**Penstock**

Product Dev - Product Initiative of HCL

Technologies - Web Services, Spring, LDAP and EJB 3.0

**Module: Access Control List (ACL) & Security (Developer)**

Technologies: Web Services, EJB, Spring, JBoss, Oracle, OpenLDAP

ACL are the service access permissions defined in LDAP repository. It is a configurable list, which controls the user access for any business service. Based on the ACL, UI feature/operation can be enabled/disabled. Security module deals with authentication and authorization of an user. User can perform all activities related to login and passwords. A single action of user authentication and authorization can permit a user to access all business applications where he has access permission. In other words, user should be able to access different product offered by the penstock with a onetime authentication.

**Module: Instruments (Developer)**

Technologies: Web Services, Spring, Hibernate, Axis, JBoss, Oracle

Instruments represent the different types of securities on which a client can do trading. There are around 18 instruments defined for SPS. Each instrument has further subtypes. Some of the instruments of the SPS are Currency, Depository receipts, Equity, Fixed income, Forwards Funds, Futures, Index, Options, Premium bonds, Rights, Warrants.