



**Visual Basic Program to Create all Relevant Scripts, Tasks and Logs for Server-based EMC Open Replicator Migration Push and Pull from DMX / Symmetrix® to DMX / Symmetrix**

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## Introduction

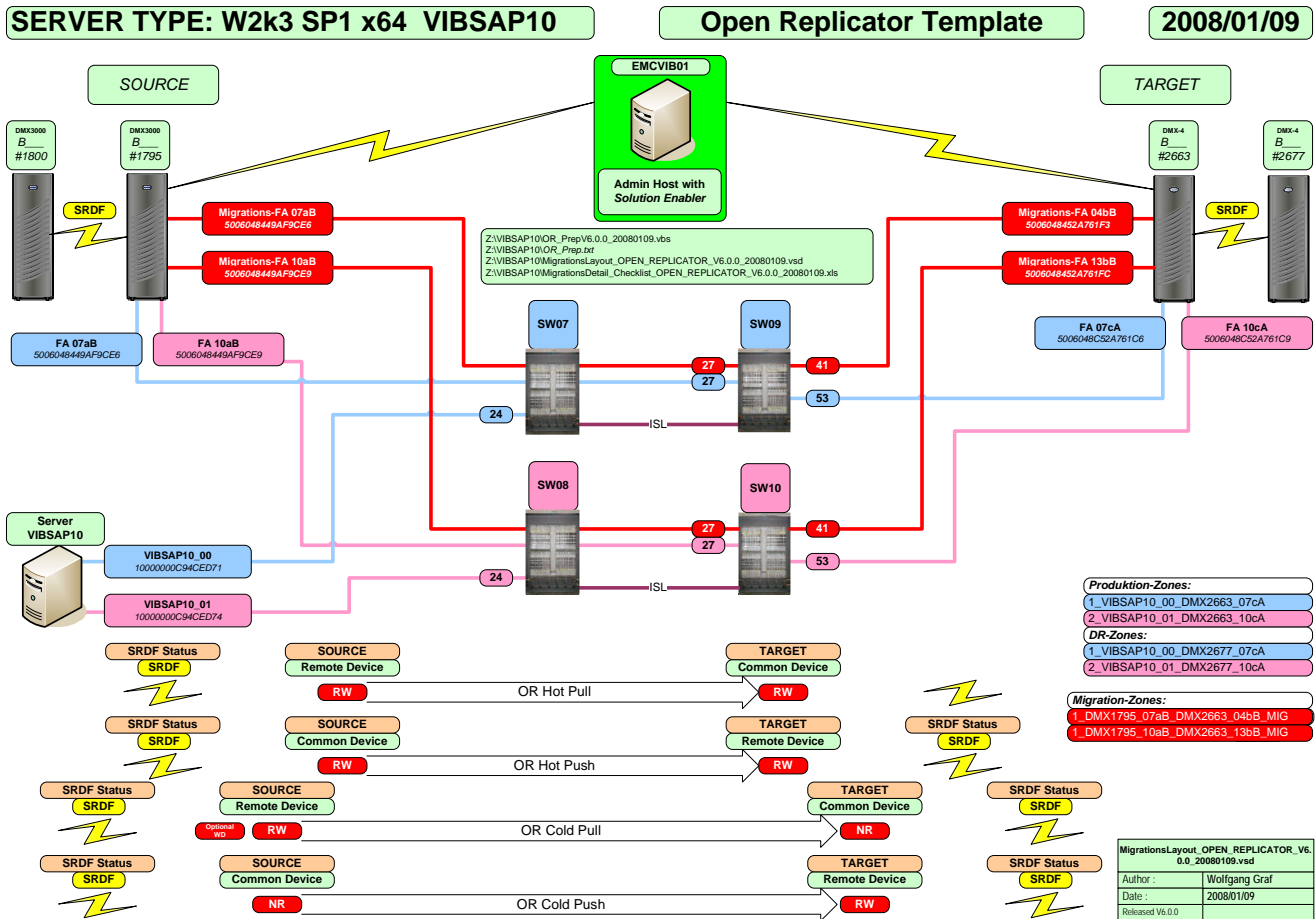
This document describes the Symmetrix DMX remote copy functionality included in versions of EMC Solutions Enabler version 6.0 and higher, running on DMX / Symmetrix arrays using Enginuity version 5x71 and higher. Additionally, it explains how to use Visual Basic for Open Replicator Migration reducing time and errors for preparation, pre check, and post check and script execution for copy direction parameter **(-push|-pull)**, the online / offline parameter **(-hot|-cold)**.

The Visual Basic Program creates most of the scripts you need for Server based Open Replicator Migration using two Host Adapters:

- Two Source DMX / Symmetrix Front-end Adapters for Migration / Production.
- Two Target DMX / Symmetrix Front-end Adapters for Migration / Production.

The Visio Template shows the general overview for Open Replicator Migration for hostname "VIBSAP10":

File: "MigrationsLayout\_OPEN\_REPLICATOR\_V6.0.0\_20080109.vsd"



## Related Documentation

Solutions Enabler Symmetrix Open Relicator CLI Product Guide 6.4 A04\_300-002-182\_a04\_elcncnt\_0.pdf

## Practical Uses

Migrate data between Symmetrix DMX arrays and third-party storage arrays within the SAN infrastructure without interfering with host applications and ongoing business operations. The remote capacity must be equal to or larger than the control device.

## Visual Basic Program

To use the Visual Basic Program File: "OR\_PrepV6.0.0\_20080109.vbs"

## Template File for Visual Basic Program “OR\_Prep.txt”

The Visual Basic Program needs a template File “OR\_Prep.txt” for the required Server Migration.

Template file = specific entries	Comment for the Template file
<pre> Server                =VIBSAP10 DGType                =RDF1 Target_Sid            =2663 Target_MigFA1        =13b Target_MigPo1        =1 Target_MigWWN1       =5006048452A761FC Target_MigFA2        =04b Target_MigPo2        =1 Target_MigWWN2       =5006048452A761F3  Source-Sid            =1795 Source_MigFA1        =10a Source_MigPo1        =1 Source_MigWWN1       =5006048449AF9CE9 Source_MigFA2        =07a Source_MigPo2        =1 Source_MigWWN2       =5006048449AF9CE6  Target_ProdMigFA1    =10c Target_ProdMigPo1    =0 Target_ProdMigFA2    =07c Target_ProdMigPo2    =0  HostProdWWN1         =10000000c94ced74 HostProdWWN2         =10000000c94ced71  Target                Source 06cc-004 013f-001 06ce-005 0140-002 06d1-006 0141-003 xxxx-yyy  aaaa-bbb </pre>	<pre> Server to be migrated                = 8 Charakter If SRDF Device Group Type = RDF1 / RDF2 / REGULAR = 7 Charakter Target Symmetrix / DMX Serial Number = 4 Charakter Target Symmetrix / DMX first FA Adapter = 3 Charakter Target Symmetrix / DMX first FA Adapter Port = 1 Charakter Target Symmetrix / DMX first FA WWN number = 16 Charakter Target Symmetrix / DMX second FA Adapter = 3 Charakter Target Symmetrix / DMX second FA Adapter Port = 1 Charakter Target Symmetrix / DMX second FA WWN number = 16 Charakter  Source Symmetrix / DMX Serial Number = 4 Charakter Source Symmetrix / DMX first FA Adapter = 3 Charakter Source Symmetrix / DMX first FA Adapter Port = 1 Charakter Source Symmetrix / DMX first FA WWN number = 16 Charakter Source Symmetrix / DMX second FA Adapter = 3 Charakter Source Symmetrix / DMX second FA Adapter Port = 1 Charakter Source Symmetrix / DMX second FA WWN number = 16 Charakter  Target Symmetrix / DMX Production first FA Adapter = 3 Charakter Target Symmetrix / DMX Production first FA Adapter Port = 1 Charakter Target Symmetrix / DMX Production second FA Adapter = 3 Charakter Target Symmetrix / DMX Production second FA Adapter Port = 1 Charakter  first Host WWN = 16 Charakter second Host WWN = 16 Charakter  Target and Source Symmetrix / DMX This line is comment Target "4digit Volume"- "3digit LUN" &lt;Space&gt; Soutrc "4digit Volume"- "3digit LUN" next Volume to migrate next Volume to migrate no carriage reurn at the last line ! </pre>

## Checklist Template File for Visual Basic Program

The Visual checklist file is useful for Open Replicator during the preparation and migration phase. It is also a good document to track changes.

File: **"MigrationsDetail\_Checklist\_OPEN\_REPLICATOR\_V6.0.0\_20080109.xls"**

### **Run Visual Basic Program "OR\_PrepV6.0.0\_20080109.vbs"**

Run the Visual Basic Program from a Directory (click on the filename from Windows Explorer) where you are able to manage the Source and Target Symmetrix / DMX. This will create the necessary Directories and relevant script files. Additionally it creates the relevant output files.

The Visual Basic Program can be run more than once, but you have to delete the created Directories and Files.

### **Migration Log File**

The log file will be created with a task, and written to the directory for the related migration option. This file can be read during migration to estimate the time necessary to complete the migration session.

### **Migration Zoning**

Migration Zoning must be done before executing the Migration Device Masking File created with the Visual Basic Program.

### **Files and File structure created from Visual Basic Program**

All SRDF™ Device Group Device Masking Files are created as text files with extension "**<file> .txt**". To execute, they have to be renamed "**<file> .cmd**" as executable. The text files are easier to edit and check, and they cannot be executed by mistake. Also, it is easier to add new volumes that are not part of the migration.

### **Execute Task for Open Replicator Migration**

Open the task file, copy the required line to a command window, and execute the task for the Open Replicator Migration Method.

## Files and Filestructure Example Hostname: VIBSAP10

The Directory and File structure created from the Visual Basic Program:

Z:\20080120_VIBSAP10\	OR_PreV6.0.0_20080109.vbs OR_Pre.txt MigrationsDetail_Checklist_OPEN_REPLICATOR_V6.0.0_20080109.xls MigrationsLayout_OPEN_REPLICATOR_V6.0.0_20080109.vsd	→ Template Files copied to the Directory
01_OR_VIBSAP10_SMigMapping.txt	02_OR_VIBSAP10_TMigMapping.txt	→ Source Migration Device Mapping File
04_OR_VIBSAP10_SDG.txt	05_OR_VIBSAP10_TDG.txt	→ Target Migration Device Mapping File
07_OR_VIBSAP10_TProdMasking.txt	08_OR_VIBSAP10_ProdMapping.txt	→ Source SRDF Device Group File
→ Releated files for Cold Push		→ Target SRDF Device Group File
→ Migration Device Masking File for Push		→ Target Production Device Masking File
→ File with required Task Cold Push		→ Target Production Device Mapping File
→ File for push Migration		
→ Releated files for Hot Push		
→ Migration Device Masking File for Push		
→ Log File with estimated time to completion		
→ File with required Task Hot Push		
→ File for push Migration		
→ Releated files for Cold Pull		
→ Migration Device Masking File for Pull		
→ File with required Task Cold Pull		
→ File for pull Migration		
→ Releated files for Hot Pull		
→ Migration Device Masking File for Pull		
→ File with required Task Hot Pull		
→ File for pull Migration		
→ Directory with the created check files		
→ Required files for check created with Solution Enabler commands		
→ Directory with the created checklist		
→ Excel Checklist File		
→ Directory with the created Visio Layout File Template		
→ Visio Layout File Template		

## Open Replicator – Quick Reference Guide

This Guide provides a quick overview of Open Replicator Session Limitations and Restrictions.

	Hot Push	Cold Push	Hot Pull	Cold Pull
<b>Control Tracks</b>	All are marked protected at session activation.	All are marked protected at session activation.	All are marked protected at session activation.	All are marked protected at session activation.
<b>Control Device</b>	May be host read/write accessible (hot). May be larger or smaller than remote.	Must be user not ready (NR) to host. May be larger or smaller than remote.	May be host read/write accessible. May be larger or smaller than remote.	Must be user not ready (NR) to host. May be larger or smaller than remote.
<b>Remote Device</b>	Should be host inaccessible.	Should be host inaccessible.	Should be remote host readily.	Should be remote host readily.
<b>Remote larger than control</b>	OR will only overwrite the tracks needed to copy all of the data from the control to the remote.		Control will have tracks copied to it. When control is full, OR stops copying. This requires a force_copy option to execute.	
<b>Remote smaller than control</b>	Remote will have tracks copied to it. When remote is full, OR stops copying (different sized targets will have different amounts of data). This requires a force_copy option to execute.		OR will only overwrite the tracks needed to copy all of the data from the remote to the control.	
<b>Background Copy ON</b>	Protected tracks will be copied to the remote before they are accessed. Track copying continues until all tracks have been sent to the remote.	Protected tracks will be copied to the remote before they are accessed. Track copying continues until all tracks have been sent to the remote. Must be set for a cold operation.	Protected tracks will be copied from the remote before they are accessed. Track copying continues until all tracks have been received from the remote.	Protected tracks will be copied from the remote before they are accessed. Track copying continues until all tracks have been received from the remote. Must be set for a cold operation.
<b>Background Copy OFF</b>	Protected tracks will only be copied to the remote once they are written to. Track copying stays active until every track on the control volume is written to.	Track copy operation cannot take place. No data will ever be copied to the remote, because the control must be set NR.	Protected tracks will only be copied to the control once they are accessed. Track copying stays active until every track on the remote is accessed.	Protected tracks will only be copied to the control once they are accessed. Track copying stays active until every track on the remote is accessed.
<b>Differential sessions</b>	yes	Yes, but no recreate	no	no
<b>FA Ports</b>	All FAs with access to the control device must have access to remote devices.	At least one FA must have access to the remote. Not all FAs with access to control devices must have access to remote devices.	All FAs with access to the control device must have access to remote devices.	At least one FA must have access to the remote. Not all FAs with access to control devices must have access to remote devices.
<b>Sessions per control device</b>	Up to 15 sessions can be created and activated one after the other with one being active (i.e. CopyInProgress) at a time per LUN.	Up to 15 sessions can be created and activated one after the other with one being active (i.e. CopyInProgress) at a time per LUN.	Single session between the control and the remote	Single session between the control and the remote
<b>Session Limits</b>	Only one remote is allowed per session.	One control may have up to 16 targets (in a single session).	Only one remote is allowed per session.	Only one remote is allowed per session.
<b>Communication Loss</b>	Session fails.	Session stalls until link is recovered.	Session stalls until link is recovered.	Session stalls until link is recovered.



## Useful Commands

Checking the source Symmetrix / DMX and the target Symmetrix / DMX is important!

Here are the most commonly used Commands to check and execute.

```
symrcopy -h
symrcopy list
symrcopy -sid <SymmID> list
symrcopy -sid <SymmID> query -file <filename>
symrcopy query -file <filename>
symrcopy verify -file <filename> -copied
symrcopy list -detail
symrcopy -sid <SymmID> list -detail
```

### Pulling Data Offline to a DMX Array if Source Array Host is Offline

```
symrcopy create -copy -name <name> -pull -hot -file <filename> -noprompt
symrcopy query -file <filename>
symrcopy activate -file <filename> -noprompt
symrcopy query -file <filename> -detail
symrcopy verify -i 60 -file <filename> sec, 60=60 second Interval
symrcopy list -sid <SymmID>
symrcopy terminate -file <filename> -noprompt
```

### Pulling Data Online to a DMX Array until Source Array Host is Offline

```
symrcopy create -copy -name <name> -pull -hot -donor_update -file <filename> -noprompt
symrcopy query -file <filename>
symrcopy activate -file <filename> -noprompt
symrcopy query -file <filename> -detail
symrcopy verify -i 60 -file <filename> sec, 60=60 second Interval
symrcopy query -file <filename>
symrcopy list -sid <SymmID>
```

### Shutdown Source Host

```
symrcopy list -sid <SymmID>
symrcopy terminate -file <filename> -noprompt
symrcopy list -sid <SymmID>
```

## Pushing DMX Data Offline to a Symmetrix

```
symrcopy create -name <name> -copy -push -cold -file <filename> -differential -noprompt
symrcopy -file <filename> query
symrcopy -file <filename> activate -noprompt
symrcopy -file <filename> query -detail
symrcopy -file <filename> set pace 7 -noprompt           0 to 9, 0=fastest, 9=slowest
symrcopy -file <filename> query -detail
symrcopy -file <filename> verify -i 60                 sec, 60=60 second Interval
symrcopy -file <filename> query -detail
```

### Shutdown Source Host

```
symrcopy -file <filename> recreate -noprompt
symrcopy -file <filename> activate -noprompt
symrcopy -file <filename> query
symrcopy -file <filename> terminate -noprompt
```

## Pushing DMX Data Online to Symmetrix or Other Arrays

```
symrcopy create -name <name> -copy -push -hot -file <filename> -differential -noprompt
symrcopy activate -file <filename> -consistent -noprompt
symrcopy query -file <filename>
symrcopy set pace 9 -file <filename> -noprompt           0 to 9, 0=fastest, 9=slowest
symrcopy query -file <filename> -detail
symrcopy set mode nocopy -file <filename> -noprompt
symrcopy list -detail -sid <SymmID>
symrcopy set mode copy -file <filename> -noprompt
symrcopy verify -file <filename> -i 30                 sec, 30=30 second Interval
symrcopy query -file <filename> -detail
symrcopy terminate -file <filename> -noprompt
```

## Check Commands DMX / Symmetrix

symdmg list

symdmg -sid <SymmID> list

symdmg show <DgName>

symrdf -g <DgName> query

symrdf show -g <DgName>

symrdf -g <DgName> suspend

symld -g <DgName> not\_ready

symld -g <DgName> ready

symdev -sid <SymmID> show <SymDev>

symdev -sid <SymmID> not\_ready <SymDev>

symdev -sid <SymmID> ready <SymDev>

symcfg discover

symcfg -sid <SymmID> discover

symcfg list

symcfg -sid <SymmID> list

symcfg -dir all -addr -ava list

symcfg -sid <SymmID> -dir all -addr -ava list

symcfg -sid <SymmID> -dir <#> -p <#> -addr -ava list

symmask -sid <SymmID> -dir <#> -p <#> list logins

symmaskdb -sid <SymmID> list database

symmaskdb -sid <SymmID> -dir <#> -p <#> list database

symmaskdb -sid <SymmID> list devs -wwn <WWN>

## Visual Basic Program Code

To use the Visual Basic Program File: "OR\_PrepV6.0.0\_20080109.vbs"

```
set fso = CreateObject("Scripting.FileSystemObject")
set oShell = CreateObject("WScript.Shell")

' Create a Folder, using strDirectory
Set objFolder10 = fso.CreateFolder("10_OR_Cold_Push")
Set objFolder20 = fso.CreateFolder("20_OR_Cold_Pull")
Set objFolder11 = fso.CreateFolder("11_OR_Hot_Push")
Set objFolder21 = fso.CreateFolder("21_OR_Hot_Pull")
Set objFolder60 = fso.CreateFolder("60_CHECKS")
Set objFolder80 = fso.CreateFolder("80_CHECKLIST")
Set objFolder90 = fso.CreateFolder("90_MIGRATION_LAYOUT")

v_TraceFile = "OutPut.txt"
v_PrepFile = "OR_Prep.txt"
v_AllDevs = ""

    set o_PrepFile = fso.OpenTextFile(v_PrepFile)

    v_Srv = Trim(Right(Trim(o_PrepFile.ReadLine),8))
    If Left(v_Srv,1) = "=" then
        v_Srv = Right(v_Srv,len(v_Srv)-1)
    End If

    v_Typ = Trim(Right(Trim(o_PrepFile.ReadLine),8))
    If Left(v_Typ,1) = "=" then
        v_Typ = Right(v_Typ,len(v_Typ)-1)
    End If

    v_Typ = Trim(Right(Trim(o_PrepFile.ReadLine),7))
    If Left(v_Typ,1) = "=" then
        v_Typ = Right(v_Typ,4)
    End If

    v_TSid = Right(Trim(o_PrepFile.ReadLine),4)
    v_TFa1 = Right(Trim(o_PrepFile.ReadLine),3)
    v_TPo1 = Right(Trim(o_PrepFile.ReadLine),1)
    v_WWN1 = Right(Trim(o_PrepFile.ReadLine),16)
    v_TFa2 = Right(Trim(o_PrepFile.ReadLine),3)
    v_TPo2 = Right(Trim(o_PrepFile.ReadLine),1)
    v_WWN2 = Right(Trim(o_PrepFile.ReadLine),16)

    v_Dummy = o_PrepFile.ReadLine

    v_SSid = Right(Trim(o_PrepFile.ReadLine),4)
    v_SFa1 = Right(Trim(o_PrepFile.ReadLine),3)
    v_SPo1 = Right(Trim(o_PrepFile.ReadLine),1)
    v_SWN1 = Right(Trim(o_PrepFile.ReadLine),16)
    v_SFa2 = Right(Trim(o_PrepFile.ReadLine),3)
    v_SPo2 = Right(Trim(o_PrepFile.ReadLine),1)
    v_SWN2 = Right(Trim(o_PrepFile.ReadLine),16)

    v_Dummy = o_PrepFile.ReadLine

    v_TPFa1 = Right(Trim(o_PrepFile.ReadLine),3)
    v_TPPo1 = Right(Trim(o_PrepFile.ReadLine),1)
    v_TPFa2 = Right(Trim(o_PrepFile.ReadLine),3)
```

```

v_TPPo2 = Right(Trim(o_PrepFile.ReadLine),1)

v_Dummy = o_PrepFile.ReadLine

v_HWWN1 = Right(Trim(o_PrepFile.ReadLine),16)
v_HWWN2 = Right(Trim(o_PrepFile.ReadLine),16)

v_Dummy = o_PrepFile.ReadLine
v_Dummy = o_PrepFile.ReadLine

set o_SMapFile = fso.CreateTextFile("01_OR_" & v_Srv & "_SMigMapping.txt")
set o_TMapFile = fso.CreateTextFile("02_OR_" & v_Srv & "_TMigMapping.txt")
set o_PMapFile = fso.CreateTextFile("08_OR_" & v_Srv & "_TProMapping.txt")
set o_SDGrFile = fso.CreateTextFile("04_OR_" & v_Srv & "_SDG.txt")
set o_TDGFile = fso.CreateTextFile("05_OR_" & v_Srv & "_TDG.txt")
set o_TMskFile = fso.CreateTextFile("07_OR_" & v_Srv & "_TProdMasking.txt")

set o_MigLFile = fso.CreateTextFile("20_OR_Cold_Pull\OR_" & v_Srv & "_Pull.ini")
set o_MasLFile = fso.CreateTextFile("20_OR_Cold_Pull\03_OR_" & v_Srv & "_SMigMasking.txt")
set o_TasLFile = fso.CreateTextFile("20_OR_Cold_Pull\06_OR_" & v_Srv & "_Tasks.txt")

set o_MigSFile = fso.CreateTextFile("10_OR_Cold_Push\OR_" & v_Srv & "_Push.ini")
set o_MasSFile = fso.CreateTextFile("10_OR_Cold_Push\03_OR_" & v_Srv & "_TMigMasking.txt")
set o_TasSFile = fso.CreateTextFile("10_OR_Cold_Push\06_OR_" & v_Srv & "_Tasks.txt")

set o_MigHFile = fso.CreateTextFile("21_OR_Hot_Pull\OR_" & v_Srv & "_Pull.ini")
set o_MasHFile = fso.CreateTextFile("21_OR_Hot_Pull\03_OR_" & v_Srv & "_SMigMasking.txt")
set o_TasHFile = fso.CreateTextFile("21_OR_Hot_Pull\06_OR_" & v_Srv & "_Tasks.txt")

set o_MigPFile = fso.CreateTextFile("11_OR_Hot_Push\OR_" & v_Srv & "_Push.ini")
set o_MasPFile = fso.CreateTextFile("11_OR_Hot_Push\03_OR_" & v_Srv & "_TMigMasking.txt")
set o_TasPFile = fso.CreateTextFile("11_OR_Hot_Push\06_OR_" & v_Srv & "_Tasks.txt")

Set WSHShell = WScript.CreateObject("WScript.Shell")
WSHShell.Run "cmd /c symcfg list >> 88_CHECKS\SYMCFG_LIST_ALL_DMx.txt",0
WSHShell.Run ("cmd /c symcfg -sid " & v_SSid & " -FA ALL list >> ""88_CHECKS\FA_ALL_" & v_SSid & "_SOURCE_DMx.txt""),0
WSHShell.Run ("cmd /c symcfg -sid " & v_TSid & " -FA ALL list >> ""88_CHECKS\FA_ALL_" & v_TSid & "_TARGET_DMx.txt""),0

WSHShell.Run ("cmd /c symcfg -sid " & v_SSid & " -dir " & v_SFa1 & " -p " & v_SPo1 & " -addr -ava list >> ""60_CHECKS\61_ADDR_AVA_" & v_SSid & "_" & v_SFa1 & "_" & v_SPo1 & "_SOURCE_MIG_DMx.txt""),0
WSHShell.Run ("cmd /c symcfg -sid " & v_SSid & " -dir " & v_SFa2 & " -p " & v_SPo2 & " -addr -ava list >> ""60_CHECKS\62_ADDR_AVA_" & v_SSid & "_" & v_SFa2 & "_" & v_SPo2 & "_SOURCE_MIG_DMx.txt""),0

WSHShell.Run ("cmd /c symcfg -sid " & v_TSid & " -dir " & v_TFa1 & " -p " & v_TPo1 & " -addr -ava list >> ""60_CHECKS\63_ADDR_AVA_" & v_TSid & "_" & v_TFa1 & "_" & v_TPo1 & "_TARGET_MIG_DMx.txt""),0
WSHShell.Run ("cmd /c symcfg -sid " & v_TSid & " -dir " & v_TFa2 & " -p " & v_TPo2 & " -addr -ava list >> ""60_CHECKS\64_ADDR_AVA_" & v_TSid & "_" & v_TFa2 & "_" & v_TPo2 & "_TARGET_MIG_DMx.txt""),0

WSHShell.Run ("cmd /c symcfg -sid " & v_TSid & " -dir " & v_TPFa1 & " -p " & v_TPPo1 & " -addr -ava list >> ""60_CHECKS\65_ADDR_AVA_" & v_TSid & "_" & v_TPFa1 & "_" & v_TPPo1 & "_TARGET_PROD_DMx.txt""),0
WSHShell.Run ("cmd /c symcfg -sid " & v_TSid & " -dir " & v_TPFa2 & " -p " & v_TPPo2 & " -addr -ava list >> ""60_CHECKS\66_ADDR_AVA_" & v_TSid & "_" & v_TPFa2 & "_" & v_TPPo2 & "_TARGET_PROD_DMx.txt""),0

WSHShell.Run ("cmd /c symmaskdb -sid " & v_SSid & " -dir " & v_SFa1 & " -p " & v_SPo1 & " list database >> ""60_CHECKS\73_LISTDATABASE_" & v_SSid & "_" & v_SFa1 & "_" & v_SPo1 & "_SOURCE_MIG_DMx.txt""),0
WSHShell.Run ("cmd /c symmaskdb -sid " & v_SSid & " -dir " & v_SFa2 & " -p " & v_SPo2 & " list database >> ""60_CHECKS\74_LISTDATABASE_" & v_SSid & "_" & v_SFa2 & "_" & v_SPo2 & "_SOURCE_MIG_DMx.txt""),0

WSHShell.Run ("cmd /c symmaskdb -sid " & v_TSid & " -dir " & v_TFa1 & " -p " & v_TPo1 & " list database >> ""60_CHECKS\75_LISTDATABASE_" & v_TSid & "_" & v_TFa1 & "_" & v_TPo1 & "_TARGET_MIG_DMx.txt""),0
WSHShell.Run ("cmd /c symmaskdb -sid " & v_TSid & " -dir " & v_TFa2 & " -p " & v_TPo2 & " list database >> ""60_CHECKS\76_LISTDATABASE_" & v_TSid & "_" & v_TFa2 & "_" & v_TPo2 & "_TARGET_MIG_DMx.txt""),0

```

```

WSHShell.Run ("cmd /c symmask -sid " & v_SSid & " -dir " & v_SFa1 & " -p " & v_SPo1 & " list logins >> "60_CHECKS\67_LIST_LOGINS_" & v_SSid & "_" & v_SFa1 & "_" & v_SPo1 & "_SOURCE_MIG_DMX.txt"),0
WSHShell.Run ("cmd /c symmask -sid " & v_SSid & " -dir " & v_SFa2 & " -p " & v_SPo2 & " list logins >> "60_CHECKS\68_LIST_LOGINS_" & v_SSid & "_" & v_SFa2 & "_" & v_SPo2 & "_SOURCE_MIG_DMX.txt"),0

WSHShell.Run ("cmd /c symmask -sid " & v_TSid & " -dir " & v_TFa1 & " -p " & v_TPo1 & " list logins >> "60_CHECKS\69_LIST_LOGINS_" & v_TSid & "_" & v_TFa1 & "_" & v_TPo1 & "_TARGET_MIG_DMX.txt"),0
WSHShell.Run ("cmd /c symmask -sid " & v_TSid & " -dir " & v_TFa2 & " -p " & v_TPo2 & " list logins >> "60_CHECKS\70_LIST_LOGINS_" & v_TSid & "_" & v_TFa2 & "_" & v_TPo2 & "_TARGET_MIG_DMX.txt"),0

WSHShell.Run ("cmd /c symmaskdb -sid " & v_SSid & " list devs -wnn " & v_HWWN1 & " >> "60_CHECKS\71_LIST_DEVS_WWN1_" & v_SSid & "_" & v_HWWN1 & "_SOURCE_PROD_DMX.txt"),0
WSHShell.Run ("cmd /c symmaskdb -sid " & v_SSid & " list devs -wnn " & v_HWWN2 & " >> "60_CHECKS\72_LIST_DEVS_WWN2_" & v_SSid & "_" & v_HWWN2 & "_SOURCE_PROD_DMX.txt"),0

Set objFSO = CreateObject("Scripting.FileSystemObject")
dtmThisDay = Day(Date)
dtmThisMonth = Month(Date)
dtmThisYear = Year(Date)
objFSO.CopyFile "MigrationsDetail_Checklist_OPEN_REPLICATOR_V6.0.1_20080208.xls" , "80_CHECKLIST\81_Migration_Checklist_Host_" & v_Srv & "_Open_Replicator_V6.0.1_" & dtmThisYear & "_" & dtmThisMonth & "_" & dtmThisDay & ".xls",true
objFSO.CopyFile "MigrationsLayout_OPEN_REPLICATOR_V6.0.1_20080208.vsd" , "90_MIGRATION_LAYOUT\91_Migration_Layout_Host_" & v_Srv & "_Open_Replicator_V6.0.1_" & dtmThisYear & "_" & dtmThisMonth & "_" & dtmThisDay & ".vsd",true

'Set objExcel = CreateObject("Excel.Application")
'objExcel.Visible = True

'Set objWorkbook = objExcel.Workbooks.Open("80_CHECKLIST\81_Migration_Checklist_Host_" & v_Srv & "_Open_Replicator_V6.0.1_" & dtmThisYear & "_" & dtmThisMonth & "_" & dtmThisDay & ".xls")
'Set objWorksheet = objWorkbook.Worksheets(1)
'
'objWorksheet.UsedRange.ClearContents
'
'i = 2
'
'Do Until x = 1
'   If objWorksheet.Cells(i,1) = "" Then
'       Exit Do
'   End If
'
'   intColor = objWorksheet.Cells(i,2).Interior.ColorIndex
'
'   Select Case intColor
'       Case 3 strStatus = "Behind schedule"
'       Case 4 strStatus = "Project complete"
'       Case 6 strStatus = "Project on schedule"
'       Case Else strStatus = "No information"
'   End Select
'
'   Wscript.Echo objWorksheet.Cells(i,1).Value & " -- " & strStatus
'   i = i + 1
'Loop

v_SDGName = "OR_" & v_Srv & "_Source"
v_TDGName = "OR_" & v_Srv & "_Target"

o_MigLFile.WriteLine "#Control-Vol. Remote-Vol."
o_MigSFile.WriteLine "#Control-Vol. Remote-Vol."
o_MigHFile.WriteLine "#Control-Vol. Remote-Vol."
o_MigPFile.WriteLine "#Control-Vol. Remote-Vol."

o_SDGrFile.WriteLine "symdg -force delete " & v_SDGName

```

```

o_SDGrFile.WriteLine "symdg create " & v_SDGName & " -type " & v_Typ
o_TDGrFile.WriteLine "symdg -force delete " & v_TDGName
o_TDGrFile.WriteLine "symdg create " & v_TDGName & " -type " & v_Typ

o_MasLFile.WriteLine "symcfg discover"
o_MasSFile.WriteLine "symcfg discover"
o_MasHFile.WriteLine "symcfg discover"
o_MasPFile.WriteLine "symcfg discover"

o_TMskFile.WriteLine "symcfg discover"

do while o_PrepFile.AtEndOfStream = false

    InVar = o_PrepFile.ReadLine

    v_TVar = Left(InVar,8)
    v_T_ID = Left(v_TVar,4)
    v_TLun = Right(v_TVar,3)

    v_SVar = Right(InVar,8)
    v_S_ID = Left(v_SVar,4)
    v_SLun = Right(v_SVar,3)

    o_MigLFile.WriteLine "symdev=" & v_TSid & ":" & v_T_ID & " symdev=" & v_SSid & ":" & v_S_ID
    o_MigSFile.WriteLine "symdev=" & v_SSid & ":" & v_S_ID & " symdev=" & v_TSid & ":" & v_T_ID
    o_MigHFile.WriteLine "symdev=" & v_TSid & ":" & v_T_ID & " symdev=" & v_SSid & ":" & v_S_ID
    o_MigPFile.WriteLine "symdev=" & v_SSid & ":" & v_S_ID & " symdev=" & v_TSid & ":" & v_T_ID

    o_SMapFile.WriteLine "map dev " & v_S_ID & " to dir " & v_SFa1 & ":" & v_SPol & " Target=0, Lun=" & v_SLun & ";"
    If Right(v_SFa2,1) <> "=" then
        o_SMapFile.WriteLine "map dev " & v_S_ID & " to dir " & v_SFa2 & ":" & v_SPo2 & " Target=0, Lun=" & v_SLun & ";"
    End If

    o_TMapFile.WriteLine "map dev " & v_T_ID & " to dir " & v_TFa1 & ":" & v_TPol & " Target=0, Lun=" & v_TLun & ";"
    If Right(v_TFa2,1) <> "=" then
        o_TMapFile.WriteLine "map dev " & v_T_ID & " to dir " & v_TFa2 & ":" & v_TPo2 & " Target=0, Lun=" & v_TLun & ";"
    End If

    o_PMapFile.WriteLine "map dev " & v_T_ID & " to dir " & v_TPFA1 & ":" & v_TPPol & " Target=0, Lun=" & v_TLun & ";"
    If Right(v_TPFA2,1) <> "=" then
        o_PMapFile.WriteLine "map dev " & v_T_ID & " to dir " & v_TPFA2 & ":" & v_TPPo2 & " Target=0, Lun=" & v_TLun & ";"
    End If

    o_SDGrFile.WriteLine "symld -sid " & v_SSid & " -g " & v_SDGName & " add dev " & v_S_ID
    o_TDGrFile.WriteLine "symld -sid " & v_TSid & " -g " & v_TDGName & " add dev " & v_T_ID

    o_MasLFile.WriteLine "symmask -sid " & v_SSid & " -wwn " & v_WWN1 & " -dir " & v_SFa1 & " -p " & v_SPol & " add devs " & v_S_ID & " -nop"
    If Right(v_SFa2,1) <> "=" then
        o_MasLFile.WriteLine "symmask -sid " & v_SSid & " -wwn " & v_WWN2 & " -dir " & v_SFa2 & " -p " & v_SPo2 & " add devs " & v_S_ID & " -nop"
    End If

    o_MasSFile.WriteLine "symmask -sid " & v_TSid & " -wwn " & v_SWN1 & " -dir " & v_TFa1 & " -p " & v_TPol & " add devs " & v_T_ID & " -nop"
    If Right(v_TFa2,1) <> "=" then
        o_MasSFile.WriteLine "symmask -sid " & v_TSid & " -wwn " & v_SWN2 & " -dir " & v_TFa2 & " -p " & v_TPo2 & " add devs " & v_T_ID & " -nop"
    End If

    o_MasHFile.WriteLine "symmask -sid " & v_SSid & " -wwn " & v_WWN1 & " -dir " & v_SFa1 & " -p " & v_SPol & " add devs " & v_S_ID & " -nop"
    If Right(v_SFa2,1) <> "=" then
        o_MasHFile.WriteLine "symmask -sid " & v_SSid & " -wwn " & v_WWN2 & " -dir " & v_SFa2 & " -p " & v_SPo2 & " add devs " & v_S_ID & " -nop"
    End If

    o_MasPFile.WriteLine "symmask -sid " & v_TSid & " -wwn " & v_SWN1 & " -dir " & v_TFa1 & " -p " & v_TPol & " add devs " & v_T_ID & " -nop"
    If Right(v_TFa2,1) <> "=" then
        o_MasPFile.WriteLine "symmask -sid " & v_TSid & " -wwn " & v_SWN2 & " -dir " & v_TFa2 & " -p " & v_TPo2 & " add devs " & v_T_ID & " -nop"
    End If

```

```

End If

o_TmskFile.WriteLine "symmask -sid " & v_TSid & " -wn " & v_HWWN1 & " -dir " & v_TPPA1 & " -p " & v_TPPo1 & " add devs " & v_T_ID & " -nop"
If Right(v_TPPA2,1) <> "=" then
    o_TmskFile.WriteLine "symmask -sid " & v_TSid & " -wn " & v_HWWN2 & " -dir " & v_TPPA2 & " -p " & v_TPPo2 & " add devs " & v_T_ID & " -nop"
End If

v_AllDevs = v_AllDevs & v_TVar
Loop

o_MasLFile.WriteLine "symmask -sid " & v_SSid & " refresh"
o_MasSFile.WriteLine "symmask -sid " & v_TSid & " refresh"
o_MasHFile.WriteLine "symmask -sid " & v_SSid & " refresh"
o_MasPFile.WriteLine "symmask -sid " & v_TSid & " refresh"
o_TmskFile.WriteLine "symmask -sid " & v_TSid & " refresh"

o_SDGrFile.WriteLine "symdg show " & v_SDGName
o_TDGrFile.WriteLine "symdg show " & v_TDName

o_TasLFile.WriteLine "_____ COLD PULL _____"
o_TasLFile.WriteLine "_____ COMMON DEVICE 'NOT READY' and REMOTE DEVICE 'READY' _____"
o_TasLFile.WriteLine "_____ CHECK OR SESSION _____"
o_TasLFile.WriteLine "symrcopy list"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____ OPTIONAL_SOURCE_SRDF_SUSPEND_AND_DEVICES_WRITE_DISABLE _____"
o_TasLFile.WriteLine "symrdf -g " & v_SDGName & " suspend"
o_TasLFile.WriteLine "symrdf -g " & v_SDGName & " query"
o_TasLFile.WriteLine "symdg show " & v_SDGName
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "symld -g " & v_SDGName & " write_disable"
o_TasLFile.WriteLine "symdev -sid xxxx write_disable yyyy"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____ OPTIONAL_TARGET_SRDF_SUSPEND_AND_DEVICES_NOT_READY _____"
o_TasLFile.WriteLine "symrdf -g " & v_TDName & " suspend"
o_TasLFile.WriteLine "symrdf -g " & v_TDName & " query"
o_TasLFile.WriteLine "symdg show " & v_TDName
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "symld -g " & v_TDName & " not_ready"
o_TasLFile.WriteLine "symdev -sid xxxx not_ready yyyy"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____ IF Server is shut down ==> COLD PULL _____"
o_TasLFile.WriteLine "symrcopy create -pull -cold -copy -file OR_" & v_Srv & "_Pull.ini"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____ ACTIVATE _____"
o_TasLFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Pull.ini"
o_TasLFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Pull.ini" & " query"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____ SET PACE from: 0 the fastest copy, 5 is the default, 9 is slow _____"
o_TasLFile.WriteLine "symrcopy set pace 1 -file OR_" & v_Srv & "_Pull.ini"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____ QUERY and WRITE to a LOG FILE every 120 sec until READY _____"
o_TasLFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Pull.ini" & " query"
o_TasLFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Pull.ini" & " query -i 120 >> OR_" & v_Srv & "_Cold_Pull_Log.txt"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "

```



```

o_TasLFile.WriteLine "_____TERMINATE SESSION_____"
o_TasLFile.WriteLine "symrcopy terminate -file OR_" & v_Srv & "_Pull.ini"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____OPTIONAL_SOURCE_SRDF_SUSPEND_AND_DEVICES_RW_ENABLE_____"
o_TasLFile.WriteLine "symrdf -g " & v_SDGName & " resume"
o_TasLFile.WriteLine "symrdf -g " & v_SDGName & " query"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "symld -g " & v_SDGName & " rw_enable"
o_TasLFile.WriteLine "symdev -sid xxxx rw_enable yyyy"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "_____OPTIONAL_TARGET_SRDF_SUSPEND_AND_DEVICES_READY_____"
o_TasLFile.WriteLine "symrdf -g " & v_TDGNName & " resume"
o_TasLFile.WriteLine "symrdf -g " & v_TDGNName & " query"
o_TasLFile.WriteLine " "
o_TasLFile.WriteLine "symld -g " & v_TDGNName & " ready"
o_TasLFile.WriteLine "symdev -sid xxxx ready yyyy"
o_TasLFile.WriteLine " "

o_TasSFile.WriteLine "_____COLD PUSH_____"
o_TasSFile.WriteLine "_____COMMON DEVICE 'NOT READY' and REMOTE DEVICE 'READY'_____"
o_TasSFile.WriteLine "_____CHECK OR SESSION_____"
o_TasSFile.WriteLine "symrcopy list"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____OPTIONAL_SOURCE_SRDF_SUSPEND_AND_DEVICES_NOT_READY_____"
o_TasSFile.WriteLine "symrdf -g " & v_SDGName & " suspend"
o_TasSFile.WriteLine "symrdf -g " & v_SDGName & " query"
o_TasSFile.WriteLine "symdg show " & v_SDGName
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "symld -g " & v_SDGName & " not_ready"
o_TasSFile.WriteLine "symdev -sid aaaa not_ready zzzz"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____OPTIONAL_TARGET_SRDF_SUSPEND_____"
o_TasSFile.WriteLine "symrdf -g " & v_TDGNName & " suspend"
o_TasSFile.WriteLine "symrdf -g " & v_TDGNName & " query"
o_TasSFile.WriteLine "symdg show " & v_TDGNName
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____IF Server is shut down ==> PUSH COLD_____"
o_TasSFile.WriteLine "symrcopy create -push -cold -copy -file OR_" & v_Srv & "_Push.ini"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____ACTIVATE_____"
o_TasSFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Push.ini"
o_TasSFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Push.ini" & " query"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____SET PACE from: 0 the fastest copy, 5 is the default, 9 is slow_____"
o_TasSFile.WriteLine "symrcopy set pace 1 -file OR_" & v_Srv & "_Push.ini"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____QUERY and WRITE to a LOG FILE until READY_____"
o_TasSFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Push.ini" & " query"
o_TasSFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Push.ini" & " query -i 120 >> OR_" & v_Srv & "_Cold_Push_Log.txt"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____TERMINATE SESSION_____"
o_TasSFile.WriteLine "symrcopy terminate -file OR_" & v_Srv & "_Push.ini"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "

```

```

o_TasSFile.WriteLine "_____OPTIONAL_SOURCE_SRDF_RESUME_AND_DEVICES_READY_____"
o_TasSFile.WriteLine "symrdf -g " & v_SDGName & " resume"
o_TasSFile.WriteLine "symrdf -g " & v_SDGName & " query"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "symld -g " & v_SDGName & " ready"
o_TasSFile.WriteLine "symdev -sid aaaa ready zzzz"
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine " "
o_TasSFile.WriteLine "_____OPTIONAL_TARGET_SRDF_RESUME_____"
o_TasSFile.WriteLine "symrdf -g " & v_TDGNName & " resume"
o_TasSFile.WriteLine "symrdf -g " & v_TDGNName & " query"
o_TasSFile.WriteLine " "

o_TasHFile.WriteLine "_____HOT PULL_____"
o_TasHFile.WriteLine "_____COMMON DEVICE 'READY' and REMOTE DEVICE 'READY' SRDF LINK 'SUSPEND'_____"
o_TasHFile.WriteLine "_____CHECK OR SESSION_____"
o_TasHFile.WriteLine "symrcopy list"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____OPTIONAL_SOURCE_SUSPEND_SRDF_LINK_____"
o_TasHFile.WriteLine "symrdf -g " & v_SDGName & " suspend"
o_TasHFile.WriteLine "symrdf -g " & v_SDGName & " query"
o_TasHFile.WriteLine "symdg show " & v_SDGName
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____OPTIONAL_TARGET_SUSPEND_SRDF_LINK_____"
o_TasHFile.WriteLine "symrdf -g " & v_TDGNName & " suspend"
o_TasHFile.WriteLine "symrdf -g " & v_TDGNName & " query"
o_TasHFile.WriteLine "symdg show " & v_TDGNName
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____IF Server is Shutdown at Source DMX / Symmetrix ==> HOT PULL Online_____"
o_TasHFile.WriteLine "symrcopy create -pull -hot -copy -file OR_" & v_Srv & "_Pull.ini"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "____Shutdown Source Server and bring Online on the Target DMX / Symmetrix ==> HOT PULL ONLINE____"
o_TasHFile.WriteLine "symrcopy create -pull -hot -copy -file -donor_update OR_" & v_Srv & "_Pull.ini -name name_xyz"
o_TasHFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Pull.ini"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____ACTIVATE IF Server is shut down ==> PULL HOT_____"
o_TasHFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Pull.ini"
o_TasHFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Pull.ini" & " query"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____SET PACE from: 0 the fastest copy, 5 is the default, 9 is slow_____"
o_TasHFile.WriteLine "symrcopy set pace 1 -file OR_" & v_Srv & "_Pull.ini"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____QUERY and WRITE to a LOG FILE every 120 sec until READY_____"
o_TasHFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Pull.ini" & " query"
o_TasHFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Pull.ini" & " query -i 120 >> OR_" & v_Srv & "_Hot_Pull_Log.txt"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____TERMINATE SESSION_____"
o_TasHFile.WriteLine "symrcopy terminate -file OR_" & v_Srv & "_Pull.ini"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine "_____OPTIONAL_SOURCE_RESUME_SRDF_LINK_____"
o_TasHFile.WriteLine "symrdf -g " & v_SDGName & " resume"
o_TasHFile.WriteLine "symrdf -g " & v_SDGName & " query"
o_TasHFile.WriteLine " "
o_TasHFile.WriteLine " "

```

```

o_TasHFile.WriteLine "_____OPTIONAL TARGET RESUME SRDF LINK_____"
o_TasHFile.WriteLine "symrdf -g " & v_TDGNName & " resume"
o_TasHFile.WriteLine "symrdf -g " & v_TDGNName & " query"
o_TasHFile.WriteLine " "

o_TasPFile.WriteLine "_____HOT PUSH_____"
o_TasPFile.WriteLine "_____COMMON DEVICE 'READY' and REMOTE DEVICE 'READY' SRDF LINK 'SUSPEND'_____"
o_TasPFile.WriteLine "_____CHECK OR SESSION_____"
o_TasPFile.WriteLine "symrcopy list"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____OPTIONAL SOURCE SUSPEND SRDF LINK_____"
o_TasPFile.WriteLine "symrdf -g " & v_SDGNName & " suspend"
o_TasPFile.WriteLine "symrdf -g " & v_SDGNName & " query"
o_TasPFile.WriteLine "symdg show " & v_SDGNName
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____OPTIONAL TARGET SUSPEND SRDF LINK_____"
o_TasPFile.WriteLine "symrdf -g " & v_TDGNName & " suspend"
o_TasPFile.WriteLine "symrdf -g " & v_TDGNName & " query"
o_TasPFile.WriteLine "symdg show " & v_TDGNName
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____IF Server is shut down ==> PUSH HOT_____"
o_TasPFile.WriteLine "symrcopy create -push -hot -copy -file OR_" & v_Srv & "_Push.ini"
o_TasPFile.WriteLine "symrcopy list -detail"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____IF Server is Online until shut down ==> PUSH HOT ONLINE_____"
o_TasPFile.WriteLine "symrcopy create -push -hot -copy -file OR_" & v_Srv & "_Push.ini -differential -name name_xyz"
o_TasPFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Push.ini"
o_TasPFile.WriteLine "symrcopy list -detail"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____ACTIVATE IF Server is shut down ==> PUSH HOT_____"
o_TasPFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Push.ini"
o_TasPFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Push.ini" & " query"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____ACTIVATE IF Server is Online until shut down ==> PUSH HOT ONLINE_____"
o_TasPFile.WriteLine "symrcopy recreate -file OR_" & v_Srv & "_Push.ini -name name_xyz"
o_TasPFile.WriteLine "symrcopy activate -file OR_" & v_Srv & "_Push.ini"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____SET PACE from: 0 the fastest copy, 5 is the default, 9 is slow_____"
o_TasPFile.WriteLine "symrcopy set pace 1 -file OR_" & v_Srv & "_Push.ini"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____QUERY and WRITE to a LOG FILE until READY_____"
o_TasPFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Push.ini" & " query"
o_TasPFile.WriteLine "symrcopy -file OR_" & v_Srv & "_Push.ini" & " query -i 120 >> OR_" & v_Srv & "_Hot_Push_Log.txt"
o_TasPFile.WriteLine "symrcopy list -detail"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____TERMINATE SESSION_____"
o_TasPFile.WriteLine "symrcopy terminate -file OR_" & v_Srv & "_Push.ini"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____OPTIONAL SOURCE RESUME SRDF LINK_____"
o_TasPFile.WriteLine "symrdf -g " & v_SDGNName & " resume"
o_TasPFile.WriteLine "symrdf -g " & v_SDGNName & " query"
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine " "
o_TasPFile.WriteLine "_____OPTIONAL TARGET RESUME SRDF LINK_____"

```

```
o_TasPFile.WriteLine "symrdf -g " & v_TDGName & " resume"  
o_TasPFile.WriteLine "symrdf -g " & v_TDGName & " query"  
o_TasPFile.WriteLine " "
```

```
WScript.Quit
```

## Migration Check List

To use the Excel Migration Checklist: **"MigrationsDetail\_Checklist\_OPEN\_REPLICATOR\_V6.0.1\_20080208.xls"**

Preparation OR Migration	Who	OK ?	Description OR Migration Steps	Time Start	Time End	Who	OK ?
MigrationsDetail_Checklist_OPEN_REPLICATOR_V6.0.0_20080109.xls							
SERVER: < HOSTNAME> _____ DATE: _____	Cust		Customer Contact:				
Change Request: _____ Change Request Printout ?	Cust		Stop Application and make sure that it not start again Shutdown Hosts			Cust	
System description: actual Topology actual Inquiry draw Visio Sheet	EMC		COLD PUSH: Status change CONTROL Devices to: „not ready“ symld -g OR_HOSTNAME_Source not ready			EMC	
Preparation Cable work: Cable-Design Sheet to Customer DRX	Cust EMC		COLD PUSH: Status change REMOTE Devices to: „ready“ symld -g OR_HOSTNAME_Source ready			EMC	
Save as a File all required Info's Example:  When Template File is Edit: OR_Prep.txt Execute from Admin Server: OR_PrepV6.0.0_20080109.vbs  Writes Output Files to Directory: \88_CHECKS\	EMC		COLD PULL: Status change CONTROL Devices to: „not ready“ symld -g OR_HOSTNAME_Source not ready			EMC	
Create Meta at DMX 1: _____ Assignment Target-Disks + VCM-Dev: symmaskdb -sid TSID list assignment - dev TDEVs	Cust EMC		COLD PULL: Status change REMOTE Devices to: „ready“ symld -g OR_HOSTNAME_Source ready Or Write Protect that REMOTE can't be written symld -g OR_HOSTNAME_Source write_disable			EMC	
Create Meta at DMX 2: _____  Assignment Target-Disks + VCM-Dev: symmaskdb -sid TSID list assignment - dev TDEVs	Cust EMC		SRDF TARGET set possible "suspended" symrdf -g OR_HOSTNAME_Target suspend			EMC	
Create SRDF with GUI or CLI: _____ with GUI Create SRDF Volumes R1   R2	Cust EMC		SRDF SOURCE set possible "suspended" symrdf -g OR_HOSTNAME_Source suspend  OR Session Setup from Tasklist: 06_OR_HOSTNAME_Tasks.txt COLD PUSH: symrcopy create -push -cold -copy -file OR_HOSTNAME_Prod.ini			EMC	
			OR Session Setup from Tasklist: 06_OR_HOSTNAME_Tasks.txt HOT PUSH: symrcopy create -push -hot -copy -file OR_VIBSAP10_Push.ini			EMC	

Preparation OR Migration	Who	OK ?	Description OR Migration Steps	Time Start	Time End	Who	OK ?
MigrationsDetail_Checklist_OPEN_REPLICATOR_V6.0.0_20080109.xls							
SERVER: < HOSTNAME>_____	Cust		Customer Contact:				
DATE:_____							
<b>Example with CLI:</b> <i>symconfigure -sid &lt;xxxx&gt; -v -f &lt;file&gt; commit</i>			<b>OR Session Setup from Tasklist:</b> <i>06_OR_HOSTNAME_Tasks.txt</i>			EMC	
<b>File Content:</b> <i>convert dev bed to RDF1+R-5, ra_group=4,REMOTE_DEV=bed, invalidate=R2,start_copy=yes;</i>			<b>COLD PULL:</b> <i>symrcopy create -pull -cold -copy -file OR_HOSTNAME_Prod.ini</i>				
			<b>OR Session Setup from Tasklist:</b> <i>06_OR_HOSTNAME_Tasks.txt</i>			EMC	
<b>Check TARGET Devices are equal or larger than SOURCE Devices !</b>			<b>HOT PULL:</b> <i>symrcopy create -pull -hot -copy -file OR_VIBSAP10_Pull.ini</i>				
<b>512 k Byte Blocks:</b> <i>symdev -sid &lt;xxxx&gt; show TDEVs</i> <i>symdev -sid &lt;xxxx&gt; show SDEVs</i>	EMC		<b>OR Session Activate:</b> <i>06_OR_HOSTNAME_Tasks.txt</i> <i>symrcopy activate -file OR_HOSTNAME_Prod.ini</i>			EMC	
<b>Prepare Scripts with Visual Basic Program Ver:</b> <i>OR_PrepV6.0.0_20080109.vbs</i>	EMC		<b>OR Session Set Pace:</b> <i>06_OR_HOSTNAME_Tasks.txt</i> <b>SET PACE from:</b> <i>0 the fastest copy, 5 is the default, 9 is slow</i> <i>symrcopy set pace 1 -file OR_HOSTNAME_Pull.ini</i>			EMC	
<b>Enter all required Data to Template:</b> <i>OR_Prep.txt</i> <b>Execute from Admin Server:</b> <i>OR_PrepV6.0.0_20080109.vbs</i>			<b>OR Session check and write Log file (every 120 Sec.)</b> <i>Symrcopy -file OR_HOSTNAME_Prod.ini query -l 120</i> <i>&gt; Z:\DATUM_HOST\OR_HOSTNAME_Log.txt</i>			EMC	
<b>Mapping Target Devices to Production-FA's : PUSH File:</b> <i>08_OR_HOSTNAME_PProMapping.txt</i>	Cust		<b>PRODUCTION Zoning can be done during Migration:</b> <i>Production Zoning Target Fabric 1</i>			Cust	
<b>Content of File:</b> <i>map dev PDEV to dir SYMDIR:X Target=0 Lun=LUN;</i> <i>symconfigure -sid SSID -v -f</i> <i>08_OR_HOSTNAME_TProMapping.txt preview</i> <i>symconfigure -sid SSID -v -f</i> <i>08_OR_HOSTNAME_TProMapping.txt commit</i>	EMC		<b>PRODUCTION Zoning can be done during Migration:</b> <i>Production Zoning Target Fabric 2</i>			EMC	
<b>Check Mapping at Source Migrations-FA's and VCM-Device</b> <i>symcfg -sid SSID -dir SDIR -p</i> <i>X -addr -ava list</i>	EMC		<b>SOURCE PRODUCTION Zoning Remove during Migration:</b> <i>Production Zoning SOURCE Fabric 1</i>			Cust	
<b>Mapping Source Devices to Migrations-FA's File:</b> <i>01_OR_HOSTNAME_SMigMapping.txt</i>	EMC		<b>SOURCE PRODUCTION Zoning Remove during Migration:</b> <i>Production Zoning SOURCE Fabric 2</i>			EMC	
<b>Content of File:</b> <i>map dev SDEV to dir SYMDIR:X Target=0 Lun=LUN;</i> <i>symconfigure -sid SSID -v -f</i> <i>01_OR_HOSTNAME_SMigMapping.txt preview</i> <i>symconfigure -sid SSID -v -f</i>			<b>OR Session terminate when ready (check Log file time Estimation)</b> <i>symrcopy terminate -file OR_HOSTNAME_Prod.ini</i>			EMC	
			<b>OR PUSH Set Source Devices "ready"</b>			EMC	

Preparation OR Migration	Who	OK ?	Description OR Migration Steps	Time Start	Time End	Who	OK ?
MigrationsDetail_Checklist_OPEN_REPLICATOR_V6.0_0_20080109.xls							
SERVER: < HOSTNAME>_____	Cust		Customer Contact:				
DATE:_____							
01_OR_HOSTNAME_SMigMapping.txt commit							
<b>Check Mapping at Target Migrations FA's and VCM-Device</b>	EMC		<i>symld -g OR_HOSTNAME_Source ready</i>				
<i>symcfg -sid TSID -dir DIR -p X</i>							
<i>-addr -ava list</i>			<b>OR PULL Set Target Devices "ready"</b>			EMC	
<b>Mapping Target Devices to Migrations-FA's File:</b>	EMC		<i>symrdf -g OR_HOSTNAME_Target ready</i>				
<i>02_OR_HOSTNAME_TMigMapping.txt</i>							
<b>Content of File:</b> <i>map dev TDEV to dir TMDIR:X</i>			<b>SRDF SOURCE set possible "resume"</b>			EMC	
<i>Target=0 Lun=LUN;</i>			<i>symrdf -g OR_HOSTNAME_Source resume</i>				
<i>symconfigure -sid TSID -v -f</i>			<i>symrdf -g OR_HOSTNAME_Source query</i>				
<i>02_OR_HOSTNAME_TMigMapping.txt preview</i>							
<i>symconfigure -sid TSID -v -f</i>			<b>SRDF TARGET set possible "resume"</b>			EMC	
<i>02_OR_HOSTNAME_TMigMapping.txt commit</i>			<i>symrdf -g OR_HOSTNAME_Target resume</i>				
<b>Migration Zoning:</b>	Cust		<i>symrdf -g OR_HOSTNAME_Target query</i>				
Migration Zoning SOURCE to	EMC						
TARGET Fabric 1			<b>Mapping Target Devices to Production-FA's : PULL</b>			Cust	
<b>Migration Zoning:</b>	Cust		<b>File:</b> <i>08_OR_HOSTNAME_PProMapping.txt</i>			EMC	
Migration Zoning SOURCE to	EMC		<b>Content of File:</b> <i>map dev TDEV to dir TPDIR:X Target=0</i>				
TARGET Fabric 2			<i>Lun=LUN;</i>				
<b>OR PUSH_____ Check Logins Target Migrations</b>	EMC		<i>symconfigure -sid TSID -v -f</i>				
<b>FA's Logins at the</b>			<i>08_OR_HOSTNAME_PProMapping.txt preview</i>				
<b>Source Migrations: FA_____</b>			<i>symconfigure -sid TSID -v -f</i>				
<b>FA_____</b>			<i>08_OR_HOSTNAME_PProMapping.txt commit</i>				
<i>symmask -sid SSID -dir</i>							
<i>SMDIR -p X list logins</i>			<b>LUN Masking Production Hosts - Target FA's</b>			EMC	
<b>OR PULL_____ Check Logins Source Migrations</b>	EMC		<b>Skript:</b> <i>07_OR_HOSTNAME_TProdMasking.cmd</i>				
<b>FA's Logins at the</b>							
<b>Target Migrations: FA_____</b>			<b>Response to Customer that Data is copied 100%</b>			Cust	
<b>FA_____</b>			<b>Production Zoning and Masking is Done:</b>			EMC	
<i>symmask -sid TSID -dir</i>			<b>Host can be startup</b>				
<i>TMDIR -p X list logins</i>			<b>Check login on Switch</b>				
<b>Execute PUSH_____</b>	EMC		<b>Info back from Customer DRX: Hosts Online</b>			Cust	
<b>Masking Source Migrations FAs to the Target</b>			<b>Comment:</b>				
<b>Devices:</b>			<b>Possible restart Host or rescan Devices</b>			Cust	
<b>Script:</b>							
<i>03_OR_HOSTNAME_TMigMasking.cmd</i>							
<b>Content of File:</b>							
<i>symmask -sid TSID -wwn WWN1 -dir SMDIR -p X add</i>							
<i>dev DEV -nop</i>							
<b>Execute PULL_____</b>	EMC						

Preparation OR Migration	Who	OK ?	Description OR Migration Steps	Time Start	Time End	Who	OK ?
MigrationsDetail_Checklist_OPEN_REPLICATOR_V6.0_0_20080109.xls							
SERVER: < HOSTNAME>_____	Cust		Customer Contact:				
DATE: _____							
<b>Masking Target Migrations FAs to the Source Devices:</b>			<b>Possible Extend Partition if new Volume is larger then old</b>				
<b>Script:</b> 03_OR_HOSTNAME_SMigMasking.cmd			<b>Possible DR Zoning Hosts - Target FA's:</b> DR TARGET Zoning Fabric 1			Cust EMC	
<b>Content of File:</b> symmask -sid TSID -wwn WWN1 -dir SMDIR -p X add dev DEV -nop			<b>Possible DR Zoning Hosts - Target FA's:</b> DR TARGET Zoning Fabric 2			Cust EMC	
<b>Create Device Group for Source DMX</b> _____	EMC		<b>Possible DR Device Groups change for new DMX !!</b> <b>Possible DR Test !!</b>			Cust	
<b>Script:</b> 04_OR_HOSTNAME_TDG.cmd			<b>For CLARIION:</b>			EMC	
<b>Content of File:</b> symdg -force delete OR_HOSTNAME_Source symdg create OR_HOSTNAME_Source -type REGULAR symld -sid SSID -g OR_HOSTNAME_Source add dev SDEV1			<b>Register HBAs -&gt; Failover Setting</b>				
<b>Create Device Group for Source DMX</b> _____	EMC		<b>Hosts to Storagegroup</b>			EMC	
<b>Script:</b> 05_OR_HOSTNAME_TDG.cmd			<b>Check Login at CLARIION</b>			EMC	
<b>Content of File:</b> symdg -force delete OR_HOSTNAME_Target symdg create OR_HOSTNAME_Target -type REGULAR symld -sid SSID -g OR_HOSTNAME_Target add dev SDEV1			<b>Test Application</b> <b>Ready Info from Customer</b>			Cust	
<b>Check Migrations File:</b> HOSTNAME_Prod.ini #DMX/Symmetrix (Target) #DMX/Symmetrix (Source)	EMC		<b>Migration done with or without Problems ?</b>			EMC	
symdev=TSID:TDEV1 symdev=SSID:SDEV1			<b>Service Request:</b> _____			EMC	
<b>Check for old OR Sessions</b>	EMC		<b>Mail to all involved Peoples with Status</b>			EMC	
symrcopy list			<b>Possible close Change Request:</b> _____			Cust	
symrcopy -sid xxxx list			<b>Optional Customer:</b>			Cust	
			<b>Optional EMC:</b>			EMC	
<b>Copy Flies to Fileshare:</b>	EMC		<b>Cleanup Migration:</b>			EMC	
<b>Example:</b> Z:\MIGRATION\20080109_HOSTNAME			<b>Remove Migration Zoning, Masking, Mapping.....</b>				



