BIM Collaboration Format

The BIM Collaboration Format (BCF) came originally as a suggestion from Tekla and Solibri and was endorsed by a number of other software vendors.


Basically BCF introduces a workflow communication capability connected to Ifc models. The idea is to separate the “communication” from the actual model.

The BCF format is based on XML.

In most real-life projects the user of a tool for one discipline will import Ifc models from other disciplines. If there is an issue related to one of the imported models, the efficient process will be to raise that issue so they can be resolved in the BIM authoring application from where this model originated. The responsibility for maintaining and updating this model will in many/most cases be assigned to the author of the model. Instead of adding information directly into a Ifc model as a “property set” or whatever and send the whole thing back (which could be an alternative), the issues are described using BCF with direct links to objects in the model(s) with the issue(s).

The BCF format is extremely simple and easy to implement. The basic content is that you create an issue, add comment and refer that to the object(s) in question (using Ifc mechanisms for Global Unique ID’s (GUIDs)). The format also supports comments and status as this issue may be referred to and answers/suggestions added by receiving applications. In addition to text, comments and the list of objects, each issue can also have camera and viewport attached and even a snapshot of how the model looked in the application where the issue was last addressed.

The close connection to the Ifc model positions it as a capability extension of the existing Ifc format with focus on workflow and processes (close relation also to IDM).

The BCF format is independent of which Ifc schema version being used.

The full specification can be found in the GTDS workspace (http://gtds.iabi.eu/)
Implementations can be tested in Solibri, Tekla and the DDS viewer (ftp://ftp.dds.no/pub/install/IfcViewer/Beta/)

This viewer supports the BCF (BIM Collaboration Format) according to the spec found in the GTDS workspace. Activate the function from the “tools” menu.

Screen should from the BCF administrator from the DDS Viewer
A YouTube demo showing how BCF may be used:

http://www.youtube.com/watch?v=MW5hSMcf5qI