

Semantic Infrastructure Metadata Specialist User Story 1

Semantic Infrastructure Services

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Semantic Infrastructure Metadata Specialist User Story 1:

Creation of metadata and management of information models through modeling and web tools

Domain Description

The imaging center at a cancer center has just purchased a magnetic resonance spectroscopy (MRS) machine to add to their numerous magnetic resonance imaging (MRI) machines. MRS is used to measure the levels of different metabolites in body tissues. The MR signal produces a spectrum of resonances that correspond to different molecular arrangements of the isotope being "excited". Magnetic resonance spectroscopic imaging (MRSI) combines both spectroscopic and imaging methods to produce spatially localized spectra from within the sample or patient. A metadata specialist has been assigned to enhance their imaging repository to handle this new type data. He opens his modeling tool, and begins to add additional classes related to metabolic signatures. As the metadata specialist types the class name "Metabolite" into the modeling tool, a number of existing classes and concepts are suggested to him automatically. One of these peak's his interest, and he clicks on the link for more information. His web browser pops up showing him the data element from a system focused on drug discovery and pharmokenetics. This is the perfect term to reuse, and this type of linkage should provide for a convenient way to easily match potential drugs with MRS results. He imports the class into his modeling tool, bringing with it an number of associated classes and attributes that may be of use.

Technical Description

Data elements and referenced concepts in the metadata repository are indexed and easily accessible by type-ahead and other integrated tooling solutions. The model browser is a convenient interface for exploring the metadata in a UML or data element centric way. Furthermore, the repository supports the import and export of modeling standards, such as XML, which facilitates direct reuse.

Cross Reference

Related Services