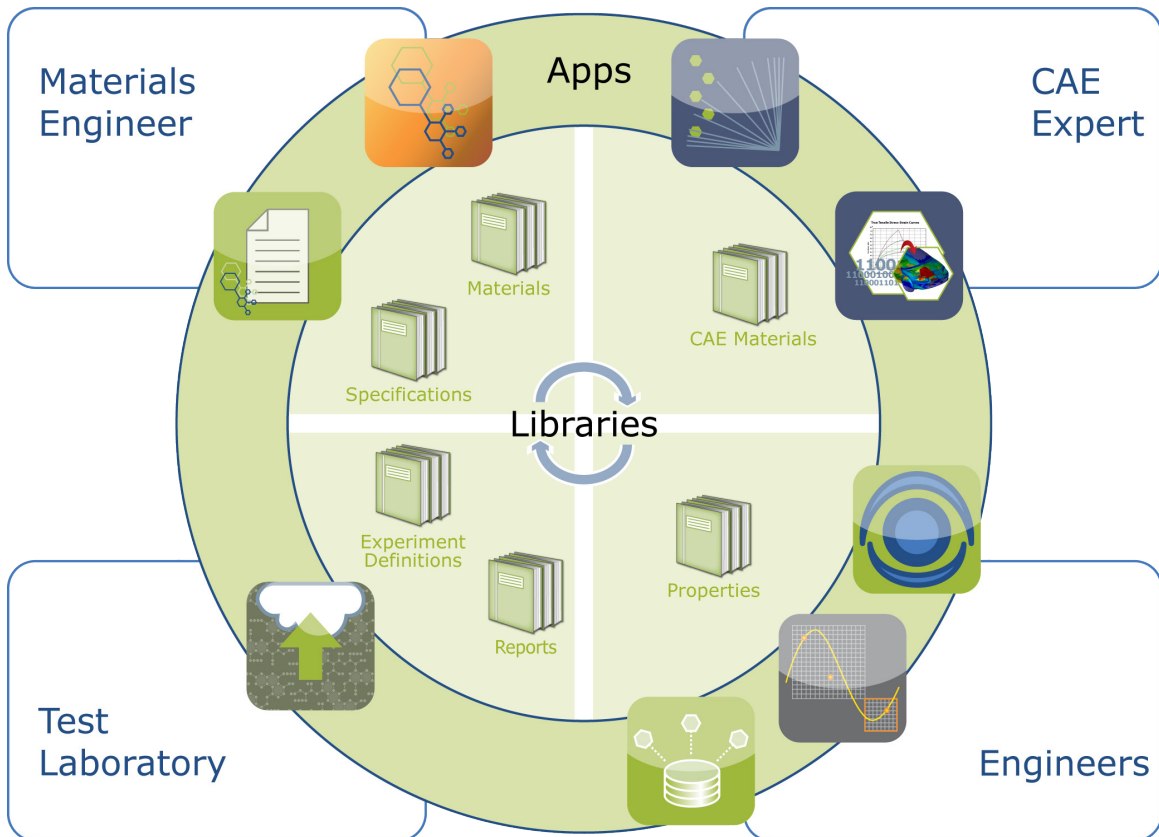




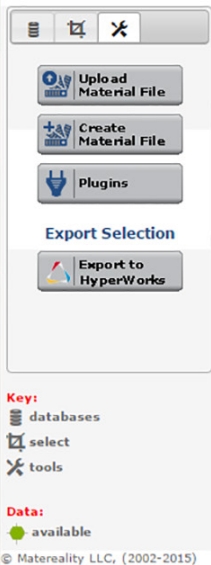
Altair

Partner Alliance



Matereality

**PARTNER SPOTLIGHT**



My Database > CAE Materials Grid

☒ Author Mode



#### Download selected models into Altair HyperWorks

1. Click download button below to export selected items as a zip file
2. Save zip file to your computer
3. Right click on the zip file you just saved and extract all files
4. Make sure that the environment variable "altair\_home" points to the install location of HyperWorks
5. Run the batch file included in the zip file to import the models into your HyperWorks library

Download



## Partner Spotlight: Matereality

*Adam Beckwith, Software Product Manager, discusses material management software, Workgroup Material DatabasePro, available through the Altair Partner Alliance.*

### APA: What prompted the development of your software? What problem is Workgroup Material DatabasePro meant to solve?

**Adam:** Matereality was built to address a long-term frustration experienced by material scientists and engineers who found their work hampered by a lack of availability of all but the most simple material data in digital form.

Manufacturing enterprises have moved to the use of modern materials, novel manufacturing processes and simulation-based product development. Designing in this environment makes it vital that engineers use real material data before their products become real. The extreme heterogeneity of material data challenges conventional database structures. Our robust, patented cloud infrastructure has been in continuous operation for more than a decade, adding new materials, manufacturing processes and support for simulation solvers with the goal of supporting engineering teams at many stages of the product life-cycle.

### APA: What are the benefits of using Workgroup Material DatabasePro for material management?

**Adam:** Matereality allows users to create a centralized, extensible library core, connected to a suite of software to help employees understand and use their material data in a consistent way. Collaboration, authorship and management layers

Unit Options:

SI-m,s,kg

Download

Save



allow for highly specific access and management of the content.

Workgroup Material DatabasePro allows engineering teams or enterprises to store and manage all of their materials information, properties data, CAE material files and testing reports using the same software infrastructure. All recorded traceability information is stored with data in your Workgroup, so that all members can verify the validity of data before use.

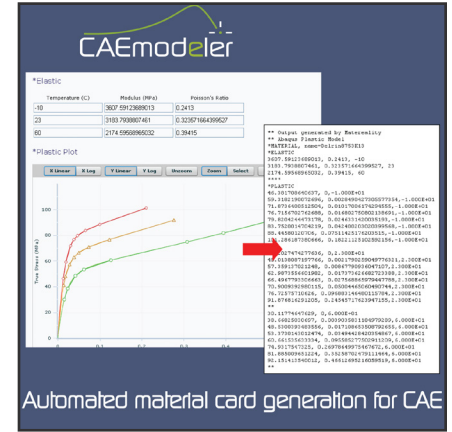
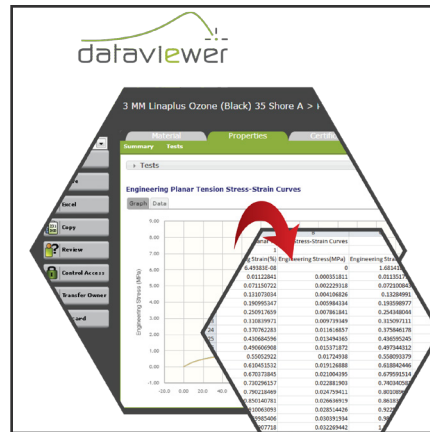
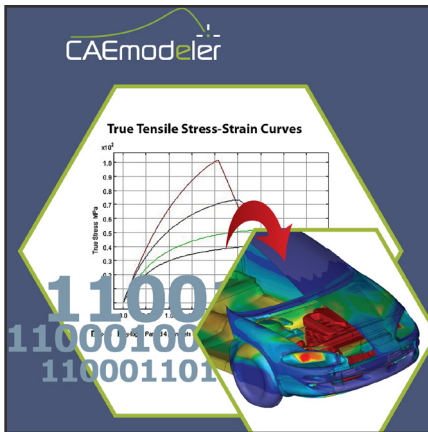
**APA: Are there any unique characteristics of Workgroup Material DatabasePro that your competition does not have?**

**Adam:** Matereality Workgroup Material DatabasePro is integrated directly with DatapointLabs material testing services. Any materials testing purchased from DatapointLabs is deposited directly into Matereality and can be made accessible to other Workgroup members.

**APA: How much time does it take to learn and start using your software?**

**Adam:** Accessing data on Matereality is made incredibly easy by using the Property Grid, which shows what data is available to the user and where there may be gaps in the company database. Creating CAE material files from raw data in the database is easily done using the CAE Modeler module, available to all Workgroup users.

Matereality contains a number of authorship tools for uploading data for new materials into your Workgroup database. Depending on the complexity of the data to be loaded, this process can be straightforward, but it may require a brief training session with Matereality engineering staff (available upon request).

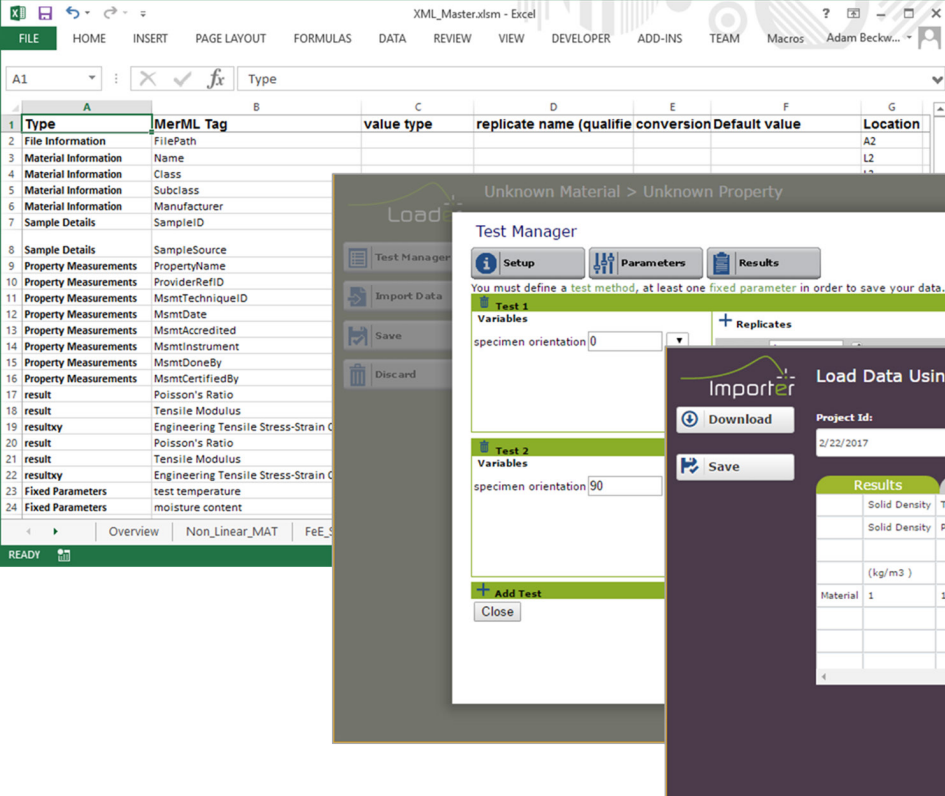


## APA: What are the biggest challenges or problems that customers in your target market face and how do you address their needs?

**Adam:** Many customers have vast collections of material data stored in legacy systems that can be difficult to use and somewhat unorganized. Matereality provides infrastructure and tools for users to properly categorize and organize their testing data and information relating to materials in a single system, reducing risk when selecting materials for a product. The CAE Modeler module can be used to write material data stored in your libraries as properly formatted CAE Material files for popular CAE solver software products, reducing the need for conversion scripts or manual entry of CAE data.

## APA: Describe a typical workflow of Workgroup Material DatabasePro.

**Adam:** A CAE engineer enters the Workgroup database to locate appropriate data for use in a simulation using RADIOSS. Once the engineer has confirmed that appropriate data exists, the engineer then opens the CAE Modeler for RADIOSS and searches the database for their target material. The engineer opens this material in the Modeler module and makes adjustments to the card before saving it to their CAE Materials library. The CAE engineer then uploads two existing CAE Material files from their company server and makes them accessible to the rest of the Workgroup. The engineer uses the CAE Materials Grid to select all RADIOSS models for applicable materials and exports the collection as a Master Material file into HyperMesh.



## APA: What's next for Workgroup Material DatabasePro ... what can we look forward to?

Development of new functionalities is primarily user-driven. As industry needs change, we record feedback from users about commonly used CAE model formats and software solutions that require the use of material data and we build new integrations and software features to support product development teams. Included in the brand new v11 release, users can now upload a collection of legacy CAE material files to their Workgroup database, instead of uploading individual files. This feature makes it easy for CAE teams to populate their Workgroup databases with existing files and manage access to ensure that team members have access to the properly organized and categorized files on Matereality.

For more information about [Workgroup Material DatabasePro](#), visit the solution page.