

Data Center

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Element Description

The Data Center metadata element is used to identify and provide contact information for the organization responsible for originating, processing, archiving, and/or distributing the dataset being described in the metadata.

Contact information for an individual or a group affiliated with the data center can also be provided. Information about an individual should be provided in the DataCenter/ContactPerson sub-fields. Information about a group should be provided in the DataCenter/ContactGroup sub-fields.

There are 5 options for providing contact information in the UMM:

1. **Data Center**
2. [Data Center/Contact Person](#)
3. [Data Center/Contact Group](#)
4. [Contact Person](#)
5. [Contact Group](#)

Details for each of these options are provided on a separate wiki page. This wiki page describes details for option 1 (Data Center).

Best Practices

Each Data Center listed in the metadata must be affiliated with a **Role**. Providing a Role for the Data Center is required and must be selected from a controlled vocabulary list. There are four options for Role:

1. ARCHIVER: the organization responsible for storing the data. This role should be selected when listing the name of a NASA Distributed Active Archive Center (DAAC).
2. DISTRIBUTOR: the organization responsible for distributing the data. The archiver and distributor will often be the same organization. In this case, both 'ARCHIVER' and 'DISTRIBUTOR' can be specified for the same data center.
3. ORIGINATOR: the organization responsible for producing the data.
4. PROCESSOR: the organization responsible for processing the data. Not all data is necessarily processed. Examples of processing include: converting raw data into level 1 data; re-gridding or re-projecting data to make a higher level product; combining multiple data products to derive a model output.

The same data center may be responsible for multiple roles. In this case, multiple roles may be assigned to the same data center.

Other Data Center metadata fields include:

Short Name: The name of the Data Center (abbreviated version). Providing a Data Center Short Name is required. The Data Center Short Name must be selected from a controlled vocabulary maintained in the [Keyword Management System \(KMS\)](#). A list of valid Data Center keywords can be found here: https://gcmd.earthdata.nasa.gov/kms/concepts/concept_scheme/providers?format=csv Note that the Short Name should be selected from the "Short_Name" column in the keyword list.

Long Name: The name of the Data Center. Providing a Data Center Long Name is optional, however, it is recommended that a long name be provided if one exists in the keyword list since short names are often comprised of acronyms. A list of valid Data Center keywords can be found here: https://gcmd.earthdata.nasa.gov/kms/concepts/concept_scheme/providers?format=csv Note that the Long Name should be selected from the "Long_Name" column in the keyword list.

Uuid: The uuid is the unique identifier associated with the Data Center name in the controlled vocabulary keyword list. Providing the uuid is completely optional. The uuid can be found in the [Data Centers keyword list](#) in the "UUID" column.

Contact Information: Any relevant contact information for the data center can be provided in the Contact Information fields. Providing contact information is optional, however, it is recommended that at least one piece of contact information (such as a link, email or phone number) be provided. Some examples of contact information include: phone number, email, fax, related links, service hours, and contact instructions. See the element specification table below for full details.

Example:

Role: ARCHIVER, DISTRIBUTOR

ShortName: NASA/MSFC/GHRC

LongName: Global Hydrology Resource Center, Marshall Space Flight Center, NASA

ContactInformation/RelatedURL/Url: <https://ghrc.nsstc.nasa.gov/home/>

ContactInformation/RelatedURLs/UrlContentType: DataCenterURL

ContactInformation/RelatedURLs/Type: HOME PAGE

ContactInformation/RelatedURLs/Description: The Global Hydrology Resource Center (GHRC) website's home page

ContactInformation/ServiceHours: 8 AM to 5 PM Central Time

ContactInformation/ContactMechanism/Type: Email

ContactInformation/ContactMechanism/Value: support-ghrc@earthdata.nasa.gov

ContactInformation/ContactMechanism/Type: Phone

ContactInformation/ContactMechanism/Value: 256-961-7932

Element Specification

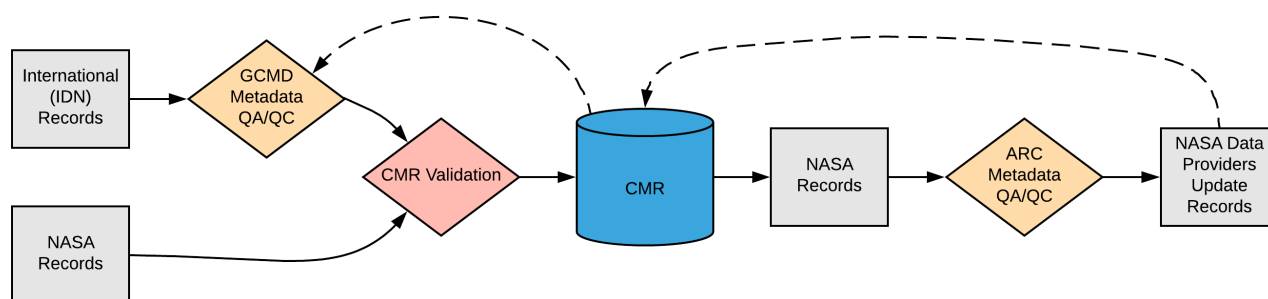
Data Centers is a required element. At least 1 Data Center must be provided. Multiple Data Centers may also be provided, if necessary (Cardinality: 1..*).

Model	Element	Type	Usable Valid Values	Constraints	Required?	Cardinality	Notes
UMM-Common	DataCenters/Roles	Enumeration	DISTRIBUTOR ORIGINATOR ARCHIVER PROCESSOR	n/a	Yes	1..*	Location of the enumeration list in the UMM-Common schema: https://git.earthdata.nasa.gov/projects/EMFD/repos/unified-metadata-model/browse/collection/v1.10/umm-cmn-json-schema.json#1435 Note: enumerations are case sensitive. This means that the Role must be provided in all caps to pass validation.
UMM-Common	DataCenter/ShortName	String	Data Center Short Name Keywords	KMS controlled	Yes	1	
UMM-Common	DataCenter/LongName	String	Data Center Long Name Keywords	KMS controlled	No	0..1	It is highly recommended that a Data Center Long Name be provided if one exists in the keyword list.
UMM-Common	DataCenter/Uuid	Number	Data Center UUID	KMS controlled	No	0..1	
UMM-Common	DataCenters/ContactInformation/RelatedURLs/Url	String	n/a	n/a	Yes, if applicable	1..*	Providing a URL is optional. If information is provided in any of the 'RelatedURLs' metadata fields, then the URL must be provided. This URL should link to the home page of the Data Center's website.
UMM-Common	DataCenters/ContactInformation/RelatedURLs/UrlContentType	Enumeration	DataCenterURL	n/a	Yes, if applicable	1	This field is only required if a URL is provided. URL Content Types are controlled as an enumeration list in the UMM-Common schema . The only valid option for Data Center Related URLs is "DataCenterURL".
UMM-Common	DataCenters/ContactInformation/RelatedURLs/Type	String	HOME PAGE	KMS controlled	Yes, if applicable	1	This field is only required if a URL is provided. Related URL Types are controlled by GCMD vocabulary (URL Content Types). The only valid keyword option for a Data Center Related URL is "HOME PAGE".
UMM-Common	DataCenters/ContactInformation/RelatedURLs/Description	String	n/a	1 - 1024 characters	No	0..1	It is strongly recommended that a description be provided for each URL.
UMM-Common	DataCenters/ContactInformation/ServiceHours	String	n/a	1 - 1024 characters	No	0..1	The time zone should be specified.
UMM-Common	DataCenters/ContactInformation/ContactInstructions	String	n/a	1 - 2048 characters	No	0..1	Supplemental/ special instructions on how or when to contact the data center.

UMM-Common	DataCenters /ContactInformation /ContactMechanism/Type	Enumeration	Direct Line Email Facebook Fax Mobile Modem Primary TDD/TTY Phone Telephone Twitter U.S. toll free Other	n/a	Yes, if applicable	1	Providing a contact mechanism is optional. If provided, the Type is required and must be selected from the ContactMechanismType enumeration list found in the UMM-Common schema. The actual value (e.g. the phone number or email) should be provided in the Value field (see below). Multiple contact mechanisms can be provided for each data center (Cardinality 0..*).
UMM-Common	DataCenters /ContactInformation /ContactMechanism/Value	String	n/a	1 - 1024 characters	Yes, if applicable	1	Providing a contact mechanism is optional. If provided, a Value is required (e.g. if the contact mechanism type is 'Email' then the actual email would go in this field). Multiple contact mechanisms can be provided for each data center (Cardinality 0..*).
UMM-Common	DataCenters /ContactInformation /Address/StreetAddresses	String	n/a	1 - 1024 characters	No	0..*	Multiple Street Addresses may be provided to indicate multiple lines in a street address.
UMM-Common	DataCenters /ContactInformation /Address/City	String	n/a	1 - 100 characters	No	0..1	
UMM-Common	DataCenter /ContactInformation /Address/StateProvince	String	n/a	1 - 100 characters	No	0..1	
UMM-Common	DataCenter /ContactInformation /Address/PostalCode	String	n/a	1 - 20 characters	No	0..1	
UMM-Common	DataCenter /ContactInformation /Address/Country	String	n/a	1 - 100 characters	No	0..1	

Metadata Validation and QA/QC

All metadata entering the CMR goes through the below process to ensure metadata quality requirements are met. All records undergo CMR validation before entering the system. The process of QA/QC is slightly different for NASA and non-NASA data providers. Non-NASA providers include interagency and international data providers and are referred to as the International Directory Network (IDN).



Please see the expandable sections below for flowchart details.

- Manual Review
 - Identify errors, discrepancies or omissions.
 - Confirm that the URL links to the appropriate web page.
- Automated Review
 - Check that the field length is not greater than 160 characters (Dataset_ID).

- Check that the field length is not greater than 1,024 characters (Hours_of_Service).
- Check that the field length is not greater than 2,048 characters (Instructions).
- Check that the field length is not greater than 2,048 characters (Organization_URL).
- Check that the field has been populated.
- Check that the field value is not a duplicate.
- Check that the field value (Role) matches the enumeration value (DISTRIBUTOR, ORIGINATOR, ARCHIVER, PROCESSOR).
- Check for potential broken links.
- Check that the URL is formatted correctly.

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ARC Priority Matrix

Priority Categorization	Justification
Red = High Priority Finding	This element is categorized as highest priority when: • No Data Center information is provided. ◦ No Data Center Short Name is provided. ◦ No Data Center Role is provided. ◦ No Data Center URL is provided. • The Data Center URL provided is broken. • The Data Center URL provided is incorrect/unrelated to the data center. • The URL Content Type does not match the enumeration value "DataCenterURL". • The URL Type provided does not match the keyword value "HOME PAGE". • The Data Center Short Name and/or Long Name does not align with the KMS. ◦ The Short Name and/or Long Name does not exist in the KMS. ◦ The Short Name and/or Long Name is placed in the incorrect position of the hierarchy (e.g. DOC/NOAA/OOE should not be provided in the Long Name field because it is categorized as a Short Name in the KMS). ◦ There is an invalid Short Name/ Long Name relationship (e.g. Short Name: DOC/NOAA/OOE, Long Name: Energy Team, U.S. Geological Survey, U.S. Department of the Interior, is not a valid combination in the KMS). • The UUID provided is incorrect for the Data Center. • The Data Center provided is incorrect for the dataset. • The Data Center Role provided does not align with the UMM-Common enumeration values (DISTRIBUTOR, ORIGINATOR, ARCHIVER, PROCESSOR). • The Contact Mechanism Type does not align with the UMM-Common enumeration values (Direct Line, Email, Facebook, Fax, Mobile, Modem, Primary, TDD/TTY Phone, Telephone, Twitter, U.S. toll free, Other). • The Contact Information provided is incorrect.
Yellow = Medium Priority Finding	This element is categorized as medium priority when: • The Data Center Related URL 'Description' element is left blank. It is highly recommended that a description be provided for each URL. • The Data Center Related URL provided in the metadata redirects - it is recommended that the most current link always be provided. • A recommendation is made to change a valid Data Center keyword for purposes of consistency with other similar metadata records. • No Data Center Long Name is provided when a long name exists in the KMS. • The information provided in the Data Center elements is better suited for the Data Center/Contact Person, Data Center /Contact Group, Contact Group or Contact Person metadata elements.
Blue = Low Priority Finding	This element is categorized as low priority when: • The Data Center Related URL is provided via "http" when "https" is available.
Green = No Findings/Issues	The element is provided and follows all applicable criteria specified in the best practices section above.

ARC Automated Checks

ARC uses the [pyQuARC library](#) for automated metadata checks. Please see the [pyQuARC GitHub](#) for more information.

Dialect Mappings

DIF 9 (Note: DIF-9 is being phased out and will no longer be supported after 2018)

DIF 10

Data Centers is a required element. At least 1 Data Center must be provided. Multiple Data Centers may also be provided, if necessary (Cardinality: 1..*).

UMM- C Element	DIF 10 Path	Type	Usable Valid Values	Constraints	Required in DIF 10?	Cardinality	Notes
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DataCenters/Roles	Organization/Organization_Type	Enumeration	PROCESSOR ORIGINATOR ARCHIVER DISTRIBUTOR	n/a	Yes	1..*	
DataCenters/ShortName	Organization/Organization_Name/Short_Name	String	Data Center Short Name Keywords	KMS controlled	Yes	1	
DataCenters/LongName	Organization/Organization_Name/Long_Name	String	Data Center Long Name Keywords	KMS controlled	No	0..1	
DataCenters/Uuid	Organization/Organization_Name attribute uuid	String	Data Center UUID	KMS controlled	No	0..1	
DataCenters/ContactInformation/ServiceHours	Organization/Hours_Of_Service	String	n/a		No	0..1	
DataCenters/ContactInformation/ContactInstructions	Organization/Instructions	String	n/a		No	0..1	
DataCenters/ContactInformation/RelatedURLs/Url	Organization/Organization_URL	String	n/a		No	0..1	
	Organization/Data_Set_ID	String	n/a		No	0..*	This field does not map to UMM.

Example Mapping

DIF 10

```
<Organization>
  <Organization_Type>ARCHIVER</Organization_Type>
  <Organization_Type>DISTRIBUTOR</Organization_Type>
  <Organization_Name>
    <Short_Name>SEDAC</Short_Name>
    <Long_Name>Socioeconomic Data and Applications
Center</Long_Name>
  </Organization_Name>
  <Organization_URL>http://sedac.ciesin.columbia.edu<
/Organization_URL>
  <Dataset_ID>CIESIN_SEDAC_ESI_2000</Dataset_ID>
</Organization>
```

UMM

```
"DataCenters": [
  {
    "Roles": [
      "ARCHIVER",
      "DISTRIBUTOR"
    ],
    "ShortName": "SEDAC",
    "LongName": "Socioeconomic Data and Applications
Center"
    "ContactInformation": {
      "RelatedUrls": [
        {
          "URLContentType": "DataCenterURL",
          "Type": "HOME PAGE",
          "URL": "http://sedac.ciesin.columbia.edu"
        }
      ]
    }
  }
],
```

ECHO 10

In ECHO 10, it is required that either Processing Center OR Archive Center be provided. It is not necessary to provide both. If a data center name is provided in the 'Contacts' section (with an appropriate GCMD Data Center Short Name and 'Type' value) then it will be mapped to the UMM 'Data Centers' element.

UMM- C Element	ECHO 10 Path	Type	Usable Valid Values	Constraints	Required in ECHO10?	Cardinality	Notes
DataCenters /ShortName	ProcessingCenter	String	Data Center Short Name Keywords	KMS controlled	Yes, if applicable	1	The ECHO 10 field 'ProcessingCenter' maps to the UMM field DataCenter/ShortName and the associated DataCenter/Role will automatically be set to "PROCESSOR". Values provided in the 'ProcessingCenter' field should be selected from the Data Center keywords list: https://gcmd.earthdata.nasa.gov/kms/concepts/concept_scheme/providers?format=csv Note that the Short Name should be selected from the "Short_Name" column in the keyword list.
DataCenters /ShortName	ArchiveCenter	String	Data Center Short Name Keywords	KMS controlled	Yes, if applicable	1	The ECHO 10 field 'ArchiveCenter' maps to the UMM field DataCenter/ShortName and the associated DataCenter/Role will automatically be set to "ARCHIVER". Values provided in the 'ArchiveCenter' field should be selected from the Data Center keywords list: https://gcmd.earthdata.nasa.gov/kms/concepts/concept_scheme/providers?format=csv Note that the Short Name should be selected from the "Short_Name" column in the keyword list.
DataCenters /Roles	Contacts/Contact/Role	String	n/a	1 - 80 characters	Yes, if applicable	1	While this field is not controlled in ECHO 10, it is highly recommended that the Role be selected from the UMM-Common enumeration values for role: DISTRIBUTOR, ORIGINATOR, ARCHIVER, PROCESSOR. The CMR will attempt to map any value provided in this field to one of the 4 roles above when displaying metadata in the Earthdata Search client. Providing one of the UMM-Common enumeration values will help prevent translation errors from occurring. While it is recommended that the enumeration be provided in all caps, the translation from ECHO10 UMM should correct for mixed case.
DataCenters /ShortName	Contacts/Contact/OrganizationName	String	Data Center Short Name Keywords	1 - 200 characters	No	0..1	Values provided in the 'OrganizationName' field should be selected from the Data Center keywords list: https://gcmd.earthdata.nasa.gov/kms/concepts/concept_scheme/providers?format=csv Note that the Organization Name should be selected from the "Short_Name" column in the keyword list.
DataCenters /ContactInformation /ServiceHours	Contacts/Contact/HoursOfService	String		1 - 1024 characters	No	0..1	
DataCenters /ContactInformation /ContactInstructions	Contacts/Contact/Instructions	String		1 - 2048 characters	No	0..1	
DataCenters /ContactInformation/Address /StreetAddresses	Contacts/Contact /OrganizationAddresses/Address/StreetAddresses	String		1 - 1024 characters	Yes, if applicable	1	Providing an address is optional. If provided, all of the address sub-elements (StreetAddress, City, StateProvince, PostalCode, Country) are required. Use "Unknown" if no value exists.
DataCenters /ContactInformation/Address /City	Contacts/Contact /OrganizationAddresses/Address/City	String		1 - 80 characters	Yes, if applicable	1	Providing an address is optional. If provided, all of the address sub-elements (StreetAddress, City, StateProvince, PostalCode, Country) are required. Use "Unknown" if no value exists.
DataCenters /ContactInformation/Address /StateProvince	Contacts/Contact /OrganizationAddresses /OrganizationAddresses/StateProvince	String		1 - 30 characters	Yes, if applicable	1	Providing an address is optional. If provided, all of the address sub-elements (StreetAddress, City, StateProvince, PostalCode, Country) are required. Use "Unknown" if no value exists.
DataCenters /ContactInformation/Address /PostalCode	Contacts/Contact /OrganizationAddresses/Address/PostalCode	String		1 - 20 characters	Yes, if applicable	1	Providing an address is optional. If provided, all of the address sub-elements (StreetAddress, City, StateProvince, PostalCode, Country) are required. Use "Unknown" if no value exists.
DataCenters /ContactInformation/Address /Country	Contacts/Contact /OrganizationAddresses/Address/Country	String		1 - 10 characters	Yes, if applicable	1	Providing an address is optional. If provided, all of the address sub-elements (StreetAddress, City, StateProvince, PostalCode, Country) are required. Use "Unknown" if no value exists.
DataCenters /ContactInformation /ContactMechanism/Value	Contacts/Contact /OrganizationPhone s/Phone/Number	Number		1 - 23 characters	Yes, if applicable	1	Providing a phone number is optional. If provided, all of the sub-elements (Number, Type) are required.
DataCenters /ContactInformation /ContactMechanism/Type	Contacts/Contact /OrganizationPhone s/Phone/Type	String		1 - 30 characters	Yes, if applicable	1	Providing a phone number is optional. If provided, all of the sub-elements (Number, Type) are required.

DataCenters /ContactInformation /ContactMechanism/Type	Contacts/Contact /OrganizationEmails/ Email	String		1 - 1024 characters	No	0..*	
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Enumeration Mapping

The ECHO10 "Contacts/Contact/Role" field is not enumeration controlled, however, the equivalent field in the UMM *is* enumeration controlled. The below table summarizes how values provided in the ECHO10 field "Contacts/Contact/Role" are converted to the UMM field "DataCenters/Roles". Note that the value provided in the ECHO10 field "Contacts/Contact/Role" will automatically be converted to all lower case and then mapped accordingly. If the ECHO10 value does not match any of the options provided below, then it will automatically be mapped to "ARCHIVER" by the UMM.

ECHO10 Contacts/Contact/Role value	Translation Direction	UMM DataCenters/Roles value
archiver		ARCHIVER
archive		ARCHIVER
archiving data center		ARCHIVER
custodian		ARCHIVER
data manager		ARCHIVER
internal data center		ARCHIVER
data center contact		ARCHIVER
distributor		DISTRIBUTOR
data originator		ORIGINATOR
author		ORIGINATOR
originator		ORIGINATOR
processor		PROCESSOR
producer		PROCESSOR

Example Mapping

ECHO 10

```
<Contacts>
  <Contact>
    <Role>ARCHIVER</Role>
    <OrganizationName>SEDAC</OrganizationName>
  </Contact>
  <Contact>
    <Role>DISTRIBUTOR</Role>
    <OrganizationName>SEDAC</OrganizationName>
  </Contact>
</Contacts>
```

UMM

```

"DataCenters":[
{
  "Roles":[
    "ARCHIVER",
    "DISTRIBUTOR"
  ],
  "ShortName": "SEDAC",
  "LongName": "Socioeconomic Data and Applications
Center"
  "ContactInformation": {
    "RelatedUrls": [
      {
        "URLContentType": "DataCenterURL",
        "Type": "HOME PAGE",
        "URL": "http://sedac.ciesin.columbia.edu"
      }
    ]
  }
}
],

```

ISO 19115-2 MENDS

Data Centers is a not a required element in ISO 19115-2 MENDS. Multiple Data Centers may also be provided, if necessary.

UMM- C Element	ISO 19115-2 MENDS Path	Type	Notes
DataCenters/Roles	/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:pointOfContact/[*=> write only if PROCESSOR exists above otherwise read from here: /gmi:MI_Metadata/gmd:dataQualityInfo/gmd:DQ_DataQuality/gmd:lineage/gmd:LI_Lineage/gmd: processStep/gmi:LE_ProcessStep/gmd:processor/[*=> [=>gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = processor OR /gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:pointOfContact/gmd: CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = originator OR /gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:pointOfContact/gmd: CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = custodian write only if ARCHIVER exists above otherwise read from here: /gmi:MI_Metadata/gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = custodian OR /gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification/gmd:pointOfContact/[*=> write only if DISTRIBUTOR exists above otherwise read from here: /gmi:MI_Metadata/gmd:distributionInfo/gmd:MD_Distribution/gmd:distributor/gmd:MD_Distributor /gmd:distributorContact/[*=> [=>gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = distributor	String	UMM Roles - ISO Roles ARCHIVER - custodian DISTRIBUTOR - distributor ORIGINATOR - originator PROCESSOR - processor
DataCenters/ShortName	[=>gmd:CI_ResponsibleParty/gmd:organisationName/gco:CharacterString ShortName delimited by > LongName - only if LongName exists.	String	
DataCenters/LongName	[=>gmd:CI_ResponsibleParty/gmd:organisationName/gco:CharacterString ShortName delimited by > LongName - only if LongName exists.	String	(ECHO => UMM - only if OrganizationName >= 85 Characters)
DataCenters /ContactInformation /ServiceHours	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:hoursOfService/gco:CharacterString	String	
DataCenters /ContactInformation /ContactInstructions	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:contactInstructions/gco:CharacterString	String	
DataCenters /ContactInformation /Address/StreetAddresses	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address /gmd:deliveryPoint/gco:CharacterString	String	

DataCenters /ContactInformation /Address/City	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address /gmd:city/gco:CharacterString	String	
DataCenters /ContactInformation /Address/StateProvince	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address /gmd:administrativeArea/gco:CharacterString	String	
DataCenters /ContactInformation /Address/PostalCode	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address /gmd:postalCode/gco:CharacterString	String	
DataCenters /ContactInformation /Address/Country	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address /gmd:country/gco:CharacterString	String	
DataCenters /ContactInformation /ContactMechanism/Value	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:phone/gmd:CI_Telephone/ [=> [=>gmd:voice/gco:CharacterString (UMM Types=>ISO: Direct Line, Mobile, Primary, TDD/TTY Phone, Telephone, U.S. toll free, Other) (ISO=>UMM: Telephone) or gmd:facsimile/gco: CharacterString (Fax) For email: [=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address /gmd:electronicMailAddress/gco:CharacterString	String	

Enumeration/Code List Mapping

N/A

Example Mapping

ISO 19115-2 MENDS

ADD EXAMPLE

UMM

ADD EXAMPLE

ISO 19115-2 SMAP

Data Centers is a not a required element in ISO 19115-2 SMAP. Multiple Data Centers may also be provided, if necessary.

UMM- C Element	ISO 19115-2 SMAP Path	Type	Notes
DataCenters/Roles	/gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification /gmd:citation/gmd:CI_Citation/ gmd:citedResponsibleParty/gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = processor OR /gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification /gmd:pointOfContact/gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = originator OR /gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification /gmd:pointOfContact/ gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = originator OR /gmd:DS_Series/gmd:seriesMetadata/gmi:MI_Metadata/gmd:identificationInfo/gmd:MD_DataIdentification /gmd:pointOfContact/gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode = distributor	String	UMM Roles - ISO Roles ARCHIV ER - distributo r DISTRIB UTOR - distributor ORIGIN ATOR - PROCE SSOR - originator
DataCenters/ShortName	[=>gmd:CI_ResponsibleParty/gmd:organisationName/gco:CharacterString ShortName delimited by > LongName - only if LongName exists.	String	
DataCenters/LongName	[=>gmd:CI_ResponsibleParty/gmd:organisationName/gco:CharacterString ShortName delimited by > LongName - only if LongName exists.	String	

DataCenters /ContactInformation /ServiceHours	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:hoursOfService/gco:CharacterString	String	
DataCenters /ContactInformation /ContactInstructions	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:contactInstructions/gco:CharacterString	String	
DataCenters /ContactInformation/Address /StreetAddresses	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/gmd:deliveryPoint/gco:CharacterString	String	
DataCenters /ContactInformation/Address /City	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/gmd:city/gco:CharacterString	String	
DataCenters /ContactInformation/Address /StateProvince	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/gmd:administrativeArea/gco:CharacterString	String	
DataCenters /ContactInformation/Address /PostalCode	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/gmd:postalCode/gco:CharacterString	String	
DataCenters /ContactInformation/Address /Country	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/gmd:country/gco:CharacterString	String	
DataCenters /ContactInformation /ContactMechanism/Value	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:phone/gmd:CI_Telephone/[==>[==>gmd:voice/gco:CharacterString (UMM Types=>ISO: Direct Line, Mobile, Primary, TDD/TTY Phone, Telephone, U.S. toll free, Other) (ISO=>UMM: Telephone) or gmd:facsimile/gco:CharacterString (Fax) OR [=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/gmd:electronicMailAddress/gco:CharacterString	String	

Enumeration/Code List Mapping

N/A

Example Mapping

ISO 19115-2 SMAP

ADD EXAMPLE

UMM

ADD EXAMPLE

UMM Migration

None

History

UMM Versioning

Version	Date	What Changed
1.15.5	12/3/2020	No changes were made for Data Centers during the transition from version 1.15.4 to 1.15.5
1.15.4	9/18/2020	No changes were made for Data Centers during the transition from version 1.15.3 to 1.15.4
1.15.3	7/1/2020	No changes were made for Data Centers during the transition from version 1.15.2 to 1.15.3
1.15.2	5/20/2020	No changes were made for Data Centers during the transition from version 1.15.1 to 1.15.2
1.15.1	3/25/2020	No changes were made for Data Centers during the transition from version 1.15.0 to 1.15.1

1.15.0	2/26/2020	No changes were made for Data Centers during the transition from version 1.14.0 to 1.15.0
1.14.0	10/21/2019	No changes were made for Data Centers during the transition from version 1.13.0 to 1.14.0
1.13.0	04/11/2019	No changes were made for Data Centers during the transition from version 1.12.0 to 1.13.0
1.12.0	01/22/2019	No changes were made for Data Centers during the transition from version 1.11.0 to 1.12.0.
1.11.0	11/28/2018	No changes were made for Data Centers during the transition from version 1.10.0 to 1.11.0.
1.10.0	05/02/2018	No changes were made for Data Centers during the transition from version 1.9.0 to 1.10.0.
1.9.0		

ARC Documentation

Version	Date	What Changed	Author
1.0	09/07/18	Recommendations/priority matrix transferred from internal ARC documentation to wiki space	Jeanne' le Roux