

MIKADO: USER MANUAL

version 3.8.2





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Deliverable number	Short title
	MIKADO User manual
Long title	
MIKADO User manual	
Short description	
MIKADO is a software which enables to gener Seas catalogues either manually or automatica csv file. This document is the detailed user mar	lly by reading information in a database or in a
Author	Working group
Tosello V., Fichaut M., Larour M., Pertuisot C.	РО
Dissemination	Copyright terms
Public	

History

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		Replacement of Download Manager by Replication Manager
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	13/10/2021	"Download Manager" replaced by "Replication Manager"
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		Addition of "Sensor model" – L22 field in CDI – "How" tab (§10.1.3.5)
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1. Introduction

In the framework of the FP5 European program SEA-SEARCH, IFREMER has designed the MIKADO tool for the generation of XML files that are entries for the following directories:

- the Marine Environmental Datasets (EDMED),
- the Cruise Summary Reports (CSR),
- the Common Data Index to individual datasets (CDI)

In the framework of the FP6 - European program SeaDataNet, IFREMER proposed to upgrade this tool to support new functionalities and to include the European Directory of Marine Environmental Research Projects (EDMERP) and the European Directory of the Ocean Observing System (EDIOS) in a later version. MIKADO V1 is compliant with the SeaDataNet V1 XML schemas and uses the SeaDataNet web services for standards and common vocabularies.

In the framework of the FP7 - European program Geo-Seas, IFREMER has had to upgrade the software to support new functionalities for describing geological and geophysical data and about SENSOR ML and O&M. This has resulted in an upgraded CDI V1.6 format with the following extensions:

- GML objects to support tracks and polygons next to points
- Service bindings for extra services (e.g. previewing)
- Resolution (spatial / temporal)
- Multiple instruments (to be able to include the positioning systems adjacent to the primary measuring device)

In addition to the CDI discovery metadata, specific O&M and Sensor ML extensions have been adopted in the framework of the Geo-Seas project to take into account needs specific to the description of seismic data and for accessing and for viewing them . These extensions are included in XML documents external to the CDI XML one. But they are linked to one another via URLs.

In order to produce a complete description of a seismic dataset, MIKADO has been updated to allow the production of the following XML documents when needed:

- a. the CDI (that includes the links to O&M, thumbnails, Distribution Website Services through DM/RSM and to the High Resolution Seismic Visualization Service HRSVS),
- b. the O&M extension (that includes the links to SensorML, to UKOOA navigation file, and name of the seismic resource),
- c. the SensorML extension (that includes a link to O&M)

In addition, **MIKADO** has been upgraded for the generation of the coupling table which results of the specifications for the integration of the Downloading and Viewing services of seismic data – modus 1, 3, 4, 5 in the Geo-Seas portal.



sdn-userdesk@seadatanet.org – www.seadatanet.org SeaDataNet - The pan-European infrastructure for marine and ocean data management In the framework of the FP7 - European program SeaDataNet II, IFREMER has had to upgrade the software to take into account the migration from ISO-19115 to ISO-19139 standard for Common Data Index (CDI) and Cruise Summary Report (CSR) and the compliancy with version 2 of BODC vocabularies.

The XML schemas used by MIKADO for EDMED, CSR, CDI and EDMERP, EDIOS are available on the SeaDataNet website at:

https://www.seadatanet.org/Standards/Metadata-formats

2. Technical characteristics

- Written in Java Language (Version >= 1.8)
- Available under multiple environments :
 - Microsoft : Windows 2000, XP, VISTA,
 - APPLE
 - Unix Solaris
 - Linux
- Use of the SeaDataNet common vocabularies web services (V2)
 - to update lists of values of the SeaDataNet common vocabularies
 - need network connections in order to have up to date lists of values.
 - But Mikado works offline once the list are up-to-date



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3. Requirements

3.1. Java version

- Make sure that the java version (Java Runtime Environment (JRE)) on your computer is \geq 1.8
- > To know if Java is available on your computer, in the right version, follow these steps:
 - Open 'Start' menu, then 'Execute'
 - On the displayed window, enter: 'cmd', then click on 'OK' button
 - Enter 'java -version'
- > Check if command has been executed:
 - If not, download the last java version at http://java.com/en/download/index.jsp.
 - Else, check the version displayed. The version should be greater than or equal to 1.6.



Figure 1: Check Java version installed on your computer

3.2. Screen resolution

MIKADO works properly with screen resolution of 1400x1050 minimum, but it is possible to get around this problem by following these steps:

- 1. Open WINDOWS settings.
- 2. Select system, display
- 3. Change scale and layout up to 125%. Do not close the settings window. Wait until everything is resized.
- 4. Run MIKADO. There is no need to open any files.
- 5. Change scaling of the display back to 100%
- 6. Continue working with MIKADO; it may be necessary to increase the window of either moorings or parameters using the mouse to see all items.



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The Frequently Asked Questions about MIKADO software are available online and are regularly updated:

http://www.seadatanet.org/Software/MIKADO/FAQ

If you do not find the answer you need in this FAQ, do not hesitate to contact our helpdesk at sdnuserdesk@seadatanet.org.



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5. Installation

5.1. Download MIKADO software

The last version of MIKADO is available and downloadable on the SeaDataNet website:

http://www.seadatanet.org/Software/MIKADO

To install MIKADO, you have to download the MIKADO zip file, to unzip it and to copy the MIKADO directory on your computer.

To uninstall MIKADO, you have just to delete the MIKADO directory.

5.2. Run MIKADO software

To run MIKADO:

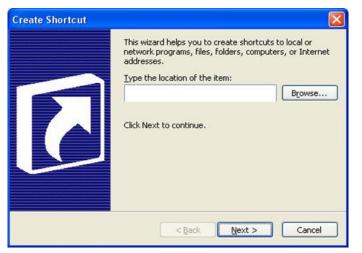
- under Windows: double click on the mikado.bat file in the MIKADO directory,
- **under Solaris or Mac:** run the mikado.csh file in the MIKADO directory.

In order to access MIKADO more easily under Windows, you can create a shortcut on your desktop (see 5.3).

5.3. For Windows: Create a MIKADO shortcut on your desktop

The quickest method to access MIKADO is to create a shortcut on your desktop. To do so, proceed as follow:

1- Right click on your desktop and select **New** and the **Shortcut** options. This window opens:



2- Select the Mikado.bat file in the MIKADO directory by clicking on the Browse button. Click on the Next button.



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3- Select a title for this shortcut: MIKADO for example. Click on the Finish button.

	Iype a name for this shortcut:
	MIKADO
R	Click Finish to create the shortcut.
	< Back Finish Cancel

- 4- The MIKADO shortcut will appear on your desktop:
- 5- You can associate the MIKADO icon with the Mikado shortcut. To do so, right click on the Mikado shortcut and select **Properties.** Click on the **Change icon** button in the MIKADO Shortcut Properties window.



General Shorto	Compatibility
s s	nortcut to MIKADO
Target type:	Application
Target location	vbuzzer
Target:	C:\software\mikado_V1.5\mikado.bat
Start in:	C:\software\mikado_V1.5
Shortcut key:	None
Run:	Normal window
Comment:	
Find	Target Change Icon Advanced
	OK Cancel Apply

6- Click on the **Browse** button and select the Mikado.ico file provided in the MIKADO directory. And click on **OK** button.

hange Icon		Change Icon	
ok for icons in this file:		Look for icons in this file:	
nRoot%(system32)(SHELL32.dll	Browse	C:\software\mkado_V1.5\mkado	ico Browse
ect an icon from the list below:		Select an icon from the list below	¥2
0 0-000000	T &	**	
		-38-	
] = < [*] / [*]			
	30		
با 😻 🛯 🖌 🔛 🖉			
🖻 🞯 🖕 🔌 🗙 🌘	3 660 8		
¢	(2)		
OK	Cancel	0	Cancel
		alle-	
		P.	
The MIKADO icon will ap		mikado	

6. Main menu of MIKADO



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When you run MIKADO tool, you can access four different menus:

- "Manual" menu
- "Automatic" menu
- "Options" menu
- "Tools" menu
- "?" menu.



Figure 2: First screen of the Mikado tool

6.1. "Manual" menu

The first "Manual" menu (Figure 2) enables you to run the manual way of MIKADO which allows inputting manually the relevant information for all the fields in order to generate XML files for one directory.

6.2. "Automatic" menu

The second "Automatic" menu (Figure 2) enables you to run the automatic way of MIKADO which allows generating these descriptions automatically if information is catalogued in a relational database or in a csv file.

6.3. "Options" menu

The "Options" menu (Figure 3) allows you:



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Vocabulary Update: To enable the automatic check and download of the controlled vocabularies (see 7).

- o Data Centre Type: To select the data centre type:
 - SDN V2 is the type for the SeaDataNet partners
 - ECOOP V1 is the type for the ECOOP (European Coastal sea Operational observing and Forecasting system) partners.
 - Those two data centre types in MIKADO need to be identified in the CDI input: for ECOOP partners, the URL distribution website is free whereas for the SDN partners, the URL distribution website is fixed (see 10.1.3 for manual CDI and 11.5.1 for automatic CDI).
- o Look and feel: To enable the NIMBUS mode of MIKADO
- Set programs directory: To select the directory where the XML description of EDIOS programs are stored. This is useful for having a list of values of the available local EDIOS programs when manually fulfilling the EDIOS series forms.
- Set series directory: To select the directory where the XML description of EDIOS series are stored. This is useful for having a list of values of the available local EDIOS series when manually fulfilling the EDIOS platforms forms.
- Set proxy authentification: To configure MIKADO if the connection for your PC to the internet is not direct but is established through a proxy

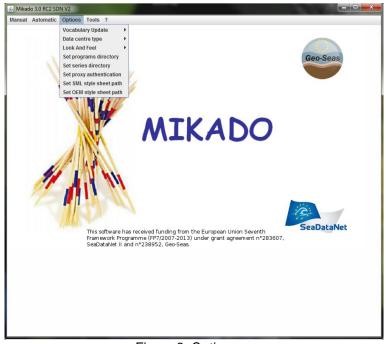


Figure 3: Options menu

6.4. "Tools" menu

The "Tools" menu (Figure 4) allows you to generate the Coupling table for the SeaDataNet Replication Manager.



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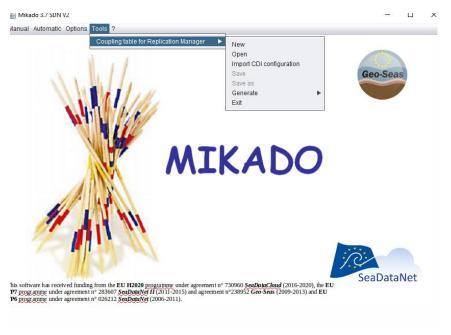


Figure 4: Tools menu

6.5. "?" menu

The "?" menu (Figure 5) provides you information about the MIKADO tool (Version and corresponding updates).



Figure 5: About Mikado menu (?)



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7. Controlled vocabularies

7.1. Check and import the controlled vocabularies

As MIKADO includes functionality to import and use the SeaDataNet Common Vocabularies, it has been upgraded to make use of the new Version 2 Common Vocabularies (NVS 2.0) in all metadata directories (CDI, CSR, EDMED, EDMERP, EDIOS).

MIKADO uses the following SeaDataNet controlled vocabularies (NVS 2.0):

List code	List Name
C19	SeaVoX salt and fresh water body gazetteer
C77	ICES ROSCOP data types
C17	SeaDataNet CSR ship metadata
C32	ISO countries
C34	Monitoring activity rationale
C35	European Nature Information System Level 3 Habitats
C36	Monitoring activity legislative drivers
C37	Ten-degree Marsden Squares
C38	Ports Gazetteer
L05	SeaDataNet device categories
L02	SeaDataNet Geospatial Feature Types
L03	SeaDataNet Measurement Periodicity Classes
L05	SeaDataNet device categories
L06	SeaDataNet Platform Classes
L07	http://seadatanet.maris2.nl/v_bodc_vocab/search.asp?name=%28L071%29%20SeaDa taNet+data+access+mechanisms&l=L071SeaDataNet data access mechanisms
L08	SeaDataNet Data Access Restriction Policies, limited to RS (By Negociation) and CB (CC- BY 4.0) in CDI
L10	SeaDataNet geographic co-ordinate reference frames
L11	Height and Depth Vertical Co-ordinate Reference Datum
L12	http://seadatanet.maris2.nl/v_bodc_vocab/search.asp?name=%28L121%29%20SeaDa taNet+Parameter+Validation+Terms&l=L121SeaDataNet Parameter Validation Terms
L13	http://seadatanet.maris2.nl/v_bodc_vocab/search.asp?name=%28L131%29%20SeaVo X+Vertical+Co-ordinate+Coverages&I=L131SeaVoX Vertical Co-ordinate Coverages



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L14	http://seadatanet.maris2.nl/v_bodc_vocab/search.asp?name=%28L141%29%20SeaDa taNet+Activity+Operational+Stati&l=L141SeaDataNet Activity Operational Stati
L15	SeaDataNet quality management system accreditations
L18	ROSCOP sample quantification units
L22	SeaVoX Device Catalogue
L23	SeaDataNet metadata entities
L24	SeaDataNet data transport formats
L26	EDIOS permitted sampling interval units
P02	BODC Parameter Discovery Vocabulary
P06	BODC data storage units
P08	SeaDataNet Parameter Disciplines
CSR	Cruise Summary Report
EDMED	European Directory of Marine Environmental Data sets
EDMO	European marine organisations
EDMERP	European marine projects

The NVS 2.0 vocabulary lists are available at:

http://seadatanet.maris2.nl/v_bodc_vocab_v2/welcome.asp

In MIKADO, the controlled vocabularies can be downloaded when using the menu **Options** > **Vocabulary update** > **Update once now**.

This functionality can be automated: when MIKADO starts, it checks automatically the version of the vocabulary lists and uploads locally the latest version of each list. To do so, use the **Options** main menu and select "On" in the **Vocabulary Update** sub-menu. After clicking on "Update once now", it is not necessary to restart MIKADO: MIKADO checks directly the version of the vocabulary lists and uploads locally the latest version of each list.





Figure 6: Vocabulary Update Menu

A window shows the progression of the update, where you can see the name of the list which is updated:

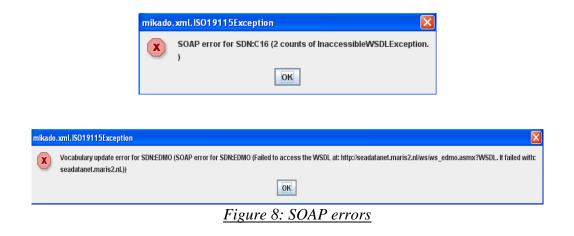


Figure 7: Download of the controlled vocabularies

If there are any network problems, MIKADO detects them and does not check the versions of controlled vocabularies. You will have an error message but it will be possible to work off line.



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These SOAP errors can arise when the web services provided by BODC (vocabularies) and/or Maris (EDMO, EDMERP) are not reachable from your computer.

That means alternatively:

- The web services were down at the moment you launched Mikado update of vocabulary. Mikado is continuing with the latest version of the vocabularies and EDMO and EDMERP directories. It is not a real inconvenient except if new entries are necessary for you, since the local copy will be made next time by Mikado. However, even if BODC warned us that their web services will be down, it is pretty rare that BODC and Maris web services are down at the same time. That could mean there is a problem for Mikado to connect to the web services (please refer to point 2).
- 2. Mikado is not able to connect to BODC and Maris web services using Soap protocol (based on http protocol) :
 - no internet connection available on your PC at that moment,
 - the firewall of your organization prevents such connection (please contact your network and security team),
 - the connection for your PC to the internet is not direct but is established through a proxy. That is the IP address of your PC is not visible from the outside of your internal network (address mapped by the proxy in both directions from internal IP addresses (intranet addresses) to external IP addresses : often used when the number of computers on the intranet are more numerous than the allocated external IP addresses (time share of the available addresses): WIFI connexion in an hotel for example, but proxys could also been set up for other reasons. To support such indirect connections, MIKADO requires extra configuration (name of the proxy, ...):
 - In the mikado.bat file (for Windows) or the mikado.csh file (for Unix), you have to replace the command "java -

Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp dist/*;dist/lib/* mikado.Mikado mikado-home=." with :

"java -Dhttp.proxyHost=XXX.XXX.XXX.-Dhttp.proxyPort=XXXX -Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp dist/*;dist/lib/* mikado.Mikado mikado-home=." where xxx.xxx.xxx is the IP address of your HTTP proxy server or the name of your HTTP proxy server and xxxx is the port of your proxy.



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- If you have a HTTPS proxy, you may use: "java -Dhttps.proxyPort=XXXX -Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp dist/*;dist/lib/* mikado.Mikado mikado-home=." where xxx.xxx.xxx is the IP address of your HTTPS proxy server or the name of your HTTPS proxy server and xxxx is the port of your proxy.
- You can combine HTTP and HTTPS parameters if needed: java -Dhttp.proxyHost=XXX.XXX.XXX.-Dhttp.proxyPort=XXXX -Dhttps.proxyHost=XXX.XXX.XXX.-Dhttps.proxyPort=XXXX -Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp dist/*;dist/lib/* mikado.Mikado mikado-home=.

7.2. Use of the controlled vocabularies

7.2.1. Manual input

The lists of values used by MIKADO Manual version are the SeaDataNet common vocabularies. For each field associated with a list of values, you have to choose the correct value in the corresponding common vocabulary list.

To do so, click on the 🖄 icon on the right of the field.

al Automatic Options T	'ools ?			
entification General infor	mation Mooring	Measurement	Geographical area	
Cruise Objectives and b	rief of cruise Ship	Parameters	Responsible party Collate center	
Revision date 30	0/04/2013 15:15:15	dd/mm/yyyy (2	5/01/2007)	
Start date *	dd/mr	m/yyyy (25/02/2007	0	
End date *	dd/mr	m/yyyy (25/02/2007	0	
Country of departure			Port of departure	
Keyword		22 💼	Keyword	22 💼
SDNIdent			SDNIdent	
Country of return			Port of return	
Keyword		2	Keyword	22 🗃
SDNIdent			SDN/dent	
Dataset Access Restriction	1			
Access const	traints	SDNIdent (access	constraints) 🔀 📥	
•				
			Click on the 🔯	1

A new window opens, allowing you to select a value in a list. Select the corresponding value and click on the **OK** button on the bottom of the window.



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🔬 Mi	ikado 3.0 RC2 SDN V2 Manual / New CSR
Manu	ual Automatic Options Tools ?
Id	Ientification General Information Mooring Measurement Geographical area
	Cruise Objectives and brief of cruise Ship Parameters Responsible party Collate center
	Revision date * 30/04/2013 15:15:15 dd/mm/yyyy (25/01/2007)
	Period
Keyword	
Country Name	* Houston Port of departure
BSH2736 - Zhen Hai BSH2735 - St Rose	8 * SDN:C38::BSH2726 Keyword Houston
BSH2734 - Gretna	
BSH2733 - St Augustine	SDN/dent SDN:C38::BSH2726
BSH2732 - Adabiya	Port of return
BSH2731 - Nederland	
BSH2730 - Carrabelle	Keyword 💫 😭
BSH2728 - Port Arthur	SDNident
Place 29 - Kualig Cm	SDN/dent
BSH2726 - Houston	
PSH2727 - Port St Joe	
BSH5700 - Port Penrhyn	pnstraints) 🔀 🔹
BSH5702 - Portnaguran	
BSH5701 - Port Seton	
BSH5704 - Rhos-on-sea	
BSH5703 - Portscatho	
BSH5705 - Poliscano BSH5706 - Seahouses	
BSH5705 - Saundersfoot	
BSH5705 - Saunderstoot BSH2723 - Norsworthy	
BSH2723 - Norswormy BSH2722 - Baytown	
BSH2722 - Baytown BSH2725 - Deer Park	
BSH2/25 - Deer Park	
match filter (use * to set filter and <return> for next match)</return>	
	Ok Cancel

Figure 10: Select the corresponding value in the list

It is possible to set a filter in order to find a specific value in a vocabulary list. To do so, see 9.2.

7.2.2. Automatic generation – Incremental Mapping

7.2.2.1. Manual mapping

MIKADO V1 allows you to create an incremental local mapping between the information of your database and the common vocabularies. This mapping is done during the XML generation:

- Each time that MIKADO does not recognized a value (entrykey or entryterm) which should come from the common vocabulary, it asks the user for mapping.
- MIKADO manages a demand-driven continuous (incremental) extension of a local mapping: mapping of the local database to the common vocabulary.

In the mapping window, you will find in a red field at the top of the window, the value to map with the common vocabulary list. Select the corresponding value in the list and click on OK button at the bottom of the window.



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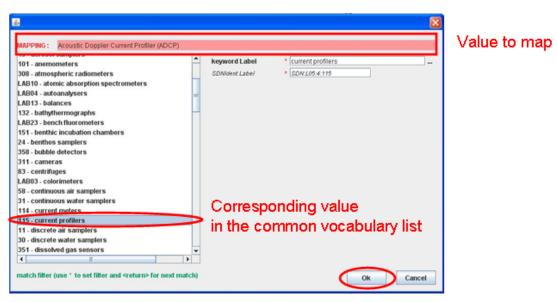


Figure 11: Mapping window for paramaters

It is possible to set a filter in order to find a specific value in a vocabulary list. To do so, see 9.2.

7.2.2.2. Automatic mapping

MIKADO includes also a functionality to download automatically existing mappings between different vocabulary lists. The available mappings are provided by the BODC Vocabulary Server Mappings Index (C970):

http://seadatanet.maris2.nl/v_bodc_vocab/search.asp?name=(C970)%20Vocabulary+Server+Mappin gs+Index&I=C970

In the available mappings, the SeaDataNet vocabulary lists are mapped with other vocabulary lists using only the exact and narrow matches defined by BODC as follows:

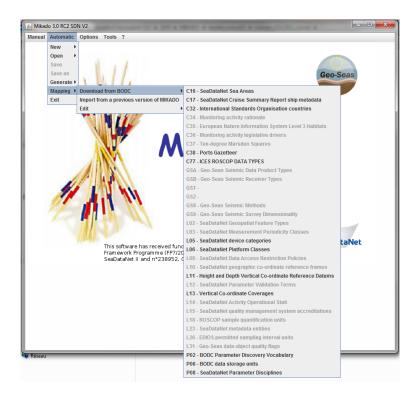
- If MIKADO finds an exact match for a local value in the Seadatanet vocabulary selected list, it maps the local value with this exact match.
- If MIKADO does not find an exact match but finds a narrow match, it maps the local value with the narrow match.
- If MIKADO finds neither exact match nor narrow match, it does not map the local value and then ask the user to define manually the mapping.
- If a local value can be mapped with several SDN values, MIKADO does not map it and ask the user to define manually the mapping.

To use this functionality, follow the different steps:



sdn-userdesk@seadatanet.org – www.seadatanet.org SeaDataNet - The pan-European infrastructure for marine and ocean data management 1- Select **Mapping > Download from BODC** in the **Automatic** main menu. The available vocabulary lists appear in a dropdown list.

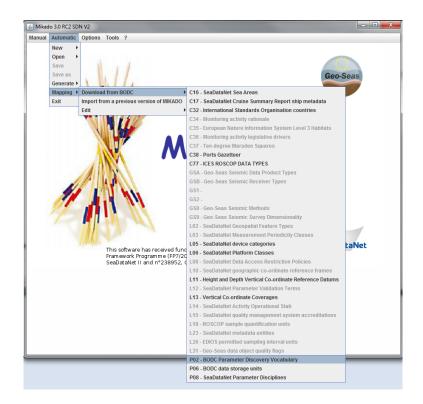
MIKADO checks the available mappings. If no mapping exist for a list, the vocabulary list will appear painted with grey in the dropdown list and the user can not select it.



2- Select the vocabulary list you want to map automatically with an other one. For example, select the PO2 list (BODC Parameter Discovery Vocabulary)



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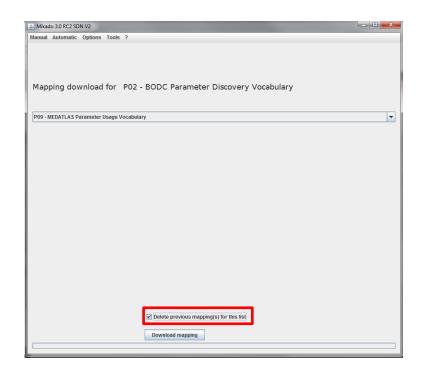
3- Select the mapping to upload in MIKADO. For example, select the mapping between the P021 list and the P09 list if P02 corresponds to your local data.

Mikado 3.0 RC2 SDN V2		
anual Automatic Options Tools ?		
Mapping download for P02	2 - BODC Parameter Discovery Vocabulary	
P09 - MEDATLAS Parameter Usage Vocab	ilary	•
C47 - Marine Strategy Framework Directive		
P02 - SeaDataNet Parameter Discovery Vo		
P04 - Global Change Master Directory Scie P05 - International Standards Organisation		
207 - Climate and Forecast Standard Name		
A01 - International Coastal Atlas Network C		
19 - SeaDataNet keyword types		
P03 - SeaDataNet Agreed Parameter Group	IS	
P22 - INSPIRE themes		
P01 - BODC Parameter Usage Vocabulary		
P09 - MEDATLAS Parameter Usage Vocabu		
M03 - The Crown Estate Renewable Energy		
M04 - The Crown Estate Renewable Energy	Development Phases	
	Delete previous mapping(s) for this list	
	Download mapping	

4- Tick the check box if you want to delete the previous mappings (manual or automatic) of the selected list.



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Important: The manual and automatic mappings are saved in the same file. If you choose to delete the previous mappings, you can lose a previous manual mapping and you will have to make it again if you want to use it later. So, be careful using the check box!

5- Click on the **Download mapping** button. A progress bar indicates the upload progress.

🚳 Mikado 3.0 RC2 SDN V2	X
Manual Automatic Options Tools ?	
Mapping download for P02 - BODC Parameter Discovery Vocabulary	
P09 - MEDATLAS Parameter Usage Vocabulary	-
Delete previous mapping(s) for this list	
Download mapping	

6- It is possible to edit and to check the uploaded mapping by selecting **Mapping > Edit** in the **Automatic** main menu.



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anual Automatic Options Tools ? Mapping SDN:P02 - BODC Param	eter Discovery Vocabulary	
Local Value	SDN Value	X
PSAL	PSAL	
PHTP	PHWC	
6040	SPHT	
NORG	TDNT	
HBAW	BNTX	
DOCP	OCPW	
DIPF	PCFX	
PHTF	AXFX	
MNTH	AYMD	
CE3W	FR11	
WYYS	RMIN	
DEPH	AHGT	
GDIR	EWSB	
WSMP	SPGS	
HCSS	RFVL	
HCSP	RFVL	
NEEW	HEXC	
SIC	TD00	
MZRS	RMIN	
CE2W	FR11	
NT1P	NTOT	
TICW	TCO2	
SLEV	ASLV	
DINW	PATX	
PRES	AHGT	
CNDC	CNDC	
NTIW	NTRI	
ZNTH	HEAD	
HEEW	HEXC	
ЛРК	WVST	
DENS	SIGT	
NTIP	NTPW	
TPHS	TPHS	
LGHT	VSRW	
CE1W	FR11	
TPHP	PHWC	
C13D	WSTB	
WCLP	HLWC	
DCAW	PPRD	
MBRS	RMIN	
DPSF	AHGT	
HEDW	WSTB	

7.2.2.3. Edit the mapping

To edit the incremental mapping, select **Mapping > Edit** in the **Automatic** main menu and choose a vocabulary list. The different vocabulary lists appear in a dropdown list. If the mapping does not exist, the vocabulary list appears painted with grey in the dropdown list and the user can not select it.



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nual	Automatic	Options Tools ?	
	New 🕨		C16 - SeaDataNet Sea Areas
	Open 🕨	PERSONAL PROPERTY AND ADDRESS OF ADDRESS ADDRES	C17 - SeaDataNet Cruise Summary Report ship metadata
	Save		C32 - International Standards Organisation countries
	Save as		C34 - Monitoring activity rationale
	Generate 🕨		C35 - European Nature Information System Level 3 Habitats
	Mapping 🕨	Download from BODC	C36 - Monitoring activity legislative drivers
	Exit	Import from a previous version of MIKADO	C37 - Ten-degree Marsden Squares
		Edit •	C38 - Ports Gazetteer
			C77 - ICES ROSCOP DATA TYPES
			EDMED - EDMED record
			CSR - Cruise Summary record
			EDMERP - European Directory of Marine Environmental Research Projects
			EDMO - European Directory of Marine Organisations
			GSA - Geo-Seas Seismic Data Product Types
			GSB - Geo-Seas Seismic Receiver Types
	1		GS1 -
			GS2 -
	11		GS8 - Geo-Seas Seismic Methods
	71		GS9 - Geo-Seas Seismic Survey Dimensionality
	1		L02 - SeaDataNet Geospatial Feature Types
			L03 - SeaDataNet Measurement Periodicity Classes
			L05 - SeaDataNet device categories
		This software has received fund	L06 - SeaDataNet Platform Classes
		Framework Programme (FP7/20	L07 - SeaDataNet data access mechanisms
		SeaDataNet II and n°238952, 0	L08 - SeaDataNet Data Access Restriction Policies
			L10 - SeaDataNet geographic co-ordinate reference frames
			L11 - Height and Depth Vertical Co-ordinate Reference Datums
			L12 - SeaDataNet Parameter Validation Terms
			L13 - Vertical Co-ordinate Coverages
			L14 - SeaDataNet Activity Operational Stati
			L15 - SeaDataNet quality management system accreditations
			L18 - ROSCOP sample quantification units
			L23 - SeaDataNet metadata entities
			L24 - SeaDataNet data transport formats
			L26 - EDIOS permitted sampling interval units
			L31 - Geo-Seas data object quality flags
			P01 - BODC Parameter Usage Vocabulary

For each vocabulary list, you can access the mapping table and you can update it:

- modify the first column of the table (local value) by double clicking on the field you want to update,
- delete a row by selecting the row and by clicking on the 💹 button,
- delete all the rows by clicking on the 🛍 button.

Important: Do not forget to press on "Return" when you update a field in the mapping table.

Once the mapping table is updated, you have to save it by clicking on the button.



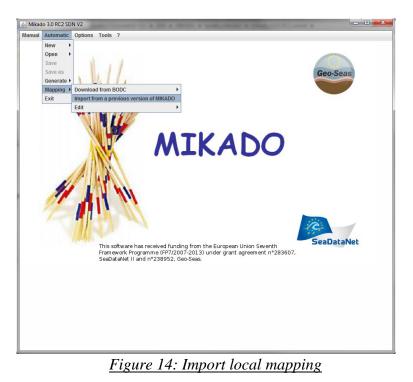
/lapping SDN:C381 - F	orts Gazetteer	Mapping for C381 list	Delete 1 row/all rows
Local \	alue	SDN Valu	e 🗶
SH3905		BSH192	~
SH4160		BSH4163	
SH4115 SH3906		BSH108 BSH192	
		031132	P
Edit and m	odify		~~
			Save

Figure 13: Update local mapping – C381 list

7.2.2.4. Import the mapping

For each release of MIKADO, the local mapping cannot be delivered with the software because it is a local mapping depending on each local database. So, it is possible to import the mapping already done with a previous release of MIKADO.

To do so, select **Mapping > Import from a previous version of MIKADO** in the **Automatic** main menu:





This opens a window where you have to browse your directories to tell MIKADO where the path of the previous installation of MIKADO was:

🛃 Import Mapping : choose previous installation directory of Mikado software 👘 📃	٢
Look In: mikado_V2.5_sismer	-
 conf dist languages lists mapping OODatabase sql 	
Import mapping Cancel	

Figure 15: Select the path of the previous installation of MIKADO

Then click on "Import mapping" button and you will get all the mapping to your local database that you have already done.

7.3. Conversion V1 to V2 vocabulary lists

MIKADO is still able to read (import) V1 XML files and save these as V2 XML for data centres to upgrade their existing local XML files for all catalogs.

To do so, go to Manual > Open, then Save.

For more information about V2 vocabulary lists, please refer to:

- Common vocabulary webpage
- Upgrading workshop (Lucca, September 2013) How to use MIKADO?

8. CDI and CSR ISO 19139 schemas

The **Common Data Index (CDI)** and **Cruise Summary Report (CSR)** metadata formats are based upon the ISO19115 content standard and both their content and XML coding have been upgraded in September 2013 to the ISO19139 schema and made INSPIRE compliant. The MIKADO software has been upgraded so that it can work with and produce CDI and CSR XML files that are following the upgraded CDI and CSR content and XML format.



sdn-userdesk@seadatanet.org – www.seadatanet.org SeaDataNet - The pan-European infrastructure for marine and ocean data management The different versions of CDI and CSR schemas are available at:

http://schemas.seadatanet.org/Standards-Software/Metadata-formats/

MIKADO makes use of the CDI and CSR xsd schemas. Since release 3.6, MIKADO includes functionality to check the CDI and CSR xsd schemas used in your MIKADO installation and to import the latest version of the CDI and CSR xsd schemas if needeed.

If your MIKADO installation do not use the latest version of CDI and CSR schemas, you will be informed by the following red messages:



To update the CDI and CSR schemas version used by your MIKADO software, use "Options / ISO19139 schema update" menu.

If your MIKADO installation uses the lastest version of CDI and CSR schemas, you will have the following green message:





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9. Common functionalities

9.1. Tables

9.1.1. Free text table

The following figure shows examples of free text tables that you will find in the MIKADO Manual interface:

Westion	gitude *	East longitude	South latitude *	North latitude	
			1		
					L
					a
-	43. 0	0.188 - 288 - 150			
aphic-cove	erage (tex	tual description)			
aphic-cove			e geographic covera	0e	7
aphic-cove			e geographic covera	ge	1
aphic-cove			e geographic covera	ge	
aphic-cove			e geographic covera	ge	

Figure 16: Free text table

9.1.1.1. Add a row

To add information in a free text table, click on the 🖻 button. A row will be added to the table. The new row appears in blue.

	gitude * 🔰 South lat	titude * North latitude *
1.		l

To complete the added row, double click on the row or on the field you want to complete. The field to complete appears in white:

	East longitude *	South latitude *	North latitude *
2			
			-



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Important: To validate your update, do not forget to press on "Return". The updated field appears in blue.

West longitude *	East longitude *	South latitude *	North latitude *
0.2			

9.1.1.2. Delete a row

To delete a row in a table, select the row to delete by clicking on it and click on the K button. The row will be deleted.

9.1.1.3. Update a row/a field

To update a row/field, double click on it. The selected row/field will appear in white. Update it.

Important: To validate your update, do not forget to press on "Return". The updated field appears in blue.

9.1.2. Common vocabularies content table

The following figure shows you examples of tables containing values from a vocabulary list:

Projects	SDNIdent	X

9.1.2.1. Add a row/several rows

To add information in this kind of tables, click on the 🖶 button. A window which allows you to select a value in a vocabulary list opens.

• If you want to add only one value into the table, select the value and click on the **Ok** button.



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• If you want to add several values into the table, select the value and click on the **Add** button and do it again to the last value. After selecting the last value, click on the **Ok** button.

約 project						×
Country	•	Name	* SEADATANET-PAN-EURO	PEAN INFRASTRU		
9605 - DORSALES (ac 10763 - MOMAR - FRAI 9607 - ORSTOMURJ 9609 - COARE FRANCE 11832 - South Pacific 9608 - SURTROPAC (a 3092 - Molecular ecol 11574 - Mediterraneau 7942 - Science and Pc 9597 - HALLEUTIC RES 11053 - EPIGRAM - STI 7700 - FISBOAT - FISH 11819 - Channel Habit 11820 - CHannel integ 9589 - INTERNATIONAL 9598 - INTERNATIONAL	Cronym="DORSALES" organisation="Int ▲ NCE (Monitoring Mid Atlantic Ridge) (ac I- UNDERWATER MOUNTS (acronym="' E (acronym="COARE" organisation="IR ocean circulation and Climate Experim acronym="SURTROPAC" organisation= logy of the photosynthetic procaryote p in Ocean Observing System on Environn olicy Integration for Coastal Systems A SOURCES A SSESSMENT-WE ST EUROPE 'UDY OF PHYSICAL PROCESSES IN THE IERY INDEPENDENT SURVEY BASED OP tat Atlas for marine Ressource Manage prated Approach for marine Resource IN 1 YOUNG FISH SURVEY (INFS) - FRANCE L BOTTOM TRAWL SURVEY (IBTS) - FR	Name Code EDMERP	* SEADATANET-PAN-EURO	PEAN INFRASTRU		
9543 - SOFIA {acronyn 7650 - Fisheries Globa 9590 - MEDITERRANEA 3069 - Spatial and tem 3066 - Major improver	ITRACE INSU {acronym="GMS12" organ m="SOFIA" organisation="LATMOS - L/ al Information System (FIGIS) {acronym AN INTERNATIONAL TRAWL SURVEY (M nporal trends in catches of the Mediter ments in the knowledge of Eastern Atla PAN-EUROPEAN INFRASTRUCTURE FOR ▼ ▶			Add	Dk	Cancel

The selected value(s) will appear in the table:

Projects	SDNIdent	¥ 🗸
SeaDataNet - Pan-European Infrastru	SDN:EDMERP::9632	
		(A)

9.1.2.2. Delete a row

To delete a row in a table, select the row to delete by clicking on it and click on the \bigotimes button. The row will be deleted.

9.1.2.3. Update a row

To update a row in a table, select the row to update by clicking on it and click on the window which allows you to select a value in a vocabulary list opens. Select the value and click on the OK button.



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9.2. Vocabulary list

9.2.1. Find a specific value in a vocabulary list

If you want to find a specific value in a vocabulary list, it is possible to match a filter:

- Select the list by clicking on any value,

- Use * to set filter. For example, if you want to find "World Geodetic System 1984" in the L101 vocabulary list, type ***1984**. The used filter appears in green at the left bottom of the window.

- Press "Return" to go to the next match.

4304 - Voirol 1875 4811 - Voirol 1875 (Paris)

4671 - Voirol 1879 4821 - Voirol 1879 (Paris)

1984

30491 - Voirol 1875 / Nord Algerie (ancienne) 30492 - Voirol 1875 / Sud Algerie (ancienne)

30493 - Voirol 1879 / Nord Algerie (ancienne) 30494 - Voirol 1879 / Sud Algerie (ancienne) 4979 - World Geodetic System 1984 3D 4322 - World Geodetic System 72

4901 - ATF (Paris)	Code	*	
27500 - ATF (Paris) / Nord de Guerre	SDNIdent (Code)	*	
4191 - Albanian 1987	ODMACIN (OVAC)		
2462 - Albanian 1987 / Gauss-Kruger zone 4			
4289 - Amersfoort			
28992 - Amersfoort / RD New			
7415 - Amersfoort / RD New + NAP			
28991 - Amersfoort / RD Old			
4183 - Azores Central 1948			
2189 - Azores Central 1948 / UTM zone 26N			
4665 - Azores Central 1995			
3063 - Azores Central 1995 / UTM zone 26N			
4184 - Azores Oriental 1940			
2190 - Azores Oriental 1940 / UTM zone 26N			
4664 - Azores Oriental 1995			
3062 - Azores Oriental 1995 / UTM zone 26N			
4215 - Belge 1950			
4809 - Belge 1950 (Brussels)			
21500 - Belge 1950 (Brussels) / Belge Lambert 5			
4313 - Belge 1972			
31300 - Belge 1972 / Belge Lambert 72	•		
Image: A marked and A marked			
match filter (use * to set filter and <return> for n</return>	ext match)		Ok Cancel
3015 - SWEREF99 18 45	▲ Code	 World Geodetic Syste 	m 19
3016 - SWEREF99 20 15			
3017 - SWEREF99 21 45	SDNIdent (Code)	* SDN:L101:2:4979	
3018 - SWEREF99 23 15			
3006 - SWEREF99 TM			
4616 - Selvagem Grande			
2943 - Selvagem Grande / UTM zone 28N			
4299 - TM65			
4299 - 1M65 29902 - TM65 / Irish Grid			
1300 - TM75 29903 - TM75 / Irish Grid			



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•

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Ok

Cancel

9.2.2. Find EDMERP or EDMO values for a particular country

MIKADO allows to find the EDMERP or EDMO values for a particular country in the EDMERP or EDMO lists. To do so, select the country in the dropdown list as shown in the following figure:

Country	France	-	Keyword	•			
7636 - MYTIMED	{acroBulgaria	1	SDNident				
3113 - Performa	nce of Croaua						
10431 - Multidise	ciplinaCyprus						
7571 - ASSEM - /	Array Denmark						
7645 - DEEP-WA							
7650 - FIGIS - Sp							
10133 - Assessi							
8102 - Marine Er	rviron Georgia	•					
	seasonal and interanual variation of pla	nkton					
3128 - The Impa	ct of Appendicularia in European Marin	e Eco					
9628 - SEISMIC I	MULTITRACE INSU {acronym="" organis	sation					
9543 - SOFIA (ad	cronym="SOFIA" organisation="CETP /	Centr					
9564 - FASE/SED	IMANCHE {acronym="" organisation="	IFREM					
9560 - EXTRAPL	AC {acronym="EXTRAPLAC" organisat	ion="					
9561 - FARA FRA	NCE {acronym="" organisation="IFREM	AER /					
9566 - SEISMIC I	MULTITRACE IFREMER {acronym="" org	ianisa					
	{acronym="" organisation="IFREMER /						
	HERE {acronym="LITHOSPHERE" organ						
	(acronym="MEDRIFF" organisation="IFI						
	IERAL & BIOLOGICAL INTERACTION- EX						
	IONAL OCEANOGRAPHIC DATA AND IN						
	EDATLAS II {acronym="MEDAR/MEDAT						
	GRAPHIC CRUISES CATALOGUE (acrony						
tanda da la	t do not the sould read on the sould be	to ba				_	-
match inter (use	* to set filter and <return> for next ma</return>	(CII)			Add	Ok	Cancel

The EDMERP (respectively EDMO) list will be shortened and will contain only the projects (respectively organizations) of the selected country.

After that, it is possible to match another filter to find a specific value in the EDMERP or EDMO lists (see 9.2.1).

9.3. Common screen characteristics for MIKADO manual input

9.3.1. Mandatory fields

In the different interfaces, the mandatory fields are highlighted with a red star:



Identification When Who EDMED identifier * Dataset-id * Dataset-name *	here What Referen	ce Get data Completed I	<i>x</i>
Dataset-id *			
Dutubti-Id			
Dataset-name *			

Figure 17: Mandatory fields highlighted with a red star

9.3.2. Specific formats

9.3.2.1. MIKADO manual

Specific formats, like date, are given as comment on the windows when necessary:

ataset Data holding ce	entre Data contact
Identification When	Where What Reference Get data Completed by
Description Period Start date End date	*yyyyy (2007) yyyyy (2008)
Revision date	

Figure 18: Specific formats

9.3.2.2. MIKADO automatic

The dates must be extracted from the database (or csv file) at ISO 19115 format: yyyy-mmddThh:mm:ss (time is not mandatory).



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9.3.3.Tooltips

MIKADO provides two kinds of tooltips:

- Title tool tip which indicates the XML field associated with the selected title and its definition.
- Field tool tip which gives supplementary information in order to help to fulfill the field;

To access tool tips, put the mouse cursor over an item (title or empty field), without clicking it, and a small box will appear with supplementary information regarding the chosen item.

idPoC : Orga Nident (Organisation name) Intact information	*			
Phone				
Fax				
Address				
Delivery point				
City	A			
Administrative area				
Postal code				
Country				
Email				
Website				
ble				

Figure 19: Title tool tip

int of contact (holding centre) — Drganisation name	*	N	2
SDNident (Organisation name) Contact information	•	name of the respon	sible organization
Phone Fax			
Address			
Delivery point			
City			
Administrative area Postal code			
Email			
Website			
Email			

Figure 20: Field tool tip



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10. Manual entries of EDMED, CSR, CDI, EDMERP, EDIOS, SEISMIC SENSORML and SEISMIC O&M descriptions

The manual version of the software is well adapted if there is a small amount of EDMED, CSR, CDI, EDMERP, EDIOS, SEISMIC SENSORML or SEISMIC O&M entries.

The input screens have been updated to be compliant with the new XML schemas and the lists of values used by MIKADO Manual are the SeaDataNet common vocabularies (see 7).

	omatic Options To		
ew 🕨	EDMED		
	CSR	Data contact	
	CDI 19139		
	EDMERP	re What Reference Get data Completed by	
	EDIOS PROGRAM		
dit .	EDIOS SERIES		
	EDIOS PLATFORMS	EDMED:LOCAL:	
Datase	PCR		
	SEISMIC SENSORML		
	SEISMIC O&M	DCAL identifier The LOCAL_ID is vital for the updating process, so	
the	Central system will reco	ognise whether new contributions are UPDATES of existing records	
OR	really new records.		

Figure 21: Manual menu

10.1. Create a new XML file

To create a new XML file, select **New** in the **Manual** main menu and choose EDMED, CSR, CDI, EDMERP, EDIOS, SEISMIC SENSORML or SEISMIC O&M.



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🍰 Mikado 3	0 RC2 SDN V2 Manual	I / New EDMED	×
Manual Au	tomatic Options To	ols ?	
	EDMED CSR	Data contact	
1	EDMERP EDIOS PROGRAM EDIOS SERIES	re What Reference Get data Completed by EDMED LOCAL:	
the	SEISMIC SENSORML SEISMIC O&M	CAL identifier The LOCAL_ID is what for the updating process, so organise whether new contributions are UPDATES of existing records	

Figure 22: Create a new XML file with MIKADO

10.1.1. Manual EDMED input

There are 3 main tabs for the EDMED information: 'Dataset', 'Data holding centre' and 'Data contact'

The first tab gives the dataset description (Figure 23 to Figure 29) and is divided into 7 tabs which enable to enter information about:

- Identification of the dataset which is very important. The ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.
- When and where the dataset was collected.
- What are the data in the dataset (data themes, parameters, instruments, summary, related project).
- References on the data set (bibliography, web site).
- Where and how to get the dataset.
- Responsible of the dataset description.



Dataset Data holding centre Data contact	
Identification When Where What Reference Get data Completed by	
Identification When Where What Reference Get data Completed by Dataset-id • TEST01 • EDMED identifier • SDNEDMEDLOCALTEST01 Dataset-name • Jeu données TEST The ID must be a UNIQUE LOCAL identifier The LOCAL_ID is vital for the updating process, so the Central system will recognise whether new contributions are UPDATES of existing records OR really new records.	

Figure 23: Dataset information window – 'Identification'

The identification of the dataset is the **unique** LOCAL dataset ID and the dataset name. Both fields are mandatory.

Dataset Data I	holding centre Data contact
Identification	When Where What Reference Get data Completed by
Description Period	Description du jeu de donn
Start date	* 1991 yyyy (2007)
End date	yyyy (2008)
Revision date	* 21/05/2008 00:00:00 dd/mm/yyyy hh::m::ss -24 hr (25/01/2007 15:05:00)

Figure 24: Dataset information - 'When'



ieog	graphic coverage (b	ounding bo	(x)							
	West longitude *	East lor	ngitude *	South latitu	de* N	lorth latitude *	X			
	-180	179.9999	-	-90	90					
ieog	graphic-coverage (te	extual des	cription)							
			scribing th	e geographic (overage		X			
	F World wide coverag		scribing th	e geographic (overage		X			
			scribing th	e geographic (overage		X			
			scribing th	e geographic (overage					
			scribing th	e geographic (overage					
			scribing th	e geographic (overage					
	World wide coverag	e	scribing th		soverage					
iea-	World wide coverag areas Sea- North Atlantic Ocear	e area 1		3DN:C16:1:23						
iea-i	World wide coverag	e area 1		3DN:C16:1:23 3DN:C16:1:32						
iea-i	World wide coverag areas Sea- North Atlantic Ocear	e area 1 n		3DN:C16:1:23						

Figure 25: Dataset information window – 'Where'

lentification When Where What	Reference Get data Co	mpleted by	
Projects PREVIMER - COASTAL OBSERVATION	SDNIdent N SDN:EDMERP::9634		
Parameters Temperature of the water column Salinity of the water column Wave direction Wave height and period statistics	SDNIdent SDN:P021:26.TEMP SDN:P021:26.PSAL SDN:P021:26.GWDR SDN:P021:26.WVST		
Instruments CTD profilers satellite tracking system sea level recorders wave recorders	SDNident SDN:L05:4:130 SDN:L05:4:121 SDN:L05:4:111 SDN:L05:4:110		
Abstract Abstract of the da	taset		

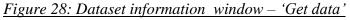
Figure 26: Dataset information window - 'What'

Dataset D	ata holding ce	ntre Dat	a contact	1						
Identificati	on When	Where	What	Reference	Get data	Complete	d by			
This of the	Title	Pu	blication d	ate	Author		Editor		X	
Title of th	ne paper	2008	-01-01	R. Abc	a	N	ame of the edito	r	P2	
· · · · ·										



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Originator centre	Organisation name	
Dataset Access Restriction		
Access constraints unrestricted	SDN:L081:1:UN	
Distribution website		



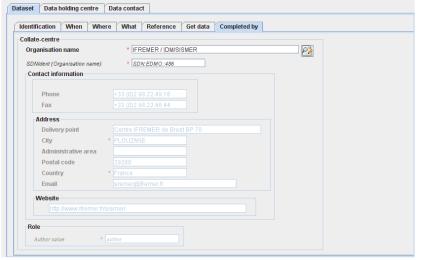


Figure 29: Dataset information window - 'Completed by'

The second tab describes the data holding centre:



rganisation name	* IFREMER / IDM/SISMER	P
DNIdent (Organisation name)	* SDN:EDMO::486	
Contact information		
Phone	+33 (0)2 98.22.49.16	
Fax	+33 (0)2 98.22.46.44	
Address		
Delivery point		
City	* PLOUZANE	
Administrative area		
Postal code		
Country	* France	
Email	sismer@ifremer.fr	
Website		
http://www.ifremer.fr		
Role		
Role code value *		

Figure 30: Data Holding centre information window

The last tab identifies the contact point within the data holding centre (defined in the previous window) able to deal with requests concerning the data sets held by the centre:

Point of contact (data contact) Individual name		
Organisation name	* IFREMER / IDM/SISMER	
SDNIdent (Organisation name)	* SDN:EDMO::486	
Person title		
Contact information		
Phone	+33 (0)2 98.22.49.16	
Fax	+33 (0)2 98.22.46.44	
Address		
Delivery point	Centre IFREMER de Brest BP 70	
City	* PLOUZANE	
Administrative area		
Postal code	29280	
Country	* France	
Email	sismer@ifremer.fr	
Website		
http://www.ifremer.fr/	sismer/	
Role		

Figure 31: Data Contact information window

Here the phone and fax which are related to the organisation name (retrieved from EDMO catalogue) may be modified to be related to the identified person, point of contact for the dataset.

Once all the information related to the EDMED dataset has been fulfilled, the xml file will be created by selecting **Save as** in the **Manual** main menu. The created XML file has a ".xml" extension.



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10.1.2. Manual CSR input

Now, MIKADO is able to generate (manually or automatically) ISO 19139 CSR descriptions instead of ISO 19115 ones. MIKADO is also able to read (import) CSR ISO 19115 XML files and convert them as CSR ISO 19139 XML files for data centres to upgrade their existing local XML files (Manual > Open then Manual > Save as).

For more information about ISO 19139 CSR profile, please refer to:

- Metadata format CSR webpage
- Upgrading workshop (Lucca, Septembre 2013) How to use MIKADO?

There are 6 main input tabs for the CSR information, which are directly inspired by the original ROSCOP form:

- Identification of the cruise which is very important and the ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.
- General information about the cruise.
- Information about the moorings.
- Information about the measurements done during the cruise.
- Information about the geographical areas of the cruise.
- Information about Documentation.

10.1.2.1. Identification of the cruise

The identification of the cruise is the **unique** LOCAL cruise ID and the cruise name. Both fields are mandatory.

Identification	General information Mo	oring Measurement	Geographical area	Documentation	
Cruise id	* FI352009010070				
CSR Identifier	• urn:SDN:CSR:LOO				
Cruise name	* TV BROR				
	e a UNIQUE LOCAL identifier stem will recognise whether n records.				

Figure 32: Unique identification of a cruise



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10.1.2.2. General information about the cruise

This window is divided into 6 tabs (Figure 33 to Figure 38) which enable to input information about:

- the cruise (identification, begin and end dates, ports of departure end return),
- the objectives of the cruise : purpose and nature of the cruise as to provide the context in which the data were collected and the projects related to the cruise,
- the ship : ship name and ship type (research, opportunity, naval survey vessel),
- the parameters measured during the cruise and the instruments used for these measurements,
- the responsible party : person(s) in charge of the scientific work (chief scientist) and laboratory responsible for coordinating the scientific planning of the cruise,
- the information about the collate centre.

ntification Genera	I information Mooring	Measurement	Geographical area	Documentation	
Cruise Objectives	and brief of cruise Shi	Parameters	Responsible party	Collate center	
levision date	* 29/04/2010 dd/mm	a/yyyy (25/01/2007)			
Period	·				
Start date	* 19/09/2009 00:00:00	dd/mm/yyyy l	nh:mm:ss -24 hr (25/0	1/2007 15:05:00)	
End date	* 24/09/2009 00:00:00	dd/mm/yyyy l	nh:mm:ss -24 hr (25/0)	2/2007 12:00:00)	
Country of depature			Port of depature		
Country	France	2	Port	Brest	2
Code list value	FR		code list value	BSH29	
Country of return			Port of return		
Country	Algeria	22 💼	Port	Oran	22 💼
Code list value	DZ		code list value	BSH3024	
Dataset Access Res	triction				
	Access const	raints		× +	
licence					
				2	
I					

Figure 33: General information window – Cruise

ruise Objectives and brief o	f cruise Ship Pa	arameters Resp	onsible party	Collate center		
bjectives/purpose of the cruise	* Techni	cal tests for multich	annel seismic, Al	OCP and navigation s	system	2
rojects						
project		code list value	X			
				2		
1						

Figure 34: General information window – Objectives and brief of Cruise



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dentification Gener	al information Moor	ing Measurement	Geographical area	Documentation	1	
Cruise Objective	s and brief of cruise	Ship Parameters	Responsible party	Collate center		
Platform code						
Platform code	* L'Atalante	2				
code list value	* 35A3					
Platform class						
Category code	* research vessel	2				
code list value	* 31					

Figure 35: General information window – Ship

Identificati	on General information M	ooring Measuremen	t Geographical area	Documentation
Cruise	Objectives and brief of cruise	Ship Parameters	s Responsible party	Collate center
Parame	ters	<u> </u>	L	
	Parameter		code list value	× 🖶
	perature of the water column hity of the water column		TEMP PSAL	2
			-	
Instrum	onto			
matum	Instrument		code list value	
CTE			130	
				2

Figure 36: General information window – Parameters

ise Objectives and brief of cruise Ship Parameters Responsible party Collate center ief scientist Individual name Organisation name LOSSOUARN Hubert IFREMER / GENAVIR BREST iginator centre Organisation name IFREMER / GENAVIR BREST	tificatio	on General information	Mooring	Measurement	Geographical area	Documentation
Individual name Organisation name LOSSOUARN Hubert IFREMER / GENAVIR BREST ginator centre Organisation name IFREMER / GENAVIR BREST	uise	Objectives and brief of cri	uise Shij	Parameters	Responsible party	Collate center
ICOSSOUARN Hubert	nief sci	ientist				
ICOSSOUARN Hubert		Individual name		Organisatio	on name	× +
ginator centre Organisation name IFREMER / GENAVIR BREST	LOS	SOUARN Hubert	IFR	EMER / GENAVIR I	BREST	
Organisation name						
Organisation name						
Organisation name						
IFREMER / GENAVIR BREST	riginate	or centre				
			rganisation	name		× 🖶
	* IFRE	MER / GENAVIR BREST				
					L	



10.1.2.3. Moorings information

Information about moorings are not mandatory, the window enables to input the information about several moorings.

			oring		Geograph				
orings info	rmation								
(Description	Longitude	Latitude	Data	type	In	dividual name	Datetime	X
	on the Atlantic Rid		-20	Current meters		Herlé ME		1996-11-04T00:00:00Z	
Mooring	on the Atlantic Rid	-38	-20	Thermistor cha	ain	Herlé ME	RCIER	1996-11-04T00:00:00Z	4

Figure 39: Mooring information window

10.1.2.4. Measurements information

Information about measurements are not mandatory, the window enables to input the information about several type of measurements.



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amples info	rmation						
De	scription	Data type	Individual name	Datetime	Quantity	Unit	X
	n CTD casts		Laurent MEMERY	1996-11-04T00:00:00Z		number of stations	
Water bot	tle sampling,	Water bottle stations	Michel ARHAN	1996-11-04T00:00:00Z	40	number of stations	P

Figure 40: Measurement information window

10.1.2.5. Geographical area information

The "Geographical area" window enables to input information about the geographical area of the cruise.

entification	General information	Mooring	Measuremen	t Geographica	il area	Documentation	
ea-areas							
	Sea-area		code listy	value	X	-	
South Atlan	tic Ocean	32					
eographic-co	verage (textual descrip	tion)					
	Free text describi	ng the geog	raphic coverage		X		
South Atlan	tic Ocean, Brasil						
South Atlan	tic Ocean, Inter-tropical A	vrea					
eographic co	verage						
	Marsden square		code list va	lue	X		
4		4		4		3	
5		5					
302		302					
303		303			_		
ographic co	verage (bounding box)						
Westion	gitude * East longitu	de* So	uth latitude *	North latitude *		K	
-50	-40	-25	1	10			
ack chart							
ile name	* FI35199480	0010.aml	P> 😭				
ile type	* GML		-				

Figure 41: Geographical area window

If a track chart is available for the cruise, browse to select the file name, File description must be 'track chart', File type can be GML', 'GIF', 'PNG', 'JPEG' or 'PDF'.





In "Geographic coverage" frame, the button opens a map with the Marsden squares. Clicking on one or several MARSDEN square(s) and clicking on Ok button add its (their) value(s) in the "Geographic coverage" table.

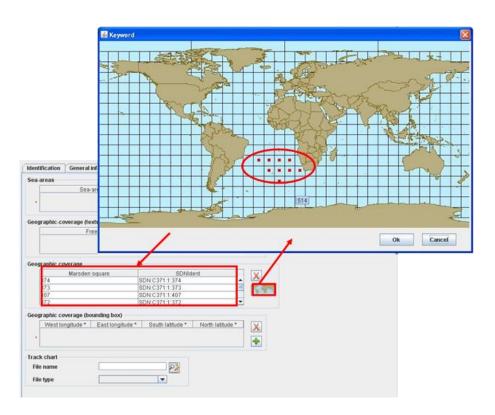


Figure 42: Geographical area – Marsden Squares

A "Documentation" tab allows including, in a CSR record, references to publications and documentations. Every CSR record can reference any number of publications. These publications will be referenced in the form of permanent URL. For the sake of homogeneity and stability, the publications included in the CDI must be stored and identified in a catalogue which provides an **digital object identifier (DOI)**, a permanent URL.



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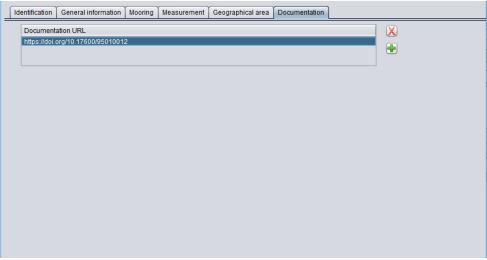


Figure 43 : Documentation window

	ld	ntification General information Mooring Measurement Geographical area Documentation
		Documentation URL
S Documentation URL		
151_Improved near real-time data management proced		Name * g System-Voluntary Observing Ship program Code EDP * 151
match filter (use * to set filter and <return> for next matc</return>	:h)	Ok Cancel

Figure 44 : Selection of a publication identified in the central catalogue

Once all the information related to the CSR has been fulfilled, the xml file will be created by selecting **Save as** in the **Manual** main menu. The created XML file has an ".xml" extension.

10.1.3. Manual CDI input

There are 11 tabs for the CDI information corresponding to the following basic questions defined in the CDI documentation:

10.1.3.1. Identification of the CDI record



The identification of the CDI record is very important. The ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.

Now, MIKADO is able to generate (manually or automatically) ISO 19139 CDI descriptions instead of ISO 19115 ones. MIKADO is also able to read (import) CDI ISO 19115 XML files and convert them as CDI ISO 19139 XML files for data centres to upgrade their existing local XML files (Manual > Open then Manual > Save as).

For more information about ISO 19139 CSR profile, please refer to:

- Metadata format CDI webpage
- Upgrading workshop (Lucca, Septembre 2013) How to use MIKADO?

Identification When	e When What How Who Where to find the data Cruise/Station Documentation Quality Others	
Dataset-id	* MARIS-TEST	
CDI identifier	um:SDN:CDI:LOCAL:MARIS-TEST	
Parent Identifier	FILLME	
Dataset-name	* Test record with full covera	
	IIQUE LOCAL identifier The LOCAL_ID is vital for the updating process, so will recognise whether new contributions are UPDATES of existing records	
OR really new record		

Figure 45: CDI 'Identification' window

10.1.3.2. Where?



Ider	tification	Where	When	What	How	Who	Wher	e to find the data	Cruis	e/Station	Documenta	tion	Quality	Others
Ge	ographic c	overage (I	ounding b	oox)						Measurir	ng area type			
	West lo	ngitude *	East lo	ongitude	Sou	th latitude	*	North latitude	X	Object to	ype code	*	curve	o≱
	-68.54884	9	-49.00715	53	59.400	296	73	8.889864						
	106.5748		114.8424		5.9167			7.636232	-					
	-80.19860	5	-70.05204	15	-57.07	9131	-3	6.777203						
Но	rizontal Da	tum						Horizontal resolu	ution					
Na	ame		* World	Geodetic	System 8	34 🗳		Value		35			22 🔒	
co	ode list value		* 4326					Unit		* http://www	r.seadatanet.org	g/urni		
Ve	rtical datu	n						Vertical resolution	on					
na	ame		* sea lev	/el				Value					22 🔒	
id	entifier		* http://w	ww.seada	atanet.or	g/ 🦻		Unit						
De	pth observ	ation						Polygon						
м	linimum de	pth	0					None enter waypoints fr	Cui					
м	laximum d	epth	100					encer waypoints in	omierce	o ngne on en	e map			
v	/ater depth		150					Description This is lin			Coordinates		X 🖶	
U	nit		metres					This is lin	line2 line3	112.9	48849 73.889 63503 17.636 16333 -36.77.	5	2	

Figure 46: CDI 'Where' window

• Resolution

Especially for geophysical and bathymetric data, resolution for the measurements in time or spatial domain (frequency or grid size) is an important parameter during discovery because it directly defines the extent of possible use of the data. It has been added as an alternative to the spatial representation information and can be specified by domain name (horizontal or vertical), a value and a unit for the resolution.

• GML extension

A GML extension ("Polygon section") has been made in the CDI format in the framework of the Geoseas project: it enables to detail the geographical features of tracks and polygons in conformity with the real geographical coverage. This enables to describe in CDI V1 format also hydrographical and seismic surveys. Thanks to this GML extension, the CDI can contain a collection of tracks or of surfaces to describe the geographical features (it is not possible to mix Multicurves and Multisurfaces). This information can be used next to the existing and mandatory "bounding box". Some fields of the GML extension could be used to add name, descriptions and possibly other metadata (it is useful for seismic tracks for example).

Example for points



sdn-userdesk@seadatanet.org – www.seadatanet.org SeaDataNet - The pan-European infrastructure for marine and ocean data management In CDI practice multiple points will not be used, because each point measurement is considered as object for an individual CDI record. The location of a single measurement point is then already described by filling in only the west longitude and the south latitude of the Bounding Box section and there is no need to fill in also the "Polygon" section.

Example for tracks

In CDI practice measurements might be undertaken as tracks or as areas. In those cases, the Bounding Box section can be used to describe the geographical rectangle that covers or surrounds the track(s) or area(s) of the measurement. In those cases, the uttermost latitude and longitudes of the Bounding Box are filled in, entering first the most left and lower point (west longitude and south latitude) and as second the most right and upper point (east longitude and north latitude).

A more detailed description of the geographical location of each measurement track or area can then be given by using the "Polygon" section. In the case of single or multiple tracks, the "Polygon" section must be used with one line for one track (see Figure 47):

1 - Select "Curves" using the radio button

2 - Click on the 🗟 button to create a new line (=a new track) in the "Multiples curves" table. A window opens.

3 - Fill in the different fields (Description, Name, Longitude, Latitude). Eastern longitudes (from 0.0000 to 180.0000) and Northern latitudes (from 0.0000 to 90.0000 are entered as positive and Western longitudes (from 0.0000 to -180.0000) and Southern latitudes (from 0.0000 to -90.0000) are entered as negative.

4 - Create as many as lines (tracks) as you need.

5 – Click on the OK button to validate.



nual Automatic Opti	ons Tools ?		mikado3\example_ISO19139_2		
Identification Where	When	🔬 . V V V 🏂 gml:curveMember	· · · · · · · · · ·	· Va ··· Va	X
Geographic coverage		Curve member			
-68 548849	-49.007153	Line string			
* 106.574831 -80.198605	114.84247 -70.052045	Description	This is line 3]	
Horizontal Datum	-	name	line3		
HUIIZUIItai Datuili	_	Coordinates			
Name	* World G		Longitude	Latitude	
			-76.816333	-36.777203	
code list value	* 4326	Geographic point	* -77.192141	-43.722611	-
			-80,198605	-47.195299	
Vertical datum			-78.319565	-50,400867	
			-74.561741	-54.674947	
name	* sea leve		-70.052045	-57.079131	
identifier	* http://ww				
Depth observation					
Minimum depth	0				
minimum ucpui					
Maximum depth	100			Ok	Cancel
	100 150			Ok	Cancel
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth					
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	
Maximum depth Water depth	150			112.963503 17.636	

Figure 47: How to fill in the Position List for single or multiple track

Example for surfaces

In case the measurement location is a polygon-shaped area (not rectangular) or multiple set of polygon-shaped areas, then the "Polygon" section can be used to describe the locations in detail. In the case of single or multiple areas (= surfaces), the "Polygon" section must be used with one line for one surface (see Figure 47):

1 - Select "Surfaces" using the radio button

2 - Click on the 🛃 button to create a new line (= a new surface) in the "Multiples curves" table. A window opens.

3 - Fill in the different fields (Description, Name, Longitude, Latitude). Eastern longitudes (from 0.0000 to 180.0000) and Northern latitudes (from 0.0000 to 90.0000 are entered as positive and Western longitudes (from 0.0000 to -180.0000) and Southern latitudes (from 0.0000 to -90.0000) are entered as negative. The coordinate pairs should describe the polygon in a direction against the clock and the first coordinate pair must be repeated as last coordinate pair! Only convex polygons are to be described.

4 – Create as many as lines (surfaces) as you need.

5 – Click on the OK button to validate.



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10.1.3.3. When?

Identification	Where	When	What	How	Who	Wher	e to find the da	ta Ci	ruise/Station	Documentatio	on	Quality	Others	
Period														
Start date		* 01/0	1/2009 00:0	0.00	dd/mr	n/anar b	h:mm:ss -24 hr	(25/04)	2007 15:05:00	、				
					-									
End date		* 24/06	5/2009 17:3	6:01	dd/mn	n/yyyy h	h:mm:ss -24 hr	(25/02/	2007 12:00:00)				
Time resolut	ion													
Value		5			2	Î								
Unit		net.or	g/urnurl/SDN	I:P06::UTA	.4									
							~~ ~ ~ ~							

Figure 48: CDI 'When' window

10.1.3.4. What?

entificatio	n Wher	e When	What	How	Who	Where to find the data	Cruise/Station	Documentation	Quality	Others
Paramete	ne.									
urumete	5									
		Para	meter			code list value	🗙 🖶			
Atmos	heric visib	ility and trans	sparency			ATVS				
Ammo	nium conce	entration para	ameters i	n the wat	ter colum	n AMON	2			
Atmos	heric hum	idity				CHUM				
ostract		* This red	ord is me	ant for te	est purpo	ses. It contains a value fo	r every field and mu	ultiple values 🥙		

Figure 49: CDI 'What' window



10.1.3.5. How?

1	dentification	Where	When	What	How	Who	Where to find the data	Cruise/Station	Documentation	Quality	Others
Ir	struments								_		
	Instrume	nt					code list value	📃 🔀 🖶			
	discrete v	water sam	plers				30				
	salinity se	ensor					350				
	CTD						130				
	water ten	nperature	sensor				134				
Se	nsor model										
	Sensor m	odel					code list value				
	Sea-Bird S	BE 911pl	us CTD				TOOL0058				
C									,		
Pl	atform class										
C	ategory code		* resea	arch ves	sel	F	2				
C	ode list value		* 31								
0											

Figure 50: CDI 'How' window

Nowadays, there are various instruments with multiple sensors in use, provide multiple parameter observations in single data files. That is why the occurrence of instruments in the CDI has been modified from 0-1 to 0-many.

In the frame of ENVRI-FAIR project, a new optional field "Sensor model" has been added to include L22 (Seavox Device Catalogue) information (CDI >=v13.0.0, MIKADO >=3.7) in complement of "Instruments" - L05 (SeaDataNet device categories) information. If L22 information is provided by the user, L05 information is automatically added by MIKADO using BODC mapping L05/L22.



10.1.3.6. Who?

Identification Where	When What H	low Who	Where to find the data	Cruise/Station	Documentation	Quality	Others
Point of contact (holding	centre)						
Organisation name	* Marine Information S	Service 💫					
Code list value	* 634						
Contact information							
voice	+31 70 3004710						
fax	+31 70 3903546						
Address							
Delivery Point		alaan 345A					
City	* Voorburg				_		
Postal code				gmd:contactInfo			
country	* Netherlands						
Email	maris@xs4all.nl						
Web site							
http://www.maris.							
Originator centre							
	Organisatio	on name		X +			
* Scott Polar Resea Midland and Scotti			▲ ■	2			
	tion of Vasterbotten						
Pliattic dal Fetad	n Denarramento de Cli	ma Maritimo	I				

Figure 51: CDI 'Who' window

10.1.3.7. Where to find the data?

dentification Where When What How Who Where to find the data	Cruise/Station	Documentation	Quality	Others
Distributor				
Organisation name * WL/Delft Hydraulics	2			
Code list value * 631				
Collate-centre				
Organisation name 🔹 University of Birmingham, Department of Geological S	2			
Code list value * 1				
Distribution Websites and services	_			
data size URL protocol database Distribution code list va	🗙 🖶			
* 123 http://www HTTP-DO DBTEST manual int download http://exam urr.ogc:ser WMS exam direct acce downloadUrl				
Dataset Access Restriction	J			
anchor SeaDataNet licence	🗶 📥			
* licence	P2			
SeaDataNet licence				
	_			
	C1 1			
Figure 52: CDI 'Where to) find dat	a' windo	W	

The content of the "Where to find the data" tab will depend on the selected options in **Data centre type** in the **Options** main menu:



- If the selected data centre type is SDN V2 (in the 'Options' > 'Data centre type' Menu), the first
 distribution Web site is fixed and the user cannot remove it, he can just add information about
 data size and database reference. The linkage address, the protocol and the distribution
 method are fixed to :
 - Linkage = 'http://www.sdn-taskmanager.org/',
 - Protocol = 'HTTP-DOWNLOAD'
 - Distribution method = 'downloadRegistration'
- If the selected data centre type is ECOOP V1, the URL distribution website is free.

An extension of the CDI format for service bindings has been made. These service bindings are links (URLs) to online services, embedded in the metadata, that allow a user or machine to get more information on the data, e.g download data, view the data in an interactive viewer or retrieve the data using a service such as OGC WMS or WFS. In the previous CDI format, it was only allowed to include one online resource under Distribution section. In the new version, it is allowed to include additional service bindings. The "protocol" field indicates the protocol to be used for retrieving the information; the content of this field is free text but there exists a policy to format this protocol definition at

http://www.opengeospatial.org/ogcUrnPolicy.

For seismic data, a High Resolution Seismic Viewing Service (**HRSVS**) has been built to allow visualization of data. If you want to add this service binding to the seismic CDIs, click on the add button, then select 'hrsvsRegistration' in the 'Data access Mechanism' field. The linkage address, the protocol and the distribution method are then automatically fixed to:

- Linkage = 'http://www.sdn-taskmanager.org/',
- o Protocol = 'HRSVS'
- Distribution method = ' hrsvsRegistration'



Identification	Where	When	What	How	Who	Where to find the data	Cruise/Station	Documentation	Quality	Others
Distributor Organisation Code list value		* WL/De * 631	elft Hydraul	lics						
Collate-centre Organisation Code list value Distribution V	name /ebsites a	* 1 nd service RL	es protocol	datat	base D	ment of Geological S	X			
Dataset Acce	http://e	xam urr	TP-DO n:ogc:ser an	Di	xam di	anual int download rect acce downloadUrl n Information			_	
licence	let licence let licence				Data siz Distrib	on Websites and services ze 123 ution website ://www.sdn-taskmanager.]		
					Data	ase Reference DBTE access mechanisms winloadRegistration	ST			
								Ok	C	Cancel

Figure 53: Distribution Websites for HRSVS access

10.1.3.8. Dataset information (Cruise, Station)

JC054 - James Cook (740H)
20127023
* 2054 - James Cook (740H)
* 20127023
01/06/2009 dd/mm/yyyy (25/01/2007)
* My Station
* STATION01
* 15/05/2009 00:00:00 dd/mm/yyyy hh:mm:ss -24 hr (25/01/2007 15:05:00)

In the Cruise/Station tab, at least cruise information or station information is mandatory, The 3 fields (for cruise or for station) are mandatory. Furthermore, a reference to a CSR record is now possible using the "CSR Reference" field.



10.1.3.9. Documentation

A "Documentation" tab allows including, in a CDI record, references to publications and documentations. Every CDI record can reference any number of publications. These publications will be referenced in the form of permanent URL. For the sake of homogeneity and stability, it is preferred that the URLs included in the CDI are persistent (including a **digital object identifier** – **DOI**, when possible).

Identification Where When	What How Who	Where to find the data	Cruise/Station	Documentation	Quality Others
Documentation URL					
https://doi.org/10.17600/950	10012				•

Figure 55 : Documentation tab

10.1.3.10. Data Quality

A principle goal of CDI metadata is to ensure that the data they describe can be independently understood and used efficiently. Data quality tests and reports play a critical role in achieving this goal. Connecting these to the CDI record is clearly important.

That is why data quality information has been added in CDI ISO 19139 profile and MIKADO has been updated to integrate the following new fields:

- Name: name of the QC standards applied to the data,
- Date: reference date of the cited QC standards (dd/mm/yyyy),
- Comment: comment or explanation about the QC evaluation and its result,
- Status: indication of the conformance result (True/False).

For example, the data quality information could refer to the Manual of Quality Control Procedures for Validation of Oceangraphic Data, IOC Manuals and guides No. 26, published on 01/01/1993:

• Name = Manual of Quality Control Procedures for Validation of Oceanographic Data, IOC Manuals and guides No. 26

• Date = 01/01/1993



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- Comment = See the referenced specification
- Status = true

For compliancy with INSPIRE, the following reference must appear in the CDI XML file in Data Quality Information section (hard coded in MIKADO):

Name="COMMISSION REGULATION (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards "

Date="2008-12-04"

Comment="See the referenced specification"

Status="True"

Identificati	on Where	When	What	How	Who	Where	to find the data	Cruise/Station	Documentation	Quality	Others
Quality pr	ocedure										
		Name				Date		Comment	5	Status	K
* COMI	IISSION RE	GULATION (EC) No 12	205/200	2008-1	12-04	See the reference	ed specification	tru	e [2

Figure 56 : Data Quality tab

entification	Where	When	What	How	Who	Where	e to find the data	Cruise/Station	Documentation	Quality	Others
Quality proce	dure										
		Name				Date		Comment	St	atus	× 🖶
COMMISS	ION REGU	ILATION (I	EC) No 12	205/200			See the reference	ed specification	true		
											2
		(Ou	ality proce	duro					×	D	
			anty proce	uure						1	
					•	-	D. I'm I d	(III			
		Na	me		- P E	uropear	Parliament and c	of the Council as re	gards metadata		
		Da	te		* 04	/12/2008	dd/mm/yyyy	(25/01/2007)			
		6	mment		. Se	e the ref	erenced specificat	ion			
			minon								
		Sta	atus		* tru	ue 💌					
								Ok	Cancel		
				_	_					U I	

Figure 57 : Fulfilled data quality information



10.1.3.11. Other relevant information

DMED Identif	fier	nultidis 973	sciplinary	Belgian s	urvey of	the eastern half of Southe	rn Bight of North S	ea (1971-75) 🦻	
rojects									
Integrated (National Co GEOWARN	oastal Data	ing Progr Co-ordir	nator {a	8857 8889 7576	CO	de list value	× + ₽≥		
ta format		1							
Ocean Dat				ode	0.3	version 3	× 🔹		
	*	29/05/20	13 di	l/mm/yyy	y (25/01	/2007)			

In this tab, a reference to an EDMED record is now possible using the "EDMED Reference" field.

Identification	Where	When	What	How	Who	Where to fir	d the data	Cruise/Station	Documentation	Quality	Others	
EDMED Refe	rence											
EDMED Iden	tifier	nultidi	sciplinary	Belgian :	survey of	the eastern ha	alf of Souther	n Bight of North Se	ea (1971-75) 🏼 🏹			
code list valu	0	973										
Projects												
	EDMED Id	entifier				-		1. *				
Data for						Forecasting a		Name Code EDMED	* half of \$ * 973	Southern Big	ght of North Sea	(1971-75)
* Ocea MED	1094 - [711 1095 - [729 1205 - [269 1206 - [269	_4700200 _1300700 _6005033 _6005034)4] MedG()1] Benthi 6] EU Mas 6] EU Mas	DOS-3 - (ic macro s Transf s Transf	Ocean Ol inverteb er and E er and E	Forecasting a bservatory (C) rates in the Da cosystem Res cosystem Res cosystem Res	COFOS) Inish Wai ponse (M ponse (M					
Date	1209 - [269 1210 - [269 1211 - [269 1212 - [269 1322 - [43_ 1343 - [269 1344 - [269	_6005037 _6005038 _6005039 _6005040 1017012] _6031004 _6031005	7] EU Mas 8] EU Mas 9] EU Mas 9] Hellenic 10S Deac 1] Trace n 6] Magnet	s Transf s Transf s Transf c Thermo con Labo netal and ic measu	er and E er and E er and E salinogr ratory N nutrient	cosystem Res cosystem Res cosystem Res cosystem Res raph Data of th on-digital Undo t levels in Patr s in sediments ts in Maliakos	ponse (M ponse (M ponse (M e Greek S erway Ge aikos Gul s of the G					
	1346 - [43_ 973 - [431_	1021004] 11009004	Regions] (CIPS/IC	of Fresh CWB) SE/	water Inf A - an ex	fluence (ROFI) tensive multid Experiment 19	Data Set isciplinar					

Figure 59 : Selection of an EDMED reference



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Once all the information related to the CDI has been fulfilled, the xml file will be created by selecting **Save as** in the **Manual** main menu. The created XML file has a '.xml' extension.

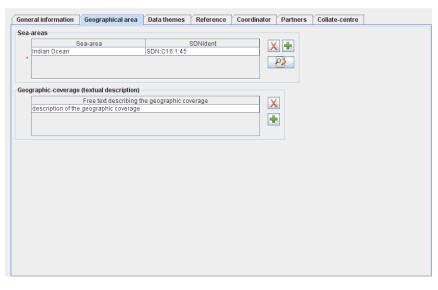
10.1.4. Manual EDMERP input

There are 7 tabs (Figure 60 to Figure 66) for the EDMERP information which enable to input information about:

- General information
- Geographical area
- Data themes
- Reference
- Coordinator
- Partners
- Collate Centre.

General information	Geographical area	Data themes	Reference	Coordinator	Partners	Collate-centre]
EDMERP identifier	* TEST						
Revision date	* 21/05/2008 00:00	dd/mm/yyyy	/ hh:mm:ss -24	hr (25/01/2007	15:05:00)		
Project name	* PROJECT TEST						
Project reference	reference project T	EST					
Project acronym	* ACRONYM TEST						
Associated programm	ne						
Title							
Programme-id							
Revision date							
	dd/mm/yyyy	(25/01/2007)					
Abstract	* Abstract of TEST						
Period							
Start date	* 01/01/2007 00:0	0:00 dd/mr	n/ <mark>yyyy</mark> hh:mm:	ss -24 hr (25/01	/2007 15:05:0)0)	
End date	31/12/2009 00:0	0:00 dd/mr	n/yyyy hh:mm:	ss -24 hr (25/02	/2007 12:00:0	00)	
Project website							

Figure 60 : EDMERP – 'General information' window





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eneral information	Geographical area	Data themes	Reference	Coordinator	Partners	Collate-centre	
	Themes	SD	NIdent	X	.		
Cross-discipline	S	DN:P081:3:DS06					
				- P			

Figure 61: EDMERP – 'Geographical area' window

Figure 62: EDMERP – 'Data themes' window

neral information	Geographical area	Data themes	Reference	Coordinator	Partners	Collate-centre
Title	Publication	date	Author		Editor	× +
						P
						Land Carlot

Figure 63: EDMERP – 'Reference' window

eneral information Geogr	aphical area	Data themes	Reference	Coordinator	Partners	Collate-centre
roject coordinator						
Individual name 🕴 🚹	AILLARD Cather	ine				
Organisation name	* IFRE	MER / IDM/SIS	MER			22
SDNIdent (Organisation name,	* SDN:	EDMO::486				
Contact information						
	-					
Phone	+33 (0)2 98.					
Fax	+33 (0)2 98.	22.46.44				
Address						
Delivery point	Centre IFRE	MER de Brest	BP 70			
City	* PLOUZANE]			
Administrative area]			
Postal code	29280		1			
Country	* France					
Email	sismer@ifre	mer.fr				
Website						
http://www.ifremer.t	r/sismer/					
Role						
Role code value						

Figure 64: EDMERP – 'Coordinator' window



Here the phone, fax and email which are related to the organisation name (retrieved from EDMO catalogue) may be modified to be related to the identified person, the project coordinator.

Figure 65: EDMERP - 'Partners' window

* IFREMER / IDN	//SISMER		F	>>
* SDN:EDMO::48	6			
+33 (0)2 98.22.46.44				
* PLOUZANE				
* France				
	SDN EDMO-43 SDN EDMO-43 SDN EDMO-43 SDN EDMO-43 SDN 22 46 16 SDN 29 22 46 14 SDN 29 29 20 SDN 29 29 20 SDN 29 29 20 SDN 29 29 20 SDN 29 20 SDN 29 20 SDN 29 20 S	Centre IFREMER de Brest BP 70	SON EDMO: 498 SON EDMO: 498 -33 (0) 2 98 22 49 16 -33 (0) 2 98 22 46 44 Centre IFREMER de Brest BP 70 PLOUZANE 29290 France sismerg/fremer fr ismerf	SDN EDMO: 498 -33 (0)2 98 22 49 16 -33 (0)2 98 22 49 16 -33 (0)2 98 22 46 44 Contre IFREMER de Brest BP 70 PLOUZNNE 29280 France sismer@ifremer.fr ismer/

Figure 66: EDMERP – 'Collate centre' window

Once all the information related to the EDMERP has been fulfilled, the xml file will be created by selecting **Save as** in the **Manual** main menu. The created XML file has a ".xml" extension.

10.1.5. Manual EDIOS input

EDIOS is the catalogue of permanent ocean observing system which has 3 levels : Programs, series and platforms.

The relations between the 3 levels are the following :

- One program has 1 to many series, and one series is attached to 1 program.
- One series as 0 to many platforms, one platform is attached to 1 to many series.



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The user has to create first the programs, then the series and finally the platforms. When he has created one or several programs, he must generate a list of the program codes which will be used in the series input form, and when he has created one or several series, he must generate a list of series codes which will be used in the platform input.

To do so follow these 3 steps :

- Open the "Options > Set programs directory" or the "Options > Set series directory" menu
- Select the directory where stays the XML programs or series descriptions
- Click on the "Set program directory" or "Set series directory" button

Mikado 3.3.1 SDN V2	And the second	
Manual Automatic	tions Tools ? cabilary Update ta centre type to control type terrors attlenetication to CH style sheet path COE style sheet path COE style sheet path COE style sheet path TO CH style sheet	
	Programs directory (used to build the programs list)	

Figure 67 - Selection of the directory of XML description of programs

For each of these EDIOS catalogues MIKADO has a manual input user interface, which is described in the next paragraphs.



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10.1.5.1. EDIOS program input

There are 4 main tabs for the EDIOS program information: 'Program', 'Chief scientist', 'Coordinating institute' and 'Point of contact'.

The first tab 'Program' gives the program description (Figure 68 to Figure 74) and is divided into 7 subtabs which enable to input information about:

- Identification of the program which is very important. The ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.
- When the program starts end ends
- Where does the observation program takes place
- What is the observation program about : abstract, concerned habitat, related projects (EDMERP) and data set descriptions (EDMED)
- Information about the continuity status, the rationale, the quality accreditation and the legislative framework of the program.
- Where and how to get access to the data collected in the framework of the program
- The author of the program description.

	Tools ?
ogram Chief scientist	Coordinating institute Point of contact
Identification When	Where What Activity Get data Completed by
Edios program id	MAWS
Program acronym	MAWS
Name •	UK Met Office Marine Automatic Weather Station Network (MAWS)
OR really new records.	

Figure 68 - EDIOS Program information window 'Identification'



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Mikado 3.3.1 SDN V2 Manual / EDIOS PROGRAM : N\projets\seadatanet2\Coordination\Catalogues\EDIOS\EDIOS_sdn_V2\EDIOS_PRO	GR 🗖 🗖 📈
Manual Automatic Options Tools ?	
Program Chief scientist Coordinating institute Point of contact	
Identification When Where What Activity Get data Completed by	
Period	
Start date * 1975 yyyy (2007)	
End date yyyy (2008)	
Revision date * 12/10/2007 09:08:33 dd/mm/yyyy hh:mm:ss -24 hr (25/01/2007 15:05:00)	

Figure 69- EDIOS Program information window 'When'

Identification When Where	What Activity Get data Completed by	
Geographic coverage (bounding bo)		
West longitude * East long		
-5 5	43 50	
Geographic-coverage (textual desc	iption)	
Free text descr	bing the geographic coverage	
Central Atlantic ocean		
	•	
Sea-areas		
Sea-area	SDNIdent 🔀 🖶	
* English Channel	SDN:C19::1_7	
	2	

Figure 70- EDIOS Program information window 'Where'



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ual Automatic								00,20100_10	III_V2(EDIO3_	PROGR	-
Program Chief	scientist	Coordi	nating in	stitute F	oint of conta	:t					
Identification	When	Where	What	Activity	Get data	Completed by]				
PREVIMER	Projec COASTAL		ATION	SDN:EDME	SDNIden RP::1404800		× +				
Habitat Habitat		Dee	p-sea mu	Habitat ddy sand		SDN:C35::A6	SDNIdent _4		× 🔹		
Dataset Associated ED SDNIdent	MED		t{acronyn //ED::1405	1="RNO"} 7002	2						
Abstract	•	oplantonio	: bloom, .	which car	i be damagea	ble for coastal a	ctivities like ac	uaculture	2		

Figure 71- EDIOS Program information window 'What'

Activity rationale	Monitoring rationale Climate change	SDNIdent SDN:C34::MRAT0013	× + P	
Continuity status Activity Operational Status SDN/dent	s operational SDN:L14::ON			
Quality accreditation Quality accreditation SDNIdent	Marine Environn	nentai Monitoring 😰 😭		
Legislative framework	Monitoring drivers EC Water Framework Directive	SDNident SDN:C36::LEGL0010	×. •	

Figure 72- EDIOS Program information window 'Activity'



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rogram	Chief	scientist	Coord	inating in	stitute 🛛	Point of cont	act	 	 	
Identific	ation	When	Where	What	Activity	Get data	Completed by			
Dataset	Acces	Restrict	ion							
Access	const	aints	* Academ	lic		PÀ				
SDNIder	nt (acce:	s const	SDN:L08	::SR						
Program	n webs	te for Rea	al time							
ftp://\	www.ifr	mer.fr/ma	arel/							
App Pro	ofile		* Real tim							
Data a	ccessi	nechanis	ms							
• dow	inload		P							
-			ayed mod	e						
		remer.fr/m								
App Pro										
		nechanis	ms	B .						
* dow										

Figure 73- EDIOS Program information window 'Get data'

Identification When V	Nhere What Activity Get data Completed by	
Collate-centre	Where What Activity Geruata Completed by	
Organisation name	* IFREMER / IDM/SISMER	\overline{P}
SDNIdent (Organisation name) * SDN:EDMO::486	
Contact information		
Phone		
Fax	+33 (0)2.98.22.46.44	
Address		
Delivery point		
City	* PLOUZANE	
Administrative area		
Postal code		
Country	* France	
Email	sismer@ifremer.fr	
Website		
http://www.ifremer.fr/s	sismer	
Role		
Author value *		

The second tab 'Chief scientist' gives information on the principal investigator of the EDIOS program:



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ogram Chief scientist	Coordinating institute Point of contact	
Point of contact (principal	investigator)	
ndividual name	Michel Larour	
Organisation name	* // TSI-DPT TECHNOLOGIE DES SYSTEMES INSTRUMENTAUX	
SDNIdent (Organisation name		
Contact information		
Phone	+33 (0)2 98.22.40.40	
Fax	+33 (0)2 98.22.45.45	
Address		
Delivery point	BP 70	
City	* PLOUZANE	
Administrative area	Brittany	
Postal code	29280	
Country	France	
	France	
Email		
Website		
http://www.ifremer.fr/	brest/	
Role		
Role code value	principalInvestigator	

Figure 75- EDIOS program window 'Chief scientist'

For the chief scientist, phone, fax, address and email which are related to the organisation name (retrieved from EDMO catalogue) may be modified to be related to the chief scientist.

ram Chief scientist	Coordinating institute Point of conta	ct		
int of contact (coordinato				
ganisation name	* : / TSI-DPT TECHNOLOGIE DE	S SYSTEMES INSTRUMENTAL	JX 🔁	
NIdent (Organisation name)	* SDN:EDMO::795			
ontact information				
Phone	+33 (0)2 98.22.40.40			
Fax				
Address				
Delivery point				
City *				
Administrative area				
Postal code				
Country *	France			
Email				
Website				
http://www.ifremer.fr/br				
ole				
Role code value *	oordinator			

Figure 76- EDIOS program window 'Coordinating institute'



Program Chief scientist	Coordinating institute Point of contact
Point of contact (data conta	act)
Individual name	Michel Gautier
Organisation name	- E-TSI : DPT TECHNOLOGIE DES SYSTEMES INSTRUMENTAUX
SDNIdent (Organisation name	») * SDN:EDMO::795
Person title	Dr
Contact information	
Phone	+33 (0)2 98 22 41 76
Fax	+33 (0)2 98 22 41 35
Fax	133 (0)2 90 22 41 33
Address	
Delivery point	BP70
City	* PLOUZANE
Administrative area	Brittany
Postal code	29280
country	
Email	Michel.Gautier@ifremer.fr
Website	
Role	

Figure 77- EDIOS program window 'Point of contact'

For the point of contact phone, fax, address and email which are related to the organisation name (retrieved from EDMO catalogue) may be modified to be related to the identified person, the EDIOS program point of contact for related data.

10.1.5.2. EDIOS series input

There are 5 tabs for the EDIOS series information: 'Identification', 'Where', 'When', 'What' and 'Completed by' (Figure 78 to Figure 83):

- Identification of the series which is very important. The ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.
- Where does the series have been measured
- When the series starts end ends, and what was the sampling rate
- What is the series about: abstract, measured parameters
- The author of the series description



dentification Where	When What	How Cor	npleted by		 	
dios series id	Brittany Buoy					
eries acronym	Brittany Buoy					
ame	Brittany Buoy					2
Edios program referenc						
Code	* er Station Netwo	rk (MAWS)				
SDNIdent (Code)	* DN:EDIOSOP:LOG					
the Central system will i OR really new records.				e updating process, TES of existing reco		
the Central system will i						

Figure 78 - EDIOS series window 'Identification'

The EDIOS program reference is the LOCAL_ID of the program to which the series is related.

If the user inputs *PROG1* for the program code, then the SDNIdent will be *SDN:EDIOSOP:LOCAI:PROG1*.

ntification Where	When What	How Complete	of here			
		now Complete	eu by			
ographic coverage (I	bounding box)					
West longitude *	East longitude	South latitude *	North latitude	X		
-10.5	-8.5	47.5	50.5			
				-		
tum of coordinate sy	stem (horizontal da	tum)	polygon			
ode	WGS84		None	O Points	Curves	Surface
			enter waypoints t		ht on the map	
NIdent (Code)	SDN:L10::4326		gml:MultiCurv	е		
ographic-coverage (textual description)		Descriptio	n name	Coordinates	🗙 🖶
			This is an .	Track 1	-9.07 49.313 -9.17	
Free text describing						
	ane geographic con	erage 🔀				2
Cardigan Bay Dovey Estuary	The geographic com					2
Cardigan Bay	ane geographic con	erage 🔀				2
Cardigan Bay Dovey Estuary	ane geographic con					
Cardigan Bay Dovey Estuary Harlech Bay	and geographic con					
Cardigan Bay Dovey Estuary	ine geographic con		Bathymet	ric depth		
Cardigan Bay Dovey Estuary Harlech Bay	2		Bathymet		2	
Cardigan Bay Dovey Estuary Harlech Bay servation depth	2		Minimum	Depth		
Cardigan Bay Dovey Estuary Harlech Bay servation depth				Depth	2	
Cardigan Bay Dovey Estuary Harlech Bay servation depth	2		Minimum	Depth		
Cardigan Bay Dovey Estuary Harlech Bay servation depth inimum Depth aximum Depth	2		Minimum	Depth		
Cardigan Bay Dovey Estuary Harlech Bay servation depth inimum Depth aximum Depth	2		Minimum Maximun Unit	n Depth	10	
Cardigan Bay Dovey Estuary Harlech Bay servation depth	2		Minimum Maximun	n Depth	10	
Cardigan Bay Dovey Estuary Harlech Bay servation depth inimum Depth aximum Depth	2	pth In metres	Minimum Maximun Unit Vertical	n Depth	10	h in metres
Cardigan Bay Dovey Estuary Harlech Bay servation depth inimum Depth aximum Depth	2		Minimum Maximun Unit Vertical	n Depth	10	

Figure 79 - EDIOS series window 'Where'



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Mikado 3.3.1 SDN V2 Man	ual / EDIOS SERIES : N\projets\seadatanet2\Coordination\Catalogues\EDIOS\EDIOS_sdn_V2\EDIOS_SERIES_V2\E 💷 💷 🗮
Manual Automatic Options	
Identification Where	When What How Completed by
Period	
Start date *	14/01/1986 dd/mm/yyyy (25/02/2007)
End date	dd/mm/yyyy (25/02/2007)
Time sampling interval	
min value	1800
max value	1800
Unit of measure	Seconds
SDNIdent	SDN:P06::UHMS
Revision date • [2	0003/2009 22:00:00

Figure 80 - EDIOS series window 'When'

der	ntification Where When What	How Completed by	
	Parameters	SDNIdent 🗙 📥	
		SDN:P02::TEMP	
		SDN:P02: REVI	
		SDN: D02-MA/ST	
bsi	tract * (MAWS). Open o	cean moored buoy, operated jointly with Meteo-France in the Bay of Biscay 🙆	
)ep	pth category		
[Code	SDNIdent 🔀 🖶	
	water column boundary layer	SDN:L13::NS	
	water column boundary layer	P	
,			
	Parameter validation	SDNIdent	
	Parameter validation Real-time plus delayed mode validatio.	SDN:L12::A	
		SDNL12:A	
•		SDN:L12::A	
		SDN:L12::A	
•		SDN:L12::A	
*		SDN:L12::A	
*		SDN:L12::A	
•		SDN:L12::A	
•		SDN:L12::A	
•		SDN:L12::A	
		SDN:L12::A	
*		SDN:L12::A	
*		SDN:L12::A	
*		SDN:L12::A	
•		SDN:L12::A	
*		SDN:L12::A	
•		SDN:L12::A	

Figure 81 - EDIOS series window 'What'



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idai Adtoina	tic Options	Tools ?			nation\Catalogues\EDIOS\EDIOS_	
dentification	Where	When Wi	nat How	Completed by		
		Instruments			SDNIdent	🗙 🖶
meteorolo wave reco	gical package	S		SDN:L05::102 SDN:L05::110		
	perature and s	salinity sense	ors	SDN:L05::350		

Figure 82-EDIOS Series window 'How'

lentification When	re When What How Completed by	
ollate-centre		
Organisation name	* IFREMER / IDM/SISMER	
SDNIdent (Organisation	n name) SDN:EDMO::486	
Contact information		
Phone		
Fax	+33 (0)2.98.22.46.44	
Address		
Delivery point		
City	* PLOUZANE	
Administrative are	ea Brittany	
Postal code		
Country		
Email	sismer@ifremer.fr	
Website		
http://www.ifrem	ner.fr/sismer	
Role		
Author value	* author	
Author vaide		

Figure 83 - EDIOS series window 'Completed by'

10.1.5.3. EDIOS platform input

There are 4 tabs for the EDIOS platform information: 'Identification', 'How', 'Who' and 'Completed by' (Figure 84 to Figure 87):

- Identification of the platform which is very important. The ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.
- Information about the instrument(s) available on the platform
- Information about the owner(s) and operator(s) of the platform
- The author of the platform description



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	Who Completed by	
ios platforms id	* MAWCS-BUOY1	
ime	* UK Met Office MAWS Network Buoy 1	2
stract	or UK Met Office Marine Automatic Weat	ther Station Network
atform class		
(eyword	* moored surface buoy	
DNIdent	* SDN:L06::41	
hip name		
(eyword	FS Alkor 😰 窗	
DNIdent	SDN:C17::06A6	
	Code	SDNident (Code) 🔀 🖶
lios series	* BRITBUOY1 BRITBUOY2	SDN:EDIOSDS:LOCAL:BRITBUOY1
ference	BRITBOUTZ	SDN:EDIOSDS:LOCAL:BRITBUOY2
evision date	* 17/03/2009 00:00:00 dd/mm/yyyy	hh:mm:ss -24 hr (25/01/2007 15:05:00)
	I]	
	VIQUE LOCAL identifier The LOCAL ID is vital	
he Central system	will recognise whether new contributions are	
OR really new recor	ds.	

Figure 84 - EDIOS platform window 'Identification'

The EDIOS series references are the LOCAL_ID of the series to which the platform is related.

If the user inputs *SERIES1* for the series code, then the SDNIdent will be *SDN:EDIOSDS:LOCAI:SERIES1*.

entification How			
	Who Completed by		
	Instruments	SDNIdent	X 🕈
meteorological pa	ackages	SDN:L05::102	
wave recorder	e and salinity sensors	SDN:L05::110 SDN:L05::350	
water temperature	e and sammy sensors	SDN.L05350	

Figure 85 - EDIOS platform window 'How'



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ual Automatio	c Opti	ons Te	ools ?					
dentification	How	Who	Completed by					
Platform Owner	s	. IF	REMER / TSI-DPT 1	Organisatior ECHNOLOGIE DES S		ENTAUX	× +	
Natform Operat	ors			Organisation IENCES OF MARINE E ECHNOLOGIE DES S	NVIRONMENT (LEN		× +	
		1						

Figure 86 - EDIOS platform window 'Who'

rganisation name IFREMER / IDM/SISMER SOME Comparisation name Some Some Comparisation name Name Some Comparisation name Some Comparisation name Name Some Comparisation name Name Some Comparisation name Name Some Name Some Name Some Name Name Some Name Some Name Some Name Some Name Some Name Some Name Name Some Name Some Name Some Name Name Some Name So
ontact information Phone -33.00/2.98.22.42.13 Fax +33.00/2.98.22.46.44 Address
Fax +33 (0)2 98 22 46 44
Address
Delivery point BP 70
City * PLOUZANE
Administrative area Brittany
Postal code 29280
Country * France
Email sismer@itremer.fr
Website
http://www.ifremer.fr/sismer
iole

Figure 87 - EDIOS platform window 'Completed by'

10.1.6. Manual PCR input

There are 3 main input tabs for the PCR (Planned Cruise Report) information:

• Identification of the planned cruise which is very important and the ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID than the central system will be able to recognise whether new contributions are updates of existing records or really new records.



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- General information about the planned cruise.
- Information about the geographical areas of the planned cruise.

10.1.6.1. Identification of the planned cruise

The identification of the planned cruise is the **unique** LOCAL cruise ID and the cruise name. Both fields are mandatory.

	V2 Manual / PCR : C:\Wichele\test MIKADO\PCR\11020030.xml Options Tools ?	
	eneral information Geographical area	
	FI352011020030 FOR FOR LOCAL 1020030 PIRATAFR21 aUNIOUE LOCAL identifier The LOCAL_ID is vital for the updating process, s	
o the Central sy ds OR really ne	stem will recognise whether new contributions are UPDATES of existing recor v records.	
PCR Status Berths available Link to cruise im:	 □planned ▼ ves ▼ ves 	
Cruise image Data size Image locat	ion (URL + Name)	
Related websit	es	

Figure 88 - PCR identification window

10.1.6.2. General information about the planned cruise

This window is divided into 9 tabs (Figure 89 to Figure 97) which enable to input information about:

- the planned cruise (begin and end dates, ports of departure end return),
- the objectives of the planned cruise : purpose of the cruise as to provide the context in which the data were collected and the projects related to the cruise,
- the ship name
- the disciplines related to the planned cruise,
- the chief scientist responsible of the cruise
- the responsible party which is the laboratory responsible for coordinating the scientific planning of the cruise,
- the ship operator,
- the cruise funding agency and
- the information about the collate centre which collect and generate the PCR information.



	V			Collate center		
Chief scientist Cruise	Responsible party	Ship operator Objectives and	Funding agency brief of cruise	Collate center	Ship	Disciplines
Revision date	* 22/03/2011 1	:45:09 ddimr	n/yyyy (25/01/200	7)		
Period				dd/mm/yyyy (2	5/01/2007)	
Start date	• 01/05/2011			(441111)))) (4		
End date	* 05/06/2011	dd/mm/yyyy (2	5/02/2007)			
Port of departu						
Keyword	Cotonou	6	2			
SDNIdent	SDN:C381	8-BSH1936				
Port of return						
Keyword	Dakar		2			
SDNIdent	SDN C381	8-8SH51				

Figure 89 - PCR - General information - Cruise window

Chief scientist Responsible par		enter	
Cruise	Objectives and brief of cruise	Ship	Disciplines
Objectives/purpose of the cruise Related project	* Prévision		P
Subsidiary project			
	Name	X	
		•	

Figure 90 - PCR - General information - Objectives of the cruise window

			7			
entification Gen	eral information	Geographical area				
Chief scientist	Responsible party	Ship operator	Funding agency	Collate center		
Cruise	ľ	Objectives an	d brief of cruise	Υ.	Ship	Disciplines
Disciplines						
	Data Themes		SDNIdent	X +		

<u>PCR - General information - Ship window</u> <u>r igure 91</u>



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	General informati	ion Geographical area		
Chief scier Crui		party Ship operator Funding agency Objectives and brief of cruise	Collate center Ship	Disciplines
Discipline		Objectives and brief of cruise	Ship	Disciplines
	Data Themes	s SDNIdent		

Figure 92 - PCR - General information - Diciplines window

	t. Your	Vor	ate center	
hief scientist Responsible pa Cruise	arty Ship operator Fundi Objectives and brief		ste center Sh	nip Disciplines
roject coordinator				
	RLES Bernard			
Organisation name	IRD /CENTRE DE BRE	TAGNE		P)
SDNIdent (Organisation name)	* SDN:EDMO::440	_		
Contact information	0011.20110.110			
Phone	+33 (0)2 98.22.45.01			
Fax	+33(0)2 98.22.45.14			
Address				
Delivery point	Centre IFREMER de Brest BP	70		
	PLOUZANE			
Administrative area				
Postal code	29280			
	France			
Email				
Website				
http://www.brest.ird.fr/				
Role				
I Mote core versa * lo	Soft W Softer			

Figure 93 - PCR - General information - Chief scientist window

Chief scientist Responsible party Ship operator Funding agency Collate center Cruise Objectives and brief of cruise	Ship Disciplines
Originator centre	
Organisation name * IRD /CENTRE DE BRETAGNE	<u>2</u>
SDNident (Organisation name) SDN:EDMO::440	
Contact information	
Phone +33 (0)2 98.22.45.01	
Fax +33(0)2 98.22.45.14	
Address	
Delivery point Centre IFREMER de Brest BP 70	
City * PLOUZANE	
Administrative area Postal code 29280	
Country * France	
Email	
Website	
Role	
Role code value * originator	



Chief scientist Responsil Cruise	ole party Ship operator Funding agency Collate cente Objectives and brief of cruise	Ship	Disciplines
Operator			
Organisation name	 IFREMER / DIRECTION DE LA COMMUNICATION - 	SIEGE P	
SDNIdent (Organisation nam	e) SDN:EDMO::547	Commit I	
Contact information			
Phone			
Fax			
Address			
Delivery point			
City	* ISSY-LES-MOULINEAUX		
Administrative area	cntAddress : physical and email address at wh	ich the organization or in	dividual may be contacted (38
Postal code			
Country	* France		
Email			
Website			
Role			
Role code value	* operator		

Figure 95 - PCR - General information - Ship operator window

	I information	Geographical are	a			
	sponsible party	Ship operator	Funding agency	Collate center		
Cruise		Objectives a	nd brief of cruise		Ship	Disciplines
Funding agency			Organisation na	me		

Figure 96 - PCR - General information - Funding agency window

Collate-centre Organisation name	Chief scientist Responsible Cruise	e party Ship operator Funding agency Collate c Objectives and brief of cruise	Ship	Disciplines
	Organisation name SDNIdent (Organisation name) Contact Information Phone Fax Address Delivery point City Administrative area Postal code Country	SDV EDMO: 486 -33 (0)2 98 22 49 15 -33 (0)2 98 22 49 15 rpCntinfo : address Centre #REMER de Breat BP 70 PLOUZANE 22280 France		0]
Role Author value * author				



10.1.6.3. Geographical information

This window is used to input geographical information such as sea areas (mandatory), textual description of the geographical location and/or geographical limits of the area.

	tic Options Tools ?	: C:\Michele\test MIKADO\PCR\11020030.xml	
nual Automa	uc opuons roois ?		
Identification	General information	Geographical area	
Sea-areas		· · · · · · · · · · · · · · · · · · ·	
	Sea-area	SDNIdent X	
North Ea	st Atlantic Ocean (limit 40	W) SDN:C16:8:23a	
- 1		P2	
Coographia	overage (textual descrip	tion)	
Geographic-c	overage (textual descrip	801)	
Geographic b			
West longit			
East longitu			
South latitu			
North latitu	de		

Figure 98- PCR - Geographical location of the planned cruise

10.1.7. Manual SEISMIC SENSORML input

Specific CDI extensions (SensorML and O&M) have been adopted for seismic data that needs specific consideration (such as external viewing services, seismic line segmentation).

There are 7 main input tabs for the SensorML (Sensor Model Language) information:

- Overall infos about the seismic dataset
- Source type of the seismic dataset.
- Receiver type of the seismic dataset.
- Acquisitor.
- Ccapabilities of the seismic dataset.
- Documentation.
- Observation of the seismic dataset which is very important: it relates to the SEISMIC O&M description.



10.1.7.1. Overall information

Overall infos	Source Receiver Acquisitor Capabilities Documentation Observation
Seismic metl	
Term URI	* http://vocab.ndg.nerc.ac.uk/term/GS80/I/SRFL
/alue	* Seismic reflection
lefinition	Describes the acquisition strategy used
Dimensionali	
Term URI	* http://vocab.ndg.nerc.ac.uk/term/GS90/1/SR2D
/alue	* Two-dimensional seismi 🕹
lefinition	* Describes geometric and temporal strategies adopted during acquisition
Data product	
Term URI	* http://vocab.ndg.nerc.ac.uk/term/GSA0/1/FLDS
/alue	• Field data: single-fold cor
lefinition	* Describes the type of data product
Overall qualit	
Term URI	* http://vocab.ndg.nerc.ac.uk/term/L311/1/0
/alue	* No quality control
definition	* Gives a qualitative indication of the usability of the data

Figure 99: Overall information

This tab gives the main characteristics of the seismic dataset:

- Seismic method specifies if it is reflexion or refraction seismic data
- Dimensionality indicates if the dataset concerns 2D, 3D or 4D seismic data.
- Data product and Overall quality inform about the level of processing of the dataset.

All the parameters are mandatory.



iuai Automat	tic Option:	<mark>Manual / Ne</mark> s Tools ?							
verall infos	Source	Receiver	Acquisitor	Capabilities	Documentation	Observation]		
Source type									
erm URI									
alue				22 📸					
efinition		Defines wh	ich seismic so	urce device was i	used				
Shot distance	2								
vit		m							
alue									
ofinition		distance be	tween two con	secutive shots					

Figure 100: Source

This tab contains two recommended parameters regarding the source type of the seismic equipment and the shot distance.

10.1.7.3. Receiver of the seismic equipment

4	Mikado 2.3 SI		Aanual / SE	NSORML SEI	SMIC : Q:\cpe	rtuis\MIKADO\mik	ado_V2.3_R	C5_08-03-2012_	sismer\export\SISM	. 💶 🗖 🗙
N	1anual Automati	c Options	s Tools ?							<u>i</u>
	Overall infos	Source	Receiver	Acquisitor	Capabilities	Documentation	Observation			
	Receiver type									
	Term URI		http://vocab	.ndg.nerc.ac.u	k/term/GSB0/1/90	00				
	Value		Streamers		2					
	definition	*	Defines the	type of receive	er or receivers ari	ray used				
	First channel									
	Value		1							
	definition	*	Index numb	er of the first c	hannel in the rec	eiver array				
	Last channel									
	Value		24							
	definition	*	Index numb	er of the last c	hannel in the rec	eiver array				
	First offset									
	unit	*	m							
	Value		12							
	definition	*	Nominal dis	tance betweer	the source and t	the first receiver of the	receiver array			
	Last offset									
	unit	*	m							
	Value		156							
	definition	*	Nominal dis	tance betweer	the source and t	the last receiver of the	receiver array			

Figure 101: Receiver

Information about the first and last channel, and first and last offset are optional. A precise definition is indicated for each parameter in grey.



10.1.7.4. Acquisitor of the dataset

🕌 Mikado 2.3 S	IDN V2	Manual / SI	NSORML SEI	SMIC : Q:\cpe	rtuis\MIKADO\mi	kado_V2.3_RC		smer\export\SISM.	💶 🗖 🔀
Manual Automat	tic Option:	s Tools ?							<u>k</u>
Overall infos	Source	Receiver	Acquisitor	Capabilities	Documentation	Observation]		
Sampling inte	rval								
unit	*	microseco	nds						
Value	*	1							
definition	×	Time interv	ral between two	consecutive san	oples in the seismic t	race.			
Samples per	trace								
Value	*	4							
definition	×	Number of	samples within	each trace.					
Recording de	lay								
unit	*	microseco	nds						
Value		1							
definition	*	Time interv	rai that needs to	be added to the	time trace in order to	postion it correct	tly in rel.		

Figure 102: Acquisitor

This tab concerns information about the technical parameters during the acquisition of the seismic dataset. The recording delay parameter is not mandatory but recommended.



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10.1.7.5.	Capabilities	of the	dataset
-----------	--------------	--------	---------

📓 Mikado 2.3 SDN V2 🛛 Manual / SENSORML SEISMIC : Q:\cpertuis\MIKADO\mikado_V2.3_RC5_08-03-2012_sismer\export\SISM 😱 🗖	
Manual Automatic Options Tools ?	
Overall infos Source Receiver Acquisitor Capabilities Documentation Observation	
Top bandwidth	
Term URI * http://vocab.ndg.nerc.ac.uk/term/L054/27/375	
Value * 250 Hz top-bandwidth mu 🥺	
definition * SeaDataNet sensor and instrument package categories	
Figure 103: Capabilities	

This mandatory parameter reports on the top bandwith of the dataset and therefore on the resolution of the data.

ikado 2.3 Iual Automa			INSORML SEI	SMIC : Q:\cpe	rtuis\MIKADO\mik	kado_V2.3_RC	5_08-03-2012_sismer\export\SISM	🗖 🗖
overall infos	Source	Receiver	Acquisitor	Capabilities	Documentation	Observation	1	
Document							<u> </u>	
escription		none						
ink								

10.1.7.6. Documentation

Figure 104: Documentation



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Any available documentation about the dataset is welcome but not mandatory.

10.1.7.7. Observation

🕌 Mikado 2.4 RC2 SDN V2	2 Manual / SENSORML	SEISMIC : Q:\	cpertuis\MIKADO	\mikado_V2.4	_RC1_sismer\output\Fl351997010	. 💶 🗖
Manual Automatic Options	s Tools ?					
Overall infos Source	Receiver Acquisitor	Capabilities	Documentation	Observation		
O&M link						
Link *	10120/SISM10_FI3519970	10120_88303/5/5	5 M10_F/3519970101 2	0_88303 <u>0em</u>		
		D .	105 01			

Figure 105: Observation

The observation is very important: it indicates the link to the SEISMIC O&M extension (external XML document). This O&M file must end with '_oem' for the good working of the High Resolution Seismic Viewing Service.

10.1.7.8. SensorML style sheet path configuration

By default, Mikado generates the SensorML style sheet path in the root directory of the same website as where the xml can be retrieved, thus as follow: «../ SMLtoHtml.xsl».

If that path doesn't suit your file organisation, you can configure it by clicking on the Options tool bar and selecting the SML style sheet path option. You can either enter a relative path (../../SMLtoHtml.xsl) or a non-relative path (http://diskABCD/SMLtoHtml.xsl).



Manual Automatic Options Tools ?	
Vocabulary Update Data centre type Set programs directory Set series directory Set provy authentication Set ISML Style sheet path Set OEM style sheet path	
🛃 Set SML style sheet path	
Set SML style sheet path http://spacedisk/SMLtoHtml.xsl	
ok cancel	
This software has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n°283607, SeaDataNet II and n°238952, Geo-Seas.	

Figure 106: SensorML style sheet path configuration

10.1.8. Manual SESMIC O&M input

10.1.8.1. O&M fields

Specific CDI extensions (SensorML and O&M) have been adopted for seismic data that needs specific consideration (such as external viewing services, seismic line segmentation).

There is one main input for the SEISMIC O&M information (Figure 100):

 Section id of the the O&M which is very important and the ID must be a UNIQUE LOCAL identifier. Because the LOCAL_ID is vital for the updating process, it is through this LOCAL_ID that the central system will be able to recognise whether new contributions are updates of existing records or really new records.

This O&M file must end with '_oem' for the good working of the High Resolution Seismic Viewing Service.

- Description of the dataset
- Envelope: indicates the lower and upper corner of the dataset. Definition is given in comment
- Related observation (Figure 102)
- UKOOA Link is not mandatory but very important as this is the seismic navigation file that will be used by the seismic viewer.



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📓 Mikado 2.4 RC2 SDN V2 🛛 Manual / O&M SEISMIC : Q:\cpertuis\WIKADO\mikado	0_V2.4_RC1_sismer\output\F1351997010120\S1 💶 🗖 🔀
Manual Automatic Options Tools ?	
Section id * 997010120_88303_oem	
Description	
Envelope	
	at. East Ion.' (13.265722 43.931889)
Upper corner * 42.54 3.573 Decimal degree 'North la	t. West Ion.' (13.39283 Decimal degree 'South lat. East Ion.' (13.26572:
CRS * urmage:def.crs:EPSG:4326	
Related observation	
UKOA link	9701012 CAL97-09

Figure 107 : SEISMIC O&M

🕌 sa: related0bserv	tion 🛛
Related observation	
Line name	* CAL97-09
Description	
Time position	* 15/11/1997 13:23:44
SensorML link	* 'FI351997010120/SISM10_FI351997010120_88303/SISM10_FI351997010120_88303_sml
Observed property	* SDN:GS20:0:Reflectly
Feature of interest	* SDN:GS10:0:EarthVol
Viewer link	97010120_casr009.TRA
Left Trace Value	
Right Trace Value	
	Ok Cancel

Figure 108: Related Observation

For more coherence between O&M and SensorML files, it is recommended to end the SensorML file with $'_sml'$.

Observed property* (GS10): put EarthVol (waiting for BODC update)

Feature of interest* (GS20): put Reflcvty (waiting for BODC update)



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Viewer link: put the name of your file (segy or image) without any URL. The extension of the file name can be anything (but has to be in SEGY standard format)

Left trace value: trace number of the left of the segment

Right trace value: trace number of the right of the segment

These 2 values are used by the HRSVS to link a segment made of an image and the navigation. **These** values don't need to be set in case of a SEG-Y file

10.1.8.2. OEM style sheet path configuration

By default, Mikado generates the O&M style sheet path in the root directory of the same website as where the xml can be retrieved, thus as follow: «../OeMtoHtml.xsl».

If that path doesn't suit your file organisation, you can configure it by clicking on the Options tool bar and selecting the OEM style sheet path option. You can either enter a relative path (../../OeMtoHtml.xsl) or a non-relative path (http://diskABCD/OeMtoHtml.xsl).

Manual Automatic Options Tools ?	
Vocabulary Update Data centre type Set programs directory Set series directory Set proxy authentication Set SML style sheet path Set OEM style sheet path	Geo-Seas
💰 Set OEM style sheet path	
Set OEM style sheet path	
http://spacedisk∳OeMtoHtml.xsl	
	ok cancel
This software has received funding from the European U Framework Programme (FP7/2007-2013) under grant ag SeaDataNet II and n°238952, Geo-Seas.	Inion Seventh greement n°283607,

Figure 109: OEM style sheet path configuration



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10.2. Open and save an existing XML description

10.2.1. Existing XML file

It is possible to open an existing XML file using MIKADO. To do so, select **Open** in the **Manual** main menu then choose **file** and then EDMED, CSR, CDI or EDMERP. Then, select the XML file to open.



Figure 110: Open an XML file with MIKADO

💰 Mikado ¥1.5	
Manual Automatic Options ?	
S Open	
Look In: Imikado_V1.5.4beta	
Conf dist	
i languages	
Imapping records Imapping records	
File Name:	
Open Cancel	
opon curror	

Figure 111 : Select the XML file to open

Update your information using the MIKADO interface and save your modifications by selecting **Save/file** or **Save as/file** in the **Manual** main menu.



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Note: under MIKADO V1.8, you could open an existing XML file created with a previous version MIKADO (without GML extension for exemple) without problem. You will just have to complete some fields (as "protocol" in Where to find data tab).

10.2.2. Working with XML URL

10.2.2.1. Open the URL

It is possible to open an existing XML URL using MIKADO. To do so, select **Open** in the **Manual** main menu then choose **URL** and then EDMED, CSR, CDI or EDMERP.



Figure 112- Open an URL with MIKADO

Then, type the URL (static or on the fly) of and XML description of the chosen catalogue.

🛓 Url chooser	
URL	
	Open Cancel

Figure 113- Enter the URL of the XML description

10.2.2.2. Save on the URL

Update your information using the MIKADO interface and save your modifications by selecting **Save/URL stream for Web service** or **Save as/ URL stream for web service** in the **Manual** main menu.

When you activate the "Manual / Save as / URL stream for Web Service" menu item, you get a popup window in which you enter the restful web service URL.





Figure 114- Enter the URL of the restful web-service

When you activate the Send button, the XML stream is sent to the restful web service as input stream.

Mikado software expect an answer stream from the restful web service, this answer string will be displayed in a popup window to inform the user about the restful web service end of execution.

\odot	URL STATUS
i	MyRestFulWebService succeed
	ОК
15	Magggggg and water and has the weather

Figure 115- Message returned by the restful Web-service

10.2.2.3. Example of Java servlet

This servelt implements a web-service able to read the XML metadata flow sent by MIKADO:

package my.restfull.webservice;

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/** JAVA restfull web service sample for mikado.
 * You can use the menu Mikado/Save/URL Stream for Web Service
 * with an URL like http://www.myserver:8080/MyRestFulWebService/MyRestFulWebService
 *
 * @author Michel.Larour@ifremer.fr
 */
public class MyRestFulWebService extends HttpServlet {
```

/**

 \ast Processes requests for both HTTP <code>GET</code> and <code>POST</code> methods.

* @param request servlet request



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```
* @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
   protected void processRequest(HttpServletRequest request, HttpServletResponse
response)
   throws ServletException, IOException {
        try
        {
            // open xml stream sent by mikado
            BufferedReader in = new BufferedReader(
                                new InputStreamReader(
                                request.getInputStream()));
            // read xml stream sent by mikado line per line
            String inputLine;
            while ((inputLine = in.readLine()) != null)
            {
               // TO DO
                // work with stream
                log(inputLine); // eg : write stream to tomcat log file
            // close xml stream send by mikado
            in.close();
            // send an execution report to mikado
            PrintWriter out = response.getWriter();
            out.println("MyRestFulWebService succeed");
            out.close();
         }
         catch(Exception ex)
         {
            // send an execution error report to mikado
            PrintWriter out = response.getWriter();
           out.println("MyRestFulWebService failed : "+ex.getMessage());
           out.close();
         }
    }
    /**
     * Handles the HTTP <code>GET</code> method.
     * @param request servlet request
```



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```
* @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    processRequest(request, response);
1
/**
 * Handles the HTTP <code>POST</code> method.
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 * /
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
    processRequest(request, response);
}
/**
* Returns a short description of the servlet.
 * @return a String containing servlet description
 * /
QOverride
public String getServletInfo() {
    return "My restful Web Service";
}
```

10.3. Download EDMED record from BODC

MIKADO V1.5 includes a functionality to download EDMED records from the EDMED central catalogue managed by BODC. This functionality allows you to download one of your EDMED records and to update it before sending it again to the EDMED central catalogue.

To download an EDMED record:

1- Select **Download > EDMED from BODC** in the **Manual** main menu.



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Figure 116: Download EDMED from BODC

2- Fill in the local Dataset-id and the Collate centre fields for the EDMED entry you want to download and click on **Download** button.

🛓 Manual / Download / EDMED	from BODC
Dataset_id * ADCP EMIED identifier * SDN & Collate-centre Organisation name SDN/egt (Organisation name)	01 EDMED:LOCAL:ADCP01 • IFREMER / IDM/SISMER • SDN:EDM0::486
Contact information	
Phone Fax	rpCntlnfo : address of the responsible party (378) +33 (0)2 98.22.49.16 +33 (0)2 98.22.46.44
Address	
Delivery point	
City	* PLOUZANE
Administrative area	
Postal code	
Country	* France
Email	sismer@ifremer.fr
Website http://www.ifremer.fr/s	
Role Author value *	
	Download Cancel

Figure 117: Select the EDMED entry to download

3- MIKADO will open the downloaded EDMED record in its EDMED manual interface. It is now possible to update it and save it (see 10.1.1) before sending it again to the EDMED central catalogue.



Note that when downloading from BODC the LOCAL EDMED identifier has been replaced by the CENTRAL EDMED identifier (*in the example SDN:EDMED:LOCAl:ADCPO1 us replaced by SDN:EDMED::3025*), so that BODC is able to recognize and updated record from a new one when the XML is sent back to BODC.

差 Mikado 2.0 SDN V2 Download / EDMED from BODC: ADCP01 ,IFREMER / IDM/SISMER	
Manual Automatic Options Tools ?	
Dataset Data holding centre Data contact	
Identification When Where What Reference Get data Completed by	
Dataset-id * ADCP01 EDMED identifier * SDN:EDMED 3025	
Dataset-name * UNDERWAY CURRENT M	
·	
The ID must be a UNIQUE LOCAL identifier The LOCAL_ID is vital for the updating process, s o the Central system will recognise whether new contributions are UPDATES of existing recor	
ds OR really new records.	

Figure 118: Downloaded EDMED record

10.4. Download CSR record from BSH

MIKADO includes a functionality to download CRS records from the CSR central catalogue managed by BSH. This functionality allows you to download one of your CSR records and to update it before sending it again to the CSR central catalogue.

To download a CSR record:

1. Select **Download** > **CSF from BSH** in the **Manual** main menu.





Figure 119: Download CSR from BSH

2. Fill in the local CSR-id and the Collate centre fields for the CSR record you want to download and click on **Download** button.

🛓 Manual / Download / CSR fro	m BSH	
	09010010 DMED:LOCAL FI352009010010 • IFREMER / IDM/SISMER • SDN:EDM0:486	
Contact information		
Phone Fax	+33 (0)2 98.22.49.16 +33 (0)2 98.22.46.44	rpCntInfo : address of the respons
Address		
Delivery point		
City		
Administrative area		
Postal code		
Country		
Email	sismer@ifremer.fr	
Website http://www.ifremer.fr/si		
Role Author value * a		
	Download	

Figure 120: Select the CSR entry to download

3. MIKADO will open the downloaded CSR entry in its CSR manual interface. It is now possible to update it and save it (see 10.1.2) before sending it again to the CSR central catalogue.



	DN V2 Download / CSR from BSH : FI352009010010 , IFREMER / IDM/SISMER c Options Tools ?	
Identification	General information Mooring Measurement Geographical area	
Cruise-id CSR identifier Cruise-name	FI352009010010 SDN CSR LOCAL FI352009010010 ESSIENCATA SOULD LOCAL Identifier The LOCAL ID is vital for the updating process, s	
	system will recognise whether new contributions are UPDATES of existing recor	

Figure 121: Downloaded CSR record

10.5. Conversion ISO19115 to ISO19139 XML files

MIKADO is still able to read (import) CDI/CSR ISO 19115 files and save them as ISO 19139 XML files for data centres to upgrade their existing local XML files. To do so, go to Manual > Open (CDI or CSR), then Save.

In CDI ISO 19139, the "Sampling interval" or "Time resolution" field uses now P06 "BODC data storage units" vocabulary list instead of L031 "SDN Measurement Periodicity Categories » previously used in CDI ISO 19115. So, to convert CDI ISO 19115 to CDI ISO 19139, MIKADO uses a mapping matrix that has been defined in the SeaDataNet CDI profile document available at: https://www.seadatanet.org/Standards/Metadata-formats/CDI



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11. Automatic generation of EDMED, CSR, CDI, EDMERP, EDIOS, SESIMIC SENSORML and SEISMIC O&M XML files

11.1. General principle

Instead of manually typing information using the forms provided by the tool, in order to describe EDMED, CSR, CDI, EDMERP, EDIOS, SESIMIC SENSORML or SEISMIC O&M, the Mikado software is also able to generate these descriptions automatically if elementary information are catalogued in a relational database which can be queried with SQL language through a JDBC driver (Java Data Base Connectivity).

JDBC drivers are available for most popular relational database management system: ORACLE, Microsoft Access, Open Office (base), Microsoft SQLServer, MySQL, POSTGRES, Sybase... Please refer to the web site **http://developers.sun.com/product/jdbc/drivers** for more information.

If the driver you want to use is not released in MIKADO, you can download it from ad hoc websites and **copy it in the dist/lib MIKADO directory.**

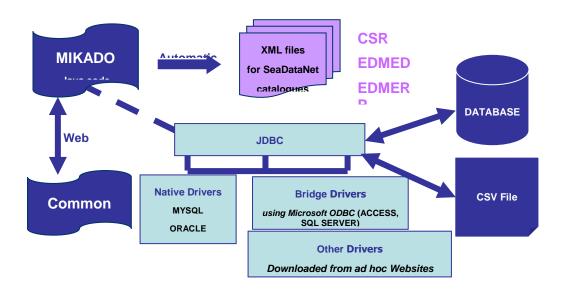


Figure 122: MIKADO - Automatic way

The different steps of MIKADO automatic version are:

- Configuration of the tool:
 - o Definition of the connection parameters to access the local database
 - o Definition of the queries to retrieve the information in the local database.



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- Saving of the configuration and the queries.
- Generation of the XML files.

11.2. Configuration of the tool

MIKADO provides a help for JDBC connection – connection checking and SQL query writing – query checking.

🙆 Mikado 2.3 SDN V2		×
Manual Automatic Options Tools ?		
Deen Save S Save S Generate Exit Exit Exit Exit Exit Exit Exit Exit	SeaDataNet	

Figure 123: Automatic menu

11.2.1. Create a new configuration

To create a new configuration (connection to the database + queries), select **New** in the **Automatic** main menu and choose EDMED, CSR, CDI EDMERP, EDIOS PROGRAM, EDIOS SERIES, EDIOS PLATFORM, SESIMIC SENSORML or SEISMIC O&M.

There are 2 tabs which enable to input information about:

- Connection to the database
- Queries.



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er Ms Server PostgreSql Sybase OpenOffice Other	abase	Preset	
BC connect url Access Excel er sswd Sybase OpenOffice Other	river class name	Mysql Orac	:le
sswd Sybase OpenOffice Other	DBC connect url	Access	el
Sybase OpenOffice Other	ser	Ms Server Postgr	eSql
	asswd	Sybase OpenO	ffice
		Other	
		Other	
	it		
check			
	check		

Figure 124: New configuration

11.2.1.1. Define the JDBC connection parameter

1 - Choose the database management system by clicking on the corresponding button.

Connection Queries	
Database	Preset
Driver class name	Mysql Oracle
JDBC connect url	Access Excel
User	Ms Server PostgreSql
Passwd	Sybase OpenOffice
	Odbc (DSN) Other

Figure 125: Connection interface- Select the database management system



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2 - Complete or replace the pre-filled JDBC connect URL field (URL of database, user name and password if required by your database). **Please, do not modify the driver class name field.**

If you have chosen the "**Other**" button to define another database management system, you will have to fufill the **JDBC connect URL** field and also the driver class name field to connect to your database (make sure that the driver file is saved in the **dist/lib** MIKADO directory).

Database		
Driver class name	com.mysql.jdbc.Driver	
JDBC connect url	jdbc:mysql://localhost/database	
User		
Passwd		

Figure 126: Pre-filled connection parameters for MySQL

Database		
Driver class name	oracle.jdbc.driver.OracleDriver	
JDBC connect url	jdbc:oracle:thin:@server:port.instance	
User		
Passwd		

Figure 127: Pre-filled connection parameters for Oracle

Driver class name	com.microsoft.jdbc.sqlserver.SQLServerDriver
JDBC connect url	jdbc:sqlserver://serverName;instanceName:portNumber;property=v
User	
Passwd	

Figure 128: Pre-filled connection parameters for SQLServer

Database	
Driver class name	org.postgresql.Driver
JDBC connect url	jdbc:postgresql://server/instance
User	
Passwd	

Figure 129: Pre-filled connection parameters for PostgreSQL



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Driver class name	com.sybase.jdbc3.jdbc.SybDriver	
JDBC connect url	jdbc:sybase:Tds:server:port/instance[?charset=]	
User		
Passwd		

Figure 130 : Pre-filled connection parameters for Sybase

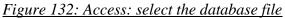
For Sybase database connection, the part [?charset=] of the **JDBC connect URL** is optional and allows to choose the right set of characters.

Ex: jdbc:sybase:Tds:wallis:7545/quadrige?charset=iso_1

Database	
Driver class name	org.hsqldb.jdbcDriver
JDBC connect url	3EAS\WVP3_training\MIKADO\example_database\cdi_bathymetry.odb
User	SA
Passwd	

Figure 131: Pre-filled connection parameters for Open Office Base

Database	Select Acce	ss File			
Driver class nar	Look <u>i</u> n:	test_mikado_v1_vt		8-	Oracle
JDBC connect u	V1.4				Excel
User	🗂 V1.5			er	PostgreSql
Passwd					Other
fest					
check					
	File <u>N</u> ame:				
	Files of <u>T</u> ype:	.mdb		-	
		4.			
			Select Canc	el	



Database	
Driver class name	sun.jdbc.odbc.JdbcOdbcDriver
JDBC connect url	ests_autom\example_database\access\cdi_training_course_2.mdb
User	
Passwd	

Figure 133: Pre-filled connection parameters for Access



3- Check the database connection using the **Check** button.

If MIKADO cannot connect to the database: check connection parameters, user and password. For Microsoft Access, check ODBC parameters too. Refer to your database and JDBC driver documentation.

Connection Queries	3	
Database		Preset
Driver class name	oracle.jdbc.driver.OracleDriver	Mysql Oracle
JDBC connect url	jdbc:oracle:thin:@borneo:1521:idm	Access Excel
User	serveur	Ms Server Postgre Sql
Passwd	•••••	Sybase OpenOffice
Test		Other
	driver loaded cted to database	



Connection	Queries	7					
Database				P	reset		
Driver cla	ss name	oracle.jdbc.driver.Oracle	eDriver		Mysql	Oracle	
JDBC con	nect url	jdbc:oracle:thin:@borne	eo:1521:idm		Access	Excel	
User		serveur			Ms Server	Postgre Sql	
Passwd		•••••			Sybase	OpenOffice	
					Oth	ner	
Test							
check	Unable	e to connect to dat	abase				
		connect url = jdbc: = serveur	oracle:thin:@borneo:	1521:idm			
			A-01017: invalid use	name/nassword: log	on denied		
		ogrogeneeporon on					

Figure 135: Unable to connect the database – Red message

11.2.1.2. Define the queries



The MIKADO interface for writing queries is divided into 3 parts:

- An expandable tree
- A frame for query writing
- A frame for query checking.

Requests	query		
← 🛄 Main ← 🛄 Singles ← 🛄 Multiples fixed	SELECT Var	sql	
1: Expandable tree		2: Query writing	
	FROM		1
	WHERE		Ī
	ORDER BY		
	Test	2 : Query checking	•

Figure 136 : Queries interface



Figure 137: Query frame: SELECT, FROM, WHERE, ORDER BY frames

The query frame can be divided into 4 sub-frames: SELECT, FROM, WHERE, ORDER BY. The free text frames (FROM, WHERE, ORDER BY) can be completed directly by typing in them. The SELECT frame works as in a free text table (see 9.1.1).



The expandable tree on the left part of the interface makes it possible to explore the different variables by expending the tree. In order to navigate in this tree, you have to click on the names of the nodes. After clicking, the corresponding query appears in the right part of the interface, in the 'Query' frame. And these queries can be checked using the query checking frame.

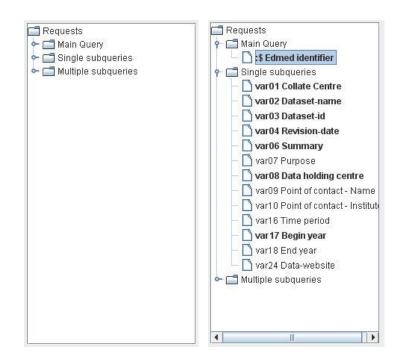


Figure 138: Expandable tree

MIKADO distinguishes different kinds of queries:

- the **main query**: It is the query which identifies all EDMED, CSR, CDI or EDMERP entries that must be exported. This request must return only one column which is the identifier (primary key) of each entry and that will be used for sub-queries. The returned identifiers could be numerical or textual.
- the **single subqueries**: These queries return **only one** row for one identifier returned in the main query.
- the **multiple subqueries**: These queries return **1 to n** rows for one identifier returned in the main query.

The character ':\$' indicates the identifier of the entry as it as been returned by the main query. **One identifier symbol must be used in each sub-query WHERE condition to identify the entry within the**



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list. It will be automatically replaced by the current identifier in the list. If identifiers are non numerical, :\$ must be enclosed by quotes (':\$')

```
select station_name from mikafdo_station
where station_id = :$ (or `:$' if non numerical)
```

For all these queries, the SQL syntax (for Oracle, MySQL ...) and SQL variables must be adapted to your own data base.

11.2.1.3. Main query

- 1- Click on the main variable in the expandable tree.
- 2- Fulfil the main query in the query frame.
- 3- Check the query using the check button (see 11.2.1.4).

📑 Requests	query		
 P I Main C di identifier C Singles Multiples fixed 	SELECT	var :\$	sql station_id
	FROM		cruise, mikado_dataset, mikado_station
		and mike	Station datase (Lorando Latase Latase Lotase Lotase) ado_dataset cruise jid=mikado, cruise cruise jid ado_cruise.cruise_name='CITHER 2 LEG 1'
	ORDER BY Test		
	check	:\$ = [418]

Figure 139 : Main query

11.2.1.3.1. Single subqueries

All the XML variables are listed in the expendable tree. The mandatory ones are written in bold characters: they must be fulfilled, null values are not allowed for mandatory variables. One to n single subqueries can be written, each of which can contain as many variables as necessary. Once a variable has been fulfilled, it is highlighted in green in the expandable tree.

To create a single query:

1- Select the first variable in the expandable tree to create a new query,



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Requests Main Quary S Cdi identifier Bingle subqueries Quart Collate Centre Var02 Measuring area hype	gunry SELECT yar sgi	
var03 Datum of coordinate var04 Dataset harme var05 Dataset ha var06 Revision date (dataset) var08 Revision date (dataset) var08 Abstract (dataset) var09 Data Holding Centre var01 Intorment var01 Plistform	Select an Option Create a new Query for var011 You Bo Cancel	
Vart 5 Cruise name Vart 6 Cruise short name Vart 7 Cruise short name Vart 7 Cruise start date Vart 8 Station name Vart 9 Station short name Var20 Station short name Var20 Station start date Var20 Station start date	ORDER BY	Ê

2- Complete the corresponding SELECT for this variable in the query frame,

query				
SELECT	une	1	cal	1
official and a	var01	collate centre	oyi	
				1
				S
FROM	1			
WHERE				
1				
	I			
ORDER BY				
Toet				
i ca				
	1			
	SELECT FROM WHERE ORDER BY Test	FROM	FROM WHERE ORDER BY	Var01 collate_centre FROM

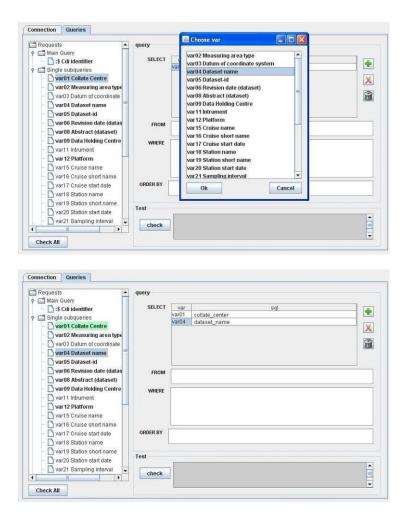
3- If needed, add another variable by clicking on the 🖶 button

Requests	query			
Aiin Query Stoli Identifier Single subqueries var01 Collate Centre var02 Measuring area ty var02 Datum of coordinate var04 Dataset name		r var var var01 collate_cent	sql re	×
 Var05 Dataset-id Var06 Revision date (data Var08 Abstract (dataset) 				
var09 Data Holding Centr var11 Intrument var12 Platform var15 Cruise name	e WHERE			
 var16 Cruise short name var17 Cruise start date var18 Station name 	ORDER BY			
var19 Station short name var20 Station start date var21 Sampling interval	Test check			•

4- Choose the second variable in the list then press OK and complete the SELECT clause for this variable and so on, as many time as you need to add variable in the query,



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5- Fulfil the FROM, WHERE and ORDER BY clauses of the query.

	 query 			
Main Query	SELEC	-	1	
— 🗋 :\$ Cdi identifier	SELEC	T var var01	collate centre	
🗂 Single subqueries		var01 var04	dataset name	
- 🗋 var01 Collate Centre		Value	ualasel_liallie	×
 Var02 Measuring area type 	pe			
- N var03 Datum of coordinat	e			6
var04 Dataset name				(ci
Var05 Dataset.id				
		<u></u>		
 Var06 Revision date (data 	is FRO	M mikado	_dataset	
 Var08 Abstract (dataset) 				
- 🗋 var09 Data Holding Centr	e WHER	F. edi ida	ntifier=:\$	
- 🗅 var11 Intrument		e cui_iue	nunci	
Var12 Platform				
- N var15 Cruise name				
— 🗋 var16 Cruise short name	S			
 var17 Cruise start date 	ORDER BY	20		
Vari / Cruise stait uate				
- 🗋 var18 Station name				
– 🗋 var18 Station name	2			
 — Var18 Station name Var19 Station short name Var19 Station short name 	Test			
— 🗋 var18 Station name	Test	1		

Don't forget that one identifier symbol ('\$') must be used in each sub-query WHERE condition to identify the entry within the list. It will be automatically replaced by the current identifier in the list.



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It is possible to sort the different variables of a particular query. To do so, click on the 'var' column; an arrow will appear allowing you to sort the variables by clicking on it:

Requests	query			
Main Query St Cdi identifier Single subqueries - Quartol Collate Centre var02 Measuring area type	V	ar ▼ 1704 dataset_name 1701 collate_center	sql	* X
 var02 measuring area type var03 Datum of coordinate var04 Dataset name var05 Dataset-id 				
 var06 Revision date (datas var08 Abstract (dataset) 	FROM	kado_dataset		
Var09 Data Holding Centre Var11 Intrument Var12 Platform Var15 Cruise name	WHERE	i_identifer=:\$		
var16 Cruise short name var17 Cruise start date var18 Station name	ORDER BY			
var19 Station short name var20 Station start date var21 Sampling interval	Test			
- 🗋 var21 Sampling interval	check			12

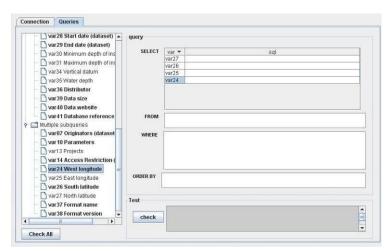
6- Check the query using the checking frame (see 11.2.1.4).

11.2.1.3.2. Multiple subqueries

All the XML variables are listed in the expendable tree. The mandatory ones are written in bold characters: they must be fulfilled, null values are not allowed for mandatory variables. The number of multiple queries and the list of variables per queries are pre-defined. Once a variable has been fulfilled, it is highlighted in green in the expandable tree.

To fulfil a multiple query:

1- Select the first variable in the expandable tree to fulfil the corresponding multiple query,



2- Complete the corresponding SELECT, FROM, WHERE, ORDER BY clauses for this variable (and associated variables) in the query frame,



Don't forget that one identifier symbol ('\$') must be used in each sub-query WHERE condition to identify the entry within the list. It will be automatically replaced by the current identifier in the list.

var28 Start date (dataset)	query	query				
 Var29 End date (dataset) 		-				
— 🗋 var30 Minimum depth of ins	SELECT	var 🕶	sql			
- 🗋 var31 Maximum depth of ins		var27				
- N var34 Vertical datum		var26	south_latitude			
		var25				
— 🗋 var35 Water depth		var24	west_longitude			
- 🗋 var36 Distributor						
- 🗋 var 39 Data size						
- 🗍 var40 Data website						
Var41 Database reference	ED ON	-	len en la constante de la const			
	FROM	mikado_station				
Multiple subqueries						
 Var07 Originators (dataset 	WHERE	where c	di_identifer=:\$			
- 🗋 var10 Parameters		1000000000	-			
- 🗋 var1 3 Projects						
Var 14 Access Restriction (
var24 West longitude =	1000000000					
 Var25 East longitude 	ORDER BY					
var26 South latitude						
var27 North latitude						
- Nvar37 Format name	Test					
		1				
🗖 var38 Format version 🖉	check					
	check					

If your database does not contain information for some non mandatory variables, let them empty in the SELECT clause.

- 3- Check the query using the checking frame (see 11.2.1.4).
- 4- Fulfil another multiple query by clicking on an empty variable.

11.2.1.4. Queries checking

MIKADO allows to check:

- Each query one by one. To do so, use the **Check** button in the query checking frame.
- All queries at the same time. To do so, use the **Check All** button above the expandable tree. All queries will be checked one after one. Use this button before generating the XML files.

The results of the query checking appear in the query checking frame. A **green** message informs that the query is correct; an **orange** message is a warning to tell the user that a reference to the IDs returned by the main query is missing and a **red** message informs that the query is wrong and gives information about the error.



Requests	query			
e — Main ☐ S Cal identifier ← ☐ Singles ← ☐ Multiples fixed	SELECT	var \$	sqi staton_id	
	FROM		cruise, mikado_dataset, mikado_station	
		and mik	station dahiset_idrimikado_dataset dataset_id ido_dataset.cruise_idrimikado_cruise.cruise_id ido_cruise.cruise_name='CITHER 2 LEG 1'	
	ORDER BY			
	Test		410]	
	check			



Connection Queries		
var28 Start date (dataset) +	query	
var29 End date (dataset)	4	
 var30 Minimum depth of ins 	SELECT	var sql
- D var31 Maximum depth of in		var37 distinct YODV var38 11.0/
 var34 Vertical datum 		var38 1.0'
 var35 Water depth 		
var 36 Distributor		
- Var 39 Data size		
var 40 Data website		
var41 Database reference	FROM	[station\$]
🕈 📑 Multiple subqueries		
 var07 Originators (dataset 	WHERE	
 var 10 Parameters 		
 – O vart 3 Projects 		
var 14 Access Restriction (
var24 West longitude =		
 var25 East longitude 	ORDER BY	
 var26 South latitude 		
- var27 North latitude	Test	
var37 Format name		value - (1.0)
var38 Format version 👻	check	
		Marning : the catalogue identifier must be present in the the re clause (variable (1))
Check All		

Figure 141: Missing reference to ID - Orange message

Requests	query	
Main St Coli identifier Singles Hultples fixed	SELECT var sgl station_id	
	FROM mikado_cruise, mikado_dataset, mikado_statio WHERE mikado_station.dataset_idomikado_dataset_id	
	and mikado_chalsectruise_name=CiTHER 2 LEG 1'	
	ORDER BY	
	Test	
Check All	check Thable to exervice query select station_id	į.

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11.2.2. Save the configuration file

Once the connection parameters and the queries have been fulfilled and checked, you can save the configuration file by selecting **Save** or **Save as** in the **Automatic** menu. The configuration file has an ".xml" extension.

nn	New Open			
Save ueries Save as pllate Centre Generate > easuring area type Mapping > atum of coordinate taum of coordinate taset-ind avar05 Dataset-id atum of coordinate var05 Dataset-id atum of coordinate var09 Data Holding Centre var09 Data Holding Centre var109 Data Holding Centre var11 Intrument var12 Platform var16 Cruise short name var18 Station name var18 Station short name var19 Station short name var20 Station short name var21 Station short name var21 Station short name	Save as pllate Centre	query SELECT	var	cam.cam_cmu sql
	Mapping > atum of coordinate		var17 var39	to_char(cam.cam_datdeb,YYYY-MM-DD) res.res_volk/1024
	FROM	var08 var04 var05	res.res_obs fic.fic_ficnom res.res_cresi['_1]pip.pip_poseta '_1]to_char(pip.PLP_DATE,YY	
		TimmuDin Terminos) wnRe To char(res:res_datdeb,\YYYY-MM-DD) T' ▼ fmt, fic, cam, res, plp		
	- 🗋 var15 Cruise name - 🗋 var16 Cruise short name - 🗋 var17 Cruise start date	WHERE ORDER BY	TAB='F' \$';'_',1,1	es_cres = fic.fic_cres and res.res_cfmt = fmt.fmt_cfmt and pip.PLP_TYP and pip.PLP_NO= res.res_cres and pip.plp_poseta = substf(\$*)INSTR(`)+1.NISTR(`\$`11.2:NISTR(`\$`11.1)-1) and pip.PLP_DATE = to_date(\$*,INSTR(`\$`12,2)+1),'YYYMMDDHH24MISS)
	var22 Temporal resolution	Test	_	
	Var29 End date (dataset)	check		

Figure 143: Save the configuration file

onn	Open 🕨					
9 6	Save ueries	query				
	Save as Generate easuring area type Mapping atum of coordinate	SELECT	var var to var17	sql to char(cam.cam datdeb,YYYY-MM-DD)		÷
			var39	res.res volk/1024		X
1	Augot Harris		var08	res.res obs		~
	var05 Dataset-id		var04	fic.fic_ficnom		8
	 Var06 Revision date (datas Var08 Abstract (dataset) 		var05	res.res_cres '_' pip.pip_poseta '_' to_char(pip.PLP_DATE,'YY YYMMDDHH24MISS')	=	
	- 🗋 var09 Data Holding Centre =		vor06	to_char(res.res_datdeb,'YYYY-MM-DD') 'T'	-	
	- 🖸 var11 Intrument	FROM	fmt, fic,	cam, res, plp		
	-	WHERE	TAB='F' \$';'',1,1	es_cress=fic.fic_cressand.res.res_crmt=fmt.frmt_crmtand_plp.PL and plp.PLP_NO= res.res_cressand.plp.plp_poseta = substr(%;IN)+1,INSTR('\$','_1,2)-INSTR('\$','_1,1)-1) and plp.PLP_DATE = to	ISTR	().
	 ar18 Station name ar19 Station short name 		substr(\$',INSTR(':\$','_,'1,2)+1),YYYYMMDDHH24MISS)		•
	 ar20 Station start date ar21 Sampling interval 	ORDER BY				
	 var22 Temporal resolution var28 Start date (dataset) 	Test	_			
•	Var29 End date (dataset)	check				



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	a
Save Look [n: query Que	
Var29 End date (dataset)	

11.2.3. Open an existing configuration

It is possible to open an existing configuration file using MIKADO. To do so, select **Open** in the **Automatic** main menu and choose EDMED, CSR, CDI or EDMERP. Next, select the configuration file to open.

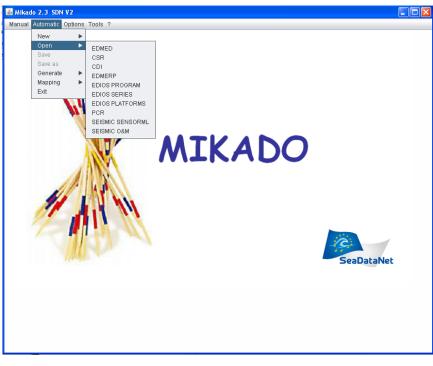


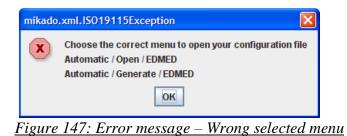
Figure 145: Open a configuration file with MIKADO



	🍯 Open confi	euration		Preset	Orrela
Driver class name					Oracle
JDBC connect url	Look <u>i</u> n:	query	-	at - 88 =	Excel
User Passwd	100778	_K048_20060202	135200.xml	CDI_oracle_res1	PostgreSql
Passwo _	100778	_K049_20060202	171200.xml	CDI_oracle_res1	Other
	100778	_KO29_20060131	131900.xml	CDI_oracle_res1	
Test	100778	CDI_transsizenu			
check	CDI_13	012009.xml		CSR_13012009.	
	CDI_ora	ncle_res100778.x	mi	CSR_oracle_NE	
	4			•	
	File Name:		00770 um		
	-	CDI_oracle_res1	100778.xmi		
	Files of <u>T</u> ype:	.xml			
<u> </u>			Open configuration	Cancel	

Figure 146: Select the configuration file to open

If there is incoherence between the selected catalogue and the file opened (for example: the user has click on open, CDI and then has selected an XML file related to EDMED) the following message will appear:



Important: Due to the modifications of CDI made in the framework of Geoseas project, some single variables have become multiple variables since MIKADO V1.8 (var11, var39, var40, var41) or are no longer used (var50, var51, var53).

So, if the user try to open an existing configuration created with a previous version of MIKADO, he will encounter some difficulties: the queries associated with the concerned variables will be deprecated by MIKADO (see Figure 148). The user will have to rewrite the queries for var11, var39, var40 and var51; the queries are detailed in the MIKADO message and the user could copy and paste them in the multiple queries.



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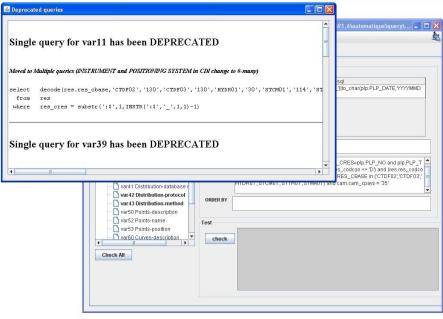


Figure 148 : Queries deprecated by MIKADO V1.8

11.3. MIKADO and NEMO interactions

NEMO was designed to be linked to MIKADO through the generation of a text file (NEMO summary).

The principle (Figure 152) is that while NEMO converts one file or a collection of files (like for example a collection of XBT files in a specific geographical area), it also generates a "CDI summary txt file" which contains all the minimum information necessary to create CDI records in the SeaDataNet catalogue. The content of the summary file for CDI is described in the NEMO user manual.

This summary file can be read by MIKADO (automatic generation) using a JDBC driver and then XML CDI files are generated using predefined queries delivered by MIKADO and can be directly exported to the central SeaDataNet catalogue.

To use the summary file with MIKADO to generate export of XML CDI records:

 Open the summary file created with NEMO by using the Automatic menu : New > CDI from NEMO export.



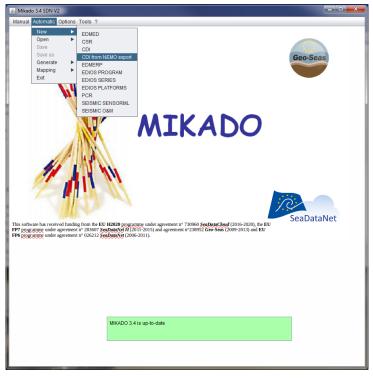


Figure 149 :Automatic menu : New > CDI from NEMO export

• MIKADO creates automatically a configuration file, with all queries on the NEMO export file as presented in Figure 150 (If a configuration already exists, MIKADO ask the user if he wants to override the existing configuration file).

💰 Mikado 3.4 SDN V2 Automatic / CDI 19139 : C	:\Users\vtosello\Desktop\CNR\CDI_summary_ovide3_small_ODV_160rc7.txt.xml	
Manual Automatic Options Tools ?		
Connection Queries		
	ATV	
Requests Main Query		
√ :\$ Cdi identifier	SELECT var sql	
Single subqueries	:S distinct LOCAL_CDI_ID	
✓ var01 CDI Partner ✓ var02 Measuring area type		
✓ var02 Measuring area typ ✓ var03 Horizontal Datum		
√ var04 Dataset name		
√ var05 Dataset-id		
var06 Revision date (data:	FROM CDI_summary_ovide3_small_ODV_160rc7	2
✓ var08 Abstract (dataset) ✓ var09 Holding Centre (cus)		
√ var12 Platform	WHERE	
√ var15 Cruise name		
✓ var16 Cruise short name ✓ var17 Cruise start date		
✓ var17 Cruise start date		
✓ var19 Station short name		
✓ var20 Station start date		
✓ var21 Time resolution valu ✓ var22 Time resolution unit		
	DRDER BY LOCAL_CDI_ID	2
√ var29 End date (dataset)		
✓ var30 Minimum depth of in		
✓ var31 Maximum depth of in ✓ var34 Vertical datum	st	
√ var35 Water depth		
✓ var36 Distributor	check	
✓ var45 Vertical resolution va ✓ var46 Vertical resolution ur		
✓ var46 vertical resolution un ✓ var47 Horizontal resolution		
✓ var48 Horizontal resolution		
✓ var80 EDMED Reference		
✓ var81 CSR Reference ▼ Multiple subqueries		
√ var07 Originators (datase		
√ var10 Parameters		
√ var11 Instruments		
Check All		

Figure 150 : Queries automatically fulfilled by MIKADO



This configuration is automatically saved at the same place than the summary file. If these 2 files need to be moved in another directory, as the path to the summary file is hard coded in the configuration file, the user needs to make use of the "Relocate NEMO export" button (Figure 151), in the connection tab, to give the new path to the CDI summary file.

	es			
itabase		Preset		
Driver class name	org.relique.jdbc.csv.CsvDriver	Mysql	Oracle	
JDBC connect url	Is\MIKADO\DY115 cruise?fileExtension=.txt&separator=	Access	Excel	
User		Ms Server	PostgreSql	
Passwd		Sybase	LibreOffice	
		Csv	Other	
		Relocate N	emo Export	
st				

Figure 151 : Relocation of the NEMO export file

- Check all the queries
- Generate the XML files by using the **Automatic menu : Generate > CDI**, using the configuration file created by MIKADO (see 11.6)

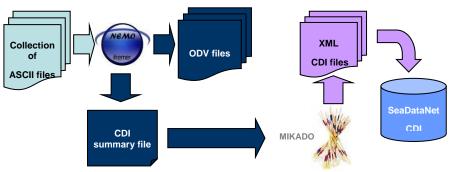


Figure 152: From « raw » data files to SeaDataNet CDI catalogue



To provide more detailed CDIs to the central catalogue, users can add information in their summary file (information about the project, the cruise, the instruments...). To do so, they have to add column in the summary file and write the corresponding queries in the configuration file created by MIKADO. Save the configuration file and generate the CDI records.

<u>Recommendation</u>: To add columns in the summary file, users will certainly use Excel or Open Office. Note that sometimes, Excel or Open Office changes the date format when opening the summary file and this could be a problem for MIKADO when it will generate the CDI records. To avoid this problem, users must define in the Text import Wizard (pop-up window in Excel when opening the summary file, see Figure Figure 153) the dates of the summary file as **Text** when they open their file in Excel.

 <u>G</u>eneral <u>T</u>ext <u>D</u>ate: DMY Do not import column 	all r		erts numeric va alues to text.	alues to numbe	rs, date values	s to dates, ar
Data <u>p</u> review						
Data <u>p</u> review Standard	Standard	Standard	Standard	Standard	Standard	Stand
ores - essays	Standard EDMO_AUTHOR				Standard DATASET_REV_	
Standard	EDMO_AUTHOR	AREA_TYPE			DATASET_REV_	DATE EDMO /
Standard LOCAL_CDI_ID FI35200653001_00001_H10 FI35200653001_00001_H10	EDMO_AUTHOR 486 486	AREA_TYPE Point Point	DATASET_NAME OVIDE 3 OVIDE 3	DATASET_ID FI35200653001 FI35200653001	DATASET_REV_ 2015-06-18 2015-06-18	DATE EDMO 4 515 515
Standard LOCAL_CDI_ID FI35200653001_00001_H10 FI35200653001_00001_H10 FI35200653001_00001_H10	EDMO_AUTHOR 486 486 486	AREA_TYPE Point Point Point	DATASET_NAME OVIDE 3 OVIDE 3 OVIDE 3	DATASET_ID FI35200653001 FI35200653001 FI35200653001	DATASET_REV_ 2015-06-18 2015-06-18 2015-06-18	DATE EDMO 515 515 515
Standard LOCAL_CDI_ID FI35200653001_00001_H10 FI35200653001_00001_H10	EDMO_AUTHOR 486 486 486	AREA_TYPE Point Point	DATASET_NAME OVIDE 3 OVIDE 3	DATASET_ID FI35200653001 FI35200653001	DATASET_REV_ 2015-06-18 2015-06-18 2015-06-18	DATE EDMO 4 515 515

Figure 153 : Text import wizard in Excel

11.4. Users of EXCEL

IMPORTANT: As ODBC driver for Excel is no more maintained in java, we cannot provide them in the MIKADO release anymore. So, the connections to Excel files are not possible anymore in MIKADO (since 3.4 release).

Here are suggested alternatives to get round this problem.

11.4.1. Excel file with only one sheet

Your excel file can be converted into csv file to be connected with MIKADO.

To do so:

- Open your excel file in Excel
- Save your file as csv file (possible separators: coma, semi-colon, tabulation, space)



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- Run MIKADO, go to Automatic menu > New or Open (your existing configuration file can be re-used with minor updates)
- Define the connection to your csv file clicking on "Csv" button

Connection Queries	
Database	Preset
Driver class name	Mysql Oracle
JDBC connect url	Access Excel
User	Ms Server PostgreSql
Passwd	Sybase LibreOffice
L	Csv Other

Select your csv file and select the type of separator

Manual Automatic Options Tools ? Connection Queries Preset Driver dass name JDBC connect un User Passwd Sybase LibreOffice Csv Office Csv Office Test Colsummary_ovide3_small_ODV_160rc7.csv Files of Type: Covwith SEMI COLON separator** Covwith COLON separator** Covwith SEMI COLON separator** Covwith Colon separator** Covvit Colon separator** C	🛃 Mikado 3.4 SDN V2 🛛 Automatic / I	New CDI 19139	
Database Preset Driver class name Mysql Oracle JDBC connect unt Access Excel User PostgreSql Sybase LibreOffice Passwd Sybase LibreOffice Csv Other Test Select CSV file Image: Coll_summary_ovide3_small_ODV_160rc7.csv Image: Coll_summary_ovide3_small_ODV_160rc7.csv File Name: Coll_summary_ovide3_small_ODV_160rc7.csv Image: Coll_summary_ovide3_small_ODV_160rc7.csv Image: Coll_summary_ovide3_small_ODV_160rc7.csv Files of Type: csvwth SEMI COLON separator " csvwth ColMA separator " Image: ColV_150rc7.csv	Manual Automatic Options Tools	?	
Database Preset Driver class name Mysql Oracle JDBC connect unt Access Excel User PostgreSql Sybase LibreOffice Passwd Sybase LibreOffice Csv Other Test Select CSV file Image: Coll_summary_ovide3_small_ODV_160rc7.csv Image: Coll_summary_ovide3_small_ODV_160rc7.csv File Name: Coll_summary_ovide3_small_ODV_160rc7.csv Image: Coll_summary_ovide3_small_ODV_160rc7.csv Image: Coll_summary_ovide3_small_ODV_160rc7.csv Files of Type: csvwth SEMI COLON separator " csvwth ColMA separator " Image: ColV_150rc7.csv	Connection Queries		
Driver class name JDBC connect un User Passwd Sybase LibreOffice Csv Other Test Select CSV file Est Ect Ect Ect Ect Ect Ect Ect Ect Ect Ec			Dreset
JDBC connect url JDBC connect url User Passwd Select CSV file Csv Other Csv Other Csv Other Csv Other Files ofper Files ofper CoL_summary_ovide3_small_ODV_160rc7.csv Files ofper Csv wth SEMI COLON separator '' Csv wth CSMI CSMI CSMI CSMI CSMI CSMI CSMI CSMI			
User Passwd Sybase LibreOffice Csv Other Test Check File Name: CDL_summary_ovide3_small_ODV_160rc7.csv File of Type: csv with SEMI COLON separator '' csv with TAB separator '' csv with TAB separator '' csv with COMA separator ''	Driver class name		Mysql Oracle
Passwd Sybase LibreOffice Test Select CSV file Image: CNR Image: CNR Image: Imag	JDBC connect url		Access Excel
Csv Other Test Select CSV file Image: Cox (n) Image: CNR Image: test Image: cox (n) Image: test Image: cox (n) Image: test Image: cox (n) Image: cox (n) Image: cox (n) Ima	User		Ms Server PostgreSql
Test Select CSV file Check Look In: CNR Image: test test Image: test Image: test test te	Passwd		Sybase LibreOffice
Test Check Look In: CNR Itest Itest_sch_xsd CDL_summary_ovide3_small_ODV_160rc7.csv File Name: CDL_summary_ovide3_small_ODV_160rc7.csv Files of Type: csv with SEMI COLON separator '' .csv with SEMI COLON separator '' .csv with COMMA separator ''			Csv Other
Check Look In: CNR Itest Itest_sch_xsd CDL_summary_ovide3_small_ODV_160rc7.csv File Name: CDL_summary_ovide3_small_ODV_160rc7.csv Files of Type: csv with SEMI COLON separator '' .csv with SEMI COLON separator '' .csv with TAB separator '' .csv with COMMA separator ''	Test Select CSV file		
File Name: CDI_summary_ovide3_small_ODV_160rc7.csv File Name: CDI_summary_ovide3_small_ODV_160rc7.csv Files of Type: csv with SEMI COLON separator '' csv with SEMI COLON separator '') CNR	
Files of Type: Csv with SEMI COLON separator ',' Csv with SEMI COLON separator ',' Csv with TAB separator ',' Csv with COMMA separator ','	📄 test_sch		
.csv with SEMI COLON separator ';' .csv with TAB separator " .csv with COMMA separator ';'	File <u>N</u> ame:	CDI_summary_ovide3_small_ODV_160rc7.csv	
.csv with TAB separator " .csv with COMMA separator ','	Files of <u>T</u> ype:		
		.csv with TAB separator " .csv with COMMA separator ','	

- Check the connection using the "Check" button
- The syntax for querying csv file is a little bit different from Excel:
 - in "From" clause : instead of using [sheet_name\$], you have to use directly the filename (without .csv extension)



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11.4.2. Excel file with several sheets

Excel file with few sheets

Your excel file can be converted into several csv files (1 csv files for 1 Excel sheet) to be connected with MIKADO. MIKADO will see the different csv files as different tables as long as the csv files are saved in the same folder.

To do so:

- Open your excel file in Excel
- Save each Excel sheet as csv file. Important: All the csv files must be saved in the same folder.
- Run MIKADO, go to Automatic menu > New or Open (your existing configuration file can be re-used with minor updates)
- Define the connection to the first csv file clicking on "Csv" button

Connection Queries	
Database	Preset
Driver class name	Mysql Oracle
JDBC connect url	Access Excel
User	Ms Server PostgreSql
Passwd	Sybase LibreOffice
	Csv Other

- Check the connection using the "Check" button
- The syntax for querying csv file is a little bit different from Excel:
 - in "From" clause : instead of using [sheet_name\$], you have to use directly the filename of your different csv files (without .csv extension).

11.4.3. Excel file with many sheets

If you use Excel files with many sheets, you have to convert your Excel file into an Open Office database (.odb).

To do so:

1) Convert your Excel file into an Open Office base

IMPORTANT: This procedure could take time if you have a lot of sheets and a lot of columns in your Excel file. Then, in the future, we recommend you to work directly with your new Open Office base instead of Excel.

- Open your Excel file in Open Office Calc
- Open a new Open Office base
- Drag and drop the different sheets from Open Office Calc to Open Office base: a table will be created for each Excel sheet
 - o Choose the name of your table (could be the same as Excel sheet name)
 - Tick the "Use first line as column name" box
 - Tick the "Create primary key" box if necessary



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		Base.odb - Op	enOffice.org Ba	se		_OX
<u>File Edit View</u>	Insert Tools Window Help					
🗈 • 🔚 🗔	ः 🖸 🔹 🍢 🐝 । 🗟 🔹 🔇) . 🛛 🖂 🗔	-			
Database	2	(opy table		R	
Tables Tables Queries Forms Reports	Table name Options Definition and data Definition As table view Append data Use first line as colum Create primary key Name	New Table				None -
	Help	<u>C</u> ancel	< <u>B</u> ack	<u>N</u> ext>	Create	
Embedded datab		atabase engine				

• Select the columns to create

Colonnes disponibles	>	CRUISE_ID CRUISE_NAME CRUISE_SHIP CRUISE_PLATFORM_TYPE CRUISE_PLATFORM_TYPE_CODE CRUISE_BEGIN_DATE CRUISE_END_DATE CRUISE_DEPARTURE CRUISE_ARRVAL CRUISE_LATN CRUISE_LATS CRUISE_LONW
		CRUISE_LONE CRUISE_ZONE CRUISE_ZONE CRUISE_DESCRIPTION CRUISE_UPDATE_DATE

- \circ $\,$ Define the format of each column if necessary
- o Create the table
- 2) Connect your Open Office base to MIKADO
- Run MIKADO, go to Automatic menu > New or Open (your existing configuration file can be re-used with minor updates)
- Define the connection to your odb file clicking on "Libre Office" button
- Select your odb file
- Check the connection using the "Check" button
- The syntax for querying odb file is a little bit different from Excel:
 - in "From" clause : instead of using [sheet_name\$], you have to use directly the table name defined in the Open Office dabatase



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If you need help to follow this procedure, do not hesitate to contact sdn-userdesk@seadatanet.org.

11.5. Specific topics for CDI

11.5.1. Distribution Web site (var39 to var43)

The content of the variables related to the distribution Website depends on the selected options in **Data centre type** in the **Options** main menu:

11.5.1.1. Data centre type = SDN V2

If the selected data centre type is SDN V2 (in the 'Options' > 'Data centre type' Menu), the first distribution Web site must be fixed to specific address for SeaDataNet.

The linkage address, the protocol and the distribution method are fixed to :

• Var40 : Distribution-data website =

'http://www.sdn-taskmanager.org/',

- Var 42 : Distribution-protocol = 'HTTP-DOWNLOAD'
- Var43 : Distribution-method = 'downloadRegistration'

Example of SQL query for one Distribution Website :

Select table2.col5 as var39,

'http://www.sdn-taskmanager.org/' as var40,

'Database' as var41,

'HTTP-DOWNLOAD' as var42,

'downloadRegistration' as var43

from table1, table2

where table1.localcdiid = ':\$'

and table1.col1 = table2.col2

Example of SQL query for several Distribution Websites :

(select "as var39,

Col1 as var40, Col2 as var41, Col3 as var42, Col4 as var43

from (Select 'http://www.sdn-taskmanager.org/' Col1, 'database' Col2, 'HTTP-DOWNLOAD' Col3,'downloadRegistration' Col4 From Dual))

Union

(Select 'http://www.distribution_website/' || table2.colx Col1, 'database' Col2, 'HTTP-DOWNLOAD' Col3,'URL' Col4

From table1, table2



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where table1.localcdiid = ':\$'
and table1.Col1 = table2.col2))
order by 1 desc

Where:

- The 1st select returns mandatory information for CDI SeaDataNet web site
- The 2nd select returns the information about another website where you can have information about the data
- The order by returns SeaDataNet web site as 1st record

Important : The first record returned by this query must be the SDN web site, so be careful when writing the order by clause.

11.5.1.2. Data centre type = ECOOP V1

If the selected data centre type ECOOP V1 (in the 'Options' > 'Data centre type' Menu), there are no restriction about the first distribution Web site.

11.5.2. GML extension for CDI

11.5.2.1. General principle

A GML extension has been made in the CDI format in the framework of the Geoseas project: it enables to detail the geographical features of tracks and polygons in conformity with the real geographical coverage. This enables to describe in CDI V1 format also hydrographical and seismic surveys. Thanks to this GML extension, the CDI can contain a collection of points, of tracks or of surfaces to describe the geographical features (it is not possible to mix Multicurves and Multisurfaces). This information can be used next to the existing and mandatory bounding box. Some fields of the GML extension could be used to add name, descriptions and possibly other metadata (it is useful for seismic tracks for example). This GML extension is represented by the variables (60, 62, 63) for Multicurves and (70, 72, 73) for Multisurfaces. (multiple queries).

Mikado supports 2 ways of fetching the geometry:

- using an Oracle SDO_geometry data type
- using wkt syntax (Well-Known Text markup language)

11.5.2.2. Example for points

In CDI practice multiple points will not be used, because each point measurement is considered as object for an individual CDI record. The location of a single measurement point is then already described by filling in only the west longitude and the south latitude of the Bounding Box (variables 24 and 26).



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11.5.2.3. Example for tracks

In CDI practice measurements might be undertaken as tracks or as areas. In those cases, the Bounding Box (variables 24 to 27) can be used to describe the geographical rectangle that covers or surrounds the track(s) or area(s) of the measurement. In those cases, the uttermost latitude and longitudes of the Bounding Box are filled in, entering first the most left and lower point (west longitude and south latitude) and as second the most right and upper point (east longitude and north latitude).

A more detailed description of the geographical location of each measurement track or area can then be given by using the variables corresponding to Multicurves (60, 62, 63). In the case of single or multiples tracks, these variables must be used with one line for one track and the coordinates of the curve position (variable 63) must be filled in as Longitude1 Latitude1 Longitude2 Latitude2 (coordinates separated by spaces and not by commas). Eastern longitudes (from 0.0000 to 180.0000) and Northern latitudes (from 0.0000 to 90.0000) are entered as positive and Western longitudes (from 0.0000 to -180.0000) and Southern latitudes (from 0.0000 to -90.0000) are entered as negative.

11.5.2.4. Example for surfaces

In case the measurement location is a polygon-shaped area (not rectangular) or multiple set of polygon-shaped areas, then the variables corresponding to Multisurfaces (70, 72, 73), can be used to describe the locations in detail. In the case of single or multiple areas (= surfaces), these variables must be used with one line for one surface and the surface coordinates (variable 73) are filled in as Longitude1 Latitude1 Longitude2 Latitude2 (coordinates separated by spaces and not by commas). Eastern longitudes (from 0.0000 to 180.0000) and Northern latitudes (from 0.0000 to 90.0000) are entered as positive and Western longitudes (from 0.0000 to -180.0000) and Southern latitudes (from 0.0000 to -90.0000) are entered as negative. The coordinate pairs should describe the polygon in a direction against the clock and the first coordinate pair must be repeated as last coordinate pair! Only convex polygons are to be described.

11.5.2.5. Well-Known Text markup language (WKT)

WKT (Well-Known Text) markup language is supported by MIKADO automatic mode for simple geometries such as POINT, LINESTRING and POLYGON and for multiple geometries such as MULTIPOINT, MULTILINESTRING and MULTIPOLYGON. Two options are possible: free text string and WKT text string (MIKADO detects automatically if position list is returned as free text or as WKT). The functions to use for WKT in MIKADO SQL queries are:

- In Oracle (version 10g or greater): SDO_UTIL.TO_WKTGEOMETRY(<geometrycolumn>)
- In PostGIS: asewkt(<geometrycolumn>)
- In MySQL: AsText(<geometrycolumn).

11.5.3. SensorML and O&M extensions for seismic CDI

Specific CDI extensions (SensorML and O&M) have been adopted for seismic data in the framework of the Geoseas project. Seismic data need specific considerations such as external viewing services, seismic line segmentation.

The fundamental criteria adopted were:

• What pertains to data discovery is restricted to the CDI



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- What pertains to data access is hosted by the O&M document
- What pertains to domain specific parameters is hosted by the SensorML document

11.6. Run the automatic generation

The second step in MIKADO Automatic version is the XML generation. The tool must have been configured before generating the XML files (see 11.2).

1- Select Generate in the Automatic Menu.

2- Select the catalogue you want to generate: EDMED, CSR, CDI, EDMERP, SESIMIC SENSORML or SEISMIC O&M.

🕌 Mikado 2.3 SDN V2		
Manual Automatic Option		
New Open Save Save as		
	Figure 154: Automatic generation of XML files	

3-Select the configuration file.



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🕌 Mikado V1.5 Manual Automatic Options	2	
	Open configuration	
1		
	Open configuration Cancel	SeeDericklast

Figure 155: Select the configuration file

If there is incoherence between the selected catalogue and the file opened (for example: the user has click on open, CDI and then has selected an XML file related to EDMED) the following message will appear:

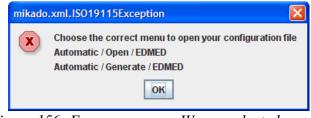


Figure 156: Error message – Wrong selected menu

MIKADO checks if all the mandatory variables had been filled in in the configuration file. If a mandatory variable is missing, MIKADO asks the user to complete it in the configuration file. After that, the user has to save the updated configuration file by selecting **Save** in the **Automatic Menu** and has to run again the generation by selecting **Generate** in the **Automatic** Menu.



Requests	query				
- S Cdi identifier	SELECT	var	sql נט_char(res.res_uaunn, דרדד-mum-נטט)ןן ו ןן		l r
Single subgueries		var29	to_char(res.res_datfin, YYYY-MW-DD) 1 to_char(res.res_datfin, 'HH24:MI:SS')	-	1
Var01 Collate Centre		var41	res.res cbase		
- Nar02 Measuring area type		var15	cam.cam_crnom	-	Ŀ
		var16	cam.cam_crno		8
 var03 Datum of coordinate syste 		var17	to_char(cam.cam_datdeb,"YYYY-MM-DD")		
Var04 Dataset name		var39	res.res volk/1024		
Second Data and St					
Var05 Dataset-id Sélectio Var06 Revision date (dat Var06 Revision date (dat Var08 Abstract (dataset Var09 Data Holding Cent Var11 Intrument		tory info	rmation : Create a new Query for var05 ! mcmt and pip. No Cancel	.PLP_TYF	
Var06 Revision date (dat Var08 Abstract (dataset Var09 Data Holding Cent	Missing manda	tory info Yes	Image: mation : Create a new Query for var05 ! Image: mathematical content of the second s	.PLP_TYF	\$','_
Var06 Revision date (dat Var08 Abstract (dataset Var09 Data Holding Cent Var01 Intrument	Missing manda	tory info Yes	rmation : Create a new Query for var05 ! Mo Cancel mt_cfmt and plp. pseta = substr(:\$*	.PLP_TYF	\$','_
Var06 Revision date (da Var08 Abstract (dataset var09 Data Holding Cent var09 Data Holding Cent var11 Intrument var12 Platform	Missing manda	tory info Yes	Image: mation : Create a new Query for var05 ! Image: mathematical content of the second s	.PLP_TYF	\$','_
Var06 Revision date (da Var08 Abstract (dataset Var09 Data Holding Cent Var11 Intrument Var12 Platform Var15 Cruise name	Missing manda	tory info Yes	Image: mation : Create a new Query for var05 ! Image: mathematical content of the second s	.PLP_TYF	\$','_
Var06 Revision date (da Var08 Abstract (dataset Var09 Data Holding Cent Var10 Intrument Var12 Platform Var12 Cruise name Var16 Cruise short name	Missing manda	tory info Yes	Image: mation : Create a new Query for var05 ! Image: mathematical content of the second s	.PLP_TYF	\$','_
Var06 Revision date (da Var08 Abstract (dataset Var09 Data Holding Cent Var10 Infrument Var12 Platform Var15 Cruise short name Var17 Cruise start date Var18 Station name	Missing manda	tory info Yes	Image: mation : Create a new Query for var05 ! Image: mathematical content of the second s	.PLP_TYF	\$','_
Var06 Revision date (da var08 Abstract (dataset var09 Data Holding Cent var09 Data Holding Cent var11 Intrument var12 Platform var16 Cruise name var16 Cruise start date var18 Station name var19 Station short name	Missing manda	tory info	Imation : Create a new Query for var05 ! No Cancel STR('\$',,1,2)+1),'YYYYMMDDHH24MISS)	.PLP_TYF	\$','_
Var06 Revision date (da Var08 Abstract (dataset Var09 Data Holding Cent Var10 Infrument Var12 Platform Var15 Cruise short name Var17 Cruise start date Var18 Station name	Missing manda	Yes Tr(:\$',IN	Imation : Create a new Query for var05 ! No Cancel STR('\$',,1,2)+1),'YYYYMMDDHH24MISS)	.PLP_TYF	\$','_

4- Select the directory in which you want to create the export XML files.

🕌 Export dire	ctory 🔀	
Look in:	output 🔻 🖬 🗇 🛱 🗄	
📑 test		
File Name:		
	eadatanet\logiciels\Mikado\test_mikado_v1_vt\V1.5\automatique\output	
57 C	directory	
Files of <u>T</u> ype:	directory 💌	
57 C	directory Export Cancel	
57 C		
57 C		

- 5- Select the export format in which you want to generate:
 - XML files,
 - ZIP file containing the XML files
 - both XML and ZIP files.



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Automatic id count
Export format Generate XML files Generate ZIP file Generate both files (XML + ZIP) Continue when error Cancel

Figure 158: Select the export format

A new functionality has been added in MIKADO 3. Now, MIKADO users can choose between two options for the automatic generation of XML files:

Option 1 "Continue when error": if MIKADO finds one record with mapping missing, or one record with error (mandatory fields null in the database for example), it writes a warning for this record in MIKADO screen, and continues to process next records. So, only the XML file of the records with warning will be missing in the output directory. To choose this option, you have to select the check box "Continue when error".

	Automatic id
	Export format Generate XML files Generate ZIP file Generate both files (XML + ZIP) Continue when error Cancel

Figure 159 : « Continue when error » option is activated

 Option 2: if MIKADO finds one record with mapping missing, or one record with error (mandatory fields null in the database for example), it writes a severe error in the logfile, and stops. In the output directory, the files generated before the detection of the error are available.



	Automatic
	id
AL ADDRESS OF THE OWNER	Export format
	Generate XML files
	Generate ZIP file
	Generate both files (XML + ZIP)
	Continue when error
	Cancel
Figure 10	60 : « Continue when error » option is not activated

6- Control the XML generation (SQL error, XML error). A progress bar and a percentage indicate the progress of the generation and a Cancel button allows cancelling the generation.

et CDI	
ancel	14%
eneration: Ongoing work	

6- During the generation, complete the mapping (if necessary see 7.2.2 for more details).



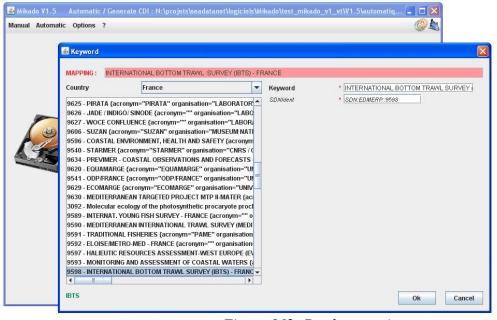


Figure 162: Do the mapping

All the XML files (extension .xml) will be then created in the chosen directory.



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12. Coupling table for Replication Manager

12.1. General principle

The coupling table is used to create a coupling file used by SeaDataNet Replication Manager to make the mapping between a LOCAL_CDI_ID (one profile, one time-series or one trajectory) and the name of the file containing this LOCAL_CDI_ID.

The coupling table contains the following information:

- LOCAL_CDI_ID: the CDI local identifier, as included in the central CDI directory at the SeaDataNet portal,
- Management modus:
 - Value equals to 1 or 3 if it concerns a pre-processed data file
 - 1 for mono-station files,
 - 3 for multi-station files,
 - Value equals to 2 if data have to be retrieved from a local database
 - Value equals to 4 if it concerns seismic data stored on an accessible space disk for access to the High Resolution Seismic Visualization Service
 - Value equals to 4 and 5 if it concerns seismic data stored on a non-accessible space disk (typically magnetic bands) for access to the High Resolution Seismic Visualization Service
- Format (see L24 vocabulary list),
- For modus 1 or 3:
 - File name.
- For modus 2:
 - $\circ~$ SQL query which allows to retrieve from local database all metadata and data necessary for creating the ODV data file,
 - Database connection parameters (protocol, ip address, port, name, login, password),
 - Mapping configuration XML file for the conversion of the original datasets to the SeaDataNet ODV format.
- For modus 4 :
 - Format for accessible data by High Resolution Seismic Visualization Service : HRSVS
- For modus 4 and 5:
 - Format for non-accessible data (typically magnetic bands) by High Resolution Seismic Visualization Service: HRSVS, SensorML, OEM, UKOAP190, SEGY
 - o File: to each format should correspond the associated file



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12.2. Configuration of the tool

12.2.1. Create a new configuration

To create a new configuration (connection to the database + queries), select **New** in the **Tools** main menu and choose **Coupling Table for Replication Manager** (*this menu will be renamed «Coupling table for Replication Manager win the next MIKADO release v3.6.3*).



Figure 163: Create a new configuration

There are 6 tabs which enable to input information about:

- Connection to the database,
- Main query,
- Query for Modus 2,
- Query for Modus 1 or Modus 3
- Query for Modus 4
- Query for modus 4 and 5



Main query	Modus 2	Modus 1 or Modus 3	Modus 4	Modus 4 and 9	5	
					Preset	
name					Mysql	Oracle
ct url					Access	Excel
					Ms Server	PostgreSql
					Sybase	OpenOffice
						Other
	name	name	name	name	name	name Ct url Ct url Mysql Mysql Access Ms Server

Figure 164: Coupling table - New configuration

12.2.1.1. Connection to the database

To define the JDBC connection parameter, please refer to the part 11.2.1.1 of this document.

12.2.1.2. Main query

- 1. Select the Main Query tab.
- 2. Fulfil the main query which identifies all the CDI local identifier (LOCAL_CDI_ID), as included in the central CDI directory at the SeaDataNet portal. This query must return only one column which is the LOCAL_CDI_ID of each CDI entry and that will be used for the Modus 2 query, the Modus 1 or 3 query, the Modus 4 query or the Modus 4 and 5 query
- 3. Check the main query by clicking on the **Check SQL** button (see 12.2.1.7).



ual Automatic	Options	Tools ?						
connection M	lain query	Modus 2	Modus 1 or Modu	s 3 Modus 4	Modus 4 and 5			
query								
SELECT	res.res_c	res				Â.	(CDI identifier)	
FROM	cam, res,	plp						
WHERE	and res.r	_crno=res.re es_cres=plp. lp_typtab='F'						A Ov
ORDER BY								Å
Test								
Cheo	k SQL							

Figure 165 : Coupling table - Main query

12.2.1.3. "Modus 1 or 3" query

- 1. Select the **Modus 1 or 3** tab.
- 2. Select the format of the CDI files using the dropdown menu (L24 vocabulary list)
- 3. Fulfil the "Modus 1 or 3" query which returns the local filename for each LOCAL_CDI_ID returned in the main query. The character ':\$' indicates the LOCAL_CDI_ID returned by the main query. **One identifier symbol (':\$') must be used in the WHERE condition of the** "Modus 1 or 3" query to identify the entry within the list. It will be automatically replaced by the current identifier in the list (see 11.2.1.2).
- 4. Check the query by clicking on the **Check SQL** button (see 12.2.1.7).
- 5. Preview the coupling table by clicking on the **Preview coupling table** button (see 12.2.1.8).



nnection N	ain query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5	
le format		
FPOINT - CI	imate and Forecast Point Data NetCDF	
uery		
ELECT	CRES 7SISM10_1 CAM.CAM_CAMREF _1 RES.RES_CRES '2p'	
ROM	res, fic, cam	Ú,
WHERE	and fit.fit_cres=res.res and fit_cfmt like (SEOV%) and res_cres=substr(\$', 1+instr(\$','_',-1, 1))	40.4
ORDER BY		μ Π
est		
Che	it SQL Preview coupling table	
Che	k SQL Preview coupling table	
Che	k SQL Preview coupling table	
Che	k SQL Preview coupling table	

Figure 166: Query for modus 1 or 3

12.2.1.4. "Modus 2" query

- 1. Select the Modus 2 tab.
- 2. Select the mapping configuration file which allows the conversion of the original datasets to the SeaDataNet ODV format.
- 3. Fulfil the Modus 2 query which retrieves from the local database all metadata and data necessary for creating the ODV data file, for each LOCAL_CDI_ID returned in the main query. The character ':\$' indicates the LOCAL_CDI_ID returned by the main query. One identifier symbol (':\$') must be used in the WHERE condition of the "Modus 2" query to identify the entry within the list. It will be automatically replaced by the current identifier in the list (see 11.2.1.2).
- 4. Check the query by clicking on the **Check SQL** button (see 12.2.1.7).
- 5. Preview the coupling table by clicking on the **Preview coupling table** button (see 12.2.1.8).



Manual Automatic	c Options Tools ?	
Connection M	Main query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5	
Mapping fil	le name	
N:\projets\sea	adatanet\logiciels\Mikado\test_mikado_v1_vt\V1.5\manuel\CDI_13012009.xml	
query		
SELECT	fic.fic_ficadr	
FROM	fic, res	
WHERE	fic.fic_cres=res.res_cres and res.res_cres=:\$	
ORDER BY		
Test		
Che	ack SQL Preview coupling table	

Figure 167: Query for modus 2

12.2.1.5. "Modus 4" query

- 1. Select the **Modus 4** tab.
- 2. Theres is no query to fulfil. Mikado will automatically create one line for each LOCAL_CDI_ID returned in the main query. The syntax is: Local_cdi_id; modus; format. Check the query by clicking on the **Check SQL** button (see 12.2.1.7).
- 3. Preview the coupling table by clicking on the **Preview coupling table** button (see 12.2.1.8).

Manual Automatic Options Tools ?	
Connection Main query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5	
Test	
Check SQL Preview coupling table	

12.2.1.6. "Modus 4 and 5" query

1. Select the Modus 4 and 5 tab.



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2. Fulfil the Modus 4 and 5 query which retrieves from the local database all metadata and data necessary for each LOCAL_CDI_ID returned in the main query. Each file that needs to be retrieved by the Replication Manager for the HRSVS has to appear as follow :

Local_cdi_id ; modus ; format ; file

ABCDEF; 4; HRSVS ABCDEF; 5; OEM; http://www.host.com/some/path/ABCDEF_oem.xml ABCDEF; 5; SEGY; http://www.webService.com/web_service/ABCDEF_1 ABCDEF; 5; SEGY; http://www.webService.com/web_service/ABCDEF_2 ABCDEF; 5; SEGY; http://www.webService.com/web_service/ABCDEF_3 ABCDEF; 5; SML; http://www.host.com/some/path/ABCDEF_fic1_sml.xml ABCDEF; 5; SML; http://www.host.com/some/path/ABCDEF_fic2_sml.xml ABCDEF; 5; SML; http://www.host.com/some/path/ABCDEF_fic3_sml.xml ABCDEF; 5; UKOAP190; http://www.host.com/some/path/ABCDEF_fic3_sml.xml

The character ':\$' indicates the LOCAL_CDI_ID returned by the main query. **One identifier** symbol (':\$') should be used in the WHERE condition of the "Modus 4 and 5" query to identify the entry within the list. It will be automatically replaced by the current identifier in the list (see 11.2.1.2). But you can also adapt the SQL query showed in 9.4.4.1 to get the right syntax in the coupling table for the Replication Manager.

- 3. Check the query by clicking on the **Check SQL** button (see 12.2.1.77).
- 4. Preview the coupling table by clicking on the **Preview coupling table** button (see 12.2.1.88).

nnection	Main query	Modus 2	Modus 1 or Modus 3	Modus 4	Modus 4 and 5		
iery							
ELECT	col1					(format)	
	col2					(file)	
ROM	((select '	DEM' col1, 'htt	p://www.ifremer.fr/ifrgeo	seas_seisn	nic/' CAM.CAM_CAMF	REFIIVSISM10_'ICAM.CAM_(CAMREFII'_'I 📮
HERE							A D V
RDER BY	(
st							
Ch	eck SQL		Preview coupling table				

12.2.1.7. Queries checking

Before generating the coupling table, MIKADO allows to check:

- the database connection,
- the main query,



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the query in the Modus 2, Modus 1 or 3, Modus 4 or Modus 4 and 5 tabs.

The results of the query checking appear in the **Test** frame. A **green** message informs that the query is correct; an **orange** message is a warning to tell the user that a reference to the IDs returned by the main query is missing and a **red** message informs that the query is wrong and gives information about the error.

anual Automatic	Options Tools ?						1
Connection	Main query Modus 2	Modus 1 or Modus 3	Modus 4	Modus 4 and 5			
query							
SELECT	res.res_cres					dentifier)	
FROM	cam, res, pip				<u> </u>		
WHERE	cam.cam_crno=res.re and res.res_cres=plp. and plp.plp_typtab='F'					A D V	
ORDER BY						A D	
Test							J
:\$ = [123977]	(CDI identifier)						
Che	ck SQL						

Figure 168: Right query – Green message

format			
DATLAS -	MEDATLAS ASCI		•
ery			
LECT	fic.fic_ficadr	a (Local filename)	
OM	res, fic		ų,
IERE	%c.%c_cres=res_res_cres		40.4
DER BY			40.4
t			
- (123977)	(CDI identifier)		_
	catalogue identifier must be present in the where clause (variable :\$)		

Figure 169: Missing reference to ID - Orange message



-

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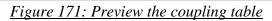
nnection M	ain query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5		_
e format			
DATLAS - M	IEDATLAS ASCII	•	
iery			
ELECT	fic.fic_ficad	(Local filename)	
ROM	res, fic		į,
HERE	fc.fc_cres=res.res_cres		101
RDER BY			10,1
st			
select fic.fic_ficad from res, fic where fic.fic_cres=res_cres			-
ORA-00904: "FIO1//FIO_FICAD": invalid identifier			Ļ
Chec	* SOL Preview coupling table		

Figure 170: Wrong query – Red message

12.2.1.8. Coupling table preview

In the **Modus 2**, **Modus 1 or 3**, **Modus 4** and **Modus 4** and **5** tabs, MIKADO allows to preview the coupling table which will be created during the generation. To do so, click on the **Preview coupling table** button and the preview will appear in the **Test** frame.

	EDATLAS ASCII	a
DATEAS - M	EDATDAS ASCI	J
uery		
ELECT	fic.fic_ficadr (Local filename)	
ROM	res, fic	
HERE	fic.fic_cres=res_res_ and res.res_cres=:\$	104
RDER BY		40.4
st		
st		
123978;1 or 3	t;MEDATLAS;/sismer_arch/geosciences/sonar/89002411/egg/89002411_0037e.00.im t;MEDATLAS;/sismer_arch/geosciences/sonar/89002411/egg/89002411_0038e.00.im	b.
	;;MEDATLAS;/sismer_arch/geosciences/sonat/99002411/egg/89002411_0038e.00.im ;;MEDATLAS;/sismer_arch/geosciences/sonat/99002411/egg/89002411_0038e.00.im	1
	IMEDATLAS/sismer_arch/geosciences/sonat/09002411/egg/09002411_0026w.00.im	





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12.2.2. Save the configuration file

Once the connection parameters and the queries have been fulfilled and checked, you can save the configuration file by selecting **Save** or **Save as** in the **Tools > Coupling table for Replication Manager** menu (*this menu will be renamed «Coupling table for Replication Manager» in the next MIKADO* release v3.6.3). The configuration file has an ".xml" extension.

Manual Automatic	Options Tools ?		4
Connection M	ain query Coupling table for Download Manager 🕨	New Open Import CDI configuration Save Save as Generate Exit	•
SELECT	res.res_cres		(CDI identifier)
FROM	cam, res, plp		
WHERE	cam.cam_cmo=res.res_crno and res.res_cres=plp.plp_no and plp.plp_typtab='F'		Ê.
ORDER BY			A V
Test			
Chec	k SQL		

Figure 172: Save the configuration file

Manual Automatic	Options Tools ?		<u></u>
	lain query Coupling table for Download Manager 🛛 🕨	New Open Import CDI configuration Save Save as Generate Exit	
query		EXIL	
SELECT	res.res_cres		(CDI identifier)
FROM	cam, res, plp		Ē.
WHERE	cam.cam_crno=res.res_crno and res.res_cres=plp.plp_no and plp.plp_typtab='F'		
ORDER BY			
Test			
Chec	k SQL		



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Manual Automatic Options Tools ?	
Connection Main query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5	
File format	
○ ODV ④ Medatlas ○ NetCDF ○ Png ○ Tiff ○ Segy ○ UkoaP190	
query SELECT	
Look In: Coupling	
FROM	
WHERE	
ORDER BY	
Test File Name: coupling_test_v2.5xml	
Files of Type: xml	
123978;1 or 3; 123978;1 or 3; 123978;1 or 3;	
123978/1 or 3	
1200 0, 5 gmmLarite is provide a straig geosciences/sona/89002411/egg/89002411_0020w.00.im	
Check SQL Preview coupling table	

Figure 173: "Save As" the configuration file- Steps 1 and 2

12.2.3. Open an existing configuration

It is possible to open an existing configuration file using MIKADO. To do so, select **Open** in the **Tools** main menu and choose **Coupling Table for Replication Manager** (*this menu will be renamed «Coupling table for Replication Manager» in the next MIKADO release v3.6.3*). Next, select the configuration file to open.



Figure 174: Open a configuration file with MIKADOfL05



🗴 Mikado V1.6		
Manual Automatic Options	Open coupling table configuration Look In: mikado_V1.6.3beta Conf dist languages lists mapping	
1	File Name: File Name: Files of Type: xml Open coupling table configuration Cancel	습 ^습 습 승 후
114		SeeDeteNet

Figure 175: Select the configuration file to open

12.2.4. Import a CDI configuration (MIKADO automatic)

It is possible to import an existing CDI configuration file created with MIKADO automatic. It allows to pre-fill the **Connection** and **Main query** tabs of the Coupling Table configuration. To do so, select **Open** in the **Tools** main menu and choose **Coupling Table for Replication Manager** (*this menu will be renamed «Coupling table for Replication Manager» in the next MIKADO release v3.6.3*). Next, select the configuration file to open. After that, it is possible to complete the Modus 1, 2 or 3 tabs.



Figure 176: Import a CDI configuration file



🔊 Mikado V1.6		- • ×
Ianual Automatic Options	Import automatic CDI configuration	
-	☐ ists ☐ mapping ☐ sql File Name: Files of Type: xml ▼	
	Import automatic CDI configuration Cancel	i i i i i i i i i i i i i i i i i i i

Figure 177: Select the configuration file to import

onnection Main	n query Modus 2 Modus 1 or Modus 3 Modus 4 M	fodus 4 and 5	
)atabase		Preset	
river class name DBC connect url	oracle.jdbc.driver.OracleDriver jdbc:oracle.thin:@borneo:1521.idm	Mysql Oracle Access Excel	
lser	serveur	Ms Server PostgreSql	
asswd	*****	Sybase OpenOffice	
		Other	
check			

Figure 178: Imported CDI configuration

12.3. Run the automatic generation

The second step is the generation of the Coupling table. The tool must have been configured before generating the XML files (see 12.2).



sdn-userdesk@seadatanet.org - www.seadatanet.org SeaDataNet - The pan-European infrastructure for marine and ocean data management 1- Select **Generate** in the **Tools > Coupling Table for Replication Manager** Menu (*this menu will be renamed «Coupling table for Replication Manager» in the next MIKADO release v3.6.3*).

2- Select the modus you want to generate: Modus1, Modus 2, Modus 3, Modus 4 or Modus 4 and 5.

Manual Automatic	Options Tools ?		1
Connection M Mapping fil	tain query Coupling table for Download Manager 🕨 e name	New Open Import CDI configuration	
N:\projets\sead	datanet\logiciels\Mikado\test_mikado_v1_vt\V1.5\manuel\	Save Save as Generate ►	
query		Exit	Modus 1 Modus 2 Modus 3
SELECT	fic.fic_ficadr	2	Modus 3 Modus 4 Modus 4 and 5
FROM	fic, res		
WHERE	fic.fic_cres=res.res_cres and res.res_cres=:\$		
ORDER BY			A D V
Test			
Chec	:k SQL Preview coupling table		

Figure 179: Automatic generation of XML files

3- Select the configuration file and the directory in which you want to create the coupling file.

Manual Automatic Options Tools ?
Connection Main query Modus 2 Modus 1 or Modus 3 Modus 4 Modus 4 and 5
Mapping file name
🗟 Coupling Table Options for Modus 3
Configuration input file
Q:/cpertuis/MIKADO/mikado_V2.5_sismer/usermanual.xml
Output directory
Q:\cpertuis\MIKADO\mikado_V2.5_sismer\output
Write mode
Append
O OverWrite
Ok Cancel
Check SQL Preview coupling table

Figure 180: Select the configuration file



4- Control the coupling table generation. A progress bar and a percentage indicate the progress of the generation and a **Cancel** button allows to cancel the generation.

Automatic id 73349 count 1660]
Cancel	74%

Figure 181: Coupling table generation: Ongoing work



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13. Batch mode

Since version 1.7 MIKADO can be run in batch mode.

The batch mode works under Windows and UNIX environments, with a small restriction if used by crontab under UNIX (see paragraph 13.3)

If severe errors occur the batch stops and errors are listed in the log file of Mikado. Fatal severe can be :

- SQL errors,
- Missing argument in the command line,
- Wrong configuration file,
- Writing rights missing in the output directory, ...

If argument "continue-on-error" is false, warnings are processed as severe errors, so they also interrupt the batch and are listed in the log file of Mikado (see paragraph 13.1.7).

13.1. Arguments for the command line

By default when MIKADO is run in interactive mode, the command line is :

java -Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp dist*;dist\lib* mikado.Mikado mikado-home=.

For the batch mode a number of arguments can be added in the command line with the following syntax :

java -Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp "[Mikado-home-path]\dist*";"[Mikado-home-path]\dist\lib*" mikado.Mikado mikado-home="[Mikado-home-path]" argument2= ... argument n=

OR

set MIKADO_FOLDER="path to your mikado installation folder"

java -Dcom.sun.xml.bind.v2.bytecode.ClassTailor.noOptimize=true -cp %MIKADO_FOLDER%\dist*;%MIKADO_FOLDER%\dist\lib* mikado.Mikado mikado-home=%MIKADO_FOLDER% argument2= ... argument n=

If the previous command line does not work, please try the following one:

Java –Djava.endorsed.dirs="dist\lib" –jar "[Mikado-home-path]\dist\Mikado.jar" mikado-home="[Mikado-home-path]" argument2= ... argument n=

The available arguments are described hereafter.

13.1.1. Argument mikado-home

This argument is mandatory ; it is the path of the home directory of Mikado. It can be equal to '.' if the batch is launched from the same directory than the home directory of Mikado.

Example:

mikado-home="N:\SeaDataNet\software\Mikado\mikado_V1.7"

or if you use the set MIKADO_FOLDER="path to mikado installation folder" command line

mikado-home=%MIKADO_FOLDER%



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13.1.2. Argument batch-type

This argument is mandatory ; it defines the type of output of Mikado.

3 values are allowed :

- XmlFiles : the output of Mikado will be individual XML files (one per LOCAL_CDI_ID)
- ZipFile : the output of Mikado will be zip files containing individual XML files (one per LOCAL_CDI_ID)
- Both : the output of Mikado will be individual XML files (one per LOCAL_CDI_ID) and zip files contaning the same individual XML files.

Example : batch-type=ZipFile

13.1.3. Argument batch-mode

This argument is mandatory; it defines which catalogue is concerned by the XML generation. 7 values are allowed : CDI19139, EDMED, CSR19139, EDMERP, EDIOSOP, EDIOSDS, EDIOSPL, SENSORMLSEISMIC, OEMSEISMIC

Example : batch-mode=CDI19139

13.1.4. Argument conf-file

This argument is the path and name of the XML configuration file to be used for the automatic generation of the XML catalogue files. This configuration xml file must have been firstly created with MIKADO automatic mode. This argument is mandatory, except if you use the "nemo-export" argument (see 13.1.5) for CDI generation (batch-mode=CDI19139).

Example : conf-file="X:\my_folder\my_configuration_file.xml"

13.1.5. Argument nemo-export

An alternative for CDI generation (batch-mode=CDI19139) is to replace the "conf-file" argument by the "nemo-export" argument to include the path of the CDI summary txt file generated by NEMO software (see 13.1.4). MIKADO will create automatically the corresponding configuration file including predefined queries as described in 11.3. This configuration is automatically saved at the same place than the summary file.

Example: nemo-export="X:\my_folder\my_CDI_SUMMARY.txt"

Using the argument nemo-export ="*X*:*my_folder*\my_CDI_SUMMARY.txt" in the batch command will generate a configuration file : *X*:*my_folder*\my_CDI_summary.xml.

13.1.6. Argument output-dir

This argument is mandatory ; it defines the output directory of MIKADO which is the directory where the zip files and/or the xml files are written by MIKADO.

Example : output-dir="X:\my_folder\"



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13.1.7. Argument continue-when-error

This argument is mandatory ; 2 values are allowed:.

- true : if MIKADO finds one record with mapping missing, or one record with mandatory field(s) null in the database, it writes a warning for this record in the logfile, and continues to process next records. So, only the XML file of the records with warning will be missing in the output directory.
- false : if MIKADO finds one record with mapping missing, or one record with mandatory field(s) null in the database, it writes a severe error in the logfile, and stops. In the output directory, the files generated before the detection of the error are available.

Example : continue-when-error=true

13.1.8. Argument log-file

By default the log file of Mikado is created in Mikado-home and it is named Mikado.log.

User can choose another Path and Name by using the log-file argument in the command line.

Example : log-file="X:\my_folder\my_log_file.log"

13.1.9. Argument trace

By default the trace argument is set to false.

This argument is for tuning the SQL time response of SQL queries written in the configuration file. 2 values are allowed :

- sql : a tuning of the SQL request is generated on the standard output, this tuning can be redirected to a text file, using the character '>'
- false : no tuning of the SQL queries.

Example :

trace = sql /* trace is written on the standard output */

trace=sql > x:\my_folder\traces\CTDF02_trace.txt /* trace is written in a text file*/

The trace file contains the elapsed time for each query of MIKADO's configuration file (main query, single queries and multiple queries). At the end of the trace file, there is a summary giving the time response of the SQL main query, the SQL query with the maximum elapsed time and the average elapsed time of all queries.

Example of trace file :

```
+======+
| MAIN QUERY ==> 2 milliseconds |
+=======+
select mikado_cdi_localcdiid
from mikado_cdi_temp
where mikado_cdi_CBASE = 'HYDR01'
and mikado_cdi_localcdiid like 'FI35198600141%'
```



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```
| :$ = FI35198600141 00270 H09 |
+==============================+
++
| SINGLE QUERY ==> 3 milliseconds |
++
select '486' as var01, '486' as var36, '486' as var09
from dual
etc ...
++
| MULTIPLE QUERY ==> 3 milliseconds |
++
select dpt.dpt edmo code as var07
from dpt, mis, cam, res, mikado cdi temp
where mikado cdi localcdiid = 'FI35198600141 00270 H09'
and mikado cdi cres=res.res cres
and res.res crno = cam.cam crno
and mis.mis crno = cam.cam crno
and mis.mis norang = 1 and mis.mis cdpt = dpt.dpt cdpt
etc ...
| MAIN QUERY TIME ==> 2 milliseconds |
select mikado cdi localcdiid
from mikado cdi temp
where mikado cdi CBASE = 'HYDR01'
and mikado cdi localcdiid like 'FI35198600141%'
| MAXIMUM SUBQUERY TIME ==> 10 milliseconds |
+===================================++
select cod.cod libel as var03
from cod, res , mikado cdi temp
where mikado_cdi_localcdiid = 'FI35198600141_00560_H09'
```



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13.1.10. Argument max-files-in-zip

By default the number of XML files in a MIKADO zip file is 1000. User can changes this number of files per zip file by using the argument max-files-in-zip.

Example : max-files-in-zip=3000

13.1.11. Argument zip-prefix

By default there is no prefix on the zip file filename, and, by default, they are called SeaDataNet_[catalogue]_[x].zip (x starting with 1). Users can add a prefix to the zip file by using the zip-prefix argument.

Example : zip-prefix=CTDF02

For the CDI catalogue, the zip files will be called :

CTDF02_SEADATANET_CDI_1.zip, CTDF02_SEADATANET_CDI_2.zip,...

13.1.12. Argument UpdateCenter

This argument, set to on, allows to automatically update the vocabulary lists when running MIKADO in batch mode (by default, it is set to on).

#

Example : UpdateCenter=off

13.2. Example of Mikado.bat file for windows

REM # Mikado 1.7 #	
REM ####################################	
REM # endorsed for java < JDK 6 Update 4 release	
REM # (JAX-WS 2.1 and JAXB 2.1 is available in JDK 6 Update 4 release) #	
REM####################################	

REM ####################################	####
REM # Mikado with user interface	#
REM ####################################	####



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REM # mikado-home=mikado directory		#
REM # optional : log-file=name of logfile (default Mikado.log)		#
REM # optional : trace=false(default) or sql		#
REM # optional : max-files-in-zip=1000 (default)	#	
REM # optional : zip-prefix= (no prefix by default)		#
REM ####################################	##	
REM#java -Djava.endorsed.dirs="dist/lib" -jar dist/mikado.jar mikado-home=	4	
REM ####################################	##	
REM # Mikado batch		#
REM ####################################	##	
REM # mikado-home=mikado directory		#
REM # batch-type=XmlFiles,ZipFile or Both		#
REM # batch-mode=CDI,EDMED,CSR or EDMERP	#	
REM # conf-file=path of xml automatic configuration file	#	
REM # output-dir=output directory for generation		#
REM # continue-when-error=true or false		#
REM # optional : log-file=name of logfile (default Mikado.log)		#
REM # optional : trace=false(default) or sql		#
REM # optional : max-files-in-zip=1000 (default)	#	
REM # optional : zip-prefix= (no prefix by default)		#
REM # optional : UpdateCenter=on or off (default on for vocabulary update	e) #	
REM ####################################	##	
java -Djava.endorsed.dirs="dist/lib" -jar c:\program\mikado\dist\mikad	o.jar r	nikado

java -Djava.endorsed.dirs="dist/lib" -jar c:\program\mikado\dist\mikado.jar **mikado-home**=C:\program\mikado **batch-type**=ZipFile

batch-mode=CDI conf-file=X:\my_folder\CDI_CTDF02_all_V1.6.1.xml

output-dir=X:\my_folder continue-when-error=true

log-file=X:\ my_folder\CDI_CTDF02.log

trace=sql > X:\my_folder\trace_CTDF02.txt

max-files-in-zip=3000 zip-prefix=CTDF02

13.3. Crontab for Unix.

Under UNIX environment, if the user launches batch mode of MIKADO by crontab, there is no DISPLAY opened. So MIKADO in batch mode will stop with a fatal error "cannot open DISPLAY".

To bypass this, user needs to install a virtual display, like XvFb.

For example, for Solaris a software for virtual display installation and tutorial can be downloaded from :

http://www.idevelopment.info/data/Unix/General_UNIX/GENERAL_XvfbforSolaris.shtml.



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14. Validation of XML files created by MIKADO

IMPORTANT: The Validation Service (www.seadatanet.org/validator) is not maintained anymore.

14.1. CDI and CSR ISO 19139

CDI and CSR ISO19139 XML Schemas are dynamically supported by ISO XML lists for EDMED, EDMO, EDMERP, CSR, Vocabs, ISO through Schematron. This allows to validate CDI and CSR XML entries using a XML editor (XML Spy or Oxygen or other XML editors).

To validate your CDI and CSR WML files created by MIKADO using Oxygen Software for example:

- Open your XML file : File > Open
 - o The file is display on the screen
- Run the validation : Document > Validate > Reset cache and validate
 - o Errors and warnings are displayed
 - o Warning are not obstacles for XML delivery
 - o Errors must be corrected
- ⇒ Green validation: your XML file is valid (see Figure 182)
- ⇒ Red validation: your XML file is not valid and must be corrected (see Figure 183)

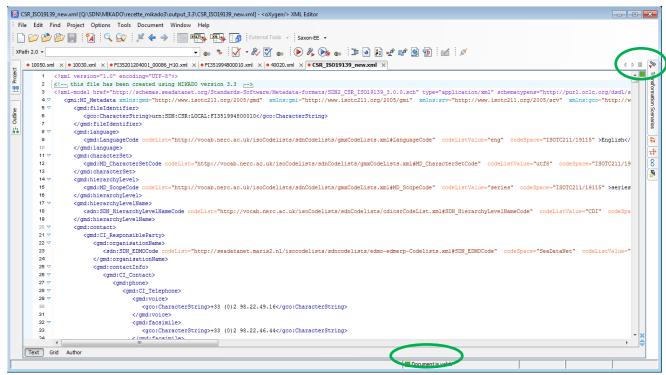


Figure 182 : Green validation : Document is valid



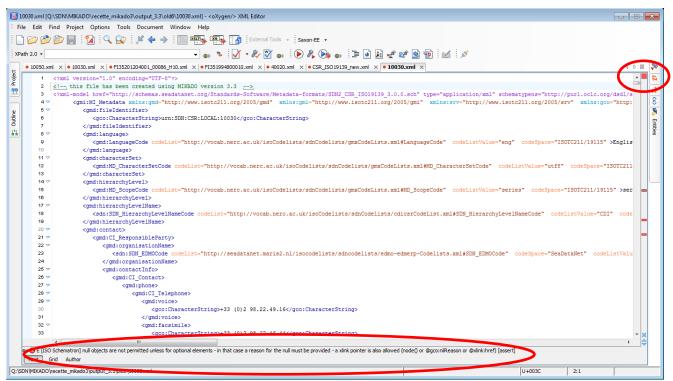


Figure 183 : Red validation : Document is not valid and must be corrected

14.2. EDMED, EDMERP, EDIOS

EDMED, EDMERP and EDIOS XML Schemas will be upgraded soon (schematron) in a comparable way allowing to validate these also with XML editors.



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