



Status of CDI buffer service

By

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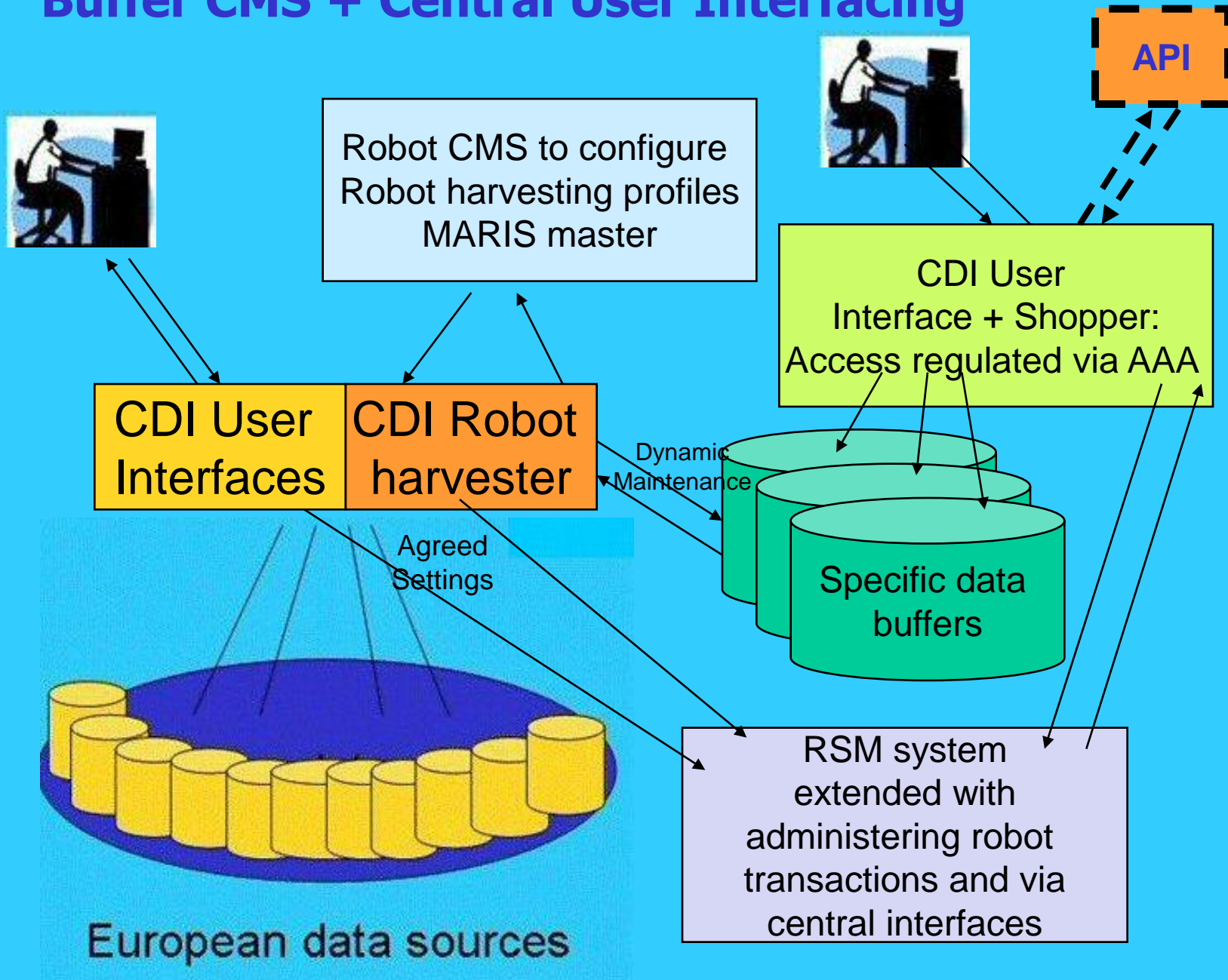
Discovery and harvesting of data sets for regional product groups

- EMODNet Chemistry 2 project is generating chemistry products per MSFD sea region
- SeaDataNet II project is generating T&S products per sea region
- This requires discovery and harvesting of data sets for specific criteria
- Earlier this was done on a manual basis using the CDI Discovery and Shopping mechanism
- Recently in EMODNet Chemistry 2 and in near future for SeaDataNet II use is made of a CDI buffer service:
 - using a Robot harvester via the shopping mechanism to discover and retrieve specific data sets from distributed data centres
 - to compile and maintain specific aggregate data sets as internal central data buffers that can be transferred to regional groups for further processing and products generation.

Discovery and harvesting of data sets for regional product groups – in automatic mode

- An online Buffer Content Management System (Buffer CMS) has been developed and tested for configuring specific data buffer profiles in agreement with data providers AND for specific data user communities (such as EMODNet Chemistry regional product groups, MyOcean, SeaDataNet regional dataproduct groups, ...)
- Configuration settings concern discovery filter, buffer group, motivation, users (by means of SeaDataNet AAA services)
- Robot harvester can be activated to perform retrieval for each buffer profile and also to maintain the central metadata and data buffers automatically for new entries and updates of existing entries
- Progress of the robot harvesters is administered in the existing online Request Status Manager (RSM) system which is part of the CDI Shopping mechanism for tracking and tracing requests by users, data providers and overall

Buffer CMS + Central User Interfacing



Buffer Content Management System (Buffer CMS)



CDI-buffer - Content Management System

Welcome to the CDI Buffer Content Management System. This CMS allows to configure and maintain content in specific buffers.

CDI-buffer Profile

Free search

Users

| Key | Name |
|-----|--------------------------------|
| 4 | Test application |
| 3 | EMODNet Chemistry 2 nutrients |
| 2 | SeaDataNet 2 Regional products |
| 1 | SDN-MyOcean joint T&S product |

CDI-buffer Profile

Home Help Logout

Free search

Users

SeaDataNet

Operated in cooperation with

Geo-Sea Black Sea SCENE EMODnet micro3

Search Reset Add new

Save Clear

Results Found 4 Show 2

General Users Filter Summary

Name

EMODNet Chemistry 2 nutrients

Name code

buffer3

Data format L24

☐ CF

☐ CFPOINT

☐ INAPP

☐ MEDATLAS

☒ ODV

☐ PNG

☐ SEGY

☐ SHP

☐ TIFF

☐ UKOAP190

☐ XTF

Restricted order user

mb312d6

Restricted order password

ec735OHT

Restricted order motivation

These data sets will be used only internally the regional groups of EMODNet Chemistry 2 as input for the compilation of regional interpolated maps using ODV and DIVA and also a number of time series in graphics for monitoring stations. Please indicate via the SeaDataNet RSM service that you agree with access for the SeaDataNet robot, operated by MARIS.

Description

As part of EMODNet Chemistry 2 project the regional groups will produce regional interpolated maps using ODV and DIVA and also a

Key: 3

Created: 7/3/2014 11:50:45

Last update: 16/6/2014 16:49:47

Here are system error messages displayed.

logon

Overview of buffers

Configuring profile of specific buffer

Central User Interface with logon (AAA service) following authorisation in buffer CMS profiles



PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT

Operated in cooperation with

Geo-Seas Black Sea SCENE Casp Info EMODnet

Enter your NetID and Password

For security reasons, please Log Out and Exit your web browser when you are done accessing services that require authentication.

NetID:

Password:

☐ Warn me before logging me into other sites.

logon

CDI Buffer Discovery and Access service

Welcome to the CDI Buffer Discovery and Access service. This gives registered users the option to choose to undertake further discovery and downloading of data sets collections.

[EMODNet Chemistry 2 nutrients](#)

[SDN-MyOcean joint T&S product](#)

[SeaDataNet 2 Regional products](#)

[Test application](#)

Overview of authorized buffers

SEADATANET COMMON DATA INDEX (SEADATANET-BUFFER) V3

Tools: [Search](#) [Map](#) [Layers](#) [Help](#) [Position](#) [Index](#)

[Datasets](#) 0 [Basket](#) [Reset](#)

[Add to basket](#)

Layer control: [Expand](#) [Add layer](#)

- ☐ CDI entry Points
- ☐ CDI entry Tracks
- ☐ CDI entry Areas
- ☐ Grid Lines
- ☐ Regional sea
- ☐ Regional sea labels
- ☐ Main sea
- ☐ Main sea labels

☒ Display all selected records
☐ Only selected records in results list

Listing results: ☒ 20 ☐ 100 ☐ 1000 records [Go](#)

Timeseries on: [Summary](#) [Zoom to selected](#) [Export result](#) [Store query](#)

[Refine query](#) [New query](#) | Found 438418 | Show (1-20) | [Previous](#) | [Next 20](#)

| # | Data set name | Country | Start date | Disciplines - Parameter groups | Instrument / gear type | Show |
|--------------------------|-----------------------|---------|------------|--|-------------------------|----------------------|
| <input type="checkbox"/> | PITAGEM water_nov2004 | Italy | 20041104 | Administration and dimensions > Administration and dimensions Biological oceanography > Pigments Chemical oceanography > Carbon, nitrogen and phosphorus > Nutrients Marine geology > Suspended particulate material | discrete water samplers | Show |
| <input type="checkbox"/> | PITAGEM water_nov2004 | Italy | 20041104 | Administration and dimensions > Administration and dimensions Biological oceanography > Pigments Chemical oceanography > Carbon, nitrogen and phosphorus > Nutrients Marine geology > Suspended particulate material | discrete water samplers | Show |
| <input type="checkbox"/> | PITAGEM water_nov2004 | Italy | 20041104 | Administration and dimensions > Administration and dimensions Biological oceanography > Pigments Chemical oceanography | discrete water samplers | Show |

Central buffer UI incl direct shopping

Request Status Manager (RSM) service extended with administering of Central buffer interfaces

RSM Request Status Manager



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MANAGEMENT

Registered Users can check the progress of the processing of their dataset requests and download datasets to which they have access. SeaDataNet Data Centres can check the overall user statistics, such as number of dataset requests, downloads and more.

Loton as user/provider/master

The screenshot displays the RSM web interface. At the top, there is a banner for the 'PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT' with the 'SeaDataNet' logo. To the right, it states 'Operated in cooperation with' followed by logos for 'Geo-Sea', 'Black Sea SCENE', 'COP-Net', and 'EMODnet'.

The main content area is titled 'Request Status Manager Menu Options' and is divided into three columns:

- User**
 - Status of download requests
 - Status of seismic viewing requests
- Data provider**
 - Standing download orders
 - Standing seismic viewing orders
 - History of all download orders
 - History of all viewing orders
 - Report of all orders
 - Report of robot testing
- Administration**
 - Master report of all orders
 - Master report of robot testing

Below this, there is a section titled 'Central Buffer Options' with three columns:

- User**
 - Status of download requests
- Data provider**
 - Standing download orders
 - History of all download orders
 - Report of all orders
- Administration**
 - Master report of all orders

New functions for central buffer shopping

Discovery and harvesting of data sets for regional product groups

- The new Buffer CMS and Central buffer UI and API (under development for full machine-to-machine interaction) together with the new central shopping mechanism and upgraded RSM will greatly facilitate the maintenance of central buffers and regular delivery of data sets incl metadata to regional product groups
- The Central shopping mechanism works on the data Buffers and can deliver (in delayed mode) large data sets which are divided over downloadable zip files with maximum 10.000 data sets each; all shopping transactions are administered in new section of the RSM
- REMARK: The central buffers are exclusive for specific applications and acces is secured via AAA service only for authorised users. These buffers do not replace the distributed CDI infrastructure and its shopping process for regular users.

Converting buffer data sets to validated aggregated data sets

- However the central buffers will contain and deliver 'raw' data sets for specific parameters and as harvested from the distributed data centres => further action is needed for making the collection more homogeneous and validated => aggregated data sets
- Aggregation and validation for generating homogeneous data collections can be done by using ODV V4.6.4 software and specific expertise per region and chemical substance
- Use will also be made of the new **P35 Vocabulary for aggregating P01 terms**. The P35 population is making progress:
http://seadatanet.maris2.nl/v_bodc_vocab_v2/welcome.asp
- The final buffers of aggregated and validated data sets will provide the input for **data products and advanced visualisation services**

Using ODV V4.6.4 for Data Aggregation

1. Import > SDN Spreadsheet

(file aggregation:

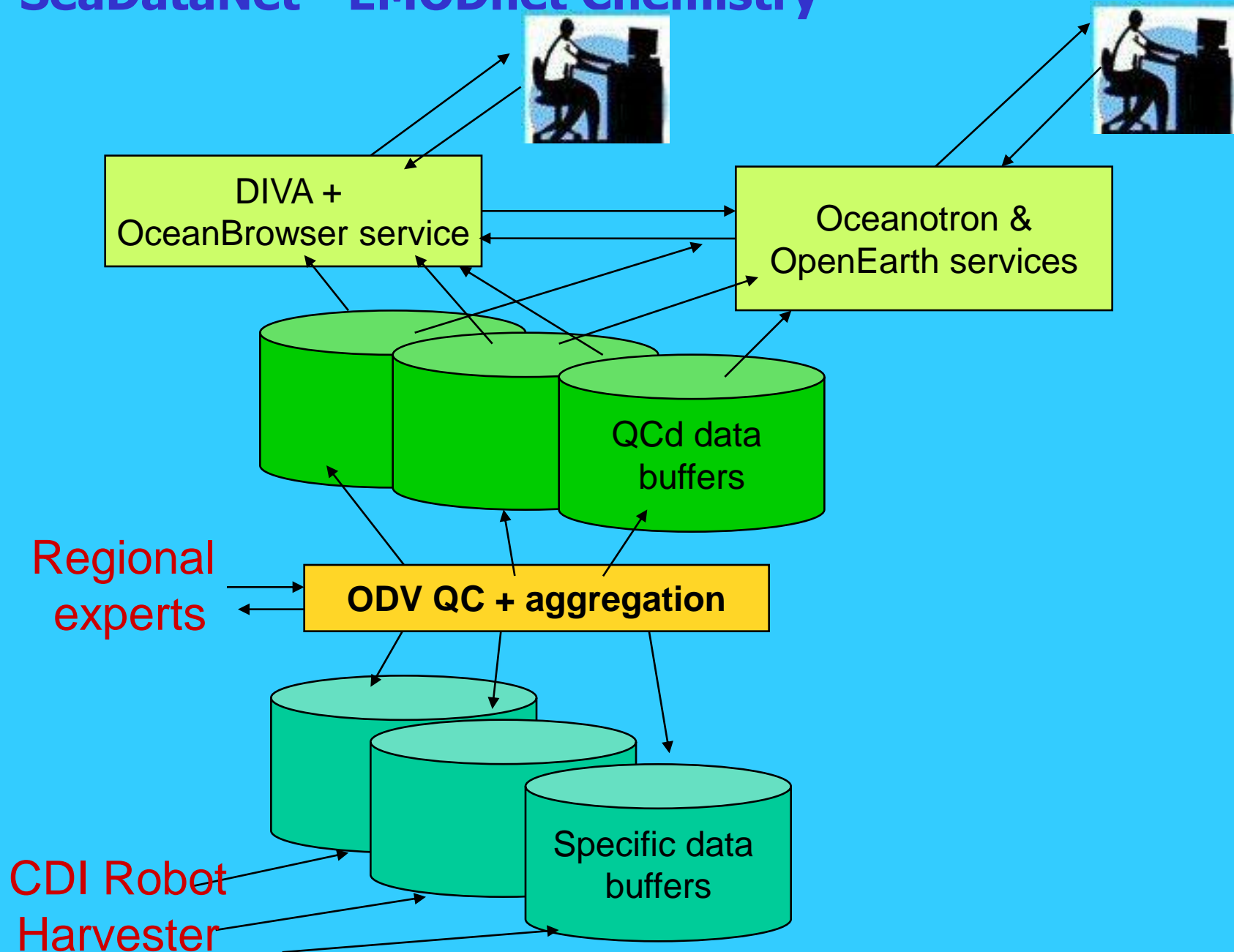
SDN ODV files + csv files >> SDN ODV metadata enriched collection)

2. Export > Station Data > SDN Aggregated ODV Collection

(P35 parameter aggregation:

SDN ODV collection >> another SDN ODV metadata enriched collection)

SeaDataNet - EMODnet Chemistry



Advanced services

- The validated and aggregated buffers of data sets will be input for the products and advanced services:
 - **Interpolated maps** as produced with DIVA software (Ulg)
 - **Time series** graphics for selected stations via WPS (Deltares)
 - **OceanBrowser** viewer (Ulg) as common service for viewing the DIVA maps and giving access to the time series graphics
 - **Oceanotron** server (IFREMER) in between ODV binary files via ODV-API and OceanBrowser for additional visualisation services of all data sets

1982-08-28 15:16:00 - 2002-04-20 11:20:00

