ICAN Prototype – Version 3

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Layout

- Progress Overview

- ICWA Version 3 - Features

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- Connecting Atlases

Progress Overview

- International Coastal Web Atlas (ICWA) version 3 is being developed as part of the GeoDI and NETMAR projects

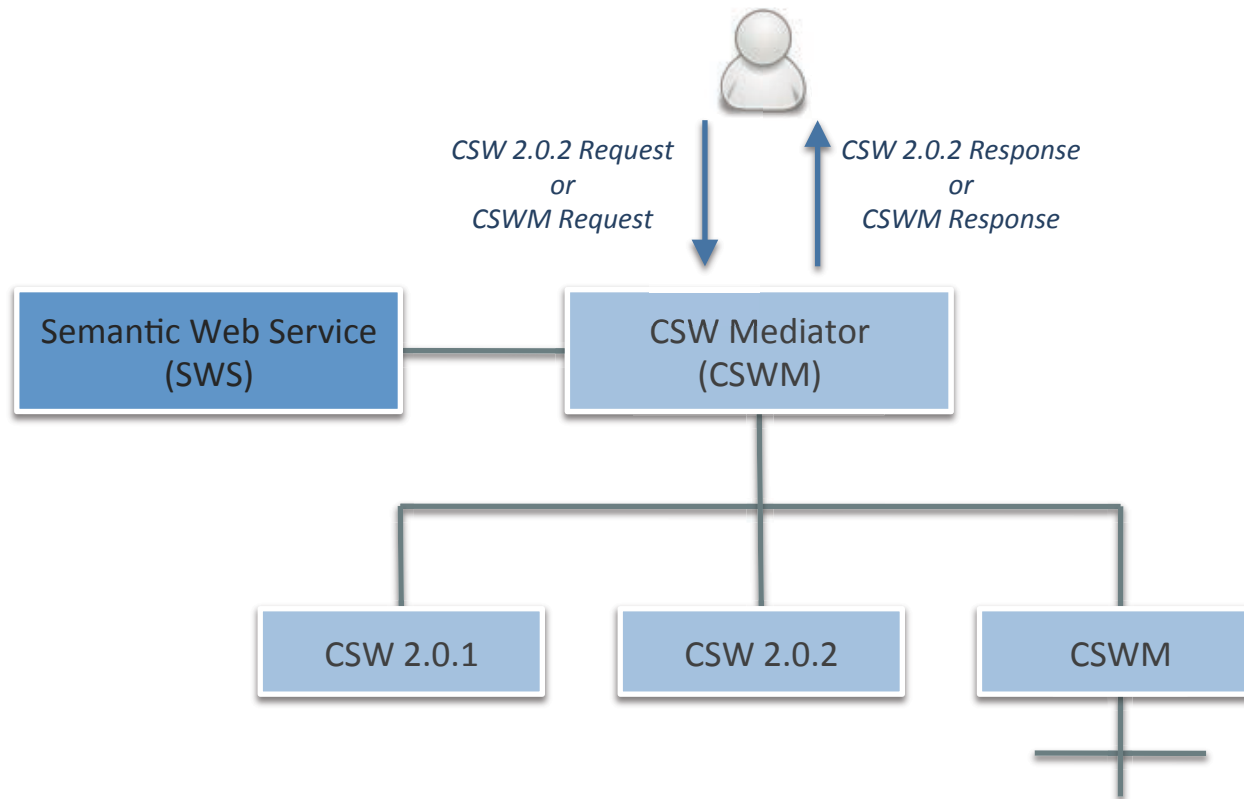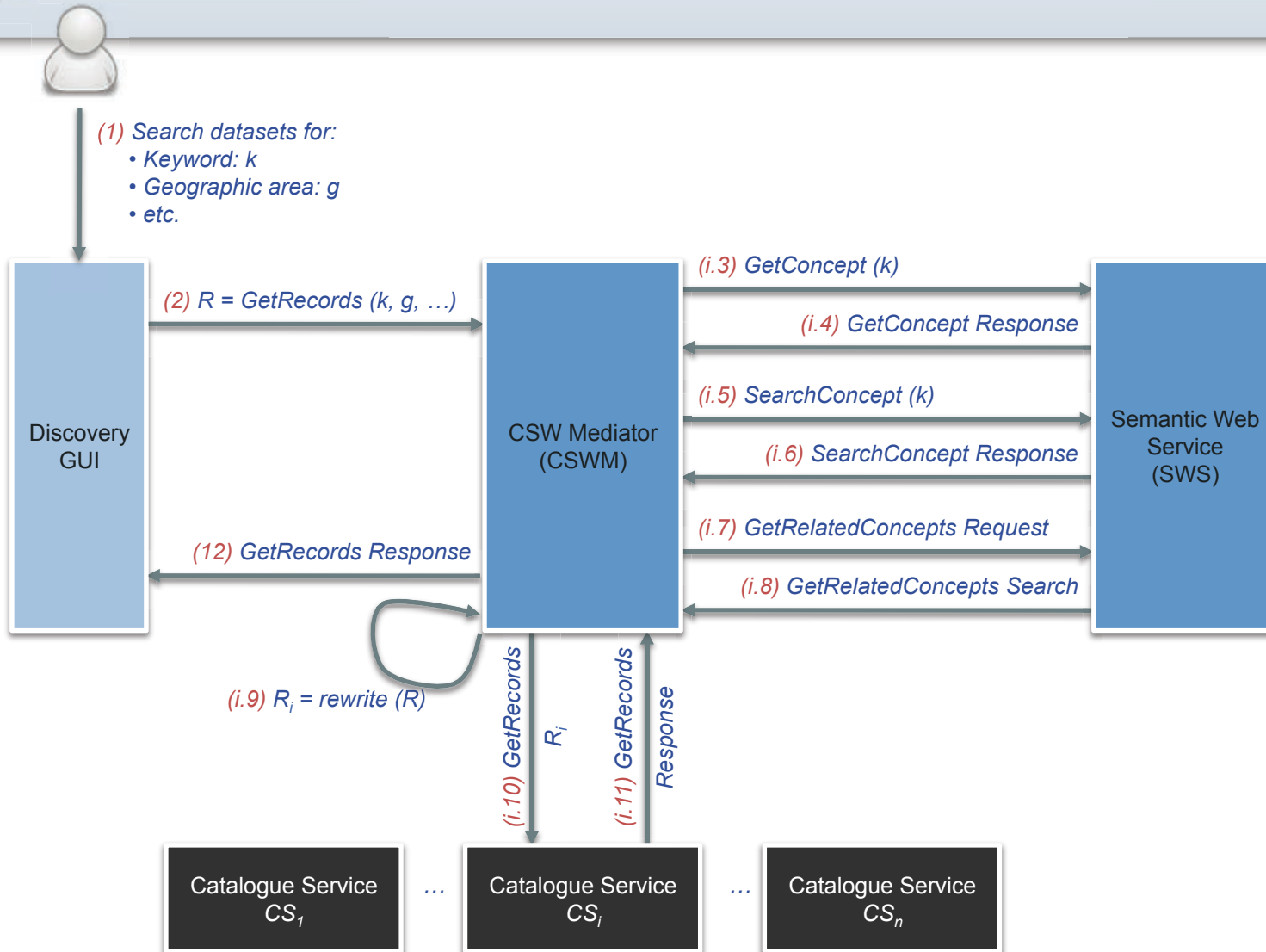| Component/Feature	Responsible Party	Done
Semantic framework	CMRC, and BODC	✓
CSW mediator	CMRC	✓
Ontology browser	CMRC	✓
Discovery interface	CMRC	✓
Global ontology	BODC, and all	✓
Local ontologies	All	✗
Application deployment	CMRC	✗

ICWA 3 – Features

- ICWA 3 is based on four components:
  - Ontology Browser (OB)
  - Discovery interface (GeoFinder)
  - Metadata viewer (MetaViewer)
  - Semantic Web Service (SWS)
  - CSW Mediator (CSWM)

ICWA 3 – Features

- Semantic Web Service:
  - Ontologies are stored and managed in a DBMS (RDB or triple store)
  - Improved ontology structure (SKOS-based)
  - The SWS is accessible on the Web and supports a set of high-level operations (GetConcept, GetConceptScheme, GetRelatedConcepts, SearchConcept, etc.)

ICWA 3 – Features

- CSW Mediator:
  - Supports CSW 2.0.1, CSW 2.0.2, and CSWM nodes
  - Provides CSW 2.0.2 and CSWM interfaces
  - Ontologies are not required
  - Improved performance (nodes are interrogated in parallel)
  - CSMWs may be nested

ICWA 3 – Demonstration

- The NETMAR prototype is available at:

    http://netmar.ucc.ie/discovery

Connecting Atlases

- Connecting atlases as nodes
  - Needed: CSW 2.0.1 or 2.0.2 (preferred)
  - Optional: local ontology for metadata keywords
  - Metadata keywords may be:
    - Concept URIs
      - e.g., http://geodi.ucc.ie/ont/20110429#Geology
    - Concept labels
      - e.g., Geology, Marine Geophysics
    - Free text
  - Atlas parameters (CSW URL, etc.) to be added into the ICAN registry by the ICWA administrator

Connecting Atlases

- Connecting atlases as clients
  - Required: CSW 2.0.2 or CSWM client

Local Atlas

CSW 2.0.2 Request
or
CSWM Request

CSW 2.0.2 Response
or
CSWM Response

CSW Mediator
(CSWM)