Linux Client Agent

# Technical Overview

* Goals:
  + Maintainability (code is fairly readable, well-documented)
  + Documentation
    - Utilizes Doxygen for C/C++ work
    - Various plain-text document files adhering to Gnits Standards (http://en.wikipedia.org/wiki/Gnits\_Standards)
* Attempt to adhere to LSB standards
  + Linux Filesystem Hierarchy Standard (FHS)
  + Linux Assigned Names And Numbers Authority (LANANA)
  + Installs to  
     /opt/intel/eil/clientagent/  
    Where:
    - /opt – FHS specification, helps reduce namespace collisions
    - intel – Official assigned name
    - eil – Our FHS namespace
      * *Note: If we want compliance and to reduce possible namespace collisions, then we probably want to put other scripts in this path as well.*
* Steward
  + C/C++
  + gSOAP
  + Interacts with CCMS
  + Thin agent
  + Built statically
  + Runs as a daemon, controlled by init (or upstart, depending on distro)
* Dispatcher
  + Bash, Ash, Dash compatible
  + Shell libraries available for use:
    - /opt/intel/eil/clientagent/lib/ - Includes:
      * helper.sh
        + Primary place to determine running Linux platform
        + Will include other helper scripts as needed
      * dispatcher.sh
        + Currently stubbed out, will contain abstraction code for dispatcher proper
      * globals.sh
        + Defines global shell definitions to be used by both the steward and the dispatcher
  + Includes shunit2-based unit-testing framework
* Cross-distro installer/build-tool
  + Currently builds the steward in a variety of ways (static, dynamic linking, as needed)
  + Generates a platform-agnostic installation package which can install the steward/dispatcher on a variety of Linux platforms (current support is for RHEL, CentOS, Ubuntu, SuSE, Xen, ESXi)