

Gi2MO IdeaStream Similarity

User Manual

1. Summary


Gi2MO IdeaStream Similarity is a Drupal extension that works together with the IdeaStream module and delivers the ability to create and manage idea relationships in an Idea Management System established using the IdeaStream software family.

The goal of this module is to deliver a feature similar to duplicate detection in current Idea Management Systems but also go beyond and allow users to create new relationships like opposite ideas, extending ideas etc.

The module injects new elements in a variety of places in the Gi2MO IdeaStream interface and depending on user role and privileges allows to:

- Select relationships for newly created idea – IdeaStream Similarity can detect and suggest similar ideas when new ideas are being created. It can prompt idea creators to select relationships with existing ideas directly after they submit their new idea.
- Manage relationships- feature aimed for moderators, available for every idea under 'Similar Ideas' tab in the idea panel. Allows browsing, adding, deleting and changing all relationships of an idea. Additionally allows approving or rejecting requests for idea similarity made by regular users.
- Create new ideas that extend existing ones – members of the community inspired by existing ideas can choose to extend them immediately setting the relation between their idea and the existing one.
- Submit reports of idea similarity – members of the community can submit reports for existing ideas to link them with other (e.g. suggest duplicates). It is possible to automatically approve those requests or let moderators to handle queries manually.

2. Similarity Detection

We can create new ideas by clicking on the proper link ( **Create New Idea**), after filling the form with Idea Title, description and taxonomy terms.

If the module detects similarity then the similarity screen appears:

Detected Similar Ideas

We have detected some ideas similar to yours! Please help us keep the system in order and mark the relationships.

Title: Wine increases risk of malware

Idea Summary: As Wine becomes more compatible and becomes a bigger target, it is more likely to be infected by malware. There are over a million Windows malwares out there. I don't want to install something that gi(...)

Suggestions:

[Full-text Search (5) | Gi2mo d0_th70 Search (0) | Gi2mo d2_th70 Search (0)]

- Smart sandbox - file manager assisted sandboxing:** --Select Relationship--
- Wine allows harmful Windows code to be executed on Linux:** --Select Relationship--
- Running windoze apps in wine makes a security hole:** --Select Relationship--
- Security Center in Ubuntu:** --Select Relationship--
- Software center asks for password too often:** --Select Relationship--

|

On this screen we have the current idea info and on the bottom page, we see related ideas, according to custom similarity search types.

These types are accessible using the suggestions navigation bar:

Suggestions:

[Full-text Search (5) | Gi2mo d0_th70 Search (0) | Gi2mo d2_th70 Search (0)]

For each idea, some info are displayed on a popup:

Suggestions:

[Full-text Search (5) | Gi2mo d0_th70 Search (0) | Gi2mo d2_th70 Search (0)]

- Smart sandbox - file manager assisted sandboxing:** --Select Relationship--
 - Wine allows harmful Windows code to be executed on Linux:** --Select Relationship--
 - Running windoze apps in wine makes a security hole:** --Select Relationship--
 - S Security Center in Ubuntu:** --Select Relationship--
 - S Software center asks for password too often:** --Select Relationship--
- Smart sandbox - file manager assisted sandboxing*
Most applications dont need full acces to your home and removable media (+ whatever you have write access to), in fact they dont need to be reading that stuff either, like any app you run can read you(...)
Author:
S Created: Thu, 12/11/2008 - 06:16

We can set any relationship for each idea suggested by using the combo box on its right side:

Suggestions:
 [Full-text Search (5) | Gi2mo d0_th70 Search (0) | Gi2mo d2_th70 Search (0)]

- Smart sandbox - file manager assisted sandboxing: --Select Relationship--
- Wine allows harmful Windows code to be executed on Linux: Similar of my idea
- Running windoze apps in wine makes a security hole: Supplementary of my idea
- Security Center in Ubuntu: Related_topic of my idea
- Software center asks for password too often: --Sele

Submit Idea | Rewrite Idea | Cancel Idea

Some relations selected

3. Similar Ideas panel

Each idea has a panel that summarizes its relations. This panel is accessible from the navigation bar of the idea:

View | Voting details | Edit | Workflow | Access control | Reviews | **Similar Ideas** | Devel

Wine Allows Harmful Windows Code To Be Executed On Linux Category: Uncategorized

0 votes
 REJECTED

Sent by on 02/17/2010 - 00:01
 Status: Rejected
 Tags: Security, Wine, Virus, Malware, Spyware, Adware
 Categories:

Viruses that run within windows also run within linux through wine. This presents a major security issue: even if it doesn't compromise the security of Ubuntu, it still acts as an area for windows viruses to spread and brings virus problems to users running wine. The simple answer is to not use wine, but that is beside the point. For many people there are not alternatives available for every application. Wine is continuously improving and allowing more people to move from Windows. Ubuntu provides a great OS for people to whom windows is unavailable, so running a virtual machine is not an ideal solution either. As wine becomes more effective, more

On this panel we find current related idea for each type of relation. It is possible to edit or delete these relations; approve pending relations or adding new ones by clicking the proper button. Also some extra information is displayed on a popup:

Running windoze apps in wine makes a security hole

View Voting details Edit Workflow Access control Reviews **Similar Ideas** Devel

[Alt_idea Ideas \(0\)](#)	[Alt_solution Ideas \(0\)](#)	[Complements Ideas \(0\)](#)	[Details Ideas \(0\)](#)
[Disjoint Ideas \(0\)](#)	[Duplicates Ideas \(0\)](#)	[Excludes Ideas \(0\)](#)	[Extends Ideas \(0\)](#)
[Generalizes Ideas \(0\)](#)	[Iss_duplicated Ideas \(0\)](#)	[Iss_extended Ideas \(0\)](#)	[Opposite Ideas \(0\)](#)
[Related_topic Ideas \(0\)](#)	[Similar Ideas \(1\)](#)	[Supplementary Ideas \(0\)](#)	

Similar Ideas:

- [Wine allows harmful Windows code to be executed on Linux](#) ⓘ 🗑️: --Change Relationship-- ▾

Similar ideas panel

Similar Ideas:

- [Wine allows harmful Windows code to be executed on Linux](#) ⓘ 🗑️: --Change Relationship-- ▾

Wine allows harmful Windows code to be executed on Linux

Viruses that run within windows also run within linux through wine. This presents a major security issue: even if it doesn't compromise the security of Ubuntu, it still acts as an area for windows v(...)

Author:

Created: Wed, 02/17/2010 - 00:01

Extra information of the idea

Pending relationships for approval:

Title	Type of relationship suggested	
More fish!	Extension	✓ Approve ✗ Deny approval
Give lunches with more fruits!	Duplicate	✓ Approve ✗ Deny approval

Suggested by: test cat

Date of suggestion: Sun, 04/29/2012 - 20:32

Top Id

Pending relations for approval

Add Relationship

[[Full-text Search](#) | [Gi2mo d0_th70 Search](#) | [Gi2mo d2_th70 Search](#)]

Similar Idea by Title:

Enter similar idea title

Relationship Type:

Suggestions:

Instead of typing idea title, choose a related idea from the suggestions list.

- Wine allows harmful Windows code to be executed on Linux:**
- Add Wine programs to the applications menu:**
- WINE integrated into Ubuntu:**
- Starter for applications inside VirtualBox:**
- Fix the autorun.ini issue:**

Adding new relations from the panel

5. How does the similarity search work?

We have three different types of search: Full-Text search (default), customizable Taxonomy searches and Mixed search.

Full-Text, search for word matches on Idea title and Idea Description, and shows similarity based on these fields according to its content.

Taxonomy Search

Taxonomy allows the module to search ideas with similar taxonomy terms. Is it possible to customize distance, threshold and vocabularies for each search.

- Distance mean how far one term can be to another (inside the taxonomy tree) to get match between them. Metric is 1 for each step inside taxonomy tree.
- Threshold delimits how many % of terms should get match to detect similarity.
- Vocabulary sets any vocabulary for the search (tags, own taxonomy tree or even between all vocabularies)

Also there is an option inside administration settings which allows indexing all parent terms of its taxonomy for a given one. This means that idea will have all that terms available to get similarity.

Mixed Search

Mixed search combine the best results for each of the created types of search (taxonomy or full-text) Results with the highest score are the ones shown as similar.

If some result appears in several search types, it will be counted once with the highest score of all of them.

6. Final Notes

Gi2MO IdeaStream Similarity is a Drupal module that has been developed by Javier Espinosa Garcia for the Gi2MO Project (<http://www.gi2mo.org>). The work has been sponsored by the Grupo de Sistemas Inteligentes ([GSI](#)) of the Universidad Politecnica de Madrid ([UPM](#)).

The module is licensed under GPLv2 and can be freely distributed, modified and reused. For details of the license please see: <http://ideastream.gi2mo.org/license.html>

This software is not a stand-alone application. Similarity is a module developed in PHP using the API of a CMS called Drupal. The IdeaStream Similarity is supposed to be used together with an Open-Source Idea Management System called Gi2MO IdeaStream (<http://ideastream.gi2mo.org/>).

For any requests, questions regarding the module or entire Gi2MO project please refer to project contact page: (<http://www.gi2mo.org/contact>).

Development information appendix

Gi2MO IdeaStream Similarity is based on GPLv2 license and can be freely modified, copied and reused. Below you can see some basic information about the underlying database architecture and the organization of the source code.

Search types Database Schema

All the different types of search are located inside `similar_ideas_searchtypes` table.

Fields of this table are `id`, `name`, `type` (full-text, taxonomy or mixed), `distance`, `threshold` and `taxonomy_subtree`

For Full-Text search `name` and `type` are used.

For taxonomy searches apart from `distance` and `threshold`, `taxonomy_subtree` has the vocabulary id (`vid`) of the vocabulary used for the search. In case all vocabularies then 'all'.

In mixed search, `distance` and `threshold` are irrelevant and `taxonomy_subtree` has the ids of the searches involved, separated with underscores ("_") for example if we are using searches 1 and 3 then `taxonomy_subtree="1_3_"`

FILES & CODE: Some annotations.

The entire taxonomy search feature is located inside **`similar_ideas_luceneapi.inc`**

`Similar_ideas_distances.inc` – has the algorithm to detect all terms in distance N for a given term.

`similar_ideas.module` – apart from possible urls, permissions or node hooks, this file also has some functions to get all the relationship types info and the search types info.

`Includes/similar_ideas_panel.inc` – the source code for the panel that summarizes similar ideas. Including moderation and "Add relationship panel". This is the panel that is accessible per every idea via a tab called "Similar ideas"

`Includes/similar_ideas_page.inc` – the source code for the page that is shown after idea is created or edited. Also, this file has the function to obtain and calculate mixed search results.