If It's Not Documented, It Doesn't Exist: Notes from the Write the Docs 2020 Conference

September 10, 2020

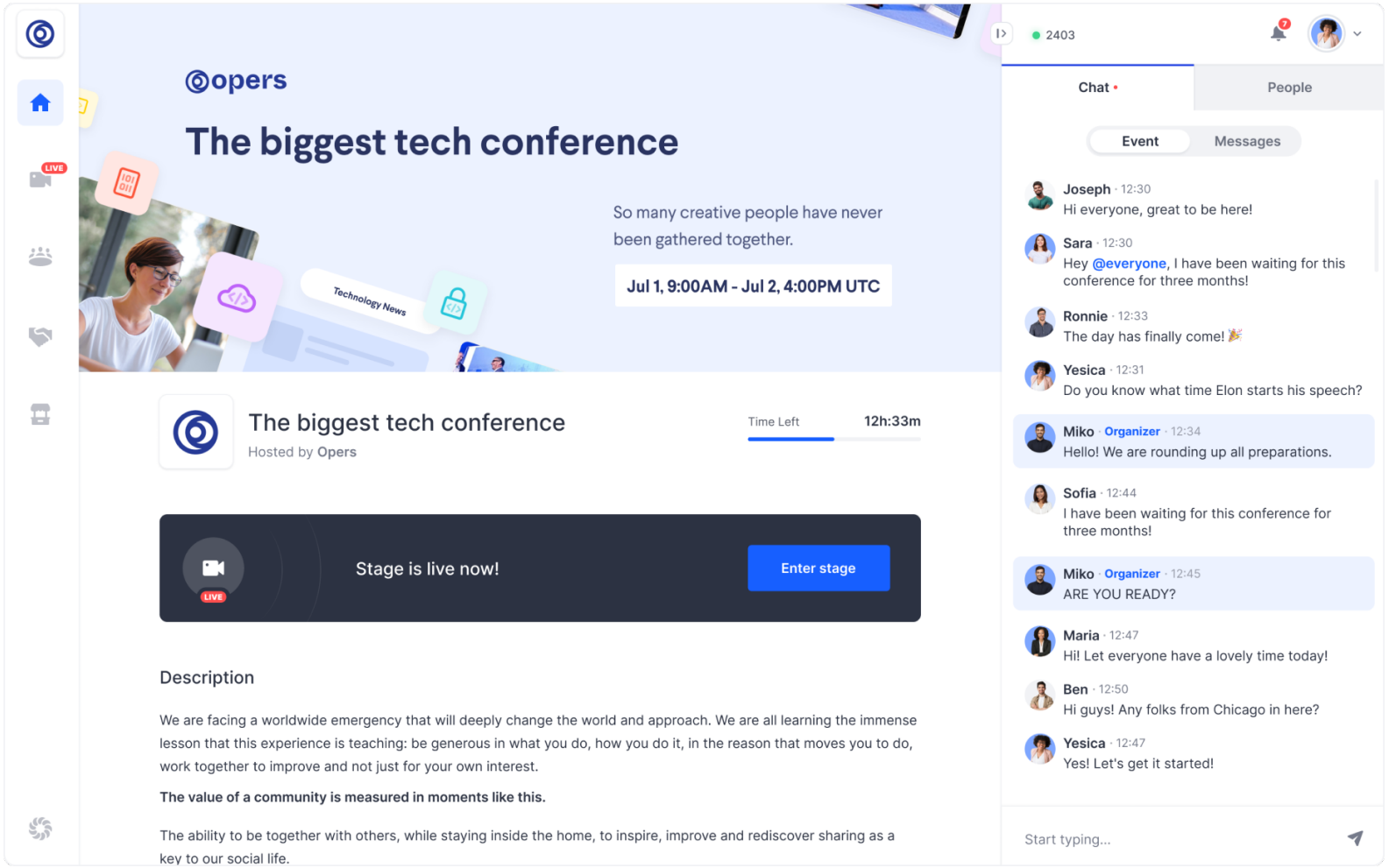
GREEN BANK OBSERVATORY

Outline

1. How the virtual conference worked
2. Ideas from talks
    1. Craft of writing
    2. Technical details: pipelines, docs as code, single source
    3. Managing documentation projects; documentation debt
3. Future directions
4. Cannibalism

“Wherever you go, there you are.”

GREEN BANK OBSERVATORY



2020-09-10

Benefits of Hopin platform

https://hopin.to

- Usability — entirely browser-based (using WebRTC)
- Flexibility — Keynote talks were pre-recorded, broadcast via YouTube
- Utility — “rooms” were useful in a variety of ways:
  - good analog for informal, ad-hoc discussions
  - Ability to go “into a corner” for one-on-one discussions
  - Easy to set up talks, sessions outside of keynotes
  - “Networking” feature that would pair you randomly with other users

Networking

- Many (most?) technical writers at the conference came from other careers
  - Software developers
  - Project managers
  - Journalists
  - . . . and one or two people with actual English degrees
- Seemed diverse — age, gender, race, sex
- There is a lot of literature out there (of course) about technical writing, as well as blogs, other resources
- WriteTheDocs Slack channel

Documentarians!

Documentarians!

Documentarians!

Documentarians!

- Writers
- Developers
- Testers
- Marketing
- Community
- Support
- DevOps
- Designers
- Scientists, machinists, engineers, technicians
- Anyone that works with other people

Humans == external data storage

Humans == external data storage

Talks

GREEN BANK OBSERVATORY

- Craft of writing
  - Accessibility (a11y), internationalization (i18n)
  - Creating quality code samples
- Tools and Pipelines
  - Using Jupyter to both document and run tests
  - Workflows — single source, using pandoc, other tools
  - Creating docs from structured data (such as APIs)
- Management
  - Migrating to a new platform
  - Community building
  - “Documentation debt”

Craft of writing — accessibility

GREEN BANK OBSERVATORY

Craft of writing — internationalization

Tools and pipelines — Jupyter

Using Jupyter to both document and run tests

- "exercise", "solution", and "testing" tags for different cells
- Different tags for tutorials, published example, and CI set
- Astronomer might write a Jupyter notebook that would both serve as a tutorial, and have built-in tests (hidden from the users) that would always ensure the tutorial worked and was current
- nbconvert (part of Jupyter) used to convert notebooks into Sphinx docs for non-interactive publication

Tools and pipelines — workflows

From a talk by Dan Gunter at LBNL describing their pipeline:

- Sphinx uses a LaTeX (XeTeX/etc.) backend for generating PDF documentation alongside the static site generator
- Container setup with all the dependencies, LaTeX stuff, fonts, etc. has helped make our build pipelines very hands-off
- When content is checked in:
  - Site is generated
  - PDF is generated
  - Site is published

Tools and pipelines — workflows

- We're doing most of this at https://docs.greenbankobservatory.org
- Check-ins of code to the SDDdocs git repo fire off a build via Jenkins
- Deploys new version if successful
- Also automatically grabs from docs/ directories of various repositories
  - Still need to add automatic PDF generation
  - Organization improvements also needed

Linting with vale

GREEN BANK OBSERVATORY

```
ls
test.md

vale .

 test.md
 8:93    warning  Avoid hyphens in ages unless    18F.Ages
                  it clarifies the text.
 14:16   error    Use 'DC' instead of 'D.C.'      18F.Abbreviations
 17:162  warning  Prefer 'drop-down' or 'drop     18F.Terms
                  down' over 'dropdown.'
 45:18   error    Use 'U.S.' instead of 'US'      18F.Abbreviations
 45:26   error    Use 'U.S.' instead of 'USA'     18F.Abbreviations

✖ 3 errors, 2 warnings and 0 suggestions in 1 file.

~/go/src/github.com/errata-ai/vale/fixtures/styles/18F/    master
```

Documentation debt

- Analyze
- Design and structure
- Develop content
- Preview and feedback
- Publish
- Maintain

Takeaway: see documentation — even if it's just internal — as a product (or in our case, a project)

Documentation debt

GREEN BANK OBSERVATORY

1. **Scope, define, map the problem of doc debt**: make a problem statement concise and clear. What to include and what not?
2. **Research and validate assumptions**
3. **Write a product requirements doc**: why do you need doc refactoring? What does it entail? Who benefits? How does it benefit them?
4. **Create a strategy and roadmap**: what is the plan of action? Who is involved? What does everyone need to do?
5. **Kick-off meeting with all stakeholders**: Alignment! Everyone should be aware of the plan. Get feedback!
6. **Develop a proof of concept**: start with *something*. Test, test, test. Iterate!
7. **Develop the product**: build the product, build the solution
8. **Publish and maintain the product**: take it live. Monitor and keep track. Retrospective and document those lessons learned.

Grammar matters!

Grammar matters!

Resources

- WtD Portland 2020: https://www.writethedocs.org/conf/portland/2020/schedule/
- Talks: https://www.youtube.com/playlist?list=PLZAeFn6dfHpkBJAPYFrob6gqdiBuePwGJ
- Hopin: https://hopin.to/
- Vale: https://github.com/apps/vale-linter
- Writing to Learn: https://www.goodreads.com/book/show/585474.Writing_to_Learn
- Modern Technical Writing: An Introduction to Software Documentation: https://www.goodreads.com/book/show/28433138-modern-technical-writing

GREEN BANK
OBSERVATORY

greenbankobservatory.org

The Green Bank Observatory is a facility of the National Science Foundation operated under cooperative agreement by Associated Universities, Inc.