THE STATE OF THE BETA DEVELOPMENT PLATFORM

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ABSTRACT –
Computer Aided Engineering is a highly technical field that demands continuous innovations and breakthroughs. In many cases, in order for innovations to take place, there is a need to jump ahead of the functionality that is currently available. The CAE tools need to provide advanced open programming capabilities were specialists can provide rapid solutions. These engineering specialists should not need to reinvent the wheel, instead APIs (Application Programming Interface) based on the latest IT industry standards should be available to them.

The goal of BETA CAE Systems has always been to provide the best CAE software solutions. We have opened our applications' programming libraries to the BETA user community, so that everyone can build upon the powerful functionalities of our software and create extensions that fit their needs.

Python's powerful ecosystem of scientific libraries together with BETA's libraries resulted into a unique, general purpose CAE development environment with unprecedented capabilities. These technologies have been embraced by the CAE community.

Continuing the effort to further improve the capabilities of the development platform new functionality is introduced that will provide greater performance, more native feel. Such functionality is the drawing artifacts on the screen and applying custom fringes, applying user defined checks on ANSA Entity Cards, using the base.Entity object to write faster and more efficient code, various new techniques to write higher performance code and how to avoid potential performance bottlenecks, ability to save, and retrieve, custom data in an ANSA database.

Moving forward we are introducing the a new distribution and commercialization layer to our development platform. Selected third party developers will be allowed to commercialize and market their application through BETA's License Manager and an on-line extensions store.