

Version 11 Release 0  
May 31, 2018

*IBM Campaign Release Notes*

**IBM**

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 25.

This edition applies to version 11, release 0, modification 0 of IBM Campaign and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 1998, 2018.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

<b>Chapter 1. IBM Campaign 11.0 system requirements and compatibility.</b>	<b>1</b>
Prerequisites for using IBM Campaign.	1
IBM Campaign documentation roadmap	2
<b>Chapter 2. New features and changes in version 11.0</b>	<b>5</b>
<b>Chapter 3. Fixed defects in IBM Campaign 11.0</b>	<b>9</b>
<b>Chapter 4. Known issues in IBM Campaign 11.0</b>	<b>11</b>
<b>Chapter 5. Known limitations in IBM Campaign 11.0</b>	<b>15</b>
<b>Chapter 6. IBM Campaign Reports Package</b>	<b>19</b>
<b>Before you contact IBM technical support</b>	<b>23</b>
<b>Notices</b>	<b>25</b>
Trademarks	27

Privacy Policy and Terms of Use Considerations	27
--	----



---

## Chapter 1. IBM Campaign 11.0 system requirements and compatibility

IBM® Campaign is part of the IBM Marketing Software suite of products. Campaign version 11.0 requires Marketing Platform 11.0.

### Where to find complete system requirement and compatibility information

For a list of IBM Marketing Software product versions compatible with this product and a list of third-party requirements for this product, see the *Recommended Software Environments and Minimum System Requirements* document. This document is posted under Detailed System Requirements on the IBM Support Portal website: (<http://support.ibm.com>).

You can also access this document by selecting **Help > Product documentation** when you are logged in to IBM Marketing Software.

---

### Prerequisites for using IBM Campaign

Before you begin using IBM Campaign, confirm that your environment meets the following requirements.

- For an improved user experience, use at least a 21" screen.
- For an improved user experience, set your screen resolution to 1600 x 900. Lower resolutions can result in some information not being properly displayed. If you use a lower resolution, maximize the browser window to see more content.
- A mouse is best for navigating in the user interface.
- Do not use the browser controls to navigate. For example, avoid using the Back and Forward buttons. Instead, use the controls that are in the user interface.
- If pop-up blocker (ad blocker) software is installed on the client machine, IBM Campaign might not function properly. For best results, disable pop-up blocker software while running IBM Campaign.
- Ensure that the technical environment meets the minimum system requirements and the supported platforms.\*
- The correct browser and versions must be used.\*
- Clear the browser cache after upgrading or applying any fix pack. This only needs to be done once, after the application is updated.
- If you use Internet Explorer (IE) with IBM Campaign or any module that uses Campaign flowcharts (eMessage, Contact Optimization, Interact, Distributed Marketing): To log in multiple times to view side-by-side information, open IE and log in to IBM Marketing Software. Then select **File > New Session** in the IE menu bar. In the new IE browser window, log in to IBM Marketing Software as the same or a different user.

**Important:** Do not use any other method to open multiple sessions. For example, do not open a new tab; do not open another browser session from the **Start** menu or desktop icon; and do not use **File > New Window** in IE. These methods can corrupt information that is shown in the application.

\*For details on the items indicated by an asterisk, see the *IBM Marketing Software Recommended Software Environments and Minimum System Requirements*.

## IBM Campaign documentation roadmap

IBM Campaign provides documentation and help for users, administrators, and developers.

Table 1. Get up and running

Task	Documentation
Find out about new features, known issues, and limitations	IBM Campaign Release Notes
Learn about the structure of the Campaign system tables	IBM Campaign System Tables and Data Dictionary
Install or upgrade Campaign	One of the following guides: <ul style="list-style-type: none"> <li>• IBM Campaign Installation Guide</li> <li>• IBM Campaign Upgrade Guide</li> </ul>
Implement the IBM Cognos® reports provided with Campaign	IBM Marketing Software Reports Installation and Configuration Guide

Table 2. Configure and use Campaign

Task	Documentation
<ul style="list-style-type: none"> <li>• Adjust configuration and security settings</li> <li>• Prepare Campaign for users</li> <li>• Run utilities and perform maintenance</li> <li>• Learn about integrations</li> </ul>	IBM Campaign Administrator's Guide
<ul style="list-style-type: none"> <li>• Create and deploy marketing campaigns</li> <li>• Analyze campaign results</li> </ul>	IBM Campaign User's Guide
Improve flowchart performance	IBM Campaign Tuning Guide
Use Campaign functions	IBM Macros for IBM Marketing Software

Table 3. Integrate Campaign with other IBM products

Task	Documentation
Integrate with IBM Engage	IBM Campaign and Engage Integration Guide for IBM Marketing Cloud
Integrate with IBM Journey Designer	<a href="http://www.ibm.com/support/knowledgecenter/SSER4E/JourneyDesigner/kc_welcome_journeydesigner.dita?lang=en">http://www.ibm.com/support/knowledgecenter/SSER4E/JourneyDesigner/kc_welcome_journeydesigner.dita?lang=en</a>
Integrate with IBM Digital Analytics	<p><i>IBM Campaign Administrator's Guide</i>: How to configure the integration</p> <p><i>IBM Campaign User's Guide</i>: Targeting IBM Digital Analytics segments in campaigns</p>
Integrate with IBM Marketing Operations	IBM Marketing Operations and IBM Campaign Integration Guide
Integrate with IBM Opportunity Detect	<p><i>IBM Campaign Administrator's Guide</i>: How to configure the integration</p> <p><i>IBM Opportunity Detect Administrator's Guide</i> and <i>IBM Opportunity Detect User's Guide</i>: How to administer and use the product</p>

Table 3. Integrate Campaign with other IBM products (continued)

Task	Documentation
Integrate with IBM eMessage	<p><i>IBM Campaign Installation and Upgrade guides</i>: How to install and prepare eMessage components in the local environment.</p> <p><i>IBM eMessage Startup and Administrator's Guide</i>: How to connect to the hosted messaging resources.</p> <p><i>IBM Campaign Administrator's Guide</i>: How to configure offer integration.</p>
Integrate with IBM SPSS® Modeler Advantage Enterprise Marketing Management Edition	<i>IBM Campaign and IBM SPSS Modeler Advantage Enterprise Marketing Management Edition Integration Guide</i>
Integrate with IBM WeatherFX.	You can integrate WeatherFX with IBM Campaign so that you can pull weather events into your marketing campaigns. Campaign version 9 and version 10 users can integrate with WeatherFX by using the UBX toolkit. For more information, see <a href="https://www.ibm.com/support/knowledgecenter/SSWU4L/Integrations/imc_Integrations/Weather_FX_for_IBM_Marketing_Cloud.html">https://www.ibm.com/support/knowledgecenter/SSWU4L/Integrations/imc_Integrations/Weather_FX_for_IBM_Marketing_Cloud.html</a> .
<b>Note:</b> Additional integrations may be available that are not listed in this table. See Product tools and utilities for IBM Campaign. Also see IBM Solution Engineering Projects.	

Table 4. Develop for Campaign

Task	Documentation
Use the REST API	See the IBM Campaign REST API
Use the SOAP API	<ul style="list-style-type: none"> <li>• See the IBM Campaign SOAP API Specification</li> <li>• JavaDocs in devkits\CampaignServicesAPI</li> </ul>
Develop Java™ plug-ins or command-line executables to add validation to Campaign	<ul style="list-style-type: none"> <li>• See the IBM Campaign Validation PDK Guide</li> <li>• JavaDocs in devkits\validation</li> </ul>

Table 5. Get help

Task	Instructions
Use the IBM Knowledge Center	Go to <a href="http://www.ibm.com/support/knowledgecenter/SSCVKV/product_welcome_kc_campaign.dita">http://www.ibm.com/support/knowledgecenter/SSCVKV/product_welcome_kc_campaign.dita</a>
Open online help	<p>When using the IBM Campaign application:</p> <ol style="list-style-type: none"> <li>1. Choose <b>Help &gt; Help for this page</b> to open a context-sensitive help topic.</li> <li>2. Click the <b>Show navigation</b> icon in the help window to display the full help.</li> </ol> <p>You must have web access to view context-sensitive online help. Contact IBM Support for more information about accessing and installing IBM Knowledge Center locally for offline documentation.</p>
Get PDFs	<p>When using the IBM Campaign application:</p> <ul style="list-style-type: none"> <li>• Choose <b>Help &gt; Product documentation</b> to access Campaign PDFs.</li> <li>• Choose <b>Help &gt; All IBM Marketing Software documentation</b> to access all product PDFs.</li> <li>• Click the links for PDFs during the installation process.</li> </ul>

Table 5. Get help (continued)

<b>Task</b>	<b>Instructions</b>
Get support	Go to <a href="http://www.ibm.com/">http://www.ibm.com/</a> and click <b>Support &amp; downloads</b> to access the IBM Support Portal.



---

## Chapter 2. New features and changes in version 11.0

IBM Campaign 11.0 includes a number of new features and changes.

For a list of newly supported and discontinued platforms, see the document *Recommended Software Environments and Minimum System Requirements*, which is posted under Detailed System Requirements on the IBM Support Portal (<http://support.ibm.com>).

### **To store email opt out events of IMC coming in Campaign via UBX**

WCA customers can receive opt-out links to opt out (unsubscribe) from the WCA mailing in the emails delivered to them. This event is now tracked by IBM Campaign via UBX. The Mailing Opt-Out Event (emailOptOut) is being tracked in the Campaign system database in a new table called UA\_EMAILOPTOUT. User must subscribe to the Mailing Opt-Out Event (emailOptOut) in UBX to enable tracking of this event in IBM Campaign.

### **Replicate User variables in extract process box when the template is being copied and pasted to another flowchart**

When users copy the Flowchart template and paste it in the flowchart, then the User Variables are copied too along with the template.

### **Allow User Variables (UserVar) to have a string length up 512**

Earlier User Variables (UserVar) supported just 32 character string length. The length of the User Variables of type TEXT (UserVar) is increased to support up to 512 characters.

### **GDPR - Right to erasure**

GDPR utility provided with IBM Campaign help in generating the SQL scripts which can be executed on IBM Campaign system tables to erase the users data referred in IBM Campaign system. Please refer to IBM Campaign GDPR documentation for more details on GDPR utility..

### **Upload contactlist to IMC without specifying Template or Content Customization details**

Using this feature user will be able to upload data in WCA database / contact list using EmailPB without selecting an Email template.

### **Add Swagger documentation for Campaign APIs**

Swagger documentation contains useful reference and task-based help content to quickly get started with the Campaign APIs.

## Integration with Watson Marketing Assistant

Watson Marketing Assistant integration with IBM Campaign will enable real time interaction for IBM Campaign users, thus enabling businesses to serve their customers better.

Call from IBM Campaign to EBA is secured and this is achieved using the JSON web token (JWT).

IBM Campaign communicates with EBA, EBA then communicates with QUEST and QUEST works on the Cognos model.

Currently, the QUEST model is based on the Campaign system schema, Modelling on User database is not supported.

For example, WMA in IBM Campaign will support queries like:

- Which campaign has the most offers
- When was a certain campaign created
- When were 10 Percent Off offers used in Test Direct Marketing Campaign
- How many people in control groups received 20 Percent Off offers; show offer start date

Though Watson integration is enabled, it is mandatory for a user to have a Report System Role in order to access WMA.

## Campaign – Audience Publishing and Subscription using UBX and UBX toolkit

Campaign can share the audience data with IBM UBX via the UBX Toolkit. Campaign can publish (produce) the audience data to UBX as well as can download (consume) the audience information from UBX. This is achieved using UBX toolkit.

## UBX does not provide the actual SMS reply message

IBM Campaign is capable of sending Mobile SMS using the SMS process box with Watson Campaign Automation. In the 11.0 release, IBM Campaign can track the SMS replies to SMSes sent from IBM Campaign using Watson Campaign Automation. The SMS Reply message is captured in UA\_InteractedSMS table. A new columns "MessageBody" is added in the UA\_InteractedSMS table to capture the SMS reply message body.

If user respond multiple times then he will see multiple entries in the UA\_InteractedSMS table, one for each reply. "Source" table column is "null" for these SMS reply records. Where as UA\_InteractedSMS table also shows a record when SMS is sent from IBM Campaign. This record will have the "Source" table column value set to "campaign".

While sending the SMS in WCA user will need to have Text to Join program available and attached to SMS templates. This Text to Join program contains a list of Keywords. While responding back to SMS user will need to use this keywords then only reply gets delivered to WCA.

## **IBM Campaign user database support to Hadoop based on Impala**

IBM Campaign now supports Bigdata hadoop based on Impala, In the current version this support is provided just for Cloudera Bigdata instance using Impala. To connect from IBM Campaign to Cloudera Bigdata instance it needs Cloudera Impala ODBC driver version 2.5.41 onwards. Existing support of Bigdata instance based on Hive remains same.

## **Fast Upgrade**

IBM Marketing Software version 11 supports the fast upgrade approach. This approach allows upgrades from version 8.6 onwards to version 11.0. This aids customers by bypassing the multi-step upgrade. The Fast Upgrade approach is also useful in reducing upgrade downtime. The approach is provided for IBM Marketing Platform, IBM Campaign, IBM Contact Optimization, IBM Marketing Operations, IBM Interact for upgrade from 8.6.x version onwards. For details, refer to the Fast Upgrade documentation released with version 11.0.

## **IBM Campaign user database support with HortonWorks Big Data on AIX Operating System**

IBM Campaign support HortonWorks Big Data based on Hive using Progress DataDirect Connect64(R) for ODBC Release 7.1.5 on AIX Operating System.



## Chapter 3. Fixed defects in IBM Campaign 11.0

The following defects were fixed in Campaign 11.0.

Table 6. Campaign fixed defects

ID	Fixed defect
DEF 283244	In a certain scenario, the Segment process box would get un-configured, in case the preceding process boxes failed. This issue has been fixed.
DEF 242477	The User variable value would not get forward to the Campaign trigger correctly on the Windows platform when the value contained double quotes. This issue has been fixed.
DEF 282025	V10 field selection was less "compact" due to more spacing between the lines. This issue has been fixed.
DEF 281959	The Campaign listener crashed at tls4d.dll module on the Windows operating system. This issue has been fixed.
DEF 223861	<p>When we were remapping the input table with the same name but in a different case, the mapped table was removed from the process box. This issue has been fixed.</p> <p>However due to technical limitation, when you open the process box for the first time after remapping you will see the old table name. If you close the process box a "Process Run Result will be Lost" pop-up message comes up.</p> <p>Please ignore this message as the results will not get lost. Also, this message does not show up the second time onwards.</p> <p>Please note even this behavior is specific to the case when you are remapping with the same table name but different case. If you remap with different table name there are no issues at all.</p>
DEF 282021	Double 'check' option in Extract PB for selecting CO Sessions
DEF 279680	The wrong CampaignAudienceID was recorded in WCA while using the Email process box to upload a single contact record into WCA, when sending an email. This issue has been fixed.
DEF 282038	Non top level Extract process box inappropriately inserted data filter query when 'MaxOf' was used. This issue is addressed by reverting the enhancement that was given for data-filtering on non top level Select and Extract box. An environment variable "UNICA_ACTOPLEVELPB" is used in the server, to decide if the non-top level PB would allow data-filter or not for Select and Extract PB. A non empty value would indicate that it would not. Putting any non empty value for this variable will enable this flag. User can set it in setenv.bat/sh or rc.unica_ac file. Enabling this flag will revert the Enhancement for data filter. Non top level Select/Extract box will no more allow data filtering.
APAR PO07343, DEF 272692	The flowchart session file was growing continuously in size with every save of the flowchart even though there were no changes done in the flowchart. This issue has been fixed.
DEF 277757	partitions or partition1 directory was converting into a file, while the activeSession.udb file was converting into a directory. This issue has been fixed for 100+ concurrent flowcharts.
DEF 228485	A blank value is allowed in the Parameters tab of the Mailist Process Box for the Date field. This issue has been fixed.
DEF 277046	SSLv2 and SSLv3 protocols should be disabled by Campaign Listener and server
DEF 268408	VER: Issues observed in the search filter
DEF 269605	Search and sort icons are too close. Difficult to distinguish between the filters On and OFF
DEF 276974	VER: Filter on select PB is cleared but the filter condition is applied even then

Table 6. Campaign fixed defects (continued)

ID	Fixed defect
APAR PO06791, DEF 238043	In the Campaign Flowchart Status Summary report, on the Campaign Analysis tab, the sorting on the date type, the column name was incorrect. This issue has been fixed.
DEF 272140	The Response process box was failing with a Database error 11528 when 3 or more text based fields are mapped to offer attributes. This issue has been fixed.
DEF 281958	There was a performance issue in the Clustered Campaign listener environments due to versioning/uniqueness of individual unica_tbmgr.cache files. This issue has been fixed.
DEF 246664	The Segment analysis tab UI distorts after viewing the Segment cross tab analysis report

## Chapter 4. Known issues in IBM Campaign 11.0

Campaign 11.0 includes the following known issues.

Table 7. Campaign known issues

ID	Known issue
13460	When the <b>Export to File</b> option is unchecked on the Fulfillment tab of the Mail List process, the <b>Summary File</b> option is enabled but should not be.
175825	When defaultBehaviorWhenOutputToFile is set to Create New File, it works only when you select a new output (export) file for the first time. If you try to change the existing output file and select a new output file, then the option Append to Existing Data gets selected by default.  It can be changed manually to Create New File.
APAR 198495, PO05293, 198494	For a custom macro, if a user account has assigned as Not Granted permission for a stored object (Custom Macros, Flowchart Templates, Stored Derived Fields, etc.), the custom macro can be used to edit, delete, add, move all stored objects regardless of permissions.
204347	LARGE_DATA: Browser Crash - Mail List process box with 700 segments - Save with 512 offers to each segment.
211253	File-based input with multiple columns containing date in different format does not read the date correctly.
212890	Boolean type column on Amazon Redshift is recognized as 'Test' field type in table mapping.
220474	When the column name of the source table contains Non-ASCII characters and is long (probably longer than 10 x 3bytes characters in UTF8), the Snapshot process does not run because the temp table is not created.
220705	Profiling count for Dimension table fields is incorrect and profiling percentage is displayed as 100% even if profiling is in progress.
APAR 222047, PO06172, 222049	IBM Campaign extract process does not write to DB2 database when flowchart is configured with two extract processes and the second extract process contains a derived field that uses French accented characters in the name of the derived field.
APAR 225568, PO06304, 225572	temptablepostexecutionsql is not run when selecting coremetrics segment.
226981	Campaign navigation URL format and Campaign/conf/config.xml Campaign navigation format is incorrect when no port is specified during Campaign installation.
230340	Inconsistent behavior for the Mail list process is observed when the data filter is assigned to <b>Effective date</b> on the Parameters tab in a new Mail list process when compared to an edited existing Mail list process. The Mail list process does not output a datetime derived field in the output log file. Changing the effective date parameter values might cause execution failure of the Mail list.
230606	In a flowchart where fields are extracted and used in a Mail list process, the fields under <b>Extract Node</b> on the Personalization tab of the Mail list process are different before and after running the process.
231859	While using the Chrome browser, it takes around 20 seconds to respond while loading the Personalization tab of the Mail list process if it contains large number of treatments and offers assigned. For example, a Mail list process with 250 cells, each cells with multiple offers, each offer having multiple attributes.

Table 7. Campaign known issues (continued)

ID	Known issue
232502	A Mail list performance issue occurs when the user changes the input in any way and there is a delay when initially switching tabs. After the user changes the input and switches to the Treatment or Process tab for the first time, there is a delay of around 10-15 seconds depending on the number of inputs selected. After this initial delay, there is no delay until the input is changed.
232835	The Campaign application performance is affected and sometimes an exception error message is displayed on the Campaign pages when the application is used for a longer time (some days) with continuous usage. You must restart your Campaign web application and Campaign Listeners
238789	While using the Chrome browser, when a user opens a Mail list with 600 cells having multiple offers assigned to each cell, the application stops responding. While using the Internet Explorer 11 browser, nothing is displayed in the Mail list process box.
APAR 238830, PO06822, 238832	Roles assignment does not work in Campaign and a user is able to create a custom macro even if the user does not have the permission to create the custom macro, has the permission for Folder Owner and Owner roles, and is neither the folder owner nor the owner.
239142	When the Audience process fails because of an incorrect Count filter expression, and the user removes the filter expression, adds a Condition, and runs the Audience process again, the process fails. The Condition is not considered and instead the previous Count filter expression is used resulting in the failure. To run the Audience process successfully, you must re-open the Audience process configuration window, click the Condition, Save and Close. The Audience process now considers the Condition and runs successfully.
APAR 243895, PO06966, 243897	A space character is converted to ' ' while profiling.
PMR 223848, 245664	Irrelevant flowcharts turned up in a Campaign when different users access different flowcharts at the same time, the wrong flowchart seems to be displayed.
248007	Hive Performance: PRE -Single Insert statements executed for loading data in temp tables (extract) when used with Hive takes 19 minutes for 2000 records.
APAR 267287, PO07170, 267288	Users cannot add an apostrophe in the text for a Derived field or a User variable.
269729	Persistent Derived field created in English locale is not displayed in French locale.
PMR 269280, 269765	Truncate does not function for the DB2 database. The DeleteAsTruncate property specifies whether, when an output process is configured to REPLACE TABLE, Campaign uses TRUNCATE TABLE or deletes from the table. When the value is TRUE, Campaign runs a TRUNCATE TABLE from the table. When the value is FALSE, Campaign runs a DELETE FROM from the table. The default value depends on the database type, with a large number of clients moving from Oracle to DB2 the difference in performance is extremely noticeable. The comparison in performance in Snapshots and Mail lists for customers leaving Oracle to DB2 is drastic.
269785	For the Chrome and Safari browsers, when the locale is set as Japanese, the labels overlap the buttons in the Save template window.
270528	<b>Use</b> and <b>Profile</b> buttons remains enabled for the Select process when the user selects some table fields and then applies the search filter in the Select process such that it does not return any matching table.
270614	An error occurs when the user tries to load/delete table catalog which is saved as XML with data folder specified.
270814	Users cannot select values from the On a trigger drop down by using the mouse on the Scheduler page.
271576	Campaign Application deployment completed with errors on WAS 8.5.0.2. The errors can be ignored.



Table 7. Campaign known issues (continued)

ID	Known issue
271642	A "Please wait....." message is displayed multiple times in console mode installation while upgrading from version 10.1 and also for new Installation
271676	The Extract table on the DB2 and Oracle databases is not deleted when In-DB optimization is unchecked.
272253	The Campaign application performance is affected when a user opens the Table mapping window and more than 500 tables are mapped.
273652	The server process crashes when Max size is set to zero and <b>Create extract tables</b> is checked in Segment process.
2968	Hot keys are not implemented on most of the windows. In the Dojo implementation it is not possible to use keyboard shortcuts to activate certain functions. Instead the user must click buttons.
PMR 266519, 75262	Clicking <b>Return to previous page</b> distorts the user interface in some cases. Use the links within the products to navigate, rather than the browser controls.
N/A	When IBM Campaign 10.0.0.1 (10.0.0 FP1) is deployed in an application server cluster environment with 80 port, the Campaign navigation URL should not contain this port number. For example: http://<host>.<domain>:80/Campaign should be changed to http://<host>.<domain>/Campaign. Change the value of the serverURL property under Campaign navigation on the <b>Settings &gt; Configuration</b> page.
N/A	Mail List process box gets unconfigured with error "31606: History table are changed" on Flowchart run.  1. There is no issue if the history tables are mapped prior to building a flowchart and adding a Mail List process. 2. If you do not follow step 1, you can still map the history tables after the error appears. If you edit the flowchart and configure the process box, the process will run.
N/A	After migrating non-ASCII data to Campaign 8.6, in some cases you cannot open Campaign flowcharts on the target system. Session flowcharts open successfully. To work around this issue, remigrate the campaigns in overwrite mode. You can then open the flowcharts.
TT 062333	Information related to associated products does not appear in offer on Marketing Operations. When an offer created in Campaign with products associated with it is imported in Marketing Operations, information about the associated products is not available in Marketing Operations.
270655	Table Mapping : Table name containing @ is supported while mapping a table, special characters like @ are should not be supported in Table names. Since Table name containing @ is supported since some time, this functioning is not updated now.
283637	When user has one maillist PB configured in the flowchart and he adds another maillist PB in the same flowchart, it is observed that All the values from already configured in treatment tab, Parameters tab, Personalisation tab of new Maillist PB appear automatically in any new dragged maillist PB.
282367	While configuring maillist PB if a used offer has a date type of attribute to input cell. Then on the parameters tab, Select a row from the Assigned value column and click on the Assign Value button and from the "Assign the following value to all selected attributes" drop down select Calendar. It is observed that a corrupted string 'date' is displayed when you click calendar on the Assign Value of Parameters tab of the Maillist PB
281389	While running Campaign in the Upgrade mode, the installer should read the installation properties files from the previous version response files as we had that response available at the install location from the previous installation. However, it does not read the installation properties files from the earlier version response files.

Table 7. Campaign known issues (continued)

ID	Known issue
280623	In Sample PB if we specify '3' in "# of Samples/Output Cells" field and Configure [sample1] with 3 samples having sample sizes as 50%, 50% and "All remaining records" respectively based on "Random Sample method" then after running Flowchart if we reopen the Sample PB "Process run results will be lost. Continue?" message is displayed in sample PB when remaining All check boxed is check.
281697	Query separator in SQL for error "previous statement must be terminated with a semicolon" - While executing a script generated by the gdpr utility on the SQL server DB, you might face this error. The generated script will fail to execute as a script. Hence the specified data will not be deleted from the Campaign system tables
283101	CHROME: "Unable to notify roles/permission changes to Campaign, eMessage OD may be out of sync". On clicking save changes for the Security Policy displays the following pop-up, this happens just first time after user logs in and changes anything in the policy and clicks save changes. Also, this is reproducible just on CHROME. Tested on Chrome V64 and V65.
282844	Campaign Offer doesn't sort on 'Channel' & 'Eff./Exp.Dates'. After clicking on every column the offers below it should be sorted in ascending order. If you click on the same column the second time, the offers beneath it should be sorted in the descending order.
283695	Segment process box execution failed with extract enabled to User database for the IMPALA user DB. This error does not reproduce when extracting to IBM Campaign server.

## Chapter 5. Known limitations in IBM Campaign 11.0

Campaign 11.0 includes the following known limitations.

Table 8. Campaign known limitations

ID	Known limitation
17202	Error 19024: Cannot delete segment folder if the segment was deleted from the folder. A segment that is deleted from a folder remains as an inactive segment in the folder. Folders with inactive segments cannot be deleted. This is working as intended.
185854	Big data: Campaign integration with Hadoop-based Hive big data as a user data source is not tested on MS Windows operating system.
190621	Big data: Campaign with Hive big data as a user database does not support user table mapping with Base and Dimension levels up to the fourth level hierarchy. If you map a Base record table with four levels of dimension tables in a Select process box, then build a query based on the fourth level Dimension table, the query fails with Error 11528. This issue should not affect big data users because multiple dimensions should not be needed. By definition, a big data source has a large table of records split across Hadoop nodes (such as HDFS).
194095	For Redshift database, the error message "Unsupported type timestamps with time zone" is displayed when exporting data from a Snapshot process box. Timestamp with timezone is an unsupported PostgreSQL data type on Amazon AWS.
195581	While running a Campaign flowchart, if listener crashes or is stopped, user is not able to access the running flowchart from the UI. Requests are being served by another node of the cluster but while accessing the flowchart, a pop-up message says "listener failover occurred..." It may be necessary to restart the master listener.
232032	User can start only one IBM Campaign listener on one server (machine) in case of Listener clustering.
PMR 243195, 244148	When a column that has the Greek Letters A and B is profiled in Campaign, the system returns only A along with the count of all the records. After the fix, some of the non-English characters, which differ only in case (like é and É in French), are counted as two different values in profiling. English language characters are not counted as case sensitive.
244482	Deep search lists all the Campaigns that are created through Marketing Operations projects when Campaign - Marketing Operations integration is on. Campaigns that are created through Marketing Operations projects when Marketing Operations - Campaign integration is enabled) are not listed on Campaign list page and are only available on the Marketing Operations project listing page. Users who do not have the permission to access Marketing Operations are able to access campaigns which are created through Marketing Operations projects through Deep search results.
248943	If the user profile database is changed (change in the table column values of audience record) for fields other than sync fields and the user runs the Email process again, a negative count is returned for the DUPLICATES parameter from Engage in the Campaign flowchart log.
N/A	Big data: To perform the UPDATE operation on any process boxes in a flowchart, ensure that your HIVE tables are configured as transactional tables such that they support the ACID property. This is a key feature introduced in HIVE version 0.14.
N/A	IBM Interact when configured with IBM WebSphere Application Server: You must configure IBM WebSphere JVM to use JDK 1.7. When IBM WebSphere Application Server 8.5.5.x is configured with JDK 1.7 and HTTPS communication, you must use IBM JAVA SDK version 7.0.8.10 or higher.

Table 8. Campaign known limitations (continued)

ID	Known limitation
N/A	Using multiple SQL statements for raw SQL queries is not currently supported on big data user datasources. For related information, search the IBM Knowledge Center for Hive query language conformance.
N/A	Dialog behavior: In certain cases, it is necessary to click twice in order to activate a field or change a field value.
N/A	The <code>monitorEnabledForEmessage</code> configuration property in Campaign monitoring is not currently used.
N/A	Relevant products limitation: When offer management is performed from IBM Marketing Operations, the "relevant products" functionality, which relates product IDs to offers, is not available.
N/A	<p>Blank or incorrect results from derived fields in a Mail List process. This can occur in a process box that uses a derived field that calls a Generated field (UCGF) that changes value.</p> <p>Do not use a UCGF in a Mail List derived field if the UCGF is not constant. Also, from the Parameters tab, do not create a derived field to call a UCGF to populate offer attributes.</p> <p>For details, see the following Tech Note: <a href="http://g01zciwas018.ahe.pok.ibm.com/support/dcf/preview.wss?host=g01zcidbs003.ahe.pok.ibm.com&amp;db=support/swg/istech.nsf&amp;unid=C4A93DC0ED188D6985257A6B00699C45&amp;taxOC=SSCKNRB&amp;MD=2012/08/31%2015:08:35&amp;sid=">http://g01zciwas018.ahe.pok.ibm.com/support/dcf/preview.wss?host=g01zcidbs003.ahe.pok.ibm.com&amp;db=support/swg/istech.nsf&amp;unid=C4A93DC0ED188D6985257A6B00699C45&amp;taxOC=SSCKNRB&amp;MD=2012/08/31%2015:08:35&amp;sid=</a></p>
N/A	Profiling a Campaign Generated Field (UCGF) does not yield correct results. Some UCGFs have a value according to the cell or the offer being processed. For cell-related UCGFs, only the value associated with the first cell appears during profiling.
N/A	The default value for a custom cell attribute does not appear when you open the target cell spreadsheet. Although the default value is not initially displayed, it will be used. The value can be displayed or changed by clicking or opening and editing the custom cell attribute in the target cell spreadsheet.
N/A	The <code>UA_UsrResponseType.Name</code> field cannot contain a left parenthesis followed by a single quote.
N/A	<p>Use unique <code>TempTablePrefix</code> for each data source when mapping multiple data sources to same physical database.</p> <p>If you mapped multiple data sources in Campaign to the same physical database, and you use the same <code>TempTablePrefix</code> for more than one of the data sources, when you use the cleanup utility to delete orphaned temp tables, it may falsely identify temp tables as orphaned, when they are in fact legitimate temp tables defined from a different Campaign data source.</p> <p>Any deleted temp tables will automatically be recreated when you rerun affected flowcharts, but as a best practice, use a unique <code>TempTablePrefix</code> for each data source when mapping multiple data sources to the same physical database.</p> <p>If the data sources defined in Campaign map to different schemas in the database, another solution is to ensure that the database user who runs the cleanup utility does not have privileges to drop tables in other schemas in the same database.</p>
161323	The error "Login failed. Error 10553" can occur if you try to log in to the Campaign utilities when the <b>IBM Marketing Platform   Security   login</b> method is set to <b>Windows integrated login</b> or <b>Web access control</b> . To avoid this issue, change the login type to <b>LDAP</b> or <b>IBM Marketing Platform</b> prior to using the Campaign utilities..

Table 8. Campaign known limitations (continued)

ID	Known limitation
176377	DB2 10.5 BLU for user DB: No indexing requirement for temp tables in Campaign datasource. DB2 10.5 (with BLU feature ON) does not require indexing in Campaign. Campaign has certain properties for datasources, such as TempTablePreTruncateRunScript, TempTablePostExecuteSQL, and PostTempTableCreateRunScript, where you can provide SQL or scripts to create indexes on user database tables. If you are using DB2 10.5 as a customer database, with the BLU feature ON, you do not need to configure any of these temp table properties.
201,968,200,241	If two process boxes are moved very close together in a flowchart, the direction of the connection arrow changes. This limitation affects the visual representation of the arrow. The process data flow is not affected. The workaround is to move the process boxes farther apart so the arrowhead changes back to the correct direction.
211293	<p>In IBM Campaign, the built-in macro Current_Date() results in an error when executed against a Hive 1.2 based Big Data instance. The Hive ODBC driver does not support the CURRENT_DATE macro to obtain interval values. For example, executing the following query results in a Hive error:</p> <pre data-bbox="456 743 1162 800">SELECT DISTINCT customerid FROM Customer_date WHERE ((Customer_date.my_date_mmdyyyy - CURRENT_DATE()) &gt;= 7)</pre> <p>Error: Hive 2 Internal error: unsupported conversion from type: interval_day_time</p> <p>Workaround: To use the CURRENT_DATE function in a RAW SQL query on Hive with Hortonworks, execute SQL in the following format:</p> <pre data-bbox="456 961 1325 1018">SELECT DISTINCT customerid FROM Customer_date WHERE (current_date() - my_date_mmdyyyy ) = interval '0 0:0:0' day to second</pre>
213088	If IBM Campaign is installed in a secured environment but IBM Cognos is in an unsecured environment, Cognos reports will not display when you use Microsoft Internet Explorer 11. Workaround: If IBM Campaign is configured with HTTPS, also configure IBM Cognos on HTTPS.
217488	IBM can support the Database Loader for Redshift until the moment Campaign triggers the Loader Script. Any problems in execution of the loader script are not supported by IBM.

Table 8. Campaign known limitations (continued)

ID	Known limitation
223716	<p>Authentication Bypass Using HTTP Verb Tampering</p> <p>Instead of applying theHttpVerbFilter.class patch, you can use the following workaround to ensure application security.</p> <p>Complete the following steps to update web.xml.</p> <ol style="list-style-type: none"> <li>Update the web app tag and set the xsd version to 3.0. <pre data-bbox="467 468 1203 596">&lt;web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://java.sun.com/xml/ns/javaee" xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd" id="Platform" version="3.0" metadata-complete="true"&gt;</pre> </li> <li>Add the following in web.xml. <pre data-bbox="467 646 1263 1094">&lt;!--[start] WhiteList Http Verbs --&gt; &lt;security-constraint&gt;   &lt;web-resource-collection&gt;     &lt;web-resource-name&gt;Unica_WhiteList_Http_Verbs&lt;/web-resource-name&gt;     &lt;url-pattern&gt;/*&lt;/url-pattern&gt;     &lt;http-method-omission&gt;GET&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;POST&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;TRACE&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;PUT&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;DELETE&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;PATCH&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;OPTIONS&lt;/http-method-omission&gt;     &lt;http-method-omission&gt;HEAD&lt;/http-method-omission&gt;   &lt;/web-resource-collection&gt;   &lt;auth-constraint/&gt; &lt;/security-constraint&gt; &lt;!--[end] WhiteList Http Verbs --&gt;</pre> </li> </ol>
283805	<p>IBM Websphere Application Server 8.5.5 Fix Pack 12 requires IFPI85892 to run IBM Marketing Software application. An interim fix is available at:</p> <p><a href="https://www-945.ibm.com/support/fixcentral/swg/selectFixes?parent=ibm%2FWebSphere&amp;product=ibm/WebSphere/WebSphere+Application+Server&amp;release=All&amp;platform=All&amp;function=fixId&amp;fixids=8.5.5.12-WASProd-IFPI85892&amp;includeSupersedes=0">https://www-945.ibm.com/support/fixcentral/swg/selectFixes?parent=ibm%2FWebSphere&amp;product=ibm/WebSphere/WebSphere+Application+Server&amp;release=All&amp;platform=All&amp;function=fixId&amp;fixids=8.5.5.12-WASProd-IFPI85892&amp;includeSupersedes=0</a></p>
283544	<p>On Oracle 12.2 database server following parameters needs to be added in sqlnet.ora file located under ORACLE_HOME/network/admin/ SQLNET.ALLOWED_LOGON_VERSION_SERVER</p> <p>User will need to consult with DBA to provide appropriate value to this parameter. Please refer this link for details: <a href="https://docs.oracle.com/database/121/NETRF/sqlnet.htm#NETRF2016">https://docs.oracle.com/database/121/NETRF/sqlnet.htm#NETRF2016</a></p>
N/A	<p>IBM Campaign Integration with Watson Marketing Assistant is not supported on Internet Explorer.</p>
N/A	<p>In IBM Campaign - Watson Marketing Assistant integration, Data from the last user is retained in the Watson window after any new / same user logs in the same browser. User will have to clear the browser cache before every login to overcome this limitation.</p>
N/A	<p>Watson Marketing Assistant does not get logged out when user logouts from IBM Marketing Software applications</p>

---

## Chapter 6. IBM Campaign Reports Package

The Campaign Reports Package delivers reporting schemas that you can use to track campaign, offer, and cell performance. To use the Reports Package, Campaign must be integrated with IBM Cognos

For more information, see the *IBM Marketing Software Reports Installation and Configuration Guide* that is supplied with IBM Marketing Platform.

The IBM Campaign Reports Package contains the following items:

- Schemas that are registered with IBM Marketing Platform during installation. They describe the attributes and metrics that represent the product's reporting schema and include:
  - Base schemas that are the basis of the reporting schema (with no custom attributes)
  - Custom versions of most of the base schemas that rely on the preconfigured custom attributes for Campaign
  - Templates 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 the reports. Documentation can be found in the directory `ReportsPackCampaign\cognos11\CampaignDocs`.

The Campaign reports retrieve data from one data source: the Campaign system tables.

### Reporting Schemas

The following reporting schemas are provided:

- Campaign Views provides the standard attribute views of the Campaign system tables (campaign, offer, cell, and so on).
- Campaign Custom Attributes is for reporting on custom attributes of campaigns, offers, and cells.
- Campaign Performance is used by reports that display performance measurements starting at the campaign level over all time or various periods of time (days, months, and so on).
- Offer Performance is used by reports that display performance measurements starting at the offer level over all time or various periods of time (days, months, and so on).
- Campaign Offer Response Breakout is used by reports that show campaign and offer responses based on response types.
- Campaign Offer Contact Status Breakout is used for measurement of campaign and offer contacts based on contact status.

The custom schemas extend the last five of the listed schemas to include the default, preconfigured response types, custom attributes, and so on.

## Templates

If you have additional audience levels, you can create additional reporting schemas for them with the following templates:

- Campaign Views
- Campaign Custom Attributes
- Campaign Performance
- Offer Performance
- Campaign Offer Response Breakout
- Campaign Offer Contact Status Breakout

## Reports

The reports package contains Cognos example reports that can be accessed from the Analytics menu or the Analysis tab for a campaign or offer. Reports can also be displayed in portlets on the Dashboard.

The following campaign-specific example reports are available from the Campaign Analysis tab:

- Campaign Detailed Offer Response Breakout
- Campaign Financial Summary by Offer (Actual)
- Campaign Offer Performance by Month
- Campaign Performance Summary by Cell
- Campaign Performance Summary by Cell with Revenue
- Campaign Performance Summary by Offer
- Campaign Performance Summary by Cell and Offer
- Campaign Performance Summary by Cell and Offer (with Revenue)

The following offer example reports are available from the Offer Analysis tab:

- "What If" Offer Financial Summary
- Offer Performance by Day
- Offer Performance Summary by Campaign

The following cross-object example reports include information about multiple objects in Campaign. These reports are available from the Campaign Analytics page.

- "What If" Offer Financial Summary
- Campaign Detailed Offer Response Breakout
- Campaign Financial Summary by Offer (Actual)
- Campaign Offer Performance by Month
- Campaign Performance Comparison
- Campaign Performance Comparison (with Revenue)
- Campaign Performance Comparison by Initiative
- Campaign Performance Summary by Cell
- Campaign Performance Summary by Cell (with Revenue)
- Campaign Performance Summary by Cell by Initiative
- Campaign Performance Summary by Offer
- Campaign Performance Summary by Offer (with Revenue)



- Campaign Performance Summary by Cell and Offer
- Campaign Performance Summary by Cell and Offer (with Revenue)
- Campaign Summary
- Offer Campaign Listings
- Offer Performance by Day
- Offer Performance Comparison
- Offer Performance Metrics
- Offer Performance Summary by Campaign

The following campaign-specific example report portlets are available on dashboard pages:

- Campaign Response Rate Comparison
- Campaign Return on Investment Comparison
- Campaign Revenue Comparison by Offer
- Offer Response Breakout
- Offer Response Rate Comparison
- Offer Responses for Last 7 Days



---

## 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](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](http://www.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](http://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."









Printed in USA