## All You Need to Know About Capturing Screens

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### What we’ll cover in this session

- Recommendations on when and how to use screenshots in your user assistance
- Potential pitfalls
- The basic procedure for capturing screens
- Five golden rules for capturing screens successfully
- How screen capture tools save labor and add value
- Survey of popular screen capture tools
When/why should I use screenshots?

- To identify the appearance and/or location of a control
- To show and explain the layout of a screen
- To demonstrate or explain a difficult technique or concept
- To show a correct selection or text entry
- To confirm the user has displayed the correct dialog box or screen (in tutorials)

Above all:
- Only use a screenshot if it adds real value

Identifying the appearance and location of a control

- To zoom in or out, click the **Zoom In** (+) or **Zoom Out** (-) button next to the **Zoom** box.

Just enough for easy recognition and location of control
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Showing and explaining the layout of a screen – annotated screenshot

Numbers clearly identify main regions of the screen

Demonstrating a concept

2. Choose Tools > Touchup Text > Find First Suspect. The first suspect word is highlighted on the page, and its original bitmap image appears in the Suspect Image window.

Screenshot illustrates and strongly reinforces the text
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Showing a correct selection

Creating bookmarks

Bookmarks generated from a table of contents are usually adequate to navigate through a document. However, there may be times, however, when you will want to add bookmarks that point to specific sections to draw the reader’s attention to them.

![Diagram showing a correct selection]

To create a new bookmark in the current document:

1. Click the Bookmarks tab in the navigation pane to bring the Bookmarks palette to the front.
2. Click the bookmark under which you want to place the new bookmark, if your look

Screenshot provides graphical instructions

Confirming the user has displayed the correct dialog box

A progress dialog will display as the book is published to HTML Help.

![Diagram showing a progress dialog]

Screenshot confirms to users that they have succeeded (they may not have known what a progress dialog looks like)
When screenshots can cause problems...

- Developers make late changes to the screens
- The screens need to be localized for many different countries

Possible solution:
- Blur or “greek out” the text

Example: Blurred text

Original screen capture

Localized text is selectively blurred – other dialog elements remain sharp
Another potential pitfall

Users may not notice scroll bar and assume they are seeing entire topic

Instructions are out of view beneath screenshot

Possible solution

Hotspot uses dynamic HTML to display optional screenshot
The basic screen capture process (1)

- Capturing a window:
  1. Press <ALT>+<Print Screen>
  2. Paste the Clipboard contents into an image editor
  3. Optionally: resize the image (only necessary for onscreen presentation)
  4. Optionally: reduce the color depth to 256 colors
  5. Save as a file

The basic screen capture process (2)

- Capturing a control or region
  1. Press <ALT>+<Print Screen>
  2. Paste the Clipboard contents into an image editor
  3. Crop to the required region, optionally applying edge effects
  4. Optionally: Reduce the color depth to 256 colors
  5. Save as a file
## The basic screen capture process (3)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Press <code>&lt;Print Screen&gt;</code></td>
</tr>
<tr>
<td>2.</td>
<td>Paste the Clipboard contents into an image editor</td>
</tr>
<tr>
<td>3.</td>
<td>Crop to the cascading menu</td>
</tr>
<tr>
<td>4.</td>
<td>Carefully remove the background</td>
</tr>
<tr>
<td>5.</td>
<td>Reduce the color depth to 256 colors</td>
</tr>
<tr>
<td>6.</td>
<td>Save as a file</td>
</tr>
</tbody>
</table>

Note that the cursor has **not** been included in any of the last three screenshots.

## Resizing screenshots

- **Reasons to decrease the dimensions of a screenshot**
  - Reduce screen real estate consumed
  - Avoid confusion with real screen

- **For best quality of resulting image:**
  - Use millions of colors (24- or 32-bit) before resizing
  - Use an anti-aliasing resize method
Resized screenshots

Original Image

Smart Resize

Pixel Resize

Selecting an image file format

- **BMP**
  - Windows bitmap
  - Millions of colors
  - No compression
- **JPG**
  - Format designed for digital photos
  - Million of colors
  - Lossy compression
- **GIF**
  - CompuServe Graphics Interchange format
  - 256 colors
  - Lossless compression
- **PNG**
  - Portable Networks Graphics
  - Millions of colors
  - Lossless compression
### Five golden rules of screen capture...

#### Rule 1: Color depth matters

- The color depth of your screen at capture time determines the color depth of screenshot
- Set your screen to its normal color depth – example: HighColor 16-bit (65,000 colors)
- Optional: During or after the capture, reduce the screenshot’s color depth to 8-bit (256 colors)

#### Rule 2: Use an adaptive (optimized) palette, unless your users have 256-color displays

- 256 colors are normally more than enough to represent a screen accurately
- Using the Netscape (safety) palette may result in dithering or color inaccuracies
### Example: Effect of using different palettes

<table>
<thead>
<tr>
<th>Original 32-bit color image</th>
</tr>
</thead>
<tbody>
<tr>
<td>256 color adaptive palette</td>
</tr>
<tr>
<td>256 color safety palette (nearest color)</td>
</tr>
<tr>
<td>256 color safety palette (error diffusion)</td>
</tr>
</tbody>
</table>

### Five golden rules of screen capture (continued)

**Rule 3:**
Screen resolution **doesn’t** matter

- You are capturing pixels
- The number of pixels that make up a screen element does not alter when you change the screen resolution
Five golden rules of screen capture

Rule 4:
Minimize the size of windows and dialogs before you capture them

- If possible, reduce the size of a window or dialog as much as you can without:
  - losing vital information
  - making it unrecognizable to the user

Example: Resized window

Resized dialog shows all UI elements
### Five golden rules of screen capture (continued)

**Rule 5:**
Capture only as much of the screen as the user needs to see

- Always aim to minimize the dimensions of the screen capture
- Exclude screen clutter that will distract the user from the main focus

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**Example: Cropping to the main focus**

- Dashed line indicates cropping
- Cropped screenshot shows all key elements of menu bar and toolbar
### What I look for in a screen capture tool: Minimum requirements

- Option to include the cursor (or easily add it post-capture)
- Support for capturing windows, objects, cascading menus, and rectangular regions (with precision)
- Automatic reduction of color depth using a specific palette
- Automatic addition of border or edge effects
- Automatic default to a specified file format when saving file

### What I look for in a screen capture tool: Nice to have

1. Option to save capture to a file without user intervention
2. Ability to capture individual buttons
3. Option to convert to a specified image resolution automatically
4. Ability to capture non-rectangular regions such as ellipses and polygons
5. Ability to capture scrolling windows
6. Built-in image editing
Screen capture tools

Let’s look at:

- **FullShot** – Inbit
- **MadCap Capture** – Madcap Software
- **Paint Shop Pro** – Corel
- **RoboScreenCapture** – Adobe (Bundled with Adobe RoboHelp)
- **SnagIt** – TechSmith
- **TNT Screen Capture** – EC Software

FullShot (Enterprise Edition)
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FullShot’s capture method

- Capture buttons automatically added to active window
- Each button activates a different capture type (Window, Region, etc.)
- Hotkeys can be used as an alternative

FullShot's Capture Settings dialog

General settings effecting all captures

Type-specific settings
### FullShot summary

- **For:**
  - ease of capture (using title bar buttons)
  - wide range of capture shapes and effects
  - supports concurrent editing of multiple screen captures

- **Against:**
  - can’t save capture settings as named profiles
  - no magnified view of the pointer area for precise selection of capture regions
  - no support for capturing buttons in the Standard Edition

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### MadCap Capture

- Help embedded within Capture application UI
- Mouse object is added post-capture in Capture Editor
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MadCap Capture File Properties dialog

MadCap Capture summary

- **For:**
  - saves coordinates of Region capture so that it can be recaptured in the future
  - great support for saving capture settings as Profiles
  - added callouts and objects saved in vector format

- **Against:**
  - most capture types require MadCap Capture window to be opened first
  - no magnified view of the pointer area for precise selection of capture regions
  - Fairly complex UI
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Paint Shop Pro Capture Setup dialog

- Use for buttons, controls, and custom regions
- Use for windows without title bar
- Use for entire windows
- Use for capturing pop-ups or drop-down menus
- Use for toolbars, and regions of dialogs or windows

RoboScreenCapture

- Raster-based image editing tools
- Complex but well-organized UI
**RoboScreenCapture**

**Capture Settings dialog**

![Capture Settings dialog]

Can be useful for capturing drop-down menus and pop-ups

**RoboScreenCapture summary**

- **For:**
  - wide range of capture options including capture of individual buttons and repeat last capture
  - high level of control over color depth, resolution, and compression
  - precise selection of capture region using arrow keys

- **Against:**
  - no support for special edge effects
  - can’t save capture settings as named profiles
  - no support for true freehand region
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SnagIt

Each profile contains a specific combination of settings

Logical organization of controls

Easy-to-use Wizard for creating new profiles

SnagIt Preview Window
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SnagIt dialogs

SnagIt summary

For:
- exceptionally well-designed interface and workflow
- comprehensive options for capturing, standardizing, and adding effects to images
- bundled tools include powerful vector-based image editor and file management utility

Against:
- may offer more features than required by some user assistance specialists
- rather lame capture sound effect

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TNT Screen Capture

- Simpler UI than the other capture tools
- Raster-based image editing tools
- Almost all capture options are available from these controls

TNT Screen Capture – Customize TNT dialog

- Possibly the only dialog that you’ll need to access
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## TNT Screen Capture summary

<table>
<thead>
<tr>
<th>For:</th>
<th>Against:</th>
</tr>
</thead>
<tbody>
<tr>
<td>– ease of use</td>
<td>– no support for choosing a specific color palette</td>
</tr>
<tr>
<td>– wide range of capture shapes and effects</td>
<td>– no support for capturing individual buttons</td>
</tr>
<tr>
<td>– precise selection of capture region</td>
<td>– can’t capture multiple cascading menus in a single operation</td>
</tr>
<tr>
<td>– online Help that uses Training Card functionality to operate as a wizard</td>
<td></td>
</tr>
</tbody>
</table>

## Further reading

- Review of Screen Capture Tools (Matthew Ellison)
  http://www.winwriters.com/articles/capturetools/
- http://desktoppub.about.com/od/screenscrapers/Screen_Captures.htm
- Guide for academic textbooks
  – screen captures
  (Prentice Hall)
  http://www.prenhall.com/author_guide/general/screen.html
- The Web-Safe Color Dilemma (Lynda Weinman)
  http://www.lynda.com/hex.html
Questions?

Please complete your evaluation forms – thank you

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