

# Introducing PeopleSoft - T-Rex

## What is PeopleSoft T-Rex?

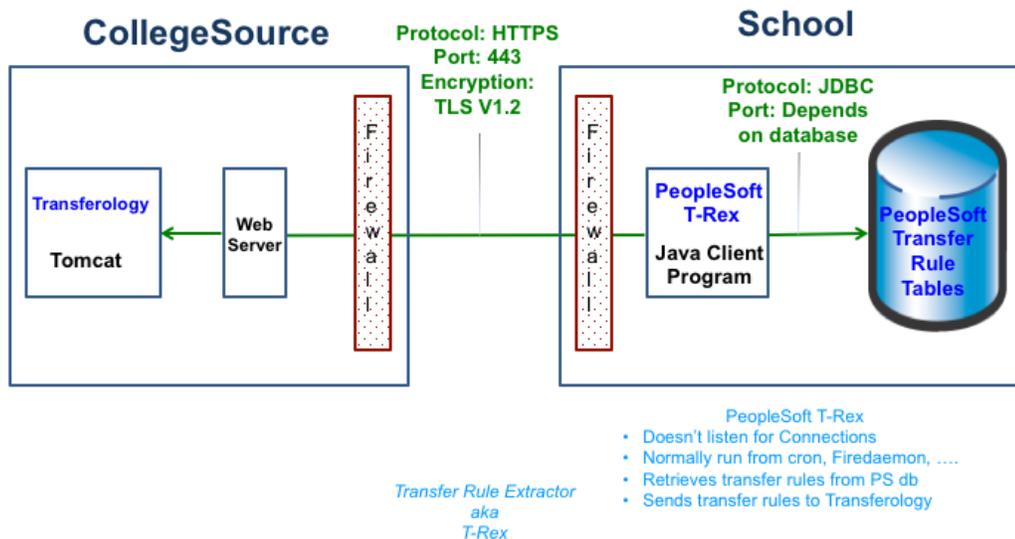
The PeopleSoft Transfer Rule extractor aka PS T-Rex, provides an alternate equivalency interface for Transferology.

PeopleSoft **T-Rex** is an installable client program which queries several PeopleSoft transfer rules database tables and sends the data to Transferology via Transferology web services.

Once the data has been received by Transferology, it is transformed into Transferology's transfer rule representation and loaded into Transferology later that night.

PeopleSoft schools are able to load their transfer rules into Transferology once a week and no longer need to use the EQ flat file import process.

## Architecture PeopleSoft Transfer Rule Extractor



PS T-Rex is a java client program, you will install on a server of your choice. **PS T-Rex is NOT installed into PeopleSoft.** It is provided for download in zip and tar.gz file formats which contain the following:

- java libraries
- A linux shell script and Windows batch file to call the java program
- A **trex.properties** file for school specific configuration
- Install instructions

## Sending Courses

Currently, T-Rex uses the sending course (department abbreviation and course code) specified in the transfer rule as is without performing any conversion or translation.

## Prerequisites

The following requirements are mandatory to successfully install, configure, and operate the T-Rex:

- **Linux or Windows server** - 1 vCPU server with 256 meg of memory and 512 meg of available disk
- **Java 8 runtime (or JRE)** - May be obtained from the following page: <http://www.oracle.com/technetwork/java/javase/downloads/index.html>
- **Firewalls**
  - **School's External firewall must allow the T-Rex web service client to open an https connection:**
    - Your production T-Rex must be able to open to <https://www.transfer.org> (18.207.24.42).
    - Your test/development T-Rex must be able to open to <http://test.transfer.org> (216.68.115.164).
  - **Internal - TCP keepalive must be enabled between T-Rex and the database server when the JDBC connection traverses an internal firewall.**
- **OS access** - You need OS access to a server to properly install T-Rex.
- **Database user and password** - Necessary for T-Rex to query the PeopleSoft tables, see [PeopleSoft Table Access](#) below.
- **JDBC Driver** - You need a JDBC Driver that is compatible with your specific database type. If you do not currently use a JDBC Driver, see one of the following pages:
  - Oracle - <http://www.oracle.com/technetwork/indexes/downloads/index.html>
  - SqlServer - [http://sourceforge.net/project/showfiles.php?group\\_id=33291](http://sourceforge.net/project/showfiles.php?group_id=33291)
  - DB2 - <http://publib.boulder.ibm.com/infocenter/db2luw/v8/index.jsp>
- **Configure the properties in the `trex.properties`.**

## Download

To download PS T-Rex, you must have a CollegeSource support center account.

If you don't have a CollegeSource support center account, please use the following link to request one:

<https://clients.collegesource.com/myprofile/RequestAccountServlet>

To download PS T-Rex, login to <https://clients.collegesource.com/home>

Then go to

<https://clients.collegesource.com/home/display/TFOT/PeopleSoft+Extractor+Downloads>

Click one of the transfer-rule-extractor package files, either the **tar.gz** or **.zip**.

## Installation and Configuration

The downloaded file contains:

1. Java libraries
2. A shell and batch script to call the Java program
3. Configuration Files
4. Install Instructions

Move the package onto the Server that you will be using to run the Extraction process.

Unzip the package.

Structure:

- bin
  - lib
    - \*.jar
  - run-trex.bat
  - run-trex.sh
- config
  - log4j.properties
  - trex.properties
- README.txt

Configure the **log4j.properties** in the config directory:

Property Name	Description	Example
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log4j.appender.fileout.File	The directory that the Extractor should log to (Make sure it has permissions to write files here). Blank, by default, to write to the bin directory.	/var/trex/log/trex.log
log4j.logger.collegesource.trex	The log level for which the Extractor should log 1. In order of least to most logging - OFF, FATAL, ERROR, WARN, INFO, DEBUG, TRACE	DEBUG

Configure the **trex.properties** in the config directory:

Property Name	Description	Example
PeopleSoft Database	PS Database connection information	oracle.jdbc.driver.OracleDriver jdbc:oracle:thin:@<hostname>:<port>:<sid> <userid> <password>
home.ipeds	Your School's IpedsID (Can be provided by CollegeSource, Inc.)	123456
home.uniq	Your School's Unique Identifier (Can be provided by CollegeSource, Inc.)	CSI
institution	The Value in the INSTITUTION column of your PS_TRNSFR_COMP table that your school will be using	CSI
trex.whereClause **	A SQL 'Where' clause that, if populated, will append to the selection of the PS_EXT_ORG_TBL records 1. The initial 'where' key word is not required.	ext_org_id >= '10000961' and ext_org_id <= '10001010'
trex.server.url	The URL of the TransferRuleReceiver based on your version (Provided by CollegeSource, Inc.)	<a href="http://test.transfer.org/transfer-rule-receiver">http://test.transfer.org/transfer-rule-receiver</a>
trex.api.key	Provided by CollegeSource, Inc.	9b9e9999-e9c9-9d99-a999-9df999a99cc9

#### Weekly Execution

After the initial integration testing, you'll need to schedule T-Rex to run once a week.

It is an individual school decision regarding what to use for the scheduling. We anticipate schools choosing their preferred scheduler, such as cron or FireDaemon.

## PeopleSoft Table Access

T-Rex needs SELECT privilege on the following tables:

- PS\_EXT\_ORG\_TBL
- PS\_EXT\_ORG\_TBL\_ADM (If PeopleSoft Version 9)
- PS\_TRNSFR\_COMP
- PS\_TRNSFR\_SUBJ
- PS\_TRNSFR\_TO
- PS\_TRNSFR\_FROM
- PS\_CRSE\_OFFER
- PS\_CRSE\_CATALOG
- PS\_SCHOOL\_CRSE\_TBL
- PS\_TST\_CREDIT\_RULE
- PS\_TST\_CREDIT\_COMP
- PS\_TST\_CREDIT\_CRSE
- PS\_SA\_TEST\_TBL
- PS\_SA\_TCMP\_REL\_TBL

If necessary, please create database synonyms when the T-Rex database user isn't the owning schema of the PS database tables.

\*\*The query that selects viable records for extraction is already limiting the number of results based on the existence of child records in both the PS\_TRNSFR\_COMP and PS\_TRNSFR\_SUBJ tables. It is also selecting PS\_EXT\_ORG\_TBL records based on MAX(PS\_EXT\_ORG\_TBL.EFFDT).

The process that selects from the PS\_TRNSFR\_COMP table also selects records based on MAX(PS\_TRNSFR\_COMP.EFFDT).

# Select statements

## PsExtOrgTbl

```
SELECT EXT.EXT_ORG_ID,  
EXT.EFFDT,  
A.IPEDS_CD,  
A.FICE_CD,  
A.ACT_CD,  
A.ATP_CD,  
A.CATALOG_ORG,  
EXT.DESCR50  
FROM PS_EXT_ORG_TBL EXT,  
PS_EXT_ORG_TBL_ADM A  
WHERE ...
```

## PsTrnsfrComp

```
SELECT COMP.INSTITUTION,  
COMP.TRNSFR_SRC_ID,  
COMP.COMP_SUBJECT_AREA,  
CAST(COMP.EFFDT AS DATE) AS EFFDT,  
COMP.TRNSFR_EQVLNCY_CMP,  
COMP.DESCR,  
COMP.TRNSFR_PRIORITY,  
COMP.EXT_TERM_TYPE,  
COMP.TRNSFR_CRSE_FL,  
COMP.CNTNGNT_CRDT_FL,  
COMP.INP_CRSE_CNT,  
COMP.XS_CRSE_FL  
FROM PS_TRNSFR_COMP COMP  
WHERE ...
```

## PsCrseCatalog

```
SELECT CRSE_ID, EFFDT, COURSE_TITLE_LONG, DESCR  
FROM PS_CRSE_CATALOG  
WHERE ...
```

## PsTrnsfrTo

```
SELECT INSTITUTION, TRNSFR_EQVLNCY_CMP, TRNSFR_SRC_ID, CRSE_ID, EFFDT, COMP_SUBJECT_AREA, CRSE_OFFER_NBR  
FROM PS_TRNSFR_TO  
WHERE ...
```

## PsTrnsfrFrom

```
SELECT INSTITUTION, TRNSFR_CMP_SEQ, TRNSFR_SRC_ID, COMP_SUBJECT_AREA, EFFDT,  
TRNSFR_EQVLNCY_CMP, SCHOOL_SUBJECT, SCHOOL_CRSE_NBR, BEGIN_DT, END_DT  
FROM PS_TRNSFR_FROM  
WHERE ...
```

## PsCrseOffer

```
SELECT CRSE_ID, EFFDT, SUBJECT, CATALOG_NBR, CRSE_OFFER_NBR  
FROM PS_CRSE_OFFER  
WHERE ...
```

## PsSchoolCrseTbl

```
SELECT EXT_ORG_ID, EFFDT, SCHOOL_SUBJECT, SCHOOL_CRSE_NBR, EFF_STATUS, DESCR  
FROM PS_SCHOOL_CRSE_TBL  
WHERE ...
```