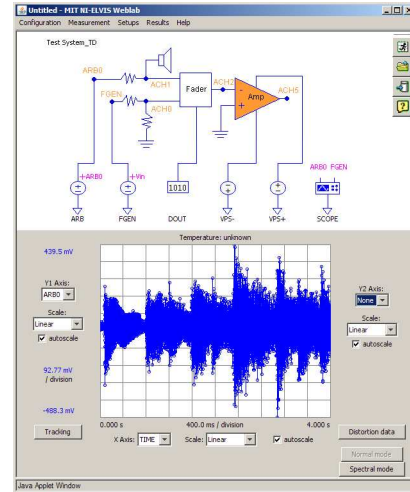


## Introducing the eSyst Analog Systems iLab

A remote laboratory, or iLab, has been developed by the MIT iLab Project in cooperation with MATEC as part of the eSyst Project. This iLab is based on the National Instruments ELVIS II platform and will provide a versatile online electronics test and analysis environment for students of the eSyst curriculum. Most of the functionality of the standard ELVIS II platform is available through this iLab, enabling students to perform experiments in both the time and frequency domain as well as allowing them to supply test signals (sinusoids, square waves) or selected audio samples as input to the system under test. Further, an audio-enabled webcam has been integrated with this iLab so that students will be able to see and hear the lab.

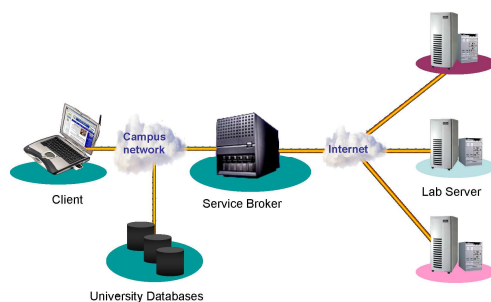
For its initial release, the eSyst Analog Systems iLab will be used in the eSyst Solid State Systems Course where students will use it to test a multistage analog audio system. As an iLab, only a single laboratory setup will be needed in order to support all of the institutions implementing the eSyst curriculum. Moving forward, this iLab will be integrated into other eSyst course curricula, allowing students and instructors to take full advantage of this remote laboratory.



The eSyst Analog Systems iLab

## The MIT iLab Project

The MIT iLab Project is dedicated to the proposition that online laboratories – real laboratories accessed through the Internet – can enrich science and engineering education by greatly expanding the range of experiments that students are exposed to in the course of their education. Unlike conventional laboratories, iLabs can be shared across a university or across the world. At the core of these remote laboratories is the iLab Shared Architecture, which provides a set of generic tools and interfaces that reduce the time and effort needed to develop, deploy and share a new lab.



Topology of the iLab Architecture

The MIT iLab Project has created remote laboratories focused on electrical engineering, physics and nuclear engineering which have been used in for-credit assignments at 19 different universities across five continents. Additional iLabs are also being developed and shared by partner institutions such as the University of Queensland in Australia and Obafemi Awolowo University in Nigeria.

## About the MIT iLab Project and eSyst iLab

For more information on the iLab Project, please visit <http://ilab.mit.edu/wiki>. For more information on the eSyst Project, please visit <http://www.esyst.org>.