EVLA Monitor & Control

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EVLA Data Flow - Overview

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Transition System vs. Final System

- In broad terms, there will be two major versions of the EVLA Monitor & Control System – a Transition System and a Final System
- The Transition System bridges the gap between the old Modcomp-based VLA Control System and the final version of the EVLA Monitor & Control System, while maintaining operational capabilities
- The Transition System will be responsible for controlling a wide array of old and new hardware – EVLA Antennas, VLA Antennas, the VLA Correlator, and the prototype WIDAR correlator
- The Transition System will incrementally shift its software architecture toward the desired architecture of the final system

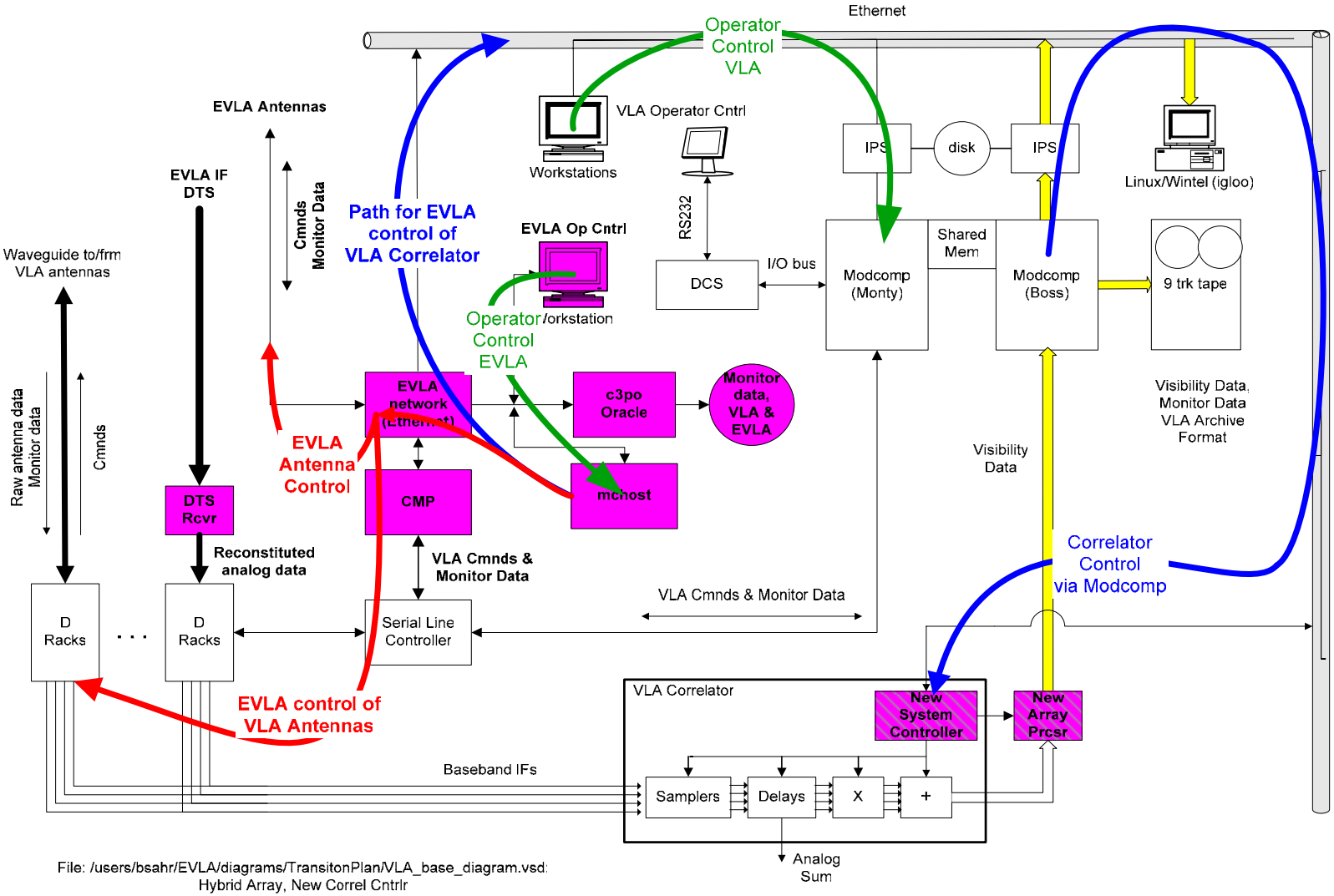
Selected Transition System Milestones

- ✓ Support for EVLA antenna hardware development
- ✓ Use of EVLA Antennas in scientific observations
  - Monitor and control of EVLA antennas
- Retirement of the Modcomp-based VLA control system
  - Monitor and control of VLA antennas (nearly done)
  - Monitor and control of VLA correlator
  - Distribution of VLA correlator output within EVLA M&C
  - Formation & writing of VLA format archive records
- Support WIDAR prototype correlator
- Implement target architecture of final system

Retirement of the Modcomp-based VLA control system

- Monitor and control of VLA antennas – end of Q2 2006
- Monitor and control of VLA correlator – Q4 2006
- Distribution of VLA correlator output – Q4 2006
- Formation & writing of VLA format archive records – Q1 2007
- Parallel operation & testing – Q2 2007

Current State of the Transition System



File: /users/bsahr/EVLA/diagrams/TransitonPlan/VLA_base_diagram.vsd:
Hybrid Array, New Correl Cntrlr

Transition vs. Final System Components & Carryover

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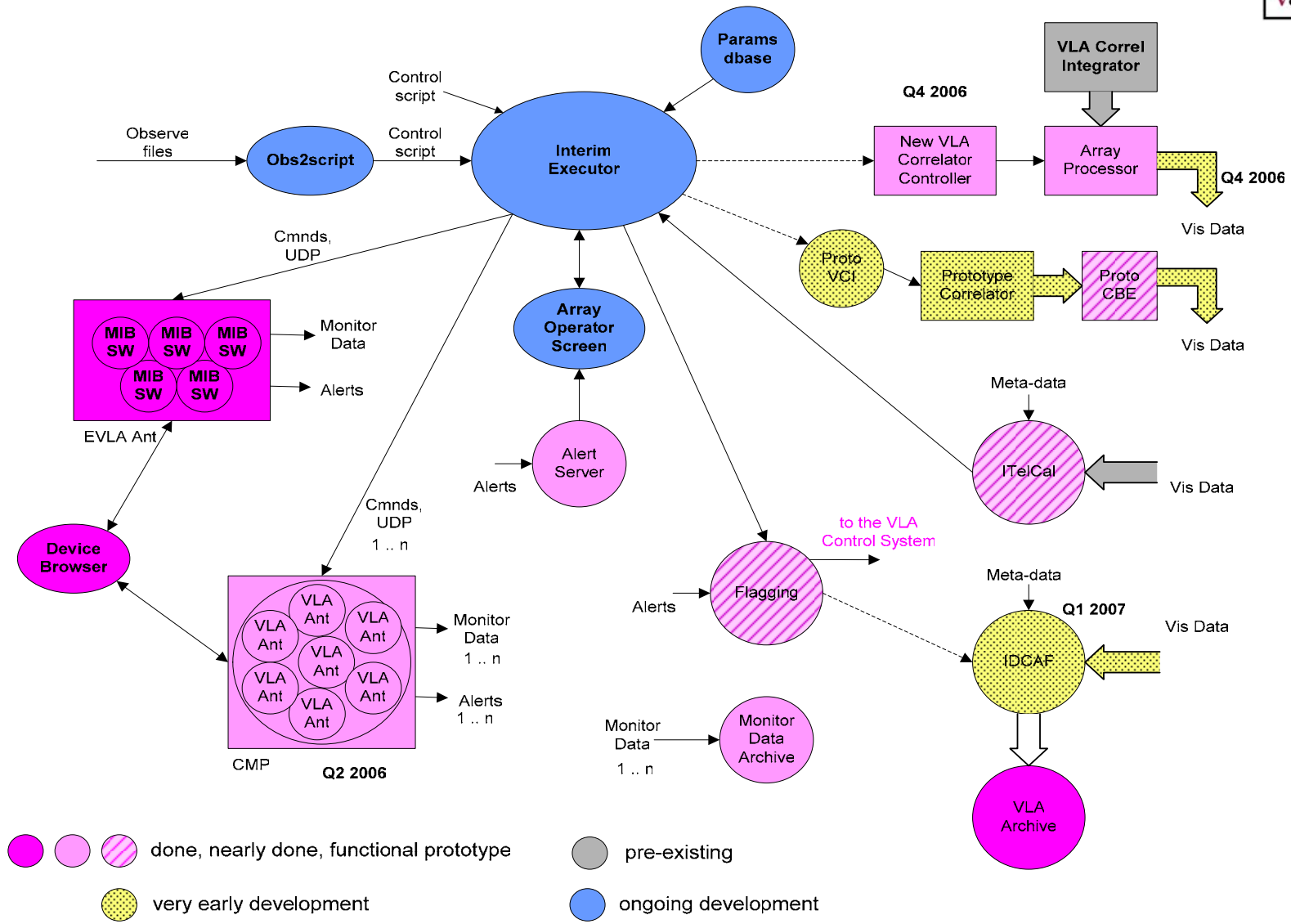
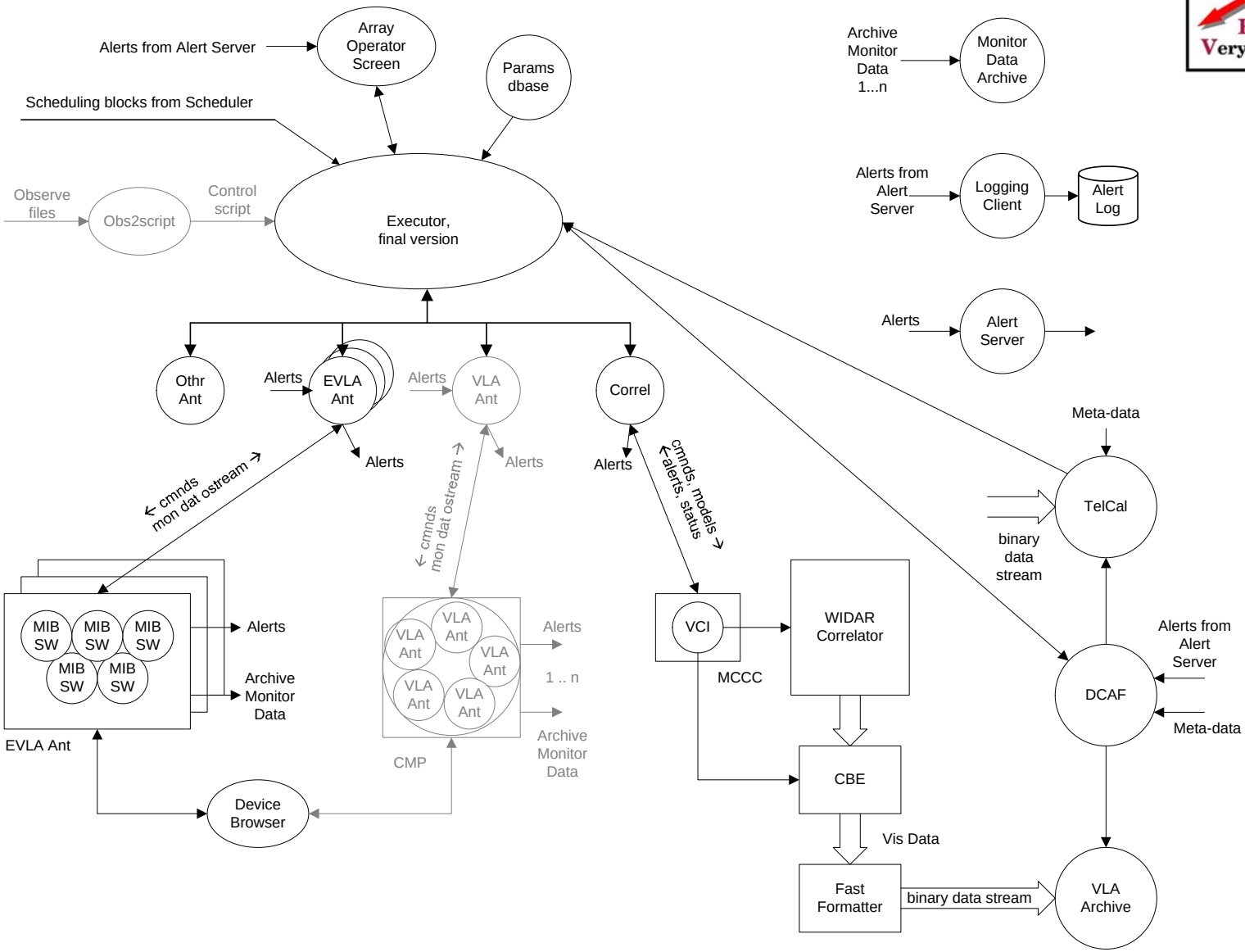
EVLA M&C Transition System
Data Flows & Status

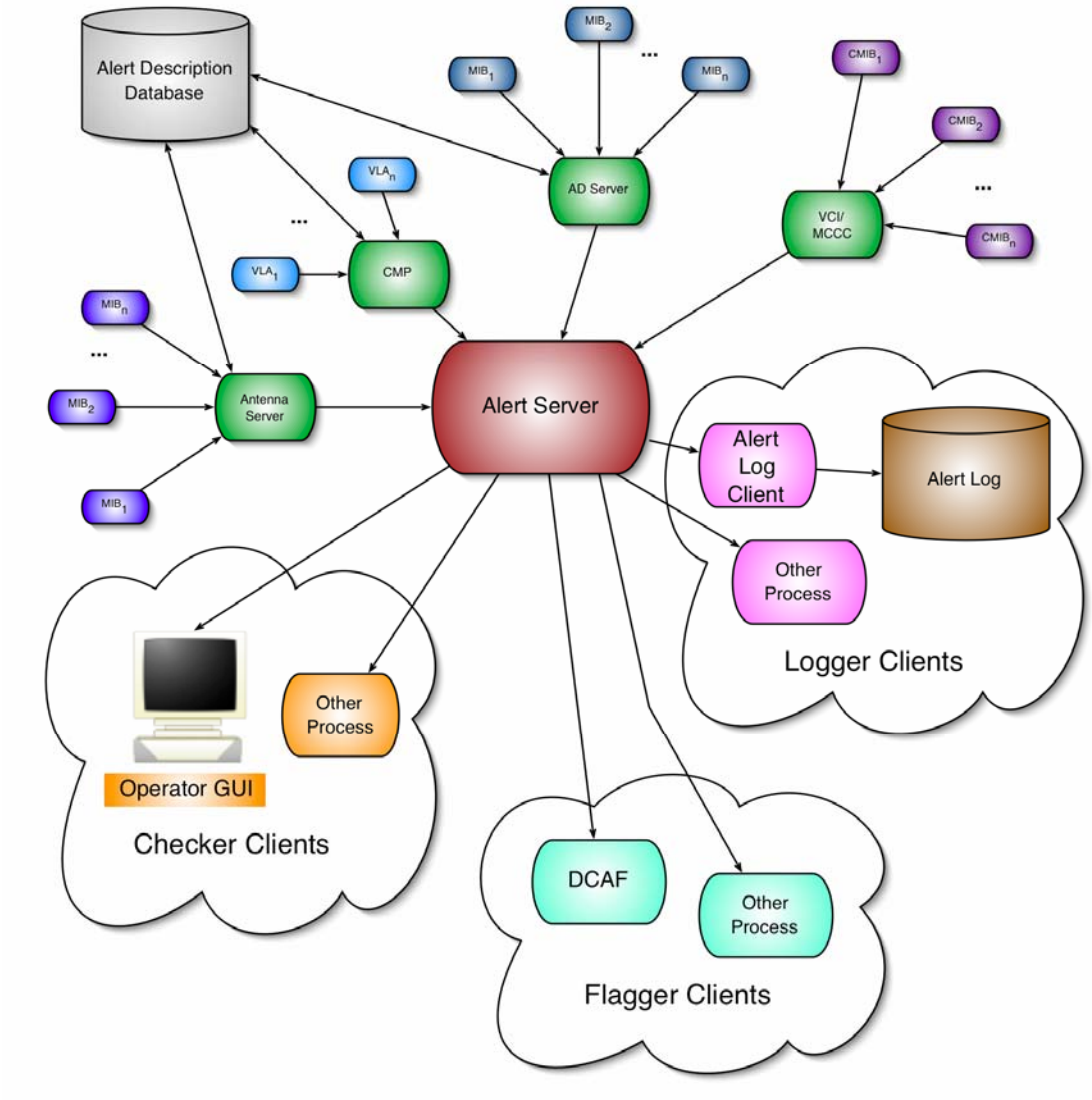


EVLA M&C Final System

Data Flows



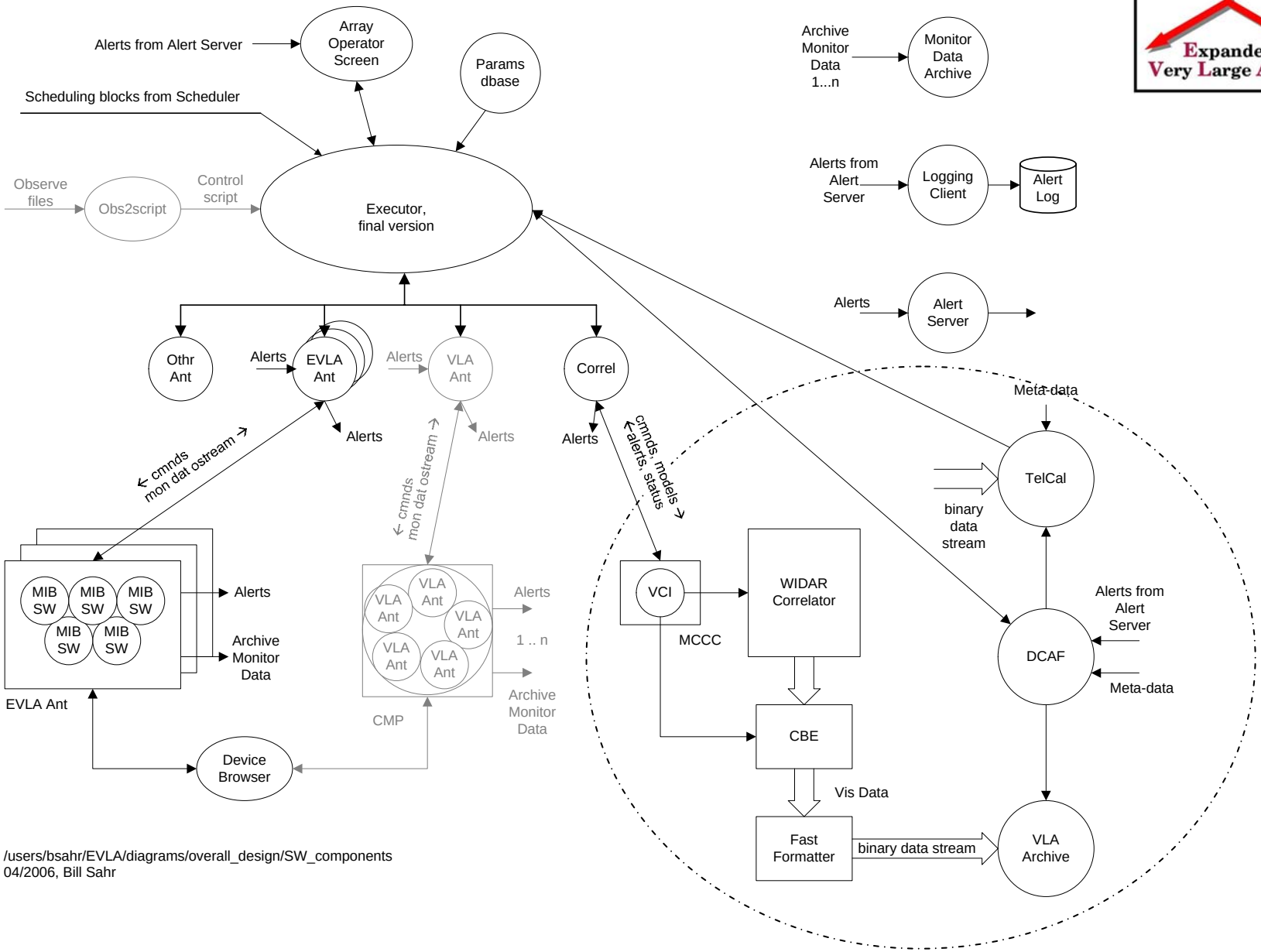
The Alert Subsystem



Bryan Butler & Rich Moeser

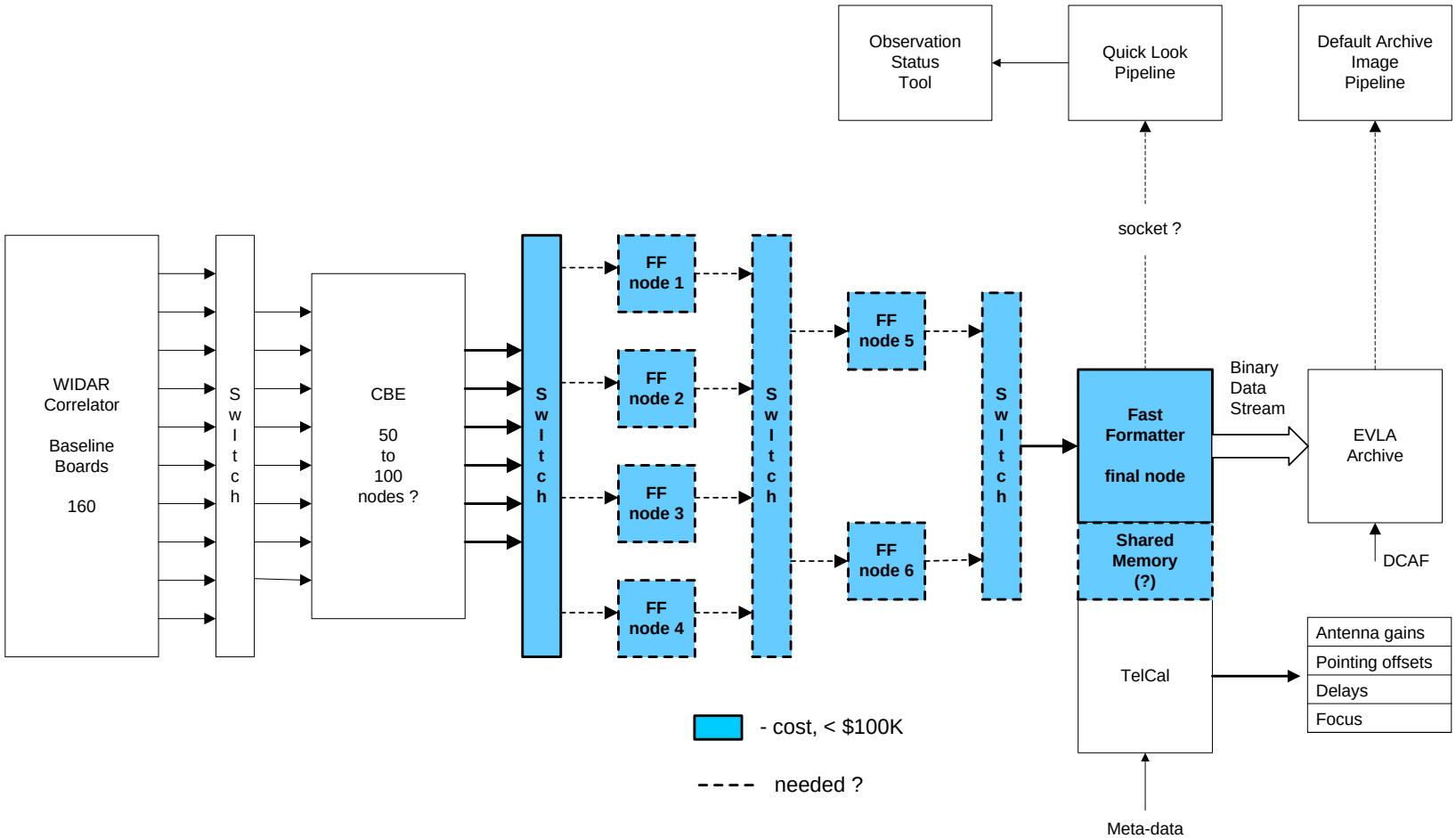
EVLA M&C Final System

Data Flows

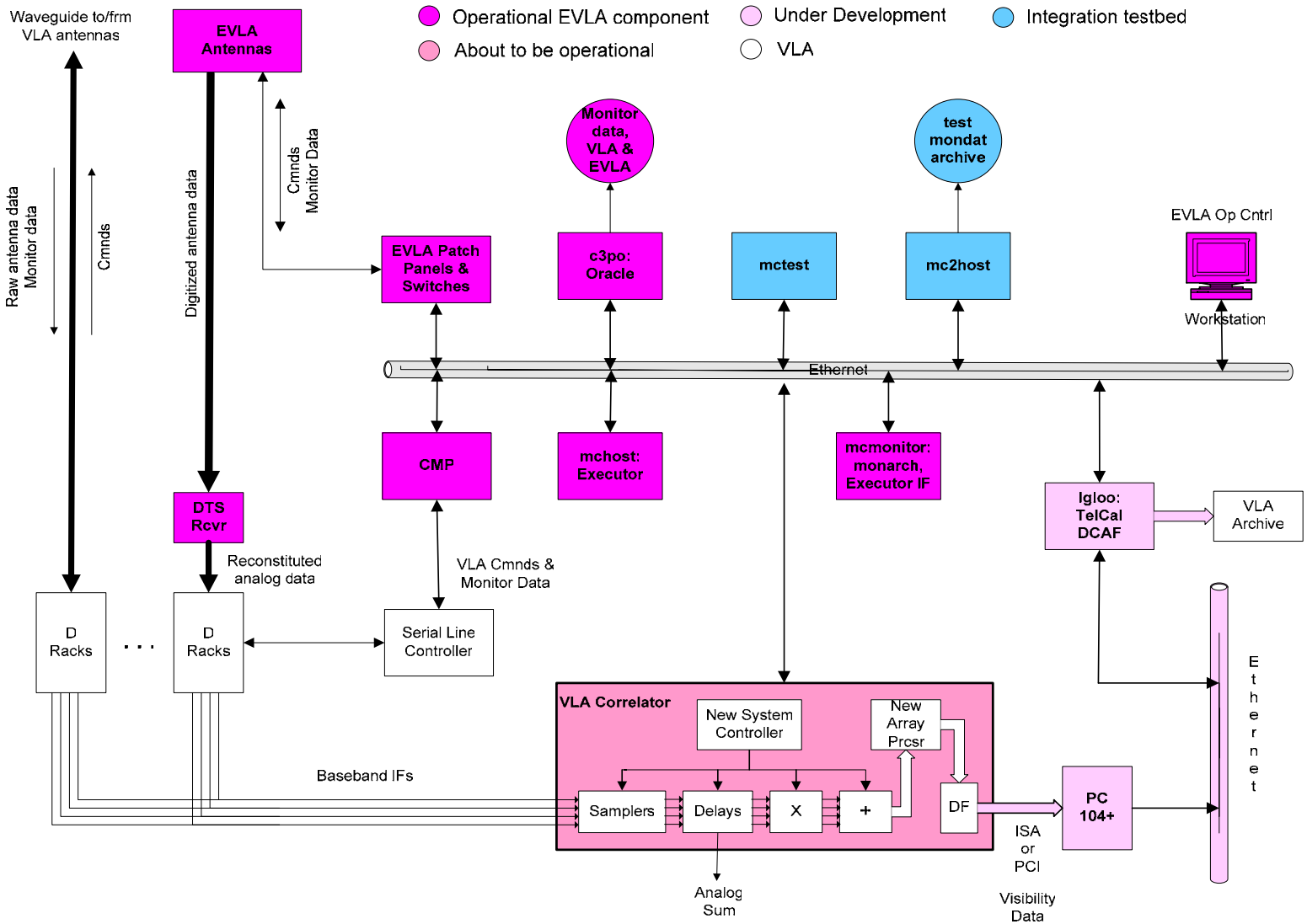


/users/bsahr/EVLA/diagrams/overall_design/SW_components
04/2006, Bill Sahr

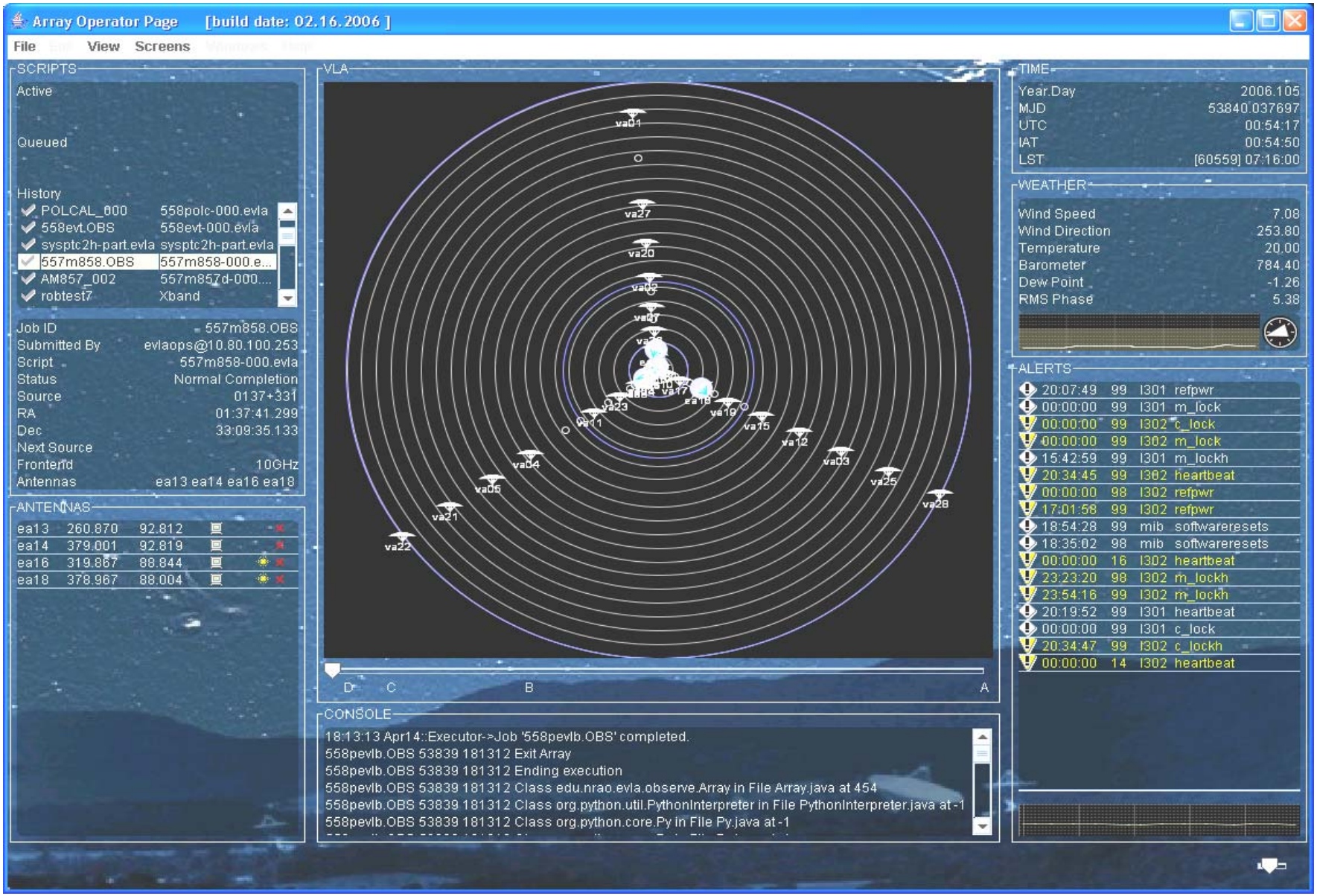
Fast Formatter, TelCal, Post-Processing Worst Case Scenario



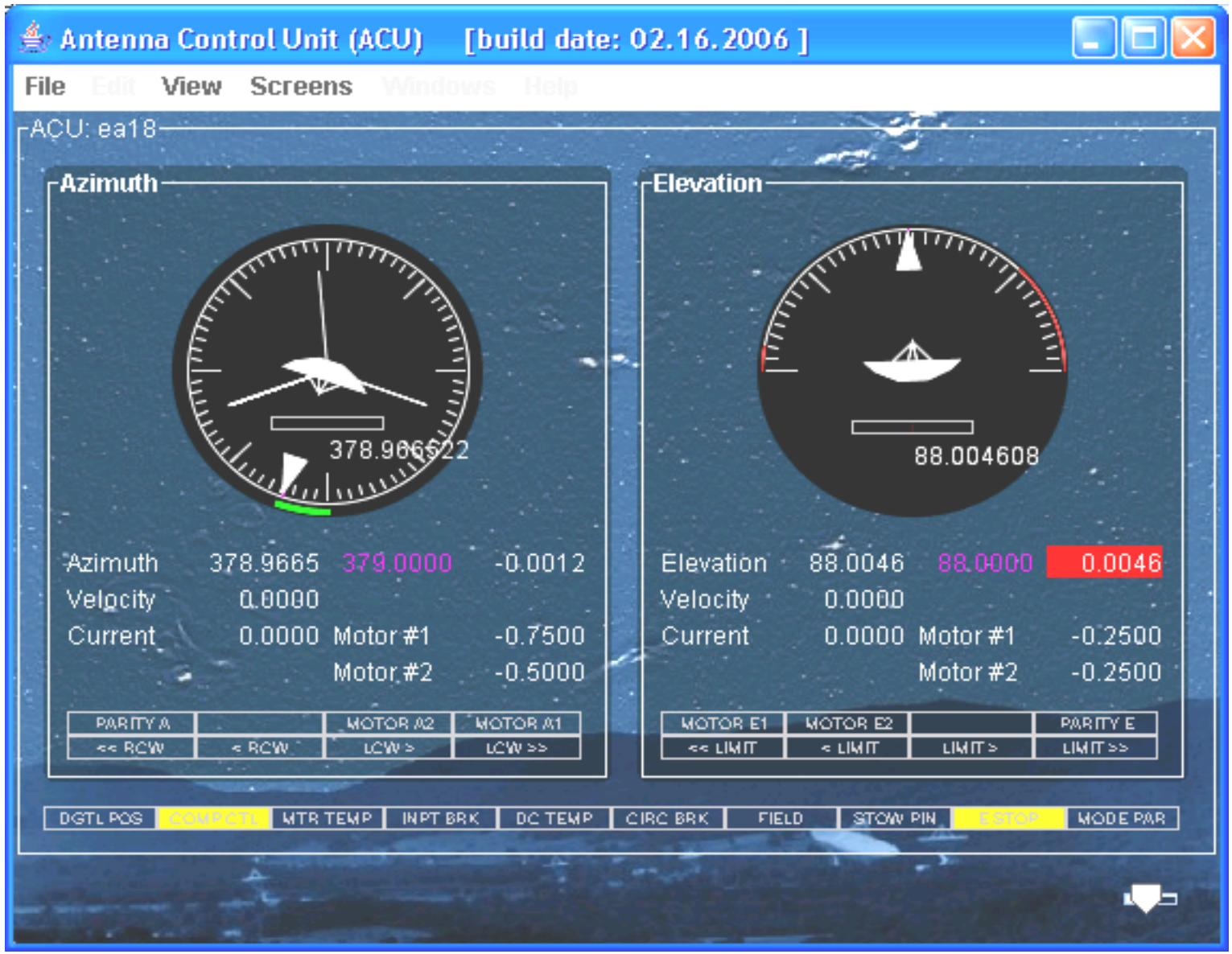
EVLA M&C, Deployment



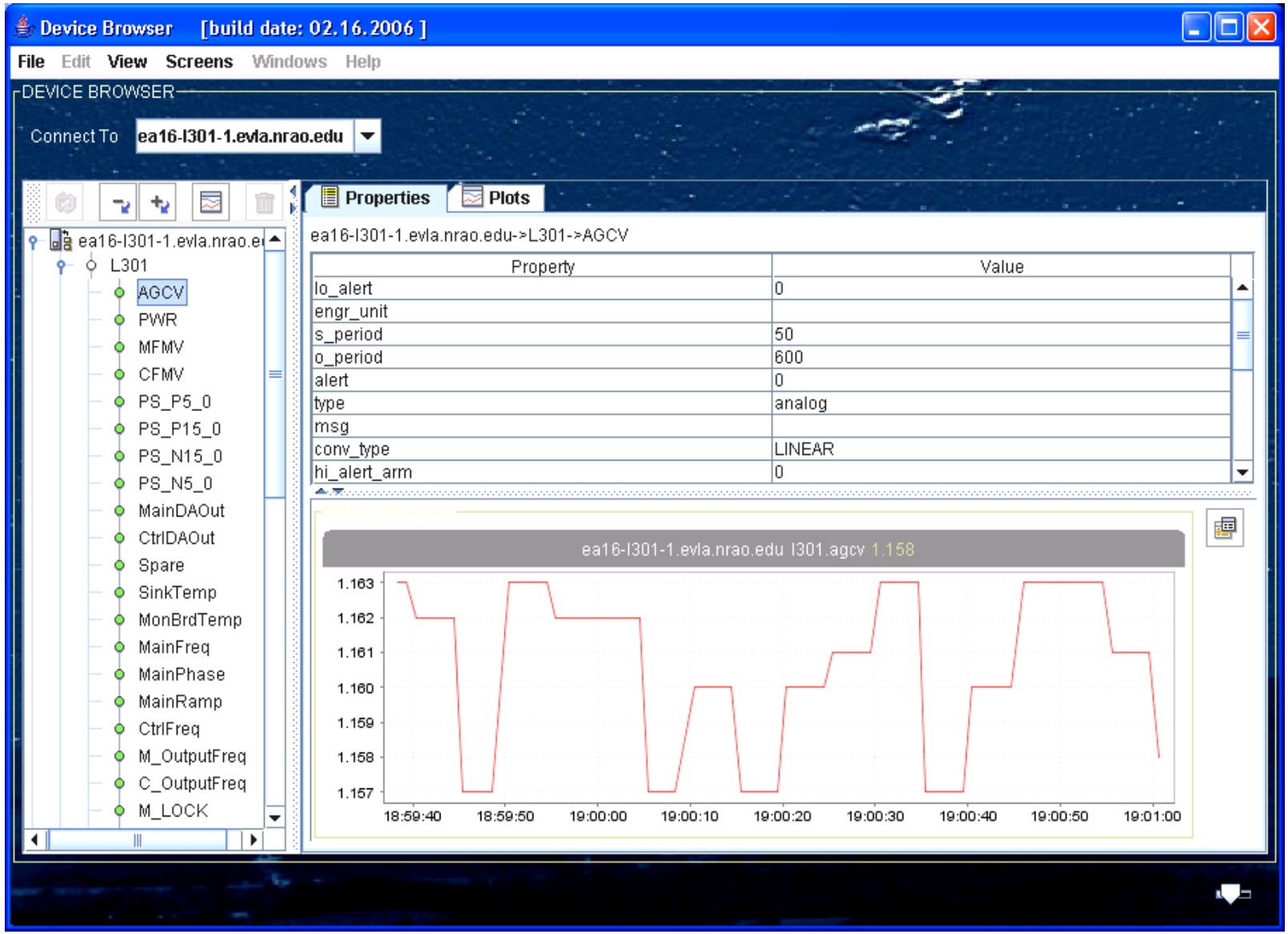
Screenshot of the Array Operators Screen



A module subsystem screen – the ACU Screen



Screenshot of the Device Browser



Latest software releases

- Stable builds web page:
  http://www.aoc.nrao.edu/asg-internal/jnlp/