

Deliverable 6.3

Sharing and Embedding Strategy

Due date of deliverable: 31/01/2023

Actual submission date: 31/01/2023

Start date of project: 01/02/2022 Duration (36 Months)

Dissemination Level: Public ✓



DELIVERABLE

Work Package	WP6 Community Engagement and Sustainability
Deliverable	D6.3 Sharing and Embedding Strategy
Document Name	D6.3 Sharing and Embedding Strategy
Due Date	M12: 31 January 2023
Submission Date	M12: 31 January 2023
Dissemination Level	<input checked="" type="checkbox"/> P – Public <input type="checkbox"/> CO – Confidential
Deliverable Lead	Global Innovation Gathering (GIG)
Author(s)	Kirstin Wiedow (kirstin@globalinnovationgathering.org)
Point of Contact	Barbara Kieslinger (kieslinger@zsi.at)
Reviewers	Frank Bentum (AOSH), Gertrude Goh (AMN), Ricardo Ruiz (GIG), Sara Bosch (IAAC), Guenda Dal Cin (IAAC)
Status	<input checked="" type="checkbox"/> Final
Abstract (for public dissemination only)	This document describes the sharing and embedding of resources and information for the project and the communities of makers and hubs in Africa and Europe.
Keywords	Maker Movement, APIs, DIHs, Global Village, Open-Source

The information, documentation and figures in this deliverable are written by the mAKE project consortium under EC grant agreement number 101016858 and do not necessarily reflect the views of the European Commission. The European Commission is not liable for any use that may be made of the information contained herein.



Document History

Version	Date	Comment
001	21 12 2022	First structure and outline
002	26 04 2022	Main content added to all sections
002.1	14 06 2022	Co-creation and content review with Consortium members
002.2	20.11.2022	Co-creation workshop with African Makerspace Gathering attendees and consortium members
003	11 01 2023	Peer review and detailed feedback on overall structure and specific content
004	28 01 2023	Integration of peer review comments
1.00	30 01 2023	Final editing



List of Figures

Figure 1: mAKE– Co-design for communities to share and embed resources.....	11
Figure 2: Amplifying and multiplying i.e. the Ripple Effect of the community and sharing resources across the seven circles identified as key communities to be engaged.....	14
Figure 3: API opportunities for embedding in partner sites and adding capabilities.....	16
Figure 4: mAKE – Co-design defining how the consortium can build and sustain the community.....	19
Figure 5: Example for a discourse RSS Polling plugin.....	25
Figure 6: Snapshot of diverse events.....	25
Figure 7: Snapshot of a discussion item.....	26
Figure 8: Snapshot of a comment.....	26
Figure 9: Snapshot of a discussion item.....	27
Figure 10: Snapshot of RSS Polling Tool (https://).....	28
Figure 11: Snapshot fo RSS Polling Tool (updates).....	29
Figure 12: Snapshot of RSS Polling Tool (system).....	29
Figure 13: Snapshot of RSS Polling Tool (Consolidated Events).....	30
Figure 14: Snapshot of RSS Polling (Select...).....	30

List of Tables

Table 1: Outcomes from the Consortium workshop.....	15
Table 2: Overview of cross-cutting tasks for each WP.....	20



List of Abbreviations

AA	Amplifier Approach
API	Application Programme Interface
CA	Consortium Agreement
CC	Community Connector
CO	Confidential
CMP	Collaborative Manufacturing Platform
CoC	Code of Conduct
DIH	Digital Innovation Hub
DI	Digital Innovation
DMP	Data Management Plan
DoA	Description of Action
DOI	Digital Object Identifier
DSI	Digital Social Innovation
EBIMS	Engage, Build, Inspire, Maintain and Sustain
EC	European Commission
EGE	The European Group on Ethics in Science and New Technologies
GA	Grant Agreement
GDPR	General Data Protection Regulations



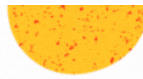
H2020	Horizon 2020 program of the European Union
IIA	Integration, Inclusion and Attachment
IoPA	Internet of Production Alliance
IPR	Intellectual Property Rights
MAB	mAke Advisory Board
ME	Multiplier Effect
ORDP	Open Research Data Pilot
PMB	Project Management Board
PU	Public
RE	Restricted
REF	Ripple Effect
R&I	Research & Innovation
STEM	Science, Technology, Engineering, and Mathematics
SWOT	Strengths, Weaknesses, Opportunities, Threats
WP	Work Package



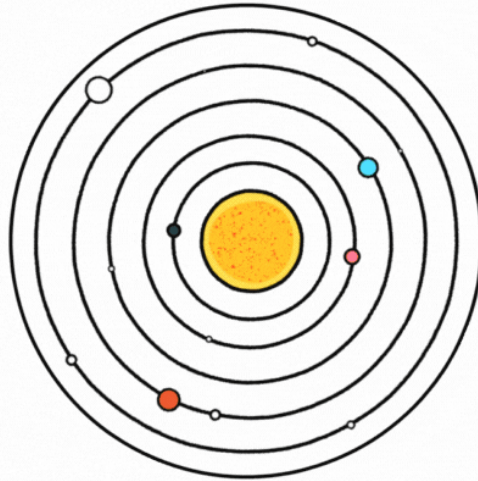
TABLE OF CONTENT

Executive Summary	8
1. Introduction	9
2. Sharing Economy	10
3. Guidelines for Open and Inclusive Sharing and Embedding	12
4. Technology and Platforms	14
5. Repository Platforms: Discourse and Wikifactory	17
6. Measuring Impact	18
7. Appendix A	19
8. Appendix B	20
9. Appendix C	24





Our mAkErverse



SHARING AND EMBEDDING STRATEGY The Ripple Effect



Executive Summary

Access to technology has brought a new era of global connectedness where the concept of borders is virtually removed. Gaining access to open source and shared information, resources and like-minded individuals championing change across the globe is the pathway driving innovation and change today. The term 'mAkErverse' is a mAKE project umbrella term uniting different maker ecosystems in Africa, Europe and beyond. The mAkErverse is our 'global village'¹ of connected makers, innovators, and their broader orbiting communities according to the seven circles within the spectrum outlined in the Community Activation and Engagement Strategy. Alongside the concept of the 'global village' or *mAkErverse*, is the concept of glocal²; globally connected and locally rooted. These two concepts delineate the mAKE sharing and embedding strategy as sharing will be done across global networks and embed accessibility to key resources that give rise to the opportunity to realise local

¹ [The world viewed as a community in which distance and isolation have been dramatically reduced by electronic media \(such as television and the Internet\)](#)

² [Glocal Definition & Meaning | Dictionary.com](#)



production of demand-driven global goods and services. The mAKE project aims to reach at least five hundred (500) businesses engaged in mAKE activities (makerspaces, founders, early-stage investors, corporates, NGOs etc), develop one hundred (100) open resources and provide access to seven hundred (700) additional open resources for DIHs across the project including blueprints, toolkits, and open-source business models. Through building communities and providing resources in a central repository shared across consortium member platforms, mAKE will catalyse a spill-over or ripple effect to the wider community because of borderless accessibility. The identified strategy to be implemented is that of the **Ripple Effect (REF)**. A '*ripple effect*' can be defined as activities where information can be disseminated and passed from community to community to broaden its impact ultimately, amplifying and multiplying all efforts. As an abstract metaphor, it describes how our actions reverberate throughout the physical and social world and the impact that every person has within the 'global village'. The embedding and sharing of community activities, information, knowledge and open access to resources in cohesiveness with the REF will impact the growth of the maker community and be an integral proponent for the rise of more local, supported, recognised, self-sustaining and educated maker communities that are globally interconnected and visible across the greater network of community networks or *mAkErverse*.

1. Introduction

The first phase of preparing this living document took place through one-on-one conversation sessions with each partner in the consortium and, the second, in-person workshops to finalise the sharing and embedding strategy across all consortium partners thereby ensuring a cohesive and inclusive strategy document that is useful and beneficial. Project partners will provide information to be shared across their respective websites, social media platforms as well as utilising open-source accessible and inclusive repository sites for long-term embedding of knowledge resources. The project website developed in WP5 will link to identified platforms through the project period as solutions for digitally integrating and embedding within partner portfolios. These additional functionalities could be integrated to already existing digital platforms (directly or externally through APIs), contributing thus to the ecosystem of the mAKE community 'mAkErverse' as described in WP6 Deliverable 6.1. In addition, utilising the Ripple Effect, the capacity building activities explained in D5.4 Capacity Building Tools for Social Innovation serve the purpose to further contribute to accessibility and open access through the process of the REF with activities such as workshops, collaborative and co-design sessions, offline and online meetings, and events.



2. Sharing Economy

The ‘*Maker Movement*’³ is a building block of the sharing economy, in design and manufacturing, in creating solutions and initiatives and implementing them in real life. The sharing economy is an economic model defined as a peer-to-peer (P2P) based activity of acquiring, providing, or sharing access to infrastructure, goods and services that is often facilitated by community-based online platforms⁴ and offline community meetups and shared spaces and equipment. The project will develop, share, and embed content and resources alongside championing community members or ‘*Community Connectors*’ who represent anchors within greater networks to develop, contribute and utilise the resources. mAkE identifies the communities across which the resources and information will be shared on the *macro* (e.g., global and continental networks able to engage policy makers, economies, governments), and shared and embedded on the *meso* (e.g., DIHs, technology hubs, makerspaces), and *micro* levels (e.g. makers, employees, consumers) in accordance with the spectrum of seven levels known as the ‘mAkErverse’.

³ [\(PDF\) Measuring the Social Impact of Maker Initiatives. Frameworks and Guidelines for Scaling the Assessment on Digital Platforms \(researchgate.net\)](#)

⁴ [Sharing Economy Definition \(investopedia.com\)](#)



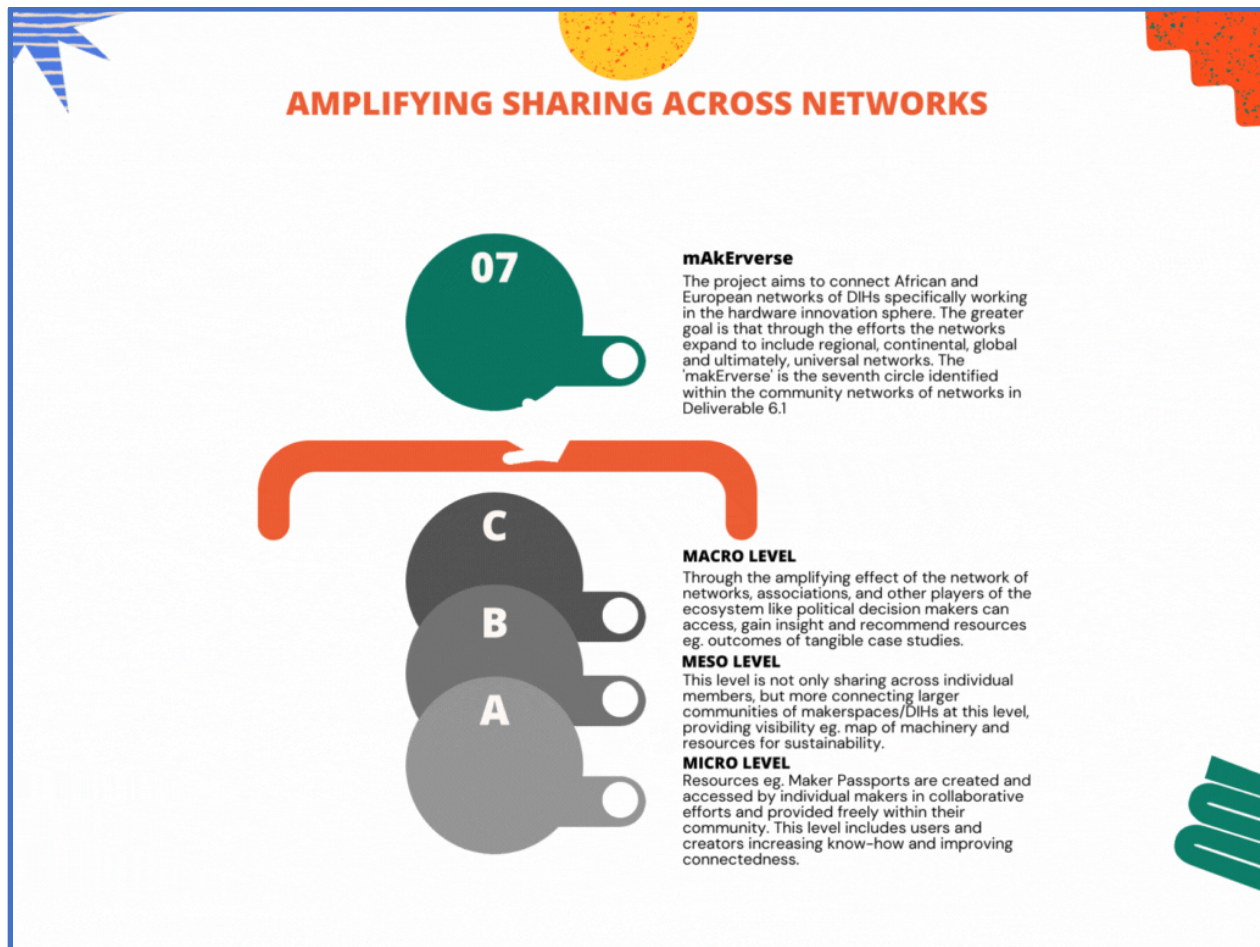


Figure 1: mAkE– Co-design for communities to share and embed resources

Building on the four steps EBIMS (Engage, Build, Inspire, Maintain and Sustain) outlined in the Community Activation and Engagement Strategy and visualised through the graphic in Appendix A; the fifth step, *Sustain*, forms the final step within the symbiosis of Deliverable 6.1 and the Sharing and Embedding Strategy is the final and ultimate objective of sustainability. The created resources e.g. toolkits will be maintained while the larger networks of communities, organisations and people will be sustained through the alignment and interplay of strategies outlined in Deliverable 6.1 and 6.3.

- **Step 5: Sustain**

Sustainability is fundamental to make the project efforts palpable and provide resources beyond the project term. Creation of open-source resources which are shared and embedded across the consortium and the greater 'mAkErverse' will provide continued access and creation of new resources as the community continues to grow and thrive in the future. Additionally, education on topics such as funding and training for train-the-trainers across the networks will have a ripple effect into the networks building a sustainable community of skilled and knowledgeable makers.



3. Guidelines for Open and Inclusive Sharing and Embedding

Easy and open access to information and increasing the number of available resources for the mAkErverse community of makers is the most critical step in order to maintain and sustain the work started through the mAKE project beyond the project term. The embedding of shared information and resources will be done across three multipliers; Integration, Inclusion and Attachment (IIA), to create the REF and communicate using a harmonious language ensuring ownership among consortium members and relevant networks aligned to the community of the 'mAkErverse'. The following multiplier actions will thus be integral to the strategy:

A. Integrate

We will make the project aims and objectives an integral part of the daily operations and practices of each consortium partner embedded in our culture and communications as our work outside of the project is aligned to the project goals.

B. Include

mAKE will be included and inserted (e.g. a media file, such as a graphic, video, print) into online and offline events, whether independently conducted or as part of mAKE activities (as on a website or in an email) and documented for sharing as outlined in the CDO.

C. Attach

We will ensure to attach (i.e someone) to a group (such as a community or network e.g. GIG, IOPA) for the purpose of advising, training, or informing its members and ensuring information is disseminated and mAKE is championed. This will also form part of the role of the 'Community Connectors' and that of each consortium member ensuring the message is amplified.

At the centre of our work as part of mAKE, sharing real experiences and accomplishments will be at the core. Stories are particularly effective in making it easier for other people to share, amplify, multiply, and create a ripple effect inspiring the next generation of makers. Simply uploading resources or information leaves a massive gap in providing the reason for engagement and the ripple effects proposed require human engagement and interaction across the seven circles of the spectrum of networks. A good story enables people to relate with the information, projects, innovations, and related content. Sharing outcomes in a story format allows for key message(s) to be conveyed through shared values that can touch people and stimulate an emotional response. Stories assist to engage people to not only understand the project, but also to care about its aims and objectives.



1. Print (e.g., brochure, poster, corporate presentation, scientific paper)

Print remains an effective way of sharing about the project and its ongoing results. For instance, you might write a magazine article highlighting your work aligned to that of the projects and related achievements. Although written for communication purposes as part of the CDO plan, it could end up in the hands of potential stakeholders outside the project and trigger interest in using some of the results and therefore forms part of *sharing* information.

2. Digital (e.g., photos, videos & infographics, website)

The mAKE website is a platform outlining the aims and objectives of the project sharing photos, videos that explains the impact the project will have. The WP5 team have already filmed and produced mini-documentaries and photo or 'video diaries' to track and share the consortium member profiles and this could be expanded to sharing the project's progress and results. An online platform (website or social media) is therefore an excellent way of communicating and disseminating results, especially amongst geographically distributed audiences across the 'mAkErverse'.

3. Events (e.g., matchmaking /networking, roundtables, workshops, conferences or online webinars)

Events are an excellent forum for two-way or interactive communication. which offer the potential for further development. Today, many in-person events are supplemented by, or even replaced by, online conferences or webinars which offer a low-cost way of sharing ideas amongst a group of geographically distributed experts across the networks and as a forum as identified during the online and in-person workshops with the consortium and community. Events additionally serve as direct capacity building activities, as explained in D5.4; these are activities with the aim of enhancing and creating knowledge, to stimulate and develop systems, skills and processes that are ecosystemic, inclusive and embedded within existing communities and networks.



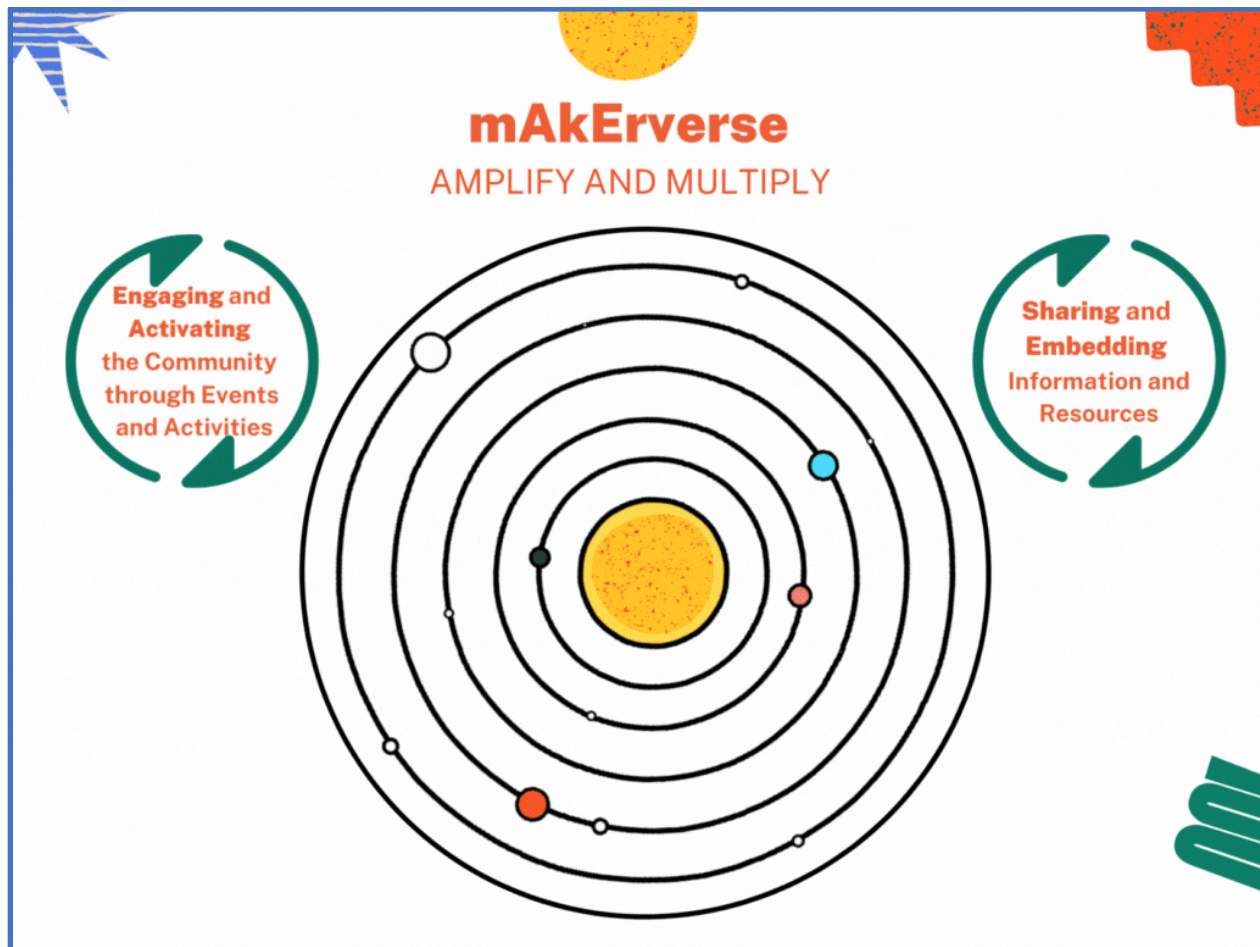


Figure 2: Amplifying and multiplying i.e. the Ripple Effect of the community and sharing resources across the seven circles identified as key communities to be engaged

4. Technology and Platforms

The consortium members involved in WP6 discussed the need for more clarification on available community platforms during the initial co-design workshop. The second phase of the co-design and development of the strategy included an online workshop in quarter one of the projects where available technologies were discussed, and resource sharing envisaged as how best to be integrated into the embedding strategy for all consortium partner portfolios. Whilst primary content will be developed through specified CA work package outputs (WP1, WP2, WP3 and WP4), the sustainability of mAkE hinges on contributions by the community and continued development of knowledge and resources which are regularly shared and updated across the European, African, and ultimately global maker communities. Community consultations through the co-creation or design workshop which took place as a community activation at the African Makerspace Gathering in Cape Town in November 2022 revealed that there are misconceptions between the initial consortium identifications



and that there is in fact a greater opportunity for value-addition and valuable knowledge exchange between both European and African communities.

Initial scoping outcomes from the Consortium workshop on resource contribution and sharing (*x indicates positive votes and o indicates negative votes from the consortium co-creation session online using jamboard*)

Table 1: Outcomes from the Consortium workshop

Continent	Owner/Creator/Provider	User
African Hubs	oxo	xxx
European Hubs	xxx	ooo
African Makers	ooo	xxx
European Makers	xxx	oxo

The outcomes of the workshop highlighted the vital importance of and need for the networks representing Africa and Europe, as identified in the Community Activation and Engagement Strategy (Deliverable 6.1), to have a regular forum (online meetings, community hangouts) where knowledge is shared, peer-to-peer connections are formed, resources which have been embedded within mAkE and its consortium partners are communicated and the community is actively engaged through this format of online gatherings which may extend into hybrid and offline or physical events in the future. The forum will be the amplifying tool utilized to have the desired REF and share the information as the project develops the content and resources and in parallel create a safe and inclusive space where all communities can discuss problems, identify challenges, and provide solutions as well as collaborate on hardware innovations.

The Amplifier Approach (AA) referred to in the Community Activation and Engagement Strategy feeds directly into the Sharing and Embedding Strategy using the REF creating a symbiosis across the EBIMS steps where information must be shared and embedded. The format used successfully in IOPA community engagement through open-source hardware, Discourse, is identified as a viable platform to meet the need of a shared and accessible portal for open hardware projects and resources. Through the co-creation session, the group initially identified that European hubs and community members would be more of the contributing parties to the network's additional shared and embedded resources whilst African makers would be the primary users or downloaders of the resources. With this in mind, and considering access and stability of internet connectivity, more research and



consortium co-design will provide the project with the identification and implementation of best platforms for the strategy to take advantage of and reach and impact the community at large.

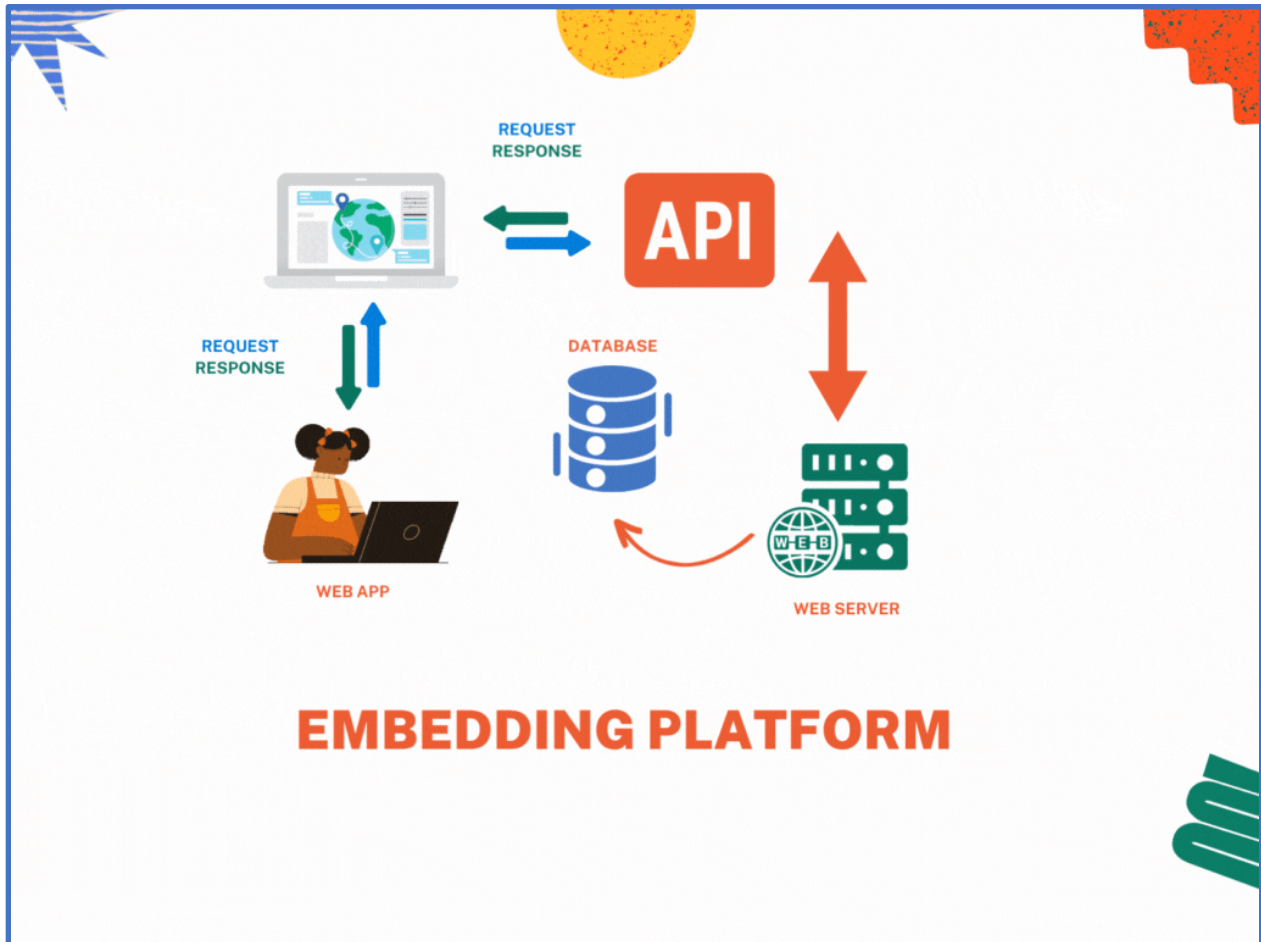


Figure 3: API opportunities for embedding in partner sites and adding capabilities

Utilisation of cross linking and embedding using an Application Programming Interface (API) could be beneficial for pooling resources, sharing information, and producing locally e.g. integrating Google Maps API to locate machines within makerspaces for local production contracting or Third-Party Banking integrations to enable direct order purchasing for clients to makers/makerspaces registered through mAKE. 'An API is a messenger that takes requests, translates, and returns responses. When you sit down to order at a cafe, the waiter takes your order, forwards it to the kitchen, and returns with your food. In this scenario, the waiter acts as the API or intermediary. They translate your request for pancakes from their handwritten notes, into the computer system, to the cooks in the kitchen and then eventually return with



your order⁵. Predominantly, making use of online platforms and open-source repositories (e.g. GitHub, Welder.app, Appropedia, Discourse, Wikifactory and Fablabs.io) will be at the core of sharing of the consortium aims and objectives as well as outputs. APIs are a secondary avenue to pursue as the foundation for further benefits to the community and accessibility e.g. Access to B2C platform editions like Shopify for the consortium to decide on the value of for one use case, embedding e-commerce into the website and across the community as an additional benefit driving local production.

5. Repository Platforms: Discourse and Wikifactory

There are many communities of practice, interest, and discussion surrounding open-source hardware and the topics surrounding building, teaching, and development topics in these spaces. Many of the forums in the open-source hardware space are already using, or are currently considering Discourse⁶ as a platform for community discussion. The work already compiled for instructions and community sharing and embedding through WP2 is attached in the Appendix C. As a secondary platform, the project consortium is exploring Wikifactory. Wikifactory is a Collaborative Manufacturing Platform (CMP) with a community of over one hundred and forty thousand (140.000) designers, engineers, SMEs, and hardware startups in more than one hundred and ninety (190) countries working on more than nine thousand (9.000) products. Wikifactory already allows access to over eight hundred (800) open hardware projects to produce drones, robotics, food-waste technology, sensors, and recycling products among others. The initial community group⁷ has been set up and will be shared across the network of community networks and populated as the project increases its reach and builds the portfolio and member community collaborating across the African and European continents of makers. The portals will be administered by work package 5 and 6 and relevant consortium partners e.g. IOPA and communities will be invited to be members and contributors for the duration of the project and the long-term sustainability and maintenance will form part of the strategy to keep the community engaged and activated past the project duration.

⁵ [What Is an API? How APIs Improve Application Development \(g2.com\)](https://www.g2.com/articles/what-is-an-api-how-apis-improve-application-development)

⁶ <https://www.discourse.org/>

⁷ <https://wikifactory.com/workspace/@makeafricaeu>



6. Measuring Impact

Work package 6 aims at ensuring that resources developed are available, shared and embedded into existing institutional structures including maintaining and sustaining resource uptake beyond the project completion date. Raising awareness through the Communication, Dissemination and Outreach strategy of the available resources, through the Capacity building tools for social innovation D5.4 and facilitating engagement through the Community Engagement and Activation Strategy will provide a catalyst for shared capacity development and open knowledge commoning through online webinars, offline events, and peer-to-peer learning sessions, among other formats. The events and activities, in Africa, Europe and Globally, will be documented in accordance with work package 5 and reported in collected metrics of downloads of resources from the mAkE website and accumulated active participation in online and offline events in synchronicity such as social media platform sharing e.g., amount of YouTube views. All mAkE outputs (open education resources and training, online platforms, maps, management systems, and catalogues) will be made available via the dedicated website and access through to an open repository (Github, Welder.app, Wikifactory, Discourse) thereby enabling open and inclusive sharing and embedding is activated and able to be continually contributed to by the 'mAkErverse' community.



7. Appendix A



Figure 4: mAKE - Co-design defining how the consortium can build and sustain the community



8. Appendix B

Table 2: Overview of cross-cutting tasks for each WP

WP	Cross-cutting task	Final objective	Sharing and Embedding Location
WP1	WP1O1 Provide business expertise to high potential, digital innovation start-ups in order to build business models that are for-profit and for-purpose and improve lives through digital innovation and job creation	<ul style="list-style-type: none"> Catalogue of Business Models (D1.1) 	<ol style="list-style-type: none"> Catalogue of Business Models: will be on a dedicated URL It will be linked to from the IOP website; Webinar Series: On Youtube; GIG playlist Open AIR will promote Catalogue via its Open AIR Twitter feed and via blog post on Open AIR website
WP1		<ul style="list-style-type: none"> D1.2 Venture Building Handbook D1.3 Matchmaking and Residency Report D1.4 Innovative Funding report 	<ol style="list-style-type: none"> Share pdf on social media platforms, via email and embed on mAKE website? Social media, email, and embed on mAKE website? Social media, email, and embed on mAKE website?
WP2	WP2O1 Map and evaluate existing approaches and case studies of regional and national associations in the fields of digital innovation, maker and innovation hubs in Africa and Europe	<ul style="list-style-type: none"> Report of 7 Case studies (D2.1) 	<ol style="list-style-type: none"> FCF social media promotion FCF mailchimp (newsletter) FCF news section of the website FCF website (project section) Slack Open AIR will promote case study findings via Open AIR Twitter feed and via blog post on Open AIR website



<p>WP3</p>	<p>WP3O1 Enable the capacity development of makerspaces themselves. WP3O2 Thereby improve and sustainably establish the services they offer to their entrepreneurial members, local SMEs, start-ups, and individual makerspace members, in creating sustainable, impact-oriented digital innovations.</p>	<ul style="list-style-type: none"> • Open Makerspace in a Box Toolkit (D3.1); • Training of Trainers Report (D3.2); • Open Educational Resources (D3.3); • MOOC platform (D3.4) 	<p>1) 2) 3) 4) 5) 6) 7) 8) Open AIR will promote MOOC via Open AIR Twitter feed and via blog post on Open AIR website</p>
<p>WP4</p>	<p>WP4O1 Skills: Enable mutual recognition of skills across makerspaces and between makers.</p>	<p>Skills: Developing mutual recognition of hardware DIH users' skills using maker passports (Task 4.1)</p>	<p>D4.1</p> <ul style="list-style-type: none"> • 'Creating a digital maker passport' Survey • Mutual recognition standard Published on the IOP Pubpub site under CC by SA 4.0 license. <p>D4.2 - Maker passport - TBD - Likely a table to be Published on the IOP Pubpub site under CC by SA 4.0</p>
<p>WP4</p>	<p>WP4O2 Machinery: Enable Makers, their customers and potential customers to know where they can find the machines, they need to fulfil a manufacturing contract. Provide consistency in data to enable data to be shared in maps.</p>	<p>Machinery: mapping of machinery in and near makerspaces across Africa and Europe (Task 4.2)</p>	<p>D4.3 - Map published via Datasette at: https://map.internetofproduction.org/Global/Global and linked to from the IOP website .</p> <p>Data submission form - Source code on IOP Github under GNU General Public License 3.0 User guides and information materials - Published on the IOP website under CC by SA 4.0 license.</p>



<p>WP4</p>	<p>WP4O3 Contracts: Enable contracting with a number of small, distributed suppliers. Enable contracting across multiple geographies.</p>	<p>Contracts: smart contracting to distribute production across the networks.</p>	<p>Scoping document: Research on the state of distributed contracting, recommendations – Published on the IOP Pubpub site under CC by SA 4.0 license.</p> <p>D4.4 – Distributed contracting prototype – Open-Source license – Shared on IOP Github under GNU General Public License 3.0.</p>
<p>WP5</p>	<p>WP5O4 Existing social innovation capacity building tools from open-source hardware innovation, design and maker initiatives will be analysed in order to develop a set of design guidelines, templates and how-to's made available to the project and stakeholders</p>	<ul style="list-style-type: none"> Guidelines for capacity building tools for social innovation (D5.4) 	<ol style="list-style-type: none"> FCF social media promotion FCF mailchimp (newsletter) FCF news section of the website FCF website (project section) Slack
<p>WP6</p>	<p>WP6O1 Facilitate online community engagement in the different formats developed in WP1, WP2, WP3 and WP4 WP6O3 Ensure the project's sustainability beyond the H2020 funding period by embedding project outcomes into existing institutional structures, i.e. open education resources and trainings, moderated online platforms, maps, management systems, and catalogues developed in WP2, WP3 and WP4</p>	<ul style="list-style-type: none"> Community Activation & Engagement Strategy (D6.1) Sharing & Embedding Strategy (D6.3) 	<ul style="list-style-type: none"> mAKE Website and GIG Website GIG Newsletter GIG Blogposts GIG Social Media Wikifactory group



<p>WP7</p>	<p>Collect information across all WPs</p>	<p>2 objectives: 1. ensure that the project’s network structures, the capacity building support, the created infrastructures, and the created materials are developed according to the project plan and are contributing to the project objectives. 2. provide evidence of the envisioned impact, and to identify facts and stories that demonstrate the project’s influence beyond the borders of the consortium, especially in terms of capacity building.</p>	<p>Impact publication (scientific publication to be defined which journal/conference)</p>
------------	---	---	---



9. Appendix C

Cross-Referencing Shared Items of Interest on Open Source Hardware Community Forums: Discourse

Problem Statement

There are many communities of practice, interest, and discussion surrounding open source hardware and the topics surrounding building, teaching, and development topics (among many others) in these spaces. And, it appears that many of the forums in the open source hardware space are already using, or are currently considering [Discourse](#) as a platform for community discussion.

While these forums may be geographically, project, or topic-specific, there is a *lot* of overlap between the separate Discourse forums. One community member could be subscribed to 5-6 different forums, just to keep an eye out for upcoming events or opportunities of interest.

Could there be an easier way, where a community user could see one consolidated list of events, opportunities, or other discussions, while still being able to easily filter down to just a single forum? Why yes, there is! And we'd like to make it happen.

The Solution

Discourse RSS Polling (and consensus amongst forum admins, of course!)

What it is:

- Each forum admin will need to install the "Discourse RSS Polling" plugin: <https://github.com/discourse/discourse-rss-polling>

What it does:

- The Discourse RSS Polling plugin allows for the capability to create single consolidated feeds between separate Discourse forums. Here is what that could look like, for example, for a test category we've named "Consolidated Events," which we've set to pull the following two feeds together:
 - <https://forum.openhardware.science/c/events.rss>
 - <https://community.oshwa.org/c/open-hardware-summit.rss>



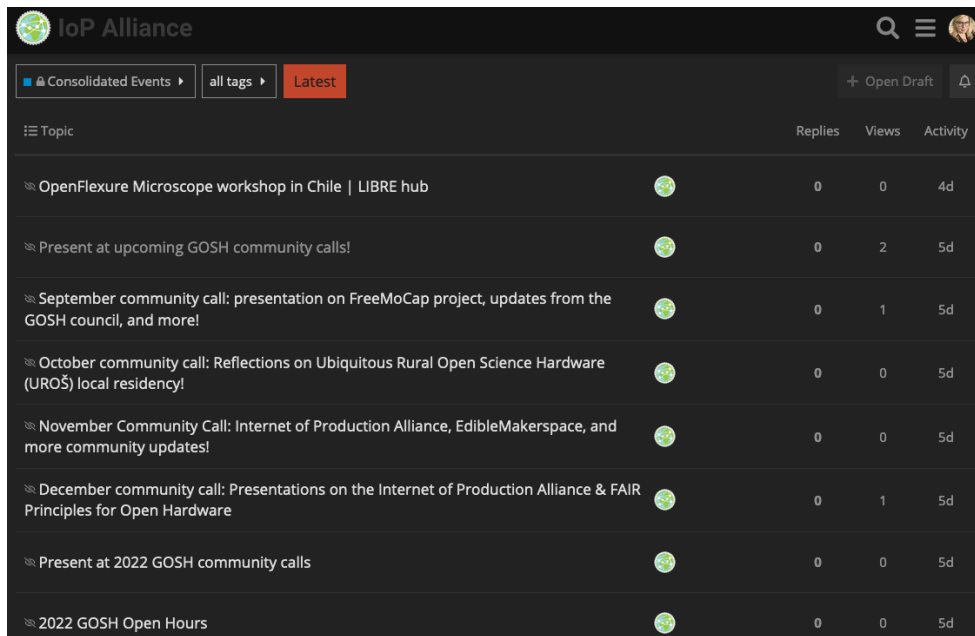


Figure 5: Example for a discourse RSS Polling plugin

👉👉 check it out, all events from both OSHWA and GOSH are listed together! 👉👉

And, you can click on any one of the events in the list and drill down to the original post/discussion thread in the original forum where is started:

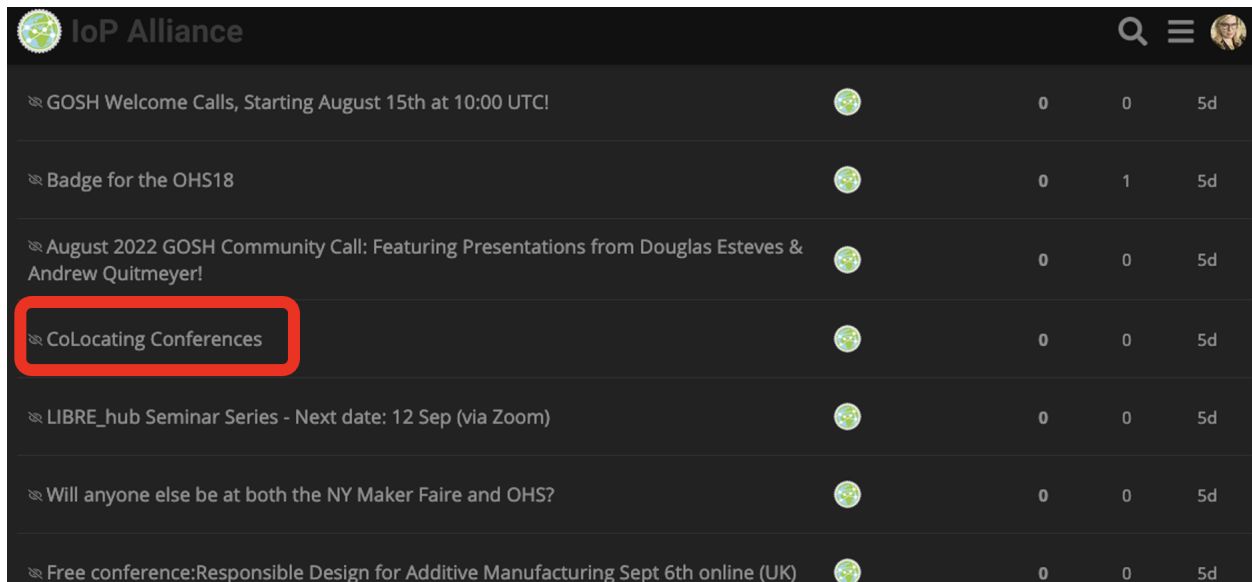


Figure 6: Snapshot of diverse events



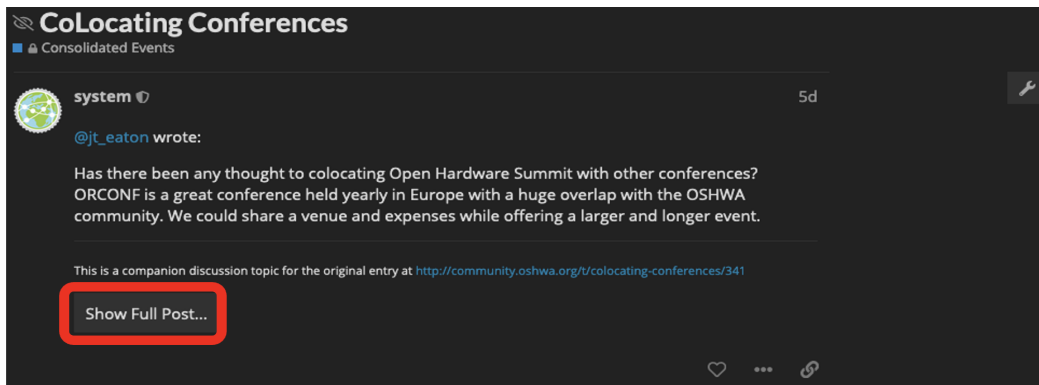


Figure 7: Snapshot of a discussion item

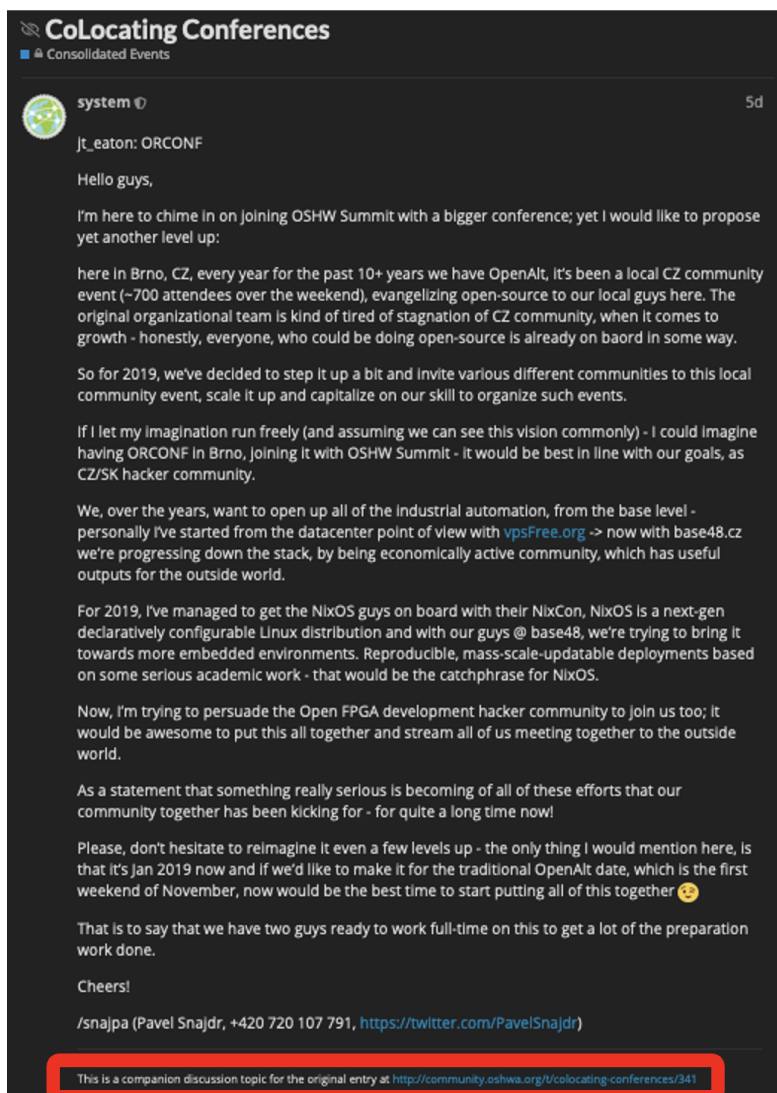


Figure 8: Snapshot of a comment



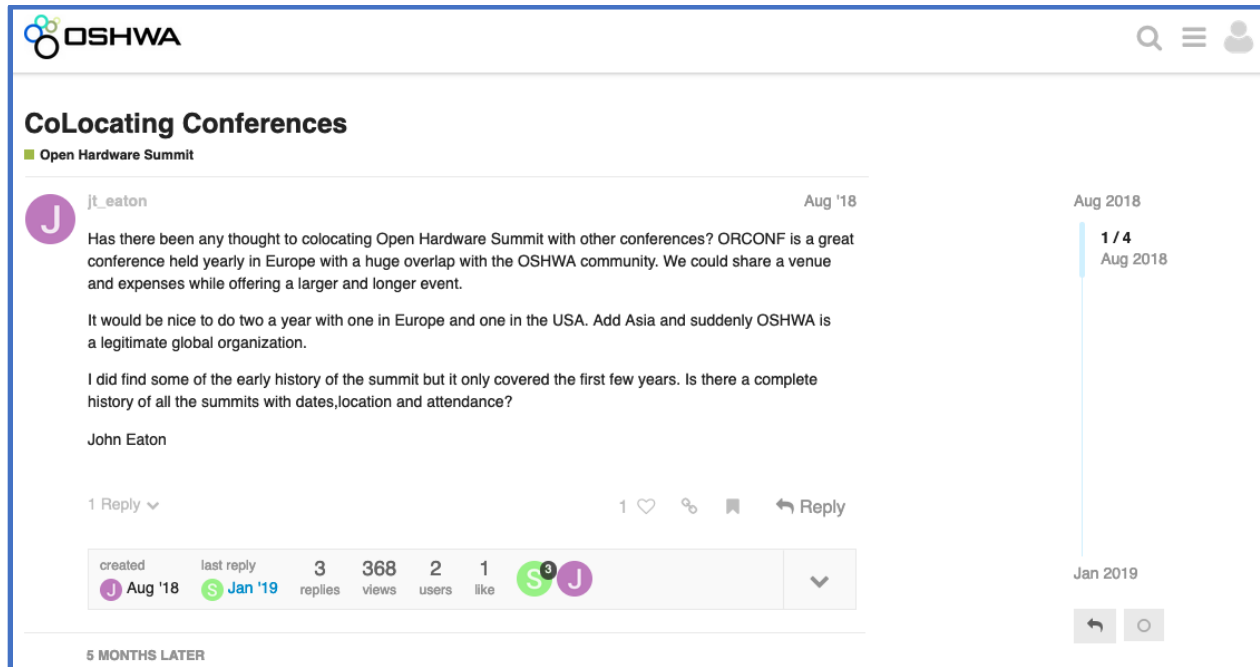


Figure 9: Snapshot of a discussion item

And, voila! Community members can post/respond in consolidated list or original post (preference is to respond to original post).

Now, just imagine; especially for this topic (granted, it's an older one – just using it as an example) what if it could have been viewed across multiple Discourse forums concurrently. what could have happened? Maybe someone in the IoPA who wasn't on OSHWA's forum would have joined the conversation and shared new/interesting information – there is a lot of potential here.

But first, let's talk more generally about how Discourse RSS Polling works, and the decisions that we'll need to make as Discourse forum admins.

How it works:

- Each Discourse community forum needs to have the RSS Polling Plugin installed: <https://github.com/discourse/discourse-rss-polling>
- You've seen what it looks like for the end user, now let's take a look at it on the back end, and how it could be configured.



- The use case we want to address in this configuration discussion is: How does a forum user take a larger consolidated list of events (for example), and limit it to just one forum and/or topic?

This is what the admin panel looks like on the backend. As you can see below, the two aforementioned content origins in our test “Consolidated Events” (<https://forum.openhardware.science/c/events.rss> and <https://community.oshwa.org/c/open-hardware-summit.rss>) are what have been used in the URL section (designating which RSS feeds are populating the list).

Basically any RSS feed will work here:

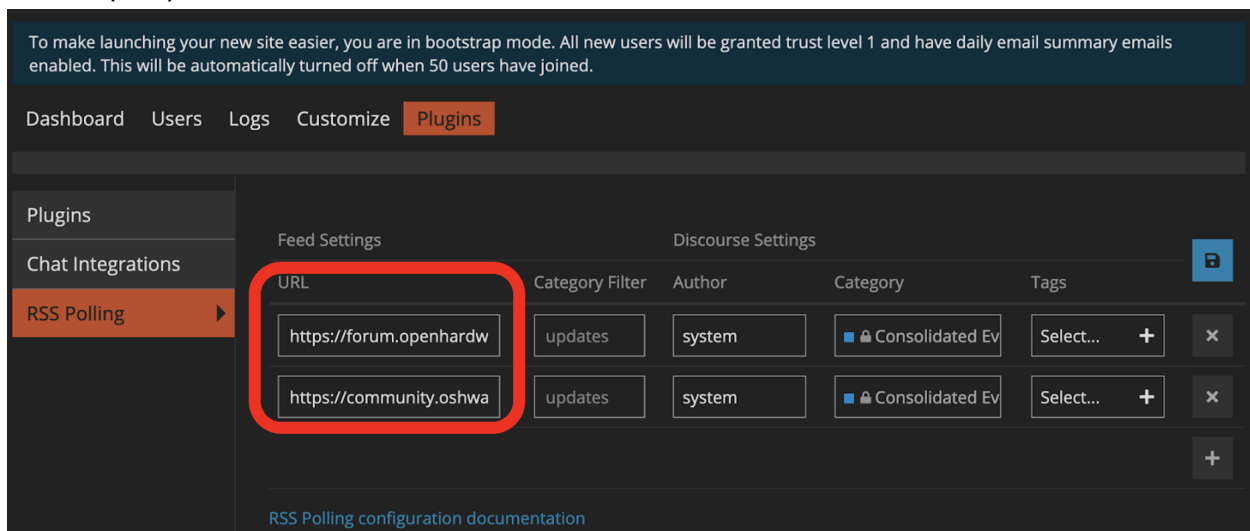


Figure 10: Snapshot of RSS Polling Tool (<https://>)

You can turn any discourse category into an RSS feed by going to its URL and adding .rss at the end. Example: OSHWA didn’t have an “Events” category on their forum, so we used the summit channel and just added .rss and away we go!

If any of the RSS feeds have assigned categories, the Category Filter section is where that designation would go, and a user could filter in that way:



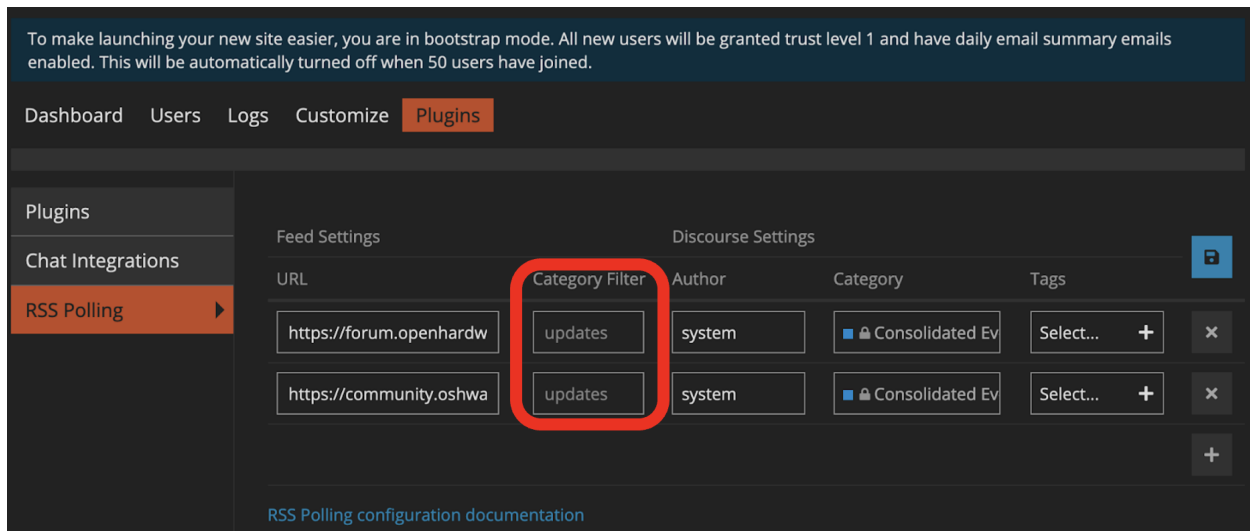


Figure 11: Snapshot fo RSS Polling Tool (updates)

Since the loPA created this test case, the Author is listed as “system” for both feeds; however, if we wanted to create a separate account for each forum, for example, a user could filter by an Author named “GOSH” or “OSHWA” (this type of filtering may require a bit of manual configuration/overhead):

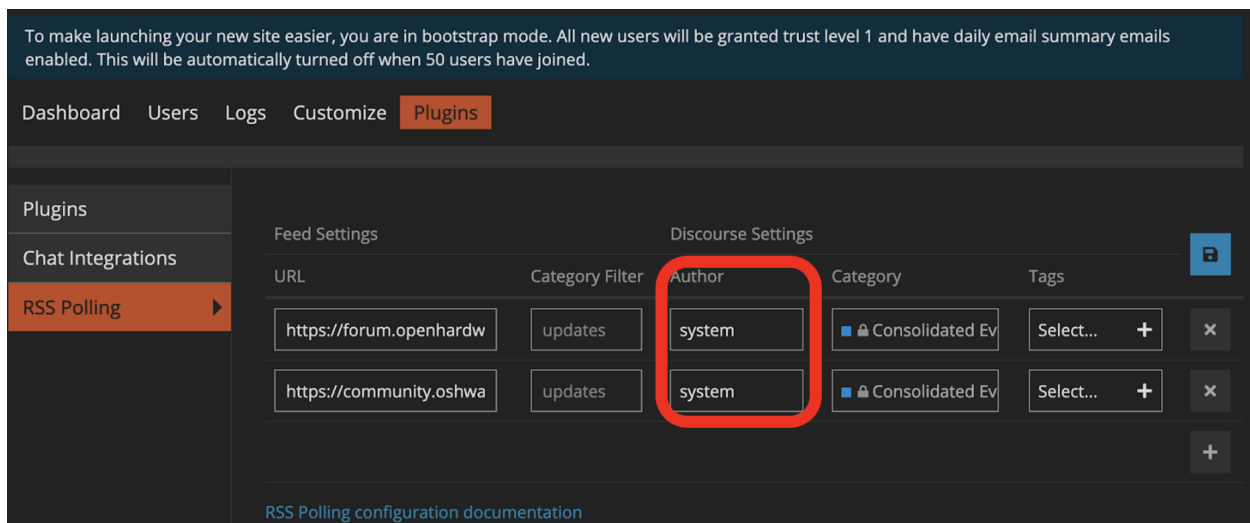


Figure 12: Snapshot of RSS Polling Tool (system)

This is the test category we created, “Consolidated Events” – the naming of this category is flexible, but it will be important to reach consensus between forum admins on what content makes sense for sharing, and what it could/should be called to resonate/be recognized across all participating community forums:



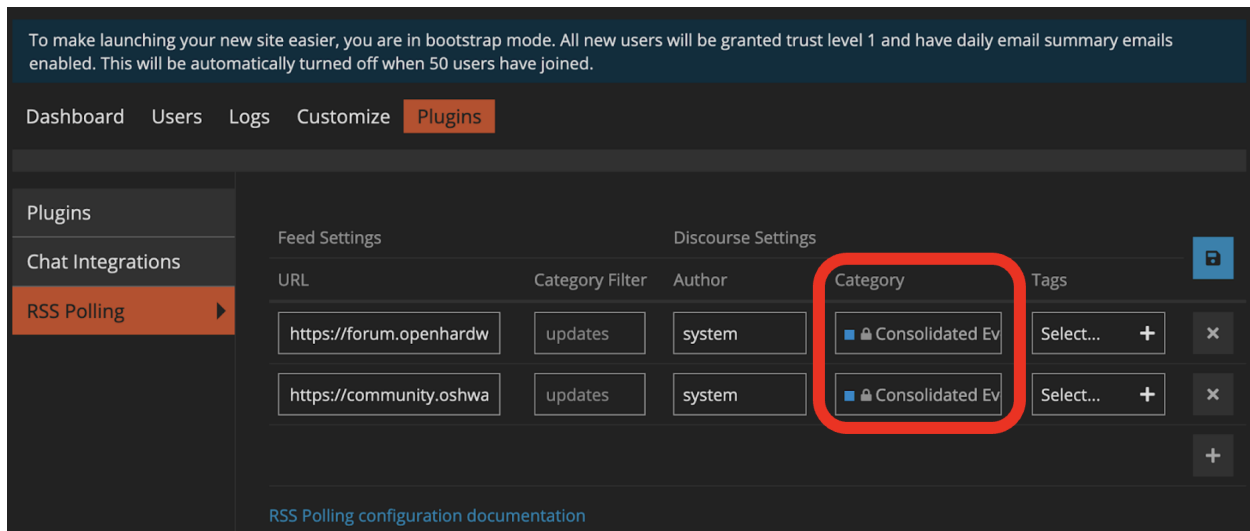


Figure 13: Snapshot of RSS Polling Tool (Consolidated Events)

If forum admins could agree on a shared tagging system (recommend tag corresponds with post provenance – who posted originally, so “GOSH,” “IOPA,” and “OTN” accordingly). This would be the easiest/lightest lift to configure, but the forum admin would need to agree on the tags and create a shared codex available to the community, to ensure that posts are getting the tags they need to get filtered properly:

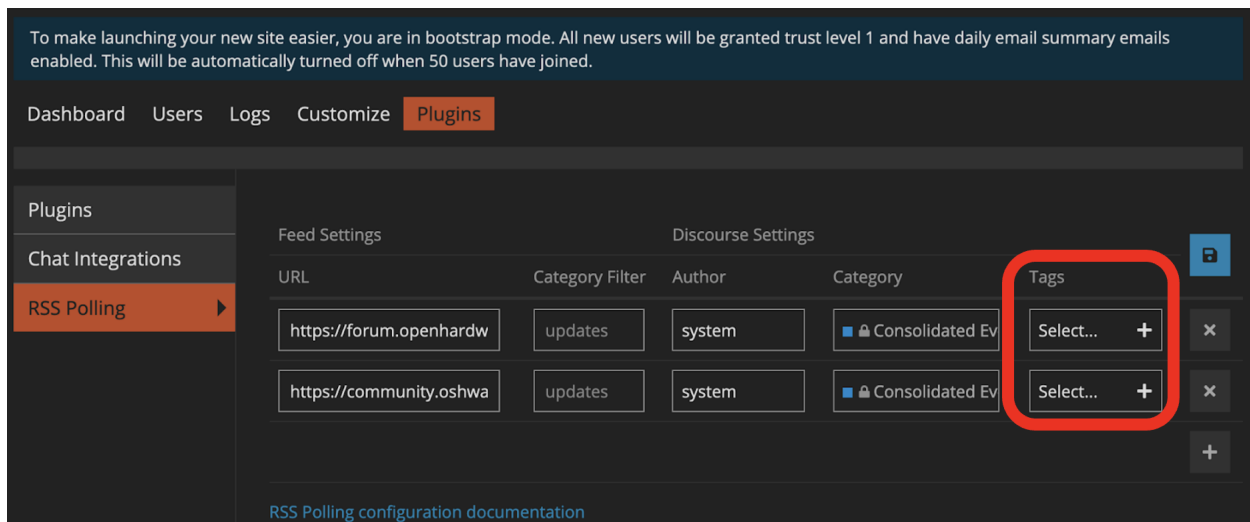


Figure 14: Snapshot of RSS Polling (Select...)

