



Project number: 216068
EIFFEL
Evolved Internet Future for European Leadership
Document Number D4.5
Report on FIpedia.org

Abstract:

In this document, we present an initial report on the efforts to create the FIpedia.org site.

As an outcome from the London TT meeting in February 2009, the FIpedia.org site was created with in the intention to stimulate the agreement on disagreements regarding crucial Future Internet issues. Since then, the idea has evolved into a concrete site with a defined structure in content and governance. This report covers the main issues around objectives, setup, governance etc. with respect to this site.

Due date of deliverable: M23 (November 30, 2009)
Actual submission date: December 14, 2009.

Organisation name of lead contractor for this deliverable: **BT**

Authors: Dirk Trossen

Keywords – EIFFEL Think Tank, FIpedia.org

Total number of pages: 9

| Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013) | | |
|---|---|---|
| Dissemination Level | | |
| PU | Public | X |
| PP | Restricted to other programme participants (including the Commission Services) | |
| RE | Restricted to a group specified by the consortium (including the Commission Services) | |
| CO | Confidential, only for members of the consortium (including the Commission Services) | |

Document Revision History

| Version | Date | Author | Summary of main changes |
|----------------|-------------|---------------|--------------------------------|
| 1.0 | 8.12.2009 | Dirk Trossen | Final version delivered to EC |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Contents

| | | |
|-----|--|---|
| 1 | INTRODUCTION..... | 4 |
| 2 | OBJECTIVES OF FIPEDIA.ORG..... | 4 |
| 2.1 | BACKGROUND..... | 4 |
| 2.2 | OBJECTIVES..... | 4 |
| 3 | GOVERNANCE OF FIPEDIA.ORG..... | 5 |
| 3.1 | EDITORIAL TEAM..... | 5 |
| 3.2 | 'OWNERSHIP' OF THE SITE..... | 5 |
| 3.3 | COPYRIGHT, PRIVACY POLICY AND ALIKE..... | 5 |
| 4 | STRUCTURE OF FIPEDIA.ORG..... | 6 |
| 4.1 | OVERVIEW..... | 6 |
| 4.2 | REPOSITORY..... | 7 |
| 4.3 | AGREEMENT ON DISAGREEMENTS..... | 7 |
| 4.4 | ARCHITECTURE FORUM..... | 7 |
| 5 | SNAPSHOT OF FIPEDIA.ORG..... | 8 |
| 5.1 | STATISTICS..... | 8 |
| 5.2 | REPOSITORY..... | 8 |
| 5.3 | CURRENT DISAGREEMENTS..... | 8 |
| 6 | NEXT STEPS..... | 8 |
| 7 | CONCLUSIONS..... | 9 |

1 Introduction

The FIPedia.org site has been created as an outcome from the second think tank (TT) meeting in London in February 2009. The motivation for its creation stemmed from the identified necessity for a forum that allowed discussion on *disagreements* in the research community with the end goal of reaching some form of *agreement* in the dialogue between members of the wider community.

Originally intended as a published book that would summarize identified areas of disagreement, the suggestion was made to rather use an online facility that would allow for an engagement with a larger community beyond the TT members themselves. The result of this insight is the FIPedia.org site, a wiki-based site that hosts relevant information and facilitate the intended debate while providing means to record the debate through means provided by the wiki, such as history, comments, etc.

This report presents the objectives of the site, its structure in terms of content, its governance model as well as contribution and other aspects. We further provide a snapshot of current content and activities as an example of its usage.

2 Objectives of FIPedia.org

This section provides some background of how the creation of the FIPedia.org site came about. This will introduce the objectives of the site itself, based on the historical motivation for its creation.

2.1 Background

During the 2nd think tank meeting in London in February 2009, the focus of TT discussions turned towards the formulation of fundamental and crucial disagreements that the wider research community would need to agree upon, in one way or another, in order to make significant headway in the discussions on the Future Internet. Examples for such disagreements, and part of the London meeting agenda, were the issues of architecture design as well as the need for measurements. A meeting slot was allocated to compile a longer list of such disagreements, which can be found on the think tank wiki.

In the discussion of how one could capture the outcome of such debate on disagreements, the possibility of publishing a book was put aside in favour of a more viral approach that would engage the wider community rather than focussing on a selected set of (book) contributors: the idea of creating a dedicated and open (wiki-based) site was born.

The weeks after the London meeting were used to set up a site with a professional web provider under an allocated name, i.e., <http://fipedia.org>, that could be build out as what we can see today as the platform for such debate. The following sections will outline the objectives, the governance and the wider structure of this site as a result of the London TT meeting.

2.2 Objectives

Based on the London TT meeting, the following objectives were identified for a platform like FIPedia.org:

- *Provide a community and contributory platform for **agreeing on disagreements***, these disagreements being not only provided by the EIFFEL TT itself but the wider community in general
- *Provide a growing repository* of relevant state-of-the-art that can serve as a reference not only the debate on disagreement but eventually also for the wider research community.
- *Provide a forum for architectural debate*, i.e., issues that span different fields of technologies on the architectural level.

The above outlined objectives and the origin of the site, i.e., the EIFFEL TT, defined the chosen governance as well as structure of the site that is outlined in the following sections.

3 Governance of FIPedia.org

The governance of the FIPedia.org site was centered around the idea that editorial responsibility was necessary to not only seed but also steer the discussions on disagreements. The intended community character of the envisioned content drove the selection of, e.g., copyright and privacy policies. In all this, well-known methods being used in other community and crowdsourcing efforts, most notably Wikipedia.org, were used as a role model and adapted where necessary. The following sections outline the results of these considerations.

3.1 Editorial Team

In order to seed the content and steer the expected discussions in a somewhat fruitful direction, in particular in the beginning of the undertaking, the role of an editorial team was created. This is a visible departure from, e.g., the Wikipedia.org model although clear editorial responsibility (albeit less visible than in the FIPedia.org case) is not absent from these sites.

The resulting editorial team was recruited from active and willing EIFFEL think tank members. The role of the editorial team is clearly outlined on the FIPedia.org site and is agreed upon the editorial team itself. The role of the editorial team encompasses steering of content production, e.g., defining categories of debates that would aid discussion, moving articles into identified categories, but also react towards inappropriate behaviour on the site. It is, however, clearly highlighted that peer review of contributions is not implemented. Instead, a quality process is assumed similar to the Wikipedia original, i.e., contributions and even corrections by the wider community to ensure a consistent quality of the material.

The role of the editorial team is described under the **General Disclaimer** link of the FIPedia.org site (http://fipedia.org/fipedia/index.php?title=FIPedia:General_disclaimer). The current editorial team is comprised of:

- Dirk Trossen
- Bob Briscoe
- Lixia Zhang
- David Clark
- Rui Aguiar

There is no model of rotation or maximum length of team member ship defined as of yet.

3.2 'Ownership' of the Site

The FIPedia.org site is hosted by a professional web hosting provider (iPowerweb) with jurisdiction in the State of Florida (US), as stated on the General Disclaimer page of the site. This particular choice of web hosting provider was merely based on prior experience with this provider and its reliability. The domain name **FIPedia.org** is registered under the name of Dirk Trossen. The hosting fees are currently paid by the EIFFEL support action, which is specifically noted in the About FIPedia page.

3.3 Copyright, Privacy Policy and Alike

The General Disclaimer page of the FIPedia.org site outlines the chosen copyright policy as follows:

Copyright of contributions to FIPedia retain with the original contributors. It is the responsibility of individual contributors to verify proper copyright of their contributions, e.g., taken from paper submissions being made to other organizations. Original submissions to FIPedia can be consolidated by the editorial team by, e.g., moving the original contribution to another category in the process of consolidation. In this case, the copyright will remain with the contributors of the original article.

In cases however, where a consolidation (either through editors or members of the community) will occur, e.g., through additions or corrections to the original material, the copyright will extend to the authors of the consolidated page, being identifiable in the history log of the consolidated page.

Using material or content from this site can be done via reference to FIPedia pages. Contributors of the material (either in its original or consolidated form) are to be included in the reference, similar to article references. Note that the reference does not create or imply any contractual or extracontractual liability on the part of FIPedia or any of its agents, members, organizers or other users. There is no agreement or understanding between you and FIPedia regarding your use or modification of this information; neither is

anyone at FIPedia responsible should someone change, edit, modify or remove any information that you may post on FIPedia or any of its associated projects.

In essence, copyright of the original content stays with contributing community members, while the site does not take any responsibility for (community) changes to contributed material. This policy is similar, in many ways, to Wikipedia.org in terms of content and change liability.

Other policies related to trademarks, personality rights and privacy, including the collection of data such as IP addresses, have been adopted from Wikipedia.org and can be viewed in the General Disclaimer and Privacy Policy links of the site.

4 Structure of FIPedia.org

As mentioned before, the FIPedia.org site is based on wiki technologies in order to enable the community contribution that is sought after. The used wiki platform is MediaWiki, which is also used for the think tank wiki. The following sections give an overview of the site itself and its sections.

4.1 Overview

Figure 1 presents the main (wiki) page of FIPedia.org – the actual main web page redirects to the main wiki page.

The layout of the site is similar to other MediaWiki sites. The left side features an adapted navigation bar with information on the editorial team, the general background of FIPedia.org (About FIPedia) and usual navigation links, e.g., for uploading files. There is also a box with links to other Future Internet activities.

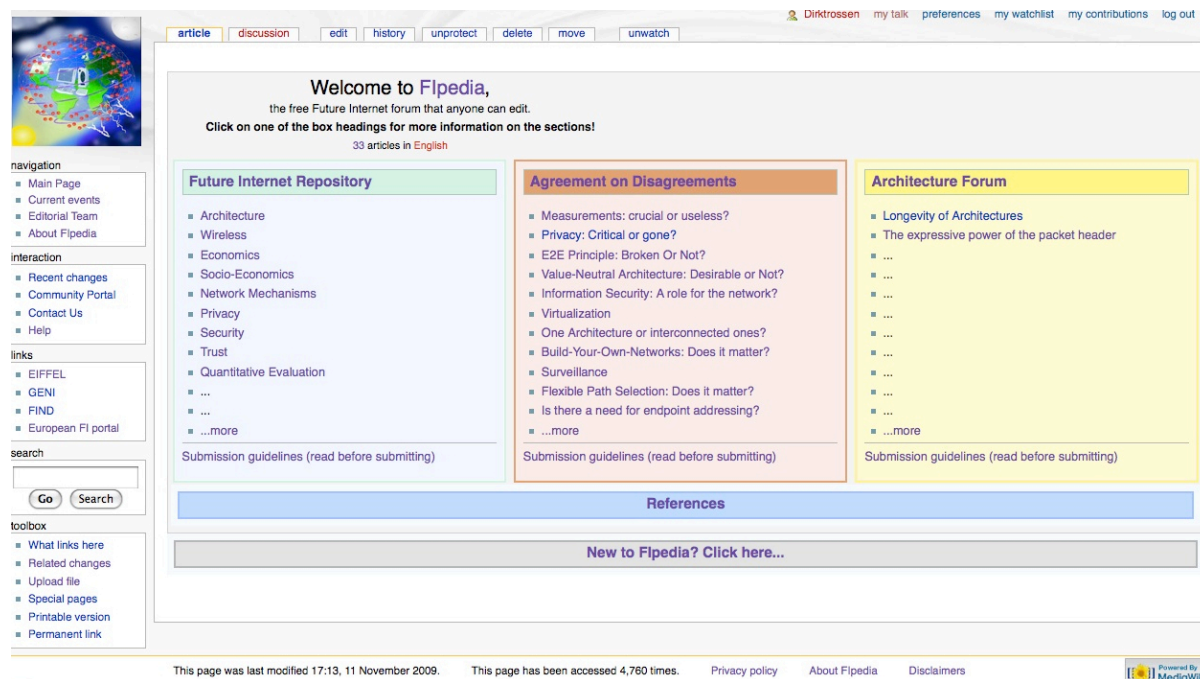


Fig.1: FIPedia.org Main Page

The bottom of the page features links to the General Disclaimer and the Privacy Policies, which were outlined in Section 3.3.

The main part of the page is centered around the three main areas of the sites, implementing the objectives outlined in Section 2.2, namely the repository (on the left), the agreement on disagreements (middle part), and the architecture forum (on the right). Each box contains a collection of article for each area. These articles are selected by the editorial team and are meant to feature certain discussions. The main page is generally locked for the wider audience and can only be changed by the editorial team.

Each area box contains a link at the bottom of each box that leads to submission guidelines specific for this area. These guidelines lay out the specific way of contributing material in a way that makes

editing easier and therefore ensure coherence of contributions. The general policy is that contributions to any area can only be made after (email-based) confirmed registration as a user of the site. This is to ensure the outlined copyright policy of Section 3.3.

The bottom of the main page areas lead to references and guidelines for new users of the site for general support.

4.2 Repository

As outlined in Section 2.2, it is the objective of FIPedia.org to provide a growing repository of relevant work for the debate on the Future Internet. For this reason, the repository area was created that provides a platform for such collection of work. This is combined with the references section at the bottom of the main page, allowing contributor to add relevant references to, e.g., papers, articles, and links.

The repository area is organized in *categories*, a wiki tool that annotates contributions according to certain categories relevant to the particular area being considered. For the repository, these categories are, for instance, architecture, networking protocols, multicast, security, etc. It is the role of the editorial team to ensure consistency in these categories and also categorize newly contributed articles to new or existing categories. Such categorization can also be performed by any (registered) member of the FIPedia.org site. Moving articles, however, can only be performed by editorial team members, if that is deemed necessary.

4.3 Agreement on Disagreements

The main driver for the FIPedia.org site creation was the realization during the London TT meeting that a debate on possible disagreements is necessary and that such debate needs to be recorded. For this purpose, the agreement on disagreements area was created.

As outlined in the submission guidelines (shown at the bottom of the area box, see Figure 1), each contribution is presented as a clear statement of disagreement in some form, including background and references that are necessary. This is followed by two or more *viewpoints* towards this disagreement. This is based on the approach to invite opposing viewpoints to be presented and discussed in the course of agreeing on what the disagreement is about (with the eventual goal to agree on a certain viewpoint).

In order to stimulate community contribution to the debate, each disagreement page includes a commenting section being enabled by a Mediawiki *extension* that utilizes that 'Talk' page of the disagreement page. In other words, visitors to the disagreement page can provide comments of any kind to the presented viewpoints and/or the disagreement in general. These comments are recorded on the 'Talk' page of the entry and shown on the wiki page itself for the wider community to see (and comment, if wanted). This provides the means to record the evidence for the debate. Commenting to contributions DOES NOT require registration to the site. This lowers the barrier of entry for community to merely comment without contribute larger pieces of text.

Each disagreement entry has assigned a moderator who is responsible for formulating the disagreement and soliciting contributions on the viewpoints.

The submission guidelines provide support to structure the actual wiki page along the lines of this structure. This is achieved by using wiki templates that can be simply copied and pasted into a new page for a contribution.

4.4 Architecture Forum

The last aspect that led to the creation of the FIPedia.org site was the identified need for an *architecture forum*. It was felt, during and after the London TT meeting, that fundamental architectural debate had taken a backseat in many of the conventional venues. Hence, FIPedia.org provides a dedicated area for the community to provide architectural contributions, e.g., pre-publication text, for discussion in the wider community. The wiki pages in this area allow for a summary of the contribution, provisioning of links (or uploading of text, if wanted) as well as commenting through the wider community, similar to the disagreement area (see above).

5 Snapshot of FIPedia.org

The FIPedia.org site was created at the end of February 2009, some two weeks after the London meeting. Since then, content and discussion has been growing with contributions from the recent TT meeting in Athens. This section provides a snapshot of the site in terms of statistics and content. For recent content, however, a visit of FIPedia.org is recommended.

5.1 Statistics

At the time of writing this report, there were 149 users registered with the site, i.e., having a confirmed wiki account. However, a substantial number is registered to bots, i.e., software agents that have registered with the intent to spam the site. Considering the bot number (which is identified in the naming and the already blocked bots), the number of 'real' users is estimated in the order to 35. This is the number of users who registered for contribution to the site. In addition to that, about 20 users have so far commented without being explicitly registered. While this total number of users seems fairly small, it is not unexpected since the site has been mainly advertised to the think tank community only (which comprises roughly 50 persons). A wider solicitation for content contribution is planned as next steps after the initial phase of the site showed the general viability.

Currently, there are about 90 articles on the site, spanning all three areas outlined in Section 4.

5.2 Repository

The repository has been seeded in order to provide a certain basis for this area before reaching out to a wider community. This seeding was provided by the FP7 project PSIRP (<http://www.psirp.org>). This was enabled since the state-of-the-art deliverable of the PSIRP project (D2.1) was developed on an internal (Media)wiki site. After obtaining agreement with the PSIRP PMC, the content was made available to the FIPedia.org site. Adjustments to structure were provided by AUEB when transferring the main content. With that, the repository currently contains relevant work in areas such as multicast, publish-subscribe, architecture design, economics, tussle, security, and others. The seeding process also provided a list of references being used for the repository.

5.3 Current Disagreements

The list of disagreements was largely seeded by the TT discussions during the London meeting. But also new disagreements, most recently resulting from break-out group discussion during the recent Athens TT meeting, were added to the list.

The current list includes:

- Is the E2E Principle broken or not?
- Is economic viability of the Internet sustainable?
- Information security: Does the network have a role to play?
- Measurements: What and Why?
- Is there a need for endpoint addressing?
- Is there one architecture or interconnected architectures?
- Privacy: Critical or gone?
- Accountability & Surveillance: Critical, desirable or irrelevant?
- Build-Your-Own-Networks: Irrelevant or driving change?
- Flexible Path Selection: Does it really matter?
- Is a Value Neutral Architecture desirable or not
- Virtualization: Enabler or Problem?

Each entry has assigned a moderator from the EIFFEL think tank. Many of the entries have a (growing) list of comments from registered and unregistered users of the site.

6 Next Steps

The initial build for the FIPedia.org site is expected to be finished by the end of the year. Although changes to the underlying Mediawiki platform are still required, e.g., to prohibit wiki bot through Captcha techniques that require a newer Mediawiki version, the crucial part of the initial setup is finished. The repository provides an initial basis through being seeded by the PSIRP project. And the list of disagreements has been populated through TT discussions.

The next steps will focus on

- Extend the disagreement content through continued TT discussions and meetings centered around the agreement on disagreement idea. This is expected to create content that can be directly contributed to the site.
- Extend the contributory community beyond the TT community through soliciting input from various other (international) communities. Here, the stand of the EIFFEL TT members in these various communities is to be used, for instance, through dedicated solicitations.
- Extend the repository through soliciting input from other research project that can provide public information on relevant work. This will be done through active TT members and the growing community.

7 Conclusions

The creation of the FIPedia.org site constitute an important step in not only disseminating the results of the think tank debate but also opening this debate to the wider community. The used wiki-based platform allows for recording this debate and creating a community-based pool of material with growing relevance to the development of the Future Internet.

The current involvement of the TT community, both in the editorial team and the contributions to the site, can clearly be seen as an endorsement of this activity by the seeding community – the EIFFEL think tank. The next steps will focus on extending this endorsement to a growing community and therefore increasing the relevance of the site as a whole.