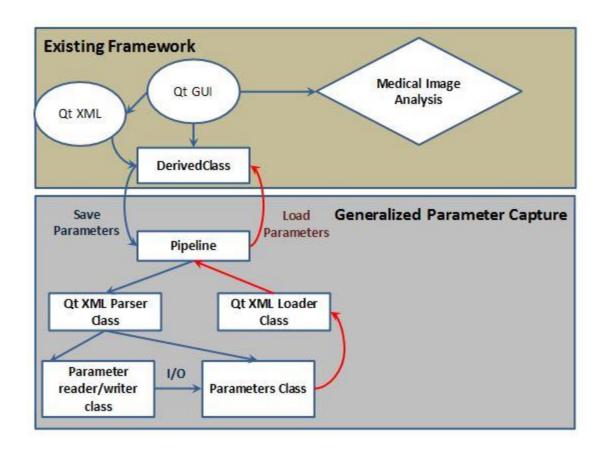
Architecture Diagram



The existing framework consists of a Qt GUI (used for Medical Image Analysis) that is described by a Qt XML Class. When the GUI needs to be saved or existing parameters need to be loaded, the DerivedClass calls the Pipeline Class, which is where Generalized Parameter Capture begins. It makes use of two classes, Qt XML Parser Class and Qt Loader Class for parsing the XML document and loading stored parameters respectively. The Qt XML Parser Class parses the Qt XML and generates a Parameters Class that stores a data representation of the GUI and a Parameter Reader/Writer Class that allows parameter values to be edited. When existing parameters need to be loaded into the GUI, the Parameters Class is sent to the Qt XML Loader Class, which in turn sends it to the Pipeline Class where it can be accessed by DerivedClass.