



T24 R12

Basic Browser/COB Support Guide

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1 Introduction

This document describes technical support for T24 R12 Browser and running COB plus some guide on daily problem solving. It provides details examples of how to stop, start COB, jboss, jbase agents etc.

R12 is now accessed via a normal Browser. The recommended browsers are:

- **Internet Explorer**, “IE” (a recent version)
- **Firefox** (a recent version)

In addition, Google’s Chrome can be used, although it *may* not behave the same with T24 in all ways. MP recommends using IE or Firefox, to be sure.

2 Terminology

eMerge / MCB

This is the name for the microfinance version of “Temenos Globus”, version R06.

The new version is now fully called “Temenos T24 for Microfinance and Community Banking”, in version R12. Therefore, you can call it simply R12 or MCB.

EOD / COB

The new name for the End Of Day process that the IT department has to run at the end of each day is now Close of Business. It does the same job, but it does it a much more robust and stable way. It also allows parallel processing, which often makes it much faster than R06’s “EOD”.

Browser

Have two meanings:

1. The standard browser applications; such as Internet Explorer, Chrome or Firefox.
2. Whereas “T24 Browser” (also simply known as “browser”) is a bunch of web-server programs, sitting on the live T24 server, which present the T24 user interface to users *through* the standard browser application (IE, for example).

Desktop

The previous T24 user interface, used from versions G13 to R06. It is proprietary Temenos software, installed on each PC. The ‘client’ in the T24 client-server set-up. Not an option from R10 onwards, superseded by Browser.

3 Available Databases

There are two servers currently available in SFF. The IPs of these servers are 10.32.1.220, which represents the “live” production server, and 10.32.1.221, which represents the “backup” server

The URL to access Browser on these servers are:

<https://10.32.1.220>

<https://10.32.1.221>

There are presently three key databases available on these two servers.

1. Live server (10.32.1.220) has only the “live” database. It is recommended that no other database should be created on the “live” server for two simple reasons
 - a. Not to create room for mistakes where development work affect “live” operations
 - b. To free the “live” from space constraints arising out of backing up files on live db.

Live server presently has “live” db only

2. The old “uat” db is on the backup server 10.32.1.221. This should be removed whenever SFF IT department deems it necessary but for now it can be used for reference purposes to troubleshoot issues that were tested and confirmed ok during uat.
3. The “uatcob” db is a copy of “uat” db for which several COBs have been run. This db is on the backup server 10.32.1.221. This also can be removed whenever IT department deems necessary but for now it can be used for reference purposes to troubleshoot issues under testing.
4. The “uatfin” db is an exact copy of the status of the data migration. This is a backup copy of the “live” db just immediately after data migration, before final go live. This “uatfin” db is on the backup server 10.32.1.221.

The URL to access these db by Browser are as follows”

Uat: <https://10.32.1.221/Browser1>

Uatcob: <https://10.32.1.221/Browser2>

Uatfin: <https://10.32.1.221/Browser3>




[T24 Portal](#) [Temenos Web Site](#)

T24 Sign in

Username


Password


Usernames and passwords are case sensitive.
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 Retail Banking

 Corporate & Correspondent Banking

 Universal Banking

 Private Wealth Management

 Islamic Banking

 Microfinance and Community Banking

3.1 Logging in credentials to the available databases

The following are the existing logging in credentials to the available databases on the two servers 10.32.1.220 and 10.32.1.221

It is advisable to change the passwords at predetermined interval suitable to SFF Management and IT department.

Live db:	login id:	live
	Password:	Abc123!@
Uat db:	Logging id:	uat
	Password:	Abc123!@
Uatcob db:	Login id:	uatcob
	Password:	Abc123!@
Uatfin db:	Logging id:	uatfin
	Password:	Abc123!@

3.2 Troubleshooting Logging issues

Sometimes error do occur while logging in.

Users can complain of record locks or Browser not available etc

1. Removing locked records could be done in two ways:
 - a. By logging off a user port number. To do this one must be at jshell level and issue the following command:

→SHOW-ITEM-LOCKS

This command will list all locked records. Care must be taken when logging off any record so that the wrong record will not be logged off.

Look for and search for the relevant record to be released and then type the following command

→LOGOFF x where x is the port number of the locked record to be unlocked.

- b. By removing the id of the record locked from the RECORD.LOCK file
Log into t24 browser and at the command line type

RECORD.LOCK V x where x is the id of the record to be removed or you can log into jshell and issue the following command

→ SELECT F.RECORD.LOCK press enter

→ JED F.RECORD.LOCK

→ ESC for each record that is displayed until you get the id of the record to be unlocked then type

→ Esc

→ FD

→ Y

3.3 Troubleshooting COB issues

To run COB requires the following steps:

1. First, clear the EB.EOD.ERROR file otherwise COB will not run. To do this, log into jshell:
 → CLEAR.FILE F.EB.EOD.ERROR
2. It is always good to resolve every COB error instead of overlooking them. Effort should be made to resolve every COB error but in case COB is to be run when the error has not been resolved then one can clear the entries in the file OR set the status of the EB,EOD.ERROR log entry to 'Y'

To set the status of the COB error log entry to resolve, do the following:

At the command line within the Browser type:

EB.EOD.ERROR I HT0010001.YYYYMMDD where YYYYMMDD is the processing date for which the error happened

Move the cursor to field 8.1 and Type Y
Commit and authorise the record

3. To start the COB do the following:
 - a. At the command line within T24 type TSA.SERVICE, I TSM
 - b. Change field 6 to START and press enter
 - c. Commit/press F5
 - d. Type COB and press enter
 - e. Change field 6 to START and press enter
 - f. Log out of t24 and go to jshell
 - g. Log to jshell
 - h. At jshell type
 →START.TSM

This command will display the following:

```
START.TSM  
Phantom process started on process id 54962  
[54962] Done : tSA 1  
jsh live ~ -->
```

you can log into T24 to check the status of the running COB by typing the following at the command line.

At the command line with t24 type:
COB.MONITOR

There are 5 stages of COB:

1. APPLICATION stage where all transactions for each modules are processed like LD end of Day, PD end of day, AC end of day etc.
2. SYSTEM WIDE stage where interest accruals and capitalisation stakes places and the charges capitalisation too.
3. REPORTING stage where reports are generated and produced and stored in &HOLD& for subsequent printing.
4. START OF DAY where modular files are prepared for a new day e.g. TELLER life file is cleared of all transactions for the day and all the transactions moved to history file same thing with FUNDS.TRANSFER or PT.GENERIC.ACCOUNTING.
All fully paid LDs are moved to history after 3 days post maturity etc
5. ONLINE where the t24 is set online for a new day.

COB processes through each of these stages in every run COB.

Any of the stages could come across an error or errors.

The solution to each error depends on the type of error so it is difficult to present a generic solution to any error that may happen.

Please Note: Whenever there is a power failure or disconnection in the network during the running of COB, it is always advisable to restore the database to the backup taken before the COB started and do a fresh re-run of the COB.

It is advisable not to continue from where the COB was when the power or communication failure happened.

This is because it is difficult to predict or know if any file has been corrupted during the failure. File corruption may be discovered some days later which may necessitate going backward by several days to do a re-post of previous days transactions.

Please avoid this discomfort and hassles.

Please Note: Daily backups are kept in the following folders in the live database as well as the backup server.

/t24/database/live/backup

Each backup has the dates of the day,s backup. E.g 20151030 as the backup names.

The backups are kept in “twos” for the same day i.e EOD and SOD:

1. EOD (End Of Day) is the backup before COB starts
2. SOD (Start Of Day) is the backup after COB is finished

It is advisable to get denver to always sync the live database to both the disaster recovery server in denver and also into the onsite backup server 10.32.1.221.

This will make life easy during disasters.

3.4 Backup and Restore Commands

Denver does daily backups (EOD and SOD) but sometimes IT department may require to do the same especially whenever there is communication failures between Haiti and Denver.

1. To do backup, a script has been written to assist and guide about the type of backup to be done.

It is advisable to always do a complete backup i.e backing up at the level of `bnk` instead of `bnk.data`

Bnk: folder contains everything about t24 i.e data, routine, tables, files etc.

Bnk.data: contains only the data e.g Teller Transactions, FT, LD etc. No routines or tables etc.

Backing up the complete database (`bnk`) safes a lot of hassles in case of disaster.

A script as been written to assist in backing up.

Backup Script:

At the jshell level type the following command:

```
jsh live ~ -->mpbkupx.sh -d ../../backup/xxx -b FULL -l SOD -s -j -q
```

This command will backup everything i.e “`bnk`”. Xxx in this case should be the name assigned to the back by the person backing up.

It is advisable to use a useful name that can represent exactly what is being backed up e.g `bnk201030B4COB` i.e “`bnk` backup of the day 20101030 before COB”

If `bnk.data` is desired to be backed up (Though not always advised) but sometimes to safe time, type the following command:

```
jsh live ~ -->mpbkupx.sh -d ../../backup/xxx -b DATA -l EOD -s -q
```

This command will backup only the `bnk.data`. Xxx in this case should be the name assigned to the back by the person backing up.

It is advisable to use a useful name that can represent exactly what is being backed up e.g `bnk201030B4COB` i.e “`bnk.data` backup of the day 20101030 before COB”

The backup taken under this situation is kept in the following folder:

```
/t24/database/live/backup
```

2. **Database Restore Script:**

Usually whenever a backup is done, the files are zipped or encrypted. To restore such backed up files requires that we must unzip the files.

The following command will unzip the file and place the file in the folder:

```
/t24/database/live/backup.
```

The unzipped file or folder will then be required to be copied from the backup folder to the relevant live folder for use.

The following command should be used to restore backed up files:

```
tar xvfj xxxx (xxxx is the name of the zipped file to be restored/unzipped).
```

The above command will unzip and create “bnk” or “bnk.data” depending on which file is being restored.

This “bnk” or “bnk.data” should then be copied from the backup folder to the relevant live folder for use.

3.5 Stopping and Starting the jboss

The jboss must be started before the jbase agent can be started.

The jboss must be started as a root user.

Jboss must be started as a root user. The following steps are to be followed to do this

1. Log in as a root user. Make sure root is specified as the user because of permission issues.
2. `sudo /sbin/service jboss stop` (and press enter key).
(Wait until all processes are killed).
3. `sudo /sbin/service jboss start` (and press the enter key).

After the start of the jboss, then the jbase agent can be started. There are presently three configured Browser ports

1. Live Browser using port 20000
2. Uat Browser using port 20001 (Browser1)
3. Uatcob Browser using port 20002 (Browser2)

Care must be taken when starting any of the following agents.

For example

```
***** Do not start port 20000 when you are logged into uat or uatcob  
Same way, do not start port 20001 or 20002 when you are logged into live etc
```

Every agent must be started in their correct ports otherwise the Browser will redirect all transactions to the started ports.

To start the jbase agents, the following step are to be followed.

Log into the database for which jbase agent is to be started.

The following db use the following jbase agents:

To start live db jbase agent:

1. `jsh live ~ -->tafc_agent stop -p 20000` (and press enter)
2. Wait while some spawned processes are being stopped.
Allow all spawned agents to stop
3. `jsh live ~ -->tafc_agent start -p 20000` (and press enter)

To Start uat db jbase agent:

4. `jsh uat ~ -->tafc_agent stop -p 20001` (and press enter)
5. Wait while some spawned processes are being stopped.
Allow all spawned agents to stop
6. `jsh uat ~ -->tafc_agent start -p 20001` (and press enter)

To Start uatcob jbase agent:

7. `jsh uat ~ -->tafc_agent stop -p 20002` (and press enter).
8. Wait while some spawned processes are being stopped.
Allow all spawned agents to stop
9. `jsh uat ~ -->tafc_agent start -p 20002` (and press enter).

Sometimes starting or stopping jbase agents do fail due to existing running agent that fail or refuse to be stopped.

Under such situation, one may need to delete the running agent from the /tmp file i.e:

```
[root@kai-shek ~]#  
[root@kai-shek ~]#  
[root@kai-shek ~]#  
[root@kai-shek ~]# cd /tmp  
[root@kai-shek tmp]# ls -l  
total 16  
-rw-r----- 1 live t24 5 Oct 31 16:35 jagent.lock20000  
-rw-r----- 1 uat t24 6 Nov 1 12:32 jagent.lock20001  
-rw-r----- 1 uatcob t24 6 Nov 1 12:32 jagent.lock20002  
-rw----- 1 root root 1266 Oct 28 17:45 krb5cc_0  
[root@kai-shek tmp]#
```

File `jagent.lock20000` or `jagent.lock20001` or `jagent.lock20002` can be deleted

Please Note: Do not delete these files if all things are working fine.

You only delete in difficult situation where the browser refuse to start after ensuring that jboss and jbase agent have all been started but still the browser refuse to work.

4 Document History

Date	Author	Modifications
28/10/2015	Kola Agbalu	Creation