

Help and Documentation

It's in the manual



Agenda

- **>** Guidelines
- ➤ Types of doc/help
- ➤ Presentation issues
- ➤ Doc organization



Customer Support

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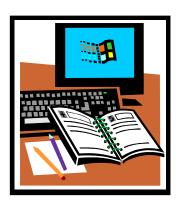


Secure Access Login	
Username:	dogbert
Password:	••••
Login Cancel	



User Support

- **≻**Help
 - Problem-oriented and specific
- ➤ Documentation
 - System-oriented and general





Help & Documentation

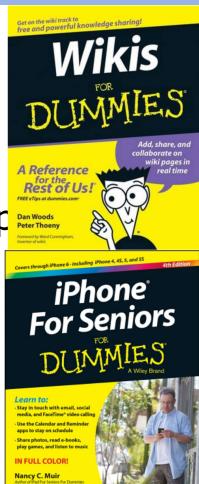
- Essential
 - BUT never a replacement for bad design
- ➤ Simple system
 - * Walk up and use it
 - Name some
- Most systems with rich features (even well-designed ones) require Help systems

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Documentation

- ➤ Users don't read manuals
 - * Boring, no goal
 - Just dive in and start working
- Often use docs in panic mode, when user needs immediate help
 - Manuals probably locked away
 - Points to need for on-line help
 - Need search capability
- Sometimes want quick ref
 - phone feature card





User Support Requirements

- ➤ Availability
 - Any time the user is operating the system
- ➤ Accuracy & Completeness
 - Accurate (tricky with changing versions)
 - Cover all aspects of application



User Support Requirements

➤ Consistency

- Across different sections
- Between on-line and paper documentation
- In terms of terminology, content and style

➤ Robustness

Predictable and free of errors



User Support Requirements

> Flexibility

- Appropriate for novices through experts
 - ...maybe have expandable sections of details
- ➤ Unobtrusiveness
 - Shouldn't distract from or interfere with normal work flow



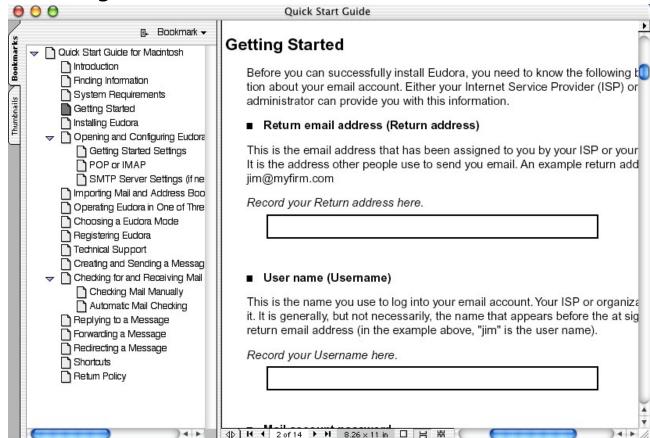
▶1. Tutorial

- For start-up
- Gets user going
- Convey conceptual model
- Communicate essential items
- Sometimes see on-line tour or demo





Quick start guide as a tutorial



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- ≥ 2. Quick reference/review
 - Reminder or short reference
 - Often for syntax
 - Can be recall aid for expert
 - Can allow novice to see what's available



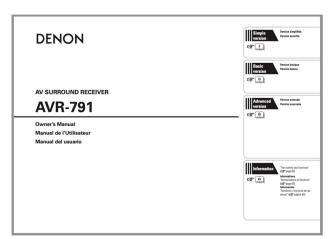


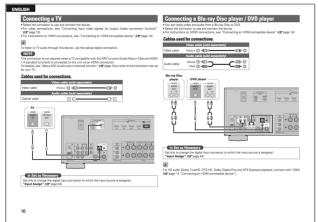






- ≥3. Reference Manual (Full explanation)
 - Detailed command descriptions
 - Usually for experts
 - Unix on-line manual pages, for example

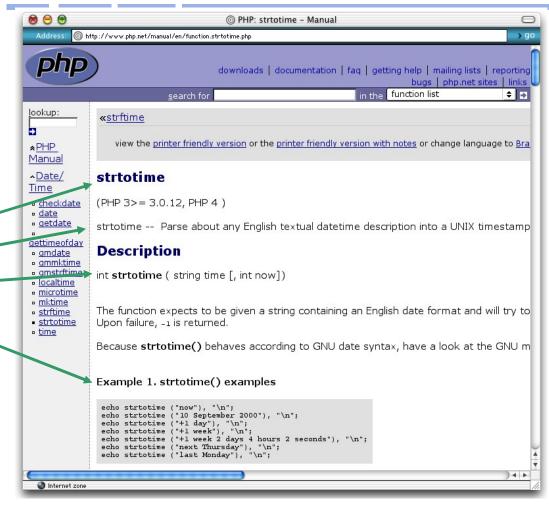






Combined
Quick Reference
and full
Reference
Manual

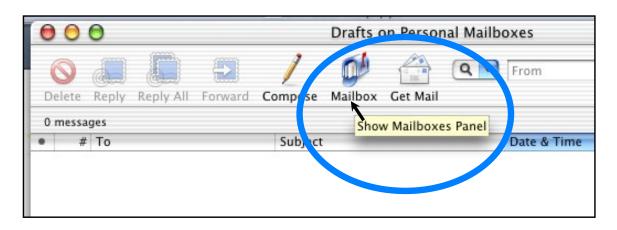
- command
- purpose
- syntax
- example
- •links to details



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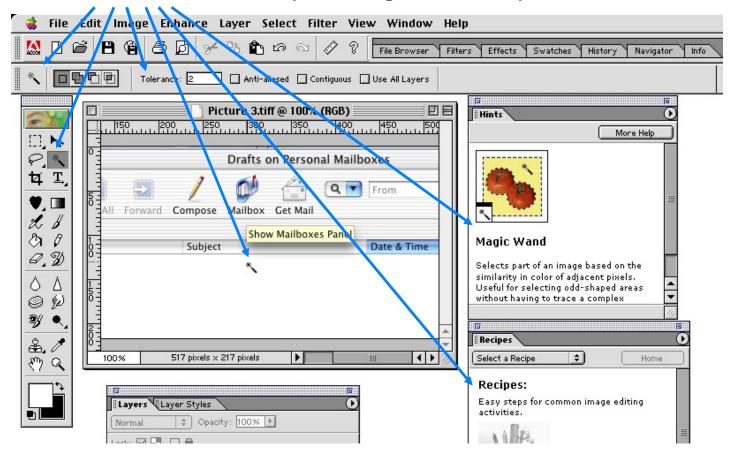
- ➤ 4. Context-sensitive (task-specific) help
 - System provides help on current situation
 - Balloon help, ToolTips
 - Other examples?





Context Sensitive Help

e.g. Photoshop



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User Support Approaches

- Command assistance
 - Specific details on particular command
 - e.g. UNIX %> man ls
 - Good if user knows what s/he wants
 - not always the case!
- Command prompts
 - Message when user commits an error
 - Menus and icons fall under this category to a degree



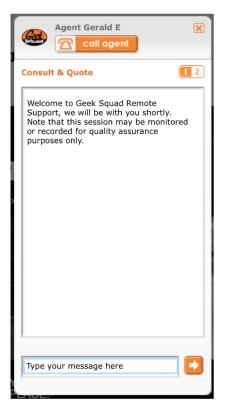
User Support Approaches

- Context-sensitive help
 - Information pertinent to a particular situation or interface item
- ➤ On-line tutorials
 - Work through simple examples, provide a feel for application



User Support Approaches

- ➤ On-line documentation
 - * How much like paper doc?
 - Electronic can emphasize hypertext, indexing, and searching
- ➤ Live help phone or online chat
 - Can often see your screen, or even take control of your computer
 - Need to be online and logged in





(Display) Medium

- Paper versus monitor?
- ➤ People are 15-30% slower reading and comprehending text from a display as compared to paper
- ➤ Generational effects





Monitor

Causes for slow-down

- Poor fonts (monospace, bad kerning, spacing)
- Low contrast of letters & background
- Emitted vs. reflected light (curved tube)
- Small display -> page turning
- Distance, placement of monitor
- Layout and formatting problems
- Reduced hand and body motion



Presentation Issues

- ➤ Integrate with system, don't "add on"
- ➤ 1. How is help requested?
 - Command, button, function, separate app.
 - Advantages, disadvantages?
- ≥2. How is help displayed?
 - Separate window, whole screen?
 - On top of application, pop-up box?
 - Command line, button, light bulb...?



Presentation Issues

- ≥ 3. Effective presentation of help
 - Design it like any other part of UI
 - language, terminology, jargon, etc.
 - Use active voice
 - "To close a window, place the mouse cursor over the red circle at the upper left corner (and click the mouse button."
- ➤ 4. Implementation issues
 - Fast response time is important
 - How is help stored? File, database, ...?



Adaptive Help

Tailor help level and style to the *particular user*

➤ Usually requires a system to maintain a <u>user model</u>



User Model

- Creating & maintaining a user model
 - 1. Quantification Numeric levels of use
 - 2. Stereotype
 - Novice, intermediate, expert
 - Utilize command use and errors to categorize
 - 3. Overlay model
 - Build expert user profile with optimal behavior
 - Compare to what user is currently doing



Adaptive Help Issues

➤ Initiative & control

- Does user feel that control was taken away?
- "You're not performing efficiently in this task"

> Use

❖ Is all this work actually useful?

➤ Scope

To what aspect of system does it apply?



Doc Organization

- State educational objectives
- Present concepts in logical sequence, increasing order of difficulty
- Avoid forward references
- ➤ Have plenty of examples, complete sample sessions



Doc Organization

- ➤ Each concept section:
 - Explain reason for concept
 - Describe concept in task-domain terms
 - Show computer-related semantic concepts
 - Offer syntax
- ➤ Table of contents and <u>index</u> are important
- Keep reading level simple
 - ❖ People liked <u>5th grade</u> text best

Roemer & Chapanis, CHI '82



Improving Doc

- > Run through think-aloud sessions
- ➤ Use on-line example tutorials
- >Try to predict common states & problems
- ➤ Anticipate errors
- Develop manuals early and pilot test
- ➤ Iteratively refine

Sound familiar??



Human Characteristics

- ➤ Don't anthropomorphize
 - "The computer will calculate an answer after you respond"
 - Gives user inaccurate impression
 - √ "You can get the solution by pressing F1"
 - Better to put user in control



Terminology

- > Avoid
 - know, think, understand, have memory
 - ask, tell, speak to, communicate with

- Better
 - process, print, compute, sort, store, search, retrieve
 - use, direct, operate, program, control

But is this the whole story?? Is this always the case??



Help Levels

- ▶ 1. Designer model
 - System designer has model of typical user and builds interface with this in mind
- ≥2. Adaptable help
 - User can edit their own model, for example, .profile on UNIX
- ≥3. Adaptive help
 - System maintains a user model and can change it on the fly



Recommendations

- > OK
 - All details of each command
 - BNF or formal notation
 - Terse, technical prose

- Better
 - Subsets of concepts
 - Lots of examples
 - Readable explanations with a minimum of technical terms



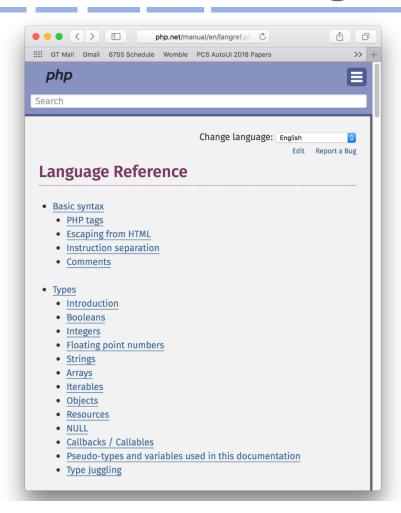
Studies

- > Studies have taken documentation and improved it
 - People did perform better with the improved documentation

>-> Effort here is worthwhile



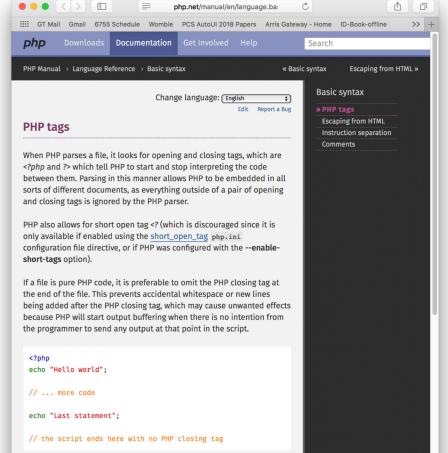
PHP Language Reference



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PHP Language Reference



```
echo "Hello world";
 // ... more code
 echo "Last statement";
// the script ends here with no PHP closing tag
                           Changelog
Version Description
          The ASP tags <%, %>, <%=, and the script tag <script
          language="php"> are removed from PHP.
5.4.0
          The tag <?= is always available regardless of the
          short_open_tag ini setting.
User Contributed Notes 5 notes
                                                       add a note
▲ 61 ▼ crazytonyi at gmail dot com
                                                       2 years ago
Regarding earlier note by @purkrt :
> I would like to stress out that the opening tag is "<?
 php[whitespace]", not just "<?php"</pre>
 This is absolutely correct, but the wording may confuse some
 developers less familiar with the extent of the term "
[whitespace]".
Whitespace, in this context, would be any character that
 generated vertical or horizontal space, including tabs ( \t
), newlines ( \n ), and carriage returns ( \r ), as well as a
 space character ( \s ). So reusing purkrt's example:
```

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