

Formal Specification of the API for Media Objects

In order to stay language neutral, the API can be specified in IDL, (Interface Definition Language defined by OMG¹). An object defined using IDL can be implemented using any programming language as long as an IDL mapping exists for that language.

The following fragment defines the two quintessential calls:

```
[
  version(0.1)
]

module MediaAnnotations
{
  typedef sequence<string> DataSet;

  interface Getter
  {
    string GetUnstructuredValue([in] string attribute, [in, optional]
userIDFilter, [in, optional] subtypeFilter, [in, optional] fragment );

    DataSet GetStructuredValue(in string attribute, [in, optional]
userIDFilter, [in, optional] subtypeFilter, [in, optional] fragment );

    attribute string objectURI;
  }
  interface Setter
  {
  }
}
}
```

The following question remain open:

Question 0. Which of the “candidate calls” are to be included? For example, GetOriginalData, GetPropertyNamesWithValues etc.? All of them? Should we wait to see the implementations?

Question 1. How to represent URIs? IDL uses some built-in types (short, long, float, boolean etc.) and it provides also mechanisms for defining structured data types to allow more complex data (strings, enumerated types structs, discriminated unions and sequences). URIs might be represented as plain strings (an IDL string is just a null-terminated character array).

Question 2. Is it OK to have two interfaces (get/set)? By doing so, we can accept partial implementations of one of them.

Question 3. How to deal with other character sets? Are they well handled through string types? I think they should not, given that Latin-1 character set is mentioned in theIDL specification as the String accepted characters...

Question 4. How to identify the user? It was already an open question...An URN?

Question 5. Is there any style guide defined in W3C?

¹ OMG (Object Management Group), an international, open membership, not-for-profit computer industry consortium. See: <http://www.omg.org/>