

DOME (Buses)

DOME is fully functional and is being actively used for research. We have added and improved tools to help researchers who are executing experiments, including tools for monitoring the status of experiments and reporting historical data. We have also improved the tools used internally, so that we can better detect and isolate problems.

We have compiled DOME with the "bella" release of ORCA, though it is not deployed. We are awaiting the release of ORCA documentation to evaluate new ORCA features. We still expect to make use of the cancel lease operation. We have also created a test harness that should allow us to debug and validate new releases of an integrated DOME controller/handler with ORCA, without affecting the operational DOME test bed.

The software to support the 900MHz radios in DOME virtual environments is complete and has been deployed on the buses. Our scheduling and diagnostic tools now also include support for the 900MHz radios.

DOME provided a demo of the fully integrated test bed at GEC 7.

The UMass VLAN is operational. It has been connected to BBN via NoX, and we have been able to create an isolated subnet than includes RENCI. The VLAN is shared with ViSE. The ViSE team did a demo at GEC 7 that made use of the VLAN.

Our REU student is running experiments on DOME.

DOME (WiMAX)

Though UMass had a WiMAX license we opted to get a separate license for DOME GENI usage. This will allow DOME to use a portion of the WiMAX spectrum that is independent of UMass's allocated frequency. Our license was applied for in December 2009 and granted in March 2010.

We have started discussions with UMass OIT and the UMass Physical Plant regarding placement of the base station. We have a tentative site for the base station identified; we are scheduling a meeting with all parties in an effort to finalize the plans.

We have had some discussions with Ivan Seskar regarding WiMAX clients for the buses. Though bus clients are not a deliverable until next year, we hope to start evaluating some hardware and begin understanding what the technical challenges will be.