# November 8, 2011

To do items:

* Tom and Craig: Look at OWL tools.
* Mike: Look at necessary topics for ROS visual servo code.
* Stephen: Get Mike account on Ubuntu machine.
* Craig and Stephen: Discuss IEEE working group.
* Everyone: Register for modex.
* Stephen: Change name of PMAS to IPMAS.

# November 15, 2011

**Carried from Nov. 8**

* Tom and Craig: Look at OWL tools.
* Mike: Look at necessary topics for ROS visual servo code.

**New**

* Tom: write abstract and title for Permis paper
* Stephen: write abstract for Ros/USARSim interface for ASME paper.
* Tom: convert existing XML to owl.
* Zeid: get info on how to create Ros package.
* Stephen: MOAST arm control.
* Zeid: find Ros contact person.

# December 5, 2011

**Carried forward**

* Mike: Look at necessary topics for ROS visual servo code. Deferred until running on real hardware.
* Stephen: write abstract for ROS/USARSim interface for ASME paper.
* Tom: convert existing XML to OWL. Deferred

**New**

* Raj to write email and snail mail about MODEX.
* Stephen to write GT about MODEX and grant.
* Stephen to schedule meeting w/ Zeid, Tom, Craig, and me on ontology.

# January 17, 2012

Items from weekly meeting:

1. MODEX is shaping up. We have confirmed the following speakers for our workshop:
2. Dick Motley: Fanuc Robotics America
3. Christian Wurll: Kuka
4. Erik Nieves: Motoman Robotics
5. David Peters: Universal Robotics, Inc.
6. Larry Sweet: C&S Wholesale

We will re-contact a few of the users (Boeing and P&G) tomorrow if we do not hear back from them. Ideally, we would get one more user as a speaker.

1. Prototype of kitting ontology delivered to IEEE working group!
2. Various team members are looking into:
   1. Ontology and real-time aspects: How can we represent our data both in a fixed file ontology and a real-time database. Steve will report more next week.
   2. Owl to cpp software: conversion from ontology to C classes that the planner can use. Tom will report more next week.
   3. Expanding our ontology to include process planning. Tom will report more next week.
3. New todo items:
4. Modex talks draft of letter to speakers… - Steveb.
5. Architecture diagram – Steveb.
6. Resend Modex invites on Wednesday. – Steveb.
7. Develop competency questions and flush out scenarios. – Craig.
8. Give outline of planner conceptual model and meet with SK to get UMD involved. – Zeid.
9. Develop plan format look at next week. – Tom.
10. Buy audio recorder for Modex – Steveb.

# January 24, 2012

1. Go over to do items from last week
2. My report
   1. Met with Julie Shaw of MIT
   2. Met with DCS
   3. Working on understanding the coupling of Ontologies and databases.
   4. Modex Update
3. Tom looking into OWLs for plan ontology. Looked at several other plan specification languages and developing process plan for kitting.
4. New to do items:
   1. Call Elena about getting P&G guy to visit. – Steveb.
   2. Write to GT about grant. – Steveb.
   3. Continued from last week:
      1. Tom – develop plan format,
      2. Craig – competency questions.
      3. Architecture diagram – Steveb.

# January 31, 2012

1. Go over to do items from last week
2. Ideas for monthly report?
   1. Meeting w/ Shaw Feng Sustainable metrics for unit assembly processes
   2. Meeting w/ DCS
   3. Example kitting plan created for use in ontology development
   4. Draft architecture developed
   5. Meeting with Gupta about conceptual model for planning system
3. My report:
   1. Architecture
   2. MODEX
4. Reports:
   1. Craig compared OWLS to Tom’s planning language
   2. Tom worked on planning language
   3. Zeid worked on formalizing plans
   4. Raj worked on workshop details
5. To do:
   1. Get back to DCS

# February 14, 2012

Stephen – Modex and GT

Tom – Started to implement planning schema in XML and worked on getting in PERMIS paper.

Zeid – Created draft of state-based kitting planning system. Will discuss next week.

Raj will have first draft of white paper by the time of PERMIS.

Craig – Putting together special session of IROS on knowledge representation.

How do you specify how many kit trays in a kit box?

# February 21, 2012

Zeid – Nothing new… working on state-space.

Craig – special session submitted to IROS. Paper deadline March 10.

Tom – Permis paper revisions.

# February 28, 2012

1. Ideas for monthly report.
   1. ASME paper accepted
   2. MODEX workshop and highlight (look at EL newsletter)
2. Reports:
   1. Tom worked on IROS paper and looking at PDDL
   2. Zeid working on “Planning for a Kitting Station” document.
   3. Craig working on special session.

# March 6, 2012

Craig presented OWL-S to PDDL converter.

Monthly report item : Kitting instance file submitted.

# March 13, 2012

Discuss use of Assembla for long term USARSim-ROS repository. Git hub?

Monthly report item: Two papers submitted to IROS.

Zeid, Tom, and Steve working on PERMIS, and 2 IROS papers

Teddy: robot arm working.

# March 20, 2012

Tasking: Stephen – SP and robot, make new diagram

Tom – owl pretty print, executor

Zeid, Craig – Generate SQL database

Anthony – Auto-gen real-time data tables

# May 1, 2012

Monthly report:

MySQL database generator

MySQL Class generator

# May 22, 2012

Around the table:

Mike – Sham want us to be able to teach a robot a task. Wants staged milestones from our current system to system that discusses what you want done.

Anthony – Methods to retrieve data from MySQL classes finished.

Zeid – Integrated access code into his planning system. Started to generate Doxygen comments.

Tom – Has researched robot languages. Will start on inter-module language this week.

Craig – IEEE standards meeting at ICRA last week. Looking at ways to represent state in Ontology.

Stephen – Presented at IEEE working group meeting and repeatable experiment workshop. Inverse kinematics between USARSim and ROS now working (almost). Issues on closed form solution.

Find out more details on Milan meeting.

# May 29, 2012

New surf students, Lee and Evan.

Zeid - C++ get function finished. Will schedule a meeting to finish defining executor.

Craig – Developing logical statements in RCC8 that will allow system to characterize a scene.

# June 5, 2012

Tom has rebuilt the way that pose is handled in the ontology. This has resulted in him also rebuilding the instance files. His next item to tackle will be creating a display similar to palletviewer for visualizing the kit building process.

Anthony is working on the auto-generation of the get and set routines for the MySQL database. These should be done by the beginning of July.

Our new surf students have gotten settled and are working on their projects. Li is examining state information on how/when the ontology will be updated and Evan is making good progress with the Kinect sensor.

Craig has been working on a new paper that details his approach to intention recognition.

Stephen has been working on creating a class structure for going from the canonical robot command language to a robot specific language for the executor.

Zeid – Made PDDL consistent with Tom’s ontology. Initial experiments have begun with querying the ontology and MySQL database from the PDDL planning system.

# July 3, 2012

Tom – Updated OWL and started to create visualization of canonical command representation.

Craig – OWLS rules for single task. 600 lines so far for OWL code. Will soon be 1000.

IROS papers accepted (2).

ASME best paper award.

Anthony – added methods to set/update mysql database from C++ code.

Evan – finishing up Kinect camera warning sensor.

# July 10, 2012

Stephen – UC Merced kick-off

Mike – will send revisions to projects

Anthony – working on state description logic for determination of object relationships (connected, next to, …).

Surf – writing checking software to check database concurrency.

Evan – Kinect sensor development

Tom – c++ classes for conical robot classes and has started work on visualization on display.