IBM Unica Interact
Version 8 Release 6
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Release Notes

IBM

Contents

Chapter 1. System requirements and compatibility

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

You can upgrade to Interact 8.6.0 from Interact version 7.5.1 or later. For instructions, see the *IBM Unica Interact Installation Guide*.

Where to find complete system requirement and compatibility information

For a list of IBM Unica product versions compatible with this product, see the *IBM Unica 8.6.0 Product Compatibility Matrix* and any other product compatibility documents posted under Documentation on the IBM Unica Product Technical Support website: (http://www.unica.com/about/product-technical-support.htm).

For a list of third-party requirements for this product, see the *IBM Unica Enterprise Products 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 Unica Product Technical Support website: (http://www.unica.com/about/product-technical-support.htm).

Key third-party software support changes in version 8.6.0

Interact version 8.6.0 has added support for the following new versions of third-party software.

Operating Systems (64-bit only)
- RHEL AP 5.6, 5.7, 6.1

Application Servers
- WAS 8.0.0.2

Cognos® Reporting Engine
- Cognos 10.1.1

Client Browsers
- Internet Explorer 9.0

Chapter 2. New features and changes in version 8.6.0

Interact integration with IBM Coremetrics® Intelligent Offer for product recommendations

Interact can now combine its sophisticated approach to offer personalization with IBM Coremetrics Intelligent Offer scalable product recommendation solutions to provide optimal offer and product information in customer interactions.

You can now customize your web pages to first call Interact for the offers to present to a visitor, which then use an API call to send a product category ID to Intelligent Offer to retrieve the most popular product recommendations for that offer. For example, you might configure a page so that Interact provides the best offer for the specific visitor (10% off all appliances), while Intelligent Offer provides the best product recommendations for that offer (the most popular home appliances for the specific category ID),

For additional information, see the *IBM Unica Interact Administrator's Guide* and the sample application installed in */<Interact_home>/samples/IntelligentOfferIntegration*, available for use as a demonstration and a starting point for your own web pages.

(ENH11607)

New deployment management and versioning

For interactive channels, deployment information has been moved to a separate Deployment tab. The Deployment tab provides an enhanced user interface for managing deployments, including the following features:

- **View and undeploy active deployments.** Active deployment view provides immediate information about the current deployment, and allows you to undeploy the selected deployment as wanted.
- **View pending changes.** Pending Changes view lets you see what changes are marked for deployment but are not yet deployed, and lets you deploy the changes or only the global settings as needed to the targeted server group.
- **Roll back previous deployments.** The Deployment History section lets you select and redeploy earlier versions of a deployment, or reload and modify earlier components (flowcharts and strategy tabs).
- **Reload and modify previous Design Time components.** You can use the Deployment tab to reload interactive channels, flowcharts, and interactive strategies from previous deployments to view or modify them before redeploying.
- **Custom views.** Filter the deployment history list to show only the information that you want, such as filtering out all but the deployments to a particular server group, or only the deployments that succeeded. You can also sort lists on specific columns or on multiple combinations of columns to view deployment information exactly as needed.

(ENH11608)

External learning enhancements

In previous releases, Interact pre-built learning could not be used alongside custom learning requirements. Now, select functions of the Interact pre-built learning implementation is accessible via a new set of API calls to let you use built-in learning methods in your external learning algorithm. See the Javadocs installed in /<Interact_home>/docs/learningOptimizerJavaDocs for additional technical details. (ENH11609)

Profile Data Service: hierarchical profile data retrieved via EXTERNALCALLOUT

You can now use the EXTERNALCALLOUT API function to import hierarchical profile data into Interact runtime sessions. This allows you to pull data from various sources, including web services. (ENH11610)

Interaction strategy tab enhancements

The Interaction Strategy tab has been redesigned to add features and to enhance ease-of-use. Improvements include:

- **New view options.** It is now much easier to manage large numbers of rules, offers, zones, segments, and so on, through the use of list filtering and multiple selections of segments and zones.
- **Apply options to many treatment rules at the same time.** You can now select multiple segments or zones in the list to assign the same set of advanced options, learning model customization, and parameterized offer attributes to all selected treatment rules at the same time.
- **Enable, disable, delete many treatment rules at the same time.** The same selection features allow enabling, disabling, and deleting multiple treatment rules in a single step.
- **Drag-and-drop interface.** The drag-and-drop interface has been enhanced, and now allows adding zones in addition to segments and offers to the rules. You can also select and drag more than one item onto the list of rules at the same time.
- New views: you can now view treatment rules by segment or by zone, as well as added information and filtering.
- Added the ability to copy an interaction strategy to another campaign through the use of the Copy Interaction Strategy icon.
- Removed the automatic save feature to prevent unwanted changes. You must now explicitly save your changes to the strategy tab, or cancel to discard unwanted modifications.

(ENH11611)

Enhanced parameterized offers

You can use offer parameterization to personalize a generic offer to individuals using attributes that are specific to the individual and session. You can now configure parameterized offers on the Strategy tab, as part of a treatment rule after an offer is mapped to a segment and zone. Parameterized offer values will be specific to the treatment rule.

Note that using the new strategy tab features, you can select multiple treatment rules and modify common parameters at the same time.

You will also be able to set the parameterized values using the Global Offers, Whitelist, and OffersBySQL tables.

(ENH11612)

Reporting enhancements

The following report enhancements have been provided with this release, if you are using the optional Interact Reports Pack:

- **Zone Performance Report by Offer.** This report, available by selecting **Analytics > Campaign Analytics**, clicking **Itnteract Reports**, and then clicking **Zone Performance**, lets you see how offers are performing by zone.
- **Cell Performance Report filter.** The Interact Cell Performance report has been enhanced so that you can run it for only the items you select, to help you improve the response rate of your interactive strategies. This enhancement allows you to filter the data on a specific cell code, more focused than the original report.

(ENH11254, ENH11253)

Secure RMI protocol

Interact currently provides two methods to retrieve JMX statistics: RMI and JMXMP (configurable through the Marketing Platform configuration. Previously, only JMXMP enabled secure access (requiring a Marketing Platform user name and password to retrieve JMX statistics). With this release, that level of security is now supported for RMI as well.

You can configure secure RMI in the Marketing Platform configuration settings on the Interact | monitoring page, by setting protocol to RMI, and enableSecurity to TRUE.

(ENH11488)

IBM Unica product language support

With this IBM Unica release, virtually all of the product documentation, as well as the product user interfaces, is available in the following languages:

- Brazilian Portuguese
- English
- French
- German
- Italian
- Japanese
- Korean
- Simplified Chinese, including compliance with GB18030 requirements
- Spanish

See the *IBM Unica Marketing Platform Administrator's Guide* for information about setting locale preferences within your IBM Unica product.

Note: Use of the **Help** menu to open the online help and other documentation uses the locale setting to display the documentation in the matching language automatically, where available.

Chapter 3. Fixed defects

This section lists defects fixed in Interact 8.6.0.

Issue ID	Description
DEF045215	DB2® warnings were being observed in the log when navigating through a design environment GUI. This is no longer the case.
DEF048645	When any of the RT servers from a server group were down, the Interactive Channel deployment would still show the deployment as completing successfully while an error was thrown in the web application server console. This is no longer the case.
DEF048980	On the Interactive Channel "Change Waiting" list, the behavior was inconsistent when changes waiting to be deployed to production were canceled or unmarked. This is no longer the case.
DEF051567	After upgrading from Interact 7.5.3, if cross-session response was enabled, Interact would fail to start. This has been addressed, and the workaround previously provided is no longer needed.
DEF052122, DEF052021	After upgrading from Interact 7.5.3 to version 8.x, the `aci_upgrade.log` file displayed multiple warnings regarding table constraints. These warnings should no longer occur.
DEF052129	When upgrading from Interact 8.0 to 8.x.0 on AIX® with a 32-bit JDK 1.5, the upgrade process would fail to complete the backup for Interact and the Interact Reports Pack. This is no longer an issue.
DEF052178	Deployment to a non-production server group was not reflected in the Interact deployment history report. The deployment history displayed on the Deployment tab and under the View Deployment History link should now be accurate.
DEF052216	Upgrading from Interact 7.5.3 to 8.x.0, after the first interactive channel was deployed, calling the `getOffers` API produced a null pointer exception. This is no longer the case.
DEF052780	The Optimize Installer was overwriting the Interact subcomponent version if Interact was already installed before Optimize was installed. This is no longer an issue.
DEF054132	If you ran the Interact installer in unattended (silent) mode, the Design Time component was not installed. This has been fixed.
DEF054848	Loader failed to work after upgrade to 8.2 or higher as the loader script file `oraload.sh` was updated after the upgrade, and any settings provided before the upgrade were overwritten. This is no longer the case.
DEF054993	A "Test Run" of interactive flowcharts was failing with User Variable of type "Integer". When user variables of type "integer" are used, test runs of interactive flowcharts would with Error 21100. This is no longer the case; Test Run is successful with user variables of type "integer."
DEF057828	When the audience level in Interact and Campaign is configured as non-ASCII (that is, using extended characters from the specified locale), the error `ORA-00001: unique constraint (RBGB_UC.CTREATMENT_PK) violated` was occurring. This issue no longer occurs.
DEF057822, DEF060580	Loader for contact history and response history was failing if the Audience level used non-ASCII (extended language) characters. Also, the Mapped Offer Table on the interactive channel summary page displayed an exception for non-ASCII audience. These issues have been addressed along with generally improved non-ASCII data handling.
DEF059806	When Interact is using DB2 loader to insert the Contact and Response data into the Contact History and Response History staging tables, an exception is logged (`java.io.IOException: Problem deleting directory`) indicating that the directory could not be deleted. The Contact and Response History data is successfully inserted as expected, regardless of this error. Note that it is not required that you delete the directory indicated in the logged error; however, those directories will take up space and will not be removed automatically, so you might want to delete them manually when they are no longer needed.

Issue ID	Description
DEF060192	When the learning aggregator runs, its purpose is to take data from the `uaci_offerstatstx` and merge into `uaci_offerstats` table. In some cases involving Oracle as the database, the aggregation was operating inefficiently, taking longer than it needed to. This performance has been improved.
DEF047872	The Interact design time was displaying an error for each Audience Level that was not mapped when ETL is enabled. This error has been reduced to a warning, and the information is displayed indicating that the Audience Level is not properly mapped.
DEF048646	Previously, a database error occurred while trying to delete a flowchart that was marked for deployment. Now, an informational alert is displayed explaining to the user why the flowchart cannot be deleted.
DEF048768	When a user was unmapping the profile table for an audience, a misleading error message was being displayed. A more accurate message, indicating that the table is mapped to a deployed flowchart and must be undeployed before the table is unmapped, is now displayed in this case.
DEF051664	Previously, an Interact upgrade would fail with an "insufficient disk space available" message if the user selected a backup directory that was the same as the installation directory. That selection is now prevented, so the error no longer occurs.
DEF061472	In prior releases, when an `audienceID` passed into the `startSession` API call was not found in the profile table, the system would log a warning with a full stack trace. This has been addressed so that a simple warning without the stack trace is now logged.
DEF061817	Attempting to test run a flowchart containing an InteractionPoint process box would sometimes result in the error message `Error 13200 IntFlowchartTest Run: Unspecified error For input string:` being displayed. This error was related to certain custom macros, and should no longer occur.
DEF061972	If a database table contained a field with trailing spaces, flowchart processes would take the trailing white space into account when evaluating the contents of those fields. Trailing white space is now ignored, as it is in Campaign
DEF062147	Using the `getOffers` API call would fail with a `java.lang.NullPointerException` error in some situations related to defining the interactive channel with constraints, but no impression limits. This issue has been corrected.

Chapter 4. Known issues

This section lists known issues in Interact 8.6.0.

Issue	Issue ID	Description
Cannot stop an interactive flowchart test run	N/A	You cannot stop or pause an interactive flowchart test run. Test runs are designed to run on a subset of data, for example hundreds of rows. You can configure the size of your test run in the Interaction process. See the *IBM Unica Interact User's Guide* for details.
If you are using built-in learning, Interact uses most recent learning attributes across all interactive channels	N/A	Learning attributes are defined across all interactive channels. If you have a single Interact runtime for multiple interactive channels, the Interact runtime uses the most recently deployed learning attributes. For example, the scenarios for your call center track learning attributes A, B, and C and the scenarios for you website track learning attributes C, D, and E. If you update the interactive channel for your website, changes to learning attribute C affects both the call center and the website.
Test run result tables are not dropped from Interact test run tables	N/A	When you perform a test run of an interactive flowchart, Interact creates four tables in your test run tables for each interactive flowchart. These tables are not deleted if you delete the interactive flowchart.
If you remove an audience level, contact and response history utility may fail	N/A	The contact and response history module attempts to transfer data for all audience levels listed in UACI_CHRHAudMap. If you remove an audience level, you must remove all associated entries from the UACI_CHRHAudMap table or the contact and response history utility will fail.
DB2 may return erroneous error when using a database load utility	N/A	In some cases, the database load utility returns an error even though the load was completed with only a warning. For example, if the value of a column exceeds the column's width, it is truncated before the load. In these cases, look at the database load utility log files and make sure that the records were not inserted before renaming the directory to rerun. You can determine the number of rows loaded by reviewing the db2loader.xxx.log file, specifically the line Number of rows committed = xxx.
Channel Event Summary Report may display incorrect data if you rename an event	N/A	If you rename an event, the new name may not display correctly in the report.
Online Help is not available for Interact Reports	DEF052233, DEF063147	Clicking **Help** from the Campaign Analytics/Analysis pages does not display Help for any of the Interact reports. A help window appears, but contains Campaign report information instead. As a workaround, use the help window to search for the reports by name for which you want to view information.
Non-ASCII Profile in Decision process box throws Error 11300	DEF054887	Objects with non-ASCII field names cannot be profiled in the Decision process when migrated to Interact 8.2.0 or higher.

Issue	Issue ID	Description
DB2 Loader not working with Non-ASCII Audience name	DEF054920	DB2 file-based loader for contact and response history logging is not supported if Audience Level contains non-ASCII characters. To work around this issue, either make sure Audience Levels use only ASCII characters, or use a memory cache instead of the file-based loader.
SiteMinder access is not supported for deployment of Interactive Channels	DEF054926	SiteMinder access is not supported for deployment of Interactive Channels. For Interact runtime deployment, you must use a user ID and password that has been explicitly created in the Marketing Platform database.
Changing session and campaign owners in Campaign causes associated interactive flowcharts and interactive sessions to stop working	DEF055155	If you change the ownership of a session or campaign in Campaign, the associated interactive flowcharts and interactive sessions do not work in Interact.
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.
IPv6 support is not included in this release.	DEF061723	Use of Internet Protocol v6 (IPv6) is not supported in this release. Only IPv4 connections are supported.
Cannot delete a campaign even after deleting the interaction strategy.	DEF062936	In some cases, users cannot delete a campaign even after the interaction strategy with which the campaign is associated is deleted. The ac_web.log file may contain a message similar to "DELETE statement conflicted with the REFERENCE constraint "iTrmtRuleInv_FK3". The conflict occurred in database "Automator_UC", table "dbo.UACI_TrmtRuleInv", column 'CellID'" in this situation. In this situation, where even the interactive flowchart is undeployed and deleted, and the strategy is deleted, the campaign cannot be deleted because it was part of a strategy that was deployed, and therefore historical data exists for that campaign that is used for reporting. This may be addressed in a future release.
Interact initialization fails while you deploy an EAR file containing the Interact runtime, Interact design time, andCampaign	DEF063006	Running the Interact runtime and Interact design time on the same system is a configuration that will not provide optimal performance. However, it is possible if you deploy the Interact web applications as individual WAR files, rather than EAR files containing all of the web applications in a single archive. Deploying the web applications together in an EAR file will cause the Interact runtime to fail on deployment. To work around this error, deploy the Interact runtime and design time on separate servers, or deploy them as individual WAR files.

Issue	Issue ID	Description
Exception displayed while copying an interaction strategy into a folder.	DEF063013	When you try to copy an interaction strategy, if you specify a folder as the destination an error message similar to `Could not execute JDBC batch update; nested exception is org.hibernate.exception.ConstraintViolationException: Could not execute JDBC batch update` is displayed. In reality, the error should indicate that you need to specify a campaign as the copy destination, rather than a folder.
Interact upgrade scripts execution console displayed incorrect info.	DEF063100	When you are upgrading an Interact installation from 7.x to the current version, a message appears in the console after writing the bootstrap file that is similar to `Setting target campaign installation directory to....` In reality, this message should refer to the Interact installation directory, and proceeds correctly using theInteract directory. This incorrect wording can be ignored.
User can undeploy an interactive channel version multiple times because the Acctive Deployments list is not refreshed each time.	DEF063504	On the Deployment tab, users who undeploy an interactive channel can repeatedly undeploy the interactive channel, becauseInteract does not currently refresh the status to indicate that the undeployment succeeded. The workaround is to manually refresh the status or navigate to another page and back to the Deployment tab to see the updated status. This will be addressed in a future release.
All table-driven features, such as offer blacklisting and whitelisting, are case-sensitive.	DEF063617	When specifying an Audience Level for offer blacklisting, the case you specify must match the actual Audience Level name as it is defined. For example, if you attempt to blacklist offers based on an audience level of "customer" while the actual audience level name is "Customer," the blacklisting will fail. The workaround is to use the same case that was used to define the Audience Level name.

Chapter 5. Known limitations

This section lists known limitations in Interact 8.6.0.

Issue	Number	Description
Offers in treatment rules do not appear in Interact report	N/A	If you do not select offers created with an offer template with **Allow offers created from this template to be used in real-time interactions** selected, Interact cannot collect the correct data for reporting.
SOAP client does not release threads	N/A	The SOAP client leaves sockets in a CLOSE_WAIT state instead of closing them. This is a known issue with the Axis2 SOAP client. See http://issues.apache.org/jira/browse/AXIS2-2883 for details.
Test run does not change value of user variables in design time	DEF030254	If you perform a test run of an interactive flowchart that contains a user variable, the value of the variable does not change in the design environment (IBM Unica Campaign). In runtime, you can use a session name-value pair to view the user variable current value.
Distributed caching in hybrid architecture is not supported	DEF049665	Interact does not support distributed caching in architectures that use a combination of operating systems on different instances of the runtime environment (for example, an instance on UNIX with Oracle and an instance on Windows with SQL Server). To support various components, including ETL capabilities, Interact requires that all instances of the runtime environment be of the same operating system type.
JNDI names for data sources must be unique	DEF049882	In a multi-partition setup, the JNDI name for each data source must be unique.
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.
Known limitation with German character ß	DEF051037	The German Eszett character ß (Unicode U+00DF) is not supported in Interact. • Interact initialization fails when an Audience is mapped to a table that contains this character. • An eligible Segment name that contains the character displays incorrectly when the segment is added to an interaction strategy.
UACI_EligStat table logs offers with effective dates that should have been excluded by effDateBehavior>	DEF054281	Offers with effective dates that falls out of the (effectiveDateBehavior + effectiveDateGracePeriodOfferAttr) are being logged as eligible offers in the UACI_EligStat table. The parameter specified in effectiveDateGracePeriodOfferAttr is not dynamic therefore if you include a "Grace_Period" attribute in effectiveDateGracePeriodOfferAttr and this is included in offers, every time the value for this parameter is changed in the offer, it requires redeployment of the interactive channel.
Constraint state lost on restarting Interact runtime server.	DEF057040	If the Interact runtime server is restarted for any reason, the most recent constraint state (stored in memory, for performance reasons) is lost.

Issue	Number	Description
Offer constraints do not work as expected when multiple offer constraint rules are added in one interactive channel for same set of offers.	DEF057081	Interact currently does not support multiple constraints to be applied independently over different intervals of tie for a specific deployment. Offers that fall under multiple constraints will follow the most restrictive of the constraints.
Modifying constraint parameters (such as start date or maximum number of offers per interval) results in changes to how the offers are served using that constraint.	DEF057070, DEF057076	Modifying the settings may affect constraint results in several ways: • Changing the start date of an offer constraint midstream may result in the counter being reset to zero. This occurs because when the startTime changes, the interval is recalculated and may yield a different interval, so the count may be reset. • On the Interact Constraint State page, the **Current count for this interval** data does not update if you change the offer constraint's start date to an earlier date. This issue occurs because, when the start time is changed, the interval must also be recalculated. The constraint state is updated correctly after that initial recalculation. For more information about how the constraint parameters affect the outcome, see the *IBM Unica Interact User's Guide*.

When issuing the getoffersForMultipleInteractionPoints call in the Interact API, the top-level attribute requirements can accept at most one attribute.	DEF057693	For example, if you set up offers in an Interactive Channel and execute a getoffersForMultipleInteractionPoints() API call using the Offer Attribute with OfferType values "Bank Account" and "Insurance".
		
		For an eligible segment, 3 offers are assigned: 2 offers with an offer type of "Bank Account" and 1 with an offer type of "Insurance". The following getoffersForMultipleInteractionPoints() API call would produce *incorrect* results:
		
		`{DIP1,3,1,(2,Offertype=Bank account|string) (1,Offertype=Insurance|string)}`
		
		This call would return only 2 offers with an offer type of "Bank Account."
		
		The following call would correctly return the wanted output:
		
		`{DIP1,3,1,(3,,(2,Offertype=Bank account|string) (1,Offertype=Inssurance|string))}`

Deployment successful even if interactive flowchart contains an unconfigured process	DEF030956	If you make some configuration change which places processes in interactive flowcharts into an unconfigured state, and you have deployed the interactive flowchart in the past, the interactive flowchart will deploy. Interactive flowcharts with unconfigured processes should not deploy.
Existing installer properties files are deleted after Marketing Platform installation in silent mode	DEF042448	If a previous installation in UI mode was performed, the `installer.properties` and `installer_uep.properties` files are wiped out after you then perform Platform installation in silent mode.
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.
Test Run shows results from first schema when 2 schemas are present	DEF054970, DEF055064	If more than one schema is present, test run results are from the schema that comes first alphabetically.

Issue	Number	Description
Validate flowchart fails when Mail List process is configured	DEF055021	"Validate Flowchart" fails to validate if a Flowchart Template created from a Batch Flowchart having MailList process is added into an interactive flowchart. "Validate Flowchart" displays "No errors detected in flowchart configuration".
Removing a learning attribute from the model deletes the historical data for that attribute.	DEF058996	This occurs as part of the learning feature self-maintenance, to clear out unnecessary data. In the situation where you want to add back the attribute that was removed, the Learning system will learn again from scratch for that attribute (rather than rely on old history data). If you want to keep the history for an attribute rather than allowing the system to delete it, add it to the global setting, and then avoid using it by creating a learning model that does not use that attribute, and assign at the Interactive Channel level.

Chapter 6. New features in earlier releases

This section contains changes in earlier 8.x releases of IBM Unica Interact for reference purposes. For more detailed instructions on using these features, see the Interact documentation.

New features and changes in version 8.5.0

Interact List process box added to batch flowcharts in Campaign

A new process box has been added to Campaign batch flowcharts to allow users to easily define the tables containing candidate offers to be served by the Interact Runtime server. The new process box, called Interact List, operates in a similar manner to a Call List or Mail List process box. Use the Interact List process box on a batch flowchart to determine the offers that will be served to customers by the runtime server, including the following choices:

- Offer suppression at an individual level (a "black list")
- Offer assignment at an individual level (a "white list," or score override)
- Offer assignment at an audience level (global or default offers)
- Offer assignment by custom SQL query

The runtime server has access to the output from this process when you deploy the interactive campaign. Note that a batch flowchart may contain multiple instances of the Interact List process box. (ENH10375)

Enhanced Learning (ENH10650,ENH10651,ENH10652,ENH10654)

The Interact Learning feature has been enhanced in the following ways:

- In addition to the Global learning model already existing in Interact, you can now enable learning and customize learning attributes at the Interactive Channel, Zone, and Rule Group level. Each of those levels can have its own set of custom learning models. This feature is also referred to as "self-learning." The global settings for learning are inherited in the following order: Global, Interactive Channel, Zone, Rule Group, with each subsequent level having the option of adding to or overriding the inherited settings.
- Learning Observation Mode.

  Previously, Interact could not collect learning statistics unless learning was specifically enabled. Beginning in this release, Learning Observation Mode allows Interact to collect learning statistics based on a pre-defined learning model (including the Global model) even when you are not using Interact Learning to arbitrate offers.

- Self-learning Learning Reports. (ENH10653)

  A new report has been added to support the new self-learning models described above. Marketers can now run the Learning Model Report Analysis report in the Interact Design Time environment to compare performance of two learning models over a specified period of time.

Web Connector (ENH09370)

The Web Connector enables web pages to make calls to Interact for real-time offer personalization without having to implement low-level Java or SOAP calls to the Interact server. The Web Connector manages offer arbitration, presentation, and contact/response history through two key processes: Page Load, which serves the web page with personalized offers, and Offer Click Through, which captures offer click-through and re-directs it to the specified landing page.

On your web page at load time, embedded JavaScript code links to the Web Connector, which then uses the Interact API to return a personalized offer list, which is then added to your web page in the form of HTML and other markup fragments as needed. When a user clicks a link, it's passed to the Web Connector which uses Interact to determine the correct target URL to which the user is then redirected.

Message Connector (ENH10655,ENH10656,ENH10657)

The Interact Message Connector enables email (and other electronic media) to make calls to Interact for offer personalization at open-time and click-through, determining the offer arbitration and contact/response history through the <img> tags (to retrieve personalized offers for email at open) and <href> tags, which capture click-through to redirect the user to landing pages.

Offer Constraints (ENH10646,ENH10647)

The Offer Constraints feature allows organizations to limit and manage distribution of offer impressions, limiting the number of times an offer or a collection of offers can be presented over defined periods of time. For example, you might want to suppress an offer after a predefined quota of impressions (such as a certain number of impressions in one day) has been met, or to evenly distribute offer impressions over a period of time.

Offer de-duplication (ENH10649)

The offer de-duplication policy enhances the efficiency with which Interact removes duplicate offers from requests for multiple interaction points. To accomplish this, a new call has been added to the Interact API called getOffersForMultipleInteractionPoints, which retrieves a list of offers that spans a list of specified interaction points. The API call also specifies whether the Interact server should apply de-duplication to the returned list.

Performance enhancements across Interact

Numerous performance enhancements have been implemented across all of IBM Unica Interact, involving some of the following areas:

- Contact history session caching and other file-based cache writing (ENH10959, DEF059773, DEF059774)
- Duplicate response history entries in ETL queries are handled more efficiently (DEF055886)
- Improved memory handling for Learning (DEF059772)
- Learning aggregation in general is handled more efficiently (DEF057236)
- OfferBySQL performance has been enhanced (DEF055126)

New features and changes in version 8.2.0

Offer marketplace enhancements

The following enhancements have been made in Interact 8.2.0 to support working with large numbers of offers:

- Ability to use SQL queries to get a desired set of candidate offers. OffersBySQL allows users to configure SQL to query a table or tables, to which offer lists or offers have been written, at run time.
- New command line tool for deploying candidate offers. A Campaign batch flowchart can be configured to run on a periodic basis. When the flowchart run completes, a trigger can be called to initialize deployment of the offers in the OffersBySQL table.

How to use the OffersBySQL feature

Basic steps for using the OffersBySQL feature are as follows:

1. Organize offers in folders or in offer lists.
2. Using Campaign batch features, or any external ETL process,
3. Populate the `UACI_ICBatchOffers` table with the final list of candidate offers.
4. Deploy the interact channel using a trigger.
5. On the run time side:

   Configure SQL to be called by creating an SQL template under configuration: `Interact/profile/audienceLevels/<AudienceLevel>/offers By Raw SQL`.

   - SQL may contain references to variable names that are part of the visitor's session data (profile). For example, `"select * from MyOffers where category = ${preferredCategory}"` will rely on the session containing a variable named `preferredCategory`.
   - SQL should be configured to query the offer tables generated in Step 2 above.

The execution of the SQL will happen for every `startSession` call if the offersBySQL feature is enabled.

To have the execution occur for every `getOffers` call, a `postEvent` may be called prior to `getOffers` with the parameter `UACIQueryOffersBySQL` set to 1. The `getOffers` call (and all subsequent `getOffers`) will execute the SQL.

To execute a different SQL, set the value of the parameter `UACIOffersBySQLTemplate` to the name of the preferred SQL template.

About the command line tool

The command line tool (`runDeployment.sh/.bat`) can be found under the Interact Design Time install directory `tools/deployment`. The usage of the script is simply: `runDeployment <propertiesFile>` for each interactive channel/server group deployment combination.

A sample properties file called `deployment.properties` outlines all the possible parameters and is available in the `tools/deployment` folder.

New configuration parameters

The following new configuration parameters are introduced in Interact 8.2 to support the OffersBySQL feature.

Table 1. New Design Time configuration parameters

Path name	Description	Default
Interact/whitelist/<audienceLevel>/ offersBySql/defaultCellCode	The default cell code to be used for any offer in the OffersBySQL table(s) that has a null value in the cell code column (or if the cell code column is missing altogether. This value must be a valid cell code.	None

Table 2. New Run Time configuration parameters

Path name	Description	Default
profile/audienceLevels/<AudienceLevel>/ offers By Raw SQL/enableOffersByRawSQL	Boolean flag to enable the offersBySQLoffersBySQL feature for this audience level.	FALSE
profile/audienceLevels/<AudienceLevel>/ offers By Raw SQL/cacheSize	Size of cache; used to store results of the OfferBySQL queries. NOTE: Using cache may have negative impact if query results are unique for most sessions.	-1 (off)
profile/audienceLevels/<AudienceLevel>/ offers By Raw SQL/cacheLifeInMinutes	The number of minutes before the system will clear the cache to avoid staleness.	-1 (off)
profile/audienceLevels/<AudienceLevel>/ offers By Raw SQL/defaultSQLTemplate	The name of the SQL template to use if not specified via the API	None
profile/audienceLevels/<AudienceLevel>/ offers By Raw SQL/<SQLTemplate>/name	The name of the SQL template.	None

New distance macro

The new Distance macro, available in both IBM Unica Campaign and IBM Unica Interact, supports calculating the distance between two geographical points, when two pairs of latitude and longitude coordinates are provided. For complete details, refer to the *IBM Unica Macros for IBM Unica Marketing User's Guide*.

Ability to set JDBC fetchSize when retrieving records from staging tables

A new configuration parameter, `fetchSize` has been added to allow setting the JDBC fetchSize when retrieving records from staging tables.

The path to the parameter in Configuration Manager in Marketing Platform is `Affinium | Campaign | partitions | partition1 | Interact | contactAndResponseHistTracking | fetchSize`

The 8.2 installation automatically adds this parameter to your configuration.

On Oracle databases especially, adjust the setting to the number of records that the JDBC should retrieve with each network round trip. For large batches of 100K or more, try 10000. Care must be taken not to go too large as that will have an impact on memory usage and the gains will become negligible, if not detrimental.

Interact contact and response history ETL script enhancements

The following enhancements have been made in Interact 8.2.0:

1. Ability to specify a larger batch size for ETL using the new configuration property `maxJDBCFetchBatchSize`.

    The CH/RH records will be read from the Interact Runtime data source in chunks of the size specified in the `maxJDBCFetchChunkSize` property, and written to the Campaign data source.

    For example, to process 2.5 million contact history records a day, you should set `maxJDBCFetchBatchSize` to a number greater than 2.5M so that all records for one day will be processed. `maxJDBCFetchChunkSize` and `maxJDBCInsertBatchSize` should be set to smaller values, say 50,000 and 10,000 respectively. Some records from the next day will be processed as well, but retained until the next day.

2. Ability to schedule an ETL run

    An option is now available to run the ETL once a day, with the ability to specify a preferred time window for the run. The ETL will start during the specified tiem interval and will process at most the number of records specified using `maxJDBCFetchBatchSize`.

3. Option to retain process contact and response history records

    An option is now available to retain processed contact and response history records.

4. ETL completion notification

    You can now specify an absolute path to a script that will be run when ETL completes. Four arguments are passed to the completion notification script: start time, end time, total number of CH records processed, and total number of RH records processed. The start time and end time are numeric values representing number of milliseconds elapsed since 1970.

Note: If ETL takes more than 24 hours to execute, and thus misses the start time for the next day, it will skip that day and run at the scheduled time the following day. For example, if ETL is configured to run between 1AM to 3AM, and the process starts at 1AM on Monday and completes at 2AM on Tuesday, the next run, originally scheduled for 1AM on Tuesday, will be skipped, and the next ETL will start at 1AM on Wednesday.

Note: ETL scheduling does not account for Daylight Savings Time changes. For example, if ETL scheduled to run between 1AM and 3AM, it could run at 12AM or 2AM when the DST change occurs.

Start/Effective dates of offers now taken into consideration in Interact

Two new configuration parameters have been added to allow managing start/effective date behavior with offers. Both are located in the following path in Configuration Manager in Marketing Platform:

```
Affinium > Interact > offerServing
```

Table 3. Summary of start/effective date changes

Parameter name	Description
`effectiveDateBehavior`	This parameter is a global configuration that impacts all offers. By default, it is set to 0 (use effective date). Possible values are: • `-1` -- Ignore effective date (equivalent to behavior prior to this enhancement) • `0` -- Use effective date (default) • `>0` -- Grace period (number of days added to currect date. If the effective date is greater than the calculated date (current date plus grace period), the offer will be filtered out)
`effectiveDateGracePeriodOfferAttr`	This parameter allows each offer created from a template to have a different grace period value. It maps to a custom offer attribute for setting the number of days before the effective date that an offer can be served. The value is the name of the custom attribute created in the offer template, and the default is blank or no value. If `effectiveDateGracePeriodOfferAttr` is set, Interact looks for the named attribute in each offer. If an offer contains the named attribute, Interact reads the value and determines the grace period. If an offer does not contain the named attribute or if effectiveDateGracePeriodOfferAttr is not set, Interact uses the `effectiveDateBehavior` setting. To configure `effectiveDateGracePeriodOfferAttr`, 1. Create a custom offer attribute in Campaign. 2. Set the value of `effectiveDateGracePeriodOfferAttr` to the name of the new custom offer attribute. 3. Assign the custom offer attribute to each offer template for which you want to specify a grace period. 4. In offers created from the offer template, set this attribute to the number of days to be added to the current date to allow as a grace period.

Chapter 7. About the IBM Unica Interact Reports Package

The Interact Reports Package delivers reporting schemas that you can use to track campaign, offer, and cell performance based on the interactive channel and other Interact-specific metrics.

The reports package contains the following features:

- Schemas and schema templates that are registered with Marketing Platform during installation. They describe the attributes and metrics that represent the product's reporting schema and include:
  - Five base schemas that are the basis of the reporting schema (with no custom attributes)
  - One schema template that you can use to create new schemas
- IBM Cognos customizable model and reports to be deployed on an IBM Cognos BI Server
- Reference documentation that describes the IBM Cognos model and reports

  Reference documentation for report packages is no longer available on the documentation server where the PDF versions of the product documentation are posted. You can access the reference documentation for report packages after you install the reporting schemas on the machine where the Marketing Platform is installed. The reference documentation is in a subdirectory of the `Cognos10` directory under the report package installation.

The Interact reports retrieve data from three data sources:

- Interact system tables (design environment)
- Interact learning database
- Interact runtime database

Reporting schemas

Following are the schemas:

- Interact Views provides the standard attribute views of Interact design environment system tables (campaign, offer, cell, TreatmentRuleInv, and so on).
- Interact Performance is used for measuring performance starting at the campaign or interactive channel level across a combination of other dimensions: offers, cells, segments, interaction points, and over time (hours/last 24-hours or days/last seven days). The metrics are divided into contact and response metrics.
- Deployment History is used by reports that provide information about interactive channel deployments.
- Interact Runtime Views is used by reports that retrieve eligibility statistics, defaulted statistics, and event activity from the runtime system tables.
  - Eligibility statistics are summarized by the following dimensions: interactive channel, interaction point, offers, cells, and time.

    Defaulted statistics are summarized by the following dimensions: interactive channel, interaction point, and segment.

    Event activity is summarized by hour and day.
- Interact Learning View is used by reports that retrieve data from the Interact learning database.

Template

The package contains a template for the Interact Performance schema so that you can create additional performance reporting schemas for additional audience levels.

Reports

Following are the reports available from the Campaign Analysis section and Campaign Analysis tab:
- Channel Deployment History
- Interactive Cell Performance Over Time
- Interactive Cell Performance by Offer
- Interactive Offer Performance Over Time
- Interactive Offer Performance by Cell
- Interactive Offer Learning Details
- Interactive Cell Lift Analysis
- Channel Learning Model Performance Over Time
- Zone Performance Report by Offer

Following are the reports available from the Interactive Channel Analysis tab:
- Channel Deployment History
- Channel Event Activity Summary
- Channel Interaction Point Performance Summary
- Interactive Segment List Analysis
- Channel Learning Model Performance Over Time
- Zone Performance Report by Offer

Following are the available dashboard reports:
- Interaction Point Performance

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- A brief description of the nature of your issue.
- Detailed error messages 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

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