



Restore FVMaster Database From Live Server to Test Server (BP0106)

Introduction

It is best practice to perform configuration in a test database and then copy it over to live. The following guide explains how to grab recent backups from a live server and move them over to the test server. This will allow the user to work with more recent data in the test environment.

Note: Configuration of a test server is not covered in this guide.

Use

Once complete, someone can point to the test server from their client PC by changing connection information or work directly on the test server to ensure the correct database is being updated at all times.

Note (pre 11.2 versions): It is possible to see errors when the test system references a production database that does not exist on test. This is typically seen when processing orders after a schedule is released on live in test. For example, if a schedule released in live then restored back to test, the user would not be able to scan the unit at tracking or ship in Route Builder or Trucking.

Live Server Steps

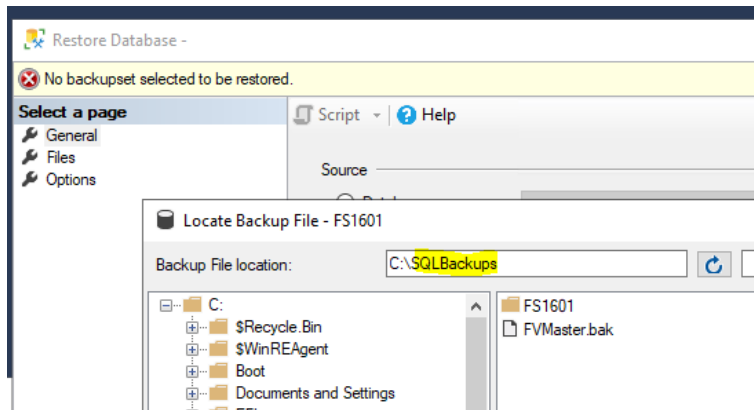
The following steps should be completed directly on the live server.

1. Copy FULL FVMaster, FVTranslog, FVWarehouse (post 11.2 only), and FVOptiGlass backup files created by the FeneTech nightly database maintenance plan to test server. Full backups should be found in a directory on the live server such as "E:\FV Database Backup*liveservername* \FVMaster\FULL*liveservername*_FVMaster_FULL_YYYYMMDD.bak" where *liveservername* is the name of the live server.
2. Make sure you select the file with the newest date (YYYYMMDD) in order to get the most recent backup.

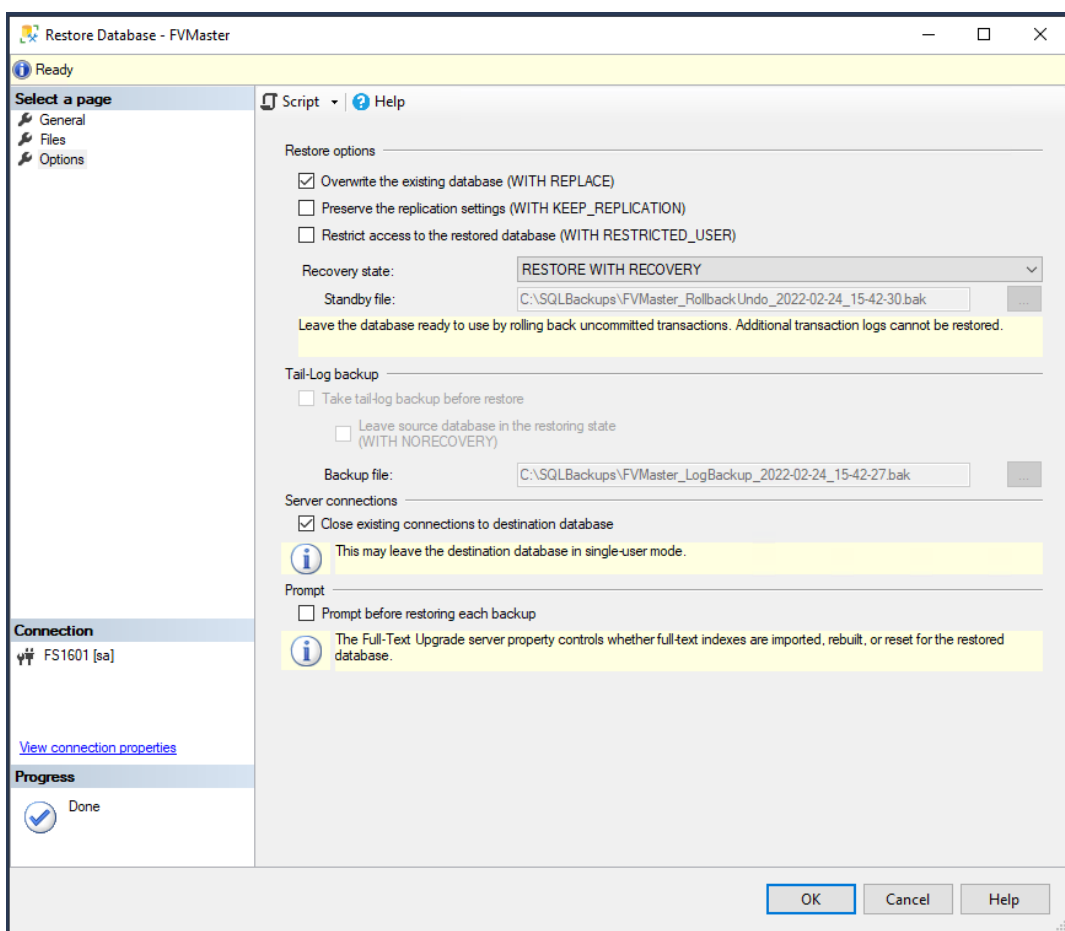
Test Server Steps

The following steps should be completed directly on the test server, where *testservername* is the name of your test server.

1. **Backup the existing FVMaster, FVTranslog, FVWarehouse, and FVOptiGlass.** Refer to the following Microsoft Knowledgebase article for how to backup a database. <https://msdn.microsoft.com/en-us/library/ms187510.aspx>
2. **Restore the new FVMaster, FVTranslog, FVWarehouse, and FVOptiGlass over the existing.** Refer to the following Microsoft Knowledgebase article for how to restore a database. <https://msdn.microsoft.com/en-us/library/ms177429.aspx>
 - a. Be sure to backup existing databases before overwriting if they contain configuration you want to keep for future reference!
 - b. Right click on the Databases node, select Restore Database, select the Device radio button and the ellipsis button, and then select Add to get the screenshot below. Notice when selecting a database for restore, it defaults to the SQLBackups folder so that is where you want to place the backups you are restoring. Then you will be able to select the desired .bak file for restore.



- c.
- d. When overwriting a database, be sure to select “Overwrite the existing database” and “Close existing connections.” Selecting this will ensure the restore of the database will not error.

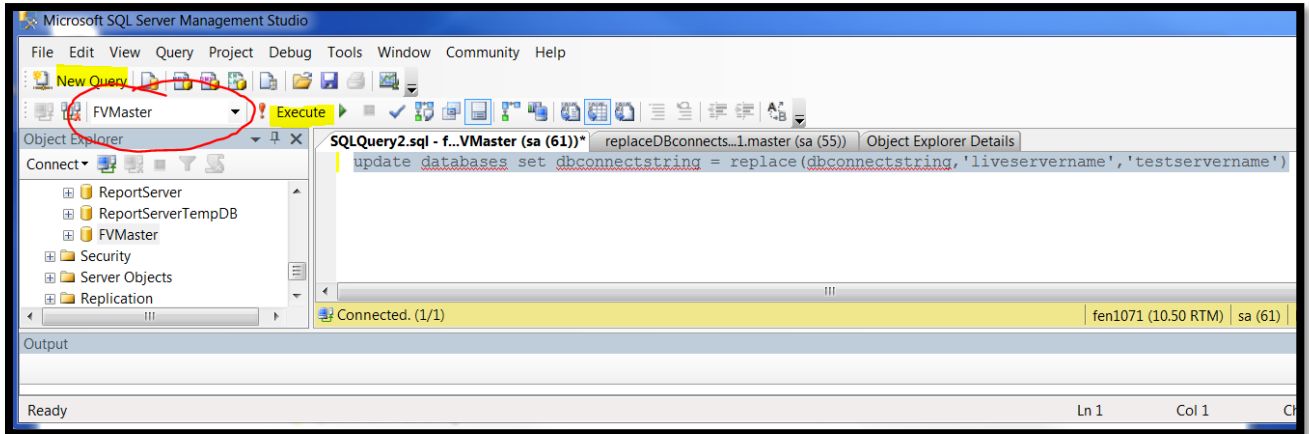


3. **(Pre 11.2 Only) Delete Production Databases.** Old production databases with old data will not match the new FVMaster.
 - a. Production Databases can be deleted more efficiently by Selecting ‘Databases’ in Object Explorer | Selecting View in the menu bar (at the top) | opening Object Explorer Details | clicking on the first production database and then shift-clicking on the last production database in the screen | right clicking and selecting ‘Delete’.
4. **(Pre 11.2 Only) Update the Databases table on the restored FVMaster to be the test server.** Complete the following:
 - a. Go to SQL Management Studio.
 - b. Click the ‘New Query’ button in the toolbar.

- c. Type the query below into the 'New Query' window.

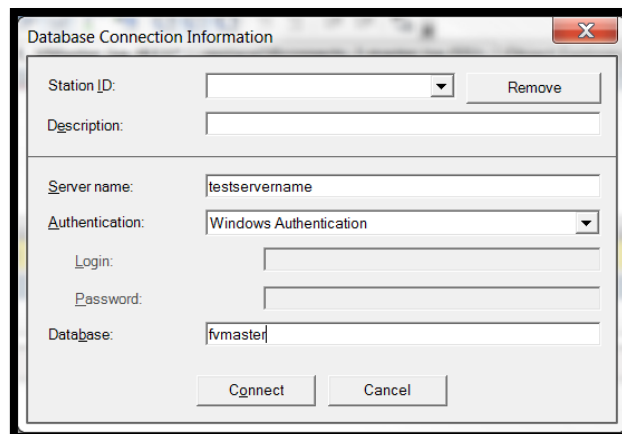
Note: Make sure the database name shown is FVMaster, as highlighted in the screenshot below. Press the 'Execute' button to update the connections.

```
USE FVMaster
UPDATE databases
SET dbconnectstring = REPLACE(dbconnectstring, 'liveservername', 'testservername')
```



5. **Update database security.** In SQL Management Studio, complete the following...
 - a. Open the FVMaster database folder and then the Security folder under the database.
 - b. Right click on the IIS user and delete it.
 - c. Open the Security folder at the top level of the server (not under a specific database).
 - d. Select Logins under Security.
 - e. Right click on the IIS user and select Properties.
 - f. Select User Mapping in the Login Properties dialog.
 - g. Find FVMaster in the list and CHECK it.
 - h. For users comfortable with SQL, see the template [Drop and Add iis User](#) SQL script located at the end of this document to write SQL to do this easily each time.

6. **Confirm CORE is pointed to the test server FVMaster.** Hold Shift when you open CORE and confirm the 'Server Name' is the 'testservername' and the database is FVMaster.
 - a. Note: On occasion you may not be able to sign in to Core without updating the General Setup Parameters in Core. If you are not able to sign in, you will have to use SQL to make these updates and then log in. The SQL that can be used to make these changes can be found here: [Updating GeneralSetup.](#)



7. Update the accounting interface file paths and database settings.

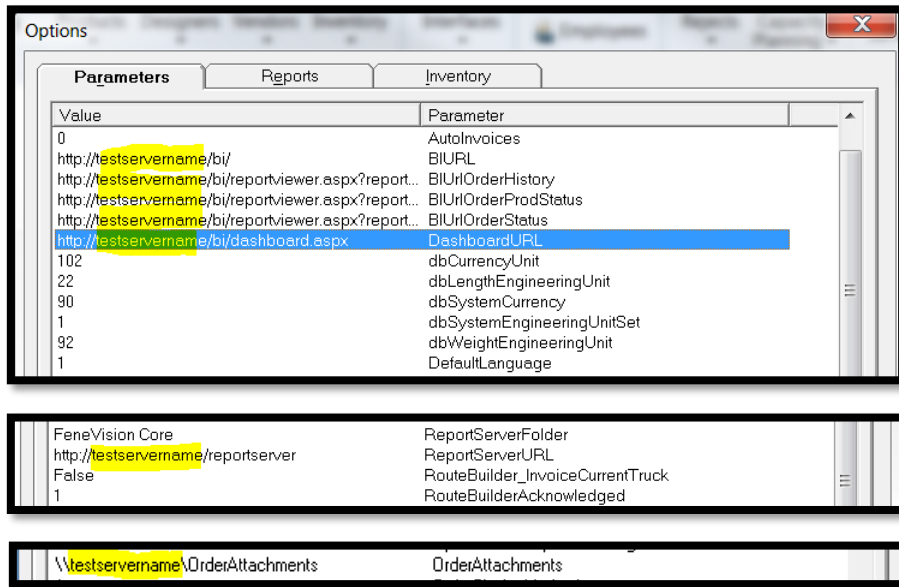
- a. For users comfortable with SQL, see the template [Updating GeneralSetup](#) SQL script located at the end of this document to write SQL to do this easily each time.
 - i. This SQL script may be helpful depending on version. Do not run this on any server without proper testing.

Note: In 11.3 or earlier, these settings are saved in the GeneralSetup table of the FVAccounting database. So, if the customer's test database is on the same server as the live database you probably do not want to touch these settings as it will affect live as well (unless they have a test FVAccounting database set up as well).

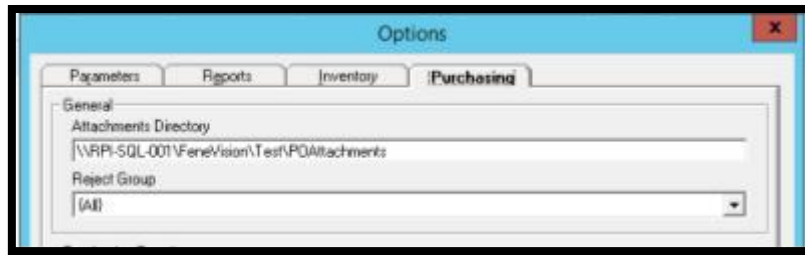
8. Update System Settings to point at the test server. In CORE, complete the following:

- a. Go to Setup | System | Settings.
- b. In the Parameter Tab, update parameters referencing the other server. Examples highlighted below.
 - i. **CRMPluginApiToken** – If using the CRM module, this value needs to be copied from the old test server database. The token is unique to the test server and the token from the live server database will not work.
- c. Be on the lookout for live file servers as well! These should also be updated to point at the test server!
 - i. The OrderAttachments parameter is often pointing to a file server
- b. For users comfortable with SQL, see the template [Updating GeneralSetup](#) SQL script located at the end of this document to write SQL to do this easily each time.
 - i. This SQL script may be helpful depending on version. Do not run this on any server without proper testing.

Note: Be sure to update the server name for the 'ReportServerURL' parameter. Do not update the 'ReportsGlobalDirectory' parameter. The ZPL files are contained in this location, and since the system accesses these files as read only, they can be referenced from the live server. However, if you are working on changes to the ZPL templates, you need to copy all templates to the test server and update the 'ReportsGlobalDirectory' parameter to point to the test server.



- c. On the Purchasing tab, make sure to change the PO Attachments Directory as well.



- d. In newer versions, on the Orders tab, make sure to change the Order Attachments Directory.



9. Update CAD Paths to test server (only applicable if you have the CAD module)

- a. Go to Setup | Designers | CAD
- b. Update the Export Scripts for each file that uses a path to point at the test server
- c. Review the Parameters page as well. Newer configuration doesn't have hard coded paths in the scripts, but instead pull from a parameter. Update these parameters to point at the test server.
 - i. Be on the lookout for live file servers, rather than the live server name!
- d. For users comfortable with SQL, this [SQL script](#) may be helpful. Do not run this on any server without proper testing.
- e. For users comfortable with SQL, see the template [Updating CADScripts](#) SQL script located at the end of this document to write SQL to do this easily each time.
 - i. This SQL script may be helpful depending on version. Do not run this on any server without proper testing.

10. Check attribute scripts for any references to the live server and update to the test server

- a. Go to SQL Management Studio
- b. Click the 'New Query' button in the toolbar
- c. Type the query below into the 'New Query' window

Note: Make sure the database name shown is FVMaster, as highlighted in the screenshot below. Press the 'Execute' button to update the connections.

USE FVMaster

```
SELECT DISTINCT [Name] FROM Attributes WHERE AttrExpression LIKE '%liveservername%' OR AttrString LIKE '%liveservername%'
```

- d. These attributes are typically System, so a single change can be made per attribute.
- e. Go to Setup | Products | Parts
- f. Update the scripts returned from the query to reference the test server name instead.
- g. If a file server has been used and updated in previous steps (8 and 9), look for that file server name in attributes as well!
- h. If you want/need to update the production attributes on all entered orders you can use [this](#) advanced SQL script

11. Update release file paths for machine interfaces to test server.

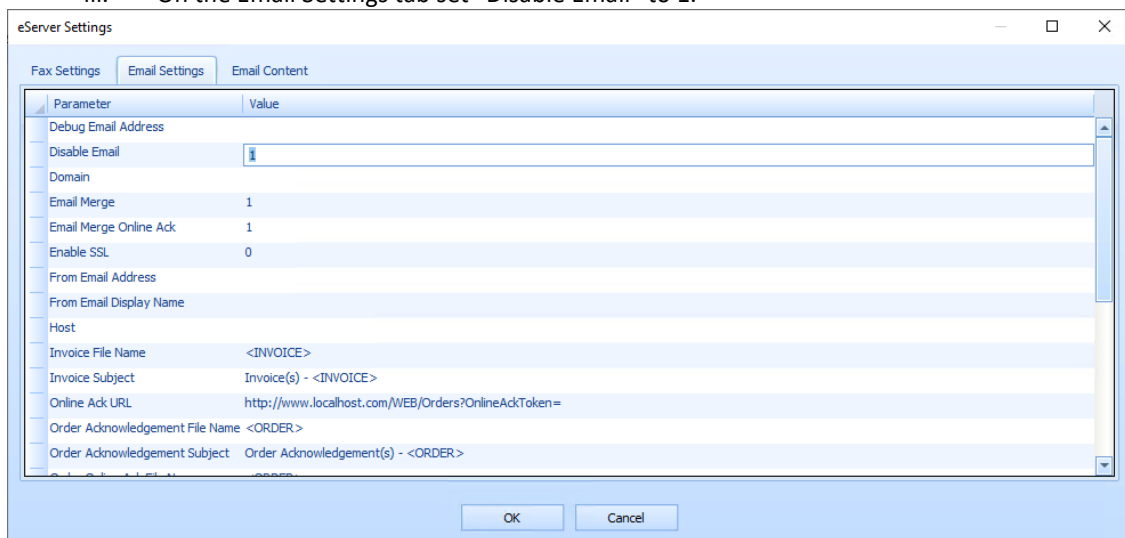
- a. Go to Setup | Interfaces.
- b. Update the Output file path for each interface.
 - i. Be on the lookout for live file servers, rather than the live server name!
- c. For users comfortable with SQL, see the template [Updating Machine Interfaces](#) SQL script located at the end of this document to write SQL to do this easily each time.
 - i. This SQL script may be helpful depending on version. Do not run this on any server without proper testing.
 - ii. The SQL script needs to be altered for old interfaces as it contains its own table name. Thus, change the table name to the machine interface table name. For example: Machine Interface WinIG will have a table name WinIG in FVMaster database.

12. Update Import/Export Paths

- a. Go to Setup | Import/Export.
- b. Change the Directory for any Import or Export definition.
 - i. Be on the lookout for live file servers, rather than the live server name!
- c. For users comfortable with SQL, see the template [Updating Import/Export Formats](#) SQL script located at the end of this document to write SQL to do this easily each time.
 - i. This SQL script may be helpful depending on version. Do not run this on any server without proper testing.

13. Disable Email and Fax

- a. If eServer will not be used
 - i. In Core navigate to the eServer Settings screen. Setup > System > eServer
 - ii. On the Fax settings tab set "Disable Fax" to 1.
 - iii. On the Email Settings tab set "Disable Email" to 1.



- b. If eServer will be used
 - i. Make sure the debug key is set to a value of 1 in the eServer.config file on the computer eServer is installed on


```
<add key="interval" value="1" />
<add key="debug" value="1" />
```
 - ii.

```
</GeneralSettings>
```
 - iii. Set the debug fax number and debug email address in Core-Setup-System-eServer on the Fax Settings and Email Settings tabs, respectively.
 - iv. Restart the eServer service after making these changes.
 - v. If setting this up with a pre-existing FVMaster, there could be items in the equeue table that you do NOT want sent out. You can set the Obsolete field in this table to 1 to disable each row in the table. Make sure the eServer service is OFF, or eServer not installed, until you've marked the items obsolete.

14. Update Tracking Actions Paths

If you plan to work with Tracking actions that creates or copy an interface file on the test server, you will need to update the paths Tracking will place the files. These files could be created on the server or a different computer, so you cannot just search for the 'liveservername'.

- a. Go to SQL Management Studio
- b. Click the 'New Query' button in the toolbar
- c. Type the query below into the 'New Query' window
Note: Make sure the database name shown is FVMaster as the database in use. Press the 'Execute' button to update the connections.

```
USE FVMaster
SELECT * FROM StationActions
```

- d. Open the Tracking station and go to Setup, Tracking Actions and modify the 'Parameters' record for all the stations/actions returned by the query beneath

15. Update FVOptiGlass Paths

There is a refence in the table FVOPTIGLASS.dbo.OrderDetail.Shape to the attachments folder. You can use the script 'FVOptiGlass_ChangeAttachmentsFolder.sql' located [here](#) to help you on this database modification.

There are some parameters in FVOPTIGLASS.dbo.GeneralSetup ('CultureInfo', 'DefaultLanguage', 'DefaultDXFPath', 'ExportFileLocation', 'FeneVisionCatalog', 'ImportFileLocation', 'IntegrateFenevision', 'IntegrateFenevisionInventory', 'ReportServerFolder', 'ReportServerURL' and 'MachineFileDirectory') and FVOPTIGLASS.dbo.MachineParameters ('NCDir' and 'FileDirectory') that needs updated. You can update them with the script 'FVOptiGlass_ChangeFilePathsAndParameters.' located [here](#) .

Testing

It is recommended to do a few simple tests in CORE after complete.

1. **Basic order processing** – Enter an order, create a schedule, release it to production, ship it on a route.
2. **Reporting** – Preview an 'Order Acknowledgement'. Launch BI from 'Order Entry' and confirm the 'Order Status' page for the same order loads, i.e., reports are not pointing to the live server.
3. **Run the Database Maintenance Plan to ensure it does not fail**

Advanced SQL Server Scripts

Drop and Add iis User

```
--Drop/Add iis user on all databases after server migration:
exec sp_MSforeachdb 'use [?]
    IF EXISTS(SELECT * FROM sys.schemas WHERE name in (''iis'')) DROP SCHEMA [iis];
    IF EXISTS(SELECT * FROM sys.database_principals WHERE name in (''iis'')) DROP
USER [iis]; CREATE USER [iis] FOR LOGIN [iis];'

-- Ensure iis has db_ddladmin role on FVRemote (not needed for other databaes)
-- COMMENT THIS OUT IF NOT USING WEB CENTER
-- NOTE: Your FVRemote database may be named differently.
USE [FVRemote]
GO
EXEC sp_addrolemember N'db_ddladmin', N'iis'
GO
```

Updating GeneralSetup

```
--FVMASTER..Databases: Version 11.1 and earlier
```

```
USE [FVMaster]
SELECT *
--UPDATE db SET dbConnectionString = REPLACE(dbConnectionString,
'liveservername','testservername')
FROM databases db
WHERE db.ConnectionString LIKE '%liveservername%'
-----
```

```
--CORE GSP's:
```

```
USE [FVMaster]
SELECT *
FROM FVMaster.dbo.GeneralSetup
WHERE StationID = '__SYSTEM__' and Value LIKE '%liveservername%'
```

```
USE [FVMaster]
SELECT *
-- UPDATE gs SET [Value]=REPLACE([Value], 'liveservername', 'testservername')
FROM GeneralSetup gs
WHERE gs.[Value] LIKE '%liveservername%'
-----
```

Updating CADScripts

```
--CAD setup:
```

```
USE [FVMaster]
SELECT *
--UPDATE cs SET ParameterValue = REPLACE(ParameterValue,
'liveservername','testservername')
FROM CADSetup cs
WHERE cs.ParameterValue LIKE '%liveservername%'
-----
```

Updating Machine Interfaces

```
--InterfaceInstances
```

```
USE [FVMaster]
SELECT *
--UPDATE ii SET OutputFilePath = REPLACE(OutputFilePath, 'liveservername',
'testservername')
FROM InterfaceInstances ii
```

```

WHERE ii.OutputFilePath LIKE '%liveservername%'
-----
--InterfaceInstanceParameters

USE [FVMaster]
SELECT *
--UPDATE iip SET ParamValue = REPLACE(ParamValue, 'liveservername','testservername')
FROM InterfaceInstanceParameters iip WHERE iip.ParamValue LIKE '%liveservername%'
-----

--Update interface instances paths in FVMASTER :

USE [FVMaster]
SELECT *
--UPDATE ist SET OutputFilePath = REPLACE(OutputFilePath,
'liveservername','testservername')
FROM InterfaceInstances ist WHERE ist.OutputFilePath LIKE '%liveservername%'
-----

```

Updating Import/Export Formats

```

USE [FVMaster]
SELECT *
-- UPDATE ief SET Directory=REPLACE(Directory, 'liveservername', 'testservername')
FROM ImpExpFormats ief
WHERE ief.Directory LIKE '%liveservername%'

```

Updating OrderDetailAttributes

--Attributes:

```

USE [FVMaster]
SELECT *
--update Attributes set AttrExpression= REPLACE(AttrExpression,
'\\liveservername','\\testservername')
FROM Attributes
WHERE AttrExpression LIKE '%liveservername%'
-----

```

--Update Order Attachment path in FVMASTER:

```

USE [FVMaster]
SELECT *
--UPDATE oda SET ParamValue2 = REPLACE(ParamValue2,
'\\liveservername\\','\\testservername\\')
FROM OrderDetailAttributes oda
WHERE oda.ParamValue2 LIKE '%liveservername%'
-----

```

--Tracking actions:

```

USE [FVMaster]
SELECT *
--UPDATE sa SET Params = REPLACE(Params, '\\liveservername\\','\\testservername\\')
FROM StationActions sa
WHERE sa.Params LIKE '%liveservername%'
-----

```

OptiGlass

--Opti-Glass machine files & machine parameters :

```

USE [FVOptiGlass]
SELECT *
--update MachineParameters set value = 'E:\FENEVISION\Mfiles\Scambio' where Value like
'%\\PC_Bottero\Scambio%'

```

```

from FVOptiGlass.dbo.MachineParameters mp
where mp.Value like '%\\PC_Bottero%'

USE [FVOptiGlass]
SELECT *
--UPDATE mp SET Value = REPLACE(Value, '\\liveservername', '\\testservername')
FROM FVOPTIGLASS.dbo.MachineParameters mp
WHERE mp.Value LIKE '%\\liveservername%'
-----

--Order Attachment path in FVOPTIGLASS:

USE [FVOptiGlass]
SELECT *
--UPDATE od SET Shape = REPLACE(Shape, 'liveservername', 'testservername')
FROM FVOPTIGLASS.dbo.OrderDetail od WHERE od.Shape LIKE '%liveservername%'
-----

--Opti-Glass Order Attachments GSP:

USE [FVOptiGlass]
SELECT *
--UPDATE gs SET Value = REPLACE(Value, 'liveservername', 'testservername')
FROM GeneralSetup gs
WHERE gs.Value LIKE '%liveservername%' and gs.StationID = '__SYSTEM__'
-----

Accounting
--Search and update Order Attachment path in FVAacct..InterfaceSettings :

SELECT *
--UPDATE ist SET ParameterValue = REPLACE(ParameterValue,
'liveservername', '%testservername')
FROM InterfaceSettings ist
WHERE ist.ParameterValue LIKE '%liveservername%'
-----

--Search and update file path in FVMaster.act.GeneralSetup :
USE [FVMaster]
SELECT *
--UPDATE gs SET [Value] = REPLACE([Value], 'liveservername', '%testservername')
FROM act.GeneralSetup gs
WHERE gs.[Value] LIKE '%liveservername%'
-----

```