



# Infogix Assure®

Release Notes

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**Release 9.4**





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## Overview

The *Infogix Assure Release Notes* describe the enhancements and modifications included in Infogix Assure® 9.4. This document lists migration concerns, maintenance fixes that may affect your rules if you upgrade from a previous release, and known issues.

Follow the instructions in the *Infogix Server Upgrade Guide* to upgrade the Infogix Assure server to the new release. You must also upgrade any client installations to release 9.4. Follow the instructions in the *Infogix Assure Client Installation Guide*.



## Contacting Customer Support

If you need assistance to upgrade to release 9.4, contact Infogix® Customer Support.

Support Phone: +1.630.505.1890

Support Email: [support@infogix.com](mailto:support@infogix.com)

Support Website: <http://support.infogix.com>

Fax Number: +1.630.505.1883

Visit our Website: [www.infogix.com](http://www.infogix.com)

# What's New

This section summarizes the enhancements for Infogix Assure Release 9.4.

## Result Catalog Actions

A new type of result action is available that acts upon result catalogs as a whole, producing alerts for entire result catalogs rather than the individual results within a catalog. This feature allows action administrators to reduce the number of alerts by focusing on the overall control point execution rather than the individual findings within the overall execution.

## Data360 Govern Integration Improvements

The following improvements have been made to the Data360 Govern integration capability originally introduced in release 9.3.

### Control Point Execution Summary

Infogix Assure now sends execution summary data to Data360 Govern daily. This information includes how many times a control point has run in the current month, how long those executions collectively ran, and how many instances they collectively processed. The number of periods (year-month) is configurable. This information allows the Data360 user to understand whether controls are actively running and how the execution behavior has changed over time.

### Layout Field Assets and Usage


Infogix Assure now sends information about each field of layout rules defined within Infogix Assure. Additionally, Infogix Assure sends relationship information on which control points read which layout fields. For database layouts, the information about layout fields includes the database connection, database table, and database column that the field maps to. These capabilities allow a Data360 Govern user to extend the data lineage from technical assets that describe the original business source all the way to the control points, fields, and reports that use those assets.

## User Report Key Break Control

User report summary row output (corresponding to “key breaks” on control fields) is more controllable by the rules developer. In addition to the traditional behavior (now defined as “All”), the rules developer can specify that only summary rows at the most detailed level of “key break” be produced. Alternately, the rules developer can specify that summary rows only be produced for key breaks that have explicit sum or count labels defined, and whether or not to include a grand totals summary line. This new capability allows the rules developer to produce user reports with only the summarization output that they desire.

## Catalog Results Report List Web Service

A new web service method is added to the results web service that returns the list of



reports produced by a control point execution. The returned information includes the type of report and the user interface URL that can be used to view the report. This allows customer-specific programs and interfaces to run control points and provide links to their users that access the reports produced by the control point.

## JSON Layout

A layout rule which provides access to JSON (javascript object notation) encoded data is added to the system. This allows the rules developer to extract data from files of JSON data or database sources that return JSON information in columns.

## Database References Report

A new system-wide report is added that lists database table and column mappings to layout fields and to the rules that use the layout fields. This new report helps customers review and understand the potential impacts to controls for changes being made in source databases.

## Calendar Picker

Calendar selection throughout the system is changed from a drop-down list of calendars to a calendar selection popup window. When the selection popup is used from control points, the user can create the needed schedule calendar or duration calendar on the fly. This improves the rules developer's productivity by avoiding the need to save their control point, navigate to calendars, create the necessary calendar, and then return to the control point and select the calendar.

## Reconciliation Task Summary Report

Reconciliation control points now produce a reconciliation task summary report for the control point execution. The report includes information for each reconciliation task applied in the control point. This information was previously only seen on the reconciliation task summary result produced for each reconciliation task. Additionally, the report summarizes each match-set-end balance check within each task, providing totals for the left side total, the right side total, and the comparison variance in both natural and absolute terms. This new report helps internal auditors and operations staff to ensure the consistent application of the matching rules.


## Client Logging Context

The Infogix Assure client and server utility now includes a process-specific context on log output. This helps system administrators and support to correlate the logging of particular executions in environments where multiple client executions use a shared log file.

## Infogix Insight Notification Override

Traditionally, when Infogix Insight integration is enabled, Infogix Insight is notified of the execution of every control point in Infogix Assure. Now, the controls developer in Assure can choose which control points send execution notification information to Insight with a new option in the control point advanced details. This allows the controls developer to





avoid sending excessive notifications for frequently executed control points that are not included in control views. This helps Infogix Insight keep its control views up to date.

## Fixed in this Release

The following issues have been fixed in this release of Infogix Assure.

JIRA	Details
IA-50250	Control report presentation of derived values and validation checks has problems since 9.0
IA-50815	#UOCM006 persistence error for point-history or field-change-history doesn't show control entity name
IA-50863	Upgrade PDFBOX to 2.0.15 or above for security vulnerability CVE-2019-0228
IA-50865	Runtime field usage fails with #UCMF021 for an async direct input control point execution
IA-50881	governTypes -c fails when relationship types already exist
IA-50884	Importing entity rules with missing profile references may fail with concurrent modification error
IA-50885	Controls import or save may fail with NullPointerException when recon task report definition has invalid source name reference
IA-50930	Export control data server utility does not offer standard security command line options (username, password)
IA-50931	System is allowing invalid characters like semi-colon in named validation checks, causes item dependency errors
IA-50934	Traditional extract tab isn't rendering the extract rule type for expand/collapse-able extract rules (evaluate/when/default, translate)
IA-50935	Possible server 500-bad request error in Recon control point, recon source for output on output tab add source apply

JIRA	Details
IA-50944	Layout add field popup too tall, buttons may be obscured in Edge or Chrome
IA-50964	Express define for a fixed layout, choosing a .pdf file, does not show text of pdf
IA-50970	Reverting a result template to a version with a different display name does not update the display name
IA-51006	Concurrent control point execution may fail with NullPointerException due to unsafe changes to combine rule
IA-51010	Manage control fields duplicate button - cannot edit/alter the name field prior to applying
IA-51016	ProcessedExceptionMigrationTool upgrade handler (8.3 step) fails with processed exception values over 2 billion
IA-51058	Running a control point that has Bypass1ExecuteActions defined no longer works with async cp execution
IA-51097	Reconcilor should, by default, only create matching indexes when saved/imported, not during execution
IA-51099	Async cp runner should retry polling call for communication errors like NoHttpResponseException
IA-51100	Scan control point merge processors make transactions when not needed
IA-51101	Control data instance edit fails to change a boolean field's value - always ends up false
IA-51104	Control data query with field criteria ignores general criteria for cycle and run
IA-51116	Serialized cluster under WildFly does not give back partition processors when node restarts

JIRA	Details
IA-51129	Error during dq application delete, error #UCCM008 shows rule pk instead of application name
IA-51136	Access is denied for apiLayoutChooser from spring when navigating to Rules   Layouts as rule viewer
IA-51142	User report summary filter choices for key breaks missing - only offers All and None
IA-51147	NoSuchElementException running health checker "Item Dependency and rule problems"
IA-51150	Async CP responses may remain on reply queue forever
IA-51156	Workaround WildFly jms correlated jms reply problem in clusters with result catalog check to detect control point completion
IA-51162	External service layouts that support system channels can't be used as reference sublayouts
IA-51163	Problem selecting an Excel layout from the picker using Express control entity creation if the excel layout has a path with parenthesis
IA-51166	Audit comment ID and comments not recorded in execution audit events for async model executions
IA-51171	Test control point via direct input is not setting principal and authorizing in async control execution
IA-51173	Control data filter criteria for dates is not providing for timestamp level values, only whole dates
IA-51187	Control data query with text field field criteria that has a comma in value produces incorrect results
IA-51190	Javascript errors on Chrome when initially viewing a fast rendering Extract tab

JIRA	Details
IA-51191	CSV output where first column data is null incorrectly shifts all data left
IA-51217	Security   Permissions page with filter open partially obscures last row of the sorted list
IA-51219	Permissions error through AssureGateway should provide the userid lacking the needed permission
IA-51220	Govern asset updates should send all fields by default, not just changed fields
IA-51222	Control point definition reports "Updated" time is time of entity update, not the control point being viewed
IA-51223	User report generate to CSV or PDF is very slow for large reports
IA-51226	Inconsistent behavior for alert display or error when following an email link for the alert
IA-51246	Restore "View Control Report" behavior for an alert on a cp with a single user report
IA-51252	Assure clients local capture cannot use internal plugin layouts OLAP, HTML, SOAP webservice
IA-51256	Test layout of a plugin/custom layout set to API data always fails
IA-51257	Test source for source using API data channel does not work for custom layouts or internalized custom layouts like json

# Platform Improvements

This section summarizes changes to supported software, new features, and improvements for this release.

## New Software Supported

The following is now supported:

- WildFly 20

The complete list of supported software and hardware versions is included in the *Infogix Technical Specifications Document* included in the application documentation.

## Java Support

The product has been tested in the following Java environments:

- Amazon Corretto 11 for WildFly 20
- IBM SDK for IBM WebSphere

## Library Updates

In this release, several third-party libraries were updated. These updates increase system security and reliability. Several libraries were updated specifically to address security vulnerabilities.

## Fixed in this Platform Release

The following issues have been fixed in this release.

JIRA	Details
IP-5504	Fixed an issue where an error is generated when a query containing the ">" or "<" operators is run from Infogix Admin Console > SQL Console.
IP-5481	Fixed an issue where the user is logged out of the product when a link to a report in another product is selected.
IP-5446	Fixed an issue where connections were not getting closed for JDBC Scheduler job.
IP-5428	Removed Cancel button from Change Password for User screen.
IP-5357	Fixed an issue with the generation of Hibernate ID values when jobs are run concurrently. This fix is applicable for product deployments that use MS SQL Server database.
IP-5356	Fixed an issue in Admin Console > Logging > Manage Log Outputs that prevented the creation of a new Log Output definition.
IP-5332	Fixed an issue where validate-config-values.bat (.sh) script fails when DBA credentials are not provided.
IP-5280	Fixed an issue where passwords in the properties files are not encrypted with crypt-properties.sh script.
IP-5275	Fixed an issue where HTTP error 400 is generated when "Forgot Password" link is selected.
IP-5246	Fixed a problem where the creation date is incorrectly shown as blank when the user id is added using user.bat (.sh) script.
IP-5182	Microsoft SQL Server JDBC driver has been updated to v8.2
IP-4840	Fixed an issue where SQL Server bulk load utility, bcp, fails when run on a Linux server.



## Changes to System Requirements

For current Infogix Assure technical specifications, see the Infogix Web site:  
<http://www.infogix.com/resource/infogix-technical-specifications>





## Obtaining Product Updates

Be sure to check for product updates for the 9.4 release. Log on to <http://support.infogix.com> and download any applicable fix packs or patches.

# Release-Specific Considerations

The following sections contain information about migration considerations and maintenance fixes that may affect rules migrated from versions 5.1 through 9.3. Refer to the section that covers your current product version.

## Upgrading from 9.3

The following consideration applies to upgrades from Infogix Assure 9.3.

### SOAP and REST API Changes in ControlsAssureResultsService

In addition to the new listReports operation in ControlsAssureResultsService, the following inconsistencies were corrected in this service. These changes mean that your uses of casapi\_results.wsdl should be refreshed to ensure correct results with the service operations readResultCatalogSummary and listResults.

- ExceptionCatalogResponse attribute ID (returned as "id" in REST) is renamed to catalogId.
- ExceptionResponse attribute exceptionCatalogID is renamed to catalogId.
- ExceptionResponse attributes reportID, ruleID and ruleTraceID have been removed (values were never returned by earlier releases).
- readCatalogSummary parameter "arg0" has been renamed to "catalogId".
- listResults parameters have been renamed: "arg0" is renamed to "catalogId", "arg1" is renamed to "offset" and "arg2" is renamed to "limit".

## Upgrading from 9.2

The following consideration applies to upgrades from Infogix Assure 9.2.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

## Upgrading from 9.1

The following consideration applies to upgrades from Infogix Assure 9.1.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix

Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property excel.AUTO\_LENIENTNUMBER\_FOR\_DEFAULT to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

### Network I/O using HDFS file system

In release 9.1 and 9.0 fix pack 90679-0, support for the Hadoop HDFS file system was added. For this capability, the system included libraries from Hadoop 2.6.5 necessary for client access to HDFS. The following libraries were included: commons-configuration-1.6.jar, guava-11.0.2.jar, hadoop-auth-2.6.5.jar, hadoop-common-2.6.5.jar, hadoop-hdfs-2.6.5.jar, htrace-core-3.0.4.jar, and protobuf-2.5.0.jar.

Infogix Assure 9.2 no longer includes these libraries as part of the default installation. To use HDFS, establish a "PLUGINS" folder (see the installation Properties guide topic "PLUGINS\_DIR" for more information), copy the appropriate libraries there for the version of Hadoop HDFS being used, and redeploy Infogix Assure. A similar process can be followed for the Infogix Assure client installation (via CLIENT\_PLUGINS\_DIR).

### Upgrading from 9.0

The following consideration applies to upgrades from Infogix Assure 9.0.

#### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

#### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would

show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property excel.AUTO\_LENIENTNUMBER\_FOR\_DEFAULT to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

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Infogix Assure 9.2 no longer includes these libraries as part of the default installation. To use HDFS, establish a "PLUGINS" folder (see the installation Properties guide topic "PLUGINS\_DIR" for more information), copy the appropriate libraries there for the version of Hadoop HDFS being used, and redeploy Infogix Assure. A similar process can be followed for the Infogix Assure client installation (via CLIENT\_PLUGINS\_DIR).

## Upgrading from 8.5

The following consideration applies to upgrades from Infogix Assure 8.5.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel

documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

### JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase", "com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name "com.{DATABASE\_TYPE}" where DATABASE\_TYPE is one of the properties in a set for making a datasource.

## Upgrading from 8.4

The following consideration applies to upgrades from Infogix Assure 8.4.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property excel.AUTO\_LENIENTNUMBER\_FOR\_DEFAULT to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

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The preferred course of action is to use the datasources.properties installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase",

"com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned datasources.properties installation mechanism works, where the JDBC driver module is deployed using a name "com.{DATABASE\_TYPE}" where DATABASE\_TYPE is one of the properties in a set for making a datasource.

### Error Handling for dateplus and dateminus Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the dateplus or dateminus functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define dateplus.ALLOW\_FAILURE=false and/or dateminus.ALLOW\_FAILURE=false in override.properties and run update-config or deploy.

## Upgrading from 8.3

The following considerations applies to upgrades from Infogix Assure 8.3.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property excel.AUTO\_LENIENTNUMBER\_FOR\_DEFAULT to false. Then, the controls developer can use Format = (Default) for values that may contain

scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

### JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase", "com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name "com.{DATABASE\_TYPE}" where DATABASE\_TYPE is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### External Service (Plugin) Layouts

Any plugin jar files provided by Infogix for a custom type of layout in prior releases must be updated to work with Infogix Assure 8.5. Contact Infogix support about obtaining updated plugins for any layouts that your organization is using.

## Upgrading from 8.2

The following considerations apply to upgrades from Infogix Assure 8.2

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with



cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

### JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase", "com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name "com.{DATABASE\_TYPE}" where DATABASE\_TYPE is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error

occurs during the processing of the dateplus or dateminus functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Web Service Layouts

Any web service layout rules built in this release will no longer work. A new layout rule must be built to access the web service. See “Web Services Layout” in the What’s New section of the Infogix Assure 8.3 release notes for more information.

### External Service (Plugin) Layouts

Any plugin jar files provided by Infogix for a custom type of layout in prior releases must be updated to work with Infogix Assure 8.5. Contact Infogix support about obtaining updated plugins for any layouts that your organization is using.

## Upgrading from 8.1

The following considerations apply to upgrades from Infogix Assure 8.1.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of “General”. In older releases, the library returned the originally entered “raw” value, for example “123123123123”. Viewing the cell in Microsoft Excel would show “1.23123E11”, and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has `Format = (Default)`, this will result in a value of “1.2312311” instead of “123123000000”.

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a `Format of (Default)` is equated to the format called “Lenient” in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as “\$1,231,231,231.23”. In other layouts, a `Format of default` automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn’t shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the `Format` field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same `Format` behavior as previous releases. To change the system

behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to `false`. Then, the controls developer can use `Format = (Default)` for values that may contain scientific notation values, and change fields to `Format = Lenient` for values that may contain decorated values.

### JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names `"com.sybase"`, `"com.db2"` or `"com.postgres"`, then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name `"com.{DATABASE_TYPE}"` where `DATABASE_TYPE` is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Error Handling for `t_contains` Function

Capture processing now fails if an error occurs during processing of the `t_contains` function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define `t_contains.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Web Service Layouts

Any web service layout rules built in this release will no longer work. A new layout rule must be built to access the web service. See "Web Services Layout" in the What's New section of the Infogix Assure 8.3 release notes for more information.

### External Service (Plugin) Layouts

Any plugin jar files provided by Infogix for a custom type of layout in prior releases must be updated to work with Infogix Assure 8.5. Contact Infogix support about obtaining

updated plugins for any layouts that your organization is using.

## Upgrading from 8.0

The following considerations apply to upgrades from Infogix Assure 8.0.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

### JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then

change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase", "com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name "com.{DATABASE\_TYPE}" where DATABASE\_TYPE is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Error Handling for `t_contains` Function

Capture processing now fails if an error occurs during processing of the `t_contains` function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define `t_contains.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Embedded Database Translation Disk Usage

Translation rules that use the "Embedded Database" algorithm now create temporary files in the "DATA\_TEMP" location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

### Web Service Layouts

Any web service layout rules built in this release will no longer work. A new layout rule must be built to access the web service. See "Web Services Layout" in the What's New section of the Infogix Assure 8.3 release notes for more information.

### External Service (Plugin) Layouts

Any plugin jar files provided by Infogix for a custom type of layout in prior releases must be updated to work with Infogix Assure 8.5. Contact Infogix support about obtaining updated plugins for any layouts that your organization is using.

## Upgrading from 7.2

The following considerations apply to upgrades from Infogix Assure 7.2.

## Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

## Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.


While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

## JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase", "com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to



use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name `com.{DATABASE_TYPE}` where `DATABASE_TYPE` is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Error Handling for `t_contains` Function

Capture processing now fails if an error occurs during processing of the `t_contains` function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define `t_contains.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Embedded Database Translation Disk Usage

Translation rules that use the “Embedded Database” algorithm now create temporary files in the `DATA_TEMP` location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

### New Processing Behavior for Delimited Data Sources


Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file if a matching, closing-quote was not found.

Default configuration properties now also limit delimited record lengths to one million characters. Please contact Customer Support if you need to increase this limit for backward compatibility.

### Checking for Required Identity Control Fields

The system now produces a runtime error if a control point cannot capture instances due to a missing Extract rule. Previously, the control point executed, but produced 0 instances.

The error occurs when the extract rules for a capturing control point do not populate a required identity control field. The error message indicates that an extract rule is missing for a required ID field, and the name of the field. To resolve the error, go to the Extract tab for the data source, and add a rule to populate the ID field. If the control entity has



multiple ID fields, verify that extract rules are defined to populate all the other ID fields, too.

### Error Handling for `in` and `val_ifelse` Functions

Capture processing now fails if an error occurs during processing of the `in` or `val_ifelse` functions. Previously, the `in` function returned "false" and `val_ifelse` returned the "else" value in this situation. You can uncomment a property in the `CMF_functions.properties` file if you do not want capture processing to fail, consistent with the behavior of previous releases.

### Web Service Layouts

Any web service layout rules built in this release will no longer work. A new layout rule must be built to access the web service. See "Web Services Layout" in the What's New section of the Infogix Assure 8.3 release notes for more information.

### External Service (Plugin) Layouts

Any plugin jar files provided by Infogix for a custom type of layout in prior releases must be updated to work with Infogix Assure 8.5. Contact Infogix support about obtaining updated plugins for any layouts that your organization is using.

## Upgrading from 7.1

The following considerations apply to upgrades from Infogix Assure 7.1.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell



formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to `false`. Then, the controls developer can use `Format = (Default)` for values that may contain scientific notation values, and change fields to `Format = Lenient` for values that may contain decorated values.

### JDBC in Database Layouts and Control Point Data Exports under WildFly

Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names `"com.sybase"`, `"com.db2"` or `"com.postgres"`, then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name `"com.{DATABASE_TYPE}"` where `DATABASE_TYPE` is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions


Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Error Handling for `t_contains` Function

Capture processing now fails if an error occurs during processing of the `t_contains` function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define `t_contains.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Embedded Database Translation Disk Usage

Translation rules that use the "Embedded Database" algorithm now create temporary files in the `"DATA_TEMP"` location you define during installation. This change allows the



system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

### Text Control Field Length Checking

When the system captures data for a text control field with a specified length, the system now produces a runtime error if the captured value is too large for the field. Generally, this check produces more reliable error notifications than the database truncation check performed by past releases. The system may now produce an error for Match Data captures even though no error was reported in the past.

### Error Handling for `in`, `t_split`, and `val_ifelse` Functions

Capture processing now fails if an error occurs during processing of the `in`, `t_split`, or `val_ifelse` functions. You can uncomment a property in the `CMF_functions.properties` file if you do not want capture processing to fail, consistent with the behavior of previous releases.

### WebSphere Data Source Provider

For a WebSphere deployment, the system now uses a different process to construct the data source provider. The name of the data source provider is also different. The previous name was *Infogix XX JDBC Provider*, where *XX* represents the product identifier. Now the provider is named *InfogixXX JDBC Provider*, with no space after *Infogix*.

To avoid a conflict with an existing JNDI name, it is important to run the `clean.bat` or `clean.sh` script for an upgrade to remove the previous data sources.

### New Processing Behavior for Delimited Data Sources


Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file if a matching, closing-quote was not found.

Default configuration properties now also limit delimited record lengths to one million characters. Please contact Customer Support if you need to increase this limit for backward compatibility.

### Checking for Required Identity Control Fields

The system now produces a runtime error if a control point cannot capture instances due to a missing Extract rule. Previously, the control point executed, but produced 0 instances.

The error occurs when the extract rules for a capturing control point do not populate a required identity control field. The error message indicates that an extract rule is missing



for a required ID field, and the name of the field. To resolve the error, go to the Extract tab for the data source, and add a rule to populate the ID field. If the control entity has multiple ID fields, verify that extract rules are defined to populate all the other ID fields, too.

### Web Service Layouts

Any web service layout rules built in this release will no longer work. A new layout rule must be built to access the web service. See “Web Services Layout” in the What’s New section of the Infogix Assure 8.3 release notes for more information.

### External Service (Plugin) Layouts

Any plugin jar files provided by Infogix for a custom type of layout in prior releases must be updated to work with Infogix Assure 8.5. Contact Infogix support about obtaining updated plugins for any layouts that your organization is using.

## Upgrading from 7.0

The following considerations apply to upgrades from Infogix Assure 7.0.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of “General”. In older releases, the library returned the originally entered “raw” value, for example “123123123123”. Viewing the cell in Microsoft Excel would show “1.23123E11”, and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of “1.2312311” instead of “123123000000”.

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of “(Default)” is equated to the format called “Lenient” in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as “\$1,231,231,231.23”. In other layouts, a Format of “default” automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn’t shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to

false. Then, the controls developer can use `Format = (Default)` for values that may contain scientific notation values, and change fields to `Format = Lenient` for values that may contain decorated values.

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If you establish JDBC driver modules in WildFly with the names `"com.sybase"`, `"com.db2"` or `"com.postgres"`, then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name `"com.{DATABASE_TYPE}"` where `DATABASE_TYPE` is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Error Handling for `t_contains` Function

Capture processing now fails if an error occurs during processing of the `t_contains` function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define `t_contains.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Embedded Database Translation Disk Usage

Translation rules that use the "Embedded Database" algorithm now create temporary files in the `"DATA_TEMP"` location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

### Text Control Field Length Checking

When the system captures data for a text control field with a specified length, the system now produces a runtime error if the captured value is too large for the field. Generally, this check produces more reliable error notifications than the database truncation check performed by past releases. The system may now produce an error for Match Data captures even though no error was reported in the past.

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Capture processing now fails if an error occurs during processing of the `in`, `t_split`, or `val_ifelse` functions. You can uncomment a property in the `CMF_functions.properties` file if you do not want capture processing to fail, consistent with the behavior of previous releases.

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For a WebSphere deployment, the system now uses a different process to construct the data source provider. The name of the data source provider is also different. The previous name was Infogix XX JDBC Provider, where XX represents the product identifier. Now the provider is named InfogixXX JDBC Provider, with no space after Infogix.

To avoid a conflict with an existing JNDI name, it is important to run the `clean.bat` or `clean.sh` script for an upgrade to remove the previous data sources.

### Empty Text ID Control Fields

In all releases, the system does not capture control data for control entity instances with identity control fields containing null values. However, text ID fields containing an empty string value ("") were permitted prior to release 7.1. In most cases, the database stores these empty strings as null values, so any associated control data may be inaccessible. Beginning with release 7.1, the system produces the following error if a text ID field contains an empty string: #UCMF055: An empty value for ID field <fieldname> was found. You can disable this check if it is not appropriate in your environment. Contact customer support for instructions.

### Initial Archive Processing

Beginning with Release 7.1, the system supports scheduled, daily archiving of reports and results generated by control runs. After you upgrade an existing production system and enable archiving, the first archiving run will attempt to archive all the reports and result catalogs in the Infogix Assure database. Because the volume of reports produced by this initial archiving run may be large, ensure there is adequate storage space available in the directory specified for archival outputs. Also keep in mind that archival processing may run for a significant amount of time until it finishes processing the backlog of existing reports and result catalogs in the database. For tips on managing the initial archive process, see the *Infogix Server Upgrade Guide*.

### Archive Space Management

When you enable automatic archiving for a new or upgraded instance of Infogix Assure, establish a process for managing disk space for the archival output directory. For

example, you might want to periodically copy the archived outputs to long term storage media and remove them from the archive folder.

### Web Service API Change

Beginning with release 7.1, the system provides Web services using the JAX-WS libraries, instead of the JAX-RPC libraries used by prior releases. If you like, you can refresh any Java clients that invoke the Infogix Assure Web services to use the new libraries and generated stubs for the API. The wsclientexample project demonstrates the use of the JAX-WS libraries and generated client code. The example project is on the API CD shipped with Infogix Assure.

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Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file if a matching, closing-quote was not found.

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### Checking for Required Identity Control Fields

The system now produces a runtime error if a control point cannot capture instances due to a missing Extract rule. Previously, the control point executed, but produced 0 instances.

The error occurs when the extract rules for a capturing control point do not populate a required identity control field. The error message indicates that an extract rule is missing for a required ID field, and the name of the field. To resolve the error, go to the Extract tab for the data source, and add a rule to populate the ID field. If the control entity has multiple ID fields, verify that extract rules are defined to populate all the other ID fields, too.

## Upgrading from 6.2

The following considerations apply to upgrades from Infogix Assure 6.2.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered

“raw” value, for example “123123123123”. Viewing the cell in Microsoft Excel would show “1.23123E11”, and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of “1.2312311” instead of “123123000000”.

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of “(Default)” is equated to the format called “Lenient” in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as “\$1,231,231,231.23”. In other layouts, a Format of “default” automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn’t shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

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The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name instead.

If you establish JDBC driver modules in WildFly with the names “com.sybase”, “com.db2” or “com.postgres”, then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name “com.{DATABASE\_TYPE}” where DATABASE\_TYPE is one of the properties in a set for making a datasource.

### Error Handling for dateplus and dateminus Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the dateplus or dateminus functions. If you do not want

processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Error Handling for `t_contains` Function

Capture processing now fails if an error occurs during processing of the `t_contains` function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define `t_contains.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

### Embedded Database Translation Disk Usage

Translation rules that use the “Embedded Database” algorithm now create temporary files in the “`DATA_TEMP`” location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

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When the system captures data for a text control field with a specified length, the system now produces a runtime error if the captured value is too large for the field. Generally, this check produces more reliable error notifications than the database truncation check performed by past releases. The system may now produce an error for Match Data captures even though no error was reported in the past.

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### Initial Archive Processing

Beginning with Release 7.1, the system supports scheduled, daily archiving of reports and results generated by control runs. After you upgrade an existing production system and enable archiving, the first archiving run will attempt to archive all the reports and result catalogs in the Infogix Assure database. Because the volume of reports produced by this initial archiving run may be large, ensure there is adequate storage space available in the directory specified for archival outputs. Also keep in mind that archival processing may run for a significant amount of time until it finishes processing the backlog of existing reports and result catalogs in the database. For tips on managing the initial archive process, see the *Infogix Server Upgrade Guide*.

### Archive Space Management

When you enable automatic archiving for a new or upgraded instance of Infogix Assure, establish a process for managing disk space for the archival output directory. For example, you might want to periodically copy the archived outputs to long term storage media and remove them from the archive folder.

### Web Service API Change

Beginning with release 7.1, the system provides Web services using the JAX-WS libraries, instead of the JAX-RPC libraries used by prior releases. If you like, you can refresh any Java clients that invoke the Infogix Assure Web services to use the new libraries and generated stubs for the API. The wsclientexample project demonstrates the use of the JAX-WS libraries and generated client code. The example project is on the API CD shipped with Infogix Assure.

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Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file if a matching, closing-quote was not found.

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## Upgrading from 6.1

The following considerations apply to upgrades from Infogix Assure 6.1.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting


Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

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true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

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If you establish JDBC driver modules in WildFly with the names “`com.sybase`”, “`com.db2`” or “`com.postgres`”, then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned `datasources.properties` installation mechanism works, where the JDBC driver module is deployed using a name “`com.{DATABASE_TYPE}`” where `DATABASE_TYPE` is one of the properties in a set for making a datasource.

### Error Handling for `dateplus` and `dateminus` Functions

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Translation rules that use the “Embedded Database” algorithm now create temporary files in the “`DATA_TEMP`” location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

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To avoid a conflict with an existing JNDI name, it is important to run the `clean.bat` or `clean.sh` script for an upgrade to remove the previous data sources.

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Beginning with Release 7.1, the system supports scheduled, daily archiving of reports and results generated by control runs. After you upgrade an existing production system and enable archiving, the first archiving run will attempt to archive all the reports and result catalogs in the Infogix Assure database. Because the volume of reports produced by this initial archiving run may be large, ensure there is adequate storage space available in the directory specified for archival outputs. Also keep in mind that archival processing may run for a significant amount of time until it finishes processing the backlog of existing reports and result catalogs in the database. For tips on managing the initial archive process, see the *Infogix Server Upgrade Guide*.

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### Web Service API

If you use the Web Service API, install the current schema (`wsdl`) and modify any client programs before you upgrade to release 7.1. In release 6.2, the schema changed to provide an additional element. Release 7.1 uses JAX-WS libraries instead of the JAX-RPC

libraries used by prior releases.

See the API CD shipped with Infogix Assure for the current schema and the *Infogix Assure Application Programming Interface (API) Guide*. The guide provides information on the new instance count element added in release 6.2. The updated wsclientexample project demonstrates the use of the JAX-WS libraries and generated client code.

### Object Security Migration

The system will assign the configured default security profile to all rules that are newly securable. This includes layouts, result actions, result templates, calendars, and translation tables. Only control entities were secured prior to release 6.2.

The system will alter the default security profile's group to include the new permission sets. If your system is configured to allow the Permit Everyone feature, the migration process will alter the default profile to set the Permit Everyone option for the new permissions. This setting provides backward compatibility. However, if you want to implement the added security immediately following the migration, before you migrate rules, you can alter the value of the migration property that sets the Permit Everyone option for each permission. This property is in the dbupdate.properties file.

After the migration process, modify the permissions for the default profile or create and assign new profiles to the migrated rules.

### New Processing Behavior for Delimited Data Sources

Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file if a matching, closing-quote was not found.

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### Upgrading from 6.0

The following considerations apply to upgrades from Infogix Assure 6.0.

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## Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

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### Error Handling for `dateplus` and `dateminus` Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the `dateplus` or `dateminus` functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define `dateplus.ALLOW_FAILURE=false` and/or `dateminus.ALLOW_FAILURE=false` in `override.properties` and run `update-config` or `deploy`.

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Translation rules that use the "Embedded Database" algorithm now create temporary files in the `"DATA_TEMP"` location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).

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In all releases, the system does not capture control data for control entity instances with identity control fields containing null values. However, text ID fields containing an empty string value ("") were permitted prior to release 7.1. In most cases, the database stores these empty strings as null values, so any associated control data may be inaccessible. Beginning with release 7.1, the system produces the following error if a text ID field contains an empty string: #UCMF055: An empty value for ID field <fieldname> was found. You can disable this check if it is not appropriate in your environment. Contact customer support for instructions.

### Initial Archive Processing

Beginning with Release 7.1, the system supports scheduled, daily archiving of reports and results generated by control runs. After you upgrade an existing production system and enable archiving, the first archiving run will attempt to archive all the reports and result catalogs in the Infogix Assure database. Because the volume of reports produced by this initial archiving run may be large, ensure there is adequate storage space available in the directory specified for archival outputs. Also keep in mind that archival processing may run for a significant amount of time until it finishes processing the backlog of existing reports and result catalogs in the database. For tips on managing the initial archive process, see the *Infogix Server Upgrade Guide*.

### Archive Space Management

When you enable automatic archiving for a new or upgraded instance of Infogix Assure, establish a process for managing disk space for the archival output directory. For example, you might want to periodically copy the archived outputs to long term storage media and remove them from the archive folder.

### API Controls Processing

The default value is 10 seconds for the API property that determines the wait time for a response. If no value is specified, the system applies the default value. Previously, the default value was 10 seconds, but the system processed the default value as an infinite value, resulting in an indefinite wait time. The system now processes the value as 10 seconds.

If client requests require more than 10 seconds to complete, the invoking client application will time out because the wait time for the client was exceeded. If you need more time, you can override the default value. To specify a different value, assign a value to the `timeout` parameter on the client application.

For backward compatibility information, see the Troubleshooting section in the "Web Services" chapter of the *Infogix Assure Application Programming Interface Guide*.



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If you use the Web Service API, install the current schema (wsdl) and modify any client programs before you upgrade to release 7.1. In release 6.2, the schema changed to provide an additional element. Release 7.1 uses JAX-WS libraries instead of the JAX-RPC libraries used by prior releases.

See the API CD shipped with Infogix Assure for the current schema and the *Infogix Assure Application Programming Interface (API) Guide*. The guide provides information on the new instance count element added in release 6.2. The updated wsclientexample project demonstrates the use of the JAX-WS libraries and generated client code.

## Object Security Migration

The system will assign the configured default security profile to all rules that are newly securable. This includes layouts, result actions, result templates, calendars, and translation tables. Only control entities were secured prior to release 6.2.

The system will alter the default security profile's group to include the new permission sets. If your system is configured to allow the Permit Everyone feature, the migration process will alter the default profile to set the Permit Everyone option for the new permissions. This setting provides backward compatibility. However, if you want to implement the added security immediately following the migration, before you migrate rules, you can alter the value of the migration property that sets the Permit Everyone option for each permission. This property is in the dbupdate.properties file.

After the migration process, modify the permissions for the default profile or create and assign new profiles to the migrated rules.

## New Processing Behavior for Delimited Data Sources

Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file if a matching, closing-quote was not found.

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The error occurs when the extract rules for a capturing control point do not populate a required identity control field. The error message indicates that an extract rule is missing for a required ID field, and the name of the field. To resolve the error, go to the Extract tab for the data source, and add a rule to populate the ID field. If the control entity has multiple ID fields, verify that extract rules are defined to populate all the other ID fields, too.

## Upgrading from 5.2

The following considerations apply to upgrades from Infogix Assure 5.2.

### Oracle and SQL Database Drivers

Infogix Assure 9.4 uses SQL Server JDBC Driver 7.2.1 or the Oracle 19.3.0.0.0 JDBC driver. Be sure that your installation points to the correct driver.

### Microsoft Excel Numbers with Default Cell Formatting

Release 9.2 upgrades the Apache POI library that is used to read Microsoft Excel documents, and this library has a changed behavior for large numeric values in a cell with cell formatting of "General". In older releases, the library returned the originally entered "raw" value, for example "123123123123". Viewing the cell in Microsoft Excel would show "1.23123E11", and this is now the value that the new library returns. Within Infogix Assure, if the corresponding field has Format = (Default), this will result in a value of "1.2312311" instead of "123123000000".

The reason that Infogix Assure returns the value it does is that for Excel layout rules, a Format of "(Default)" is equated to the format called "Lenient" in other layouts, which strips all non-digit and non-decimal characters. For example, the Lenient format is useful for a decorated number with currency symbols and thousands separators such as "\$1,231,231,231.23". In other layouts, a Format of "default" automatically handles scientific notation.

While the best solution to this issue is to change the source Excel document cell formatting so that scientific notation isn't shown (from General to Number with a number of decimals, for example), the behavior of Microsoft Excel layout rules in Assure has been enhanced so that the controls developer can use the Format field options (Default) and Lenient the same way they are used for other layouts. By default, though, the system is configured with the same Format behavior as previous releases. To change the system behavior, customize the property `excel.AUTO_LENIENTNUMBER_FOR_DEFAULT` to false. Then, the controls developer can use Format = (Default) for values that may contain scientific notation values, and change fields to Format = Lenient for values that may contain decorated values.

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Due to the way that WildFly deploys JDBC driver modules, database layouts that specify a JDBC connection that worked under JBoss may not work under WildFly. The same is true of the Export Data rule that can be defined in capturing and scanning control points. JDBC connections to Oracle and SQL Server will continue to work, but for other types of database connections, the remainder of this topic applies.

The preferred course of action is to use the `datasources.properties` installation mechanism as described in the installation guide to establish both a JDBC driver module, and one or more datasources that use that JDBC driver module. You can then change those rules that are using the JDBC connection to use the datasource JNDI name

instead.

If you establish JDBC driver modules in WildFly with the names "com.sybase", "com.db2" or "com.postgres", then Infogix Assure will be able to access the JDBC driver classes directly for those modules. For anything else, you must change the rules to use a JNDI datasource name. This naming convention follows the way that the above-mentioned datasources.properties installation mechanism works, where the JDBC driver module is deployed using a name "com.{DATABASE\_TYPE}" where DATABASE\_TYPE is one of the properties in a set for making a datasource.

### Error Handling for dateplus and dateminus Functions

Expression evaluation in processing such as capture processing now fails if an error occurs during the processing of the dateplus or dateminus functions. If you do not want processing to fail, consistent with the behavior of past releases, you can define dateplus.ALLOW\_FAILURE=false and/or dateminus.ALLOW\_FAILURE=false in override.properties and run update-config or deploy.

### Error Handling for t\_contains Function

Capture processing now fails if an error occurs during processing of the t\_contains function. If you do not want capture processing to fail, consistent with the behavior of previous releases, you can define t\_contains.ALLOW\_FAILURE=false in override.properties and run update-config or deploy.

### Embedded Database Translation Disk Usage

Translation rules that use the "Embedded Database" algorithm now create temporary files in the "DATA\_TEMP" location you define during installation. This change allows the system to limit memory use for very large translation tables. These files are created and deleted automatically by the system as controls start and finish using translation tables on a per process (server JVM) basis. Depending on your translation rules and data, this temporary disk usage could be significant (hundreds of megabytes).


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### Error Handling for in, t\_split, and val\_ifelse Functions

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For a WebSphere deployment, the system now uses a different process to construct the data source provider. The name of the data source provider is also different. The previous name was Infogix XX JDBC Provider, where XX represents the product identifier. Now the provider is named InfogixXX JDBC Provider, with no space after Infogix.

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The length of time for control data migration varies greatly depending on the amount of control data that is migrated. The system performs the migration in batches to ensure the ability to rerun and restart the migration process.

Disable the scheduler before you begin the migration process. If you start the system or access or update control data before the entire control data migration process completes, you may experience *create versus update* errors in the control point execution or in the migration process, as it continues.

## Migrating to UTC Dates

In addition to the UTC date conversion, described above, the system converts the following times to UTC times:

- Result catalog times
- Capture source times
- Process history dates

The conversion to UTC time resolves any daylight saving and standard time boundary issues. If you start and use the system before the migration completes, you may experience an apparent time shift in results, and incorrect behavior for file monitor, tracking and timeliness, and frequent pull database capture processing. Frequent pull database capture obtains only new or modified database data using system-provided query substitution parameters for the last query time (LastLoadTime) and the current query time (CurrentLoadTime).

Depending on the volume of historical data that requires conversion, the conversion process may take several hours. If you have a time limitation for your upgrade process, contact Infogix Customer Support.

### Execute Script Actions

Follow the directions in the *Infogix Properties Guide* to configure a script repository on the same server where you install Infogix Assure. Modify the EXECUTE\_SCRIPTS\_HOME property in the IA.properties file.

Place any scripts executed by control points in the script repository. For security purposes, control points can directly execute only scripts located in the repository. If an existing control point executes a system utility, such as archive reports, create a script to invoke the utility. Then, upload your script to the repository.

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### Case-Sensitive Control Point Names

Beginning with release 5.3, the Run Control Point (runcp) script is case-sensitive regarding both the control entity and control point name. Before upgrading, make sure that the control entity and control point names in any runcp commands issued by your job scheduler or other applications match the names specified in Infogix Assure. For example, if your job scheduler invokes control entity ABC and control point Cp1, the following commands are correct:

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Several enhancements improve processing accuracy and efficiency for input data sources described by delimited layouts. By default, the system now recognizes field quotes only when a double quote is at the start of a field. Previously, the system recognized a quote occurring anywhere within a field as the initial quote delimiting a field value. This could cause the value of a single field to span many records or even significant parts of the file

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### Upgrading from Releases Prior to Release 5.1

Please contact Infogix Customer Support if you are upgrading from a release prior to release 5.1. You must first upgrade to release 7.1 and then to the current release in this situation. See [Contacting Customer Support](#).

## Known Issues

This section describes any known issues and provides corrective action, where applicable.

### Test source error detection

The Test Source facility does not detect errors in On Begin processing for Capture sources. The test appears to complete successfully with no input records read.

### Extraction details

When you test a capture source, the extraction details show nested evaluate conditions up to four levels deep. Beyond four levels, the source test extracts the information but you cannot see these levels in the test results.

### Using multiple browser windows for Infogix applications

If you run more than one Infogix application, open a new Internet Explorer browser session for each application. Use "New Session" from the File menu of Internet Explorer. Web-based Infogix applications store application data on the server in the http session. If you open a new tab or window from the File menu, the system shares session information across these tabs or windows, which can result in unpredictable errors or data loss. The system warns you if you attempt to do this, but it does not stop you.

### Control data capture source with invalid order-by clause

A control data capture source, when changed from using a Detail control entity to using a Match Data control entity, can fail with invalid column errors. If the original capture source was defined with order by fields, when the rules writer changes the source to a match data entity, the system hides the order by fields' definition, but incorrectly retains the previously defined order by fields in the rule. When the capture source is executed, the order by clause is generated and likely leads to errors in the database. To correct the capture source, edit the source. Temporarily, switch the source to use a Detail control entity on the Details tab. Switch to the Select tab. The order by fields section appears again; remove all order by fields. Switch back to the Details tab, and choose the match data entity again. Switch to the Select tab, and verify the settings. Switch to the Extract tab and verify the extraction logic. Click OK and save. Verify the order by information is successfully removed by viewing the definition report of the control point.



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