

TestBed Installation Guide

FODAVA 2012

Georgia Institute of Technology

1. Installation

1) Supported Machines

Windows 7 (64bit)

2) Required files or programs

- a. Java JRE (Version 6 recommended)
- b. TestBed zip file
- c. MATLAB Compiler Runtime (MCRInstaller.exe)

3) Installation instructions

- a. Download and install Java JRE (“jre-6u32-windows-x64.exe” from <http://www.oracle.com/technetwork/java/javase/downloads/jre-6u32-downloads-1594646.html>).
- b. Run MCRInstaller.exe to install MATLAB Compiler Runtime.
- c. Reboot after the installation.
- d. Extract TestbedBinary.zip and run testbed.bat.
- e. Extract Data.zip file to test out sample data sets.

2. How to use the testbed system

1) Data Load

- a. Three data types are supported.
 - i. Text file: any ASCII style file format.
 - ii. Image file: JPG, BMP, TIF
 - iii. Vector-encoded data with CSV (Comma-separated vector) format

2) Preprocessing

- a. Choose appropriate options and click ‘Preprocess.’

3) Clustering

- a. Choose appropriate clustering methods and options and click ‘Clustering.’

4) Dimension Reduction (for visualization)

- a. Choose appropriate dimension reduction methods and options and click `Visualize.'
- 5) Alignment
 - a. Given multiple visualizations created, select the reference view and the target view to be aligned to the reference one. Click `Align.'
 - 6) Original data access
 - a. Click a single item or a cluster centroid in the scatter plot or do the drag-and-drop to select multiple items.
 - b. Click or control-click after selection to pop up the original data view.
 - 7) Clustering/dimension reduction for a subset of data
 - a. After selecting a subset of data, do clustering/dimension reduction as described in the above.

* To see how it works in detail, please refer to the accompanying video and the paper.