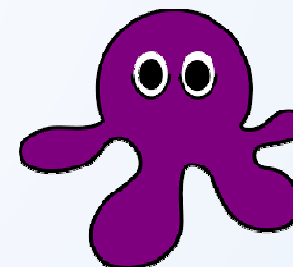




SeaDataNet

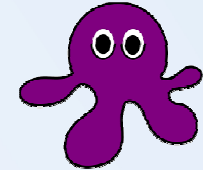
OCTOPUS – SeaDataNet Format
conversion tool



Michèle Fichaut - Ifremer

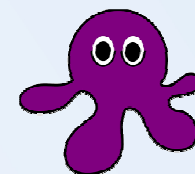
EMODnet Chemistry 3 Training Workshop, Trieste, Italy, 18-19 May 2017
sdn-userdesk@seadatanet.org – www.seadatanet.org

New tool: OCTOPUS



- Can be downloaded from SeaDataNet Web site
<https://www.seadatanet.org/Software/OCTOPUS>
- Javatool compliant with Windows and Linux, works in interactive mode and in batch
- Version 1.2, released beginning of 03/02/2017
- For SeaDataNet format conversion
 - Replace the previous tools
 - Change_Vocab_V1toV2: update the BODC vocabulary from V1 to V2
 - Med2MedSDN: convert old MedAtlas to SDN MedAtlas
 - Med2SDN2CFPOiNT: Convert SDN MedAtlas to SDN NetCDF
 - Odv2SDN2CFPOINT: Convert SDN ODV to SDN NetCDF
 - New conversions available
 - Possibility of splitting the input files station per station (and also to extract LOCAL_CDI_IDs from a multistation file)
 - Check of ODV and MedAtlas format

Possible conversions



Input files Output files	Old MedAtlas	SDN MedAtlas [NVSv1-NVSv2]	SDN ODV [NVSv1-NVSv2]	SDN NetCDF [NVSv1-NVSv2]	MGD v81	MGD v98
SDN MedAtlas	Replace Med2MedSDN	✓	X	X	X	X
SDN ODV	New	New	✓	X	New	New
SDN NetCDF	New	Replace MedSDN2CFPOiNT	Replace OdvSDN2CFPOINT	✓	X	X

- If input files contain NVSv1 vocabulary → Change by OCTOPUS to NVSv2 vocabulary

Octopus

file edit help

input file / directory

C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\2013020010.ctd

check input format

split keep

output files type

output file / directory

browse

show CDIs

export to

medatlas

odv

cfpoint

- Can convert on file or one folder

```
16:33:56- INFO - OctopusOverviewController - ===== open file =====
16:33:56- INFO - OctopusOverviewController - **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\2013020010.ctd ****
16:33:56- INFO - PreferencesManager - preferences file found: C:\Program Files\octopus\resources\preferences.xml
16:33:56- INFO - AbstractController - LANGUAGE: en_GB
16:33:56- INFO - AbstractController - Detected input format: MEDATLAS
```

Remove selected Clear Auto-Scroll INFO

The screenshot shows the Octopus application window. The title bar reads 'Octopus'. The menu bar contains 'file', 'edit', and 'help'. The main interface has a purple header with a cartoon octopus logo on the right. Below the header, there are several input fields and buttons:

- input file / directory:** A text box containing the path `C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\2013020010.ctd`. Below it is a 'check input format' button.
- output files type:** Radio buttons for 'split' and 'keep', with 'keep' selected.
- output file / directory:** An empty text box with a 'browse' button to its right.
- show CDIs:** A checkbox that is currently unchecked.
- export to:** Three stacked buttons labeled 'medatlas', 'odv', and 'cpoint'.

A large red box highlights the 'check input format' button in the center of the interface. A red arrow points from the 'check input format' button located below the input field to this highlighted button. The bottom of the window features a log area with the following text:

```
16:33:56- INFO - OctopusOverviewController - ===== open file =====  
16:33:56- INFO - OctopusOverviewController - **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\2013020010.ctd ****  
16:33:56- INFO - PreferencesManager - preferences file found: C:\Program Files\octopus\resources\preferences.xml  
16:33:56- INFO - AbstractController - LANGUAGE: en_GB  
16:33:56- INFO - AbstractController - Detected input format: MEDATLAS
```

At the bottom of the window, there are buttons for 'Remove selected', 'Clear', 'Auto-Scroll', and an 'INFO' dropdown menu.

- Check of the input format (ODV or MedAtlas), input format automatically detected

The screenshot shows the Octopus application window. The title bar reads "Octopus" and the menu bar contains "file", "edit", and "help". The main interface has a purple header and a white body. On the right side, there is a purple octopus logo. The main area contains several input fields and buttons:

- input file / directory:** A text field containing the path `C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\2013020010.ctd`. Below it is a purple button labeled "check input format", which is highlighted with a blue circle.
- output files type:** Two radio buttons, "split" (unselected) and "keep" (selected).
- output file / directory:** An empty text field with a purple "browse" button to its right.
- show CDIs:** A checkbox that is currently unchecked.
- export to:** Three stacked purple buttons labeled "medatlas", "odv", and "cfpoint".

At the bottom of the window is a log window with a grey background, displaying the following messages:

```
15:40:07- INFO - OctopusOverviewController - ===== open file =====
15:40:07- INFO - OctopusOverviewController - **** ** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\2013020010.ctd
15:40:07- INFO - AbstractController - Detected input format: MEDATLAS
15:41:11- INFO - AbstractController - [OK] Format is valid. Detected format is MEDATLAS.
```

Below the log window, there is a list of items:

- If format OK, green message

At the very bottom of the window, there is a footer bar with buttons for "Remove selected", "Clear", "Auto-Scroll", and a dropdown menu currently set to "INFO".

Octopus

file edit help

input file / directory

output files type split keep

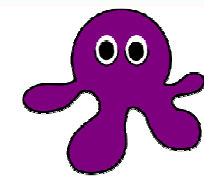
output file / directory

show CDIs

export to

```
15:45:34- INFO - OctopusOverviewController - ===== open file =====
15:45:34- INFO - OctopusOverviewController - **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2013020030_with errors.txt ****
15:45:34- INFO - AbstractController - Detected input format: ODV
15:45:36- ERROR - SdnVocabularyManager - Parameter PRESAAA1 not found in BODC NVS-2 P01 list
15:45:36- ERROR - OdvReader - Error while searching for parameter P01 PRESAAA1
15:45:36- ERROR - OdvReader - ERROR 26: Error parsing semantic header, line 112
15:45:36- ERROR - OdvFormatChecker - ERROR 26: Error parsing semantic header, line 112
15:45:36- ERROR - AbstractController - Invalid file C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2013020030_with errors.txt
```

- If format KO, red message and description of the error



input file / directory

C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2013020030_with errors.txt

check input format

output files type

split keep

output file / directory

[Empty text box]

browse

show CDIs

export to

medallas

odv

cfpoint

```

15:45:34- INFO - OctopusOverviewController - ===== open file =====
15:45:34- INFO - OctopusOverviewController - **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2013020030_with errors.txt ****
15:45:34- INFO - AbstractController - Detected input format: ODV
15:45:36- ERROR - SdnVocabularyManager - Paramete PRESAAA1 not found in BODC NVS-2 P01 list
15:45:36- ERROR - OdvReader - Error while searching for parameter P01 PRESAAA1
15:45:36- ERROR - OdvReader - ERROR 26: Error parsing semantic header, line 112
15:45:36- ERROR - OdvFormatChecker - ERROR 26: Error parsing semantic header, line 112
15:45:36- ERROR - AbstractController - Invalid file C:\test_logiciels\OCTOPUS\input for Octopus\multistation\C

```

Remove selected

Clear

Auto-Scroll

INFO

Octopus

file edit help

input file / directory
C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2013020030_with errors.txt

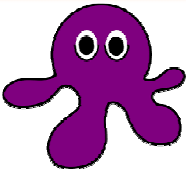
check input format

output files type
 split keep

output file / directory
browse

show CDIs

export to
medallas
odv
cfpoint



```
15:45:34- INFO - OctopusOverviewController - ===== open file =====
15:45:34- INFO - OctopusOverviewController - **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2013020030_with errors.txt ****
15:45:34- INFO - AbstractController - Detected input format: ODV
16:21:57- ERROR - OdvReader - Error on column header: 6th column name shall be Latitude [degrees_north]
16:21:57- ERROR - OdvReader - ERROR 34: Error parsing Column header row, line 119
16:21:57- ERROR - OdvFormatChecker - ERROR 34: Error parsing Column header row, line 119
16:21:57- ERROR - AbstractController - Invalid file C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\2
```

Remove selected Clear Auto-Scroll INFO

The screenshot shows the Octopus software interface. The main window has a purple header with 'file edit help' and a purple octopus logo. The interface includes several input fields and controls:

- input file / directory:** C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instr
- output files type:** Radio buttons for 'split' and 'keep', with 'keep' selected.
- output file / directory:** C:\test_logiciels\OCTOPUS\Output from Octopus\ODV\output_Ovide3_CTD.txt
- show CDIs:** A checkbox that is currently unchecked.
- export to:** Buttons for 'medatlas', 'odv', and 'cfpoint'.

A log window at the bottom displays the following messages:

```
14:30:02- INFO - OctopusOverviewController - ===== open file =====  
14:30:02- INFO - OctopusOverviewController - **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instrument.med ****  
14:30:02- INFO - AbstractController - Detected input format: MEDATLAS
```

At the bottom of the interface, there are buttons for 'Remove selected', 'Clear', 'Auto-Scroll', and an 'INFO' dropdown menu.

- Choose to split Multistation file into Monostation files or Keep the input file as it is

Octopus

file edit help

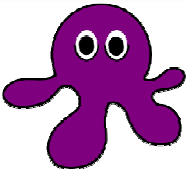
input file / directory C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instr

check input format

output files type split keep

output file / directory C:\test_logiciels\OCTOPUS\Output from Octopus\ODV\Ovide3_CTD_Output_ODV.txt

show CDIs



export to

```
16:27:29- INFO - OctopusOverviewController - ===== open file =====
16:27:29- INFO - OctopusOverviewController - **** **** Initialize C:\test_logiciels\OCTOPUS\input for Octopus\multistation\Me
16:27:29- INFO - AbstractController - Detected input format: MEDATLAS
16:29:13- INFO - OctopusOverviewController - ***** Start export *****
16:29:13- INFO - OctopusOverviewController - **** Start export C:\test_logiciels\OCTOPUS\input for Octopus\multistation\Me
16:29:13- INFO - MetadataReader - read metadata
16:29:13- INFO - OctopusOverviewController - Export to ODV
16:29:13- INFO - MetadataReader - read metadata
16:29:14- INFO - OctopusOverviewController - [OK] process ended with success.1 file(s) have been written.
16:29:14- INFO - OctopusOverviewController - [C:\test_logiciels\OCTOPUS\Output from Octopus\ODV\Ovide3_CTD_Output_ODV.txt]
```

Octopus

file edit help

EMODnet Chemistry 3 Training Workshop, Trieste, Italy, 18-19 May 2017

input file / directory
C:\test_logiciels\OCTOPUS\input for Octopus\multistation\ODV\NEMO_Pelgas2013_Bottle

check input format

split keep

output files type

output file / directory
C:\test_logiciels\OCTOPUS\Output from Octopus\ODV\test

browse

show CDIs

export to

medialis

odv

clpoint

show CDIs

- Extract CDIs from a given file

Remove selected Clear Auto-Scroll INFO

Partage de capture d'

Octopus

file edit help

input file / directory
C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instr
check input format

output files type
split keep

output file / directory
C:\test_logiciels\OCTOPUS\Output from Octopus\ODV\output_Ovide3_CTD.txt browse

show CDIs

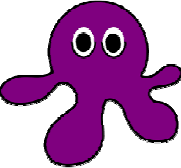
<input type="checkbox"/>	CDI
<input checked="" type="checkbox"/>	FI35200653001_00001_H10
<input checked="" type="checkbox"/>	FI35200653001_00002_H10
<input checked="" type="checkbox"/>	FI35200653001_00003_H10
<input checked="" type="checkbox"/>	FI35200653001_00004_H10
<input checked="" type="checkbox"/>	FI35200653001_00005_H10
<input checked="" type="checkbox"/>	FI35200653001_00006_H10

export to

medatlas
adv
cfpoint

- List all CDIs of the input file

Remove selected Clear Auto-Scroll INFO



Octopus

file edit help

input file / directory C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instr

check input format

output files type split keep

output file / directory C:\test_logiciels\OCTOPUS\Output from Octopus\ODV\output_Ovide3_CTD.txt browse

show CDIs

<input type="checkbox"/>	CDI
<input type="checkbox"/>	FI35200653001_00001_H10
<input type="checkbox"/>	FI35200653001_00002_H10
<input checked="" type="checkbox"/>	FI35200653001_00003_H10
<input type="checkbox"/>	FI35200653001_00004_H10
<input type="checkbox"/>	FI35200653001_00005_H10
<input checked="" type="checkbox"/>	FI35200653001_00006_H10

export to

medatlas

adv

cfpoint

- Select the CDIs that you want to extract

Remove selected Clear Auto-Scroll INFO

Octopus

file edit help

input file / directory: C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instr

check input format

output files type: split keep

output file / directory: C:\tmp browse

show CDIs

CDI
<input type="checkbox"/> FI35200653001_00001_H10
<input type="checkbox"/> FI35200653001_00002_H10
<input checked="" type="checkbox"/> FI35200653001_00003_H10
<input type="checkbox"/> FI35200653001_00004_H10
<input type="checkbox"/> FI35200653001_00005_H10
<input checked="" type="checkbox"/> FI35200653001_00006_H10

export to

medatlas

odv

cfpoint

```
14:51:19- INFO - MetadataReader - read metadata
14:51:52- INFO - OctopusOverviewController - ***** Start export *****
14:51:52- INFO - OctopusOverviewController - **** Start export C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instrument.med ***
14:51:52- INFO - OctopusOverviewController - Export to ODV
14:51:52- INFO - MetadataReader - read metadata
14:51:52- INFO - OctopusOverviewController - [OK] process ended with success.2 file(s) have been written.
14:51:52- INFO - OctopusOverviewController - [C:\tmp\FI35200653001_00003_H10.txt, C:\tmp\FI35200653001_00006_H10.txt]
```

- Only the 2 stations selected are extracted

Remove selected Clear Auto-Scroll INFO

input file / directory: C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instr

output files type: split keep

output file / directory: C:\tmp\output.txt

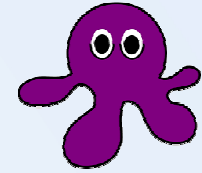
show CDIs:

export to: medatlas, odv, cpoint

- Input file with old version of vocabulary
 - P011 and P061

```
15:02:31- INFO - OctopusOverviewController - ***** Start export *****
15:02:31- INFO - OctopusOverviewController - **** Start export C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instrument_NVsv1.med ****
15:02:31- INFO - MetadataReader - read metadata
15:02:31- WARN - MetadataReader - Le fichier MEDATLAS C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instrument_NVsv1.med contient des Vocabulaires BODC NVS-V1. La c
15:02:31- INFO - OctopusOverviewController - Export to ODV
15:02:31- INFO - MetadataReader - read metadata
15:02:31- WARN - MetadataReader - Le fichier MEDATLAS C:\test_logiciels\OCTOPUS\input for Octopus\multistation\MedAtlas\PV_Ovide3_CTD_instrument_NVsv1.med contient des Vocabulaires BODC NVS-V1. La c
15:02:31- INFO - OctopusOverviewController - [OK] process ended with success.1 file(s) have been written.
15:02:31- INFO - OctopusOverviewController - [C:\tmp\output.txt]
```

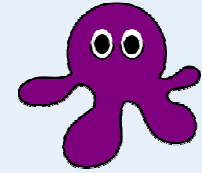
- Warning send to the user (orange)
- Conversion to V2 vocabulary done : P01 and P06



OCTOPUS

- Batch mode availablejava
- `java -jar octopus.jar [-c <arg>] [-f <arg>] [-i <arg>] [-l <arg>] [-o <arg>] [-t <arg>]`

-c <arg>	Optional	list of local_cdi_id, eg <FI35AAB, FI35AAC>, all cdi are exported if this argument is omitted
-f <arg>	Mandatory	output format: <medatlas>, <odv> or <cfpoint>
-i <arg>	Mandatory	input path: </home/user/...>
-l <arg>	Mandatory	local CDI Id value if input is a file, mapping file is input is a if input is directory (see §5.5) MGD
-o <arg>	Mandatory	output path (file or directory): </home/user/...>
-t <arg>	Mandatory	output type: <split> or <keep> except if input is MGD

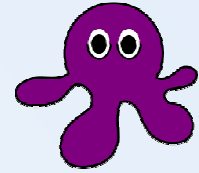


OCTOPUS – User manual

- User manual is provided on line on SeaDataNet website:

<https://www.seadatanet.org/Software/OCTOPUS>

- Available also on this page
 - FAQ
 - This presentation of OCTOPUS

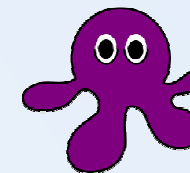


Next release of Octopus

- New conversion: NetCDF → ODV
- New format checker: NetCDF
- Management of deprecated parameters :
 - replacement by the new parameter defined in the 'Replaced by' attributes in the vocabulary
- Planned released date : Summer 2017



EMODnet Chemistry 3 Training Workshop, Trieste, Italy, 18-19 May 2017



Any questions?

