

**CANARIE Project CIIP-19**  
**Second Quarterly Progress Report**  
**April 12, 2006**

**JANUARY 2006**

- Progress was made with the overall software architecture: tools development tools were put in place (Eclipse, Velocity, Hibernate, subversion, Cruise Control, ...)
- Several internal meetings took place to define a suitable architecture for the future system.
- In particular, extensive efforts were devoted to the data model underlying this project.
- The CANARIE workshop/training on Service Oriented Architectures was attended by one of us.
- The toolset made available to us as in-kind contribution by IBM was studied

**FEBRUARY 2006**

- Convergence on the data model was achieved. Its implementation has been scheduled for May.
- The Kepler workflow management software was evaluated and a prototype with using a web service was built.
- The architecture design was continued.
- An observatory junction box was chosen as a first "instrument" to be monitored and controlled using web services. Work was started on the requirements, design and implementation of its device driver, including display of new incoming data and processing of command through web services
- The DoDAF (Department of Defence Application Framework) methodology was evaluated as a possible contender for the DMAS project definition.
- The Cruise Control (automated build system) was installed and configured.
- Training was provided to other developers in the team

**MARCH 2006**

- Conceptualization work on this project continued in earnest. Extensive consultations with US colleagues from the LOOKING project as well as from the MBARI MMI initiative took place. In particular, documents under production include:
  - a glossary of terms
  - operational activity model

- requirements

Those documents will be published in May and will be attached to the next quarterly report.

- The IBM WebSphere MQ Enterprise Service Bus product was evaluated.
- Efforts were made in streamlining the development efforts within the team. Tools such as bugzilla and wiki are now used to report software issues as well as define user requirements and describe operational procedures.
- In parallel to the elaboration of a web service infrastructure to interact with the observatory junction boxes, efforts are being made to deploy an access to the database.
- Contacts with the Monterey Bay Aquarium Institute in California were made. A group there has developed software to do pattern recognition in video footage from the ocean floor. Integration of such system into our service oriented architecture is one of the goals of this project (in conjunction with workflow orchestration tools such as Kepler). Consultations with this group will take place after the Summer.