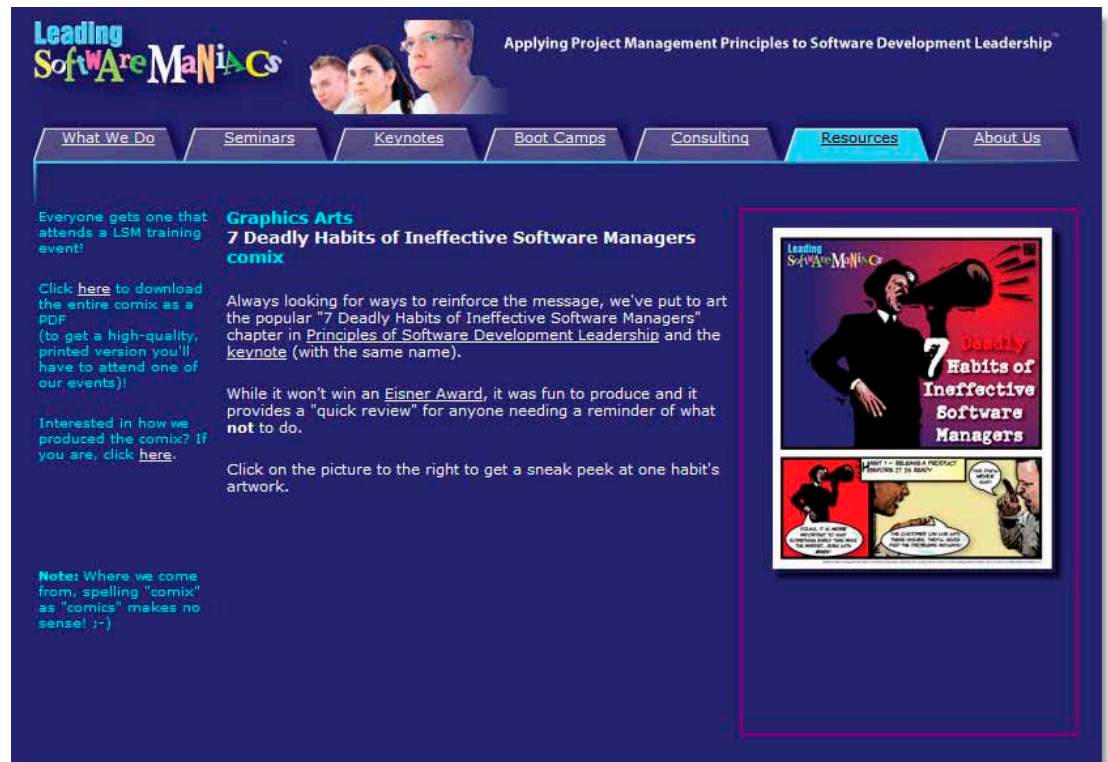


You'll be prompted for a file name and create a name something like *Comix Left Page* — Acrobat will automatically complete the file name by suffixing a *1* and *2* for each page file.

Don't save the cropped PDF—that will overwrite your spread! Do the **File > Revert** command instead and then do the same for the right side (only this time, you'd crop the right half of the spread).

You can rename the files to a more logical *Comix Page 1*, *Comix Page 2*, and so on. From within Acrobat, you can export as *.jpg* files or leave them as *.pdf* files (or provide both for download).

If you want to post the comix for download or viewing, use Dreamweaver to link your graphics onto your web page and make the finished artwork available for download with Dreamweaver's **Site > Put** or **Site > Synchronize Sitewide** commands. You can see our comix at http://www.leadingswmaniacs.com/resources_comix_c7dh.html:



The screenshot shows the website for Leading Software Maniacs, which is focused on applying project management principles to software development leadership. The page features a navigation menu with options like 'What We Do', 'Seminars', 'Keynotes', 'Boot Camps', 'Consulting', 'Resources', and 'About Us'. The main content area is titled 'Graphics Arts' and '7 Deadly Habits of Ineffective Software Managers comix'. It includes a paragraph explaining that the comix is a popular chapter from their book, 'Principles of Software Development Leadership', and a 'keynote' (with the same name). A note mentions that while it won't win an Eisner Award, it was fun to produce and provides a 'quick review' for those needing a reminder of what not to do. There is a link to download the entire comix as a PDF and a link to get a high-quality, printed version. A note at the bottom explains that the spelling 'comix' is used because 'comics' makes no sense. On the right side, there is a preview of the comix artwork, which depicts a man in a suit shouting into a megaphone, with a speech bubble that says 'I'M NOT A MANAGER! I'M A PROGRAMMER!'. Below the main preview is a smaller version of the comix showing a man in a suit talking to a man in a white lab coat, with a speech bubble that says 'I'M NOT A MANAGER! I'M A PROGRAMMER!'. The comix is titled '7 Deadly Habits of Ineffective Software Managers'.

Special Tip (Shhh...don't tell anybody): What if you want to convert the PDFs into grayscale especially if you can't afford to print with four colors?

From within Acrobat, select the following **Advanced > Preflight** command. Click under **Profiles** and then under the **PDF fixups** group, select **Convert to grayscale**. Click **Analyze and fix** and tada—color is gone, gray is in!

A Final Word

Plan, plan, and plan some more!

If you do, the resulting artwork will be fun and easy! You can do it with the Adobe Creative Suite and wonderful software add-ins like ToonIt!.

Bibliography

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(<http://www.digitalanarchy.com/toonPS/gallery/kenWhitaker.html>).

Leading Software Maniacs. “7 Deadly Habits of Ineffective Software Managers” comix download page (http://www.leadingswmaniacs.com/resources_comix_c7dh.html).

Leading Software Maniacs. “How to Create a Digital Comix” whitepaper (http://www.leadingswmaniacs.com/resources_whitepapers.html).

Whitaker, Ken. *Principles of Software Development Leadership: Applying Project Management Principles to Agile Software Development*. Boston: Course Technology PTR, 2009.

Bio



Ken Whitaker of Leading Software Maniacs™ (LSM) has more than twenty-five years of software development executive leadership and training experience in a variety of technology roles and industries. He has led commercial software teams at Software Publishing (remember Harvard Graphics?), Data General, embedded systems software companies, and enterprise software suppliers. Ken is an active PMI® member, Project Management Professional (PMP)® certified, a Lewis Institute Certified Instructor, and a Certified ScrumMaster (CSM). Sources for LSM’s presentations come from case studies, personal leadership experience, the PMI *Project Management Book of Knowledge (PMBOK® Guide)*, and Ken’s two books: *Managing Software Maniacs* and *Principles of Software Development Leadership*.

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