

Installation and User Documentation

Outline

Installation

Training

User Documentation - Specification

User Documentation - Implementation

Aspects of System Installation

Installation is *much* more than just moving a few files around.

In general, installation includes:

- Site and system preparation
- Data conversion
- ☆ Software installation & installation testing
- Transitional operation
- ☆ Training
- ☆ Documentation
- Acceptance testing
- Tuning
- Starting all over *again*

Software Installation

Installation proper

- “the obvious” might be overlooked under pressure
- ∴ planning and preparation typically not extensive
note paths, parameters, *etc.*
- script/procedure helps if available
most PC software has an install procedure

Installation testing

- access each file
- exercise each parameter
- keep a log

How to Train

Very often the user is asked to learn *new ways of thinking* in addition to new operations.

User training should include

- *general concepts* (mental road-map)
- *task-specific information*
 - ◇ system navigation (how to follow the road map)
 - ◇ choice points
 - ◇ operations
 - ◇ exceptions too

Whom to Train

Target separately:

- Users
 - ◊ Clerical staff (possibly multiple targets)
 - ◊ Management
- Systems administration
- Systems maintenance

Different jobs imply different modes of use:

- rote *versus* mindful

Hence different training tactics:

- rote – task-oriented
 - ◊ like a recipe
 - ◊ recovery from exceptions
- mindful – both general and task-specific
 - cover both actions and consequences
 - impact of *choices* on
 - ◊ task (navigation, changes in operations, ...)
 - ◊ system (updates, constraints, ...)

Design for Trainability

Goal: enable the user to learn the system.

- conceptual integrity
Is there a simple mental model of the system?
Are there effective metaphors?
- consistency
- reversibility
- help for tasks and concepts
- examples for tasks and concepts

Motivation

Why write user documentation?

- contractual obligations
- commercial advantage
- professional pride

Terminology

Navigation:

- through the system
 - through the documentation
- ⇒ keep **both** in mind

Documentation Process

Documentation, like any other project activity, requires

- thoughtful planning
- systematic execution

Specific requirements:

- goals and objectives
statement of thesis
- specification and design
outline
- good presentation
- evaluation

Targets of Documentation

Identify Readers of Documentation:

No one (well, *almost* no one) reads computer documentation for the fun of it.

Hence, a reader of documentation has a particular purpose in mind.

The identification of the end user(s) is by far the most critical factor for ensuring that your documentation will be useful to your client and profitable for you.

– Hastings and King

Once again the advice:

“Put yourself in the user’s shoes.”

Context for Documentation

Knowledge Level of User:

- software:
 - ◇ naive
 - ◇ computer literate
 - ◇ experienced with other software
 - ◇ experienced with this software
- application domain:
 - ◇ novice
 - ◇ expert

Sophistication of Software:

- simple, complex, multi-system

Frequency of Use:

- daily, weekly, or occasional

Variety of Use:

- “canned” interaction, few or simple tasks, multiple interrelated tasks, operation
- again, rote *versus* mindful

Purpose of Documentation:

- tutorial, general overview, or reference

Document Organization

Analogy to **Modularity**:

A *single* document should address a *single* user type and a *single* purpose.

Most common “modules”:

- tutorial
- general introduction
- reference manual

Analogy *fails* with respect to redundancy

- modules limit redundancy to increase consistency
- documents need redundancy and consistency
- ∴ documents must gain consistency other ways
careful proofreading
link, don't copy, if tools permit it

Document Organization

Analogy to **Design**:

Outline is like Preliminary Design

(aside)

We have now come full circle, since one of the first analogies for the design process was outlining a paper.

Issue in Organization is *Information Flow*

(order in which are concepts are introduced)

- not relevant for reference manual

Arises because

- people are poor at forward-referencing

⇒ “spiral” organization

Reference Manual

Goal: Fast Access to Information

Navigation through the documents

- **table of contents**
access by general concepts
 - **index**
access by details
include all synonyms
 - **cross references**
- ✧ tools provide consistency

Help

Q: Is “Help” documentation?

A: Yes, **but** there’s more to documentation than just “Help”.

Once again, distinguish goals:

- identification: *what is* _____?
- navigation: *where is* _____?
- operation: *how do I* _____?
what does _____ do?
- conceptualization: *why* does the system appear this way?

Writing Style

“English is your most important professional tool. Use it with precision.”

Be **consistent** in form and terminology!

Give directions:

- using active voice
- using second person
- explaining consequences first
 - When the ENTER key is pressed, the system • • •
 - Press the ENTER key in order to • • •
 - + In order to • • •, [you should] press the ENTER key.

Use outlines, lists, headers to

- organize facts
- distinguish facts
- allow reader to digest facts separately

Presentation Suggestions

- Use special fonts (or similar 'marking') to indicate computer output, user input, etc.
- Use positive voice, direct statements, simple syntax, ...
- Use terms that indicate direct manipulation, for example say "press the ENTER key" rather than "select the ENTER key."
- Don't confuse readers by digressing.
- Don't use synonyms unless the equivalence is VERY clear.
- Organize consistently and apparently
apparently ⇒ user understands organization
 - ◇ by category
 - ◇ alphabetically

Content Suggestions

Introduction

- purpose

- notation

- information content of system
(possibly simplified data model)

User Interface Operations

- cursor motion, selection, help, *etc.*
less necessary as users gain experience

Navigation

Data Manipulation Operations

- entering master and detail records, *etc.*

Tools

e.g. MS Help Compiler

Help you:

- organizing
- indexing
- another thing to learn

Help user:

- familiarity
- context
- indexing