**Red Team**

**Stargazer**

**Automatic Telescope Control System**

**Release Notes**

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**Course:**

**COSC 471**

**Date:**

**February 7th, 2010**

# ****Release Notes: Prototype: Release #4****

We have begun construction of the telescope-controlling application as well as overcome issues related to drivers and automated scheduling.

To view release code, please view our repository: <http://github.com/RedTeamCOSC470/StargazerReleases>

The following development was completed this iteration:

* Database: has now changed from SQLite to Oracle 10g XE (Express Edition). Thus, the web server also needs the Oracle client installed and additional plugins installed to the web system such as the Oracle Enhanced Adapter.
* Job scheduling: schedules created through the web application correspond to jobs created in the Oracle XE database. When new schedules are created, a trigger fires on the Schedules table, creating a job using Oracle’s dbms\_scheduler package. When the specified time occurs, the scheduler calls a batch file on the local Windows machine connected to the telescope. The batch file takes arguments passed from the scheduler and then calls the telescope-controlling application passing in the same arguments. The application then runs the commands necessary for the drivers to recognize and position the telescope.
* Drivers: we have tested both the Ascom and Meade drivers. The Ascom commands to move to a specific set of coordinates work, but the parking ability does not work. The Meade commands that are supported by our telescope do work but there is no ability to unpark the telescope once parked.
* Telescope movement: we have developed the program which has the abilities to park the telescope and move the telescope to specific celestial coordinates.
* Celestial Library: Ascom provides a library of celestial objects which we have extracted.
* Online help: has been updated and added to the web application with accompanying images.