# Building and Analyzing SEDs with Iris 1.0

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# Current Status

- SED Access and Aalysis tool enables
  - Data discovery and data access to NED service
  - SED data preparation from NED Service and/or user's data files
  - SED visualization and fitting
- Distributed libraries
  - Downloadable SEDLib available to developers
  - SEDImporter API and SDK
- IVOA Standards/Protocols
  - Spectrum DM v1.03
  - SAMP used for private (Specview/Sherpa) and public (Any/SEDImporter, Any/Specview) interfaces

# DEMO

# Remarks

- ## We like SAMP!
  - Used for private interfaces (Specview and Sherpa)
  - Used for public interfaces (SEDImporter, Specview)

- ## Users have non compliant FITS, VOTables, CSV…
  - SEDImporter

- ## Reusable components
  - SEDLib
  - SEDImporter API

- ## Extensibility
  - SEDImporter SDK – Custom file filters (can workaround current Interoperability issues)

# IVOA WishList

- ## Data Models
  - standard representation for analytical functions/SED models.
  - ~~standard representation for units and quantities.~~

- ## DAL
  - SED service definition

- ## Serialization
  - More abstraction => Faster implementation (up to $10^2$)

- ## Extensibility
  - Needs real specification, e.g.:
    - ○ how to define new utypes
    - ○ namespaces

# Future plans

- Requirements Doc (latest update 29 Aug 2011)
  - http://dev.usvao.org/vao/attachment/wiki/Projects2010/ SEDAccessAnalysis/HLR_8_29_11.pdf

- New development priorities
  - More flexible tabular data ingestion
  - User supplied models for fitting
  - Template fitting
  - "Segment" and "Properties" interactive browsing and filtering
  - Further interoperability with VO tools
  - Simple aperture correction to photometric points

- Iris v1.0 downloadable tool for Linux and Mac
  - http://cxc.harvard.edu/iris/

# Components