EDIT - feature request #9009

Add structure to store media metadata

05/11/2020 05:02 PM - Andreas Kohlbecker

Status:	Closed	**Start date:**	
Priority:	Highest	**Due date:**	
Assignee:	Andreas Müller	**% Done:**	100%
Category:	cdm	**Estimated time:**	0:00 hour
Target version:	CDM UML 5.15		
Severity:	normal		

Description

Media files can contain metadata (Exif, IPCT, PhotoshopMetadata, etc). The Cdm needs to be able to store data extracted from a media file to avoid fetching and analyzingthe file each time it's metadata is requested.

The data structure will be a cache for

```
ImageInfo info = new ImageInfo(URI imageUri);
info.getMetaData();
info.getWidth();
info.getHeight();
// etc ...
```

Since the ImageInfo is fetched for each media URI individually the metadata cache should also extend the MediaRepresentationPart.

Structure of the metadata could be a flat key/value pair list like a Map<String,String>.

Now that ImageInfo and MediaInfo are returning also typed information like width, height, etc it could beneficial to use typed keys and predefined keys with specific types for e.g. with, length, etc ...:

```
public class MetaDataMap extends HashMap<MetaDataType<T>, T>{

    public static class MetaDataType<T extends Object> {

        public static final MetaDataType<String> stringType = new MetaDataType<String>(String.
class);
        public static final MetaDataType<Integer> integerType = new MetaDataType<Integer>(Integer.
class);
        public static final MetaDataType<Double> doubleType = new MetaDataType<Double>(Double.
class);

        Class<T> type;
        T value;

        private MetaDataType(Class<T> type) {
            this.type = type;
        }

        public void setValue(T value) {
            this.value = value;
        }

        public T getValue() {
            return value;
        }

        public Class<T> getType(){
            return type;
        }

        public boolean hasType(Class otherType) {
            return type.equals(otherType);
        }
```

```
    }

    enum MetaDataKey {

        WIDTH(MetaDataMap.MetaDataType.stringType),
        HEIGHT(MetaDataMap.MetaDataType.integerType),
        DURATION(MetaDataMap.MetaDataType.doubleType);

        MetaDataType<?> type;

        private MetaDataKey(MetaDataMap.MetaDataType<?> type){
            this.type = type;
        }
    }
}
```

Associated revisions

Revision 72032e83 - 06/10/2020 05:37 PM - Andreas Müller

fix #9009 add MediaMetaData

Revision 8147e611 - 06/10/2020 05:37 PM - Andreas Müller

fix #9009 add MediaMetaData (cont.)

Revision 66f2a16f - 06/10/2020 11:09 PM - Andreas Müller

fix #9009 fixing test schemas for MediaMetaData

Revision e59aa8bb - 07/02/2020 08:59 AM - Andreas Kohlbecker

ref #9009 updating class doc regarding auditing

History

#1 - 05/11/2020 05:27 PM - Andreas Müller

- Target version changed from CDM UML 5.5 to CDM UML 5.15

#2 - 05/11/2020 05:27 PM - Andreas Müller

- Priority changed from New to Highest

#3 - 05/26/2020 11:48 AM - Andreas Müller

as size information like width and height is already stored in MediaRepresentationPart it is not necessary to store such data in the new class. A pure String based key-value implementation extending CdmBase should be enought. Also versioning is not necessary as the data should be available from the external files if necessary.

#4 - 06/10/2020 02:57 PM - Andreas Müller

- Status changed from New to In Progress

#5 - 06/10/2020 05:38 PM - Andreas Müller

- Status changed from In Progress to Resolved

- % Done changed from 0 to 50

Applied in changeset cdmlib|72032e8369286b8e52207a4ed1ed0443e416b72a.

#6 - 06/15/2020 08:57 PM - Andreas Müller

- Assignee changed from Andreas Müller to Andreas Kohlbecker

- % Done changed from 50 to 0

Please review

#7 - 07/02/2020 09:00 AM - Andreas Kohlbecker

- Status changed from Resolved to Closed

- Assignee changed from Andreas Kohlbecker to Andreas Müller

- % Done changed from 0 to 100

The type level java doc regarding auditing was not up to date. I changed this and the ticket can be closed.