Component Management System: Existing Software Notes

# IRMIS 2

IRMIS (Integrated Relational Model of Installed Systems, http://www.aps.anl.gov/epics/irmis/) is a collaborative effort between several EPICS sites to build a common Relational DataBase schema and a set of tools to populate and search a RDB that contains information about the operational EPICS IOCs installed at that site. It has been used by the Controls Group at APS. Its database has a large number of existing component entries.

We have deployed IRMIS 2.2 database and client applications in the development environment. For the database deployment we used production DB dump, modified to exclude certain items (e.g., large number of historical PV entries) that were irrelevant for our investigation.

* Existing DB schema scripts in code repository are not maintained and did not correspond to the production schema.
* DB schema has several tables that are not used, or tables that are used inconsistently. For example, the distinction between components, component types and instances is not very clear.
* Most tables contain set of columns (“version”, “deleted”) that are irrelevant to the corresponding DB entities.
* DB schema contains number of tables that belong to different application.
* DB schema does not support log entries.
* DB schema does not support complex components (assemblies).
* DB schema has number of APS-specific tables.
* Java client did not build out of the box (due to specific java version. requirement), and it is not easy to get it to work on a typical user desktop.
* Application has limited usability: for Controls Group only couple of people can add new data, others are limited to browsing.
* Application does not lend itself for use by multiple groups.

# IRMIS 3

IRMIS 3 (<http://irmis.sourceforge.net/>) has stopped development and has not been used at any sites.

# DISCS

DISCS (Distributed Information Services for Control Systems, <http://openepics.sourceforge.net/>) is a framework for building high-level applications for commissioning, operation and maintenance of an Experimental Physics Facility.

* Web based application, uses modern technology (J2EE).
* There are no application deployment scripts. Installation is fairly involved, and requires manual installation/configuration of application server.
* DB schema is much smaller than IRMIS schema. It supports complex components, but it also has certain tables that are site/application specific.
* Application is read-only. New entries must be added via specially formatted spreadsheets.