

Qualitative and Quantitative Content Audit

Documentation Evaluation: Preliminary analysis and methodology

Evaluating content for OWASP documentation is until now, the most challenging aspect of reviewing projects. Not only because of the matter and content each documents handles, which is complex, but also due to the amount of Documents to be evaluated.

Creating an evaluation methodology for Documentation

The Evaluation of Documentation proposed in this paper have 3 main phases

Preliminary –quality evaluation:

This phase consists on the minimum requirements an OWASP document should have, in order to be considered a LAB project. An analysis based on *Qualitative content audit methodology* (Martin & Hannington, 2012), can help us identify the key indicators the content must have in order to be considered of high quality.

For this method, content is rated on the following criteria:

- Credibility
- Originality
- Accuracy
- Accessibility/Open Source/ Publicly Available

Some criteria that would be consider during the review process for projects to become flagships are:

- Defined and Repeatable
- Formatting/Branding
- Relevance to the audience (which is the target group?)
- Relevance to the subject (security)

Measuring these criteria is complex. Therefore the first evaluation to determine the basic and minimum quality of the Document will include automated systems. The following is a detailed description of the criteria

Originality: In order to measure the originality of the document, we can automate this process using a Plagiarism checker. Documents that copy paste other author's information and publish it as their own infringe in plagiarism/copyright issues and this should not be accepted, only if the original author authorizes to publish the information under the OWASP documentation or references have been properly addressed.

Grammar: This can also be done with tools such as “PlagTracker”. We can determine a minimum amount of grammar mistakes (the tool can measure this in percentages). We could determine that the document should not have more than 15% of grammatical mistakes for example

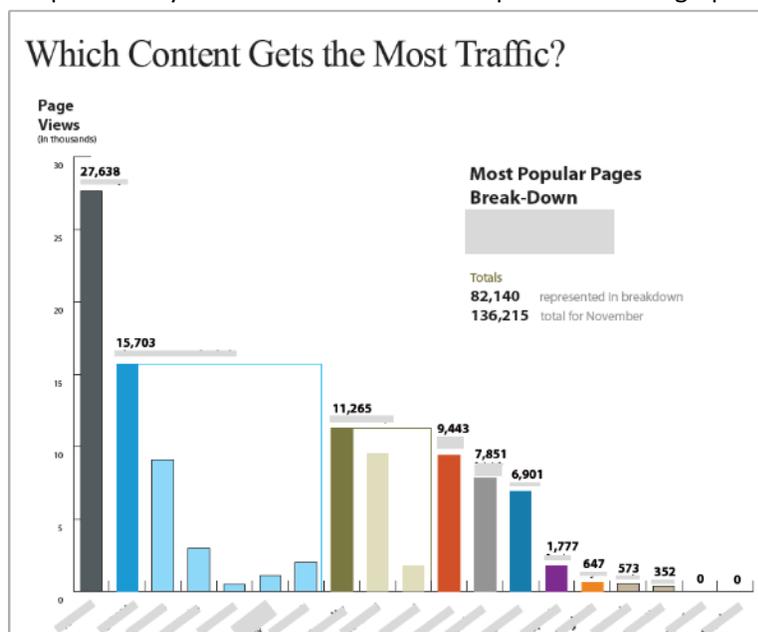
Accessibility: How easy and an accessible is the document? Also with Accessibility we mean which projects have a “mailing list” responding to users or feedback form for readers to provide their opinion regarding the document and answer to their questions. An extra point for accessibility will be considered if Project leaders have placed their content in containers such as repositories or wikis to facilitated collaboration among authors and update their information.

Open Source: Since everything OWASP puts out there is free and open source, it is important to validate that all of our documentation projects live up to this standard. This means not only slapping an open source license on the document, but also verifying that all of the materials that were used to produce the document were properly licensed as well (nothing proprietary).

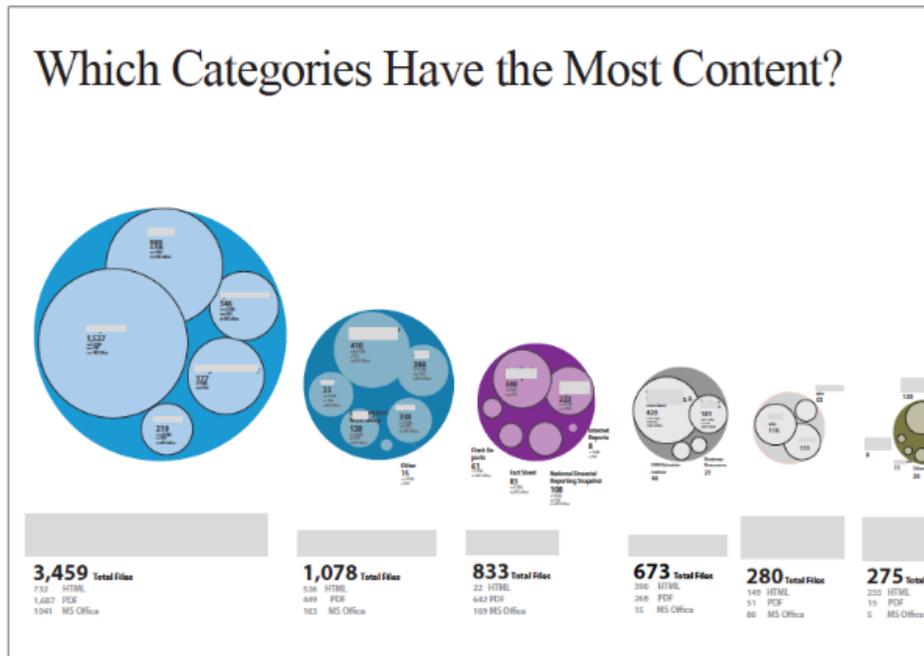
Publicly Available: It's counter-intuitive that we would produce any project that would not be made publicly available, but it's happened before. In order for a project to be Flagship, it needs to be readily downloadable by anyone who wants it. No guestbook or other forms of data collection for downloads either. This is implicit in "Accessibility" criteria, but needs to be specifically called out.

Second Phase: Quantitative Content Audit (Content Inventory)

Before we can actually evaluate other criteria such as ‘relevance to the subject’ or ‘credibility’, we should measure how many documents we have and what are the content type. Basically we will execute a content inventory Audit. This information can also be provided to new/old Project leaders, to understand and know on which areas they could work on to improve security in those that need it most (gaps). With the results of this preliminary research we will be able to produce an infographic similar to the following examples:



(Detzi, 2012)



(Detzi, 2012)

Third phase: Final Review of Potential Flagships Document projects

Those projects that have fulfilled the minimum criteria will continue to be reviewed at a higher level to be considered flagship such as

- **Credibility:** This is about trustworthiness and expertise. That means evaluating the authors sources deeply and for this we also need experts evaluating the subject treated in the document
- **Accuracy:** Are there errors in the subjects/code treated? How correct is the information? In order to measure this part we will execute a research to find discussions of readers about the document.
- **Relevance to the audience:** we will use the amount of hits the wiki page has received since their conception. This is just a key indicator of the level of interest to the audience. Measuring amount of downloads is also an indicator of interest.
- **Relevance to the subject (security) →** this can be measured using the results of the content audit. How many documents are handling the same subject and which ones are unique to the matter.
- **Defined and Repeatable:** labeling something as Flagship is a promise that it will be supportable long-term. Project leaders and contributors will come and go, but we need to make sure that the project can live on. To this extent, we need to make sure that not only the document, but also the reference materials that went into creating the document, and the process to assemble those materials are documented so that it can be repeated with future iterations.
- **Formatting/Branding:** If Flagship project status truly represents the best we have, then we should put our best face forward not only in content, but also in format. This means that we need to develop a standardized look and feel for all of our documentation projects.

Again a team of experts will be necessary in order to judge credibility and Accuracy of Documents. As mentioned in multiple emails and from experience, finding reviewers is not easy so maybe for this last stage, should be considered hiring experts in the matter or asking for top level contributors willing to commit for these last reviews.

Conclusion

This paper proposes a simple and for most parts of the evaluation, an automated methodology to measure the minimum quality a Document project should have in order to be considered 'LAB'. After executing a Content Audit, we will be able to identify the categories and content gaps OWASP has at level documentation. After an elimination process, only those documents with the minimum level of quality will be evaluated at a higher level for flagships. For this part we will probably need a team of experts to assess credibility and accuracy of the document content.

If Board and community approves this methodology, we still need to create a budget for those tools that are necessary for the preliminary evaluation and a plan of execution.

References

Martin Bella & Bruce Hanington, 2012 .”Universal Methods of Design-100 ways to Research Complex problems, Develop Innovative Ideas and Design Effective solutions”. Rockport Publisher

Christopher Detzi, 2012, Images available at <http://uxmag.com/articles/from-content-audit-to-design-insight>