

Coq Platform Docs: Documenting Coq and its Platform

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Introduction

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 - Abstract and detailed documentation like the ref man
 - Course-shaped documentation like Coq'Art or SF
 - Action-oriented documentation like tutorials or how-to guides

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A lack of action-oriented documentation

There are currently a lack of action-oriented documentation:

1. When it exists, it is often incomplete or outdated
2. When it exists, it often spread out over many repo / blog

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For users

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For experts

1. Writing documentation forces us to do stuff right (no cheating)
2. It makes our work easier to discover and more accessible

Coq Platform Docs

The Project

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 - it easier to maintain as less dependencies
 - it allows differentiate learning:
Ltac2 for new users / Ltac2 for Ltac1's users

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4. It will showcase all that is possible with Coq

Tutorials

Tutorials guide users through learning new features:

1. It introduces notions gradually, step by step
2. Going through predetermined nice examples
3. It talks about one specific feature

Tutorials vs How-to guides

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Examples Coq

- Searching for Lemma
- Requiring and Importing Files / Modules
- Setting up a Coq project
- Using Notations

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Examples Equations

- Introduction to Equations
- Equations and obligations
- Equations and well-founded recursion
- Equations and dependent programming

How-to guides

How-to guides are meant to guide users through the resolution of real life problem:

1. Provide a step by step resolution procedure
2. Accounting for real life complexity
3. But without touring all that is possible

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Examples Coq

- How to search for a lemma
- How to set up a Coq Project
- How to use Equations to reason about intrinsic syntax

Example: Documenting Equations

The documentation was inadequate

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2. The documentation is now much clear, and easy to improve
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Many Improvements

1. Found 2/3 bugs writing the documentation
2. Improve the behavior of the main tactic

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Demonstration

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Contributing

Develop the documentation modularly

- Each community should have a reviewer term and a project to manage its part of the documentation

Documenting Project and Plugins

Develop the documentation modularly

- Each community should have a reviewer term and a project to manage its part of the documentation

Basic Plan

1. Set up a reviewer team and a project
2. Understand what the documentation should look like
3. Set up the associated ci
4. Port / update / write the documentation

Contributing as a Coq's User

Contributing by Reviewing

1. Becoming an expert reviewer for a project or a general reviewer
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Contributing by Sharing Knowledge

1. Share folklore that should be common knowledge
2. Answer the questions of people writing tutorials
3. Give feedbacks on existing tutorials and your needs

Help with the Web interface

- Help setting up the web interface (set up Alectryon / Sphinx)
- Help setting up a nice automatic deployment
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Contributing Technically

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- Help setting up a nice automatic deployment
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Help with the Repo

- Help setting up a nice ci (platform / dev etc..)
- Help writing contribution guidelines
- etc...

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Ressources to check out

- Check out the [prototype website and the first tutorials](#)
- Come talk to us and give feedback on the [zulip stream](#)
- Check out the [repo](#) and the [CEP](#)