

22 August 2012

SEDRIS Organization Report
To
ISO/IEC JTC 1/SC 24 and WG 8
SC 24 and WG 8 Plenary Meetings
Brussels, Belgium
20 - 24 August 2012

During the last year, the SEDRIS Organization, working closely with ISO/IEC JTC 1/SC 24 / WG 8, has advanced and/or completed the work on a number of SEDRIS standards to either their next stage or publication. This includes the completion of the work and publication of the Amendments on ISO/IEC 18023-1 (SEDRIS Part 1, Functional specification - DRM and abstract API), 18023-3 (SEDRIS Transmittal Format), 18024-4 (Language binding for SEDRIS Part 1), and 18042-4 (Language binding for the SRM). It also includes the progression of Edition 2 of ISO/IEC 18025 (EDCS) and Edition 3 of 18026 (SRM) to DIS stage.

Significant work was done during the last year to prepare the DIS text for both the EDCS and SRM standards. The DIS text for Edition 2 of ISO/IEC 18025 (EDCS) is currently in ballot, and the ballot closes in September 2012. During ballot review, we have uncovered several editorial and form/format errors in the DIS text. These include spelling errors, missing fields in various forms, missing HTML constructs (such as hover-over text), and incorrect presentation of standardized profiles in various tables. Comments will be submitted against the DIS to correct these defects. However, none of the comments will change any of the standard's technical concepts or content.

The DIS text for Edition 3 of ISO/IEC 18026 (SRM) is currently in ballot, with the ballot closing in October 2012. As noted in the updated Comment Resolutions document that accompanied the DIS text, several issues that were identified in the FCD comments still require further effort to complete. The work on these issues has been on-going and includes improvements to the treatment of rotation and orientation concepts and the consistent use of terminology and symbols throughout the standard. In addition, editorial and other technical changes have also been identified during the review, which will improve the consistency and quality of the standard. These include correction of errors and/or updates to numerical values of domain, range, and boundary values of various functions and parameters, as well as improvements to the treatment of profiles and conformance clauses. Comments will be submitted against the DIS to address these remaining topics. Changes for rotation and orientation concepts will be provided as a complete replacement of Clause 6 (Rotation and Orientation). Although these comments will not change the standard's concepts or core technical capabilities, the number and/or volume of the changes may appear relatively large, and therefore SC 24 should review the comments to determine whether the standard should be moved from DIS to FDIS or to publication.

As a result of changes to both the EDCS and the SRM standards, updates to their corresponding Language Bindings, as well as the other SEDRIS standards will be necessary. The following five new work item proposals will be generated and circulated to SC 24 in the next few months to begin the work on updating these standards:

- Edition 2 of SEDRIS Part 1 (ISO/IEC 18023-1)
- Edition 2 of SEDRIS Part 3 (ISO/IEC 18023-3)
- Edition 2 of SEDRIS Language binding (ISO/IEC 18024-4)
- Edition 3 of EDCS Language binding (ISO/IEC 18041-4)
- Edition 2 of SRM Language binding (ISO/IEC 18042-4)

During the last few years, with main priority given to the progression of the 18025 and 18026 standards and with limited availability of resources, the preparation of ballot packages for a number of completed items that were submitted to the EDCS Registry has been delayed. As the work on the 18025 and 18026 standards are now nearing their completion, the resources can resume focus on completing the remaining registry proposal ballot packages and release them for SC 24 ballot.

The changes introduced in the EDCS standard require modifications to the registry's software to make the registry's capabilities compliant with the new Edition of the standard. Once the standard is published as Edition 2, the current online registry will also be updated to include the new capabilities. The changes to registry software include a number of key areas, which are detailed in the attached document, and a prototype registry has been developed and is being reviewed, tested, and refined. Implementation of the changes to registry software involves a number of design options and trade offs that take into account the need for minimal or no impact on registry users, the impact on the future maintenance of the underlying software, and the maintenance of the registry web site and database. In addition, the work on the registry software has uncovered minor defects and errors in the current text of the EDCS DIS baseline. These will be corrected through comments on the DIS.

The implementation of all changes to the standards, including those that will be proposed as new work items, are underway as the new version 4.5 of the SEDRIS SDK (software development kit) and the large number of associated tools and utilities. As these implementations and tools become available, they will be released through the SEDRIS web site. This will allow the user community to take early advantage of the capabilities being added to the standards for use in their applications and software development activities. In addition, a new tool that combines the capabilities of Google Maps with the SRM software has been developed and as a prototype is being made available to interested users. The tool is a new application for the iPhone and iPad platforms, and provides broad array of SRM coordinate reference frames, object reference models, datums, and the inter-conversion between them.

The work on Augmented Reality and associated reference models, terminology, and various components and modules is of interest to the SEDRIS Organization, especially since this is an area that is highly relevant to modeling and simulation activities that mix live and virtual environments. The standards developed and maintained in WG 8 are relevant to work in augmented reality and can enhance the use of augmented reality applications and their underlying data models and architectures. We look forward to formal participation in, and contribution to, the work of the newly formed ISO/IEC SC 24 / WG 9.

The SEDRIS Organization looks forward to another year of continued productive work with SC 24 and its working groups in developing and progressing the standards.

Respectfully submitted,

Farid Mamaghani
SEDRIS Organization

Attachment: SEDRIS Organization report presentation at WG 8 Plenary

Status
on
SEDRIS Standards and EDCS Registry

ISO/IEC JTC 1

SC 24 WG 8

Brussels, Belgium

22 August 2012

Farid Mamaghani

Topics

- Status of the EDCS standard (ISO/IEC 18025)
- Status of the SRM standard (ISO/IEC 18026)
- Updates to other SEDRIS standards to remain compatible with changes introduced in EDCS and SRM
- Status of EDCS Registry Submitted Items
- Changes required to EDCS Registry software

Status of the EDCS Standard

- DIS for Edition 2 of ISO/IEC 18025 (EDCS) is currently in ballot (ballot closes in September)
- During ballot review, several editorial and form/format errors have been uncovered in the DIS baseline
- These include spelling errors, missing fields in forms, missing hover-over text (html), and incorrect presentation of standardized profiles
- Comments will be submitted against the DIS to correct these defects
- Since none of the comments affect any of the standard's concepts, the standard should be moved from DIS to publication

Status of the SRM Standard

- DIS for Edition 3 of ISO/IEC 18026 (SRM) is currently in ballot (ballot closes in October)
- Several issues identified in FCD comments require further work to complete
- These include: improvements to the treatment of rotation and orientation concepts; consistent use of terminology and symbols across the standard
- Comments will be submitted against the DIS to address these remaining topics. Changes for rotation and orientation concepts will be provided as a replacement Clause 6
- Although these comments will not change any of the standard's concepts, the number or volume of the changes will appear relatively large, and therefore SC 24 should review the comments to determine whether the standard should be moved from DIS to FDIS or to publication

Status of the Other SEDRIS Standards

- Changes in both the SRM and the EDCS will require updates to their corresponding Language Bindings, as well as the other SEDRIS standards
- The following five new work item proposals will be generated and circulated to SC 24 in the next few months:
 - Edition 2 of SEDRIS Part 1 (ISO/IEC 18023-1)
 - Edition 2 of SEDRIS Part 3 (ISO/IEC 18023-3)
 - Edition 2 of SEDRIS Language binding (ISO/IEC 18024-4)
 - Edition 2 of SRM Language binding (ISO/IEC 18042-4)
 - Edition 3 of EDCS Language binding (ISO/IEC 18041-4)

EDCS Registry Operation Status

- EDCS registry began operation in June 2005
- In June 2008, the SC 24 Registry web site was moved from JITC to ISO
- Since 2009, all ISO/IEC JTC 1/SC 24 registries can be accessed through the MA/RA page of the ISO web site
- The following (more intuitive) URL was chosen and agreed to in 2009, and can be used to access the SC 24 registries:

<http://www.iso.org/jtc1/sc24/register>

Rapporteur Group Members and Administrator

- Farid Mamaghani (rapporteur)
- Jack Cogman
- Louis Hembree
- Youngsoo Kwon
- Richard Puk

- Gary Wentz (administrator)

- Michele Worley (EDCS Editor and SME)

EDCS Registry Activity Summary

- Since June 2005 a total of 1498 items (including references) have been submitted for registration
- More than 100 web meetings have been conducted to review, adjudicate, and process the submitted items
- Of the total items, 898 have completed their process, resulting in 691 withdrawn or rejected items, and 207 registered items
- Of the remaining 600 items, 577 have completed review and are pending ballot preparation, and 23 items await further resolution/response from the submitter
- Within the limited resources available and priority being given to the progression of the 18025 and 18026 standards, the preparation of ballot packages for the completed 577 items has been delayed
- With 18025 and 18026 standards now nearing their final stage, the remaining will be released in the next few months for the one-month SC 24 ballot

Updates to the EDCS Registry Software

- Changes introduced in the EDCS standard require updates to the registry's software to make its capabilities compliant with the new Edition of the standard
- When the standard is published as Edition 2, the current online registry will switch to the new capabilities. This is still a few months away. But the impact and complexities of the changes require advance preparation and planning, and involve updates to the registry software in a number of key areas.
- These key changes are listed on the following slide.

Updates to the EDCS Registry Software (cont.)

- Support for browsing Figures, Abbreviations, and Profiles
- Capability to search new item types (e.g. Figure narratives, Profiles, etc.)
- Improvements to search, including: searching more than one field, better support for grep-style searches, better display of search results, ...
- Identifying whether an entry has a "Modification" and/or a "Clarification"
- Correcting existing registry defects (e.g. when displaying members of a Group, those entries that are proposed, registered, or deprecated are not distinguished currently; another example is errors in sort modes; ...)
- Improvements and changes to the database to support many of the above changes
- Modernization of the internals of the registry software to take advantage of more recent IT capabilities (for example, the current registry software uses .NET, which had introduced various bugs and problems; a more capable and robust framework, called Django will replace .NET)
- Improvements to user interface, including updates to display parameters, retaining user's choices for page size and selected holdings, etc.

Updates to the EDCS Registry Software (cont.)

- Changes to the registry software also uncovered defects and errors in the current standard that need to be corrected, including: incorrect display of standardized Profiles in the standard; spelling errors; other errors in the standard's text (e.g. incorrect hover-over text).
- Implementation of the changes to registry software involves various design options and trade offs, taking into account ramifications and impacts on users, and on the current and future underlying software, as well as the maintenance of the site and the database.
- A prototype of the new EDCS Registry has been implemented and is being revised, refined, and evaluated.