Macintosh HD:Users:jon:Documents:DLM Forum:DLM Foundation:Branding:Logos:MoReq logos:MoReq2010:MoReq2010_Reg:MoReq2010_Reg_pms.eps

MoReq2010®

Modular Requirements for Records Systems

Test Framework

Test Module 4: Model metadata

Version 0.1 BETA

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# 4.0 Scope

## 4.0.1 IMPORTANT NOTICE

This test module should **only** be used if the test system implements the model metadata service. If the test system implements a native metadata service then a custom test module agreed by the supplier, the test centre and the DLM Forum, must be substituted for this test module.

The substitute test module must test the native metadata service to an equivalent level of functionality as this test module.

## 4.0.2 Introduction

This test module tests requirements from the following sections of the MoReq2010® specification:

* **2. System Services**
* **6. Record Service**
* **7. Model Metadata Service**
* **10. Searching and Reporting Service**
* **11. Export Service**
* **101. Graphical User Interface**
* **102. Application Programming Interface**

Of these the major emphasis of the test module is placed on **7. Model Metadata Service**.

This test module (or a substitute, see 4.0.1 above) should be used whenever the core services of MoReq2010® are being tested.

Additional notes are provided to test centres for clarity throughout. From time-to-time the test scripts will be updated; be sure to check that you are using the most up-to-date version of the testing materials.

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# TEST MODULE 4: MODEL METADATA

(To be completed by the test centre)

# 4.1 Observation record

Supplier name

Product name and version

Test centre name

Date of test

Test location

Supplier representative(s) present during testing

Test centre representative(s) present during testing

DLM Forum observer(s) present during testing

Test system technical architecture, hardware, software and operating system(s)

Test outcomes

Fill in with 🗹 or 🗷 to ensure all test outcomes are met

🞏 The test system was correctly configured prior to testing

🞏 The test system was not reconfigured during testing

🞏 The test module was completed in a single session

🞏 All test cases in the test module were completed, in order

🞏 All test cases in the test module were completed successfully

Refer to the individual test results for all test cases in this test module

Additional remarks or observations

# 4.2 Test script – Model metadata

All test cases in the test script for this test module must be completed in order before moving onto the next test case.

## T4.2.1 – Test case

### 4.2.1.1 Test case description

**Initial error check**

### 4.2.1.2 Test case preconditions

* Test system is operational
* Test data (see **Appendix 4.A Test Data**) are loaded onto test system
* Where the test system uses an API then a suitable test harness has been provided (see the **Test Framework: Overview and Instructions, 4.1 Providing a test harness for API interfaces**)
* The test system has been configured, under **R2.4.13** such that performing any function system wide will generate an event under **R2.4.15** and **R2.4.16** – in other words, all function definitions must have their Generate Event Flag (**M14.4.34**) set
* The test system has been configured, under **R2.4.20** such that the events generated by all functions system wide will be retained by residual entities – in other words, all function definitions must have their Retain On Destruction Flag (**M14.4.88**) set
* The test system has been configured, under **R4.5.8** such that every access control list is set to inherit all roles, not just administrative roles – in other words, the Include Inherited Roles Flag (**M14.4.43**) for all access control lists for all entities is set by default

### 4.2.1.3 Test case steps (instructions)

* Before logging into the test system take a copy of the external error log, under **R2.4.7**

### 4.2.1.4 Test case post-conditions (expected result)

* Errors in the external error log must contain at least the information listed under **R2.4.7**

### 4.2.1.5 Notes to test centre

* Check whether there are any errors generated by functions failing to perform under **R2.4.8**
* Note that **R2.4.8** is not tested directly unless an error occurs during testing, instead it is tested indirectly through this test case

### 4.2.1.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.2 – Test case

### 4.2.2.1 Test case description

**Initial compliance check**

### 4.2.2.2 Test case preconditions

* **T4.2.1** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.1** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.2.3 Test case steps (instructions)

* Log into the test system as user **Usr.4.1** (reference **R3.4.1**)
* Generate the compliance report for the test system (reference **R2.4.5**)

### 4.2.2.4 Test case post-conditions (expected result)

* User **Usr.4.1** logs in successfully
* The compliance report contains all of the information and metadata required by **R2.4.5** and **R2.4.2**
* Specifically, the compliance report must show compliance with, at least:
  + **User and Group Service v1.x** (**cd532472-85b0-4c1c-82b4-5c8370b7d0e6**)
  + **Model Role Service v1.x (2f6d05c6-51e6-4a32-a7fc-c0a6883eb85b)**

**OR Native Role Service v1.x (d945dcd9-dc2d-491d-965a-11ce936d044b)**

* + **Classification Service v1.x** (**10fea10e-9c2f-4760-9095-f4f9295f4b19**)
  + **Record Service v1.x** (**ced3d0df-3f9f-4807-9e96-b5b790adad4a**)
  + **Metadata Service v1.x** (**a600f8d0-2d58-418e-bb41-211d1fd42350**)
  + **Disposal Scheduling Service (fd05e284-181f-4f5d-bd8c-4bed835c8931)**
  + **Searching and Reporting v1.x** (**f09984a5-dd31-44d8-9607-22521667c78a**)
  + **Export Service v1.x** (**2777ab81-057e-4aa4-9595-69459ec2dc1e**)
* The compliance report must use the UUIDs listed above, under **R2.4.23**

### 4.2.2.5 Notes to test centre

* Describe in the remarks how the user performs a compliance check
* Note that if the test system implements its own native metadata service then the compliance report would show:
  + **Metadata Service v1.x** (**66bf4419-d92f-4358-8506-7ee9c06abdcd**)
* In this circumstance the test centre should not use this test module but should use instead the agreed custom test script for the supplier’s native metadata service

### 4.2.2.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.3 – Test case

### 4.2.3.1 Test case description

**Browse available services (or bundles of services) and inspect the metadata of the metadata service**

### 4.2.3.2 Test case preconditions

* **T4.2.2** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.2** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.3.3 Test case steps (instructions)

* Browse the services (**E14.2.14**) of the test system, under **R2.4.3**
* Inspect the metadata of the metadata service or the bundle of services that contains the metadata service, under **R2.4.3**

### 4.2.3.4 Test case post-conditions (expected result)

* The test system must allow browsing of all services listed under **R2.4.1**, either as individual services or within one or more bundles of services
* The test system must allow inspection of the metadata of services or bundles of services where each service or bundle of services has the metadata listed under Inspect the metadata of the role service or the bundle of services that contains the role service, under **R2.4.3**
* The metadata of the role service or bundle of services must match the compliance report generated previously under **T4.2.2**

### 4.2.3.5 Notes to test centre

It is possible that the test system implements all services as part of a single bundle. In this circumstance the metadata will relate to the test system as a whole.

### 4.2.3.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.4 – Test Case

### 4.2.4.1 Test case description

**Modify the metadata of the metadata service**

### 4.2.4.2 Test case preconditions

* **T4.2.3** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.3** was completed
* The test operator is logged in as user **Usr.4.1**
* The Title (**M14.4.104**), Description (**M14.4.16**) and Owner Information (**M14.4.62**) for the metadata service or bundle of services containing the metadata service must NOT have been set to the values below prior to this test case

### 4.2.4.3 Test case steps (instructions)

* Modify the metadata of the metadata service or bundle of services containing the metadata service, under **R2.4.4**, as follows:
  + Change Title (**M14.4.104**) to “MoReq2010® Test System”
  + Change Description (**M14.4.16**) to “Test Module 4: Model metadata”
  + Change Owner Information (**M14.4.62**) to the name and address of the test centre
* Add a comment, “Changed during testing” under **R2.4.18**

### 4.2.4.4 Test case post-conditions (expected result)

* The metadata is modified correctly to the input values
* The comment has been accepted as part of the event generated by the changes to the metadata

### 4.2.4.5 Notes to test centre

* Make a note (or screenshot) of the values of the metadata prior to changing them
* Ensure that you can include the Unicode “®” character (U+00AE) in accordance with **R2.4.28**

### 4.2.4.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.5 – Test Case

### 4.2.5.1 Test case description

**Browse the system metadata element definitions in the metadata service**

### 4.2.5.2 Test case preconditions

* **T4.2.4** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.4** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.5.3 Test case steps (instructions)

* From the metadata service or bundle of services containing the role service browse through the metadata element definitions in the metadata service under **R7.5.12**
* Browse to the system metadata element definition Class Identifier (**M14.4.4**) and inspect its metadata under **R7.5.12**
* Ensure that the system metadata element definition Class Identifier (**M14.4.4**) contains all of the system metadata elements listed under **R7.5.1**
* From the system metadata element definition Class Identifier (**M14.4.4**) browse to the entity types in which it is used and inspect their metadata under **R7.5.12**
* From either of these entity types browse under **R7.5.12** from the entity type to the system metadata element definition for Title (**M14.4.104**) in the metadata service and inspect its metadata

### 4.2.5.4 Test case post-conditions (expected result)

* All 107 system metadata element definitions listed under section **14.4** of the MoReq2010® specification must be present in the metadata service and able to be browsed
* The user must be able to browse to and inspect the system metadata element definition Class Identifier (**M14.4.4**)
* The system metadata element definition Class Identifier (**M14.4.4**) has all of the system metadata elements listed under **R7.5.1**
* Upon inspection, the System Identifier (**M14.4.100**) for the system metadata element definition Class Identifier (**M14.4.4**) must be set to “7d935531-e7e6-4a28-a474-431c68522cfa”
* As described under **R7.5.12** the user must be able to browse directly to the entity types under which the system metadata element definition Class Identifier (**M14.4.4**) is used and inspect them, these are both part of the record service:
  + **Aggregation** (**E14.2.1**)
  + **Record** (**E14.2.12**)
* Upon inspection of these entity types, their System Identifier (**M14.4.100**) values must be set to:
  + **Aggregation** (**E14.2.1**) = “c4bd4f18-e3f5-4dba-819d-8d58cbd0aed4”
  + **Record** (**E14.2.12**) = “3ac228ef-c008-4524-9e41-5c4564eaa7f0”
* As described under **R7.5.12** the user must be able to browse directly from an entity type to a system metadata element definition used by that entity type, in this case System Identifier (**M14.4.100**)
* Upon inspection, the System Identifier (**M14.4.100**) for the system metadata element definition Title (**M14.4.104**) must be set to “077fc367-48ba-44a8-8afb-012d05ed1a16”

### 4.2.5.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.6 – Test Case

### 4.2.6.1 Test case description

**Attempt to delete or destroy a system metadata element definition**

### 4.2.6.2 Test case preconditions

* **T4.2.5** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.5** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.6.3 Test case steps (instructions)

* Attempt to delete the system metadata element Title (**M14.4.104**) under **R7.5.10**
* Attempt to destroy the system metadata element Title (**M14.4.104**) under **R7.5.11**

### 4.2.6.4 Test case post-conditions (expected result)

* The system metadata element Title (**M14.4.104**) cannot be deleted
* The system metadata element Title (**M14.4.104**) cannot be destroyed

### 4.2.6.5 Notes to test centre

* System metadata element definitions cannot be deleted or destroyed – unlike contextual metadata element definitions
* Compare to test cases **T4.2.12** and **T4.2.18**

### 4.2.6.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.7 – Test Case

### 4.2.7.1 Test case description

**Modify the metadata of a system metadata element definition**

### 4.2.7.2 Test case preconditions

* **T4.2.6** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.6** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.7.3 Test case steps (instructions)

* Modify the metadata of the system metadata element definition Title (**M14.4.104**) under **R7.5.8**, as follows:
  + Change the content of Title (**M14.4.104**) to “наслов”
  + If possible (see notes below) change the language identifier for Title (**M14.4.104**) to “sr-Cyrl”
  + Change Description (**M14.4.16**) to “Title and description changed during test case T4.2.7”
* When making these changes add a comment, “Title changed to Serbian Cyrillic” under **R2.4.18**
* Inspect the system metadata element definition Title (now “наслов”) (**M14.4.104**) to ensure that its metadata has been correctly updated

### 4.2.7.4 Test case post-conditions (expected result)

* The Title and Description are modified correctly to the new values
* The language identifier for the Title may have been updated
* The comment has been accepted as part of the event generated by the changes to the metadata
* “наслов” is displayed instead of “Title” in contexts where the test system shows the system metadata element

### 4.2.7.5 Notes to test centre

* An MCRS must support the Unicode character set for textual metadata under **R2.4.28**
* “наслов” is Serbian (also Macedonian) and means “title”, it is made up of the following Unicode characters:
  + Cyrillic small letter en (**U+043D**)
  + Cyrillic small letter a (**U+0430**)
  + Cyrillic small letter es (**U+0441**)
  + Cyrillic small letter el (**U+043B**)
  + Cyrillic small letter o (**U+043E**)
  + Cyrillic small letter ve (**U+0432**)
* Note that the language identifier for Title (**M14.4.14**) is NOT the same as the separate system metadata element Default Language Identifier (**M14.4.12**)
* The MoReq2010® core services do not require that an MCRS support the setting of the language identifier for individual textual elements (see for example the rationale to **R2.4.28**)
* However, the test centre should note in the comments whether the test system does permit the language identifier for the Title (**M14.4.104**) to be individually updated when its value is changed to a term used in a different language
* “sr-Cyrl” is the language identifier for “Serbian in Cyrillic script”
* See the IANA Language Subtag Registry at <http://www.iana.org/assignments/language-subtag-registry>

### 4.2.7.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.8 – Test Case

### 4.2.8.1 Test case description

**Change the Retain On Destruction Flag for a system metadata element definition**

### 4.2.8.2 Test case preconditions

* **T4.2.7** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.7** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.8.3 Test case steps (instructions)

* Under **R7.5.6**,Modify the system metadata element definition for наслов (formerly “Title”) (**M14.4.104**) and clear the Retain On Destruction Flag (**M14.4.88**) so that metadata elements of this type will not be retained when entities they are associated with are destroyed
* When making these changes add a comment, “Title is no longer retained on destruction (test case T4.2.7)” under **R2.4.18**
* Inspect the system metadata element definition наслов (formerly “Title”) (**M14.4.104**) to ensure that its metadata have been correctly updated

### 4.2.8.4 Test case post-conditions (expected result)

* The Retain On Destruction Flan (**M14.4.88**) for the system metadata element definition, наслов (formerly “Title”) (**M14.4.104**) has been cleared under **R7.5.6**

### 4.2.8.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.9 – Test Case

### 4.2.9.1 Test case description

**Create new contextual metadata element definitions**

### 4.2.9.2 Test case preconditions

* **T4.2.8** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.8** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.9.3 Test case steps (instructions)

* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.1 – Number Of Contacts”
  + Set Description (**M14.4.16**) to “Contact Number”
  + Set Scope Notes (**M14.4.62**) to “Built-in nonNegativeInteger datatype”
  + Set Presentation Order (**M14.4.84**) to “1” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “1”, under **R7.5.4**
  + Set Max Occurs (**M14.4.53**) to “1”, under **R7.5.4**
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.1 Contact number datatype** (see the appendix to this test module)
  + Clear the Is Textual Flag (**M14.4.47**)
  + Set the Default Value (**M14.4.13**) to “0” (zero)
  + Set the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.2 – Contact Name”
  + Set Description (**M14.4.16**) to “Contact Name”
  + Set Scope Notes (**M14.4.62**) to “Simpletype derived by restriction from string”
  + Set Presentation Order (**M14.4.84**) to “2” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “1”, under **R7.5.4**
  + Set Max Occurs (**M14.4.53**) to “3”, under **R7.5.4**
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.2 Contact name datatype** (see the appendix to this test module)
  + Set the Is Textual Flag (**M14.4.47**)
  + Set the Default Value (**M14.4.13**) to “Secretariat”
  + Set the Default Language Identifier (**M14.4.12**) to “en”
  + Clear the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.3 – Contact Address”
  + Set Description (**M14.4.16**) to “Contact Address”
  + Set Scope Notes (**M14.4.62**) to “Complextype”
  + Set Presentation Order (**M14.4.84**) to “3” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “1”, under **R7.5.4**
  + Set Max Occurs (**M14.4.53**) to “1”, under **R7.5.4**
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.3 Contact address datatype** (see the appendix to this test module)
  + Set the Is Textual Flag (**M14.4.47**)
  + Do not set a Default Value (**M14.4.13**)
  + Set the Default Language Identifier (**M14.4.12**) to “en”
  + Clear the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.4 – Contact Telephone”
  + Set Description (**M14.4.16**) to “Contact Telephone”
  + Set Scope Notes (**M14.4.62**) to “Simpletype derived by restriction from string”
  + Set Presentation Order (**M14.4.84**) to “4” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “1”, under **R7.5.4**
  + Set Max Occurs (**M14.4.53**) to “1”, under **R7.5.4**
  + Clear the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.1 Contact number datatype** (note that the datatype for this contextual metadata element definition is modified in test case **T4.2.11**)
  + Set the Is Textual Flag (**M14.4.47**)
  + Set the Default Value (**M14.4.13**) to “0”
  + Set the Default Language Identifier (**M14.4.12**) to “en”
  + Clear the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.5 – Contact Email Address”
  + Set Description (**M14.4.16**) to “Contact Email Address”
  + Set Scope Notes (**M14.4.62**) to “Simpletype derived by restriction from string”
  + Set Presentation Order (**M14.4.84**) to “5” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “0”, under **R7.5.4**
  + Do not set Max Occurs (**M14.4.53**), under **R7.5.4**
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.4 Contact email address datatype** (see the appendix to this test module)
  + Clear the Is Textual Flag (**M14.4.47**)
  + Do not set a Default Value (**M14.4.13**)
  + Set the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.6 – First Contact Date”
  + Set Description (**M14.4.16**) to “Contact Date”
  + Set Scope Notes (**M14.4.62**) to “Built-in date datatype”
  + Set Presentation Order (**M14.4.84**) to “6” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “1”, under **R7.5.4**
  + Set Max Occurs (**M14.4.53**) to “1”, under **R7.5.4**
  + Clear the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.5 Contact date datatype** (see the appendix to this test module)
  + Clear the Is Textual Flag (**M14.4.47**)
  + Set the Default Value (**M14.4.13**) to [today]
  + Set the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.7 – Officer Responsible”
  + Set Description (**M14.4.16**) to “Officer Responsible”
  + Set Scope Notes (**M14.4.62**) to “Reference to a User or Group entity”
  + Set Presentation Order (**M14.4.84**) to “7” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “0”, under **R7.5.4**
  + Set Max Occurs (**M14.4.53**) to “1”, under **R7.5.4**
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Set the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Entity Reference Type Identifier (**M14.4.24**) to:
    - User (**E14.2.16**), and
    - Group (**E14.2.10**)
  + Set the Default Value (**M14.4.13**) to “Grp.4.1”
  + Clear the Retain On Destruction Flag (**M14.4.88**)
* Create a new contextual metadata element definition under **R7.5.2** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “cMED.4.8 – Home Telephone”
  + Set Description (**M14.4.16**) to “Same as Contact Telephone”
  + Set Scope Notes (**M14.4.62**) to “Simpletype derived by restriction from string”
  + Set Presentation Order (**M14.4.84**) to “8” (or equivalent), under **R7.5.5**
  + Set Min Occurs (**M14.4.56**) to “1”, under **R7.5.4**
  + Do not set Max Occurs (**M14.4.53**), under **R7.5.4**
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Clear the Is Entity Reference Flag (**M14.4.45**), under **R7.5.3**
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.6 Contact telephone datatype** (see the appendix to this test module)
  + Clear the Is Textual Flag (**M14.4.47**)
  + So not set the Default Value (**M14.4.13**)
  + Clear the Retain On Destruction Flag (**M14.4.88**)
* Inspect each of the contextual metadata elements (**cMED.4.1**, **cMED.4.2**, **cMED.4.3**, **cMED.4.4**, **cMED.4.5**, **cMED.4.6**, **cMED.4.7** and **cMED.4.8**) just created and ensure that they all have been set to the metadata values given above

### 4.2.9.4 Test case post-conditions (expected result)

* The eight new contextual metadata element definitions have been created in the metadata service, or the bundle of services that includes the metadata service
* The metadata values for each of the new contextual metadata element definitions has been set in accordance with the data above

### 4.2.9.5 Notes to test centre

* This test script will use the terms “**cMED.4.1**”, “**cMED.4.2**”, “**cMED.4.3**”, “**cMED.4.4**”, “**cMED.4.5**”, “**cMED.4.6**”, “**cMED.4.7**” and “**cMED.4.8**” to refer to these contextual metadata element definitions
* MoReq2010® allows some leeway in how Presentation Order (**M14.4.84**) is set and represented (see the rationale to requirement **R7.5.5**) for example metadata elements may be arranged by dragging-and-dropping a visual representation of the metadata entry fields
* However, the overall effect must be that these contextual metadata elements must be presented first, in order and ahead of any system metadata elements, when entities with these contextual metadata elements are displayed or inspected (see also test case **T4.2.16**)

### 4.2.9.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.10 – Test Case

### 4.2.10.1 Test case description

**Create templates**

### 4.2.10.2 Test case preconditions

* **T4.2.9** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.9** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.10.3 Test case steps (instructions)

* Create a new template under **R7.5.14** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “Tmpl.4.1 – Class contact”
  + Set Description (**M14.4.16**) to “All contact information”
  + Set the Template Entity Type Identifier (**M14.4.102**) to:
    - Aggregation (**E14.2.1**),
    - Record (**E14.2.12**)
  + Do not set the Template Service Identifier (**M14.4.103**)
  + Set the Template Class Identifier (**M14.4.101**) to **Cls.4.1**
  + Set the Contextual Metadata Element Definition Identifier (**M14.4.8**) to:
    - **cMED.4.1 – Number Of Contacts**
    - **cMED.4.3 – Contact Address**
    - **cMED.4.4 – Contact Telephone**
    - **cMED.4.5 – Contact Email Address**
    - **cMED.4.6 – First Contact Date**
    - **cMED.4.7 – Officer Responsible**
    - **cMED.4.8 – Home Telephone**
* Create a new template under **R7.5.14** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “Tmpl.4.2 – Service contact”
  + Set Description (**M14.4.16**) to “Some contact information”
  + Set the Template Entity Type Identifier (**M14.4.102**) to:
    - Aggregation (**E14.2.1**),
    - Group (**E14.2.10**), and
    - Record (**E14.2.12**)
  + Set the Template Service Identifier (**M14.4.103**) to the user and group service
  + Do not set the Template Class Identifier (**M14.4.101**)
  + Set the Contextual Metadata Element Definition Identifier (**M14.4.8**) to:
    - **cMED.4.2 – Contact Name**
    - **cMED.4.3 – Contact Address**
    - **cMED.4.4 – Contact Telephone**
    - **cMED.4.6 – First Contact Date**
    - **cMED.4.8 – Home Telephone**
* Create a new template under **R7.5.14** with the following metadata:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “Tmpl.4.3 – Aggregation contact”
  + Set Description (**M14.4.16**) to “Other contact information”
  + Set the Template Entity Type Identifier (**M14.4.102**) to Aggregation (**E14.2.1**)
  + Set the Template Service Identifier (**M14.4.103**) to the record service
  + Set the Template Class Identifier (**M14.4.101**) to **Cls.4.2**
  + Set the Contextual Metadata Element Definition Identifier (**M14.4.8**) to:
    - **cMED.4.2 – Contact Name**
    - **cMED.4.8 – Home Telephone**
* Inspect each of the templates (**Tmpl.4.1**, **Tmpl.4.2** and **Tmpl.4.3**) just created and ensure that they all have been set to the metadata values given above

### 4.2.10.4 Test case post-conditions (expected result)

* The three new templates have been created in the metadata service, or the bundle of services that includes the metadata service
* The metadata values for each of the new templates has been set in accordance with the data above

### 4.2.10.5 Notes to test centre

This test script will use the terms “**Tmpl.4.1**”, “**Tmpl.4.2**” and “**Tmpl.4.3**” to refer to these templates

### 4.2.10.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.11 – Test Case

### 4.2.11.1 Test case description

**Modify a contextual metadata element definition that has not been applied to an entity**

### 4.2.11.2 Test case preconditions

* **T4.2.10** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.10** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.11.3 Test case steps (instructions)

* Browse or find contextual metadata element definition **cMED.4.4 – Contact Telephone** and inspect it under **R7.5.12**
* Modify the following metadata for **cMED.4.4 – Contact Telephone**, under **R7.5.9**:
  + Set Min Occurs (**M14.4.56**) to “0”
  + Clear Max Occurs (**M14.4.53**) so that it does not have a value
  + Set the Is Modifiable Flag (**M14.4.46**)
  + Set the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.6 Contact telephone datatype** (note that the datatype for this contextual metadata element definition is modified in test case **T4.2.10**)
  + Clear the Is Textual Flag (**M14.4.47**)
  + Clear the Default Value (**M14.4.13**)
  + Set the Retain On Destruction Flag (**M14.4.88**)
* Inspect each of the contextual metadata elements **cMED.4.4 – Contact Telephone** to ensure that the metadata values above have been successfully modified

### 4.2.11.4 Test case post-conditions (expected result)

* The values for each of the metadata elements listed above have been correctly modified under **R7.5.9**

### 4.2.11.5 Notes to test centre

Clearing the Is Textual Flag (**M14.4.47**) will ensure that the Default Language Identifier (**M14.4.12**) is not used – for consistency some test systems may simultaneously clear this value as well

### 4.2.11.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.12 – Test Case

### 4.2.12.1 Test case description

**Delete a contextual metadata element definition that has not been applied to an entity**

### 4.2.12.2 Test case preconditions

* **T4.2.11** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.11** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.12.3 Test case steps (instructions)

* Browse or find contextual metadata element definition **cMED.4.8 – Home Telephone** and inspect it under **R7.5.12**
* Delete contextual metadata element definition **cMED.4.8 – Home Telephone** under **R7.5.10**
* Browse or find the following templates and ensure that the contextual metadata element definition **cMED.4.8 – Home Telephone** is no longer included as a contextual metadata element definition in any template:
  + **Tmpl.4.1 – Class contact**
  + **Tmpl.4.2 – Service contact**
  + **Tmpl.4.3 – Aggregation contact**

### 4.2.12.4 Test case post-conditions (expected result)

* The contextual metadata element definition **cMED.4.8 – Home Telephone** has been deleted under **R7.5.10**
* The contextual metadata element definition **cMED.4.8 – Home Telephone** is no longer included in any template

### 4.2.12.5 Notes to test centre

This contextual metadata element definition can be deleted under **R7.5.10** because it has not yet been applied to an entity

### 4.2.12.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.13 – Test Case

### 4.2.13.1 Test case description

**Manually apply a template to an active entity of an appropriate type**

### 4.2.13.2 Test case preconditions

* **T4.2.12** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.12** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.13.3 Test case steps (instructions)

* Find or browse to record **Rec.4.1** in the record service, and inspect it under **R6.5.12**
* Attempt (A) to apply template **Tmpl.4.3 – Aggregation contact** to record **Rec.4.1** under **R7.5.19**
* Apply template **Tmpl.4.2 – Service contact** to **Rec.4.1** under **R7.5.19**
* Ensure that the contextual metadata element **cMED.4.2 – Contact Name** has a default value of “Secretariat” under **R7.5.13** and that no other contextual metadata elements have a default value set
* Ensure that the contextual metadata element **cMED.4.2 – Contact Name** has a default language identifier of “en” under **R7.5.13**
* Ensure that the contextual metadata element **cMED.4.6 – First Contact Date** has a default value of [today] under **R7.5.13**
* Attempt (B) to apply the following contextual metadata element values against record **Rec.4.1**:
  + Clear **cMED.4.2 – Contact Name**
  + Set **cMED.4.3 – Contact Address** to:
    - Street: “14 Blandford Square”
    - City: “Newcastle upon Tyne”
    - Postal Code: “NE1 4HZ”
    - Country: “United Kingdom”
  + Set **cMED.4.4 – Contact Telephone** to “+441912414523”
  + Set **cMED.4.6 – First Contact Date** to [today]
* Attempt (C) to apply the following contextual metadata element values against record **Rec.4.1**:
  + Set **cMED.4.2 – Contact Name** to:
    - “Secretariat”
    - “Executive Committee”
    - “MoReq Governance Board”
    - “Testing Sub-Committee”
  + Set **cMED.4.3 – Contact Address** to:
    - Street: “14 Blandford Square”
    - City: “Newcastle upon Tyne”
    - Postal Code: “NE1 4HZ”
    - Country: “United Kingdom”
  + Set **cMED.4.4 – Contact Telephone** to “+441912414523”
  + Set **cMED.4.6 – First Contact Date** to [today]
* Attempt (D) to apply the following contextual metadata element values against record **Rec.4.1**:
  + Set **cMED.4.2 – Contact Name** to:
    - “Executive Committee”
    - “MoReq Governance Board”
    - “Accreditation, Certification and Testing Sub-Committee”
  + Set **cMED.4.3 – Contact Address** to:
    - Street: “14 Blandford Square”
    - City: “Newcastle upon Tyne”
    - Postal Code: “NE1 4HZ”
    - Country: “United Kingdom”
  + Set **cMED.4.4 – Contact Telephone** to “+441912414523”
  + Set **cMED.4.6 – First Contact Date** to [today]
* Attempt (E) to apply the following contextual metadata element values against record **Rec.4.1**:
  + Set **cMED.4.2 – Contact Name** to:
    - “Executive Committee”
    - “MoReq Governance Board”
    - “Testing Sub-Committee”
  + Clear the language identifier for **cMED.4.2 – Contact Name**
  + Set **cMED.4.3 – Contact Address** to:
    - Street: “14 Blandford Square”
    - City: “Newcastle upon Tyne”
    - Postal Code: “NE1 4HZ”
    - Country: “United Kingdom”
  + Set **cMED.4.4 – Contact Telephone** to “+441912414523”
  + Set **cMED.4.6 – First Contact Date** to [today]
* Attempt (F) to apply the following contextual metadata element values against record **Rec.4.1**:
  + Set **cMED.4.2 – Contact Name** to:
    - “Executive Committee”
    - “MoReq Governance Board”
    - “Testing Sub-Committee”
  + Ensure the language identifier for **cMED.4.2 – Contact Name** is set to “en”
  + Set **cMED.4.3 – Contact Address** to:
    - Street: “14 Blandford Square”
    - City: “Newcastle upon Tyne”
    - Postal Code: “NE1 4HZ”
    - Country: “UK”
  + Set **cMED.4.4 – Contact Telephone** to “+441912414523”
  + Set **cMED.4.6 – First Contact Date** to [today]
* Apply the following contextual metadata element values against record **Rec.4.1**:
  + Set **cMED.4.2 – Contact Name** to:
    - “Executive Committee”
    - “MoReq Governance Board”
    - “Testing Sub-Committee”
  + Ensure the language identifier for **cMED.4.2 – Contact Name** is set to “en”
  + Set **cMED.4.3 – Contact Address** to:
    - Street: “14 Blandford Square”
    - City: “Newcastle upon Tyne”
    - Postal Code: “NE1 4HZ”
    - Country: “United Kingdom”
  + Set **cMED.4.4 – Contact Telephone**:
    - “+441912414523”, and
    - “(0)1912414523”
  + Set **cMED.4.6 – First Contact Date** to [today]
* Inspect record **Rec.4.1** under **R6.5.12** and ensure that the template has been applied correctly and the metadata elements listed above exist and have the (final) values shown
* Take note of the presentation order of the metadata elements of record **Rec.4.1** when they are inspected after the template has been applied (see notes to test centre)

### 4.2.13.4 Test case post-conditions (expected result)

* Record **Rec.4.1** should exist, be found and be active – it must not have any previous contextual metadata elements added to it
* Contextual metadata element **cMED.4.2 – Contact Name** must have a default value of “Secretariat” and a default language identifier of “en”
* Contextual metadata element **cMED.4.6 – First Contact Date** must have a default value of [today]
* Attempt (A) to apply template **Tmpl.4.3 – Aggregation contact** to record **Rec.4.1** must fail under **R7.5.19** because the Template Entity Type Identifier (**M14.4.102**) for this template is set to Aggregation (**E14.2.1**) and not Record (**E14.2.12**) – see test case **T4.2.10** – it is therefore not applicable
* Attempt (B) to set the metadata of **Rec.4.1** must fail under **R7.5.13** because **cMED.4.2 – Contact Name** has Min Occurs set to “1” in test case **T4.2.9** but has not been provided with a value in this attempt
* Attempt (C) to set the metadata of **Rec.4.1** must fail under **R7.5.13** because **cMED.4.2 – Contact Name** has Max Occurs set to “3” in test case **T4.2.9** but the user is attempting to give it four values
* Attempt (D) to set the metadata of **Rec.4.1** must fail under **R7.5.13** through failed validation of the datatype for **cMED.4.2 – Contact Name** – the datatype set in test case **T4.2.9** (see appendix **4.B.2 Contact name datatype**) has a maximum length restriction of 40 characters and the string “Accreditation, Certification and Testing Sub-Committee” is longer than 40 characters
* Attempt (E) to set the metadata of **Rec.4.1** must fail under **R7.5.13** because **cMED.4.2 – Contact Name** has the Is Textual Flag (**M14.4.47**) set but has not been provided with a language identifier (see notes to test centre, below)
* Attempt (F) to set the metadata of **Rec.4.1** must fail under **R7.5.13** through failed validation of the datatype for **cMED.4.3 – Contact Address** – the datatype set in test case **T4.2.9** (see appendix **4.B.3 Contact address datatype**) includes an enumeration that contains the value “United Kingdom” but not the value “UK”
* At the final attempt, template **Tmpl.4.2 – Service contact** should be successfully applied to record **Rec.4.1** under **R7.5.19** with the correct values as listed above

### 4.2.13.5 Notes to test centre

* As described previously in section **4.2.7.5** (above) the MoReq2010® core services do not require that an MCRS support the setting of the language identifier for individual textual elements
* For this reason different test centres may implement the scenario depicted in attempt (E) differently (or not at all) – these differences, where they occur, should be described in the additional remarks on observations for this test case
* The presentation order of metadata elements is revisited in test case **T4.2.16**

### 4.2.13.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.14 – Test Case

### 4.2.14.1 Test case description

**Delete a template that has not been applied to an entity**

### 4.2.14.2 Test case preconditions

* **T4.2.13** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.13** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.14.3 Test case steps (instructions)

* Browse or find template **Tmpl.4.3 – Aggregation contact** and inspect it under **R7.5.12**
* Delete template **Tmpl.4.3 – Aggregation contact** under **R7.5.16**

### 4.2.14.4 Test case post-conditions (expected result)

* Template **Tmpl.4.3 – Aggregation contact** has been successfully deleted from the test system under **R7.5.16**

### 4.2.14.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.15 – Test Case

### 4.2.15.1 Test case description

**Modify a contextual metadata element definition after it has been applied to an entity**

### 4.2.15.2 Test case preconditions

* **T4.2.14** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.14** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.15.3 Test case steps (instructions)

* Browse or find contextual metadata element definition **cMED.4.4 – Contact Telephone** and inspect it under **R7.5.12**
* Ensure that the test system has set the First Used Timestamp (**M14.4.32**) as a result of applying the contextual metadata element definition to an entity in test case **T4.2.13**
* Attempt to modify the following metadata for **cMED.4.4 – Contact Telephone**, under **R7.5.9**:
  + Set Min Occurs (**M14.4.56**) to “1”
  + Set Max Occurs (**M14.4.53**) to “1”
  + Clear the Is Modifiable Flag (**M14.4.46**)
  + Change the Datatype (**M14.4.10**) to the W3C datatype given in appendix **4.B.1 Contact number datatype**
  + Set the Is Textual Flag (**M14.4.47**)
* Modify the following metadata for **cMED.4.4 – Contact Telephone**, under **R7.5.8**:
  + Set наслов (formerly “Title”) (**M14.4.104**) to “**cMED.4.4 – Contact Mobile**”
  + Set Presentation Order (**M14.4.84**) to “3”
  + Set the Default Value (**M14.4.13**) to “+123456789”
* Inspect the contextual metadata element **cMED.4.4 – Contact Mobile** (formerly “**cMED.4.4 – Contact Telephone**”) to ensure that the metadata values above have been successfully modified

### 4.2.15.4 Test case post-conditions (expected result)

* The user is not able to set Min Occurs under **R7.5.9** because the contextual metadata element definition has been used
* The user is not able to set Max Occurs under **R7.5.9** because the contextual metadata element definition has been used
* The user is not able to clear the Is Modifiable Flag under **R7.5.9** because the contextual metadata element definition has been used
* The user is not able to change the Datatype under **R7.5.9** because the contextual metadata element definition has been used
* The user is not able to set the Is Textual Flag under **R7.5.9** because the contextual metadata element definition has been used
* The user successfully modifies the наслов (formerly “Title”) under **R7.5.8**
* The user successfully modifies the Presentation Order under **R7.5.8**
* The user successfully modifies the Default Value under **R7.5.8**

### 4.2.15.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.16 – Test Case

### 4.2.16.1 Test case description

**Manually apply a template to an entity that already has contextual metadata**

### 4.2.16.2 Test case preconditions

* **T4.2.15** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.15** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.16.3 Test case steps (instructions)

* Find or browse to record **Rec.4.1** in the record service, and inspect it under **R6.5.12**
* Take note of the values of the contextual metadata elements and their presentation order before a second template is applied to the record
* Apply template **Tmpl.4.1 – Class contact** to **Rec.4.1** under **R7.5.19**
* Ensure that the contextual metadata element **cMED.4.1 – Number Of Contacts** has a default value of “0” under **R7.5.13**
* Set the value of contextual metadata element **cMED.4.1 – Number Of Contacts** to “3”
* Ensure that because record **Rec.4.1** already has the contextual metadata element **cMED.4.4 – Contact Mobile** (formerly **cMED.4.4 – Contact Telephone**) that the previous value of this element remains unchanged by applying a new template containing the same contextual metadata element definition, but can be modified further
* Delete the metadata value “(0)1912414523” previously given to contextual metadata element **cMED.4.4 – Contact Mobile** in test case **T4.2.13** while ensuring that its other metadata value remains (“+441912414523”)
* Add a second metadata value of “+441912453802” to contextual metadata element **cMED.4.4 – Contact Mobile** while ensuring that its other metadata value remains (“+441912414523”)
* Ensure that because record **Rec.4.1** already has the contextual metadata element **cMED.4.3 – Contact Address** that the previous value of this element remains unchanged by applying a new template containing the same contextual metadata element definition, but can be modified further
* Ensure that by applying the template the contextual metadata element **cMED.4.5 – Contact Email Address** is added to record **Rec.4.1**, but do not provide any values for this metadata elements
* Ensure that because record **Rec.4.1** already has the contextual metadata element **cMED.4.6 – First Contact Date** that the previous value of this element (today’s date) remains unchanged by applying a new template containing the same contextual metadata element definition
* Ensure that the value previously set for the contextual metadata element **cMED.4.6 – First Contact Date** in text case **T4.2.13** cannot be further modified when the template is applied because the Is Modifiable Flag for **cMED.4.6 – First Contact Date** was cleared in test case **T4.2.9**
* Ensure that the contextual metadata element **cMED.4.7 – Officer Responsible** has a default value of “Grp.4.1” under **R7.5.13** and do not change this default value while applying the template
* Inspect record **Rec.4.1** under **R6.5.12** and ensure that the template has been applied correctly and the metadata elements listed above exist and have the (final) values shown
* Ensure that during this test case the values of the contextual metadata element **cMED.4.2 – Contact Name** and its language identifier have remained unchanged as this contextual metadata element was not part of the template that was applied
* Take note of the presentation order of the metadata elements of record **Rec.4.1** after the template is applied and compare this to inspecting the record at the beginning of the test case

### 4.2.16.4 Test case post-conditions (expected result)

* Record **Rec.4.1** was found
* At the start of the test case the order and values for the metadata elements of record **Rec.4.1** were the same as those noted at the conclusion of test case **T4.2.13**
* During the test case contextual metadata element **cMED.4.1 – Number Of Contacts** was added to record **Rec.4.1** with a value of “3”
* The contextual metadata element **cMED.4.4 – Contact Mobile** was modified and now has the values:
  + “+441912414523”
  + “+441912453802”
* The contextual metadata element **cMED.4.3 – Contact Address** was not modified (although it could have been)
* The contextual metadata element **cMED.4.5 – Contact Email Address** has been added to record **Rec.4.1** but the record holds no values for this metadata element
* The user is not able to modify contextual metadata element **cMED.4.6 – First Contact Date** when the template is applied
* The contextual metadata element **cMED.4.7 – Officer Responsible** has been added to record **Rec.4.1** with a value of “Grp.4.1”
* At the completion of the test case, template **Tmpl.4.1 – Class contact** has been successfully applied to **Rec.4.1** under **R7.5.19**
* The contextual metadata element **cMED.4.2 – Contact Name** and its language identifier have remained unchanged by applying the template (and were not able to be modified)
* The user’s preferences in setting the presentation order of the metadata elements of record **Rec.4.1** are reflected in how these elements are accessed when the record is inspected (see the following discussion in **4.2.16.5 Notes to test centre**)

### 4.2.16.5 Notes to test centre

As described in the notes in section **4.2.9.5** (above) and discussed in the rationale to requirement **R7.5.5**, MoReq2010® allows some leeway in how different MCRS solutions implement presentation order. Depending on the style of interface provided by the test system there will also be variation in how entity metadata is “presented” to the user.

While it is fully accepted that the majority of MCRS solutions will have far more sophisticated ways of arranging metadata elements for presentation, the use of presentation order in MoReq2010® provides a “lowest common denominator” approach to interoperability and the problem of transferring information between different records systems.

Therefore as a general rule the test centre should be able to observe an effect caused by presentation order on metadata elements while inspecting entities during these test cases:

* When contextual metadata element definitions are created in test case **T4.2.9** each element is given a unique presentation order in accordance with **R7.5.5**
* After template **Tmpl.4.2 – Service contact** is applied to record **Rec.4.1** in test case **T4.2.13** its metadata elements on inspection should be represented to the user as being in the following order (or equivalent depending on the nature of the test system):
  + **cMED.4.2 – Contact Name** (presentation order = 2)
  + **cMED.4.3 – Contact Address** (presentation order = 3)
  + **cMED.4.4 – Contact Telephone** (presentation order = 4)
  + **cMED.4.6 – First Contact Date** (presentation order = 6)
  + Followed by the entity’s system metadata elements (presentation order = 8+)
* During test case **T4.2.15** the Presentation Order of the contextual metadata element definition **cMED.4.4 – Contact Telephone** is changed from “4” to “3” and its name is changed to **cMED.4.4 – Contact Mobile**
* As under **R7.5.5** presentation order must be unique across all metadata element definitions in the metadata service this will have the effect of modifying the presentation order of **cMED.4.3 – Contact Address** (previously “3”) to “4”
* After test case **T4.2.15** the metadata elements of record **Rec.4.1** on inspection should be represented to the user as being in the following order (or equivalent depending on the nature of the test system):
  + **cMED.4.2 – Contact Name** (presentation order = 2)
  + **cMED.4.4 – Contact Mobile** (presentation order = 3)
  + **cMED.4.3 – Contact Address** (presentation order = 4)
  + **cMED.4.6 – First Contact Date** (presentation order = 6)
  + Followed by the entity’s system metadata elements (presentation order = 8+)
* After template **Tmpl.4.1 – Class contact** is applied to record **Rec.4.1** in the current test case (**T4.2.16**) new metadata elements are added to the record and are merged with those metadata elements that have been added previously
* Following this test case, the entity’s metadata elements on inspection should be represented to the user as being in the following order (or equivalent depending on the nature of the test system):
  + **cMED.4.1 – Number Of Contacts** (presentation order = 1)
  + **cMED.4.2 – Contact Name** (presentation order = 2)
  + **cMED.4.4 – Contact Mobile** (presentation order = 3)
  + **cMED.4.3 – Contact Address** (presentation order = 4)
  + **cMED.4.5 – Contact Email Address** (presentation order = 5)
  + **cMED.4.6 – First Contact Date** (presentation order = 6)
  + **cMED.4.7 – Officer Responsible** (presentation order = 7)
  + Followed by the entity’s system metadata elements (presentation order = 8+)

Presentation order or an equivalent for arranging metadata elements is necessary to ensure the usability of long lists of entity metadata by allowing:

* More frequently accessed elements to be listed ahead of less frequently accessed elements;
* Higher priority elements to be listed ahead of low priority elements; and
* Related elements to be grouped together

### 4.2.16.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.17 – Test Case

### 4.2.17.1 Test case description

**Modify a template**

### 4.2.17.2 Test case preconditions

* **T4.2.16** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.16** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.17.3 Test case steps (instructions)

* Find or browse to template **Tmpl.4.2 – Service contact** in the metadata service, and inspect it under **R7.5.12**
* Under **R7.5.15** modify the metadata of the template **Tmpl.4.2 – Service contact** as follows:
  + Set Description (**M14.4.16**) to “Modified in test case T4.2.17”
  + Remove the following values for the Template Entity Type Identifier (**M14.4.102**):
    - Group (**E14.2.10**), and
    - Record (**E14.2.12**)
  + Set the Template Service Identifier (**M14.4.103**) to the record service and not the user and group service
  + Remove **cMED.4.3 – Contact Address** from the Contextual Metadata Element Definition (**M14.4.8**) for this template
  + Add the contextual metadata element definition **cMED.4.7 – Officer Responsible** to the element Contextual Metadata Element Definition (**M14.4.8**) for this template
* Find or browse to record **Rec.4.1** in the record service, and inspect it under **R6.5.12** to ensure that modifying the template has had no effect on its contextual metadata elements

### 4.2.17.4 Test case post-conditions (expected result)

* The description of **Tmpl.4.2 – Service contact** has been updated
* The only value for Template Entity Type Identifier (**M14.4.102**) is now Aggregation (**E14.2.1**)
* The only value for Template Service Identifier (**M14.4.103**) is now the record service
* Template **Tmpl.4.2 – Service contact** now has the following contextual metadata elements (only):
  + **cMED.4.2 – Contact Name**
  + **cMED.4.4 – Contact Mobile**
  + **cMED.4.6 – First Contact Date**
  + **cMED.4.7 – Officer Responsible**
* The contextual metadata elements of record **Rec.4.1** remain unchanged

### 4.2.17.5 Notes to test centre

Templates are used to apply contextual metadata elements with entities. Once the elements are applied to the entity they become directly associated with it and further changes in the template are irrelevant.

### 4.2.17.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.18 – Test Case

### 4.2.18.1 Test case description

**Destroy a contextual metadata element definition after it has been applied**

### 4.2.18.2 Test case preconditions

* **T4.2.17** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.17** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.18.3 Test case steps (instructions)

* Find or browse to contextual metadata element definition **cMED.4.4 – Contact Mobile** in the metadata service, and inspect it under **R7.5.12**
* Attempt to delete contextual metadata element definition **cMED.4.4 – Contact Mobile** under **R7.5.10**
* Destroy contextual metadata element definition **cMED.4.4 – Contact Mobile** under **R7.5.11**
* Find or browse to record **Rec.4.1** in the record service, and inspect it under **R6.5.12**
* Attempt to modify the values of contextual metadata element **cMED.4.4 – Contact Mobile** under **R6.5.20**
* Attempt to delete the contextual metadata element from record **Rec.4.1** **cMED.4.4 – Contact Mobile** under **R7.5.20**
* Attempt to delete any/all system or contextual metadata elements from record **Rec.4.1** under **R7.5.20**
* Reapply the following tests to the contextual metadata element **cMED.4.2 – Contact Name** from test case **T4.2.13**:
  + Attempt to add an additional value
  + Attempt to delete all values of the metadata element
  + After removing a value attempt to add a value that exceeds the 40 character datatype restriction
  + Finally, set the only value of this element to “Secretariat”
* Modify the value of the contextual metadata element **cMED.4.5 – Contact Email Address** by adding the following values under **R6.5.20**:
  + “secretariat@dlmforum.eu”
  + “testing@dlmforum.eu”
  + “moreq2010@dlmforum.eu”
* Attempt to modify the values of contextual metadata element **cMED.4.6 – First Contact Date** under **R6.5.20**
* Attempt to modify the contextual metadata element **cMED.4.7 – Officer Responsible** by changing the value from “Grp.4.1” to “Agg.4.1”
* Modify the contextual metadata element **cMED.4.7 – Officer Responsible** by changing the value from “Grp.4.1” to “Usr.4.2”
* Inspect record Rec.4.1 to ensure that these changes have been made
* Find or browse to template **Tmpl.4.1 – Class contact** in the metadata service, and inspect it under **R7.5.12**
* Find or browse to template **Tmpl.4.2 – Service contact** in the metadata service, and inspect it under **R7.5.12**

### 4.2.18.4 Test case post-conditions (expected result)

* Contextual metadata element definition **cMED.4.4 – Contact Mobile** is found and is active
* Contextual metadata element definition **cMED.4.4 – Contact Mobile** cannot be deleted under **R7.5.10** because it has previously been applied to an entity
* Contextual metadata element definition **cMED.4.4 – Contact Mobile** is successfully destroyed under **R7.5.11**
* Record **Rec.4.1** is found and is active
* Contextual metadata element definition **cMED.4.4 – Contact Mobile** cannot be deleted from record **Rec.4.1** under **R7.5.20** because although the metadata element definition has been destroyed under **R7.5.11** the record remains active
* MoReq2010® does not permit the deletion of metadata elements (system or contextual) from active entities under **R7.5.20**
* The value of contextual metadata element definition **cMED.4.4 – Contact Mobile** cannot be modified under **R6.5.20** because under **R7.5.11** the values of contextual metadata elements associated with entities cannot be modified once their definitions have been destroyed
* Contextual metadata element **cMED.4.2 – Contact Name** cannot have:
  + Fewer than 1 (Min Occurs) values,
  + More than 3 (Max Occurs) values, or
  + A value that is not valid in accordance with its datatype
* The values of the contextual metadata element **cMED.4.5 – Contact Email Address** are successfully updated to those given above
* The value previously set for the contextual metadata element **cMED.4.6 – First Contact Date** in text case **T4.2.13** cannot be further modified because the Is Modifiable Flag for **cMED.4.6 – First Contact Date** was cleared in test case **T4.2.9**
* The value of contextual metadata element **cMED.4.7 – Officer Responsible** cannot be changed to **Agg.4.1** because the values of the Entity Reference Type Identifier (**M14.4.24**) for the contextual metadata element definition (set in test case **T4.2.9**) allow a reference only to either a User (**E14.2.16**) or a Group (**E14.2.10**) entity type
* The value of the contextual metadata element **cMED.4.7 – Officer Responsible** is successfully changed from **Grp.4.1** to **Usr.4.2**
* All changes are confirmed by inspection of the record
* Inspection of the templates **Tmpl.4.1 – Class contact** and **Tmpl.4.2 – Service contact** should reveal that although the residual contextual metadata element definition **cMED.4.4 – Contact Mobile** is still associated with these templates it has been destroyed and will no longer be applied to entities to which these templates are applied

### 4.2.18.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.19 – Test Case

### 4.2.19.1 Test case description

**Automatically apply templates to entities on creation**

### 4.2.19.2 Test case preconditions

* **T4.2.18** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.18** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.19.3 Test case steps (instructions)

* In the record service create a new record with the following characteristics:
  + Title (**M14.4.104**) = “Rec.4.3”
  + Parent Aggregation Identifier (**M14.4.63**) = “Agg.4.1”
  + Class Identifier (**M14.4.4**) = [inherited] (“Cls.4.1”)
* Observe whether the test system automatically applies any active templates to the new record and requires values for any contextual metadata elements under **R7.5.18** before allowing the user to create the new record
* In the record service create a new record with the following characteristics:
  + Title (**M14.4.104**) = “Rec.4.4”
  + Parent Aggregation Identifier (**M14.4.63**) = “Agg.4.1”
  + Class Identifier (**M14.4.4**) = “Cls.4.2” (overridden)
* Observe whether the test system automatically applies any active templates to the new record and requires values for any contextual metadata elements under **R7.5.18** before allowing the user to create the new record
* In the record service create a new **root** aggregation with the following characteristics:
  + Title (**M14.4.104**) = “Agg.4.2”
  + Class Identifier (**M14.4.4**) = “Cls.4.1”
* Observe whether the test system automatically applies any active templates to the new aggregation and requires values for any contextual metadata elements under **R7.5.18** before allowing the user to create the new aggregation
* In the record service create a new **root** aggregation with the following characteristics:
  + Title (**M14.4.104**) = “Agg.4.3”
  + Class Identifier (**M14.4.4**) = “Cls.4.2”
* Observe whether the test system automatically applies any active templates to the new aggregation and requires values for any contextual metadata elements under **R7.5.18** before allowing the user to create the new aggregation

### 4.2.19.4 Test case post-conditions (expected result)

* The new record **Rec.4.3** should have template **Tmpl.4.1 – Class contact** automatically applied to it (because this template is applicable to records classified with class **Cls.4.1**) but should not have template **Tmpl.4.2 – Service contact** applied to it (because this template is only applicable to aggregations)
* The new record **Rec.4.3** must therefore be given the following contextual metadata elements by the test system:
  + **cMED.4.1 – Number Of Contacts**
  + **cMED.4.3 – Contact Address**
  + **cMED.4.5 – Contact Email Address**
  + **cMED.4.6 – First Contact Date**
  + **cMED.4.7 – Officer Responsible**
* The new record **Rec.4.4** should not have any templates associated with it (because this template **Tmpl.4.1 – Class contact** is only applicable to records classified with class **Cls.4.1** and template **Tmpl.4.2 – Service contact** is only applicable to aggregations)
* The new record **Rec.4.4** must therefore be given no contextual metadata elements by the test system
* The new aggregation **Agg.4.2** should have both template **Tmpl.4.1 – Class contact** and **Tmpl.4.2 – Service contact** automatically applied to it (because it is both an aggregation classified by class **Cls.4.1** and an aggregation in the record service)
* The new aggregation **Agg.4.2** must therefore be given the following contextual metadata elements by the test system:
  + **cMED.4.1 – Number Of Contacts**
  + **cMED.4.2 – Contact Name**
  + **cMED.4.3 – Contact Address**
  + **cMED.4.5 – Contact Email Address**
  + **cMED.4.6 – First Contact Date**
  + **cMED.4.7 – Officer Responsible**
* The new aggregation **Agg.4.3** should have template **Tmpl.4.2 – Service contact** automatically applied to it (because this template is applicable to aggregations created in the record service) but should not have template **Tmpl.4.1 – Class contact** applied to it (because this template is only applicable to aggregations classified with class **Cls.4.1**)
* The new record **Agg.4.3** must therefore be given the following contextual metadata elements by the test system:
  + **cMED.4.2 – Contact Name**
  + **cMED.4.6 – First Contact Date**
  + **cMED.4.7 – Officer Responsible**
* Ensure that the residual contextual metadata element **cMED.4.4 – Contact Mobile** which was destroyed in test case **T4.2.18** is not added to any entities created in this test case

### 4.2.19.5 Notes to test centre

The test operator may create any type of record supported by the test system and may provide any valid values for the contextual metadata elements added during this test case.

### 4.2.19.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.20 – Test Case

### 4.2.20.1 Test case description

**Destroy a template that has previously been applied to an entity**

### 4.2.20.2 Test case preconditions

* **T4.2.19** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.19** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.20.3 Test case steps (instructions)

* Find or browse to template **Tmpl.4.1 – Class contact** in the metadata service, and inspect it under **R7.5.12**
* Attempt to delete template **Tmpl.4.1 – Class contact** under **R7.5.16**
* Destroy template **Tmpl.4.1 – Class contact** under **R7.5.17**
* In the record service create a new record with the following characteristics:
  + Title (**M14.4.104**) = “Rec.4.5”
  + Parent Aggregation Identifier (**M14.4.63**) = “Agg.4.1”
  + Class Identifier (**M14.4.4**) = [inherited] (“Cls.4.1”)
* Observe whether the test system automatically applies any active templates to the new record and requires values for any contextual metadata elements under **R7.5.18** before allowing the user to create the new record
* Attempt to manually apply residual template **Tmpl.4.1 – Class contact** to record **Rec.4.5** under **R7.5.18**

### 4.2.20.4 Test case post-conditions (expected result)

* Template **Tmpl.4.1 – Class contact** cannot be deleted under **R7.5.12** because it has previously been applied to entities
* Template **Tmpl.4.1 – Class contact** is successfully destroyed
* The new record **Rec.4.5** does not have any templates associated with it (because template **Tmpl.4.1 – Class contact** is now a residual template)
* Template **Tmpl.4.1 – Class contact** cannot be manually applied to any entity under **R7.5.18** because it has been destroyed and is now a residual entity (no longer active)

### 4.2.20.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.21 – Test Case

### 4.2.21.1 Test case description

**Automatically delete metadata elements from residual entities**

### 4.2.21.2 Test case preconditions

* **T4.2.20** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.20** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.21.3 Test case steps (instructions)

* Find or browse to record **Rec.4.1** in the record service, and inspect it under **R6.5.12**
* Under **R6.5.15** apply disposal schedule **DiS.4.3** (destroy immediately) to record **Rec.4.1** overriding the disposal schedule it inherits from its class **Cls.4.1**
* Under **R8.4.16** browse and inspect all active records that are due for disposal for aggregation **Agg.4.1**
* Confirm the destruction of record **Rec.4.1** under **R8.4.20** if required
* Find or browse to residual record **Rec.4.1** in the record service under **R10.4.17** (and possibly **R101.4.3**), and inspect it under **R6.5.12**

### 4.2.21.4 Test case post-conditions (expected result)

* Record **Rec.4.1** is found and is active
* Disposal schedule **DiS.4.3** is successfully applied to record **Rec.4.1**
* Record **Rec.4.1** is successfully destroyed (with confirmation if appropriate)
* Record **Rec.4.1** is found and is residual
* The following system metadata element has been automatically deleted from the residual record **Rec.4.1** upon its destruction:
  + наслов (formerly “Title”) (**M14.4.104**) – see test case **T4.2.8**
* The following contextual metadata elements have been automatically deleted from the residual record **Rec.4.1** upon its destruction:
  + **cMED.4.2 – Contact Name** – see test case **T4.2.9**
  + **cMED.4.3 – Contact Address** – see test case **T4.2.9**
  + **cMED.4.7 – Officer Responsible** – see test case **T4.2.9**

### 4.2.21.5 Notes to test centre

The Retain On Destruction Flag (**M14.4.88**) in the metadata element definition determines whether the metadata element is retained or deleted when the entity is destroyed.

### 4.2.21.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.22 – Test Case

### 4.2.22.1 Test case description

**Manually delete metadata elements from residual entities**

### 4.2.22.2 Test case preconditions

* **T4.2.21** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.21** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.22.3 Test case steps (instructions)

* Find or browse to residual record **Rec.4.1** in the record service under **R10.4.17** (and possibly **R101.4.3**), and inspect it under **R6.5.12**
* Delete the following system metadata element from residual record **Rec.4.1** under **R7.5.7**:
  + Description (**M14.4.16**)
* Delete the following contextual metadata elements from residual record **Rec.4.1** under **R7.5.7**:
  + **cMED.4.4 – Contact Mobile**
  + **cMED.4.5 – Contact Email Address**
* Find residual record **Rec.201.2** and inspect its metadata

### 4.2.22.4 Test case post-conditions (expected result)

* Record **Rec.4.1** is found and is a residual record
* The system metadata element is successfully deleted from the residual record under **R7.5.7**
* The contextual metadata elements are successfully deleted from the residual record under **R7.5.7**

### 4.2.22.5 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.23 – Test Case

### 4.2.23.1 Test case description

**Export metadata service data**

### 4.2.23.2 Test case preconditions

* **T4.2.22** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.22** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.23.3 Test case steps (instructions)

* Export the record service under **R11.4.1** (including residual entities under **R11.4.2**)
* Export the model metadata service under **R11.4.1** (including residual entities under **R11.4.2**)
* The text comment for each export under **R11.4.5** should be: “Test case T4.2.26: export of *<name>*”

### 4.2.23.4 Test case post-conditions (expected result)

* Each of the two data exports has its own universally unique export identifier, under **R11.4.4**
* Each of the two data exports has the appropriate text comment, under **R11.4.5**
* The exported data matches that expected (\* see notes) under **R11.4.3**, **R11.4.6**, **R11.4.7** and **R11.4.9**
* The export identifier and export comment can be found in the export event generated under **R11.4.10**, and stored in the event history of each entity exported
* The exported XML data is in Unicode, under **R2.4.28**
* All textual metadata elements in the exported XML data are accompanied by a language identifier, under **R2.4.28**
* All timestamps in the exported XML data are in the W3C XML dateTimeStamp format and include time zone information, under **R2.4.27**

### 4.2.23.5 Notes to test centre

(\* see above) Definitive comparative test data is not yet available, as the test framework is in beta, and export data must currently be checked by hand

### 4.2.23.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.24 – Test Case

### 4.2.24.1 Test case description

**Final compliance check**

### 4.2.24.2 Test case preconditions

* **T4.2.23** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.23** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.24.3 Test case steps (instructions)

* Generate the compliance report for the test system (reference **R2.4.5**)

### 4.2.24.4 Test case post-conditions (expected result)

* The compliance report contains all of the information required by **R2.4.5**
* Specifically, the compliance report must show compliance with, at least:
  + **User and Group Service v1.x** (**cd532472-85b0-4c1c-82b4-5c8370b7d0e6**)
  + **Model Role Service v1.x (2f6d05c6-51e6-4a32-a7fc-c0a6883eb85b)**

**OR Native Role Service v1.x (d945dcd9-dc2d-491d-965a-11ce936d044b)**

* + **Classification Service v1.x** (**10fea10e-9c2f-4760-9095-f4f9295f4b19**)
  + **Record Service v1.x** (**ced3d0df-3f9f-4807-9e96-b5b790adad4a**)
  + **Metadata Service v1.x** (**a600f8d0-2d58-418e-bb41-211d1fd42350**)
  + **Disposal Scheduling Service (fd05e284-181f-4f5d-bd8c-4bed835c8931)**
  + **Searching and Reporting v1.x** (**f09984a5-dd31-44d8-9607-22521667c78a**)
  + **Export Service v1.x** (**2777ab81-057e-4aa4-9595-69459ec2dc1e**)
* The compliance report must use the UUIDs listed above, under **R2.4.23**

### 4.2.24.5 Notes to test centre

The compliance report should be identical to the compliance report generated by test case **T4.2.2**.

### 4.2.24.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## T4.2.25 – Test Case

### 4.2.25.1 Test case description

**Final error check**

### 4.2.25.2 Test case preconditions

* **T4.2.24** has previously been completed successfully during the same test session
* The test system has not been reconfigured or restarted since **T4.2.24** was completed
* The test operator is logged in as user **Usr.4.1**

### 4.2.25.3 Test case steps (instructions)

* Log out of the test system
* Take a copy of the external error log, under **R2.4.7**

### 4.2.25.4 Test case post-conditions (expected result)

* Errors in the external error log must contain at least the information listed under **R2.4.7**

### 4.2.25.5 Notes to test centre

* Check which errors have occurred in the external error log since the start of the test module (compare against the external error log copy obtained under **T4.2.1**)
* Check whether there are have been any errors in this period generated by functions failing to perform under **R2.4.7**
* For any each error that has occurred the current user at the time the error occurred must have had access to the extended error information under **R2.4.8**
* Note that **R2.4.8** is not tested directly unless an error occurs during testing

### 4.2.25.6 Results

Test system operator for this test case

Result

🞏 Correct – result as expected

🞏 Incorrect – unexpected result or outcome

🞏 Incorrect – operation could not be initiated

🞏 Incorrect – crash, timeout or failed to finish for any reason

Observations

One or more of the test case steps…

🞏 …required more than one user action to complete (remark below)

🞏 …provided limited or no feedback to the user (remark below)

🞏 …was dependent on one or more previous user actions (remark below)

Additional remarks on observations

## POSTSCRIPT

### Notes to test centre

To avoid strange surprises, if the test system is being used for other purposes or for additional testing of other modules without full reconfiguration, then it is wise to reverse test case **T4.2.7** at the conclusion of this test module by changing the value of наслов (**M14.4.104**) to back to “Title” for system metadata element definition **M14.4.104** and, where this has been modified, to simultaneously change its language identifier from “sr-Cyrl” to “en”.

Macintosh HD:Users:jon:Documents:DLM Forum:DLM Foundation:Branding:Logos:MoReq logos:MoReq2010:MoReq2010_Reg:MoReq2010_Reg_pms.eps

# APPENDIX TO TEST MODULE 4

# 4.A Test data

The test system must be pre-loaded with at least the test data given here.

## 4.A.1 User and group service

### 4.A.1.1 User entities

| Title | Groups | Roles | Comment |
| --- | --- | --- | --- |
| **Usr.4.1** | * Grp.4.1 | **For Usr.4.1:**   * Rol.4.1 | Power user, member of group with read/write |
| **Usr.4.2** | * Grp.4.2 | **For Usr.4.2:**   * Rol.4.2 | Essential user, member of group with read only |

### 4.A.1.2 Group entities

| Title | Roles | Comment |
| --- | --- | --- |
| **Grp.4.1** | **For User and Group Service:**   * Rol.4.4 * Rol.4.5 * Rol.4.6   **For Record Service:**   * Rol.4.4 * Rol.4.7 * Rol.4.9   **For Model Metadata Service:**   * Rol.4.3 * Rol.4.11   **For Disposal Scheduling Service:**   * Rol.4.4 * Rol.4.13   **For Classification Service:**   * Rol.4.4 * Rol.4.14 | Has read/write for role service and record service (inherited by all group members) |
| **Grp.4.2** | **For User and Group Service:**   * Rol.4.4 * Rol.4.5 * Rol.4.6   **For Record Service:**   * Rol.4.4 * Rol.4.8 * Rol.4.10   **For Model Metadata Service:**   * Rol.4.4 * Rol.4.12   **For Disposal Scheduling Service:**   * Rol.4.4 * Rol.4.13   **For Classification Service:**   * Rol.4.4 * Rol.4.14 | Has read only for all services (inherited by all group members) |

## 4.A.2 Model role service

### 4.A.2.1 Role entities

| Name | Administrative? | Functions (access control) | Comment |
| --- | --- | --- | --- |
| **Rol.4.1** | No | * User – Browse Records Due For Disposal (**F14.5.178**) * User – Detailed Report (**F14.5.184**) * User – Export (**F14.5.185**) * User – Search (**F14.5.195**) * User – Summary Report (**F14.5.196**) | Power user |
| **Rol.4.2** | No | * User – Detailed Report (**F14.5.184**) * User – Search (**F14.5.195**) | Essential user |
| **Rol.4.3** | Yes | * Entity Type – Inspect (**F14.5.83**) * Entity Type – Inspect ACL (**F14.5.84**) * Entity Type – Inspect Event (**F14.5.85**) * Entity Type – Modify ACL (**F14.5.86**) * Function Definition – Inspect (**F14.5.87**) * Function Definition – Inspect ACL (**F14.5.88**) * Function Definition – Inspect Event (**F14.5.89**) * Function Definition – Modify ACL (**F14.5.91**) * Function Definition – Modify Event Generation (**F14.5.92**) * Function Definition – Modify Retain Event On Destruction (**F14.5.93**) * Service – Inspect (**F14.5.158**) * Service – Inspect ACL (**F14.5.159**) * Service – Inspect Event (**F14.5.160**) * Service – Modify ACL (**F14.5.161**) * Service – Modify Metadata (**F14.5.162**) * Service – Report Compliance (**F14.5.163**) | Read/write services |
| **Rol.4.4** | Yes | * Entity Type – Inspect (**F14.5.83**) * Entity Type – Inspect ACL (**F14.5.84**) * Entity Type – Inspect Event (**F14.5.85**) * Function Definition – Inspect (**F14.5.87**) * Function Definition – Inspect ACL (**F14.5.88**) * Function Definition – Inspect Event (**F14.5.89**) * Service – Inspect (**F14.5.158**) * Service – Inspect ACL (**F14.5.159**) * Service – Inspect Event (**F14.5.160**) * Service – Report Compliance (**F14.5.163**) | Read only services |
| **Rol.4.5** | Yes | * Group – Inspect (**F14.5.101**) * Group – Inspect ACL (**F14.5.102**) * Group – Inspect Event (**F14.5.103**) * Group – Report User Membership (**F14.5.108**) | Read only groups |
| **Rol.4.6** | Yes | * User – Inspect (**F14.5.187**) * User – Inspect ACL (**F14.5.188**) * User – Inspect Event (**F14.5.189**) * User – Report Authorisation (**F14.5.193**) * User – Report Group Membership (**F14.5.194**) | Read only users |
| **Rol.4.7** | Yes | * Aggregation – Add Aggregation (**F14.5.1**) * Aggregation – Add Contextual Metadata (**F14.5.2**) * Aggregation – Add Record (**F14.5.3**) * Aggregation – Close (**F14.5.4**) * Aggregation – Create (**F14.5.5**) * Aggregation – Delete (**F14.5.6**) * Aggregation – Delete Residual Event (**F14.5.7**) * Aggregation – Delete Residual Metadata (**F14.5.8**) * Aggregation – Inherit Default Class (**F14.5.11**) * Aggregation – Inspect (**F14.5.12**) * Aggregation – Inspect ACL (**F14.5.13**) * Aggregation – Inspect Event (**F14.5.14**) * Aggregation – Modify ACL (**F14.5.15**) * Aggregation – Modify Max Levels Of Aggregation (**F14.5.16**) * Aggregation – Modify Metadata (**F14.5.17**) * Aggregation – Modify Originated Date/Time (**F14.5.18**) * Aggregation – Open (**F14.5.19**) * Aggregation – Override Class (**F14.5.20**) * Aggregation – Remove Aggregation (**F14.5.21**) * Aggregation – Remove Record (**F14.5.22**) | Read/write aggregations |
| **Rol.4.8** | Yes | * Aggregation – Inspect (**F14.5.12**) * Aggregation – Inspect ACL (**F14.5.13**) * Aggregation – Inspect Event (**F14.5.14**) | Read only aggregations |
| **Rol.4.9** | Yes | * Record – Add Contextual Metadata (**F14.5.115**) * Record – Cancel Destruction (**F14.5.116**) * Record – Cancel Transfer (**F14.5.117**) * Record – Complete Review (**F14.5.118**) * Record – Confirm Destruction (**F14.5.119**) * Record – Confirm Transfer (**F14.5.120**) * Record – Create (**F14.5.121**) * Record – Delete Residual Event (**F14.5.122**) * Record – Delete Residual Metadata (**F14.5.123**) * Record – Disposal Alert (**F14.5.125**) * Record – Duplicate (**F14.5.126**) * Record – Held (**F14.5.128**) * Record – Inherit Default Class (**F14.5.129**) * Record – Inherit Default Disposal Schedule (**F14.5.130**) * Record – Inspect (**F14.5.131**) * Record – Inspect ACL (**F14.5.132**) * Record – Inspect Event (**F14.5.133**) * Record – Modify ACL (**F14.5.134**) * Record – Modify Metadata (**F14.5.135**) * Record – Modify Originated Date/Time (**F14.5.136**) * Record – Override Class (**F14.5.137**) * Record – Override Disposal Schedule (**F14.5.138**) * Record – Released (**F14.5.139**) * Record – Update Disposal (**F14.5.140**) | Read/write records |
| **Rol.4.10** | Yes | * Record – Inspect (**F14.5.131**) * Record – Inspect ACL (**F14.5.132**) * Record – Inspect Event (**F14.5.133**) * Record – Released (**F14.5.139**) * Record – Update Disposal (**F14.5.140**) | Read only records |
| **Rol.4.11** | Yes | * Contextual Metadata Element Definition – Create (**F14.5.48**) * Contextual Metadata Element Definition – Delete (**F14.5.49**) * Contextual Metadata Element Definition – Delete Residual Event (**F14.5.50**) * Contextual Metadata Element Definition – Destroy (**F14.5.51**) * Contextual Metadata Element Definition – Modify Before Use (**F14.5.53**) * Contextual Metadata Element Definition – Modify Originated Date/Time (**F14.5.54**) * Metadata Element Definition – Inspect (**F14.5.109**) * Metadata Element Definition – Inspect ACL (**F14.5.110**) * Metadata Element Definition – Inspect Event (**F14.5.111**) * Metadata Element Definition – Modify ACL (**F14.5.112**) * Metadata Element Definition – Modify Metadata (**F14.5.113**) * Metadata Element Definition – Modify Retain On Destruction (**F14.5.114**) * Template – Add Contextual Metadata (**F14.5.164**) * Template – Create (**F14.5.165**) * Template – Delete (**F14.5.166**) * Template – Delete Residual Event (**F14.5.167**) * Template – Delete Residual Metadata (**F14.5.168**) * Template – Destroy (**F14.5.169**) * Template – Inspect (**F14.5.171**) * Template – Inspect ACL (**F14.5.172**) * Template – Inspect Event (**F14.5.173**) * Template – Modify ACL (**F14.5.174**) * Template – Modify Metadata (**F14.5.175**) * Template – Modify Originated Date/Time (**F14.5.176**) | Read/write metadata |
| **Rol.4.12** | No | * Metadata Element Definition – Inspect (**F14.5.109**) * Metadata Element Definition – Inspect ACL (**F14.5.110**) * Metadata Element Definition – Inspect Event (**F14.5.111**) * Template – Inspect (**F14.5.171**) * Template – Inspect ACL (**F14.5.172**) * Template – Inspect Event (**F14.5.173**) | Read only metadata |
| **Rol.4.13** | Yes | * Disposal Hold – Inspect (**F14.5.63**) * Disposal Hold – Inspect ACL (**F14.5.64**) * Disposal Hold – Inspect Event (**F14.5.65**) * Disposal Schedule – Inspect (**F14.5.77**) * Disposal Schedule – Inspect ACL (**F14.5.78**) * Disposal Schedule – Inspect Event (**F14.5.79**) | Read only disposal |
| **Rol.4.14** | Yes | * Class – Inspect (**F14.5.30**) * Class – Inspect ACL (**F14.5.31**) * Class – Inspect Event (**F14.5.32**) | Read only classes |

## 4.A.3 Record service

### 4.A.3.1 Aggregation entities

| Title | Parent Aggregation | Open/closed | Class | Comment |
| --- | --- | --- | --- | --- |
| **Agg.4.1** | *Root* | Open | Cls.4.1 | Root aggregation |

### 4.A.3.2 Record entities

| Title | Parent Aggregation | Class | Disposal Schedule | Comment |
| --- | --- | --- | --- | --- |
| **Rec.4.1** | Agg.4.1 | *Inherited* (Cls.4.1) | *Inherited* (DiS.4.1) | Active record created before test begins |
| **Rec.4.2** | Agg.4.1 | *Inherited* (Cls.4.1) | *Inherited* (DiS.4.1) | Active record created before test begins |

## 4.A.4 Disposal scheduling service

### 4.A.4.1 Disposal Schedule entities

| Title | Disposal Action Code | Retention Trigger | Retention Period | Comment |
| --- | --- | --- | --- | --- |
| **DiS.4.1** | Retain Permanently | *N/A* | *N/A* | Retain Permanently |
| **DiS.4.2** | Transfer | From aggregation closed date | 2 years | Transfer 2 years after aggregation closed |
| **DiS.4.3** | Destroy | From now | *N/A* | Destroy immediately |

## 4.A.5 Classification service

### 4.A.5.1 Class entities

| Title | Disposal Schedule | Comment |
| --- | --- | --- |
| **Cls.4.1** | DiS.4.1 | Default disposal schedule: Retain Permanently |
| **Cls.4.2** | DiS.4.2 | Default disposal schedule: Transfer 2 years after aggregation closed |

# 4.B Test datatypes

The following datatypes are used by this test module.

## 4.B.1 Contact number datatype

(This is a built-in W3C XML datatype.)

**nonNegativeInteger**

## 4.B.2 Contact name datatype

(This simple datatype is derived by restriction.)

**<simpleType>**

**<restriction** base="string"**>**

**<maxLength** value="40" **/>**

**</restriction>**

**</simpleType>**

## 4.B.3 Contact address datatype

(This is a complex datatype.)

**<complexType>**

**<sequence>**

**<element** name="Street"**>**

**<simpleType>**

**<restriction** base="string"**>**

**<maxLength** value="40" **/>**

**</restriction>**

**</simpleType>**

**</element>**

**<element** name="Street2" minOccurs="0"**>**

**<simpleType>**

**<restriction** base="string"**>**

**<maxLength** value="40" **/>**

**</restriction>**

**</simpleType>**

**</element>**

**<element** name="City" minOccurs="0"**>**

**<simpleType>**

**<restriction** base="string"**>**

**<maxLength** value="40" **/>**

**</restriction>**

**</simpleType>**

**</element>**

**<element** name="Region" minOccurs="0"**>**

**<simpleType>**

**<restriction** base="string"**>**

**<maxLength** value="40" **/>**

**</restriction>**

**</simpleType>**

**</element>**

**<element** name="Postal Code"**>**

**<simpleType>**

**<restriction** base="string"**>**

**<pattern** value="[0-9A-Z]{0,6}[\ ]{0,1}[0-9A-Z]{0,6}" **/>**

**</restriction>**

**</simpleType>**

**</element>**

**<element** name="Country"**>**

**<simpleType>**

**<restriction** base="string"**>**

**<enumeration** value="Austria" **/>**

**<enumeration** value="Belgium" **/>**

**<enumeration** value="Bulgaria" **/>**

**<enumeration** value="Cyprus" **/>**

**<enumeration** value="Czech Republic" **/>**

**<enumeration** value="Denmark" **/>**

**<enumeration** value="Estonia" **/>**

**<enumeration** value="Finland" **/>**

**<enumeration** value="France" **/>**

**<enumeration** value="Germany" **/>**

**<enumeration** value="Greece" **/>**

**<enumeration** value="Hungary" **/>**

**<enumeration** value="Ireland" **/>**

**<enumeration** value="Italy" **/>**

**<enumeration** value="Latvia" **/>**

**<enumeration** value="Lithuania" **/>**

**<enumeration** value="Luxembourg" **/>**

**<enumeration** value="Malta" **/>**

**<enumeration** value="Netherlands" **/>**

**<enumeration** value="Poland" **/>**

**<enumeration** value="Portugal" **/>**

**<enumeration** value="Romania" **/>**

**<enumeration** value="Slovakia" **/>**

**<enumeration** value="Slovenia" **/>**

**<enumeration** value="Spain" **/>**

**<enumeration** value="Sweden" **/>**

**<enumeration** value="United Kingdom" **/>**

**</restriction>**

**</simpleType>**

**</element>**

**</sequence>**

**</complexType>**

## 4.B.4 Contact email address datatype

(This simple datatype is derived by restriction.)

**<simpleType>**

**<restriction** base="string"**>**

**<pattern** value="^([0-9a-zA-Z]([-.\w]\*[0-9a-zA-Z])\*@([0-9a-zA-Z][-\w]\*[0-9a-zA-Z]\.)+[a-zA-Z]{2,9})$" **/>**

**</restriction>**

**</simpleType>**

## 4.B.5 Contact date datatype

(This is a built-in W3C XML datatype.)

**date**

## 4.B.6 Contact telephone datatype

(This simple datatype is derived by restriction.)

**<simpleType>**

**<restriction** base="string"**>**

**<pattern** value="\+[1-9][0-9]{2,14}" **/>**

**<pattern** value="\([0-9]{1,4}\)[0-9]{1,10}" **/>**

**</restriction>**

**</simpleType>**