

**Subject:** FW: First Stab at Repository Capabilities using ST2071  
**Date:** Thursday, 25 September 2014 07:00:16 British Summer Time  
**From:** Posick, Steve J.  
**To:** Richard Cartwright

Hi Richard,

Here is another email in the chain that describes the application of ST2071 to the FIMS repository. The following includes a sample ServiceInformation XML, and a list of the RCR elements converted to a ST2071 style, including the readable Attributes.

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**From:** <Posick>, Steve Posick <[Steve.J.Posick@espn.com](mailto:Steve.J.Posick@espn.com)>  
**Date:** Thursday, August 14, 2014 at 9:42 PM  
**To:** Loic Barbou <[loicbarbou@verizon.net](mailto:loicbarbou@verizon.net)>  
**Subject:** Re: First Stab at Repository Capabilities using ST2071

Yes.

I've decided that for extensibility the following definition is the best for the Map data structure.

```
<xs:complexType name="MapEntry">
  <xs:choice minOccurs="0" maxOccurs="1">
    <xs:element ref="tns:Boolean"/>
    <xs:element ref="tns:String"/>
    <xs:element ref="tns:Integer"/>
    <xs:element ref="tns:Float"/>
    <xs:element ref="tns:DateTime"/>
    <xs:element ref="identity:URI"/>
    <xs:element ref="tns:Map"/>
    <xs:element ref="tns:Blob"/>
    <xs:any namespace="##other" processContents="lax"/>
  </xs:choice>
  <xs:attribute name="key" type="xs:string" use="required"/>
  <xs:anyAttribute namespace="##other" processContents="lax"/>
</xs:complexType>
```

Here's an example of what the XML would look like. I haven't defined the EventsAndNotifications Capability yet. For simplicity I duplicated the Capabilities list for the Service Type and the Instance, but I'm sure you understand how those work (Default values, Instance values).

```
<?xml version="1.0" encoding="UTF-8"?>
<ServiceInformation xmlns="http://www.smp-te-ra.org/schemas/st2071/2014/service"
  xmlns:identity="http://www.smp-te-ra.org/schemas/st2071/2014/identity">
```

```

    xmlns:types="http://www.smpte-ra.org/schemas/st2071/2014/types"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.smpte-ra.org/schemas/st2071/2014/service
file:/Users/posicks/work/workspaces/standards/MDCP/src/xml/st2071-2q.xsd">
  <identity:USN>urn:smpte:usn:com.bloomberg.ny:type="instance";repository=1</identity:USN>
  <Type>
    <identity:USN>urn:smpte:usn:org.fims:type="template";Repository</identity:USN>
    <Attributes>
      <types:Entries>
        <types:MapEntry key="version"><types:Float>1.1</types:Float></types:MapEntry>
      </types:Entries>
    </Attributes>
    <types:Capabilities>
      <!--
      urn:smpte:ucn:org.fims:Repository_v1.1
      formatProfileMetadataProcessingType - String enum (mustBeProvided, autoGenerated,
autoGeneratedWhenNotProvided)
      supportedSourceLocations - Map(index - integer, Map(name - string, path - URI))
      supportedDestinationLocations - Map(index - integer, Map(name - string, path - URI))
      supportedCustomEventTemplates - Map(event_type - string, Map(parameter_name - Map(type, minOccurs,
maxOccurs, default)))
      AutoPurge - boolean
-->
    <types:Capability>
      <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1</identity:UCN>
      <types:Attributes>
        <types:Entries>
          <types:MapEntry key="formatProfileMetadataProcessingType">
            <types:String>mustBeProvided</types:String>
          </types:MapEntry>
          <types:MapEntry key="supportedSourceLocations">
            <types:Map>
              <types:Entries>
                <types:MapEntry key="1">
                  <types:Map>
                    <types:Entries>
                      <types:MapEntry key="name">
                        <types:String>Source</types:String>
                      </types:MapEntry>
                      <types:MapEntry key="path">
                        <identity:URI>http://bloomberg.com/</identity:URI>
                      </types:MapEntry>
                    </types:Entries>
                  </types:Map>
                </types:MapEntry>
              </types:Entries>
            </types:Map>
          </types:MapEntry>
          <types:MapEntry key="supportedDestinationLocations">
            <types:Map>
              <types:Entries>
                <types:MapEntry key="1">
                  <types:Map>
                    <types:Entries>
                      <types:MapEntry key="name">
                        <types:String>Destination</types:String>
                      </types:MapEntry>
                    </types:Entries>
                  </types:Map>
                </types:MapEntry>
              </types:Entries>
            </types:Map>
          </types:MapEntry>
        </types:Entries>
      </types:Attributes>
    </types:Capability>
  </types:Capabilities>

```

```

        <types:MapEntry key="path">
          <identity:URI>http://bloomberg.com/</identity:URI>
        </types:MapEntry>
      </types:Entries>
    </types:Map>
  </types:MapEntry>
</types:Entries>
</types:Map>
</types:MapEntry>
<types:MapEntry key="supportedCustomEventTemplates">
  <types:Map>
    <types:Entries>
      <types:MapEntry key="event_type">
        <types:String>SomeEvent</types:String>
      </types:MapEntry>
      <types:MapEntry key="Parameters">
        <types:Map>
          <types:Entries>
            <types:MapEntry key="Parameter">
              <types:Map>
                <types:Entries>
                  <types:MapEntry key="type">
                    <types:String>String</types:String>
                  </types:MapEntry>
                  <types:MapEntry key="minOccurs">
                    <types:Integer>1</types:Integer>
                  </types:MapEntry>
                  <types:MapEntry key="maxOccurs">
                    <types:Integer>1</types:Integer>
                  </types:MapEntry>
                  <types:MapEntry key="default">
                    <types:String>Default</types:String>
                  </types:MapEntry>
                </types:Entries>
              </types:Map>
            </types:MapEntry>
          </types:Entries>
        </types:Map>
      </types:MapEntry>
    </types:Entries>
  </types:Map>
  <types:MapEntry key="AutoPurge">
    <types:Boolean>true</types:Boolean>
  </types:MapEntry>
</types:Entries>
</types:Attributes>
<identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#GenerateUniqueID
-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#GenerateUniqueID</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>

```

```

    <identity:URLs/>
  </types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#AddContent
  ContentVersioning - boolean
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#AddContent</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="ContentVersioning"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#PurgeContent
  maxConcurrentPurgeContentProcessing - integer
  maxConcurrentPurgeContentQueued - integer
  ContentVersioning - boolean
  AutoPurge - boolean
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#PurgeContent</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="maxConcurrentPurgeContentProcessing"><types:Integer>10</types:Integer>
    </types:MapEntry>
      <types:MapEntry key="maxConcurrentPurgeContentQueued"><types:Integer>10</types:Integer>
    </types:MapEntry>
      <types:MapEntry key="ContentVersioning"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="AutoPurge"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--

```

```

urn:smpte:ucn:org.fims:Repository_v1.1#RemoveContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#RemoveContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#ReplaceContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#ReplaceContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelReplaceContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelReplaceContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#GetContent
  DirtyRead - boolean
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#GetContent</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="DirtyRead"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#ContentQuery
  QueryResultPaging - boolean
  DirtyRead - boolean
  CaseSensitiveQuery - boolean

```

```

maxQueryResults - integer
maxQueryResultsPerPage - integer
maxQueryOperators - integer
maxQueryParameters - integer
queryTimeout - integer
supportedSystemQueries - string
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#ContentQuery</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="QueryResultPaging"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="DirtyRead"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="CaseSensitiveQuery"><types:Boolean>true</types:Boolean>
    </types:Entries>
  </types:MapEntry>
  <types:MapEntry key="maxQueryResults"><types:Integer>10</types:Integer></types:MapEntry>
  <types:MapEntry key="maxQueryResultsPerPage"><types:Integer>10</types:Integer>
</types:MapEntry>
  <types:MapEntry key="maxQueryOperators"><types:Integer>10</types:Integer></types:MapEntry>
  <types:MapEntry key="maxQueryParameters"><types:Integer>10</types:Integer></types:MapEntry>
  <types:MapEntry key="queryTimeout"><types:Integer>10</types:Integer></types:MapEntry>
  <types:MapEntry key="supportedSystemQueries"><types:String>Query1,Query2</types:String>
</types:MapEntry>
  </types:Entries>
</types:Attributes>
<identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#UpdateContentProperties
  ContentVersioning - boolean
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#UpdateContentProperties</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="ContentVersioning"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
<identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#AddEssencePlaceholder
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#AddEssencePlaceholder</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
<identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#AddEssence
  maxConcurrentAddEssenceProcessing - integer
  maxConcurrentAddEssenceQueued - integer
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#AddEssence</identity:UCN>

```

```

        <types:Attributes>
        <types:Entries>
        <types:MapEntry key="maxConcurrentAddEssenceProcessing"><types:Integer>10</types:Integer>
</types:MapEntry>
        <types:MapEntry key="maxConcurrentAddEssenceQueued"><types:Integer>10</types:Integer>
</types:MapEntry>
        <types:Entries>
        </types:Attributes>
        <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddEssence
-->
<types:Capability>
<identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddEssence</identity:UCN>
        <types:Attributes>
        <types:Entries/>
        </types:Attributes>
        <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#PurgeEssence
maxConcurrentPurgeEssenceProcessing - integer
maxConcurrentPurgeEssenceQueued - integer
AutoPurge - boolean
-->
<types:Capability>
<identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#PurgeEssence</identity:UCN>
        <types:Attributes>
        <types:Entries>
        <types:MapEntry key="maxConcurrentPurgeEssenceProcessing"><types:Integer>10</types:Integer>
</types:MapEntry>
        <types:MapEntry key="maxConcurrentPurgeEssenceQueued"><types:Integer>10</types:Integer>
</types:MapEntry>
        <types:MapEntry key="AutoPurge"><types:Boolean>true</types:Boolean></types:MapEntry>
        </types:Entries>
        </types:Attributes>
        <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeEssence
-->
<types:Capability>
<identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeEssence</identity:UCN>
        <types:Attributes>
        <types:Entries/>
        </types:Attributes>
        <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#RetrieveEssence
maxConcurrentRetrieveEssenceProcessing - integer
maxConcurrentRetrieveEssenceQueued - integer
-->
<types:Capability>
<identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#RetrieveEssence</identity:UCN>
        <types:Attributes>

```

```

        <types:Entries>
          <types:MapEntry key="maxConcurrentRetrieveEssenceProcessing">
<types:Integer>10</types:Integer></types:MapEntry>
          <types:MapEntry key="maxConcurrentRetrieveEssenceQueued"><types:Integer>10</types:Integer>
</types:MapEntry>
        </types:Entries>
        </types:Attributes>
        <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelRetrieveEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelRetrieveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#RemoveEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#RemoveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#PurgeEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#PurgeEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#Locking
  CascadingLocks - boolean
  lockExpiration - time
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#Locking</identity:UCN>
  <types:Attributes>

```



```

        <types:Entries>
          <types:MapEntry key="CascadingLocks"><types:Boolean>true</types:Boolean></types:MapEntry>
          <types:MapEntry key="lockExpiration"><types:Time>01:00:00</types:Time></types:MapEntry>
        </types:Entries>
      </types:Attributes>
      <identity:URLs/>
    </types:Capability>
    <!-- TODO
    urn:smpte:ucn:org.fims:Repository_v1.1#EventsAndNotifications
      eventListenerEndpoint - rps:EventListenerEndpointType
      supportedEventTypes - bms:EventSubType
    -->
  </types:Capabilities>
</Type>
<State>STARTED</State>
<identity:URLs>
  <identity:URL>mdcp://some.server.bloomberg.com:8080/Repository</identity:URL>
  <identity:URL>fims_rest://some.server.bloomberg.com:8080/Repository</identity:URL>
</identity:URLs>
<Attributes>
  <types:Entries>
    <types:MapEntry key="location"><types:String>New York</types:String></types:MapEntry>
    <types:MapEntry key="sub_map">
      <types:Map>
        <types:Entries>
          <types:MapEntry key="map_value"><types:String>Value</types:String></types:MapEntry>
          <types:MapEntry key="sub_sub_map">
            <types:Map>
              <types:Entries>
                <types:MapEntry key="map_value"><types:String>Value</types:String></types:MapEntry>
              </types:Entries>
            </types:Map>
          </types:MapEntry>
        </types:Entries>
      </types:Map>
    </types:MapEntry>
  </types:Entries>
</Attributes>
  <types:Capabilities>
    <!--
    urn:smpte:ucn:org.fims:Repository_v1.1
      formatProfileMetadataProcessingType - String enum (mustBeProvided, autoGenerated,
autoGeneratedWhenNotProvided)
      supportedSourceLocations - Map(index - integer, Map(name - string, path - URI))
      supportedDestinationLocations - Map(index - integer, Map(name - string, path - URI))
      supportedCustomEventTemplates - Map(event_type - string, Map(parameter_name - Map(type, minOccurs,
maxOccurs, default)))
      AutoPurge - boolean
    -->
  <types:Capability>
    <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1</identity:UCN>
    <types:Attributes>
      <types:Entries>
        <types:MapEntry key="formatProfileMetadataProcessingType">
          <types:String>mustBeProvided</types:String>
        </types:MapEntry>
        <types:MapEntry key="supportedSourceLocations">

```

```

<types:Map>
  <types:Entries>
    <types:MapEntry key="1">
      <types:Map>
        <types:Entries>
          <types:MapEntry key="name">
            <types:String>Source</types:String>
          </types:MapEntry>
          <types:MapEntry key="path">
            <identity:URI>http://bloomberg.com/</identity:URI>
          </types:MapEntry>
        </types:Entries>
      </types:Map>
    </types:MapEntry>
  </types:Entries>
</types:Map>
<types:MapEntry key="supportedDestinationLocations">
  <types:Map>
    <types:Entries>
      <types:MapEntry key="1">
        <types:Map>
          <types:Entries>
            <types:MapEntry key="name">
              <types:String>Destination</types:String>
            </types:MapEntry>
            <types:MapEntry key="path">
              <identity:URI>http://bloomberg.com/</identity:URI>
            </types:MapEntry>
          </types:Entries>
        </types:Map>
      </types:MapEntry>
    </types:Entries>
  </types:Map>
</types:MapEntry>
<types:MapEntry key="supportedCustomEventTemplates">
  <types:Map>
    <types:Entries>
      <types:MapEntry key="event_type">
        <types:String>SomeEvent</types:String>
      </types:MapEntry>
      <types:MapEntry key="Parameters">
        <types:Map>
          <types:Entries>
            <types:MapEntry key="Parameter">
              <types:Map>
                <types:Entries>
                  <types:MapEntry key="type">
                    <types:String>String</types:String>
                  </types:MapEntry>
                  <types:MapEntry key="minOccurs">
                    <types:Integer>1</types:Integer>
                  </types:MapEntry>
                  <types:MapEntry key="maxOccurs">
                    <types:Integer>1</types:Integer>
                  </types:MapEntry>
                  <types:MapEntry key="default">

```

```

        <types:String>Default</types:String>
      </types:MapEntry>
    </types:Entries>
  </types:Map>
</types:MapEntry>
</types:Entries>
</types:Map>
</types:MapEntry>
</types:Entries>
</types:Map>
</types:MapEntry>
<types:MapEntry key="AutoPurge">
  <types:Boolean>true</types:Boolean>
</types:MapEntry>
</types:Entries>
</types:Attributes>
<identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#GenerateUniqueID
-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#GenerateUniqueID</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#AddContent
  ContentVersioning - boolean
-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#AddContent</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="ContentVersioning"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#CancelAddContent
-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#CancelAddContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#PurgeContent
  maxConcurrentPurgeContentProcessing - integer
  maxConcurrentPurgeContentQueued - integer
  ContentVersioning - boolean
  AutoPurge - boolean
-->

```

```

-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#PurgeContent</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="maxConcurrentPurgeContentProcessing"><types:Integer>10</types:Integer>
    </types:MapEntry>
      <types:MapEntry key="maxConcurrentPurgeContentQueued"><types:Integer>10</types:Integer>
    </types:MapEntry>
      <types:MapEntry key="ContentVersioning"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="AutoPurge"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#RemoveContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#RemoveContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#ReplaceContent
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#ReplaceContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelReplaceContent

```

```

-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelReplaceContent</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#GetContent
  DirtyRead - boolean
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#GetContent</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="DirtyRead"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#ContentQuery
  QueryResultPaging - boolean
  DirtyRead - boolean
  CaseSensitiveQuery - boolean
  maxQueryResults - integer
  maxQueryResultsPerPage - integer
  maxQueryOperators - integer
  maxQueryParameters - integer
  queryTimeout - integer
  supportedSystemQueries - string
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#ContentQuery</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="QueryResultPaging"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="DirtyRead"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="CaseSensitiveQuery"><types:Boolean>true</types:Boolean>
    </types:MapEntry>
      <types:MapEntry key="maxQueryResults"><types:Integer>10</types:Integer></types:MapEntry>
      <types:MapEntry key="maxQueryResultsPerPage"><types:Integer>10</types:Integer>
    </types:MapEntry>
      <types:MapEntry key="maxQueryOperators"><types:Integer>10</types:Integer></types:MapEntry>
      <types:MapEntry key="maxQueryParameters"><types:Integer>10</types:Integer></types:MapEntry>
      <types:MapEntry key="queryTimeout"><types:Integer>10</types:Integer></types:MapEntry>
      <types:MapEntry key="supportedSystemQueries"><types:String>Query1,Query2</types:String>
    </types:MapEntry>
      <types:Entries>
    </types:Attributes>
    <identity:URLs/>
  </types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#UpdateContentProperties
  ContentVersioning - boolean
-->

```

```

<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#UpdateContentProperties</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="ContentVersioning"><types:Boolean>true</types:Boolean></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#AddEssencePlaceholder
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#AddEssencePlaceholder</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#AddEssence
  maxConcurrentAddEssenceProcessing - integer
  maxConcurrentAddEssenceQueued - integer
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#AddEssence</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="maxConcurrentAddEssenceProcessing"><types:Integer>10</types:Integer>
    </types:MapEntry>
      <types:MapEntry key="maxConcurrentAddEssenceQueued"><types:Integer>10</types:Integer>
    </types:MapEntry>
  </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#PurgeEssence
  maxConcurrentPurgeEssenceProcessing - integer
  maxConcurrentPurgeEssenceQueued - integer
  AutoPurge - boolean
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#PurgeEssence</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="maxConcurrentPurgeEssenceProcessing"><types:Integer>10</types:Integer>
    </types:MapEntry>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>

```

```

</types:MapEntry>
  <types:MapEntry key="maxConcurrentPurgeEssenceQueued"><types:Integer>10</types:Integer>
</types:MapEntry>
  <types:MapEntry key="AutoPurge"><types:Boolean>true</types:Boolean></types:MapEntry>
  </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#RetrieveEssence
  maxConcurrentRetrieveEssenceProcessing - integer
  maxConcurrentRetrieveEssenceQueued - integer
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#RetrieveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="maxConcurrentRetrieveEssenceProcessing">
<types:Integer>10</types:Integer></types:MapEntry>
      <types:MapEntry key="maxConcurrentRetrieveEssenceQueued"><types:Integer>10</types:Integer>
</types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#CancelRetrieveEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#CancelRetrieveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#RemoveEssence
-->
<types:Capability>
  <identity:UCN>urn:smpte:ucn:org.fims:Repository_v1.1#RemoveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveEssence

```

```

-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#UnRemoveEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#PurgeEssence
-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#PurgeEssence</identity:UCN>
  <types:Attributes>
    <types:Entries/>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!--
urn:smppte:ucn:org.fims:Repository_v1.1#Locking
  CascadingLocks - boolean
  lockExpiration - time
-->
<types:Capability>
  <identity:UCN>urn:smppte:ucn:org.fims:Repository_v1.1#Locking</identity:UCN>
  <types:Attributes>
    <types:Entries>
      <types:MapEntry key="CascadingLocks"><types:Boolean>true</types:Boolean></types:MapEntry>
      <types:MapEntry key="lockExpiration"><types:Time>01:00:00</types:Time></types:MapEntry>
    </types:Entries>
  </types:Attributes>
  <identity:URLs/>
</types:Capability>
<!-- TODO
urn:smppte:ucn:org.fims:Repository_v1.1#EventsAndNotifications
  eventListenerEndpoint - rps:EventListenerEndpointType
  supportedEventTypes - bms:EventSubType
-->
</types:Capabilities>
<ValidTill>2015-05-04T18:13:51.0</ValidTill>
<Created>2015-05-04T18:13:51.0</Created>
<CreatedBy>System</CreatedBy>
</ServiceInformation>

```

## Steve Posick

Associate Director, Production Workflow Application Development

**ESPN Inc.**

Phone: (860) 766-4107

Mobile: (203) 257-0037

---

**From:** Loic Barbou <[loicbarbou@verizon.net](mailto:loicbarbou@verizon.net)>

**Date:** Thursday, August 14, 2014 at 5:58 PM

**To:** Steve Posick <[Steve.J.Posick@espn.com](mailto:Steve.J.Posick@espn.com)>

**Subject:** Re: First Stab at Repository Capabilities using ST2071



Steve,

Thank you, looking good from my quick assessment. I haven't been able to attack this task today yet. I will try to get to it later tonight or tomorrow, I will let you know. Have you tried to go down to the level of MapEntry modeling in XML?

Loic

On Aug 14, 2014, at 3:01 PM, Posick, Steve J. <[Steve.J.Posick@espn.com](mailto:Steve.J.Posick@espn.com)> wrote:

Hi Loic,

Here's my first stab at mapping the RCR to ST2071 Capabilities and Attributes assigned to those Capabilities. I added some Capabilities not specified in the RCR, to assign attributes too and to also add functionality that is not currently available.

The Format is:

<UCN of Capability>

\t<Attribute assigned to Capability>

```
urn:smpte:ucn:org.fims:Repository_v1.1
    formatProfileMetadataProcessingType - String enum (mustBeProvided,
autoGenerated, autoGeneratedWhenNotProvided)
    supportedSourceLocations - Map(index - integer, Map(name - string,
path - URI))
    supportedDestinationLocations - Map(index - integer, Map(name -
string, path - URI))
    supportedCustomEventTemplates - Map(event_type - string,
Map(parameter_name - Map(type, minOccurs, maxOccurs, default)))
    AutoPurge - boolean
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#GenerateUniqueID
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#AddContent
    ContentVersioning - boolean
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#CancelAddContent
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#PurgeContent
    maxConcurrentPurgeContentProcessing - integer
    maxConcurrentPurgeContentQueued - integer
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#CancelPurgeContent
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#RemoveContent
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#UnRemoveContent
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#PurgeContent
    AutoPurge - boolean
    ContentVersioning - boolean
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#ReplaceContent
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#CancelReplaceContent
```

```
urn:smpte:ucn:org.fims:Repository_v1.1#GetContent
```

DirtyRead - boolean

urn:smppte:ucn:org.fims:Repository\_v1.1#ContentQuery

urn:smppte:ucn:org.fims:Repository\_v1.1#QueryResultPaging

DirtyRead - boolean

CaseSensitiveQuery - boolean

maxQueryResults - integer

maxQueryResultsPerPage - integer

maxQueryOperators - integer

maxQueryParameters - integer

queryTimeout - integer

supportedSystemQueries - string

urn:smppte:ucn:org.fims:Repository\_v1.1#UpdateContentProperties

ContentVersioning - boolean

urn:smppte:ucn:org.fims:Repository\_v1.1#AddEssencePlaceholder

urn:smppte:ucn:org.fims:Repository\_v1.1#AddEssence

maxConcurrentAddEssenceProcessing - integer

maxConcurrentAddEssenceQueued - integer

urn:smppte:ucn:org.fims:Repository\_v1.1#CancelAddEssence

urn:smppte:ucn:org.fims:Repository\_v1.1#PurgeEssence

maxConcurrentPurgeEssenceProcessing - integer

maxConcurrentPurgeEssenceQueued - integer

AutoPurge - boolean

urn:smppte:ucn:org.fims:Repository\_v1.1#CancelPurgeEssence

urn:smppte:ucn:org.fims:Repository\_v1.1#RetrieveEssence

maxConcurrentRetrieveEssenceProcessing - integer

maxConcurrentRetrieveEssenceQueued - integer

urn:smppte:ucn:org.fims:Repository\_v1.1#CancelRetrieveEssence

urn:smppte:ucn:org.fims:Repository\_v1.1#RemoveEssence

urn:smppte:ucn:org.fims:Repository\_v1.1#UnRemoveEssence

urn:smppte:ucn:org.fims:Repository\_v1.1#PurgeEssence

urn:smppte:ucn:org.fims:Repository\_v1.1#Locking

CascadingLocks - boolean

lockExpiration - time

urn:smppte:ucn:org.fims:Repository\_v1.1#EventsAndNotifications

eventListenerEndpoint - rps:EventListenerEndpointType

supportedEventTypes - bms:EventSubType

## Steve Posick

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