



Journyx Technical Note

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Subject: Configuring external Apache with Journyx Timesheet

Document Version: 2.5

In some environments it may be necessary to configure the Timesheet product to operate with an existing Apache Web Server installation.

This document gives guidelines on how that may be done. Journyx recommends that only personnel with extensive experience in Apache administration attempt this procedure.

This version of this document applies ONLY to Timesheet Versions 4.6 through 5.5.

First some background. Timesheet ships with Apache HTTP Server; in the case of Timesheet versions based on 4.6 this is Apache 1.3.6, Timesheet 5.0 uses Apache 1.3.26 and 5.5 is Apache 1.3.27. In order to achieve best performance, Journyx requires that the Apache used as the Web Server front-end for Timesheet support the mod_python module. Thus the following requirements on the external (target) Apache must be met.

- *httpd -v* must list the version as 1.3 or higher, but NOT 2.0 or higher.
- *httpd -l* must list mod_python.c as one of the compiled modules OR must list mod_so and be capable of loading a mod_python extension of level 2.7.3 but NOT 3.0 or higher. 2.7.8 is the preferred version.
- The user that runs the external Apache must have permissions to read all owned in the Timesheet install directories. A good way to do this is to make sure they are in the same group and set appropriate group permissions for the files.

If mod_python does not show up as one of the supported modules, then the httpd must be recompiled with that capability or with mod_so. Additionally, the Python version used by the mod_python extension must be Python Version 2.1.1 for Timesheet 4.6 and 5.0, and Python Version 2.1.3 for Timesheet 5.5.

In the event that the target httpd needs to be recompiled, the Python executable found in the Timesheet install must be found in the compiling user's path. This is found in the directory pd/Linux/python/bin. (If you are not installing on Linux, the 'Linux' component in the path should be one of 'AIX' or 'SunOS' or 'FreeBSD')

Complete instructions on compiling Apache are beyond the scope of this document. For instructions on compiling Apache with mod_python support see the following websites.

<http://www.apache.org/>

<http://www.modpython.org/>

After the mod_python functionality has been confirmed for the target Apache httpd then the following steps may be used to install a Timesheet instance referencing the target Apache.

Unzip and un-tar the product distribution in the normal manner.

Upon running the jtinstall install script you will have to designate the externalapache option.

```
./jtinstall --externalapache /<identifier>/
```

Where <identifier> is typically the name of the installing user. For this example we suppose that the installing user is 'tsadmin'. Also suppose that we are installing in /u/tsadmin/jt (as opposed to the default of /u/tsadmin/jtime/jtime)

The tsadmin user must exist, and should be in a group such that files installed by that user can be accessed by the user under which the target Apache instance runs. Then, logged in as the tsadmin user, un-zip and un-tar the image into the tsadmin home directory.

cd to jtime and enter this command

```
./jtinstall --externalapache /tsadmin/
```

After the command has completed, you will need to add the following lines to apache's httpd.conf. Note the full path shown here as /home/tsadmin/jt/pi... may have to be modified to reflect the path to the actual install on your system.

```
#####
# configuration for tsadmin (4.5 site)
#####
PassEnv PGDAT
PassEnv PYTHONPATH
PassEnv WTHOME
PassEnv PATH
AddHandler python-py pyc inc
PythonInterpPerDirectory On

Alias /tsadmin/icons/ /home/tsadmin/jt/pi/apache/serverroot/htdocs/image/
Alias /tsadmin/jtime /home/tsadmin/jt/pi/apache/serverroot/htdocs/
ScriptAlias /tsadmin/jtcgi/ /home/tsadmin/jt/pi/apache/serverroot/cgi-bin/

<Directory /home/tsadmin/jt/pi/apache/serverroot/cgi-bin>
    AddHandler python-program .py
    AddHandler python-program .pyc
    AddHandler python-program .python
    PythonHandler dopy
</Directory>

<Directory /home/tsadmin/jt/pi/apache/serverroot/htdocs>
    Action python-py /tsadmin/jtcgi/dopy.py
</Directory>
```

After adding those directives to the httpd.conf file then you will have to stop and restart Apache. Before restarting Apache, you will need to make sure the PYTHONPATH environment variable is set properly for the user that runs Apache. You can take the setting and place it in the appropriate rc file (.bashrc, .profile, etc.) to make sure that this is always set when starting Apache. A good way to tell what the variable should be set to is to source the Timesheet setup file then echo the variable. Do this as the installing user.

```
cd jt/pi/bin
. ./setup
echo $PYTHONPATH
```

When you have that variable in the Apache user's environment, stop and restart httpd.

Finally, stop and restart the installation by doing the following.

```
cd ~/jt/pi/bin
. ./setup
wstop;wstart
```

Check Timesheet to see if everything is working. If the site or modules can not be found by Apache then review the Apache configuration. If the site is found, but returns no HTML, then check for permissions problems between the Apache user and the files in the Timesheet install directory.