DDI Developers Meeting

DECEMBER 6 – 8, UTRECHT, THE NETHERLANDS

Location: SURFfoundation
Chair: Jeremy Iverson (jeremy@colectica.com)

PURPOSE

The DDI Developers Meeting is an opportunity for software developers who work with the DDI 3 standard to gather together. Attendees will:

- See what others in the field are doing
- Learn about upcoming changes to the DDI standard
- Increase interoperability among our applications
- Exchange experiences and come up with new development ideas

PRELIMINARY PROGRAM

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 – 9:30</td>
<td>Welcome and Introductions</td>
<td>SURF 5b</td>
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<tr>
<td>9:30 – 10:30</td>
<td>DDI Tool Demonstrations</td>
<td>SURF 5b</td>
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<td>10:30 – 10:45</td>
<td>Break</td>
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<td>10:45 – 12:15</td>
<td>DDI Tool Demonstrations</td>
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<td>12:15 – 13:45</td>
<td>Catered Lunch</td>
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<td>13:45 – 14:45</td>
<td>DDI Developments: What’s coming in 3.2 and Keeping up with TIC</td>
<td>SURF 5b</td>
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<td>14:45 – 15:15</td>
<td>DDI Sticky Points and Coping Strategies</td>
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<td>Break</td>
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<td>15:30 – 16:15</td>
<td>DDI Sticky Points and Coping Strategies (continued)</td>
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<td>16:15 – 17:00</td>
<td>Framework for Ensuring DDI 3 Interoperability</td>
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<td>18:30</td>
<td>Group Dinner</td>
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<tr>
<td>9:00 – 10:30</td>
<td>Technical Infrastructure for DDI: Storage and Web Service Strategies</td>
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<td>10:45 – 12:15</td>
<td>Advocating DDI Tools and Development</td>
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<td>Catered Lunch</td>
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<td>13:45 – 15:15</td>
<td>Breakout Group 1</td>
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<td>15:15 – 15:30</td>
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<td>15:30 – 16:30</td>
<td>Future Tools and Directions for DDI</td>
<td>SURF 1</td>
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<td>16:30 – 17:00</td>
<td>Wrap-up and Discussion of Future Cooperation</td>
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**Tuesday, December 7, 2010**

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<tr>
<th>Time</th>
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<td>9:00 – 12:30</td>
<td>Breakout Discussion</td>
<td>SURF 3</td>
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<td>Introduction to the SDMX Standard</td>
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<td>DDI 3 Course</td>
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<tr>
<td>12:30 – 14:00</td>
<td>Lunch</td>
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<tr>
<td>14:00 – 17:30</td>
<td>European DDI Users Group Meeting</td>
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**Wednesday, December 8, 2010**
Welcome and Introductions

Welcome to the DDI Developers Meeting. We will start with short introductions so we all know who each other are: who am I, where do I work, and what sort of DDI development do I do?

DDI Tool Demonstrations

Each developer will give a high level, 5 to 10 minute demonstration of their tool with a few minutes for questions and discussion.

This should raise awareness of what types of tools exist and show where tools may overlap or complement each other. Seeing and discussing many tools at the same time should also generate ideas for new directions in development.

DDI Developments: What’s coming in 3.2 and keeping up with TIC

DDI 3.2 is coming soon and will offer an assortment of useful fixes. There may also be some additions to the content model. Here, we will review the changes that have already been made to the schema and discuss how they will affect future development.

We will also discuss the schema development process, how to communicate with the DDI Technical Implementation Committee, and how to access the DDI bug tracking system.

Discussion: DDI Sticky Points and Coping Strategies

DDI isn’t perfect. Let’s discuss what traps and pitfalls we have come across while developing against the standard. Possible topics include:

- Defining hierarchical data in DDI 3.1: workarounds being used in the field
- Documenting Surveys: QuestionItem, MultiQuestionItem, and Sequences of varying types. Which ones and when?
- Extending DDI: Notes, schema extensions, and other approaches
- What makes a DDI instance both valid and useful? Schema validation isn’t enough.
  - What are important second level validation tests?
- Any other issues or ambiguities developers have come across

By discussing such issues amongst developers, we will hopefully be able to come up with common solutions that will increase interoperability.
Framework for Ensuring DDI 3 Interoperability

Given the vast scope of the DDI standard, simply passing schema validation does not ensure that two DDI tools will interoperate with each other. Such interoperability requires testing and cooperation between developers. We will discuss what technical infrastructure can facilitate such interoperability testing.

One approach is to create a shared pool of DDI instances generated by various tools.

1. Everybody who has a tool that writes DDI creates several instances -- hopefully showcasing their complete coverage -- and puts the instances in a shared location that everyone can access.
2. Everybody who has a tool that reads DDI tries to load each instance into their app.
3. If appropriate, people use their own tool to make some changes and save the changed instance.
4. Developers analyze problems with interoperability and determine fixes.
5. Continue until all developers have satisfactorily resolved any issues and/or discussed them for too long.
6. If changes are made to anybody's serialization, repeat the process as necessary.

Technical Infrastructure for DDI: Storage and Web Service Strategies

Although a common way to store and transfer DDI is with simple XML files, more options are available to provide a richer, more scalable experience for end-users. This discussion will focus on different ways to manage and share DDI metadata. Topics will include:

- **Storage strategies**
  - Relational databases
  - XML and object databases
  - Approaches to database design
- **Transfer strategies**
  - Web Services
    - What functionality should be provided?
    - Should there be a standard?
  - Other ways of querying for DDI

Discussion: Advocating DDI Tools and Development

How can DDI developers promote their applications? We will review the DDI Tools Catalog operated by the DDI Alliance, and discuss other ways of getting the word out.

Also, how can developers make a case for devoting development time to DDI-based interoperability? We will discuss the experiences of various application developers.
Breakout Groups

There are many ways to categorize types of DDI development and DDI developers. Based on interest, we will break into several groups for roundtable discussions. Several group ideas are listed below, but additional ideas will undoubtedly come up at the meeting.

- **License**
  - Open source developers
  - Closed source developers
- **Distribution**
  - Tools intended for public distribution to end-users, either commercial or free
  - Developers of in-house tools
- **Metadata models**
  - Custom-built metadata model
  - Auto-generated (beans) model
  - Direct XML (XPath) model
- **Languages**
  - Java
  - .NET
  - Interpreted languages (Perl, Python, PHP, Ruby, etc.)
  - Others

Future Tools and Directions for DDI

What areas of DDI 3 lack mature tools? What new areas can be explored by DDI tools developers?

As developers, where do we think DDI should move in the future? What should DDI 4 look like?

Wrap-up and Discussion of Future Cooperation

How did the meeting go? This will be a general discussion regarding the usefulness of DDI developers gathering together.

We can also discuss how to cooperate in the future. Are mailing lists and other online resources useful? Should we plan a future meeting of DDI developers?