



Release Bulletin

**SAP Replication Server[®] Data
Assurance Option 15.7.1 SP200**

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Contents

Product Summary	1
Product Compatibility	3
SAP Control Center for Data Assurance Compatibility	3
Installation and Upgrade	5
Known Issues	7
Obtaining Help and Additional Information	13
Technical Support	13
Downloading Product Updates	13
Product and Component Certifications	14
Accessibility Features	14

Contents

Product Summary

This release bulletin provides late-breaking information about SAP® Replication Server® Data Assurance (DA) Option. A more recent version may be available on the Web.

SAP Replication Server DA Option compares row data and schema between any combination of SAP® Adaptive Server® Enterprise (SAP® ASE) and SAP® IQ, SAP HANA®, IBM DB2, Microsoft SQL Server, or Oracle databases and reports discrepancies.

SAP Replication Server DA Option supports these operating systems:

- HP-UX
- IBM AIX
- Linux
- Linux on Power
- Solaris
- Windows

Before you start the installation, download and install these Microsoft Visual Studio patches for your x86 or x64 Windows platform:

- Microsoft Visual C++ 2005 Service Pack 1 Redistributable Package ATL Security Update at <http://www.microsoft.com/download/en/details.aspx?amp;displaylang=en&id=26347>.
- Microsoft Visual C++ 2010 Service Pack 1 Redistributable Package MFC Security Update at <http://www.microsoft.com/en-us/download/details.aspx?id=26999>.

For information about accessibility, see *Accessibility Features* in this release bulletin.

Product Compatibility

These server versions are supported by SAP Replication Server DA Option.

Server	Version
SAP® Replication Server®	15.1 and later
SAP Adaptive Server Enterprise	15.0.3 and later

SAP Control Center for Data Assurance Compatibility

The compatibility matrix table lists versions of SAP® Control Center for Data Assurance plug-in that are compatible with versions of DA server.

SAP Control Center DA Plug-In Version	DA Server 15.6 and 15.7	DA Server 15.7.1	DA Server 15.7.1 SP100	DA Server 15.7.1 SP200
3.3	No	No	No	Yes
3.2.8	No	No	Yes	No
3.2.6	No	Yes	No	No
3.2.1	Yes	No	No	No

Installation and Upgrade

Get last-minute information about installation and upgrading that was omitted from or incorrect in your installation guide, or that needs special emphasis.

For detailed information about installing and upgrading DA server and agents, see the *SAP Replication Server Data Assurance Option Installation Guide*.

Known Issues

Known issues and their workarounds for SAP Replication Server Data Assurance Option.

Note:

If you have a Sybase® support contract, you can search the Sybase Web site for solved cases. Choose **Support > Solved Cases** or go to <http://search.sybase.com/search/simple.do?mode=sc>. You need a MySybase account to view solved cases in the archive.

If you have an SAP® support contract, use the Sybase xSearch to search for knowledge-based articles and solved cases. Go to the SAP Support Portal at <http://service.sap.com/sybase/support>, log in, and select **KBAs & Solved cases** to start the xSearch.

Find issues by Change Request (CR) number.

CR#	Description
758567	<p>When a table in a comparison has more than two billion rows, the create compareset command with map all fails.</p> <p>Workaround: Execute create compareset without the map all parameter to compare all compareset columns successfully.</p>

CR#	Description
751110	<p>SAP Adaptive Server (SAP ASE) database connections with secure socket layer (SSL) configuration hangs while connecting to non SSL-enabled SAP Adaptive Servers.</p> <p>The create connection command uses the SYB SOCKET_FACTORY SAP® jConnect™ for JDBC SSL connection property to connect to a non SSL-enabled SAP ASE. For example:</p> <pre data-bbox="377 413 1176 720"> create connection ase_ssl set type ASE and set agent localagent and set host soka2 and set port 5000 and set database dadb and set user dauser and set password dauser with properties set SYB SOCKET_FACTORY 'com.sybase.da.jdbc.AseSsl- SocketFactory' go </pre> <p>If the SAP ASE instance is not SSL-enabled, any attempt DA makes to connect with that instance will result in DA hanging indefinitely. For example, if you execute this isql command:</p> <pre data-bbox="377 835 709 887"> test connection ase_ssl go </pre> <p>The isql prompt will never return.</p> <p>Workaround: Restart DA server and correct the connection settings before reconnecting to the SAP ASE instance.</p>

CR#	Description																																													
745228	<p>In an IBM DB2 UDB 9.5 in a homogeneous comparison environment, DA cannot obtain column metadata for the DECFLOAT datatype.</p> <p>The create compareset command with the map all parameter fails to map DEC-FLOAT columns with no warning. For example:</p> <pre>create compareset example1 with source pri_udb95 A_USER EXAMPLE1 s target rep_udb95 A_USER EXAMPLE1 t map all go</pre> <pre>show compareset example1 columns go</pre> <table border="1"> <thead> <tr> <th>TYPE</th> <th>CONNECTION</th> <th>OWNER</th> <th>TABLE</th> <th>MAPID</th> <th>COLUMN</th> <th>PKEY</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>pri_udb95</td> <td>A_USER</td> <td>EXAMPLE1</td> <td>1</td> <td>A_LABEL</td> <td>N</td> </tr> <tr> <td>T</td> <td>rep_udb95</td> <td>A_USER</td> <td>EXAMPLE1</td> <td>1</td> <td>A_LABEL</td> <td>N</td> </tr> <tr> <td>S</td> <td>pri_udb95</td> <td>A_USER</td> <td>EXAMPLE1</td> <td>2</td> <td>ID</td> <td>Y</td> </tr> <tr> <td>T</td> <td>rep_udb95</td> <td>A_USER</td> <td>EXAMPLE1</td> <td>2</td> <td>ID</td> <td>Y</td> </tr> </tbody> </table> <p>If you create a compareset with explicit column mappings, the DECFLOAT columns are mapped successfully. However, a job comparison that attempts to compare DEC-FLOAT columns will fail. For example:</p> <pre>create compareset example1 with source pri_udb95 A_USER EXAMPLE1 s target rep_udb95 A_USER EXAMPLE1 t map s.ID = t.ID set key=true and s.A_LABEL = t.A_LABEL and s.AN_AVERAGE = t.AN_AVERAGE go</pre> <pre>create job demo1 add comparison example1 set compareset example1 go</pre> <pre>run job demo1 go</pre> <pre>monitor job demo1 go</pre> <table border="1"> <thead> <tr> <th>COMPARISON</th> <th>PART</th> <th>STATUS</th> <th>SUBMIT TIME</th> <th>END TIME</th> </tr> </thead> <tbody> <tr> <td>c</td> <td>0</td> <td>ABORTED</td> <td>2013-08-16 09:36:22</td> <td>2013-08-16 09:36:30</td> </tr> </tbody> </table> <p>1 100% No metadata for source column: AN_AVERAGE</p> <p>Workaround: There is no workaround. DECFLOAT columns in IBM DB2 UDB 9.5 databases cannot be compared.</p>	TYPE	CONNECTION	OWNER	TABLE	MAPID	COLUMN	PKEY	S	pri_udb95	A_USER	EXAMPLE1	1	A_LABEL	N	T	rep_udb95	A_USER	EXAMPLE1	1	A_LABEL	N	S	pri_udb95	A_USER	EXAMPLE1	2	ID	Y	T	rep_udb95	A_USER	EXAMPLE1	2	ID	Y	COMPARISON	PART	STATUS	SUBMIT TIME	END TIME	c	0	ABORTED	2013-08-16 09:36:22	2013-08-16 09:36:30
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739543	<p>create connection command for SAP HANA database requires an unnecessary database parameter.</p> <p>DA connection configuration objects require a database parameter to use with the JDBC driver for SAP Adaptive Server, Oracle, and SAP IQ databases. The SAP HANA database JDBC driver does not require this parameter.</p> <p>However, if you create the SAP HANA database connection without a database parameter, DA will not create the connection. DA assumes all connection objects require a database parameter.</p> <p>Workaround: When you create an SAP HANA database connection, set the database parameter to a placeholder value.</p> <p>For example:</p> <pre data-bbox="377 600 1170 829"> create connection myHDBconn1 set type = HANADB and set agent = myagent and set host = "10.0.14.119" and set port = 30315 and set database = placeholder and set user = HAUSER and set password = Pa55word go </pre>

CR#	Description
734029	<p>TIMESTAMP reconciliation issue with Data Assurance (DA) in non-SAP Adaptive Server databases replication environment.</p> <p>DA does not compare the second-fractions of <code>TIMESTAMP</code> values beyond the first three, of a total of nine digits.</p> <p>For example, 2009-01-16 18:55:33.213000000 is considered equal to 2009-01-16 18:55:33.213666666 when compared by DA. Additionally, DA reconciles all nine digits, which leads to an SAP Replication Server error, when you are replicating <code>TIMESTAMP</code> columns in non-SAP Adaptive Server databases.</p> <p>For example:</p> <ul style="list-style-type: none"> • SAP Adaptive Server-to-SAP Adaptive Server replication – no error in <code>DATE-TIME</code> comparison as both SAP Adaptive Server and DA support only three digits in the second-fraction precision. • SAP Adaptive Server-to-SAP IQ replication – DA reconciliation function leads to replication errors, when the <code>TIMESTAMP</code> column is replicated. <p>When DA receives 2009-01-16 18:55:33.213 from SAP Adaptive Server <code>DATE-TIME</code>, it is interpreted as 2009-01-16 18:55:33.213333333 because <code>java.sql.Timestamp</code> supports nine digits of second-fraction precision while SAP Adaptive Server is only accurate to 1/300th of a second. SAP IQ <code>TIMESTAMP</code> supports six digits in second-fraction precision, so the value is reconciled as 2009-01-16 18:55:33.213333. The correct reconciliation value should be 2009-01-16 18:55:33.213000.</p> <p>Workaround: None.</p>
723993	<p>The SAP HANA database alphanumeric datatype is not supported in heterogeneous comparisons with DA.</p> <p>For example, in an Oracle-to-SAP HANA database heterogeneous comparison environment, you cannot compare Oracle <code>varchar2</code> datatype with the SAP HANA database alphanumeric datatype.</p> <ul style="list-style-type: none"> • When you insert 202 into SAP HANA database alphanumeric, DA receives it as 0000000000000202. • When insert you 202 into Oracle <code>varchar2</code>, DA receives it as 202. <p>This SAP HANA database alphanumeric datatype mapping issue causes comparison failure.</p> <p>Workaround: Compare SAP HANA database alphanumeric datatypes only in SAP HANA to SAP HANA database comparisons.</p>

Known Issues

CR#	Description
666694	<p>The DA server license is not checked in after the JVM is terminated with Ctrl+C.</p> <p>If the JVM for the DA server process fails or is terminated from the operating system, DA server cannot complete tasks it would normally perform before shutdown, such as checking in the license. DA server may also not check in the license if its JVM is terminated with Ctrl+C on a Windows machine.</p> <p>Workaround: Stop DA server from isql with the SAP Replication Server shutdown command.</p>
656778	<p>Uninstallation issues occur when SAP Replication Server DA Option is installed in the same directory as older Sybase products which used InstallShield.</p> <p>If new Sybase products that use InstallAnywhere (like DA Option) are installed in the same directory as the older Sybase products which used InstalledShield, uninstalling one of the products may make the others unusable because some of the shared components are removed by the uninstaller.</p> <p>For example, if DA is installed in the same directory as Replication Server 15.2 and Replication Manager (RM) plug-in 15.2, and the RM plug-in is uninstalled, the DA server cannot be started because the JRE on the <code>/shared</code> directory has been removed.</p> <p>Workaround: Install DA in a separate directory.</p> <hr/> <p>Note: If you have already installed a new product in the same directory as the other older products, do not uninstall.</p>
656068	<p>Starting DA server or agent on Windows 7 fails.</p> <p>DA server or agent can not start properly on Windows 7 if you run the <code>RUN_instance_32.bat</code> or <code>RUN_instance_64.bat</code> script using the Run option.</p> <p>Workaround: Use the Run as Administrator option instead of the Run option when running the start-up scripts.</p>

Obtaining Help and Additional Information

Use the Product Documentation site and online help to learn more about this product release.

- Product Documentation at <http://sybooks.sybase.com/> – online documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. The Web site also has links to other resources, such as white papers, community forums, maintenance releases, and support content.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the *Adobe* Web site.

Note: A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.

Technical Support

Get support for SAP® products.

If your organization has purchased a support contract for this product, then one or more of your colleagues is designated as an authorized support contact. If you have any questions, or if you need assistance during the installation process, ask a designated person to contact Technical Support as specified in your contract:

- Sybase Technical Support or the Sybase subsidiary in your area
- SAP Technical Support

Customers with an SAP support contract can obtain support for this product at the SAP support site, <http://service.sap.com/sybase/support>.

You can also find information about Sybase support migration at this location (login may be required).

Customers with a Sybase support contract can obtain support for this product at <http://www.sybase.com/support> (login required).

Downloading Product Updates

Get maintenance releases, support packages and patches, and related information.

- If you purchased the product directly from Sybase or from an authorized Sybase reseller:

Obtaining Help and Additional Information

- a) Go to <http://www.sybase.com/support>.
- b) Select **Support > EBFs/Maintenance**.
- c) If prompted, enter your MySybase user name and password.
- d) (Optional) Select a filter, a time frame, or both, and click **Go**.
- e) Select a product.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as an authorized support contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click **My Account** to add the “Technical Support Contact” role to your MySybase profile.

- f) Click the **Info** icon to display the EBF/Maintenance report, or click the product description to download the software.
- If you ordered your product under an SAP contract:
 - a) Go to <http://service.sap.com/swdc> and log in if prompted.
 - b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

Product and Component Certifications

Certification reports verify Sybase product performance on a particular platform.

To find the latest information about certifications:

- For partner product certifications, go to http://www.sybase.com/detail_list?id=9784
- For platform certifications, go to <http://certification.sybase.com/ucr/search.do>

Accessibility Features

Accessibility ensures access to electronic information for all users, including those with disabilities.

Documentation for this product is available in an HTML version that is designed for accessibility.

Vision impaired users can navigate through the online document with an adaptive technology such as a screen reader, or view it with a screen enlarger.

HTML documentation has been tested for compliance with accessibility requirements of Section 508 of the U.S Rehabilitation Act. Documents that comply with Section 508 generally also meet non-U.S. accessibility guidelines, such as the World Wide Web Consortium (W3C) guidelines for Web sites.

Note: You may need to configure your accessibility tool for optimal use. Some screen readers pronounce text based on its case; for example, they pronounce ALL UPPERCASE TEXT as

initials, and MixedCase Text as words. You might find it helpful to configure your tool to announce syntax conventions. Consult the documentation for your tool.

For information about how Sybase supports accessibility, see the Sybase Accessibility site: <http://www.sybase.com/products/accessibility>. The site includes links to information about Section 508 and W3C standards.

You may find additional information about accessibility features in the product documentation.

Obtaining Help and Additional Information