# **IEPM Topology Analysis Repository**

## Introduction

The Topology SVN houses all IEPM programs and scripts in relation to topology analysis and visualisation. The following is a listing of the currently modules and files related to the project:

```
[ytl@slac:~/svn/topology/trunk]$ tree
-- bin
   -- asn.pl
    `-- traceroute_topology.pl
|-- doc
-- lib
   `-- IEPM
       `-- Topology
           -- ASGroup.pm
           -- Canvas
           `-- Graphviz.pm
           |-- Canvas.pm
           -- Link
           `-- Graphviz.pm
            `-- Node
               `-- Graphviz.pm
`-- unit_tests
    |-- test_canvas-graphviz.pl
   |-- test_iepm-db-topology.pl
   `-- test_topology.pl
9 directories, 10 files
```

The libs should be included in your PERL5LIB path in order for the modules to function. There are also some dependencies upon the base iepm project libraries.

## bin

File	Description	Dependencies
asn.pl	This script determines AS information for supplied IP or DNS entries	iepm, iepm-bw
traceroute_topology.pl	This will create graphviz diagrams of traceroute data gathered from the IEPM-BW MySQL databases	iepm, iepm-bw

#### lib

File	Description	Dependencies
IEPM::Topology::ASGroup.pm	Defines a single AS entry	
IEPM::Topology::Canvas.pm	Defines a base class of objects to draw for topological representation	
IEPM::Topology::Canvas::Graphviz.	Inherited from Canvas.pm for Graphviz implementation specifics	
IEPM::Topology::Link::Graphviz.pm	Inherited object of IEPM::Topology::Link::Graphviz.pm for Graphviz specific representation	IEPM::Topology::Graphviz.pm
IEPM::Topology::Node::Graphviz.pm	Inherited object of IEPM::Topology::Node::Graphviz.pm for graphviz specific implementation	IEPM::Topology::Node::Graphviz.pm

#### unit\_tests

File	Description	Dependencies
test_canvas-graphviz.pl	Creates some graphviz nodes and links and draws them in graphviz format	
test_iepm-db-topology.pl	Gathers some traceroutes from the iepm-bw traceroute databases and plots them in graphviz format	iepm-bw
test_topology.pl	Using some raw traceroute output (hardcoded), puts them into a graphviz canvas and plots them in graphviz format	