

Current SIAM "user stories"

November 12, 2003

Version 1.3

Open stories:

7a. Operator add inductive modem string containing MicroCats and HydroScats/HydroRads to mooring.

20. WetStar analog fluorometer service

23a. HydroScat service

24. Wireless links are periodically turned on, at interval and duration specified by user.

25. Shutting down a port guarantees that power is disconnected from the port.

29. User can easily access online help for command line tools - Eric Reinecker

30. User can determine which nodes are present on network - Eric Reinecker

Implemented stories:

1. Operator plugs new instrument into vacant port A, and initiates discovery process on port A using "scanPort" utility. When instrument service has been loaded and started, operator is able to quickly verify proper instrument functionality at port and network levels.

2. Operator removes instrument from port A by first running 'shutdownPort' utility, then physically removing instrument.

3. Operator removes instrument from port A, replaces it with another instrument of same type.

4. Operator removes instrument from port A, replaces it with instrument of different type.

5. Operator can specify sampling schedule for each instrument. Can schedule by relative interval or absolute time. Operator can specify day/night mask.

6. Operator can access genericGUI of any instrument service, either on localhost or network. Includes capability to trigger

immediate sample acquisition, retrieval of current instrument state.

7. Operator adds inductive modem string containing MicroCats to the mooring.

8. Operator performs maintenance on mooring node; node log(s) reflect maintenance events.

9. DeviceBrowser displays status of all instrument services on node. Browser display updates as devices are installed or uninstalled.

10. System starts up, loads instrument services from files (not pucks yet). User can display which services are running. User can shutdown services on specified ports, user can start services on specified ports using command line interface.

12. User has command line interface to interact directly with instrument serial port. Literal strings typed by user are sent directly to serial port. Data coming from serial port is displayed.

11. User initiates port scan; by default port scan looks for puck and loads contents. User has option to load instrument jar file from filesystem instead of from puck. Port scan should be as unobtrusive as possible with respect to other instrument services which are already running. User can easily view status of new service.

13. User can interact with node via wireless link.

14. Instrument service has "default" sample schedule which is retrieved by node. User can override default sample schedule. Sampling can be scheduled on either a relative time or absolute time basis. Can specify day vs night. User can request "immediate" instrument sample.

15. "Intrusive" user command sessions time-out safely, allowing system to resume normal operations automatically. E.g. if serial diagnostic tool has obtained instrument serial port, it will relinquish after some timeout (allowing sampling to continue)?

16. RDI 300 KHz ADCP service

17. Seabird inductive string service

18. Metsys system service

19. WetStar Eco-puck fluorometer service

- 21. ISUS or YSI nutrient sensor service
- 22. GasHound CO2 sensor service
- 23. Hobi HydroRad service
- 26. Instruments log their data and metadata to persistent node storage.
- 27. Operator can cause specific messages to be recorded in instrument and/or node logs, e.g. to indicate maintenance or debug activity.
- 28. Operator can trigger "immediate" data sample from instrument service.