ANSYS Tool Customization and Automation

PADT is known around the world for our ability to quickly and effectively automate simulation tools from ANSYS, Inc. Whether you need a script to simplify a custom load, a subroutine to model a complex behavior, or a connection to integrate your own solver, PADT’s experienced engineers have the experience and the training to make that happen.

MODIFYING EXISTING TOOLS AND PROCESSES
The most common way in which PADT works with customers is in the customization of existing processes. Instead of reinventing the wheel, PADT’s engineers use their intimate knowledge of the various tools used in simulation and modifies these tools using the built in programming scripts and languages, or by writing external tools that manage the simulation software.

CUSTOMIZATION BASED ON PROCESS KNOWLEDGE
Our engineers understand the processes required to carry out simulation. Instead of simply working from a specification given to us from the customer, our team works from the beginning to meet the real world needs of the simulation process. This avoids spending time on features and functions with limited value, and ensures that the resulting tools will have a significant and measurable impact on productivity.

HOOKING THINGS UP
Many projects are entered around creating connections between different software tools: Databases, CAD, Simulation, and Post Processing. This can often eliminate one of the costliest and most error prone steps in the simulation process. Using our experience with a very wide variety of tools, including CAD systems, databases, life codes, and other simulation tools, we can create a software program to translates models, transfers loads, or downstream calculations.

PADT provides customization services for any simulation related need. Our past projects have included:

- ANSYS Parametric Design Language (APDL)
- ANSYS MAPDL UIDL & Tcl/TK
- ANSYS Mechanical Jscript Programming
- ANSYS Workbench Python Programming
- ANSYS Customization Toolkit (ACT)
- ANSYS FLUENT TUI and Journal Files
- ANSYS CFX Expressions and Scripting
- ICEM CFD Tcl/TK
- FORTRAN, Python, C++, C#, Java, Jscript, VisualBasic
- HTML, PHP, SQL

Contact PADT Today to Discuss your Customization and Automation Needs