Installation

1. Prerequisites

1.1 Required software

    Java 1.6
    Tomcat 6.0
    Mysql 5.0
    JBrowse package (an embed Jbrowse used by HicP, you need to install the JBrowse required moudules)

    Pipeline required software:
    TADtree
    FastHic
    BACH
    Tabix

2 Installation

2.1.1 Download & Unzip

Once the prerequisites are installed, please download the package from

This will give you a .tar.gz file, which must be uncompressed and unpacked. The description of unzip files as following:

File Name	Version	Description
circosweb	1.0	The web project of HicP
Scripts2016	1.0	The scripts need to run pipeline
DatabaseDump	1.0	The MySQL dump files

2.1.2 Populating MySQL Database

HicP uses MySQL database to store public annotation data. You need to load the MySQLdump file from which located in DatabaseDump directory.
The command as the followings:

mysql -uroot -p*password* -e "create database hicbrowser_20160607_1"

mysql -uroot -p*password* -e "grant all on hic.* to 'hic'@'localhost' identified by 'hic' "

mysql -uroot –p*password* hic < /home/test/DatabaseDump/hicp.sql

2.1.3 Deploy Web Project

Hicp Uses Tomcat server to start the web service, you need to put directory circosweb under Tomcat web application directory, such as /home/test/tomcat6.0/webapps/.

Some extra configurations are needed before run the web service, which is described in 1.2.4.

Then start the Tomcat.

If deploy successfully, use browser to open http://localhost:8080/circosweb/index.jsp , a start web page as the following will be shown.

2.1.4 Modify Database Configuration

Change MySQL configuration under Circosweb project at /home/test/tomcat6.0/webapps/circosweb/WEB-INF/applicationContext-common.xml, find tag "dataSource", then modify the parameters url, username, password which has been done in 1.2.3

```
<bean id="dataSource" class="org.apache.commons.dbcp.BasicDataSource" destroy-method="close">
        <property name="driverClassName">
        <value>com.mysql.jdbc.Driver</value>
        </property>
        <property name="url">
<value>jdbc:mysql://localhost:3306/hicbrowser_20160607_1?useUnicode=true&amp;characterEncoding=UT
F-8&amp;zeroDateTimeBehavior=convertToNull&amp;autoReconnect=true&amp;failOverReadOnly=false</
value>
        </property>
        <property name="username">
        <value>hic</value>
        </property>
        <property name="password">
         <value>hic</value>
        </property>
    </bean>
```

2.1.5 Configuration

For the detail configuration of visualization views, you can check the document for "Genome View", "Topological View" and "Physical View" in the download page.