DBus

Developer Meeting
May 10 - 14, 2010
Background

- Used on most Linux systems for both session messaging (cooperating applications) and system messaging (talking to device drivers)
- Object/proxy model + asynchronous events
- Lightweight in both size and overhead
- Basic data types plus arrays, dictionaries, variants and structures
Qt Adaptor

- Provides interface to Qt application
- Automatically exports public slots & signals
- Provides Qt friendly DBus ADTs
- CASA wrappers provide consistency
- Very straightforward
Python Connection

- Standard DBus module
- Asynchronous event handling possible (but only with event loop)
- Easy to hide DBus details in a Python class
- Retrieves the interface from the object
C++ Connection

- Generator takes XML to self-contained proxy header
- Default values + conversions in derived class which just forwards call to base class
- CASA launch<PROXY>( ) handles launching and/or connecting to DBus object
- Also supports object implementation
Tutorial

https://safe.nrao.edu/wiki/bin/view/Software/CasaDBus