SYMBERED
Symbol and Concept Editing Tools

DART Kommunikations- och dataresurscenter för funktionshindrade

cc-my-9001
cc-cat-1001
cc-be-2001
cc-great-4004

What?

Developing editing tools for multimodal – multilingual and multi symbol system – web content, based on Concept Coded ontology material

Why?

Using AAC (Augmentative and Alternative Communication) – graphic symbol support etc. – to improve access to web content for persons having problems in accessing standard means of spoken and written communication
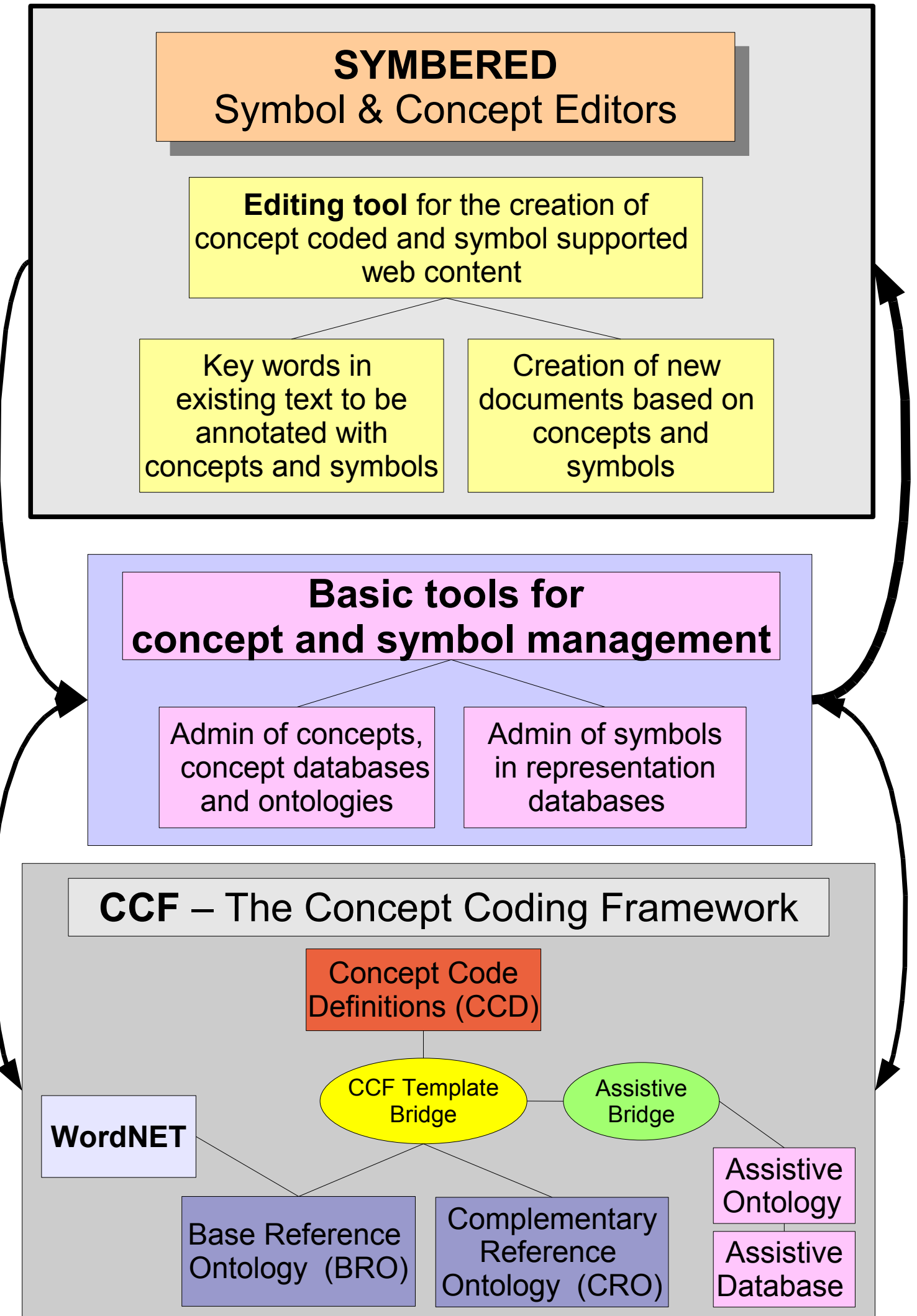
Hows:

CCF defined as an Open Source Controlled User Vocabulary

Supporting Content Management Systems (CMSs) with multilingual and multimodal editing and presentations – based on CCF 1:st target being **www.papunet.net**
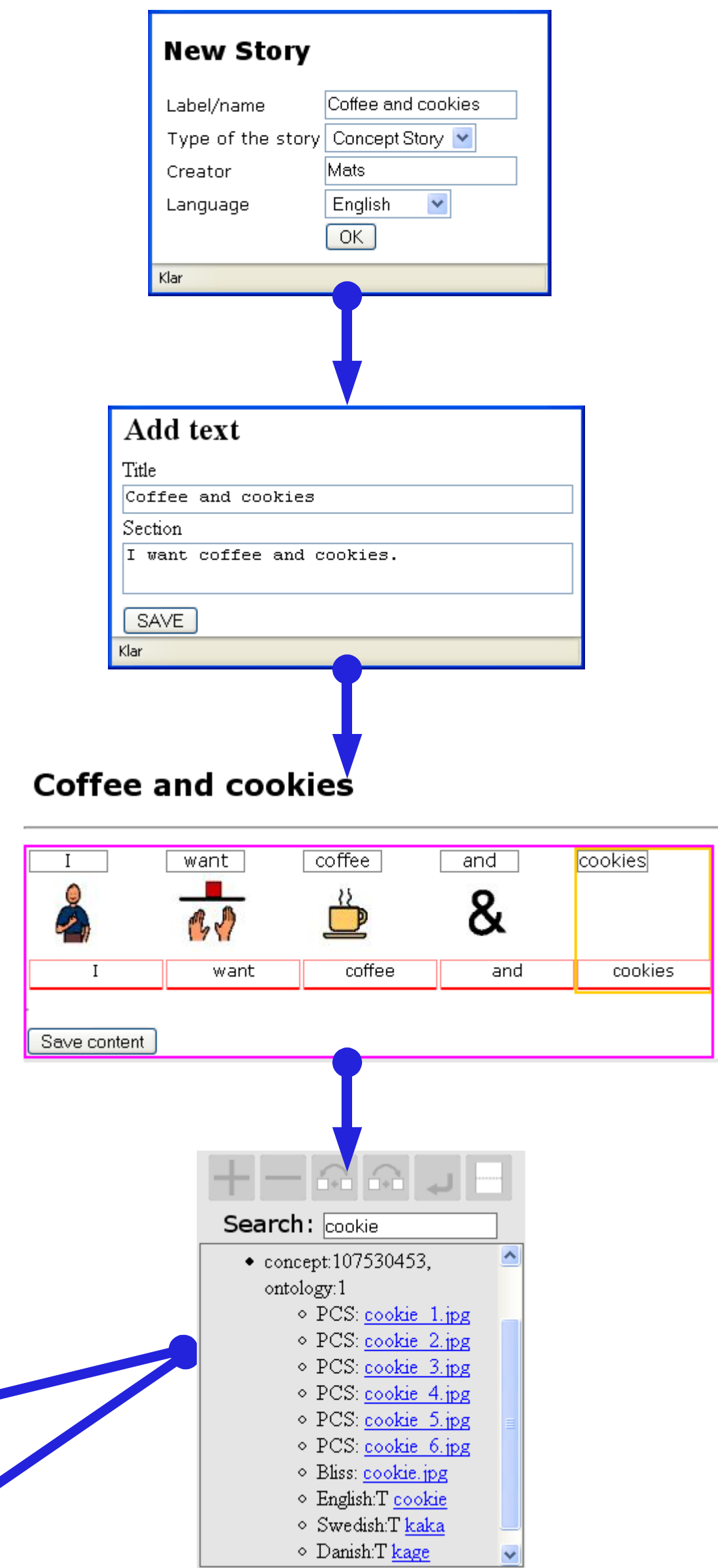
Components based on JPF (Java Plugin Framework) for accessing and managing ontologies in different storage formats, including **SQL**, **RDF-OWL** (Jena), **WordNet**

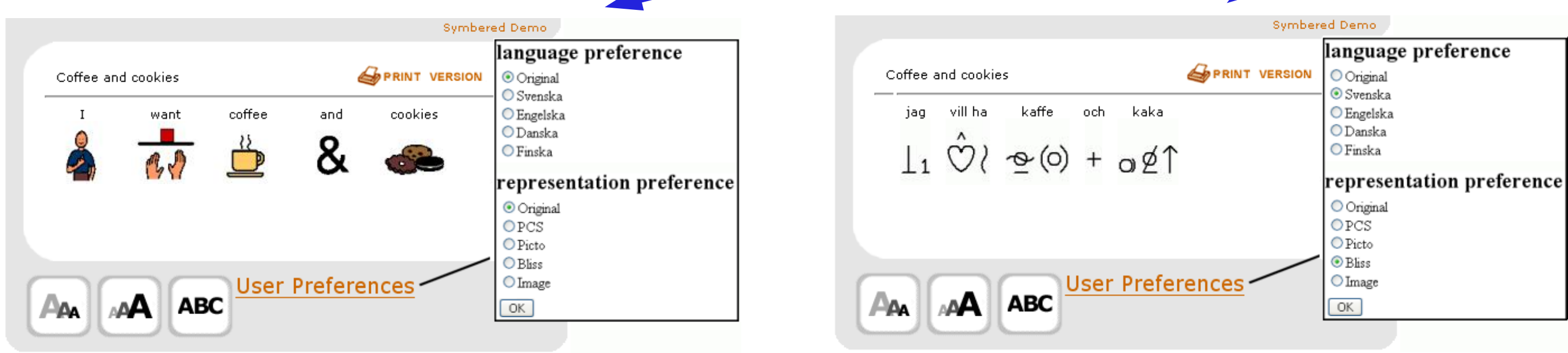Supporting extensibility and easy integration into other web content environments
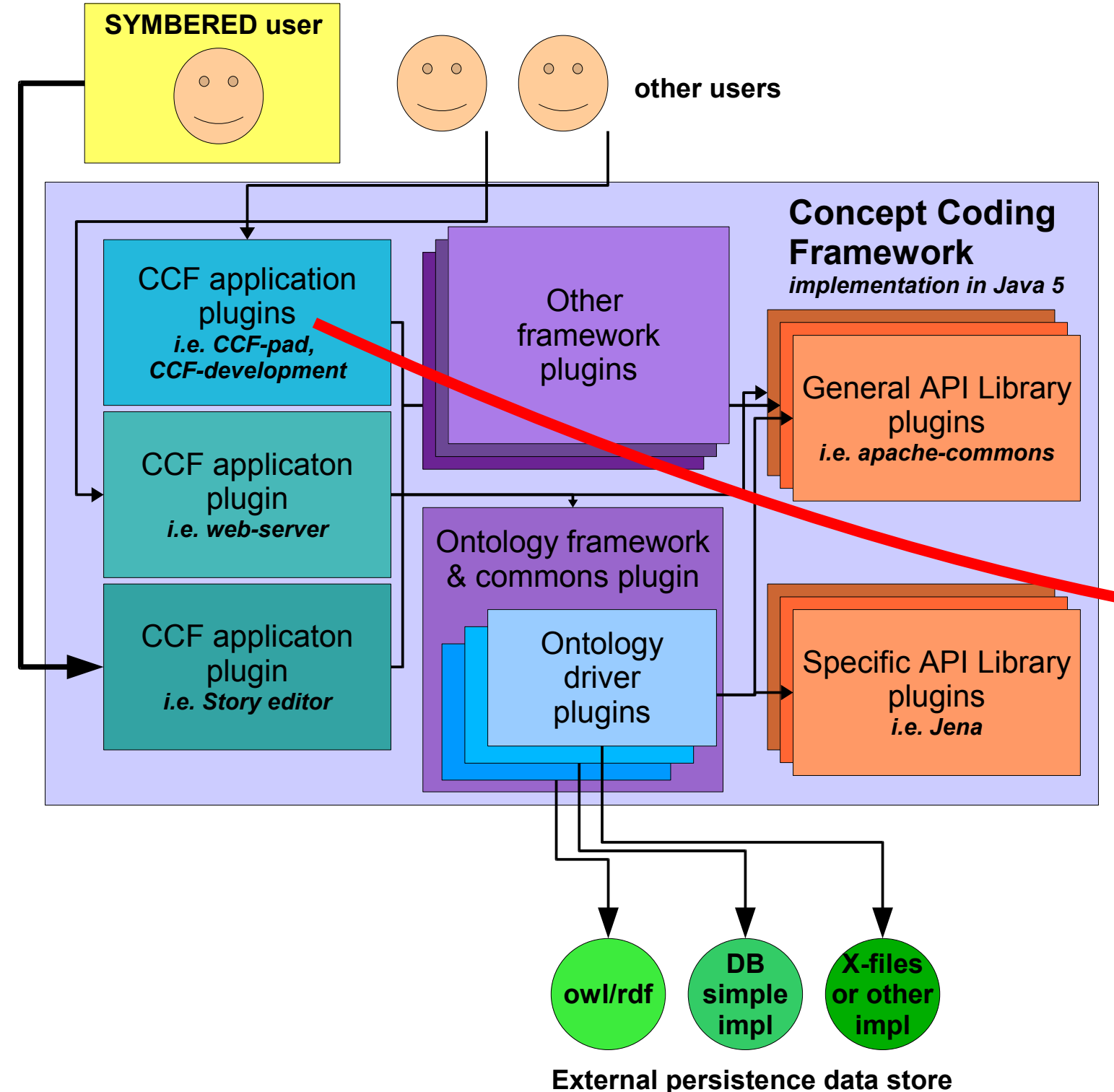
SYMBERED Symbol & Concept Editors

Editing tool for the creation of concept coded and symbol supported web content

Key words in existing text to be annotated with concepts and symbols

Creation of new documents based on concepts and symbols

Basic tools for concept and symbol management

Admin of concepts, concept databases and ontologies

Admin of symbols in representation databases

CCF – The Concept Coding Framework

Concept Code Definitions (CCD)

CCF Template Bridge

Assistive Bridge

WordNET

Base Reference Ontology (BRO)

Complementary Reference Ontology (CRO)

Assistive Ontology

Assistive Database

Outcomes:

Papunet content editingt:

New Story

Label/name — Coffee and cookies
Type of the story — Concept Story
Creator — Mats
Language — English
OK
Klar

Add text
Title — Coffee and cookies
Section — I want coffee and cookies.
SAVE
Klar

Coffee and cookies

I	want	coffee	and	cookies

Save content

Search: cookie
- concept:107530453, ontology:1
  - PCS: cookie_1.jpg
  - PCS: cookie_2.jpg
  - PCS: cookie_3.jpg
  - PCS: cookie_4.jpg
  - PCS: cookie_5.jpg
  - PCS: cookie_6.jpg
  - Bliss: cookie.jpg
  - English:T cookie
  - Swedish:T kaka
  - Danish:T kage

Outcomes:

Papunet end-users' content views:

Symbered Demo
Coffee and cookies — PRINT VERSION

| I | want | coffee | and | cookies |

language preference
- Original
- Svenska
- Engelska
- Danska
- Finska

representation preference
- Original
- PCS
- Picto
- Bliss
- Image

OK
User Preferences

Symbered Demo
Coffee and cookies — PRINT VERSION

jag vill ha kaffe och kaka

language preference
- Original
- Svenska
- Engelska
- Danska
- Finska

representation preference
- Original
- PCS
- Picto
- Bliss
- Image

OK
User Preferences

Outcomes:

SYMBERED/CCF JPF Plugin Architecture:

SYMBERED user

other users

Concept Coding Framework *implementation in Java 5*

CCF application plugins *i.e. CCF-pad, CCF-development*

Other framework plugins

General API Library plugins *i.e. apache-commons*

CCF applicaton plugin *i.e. web-server*

CCF applicaton plugin *i.e. Story editor*

Ontology framework & commons plugin

Ontology driver plugins

Specific API Library plugins *i.e. Jena*

owl/rdf — DB simple impl — X-files or other impl

External persistence data store

SYMBERED/CCF Concept Browser and Management Tool:

[Tool Box] - CCF Concept Browser

Plug-in Browser Tool — CCF Concept Browser

coffee — Search — <Select a Concept (Concept Code)?> — Display all in list

<<< Hypernym — beverage

Concept Code Definition:
CCD: http://www.conceptcoding.org/ontologies/2005/05/01/ConceptCodeDefinitions#cc-coffee-1001
Lemma: coffee

Concept:
URI: http://www.conceptcoding.org/ontologies/2005/05/01/BaseReferenceOntology#107822148
Lemma: coffee
Description:

Representations:
- http://www.conceptcoding.org/ontologies/2005/05/01/BlissAssistiveOntology#1300352
  Lang: Bliss
  Data: file:representations/bliss/coffee.jpg
- http://www.conceptcoding.org/ontologies/2005/05/01/PCSAssistiveOntology#1100101
  Lang: PCS
  Data: file:representations/pcs/coffee.jpg
- http://www.conceptcoding.org/ontologies/2005/05/01/BaseReferenceOntology#446
  Lang: en coffee
- http://www.conceptcoding.org/ontologies/2005/05/01/SwedishLexicon#546
  Lang: sv kaffe

Close — Dismiss all checked — Concept Browser — Create/Add/Update Concept/Repr. — Create Links