

Effectively Managing Documentation for Embedded Linux™ Projects



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Today

- 1 subject for today: documentation
- 2 things to avoid in documentation
- 3 qualities of solid documentation
- 4 classical elements
- 5 readers you must satisfy
- 6 critical questions
- 7 habits for managing the process effectively

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What is documentation?

- first contact – presentation
- source of education – training
- front line of support – troubleshooting

What is documentation?

- conceptual material
- “how-to” information
- reference material
- troubleshooting

What is documentation?

communication with people
who care about your project

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Two Things to Avoid

- perfection
- forgetting that your audience is people

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Qualities of **Solid** Documentation

What is *not* solid?

- missing unmentioned features
(TBD is OK)
- inconsistent
- unprofessional

Qualities of **Solid** Documentation

- complete
- correct
- appropriate

Qualities of **Solid** Documentation

Complete

- covers all features, usage modes, and interfaces
- answers essential questions (what, how, where)
- consistent & professional

Qualities of **Solid** Documentation

Correct

- matches the software, hardware, or device which it targets
- logically organized
- consistent & professional

Qualities of **Solid** Documentation

Appropriate to audience

- know who the audience is
- know what they need to know
- answer their questions
- accessible
- consistent & professional

Qualities of **Solid** Documentation

What is less important?

- text format – fonts, colors...
- tools – XML, FrameMaker, nroff, Word
- delivery format – HTML, PDF, print
- perfection

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Critical Elements

- Concepts
- Tasks & Examples
- Reference
- Troubleshooting

Critical Elements

Concepts

- the Big Picture from 10,000 ft
- overview, introductory material
- brochures, white papers, web pages
- architecture guides
- focus on education

Critical Elements

Tasks & Examples

- the 10-foot overhead view
- step-by-step user & “quick-start” guides
- tutorials, training materials
- minimal cross-references
- focus on usability & consistency

Critical Elements

References

- the 0-foot view
- system reference manuals
- layout, manufacturing, API guides
- maximal cross-references
- focus on completeness

Critical Elements

Troubleshooting

- the -5 foot view, looking backward
- step-by-step diagnostics, flowcharts
- FAQs
- from the reader's perspective
- focus on answering questions

Critical Elements

Four-element theme is recursive:

	Concepts	Tasks & Examples	Reference	Trouble-shooting
Doc set in general	Overview & Specs	Prog. Guides Tutorials	API Guides Glob. Index Search function	FAQs KBs
Each document	Prefatory chapters	“How-To” chapters	Appendices Index	Optional trouble-shooting sec.
Each chapter	Overview	Task and example sections	Cross-refs to reference documents	Cross-refs to related information
Each individual document element	Introduce topic, task, example	Step by step instructions	Cross-refs to reference documents	Cross-refs to related information

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Readers

- Partners
- Developers
- Internal
- End-users
- Community

Readers

Partners

- people who sell, extend, promote, or add value to your project

Readers

Developers

- people who use your project as basis for creating products of their own

Readers

Internal

- people in your organization

Readers

End-users

- people who use the end result of the above activities
(and sometimes pay for the privilege)

Readers

Community

- people who care about your project
by choice

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Critical Questions

- What is it?
- Why do I need it?
- What does it look like?
- Who's going to make it?
- Where do I put it?
- When do I schedule it?

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7 Habits of Highly Effective...

- Habit 1: Be Proactive
- Habit 2: Begin with the End in Mind
- Habit 3: Put First Things First
- Habit 4: Think Win/Win
- Habit 5: Seek First to Understand,
Then to Be Understood
- Habit 6: Synergize
- Habit 7: Sharpen the Saw

7 Habits of Highly Effective...

abundance mentality == open source:

“... a business concept in which a person believes there are enough resources and success to share with others, *when looking at optimistic people.*”

7 Habits of Highly Effective...

abundance mentality == open source:

“It is commonly contrasted with the scarcity mindset, which is founded on the idea that, given a finite amount of resources, a person must hoard their belongings and protect them from others. ”

7 Habits of Highly Effective...

abundance mentality == open source:

“Individuals with an abundance mentality celebrate the success of others rather than be threatened by it.”

Other Resources

- FLOSS Manuals (flossmanuals.net)
sourceforge for docs
- eLinux.org
wiki for embedded Linux
- tldp.org
The Linux Documentation Project
- Linux.com
- Your Community
for the projects you care about

Jefro.net

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