

How We Killed Our Most-Loved Service and No One Batted an Eye

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Replacing a well-loved service

- First, we did it the wrong way
 - Don't do it like we did!
- Then, we did it the right way
 - Do it like we did it!

The General Finnish Thesaurus YSA

- National Library's General Finnish thesaurus YSA was/is the most used thesaurus in Finland
 - Developed originally in the 1980's mainly for book indexing
 - Used in the indexing of the national bibliography
 - Monolingual, has a swedish equivalent Allärs
 - Structure tied to MARC21-format, for example use of MARC-subdivisions

VESA

- A dedicated site for browsing YSA and its Swedish-language counterpart Allärs
 - Also included the music domain thesaurus MUSA/Cilla

VESA

[Aakkosellinen hakemisto](#)
[Alanmukainen hakemisto](#)
[Maantieteellinen hakemisto](#)
[Vapaan indeksoinnin sanaryhmät](#)
[Liitetaulukot](#)
[Opastus](#)
[YSA - Hakusivu](#)
[VESA - Etusivu](#)
[YSA ONKI-palvelimella](#)

YSA - Yleinen suomalainen asiasanasto

Haettava asiasana:

Huom: Hakusanan voi katkaista *:llä

A

a priori tieto

käytä: [apriorinen tieto](#)

[A\(H1N1\)-virus](#)

[A\(H5N1\)-virus](#)

[A-klinikat](#)

[A-vitamiini](#)

[AA-liike](#)

AAC-menetelmät

käytä: [puhetta tukeva ja korvaava kommunikaatio](#)

[Aachen](#)

[Aakenustunturi](#)

[aakkoset](#)

Hakutulos: (YSA)

Käytettävä asiasana: [koralliriutat](#)

Rinnakkaistermit: [laguunit](#)

Korvaa termit: atollit

Kuuluu ryhmiin: [\[11\] Maantiede. Kartografia. Kartoitus. Geodesia. Geologia. Paleontologia](#)
[\[13\] Hydrologia](#)

Ruotsinkielinen asiasana: [korallrev](#)

VESA

- Built in the 90s
 - Users were very used to it
- Single-purpose
 - Very functional design
 - Very fast
- Consistently our most-loved service in user surveys
 - No improvements needed!

VESA

- Started in 1999
 - Users were very used to it
- Single-purpose
 - Very functional design
 - Very fast
- Consistently our most-loved service in user surveys
 - No improvements needed!
 - Except that there was no proper support for linked data, no APIs in order to integrate the vocabularies into other systems, and the ancient software was more and more difficult to maintain

ONKI

- A general thesaurus and ontology service
 - Developed in the FinnONTO research project
 - Aalto University and University of Helsinki
- Several aims
 - Ability to handle moderately complex OWL ontologies as well as thesauri and classifications
 - APIs to allow integration into annotation and search systems
 - Part of the larger national linked data infrastructure
- From YSA to YSO (General Finnish Ontology)
 - From terms to concepts (identified with URIs)
 - A complete is-a hierarchy
 - Multilingual (Finnish, Swedish, English)
 - Machine-understandable semantics

ONKI1 - 2008

YSO - The Finnish General Upper Ontology

Ontology Server ONKI



Ontology browser

Information about the ontology

Language English

About ONKI

Concept Search

Type of the concept:

YSO Concept

0-9 A B C D E F G H I J K L M N O P Q R S T U V
W X Y Z Å Ä Ö [All]

[a posteriori](#)
[a priori knowledge](#)
[a-clinics](#)
[A\(H5N1\) virus](#)
[aapa mires](#)
[aardvark](#)
abandoned farms → [deserted farms](#)
[abandoned houses](#)
[abandonment](#)
[abandonment](#)
abandonment of action → [waiver of measures](#)
[ABAQUS](#)
abatement of debts
→ [debt provable in bankruptcy](#)
[abbreviations](#)
[abdomen](#)
[abdominal massage](#)
[abduction](#)
[abductions](#)
[ability](#)
[ability to study](#)
[ability to work](#)
[ability to write](#)
[abnormality](#)
[Aboriginals](#)
[abortion](#)

abstract art

URI: <http://www.yso.fi/onto/yso/p13274>

Context

[yso-käsitteet](#)
└ [endurant](#)
└ [phenomena](#)
└ [cultural phenomena](#)
└ [styles](#)
└ **abstract art** [Hide coordinate concepts](#)
└ [abstrakti ekspressionismi](#)
└ [absurdism](#)
└ [aegean art](#)
└ [akmeismi](#)
└ [anti-formalism](#)
└ [art brut](#)
└ [art deco](#)
└ [arte povera](#)
└ [asiatyyli](#)
└ [avant-garde](#)
└ [baroque](#)
└ [biedermeier](#)
└ [burlesque](#)
└ [Byzantine art](#)
└ [carnavalesque](#)
└ [carolingian art](#)
└ [celtic art](#)
└ [Chippendale](#)
└ [classicism](#)
└ [comic art](#)
└ [concretism](#)
└ [contemporary art](#)
└ [cubism](#)
└ [dadaism](#)
└ [dandyism](#)
└ [elevated style](#)

Properties

Label (en): [abstract art](#)
Alternative label (fi): [nonfiguraatiivinen taide](#)
Label (fi): [abstrakti taide](#)
Alternative label (sv): [nonfigurativ konst](#)
Label (sv): [abstrakt konst](#)
Matching concept: [Y14900*](#)
[Y94509*](#)
Related concept: [figurative art](#)
[informalism](#)
[suprematism](#)
Type: [YSO Concept](#)
[Hide additional properties](#)
Superordinate concept: [styles](#)

ONKI2 - 2010

ONKI2 :: Search :: The United Nations Standard Products and Services Code - UNSPSC - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.yso.fi/onki2/search?o=http%3A%2F%2Fwww.yso.fi%2Fonto%2Funspsc&l=en&q=ap&q_langs=en Google

ONKI2 :: Search :: The United Na... +

ONKI Finnish Ontology Library Service ONKI
Ontologies and vocabularies | Publishers | Instructions | About | Feedback | yso.fi frontpage | ONKI@Twitter

suomeksi | på svenska | in English

Ontologies and vocabularies > The United Nations Standard Products and Services Code - UNSPSC > Search

The United Nations Standard Products and Services Code - UNSPSC

Search (info):

Subconcept restriction: Services

Results / page: 20 50 100
The way property values are displayed: value/row values side by side

Results (7 hits, showing 1-20):
[\[expand all\]](#)

[+] Apartment construction

[-] Apiculture

Broader terms: [UNSPSC](#)
 L [Services](#)
 L [Farming and Fishing and Forestry and Wildlife Contracting Services](#)
 L [Livestock services](#)
 L [Livestock industry](#)

Coordinate terms: [Animal husbandry](#)
[Bovine production services](#)
[Farm rearing systems](#)
[Livestock breeding](#)
[Livestock genetics services](#)
[Poultry production services](#)
[Sericulture](#)
[Small animal breeding services](#)

URI: <http://www.yso.fi/onto/unspsc/C70121610>
Mehiläishoito (fi)

[+] Appeals process or judicial review

[+] Appellate procedure services

[+] Application implementation services


Done

ONKI3 - 2011

ONKI Ontologies and vocabularies Instructions About Feedback suomeksi på svenska in English



Finnish General Upper Ontology - YSO/ALLSO


New features



Hide all the concept details you don't want to view.  **Pilota tieto**


Shortcuts

Bookmark those concepts you need to access again.

Kirjanmerkit   **vaahtera**


Search for concept... 


Language: en  

Select ontologies and vocabularies 

Browser

Alphabetical directory


Concept type: All types 

Search language: en 

Show relations: separately in hierarchy

Search for concept:

- cat
- catacombs
- catalan language
- Catalan sheepdog
- Catalans
- catalogues
- cataloguing → listing
- cataloguing rules
- catalysis
- catalysts
- catalyzers
- cataract
- catastrophe theory
- catastrophes
- catastrophes
- catch and release fishing
- catches
- catching
- catchment areas

cat 

Superordinate concepts:

- yso-käsitteet
 - └┬endurant
 - └┬physical object
 - └┬organic structure
 - └┬organisms
 - └┬eukaryotes
 - └┬animals
 - └┬eläimet taksonin mukaan
 - └┬chordates
 - └┬vertebrates
 - └┬mammals
 - └┬beasts of prey
 - └┬petoeläimet heimon mukaan
 - └┬felines
 - └┬**cat**

Subordinate concepts:

- birman
- Burmese (cat)
- devon rex
- European shorthair
- exotic (breed of cat)
- korat
- Norwegian forest cat
- Persian
- Siamese
- Siberian

Related concept: kulkukissat, pets

Type: YSO Concept

Coordinate concepts: cheetah, forest cat, jaguar, leopard

ONKI – weak points

- Designed by engineers for engineers
 - The design was refined over the versions to more accommodate the needs of the annotators
- A research prototype
 - Proof of concept
 - Not very reliable
 - Reliability isn't important for research
- Slated to replace VESA in 2011
 - Pulled back because of user feedback

Finto

- A project to build a production version of ONKI
 - 2013 ->
 - National Library of Finland
 - Funded by the Ministry of Finance and the Ministry of Culture and Education

Finto - 2013

finto Finnish Thesaurus and Ontology Service

Vocabularies About Feedback Help | suomeksi på svenska

YSO - General Finnish ontology

Content language English | Search

A-Z Hierarchy Groups New

- events and action
- objects
 - abstract objects
 - physical objects
 - physical whole
 - place
 - areas and regions
 - other places
 - places created by nature
 - coral reefs**
 - craters
 - natural sites
 - potholes
 - places defined by humans
 - systems
 - properties

objects > place > places created by nature > coral reefs

PREFERRED TERM

coral reefs

TYPE General concept

BROADER CONCEPT places created by nature

RELATED CONCEPTS lagoons

BELONGS TO GROUP 11 Geography. Cartography. Geodesy. Geology. Palaeontology
13 Hydrology

IN OTHER LANGUAGES

| | |
|----------------------|---------|
| koralliriutat | Finnish |
| <i>atollit</i> | |
| korallrev | Swedish |
| <i>atoller</i> | |


URI <http://www.yso.fi/onto/yso/p14886>

Download this concept: [RDF/XML](#) [TURTLE](#) [JSON-LD](#) Last modified 10/7/16


CLOSELY MATCHING CONCEPT

| | |
|-------------------------|--------------------------------------|
| Coral reefs and islands | Library of Congress Subject Headings |
| koralliriutat (fi) | YSA - General Finnish thesaurus |
| korallrev (sv) | Allärs - Allmän tesaurus på svenska |


Images indexed with the term in Finna 6 Image




Postikorttipainanteinen lähivalokuva värikkään keltasinisest ...




Postikorttipainanteinen ilmakehu Cairnsin kaupungeista Austra ...



Postikorttipainanteinen valokuva Australian suuren koralliri ...



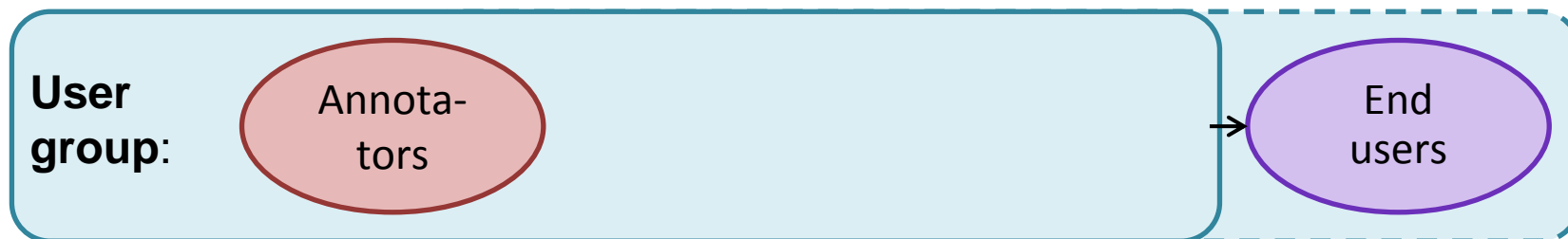
Postikorttipainanteinen valokuva Australian Green Islandista ...



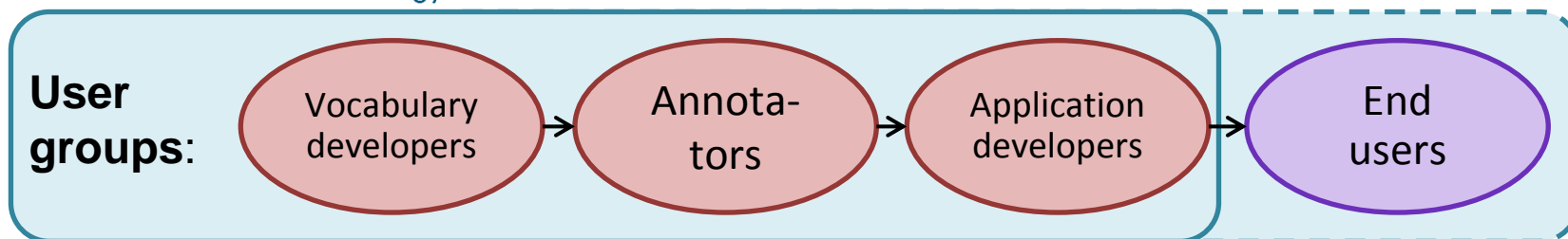
Postikorttipainanteinen valokuva Australian Green Islandin r ...

User groups

VESA - verkkosanasto/webbtesaurus



finto Finnish Thesaurus and Ontology Service



Design principles

- Finto must be reliable and fast
- No extra workload for the annotators
- A lot of emphasis on usability
 - Tests with professionals
- Deep collaboration with people with real annotation experience
 - Several people in the project group
 - Active participation in the design
- Dug up information based on the VESA logs
 - An example finding: many users search for terms with the singular

User testing

- A limited pool of possible test subjects
 - Professional annotators are not very common
 - Various sub-categories
 - Books vs museum artefacts vs health documents
 - Finnish vs Swedish vs both
 - Annotation as main work vs annotation as auxiliary work
- Thorough planning
 - When to test?
 - Who to test with?

Test set ups

- Tests done on the test subject's own computer in their own office
- Tasks
 - An ordinary annotation task
 - Using their usual set-up
 - Using Finto
 - A specifically set up annotating a book with key concepts that are not present in the annotation vocabulary as is but that require the use of the search interface
 - Using Finto
- Recorded
 - Observations
 - Questionnaire
 - General interview

System Usability Scale

- The System Usability Scale (SUS) provides a light-weight tool for measuring usability
 - Ten questions
 - I think that I would like to use this system frequently.
 - I found the system unnecessarily complex.
 - Etc.
 - Score of 1-100 with 68 being average

Results

| System | ONKI3 | Finto
test 1 | Finto
test 2 | Finto
test 3 |
|----------------|--------------|-------------------------|-------------------------|-------------------------|
| Average | 48 | 80 | 80 | 76 |

Patient long-term communication

- Presentations in various forums
- Emphasizing the fact that the user should get no extra workload
- New possibilities and general interoperability with systems outside of the library domain
- Full support for multilinguality
- A long countdown to the end
 - Once we were absolutely sure of Finto's performance

New features

- Modular design allows for additional features
 - Integration into the Finna search and access service to museum, archive, and library materials
- Suggestions system for new concepts and changes to existing ones
 - Originally done through email

Suggestions system

Uuden käsitteen ehdottaminen

YSA:n ja YSO:n käsite-ehdotuslomake

suomeksi

på svenska

Selaa ehdotuksia

Ehdota uutta käsitettä

Ehdota muutosta käsitteeseen

* merkityt kohdat ovat pakollisia.

Näytä ohje

Tyyppi:

Käsite

Päätermi/asiasana: *

Termi ruotsiksi

Termi englanniksi:

Vaihtoehdoiset termit ja ilmaisut:

Yläkäsite YSOssa (LT):

Alakäsitteet (ST):

Assosiatiiviset (RT):

YSA/YSO temaattinen ryhmä: *

Hae käsitettä

Hae käsitettä

Hae käsitettä

Valitse ryhmä(t) listalta

Suggestions system

- A simple web form codifying the necessary fields
 - A star rating for the suggestions – more fields filled, more stars
- Each suggestion opens an issue in GitHub
 - Allows for commenting on the suggestions
 - Powerful search tools
- Suggestions also go into a "suggestions vocabulary" in Finto where you can use them straight away
 - If the suggestion is accepted into the vocabulary, the URI stays
 - If it is not accepted, the URI is given a `dct:isReplacedBy` relation to a suitable other concept

Suggestions system

- Makes the work transparent
- Makes the suggestions easier to process but also makes sending them more streamlined
- Loved by the developers

The death of VESA

- VESA was finally unplugged in the beginning of 2016
 - Zero negative feedback



Thank you! Questions?

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<http://finto.fi>

<http://skosmos.org>