



# How to Change the Server Hostname

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Document released: June 2014

Web address: <http://www.exlibrisgroup.com>

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# 1 Introduction

The document details the procedure for changing the server hostname value in DigiTool Version 3 configuration files. This process should be used only for sites with DigiTool v.3 installed.

The replacement instructions have to be applied to **all DigiTool installed instances** on the server.

## **Caution:**

**The change of the hostname value requires DigiTool application shutdown and Oracle shutdown. Therefore relevant downtime has to be scheduled.**

## **Notes:**

- This document describes the actions to perform for standard DigiTool instance #1 that should be installed in the directory `/exlibris/dtl/d3_1`.
- Check the DigiTool application before the hostname change process. In order to compare same functions after the hostname process. See sanity checks [below](#).
- The value change of the hostname on Unix and network configuration should be performed by the System and Network administrators.

This should be coordinated in parallel with the DigiTool configuration changes for a running DigiTool application – as explained below.

For all questions about non-standard installations, contact the Ex Libris Support and Installation Teams.

# 2 Conventions

`<oracle_home>`

This is the path of the Oracle home directory

`i-e <ORA_MOUNT>/app/oracle/product/920 for Oracle9`  
`or <ORA_MOUNT>/app/oracle/product/102 for Oracle10`

`$ORACLE_HOME`

This is the variable that contains the home directory of the Oracle Unix user. When logging in as oracle or dtl, the `ORACLE_HOME` variable is set and can be referred to as `$ORACLE_HOME`.

`<oracle_sid>` Oracle database SID, used for DigiTool installation

Relevant Oracle Unix user is named “**oracle**” in this document.

## 3 DigiTool configuration change

### 3.1 DigiTool application shutdown

Login as **dtl** user and stop the DigiTool application:

```
cd $dtle_root
./dtl_shutdown_all
```

### 3.2 Check DigiTool parameters and modify configuration files

The following steps perform replacement of hostname value in the relevant files. Should be changed, the occurrences of:

- long (fully qualified) hostname i-e including domain name
- short hostname

**Note:**

1. Sometimes several hostnames are defined and used for the same server (see for example definitions in file `/etc/hosts`). In such a case, perform the following steps for all relevant hostname values.
2. Proceed with the described following steps in order to check presence of old hostname value, and don't automatically replace this value before checking that every change is relevant.
3. In the following modification steps, proceed **first** with “full hostname” replacement, and then with short hostname replacement.

#### 3.2.1 Changes in the u-tree

```
cd /exlibris/dtl/u3_1
```

- Check the hostname value in relevant files

Check for necessary tml files:

```
find . -name "*.tml" -print -name ".*.tml" | sed 's/\.tml//g'
```

Check the files to be modified by displaying the occurrences of hostname in the relevant files:

```
find . -name "*.tml" -print -o -name ".*.tml" -print | sed 's/\.tml//g' |
xargs grep <old_hostname>
```

**Reminder:**

Check the occurrences of <old\_hostname> value, relevant to the **long** hostname(s) first, and perform the suitable changes described below.

Then check and replace the occurrences of <old\_hostname> value relevant to the **short** hostname(s).

Then check that each change for the displayed results is relevant.

**For example:**

If old hostname is “digitool”, you cannot replace every occurrence of this value with the new hostname, because the name “digitool” is also present in files as directory path value, general application name, and so on...!

In such a case, you have to **manually** replace the hostname value in the files previously displayed.

But for other cases you might use the next step, for **automatic** replacement.

- Automatic change of the files:

The following instructions help you automatically change the files found in the previous steps.

```
set DD=`date +%Y%m%d` OR
set DD=`date +%Y%m%d.%H%M`
echo $DD
```

Each modified file <file\_name> will be previously backed up as <file\_name>.<DATE>

With <DATE> = current date with format YYYYMMDD or YYYYMMDD.HHMM.

```
find . -name "*.tml" -print -o -name ".*.tml" -print | sed 's/\.tml//g' |
xargs perl -pi.$DD -e 's/<old_hostname>/<new_hostname>/g'
```

- Then use the same commands to replace for:
  - other potentially used long hostnames of the server
  - the short hostname of the server

- Check that the files have been changed

for example:

```
cd $dtle_root
ls -ltr
diff dtl_start.<date> dtl_start
```

### 3.2.2 Changes in the j-tree:

```
cd $jdtlh/profile/
```

- Check the hostname value in relevant files

Check for necessary tml files:

```
find . -name "*.tml" -print -name ".*.tml" | sed 's/\.tml//g'
```

Check the files to be modified by displaying the occurrences of hostname in the relevant files:

```
find . -name "*.tml" -print -o -name ".*.tml" -print | sed 's/\.tml//g' | xargs grep <old_hostname>
```

Then check that each change for the displayed results is relevant.

**For example:**

If old hostname is “digitool”, you cannot replace every occurrence of this value with the new hostname, because the name “digitool” is also present in files as directory path value, general application name, and so on...!

In such a case, you have to **manually** replace the hostname value in the files previously displayed.

But for other cases, you might use the next step for **automatic** replacement.

- Automatic change of the files:

The following instructions help you automatically change the files found in the previous steps.

```
set DD=`date +%Y%m%d` OR
set DD=`date +%Y%m%d.%H%M`
echo $DD
```

Each modified file <file\_name> will be backed up as <file\_name>.<DATE>

With <DATE> = current date with format YYYYMMDD or YYYYMMDD.HHMM.

```
find . -name "*.tml" -print -o -name ".*.tml" -print | sed 's/\.tml//g' | xargs perl -pi.$DD -e 's/<old_hostname>/<new_hostname>/g'
```

- Then use the same commands to replace for:
  - other potentially used long hostnames of the server
  - the short hostname of the server

- Check that the files have been changed

For example, check the file global.properties:

```
cd $jdtlh/profile
vi global.properties
```

Eventually check the performed changes too:

```
ls -ltr
cd $jdtlh/profile
diff global.properties.<date> global.properties
```

### 3.2.3 Change the pds configuration files:

Check the pds files to be modified (in the d-tree):

```
pdsroot
find . -name "*" -print | xargs grep <old_hostname>
```

As above (for u-tree replacement), check that each change for the displayed results is relevant.

In such a case you can perform an automatic change (as explained below).

Otherwise, you have to **manually** replace the hostname value in the files previously displayed.

- Automatic change of the files:

The following instructions help you to automatically change the files found in the previous steps.

```
set DD=`date +%Y%m%d` OR
set DD=`date +%Y%m%d.%H%M`
echo $DD
```

Each modified file <file\_name> will be previously backed up as <file\_name>.<DATE>  
With <DATE> = \$DD

Use the following command with the fully qualified (long) hostname.

Change the necessary files:

```
find . -name "*" -print | xargs perl -pi.$DD -e
's/<old_hostname>/<new_hostname>/g'
```

- Then use the same commands to replace for:
  - other potentially used long hostnames of the server
  - the short hostname of the server

### 3.2.4 Other DigiTool configuration changes

Correct the main configuration file conf\_tml.dat (even if you don't need to use it):

```
cd /exlibris/dtl/d3_1/install
vi conf_tml.dat
```

## 4 Oracle configuration changes

During this step, the Oracle setting will be changed and DB will be shutdown

### 4.1 Configure database parameters

When the old hostname value is defined in the DB parameter `service_names` you should change it.

#### **Reminder:**

the Oracle Unix user is mentioned as “**oracle**” in the present document. Eventually correct this login name with the relevant value actually defined on the server, e.g. the Oracle user name defined in the DigiTool configuration.

Log in as **oracle** user

#### 4.1.1 Check the `service_names` string defined in the DB

In order to visualize the current value of parameter `service_names`, perform the following:

```
> setenv ORACLE_SID <oracle_sid>
> sqlplus /nolog
idle> connect /as sysdba
idle> show parameter service_names
idle> exit
```

#### 4.1.2 Replace the `service_names` string defined in the DB

Eventually change the value of parameter `service_names` if the string contains the old server hostname.

For example:

```
dtl3.digiserver.domainname
change to: dtl3.digiserver_new.domainname
```

- **For Oracle 10**, as (relevant) user `oracle`:

##### 1. Change value of parameter `SERVICE_NAMES`

```
> setenv ORACLE_SID <oracle_sid>
> sqlplus /nolog
idle> connect /as sysdba
idle> alter system set service_names='dtl3.digiserver_new.domainname'
scope=both;
```

It might take a few moments for Oracle to perform this change.

Then check the `service_names` string value was updated (see how to check the `service_names` value above).

## 2. Then shutdown the DB

```
idle> shutdown immediate
```

## 3. Do NOT restart DB yet..

The DB will be restarted with a global DigiTool re-start, after the actual unix hostname will be changed.

- **For Oracle 9**, as (relevant) user oracle:

### 1. Shutdown DB:

```
> setenv ORACLE_SID <oracle_sid>
> sqlplus /nolog
idle> connect /as sysdba
idle> shutdown immediate
idle> exit
```

### 2. Change value of parameter SERVICE\_NAMES in file

```
/exlibris/app/oracle/admin/<oracle_sid>/pfile/init<oracle_sid>.ora
```

### 3. Do NOT restart DB yet..

It will be restarted with a global DigiTool re-start, after the actual unix hostname will be changed.

## 4.2 Configure network files

During this step, the Oracle listener will be stopped.

When the old hostname is defined in the Oracle network files you should change it.

Log in as **oracle** user.

```
cd $ORACLE_HOME/network/admin
```

Replace the value of hostname in the files `listener.ora` and `tnsnames.ora` (editing them).

Stop the Oracle Listener:

```
lsnrctl stop
```

## 5 Unix hostname change

Before restarting the DigiTool application, you must perform the change of the hostname value for the Unix system and network configurations.

**Note:** The value change of the hostname for Unix and network configuration should be performed by the System and Network administrators **only**.

This should be coordinated in parallel with the DigiTool configuration changes for a running DigiTool application.

**For example**, the following should be affected:

The value of the “hostname” Unix command, the `/etc/hosts` file, the DNS configuration,...

DigiTool application must use URLs containing the new hostname.

So when the hostname is changed (regardless of whether IP address of the server is kept or not), the DNS should be updated in order to keep the association between the server hostname and its IP address.

Often, the DNS cache of the DNS servers of the Internet Service Providers are not updated in real time. Therefore, the DNS update may take up to 48 hours to take effect.

In order to use and check the DigiTool application immediately after the hostname change, you should configure your own `/etc/hosts` file (on your client PC for example). Thus your internet browser will take in account the relevant DNS changes.

On Windows for example:

In file `C:\WINDOWS\system32\drivers\etc\hosts`, add the following lines:

```
#IP address          # hostname
<xxx.xxx.xxx.xxx>  new_hostname.domainname      new_hostname
```

(where `<xxx.xxx.xxx.xxx>` is the value of the IP address for the server)

## 6 Oracle startup

Log in as **oracle** user

### 6.1 Database startup

In order to startup the DB, run the following:

```
> setenv ORACLE_SID <oracle_sid>
> sqlplus /nolog
idle> connect /as sysdba
idle> startup
idle> exit
```

### 6.2 listener startup

To startup the Oracle Listener, run the following:

```
lsnrctl start
```

## 7 DigiTool Application startup

Log in as **dtl** user.

```
cd $dtle_root
source dtl_start
./dtl_start_conf_create
```

Then run:

```
j_bin
bash set_globals.sh
```

Logout and login again as **dtl** user.

Start post installation script:

```
cd $dtl_dev/install
csh -f change_post.csh
```

Then startup the DigiTool application:

```
cd $dtle_root
./dtl_startup_all
```

If the Apache Web server is configured to be run by user **root**, then restart it as required:

```
apcb
su
./apachectl stop
./apachectl start
```

## 8 Application-related changes

### Caution:

**DigiTool application administrator should perform the following steps.**

#### 1. Delivery Rules Update:

- a. Login to management as an administrative user into unit REP00.

Update any delivery rule URL which references the old hostname and change them to the new hostname.

- b. Run management maintenance job “Re-load repository configuration”.

## 9 DigiTool Sanity check

Check the DigiTool basic functions via your Web browser.

In the URL previously used to access the DigiTool Web interface, replace the hostname value with the relevant new one.

- Connect to the new URL
- In the DigiTool interface, perform a search by entering a keyword
- Choose one item among the displayed results, and try to view the associated object

### **Reminder:**

In order to use the new URL value, the change in the DNS configuration has to be effective (See previous chapter [Unix hostname change](#) for details).