



Sample  
***Installation  
Qualification Plan***

**Signatory Page**

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Functional Role	Name/Title/Department	Signature	Date
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By affixing their signatures, the individuals below acknowledge that they have reviewed the scope of the effort described in this Installation Qualification Plan for Sample.			
Functional Role	Name/Title/Department	Signature	Date
Technical Reviewer	Alan Runck/ Sr. Manager – IS Operations / Information Systems		
Validation Quality Reviewer	Joyce Brendle / Lead Compliance Analyst / Information Systems		

APPROVED BY:			
By signing this section, the individuals below agree that they have reviewed and approved the scope of the effort described in the Installation Qualification Plan for Sample. The signatures below represent the approval of the Installation Qualification Plan for Sample and acceptance by Technology Workshop Management representing the Qualification Team.			
Functional Role	Name/Title/Department	Signature	Date
IS Management	Deborah Urbanek / Vice President / Information Systems		

### Revision History

Version	Date	Author(s)	Notes
1.0	8/7/2012	Helen Hill	Initial creation

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## 1.0 Purpose

The purpose of this Installation Qualification Plan for Sample is to define the testing activities, expected results, and acceptance criteria for qualifying the installation and configuration of Sample. This Installation Qualification Plan for Sample is based on Technology Workshop’s approved procedure – IS-175.000 “Master Validation Plan” procedure.

## 2.0 Scope

A key component of Technology Workshop’s Disaster Recovery Procedure is offsite replication of essential Concert Drive Data Center files. Concert Drive Data Center files are stored on two types of computers:

- Computers running VMware ESX 3.0 Server
- Computers running Windows

All offsite computers are configured with VMware ESX 3.0 Server.

esxReplicator will be used to replicate the virtual machines (VMs) that are running on ESX Server computers. Sample, available from Sample Software, will be used to replicate key data from the Windows computers.

Concert Drive		Backup Destination		Replication Method	
Host Computer	VM	Host Computer	VM	esxReplicator	Sample
ESX Server	various	ESX Server	same as source	entire VM	X
Windows	N/A	ESX Server	Windows	X	selected files

The scope of this Installation Qualification Plan is limited to the qualification of the installation and configuration of Sample software.

*Note: Refer to the esxReplicator Installation Qualification Plan for testing activities planned for the esxReplicator software.*

### 3.0 Reference Documents

Document Number	Document Title
IS-072.000	Computer System Validation Procedure
IS-075.000	Master Validation Plan
IS-073.000	IS Good Documentation Practices
IS-074.001	IS Good Testing Practices

#### 4.0 Roles and Responsibilities

The roles and responsibilities associated with the Sample qualification are listed below.

Additional members may be added to the team and existing members may be utilized to assist in and/or perform additional roles.

Functional Role	Responsibilities	Name/Title/Department
Project Manager	<ul style="list-style-type: none"> <li>• Coordinates, reports on and is accountable for activities regarding the installation qualification of Sample</li> <li>• Controls the technical aspects of the project.</li> <li>• Helps resolve issues and scope changes.</li> <li>• Is responsible for the technical quality of the solution.</li> <li>• Prepares the Installation Qualification Plan and test script(s) for Sample</li> <li>• Prepares qualification summary report</li> </ul>	Helen Hill / Sr. Manager – IS Operations / Information Systems
Validation Quality Reviewer	<ul style="list-style-type: none"> <li>• Ensures the quality of the qualification process and the deliverables meet Technology Workshop’s policies and procedures.</li> <li>• Reviews the Installation Qualification Plan and test script(s) for Sample</li> <li>• Reviews the executed test script(s).</li> <li>• Reviews the qualification summary report and/or validation deliverable(s)</li> </ul>	Joyce Brendle / Lead Compliance Analyst/ Information Systems
Tester	<ul style="list-style-type: none"> <li>• Responsible for executing the test scripts</li> <li>• Responsible for documenting the test results</li> <li>• Provides assistance in preparing the test summary report</li> </ul>	Helen Hill / Sr. Manager – IS Operations / Information Systems
Technical Reviewer	<ul style="list-style-type: none"> <li>• Ensures that software documentation and test procedures comply with approved procedures.</li> <li>• Coordinates the availability of resources.</li> <li>• Is responsible for the resolution of issues and scope changes.</li> <li>• Reviews the Installation Qualification Plan and approves test scripts for Sample.</li> <li>• Reviews qualification summary report</li> </ul>	Alan Runck / Sr. Manager – IS Operations / Information Systems
IS Management	<ul style="list-style-type: none"> <li>• Provides guidance to the project team and assists team members in use of methodology.</li> <li>• Approves the Installation Qualification Plan for Sample.</li> <li>• Approves the qualification summary report.</li> </ul>	Deborah Urbanek / Vice President / Information Systems

## 5.0 Qualification Approach

### 5.1 Qualification Activities

As part of the Sample qualification process, the following activities will be performed.

#### 5.1.1 Prerequisite Software and Hardware

Source and target servers will be examined to verify that the minimum software and hardware requirements necessary for proper operation of Sample are met. The qualification deliverables and list of test script(s) associated with this activity are attached in Appendix A.

#### 5.1.2 Installation

Procedures for successful installation of Sample software will be documented and tested. The qualification deliverables and list of test script(s) associated with this activity are attached in Appendix B.

#### 5.1.3 Configuration

Configuration of Sample will be verified. The qualification deliverables and list of test script(s) associated with this activity are attached in Appendix C.



## 5.2 Qualification Deliverables

The following list of validation deliverables will be generated as a part of the Sample qualification process.

Deliverable
Installation Qualification Plan for Sample (this document)
Installation Qualification Summary Report for Sample

The execution of test scripts associated with the Sample qualification process will be performed manually in accordance with IS-074.001, "IS Good Testing Practices" and entries made in accordance with IS-073.000, "IS Good Documentation Practices".

Output generated during testing will be referenced from the actual results column of the corresponding test step and will be clearly labeled, dated, and initialed by the tester prior to being attached to the test script. Incidents that occur during testing will be recorded using LNIS1263, "Incident Form" and entered onto LNIS1265, "Incident Log Form". The Tester will be trained in IS-073.000, "IS Good Documentation Practices" and IS-074.001, "IS Good Testing Practices" prior to the execution of test scripts.

The Project Manager is responsible for maintaining the documentation in a secure location during the qualification process. The approved documents will be stored in accordance with IS-073.000, "IS Good Documentation Practices".

## 6.0 Project Acceptance Criteria

The Sample Installation Qualification Project will be accepted when the following conditions are met:

- All qualification activities identified in this document have been completed and documented and workarounds have been identified and implemented for any required functionality not met.
- All documentation and deliverables defined in this document are complete and approved as designated.

## 7.0 Installation Qualification Summary Report

An Installation Qualification Summary Report for Sample will be generated, which describes the activities associated with the qualification process. This report will summarize the qualification environment, testing performed, test results and any unresolved errors. If there are any gaps in the qualification process, the test will be labeled as Fail. Otherwise, the test will be labeled as Pass.

The project team shall accept the outstanding issues through their approval of the Installation Qualification Summary Report. Furthermore, the qualification summary report shall constitute qualification of the Sample installation as per applicable Technology Workshop procedures and predicate rules.

**8.0 Appendix A – Prerequisite Software and Hardware**

**8.1 Background**

As part of the Installation Qualification Plan for Sample, the hardware and software requirements for the Sample source and target servers will be verified.

**8.2 Sample Requirements**

Unlike esxReplicator, which replicates the entire image of a virtual machine, Sample replicates selected drives, directories, and/or files on Windows servers.

Sample requires a physical or virtual machine running Windows 2003 with a minimum of 128 MB memory. Sample also requires that the source and target servers are mirror images of each other except for the server name and IP address, which must be unique.

**8.3 Sample Application Manager Requirements**

In addition to the above requirements, the server running Sample Application Manager must have Microsoft .NET Framework version 2.0 or later installed.

**8.4 Qualification Approach**

The following test script will be executed to ensure that the Sample source and target servers meet the minimum hardware and software requirements.

Test Script ID	Test Script Title
Sample-PRE-01	Sample System Requirements Verification

**8.5 Acceptance Criteria**

The qualification activities associated with the Prerequisite Software and Hardware section will be accepted when all qualification activities identified in Sample-PRE-01 have been completed and documented and workarounds have been identified and implemented for any required functionality not met.

## 8.6 Installation Qualification Summary Report

The Installation Qualification Summary Report for Sample will be updated to describe the testing associated with the Prerequisite Software and Hardware section, including related incidents and resolutions if any, and the final testing status (Pass or Fail).

## 9.0 Appendix B –Installation

### 9.1 Background

This section provides installation procedures for Sample and Sample Application Manager.

### 9.2 Sample Installation Instructions<sup>1</sup>

*Note: Use these instructions if you are installing Sample for the first time or if you have completely uninstalled any previous version of Sample.*

1. Close any open applications.
2. Start the installation program by loading the Sample CD into the local CD-ROM drive. If auto-run is enabled, the program will start automatically. To manually start the program, select "Start >Run" and specify:  
<cd\_drive>:\autorun.exe.
3. The Sample installation program starts with an initial screen allowing you to install the software or read associated files. Select "Install Sample for Windows".
4. When the Sample installation program begins, you will be given the opportunity to check for more recent versions of the software.

*Note: If you do not want to check for later versions, select "No" and click "Next."*

*Note If you want to check for later versions, select "Yes" and click "Next." The installation program will establish an Internet connection from your machine to the Sample Software web site.*

5. Review and accept the Sample license agreement to continue with the installation program. Click "Next" to continue.
6. Select "Client and Server Components" and click "Next."

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<sup>1</sup> Refer to *Sample Getting Started* for additional information.

7. Select "Complete" for the type of Sample installation and click "Next."
8. Enter your User Name, Organization, and Activation Code (a 16-character, alphanumeric activation code that applies the appropriate Sample license to your installation). Click "Next" to continue.
9. Confirm the Activation Code and click "Next."
10. Sample uses system memory to store data in queues. Specify the maximum amount of system memory to be used.
11. When the Sample system memory queue is exhausted, Sample will queue to disk. Specify the size and location of the disk queue.
12. Click "Next" to continue.
13. The Sample security information screen appears next. Review this information and click "Next" to continue with the installation.
14. If you are satisfied with the selections you have made and are ready to begin copying the Sample files, click "Install."
15. After the files have completed copying, click "Finish" to exit the installation program.
16. Restart the computer to complete the Sample installation.

### **9.3 Sample Application Manager Installation<sup>2</sup>**

The Sample Application Manager automates the setup and configuration of replication and failover monitoring for Exchange and SQL servers. Sample Application Manager is installed on the target server by running the Application Manager installation file downloaded from the Sample Software support website or from the installation media.

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<sup>2</sup> See *Sample Application Manager User's Guide* for additional information.

#### 9.4 Qualification Approach

The following test script will be executed to ensure that the Sample applications are properly installed.

Test Script ID	Test Script Title
Sample-INS-01	Sample Source Server Installation Verification
Sample-INS-02	Sample Target Server Installation Verification

#### 9.5 Acceptance Criteria

The qualification activities associated with the Installation section will be accepted when all qualification activities identified in Sample-INS-01 and Sample-INS-02 have been completed and documented and workarounds have been identified and implemented for any required functionality not met.

#### 9.6 Installation Qualification Summary Report

The Installation Qualification Summary Report for Sample will be updated to describe the testing associated with the Installation section, including related incidents and resolutions if any, and the final testing status (Pass or Fail).

## 10.0 Appendix C –Configuration

### 10.1 Background

After successful installation of Sample, the server settings need to be configured or verified.

### 10.2 Server Properties

The following settings, located in the Sample Server Properties dialog box will be verified:

Category	Settings
General	Basic settings including the machine's identity
Setup	Settings that are initialized when Sample is started
Network	Settings that control network communications
Queue	Settings for Sample queue usage
Source	Setting specific to the source computer
Target	Settings specific to the target computer
Database	Settings that specify the name and location for the database files used by Sample
Logging	Settings for Sample log files
E-mail Notification	Settings that enable messages logged to the Windows Event Viewer to be sent as e-mail messages to a specified address

### 10.3 Qualification Approach

The following test script will be executed to ensure that Sample is properly configured.

Test Script ID	Test Script Title
Sample-CFG-01	Sample Source Server Configuration Verification
Sample-CFG-02	Sample Target Server Configuration Verification

#### **10.4 Acceptance Criteria**

The qualification activities associated with the Configuration section will be accepted when all qualification activities identified in Sample-CFG-01 and Sample-CFG-02 have been completed and documented and workarounds have been identified and implemented for any required functionality not met.

#### **10.5 Installation Qualification Summary Report**

The Installation Qualification Summary Report for Sample will be updated to describe the testing associated with the Configuration section, including related incidents and resolutions if any, and the final testing status (Pass or Fail).