



CIS and Business Directory Release Notes

Cisco Data Virtualization Suite

Version 7.0.5

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Preface

CIS Documentation Updates

All CIS documents are updated for releases including service packs. When a CIS patch is applied, new PDF files replace the previous versions. You can find these documents and other product documentation:

- From <https://supportforums.cisco.com/community/12298251/data-virtualization-software-cis>
- From the Windows or Web application through the Help menu.
- From the Windows Start menu.
- From the CIS installation directory docs folder:
`<CIS_install_dir>\docs`

Obtaining Documentation and Submitting a Service Request

For information regarding anything within Cisco's Data Virtualization and Analytics product suite, including Cisco Data Preparation, please see:

<https://supportforums.cisco.com/community/12298251/data-virtualization-software-cis>

If you follow the page, you will automatically get email when new documents or comments are added. We look forward to seeing you on the site.

For general Cisco information, documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

Conventions

This document uses the following conventions.

Conventions	Indication
bold font	Commands and keywords and user-entered text appear in bold font .
<i>italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
[]	Elements in square brackets are optional.
{x y z }	Required alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<code>courier font</code>	Terminal sessions and information the system displays appear in courier font.
< >	Nonprinting characters such as passwords are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Note: Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

Searching Across Multiple PDF Documents

When you are looking for information in the documentation set, you might want to search across multiple documents. You can use the free Adobe Reader to do this.

If the options described below are not available in your version of Adobe Reader, please update it.

To search your PDF documents

1. Open Adobe Reader.
2. From the File menu, choose Open. and open any PDF document.
3. From the Edit menu, choose Advanced Search.
4. Under Where would you like to search?, click All PDF Documents in.
5. Click My Documents and choose Browse for Location at the bottom of the drop-down list.
6. Browse to the location of all your PDF files.
7. Enter the search term and click Search.

Acrobat lists all PDFs in the folder that contain the search string, and the number of occurrences in each.

8. Click the instance of the search term and its surrounding text to open the PDF to that page.

Document Change History

This section provides the revision history for this document.

Version Number	Issue Date	Status	Reason for Change
7.0	December 2014		Updated for 7.0.0 release.
7.0.1	March 2015		Updated for 7.0.1 release.
7.0.2	September 2015		Updated for 7.0.2 release.
7.0.3	January 1016		Updated for 7.0.3 release.
7.0.3.12	February 2016		Updated for rollback/downgrade procedures for hotfix 12 and beyond.
7.0.4	August 2016		Updated for 7.0.4 release.
7.0.5	March 2017		Updated for 7.0.5 release.



New Features in 7.0.5

The CIS 7.0.5 release is being distributed as an installable product. For information on the products and components included in CIS, see the *CIS Installation and Upgrade Guide*. For information on the products and components included in Business Directory, see the *Business Directory Guide*.

The 7.0.5 release includes features and enhancements in the following areas:

- [CIS and Studio, page 5](#)
- [Technical Documentation, page 7](#)

CIS and Studio

CIS and Studio changes for version 7.0.5 include the following:

- [Version Control, page 5](#)
- [Column Masking Policies \(Column-Level Security\), page 6](#)
- [Centralized Cache Status Tracking \(Cache Data Storage on Multiple Databases\), page 6](#)
- [Lineage UI Improvements, page 6](#)
- [Functions and Configuration Updates, page 6](#)
- [Query Engine Partition/Join Pruning Optimization, page 7](#)
- [New and Updated Data Source Adapters, page 7](#)

Version Control

You can use CIS with popular version control systems. Version control helps track changes and gives control over changes to CIS resources. For centralized version control, check-outs and check-ins are done to a repository. For distributed version control, changes can be merged into any branch. For more information, see the *CIS Administration Guide*.

Supported Default Version Control Systems

By default, the supported version control systems are:

- SVN client version 1.9.5 and higher
- GIT client version 2.11 and higher

Version control for CIS can be extended using custom properties to connect with other version control systems.

- Setup multiple VCS projects per server
- Add shared or published folders to a VCS project (must include sub folders)
- Check in/out folders or a set of resources

- Version History
 - View past revisions for an entire project, folder or resource
 - Rollback to prior revisions or versions of a resource
 - Visually compare the .cmf or code for specific versions
- Not supported in cluster environments

Column Masking Policies (Column-Level Security)

Column masking policies allow you to create reusable masking rules that can apply to specific types of data requiring specific levels of access for different user/groups. For example, social security numbers in different views can use the same policy to say that a user in HR can see the entire value, a user in the support team can only see the last 4 digits ('xxx-xx-4837'), a user from marketing can not see any of the value ('xxx-xx-xxxx') while any other user will get NULL returned. For more information, see the *CIS Administration Guide*.

- Reusable policies for common types of data (e.g., credit cards, SSN, etc.)
- Policies have rules defined for different user/group access levels
- Masking rules can be:
 - Original Value
 - NULL
 - Static value (for example, replace salary with '[no access]')
 - Padding first or last parts of a value (for example, mask everything but last 4 digits)
 - A custom function (any procedure on the server that returns a scalar) can call a custom expression (an embedded case statement)

Centralized Cache Status Tracking (Cache Data Storage on Multiple Databases)

Decoupling of cache status/tracking tables. For each eligible data source, you can specify whether you want the cache status and tracking data stored on that data source or on another eligible data source. Typically this type of configuration allows an administrator to manage all the tracking and status tables. When using multiple data sources for caching, the cache tracking and cache storage tables stay together on the same data source. For more information, see the *CIS User's Guide*.

Lineage UI Improvements

- Launch lineage graph directly from a column in the explorer tree to a filtered graph

Functions and Configuration Updates

- Updates to Redshift topics.
- IN () operator revisions.
- Revert SELECT behavior configuration parameter added.
- Updates to analytical functions chapter.

For more information, see the *CIS Reference Guide*.

Query Engine Partition/Join Pruning Optimization

Sometimes, for partitioned data, you want to run a query against a specific partition. This behavior is often referred to as join pruning. CIS has been set to perform this for you automatically. If you want to manipulate or confirm the settings, you can use the CIS configuration parameters that are accessed through Studio. For more information, see the *CIS User's Guide*.

Rewrite Correlated Subqueries as JOINS

- CIS converts certain classes of subqueries used by IN or equality (=) query predicates (filters), that are correlated (depend on column values provided by the outer query), to Inner Joins.
- This translation results in better runtime performance. Instead of having to execute the subquery as many times as the number of rows of the outer query the subquery is evaluated once.

Join Pruning Is Supported for INNER JOINS When FK Information is Available

- CIS rewrites prunes (removes) the PK branch of a PK-FK INNER JOIN to eliminate the join, if no columns are projected from that branch.
- Not having to fetch any data from the removed branch leads to improved performance.

UNION and JOIN Pruning When an 'IN' Clause Is Used

- CIS leverages the information in IN query predicates (i.e. filters) using literal values (for example, IN (1, 2, 3)) by combining it with other filters known to be applied to branches of JOINS or UNIONS.

For example, consider a UNION using three branches combining data from 'CA' and 'NY' and 'TX' with each branch contributing data from exactly one state.

- If within the same query scope the state is known to be IN ('IL', 'CA', 'CO'), then the Union branches for 'NY' and 'TX' can be safely pruned.
- Not having to fetch any data from the removed branches leads to improved performance.

Similar patterns on JOINS, depending on the type of the join (inner or outer) can lead to the conversion of the join to a 'null scan' (a special query plan node indicating no input) or to its elimination through the removal of one of its branches.

New and Updated Data Source Adapters

The new and updated adapters:

- ParStream

Technical Documentation

Significant improvements to email trigger instructions were made.



Service Pack Maintenance

This section contains:

- [About CIS 7.0 Installation, page 9](#)
- [About Service Pack Maintenance, page 9](#)
- [Applying the Service Pack to CIS, Studio, and Business Directory, page 10](#)
- [Applying the Service Pack to Active Cluster, page 11](#)
- [Rolling Back a Service Pack or Hotfix for CIS, Studio, and Business Directory, page 12](#)
- [Uninstalling the Default Database Cache Feature, page 14](#)
- [Recovering if a Server Was Started Too Soon, page 14](#)
- [Maintaining CIS-to-Client Application Connections, page 15](#)

About CIS 7.0 Installation

The instructions for installing CIS 7.0 are in the *CIS Installation and Upgrade Guide*. After CIS 7.0 is installed, you can proceed with installation of service packs or hotfixes.

If you are sent a patch to address a specific urgent issue, it is referred to as a hotfix patch. Hotfix patches have been quickly created by our engineering group for timeliness and are not for general use.

Hotfix patches are not automatically carried over through export and import processes during an upgrade or migration. They need to be reapplied if you migrate to another instance that is the same version. Hotfixes are also built for specific versions of CIS, so they should not be used for later versions of CIS than the version for which they were built.

About Service Pack Maintenance

A service pack is a zipped package of files that fixes known issues and often provides enhanced functionality. All CIS, Studio and Business Directory software service packs are cumulative and supersede previously released service packs. A service pack should be applied on all computers where CIS products are installed, keeping them all at the same revision level. Installation of a service pack does not change configuration settings and custom functionality.

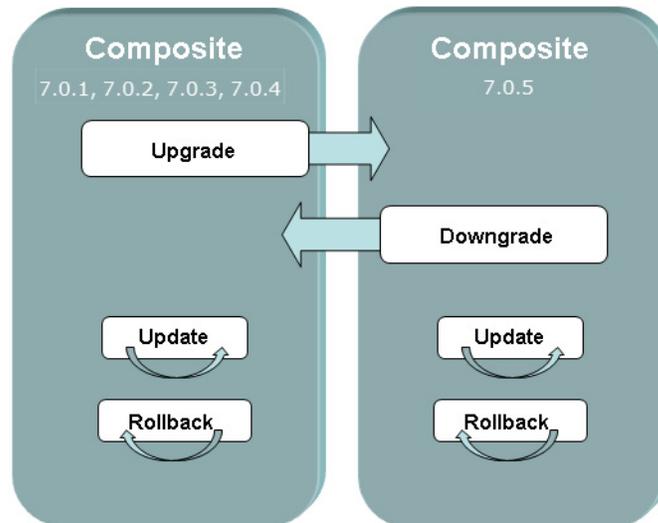
It is recommended that you keep your CIS Server and Business Directory Server instances at the same patch level.

Update, Upgrade, Downgrade, and Rollback

Terms have the following definitions in the diagram and procedures in this section:

- `<install_dir>`: The installation directory for CIS, Studio, or Business Directory, as appropriate.
- **Upgrade**: To upgrade to a higher release (for example, from 7.0.4 to 7.0.5) by running the upgrade script that comes with the service pack. You can upgrade from any 7.0.x version directly to 7.0.5.
- **Downgrade**: To revert to a previous release (for example, 7.0.5 to 7.0.4, or 7.0.5 to 7.0.2) by running the downgrade script that comes with the service pack. You can downgrade from 7.0.5 to 7.0.4, 7.0.2, or 7.0.1. You cannot downgrade to 7.0.

- **Update:** To apply a hotfix within a release (7.0.x) by running an update script, which is included with every hotfix.
- **Rollback:** To remove a hotfix within a release by running a rollback script, which is included with every hotfix.



Applying the Service Pack to CIS, Studio, and Business Directory

Important bug fixes and additional functionality are added to CIS with each service pack.

Service packs typically involve careful ordering of procedural steps to make sure appropriate scripts are generated and available, and backup files saved.

Note:

- Customers using advanced data source adapters that require OAuth need to first run CIS as a stand-alone server (no Monitor Daemon), set up OAuth once, and then run CIS with the Monitor Daemon.
- Sometimes when running Manager after a service pack install an error message pops up (Unable to finish loading...). You can safely ignore this message, close, and reopen Manager.

To apply a service pack

1. Optionally, perform a full CIS and Business Directory backup. For details about backup export, see the *CIS Administration Guide* or the *Business Directory Guide*.
2. If installing on Windows 8, be sure to use Run as Administrator.
3. If your CIS products are running, stop the products that you want to upgrade.
4. Copy the service pack zip file to <install_dir>.
5. Unzip the file.
6. When asked whether to replace the existing files, reply Yes.

If you are not asked whether to replace files, the patch is being extracted to some directory other than <install_dir>. The patch must be extracted to the appropriate installation directory, and must overwrite files in that directory.

Applying the Service Pack to Active Cluster

7. Run one or more of these scripts to upgrade your products:

Product	Directory	Script
Studio	bin	studio_upgrade_patch.bat
CIS	bin	cis_upgrade_patch.<sh bat>
Business Directory	bin	bd_upgrade_patch.<sh bat>

Note: When you run the CIS_upgrade_patch script to upgrade from 7.0.1, you will be prompted for the cache database password.

CIS Server and Business Directory servers are restarted when the script finishes running. You can reopen the client applications, such as Studio, after the script finishes running.

8. To configure the dependency from your CIS Server to the default database cache:

a. Stop the CIS Server. For example:

```
composite.bat monitor stop
```

b. Uninstall the monitor daemon. For example:

```
composite.bat monitor uninstall
```

c. Install the monitor daemon. For example:

```
composite.bat monitor install
```

Applying the Service Pack to Active Cluster

When updating Active Cluster, it is critical that clusterid remain unchanged. Changing it can adversely affect cached data.

These instructions are guidelines developed from testing with a two node Active Cluster environment.

To upgrade with scheduled system downtime

1. Determine and note the clusterid, so that it can remain unchanged.
2. Make sure that the cluster is in sync. That is, make sure both nodes are in the cluster and are functional.
3. Disable any cache refreshes on both of the nodes.
4. Configure the load balancer to stop sending traffic to node 1.
Shutting down node 1 would cause in-flight requests to fail.
5. Remove node 1 from the cluster.
6. Apply the service pack or hot fix to node1.
7. Start up node 1, but do not re-join the cluster.
8. Configure the load balancer to send traffic to node 1 instead of node 2.
9. Remove node 2 from the cluster.
10. Apply the service pack or hot fix to node 2.
11. Join node 1 and node 2 to the cluster.

12. Enable cache refreshes on both of the nodes.
13. Verify the cluster status.

Rolling Back a Service Pack or Hotfix for CIS, Studio, and Business Directory

If you installed a service pack or hotfix and you later decide that you want to revert to the previous installation, you can roll back the service pack changes.

Precautions

It is important to understand the requirements and limitations of rollback procedures:

- You can use this process to roll back to an earlier 7.0.x release. You cannot use this process to roll back to a version prior to 7.0.
- If you are rolling back from version 7.0.5 to 7.0.2, you need to use the `-toVersion` argument with the `rollbackRepository` command.
- *The rollback scripts are only for rolling back to a previous patch. Rollback is not guaranteed to work if performed with an instance that only has one 7.0.1 or later patch or hotfix applied, in an attempt to roll back to the base 7.0 GA version. If you do this, starting the CIS server may result in error messages such as these:*
 - In the `cs_repository.log`: “Could not receive data from client: No connection could be made because the target machine actively refused it.”
 - In the `cs_monitor.log`: “MONITOR STOP. The metadata repository was created with a newer version of the server. The server cannot continue.”
- To recover from an attempted rollback to CIS 7.0 GA, you need to stop CIS or Business Directory, reapply the patch or hotfix, and then restart the application. If you have already run the `update_patch` script, you do not need to run it again. (This nullifies the rollback and puts you back in the patched release level.)
- Another way to recover from an attempted rollback to CIS 7.0 GA is to reinstall CIS 7.0 GA from scratch and re-import the backup export file you saved before applying the patch.
- Refer to [Rolling Back CIS from 7.0.5 to 7.0.4 on a Linux Platform, page 14](#) for a procedure to work around a cache policy configuration error.

To roll back or downgrade a service pack or hotfix for CIS, Studio, or Business Directory

1. Stop each product you need to roll back or downgrade.
2. Stop the Monitor Daemon:

```
composite.<bat|sh> monitor stop
```

You can check for a “Bye” message in `cs_server.log`.

3. For Business Directory, locate and edit the `bd_server_values.xml` file so that it looks like this:

```
<?xml version="1.0" encoding="UTF-8"?>
<common:attributes xmlns:common="http://www.compositesw.com/services/system/util/common">
  <common:attribute>
    <common:name>/bd/config/enableAdminInterface</common:name>
    <common:type>BOOLEAN</common:type>
    <common:value>>true</common:value>
  </common:attribute>
</common:attributes>
```

4. Navigate to the CIS, Studio, or Business Directory install directory.

Rolling Back a Service Pack or Hotfix for CIS, Studio, and Business Directory

5. Start the server process without the Monitor Daemon. For example:

```
For CIS: composite_server.<bat|sh> run
For BD: bd_server.<bat|sh> run
```

6. Keep the server running, and in a different terminal roll back the repository.

To roll back the repository from 7.0.5 to 7.0.4 or 7.0.2, run:

```
server_util.<bat|sh> -server <ID> -port <port> -user <user_ID> -password <password> -rollbackRepository
-toVersion 7.0.x
```

7. Check the repository version, for example:

```
INSTALL_DIR/repository/bin> ./psql -U admin -p 9408 -h localhost -d cis070001 -c "select * from
cis070002.metadata_version"
```

Rollback Version	CIS Repository Name
7.0.5	31
7.0.4	30
7.0.3	29
7.0.2	28
7.0.1	27

8. Run the rollback script. For example:

Rollback Type	Command
Service Pack rollback	<pre><install_dir>/install/rollback_cisco_cdv_patch_A.B.C.DD.EE.SPx.<product>.<bat sh></pre> <p>The <product> string is cis, studio, or bd (Business Directory). For example:</p> <pre><install_dir>/install/rollback_cisco_cdv_patch_7.0.1.00.11.SP1_bd.bat</pre>
Hotfix rollback	<pre><install_dir>/install/rollback_cisco_cdv_hotfix_A.B.C.DD.EE.SPx.<product>.<bat sh></pre>

9. If you are moving from 7.0.x or 7.0.2 to 7.0.1, run the downgrade script. For example:

Downgrade Type	Command
Service Pack downgrade	<pre><product>_downgrade_patch.<bat sh></pre> <p>The <product> is cis, studio, or bd (Business Directory). For example:</p> <pre>cis_downgrade_patch.sh</pre>

Note: If you are applying a patch or a hotfix within the same release (7.0.1, 7.0.2, or 7.0.5), or moving back to a release that does not require an upgrade (7.0.2), you perform a rollback, but not a downgrade. For example, you would need a rollback but not a downgrade if you were moving from 7.0.5 hotfix 12 and 7.0.5 patch 10.

10. Navigate up one directory level and reapply the last service pack or hotfix.

11. Start the Monitor Daemon.

```
For CIS: composite.<bat|sh> monitor start
For BD: bd.<bat|sh> monitor start
```

Uninstalling the Default Database Cache Feature

In the server.log, verify that the version is the target version you intended.

12. Import backup CAR files as needed.

Note: Downgrading from 7.0.5, 7.0.4, 7.0.3, 7.0.2 to 7.0.1 or 7.0 does not remove the default database cache process.

Rolling Back CIS from 7.0.5 to 7.0.4 on a Linux Platform

If you roll back CIS from 7.0.5 to 7.0.4 on a Linux platform, you will encounter what appears to be a cache policy configuration error. For example:

```
Problem(s) encountered :1 - "/shared/examples/ViewSales" using the cache policy: "h2" : The resource
'/lib/sources/cacheDataSource/view29088' does not exist.
```

In fact (in this case), the resource /lib/sources/cacheDataSource/view29088 does exist.

Workaround

1. Perform the rollback (refer to [Rolling Back a Service Pack or Hotfix for CIS, Studio, and Business Directory, page 12](#)).
2. Go to the Info tab and add an annotation.
3. Save the Cache Policy.

Uninstalling the Default Database Cache Feature

If you installed the Default Database Cache feature as part of a patch installation, you need to stop it and uninstall it manually before the step in which you uninstall CIS.

To uninstall the Default Database Cache feature

1. Stop the Server and Repository if they are running.
2. Go to the bin directory under <install_dir>.
 - a. Run these commands for Windows:

```
bin\composite.bat cache stop
bin\composite.bat cache uninstall
```

- b. Run these commands for UNIX:

```
bin/composite.sh cache stop
bin/composite.sh cache uninstall
```

3. Follow the uninstallation steps for CIS, as described in the *CIS Installation and Upgrade Guide*.

Recovering if a Server Was Started Too Soon

For CIS 7.0.x on Windows OS, if you started CIS or Business Directory before you ran the patch, you can no longer start the server from the command line. To recover from this situation, follow this procedure.

To recover if a server was started too soon:

1. If they are running, stop the CIS or Business Directory service.
2. Open a command window (for example, cmd.exe) and type:

```
cd <install_dir>\bin
.\70inst_patch.bat
```

3. Start the CIS or Business Directory service.

Maintaining CIS-to-Client Application Connections

4. In a command window, type:

```
.\server_util.bat -server <hostname> -user <user_ID> -password <password>  
[ -port <port> ] [ -domain <domain> ] -regenerateFiles
```

5. Stop the CIS or Business Directory service.

6. Wait two minutes.

7. Try starting the CIS or Business Directory service from a command window:

```
<install_dir>\bin\composite.bat monitor start (CIS)  
<install_dir>\bin\bd.bat monitor start (Business Directory)
```

CIS or Business Directory should now run without any “unknown service” errors.

Maintaining CIS-to-Client Application Connections

This section includes instructions for how to update connections between CIS and your client applications in the following sections:

- [Updating an ODBC Client Application, page 15](#)
- [Updating a JDBC Client Application, page 15](#)

Updating an ODBC Client Application

To patch ODBC client applications

1. Install the ODBC patch as you would for a Studio installation, but apply the ODBC patch only to where you installed a CIS ODBC client:
 - 32-bit driver: <CIS_install_dir>/apps/odbc
 - 64-bit driver: <CIS_install_dir>/apps/odbc64
2. See the *CIS Client Interfaces Guide* for more information.

To patch ODBC client users on Windows 7

1. Locate your Windows 7 DSN entry file.
2. Recreate any custom system DSNs, using DSN tools.
3. See the *CIS Client Interfaces Guide* for more information.

Updating a JDBC Client Application

To patch JDBC client applications

1. If you only need to obtain the updated CIS JDBC driver for your JDBC client, you can do one of the following:
 - Obtain the updated csjdbc.jar file from the server's <CIS_install_dir>/apps/jdbc/lib directory after the Studio patch is installed.
 - Extract any one of the csjdbc.jar files directly from the patch zip file.
2. See the *CIS Client Interfaces Guide* for more information.



7.0.5 Fixed and Known Issues

This section contains:

- [CIS and Business Directory 7.0.5 Fixed Issues, page 17](#)
- [CIS and Business Directory 7.0.5 Known Issues, page 21](#)

CIS and Business Directory 7.0.5 Fixed Issues

This section lists issues fixed in this release (includes hot fix issues).

7.0.5 Fixed Issue Number	Components	Description
CIS-57786	Driver - ADO.NET	Kerberos pass through authentication has been added for the ADO.NET client driver.
CIS-60780	Driver - ADO.NET	TIME data type is now returned properly while using ADO.net driver
CIS-62822	Driver - ADO.NET	The ADO.NET driver no longer throws a security decryption error if an AD service account is used.
CIS-63062	Driver - ADO.NET, Security	Denial of Service Attack against CIS using ADO.net are prevented so that TCP ports will not be established with an incorrect keystory password.
CIS-61005	Driver - ODBC	CIS will now return a better error code (01002 Disconnect error or 08S01 Communication link failure) when an ODBC client connection like Tableau times out so the application can handle the error and reconnect.
CIS-64086	Driver - ODBC	The CIS ODBC Driver now reports the ODBC compliant level 3 data code (# 93) for TIMESTAMP columns in a result set instead of the incorrect code # 11 when an Oracle Gateway connection is used.
CIS-61616	Interface - REST, Server	There is now a REST API call to get CIS server product/version related information.
CIS-62701	Monitor - Server	Set cookie now uses the HTTPOnly Keyword to prevent cross-site scripting.
CIS-63832	Monitor - Server	Monitor Information Disclosure
CIS-60803	Other	The Custom Adapter Framework now allows the suppression of the Catalog name during introspection
CIS-60804	Other	A Custom Adapter no longer removes all previously introspected resources if CIS fails to connect during re-introspection
CIS-57292	Performance	DBChannel queuing is now enabled by default to improve performance for large data sets.
BD-4620	Security	Reflected Cross-Site Scripting
CIS-58398	Security	commons-collections-3.2.2.jar is included.
CIS-59559	Security	"Jsessionid" and "session_id" are now configured with the HTTPOnly and secure flags to prevent cookie theft and eavesdropping
CIS-59726	Security	Special characters are now escaped in LDAP DSN names

7.0.5 Fixed Issue Number	Components	Description
CIS-61172	Security	CIS will now return a more detailed error message when an error occurs using certificate-based cipher suites
CIS-61487 CIS-61718	Security	<p>There is a known issue with Silverlight that allows access from any domain. To mitigate this security issue, the following to files have been renamed:</p> <ul style="list-style-type: none"> ■ crossdomain.xml.sample ■ clientaccesspolicy.sample <p>To workaround this issue and continue using the files, you can reintroduce the security issue by renaming the files.</p>
CIS-61600	Security	<p>Using the default CIS keystore and truststore files with the default passwords that are defined can be a security risk.</p> <p>Consult the <i>CIS Administration Guide</i> for version 7.0.4 or later and create customized keystore truststore files with customized passwords.</p>
CIS-62715	Security	Denial of Service Attack against CIS using OpenSSL or other client are prevented.
CIS-63631	Security	LDAP groups will no longer be deleted if a sync request comes back empty or if there are users or sub groups in the LDAP group.
CIS-63794	Security	Internal Jetty URLs are no longer displayed in error messages.
CIS-28016	Server	IN() operator now works for multiple values.
CIS-54202	Server	Security Tokens can be add in the SOAP Header.
CIS-54202	Server	Configure SOAP data source with security token is supported.
CIS-54202	Server	Security Tokens can now be passed in the header for SOAP data sources.
CIS-60549	Server	cs_server.out file now properly rollover based on the value of the log4j.appender.MONITOR_STDOUT.MaxFileSize property in the log4j.properties file.
CIS-60781	Server	In Studio, you can now access a folder if it has a data source type with an expired license.
CIS-61178	Server	QE no longer creates duplicate projections from a client query to a CIS published table
CIS-61339	Server	The dbchannel queue has been improved for better performance.
CIS-61342	Server	Max/min memory setting have been moved to the vmargs file instead of java options
CIS-61459	Server	CIS Monitor / Server session ERRORS are no longer generated forever in cs_server_client.log
CIS-61679	Server	SNMP events (CS_SESSION_LOGIN_FAIL_ID= 20700) generated prior to 7.0.3 hotfix 13 have been restored to maintain backward compatibility.
CIS-61933	Server	Performance of the re-introspection of Drill data source has been improved.
CIS-62027	Server	A nested SQL procedure calls that contain large vector cause memory to increase no longer cause a memory leak under certain conditions.
CIS-62069	Server	The SSL protocol for Salesforce no longer gets reset when a REST/HTTPS data source is executed.
CIS-62819	Server	Session counter is now incremented only if the session is properly authenticated.
CIS-63642	Server	Connections now properly timeout after no data is received in a given duration while using either telnet or openssl s_client utilites

7.0.5 Fixed Issue Number	Components	Description
CIS-63904	Server	Related to CIS-64499, Max sessions parameter will now be enforced so requests will be properly released and the pre-fetch queue will not max out.
CIS-64166	Server	Further testing and support for Kerberos when IBM JDK is used
CIS-64499	Server	With the 7.0.4 GA release, some cases were found where the max sessions and max requests parameters were not enforced. This has been corrected in HF 04.
CIS-61741	Server - Caching	Caches will maintain consistency when a cache policy is used and refreshes are in progress.
CIS-61873	Server - Caching	The implicit dependency check for cache policies will now include procedures.
CIS-61485	Server - Cluster	User's password change is now propagated to other nodes when "Store User Passwords" is off and user's password is stored in a hash
CIS-53193	Server - Data Sources	CIS now supports the ability to push the OVERLAPS function.
CIS-59902	Server - Data Sources	For SAP BW BEx adapter, Hierarchy Node variable now supports nodes outside of base characteristic.
CIS-60422	Server - Data Sources	CIS now supports v37 of the Salesforce.com API.
CIS-61236	Server - Data Sources	Support for the ifnullcb() function in couchbase adapter has been added.
CIS-61603	Server - Data Sources	CIS now supports the JCo connection properties gwghost and gwserv for the SAP BW BEx adapter.
CIS-61611	Server - Data Sources	Push down for CONCAT, PI, POW(x, y), SQRT(x) are now supported for Apache Drill Adapter.
CIS-61692	Server - Data Sources	When creating a CIS SAP adapter for a load balanced SAP environment, the application server field and system number are no longer mandatory so that a message server can be used.
CIS-62597	Server - Data Sources	JCO 3.0.15 for is now certified for SAP data sources.
CIS-62664	Server - Data Sources	Refresh google adwords adapter to use the latest API (v201609)
CIS-62804	Server - Data Sources	Able to get a text value from a numeric cell.
CIS-62804	Server - Data Sources	When access Microsoft Excel 97-2003 workbooks with the Excel (non-ODBC) adapter, CIS will not throw an error if there are multiple datatypes in a column.
CIS-63717	Server - Data Sources	jcifs-1.3.17.jar file was missing from CIS 7.0.4.00.03, it is now included with the product.
CIS-63717	Server - Data Sources	jcifs-1.3.17.jar file is now included. It was missing from CIS 7.0.4.00.03.
CIS-64479	Server - Data Sources	The LIKE clause no longer fails when using the customer adapter framework for a DB2 iSeries custom adapter.
CIS-62535	Server - Import/Export	pkg_import can now reset the 'host' (URL) attribute for SOAP data sources.
CIS-62111	Server - Metrics	KPI Server Duration value now correctly reflects amount of time a request spends on the server.
CIS-64016	Server - Metrics	Cluster Metrics Delete Issue

7.0.5 Fixed Issue Number	Components	Description
CIS-64016	Server - Metrics	When deleting old KPI metrics data in a cluster setup, the host and port are now included to properly delete the old metrics data.
CIS-61543	Server - Query Engine	Colliding alias name no longer lead to query results returned in wrong order
CIS-62665	Server - Query Engine	Fixed an issue introduced in 7.0.4 HF02 where a null point exception was thrown when saving a view that has a VARCHAR/CHAR column with a numeric value.
CIS-62901	Server - Query Engine	Support UNION and JOIN pruning for IN clause.
CIS-63878	Server - Query Engine	REGEXP_EXTRACT results no longer vary between runs.
CIS-64044	Server - Query Engine	Optimizer uses statistics for semijoin when DISTINCT clause is used.
CIS-64511	Server - Query Engine	CIS PARSE_TIMESTAMP returns correct results when hour=12.
CIS-64511	Server - Query Engine	Wrong Results: PARSE_TIMESTAMP function was returning incorrect results when the hour was set to 12.
CIS-64841	Server - Query Engine	Same Query returns different results on CIS and Oracle
CIS-61187	Server - Repository	A postgres repository corruption could happen when performing a backup_export.sh if the allocated RAM was less than the Heap memory. There is now a configuration to Server > Memory > Java Heap that shows the total RAM available on the system so users won't tend to over-allocate memory to CIS.
CIS-63295	Server - SOA	Published web services will now work when output xml value includes xmlns="" as attribute.
CIS-55300	Server - Transformation Engine	XML namespace does not display in sub nodes.
CIS-55300	Server - Transformation Engine	A new option has been added to remove the namespace declarations when an Any-to-Any transformation has an XML output. There is a new configuration parameter to enable the behavior under Data Sources > Transformations > Declare Namespace in Root Element.
CIS-62699	Server - Transformation Engine	When creating and publishing a XQuery transformation as a JSON service, data will not be truncated from random fields if querying a large amount of records.
CIS-62847	Server - Transformation Engine	XQuery published as a JSON web service no longer throws an exception when a null decimal element is encountered for pre-7.0.4 REST/JSON web services.
CIS-62902	Server - Transformation Engine	The extra element wrapper introduced in 7.0.4 GA when publishing a REST/JSON web service has been removed so that REST/JSON web service output is consistent with pre-7.0.4 versions.
CIS-64573	Server, Server - Data Sources	You can introspect Teradata Macros.
CIS-62510	Server, Server - Query Engine	INSERT / SELECT no longer fails due to Data Ship missing temporary ship table error
CIS-62109	Server, Server - Repository	The metadata in system.ALL_COLUMNS will now be updated after a re-introspection.

7.0.5 Fixed Issue Number	Components	Description
CIS-59773	Server, UI - Manager	Web Manager supports user login through SSL (http (non-SSL) is disabled).
BD-4581	UI	"Day of Week" is now listed in the site refresh page when language is set to Chinese.
BD-4615	UI	Selection of categories now work properly when using hotkeys in Business Directory.
CIS-58916	UI - Studio	Data source component owner, if different, can now be changed to owner of the data source itself
CIS-59219	UI - Studio	Moving RBS policy resource folders to any folder within studio other than its original location no longer generates an error in the Web Manager or Studio.
CIS-62550	UI - Studio	When a Trigger that executes a procedure is opened, the procedure values are defaulted to the proper values

CIS and Business Directory 7.0.5 Known Issues

This section contains the following topics:

- [Legacy Web Services Known Issues, page 21](#)
- [7.0.5 Known Issues, page 21](#)

Legacy Web Services Known Issues

If you have converted a legacy Web Service, and Studio shows that resource as being impacted, you will not be able to access that site's published data using Business Directory. To work around this issue, make sure that all the published resources for your CIS instance are in a clean and valid state before attempting to add it as a site for Business Directory.

Legacy Web Services are not supported in CIS version 7.0 and later.

7.0.5 Known Issues

The following are known issues in the release:

7.0.5 Known Issue	Component	Description
BD-4706	Business Directory	<p>"Unable to retrieve data from data source" error in Business Directory. If you apply a column-based security (CBS) policy to a table (tbl1), and also apply a CBS policy to a view in that same schema that is derived from the table (tbl1), an error displays in Business Directory.</p> <p>To work around this issue, make sure that CBS policies are applied in such a way that they do not cause a conflict.</p>
	Documentation	<p><i>CIS Installation and Upgrade Guide</i>, Supported Add-On Adapters topic should say:</p> <p>SAP BW Adapter 3.5 and 7.4 SP 9 SAP BW BEx Adapter 3.5 and 7.4 SP 9</p>

7.0.5 Known Issue	Component	Description
CIS-63992	Documentation	<p><i>CIS Administration Guide</i>, Managing Column-Level Security chapter, Importing and Exporting Column Filter Policies topic states that:</p> <p>Export and import of column filter policies requires the following rights:</p> <ul style="list-style-type: none"> ■ Access Tools ■ Read All Resources ■ Read All Users ■ Read All Config ■ Modify All Resources ■ Modify All Config Rights <p>replace the text with:</p> <p>Export and import of column filter policies requires the following rights:</p> <ul style="list-style-type: none"> ■ Access Tools ■ Read All Resources ■ Read All Users ■ Read All Config ■ Modify All Resources ■ Modify All Config Rights <p>To use package import and export of column filter policies requires the following rights:</p> <ul style="list-style-type: none"> ■ access tools ■ read all resources ■ read all users ■ read all config ■ modify all resources ■ modify all config rights
CIS-64540	Documentation	<p>CIS can't load the new ParStream driver (cisco-parstream-jdbc-4.3.3.jar) because it is compiled with JDK 1.8.</p> <p>To work around this issue, configure CIS to use JRE 1.8 because the parstream-jdbc-4.3.3.jar is compiled with JRE 1.8.</p>
CIS-65210	Documentation	<p><i>CIS Installation and Upgrade Guide</i> incorrectly omits support for Red Hat Enterprise Linux 6.7.</p> <p>CIS does support Red Hat Enterprise Linux 6.7.</p>

7.0.5 Known Issue	Component	Description
CIS-65215	Documentation	<p><i>CIS Administration Guide</i>, Using Version Control and CIS chapter, About Version Control (VCS) for CIS topic is missing the following bullet point from the Requirements section:</p> <ul style="list-style-type: none"> ■ The system PATH environment variable must include the full path to your SVN or GIT instance.
CIS-65298 CIS-65295	Documentation	<p><i>CIS Administration Guide</i>, Using Version Control and CIS chapter UI labels as documented might not exactly match the product.</p>
CIS-65309 CIS-65305 CIS-65302	Documentation	<p><i>CIS Administration Guide</i>, Using Version Control and CIS chapter is missing instructions for:</p> <ul style="list-style-type: none"> ■ how to commit multiple resources to your VCS at one time. ■ some details for how revert works. Specifically that revert is also available from the history panel. ■ how to copy a connection.
CIS-65324	Documentation	<p><i>CIS Administration Guide</i>, Using Version Control and CIS chapter, Requirements topic states that:</p> <p>The CIS VCS user must have access tools, read all resources, read all users, read all config, modify all resources, modify all config rights.</p> <p>replace the text with:</p> <p>CIS VCS user must have access tools rights, read all and modify all resources to do VCS operations. To import resources, a CIS VCS user must also have Modify all user rights.</p>
CIS-65232 CIS-65241	Install	<p>Login error for Studio when attempting to use the -encrypt option after downgrading a Studio only install from 7.0.5 to 7.0.4.</p> <p>Work around description:</p> <p>When downgrading a Studio only installation to 7.0.4, you must reapply the keystore/truststore passwords in <CIS_INSTALL_DIR>/bin/studio.bat. Otherwise the Encrypt option from Studio causes an SSL failure when trying to use your downgraded Studio against a 7.0.4 CIS server.</p>
CIS-63487	Other	<p>The resource modified warning dialog does not display and the editor does not close if a foreign key or primary key was updated after performing a reintrospection.</p> <p>To work around this issue, make sure that all table and view editors are closed before performing a reintrospection.</p>
CIS-65289	Security	<p>Sometimes a resource with Column-based policies displays an impact message.</p> <p>To work around this, you can safely ignore the message.</p>
CIS-64674	Server - Data Sources	<p>Investigate why CIS introspection of a remote file-delimited data source does not work on Windows platform</p>

7.0.5 Known Issue	Component	Description
CIS-64936	Server - Data Sources	<p>PostgreSQL current data and time (clock_timestamp) can change during a SQL statement execution. CIS currently maps CURRENT_TIMESTAMP to clock_timestamp().</p> <p>To work around this issue, be advised that this behavior might cause timestamp differences and take that into account when designing the resources and objects that make use of date and time.</p>
CIS-62873	Server - Query Engine	<p>Sometimes when using ORDER BY in the Studio SQL Scratchpad, incorrect results display.</p> <p>To work around the issue, use ALIAS NAME in the query with ORDER BY.</p>
CIS-64318	Server - VCS	When creating Cache for a View and a Procedure, TRIGGER type resources are listed in createdResources even though they don't exist in CIS.
CIS-64365	Server - VCS	Modifications made during reintrospection do not show in the Diff panel.
CIS-65017	Server - VCS	<p>Fetch does not work after moving or renaming resource.</p> <p>To work around this issue, do not attempt to fetch details on a resource that has been moved or renamed.</p>
CIS-65131	Server - VCS	Full server backup does not contain VCS released information.
CIS-65138	Server - VCS	The only currently supported directory for VCS is <CIS_INSTALL_DIR>/data/vcs.
CIS-65220	Server - VCS	Active Cluster is not supported for VCS.
CIS-65252 CIS-65297	UI - Manager	<p>Session timeout is not maintained for Manager. There are 3 configuration parameters that control session and Studio timeouts:</p> <ul style="list-style-type: none"> ■ Session Timeout ■ Session Heartbeat(millisecond)- ■ Session Heartbeat Interval <p>Depending on your settings for each of those values, they can cancel each other out and leave you with sessions that stay active longer than you want. Adjust the values of each of the parameters until you achieve the timeout behavior that you want.</p>
CIS-64346	UI - Monitor	<p>Internet Explorer has a known issue when attempting to require SSL for the Monitor.</p> <p>To work around the issue, after configuring web Monitor to use SSL, use a different browser to access the Monitor.</p>
CIS-64252	UI - Studio	<p>Attempting to search within the Impacted Resource dialog window for a resource that no longer exists in Studio can cause the search field to generate errors.</p> <p>To work around this issue, close the dialog. Refresh the Studio resource tree. Attempt to search for the resource to validate that it still exists.</p>

7.0.5 Known Issue	Component	Description
CIS-65297	UI - Studio	<p>Session timeout is not maintained. There are 3 configuration parameters that control session and Studio timeouts:</p> <ul style="list-style-type: none"> ■ Session Timeout ■ Session Heartbeat(millisecond)- ■ Session Heartbeat Interval <p>Make sure the Studio Heartbeat session is greater than the Server Session Timeout configuration parameter value.</p>
CIS-64489	UI - VCS	When reverting changes, <View> is created and <View>1 is deleted in the CAR file. After a revert, a rebind is not possible.
CIS-64578	UI - VCS	Special character in a VCS instance name can cause unexpected behavior.
CIS-64788	UI - VCS	<p>If you receive “A MultiException has 1 exceptions. They are:1. java.lang.OutOfMemoryError: PermGen space” error in you Studio log files, you need to modify your studio.bat manually after applying the fix in a Studio only installation.</p> <ul style="list-style-type: none"> ■ Find the set JAVA_OPTS line, at the end of that line add the following: <pre style="margin-left: 40px;">-XX:PermSize=64M -XX:MaxPermSize=128M</pre>
CIS-64923	UI - VCS	VCS GIT does not support setting an email.
CIS-64970	UI - VCS	Deleting a root folder detaches of root from VCS without a warning message.
CIS-65034	UI - VCS	Diff for XQuery Procedure results in an empty Source only panel.
CIS-65049	UI - VCS	<p>Special characters in a VCS instance name can cause CIS and VCS to behave incorrectly.</p> <p>To work around, avoid using special characters when naming a VCS instance.</p>
CIS-65056	UI - VCS	After a rollback fails, all subsequent rollbacks also fail.
CIS-65159	UI - VCS	When initializing a workspace using pull, if items in CIS do not exist in remote, they are lost or deleted. There is no message warning of this.
CIS-65161	UI - VCS	<p>If you rename resource and rollback twice, the Studio resource tree displays the original and the renamed resource.</p> <p>To work around, avoid resource renaming if you frequently perform rollbacks.</p>
CIS-65166	UI - VCS	SVN History sometimes displays incorrect commit date and time.
CIS-65178	UI - VCS	<p>The Studio resource tree displays a deleted resource after creating a resource with same name and checking it into VCS.</p> <p>To work around, avoid using the same resource name after a deletion from the Studio resource tree.</p>
CIS-65212	UI - VCS	VCS Fetch incorrectly tags some resources as modified even though there are no differences.

7.0.5 Known Issue	Component	Description
CIS-65250	UI - VCS	Detaching a folder and reattaching with same name (but upper case) results in unexpected behavior. To work around, when renaming resources, choose more than case to make the new name unique.
CIS-65264	UI - VCS	Attempting to attach a folder whose file name and or path are too long causes an error. This is a known problem with Windows.
CIS-65282	UI - VCS	VCS Diff result shows multiple changes after making a change in data source.



Issues Fixed in Earlier Releases

This section contains:

- [CIS and Business Directory 7.0.4 Fixed Issues, page 27](#)
- [CIS and Business Directory 7.0.3 Fixed Issues, page 28](#)
- [CIS and Business Directory 7.0.2 Fixed Issues, page 29](#)
- [CIS and Business Directory 7.0.1 Fixed Issues, page 30](#)
- [CIS 7.0 Fixed Issues, page 30](#)

CIS and Business Directory 7.0.4 Fixed Issues

This section lists issues fixed in this release.

7.0.4 Fixed Issue Number	Components	Description
BD-4538	Security, Server, UI	Users of Business Directory can only browse directories that they have permissions to see.
CIS-58183	UI–Studio	The Studio panel that displays privileges on resources again sorts external LDAP groups.
CIS-58503	Install	CIS is able to find customEventHandler.jar.
CIS-58559	Documentation	<i>CIS Administration Guide, Active Cluster Guide</i> : The PostgreSQL repository and cache port numbers are documented correctly.
CIS-58893 CIS-59701	Server–Query Engine	Query engine supports push-down of GROUP BY over UNION when applicable. (This is also in the list of new features.)
CIS-59176	UI–Studio	Studio displays the Configuration tab on packages.
CIS-59223	UI–Manager	User Management tab in Web Manager no longer returns an error while looking at Group Info.
CIS-59239	Server	Export to Excel no longer has blank cells in the header.
CIS-59479	Documentation	<i>CIS Administration Guide</i> : Documents the composite.sh cache command.
CIS-59485	Documentation	<i>CIS Administration Guide</i> : Provides examples of event log entries.
CIS-59535	Server–Caching	An error workaround is available for BCP bulk transfer for MSSQL on LINUX.
CIS-59753	Documentation, Server–Caching	<i>CIS User Guide</i> : caching chapter: Documents that aborted cache jobs could leave orphaned tables.
CIS-59778	Documentation	<i>CIS Reference Guide</i> : Marks functions that treat empty strings as NULL.
CIS-59822	Documentation	<i>CIS Administration Guide</i> : Documents how to use the Email Logger feature.
CIS-60158	Server	CIS DDL feature requires appropriate rights to create a table.
CIS-60344	UI–Studio	If any setting is changed in the Join Properties dialog, CIS no longer forces you to enter cardinality values (CSCuz69143)
CIS-60958	Documentation	<i>CIS Reference Guide</i> : The LOG function returns a base-10 log.

 CIS and Business Directory 7.0.3 Fixed Issues

7.0.4 Fixed Issue Number	Components	Description
CIS-61147	Server-Caching	The Refresh Now button is grayed out for resources after they are associated with a cache policy.
CIS-61192	Server-Query Engine	A pipe () character in SQL gives expected results.
CIS-61312	Server-Query Engine	UNION ALL results are consistent.
CIS-61370	UI-Manager	Exceptions no longer occur while looking at Group info in Manager.
CIS-61371	UI-Manager	The Lock User popup window in Manager contains spaces between words.

CIS and Business Directory 7.0.3 Fixed Issues

This section lists issues fixed in this release.

7.0.3 Fixed Issue Number	Components	Description
CIS-29609	Server	Support statistics gathering for trending and metrics on published resources. For more information, see the <i>CIS Administration Guide</i> .
CIS-44226	Server - Data Sources	Adapter support for Oracle E-Business Suite 12.1 on Oracle database 11g.
CIS-44815	Server	Support TEMP table creation and deletion for temporary calculations. For more information, see the <i>CIS User Guide</i> .
CIS-52105	Server - Data Sources	Support Teradata 15 as a data source, cache target, and data ship. For more information, see the <i>CIS User Guide</i> .
CIS-55184	Server - Data Sources	Support SQL Server 2014 as a data source, cache target, and data ship. For more information, see the <i>CIS User Guide</i> .
CIS-56238	Interface - REST, Interface - Web API	ADD support for REST / CORS (Cross Origin Resource Sharing). For more information, see the <i>CIS User Guide</i> .
CIS-56473	Server	Web Manager retrieves all groups as expected.
CIS-57092	Install	CIS 7.0.2 service is not coming up after applying service pack 2 because DefaultCacheDatabase port was set to 2147483651
CIS-57133	Server - Import/Export	Fixed the dependency in pkg_export between the command line interface and the Studio interface.
CIS-57546	Server	When using triggers to send email, the CIS Enable Email Events configuration parameter works when set to true.
CIS-57990	Documentation, Server	A new SSL Setup topic has been written for the Administration Guide, detailing how keystore and truststores are to be set up for all CIS components so they can communicate securely with each other.

CIS and Business Directory 7.0.2 Fixed Issues

This section lists issues fixed in the 7.0.2 release.

7.0.2 Fixed Issue Number	Component	Description
CIS-43384	UI - Studio	Allow rebinding of packaged queries to new data sources even if it is impacted or allow rebinding to a different data source.
CIS-43651	JDBC/ODBC	Writing to a univarchar field in Sybase through JDBC works properly.
CIS-44520	UI - Studio	Studio no longer rounds off decimal places.
CIS-44633	Server - Data Sources	Improve the message to explicitly show the status of scheduled test for a data source.
CIS-45768	Server - Query Engine, UI - Studio	Cardinality statistics improvements including: <ul style="list-style-type: none"> ■ Support for gathering statistics on individual tables. ■ Provide a better way to override the number of buckets for columns. Instead of setting this in the configuration parameters, you can now set it in the cardinality statistics tab for the table
CIS-45850	Server - Data Sources	Change the default value for a capability to prevent requests from persisting a READY state.
CIS-46746	Security	Permission denied error no longer happens when querying against published procedure or Composite web services that have column level privilege enabled.
CIS-47578	JDBC/ODBC	Some ODBC tools can be configured to limit the size of the result set. CIS ODBC now honors this limit.
CIS-49090	UI - Studio	When disabling caching on a view, a message displays stating that any gathered statistics will be discarded and cardinality statistics will be disabled.
CIS-50563	Server - Caching	A SystemException no longer occurs when a cache refresh is done by pRefreshResourceCache.
CIS-50744	UI - Studio	Memory manager and privilege window color combinations can be hard for color blind people to see.
CIS-51463	Server - Data Sources	DB2 z/OS MQT (Materialized Query Tables) are available for introspection.
CIS-51477	Server - Caching	An issue with multi table cache refresh is fixed.
CIS-51723	Other	For CIS 7.0, CIS can be stopped as expected.
CIS-51947	Server - Data Sources	System Dual tables can have READ access granted to them.
CIS-52019	Release	CIS product PDFs are included in the Studio installer.
CIS-52090	JDBC/ODBC, Server - Data Sources	Queries to Netezza no longer throw a netezza.max.stmt.handles exception.
CIS-52142	Server - Query Engine	Pushing selections into union branches with an analytical function was improved.
CIS-52234	JDBC/ODBC	Can create Composite ODBC data source on a DEV server.
CIS-52418	Server - Data Sources	Reformatted the custom capabilities XML file so that no additional XML is required inside the comment block.
CIS-52482	Security	Regular users can no longer compromise administrative sessions and gain administrative access to Studio.

 CIS and Business Directory 7.0.1 Fixed Issues

7.0.2 Fixed Issue Number	Component	Description
CIS-52499	Performance	Timeout for statistics gathering should be able to stop a statistics gathering job that is running on the data source.
CIS-52527	Security	Studio no longer allows unauthorized access to query results.
CIS-52537	Security	SQL injection on manager in resource privileges.
CIS-52552	Security	CIS manager session tokens can have "httponly" attribute set.
CIS-53766	Server	CIS installer works on Linux. Because bd_init.sh, cis_init.sh, and cache_init.sh have export LANG=en_US.UTF-8.
CIS-55287	Documentation	The TO_CHAR() function accepts a second (formatting) argument.

CIS and Business Directory 7.0.1 Fixed Issues

This section lists issues fixed in the 7.0.1 release.

7.0.1 Fixed Issue Number	Component	Description
CIS-50251	Query Engine	Self-join generating duplicate alias.
CIS-50742	Other	Long SAP column names are truncated.
CIS-50757	Data Sources	Data source cardinality statistics (full) cause "Exception. Cause: SelectableEstimate is constant but distinct is specified but not equal to 1."
CIS-50787	Server	Procedure containing a custom Java procedure exhausts memory after applying hotfix 6.2.6.00.90.
CIS-50867	Data Sources	SAP - BETWEEN clause fails.
CIS-51482	JDBC/ODBC	ODBC 6.2.5 giving segmentation fault error "Address out of bounds."
CIS-51513	Data Sources	Allow Kerberos login to Hive data source using Keytab/Principal.
CIS-51574	Data Sources	Teradata introspection problems have been fixed.
CIS-51636	UI - Studio	Special XML characters are encoded when run through an XQuery procedure.
CIS-51717	Data Sources	SQL Server data source introspection: An object or column name is missing or empty. For SELECT INTO statements, verify that each column has a name.
CIS-52109	UI - Studio	Check-in to VCS pop-up windows does not display.
CIS-52312	Documentation	Add a step to the 'Identity Confirmation Security Feature' instructions in DataServices_Salesforce.com.pdf.

CIS 7.0 Fixed Issues

This section lists issues fixed in the 7.0 release. Fixed issues are sorted by issue number.

7.0 Fixed Issue Number	Component	Description
CIS-42649	Data Sources, UI - Studio	During Teradata introspection, errors that occur during the fetching of the introspectable resources list are shown on Studio and displayed using the standard error reporting dialog.
CIS-44962	Data Sources	Teradata 14 is supported for data ship and can parse cost estimation information.
CIS-45034	Cache	Scheduled cache refreshes now succeed without errors.
CIS-45211	Server	The EXTRACT function and other date/time related functions work for Teradata.

CIS 7.0 Fixed Issues

7.0 Fixed Issue Number	Component	Description
CIS-45239	UI - Studio	SOAP data sources with the correct credentials can be introspected.
CIS-45366	Data Sources	Data sources without proper configuration issue a warning in the log file instead of failing.
CIS-45481	Data Sources	LDAP data OCTET STRING(VARCHAR) displays the correct characters.
CIS-45564	Data Sources	Delimited file data sources with an empty element can be correctly introspected.
CIS-45666	UI - Studio	Running procedures that print to the Studio console no longer freezes the Studio UI.
CIS-45690	Query Engine	Description of the In Clause Limit For SubQuery In Update And Delete configuration parameter has been augmented.
CIS-45960	Cache	Auto-collection of cardinality stats during cache policy refresh no longer causes locking.
CIS-45973	Archive - Import/Export	Full server backup succeeds as expected for nodes in a cluster.
CIS-46087	UI - Studio	Statistics display consistently for nodes in a cluster.
CIS-46223	Server, Transformation Editor	Transformation Editor error reporting has been improved.
CIS-46225	Server	Opening the lineage panel succeeds without error messages.
CIS-46250	SOA	Published REST services are handling NULL input parameters.
CIS-46279	Data Sources	Introspecting a WSDL that is part of a SOAP data source is successful.
CIS-46824	Server	REST JSON output has improved consistency.
CIS-47518	Data Sources	Re-introspecting flat files in a folder directly under the data source works as expected.
CIS-48328	Cache	Improvements to multi-threaded caching using bcp and messaging related to the same.
CIS-48636	Documentation	Instructions added for how to configure an Impala data source with delegated trusted Kerberos.
CIS-48734	Data Sources	Introspecting Teradata data sources that have column names longer than 30 characters is now supported.
CIS-48795	Archive - Import/Export	Improvement made to how the Row-Based Security Policy "assignments" manage relocation.
CIS-50412	Security	Improvements made to messages logged into Studio from the monitor user.



Support Notices

This section includes

- [Cisco Information Server \(CIS & BD\) EOL Policy, page 33](#)
- [Data Source Deprecations, page 33](#)

Cisco Information Server (CIS & BD) EOL Policy

The Cisco Information Server (CIS) has key dates to keep in mind for its support lifecycle for major (x.0) and minor (x.y) software versions. For service pack releases customers will get support as long as they have a current maintenance contract. However, when a newer service pack releases, the older service pack will not receive any future bug fixes or enhancements. Customers are expected to upgrade to the latest service pack for new bug fixes or enhancements.

The key dates are as follows:

First Customer Ship (FCS)	Initial customer availability of the major or minor software version.
End of Sale (EOS)	End of purchases for a specific major or minor software version. Determined by FCS date of the next major/minor release date.
End of Software Maintenance (EOSM)	End of patches/hotfixes for specific software version. EOSM is 1 year after End of Sale (EOS) Date.
End of Life (EOL)	End of support for specific software version. The EOL date for a specific version is 2 years after the End of Sale (EOS) date.

CIS & BD 7.0 EOL Schedule

Release	FCS Date	EOS Date	EOSM Date	EOL Date
7.0	Jan-2015	Jan-2017	Jan-2018	Jan-2019

The end of life dates for releases are as follows:

- CIS 5.2 - January 30, 2013
- CIS 6.0 - August 15, 2013
- CIS 6.1 - December 2013
- CIS 6.2 - January 2017*

* The 6.2 end of software maintenance dates are subject to change.

Data Source Deprecations

The following data sources are targeted for inactive status and/or deprecation in upcoming releases.

- **Active**—Supported in Studio and Server.

Data Source Deprecations

- **Inactive**—Design and runtime are allowed from Studio and Server. No active testing or development of new features.
- **Desupported**—Design of platform version is no longer supported. Runtime will persist until the subsequent major or minor version of CIS.
- **Deprecated**—Runtime removed from CIS. Old data sources need to be upgraded to platform versions that are supported.

Data Source	Inactive	Desupported Release	Deprecated Release
Apache Hive 0.8.1	6.2.4	7.0	TBD
IBM DB2 LUW 8	6.2.4	7.0	TBD
IBM DB2 z/OS 8	6.2.4	7.0	TBD
iPlanet	6.2.3	7.0	TBD
MS SQL Server 2000	6.2.4	7.0	TBD
MS SQL Server 2005	6.2.4	7.0	TBD
MySQL 4.1	6.2.4	7.0	TBD
MySQL 5.0	6.2.4	7.0	TBD
Netezza NPS 4.5	6.2.4	7.0	TBD
Netezza NPS 4.6	6.2.4	7.0	TBD
Netezza NPS 5.0	6.2.4	7.0	TBD
Oracle 9i	6.2.4	7.0	TBD
Oracle 10g	6.2.4	7.0	TBD
Teradata 12	6.2.3	6.2.4	TBD