# EIL Linux Client Agent Meeting Update – Oct 2010

* **C# Viability?**
  + **Existing Windows C# agent may not be portable to Linux/Mono.**
  + **Start exploring some alternatives.**
* **Python v. C/C++**
  + **Python Pros:**
    - **Agent will run on all distributions we care about equally (Ubuntu, SuSE, RHEL, CentOS, ESXi, Xen, etc.) and future distributions.**
    - **Agent could work on Windows if desired in future.**
    - **Python an accepted “Linux standard” high level language.**
    - **Python-based agent will “just work” out of the box on all Linux distributions.**
    - **Python is license compatible with our needs (no encumbrance).**
  + **Python Cons:**
    - **No existing staff knowledge of Python.**
    - **Interpretive language, which implies potential overhead (Cython as a suggestion if needed).**
  + **C/C++ Pros:**
    - **Low-level, total control over the entire application stack.**
    - **Staff has knowledge of C/C++.**
    - **Smaller overhead.**
  + **C/C++ Cons:**
    - **Due to “Windows-like installer” requirement, likely will need to have static built binary. This implies encumbered binary.**
    - **Must do *everything ourselves (fewer viable API options to assist in creation of the tool).***
    - ***Cross-distribution development and debugging may be tricky on the more embedded platforms (ESXi, Xen).***
    - ***Static requirement will have ramifications in the C++ ABI compatibility space (gcc/Linux-kernel issue).***
* ***Recommendation:***
  + ***My recommendation is that the C/C++ option has too many problems (encumbrance, ABI compatibility, debugging) compared to the relatively fewer issues associated with development of the agent in Python.***
  + ***Python seems to be the better option.***