

# CA ARCserve® Replication and High Availability

## Release Notes

r15.2



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## Product References

This document references the following CA Technologies products:

- CA ARCserve® Replication
- CA ARCserve® High Availability (HA)
- CA ARCserve® Assured Recovery
- CA ARCserve® Content Distribution

Throughout this Guide, the term, CA ARCserve RHA, is used to represent the entire product family, which was previously sold as CA XOsoft Replication (WANsync) and CA XOsoft High Availability (WANsyncHA).

### Contact Technical Support

For your convenience, CA provides one site where you can access the information you need for your Home Office, Small Business, and Enterprise CA products. At [arcsolve.com/support](http://arcsolve.com/support), you can access the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

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# Chapter 1: Welcome

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Welcome to the CA ARCserve RHA Release Notes. This document contains the following information relating to use of the CA ARCserve RHA family of products:

- New and discontinued features, as well information about how the enhancements made to existing features might affect you
- Issues discovered after publication that you should know before you use this product
- A list of the fixes included in this release

For similar information about previous releases, see the corresponding Release Summaries located on the Support site.

1. Go to [support.ca.com](http://support.ca.com).
2. Click Product Documentation from the Get Support box.
3. Select CA ARCserve Replication and High Availability from the Select a Product list.
4. Select the current version from the Select a Release list.
5. Click Go. A list of document titles is displayed. Download the Release Notes for the desired service pack.

Throughout this document, the term "CA ARCserve RHA" refers to all products, unless otherwise specified.



# Chapter 2: CA ARCserve RHA New Features and Enhancements

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This section describes the new features and enhancements made to the CA ARCserve RHA family of products, formerly sold as *CA XOsoft*.

This section contains the following topics:

[New Features and Enhancements Effective with r15](#) (see page 9)

[New Features and Enhancements Effective with r15 SP2](#) (see page 15)

## New Features and Enhancements Effective with r15

### Hyper-V Enhancements

The following enhancements related to virtualization have been included in this release:

#### **Full System**

With Full System scenarios, you can copy an entire physical machine to a virtual machine on a Hyper-V-enabled Replica server.

#### **DNS Redirection in Hyper-V**

Hyper-V HA scenarios now support DNS redirection.

### Microsoft Dynamics

Effective with this release, CA ARCserve RHA provides replication and high availability protection to Microsoft Dynamics CRM environments.

## Microsoft SharePoint Server Enhancements

Effective with this release, CA ARCserve RHA supports your Microsoft SharePoint Server 2007 distributed farm configurations:

- Replication and High Availability
- Assured Recovery
- Failover for individual components in the LAN or multi-server farms

The following configurations are supported:

- Standalone -- all components are installed on a single server with a local SQL Server Express database, with no additional servers permitted.
- All-in-one Server Farm -- all components are installed on a single server with a local SQL Server 2005/2008 database with additional servers permitted.
- Distributed Server Farm -- all components are installed on dedicated servers with a local or remote SQL Server 2005/2008 database with additional servers permitted. In this configuration, only the server filling the Application role can be protected with a CA ARCserve RHA for SharePoint Replication or HA scenario.

Scenarios can now be created at the farm level, allowing you to create scenarios for each server in the farm at once (web front end, database, and application servers). Switchover can be set to the group level so that all servers fail over as a single entity.

## Windows PowerShell

CA ARCserve RHA now supports Windows PowerShell 2.0, in addition to 1.0.

**Note:** The CA ARCserve RHA PowerShell SnapIn and related xo.ps1 script should be launched with PowerShell (x86) if you are running on 64-bit systems.

## Sparse File Support

Effective with this version, sparse files are now supported on NTFS file systems.

## UNIX/Linux Enhancements

Effective with this release, CA ARCserve RHA includes support for the following:

### **UNIX/ Linux HA for File Systems**

Existing Windows HA functionality has been extended to Linux and UNIX File systems.

- Manual/ automatic switchover support
- All network traffic redirection method support
- Multiple pre/post switchover scripts option support

### **UNIX/ Linux HA for Applications**

Existing HA application wizards and functionality have been extended to support Oracle.

### **Support HA on the latest Linux release(s)**

- Latest Linux Kernels/ releases on x32 and x64 distributions
- AIX6.1, RHEL 5.4 (or later if made available before BETA), and SuSE 11

### **Hard Links Support**

For hard links in replicated directories, CA ARCserve RHA can now ensure the consistency for different names linked to the same data file. Synchronization, replication, and journal event undo are supported. Symbolic links can also be replicated.

### **Linux ACL Support**

ACL (Access control list) synchronization and replication is now supported on Linux systems.

## Microsoft Exchange Server Enhancements

Effective with this release, CA ARCserve RHA provides the following support for your Exchange Server 2010 environments:

- Rewind Points
- Assured Recovery
- Auto Discovery
- Public folder management
- Mailbox level protection
- CAS role availability check

## IIS Enhancements

Effective with this release, CA ARCserve RHA includes the following IIS enhancements:

### **IIS Metadata Support**

IIS metadata is now captured during scenario creation. IIS configuration data is automatically created on the Replica server. Metadata is replicated in real time and synchronized at scenario start or when manual/scheduled sync is initiated. Metadata can now be recovered along with data files.

IIS metadata is supported on the following systems:

- IIS 6.0 running on Windows Server 2003
- IIS 7.0 running on Windows Server 2008
- IIS 7.5 running on Windows Server 2008 R2

## Synchronization Enhancements

The following enhancements made to the CA ARCserve RHA synchronization processes are included in this release:

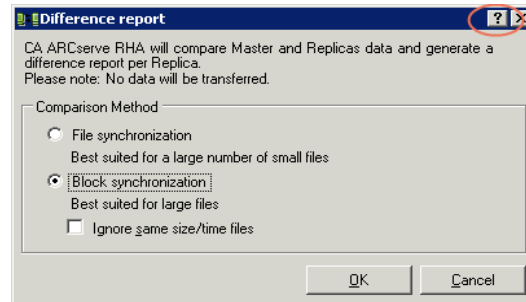
### **Offline Synchronization**

When running scenarios, you can elect to perform offline synchronization, which synchronizes your data to an external device. Offline synchronization is effective for huge volumes of data over low bandwidth networks.

## GUI Enhancements

CA ARCserve RHA is now more fully integrated with CA ARCserve Backup. When both products are installed on the same system, you can now launch CA ARCserve RHA from the CA ARCserve Backup Manager Console.

CA ARCserve RHA now includes context-sensitive Help. Where context-sensitive Help is available, the screen features a question mark (?) button at the top right corner.



You may still access the full online Help system using the Help menu.



# Chapter 3: Features No Longer Supported

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Effective with this release, the CA ARCserve RHA CDP Repository is no longer supported.

## New Features and Enhancements Effective with r15 SP2

### Customized Application Support

Effective with this release, CA ARCserve RHA lets you protect customized services in addition to applications like Microsoft SQL or Exchange without having to write custom scripts. Create scenarios in the usual manner using the Scenario Creation Wizard and specify Customized Application as the scenario type. Complete the remaining scenario creation Wizard screens. The Wizard now includes a step so you can specify the services to monitor, specify which services are critical and should trigger switchover, and even the service order. This new Services Management can be extended to any scenario.

### Interface Enhancements

The CA ARCserve RHA home page now includes links to various websites. Follow us on Twitter, friend us on Facebook, or subscribe to the RSS news feed to obtain the latest product news, best practices and tips, and obtain help and support.

### Supported Systems

Effective with this release, CA ARCserve RHA supports:

- Internet Explorer 7
- Internet Explorer 8
- Microsoft SQL Server 2008 R2

### Multiple Streams

Effective with this release, a new property has been added to the Optional Settings group on the Replication Properties tab in the Manager. This property lets you more effectively manage WAN bandwidth latency without having to create multiple scenarios. Using the GUI or the `ws_rep.cfg` file, you can specify how many data streams to use during replication.

## SharePoint Server 2010 Support

Effective with this release, CA ARCserve RHA supports all Microsoft SharePoint Server 2010 server roles. In this version, Replica servers are no longer displayed in farm lists, so you can more easily distinguish active from standby systems.

# Chapter 4: System Information

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This section describes the supported operating systems and system requirements. Review this information before installing and using CA ARCserve RHA.

This section contains the following topics:

[Supported Configurations: Windows](#) (see page 17)

[Supported Configurations: UNIX/Linux](#) (see page 23)

[Installation Considerations](#) (see page 24)

[Localized Versions](#) (see page 26)

## Supported Configurations: Windows

For the most current information regarding supported systems, see the [Compatibility Matrix](#).

### General Notes:

- High availability support for BlackBerry (BES) is included with CA ARCserve RHA for SQL and CA ARCserve RHA for File Servers.
- CA ARCserve High Availability is not supported in an environment in which either the Master or Replica server is also functioning as a Windows Domain Controller (DC), DNS server, or SBS (Windows Small Business Server) server. You must use CA ARCserve Replication instead.
- Itanium 2 and IA-64 processors are not supported.
- Hardware requirements for CA ARCserve RHA depend upon the operating system and applications you are running. Ensure your system meets the minimum hardware requirements for the operating system on which you plan to install CA ARCserve RHA and for the applications you wish to protect.

### CA ARCserve Replication

The following operating systems are supported for Replication for File Server, SQL 2005/2008, Exchange 2003/2007/2010, SharePoint 2007:

- Windows Server 2003 Standard Edition (32-bit, x64), Windows Server 2003 Standard Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Standard Edition R2 (32-bit, x64)
- Windows Server 2003 Enterprise Edition (32-bit, x64), Windows Server 2003 Enterprise Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Enterprise Edition R2 (32-bit, x64)

- Windows 2003 Web Server Edition (32-bit, x64), Windows 2003 Web Server Edition (32-bit, x64) SP1, SP2
- Windows 2003 Datacenter Edition (32-bit, x64)
- Windows Small Business Server 2003 (32-bit, x64), Windows 2003 Small Business Server (32-bit, x64) SP1, SP2 (Exchange failover is not supported on SBS)
- Windows Small Business Server 2003 R2 (32-bit, x64) (Exchange failover is not supported on SBS)
- Windows Server 2003 Cluster (32-bit, x64), Windows Server 2003 Cluster SP1 (32-bit, x64) (MNS and CCR clusters are not supported)
- Windows Server 2003 Cluster R2, SP2 (32-bit and x64) (MNS and CCR clusters are not supported)
- Windows Storage Server 2003 SP1 (32-bit and x64)
- Windows Server 2008 Standard, Enterprise, Datacenter, Web Server (32-bit and x64). Windows Server 2008 on Itanium-based systems is not supported.
- Windows Server 2008 Enterprise Edition R2 (x64)
- Windows Storage Server 2008 SP1, SP2 (32-bit and x64)
- Microsoft Virtual PC (32-bit, x64) (all versions) (Guest environment only)
- Microsoft Virtual Server (all versions) (32-bit, x64) (Guest environment only)
- Microsoft Hyper-V (all versions) (Guest environment only)
- VMware Virtualization Products (ESX, GSX, Server and Workstation all versions) (32-bit, x64) (Guest environment only)

### Notes regarding Replication:

- Replication for Exchange is not supported in an SBS (Windows Small Business Server) environment for failover/failback, but replication for data recovery is fully supported.
- Replication for Exchange 2007 no longer requires or supports the ws\_ex2e.exe utility for failover/failback. The failover and failback processes can now be manually performed using Microsoft Exchange Management Shell, a new interface for Microsoft Exchange Server 2007, built on the Microsoft Windows PowerShell. The ws\_ex2ex.exe utility is still supported for Exchange 2003. Note that for Japanese environments, this utility is supported only if non-Unicode (single-byte) characters are used as arguments for the Exchange server.

The following operation systems are supported for Full System Replication:

- Microsoft Windows Server 2003 SP2
- Microsoft Windows Server 2003 R2 SP2
- Microsoft Windows Server 2008 SP1, SP2
- Microsoft Windows Server 2008 R2

The following operating systems are supported for Replication for Oracle:

- Windows Server 2003 Standard Edition (32-bit, x64), Windows Server 2003 Standard Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Standard Edition R2 (32-bit, x64)
- Windows Server 2003 Enterprise Edition (32-bit, x64), Windows Server 2003 Enterprise Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Enterprise Edition R2 (32-bit, x64)
- Windows 2003 Web Server Edition (32-bit, x64), Windows 2003 Web Server Edition (32-bit, x64) SP1, SP2
- Windows 2003 Datacenter Edition (32-bit, x64)
- Windows Small Business Server 2003 (32-bit, x64), Windows 2003 Small Business Server (32-bit, x64) SP1, SP2 (Oracle failover is not supported on SBS)
- Windows Small Business Server 2003 R2 (32-bit, x64) (Oracle failover is not supported on SBS)
- Windows Server 2008 Standard, Enterprise, Datacenter and Web Server (32-bit and x64)
- Microsoft Virtual PC (32-bit, x64) (all versions) (Guest environment only)
- Microsoft Virtual Server (all versions) (32-bit, x64) (Guest environment only)
- Microsoft Hyper-V (all versions) (Guest environment only)
- VMware Virtualization Products (ESX, GSX, Server and Workstation all versions) (32-bit, x64) (Guest environment only)

**Notes regarding Oracle:**

- Automatic rewind checkpoints are not supported for Oracle. Instead, manual bookmarks can be inserted in the CA ARCserve RHA Manager or PowerShell.
- Oracle Asynchronous IO or Oracle Direct IO are not supported. Ensure they are disabled.

**High Availability**

The following operating systems are supported for High Availability for File Server:

- Windows Server 2003 Standard Edition (32-bit, x64), Windows Server 2003 Standard Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Standard Edition R2 (32-bit, x64)
- Windows Server 2003 Enterprise Edition (32-bit, x64), Windows Server 2003 Enterprise Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Enterprise Edition R2 (32-bit, x64)

- Windows 2003 Web Server Edition (32-bit, x64), Windows 2003 Web Server Edition (32-bit, x64) SP1, SP2
- Windows 2003 Datacenter Edition (32-bit, x64)
- Windows Server 2003 Cluster (32-bit, x64), Windows Server 2003 Cluster SP1 (32-bit, x64) (MNS clusters are not supported)
- Windows Server 2003 Cluster R2, SP2 (32-bit and x64) (MNS clusters are not supported)
- Windows Storage Server 2003 SP1 (32-bit and x64)
- Windows Server 2008 Standard, Enterprise, Datacenter and Web Server (32-bit and x64)
- Windows Server 2008 Enterprise Edition R2 (x64)
- Windows Storage Server 2008 SP1, SP2 (32-bit and x64)
- Microsoft Virtual PC (32-bit, x64) (all versions) (Guest environment only)
- Microsoft Virtual Server (all versions) (32-bit, x64) (Guest environment only)
- Microsoft Hyper-V (all versions) (Guest environment only)
- VMware Virtualization Products (ESX, GSX, Server and Workstation all versions) (32-bit, x64 bit) (Guest environment only)

The following operating systems are supported for High Availability for Exchange 2003/2007/2010, SQL 2005/2008, IIS 6/7.0/7.5, SharePoint 2007, CRM 4.0:

- Windows Server 2003 Standard Edition (32-bit, x64), Windows Server 2003 Standard Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Standard Edition R2 (32-bit, x64)
- Windows Server 2003 Enterprise Edition (32-bit, x64), Windows Server 2003 Enterprise Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Enterprise Edition R2 (32-bit, x64)
- Windows 2003 Web Server Edition (32-bit, x64), Windows 2003 Web Server Edition (32-bit, x64) SP1, SP2
- Windows 2003 Datacenter Edition (32-bit, x64)
- Windows Server 2003 Cluster (32-bit, x64), Windows Server 2003 Cluster SP1 (32-bit, x64) (MNS and CCR clusters are not supported)

- Windows Server 2003 Cluster R2, SP2 (32-bit, x64) (MNS and CCR clusters are not supported)
- Windows Storage Server 2003 SP1 (32-bit and x64)
- Windows Server 2008 Standard, Enterprise, Datacenter, Web Server (32-bit and x64), R2
- Windows Storage Server 2008 SP1, SP2 (32-bit and x64)
- Microsoft Virtual PC (32-bit, x64) (all versions) (Guest environment only)
- Microsoft Virtual Server (all versions) (32-bit, x64) (Guest environment only)
- Microsoft Hyper-V (all versions), (Guest environment only)
- VMware Virtualization Products (ESX, GSX, Server and Workstation all versions) (32-bit, x64) (Guest environment only)

The following operating systems are supported for High Availability for Oracle 10/11g:

- Windows Server 2003 Standard Edition (32-bit, x64), Windows Server 2003 Standard Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Standard Edition R2 (32-bit, x64)
- Windows Server 2003 Enterprise Edition (32-bit, x64), Windows Server 2003 Enterprise Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Enterprise Edition R2 (32-bit, x64)
- Windows 2003 Web Server Edition (32-bit, x64), Windows 2003 Web Server Edition (32-bit, x64) SP1, SP2
- Windows 2003 Datacenter Edition (32-bit, x64)
- Windows Server 2008 Standard, Enterprise, Datacenter, Web Server (32-bit and x64)
- Microsoft Virtual PC (32-bit, x64) (all versions) (Guest environment only)
- Microsoft Virtual Server (all versions) (32-bit, x64) (Guest environment only)
- Microsoft Hyper-V (all versions) (Guest environment only)
- VMware Virtualization Products (ESX, GSX, Server and Workstation all versions) (32-bit, x64) (Guest environment only)

**Notes:** Automatic rewind checkpoints are not supported for Oracle; instead manual bookmarks can be inserted via the CA ARCserve RHA Manager or PowerShell.

Oracle 11g R2 is supported, but you must download a 32-bit client. Go to the Oracle website and search for "Separate 32-Bit Client Software for 64-Bit Ports" for more information.

The following operating systems are supported for High Availability for Blackberry Enterprise Server (BES):

- Windows Server 2003 Standard Edition (32-bit, x64), Windows Server 2003 Standard Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Standard Edition R2 (32-bit, x64)
- Windows Server 2003 Enterprise Edition (32-bit, x64), Windows Server 2003 Enterprise Edition (32-bit, x64) SP1, SP2
- Windows Server 2003 Enterprise Edition R2 (32-bit, x64)
- Windows 2003 Web Server Edition (32-bit, x64), Windows 2003 Web Server Edition (32-bit, x64) SP1, SP2
- Windows 2003 Datacenter Edition (32-bit, x64)
- Windows Server 2003 Cluster (32-bit, x64), Windows Server 2003 Cluster SP1 (32-bit, x64) (MNS and CCR clusters are not supported)
- Windows Server 2003 Cluster R2, SP2 (32-bit, x64) (MNS and CCR clusters are not supported)
- Windows Server 2008 Standard, Enterprise, Datacenter, Web Server (32-bit and x64)
- Microsoft Virtual PC (32-bit, x64) (all versions) (Guest environment only)
- Microsoft Virtual Server (all versions) (32-bit, x64) (Guest environment only)
- Microsoft Hyper-V (all versions) (Guest environment only)
- VMware Virtualization Products (ESX, GSX, Server and Workstation all versions) (32-bit, x64) (Guest environment only)

**Note:** Blackberry Enterprise Server (BES) 4.1 SP6. Assured Recovery is not supported for BlackBerry HA due to SRP key conflicts.

The following operating systems are supported for Full System HA, AR:

- Microsoft Windows Server 2003 SP2
- Microsoft Windows Server 2003 R2 SP2
- Microsoft Windows Server 2008 SP2
- Microsoft Windows Server 2008 R2

### **Assured Recovery Option**

- CA ARCserve RHA on Windows
- VSS Snapshot Management is enabled on Windows Server 2003 and later

## Supported Configurations: UNIX/Linux

CA ARCserve RHA is supported on the following UNIX/Linux platforms:

■ UNIX:

- IBM AIX 5.2, 5.3, (32- and 64-bit) 6.1 (64-bit only)
- SUN Solaris 9 (SPARC) (32- and 64-bit) and 10 SPARC (64-bit), 10 (x86-64)

**Notes:**

For Solaris 9, Bind version 9 nsupdate or its compatible DNS dynamic update utilities are required to support DNS redirection in UNIX HA scenarios running on Solaris 9 systems. Make sure the full path name of the nsupdate utility on Solaris is /usr/sbin/nsupdate.

For AIX 6.1, ensure the operating system is upgraded to Technical Level (TL) 6.

■ Linux

- Red Hat Enterprise Linux version 4, and 5 (i386 and x86-64)
- Novell SuSE Linux Enterprise Server 9 SP1, SP2, SP3, SP4 (32-bit and 64-bit), 10 SP1, SP2 (32- and 64-bit), 11 (32- and 64-bit)

**Note:** Assured Recovery is not supported on UNIX/Linux systems.

## Installation Considerations

**Important!** Effective with this release, the CA ARCserve RHA download image exceeds the amount of free disk space available on a standard compact disk (CD). To copy the download image to media, you must use a DVD or a flash drive.

Consider the following:

- Ensure your screen resolution is set to 1024 x 768 or higher. Lower resolutions may result in cropped screens.
- On Japanese environments, the Launching Application dialog may appear in English. To avoid this problem, ensure that the .NET Framework Japanese Language Pack has been applied.
- The required .NET 2.0 Framework is installed with the CA ARCserve RHA Control Service installation procedure. However, if you try connecting to the Control Service from another Windows machine where .NET 2.0 Framework is not installed, a notification screen is displayed that provides you with a list of links from which you may download and install the missing component. Two sets of links are provided:

- To the Control Service machine
- To the Microsoft website

From the appropriate set of links, choose the link for the machine you are using to connect to the Control Service (32- or 64-bit).

- When performing remote installation on Windows Server 2003 R2 and Windows Server 2008 R2 systems, installation is limited to remote hosts on which the CA ARCserve RHA Control Service is installed.
- To avoid firewall issues, you should install or update the CA ARCserve RHA Engine on Windows Server 2008 Master and Replica servers by running setup.exe **locally**, and then disable the Verify CA ARCserve RHA Engine on Hosts option during scenario creation. If you must **remotely** install the CA ARCserve RHA Engine on these machines, you need to enable WMI traffic through the Windows Server 2008 Firewall, and then configure port 25000 on all Master and Replica machines. In addition, if you are creating Hyper-V scenarios, you should also enable ICMP echo messages on all Master, Replica, and Hyper-V guest machines so that CA ARCserve RHA can successfully ping guest operating systems.

**Note:** We recommend using the Windows Firewall with Advanced Security MMC snap-in. For more information about using the Windows Firewall with Advanced Security MMC snap-in, see the Microsoft website.

Before remotely installing the CA ARCserve RHA Engine, enable WMI traffic through the firewall:

1. From the Control Panel, open Security settings and then click Windows Firewall.

The Windows Firewall Settings dialog opens.

2. Click Change Settings and then click the Exceptions tab.

A list of programs and ports is displayed.

3. Select Windows Management Instrumentation (WMI) to enable WMI traffic through the firewall.
4. Click OK to exit firewall settings.
5. Install the Engine as usual.

6. After you install the Engine, configure port 25000 on each Master and Replica machine using the New Inbound Rule Wizard from the Windows Firewall with Advanced Security MMC snap-in.

Ensure TCP is selected and add port 25000 to the Specific local ports list. Allow the connection and apply it to the applicable profile (for example, Private).

**Note:** Port 25000 is the default. You may change this port. For more information on completing the wizard, see the Microsoft website.

7. (For Hyper-V scenarios) You should also enable ICMP echo messages on all Master, Replica and Hyper-V guest machines so CA ARCserve RHA can successfully ping Hyper-V guest operating systems.

Use the New Inbound Rule wizard to create a custom rule that enables Specific ICMP Echo Requests for any IP address and allows the connection.

**Note:** For more information, see the Microsoft website.

- Installing the CA ARCserve RHA Control Service with ACL-based authentication on domain controllers is not supported.
- Installing the CA ARCserve RHA Control Service on Windows XP systems in which the Network Access: Sharing and security model for local accounts model is set to Guest is not supported.
- When upgrading to this release from previous versions, the option, Use the service log on accounts of existing installations, is not available. This is because the product name was changed.

## Localized Versions

CA ARCserve RHA is available in the following languages:

- English
- French
- German
- Japanese
- Italian
- Spanish
- Brazilian Portuguese
- Simplified Chinese
- Traditional Chinese

**Note:** This release of CA ARCserve RHA supports all characters in the Unicode Basic Multilingual Plane. Support for JIS2004 characters includes those encoded in the Basic Multilingual Plane, but not surrogate pair characters (Plane 2).

Character sets for these languages are supported for:

- Installation
- Folder/File Replication
- Database/table/instance/Exchange Message Replication
- Certain wizard screens, menus, reports, and alerts within the Centralized Management Interface

**Note:** Character sets in these languages are not supported in email attachments within alerts, hostnames, installation/home directory paths, user names and passwords. All servers participating in a scenario should be installed with the same language package. However, the same language package is not required for all servers in a domain.

# Chapter 5: Known Issues

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The following issues are known to exist in this release:

- Synchronization and replication of the following operations are not supported when part of an open transaction (TxF):
  - Changing file names (renaming)
  - Moving files from one directory to another
- For File Server HA scenarios in which the DB/Share Management property is set to On, the share service on the Replica is not stopped.
- For HA scenarios on Windows Server 2008 systems, please consider the following:

You may be unable to log back into the system after switchover occurs if you have not rebooted the computer. To avoid this problem, set the Reboot After Switchover and Switchback property to On when using the Switch Computer Name redirection method.
- To restore the Shadow Storage Volume field to the default setting (Tasks on Replica option), delete the value (leave the field blank).
- When launching the CA ARCserve RHA Manager, an error message may be displayed: "Cannot download the application. Contact the vendor for assistance." This error is due to a known Microsoft issue. To prevent this problem, open Internet Options, click the Connections tab and then click LAN Settings to access the automatic configuration settings. Clear the option, "Automatically detect settings," and then click OK.
- After installing Microsoft SQL 2005 running on Windows Server 2008 x64 systems, the full-text search service cannot start. This is because the required NTLM Security Support Provider service does not exist on these systems. To correct this issue, install Microsoft SQL Server 2005 Service Pack 2.
- Avoid running multiple HA scenarios that have been imported. When scenarios are imported, they are assigned different names but still contain the same configuration properties. Running scenarios that are identical on one machine can cause data conflict.
- Avoid manually altering Replica root directories. Doing so can impact data consistency or integrity.
- For HA scenarios using the Move IP or Switch Hostname redirection methods, you may be unable to start the Master server after switchover, if the Master was unavailable at the time switchover occurred. When the active server is not available at switchover, CA ARCserve RHA cannot remove the IP address and IP conflicts result when the server is once again available. In such a situation, you should perform the Manually Recover a Failed Server procedure in order to remove the IP address, instead of the Recover Active Server procedure. See the appropriate Operation Guide for more information.

- If you are using Switch Hostname redirection in an HA scenario, you need to manually reboot the Master and Replica servers after performing the Recover Active Server procedure, even if you set the reboot option to On.
- For Oracle HA scenarios, after switchover occurs, you must run the following commands to manually restart the Enterprise Manager. Note that the Oracle database account is required to execute these commands:
  1. `emca -deconfig dbcontrol db -repos drop`
  2. `emca -config dbcontrol db -repos create`
  3. `net stop OracleDBConsole<oracle_db_instance_name>`
  4. `net start OracleDBConsole<oracle_db_instance_name>`
- "Mixed" scenarios are not supported; for example, running this version of the CA ARCserve RHA Manager with an older Engine results in scenarios that cannot be run. You must upgrade all CA ARCserve RHA components to the current version.
- XOMF supports "uninject" on Windows systems, but not on AIX systems, XOFs cannot support it. XOFs does support uninject on UNIX/Linux systems.
- Some Infragistics controls are not compatible with Internet Explorer 8.0, which may result in misaligned columns when displaying the Report Center.
- For SharePoint scenarios: The application's account may remain Local System if the first master you enter is not also the first application server added to the farm. The Control Service may be unable to process farm discovery. You must manually change the log on account of the COM+ application to domain.
- For Oracle Scenarios: Make sure the Oracle user IDs and Oracle group (dba, oinstall), are identical on Master and Replica servers, or switchover fails.

- For Periodic Replication: You may experience delays when applying replication data depending on the data size and number of files to apply, because the process assures data consistency. You can set the parameter, `KeepUndoForPeriodic`, to false to halt generation of the undo file and speed up the application of aggregated changes, but should not do so for database scenarios. This parameter is in the `ws_rep.cfg` file.
- For Network Traffic Redirection: After a switchover takes place, the A-records of Master and Replica servers are changed on the DNS server, depending on which Network Redirection Methods you select. The following table shows what network redirection methods impact the DNS A-record.
  - If the Network Redirection method is Move IP, the DNS A-record is not impacted.
  - If the Network Redirection is DNS redirection, the A-record Master redirects to the Replica IP after switchover, while the Replica A-record doesn't change.
  - If the Network Redirection is Switch Computer Name, the Master A-record changes to Master-xo after switchover, and the Replica A-record changes to Master.
  - If the network redirections are DNS redirection and switch computer name, the result is same as only DNS redirection.
  - If you want to keep the Replica A-Record, use the DNS Redirection method or DNS and Switch Computer Name methods.
- For CA ARCserve Backup and CA ARCserve RHA integration: When restoring a SQL database on the Master with CA ARCserve Backup, you may receive a "Windows could not start the SQL Server" error if running SQL Server 2008. (This error does not affect SQL Server 2005 restore jobs.) This error is caused by the Network Service or Local Service accounts, which do not have access rights to the SQL log file on the Master. There are three ways to avoid this issue:
  - In CA ARCserve RHA, set the scenario Replicate ACL option to On. Doing so guarantees that all ACL information for the Master SQL data directories are retained after recovery, allowing the SQL service to operate.
  - In CA ARCserve Backup, manually add the following user account after recovery to the ACL of the SQL data directories on the Master:  
`SQLServerMSSQLUser$Computer Name$Instance Name`
  - In CA ARCserve Backup disable the following restore option to NOT overwrite the ACL of the SQL data folders on the Master after restore: CA ARCserve Backup Manager, Global Options, Operation. Click to enable or disable the option, Restore and Preserve File Attributes and Security Information. Checking this option overwrites the ACL. Clearing the option does NOT overwrite the ACL.

- The following issues exist with the Use Windows Session Credentials option, when logging into to CA ARCserve RHA:
  - If you click the Use Windows Session Credentials option when logging on to CA ARCserve RHA, the standard Windows logon dialog may open. If the CA ARCserve RHA Management website is registered in your browser as a Trusted Site, and the browser security setting, "Automatic Logon with current username and password" is enabled, the standard Windows logon does not open. The Windows logon dialog also opens if the Control Service is not in the Local Intranet Web Content Zone. (Internet Options)
  - If you click Cancel from the Windows Credentials dialog, you may be unable to return to the Login screen, nor Refresh it.
  - If you use the Use Windows Session Credentials option and then launch the Remote Installer, the "Current User" selection is disabled and you must manually enter account details to continue.
- In mixed environments (environments where not all servers have been upgraded to the current release), you must restart the CA ARCserve RHA Engine to initiate a resync if the option, Stop the scenario when any replica's spool or disk is full is set.
- In mixed environments, the Difference Report may show incorrect differences between a Master running the current version and a Replica running an older one.
- When installing the CA ARCserve RHA Engine remotely, use the remote server's domain credentials. If you use the server's admin account credentials, the remote Engine installation fails.
- When performing offline synchronization, you should first clear the checkbox on the Offline Sync Management dialog to activate the Offline Sync Operations selections. The checkbox, Delete VSS Snapshots created for Offline Synchronization, has no impact on the operation choices, but is incorrectly linked on the user interface. This will be corrected in a subsequent version of the software.

## Chapter 6: Included Fixes

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The following fixes are included in this release. For more information regarding a specific test or published fix, contact Support.

T4C4067	T5D2062	T5LE039	T5LF043
T4C4071	T5KD029	T5LE040	T5LF044
T4C4073	T5KD030	T5LE041	T5LT029
T512126	T5KD031	T5LE042	T5LT030
T512130	T5KD034	T5LE043	T5LT031
T512132	T5KD035	T5LE044	T5LT032
T512132	T5KD036	T5LE045	T5LT033
T512136	T5KD037	T5LE046	T5LT034
T512139	T5KD038	T5LF021	T5LT035
T512140	T5KD039	T5LF023	T5LT036
T512141	T5KD040	T5LF024	T5LT037
T512142	T5KD041	T5LF026	T5LT038
T512143	T5KD042	T5LF027	T5LT041
T588090	T5KD043	T5LF028	
T588091	T5KD044	T5LF029	
T588093	T5KD045	T5LF030	
T59F040	T5KD046	T5LF031	
T59F041	T5KD047	T5LF033	
T59F042	T5KD049	T5LF034	
T59F043	T5LE032	T5LF035	
T59F044	T5LE033	T5LF036	
T59F044	T5LE034	T5LF037	
T59F051	T5LE035	T5LF039	
T59F052	T5LE037	T5LF040	
T59F053	T5LE038	T5LF041	

**Fixes added in SP1:**

T512148	T59F058	T5LE049	T5LT046
T512149	T59F059	T5LE050	T5LT047
T512152	T5KD053	T5LE051	T5LT048
T512155	T5KD054	T5LE052	
T512156	T5KD055	T5LE053	
T512157	T5KD056	T5LF049	
T588097	T5KD057	T5LF050	
T59F055	T5KD058	T5LT042	
T59F056	T5KD059	T5LT043	
T59F057	T5LE048	T5LT045	