

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 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): nonfiguratiivinen 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](#)

- [Services](#)
- [Farming and Fishing and Forestry and Wildlife Contracting Services](#)
- [Livestock services](#)
- [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**
ontology service

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.

Piilota tieto

Shortcuts
Bookmark those concepts you need to access again.
Kirjanmerkit
vaahtera

Search for concept...
Language: en Clear
Select ontologies and vocabularies

Browser

Alphabetical directory

Concept type:
All types

Search language: en

Show relations:
☒ separately ☐ in hierarchy

Search for concept:
cat

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

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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

atollit

korallrev

Swedish

atoller

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

koralliriutat (fi)

korallrev (sv)

Library of Congress Subject Headings


YSA - General Finnish thesaurus

Allärs - Allmän tesaurus på svenska


Images indexed with the term in Finna 6

Image


▲




Postikorttipainanteinen lähivalokuva värikkään keltasinisestä ...




Postikorttipainanteinen ilmakuva Cairnsin kaupungeista Austra ...



Postikorttipainanteinen valokuva Australian suuren koralliri ...



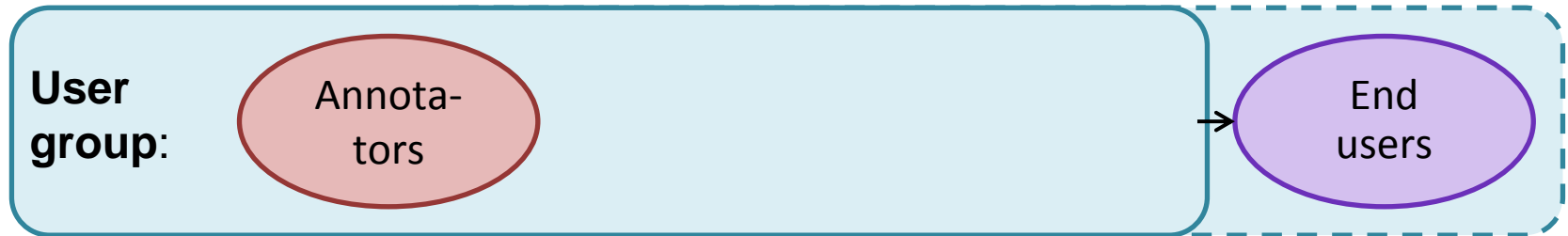
Postikorttipainanteinen valokuva Australian Green Islandista ...



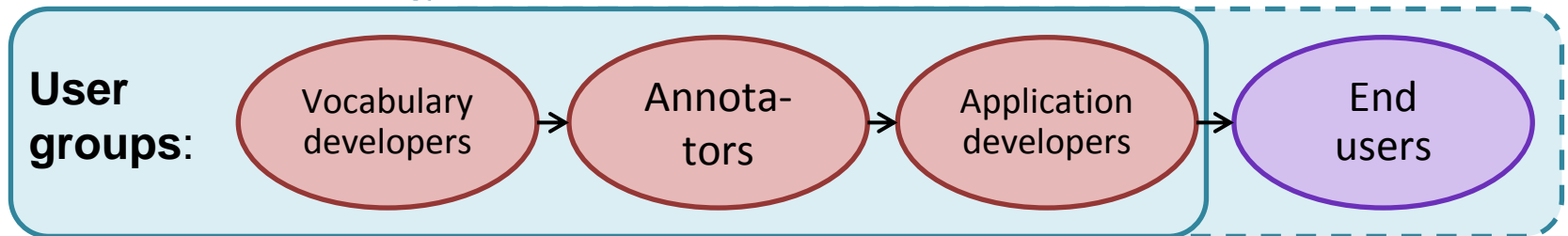
Postikorttipainanteinen valokuva Australian Green Islandin r ...

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:

Vaihtoehtoiset 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>