

Diffuser™ and the SMPTE metadata dictionary

What it is for Diffuser is an online tool that helps organizations to manage their metadata and build and edit sets of metadata labels (schemas) that match their business needs.

Background to the SMPTE metadata dictionary The extent and structure of the SMPTE metadata dictionary has been defined over several years by the SMPTE metadata committee, which is made up of both “content owners” such as broadcasters, and “content processors” such as equipment manufacturers. A very wide range of organizations and types of business are represented.

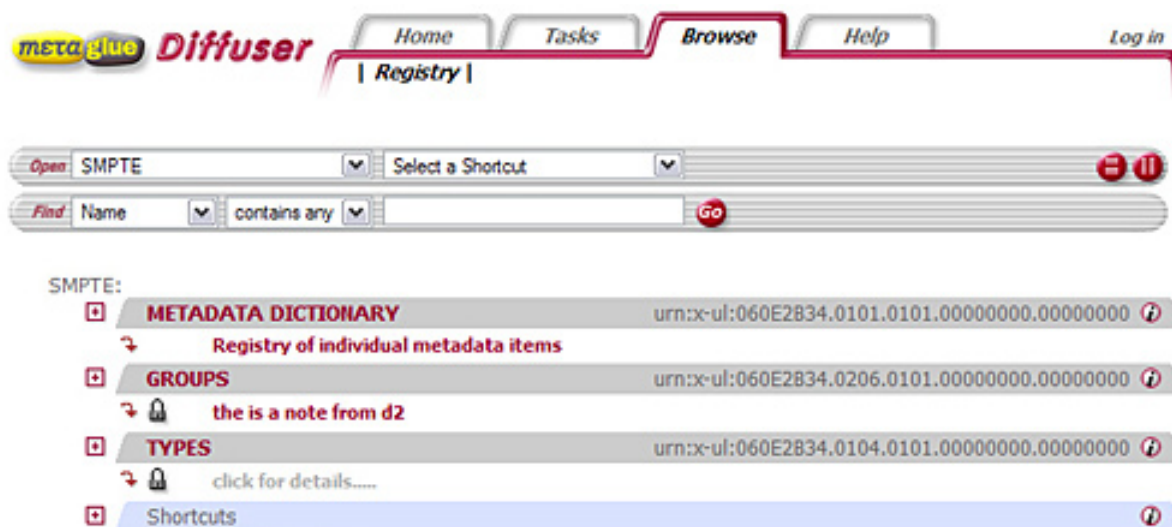
The resulting structure is the most complete and extensive listing of possible content labels that this group has been able to devise. However, our industry constantly evolves and it is never possible to understand the most detailed requirements of every organization.

To this end, Diffuser provides you with tools to add metadata of your own, either in a publicly published area of the registry where any other organization can see and utilize it, or in areas accessible only by your organization. See below for further details.

Metadata dictionary overview When you log in to the Diffuser Online Trial site, you arrive at the Home page on the “Welcome” tab.

The options in this trial version are the tabs “Browse” (which allows you to view the whole SMPTE metadata dictionary) and “Tasks” (which shows your work list when you have partly completed a job or when a task, such as an approval, has been assigned to you). In some cases there will also be a “Labels” tab, which will show which schema/s you have in the file.

Click the Browse tab, and you will see the “**METADATA DICTIONARY**” trunk, which holds the whole of the SMPTE dictionary. In the full version with the Web Services interface, you can post updates either to your own private overlay, to your organizations private or public nodes, submit additions up to the SMPTE master and refresh your local copies from the SMPTE master.



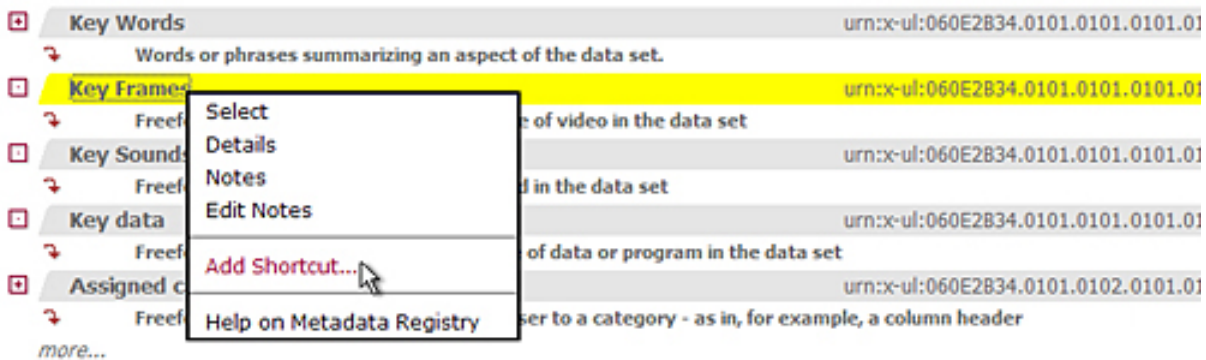
Metadata dictionary overview (continued)

Below **"METADATA DICTIONARY"** you will see **"Groups"** and **"Types"** and **"Shortcuts"**.

"Groups" is the section where, for convenience, a number of associated entries can be bundled together. This section is, in turn, split into **"Groups Registered for Public Use"** where they can be seen by everyone and **"Groups Registered for Private Use"** where the content is kept confidential. For example, there could be a **"Titles"** group that includes the working title at the planning stage, the transmission titles in various languages plus perhaps book or online release titles.

There are several types of metadata entry that can be chosen where creating a label, regardless of its position in the overall dictionary. The **"Types"** section is where all the entries are categorized specifically by their type.

"Shortcuts" allows you to store regularly used or convenient shortcuts for navigation around the dictionary. You can compare this with browser **"Favorites"**. You will see that, for speed of operation, the shortcut list is also available on the dropdown menu at the top. You must be logged in to set shortcuts.



Once you have used the system, expanded various parts of the tree structure and logged out, when you log in again you are returned to the point at which you left it.

Browsing the Registries

For all sections, sub-sections and individual entries there is a long hexadecimal number. This is the URN, unique reference for that place in the dictionary – blocks of these numbers are allocated by SMPTE to organizations that wish to create their own entries.

As you will guess, the structure is similar to a tree with branches, leafs and shoots. In other words there is a hierarchical relationship between related metadata labels.

If you click on the plus button to the left of **"METADATA DICTIONARY"** the section will expand to show the next level down of sub-sections. You can keep drilling down until you come to an individual metadata label, which is the end of the path that you have chosen.

Notice the breadcrumb trail at the top of the tree. Use the items in this row to quickly click back to the root of the registry tree.

Clicking on any item in the tree will highlight it, making it easy to spot.

Browsing the Registries (continued)

Clicking the curved down arrow will open a synopsis box will expand details about that item and provide buttons for any available options for manipulating that item.

Clicking on the URN will open a new window with details about the item.

Right click (or control click on MAC) opens a context menu with item specific options and help.

The screenshot shows a hierarchical view of metadata. The top level is 'EXPERIMENTAL METADATA' with a URN of urn:x-ul:060E2B34.0101.0101.0F000000.00000000. Below it is a description: 'Class 15 Metadata is for experimental metadata. Users may create their own structures consistent with the metadata Encoding standard.' Underneath is a 'test' node with a URN of urn:x-ul:060E2B34.0101.0101.0F0D0000.00000000. A synopsis box for 'test' is open, displaying the following information:

Path	/METADATA DICTIONARY/EXPERIMENTAL METADATA/	Synonyms
Symbol	Test	Annotate
Docs		Edit Details
Type Symbol		New Entry
Used		

Below the synopsis box are two more nodes: 'test node' with a URN of urn:x-ul:060E2B34.0101.0101.0F0D0100.00000000 and 'another test' with a URN of urn:x-ul:060E2B34.0101.0101.0F0D0200.00000000. Both have a 'click for details.....' link.

One area that will help you in this online trial is the section called “EXPERIMENTAL METADATA”. This is where any tests or trial entries can be carried out. You will find your own experimental branch here.

The screenshot shows the 'METADATA DICTIONARY' section with a URN of urn:x-ul:060E2B34.0101.0101.00000000.00000000. It contains a 'Registry of individual metadata items' link and a 'more...' link. The 'EXPERIMENTAL METADATA' node is expanded, showing its description: 'Class 15 Metadata is for experimental metadata. Users may create their own structures consistent with the metadata Encoding.' Below it are two sub-items: 'IBC' with a URN of urn:x-ul:060E2B34.0101.0101.0F010000.00000000 and 'new' with a URN of urn:x-ul:060E2B34.0101.0101.0F020000.00000000. Both have a 'click for details.....' link. The 'new' item also has a 'comment 3' link.

Because this branch is for experimentation, data stored here is temporary.

Searching

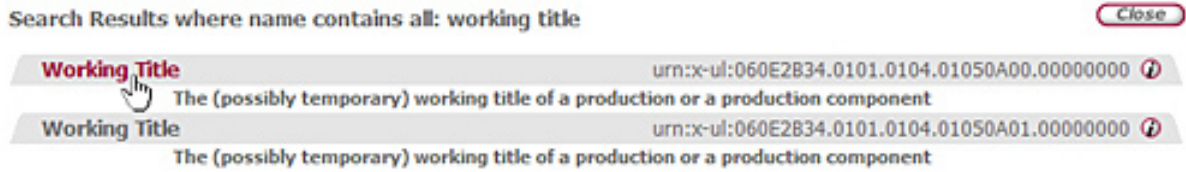
At this stage it is worth exploring the vast dictionary that already exists. One quick and easy way is to search on a term that you might need to use. For example, a program department might want to find what/whether “working title” already exists.

The screenshot shows a search bar with the following elements:

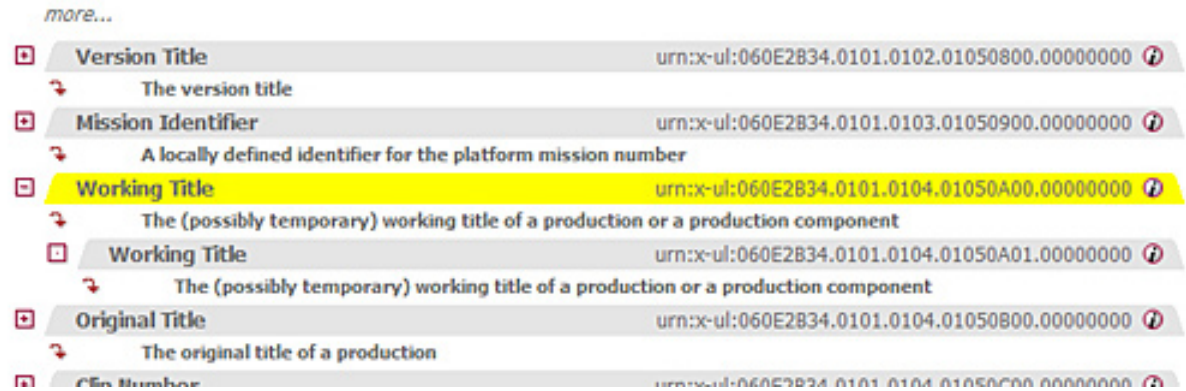
- Open** tab: Contains 'SMPTE' and a dropdown menu labeled 'Select a Shortcut'.
- Find** tab: Contains 'Name' and a dropdown menu labeled 'contains all'.
- Search input: Contains the text 'working title'.
- Buttons: A red 'GO' button and a red 'X' button.

**Searching
(continued)**

If you enter “working title” into the “find” box and click “go”, a new window will open showing all the examples of “title” and “working” already defined.



You can click on one of the results and be taken straight to that part of the dictionary. You will see that this function has some optional search conditions which help to speed the process.



Thus it is very easy to see what already exists and to identify the labels that would help your business.

**Flexibility to
match your
organisation's
needs**

As mentioned above, an integral part of Diffuser is the ability for a company to add metadata of their own in the main “METADATA DICTIONARY” section. This can be either in the area called “USER ORGANIZATION REGISTERED FOR PUBLIC USE” where any other organisation can see it or in “USER ORGANIZATION REGISTERED FOR PRIVATE USE” where it is not visible.

However, in either case, the organisation can offer their additions to be included in the standard SMPTE dictionary at any time.