

seekda as IT Multiplier: The Web Services Portal





- Founded in 2007
- Management and Development Web services for e-commerce
- e-Tourism is the main focus
- Main Products:
 - Channel Connect
 - Dynamic Shop
 - Conference Management System
 - Web Services Portal





- Research:
 - Insemtives
 - Service Bundler
 - Service Detective
 - Smart Reality
 - COIN





- Enrich COIN's base services
- Investigate Web API detection techniques
- API to access the services
- Towards community building

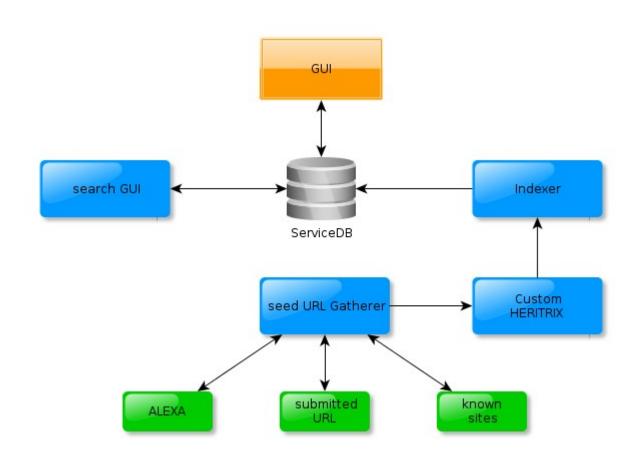


webservices.seekda.com





Crawler





Enriching COIN's base services

- Two main domains:
 - Enterprise Collaboration
 - Enterprise Interoperability
- ~100 concepts
- ~230 keywords filtered
- >350 unique WSDL services extracted



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- Hard problem in general
- Relies on web page analysis
- Techniques
 - Automatic Classification
 - Supervised
 - Unsupervised
 - Term Frequency
- Tests are work-in progress



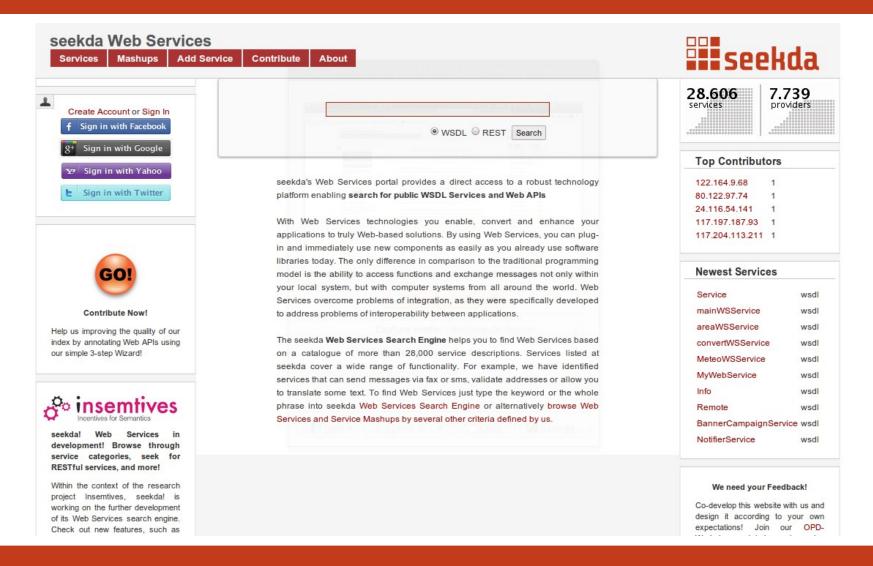
Web Services Portal API

https://webservices.seekda.com/ssl/search_api?

Parameter	Description	Examples
q	Identifies the query whose values can be either keywords (connected with a '+') or qualified tagvalue pairs as those below	q=enterprise+sms q=tag:enterprise
country (q- tag)	Returns services that pertain to the particular country code	q=country:de
sort (q-tag)	Sorts the results using the specified criterion. This criterion can be documentation, availabilitylastweek, availabilitylastyear, provider, country and age.	q=enterprise+sort:cou ntry
tag (q-tag)	Matches services that match the given tag	q=tag:sms
provider (q- tag)	Matches services from a given provider	q=enterprise+provider :http://mappoint.net
р	Indicates the page number of results to display (implicitly enables pagination)	q=enterprise&p=2
resultsPerPa ge	Determines the number of results per page if pagination is used.	q=enterprise&p=2&re sultsPerPage=10



Towards Community Building







- Annotation Crowdsourcing
- Mashups Challenge
- Long Term Competition



Annotation Crowdsourcing

- Amazon Mechanical Turk
- Specify tasks
 - Web API yes/no
 - Provide and/or confirm tags
 - Provide and/or confirm category
 - Provide and/or improve description
 - Fill-in a short survey
- Optionally specify a qualification test
- Set Reward
- Get Results and approve



Annotation Crowdsourcing

Description and Category 1 > 2 > 3

If possible, please provide a short (one sentence), but meaningful description of this Web API, such that other users can quickly get an overview of it's functionality. You may just copy a text snippet from the document to the right, if a good description is provided there. Junge-search provides a way to do shopping online. The following category has been extracted automatically. Please check if it is appropriate, and if possible provide a more detailed category by selecting it below. - Shopping Back Next





Annotation Crowdsourcing

- Three round performed
- 320 tasks in total
- Pretty good quality (80% acceptance)
- Fine tuned at every iteration
- Very good bootstrap



Mashup Challenge

- Create and add mashups
- Annotate in the process
- Steps:
 - Announcement
 - Registration
 - Brainstorming
 - Implementation
 - Finalisation
 - Addition of services and APIs (if required)
 - Annotation
 - Submission





- Lasts 6 weeks
- Evaluation by seekda engineers and external experts:
 - User voting
 - Overall quality
 - Originality and usefulness
 - Technical details/implementation
 - Annotations of used services/APIs
- Presentation of top 3 submissions
- Winner gets a smartphone



Long Term Competition

- Provide annotations; become a top contributor
- Collect points by:
 - Changing and/or improving annotations
 - Providing new annotations
- Weight points based on annotation type
- Rank contributors
- Reputation is main award





- Web API detection is a cornerstone
- Annotations are needed to provide good results
- Insentivise to obtain annotations



Q&A