

Version 11 Release 1
March 15, 2019

*IBM Marketing Software Director User
Guide*



Note

Before using this information and the product it supports, read the information in “Notices” on page 43.

This edition applies to version 11, release 1, modification 0 of IBM Marketing Software Director and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Purpose and Scope

The IBM® Marketing Software Director (IMS) is a separate application that allows you to monitor and manage your Campaign environments. Currently it cannot be used on mobile devices. It requires access to your campaign servers and works over both the intranet and a VPN

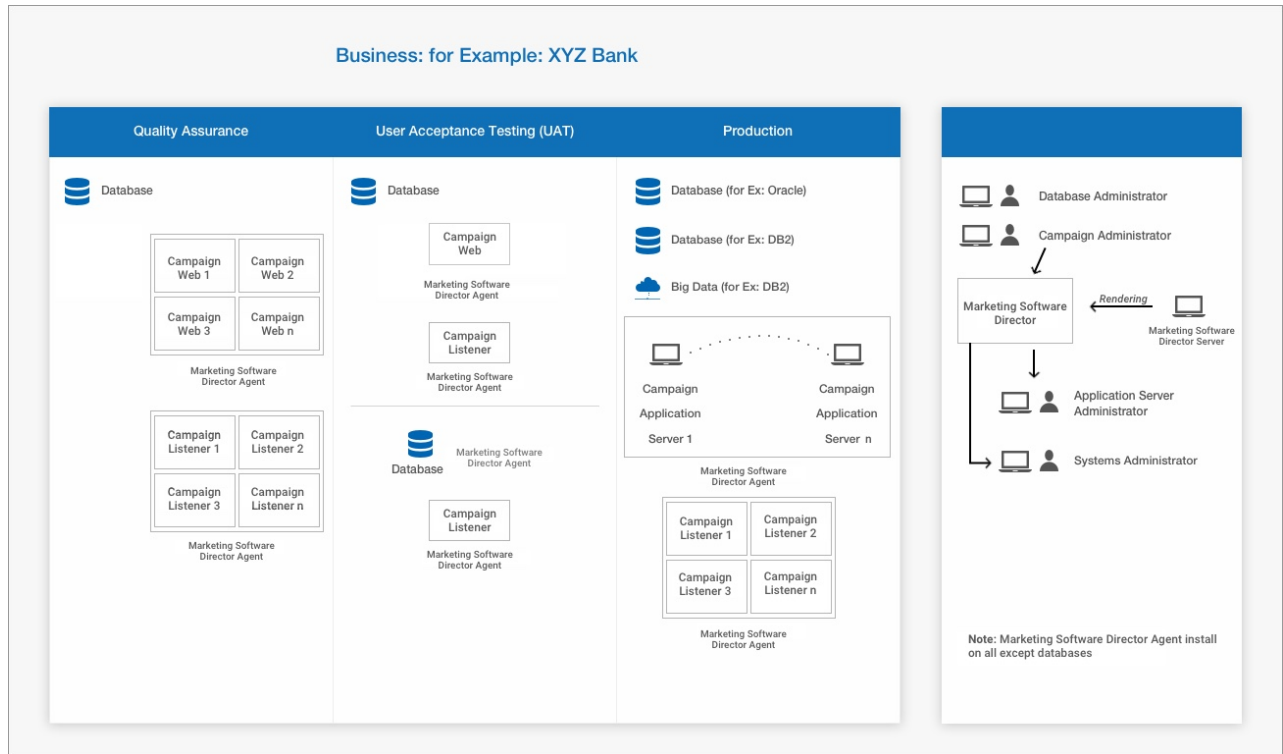
IMS Director is supported only from IBM Marketing Software version 11.1 onwards.

IMS Director can monitor multiple environments including development, quality assurance, staging and production clusters. To do this IMS Director agents must be installed on each campaign listener and web app machine for each of the campaign environments

The IMS Director agent runs CLI tools to gather information required by the IMS Director functionality, such as `unica_acclean` , `unica_svradmin` etc.

At a time, only a single environment can be monitored, but switching of the environments is accomplished within IMS Director.

Chapter 2. Architecture Diagram



Chapter 3. Prerequisites

1. As the Marketing Platform user, you should:
 - Know the host name of the listener host
For the serverHost parameter under 'Settings' enter the hostname of unicaACListener (Affinium | Campaign | unicaACListener) instead of the default "localhost". For example: serverHost = zebra658.nonprod.hclpnp.com
 - If your password has been reset then you must first login to Marketing Platform through the user interface and change your password. Only then will you be able to log on to Marketing Software Director.
2. IBM Marketing Software Director (IMS) Agent should always be up.
3. **Applicable only to Windows OS:** On the Marketing Software Director - Agent system (on the computer where the Campaign Listener is installed), please make sure that the following performance counters are available.
 - Processor Time
 - Working Set

These counters help the IBM Marketing Software Director - Agent application to gather the statistics on the Campaign listener or server processes for memory and CPU utilization.

Note: If the performance counters are not available, open the command prompt as an administrator on the target server and enter the following commands to rebuild the performance counters. **Otherwise you will not be able to see the data in the System Usage Graph on the Windows Operating System.**

For 32 bit machines:

- cd %windir%\system32\
- lodctr /R

For 64 bit machines:

- cd C:\Windows\SysWOW64\
- lodctr /R

4. For the flowchart timeline to receive and dispatch execution events to and from IMS Director, Active Message Queue (MQ) should be available. Flowchart execution events (flowchart execution started, stopped, paused, completed, failed) are communicated to IMS Director using Active MQ. Without an Active MQ available there will be no means of communication to IMS Director resulting in incorrect statistics being shown.
5. IBM Marketing Platform users who will be using IMS Director, should be a Campaign Admin user, so that they can see all the campaign objects. This user should additionally have all the permissions for executing the following Campaign Utilities:
 - Access monitoring area
 - Run svradm Command line tool
 - Terminate campaign listener
 - Run sesutil Command line tool
 - Perform cleanup operations.
6. From IBM Platform users page, assign all the Campaign system and user data sources to the IBM Marketing Platform users who will be using IMS Director

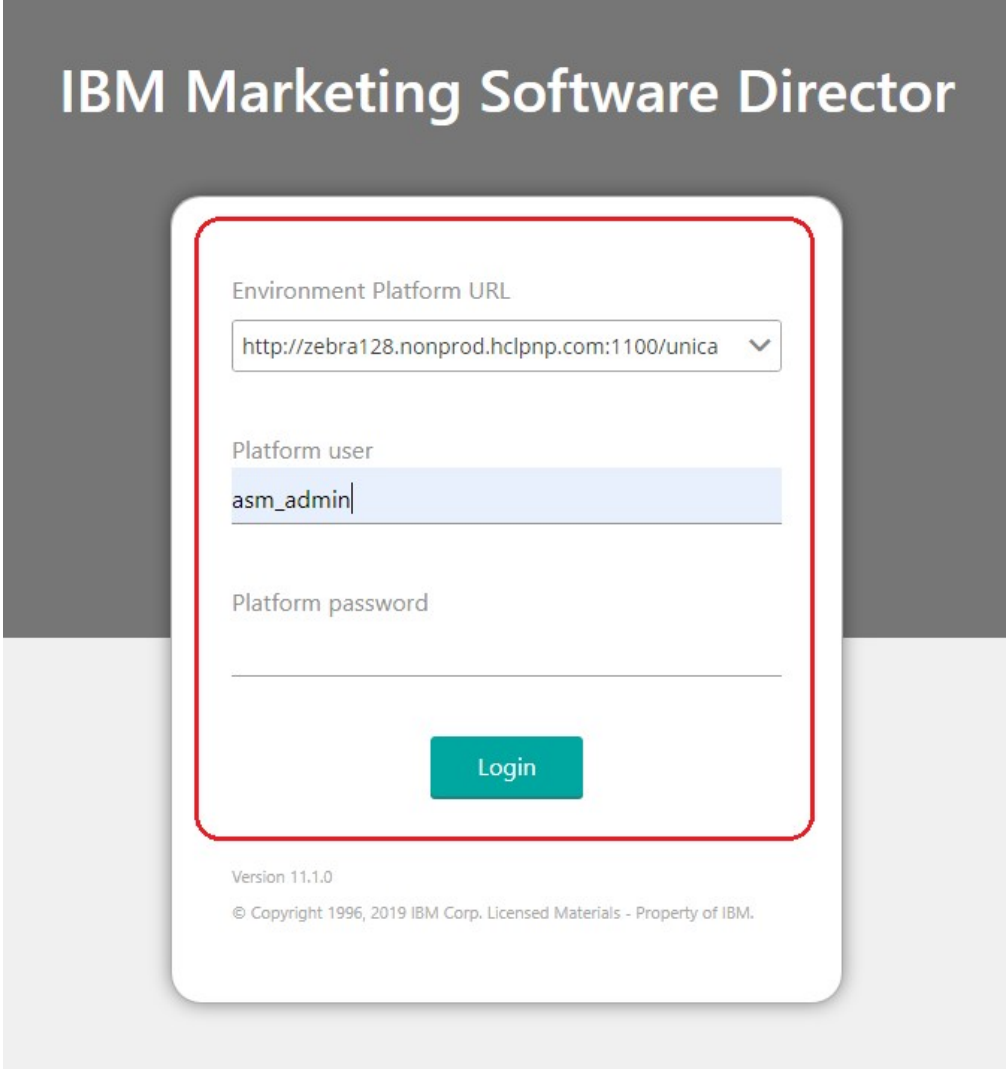
Chapter 4. Environments

Add Environments

The first step in using IMS Director, after logging in, is to identify and add the details of the systems to be monitored.

Adding an environment for the first time when no environments are present in the IBM Marketing Software Director

Login Screen

The image shows the login screen for IBM Marketing Software Director. The title "IBM Marketing Software Director" is at the top in white on a dark grey background. Below it is a white login card with a red border. The card contains three input fields: "Environment Platform URL" with a dropdown menu showing "http://zebra128.nonprod.hclpnp.com:1100/unica", "Platform user" with the text "asm_admin", and "Platform password" which is empty. A teal "Login" button is at the bottom of the card. Below the card, the text "Version 11.1.0" and "© Copyright 1996, 2019 IBM Corp. Licensed Materials - Property of IBM." are visible.

IBM Marketing Software Director

Environment Platform URL

http://zebra128.nonprod.hclpnp.com:1100/unica ▼

Platform user

asm_admin

Platform password

Login

Version 11.1.0

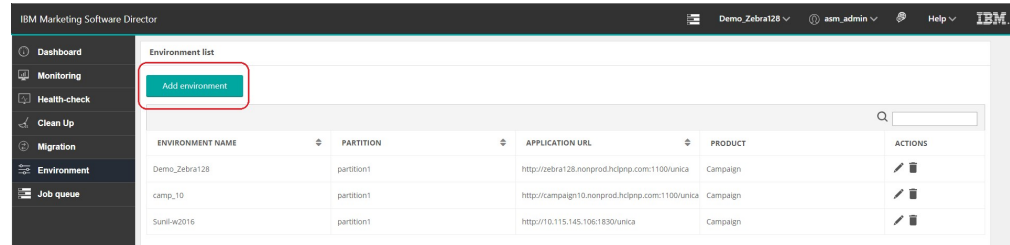
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Environment Details Page when you login for first time.

1. On the login page of the Marketing Software Director, you should specify the environment - the Marketing Platform URL (for example `http://<url>:<port>/unica`) , also in case when Web access control login method is configured, that is, Siteminder or ISAM, then too the Marketing Platform URL (for example `http://<url>:<port>/unica`) should be specified.
2. Then enter your Marketing Platform login credentials.
3. Log on to the Marketing Software Director and navigate to the Add Environments screen. The following fields are auto populated for ease of adding environment details:
 - Partition
 - Campaign URL
 - Marketing Platform URL
 - Log configuration path
 - DataSources information
 - Listener information
4. You are must enter the necessary details in the Application Servers and Listener section before saving the details. Each fields detail is given in Add Environment section
5. Once the environment is added it is automatically selected as the working environment. You can see the selected environment in the right hand top corner. The various required IMS Director actions will be performed on this selected environment

Adding an environment Adding an environment is done by clicking on the left menu option 'Environments' and adding the corresponding environment details in the associated screen

1. Log on to the Marketing Software Director and navigate to the Environments screen.
2. After you log in and select the Environment option on the left menu bar you will see the environment list screen.



Click on Add environment.

Environment details

Environment

*Name: Description:

*Partition: Product name: Clustered web: ☐

*Campaign URL: *Log file path:

*Platform URL: *Platform user: *Platform password:

WebServer

*SERVER HOST	*DEPLOYED APPLICATION	*AGENT PORT	*AGENT ON HTTPS	*CAMPAIGN HOME	*WEB SERVER
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

1. Enter the name and description of your choosing for the environment
2. Enter a partition name
3. Enter the Platform URL
4. Enter your platform credentials (user id and password)
5. Clustered Web: This option specifies if this environment is a web cluster or standalone. If this option is not enabled, then you can enter only one record in the WebServer. If this option is enabled, you can add details of all the nodes in the cluster
Note: If you have already added details of all the nodes in the cluster with this option enabled and then if you disable this option, all application server entries are removed
6. Scroll down to the bottom of the screen

The screenshot shows the 'Environment details' page in the IBM Marketing Software Director. The left sidebar contains navigation links: Dashboard, Monitoring, Health-check, Clean Up, Migration, Environment (selected), and Job queue. The main content area is divided into sections: Environment, WebServer, Data sources, and Listeners. The Environment section has fields for Name, Description, Partition, Campaign URL, Platform URL, Product name, Clustering web, Log file path, Platform user, and Platform password. The WebServer section has a table with columns: SERVER HOST, DEPLOYED APPLICATION NAME, AGENT PORT, AGENT ON HTTPS, CAMPAIGN HOME, and WEB SERVER DETAILS. The Data sources section has a table with columns: DATABASE NAME, DATABASE TYPE, SYSTEM DATABASE, and JNDI. The Listeners section has a table with columns: HOST, PORT, INSTALLED AS SERVICE, AGENT PORT, AGENT ON HTTPS, and CAMPAIGN HOME. The 'Populate' button is highlighted with a red box.

7. Click on 'Populate' This will result in most of the fields getting populated automatically. However, the Webserver and Agent details must be filled out manually

The screenshot shows the 'Environment details' page after clicking the 'Populate' button. The fields are populated with default values. The WebServer and Listeners sections are highlighted with red boxes. The Environment section has fields for Name (Demo_Zebra128), Description, Partition (partition1), Campaign URL (http://zebra128.nonprod.hcnp.com:1100/Campaign), Platform URL (http://zebra128.nonprod.hcnp.com:1100/unica), Product name, Clustering web, Log file path (C:\HCL\1\Campaign\conf\campaign_log4j.properties), Platform user, and Platform password. The WebServer section has a table with columns: SERVER HOST, DEPLOYED APPLICATION NAME, AGENT PORT, AGENT ON HTTPS, CAMPAIGN HOME, and WEB SERVER DETAILS. The Data sources section has a table with columns: DATABASE NAME, DATABASE TYPE, SYSTEM DATABASE, and JNDI. The Listeners section has a table with columns: HOST, PORT, INSTALLED AS SERVICE, AGENT PORT, AGENT ON HTTPS, and CAMPAIGN HOME.

Application Servers - Web Servers:

User must enter below details to save the Application Server details:

- a. Server Host: Enter the fully qualified host name where the application server is running.

- b. Deployed Application Name: Enter the Campaign application name –
 - for Weblogic by default it is Campaign,
 - for Websphere, Tomcat and JBOSS you can specify the application name given while deploying Campaign.war file. This name is used to start and stop the application from the Health Check screen.
- c. Agent port: Specify the Marketing Software Director Agent port.
- d. Agent on HTTPS: Set this to True or False as applicable.
- e. Campaign home: Specify the Campaign home.
- f. Web Server Details: Click Update. Select the type of server, that is, Weblogic, Websphere, Tomcat or JBoss:

ServerType - If the Server Type selected is "WebSphere"

- WebSphere Profile Path -> Specify the Application server profile location. e.g. /opt/IBM/WebSphere/AppServer/profiles/AppSrv01
- WebSphere Server Name -> Specify the Application server name where Campaign application is deployed. For example - WebSphere by default has server name as "server1"
- WebSphere Node Name -> Specify the WebSphere application server node name where the Campaign application is deployed
E.g. -zebra658Node01 - You can get these details from the websphere admin console.

ServerType - If the Server Type selected is "Weblogic"

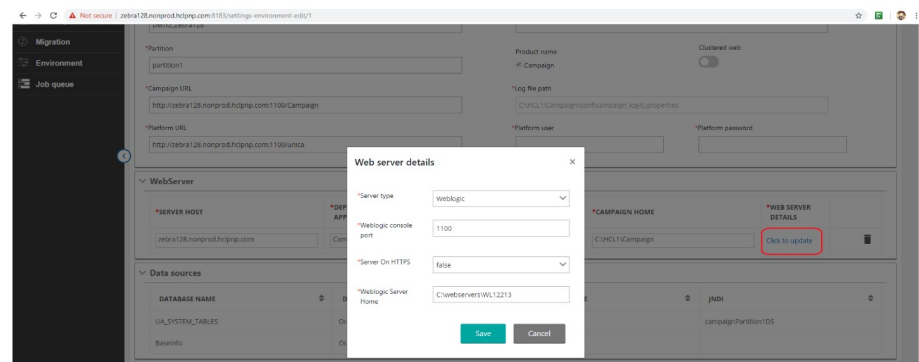
- Weblogic Console Port -> Port number used by Weblogic Console
- Server on https -> Is Weblogic Server on https
- Weblogic Server Home -> Path of Weblogic Home e.g. C:\webserver\WL12213

ServerType - If the Server Type selected is "Tomcat"

- Tomcat JMX Port -> JMX port for Tomcat

ServerType - If the Server Type selected is "JBoss"

- JBoss Admin Port - Management http port/console port which you can get from standalone.xml file
- JBoss Server Home - JBoss Application Server installation directory.



8. After entering all the required Webserver information and other required fields please click on 'Save'. Your configuration data will be saved and available for use in (Marketing Software Director).

Job queue

*Campaign URL:

*Log file path:

*Platform URL:

*Platform user:

*Platform password:

WebServer

*SERVER HOST	*DEPLOYED APPLICATION NAME	*AGENT PORT	*AGENT ON HTTPS	*CAMPAIGN HOME	*WEB SERVER DETAILS
zebra128.nonprod.hcnp.com	Campaign	1112	false	C:\HCL\1\Campaign	Click to update

Data sources

DATABASE NAME	DATABASE TYPE	SYSTEM DATABASE	JNDI
UA_SYSTEM_TABLES	Oracle	true	campaignPartition105
Baseinfo	Oracle	false	

Listeners

HOST	PORT	*INSTALLED AS SERVICE	*AGENT PORT	*AGENT ON HTTPS	*CAMPAIGN HOME
zebra128.nonprod.hcnp.com	4664	false	1112	false	C:\HCL\1\Campaign

[Back](#) [Populate](#) [Save](#)

9. Add the Listener Details

Listeners: Listener host and ports fields are auto populated. You must enter information in the fields.

Listener Installed as Service: You should select true / false per whether the listener has been installed as a service.

- Agent Port: Specify the Marketing Software Director Agent port.
- Campaign home: Specify the Campaign home.
- Agent on HTTPS. You should select True/False

10. Save the environment

Note: For each partition, you will have to create a new environment.

Modify Environments

Environment list

[Add environment](#)

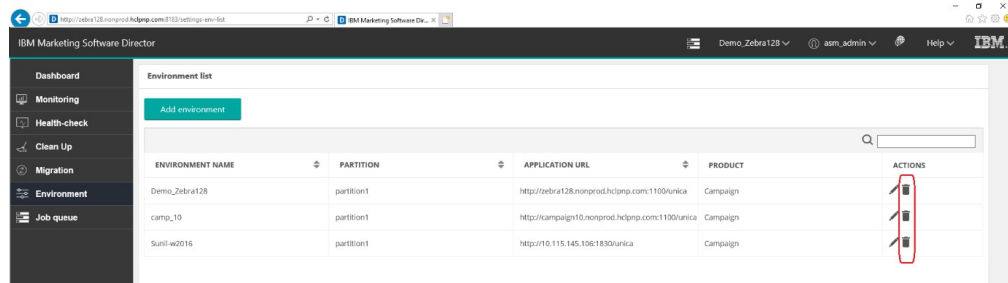
ENVIRONMENT NAME	PARTITION	APPLICATION URL	PRODUCT	ACTIONS
Demo_Zebra128	partition1	http://zebra128.nonprod.hcnp.com:1100/unica	Campaign	
camp_10	partition1	http://campaign10.nonprod.hcnp.com:1100/unica	Campaign	
Suni-w2016	partition1	http://10.115.145.106:1830/unica	Campaign	

You can modify an existing environment by clicking on the 'edit' icon (the pencil shape) under the Actions column of the environment you want to edit.

This will open the environment details page (as shown in the 'Add Environments' section). After making your changes click on the 'Save' button to ensure that your modifications have been saved.

Note: If a Listener is added, deleted or updated, this change will not be reflected in the IMS Director. For Marketing Software Director to reflect the changes, the pertaining environment must first be deleted from Marketing Software Director and then re-added so that the latest Listener will be available to the Marketing Software Director

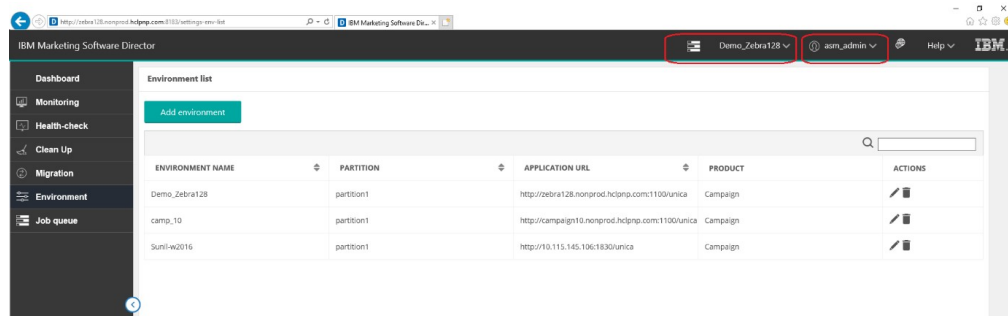
Delete Environments



You can delete an environment even if it is in use. Click on the 'Delete' icon (trash can) under the Actions column of the environments list

You should be very careful while deleting an environment as it might have a significant impact other users using the environment.

Selecting Environments

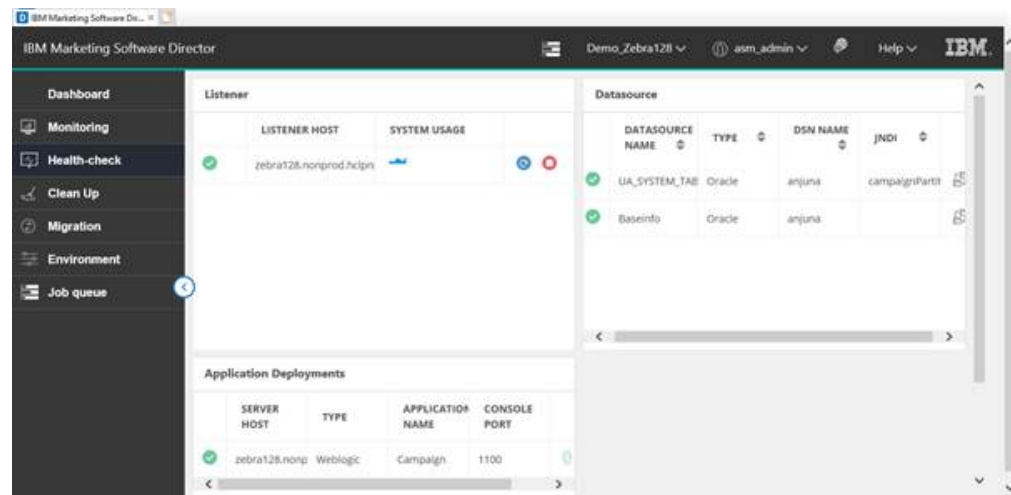


1. Select the environment to work on from the top right corner.
2. You will be prompted for the Marketing Platform login user ID and password

Chapter 5. Health Check

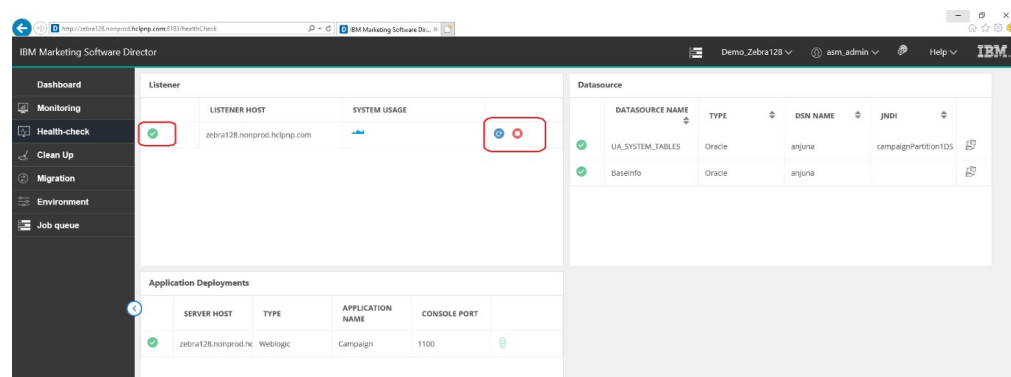
Purpose

The IBM Marketing Software (IMS) Director Health Check screen provides a snapshot of the availability of the various campaign servers in selected environment (only one environment can be monitored at a time). This comprises the database, listener and application server. Health-Check monitors the critical parameters of the different systems.



To get to the Health Check screen, from the left menu bar, select 'Health Check'

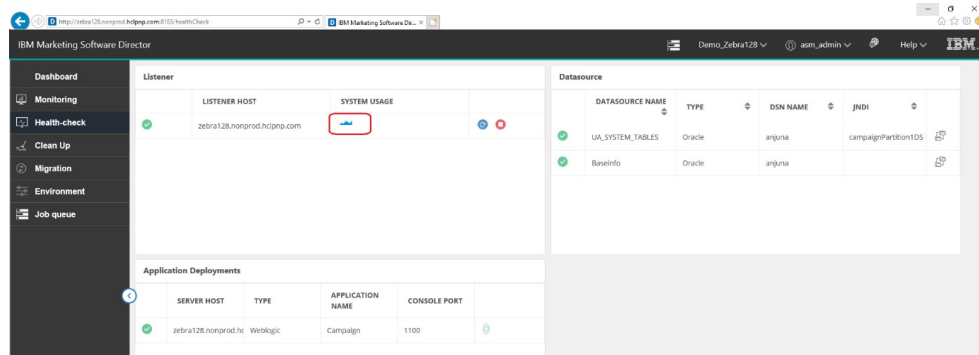
Listener health



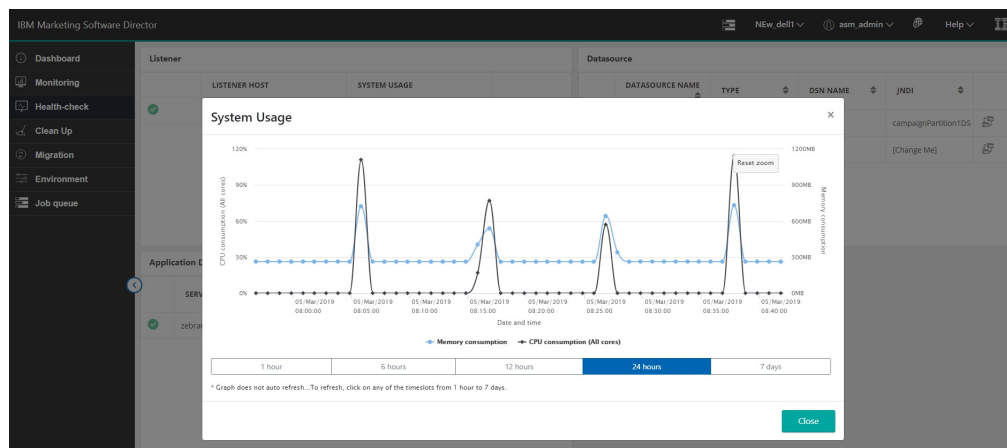
1. Availability: started or stopped status.
2. Restart, Start or stop the Listener.

Status of listener (started, restarted or stopped) will be reflected in Job Queue page.

- In case of a listener cluster, the status of each listener is shown and user can perform start and stop listener on any of the listener node



- Listener host system usage: Shows the graph CPU and Resident Set Size (RSS) Memory utilization on Listener and Campaign web application machines for all Operating Systems.



System Usage

1. System usage displays CPU Utilization and Memory Consumption of Campaign Listener and its sub-process for Last 1 hr , 6hrs , 12 hrs , 1 day and 7 days.
2. IMS Director shows RSS memory Consumption on health check screen for RHEL Linux / SUSE/ Windows and AIX operating systems.
3. CPU utilization is a measure of CPU used by the Campaign Listener (unica_aclsnr) and its sub-process (unica_aolsnr, unica_acsvr).
4. Memory Consumption displays memory used by the Campaign Listener (unica_aclsnr) and its sub-process (unica_aolsnr, unica_acsvr).
5. System usage has zooming capability to verify the CPU utilization and memory consumption data details. Details can be expanded by dragging the mouse pointer to respective timeline.
6. Please use the Reset Zoom option to remove zoom feature from the Graph.

Notes

1. IMS Director %CPU Graph can display beyond 100% utilization. The calculation is

$$\%CPU = (\text{Total Threads on all CPUs} / \text{Logical CPU cores}) * 100$$

For example, if there are 2 physical CPU each with 2 cores for a total of total 4 core CPU on system and if each core has 2 threads, there are 4*2=8 logical CPU cores. If the CPU is fully utilized on the listener, then IMS Director will show utilization of 8*100 = 800%

2. CPU Utilization and Memory Consumption Graph does not auto refresh. To refresh, click any of the time slots from 1 hour to 7 days.
3. System Usage page does not show generic message on the page after deselecting both memory utilization and CPU consumption options.

Managing Listener as Service through IBM Marketing Software Director:

1. The Listener can be started and stopped through IMS Director is when it is installed as a Windows service, and the start-stop status is reflected on the Services.msc application page
2. To use Listener as a service, in the environment details screen (while adding an environment) follow the steps below
 - a. Set the INSTALLED AS SERVICE option value to True
 - b. Set CAMPAIGN_HOME path in this format (Please ensure that you use "/" not "\\")
 - CAMPAIGN_HOME=C:/IBM/IMS/Campaign

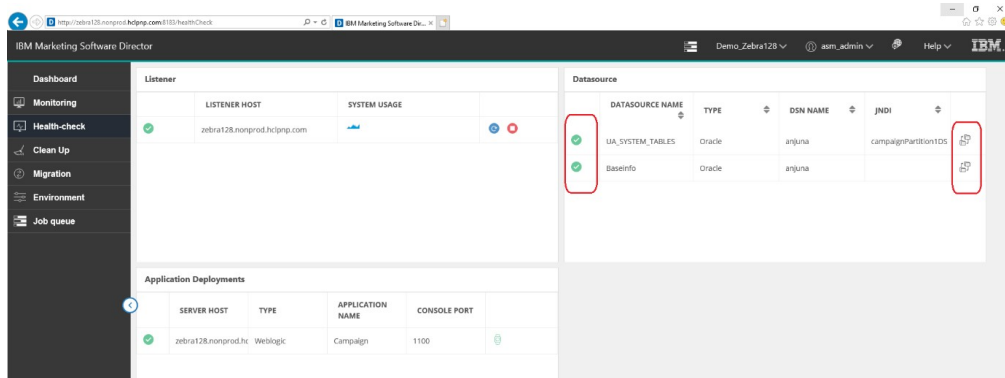
Note: Please note that the above is an example only. You need to set your own appropriate path

3. Adding, updating or deleting a listener will **not** be reflected automatically in environment details in IMS Director. You must delete the current environment from the Environment menu option and add it back so that the latest Listener will be monitored by IMS Director

The screenshot displays the 'Environment Details' configuration page in IMS Director. At the top, there are fields for Platform URL, Platform user, and Platform password. Below these, the 'WebServer' section contains fields for SERVER HOST, DEPLOYED APPLICATION NAME, AGENT PORT, AGENT ON HTTPS, CAMPAIGN HOME, and a 'WEB SERVER DETAILS' button. The 'Data sources' section lists two data sources: 'UA_SYSTEM_TABLES' and 'BaseInfo', each with fields for DATABASE NAME, DATABASE TYPE, SYSTEM DATABASE, and JNDI. The 'Listeners' section at the bottom has a table with columns: HOST, PORT, INSTALLED AS SERVICE (highlighted with a red box and unchecked), AGENT PORT, AGENT ON HTTPS, and CAMPAIGN HOME. At the bottom of the page are 'Back', 'Populate', and 'Save' buttons.

Data Source

All the data sources from the selected environment are listed



The connectivity of all data sources configured in Platform from all the Campaign Analytical server are tested and displayed. Connection failures should be reflected in the logs. You can get the status of your data sources. Start / stop actions are not supported for data sources. All data sources are supported in this connectivity check.

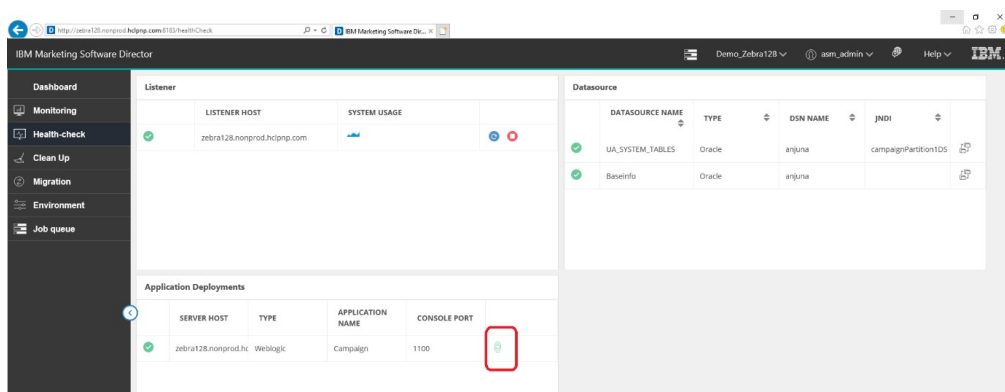
The following columns are listed on the screen:

1. Data Source Name
2. Type: This is typically the data source template type such as Oracle, DB2, SQL Server, BigDataODBC Hive, BigDataODBC Impala
3. DSN name: Name of the DSN from the data source
4. JNDI: JNDI name

Application Deployments

The Webservers screen provides status of all the webapp servers being monitored and allows you to start and stop the Application

Start/Stop status of the application server will be reflected in Job Queue page.



1. Server Host - Host name of the machine running the application Server
2. Type - Displays the type of the application server (WebSphere/ WebSphere/ Weblogic/ Tomcat/ JBOSS)
3. Application Name - Displays the Node Name of application server – this column displays only the value for Application Server
4. Application Deployment Port details:

- Node Name – Displays WebSphereWebSphere application server nodename. e.g. zebra658Node01. **Applicable to WebSphereWebSphere only**
 - Console Port –Displays Port number used by Weblogic console. **Applicable to Weblogic only**
 - JMX Port – Displays JMX port for Tomcat. **Applicable for Tomcat only**
 - Admin Port – Displays Management HTTP/console port for JBoss. **Applicable for JBoss only**
5. Actions : Start / Stop / Get Application Status
 - a. Start and Stop action are updated in Job Queue
 - b. Get Application Status updates the status icon with time stamp

Stop/Start operations on WAS, Tomcat and JBoss cluster

- Only Stop operation for Campaign Application is not supported for Websphere or Tomcat Cluster from IMS Director. If the user stops Campaign from any of the nodes, Campaign will not be available. If for any reason you need to keep the application down on any node, we strongly recommend that you bring the JVM down along with Campaign on that node.
- Both Start and Stop operation for Campaign Application are not supported for JBoss Cluster from IMS Director

Start operation on Websphere

- If Campaign has already started via the webserver Console, starting it again from IMS Director will not change the status icon to 'Running' for Websphere.

Supported Application Servers:

- Oracle Weblogic - only standalone deployment
 - IBM WebSphereWebSphere Application Server - Standalone and Cluster deployment
 - Tomcat - standalone and cluster deployment
 - JBOSS - standalone deployment
1. On clicking any of the action buttons (start / stop / get Status), you are prompted with a popup to enter your login credentials (userid / password) of the application server profile. On a successful login the respective actions will be carried out.

Note: For the WebLogic Application Server: Start and stop operations are not supported. You can only see the status information of the Application Deployment.

2. Application Server status is not reflected for the first time when the application server node is added in the environment. Click on Get Status icon to get the latest status of Campaign Application.
3. For clustered application servers, you should add each application server node in the environment.
4. Getting the status and Start/stop actions can only be performed on Campaign application deployments. These cannot be performed on the application server profile.
5. Add the following JMX parameter for TOMCAT in the tomcat setenv script:

For Tomcat add the following entry in the setenv script:

– CATALINA_OPTS=-Dcom.sun.management.jmxremote

-Dcom.sun.management.jmxremote.port=5621
-Dcom.sun.management.jmxremote.ssl=false
-Dcom.sun.management.jmxremote.authenticate=true
-Dcom.sun.management.jmxremote.password.file=../conf/

jmxremote.password -Dcom.sun.management.jmxremote.access.file=../conf/
jmxremote.access

1. jmxremote.password: It should provide the username and password for the tomcat user, this file allows access to only the user that runs the Director agent and restricts access to all other users
2. jmxremote.access: It should provide the access roles for the tomcat users. Standard users should be provided with access required to get statuses - like readonly and readwrite

Technical details:

1. For WebSphere application server we are using wsadmin tool to get the status of the application server node.
2. For WebLogic, we are using wlst script to get the status of the application server.
3. For TOMCAT, we are using JMX to connect to the application server.
4. For JBOSS we are using JBOSS CLI to get the application status and start / stop actions.
5. When the application is configured with ssl you are required to add the following options (Weblogic AppServer only):

-Dweblogic.security.SSL.ignoreHostnameVerification=true

-DwebLogic.nodemanager.sslHostNameVerificationEnabled=false

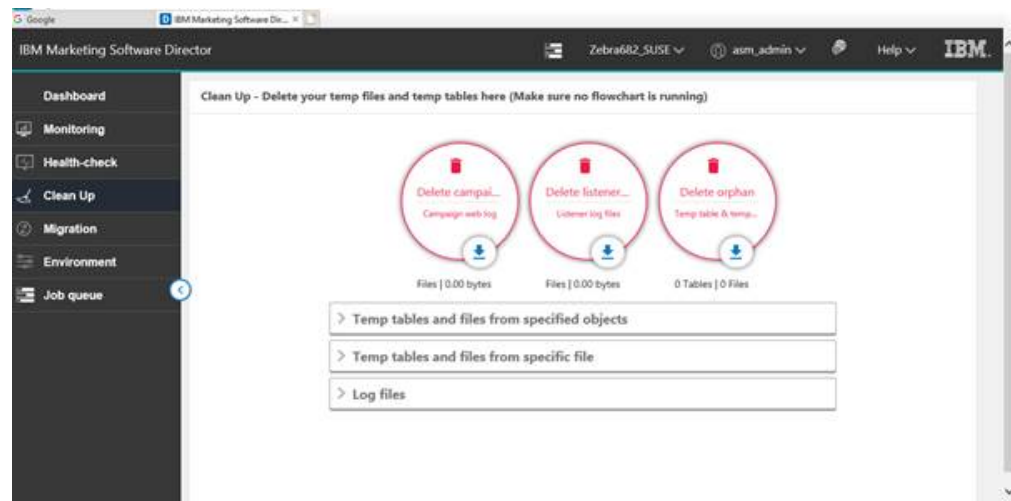
to "SET JVM_ARGS" in file "Oracle\oracle_common\common\bin\
setWlstEnv_internal.cmd"

Note: You will not be asked for confirmation when you try to start, stop, get status of Campaign deployment

Chapter 6. Clean up/Download temporary files, tables and log files

Purpose

The IBM Marketing Software (IMS) Director Clean-up feature enables the removal of various logs and temporary work items



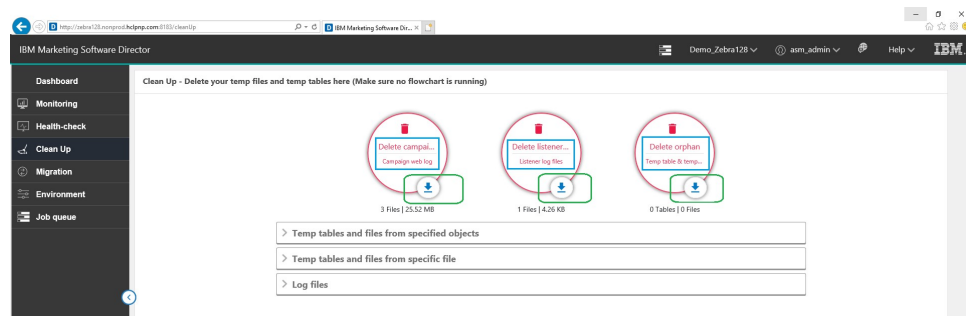
To get to the Clean up Screen, from the left menu bar, select 'Clean up'

Items cleaned up include

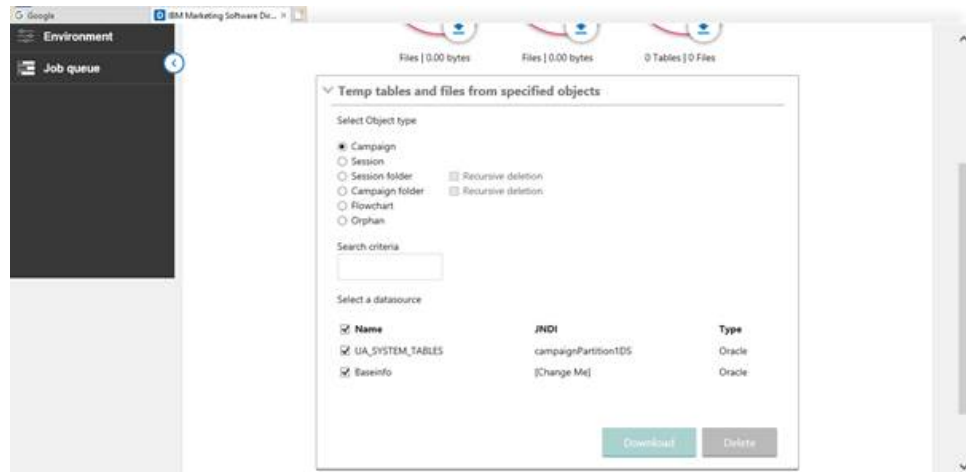
- Campaign web log, listener log and orphans
- Temporary tables and files from specified objects based on selected object and/or data source
- Temporary tables and files from specific file based on input files selected
- Clean-up of log files

The administrator can clean up temp files and tables by following the steps below.

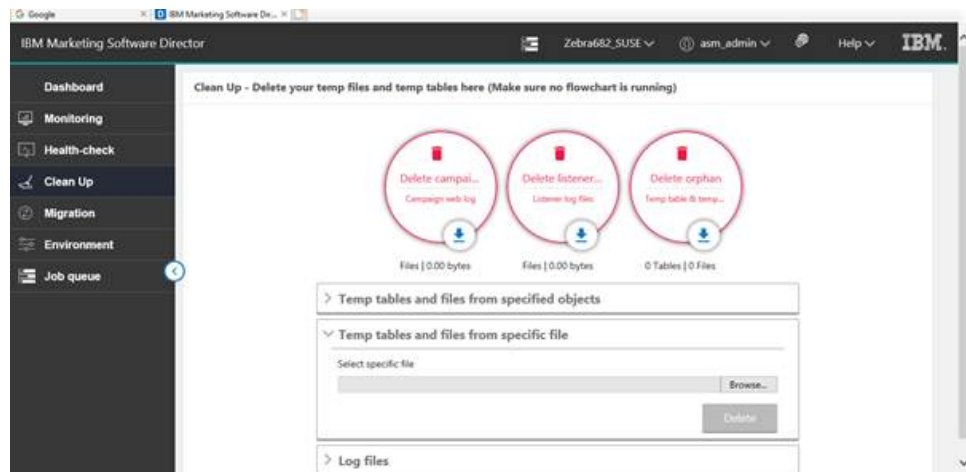
1. Ensure that no flowchart is running



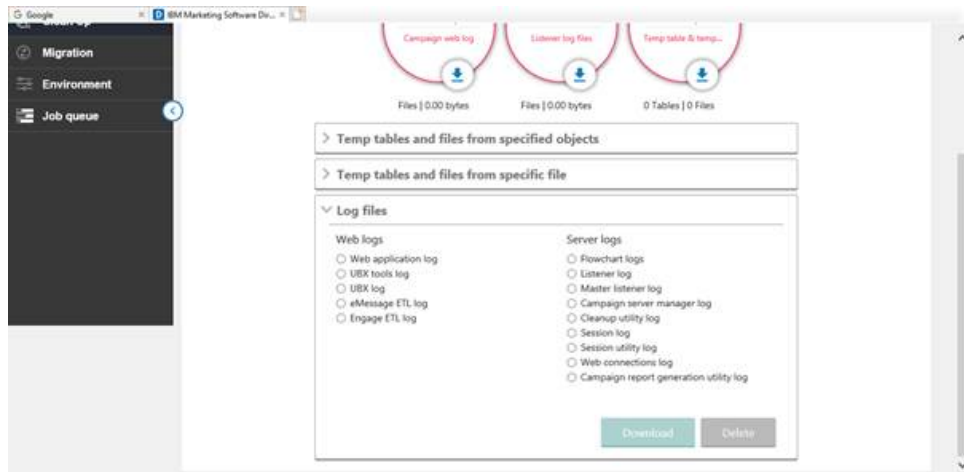
2. In the Campaign web log, Listener log files or orphan on the User Interface, click the 'download' icon to download the files or click 'Delete' to delete the Campaign web log, Listener log files or orphan.



3. To download or delete temporary tables and files from specified objects, in the **Temp tables and files from specified objects** section,
 - a. **Select Object type** from choices on the screen (Campaign, Session, Session folder, Campaign folder, Flowchart or Orphan)
 - b. Select **Recursive deletion** if required applicable to the object type you have selected.
 - c. Select a Data Source.
 - d. Click **Download** to download or **Delete** to delete.



4. To delete temporary tables and files from a specific file, in the **Temp tables and files from specific file** section, browse to select the specific file and click **Delete**.



- To download or delete log files, in the **Log files** section, select the **Web logs** from **Web application log**, **UBX tools log**, **UBX log**, **eMessage ETL log** or **Engage ETL log**.
- In the **Log files** section, select any one of **Flowchart logs**, **Listener log**, **Master listener log**, **Campaign server manager log**, **Cleanup utility log**, **Session log**, **Session utility log**, **Web connections log**, or **Campaign report generation utility log**. In certain cases, you will be asked to select and provide the exact file via a pop-up
- Click **Download** to download or **Delete** to delete.

Note: In certain cases, when you are required to clean temp files, you are provided the option of selecting (flowchart) specific files to be cleaned through the User Interface. You do not need a backup of these files.

The following log files can be cleaned up:

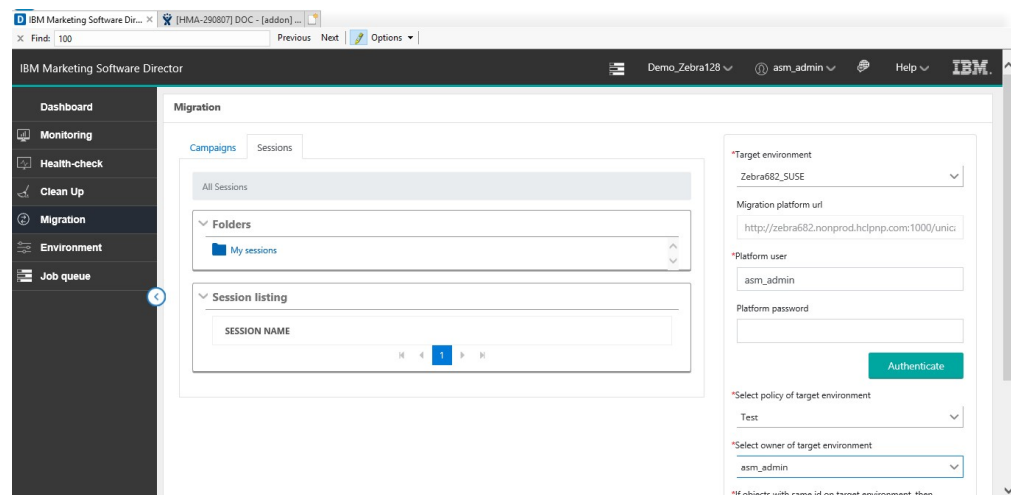
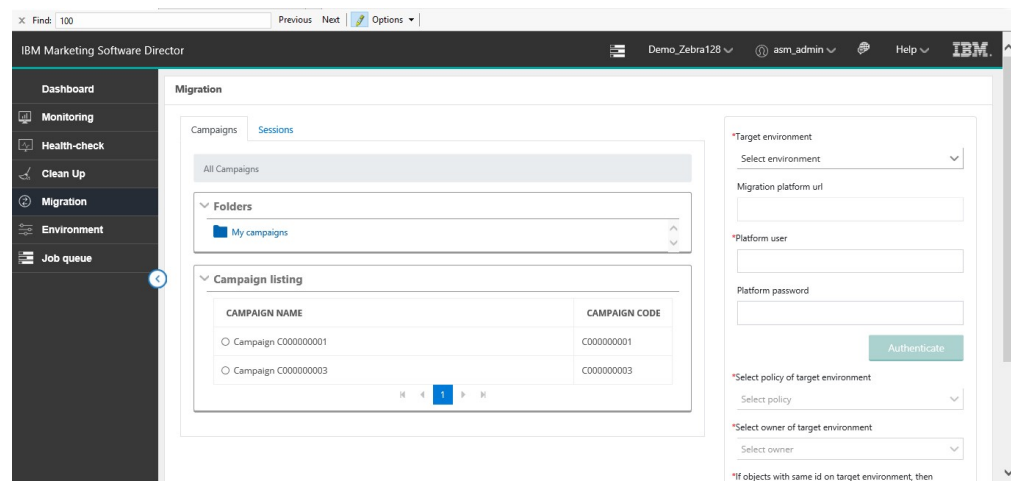
- Flowchart logs,
- Web application log,
- eMessage ETL log,
- Import Error log,
- Engage ETL log,
- Listener log,
- Master listener log,
- Campaign Server Manager log,
- Cleanup utility log,
- Session utility log,
- Sessions log,
- UBX log,
- Web connections log,
- UBX tools log

Note: If the log files do not exist on any of the Campaign web app machine or Campaign listener machine, no warning message of missing log files will be displayed on the user interface stating You can identify the logs downloaded from the name of the zip file.

Chapter 7. Migration

Purpose.

To facilitate the migration of a campaign, session or flowchart from one environment to another



1. In the left navigation pane of the IBM Marketing Software Director, click **Migration**.
2. In the **Campaigns** or **Sessions** tabs, you can select a campaign or session from the complete listing of all campaigns or sessions under the respective **Campaign listing** or **Sessions listing** sections.
3. You can select the campaign or session from **Folders** list. After selecting a folder the **Campaign Listings** or **Session Listings** sections will be populated.
4. Select the campaign or session that you wish to migrate.
5. Select the **Target environment**. The **Migration Marketing Platform url** is auto-populated.

6. Enter the **Marketing Platform user and Marketing Platform password** and click **Authenticate**.
7. When authenticated, select the policy listed under **Select policy of target environment**
8. Select the correct owner under **Select owner of target environment**.
9. Chose the appropriate option **If objects with same id on target environment then migration will**
10. Click **Migrate**.

Important Note:

Make sure to select and migrate a campaign or session first, only then flowcharts of these campaigns / sessions can be migrated. A user can also migrate more than one flowchart at a time by selecting multiple flowcharts.

Status of migration can be seen under Job queue.

Managing duplicate objects

Managing duplicate objects, (occurs when there is an ID conflict) requires one of the following options to be selected. (if there is an ID conflict):

1. abort – Migration will be aborted when a duplicate object is encountered
2. replace – The object being migrated will replace the duplicate object on the destination system.
3. skip – The object on the destination system will be retained and the migration of the object on the source system will be skipped.

The migration imports data (such as campaigns, flowcharts, session info, triggers, custom macros, etc.) into the system tables. During the import, the migration process checks the pre-existence of each on the target system. The process checks the objects internal campaign ID for uniqueness. If it is not unique then the object gets replaced. If you choose to replace the campaign, it removes all data associated with the existing campaign on the target server, and then imports the new campaign.

If you know that an object, such as a campaign, session or offer, already exists on the target system prior to migration, you should consider deleting the object before you run the migration, to avoid any conflict in migrated object.

Be very sure before selecting Replace option:

If you select "Replace" option, the migration would replace all the identical objects it detects. It is strongly recommended that you review existing objects before using the "Replace" option as it would remove all references to existing Campaign / Session / Flowchart and replace them per the newly imported objects.

While selecting replace option, you should ensure that the selected object does not exist on the target environment, otherwise it will be replaced and all the other objects (e.g. Flowcharts) will be then associated with the migrated object.

For example: There is a Campaign on target system with ID = 6 and it has three flowcharts associated

with it. If a user migrates a campaign whose ID is same as of target Environment i.e. 6 and selects the replace option, then after migration the newly migrated campaign will have three flowcharts associated with it which were not in the source environment.

Migration of campaigns / flowcharts

Note:

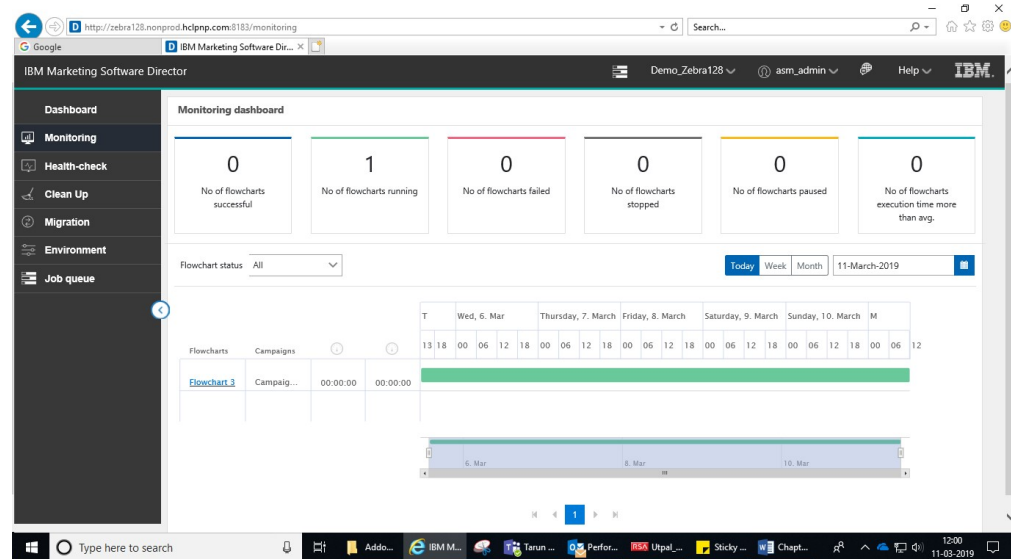
1. IBM Marketing Software Director does not support migration of campaigns / flowcharts when Marketing Operations and Campaign are integrated. You can utilize migration of Sessions and Session flowcharts with this integration enabled. Users will get Error "Campaign List : Invalid input provided for the API" when they click on "Campaign project" from Migration page. This error can be ignored as we do not support migration of Campaigns when Marketing operations and Campaign integration is ON.
2. Flowchart does not get migrated if the Campaign / session name is renamed and flowchart is not edited / saved after renaming. The workaround is that the user must open a flowchart and save it so that the .ses file name is updated as well.
3. When "web access control" login method is configured with IBM Marketing platform, Increase the value for "Token Lifetime" setting from "Affinium | Manager | miscellaneous" of IBM Platform to any value more than 15 sec , for eg: 9999 , to make migration work in IBM Marketing Software Director.
4. The same user data source's with exactly same name as of Source Campaign Environment should be configured in the target Campaign environment as well, otherwise the table mapping of migrated flowchart will not work and all the process boxes will appear unconfigured.
5. IMS Director uses campaign utility unica_acsesutil for migration , in case any error occurred while migrating using IMS director , user can check unica_acsesutil.log for more information at <Campaign_home>/logs/unica_acsesutil.log

Chapter 8. Monitoring

Purpose

IBM Marketing Software (IMS) Director Monitoring feature provides a view of flowcharts executions and their detailed information of flowcharts created by all users. It is accessed by clicking on the 'Monitoring' option in the left menu bar

Monitoring Dashboard



IMS Director displays execution highlight information along with timelines. This includes

1. Number of successfully executed flowcharts (Status as finish)
2. Number of running flowcharts (status as Started / Continue)
3. Number of failed flowcharts (status as failure)
4. Number of stopped flowcharts (status as stopped)
5. Number of paused flowcharts (status as paused)
6. Number of current flowchart runs taking longer than average execution time

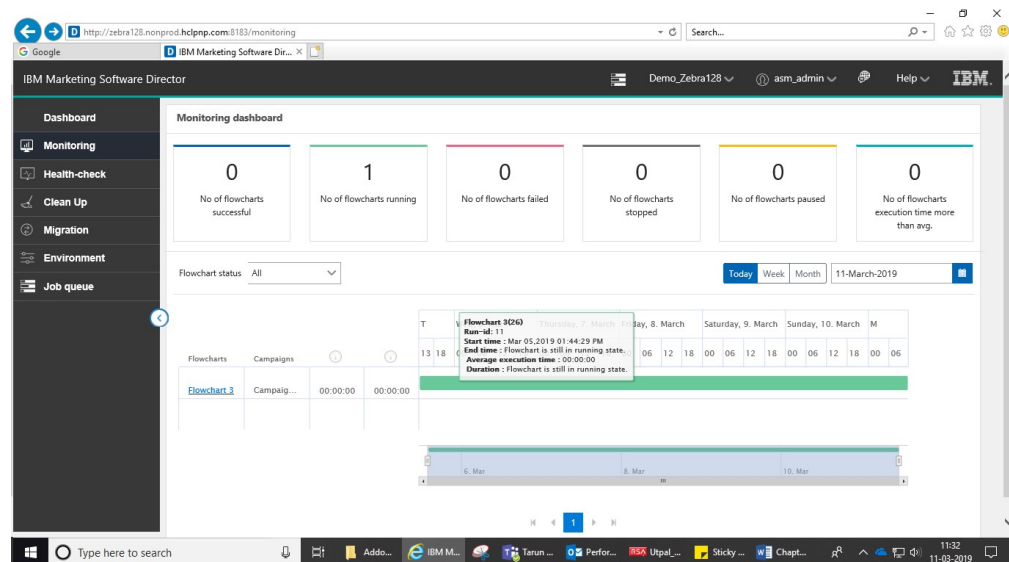
IMS Director provides user capability to see flowchart execution statistics of "Today" (covering the last 24 hours), "Week" (covering the last 7 days) and "Month" (Covering the last 30 days), or for a specific date selected from the provided calendar. The flowchart execution statistics will be shown on the top panel per the selection.

By clicking on flowchart link user will be directed to the flowchart execution details where the process box execution details are available. IBM Marketing Software Director does not show the flowchart information of flowcharts scheduled in the Campaign application. It only shows the flowchart information of the executed flowcharts

Flowcharts executed (completed flowchart run / branch) using Schedule process box are not supported by IMS Director. The user will see the flowchart status as 'running' all the time and the detailed process execution displays the same process boxes executed repeatedly

Campaign publishes the flowchart information to IMS Director using Message Queue. Data is pushed from Campaign to Message Queue and consumed by flowchart information stored, IMS Director. Message Queue should be up and running all the time to publish the data to Operational Dashboard. In case Message Queue is not up then flowchart execution data will not be available in IMS Director

Flowcharts



Mouse hover over the timeline bar of a particular flowchart, displays flowchart details including

- flowchart execution start time, end time and average flowchart execution time
- The duration of the latest flowchart execution

Flowchart states and valid actions

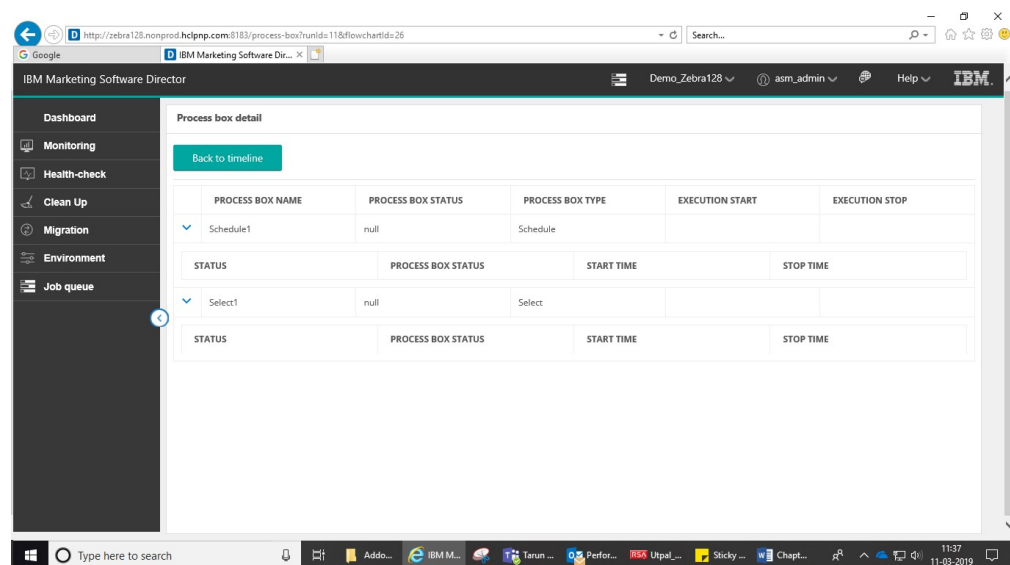
The following table describes the valid flowchart states, colour and the actions that are available on the Monitoring dashboard page.

The flowchart status reflects the status of the last run.

Status (color)	Description
Running (green)	The flowchart is running
Paused (Yellow)	The flowchart run was Paused intentionally.
Succeeded (Light Blue)	The flowchart run completed successfully, without any errors.

Stopped (Black)	The flowchart run was stopped intentionally or due to an error or due to an error in one or more process boxes
Failed (Red)	The run failed due an unhandled error or a server error indicating that the flowchart server process exited unexpectedly
Number of flowcharts exceeding current average execution time	Flowchart average execution time is calculated as the average of execution times of successfully completed flowcharts.

Process Box Details



- Clicking on a flowchart in the previous screen navigates to the flowchart listing page. The information displayed on this page includes
- Process box name, status and type
- process box execution time
- start time and end time
- process box status
- status of queries executed and time taken by each query

IMS Director does not show the information of flowcharts scheduled in the Campaign application. It only shows the flowchart information of the executed flowcharts.

Flowchart status:

The user can select any of the following Flowchart status options per the selection of "Today", "Month" and "Week" or selected date and Flowchart status – Flowchart execution shown on timeline grid.

1. ALL
2. Stop
3. Running

4. Successful
5. Paused
6. Failed

'Running' Flowchart statistics, displayed on top of the flowchart monitoring page, are for all the flowcharts currently in the 'Running' state irrespective of "Today", "Month" and "Week" or selected date.

Configuring IMS Director Flowchart Monitoring feature in IBM Marketing Platform

- Choose Settings > Configuration.
- Open the Campaign|FlowchartEvents category and set the properties
- Set enableEvents = Yes.
- Choose Settings > Configuration.
- Open the Campaign|FlowchartEvents|ActiveMQ category and set the properties
 - url tcp://<Hostname>:61616
- Platform User with Data Sources for ActiveMQ Credentials asm_admin
- Data Source For ActiveMQ message broker credentials ACTIVEMQ_CRED_DS
- queueName flowchartInfo-campaign

Data Source under Setting ->User

User name = ACTIVEMQ_CRED_DS

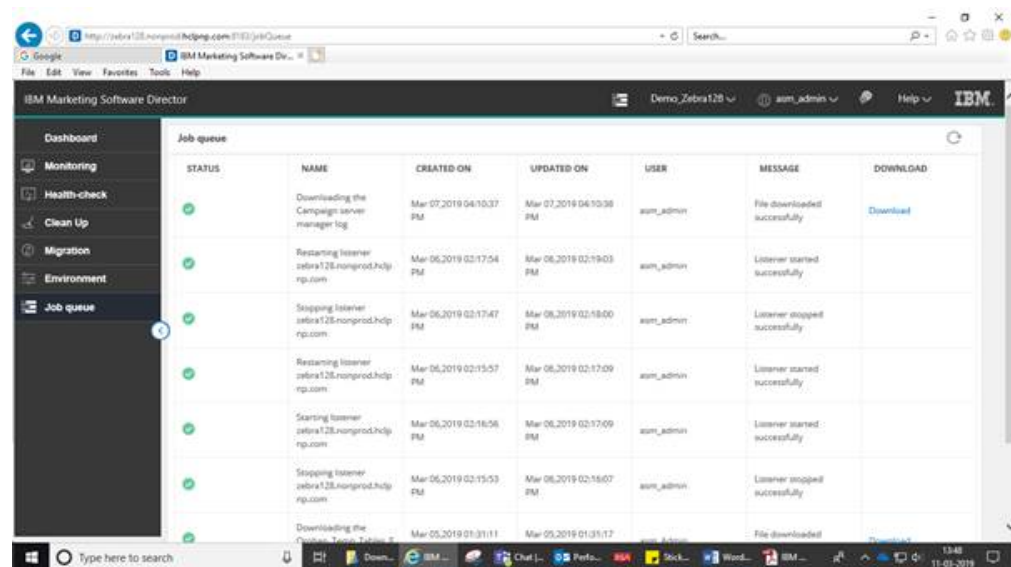
Password = admin

For more information, see the IBM Marketing Platform Administrator's Guide.

Chapter 9. Job Queue

Purpose

Job Queue option in the left menu bar navigates to the Job Queue page. It displays the status of the actions by the logged-on user id. The IBM Marketing Software (IMS) Director operations are asynchronous and are reported in the Job Queue. Once the actions are completed you will see the status of the performed actions and the details of the outcome. The Job Queue also shows all the errors that have occurred in any action performed and error information, or where to get additional information, is provided to you



STATUS	NAME	CREATED ON	UPDATED ON	USER	MESSAGE	DOWNLOAD
Success	Downloading the Campaign server manager log	Mar 07, 2019 04:10:37 PM	Mar 07, 2019 04:10:38 PM	asmt_admin	File downloaded successfully	Download
Success	Restarting listener zebra128.nongprod.hulp.rp.com	Mar 06, 2019 02:17:54 PM	Mar 06, 2019 02:19:03 PM	asmt_admin	Listener started successfully	
Success	Stopping listener zebra128.nongprod.hulp.rp.com	Mar 06, 2019 02:17:47 PM	Mar 06, 2019 02:18:00 PM	asmt_admin	Listener stopped successfully	
Success	Restarting listener zebra128.nongprod.hulp.rp.com	Mar 06, 2019 02:15:57 PM	Mar 06, 2019 02:17:09 PM	asmt_admin	Listener started successfully	
Success	Starting listener zebra128.nongprod.hulp.rp.com	Mar 06, 2019 02:16:06 PM	Mar 06, 2019 02:17:09 PM	asmt_admin	Listener started successfully	
Success	Stopping listener zebra128.nongprod.hulp.rp.com	Mar 06, 2019 02:15:53 PM	Mar 06, 2019 02:16:07 PM	asmt_admin	Listener stopped successfully	
Success	Downloading the Campaign server manager log	Mar 05, 2019 01:31:11	Mar 05, 2019 01:31:17	asmt_admin	File downloaded	Download

The job queue page lists the Status, Name, Created On, Updated On, User, Name, Message and Download.

Information on the Job Queue list

- **Operations logged in Job Queue:** The following operations are logged in Job Queue:
 - From the Health Check Page:
 - Listener - Start / Stop / Restart
 - Application - Start / Stop
 - Cleanup Page:
 - Campaign web log - Delete / Download
 - Campaign listener log - Delete / Download
 - Orphan tables and files - Delete / Download
 - Temp tables and files from specified objects - Delete / Download
 - Temp tables and files form specific files - Delete / Download
 - Log files:
 - Web application log - Delete / Download
 - UBX Tools log - Delete / Download

- UBX log - Delete / Download
- eMessage ETL log - Delete / Download
- Enagage ETL log - Delete / Download
- Flowchart log - Delete / Download
- Listener log - Delete / Download
- Master listener log - Delete / Download
- Campaign Server Manager log - Delete / Download
- Campaign utility log - Delete / Download
- Session log - Delete / Download
- Session Utility log - Delete / Download
- Web connection log - Delete / Download
- Campaign Report generation utility log - Delete / Download

Actions not reported in the Job Queue: The following actions are not reported

in the Job Queue:

- From the Health Check Page:
 - Data Source connection
 - Get status on Application Deployment

Download link: A Download link is available with which you can download logs for your user actions for jobs in the respective job queue

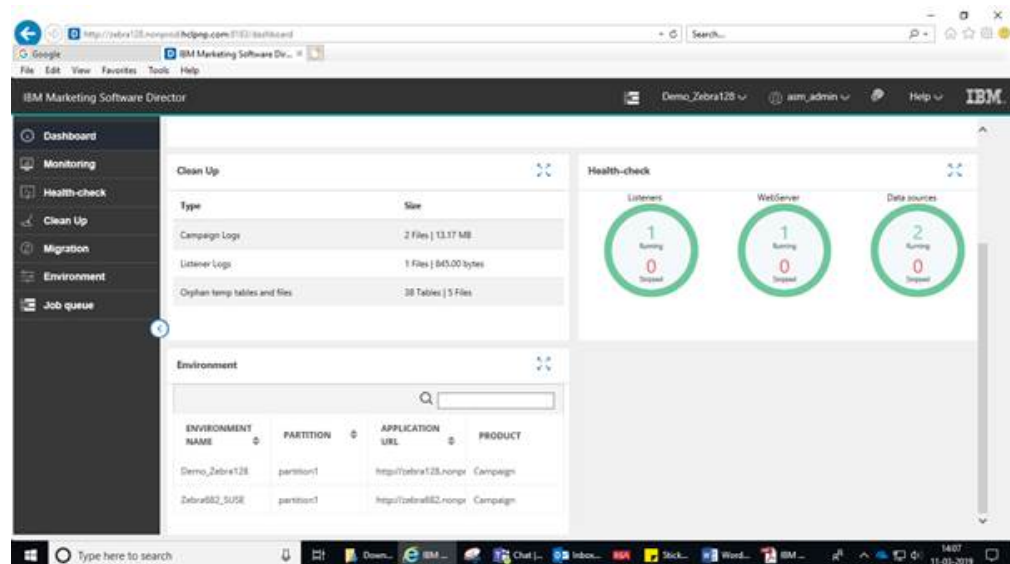
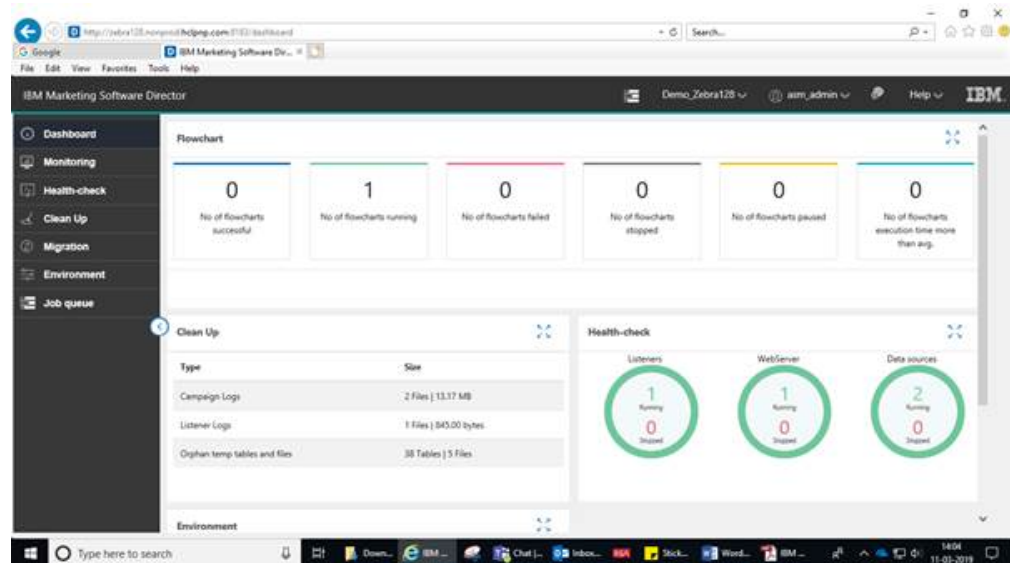
User actions performed in current selected environment: The Job queue shows all the user actions performed in the current selected environment.

Refresh button: You can Refresh the Job Queue page to get the latest status of user actions performed in IMS Director application.

Note: Job Queue page does not auto-Refresh.

Chapter 10. Dashboard

IBM Marketing Software (IMS) Director default screen after logging on, is the Dashboard. It can also be accessed by clicking on the 'Dashboard' option of the left menu bar.



IBM Marketing Software Director provides a dashboard view of the information available in IBM Marketing Software (IMS) Director comprising

- The status and statistics of flowcharts
- Display of Campaign logs, Listener logs and Orphan temp tables and files
- Health-check of Listeners, Web Servers and Data Sources,
- Environment related data such as Environment name, Partition, Application URL and the Product. Note: Scrolling down may be required to reach this section

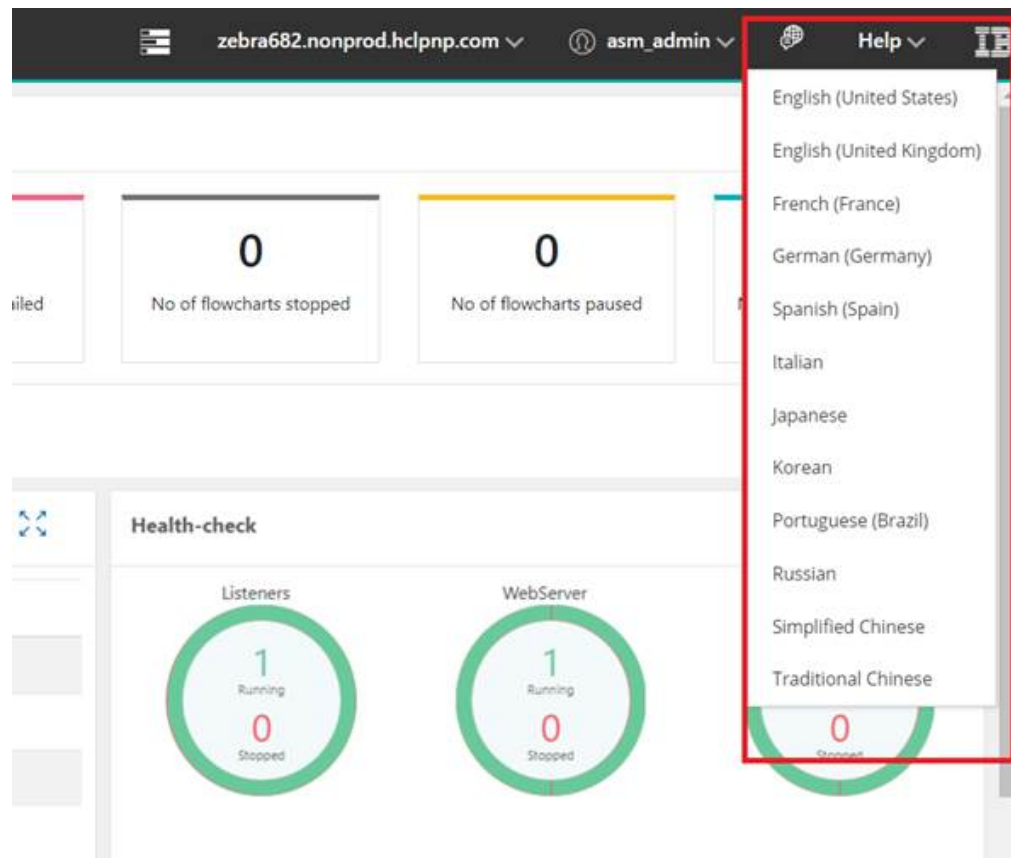
Flowchart Monitoring

- Flowchart statistics are displayed in the top section of the dashboard page and are calculated per the flowcharts which are executed (passed/failed/stopped/paused today).
- Flowchart timeline top level information is displayed per the current / latest status of the flowchart on Current date. Flowchart monitoring pane displays the flowcharts per the start date and time, and not per the completion time of these flowcharts
- While any flowchart is still in 'running' status and started before 'today' it will get displayed in Today's timeline.
- Any flowchart with any of these statuses - stopped/ failed/paused - which was started before today will not be displayed in today's timeline. These will be available in timeline with date same as their start time.

Chapter 11. Localization Support

IBM Marketing Software (IMS) Director and associated installer supports the following languages

1. English (United States)
2. English (United Kingdom)
3. French
4. German
5. Spanish
6. Italian
7. Japanese
8. Korean
9. Portuguese(Brazil)
10. Russian
11. Simplified Chinese
12. Traditional Chinese



With the 'Change Language' icon is located at the top right corner of the IBM Marketing

Software Director, you can set your desired language

Note: Using the same language as your Campaign installation is strongly recommended

Chapter 12. Troubleshooting

Flowchart execution status not communicated to IBM Marketing Software (IMS) Director

Under circumstances described below, the flowchart execution status is not communicated to IMS Director.

1. Killing the server process.
2. Killing the listener and removing the flowchart active sessions from listener.
3. Delete schedules while the flowchart is in running status...and so on.

Thus, flowcharts might be shown as running even they are completed or have failed. To rectify this please perform the following steps in such scenarios:

1. Log on to IBM Marketing Software Director.
2. Click Monitoring.
3. Hover mouse on the 'running' flowchart that is shown as completed/failed
4. Note down the RunID and flowchartID of such flowchart. example runId= 124504 &flowchartId=3455.
5. You can also get this information by clicking on the flowchart and opening the detailed execution window. In address bar, you will see something similar to <http://<HOST>:<PORT>/process-box?runId= 124504&flowchartId=3455>.
6. Use the RunID in the following queries, review this SQL script with your DBA, take a backup of the IMS Director database and then execute:
 - db2 " delete from AO_PROCESSRUNEVENTS where RUN_ID= 124504"
 - db2 " delete from AO_processruninfo where RUN_ID= 124504"
 - db2 " delete from AO_RUNINFO where RUN_ID = 124504"

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.

Contact information for IBM technical support

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

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

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