Release Notes for LinkMan-E (LME) **Winter 2011**

LinkMan-E:
BSD LinkMan-E is a linking software product that allows you to easily create, monitor and modify relationships between various representations of a building design project -- as drawn using Autodesk Revit and as specified using BSD SpecLink-E. This linking software is referred to as LinkMan-E or LME. The LME user interface is a set of "Dashboards", together constituting a monitoring station that allows you to identify, control and coordinate relevant discrepancies between the two software applications. In short, LME is a tool for coordinating the Revit building model (the BIM) and its specifications.

LME uses master lists of Assemblies and Products to connect the Revit objects (essentially assemblies) to the SpecLink-E product specs. These master lists are shown on the Assemblies and Products Dashboards and are the key views for coordination. The dashboards are organized by UniFormat (Assemblies) and MasterFormat (Products). The "Show Discrepancies" buttons in each dashboard quickly collapses the view to show only those items that are different in the Revit and SpecLink-E projects -- the user resolves the discrepancies, not the software.

Because of the nature of Revit, we anticipate that a large number of Revit objects used in the building model will be non-standard, custom objects. Since a Revit object is uniquely identified in the model by name, it becomes custom the moment it is copied because Revit forces a name change. LinkMan-E is built to minimize this drawback, by making identification of un-linked objects very easy, making linking of them to LME assemblies a simple matter of drag-and-drop, and making building new assemblies to link them to also as easy as drag-and-drop. On the other hand, the more a firm can standardize the Revit object set that they commonly use, the less work is required in LME – once a link from a Revit object is made to LME, that link is active in every subsequent project, provided the Revit object is not renamed.

The LinkMan-E Start Page (what you see upon opening the software) contains hyperlinks to further descriptions of how to use LME -- including material not contained in Help.

Data in LinkMan-E
Included in this release are:

- The Products Dashboard populated with products that could reasonably be shown in the Revit model and linked to their corresponding SpecLink-E section.
- The Assemblies Dashboard populated with appropriate assemblies related to the Products on the Products Dashboard.
- The Keynotes tab - A unique master keynote has been assigned to each of the thousands of products and assemblies in the LinkMan-E database, all of which have been linked to appropriate sections and paragraphs in BSD SpecLink-E.
- The Revit 2009, 2010, 2011 & 2012 Architectural Library objects linked to the LME Assemblies to the extent deducible (some Revit objects are not specific enough).

Changes since Version 2.0.0.6

- We fixed a problem for users running under Windows XP when using Import Keynotes.

Changes since Version 1.3.0.36

The Keynote functionality introduced in the fall quarter has been enhanced.

- The ***Import Keynotes*** icon on the Keynotes tab opens a dialog box that allows you to enter a file name or browse for a file, such as a user-generated master keynote file, and import it into LinkMan-E. When the correct file has been located, clicking on the *Import* button will automatically merge the data with the LME master keynotes, ordering them numerically (the imported keynotes are differentiated from master keynotes by a "U" for user in the *Origin* column.)
- **Revit Materials Tab** - We have added a Revit Materials tab to the LME group. This displays all of the materials available in the Revit project. Since Revit only stores the keynote number in the object (not the keynote text) the R-Keynote column may be empty if a keynote was applied in Revit, but that keynote file was not imported into LME. In LME, keynotes can be applied to materials, as well as

Revit objects. In LME, you can drag and drop from the Keynotes tab to the Materials tab, in the same way that you can drag and drop Keynotes onto an element in the Revit project tab. In addition to the Revit Materials tab, the associated materials are now also displayed in the bottom half of the screen when you click on a Revit element that has a material assigned to it.

- **Importing Keynotes to Revit** - On the *LinkMan-E Add-In* for Revit, the *Assign Keynotes* icon has been replaced by one labeled *Import/Replace Keynotes.* When the user clicks on this icon, three choices are offered. The choices and their consequences are as follows: (Note that all three options include the keynotes in the R-Keynote # and R-Keynote columns in the Revit Project tab of LME, whether they are active or not.)
    1. *"All Keynotes"* includes all LinkMan-E master keynotes, all project keynotes (the keynotes in the R-Keynote # and R-Keynote columns in the Revit Project tab of LME), and all user keynotes that have been imported into or added in LinkMan-E. All these keynotes are organized automatically into a single file in numerical order.
    2. "*All Master and Active User Keynotes"* is the same as "All Keynotes" except that user keynotes that are not in the R-Keynote # and R-Keynote columns are excluded (user keynotes are any marked "U" that have been imported into or added in LinkMan-E).
    3. *"Project Keynotes"* includes only those keynotes that are currently in the Revit keynote columns, whether they are active or not – including any that have been copied from the LinkMan-E master keynotes or the user keynotes.

  Regardless of which choice is made, any keynotes in the R columns in LinkMan-E will automatically be assigned to the corresponding elements in Revit, replacing any keynotes that may have already been placed in the Revit project. However, the choices will determine what additional information – if any – will be imported into the text file that can be used for subsequent keynote selection and placement. That, in turn, depends on how much latitude the Revit users will be given for selecting and placing additional keynotes
- ***Delete User Keynotes*** - This new function allows you to delete all user added or imported keynotes. Note that because the keynotes are shared among all LME groups, it will delete all user keynotes from all of your LME groups. If there is any chance that you might want to use these keynotes in the future, it is best to make a copy of the keynote file. Do this in Revit, using the *Import/Replace Keynotes* | *All Keynotes* function from the Add-Ins tab in Revit. Save the file with a name and in a location that you will be able to find later. If you want to bring the file back into LME, you can use the Import function in the Keynotes group in LME.
- Added the Keynotes fields to the exports of the Revit Project, Products and Assemblies tabs.
- Added to the LME database of Products, Assemblies, Keynotes and links.
- Additional miscellaneous improvements have been made.

Comments:
We welcome all comments about the software, both major and minor.

Installation:

- Read the installation document on our Download Center before installing LinkMan-E. **A SpecLink-E Server or standalone installation must be performed before the LinkMan-E software can be used.**
- If you install a new version of Revit after you install LME, you will need to redo the installation (if running standalone) or the Revit Plugin (if running as a client).

Hardware and Software Requirements

Recommended server configuration – LME shares the SpecLink-E Data Server. Requirements for that server are unchanged by the installation of LME. Please see the description of SpecLink-E requirements (SpecLink-E Installation instructions) for details.

Recommended client configuration

- Intel-compatible processor, 2 GHz or better
- Windows™ 7, Vista or XP

- 2 GB of RAM
- 1 GB of available disk space
- XGA or higher resolution monitor
- Laser printer
- Internet Explorer 8.0 or higher

Recommended laptop or standalone configuration (which will run both server and client applications) - In this configuration, the computer will likely be running Revit Architecture, SpecLink-E (client and server), and the LinkMan-E installation simultaneously, not to mention an email program and other tools as well. Be sure to review the Revit requirements. Recommended configuration for SLE and LME includes the following:

- Intel-compatible processor, 2 GHz or better
- Windows™ 7, Vista or XP
- 4 GB or more RAM
- 10 GB of available disk space
- XGA or higher resolution monitor
- Internet Explorer 8.0 or higher

Setup Configurations: Each user runs its own application locally (e.g. SpecLink-E, Revit), with or without a local instance of LinkMan-E. The computer housing Revit must have the LME Revit plug-in installed. SpecLink-E and LinkMan-E are designed to work over VPNs and wide area networks. This means, for example, that larger firms with multiple offices, or any combination of connected servers whether within one firm or not, can install the SLE server and LME databases at one site, install the Revit plug-in to gather Revit data at a second location, use the SLE client software to prepare specifications in a third office, and review coordination between model and specifications using LME client software at a fourth site.

Ways to get started:

1. Review the Help file, available from within the software (press F1). See topic called Basic Steps for step by step instructions.
2. Review the LME FAQs available from our web page.
3. The above files, as well as the most current information about LME, are available on-line at our LinkMan-E web page.

Errors, problems, miscellaneous:

- If you are having trouble of any kind, please call BSD Tech Support at 800-266-7732.

Still to come in future releases:

1. Expansion of the LME Master allowing additional “automatic” linking of Revit objects
2. Linking with BSD’s sophisticated CostLink-E building cost modeling and cost estimating software.
3. Linking with other 3D modeling systems such as AutoCAD, MicroStation, and ArchiCAD.