

Hitachi Dynamic Replicator - Scout Quick Installation/Upgrade Guide

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About this document

The purpose of this document is to describe the procedures for install Scout 5.1 or upgrade to Scout 5.1 from existing versions. This document also lists the package contents.

Hitachi Dynamic Replicator - Scout Package Contents

The installable package nomenclature of Scout 5.1 is self-explanatory; it provides the details of operating system in the name of the package itself apart from the product type. For Windows, the file is a setup program with the extension ".exe". For non-Windows platforms, the file is a compressed tar ball with the extension ".tar.gz".

Unified Agent

Operating System	File Name
Windows 2000	InMage_UA_5.10.1_Win2K3_GA_2Sep2009.exe
Windows 2003	
Enterprise	
Windows 2003	
Professional	
Windows 2003 Data	
Center	
Windows 2008	
Windows 2008 Hyper	
V	
Windows 2008 Cluster	
Windows 2008 R2	
Solaris-5-8 SPARC	InMage_UnifiedAgent_5.10.1_Solaris-5-8-Sparc_GA_02Sep2009_release.tar.gz
Solaris-5-9 SPARC	InMage_UnifiedAgent_5.10.1_Solaris-5-9-Sparc_GA_02Sep2009_release.tar.gz
Solaris-5-10 SPARC	InMage_UnifiedAgent_5.10.1_Solaris-5-10-Sparc_GA_02Sep2009_release.tar.gz
Solaris-5-10 x86 64-bit	InMage_UnifiedAgent_5.10.1_Solaris-5-10-x86-64_GA_02Sep2009_release.tar.gz
ELORCL4U4-32	InMage_UnifiedAgent_5.10.1_i386_ELORCL4U4-32_GA_02Sep2009_release.tar.gz
RHEL4 U3 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL4U3-32_GA_02Sep2009_release.tar.gz
CentOS 4.3 32-bit	
RHEL4 U3 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL4U3-64_GA_02Sep2009_release.tar.gz
CentOS 4.3 64-bit	
RHEL4 U4 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL4U4-32_GA_02Sep2009_release.tar.gz
CentOS 4.4 32-bit	
RHEL4 U4 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL4U4-64_GA_02Sep2009_release.tar.gz
CentOS 4.4 64-bit	
RHEL4 U5 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL4U5-32_GA_02Sep2009_release.tar.gz
CentOS 4.5 32-bit	
RHEL4 U5 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL4U5-64_GA_02Sep2009_release.tar.gz
CentOS 4.5 64-bit	

RHEL4 U6 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL4U6-32_GA_02Sep2009_release.tar.gz
CentOS 4.6 32-bit	
RHEL4 U6 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL4U6-64_GA_02Sep2009_release.tar.gz
CentOS 4.6 64-bit	
RHEL4 U7 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL4U7-32_GA_02Sep2009_release.tar.gz
CentOS 4.7 32-bit	
RHEL4 U7 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL4U7-64_GA_02Sep2009_release.tar.gz
CentOS 4.7 64-bit	
RHEL4 U8 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL4U8-32_GA_02Sep2009_release.tar.gz
CentOS 4.8 32-bit	
RHEL4 U8 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL4U8-64_GA_02Sep2009_release.tar.gz
CentOS 4.8 64-bit	
RHEL5 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL5-32_GA_02Sep2009_release.tar.gz
CentOS 5 32-bit	
RHEL5 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL5-64_GA_02Sep2009_release.tar.gz
CentOS 5 64-bit	
RHEL5 U1 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL5U1-32_GA_02Sep2009_release.tar.gz
CentOS 5.1 32-bit	
RHEL5 U1 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL5U1-64_GA_02Sep2009_release.tar.gz
CentOS 5.1 64-bit	
RHEL5 U2 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL5U2-32_GA_02Sep2009_release.tar.gz
CentOS 5.2 32-bit	
RHEL5 U2 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL5U2-64_GA_02Sep2009_release.tar.gz
CentOS 5.2 64-bit	
RHEL5 U3 32-bit	InMage_UnifiedAgent_5.10.1_i386_RHEL5U3-32_GA_02Sep2009_release.tar.gz
CentOS 5.3 32-bit	
RHEL5 U3 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_RHEL5U3-64_GA_02Sep2009_release.tar.gz
CentOS 5.3 64-bit	
Citrix XenServer 4.0.1	InMage_UnifiedAgent_5.10.1_i386_CITRIX-XEN-4.0.1-4249p-32_GA_02Sep2009_release.tar.gz
Citrix XenServer 4.1.0	InMage_UnifiedAgent_5.10.1_i386_CITRIX-XEN-4.1.0-7843p-32_GA_02Sep2009_release.tar.gz
Citrix XenServer 5.0.0	InMage_UnifiedAgent_5.10.1_i386_CITRIX-XEN-5.0.0-10918p-32_GA_02Sep2009_release.tar.gz
SLES9-SP2 32-bit	InMage_UnifiedAgent_5.10.1_i586_SLES9-SP2-32_GA_02Sep2009_release.tar.gz
SLES9-SP3 32-bit	InMage_UnifiedAgent_5.10.1_i586_SLES9-SP3-32_GA_02Sep2009_release.tar.gz
SLES9-SP3 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_SLES9-SP3-64_GA_02Sep2009_release.tar.gz
SLES-10 32-bit	InMage_UnifiedAgent_5.10.1_i586_SLES10-32_GA_02Sep2009_release.tar.gz
SLES-10 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_SLES10-64_GA_02Sep2009_release.tar.gz
SLES-10-SP1 32-bit	InMage_UnifiedAgent_5.10.1_i586_SLES10-SP1-32_GA_02Sep2009_release.tar.gz
SLES-10-SP1 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_SLES10-SP1-64_GA_02Sep2009_release.tar.gz
SLES-10-SP2-32	InMage_UnifiedAgent_5.10.1_i586_SLES10-SP2-32_GA_02Sep2009_release.tar.gz
SLES-10-SP2 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_SLES10-SP2-64_GA_02Sep2009_release.tar.gz
OpenSuSE10 32-bit	InMage_UnifiedAgent_5.10.1_i586_OPENSUSE10-32_GA_02Sep2009_release.tar.gz
OpenSuSE10 64-bit	InMage_UnifiedAgent_5.10.1_x86_64_OPENSUSE10-64_GA_02Sep2009_release.tar.gz
SLES11 32-bit	InMage_UnifiedAgent_5.10.1_i586_SLES11-32_GA_02Sep2009_release.tar.gz
SLES11 64-bit	InMage_UnifiedAgent_5.10.1_i586_SLES11-64_GA_02Sep2009_release.tar.gz
Debian-etch-4.0 32-bit	InMage_UnifiedAgent_5.10.1_i386-DEBIAN-ETCH-32_GA_02Sep2009_release.tar.gz
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Debian-etch-4.0 64-bit	InMage_UnifiedAgent_5.10.1_amd64-DEBIAN-ETCH-64_GA_02Sep2009_release.tar.gz
UBUNTU8 64-bit	InMage_UnifiedAgent_5.10.1_amd64_UBUNTU8-64_GA_02Sep2009_release.tar.gz

FX Agent

Operating System	File Name
AIX 5.2	InMage_FX_5.10.1_AIX52_GA_02Sep2009 .tar.gz
AIX 5.3	InMage_FX_5.10.1_AIX53_GA_02Sep2009 .tar.gz
AIX 6.1	InMage_FX_5.10.1_AIX61_GA_02Sep2009 .tar.gz
HP-UX Itanium 11i v3	InMage_FX_5.10.1_HP-UX-Itanium-11iv3_GA_02Sep2009 .tar.gz
HP-UX Itanium 11i v2	InMage_FX_5.10.1_HP-UX-Itanium-11iv2_GA_02Sep2009.tar.gz
HP-UX PA-RISC	InMage_FX_5.10.1_HP-UX-PA-RISC_GA_02Sep2009.tar.gz
RHEL3-32	InMage_FX_5.10.1_i386_RHEL3-32_GA_02Sep2009_release.tar.gz
SLES9 32-bit	InMage_FX_5.10.1_i586_SLES9-32_GA_02Sep2009_release.tar.gz
SLES9 64-bit	InMage_FX_5.10.1_x86_64_SLES9-64_GA_02Sep2009_release.tar.gz

CX Server (Configuration Server/Process Server)

Operating System	File Name
Windows 2003 32-Bit	InMage_CX_5.10.1_Win2K3_GA_02Sep2009.exe
	InMage_CX_TP_5.10.1_Win2K3_GA_02Sep2009.exe
	InMage_PI_5.10.1_Win2K3_GA_02Sep2009.exe
RHEL 5 32-bit	InMage_CX_5.10.1_RHEL5-32_GA_02Sep2009.tar.gz
CentOS 5 32-bit	
RHEL 5 64-bit	InMage_CX_5.10.1_RHEL5-64_GA_02Sep2009.tar.gz
CentOS 5 64-bit	
RHEL 5 U1 32-bit	InMage_CX_5.10.1_RHEL5U1-32_GA_02Sep2009.tar.gz
CentOS 5.1 32-bit	
RHEL 5 U1 64-bit	InMage_CX_5.10.1_RHEL5U1-64_GA_02Sep2009.tar.gz
CentOS 5.1 64-bit	
RHEL 5 U2 32-bit	InMage_CX_5.10.1_RHEL5U2-32_GA_02Sep2009.tar.gz
CentOS 5.2 32-bit	
RHEL 5 U2 64-bit	InMage_CX_5.10.1_RHEL5U2-64_GA_02Sep2009.tar.gz
CentOS 5.2 64-bit	
RHEL 5 U3 32-bit	InMage_CX_5.10.1_RHEL5U3-32_GA_02Sep2009.tar.gz
CentOS 5.3 32-bit	
RHEL 5 U3 64-bit	InMage_CX_5.10.1_RHEL5U3-64_GA_02Sep2009.tar.gz
CentOS 5.3 64-bit	

CX-HA (CX - High Availability)

Operating System	File Name
RHEL 5 64 bit	InMage_CX-HA_5.10.1_RHEL5-64_GA_02Sep2009.tar.gz
Cent OS 64 bit	
RHEL 5 U1 64-bit	InMage_CX-HA_5.10.1_RHEL5U1-64_GA_02Sep2009.tar.gz
CentOS 5.1 64-bit	
RHEL 5 U2 64-bit	InMage_CX-HA_5.10.1_RHEL5U2-64_GA_02Sep2009.tar.gz
CentOS 5.2 64-bit	
RHEL 5 U3 64-bit	InMage_CX-HA_5.10.1_RHEL5U3-64_GA_02Sep2009.tar.gz
CentOS 5.3 64-bit	

RX Server

Operating System	File Name
RHEL 5 32-bit	InMage_RX_5.10.1_RHEL5-32_GA_02Sep2009.tar.gz
CentOS 5 32-bit	
RHEL 5 64-bit	InMage_RX_5.10.1_RHEL5-64_GA_02Sep2009.tar.gz
CentOS 5 64-bit	
RHEL 5 U1 32-bit	InMage_RX_5.10.1_RHEL5U1-32_GA_02Sep2009.tar.gz
CentOS 5.1 32-bit	
RHEL 5 U1 64-bit	InMage_RX_5.10.1_RHEL5U1-64_GA_02Sep2009.tar.gz
CentOS 5.1 64-bit	
RHEL 5 U2 32-bit	InMage_RX_5.10.1_RHEL5U2-32_GA_02Sep2009.tar.gz
CentOS 5.2 32-bit	
RHEL 5 U2 64-bit	InMage_RX_5.10.1_RHEL5U2-64_GA_02Sep2009.tar.gz
CentOS 5.2 64-bit	
RHEL 5 U3 32-bit	InMage_RX_5.10.1_RHEL5U3-32_GA_02Sep2009.tar.gz
CentOS 5.3 32-bit	
RHEL 5 U3 64-bit	InMage_RX_5.10.1_RHEL5U3-64_GA_02Sep2009.tar.gz
CentOS 5.3 64-bit	

Backward Compatibility

Scout aims at providing interoperability of older versions of host agents with newer version of the CX server. 5.0 agents are compatible with the new 5.1 CX server.

For 5.1 GA agent deployments, it is strongly recommended to have a separate 5.1 GA CX server. However, if 5.0 CX server and agents are currently in use, they can be upgraded to 5.1 GA. Also, the 5.0 release agents are compatible with a 5.1 CX server. The table below provides CX server and Agent compatibility matrix

	5.1 GA Agents	5.0 GA Agents	4.2 GA Agents	4.1 SP1 Agents
5.1 GA CS/PS server	Compatible	Compatible	Compatible	Compatible
5.0 GA CS/PS server	Incompatible	Compatible	Compatible	Compatible
4.2 GA CX server	Incompatible	Incompatible	Compatible	Compatible
4.1 SP1 CX server	Incompatible	Incompatible	Incompatible	Compatible

New Installation

CX Server: (Configuration Server / Process Server / Both)

Windows

- o Double-click on the *CX Third-party* setup executable. This will install the third-party software required for the functioning of CX Server.
- o Follow the instructions displayed during the install
- o Once the third-party software is installed successfully, double-click on the *CX Server* setup executable.
- This will show the following install options. Select one of the option and follow the instructions displayed there after
 - Configuration Server
 - Process Server
 - Both Configuration and Process Servers
- o On successful installation of CX Server, a reboot is required.

Linux

- Copy the binary that suits your operating system to a temporary directory
- Uncompress the binary using the command "tar -xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see 2 files named "check.sh" and "install.sh" under "Scout-CX-<OS-NAME>" directory. Change the working directory to "Scout-CX-<OS-NAME>".
- Execution of "check.sh" is highly recommended as it is a diagnostic tool for performing the preinstall checks and provides a report of its findings. Please execute it as follows: "./check.sh"
- To continue with installation of *CX Server*, please execute the install shell script as follows: "./install.sh".
- o This will show the following install options. Select one of the option and follow the instruction displayed there after
 - 1. Configuration Server
 - 2. Process Server
 - 3. Both
- o Follow the instructions displayed from there on.
- o You can add or remove the process servers by invoking the same installer again.

Configuration Server/Process Server Compatibility Matrix

Configuration Server	Process Server				
	Win 2K3	RHEL 4.x	RHEL 5.x	CentOS 4.x	CentOS 5.x
Win 2K3	Compatible	Compatible	Compatible	Compatible	Compatible
RHEL 4.x	Compatible	Compatible	Compatible	Compatible	Compatible
RHEL 5.x	Compatible	Compatible	Compatible	Compatible	Compatible
CentOS 4.x	Compatible	Compatible	Compatible	Compatible	Compatible
CentOS 5.x	Compatible	Compatible	Compatible	Compatible	Compatible

VX Agent

Windows

- Double-click on the Unified Agent setup executable.
- o If the setup program detects a previously installed Windows VX agent, it will prompt for an upgrade to 5.1 GA version of the agent. Otherwise it will prompt for a fresh install.
- Follow the instructions displayed from there on.
- O Upon a successful install, if a reboot is required the setup program will inform the user about the same by popping up a message box.

Linux

- Copy the binary that suits your operating system to a temporary directory.
- Uncompress the binary using the command "tar -xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see a file named "install". Please execute it as follows: "./install"
- o If the above program detects a previously installed Linux VX agent, it will prompt for an upgrade to 5.1 GA version of the agent. Otherwise it will prompt for a fresh install.
- o Follow the instructions displayed from there on
- O Upon successful install, if a reboot is required the install program will inform the user about the same by printing a relevant message on the terminal.

Notes:

Refer to the Upgrade section for upgrade of existing VX agent

FX Agent

Windows

- o Double-click on the Unified Agent setup executable.
- o If the setup program detects a previously installed Windows FX agent, it will prompt for an upgrade to 5.1 GA version of the agent. Otherwise it will prompt for a fresh install.
- Follow the instructions displayed from there on
- As File Replication Agent supports data encryption during replication, through a secure shell (SSH) mechanism follow the steps given below for installation of *OpenSSH Server 4.6* for Windows:
 - Double-click on the OpenSSHServer4.6 setup.exe
 - Follow the instructions displayed during the install

■ Linux/UNIX

- Copy the binary that suits your operating system to a temporary directory.
- Uncompress the binary using the following commands:
 - gunzip <appropriate binary>. The output of this command will be a .tar archive
 - tar –xvf <tar archive>

- As a result of the above-performed un-compression, you may see a file named "install". Please
 execute it as follows: "./install"
- o If the setup program detects a previously installed Linux FX agent, it will prompt for an upgrade to 5.10.1 GA version of the agent. Otherwise it will prompt for a fresh install.
- o Follow the instructions displayed from there on

Notes:

Refer to the **Upgrade** section for upgrade of existing VX agent

Unified Agent

Unified Agent is a combined setup of both Agents VX and FX. It is a single installable tar which contains both the binaries of VX and FX. This can be used to install FX/VX/Both agents in a single shot.

Windows

- Double-click on the Unified Agent setup executable (InMage UA 5.10.1 Win2K3 GA 02Sep2009.exe)
- This will show the following install options. Select one of the option and follow the instructions displayed there after
 - File Replication Agent
 - Volume Replication Agent
 - Both File Replication and Volume Replication Agents
- As File Replication Agent supports data encryption during replication, through a secure shell (SSH) mechanism follow the steps given below for installation of *OpenSSH Server 4.6* for Windows:
 - Double-click on the OpenSSHServer4.6 setup.exe
 - Follow the instructions displayed during the install
- O Upon a successful install, if a reboot is required the setup program will inform the user about the same by popping up a message box.

Special Instructions for Xiotech (4.1/4.2 GA) to Hitachi Dynamic Replicator (5.1 GA) Upgrade:

- Double-click on the Unified Agent setup executable which is specific for Xiotech to Hitachi
 Dynamic Replicator upgrade (Xiotech_to_InMage_UA_5.10.1_Win2K3_GA_2Sep2009.exe)
- o Continue the remaining steps as normal upgrade as mentioned above.

■ Linux/Solaris

- Copy the binary that suits your operating system to a temporary directory.
- Uncompress the binary using the following commands:
 - gunzip <appropriate binary>. The output of this command will be a .tar archive
 - tar –xvf <tar archive>
- As a result of the above-performed un-compression, you may see a file named "install".
- Please execute it as follows: "./install"
- o This will prompt for the fresh install of 5.10.1 GA version of the agent:
- This will show the following install options. Select one of the option and follow the instructions displayed there after

- File Replication Agent
- Volume Replication Agent
- Both

CX-HA: (CX – High Availability)

CX-HA provides the high availability (clustering) solution for Configuration Server (CX). High Availability refers to a multiprocessing system that can quickly recover from a failure. It also refers to being able to service a component in the system without shutting down the entire operation. In this model, the CX Server is setup on a Linux HA cluster configuration. In this configuration there are two CX Server nodes, one being an active node and the other node being passive catering to requests from agents. If one of the CX nodes goes down, the passive CX server takes over and it is responsible for ensuring that the replications are kept in progress.

Notes:

This is supported only on RHEL5x platforms

- Copy the binary that suits your operating system to a temporary directory.
- Uncompress the binary using the command "tar –xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see a file named "install_ha.sh".
- Please execute it as follows: "./install_ha.sh"
- This will prompt for the fresh install of 5.10.1 GA version of the CX Server, CX-HA and FX Agent:
- While installing CX Server, the installer will show the following install options

You can install the following:

- 1. Configuration Server
- 2. Process Server
- 3. Both
- The recommended option is "3 Both", i.e. having the configuration server and process server on the same machine.
- Please follow the instructions displayed there on.

RX Server:

RX server helps in consolidates backup administration from one single interface rather than depend on individual CX UI to monitor several CX servers. You will be able to monitor a group of CX servers on one interface thus simplifying monitoring and saving time. Some of the advantages of using the RX server are:

- Centralized monitoring ability for all CX servers.
- Dashboard with centralized and consolidated reports from all CX servers including CX health, bandwidth usage, alerts and license statistics.
- Multi-tenant architecture.
- Linux
 - Copy the binary that suits your operating system to a temporary directory

- Uncompress the binary using the command "tar -xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see 2 files named "check.sh" and "install.sh" under "Scout-RX-<OS-NAME>" directory. Change the working directory to "Scout-RX-<OS-NAME>".
- Execution of "check.sh" is highly recommended as it is a diagnostic tool for performing the preinstall checks and provides a report of its findings. Please execute it as follows: "./check.sh"
- o To continue with installation of RX Server, please execute the install shell script as follows: "./install.sh".
- o Follow the instructions displayed from there on.

Remote Push Server: Installing the Agents through the CX UI

For installing the unified agent through the CX UI on windows platforms, you will need to determine the server that will act as a proxy server. This is not required for Linux clients. Prepare the list of machines where the unified agent is to be installed. Ensure that none of the machines are offline or rebooted while installing, else the installation will fail

You will be able to install the unified agent on both windows and Linux platforms through the CX UI. The unified agent installer is located on the CX server. The proxy server (windows machine) is used to perform installs on the windows clients. You will need to enter the IP address range of the clients, domain name, user name and password.

The CX server transfers the unified agent to the windows clients through the proxy server; however this is not required for Linux clients. The agent installer is started once it reaches the client machine. After installing, these agents are pointed to the CX server. You will need to assign appropriate licenses before using the agents.

Windows

- Double-click on the *Push Installer* setup executable (InMage PI 5.10.1 Win2K3 GA 02Sep2009.exe)
- o This will prompt for CX IP, Port Number, user name and password
- o Please specify the required inputs and follow the instructions displayed from there on

Linux

o There is no separate push installer required for Linux as the CX-Server itself will take care of this.

Limitations:

Scout 5.1 CX server does not have the ability to install HPUX PA-RISC, RHEL 3 32-bit and SLES9 32/64 bit FX agents using "Remote Push Server"

Notes:

Refer the Hitachi Dynamic Replicator Installation Guide for more details and screen shots.

Upgrade

Order of upgrade

An upgrade from older versions of Scout (4.1 SP1, 4.2 GA and 5.0 GA) to Scout 5.1 GA is performed as follows. Please note that the upgrade has to be done in the following order only:

- 1. Upgrade Scout CX Server
- 2. Upgrade Scout FX/VX/Unified agent on the target system
- 3. Upgrade Scout FX/VX/Unified agent on the source system.

Upgrade procedure

Please note that NO cross-platform installations (attempting to install a binary not intended for the machine's operating system) are supported in Scout 5.1 GA except where indicated otherwise in the above-mentioned tables for the files packaged. If an attempt is made to try the same, the installation will abort after displaying an appropriate error message.

Windows CX Server:

- 1. Double-click on the *CX Third-party* setup executable. This will install the third-party software required for the functioning of CX Server.
- 2. For upgrade of existing CX server to Scout 5.1 GA CX Server, copy the relevant setup program (InMage_CX_5.10.1_Win2K3_GA_02Sep2009.exe) onto the Windows machine and double-click on it to execute.
- 3. This will find the existing CX Server version and prompt for the confirmation of Upgrade to 5.1.
- 4. Follow the instructions displayed thereafter;
- 5. Upon successful completion both CS and PS get installed on the same machine if the upgrade is from lower versions than 5.0 GA. If the upgrade is from 5.0 GA, this will upgrade to CS/PS/Both based on the installed CX mode. The same installer can be run to add or remove the process servers. Refer to "Installation" section for more details.

Currently the following older versions of CX servers can be upgraded to DR Scout 5.1.

- o 4.1SP1
- o 4.2GA
- o 5.0GA

Notes:

Please note that you can perform a seamless upgrade from earlier versions of CX server to DR Scout 5.1 even though DR Scout 5.1 comes with separate Configuration Server and Process Server model.

However the upgrade will result in installation of both Configuration Server and Process Server if the upgrade is from lower versions than 5.0 GA. If the upgrade is from 5.0 GA, this will upgrade to CS/PS/Both based on the installed CX mode on the same machine.

Linux CX Server:

For Upgrade of Scout 5.1 GA CX Server on any of the Linux platforms supported by Hitachi Dynamic Replicator (see section "OS Compatibility"), please follow these steps:

- 1. Copy the binary that suits your operating system to a temporary directory
- 2. Uncompress the binary using the command "tar –xvfz <appropriate binary>"
- 3. As a result of the above-performed un-compression, you may see two files named "check.sh" and "install.sh" under "Scout-CX-<OS-NAME>" directory. Change the working directory to "Scout-CX-<OS-NAME>".
- 4. Please execute the install shell script as follows: "./install.sh"
- 5. The above program detects if a 4.1 SP1/4.2 GA/5.0GA version of the Linux CX server is already installed on the system and if it finds one, it will prompt for an upgrade.
- 6. Follow the instructions displayed from there on.
- 7. Upon successful completion both CS and PS get installed on the same machine if the upgrade is from lower versions than 5.0 GA. If the upgrade is from 5.0 GA, this will upgrade to CS/PS/Both based on the installed CX mode. The same installer can be run to add or remove any of the process servers. Refer to "Installation" section for more details.

Currently the following older versions of CX servers can be upgraded to DR Scout 5.1.

- o 4.1SP1
- o 4.2GA
- o 5.0GA

Notes:

Please note that you can perform a seamless upgrade from earlier versions of CX server to DR Scout 5.1 even though DR Scout 5.1 comes with separate Configuration Server and Process Server model.

However the upgrade will result in installation of both Configuration Server and Process Server if the upgrade is from lower versions than 5.0 GA. If the upgrade is from 5.0 GA, this will upgrade to CS/PS/Both based on the installed CX mode on the same machine.

Special Instructions for Xiotech (4.1/4.2 GA) to Hitachi Dynamic Replicator (5.1) Linux CX Migration/Upgrade:

- 1. As a first step, Please follow the instructions mentioned in the document "XiotechTS SLES Data Migration.doc" for migration of CX.
- 2. Once migration is completed, .Please follow the above upgrade steps.

VX Agent

Windows

- o Check if older version of VX Agent is running on the same machine.
- o Stop the agent before proceeding further.
- For upgrade of existing VX Agent to Scout 5.1 GA VX Agent copy the relevant setup program
 (InMage_UA_5.10.1_Win2K3_GA_02Sep2009.exe) onto the Windows machine and double-click
 on it to execute it.

- If the setup program detects a previously installed Windows VX agent, it will prompt for an upgrade to version 5.1 GA of the agent and addition of FX agent if the FX is not installed in the setup.
- Follow the instructions displayed during the upgrade.
- Upon a successful install, if a reboot is required the setup program will inform the user about the same by popping up a message box. Reboot of the agent machine is required for the new changes to take in to effect.

Linux

- o Copy the binary that suits your operating system to a temporary directory
- Uncompress the binary using the command "tar -xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see a file named "install". Please execute it as follows: "./install"
- If the setup program detects a previously installed Linux VX agent, it will prompt for an upgrade to version 5.1 GA of the agent.
- o Follow the instructions displayed from there on.
- Upon a successful install, if a reboot is required the setup program will inform the user about the same by popping up a message box.

FX Agent

Windows

- o Check if older version of FX Agent is running on the same machine.
- Stop the agent before proceeding further.
- For upgrade of existing FX Agent to Scout 5.1 GA FX Agent copy the relevant setup program
 (InMage_UA_5.10.1_Win2K3_GA_02Sep2009.exe) onto the Windows machine and double-click
 on it to execute it.
- o If the setup program detects a previously installed Windows FX agent, it will prompt for an upgrade to version 5.1 GA of the agent and addition of VX agent if the VX is not installed in the setup.
- Follow the instructions displayed during the upgrade.

Linux/UNIX

- Copy the Unified Agent binary or individual FX binary (if Unified Agent binary is not available)
 that suits your operating system to a temporary directory.
- O Uncompress the binary using the commands:
 - gunzip <appropriate binary>. The output of this command will be a .tar archive
 - "tar –xvz <tar archive>"
- As a result of the above-performed un-compression, you may see a file named "install". Please execute it as follows: "./install"
- o If the setup program detects a previously installed Linux/UNIX FX agent, it will prompt for an upgrade to version 5.1 GA of the agent.
- o If the binary is Unified Agent then it will prompt the user addition of VX agent apart of FX upgradation.
- o Follow the instructions displayed from there on.

Unified Agent

Unified Agent is a combined setup of both Agents VX and FX. It is a single installable tar which contains both the binaries of VX and FX. This can be used to upgrade FX/VX/Both agents in a single shot.

Windows

- Double-click on the Unified Agent setup executable (InMage UA 5.10.1 Win2K3 GA 02Sep2009.exe)
- This will detect the existing agents VX/FX/Both and upgrade depends on that. If any one of the agent is already installed in the setup, this will upgrade the existing agent and prompt the user for the addition of the other agent.
- If both agents are present, it will upgrade both
- As File Replication Agent supports data encryption during replication, through a secure shell (SSH) mechanism follow the steps given below for installation of *OpenSSH Server 4.6* for *Windows*:
 - Double-click on the OpenSSHServer4.6 setup.exe
 - Follow the instructions displayed during the install
- o Upon a successful install, if a reboot is required the setup program will inform the user about the same by popping up a message box.

Linux

- o Copy the binary that suits your operating system to a temporary directory.
- Uncompress the binary using the command "tar –xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see a file named "install".
- Please execute it as follows: "./install"
- This will detect the existing agents VX/FX/Both and upgrade depends on that. If any one of the agent is already installed in the setup, this will upgrade the existing agent and prompt the user for the addition of the other agent.
- o If both agents are present, it will upgrade both

CX-HA: (CX High Availability)

Please follow the steps provided below for upgrade of existing versions of CX-HA to DR Scout 5.1 CX-HA. Currently upgrade is supported from the following versions of CX/CX-HA servers to DR Scout 5.1 CX-HA.

- 1. 4.1SP1 (CX / CX-HA)
- 2. 4.2GA (CX / CX-HA)
- 3. 5.0GA (CX / CX-HA)
- As a first step, prior to upgrade, remove the FX jobs from the CX server which were earlier configured to do a db sync between active-passive and passive-active CX nodes.
- Copy the binary that suits your operating system to a temporary directory
- Uncompress the binary using the command "tar –xvfz <appropriate binary>"
- As a result of the above-performed un-compression, you may see a file named "install ha.sh"

- Please execute it as follows: "./install ha.sh"
- If the setup program detects a previously installed CX-HA agent, it will prompt for an upgrade to version CX-HA 5.1 GA.
- This upgrade will be carried out in three phases through the single installation (install_ha.sh)
- First this will upgrade the CX Server to 5.1, then the FX Agent to 5.1 and finally the CX-HA to 5.1
- Follow the instructions displayed from there on.
- After the upgrade is complete, navigate to "System -> CX Cluster" link and verify if the HA-nodes are registered properly
- Once both the HA nodes are registered with the configuration server, click on the "Enable DB Sync" button. This will setup FX jobs automatically to run every 5 minutes.

Notes:

- 1. There is no process to uninstall the upgrade separately.
- 2. Scout does not package any file system related components/drivers.

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