



# How to Change Port Numbers in DigiTool Version 3

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## 1. Overview

The document details the procedure for changing the Apache WEB port definitions in DigiTool Version 3 configuration files. This process should be used only for sites with DigiTool v 3 installed.

The instructions pertain both to Apache port as well as allowing JBOSS and Tomcat to use the Apache port for web access.

**Note:** In this example, the access ports are changed from 8881 to 80

## 2. Environment Change

```
>> cd $dtl_dev/install/  
>> vi conf_tml.dat
```

change from:

```
_HTTPD_PORT = 8881
```

to:

```
_HTTPD_PORT = 80
```

## 3. Implementing the Change in Ports – dtle\_root

As the “digitool” user, make the change active using the following commands:

```
1. >> dtle  
>> cp -p dtl_start dtl_start.<date>  
>> vi dtl_start
```

Within the dtl\_start file, change all occurrences of 8881 to 80.

```
>> source dtl_start  
>> dtl_start_conf_create
```

```
2. >> dtle  
>> cp -p www_server.conf www_server.conf.<date>  
>> vi www_server.conf
```

Within the www\_server.conf, change all occurrences of 8881 to 80

```
>> start_w  
>> start_pc
```

## 4. Updating DigiTool Apache-stored Configuration Files

As the “dtl” user, all occurrences of port 8881 should be replaced by port 80 in the following Apache files:

```
$httpd_root/conf/httpd.conf
$httpd_root/htdocs/.index.html
$httpd_root/htdocs/main.html
```

## 5. Updating PDS Configuration Files

As the “dtl” user, all occurrences of port 8881 should be replaced by port 80 in the following files:

```
$dtl_dev/pds/program/PDSDefinitions
$dtl_dev/pds/conf_table/tab_service.digitool
$dtl_dev/pds/html_form/global/main-menu-logged-on
$dtl_dev/pds/html_form/global/main-menu-logged-out
$dtl_dev/pds/html_form/calling_system-digitool /main-menu-logged-on
$dtl_dev/pds/html_form/calling_system-digitool/main-menu-logged-out
```

## 6. Verifying the Change

1. source \$dtl\_root/dtl\_start
2. start\_w
3. Issue the server command:

```
>> env | grep PORT
```

Check that these parameters have changed:

```
PDS_PORT = 80
HTTPD_PORT = 80
```

## 7. Restart Apache

**Note:** In order to change a port number lower than 1024, root user (or sudo) permissions will be required to stop Apache. If the new port is greater than 1024, then it will be possible to start the Apache server as a “dtl” user.

If using su to obtain root level permissions, use command “su”, not “su -” for correct permissions.

### To stop Apache server (for port > 1024):

```
>> cd $httpd_root/bin
>> apachectl stop
>> exit
```

### To stop Apache server (for port < 1024):

```
>> cd $httpd_root/bin
>> su
>> Password: <*****>
>> apachectl stop
>> exit
```

Exit from root session; continue as the "dtl" user

### **To start Apache server (for port < 1024):**

```
>> cd $httpd_root/bin
```

In the apachectl\_auto file replace the string "\${dtl\_dev}" with /exlibris/dtl/u3\_<slot>

```
>> su
>> Password: <*****>
>> ./apachectl_auto
>>exit
```

Exit from root session; continue as the "dtl" user.

### **To start Apache server (for port > 1024):**

```
>> cd $httpd_root/bin
>> apachectl start
```

### **To restart Apache server (for port < 1024):**

```
>> cd $httpd_root/bin
>> su
>> Password: <*****>
>> apachectl restart
>> exit
```

Exit from root session; continue as the "dtl" user

### **To restart Apache server (for port > 1024):**

```
>> cd $httpd_root/bin
>> apachectl restart
```

## **Apache logs directory: Confirming Ownership**

If switching from port 8881 to port 80 or vice versa, it will be necessary to ensure the ownership of the log directory in /exlibris/dtl/u3\_1/dtle/apache accordingly:

```
>> cd $httpd_root
>> su
>> Password: <*****>
>> chmod -R 777 logs
>> exit
```

Exit from root session; continue as the "dtl" user.

## **8. Updating JBOSS settings**

**a. In \$jdtlh/profile/global.properties (.tml)**

Add this line:

```
ajp.port=7801
```

And, ensure all occurrences of 8881 are changed to 80.

**b. In** `$user_dev/dtle/apache/conf/httpd.conf` and `(httpd.conf.tpl)`

Add/ensure the following line to the Include section:

```
Include /exlibris/dtl/u3_1/dtle/apache/conf/mod-jk.conf
```

**c. Within** `$user_dev/dtle/apache/conf/mod-jk-workers.properties`

Ensure 7801 is the defined *localnode* port.

(Note: this file may only be under `$dtl_dev` and all `mod-jk*` files should be copied to `$user_dev/dtle/apache/conf/` if not already present.

**d. In** `$user_dev/dtle/apache/htdocs/main.html (.tpl)`

Change all 1801 links (default - your JBOSS port may be different) to the Apache port number (default 80 without port number):

From

```
http://servername:1801/mng
```

To

```
http://servername/mng
```

**e. Ensure** all links such as delivery URLs are pointing to the Apache port.

Change ALL *viewer\_urls* to use the Apache port number by logging into `/mng` (`mngroot REP00`) and adjusting relevant delivery rules.

## 9. Tomcat

For JPEG2000 licensed customers: If you would like JP2000 delivery (Tomcat) running under `mod-jk` (one-port access through Apache) perform the following:

**a. Within** `$user_dev/dtle/apache/conf/mod-jk-workers.properties (.tpl)`

Add the following section:

```
# Define Node2
```

```
worker.localnode2.port=8009
worker.localnode2.host=localhost
worker.localnode2.type=ajp13
worker.localnode2.lbfactor=1
worker.localnode2.local_worker=2
worker.localnode2.cachesize=10
worker.list=localnode2
```

b. Update `$user_dev/dtle/apache/conf/mod-jk.conf (.tml)`

Add the following line to the localnode section:

```
JkMount /ImageServer* localnode2
```

## 10. Re-start application – implement changes:

To stop the application (as the “dtl” user):

```
>> dtle
>> dtl_shutdown_all
```

To implement the JBOSS side changes (as the “dtl” user):

```
>> j_bin
>> set_globals.sh
```

To start the application (as the “dtl” user):

```
>> dtle
>> dtl_startup_all
```

## 11. Changing Start-Up Scripts

Note: These changes only apply if you change to a port lower than 1024 – such as 80
---

```
>> cd /exlibris/startup
>> vi init.dat
```

Change the owner from “dtl” to “root”

```
# apache
Y:apache:dtl:httpd:/exlibris/dtl/u3_1:../u3_1:apachectl_auto:ap
achectl
```

```
# apache
Y:apache:root:httpd:/exlibris/dtl/u3_1:../u3_1:apachectl_auto:a
pachectl
```