5.1 What is the BIM Collaboration Format (BCF)?



Source: b2b.partcommunity.com

BCF is an abbreviation for BIM Collaboration Format and is an open data format for model-based communication.

In general, the BIM Collaboration Format (BCF) enables model-based communication in different BIM applications. The current version BCF 2.1 enables the transfer of

- model-related comments (so-called issues),
- the affected elements in the model (via the object GUIDs) and
- reproducible screenshots

between different BIM applications. This model-based communication improves coordination. This means that information about problems in the model, their location, viewing direction, component, comments, users, time or even changes in the IFC data model can be exchanged in a solution orientated manner.

The development of BCF started in 2009 and was originally conceived by two members of the buildingSMART International Implementation Support Group (ISG), Solibri and Tekla, together with the Institute for Applied Building Informatics (iabi) at the Munich University of Applied Science (Germany). Their desire to use an open communication technology for IFC-based workflows led to the prototyping and eventual full development of BCF with other ISG members.

BCF was created to facilitate open communication and improve IFC-based openBIM processes by using open standards (file formats and data communication protocols) to more easily identify and share model-based issues between BIM software tools, bypassing proprietary formats and workflows.

There are a number of use cases that can benefit from BCF-enabled workflows where information can be derived from the BIM and linked back to the BIM for object-specific information. These cases can include:

• Design phase

• Documenting quality assurance/quality control elements

- Identifying design coordination issues (also known as clash detection) between domain BIMs
- Commenting on design options, object substitutions and material selections
- Procurement phase
 - Coordination points and clarifications for the tender
 - $\,\circ\,$ Cost and supplier information for objects, assemblies and/or systems
- Construction phase
 - Quality assurance/quality control records
 - Tracking the availability of objects/materials and coordinating substitutions
 - Collection of last minute information for handover to the owner/operator as part of the Construction Operations Building Information Exchange (COBie) services
- Operational phase
 - Notes on handover models when changes are made to the facility and its many elements during use
 - Owner's notes on needed upgrades

BCF is now a buildingSMART International openBIM standard, like IFC and the Data Dictionary (bSDD), open to everyone. Source: BIMcert