MDSplus Objects - Python Implementation
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MDSplus is a data acquisition and analysis software package used widely throughout the international fusion research community. During the past year, an important set of enhancements were designed under the project name of "MDSobjects" which would provide a common, powerful application programming interface (API) to MDSplus in programming languages with object oriented capabilities. This paper will discuss the Python language implementation of this API and some of the capabilities that this implementation provides for data storage and retrieval using the MDSplus system. We have implemented a new MDSplus Python module which exposes the MDSplus objects features to the language. The internal MDSplus programming language, TDI, has also been enhanced to be able to invoke Python commands from the TDI language. Now that Python is aware of the complex data structures in MDSplus such as Signals, the language becomes a very good candidate for applications ranging from data acquisition device support to analysis and visualization.

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