Simulated OCS / Scheduler Coordinated Workplan

This page provides the coordinated work plan between the Simulated OCS (SOCS) and the Scheduler.
Updated: 2017-05-24 (using Francisco's private-delivery dates as of 5/11/17 .. add time for science testing)

Combined Release v0.1 - done

Release Date: 2015-09-30

SOCS Workplan	Scheduler Workplan
- Release OpSim Requirements document - Design SOCS independant of OpSim - Define and initiate SOCS code modules in SE Simulations repository - Prototype and benchmark Communications using current release of DDS-SAL-Python	- Release Scheduler Interface Document - Design Scheduler independent from OpSim - Define and initiate Scheduler code modules in T&S repository - Prototype and benchmark Communications using current release of DDS-SAL-Python

Combined Release v0.2 - done

Release Date: 2015-12-27

SOCS Workplan	Scheduler Workplan
- Implement SOCS structure with interface - Implement simulation kernel with time simulator - Refactor and integrate observatory model - Implement observatory telemetry simulator - Implement simulation sequencer with targets handling - Refactor and integrate observations DB - Integrate with Scheduler - SOCS topics: telemetry for time and observatory conditions - Scheduler topics: next target from scripted proposal	- Implement Scheduler structure with interface - Implement time handling - Refactor and integrate observatory model - Implement Scripted Proposal - Integrate with simulator (SOCS) - SOCS topics: telemetry for time and observatory conditions - Scheduler topics: next target from scripted proposal

Combined Release v0.3 - done

Release Date: 2016-05-20

SOCS Workplan	Scheduler Workplan
- Refactor and integrate Astronomical Sky - Integrate Observatory Model slew and track behavior for observing visits - Implement observing behavior in simulation sequencer - Integrate DB storage of targets received and visits performed - Integrate and benchmark performance with Scheduler - Test multiple AD proposals survey with slew time cost and sky brightness - Test repeatability - Test speed under simulation	- Refactor and integrate Astronomical Sky - Integrate Observatory Model slew time estimations - Implement Survey Conductor with slew time cost - Refactor and integrate Area Distribution Science Proposals - Integrate and benchmark performance with SOCS - Test multiple AD proposals survey with slew time cost and sky brightness - Test repeatability - Test speed under simulation

Combined Release v1.0 - in testing

Release Date: 2017-02-28

SOCS Workplan	Scheduler Workplan

- Refactor and integrate Environment Model   - Simulate weather telemetry, clouds and seeing   - Incorporate filter swaps during new moon   - Incorporate downtime simulator   - Implement Scheduler configuration via commands   - Integrate with Scheduler   - Test with complete survey   - Test repeatability   - Test execution speed

- Refactor and integrate Time Distribution Science Proposals   - Incorporate filter swaps during new moon   - Implement inter-proposal self balancing priority   - Incorporate weather telemetry handling   - configuration   - Integrate with SOCS   - Test with complete survey   - Test repeatability   - Test execution speed

Combined Release v1.1

Release Date: 2017-09-30

SOCS Workplan	Scheduler Workplan
- Support for previous release - Support Development for Area Distribution Look Ahead in Scheduler 1.1 - Implement non deterministic weather simulator - Implement non deterministic downtime simulator - Integrate and test with Scheduler - Test survey with Area Distribution proposals and Look Ahead - Test speed performance - Test repeatability	- Implement deterministic look ahead data structure - Implement Look Ahead algorithm for Area Distribution Proposals - Integrate and test with SOCS - Test survey with Area Distribution proposals and Look Ahead - Test speed performance - Test repeatability

Combined Release v1.2

Release Date: 2018-01-31

SOCS Workplan	Scheduler Workplan
- Support for previous release - Support Development for Time Distribution Look Ahead in Scheduler 1.2 - Integration and test with Scheduler	- Implement Look Ahead algorithm for Time Distribution Proposals - Integrate and test with SOCS - Validate Sequences selection with look ahead - Test speed performance

Combined Release v1.3

Release Date: 2018-05-31

SOCS Workplan	Scheduler Workplan
- Support for previous release - Evaluate and implement performance enhancements	Evaluate and implement performance enhancements

Combined Release v1.4

Release Date: 2018-12-31

SOCS Workplan	Scheduler Workplan

- Support for previous release - Implement warm start DB interface for Scheduler - Implement image quality feedback simulator - Implement degraded operational modes simulator - Constrained limits and/or speeds for mount, rotator, dome, optics. - Constrained availability of filters - Integrate and test with Scheduler - Test resuming partial surveys - Test variable image quality feedback - Test degraded modes	- Implement warm start capability - Implement image quality feedback handling - Implement degraded operational modes - Constrained limits and/or speeds for mount, rotator, dome, optics. - Constrained availability of filters - Integrate and test with SOCS - Test resuming partial surveys - Test variable image quality feedback - Test degraded modes

Combined Release v1.5

Release Date: 2019-05-31

SOCS Workplan	Scheduler Workplan
- Support for previous release - Implement spatial distribution for weather simulator - Integrate and test with Scheduler - Test dithering in Scheduler - Test spatial distribution for weather in a survey	- Implement Dithering algorithm - Implement handling of spatial distribution for weather telemetry - Integrate and test with SOCS

Combined Release v2.0

Release Date: 2019-10-31

SOCS Workplan	Scheduler Workplan
- Support for previous release - Support Scheduler Implementation for publication of future targets schedule - Integrate and test with Scheduler	- Implement publication of future targets schedule - Integrate and test with SOCS

Combined Release v2.1

Release Date: 2020-02-28

SOCS Workplan	Scheduler Workplan
- Support for previous release - Implement weather forecast - Integrate and test with Scheduler	- Implement handling of weather forecast in look ahead algorithms - Integrate and test with SOCS

Combined Release v2.2

Release Date: 2020-06-30

SOCS Workplan	Scheduler Workplan
- Support for previous release - Support Scheduler implementation of generic interface for optimization algorithms - Support Schedule Incorporation community provided optimizations	- Implement generic interface for optimization algorithms - Incorporate community provided optimizations