Version 11 Release 1
March 15, 2019

IBM Interact Release Notes
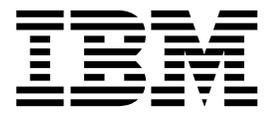
IBM

Contents

Chapter 1. System requirements and compatibility

IBM® Interact operates as part of the IBM Marketing Software suite of products.

Upgrade Paths

- Supported upgrade path via installers: 11.0.1 -> 11.1 only.
- Customers at 11.0 -> Fast upgrade to 11.1.

For instructions, see the IBM Interact 11.1 Upgrade Guide and Fast Upgrade guide.

Where to find complete system requirement and compatibility information

For a list of IBM product versions compatible with this product, see the *IBM 11.1 Product Compatibility Matrix* and any other product compatibility documents posted under Documentation on the IBM Support Portal website: (https://www.ibm.com/support/entry/portal/documentation).

For a list of third-party requirements for this product, see the *IBM Marketing Software Recommended Software Environments and Minimum System Requirements* available under **Help > Product Documentation** when you are logged in to Interact, as well as from the IBM Support Portal website: (https://www.ibm.com/support/entry/portal/documentation).

Chapter 2. New features and changes in version 11.1

IBM Interact 11.1 includes a number of new features and changes. These are listed underneath.

JBoss and Tomcat support

- You can deploy the Interact application from a WAR file or an EAR file on the JBoss Application Server (JAS).
- You can deploy the Interact application from a WAR file on the Tomcat Application Server (TAS). Deploying an EAR file is not supported on the Tomcat Application Server (TAS).

Built in distributed cache

A new cache manager "Ignite" is added under Cache Manager node. The cache InteractCache and PatternStateCache can use either EHCache or Ignite independent of each other.

The following parameters are available for configuration:

cacheType, discoveryIPAddresses, localPort, numberOfBackups and overflowToDisk.

Event Patterns can be used in Learning

Learning can now be done on event pattern states. The name of event patterns, with the prefixed value specified in configuration setting Affinium|Campaign|partitions|partition1|Interact|flowchart:eventPatternPrefix, can be added into learning models and the global learning attributes. They will be treated the same as profile attributes.

HTTP proxy support in API and the OMO gateway

1. When triggered messages are configured to use a HTTP connection, a HTTP proxy can be configured optionally with authentication between Interact and the endpoint.
2. When the client library (interact_client.jar) is used to connect the client to Interact run time servers, an HTTP proxy can be configured optionally with authentication between the client application and Interact runtime.

Ability to limit the offer field in the `getOffers` API during the Interact RunTime

You can include or exclude the attributes of an offer in the result of 'getOffers' API call, by passing UACIOfferFields and UACIExcludeOfferFields parameters in the startSession, setAudience, or a postEvent.

Offer inclusion

An API parameter UACIIgnoreSuppressionRules is added to ignore all the real time suppression rules during offer arbitration in getOffers call for particular session . Also, another API parameter UACIIgnoreBlackList is added to indicate whether BlackList offers should be ignored as well, which is defaulted to false.

Security management

Access to the Interact runtime User Interface requires authentication. Only the Login IDs defined in Marketing Platform and having Interact admin role can access the pages. You must authenticate to access the Interact JSP pages.

Interact server restart not required for Dynamically changed configuration to take effect

Earlier, in Interact, when any configuration changes were made, the system required a restart of the Interact server. This was not efficient, and could also introduce deployment failures and errors. Through a new enhancement, the configuration changes (settings) now take effect immediately without restarting the Interact server. We have introduced the configurationRefreshInMins setting.

Logging enhancement
- Out of the box option for asynchronous logging.
- Out-of-the-box option for centralized in the database - When session affinity is not enforced, the activities that belong to the same session may be handled by multiple run-time instance. Henceforth these activities are now logged in a central location, where server specific activities can be tracked

Note: Release 11.1 onward now log4j2 version is supported, you must make logging related changes in interact_log4j2.xml, instead of interact_log4j.properties. It is also required to set the INTERACT_HOME environment variable pointing to the Interact installation directory before starting the Application Server. If this is not done, Interact logs will not get generated. Also if you are running the PatternStateEtl utility/tool to generate etl reports, set INTERACT_HOME explicitly on the prompt where the utility/tool is run, else the patternState ETL utility logs will not get generated.

Real-time attributes support in flowcharts and strategies

Earlier in Interact, any attribute used in creating flowchart or strategy expression has to exist in mapped profile table. In the scenarios where an attribute does not exist in the profile table but be provided via API parameters or other sources, the attribute name has to be manually added into profile table columns, which caused unnecessary hassle. We now support adding and managing real-time attributes in Interact Design- time, which do not need to be in profile table and can be used in a flowchart or strategy expression once it is defined. At Interact Run-time, a real-time attribute used in a flowchart or strategy expression can be passed in as a parameter in startSession or postEvent API. During the process of offer evaluation, Interact uses the value of that API parameter or default value of the real-time attribute if it is not passed in.

Offer exclusion: Exclusive offer suppression

Added an extra field in each strategy rule, to limit the maximum number of offers to be returned in each getOffers API invocation.

This field has the value of a positive integer that limits the maximum number of offers that can be return if this treatment has the highest score in the eligible list.

Deployment enhancement

- Automatic cleanup of failed deployment.
- Performance improvement.

Return double precision offer scores

Business case:

The scores for Interact are provided by an external modeling tools . The scores are provided with decimal digits.

When the offers are returned to the requesting inbound channels, the channels use the scores to prioritize the offers.

For example, if a channel requests for 2 offers and the 2 offer scores are 20.2 and 20.1, channel will show 20.2 first.

Now, the decimal digits are not removed, and so the channel knows the offer has a higher score.

Technical case:

getOffer now returns one additional NameValuePair:

name = ScoreInDouble, and value is score in double.

Learning Enhancements

Several enhancements are made to the built-in learning engine:

- Remove observation mode.
- Collect data for randomly selected offers when learning is enabled globally.
- Update the way recency weight average is calculated for newly introduced offers such that those offers will have more accurate scores and better chance to be presented to users.

Chapter 3. Fixed defects

The following table lists defects that are fixed in Interact 11.1.

Issue ID	Description
HMA-285027, HMA-284807	The same OfferHistoryID is being shared for different Attribute Values from SCOREOVERRIDE table
HMA-276698	Not able to search for Interactive Segment
HMA-284403, HMA-284370	Class files missing in Interact_client.jar
HMA-287937, HMA-287631	Interact Score value coming NULL into UACI_CHSTAGING
HMA-287736, HMA-287151	Interact session gets removed only milliseconds after starting the session
HMA-180161	Add keywords to the SQL for sequence row cache for Interact Runtime tables
HMA-284783, HMA-284641	Memory leak suspect for IBM Interact for class com.unicacorp.interact.session.InteractSessionManager
HMA-284371, HMA-284344	Learning models not being used correctly for Triggered Messages
HMA-181540	XML from individual SOAP API calls cannot be copy/pasted into executeBatch calls [9.0.0.5]
HMA-203816, HMA-203816	[G11N]Interact_9114: Non-Ascii char. are shown as garbage code in API Test Client
HMA-283925, HMA-283887	Data lost while writing records from cache to DB in case of DB error
HMA-287594, HMA-287175	No offer is presented to some audiences if more than 4 samples are used in interactive flowchart.
HMA-286144, HMA-286077	IBM Interact REST API call in v.11.0 returning offer attribute names in all upper case.
HMA-284207, HMA-284046	^ operator doesn't work in Interactive Strategy when columns of profile table were used.
HMA-288242, HMA-288002	Interact crash on adding more than 20 Event patterns as a condition in flowchart
HMA-282777, HMA-282771	Cannot Save Values in Sample Process Box
HMA-283000	After a coverage scenario is run and user clicks on 'Export CSV' option then a file gets downloaded and the 'Download' icon gets enabled.
HMA-283298	Coverage scenario status remain in Running status even after Run Success message alert. Workaround: User needs to switch the tabs and revisit the coverage Scenario tab to see the latest status.

Chapter 4. Known issues

The following table lists issues in Interact 11.1.

Issue	Issue ID	Description
For upgrades from version 9.1. or earlier, you must reconfigure your session timeoutinsec.	RTC 207011	If you upgrade from version 9.1 or earlier, you must configure the timeoutinsec property for your session. It configuration property was previously found under Interact |sessionManagement. It is now found under Interact | cacheManagement | caches | InteractCache.
Suppression rule attribute value = [auto] for related offers does not work as expected in cross-session response tracking.	RTC91765	In cases where an offer is being suppressed using a dynamic attribute value (attribute value = [auto]) and cross-session response tracking is used, the offer may not be suppressed as expected. To work around this issue, use an attribute value other than [auto]. This issue may be addressed in a future release.
Message is displayed multiple times in console mode installation while upgrading from version 10.0.	271642	"Please wait....." message is displayed multiple times in console mode installation while upgrading from 10.0
Condition specified to find records for Audience Condition field of type string type is case sensitive	HMA-282764	The audience search condition is case sensitive for DB2 and Oracle.
The score for Offer returned from Whitelist is not proper, error on getoffers.	HMA-283173	There is an error for 'StartSession' as mentioned below and the Offer score is from 'Treatment Rule' and not from Whitelist table.The WAS property mentioned at 'http://www-01.ibm.com/support/docview.wss?uid=swg21429116' 2. User needs to remove the table name from predicate expression.
Error thrown 'No csv file found' when tried to export to CSV	HMA-283000	After a coverage scenario is run and user clicks on 'Export CSV' option then a file gets downloaded and the 'Download' icon gets enabled.
In Internet explorer only, Interact deployment fails with authentication failure	HMA-283120	This issue is happening on internet explorer only, it works fine on chrome. This issue does not happen if you have blank password for the user login in.
Scenario runs even if no zone is assigned when IP is moved from old zone to new one	HMA-283133	When an IP is moved from one zone to a newer one, then the zone assignment becomes blank in an already run coverage scenario. In this case, the scenario runs successfully even if no zone is shown as assigned.
Run History Status/Summary State is not Changing after Simulation run	HMA-283298	Coverage scenario status remain in Running status even after Run Success message alert. Workaround: User needs to switch the tabs and revisit the coverage Scenario tab to see the latest status.
Getting Incorrect base version number while running aciUpgrade tools	HMA-282971	While upgrading from 10.1 FP1 to 11 when user will run Interact Upgrade tools (aciUpgradeTool_usrtab.sh ,aciUpgradeTool_runtab.sh,aciUpgradeTool_lrntab.sh, aciUpgradeTool_crhtab.sh, aciUpgradeTool.sh). User will get 10.1.0 as an option for "Please select the version of Interact Runtime you are upgrading from" instead of 10.1.x., please continue with the same.

Issue	Issue ID	Description
The UBX Endpoint is unable to send the event to Interact and an error is thrown in the endpoint logs.	HMA-283665	This is observed on WAS8.5.5.11 onward with JDK1.8 . There is a workaround to resolve this. You need to remove the 'activemq-all.jar' from the Endpoint's '.war' file and restart the server.
Not able to search for Interactive Segment	HMA-276698	The search for Interact segments from the 'Segment's screen does not work. The search returns '"Your search criteria did not match any records."
DOC :Real Time Offer Suppression for same attribute is not happening in Cross-Session for Attribute Value [auto]	HMA-281406	If an Offer is created with Suppression Rule as On Offer Acceptance: Suppress this offer and 'Also suppress other offers with the same attribute' "Attribute" e.g CostPerOffer with value [auto], and create another offer with Attribute CostPerOffer = 11.0 and assign both offer to segment in IS. If you post contact event from one Session and end it, on starting same session and on posting Accept event then in this case only first offer is suppressed not the second with Attribute CostPerOffer = 11.0 Where as if you post Contact and Accept event in same session then in this Offer Suppression happens on Attribute base.
Run history related message displayed even if there is no history	HMA-283495	A message related to exporting csv is displayed even after the respective Run History is deleted

Fatal error occurs for EAR deployment	Defect 276955	A fatal error occurs during the creation of an EAR file for deployment and a message is added to the common installer logs. This message can be ignored. The EAR file is deployed successfully in spite of this error.
		
		The following entry can be seen in the common installer logs.
		
		`Custom Action: com.unica.install.ia.custom.StrIndexAndPieces`
		
		`Status: ERROR`
		
		`Additional Notes: ERROR - Unexpected Fatal Error in Class: com.unica.install.ia.custom.StrIndexAndPieces.install()`

You cannot export a PDF with a new mapped table in the snapshot process box for any locale but English.	11682	You should be able to export a PDF in the **Fields to Snapshot** list on the **Snapshots** tab with a new mapped table. However, the PDF is not visible nor available for export for any locale but English.
When users try to add a large expression in the Interact Strategy Offer attributes and try to deploy to Interact, an error is thrown in the logsORA-12899: value too large for column. "CAMP911"."UACI_ RULEOFFERATTR OVERRIDE". "EXPRESSION"	RTC 204413	System administrators must manually increase the size of the EXPRESSION field in UACI_RULEOFFERATTROVERRIDE and restart the server to correct this error.
An error is displayed when profiled event pattern	HMA-282955	An Internal Error is displayed when tried to profile event pattern. Workaround: User can specify a the expression as `<eventPattern_Name>=0/1` directly.
When you remap a dimension table the table name reverts back to the default table name	PMR 230768, DEF 232128	When you remap a dimension table the table name reverts to the default table name and the Key check mark gets removed.

Issue	Issue ID	Description
JBOSS: Warning "Failed to define class com.sun.jersey.api.json.JSONWithPadding in Module "deployment.Campaign.war:main"	287668	The error is displayed on JBOSS console - though it does not have any impact.
Jboss: Initializing monitoring service Failed with JMXMP Protocol	290149	Workaround: In case of the JBOSS Application Server if you get the 'classes are not found' Error during the Application server initialization, you must explicitly provide a path in the specific Jboss module.xml as per the jar available in Lib. For example: Class name: `GetPropertyAction` Package Name: `com/sun/jmx/mbeanserver` Jar name: `rt.jar` (basically available in jdk) So add in Jboss module.xml at the location: `<Jboss_Install_Dir>\modules\system\layers\base\sun\jdk\main\module.xml`
Java script is not working on Proxy setup	HMA-290337	Java Script method is not working when proxy is set. It gives pop-up box with message ****ERROR****
RTA: Decision PB remains mis-configured and RT logic works fine for 'Date' type RTA	HMA-290305	When Decision PB is configured using an expression real time attribute with a Date Macro syntax check fails
Unable to change market score on Strategy Rule Wizard window.	HMA-290177	Unable to change market score on Strategy Rule Wizard window.
Win8-IE11: Expression gets disappeared while adding new branch in flowchart	HMA-290084	Win8-IE11: Expression gets disappeared while adding new branch in flowchart

Chapter 5. Known limitations

The following table lists known limitations in Interact 11.1.

Issue	Number	Description
Null pointer exception while saving strategy containing large number of treatment rules created by rule wizard	RTC172332	If you create approximately 900 rules by adding one offer and 900 segments with the rule wizard and try to save the strategy, the following error is displayed. `java.lang.NullPointerException`
Interact deployment rollback is not supported with Advanced Patterns (time bound and rolling time)	RTC73521	V1 is not synchronized in Advanced Patter run time if you perform the following workflow. 1. Create an interactive channel that contains only simple pattern and deploy this version V1 to the Interact run time. 2. Add an advanced pattern counter (time bound) type of pattern in interactive channel and use the same in interactive flowchart to populate segment that is based on pattern state. 3. Deploy this interactive channel to runtime and version V2 is created. The same is reflected in the Detect workspace. 4. Rollback or redeploy to version V1. After redeploy is successfully complete, the Opportunity Detect workspace shows version V2.
When the user opens the Deployment tab an error occurs and the following message is displayed: `Compilation of JSP File '/jsp/deploymentInfo.jsp' failed.`		When the user opens the Deployment tab for any runtime other than the 1st, an error occurs and the following message is displayed: `Compilation of JSP File '/jsp/ deploymentInfo.jsp' failed.` If you are using the WebSphere application server and are using JDK 1.8, you must add the following JVM parameter for all additional runtime servers. The JVM parameter is not required for the first runtime server. `-Djavax.xml.stream.XMLInputFactory=com.ibm.xml.xlxp.api. stax.XMLInputFactoryImpl`
Interact interactive flowcharts support a subset of Campaign macros.	DEF057366, ENH11494	By design, interactive flowcharts support (and make available for selection) only a subset of the macros available on batch flowcharts. On an interactive flowchart, in any Select or decision process boxes where you want to use a macro that is not supported (for example, the `between` operator, as in "AGE between 1 and 18"), an error message "Function or operation not supported" appears when you check the syntax. This is expected behavior.
Raw SQL options are not supported in Interact flowcharts	DEF049991	Using custom macros with expression type "Raw SQL Selecting ID List" or "Raw SQL Selecting ID List+Value" in any processes in an interactive flowchart results in Error 11324.
A persistent derived field is not profiled in a downstream Decision process in an interactive flowchart.	RTC8870	If you create a persistent derived field in a flowchart process, then connect the output of that process to a decision process to try to profile the persistent derived field, the field is not profiled. To workaround this issue, profile the original derived field.

Issue	Number	Description
WebConnector does not pick up default configuration when trying to save from GUI	DEF052958	WebConnector does not set the default values for fields when saving from the GUI.
In Interact you cannot change the Campaign field name for the audience ID to a different value from the source field name.	RTC219848	In a batch flowchart, if a **Select Process Box** is used with an Interact list process box that creates a new table to export offer lists using white list (score override), the Campaign field name for the audience ID cannot be changed to a different value from the source field name. Interact uses the source field name in order to query the export table where the offer list would be, and if an alias is used for the audience ID in the Campaign field name, then Interact uses a query parameter that does not exist in the offer list. If this is not followed, a SQL error occurs during getOffers specifying that the source field name is an invalid identifier.
DOC:Pattern with reject event though turned true, Value not written to Learning Table	HMA-286800	After posting Contact and Reject event the pattern turns true. But in UACI_OfferStats table, the patterns attribute Value is still displayed as 0 when it should be 1.
DOC:Inconsistent behaviour observed for patterns data logged in UACI_offerStats table.	HMA-286951	When contact and response events are posted in the same batch, it will be unable to record the intermediate state for learning that a contact happened but not yet the response. This is because learning data for events is processed asynchronously, thus at the time Interact prepares the contact event for persistence, the response event already happened.
PRE-DOC-[Browser specific - IE]Real-Time Attributes with long name String should wrap in InteractGlobalDefinition menu.	HMA-289248	A limitation exists in case of the IE browser. A character shows on the title attribute. IE supports just 64 characters in title attribute and so in case of long strings when you hover the cursor on the string then only 64 chars are displayed in the tooltip.
DOC :Constraint - no remaining available offers once RT server is restarted	HMA-203692	If there is a constraint on number of times offers can be served in an IC, Interact considers that the limit has been reached when the runtime server is restarted.

Before you contact IBM technical support

If you encounter a problem that you cannot resolve by consulting the documentation, your company's designated support contact can log a call with IBM technical support. Use these guidelines to ensure that your problem is resolved efficiently and successfully.

If you are not a designated support contact at your company, contact your IBM administrator for information.

Note: Technical Support does not write or create API scripts. For assistance in implementing our API offerings, contact IBM Professional Services.

Information to gather

Before you contact IBM technical support, gather the following information:
- A brief description of the nature of your issue.
- Detailed error messages that you see when the issue occurs.
- Detailed steps to reproduce the issue.
- Related log files, session files, configuration files, and data files.
- Information about your product and system environment, which you can obtain as described in "System information."

System information

When you call IBM technical support, you might be asked to provide information about your environment.

If your problem does not prevent you from logging in, much of this information is available on the About page, which provides information about your installed IBM applications.

You can access the About page by selecting **Help > About**. If the About page is not accessible, check for a `version.txt` file that is located under the installation directory for your application.

Contact information for IBM technical support

For ways to contact IBM technical support, see the IBM Product Technical Support website: (http://www.ibm.com/support/entry/portal/open_service_request).

Note: To enter a support request, you must log in with an IBM account. This account must be linked to your IBM customer number. To learn more about associating your account with your IBM customer number, see **Support Resources > Entitled Software Support** on the Support Portal.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
B1WA LKG1
550 King Street
Littleton, MA 01460-1250
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating

platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Privacy Policy and Terms of Use Considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. A cookie is a piece of data that a web site can send to your browser, which may then be stored on your computer as a tag that identifies your computer. In many cases, no personal information is collected by these cookies. If a Software Offering you are using enables you to collect personal information through cookies and similar technologies, we inform you about the specifics below.

Depending upon the configurations deployed, this Software Offering may use session and persistent cookies that collect each user's user name, and other personal information for purposes of session management, enhanced user usability, or other usage tracking or functional purposes. These cookies can be disabled, but disabling them will also eliminate the functionality they enable.

Various jurisdictions regulate the collection of personal information through cookies and similar technologies. If the configurations deployed for this Software Offering provide you as customer the ability to collect personal information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for providing notice and consent where appropriate.

IBM requires that Clients (1) provide a clear and conspicuous link to Customer's website terms of use (e.g. privacy policy) which includes a link to IBM's and Client's data collection and use practices, (2) notify that cookies and clear gifs/web beacons are being placed on the visitor's computer by IBM on the Client's behalf along with an explanation of the purpose of such technology, and (3) to the extent required by law, obtain consent from website visitors prior to the placement of cookies and clear gifs/web beacons placed by Client or IBM on Client's behalf on website visitor's devices

For more information about the use of various technologies, including cookies, for these purposes, See IBM's Online Privacy Statement at: http://www.ibm.com/privacy/details/us/en section entitled "Cookies, Web Beacons and Other Technologies."

IBM ®

Printed in USA