SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT

OCTOPUS

USER MANUAL

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SEVENTH FRAMEWORK PROGRAMME

Deliverable number	Short Title
	OCTOPUS user Manual
Long title	
OCOPUS user manual	
Short description	
Octopus is a multi-formats splitter & converter tool. It replaces the following software: med2medSDN, Change_vocab_V1toV2, MedSDN2CFPoint, OdvSDN2CFPoint, offering a unique and ergonomic tool. It also allows : • to split a multistation file into monostation ones • to extract 1 to n stations from a multistation file and export them into another multistation file or several monostation ones. • to check the compliancy of MedAtlas and ODV format	
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Dissemination	**Copyright terms**

History

Version	Authors	Date	Comments
1.0	S. Brégent, M. Fichaut	07/01/2016	Creation

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1. Introduction

Octopus is a multi-formats splitter & converter tool. It replaces the following software: med2medSDN, Change_vocab_V1toV2, MedSDN2CFPoint, OdvSDN2CFPoint, offering a unique and ergonomic tool.

It also allows:

- to split a multi-station file into mono-station ones
- to extract *1 to n* stations from a multi-station file and export them into another multi-station file or several mono-station ones.
- to check the compliancy of MedAtlas and ODV format

Octopus can be used in interactive mode or in batch mode.

2. Requirements

Octopus requires java 1.8.0_60 or greater.
Octopus is available for multiple platforms: Windows, windows 64, linux, linux 64.
Languages: French, English

3. Get started

3.1. Settings

3.1.1. Menu Edit/settings

This item is used to configure OCTOPUS for your own utilization.
You can:

- Choose your language.
- Choose your default input and output directories. The browse button will automatically open these directories.
- Choose your EDMO code (used to convert MGD files).
- Ask Octopus to fill the local coupling table, by checking “Use coupling table” and choosing the coupling prefix (path prefix that will NOT be written in the coupling files path).
- Update external lists (EDMO codes and BODC NERC Vocabularies).

3.1.2. Menu Edit/Coupling table

The “Coupling Table” menu of OCTOPUS allows basic management of the content of the coupling table used by the SeaDataNet download manager to retrieve the LOCAL_CDI_IDs requested by a user downloading.

3.1.2.1. Export

This export function generates a coupling file that will be used by SeaDataNet Download Manager for retrieving stations in the files.

The coupling file used by SeaDataNet download manager is unique and called “coupling.txt”. This file must not contain duplicates (the coupling file ID is LOCAl_CDI_ID + format) It’s up to OCTOPUS user to create only one file called “coupling.txt” for SeaDataNet purpose by using the coupling table facilities.

The format of this coupling file is the following:
Local_cdi_ID;Modus;Format;File_name

The export function will replace the previous coupling file if the name of the export file is the same.

3.1.2.2. Delete all

The delete all button is used to empty the coupling table. All records will be deleted. The table should be first exported if the user wants to keep the information in a flat file.

3.2. Features

Available conversions/splits are listed in Figure 1

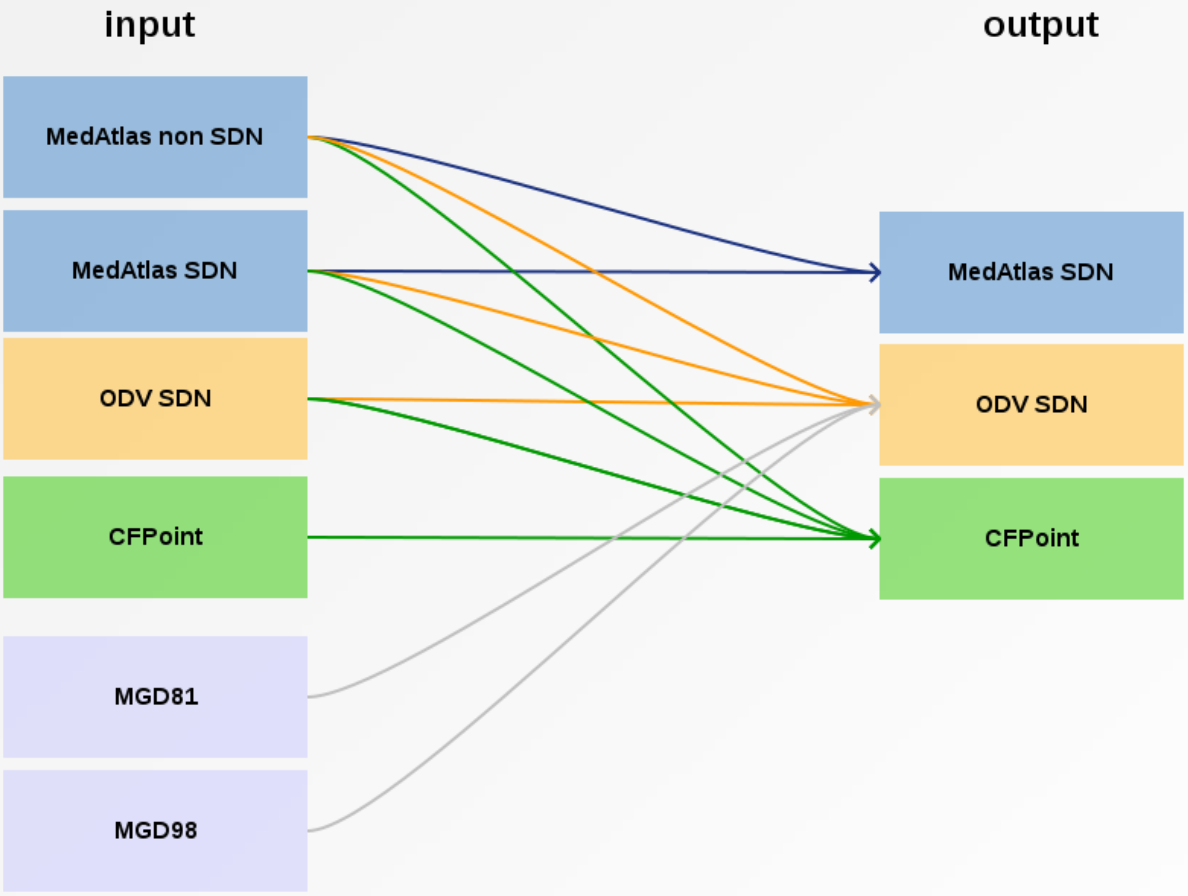

Figure 1Possible conversions using OCTOPUS

Input can be a file, or a directory containing several files (all files using the same format, no sub-directory).

Automatic format updates:

- For all conversion/split cases, Octopus will automatically add SDN CDI references.
- For conversion/split from MedAtlas (SDN or non SDN) to MedAtlas SDN, SDN CSR and SHIP (NVS2CON) references will be added to output file(s).

- For conversion/split from MedAtlas non SDN to MedAtlas SDN, SDN mapping lines will be added to output file(s).

4. Use of OCTOPUS in interactive mode

4.1. Open input file or directory

This step allow to select the file(s) to be converted/split.

OCTOPUS is able to process one file or one directory containing files at the same format.

There are two possible ways to open a file:

- Menu file/open file
- Write or paste the input path in the input file/directory then clic on “submit” or press TAB or ENTER

There are two possible ways to open a directory:

- Menu file/open directory
- Write or paste the input path in the input file/directory then clic on “submit” or press TAB or ENTER

4.2. Check input file(s)

Once the file of directory has been chosen, it is possible to check the format of the (files) by clicking on the “Check the input format” button. In the case of a directory, all files are supposed to be at the same format (it is not possible to check a directory containing MedAtlas and ODV files, for example).

Only ODV and MedAtlas format are checked in this version of OCTOPUS software.

4.3. Select the type of output file(s)

This feature is not available for MGD files.

The output files of OCTOPUS can be mono-station file (One LOCAL_CDI_ID only) or multi-station files (1 to n LOCAL_CDI_IDs): OCTOPUS can export each input file to one multi-stations file, or multiple mono-stations files.

Note: if the input is a directory, set output type to “keep” will generate a multi-station file *for each* input file (Octopus does not merge stations of different input files).

4.4. Select the output file or directory

Use the browse button, or write or paste the output path in the output file/directory.
If input is a file, and output type is “keep”, you have to set a filename.
Otherwise, set a directory name.

Note on output files names:
Except the case of one input file exported as a multi-stations file, Octopus will generate paths as below.

		Ouput type	
		split	keep
Input type	File	**output**/local_cdi_id.ext	output
	Directory	**output/inputFileName**/local_cdi_id.ext	**output**/inputFileName.ext

where : - directories are in red, files are in green.

- Output is the path set in the output file/directory field
- inputFileName is the name of one input file in the input directory
- .ext is the extension of the filename: .txt for ODV, .nc for NetCDF and .free text for MedAtlas

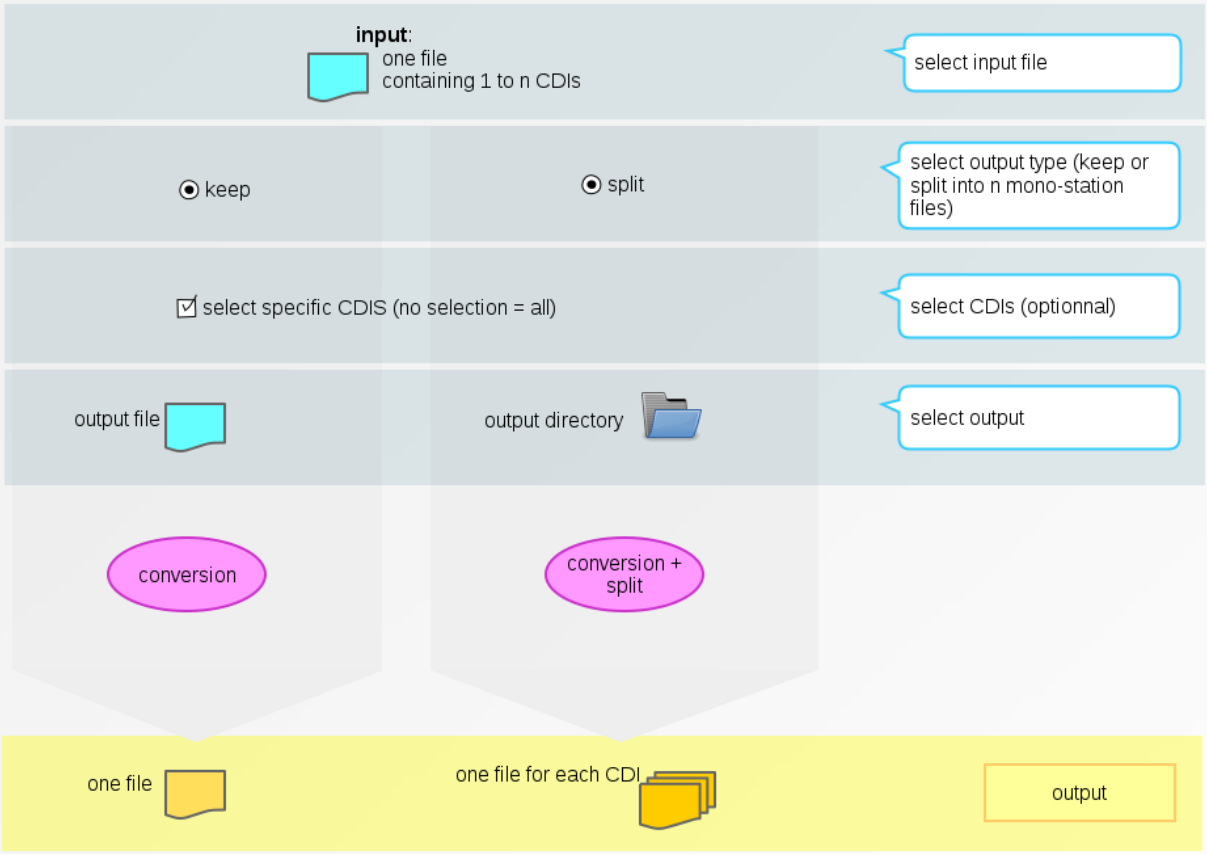

Figure 2 octopus process for input file

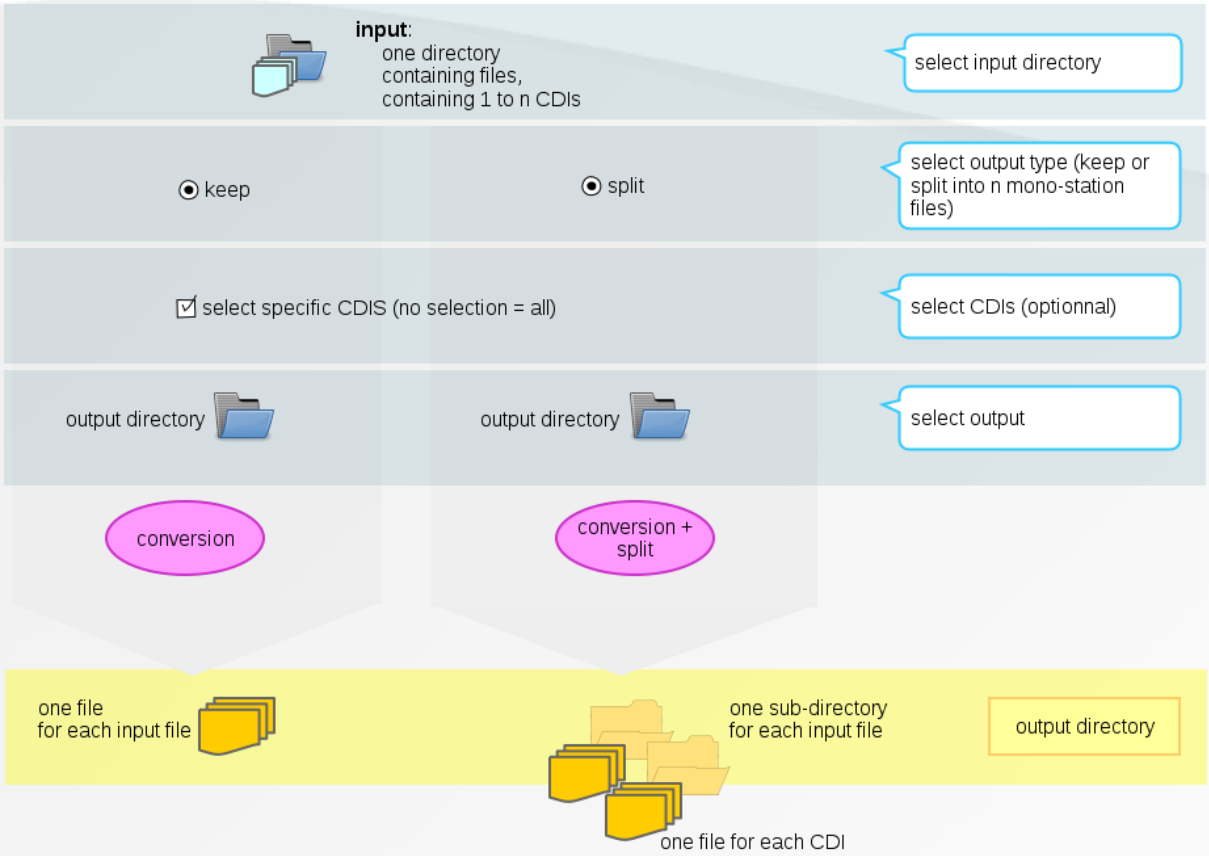

Figure 3 Octopus process for input directory

5. Use of OCTOPUS in batch mode

Open a console and move to the Octopus installation directory (where the octopus.jar is)

Launch command: *java -jar octopus.jar <options>*

Usage:
octopus [-c <arg>] [-f <arg>] [-i <arg>] [-l <arg>] [-o <arg>] [-t <arg>]

Argument	O/M	Comment
-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 if input is MGD	local CDI Id value if input is a file, mapping file is input is a directory
-o <arg>	Mandatory	output path: </home/user/...>
-t <arg>	Mandatory except if input is MGD	output type: <split> or <keep>

Examples:

- Export all stations from input MedAtlas files directory to mono-stations CFPoint files
  - unix/linux :

java -jar octopus.jar -i /home/input/profileDir -o /home/out/exportCFDirectory -f cfpoint -t split

- windows :

java -jar octopus.jar -i «C:\Users\example\input\profileDir» -o « C:\Users\example\out\exportCFDirectory » -f cfpoint -t split

- Export CDI1 and CDI2 stations from input MedAtlas file to multi-stations ODV file
  - unix/linux :

java -jar octopus.jar -i /home/input/profile.med -o /home/out/exportODV1and2.txt -f odv -t keep -c CDI1,CDI2

  - windows :

java -jar octopus.jar -i «C:\Users\example\input\profile.med» -o «C:\Users\example\out\exportODV1and2.txt» -f odv -t keep -c CDI1,CDI2

- Export MGD file to multi-stations ODV file using XXX as local CDI ID
  - unix/linux :

java -jar octopus.jar -i /home/input/mgd81.mgd77 -o /home/out/exportODV.txt -f odv -l XXX

  - windows :

java -jar octopus.jar -i « C:\Users\example\input\mgd81.mgd77» -o «C:\Users\example\out\exportODV.txt» -f odv -l XXX