Tapestry Quick Start Guide

This document shows a simple method to get started with Tapestry using a sample anonymized log file for input data. Once this works it is easy to move to the next step: real time data acquisition for Tapestry.
This assumes you have installed Erlang on your Mac/Linux system.

Section 1

A)
git clone https://github.com/FlowForwarding/loom.git
cd loom
edit tapestry/rel/files/tapestry.config
 ------ change line {datasources, [logfile]}. to {datasources, [anonymized]}
make
cd tapestry
rel/tapestry/bin/tapestry console
--- you will see Tapestry console output here. To stop Tapestry hit ctrl c, ctrl c.

B)
In another terminal window send sample anonymized DNS log file to tapestry (assuming that current directory is loom)
cd tapestry/apps/tapestry/test
ftp ftp@localhost 7777
password: ftp1
put ./sample.tar.gz

C)
View the sample data in Tapestry
http://localhost:28080/nci.html
Click on 1d ------- for some reason doing it this way helps with showing the sample data.
Click on NCI in the top left.
You should see a histogram showing two activities.

Now that you have got a sample data file being ftped, analyzed and shown in Tapestry, it is time to try with real data, either in the form of packet_in from an OpenFlow switch or logs coming from BLOX DDI.

Section 2

Real data using Openflow switch in the path to DNS server

A)
Setup test environment
Identify DNS server of interest from which you want to collect DNS responses. Use a program like “dig” from your laptop to ensure that the DNS server is being used.

B)
Place LINCX switch in the path to the DNS server by connecting the cable going to DNS server to port 2 of LINCX box, and connecting a cable from port 1 to the DNS server. You can consider LINCX as a bump in the wire. The port numbers used are an example and need to be corrected as per your configuration of LINCX switch.
Assumptions:

- Loom controller ready to use.
- LINCX configured with Loom controller IP address and started

Try “dig” now, it should not work.

C)
Add flow entries as follows to make LINCX behave like a wire between port 1 and port2.

Start loom controller
rel/icontrol/bin/icontrol console
LINCX switch should connect to it if configured correctly. This can be seen on the console.
iof:bridge(1, 100, 1, 2). ----- bridges port 1 and port 2.
Try “dig” again, and it should work

D)
Add flow entry to tap DNS responses from DNS server

iof:dns_tap(1, 200, 1, 2, controller, {DNS server IP address}).
IP address of the form {192,168,0,1}.
Try “dig” and you should start seeing packet_in messages from switch in the controller console.

Stop controller with ctrl C, ctrl C

E)
Edit tapestry.config in loom/tapestry/rel/files to change
{datasources, [logfile]} to {datasources, [packet_in]}.

start tapestry
rel/tapestry/bin/tapestry console

you should see packet_in messages when you do “dig”

You can now use
http://localhost:28080/nci.html