

HCL Unica Director 12.1.0.4 User Guide



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Chapter 1. Purpose and Scope

Unica Director is a standalone application that allows you to monitor and manage your environments. Every environment has applications installed such as Unica Campaign, Journey etc. Unica Director provides an interface to monitor and manage the applications. This is a command and control center for Unica applications. It requires access to your servers and works over both the intranet and a VPN.

Unica Director is supported from HCL Unica version 11.1 onwards and it supports the following applications:

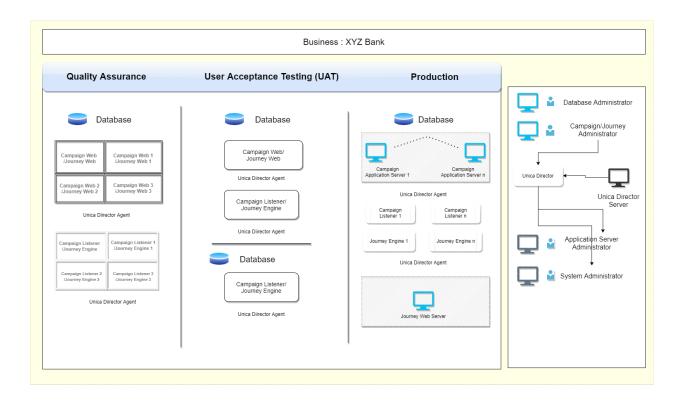
- Campaign application
- 12.1.0.4 onwards Journey application

Unica Director can monitor multiple environments such as development, quality assurance, staging and production clusters. To do this Unica Director agents must be installed on each machine where applications (Campaign / Journey, Web, Kafka and Zookeeper) are installed for each of the environments.

The Unica Director agent runs CLI command to gather information about the application being monitored.

Unica Director allows monitoring multiple environments. User can switch between environments to perform actions such as clean-up of log files, monitor status of web application and so on for the respective applications (Campaign and Journey).

Chapter 2. Architecture Diagram



Chapter 3. Prerequisites

Prerequisites are different for Campaign and Journey.

Prerequisites for Campaign

- 1. As the Unica 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.

- To log on to Unica Director for a particular environment, user must know the Unica platform credentials.
- 2. Unica Director Agent must always be running.
- 3. **Applicable only to Windows OS**: On the Unica Director Agent system (on the computer where the Unica Campaign Listener is installed), ensure that the following performance counters are available.
 - Processor Time
 - Working Set

These counters help the HCL Unica Director - Agent application to gather the statistics on the Unica 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 Unica Campaign application, the flowchart timeline to receive and dispatch execution events to and from Unica Director, Active Message Queue (MQ) should be available. Flowchart execution events (flowchart execution started, stopped, paused, completed, failed) are communicated to Unica Director using Active MQ. Flowchart timeline may show incorrect statistics if Active MQ is unavailable.
- 5. Unica Platform users who will be using Unica Director, should be a Unica Campaign Admin user, so that they are can see all the Unica Campaign objects. This user should additionally have all the permissions for executing the following Unica Campaign Utilities:
 - · Access monitoring area
 - Run syradm Command line tool
 - Terminate Unica Campaign listener
 - Run sesutil Command line tool
 - Perform cleanup operations.
- 6. From Platform users page, assign all the Unica Campaign system and user data sources to the Unica Platform users who will be using Unica Director.

Prerequisites for Journey

To work Journey Datasource health check properly following datasource jndi-names are mandatory. User can define properties in <JOURNEY_HOME>/Web/application.properties file.

Web server type: Websphere, Tomcat

journey.datasource.jndi-name=JourneyDS

journey.report.datasource.jndi-name=JourneyReportDS

Web server type: JBOSS

journey.datasource.jndi-name=java:jboss/JourneyDS

journey.report.datasource.jndi-name=java:jboss/JourneyReportDS

OR

journey.datasource.jndi-name=java:/JourneyDS

journey.report.datasource.jndi-name=java:/JourneyReportDS

Note: Director does not support login with LDAP users. Also, it does not support integration with any authentication provider tools such as SiteMinder, IBM Security Access Manager etc.

Chapter 4. Environments

Add Environments

From V12.1 Fixpack 4, onwards while logging in to Unica-Director application, the user is authenticated via Unica-Platform. There are multiple applications that can be monitored in Unica-Director, we are currently supporting Campaign and Journey. For accessing the applications the user should hold the following roles/permissions.

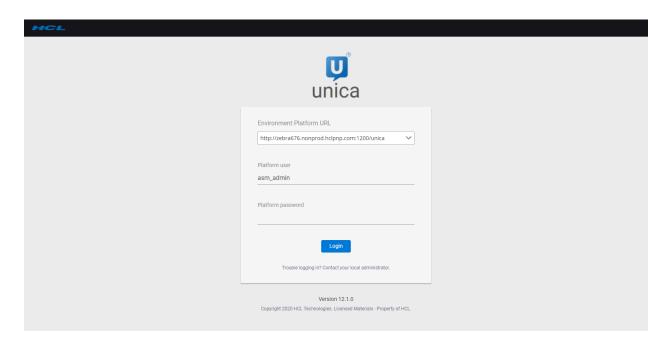
- Campaign The user should have a Campaign-Monitoring permission.
- Journey The user should have Journey Admin role.

Note: To add Environments user dont need to have Campaign-Monitoring permission or Journey Admin role. User need these permission when user want to access Application health page.

The first step in using Unica Director, after logging in, is to the 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 Unica Director

Login Screen

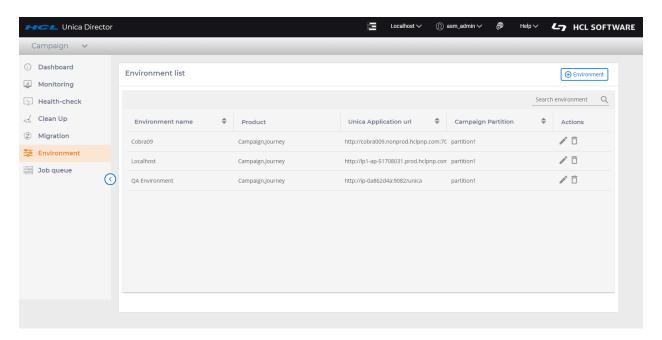


Environment Details Page when you login for first time.

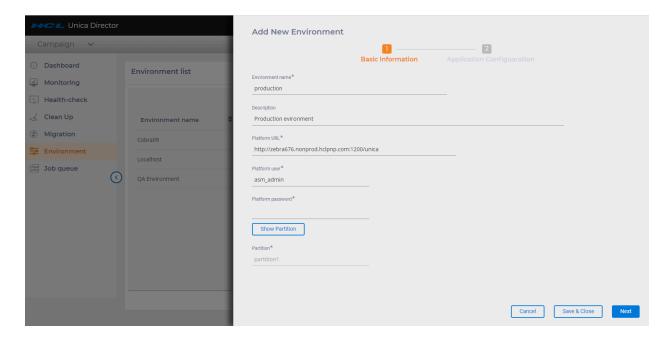
- 1. On the login page of the Unica Director, you should specify the environment the Unica Platform URL (for example http://<url>:<port>/unica), also in case when Web access control login method is configured, that is, Siteminder or ISAM, then too the Unica Platform URL (for example http://<url>:<port>/ unica) should be specified.
- 2. Enter your Unica Platform login credentials.
- 3. On Successful login, user will be redirected to Add Environment page.
- 4. Re-verify the details (i.e Platform url, username and password) and then click on **Show**Partition button.
- 5. User can save the Environment or Configure application (Configuring of application is important and it is explained in subsequent chapters).
- 6. You 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.
- 7. 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 Unica Director actions will be performed on this selected environment.

Adding an environment - User can add a new environment by clicking on the "Environment" button which is present on the Environment listing page.

Log on to the Unica Director and navigate to the Environments screen.



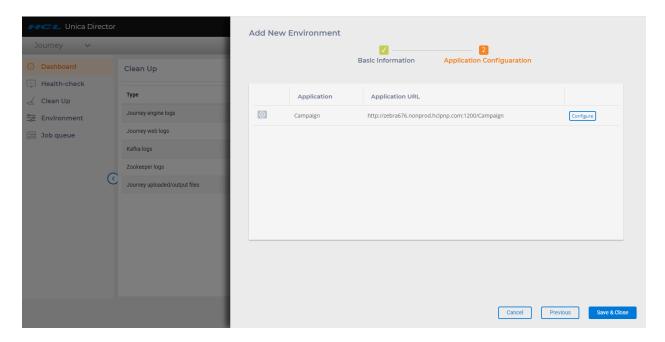
Click on Add environment.



- 1. This will open **Add Environment** screen and the user has to fill in the basic information as see in above screenshot.
- 2. Enter the Platform URL.

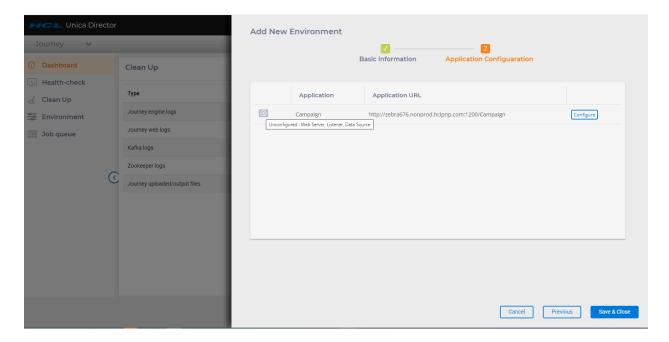
- 3. Click on **Show partition** button. This will fetch the partition details for the environment. Once the partition details for the environment are available, you can perform the below actions:
 - a. Click on **Next** button. This action will get all the applications that are available on the environment. At present, we are supporting **Journey** and **Campaign**.
 - b. Click on **Save and Close** This action will save the environment to the director database.

Application configuration screen



In the **Application Configuration** screen, all the applications that are available in the environment will be fetched and populated. (In this release, we are supporting Campaign and Journey)

In the screenshot below, the gray icon indicates that the application is not configured. If the user hovers on the icon, they can see which all components in the application are not configured.

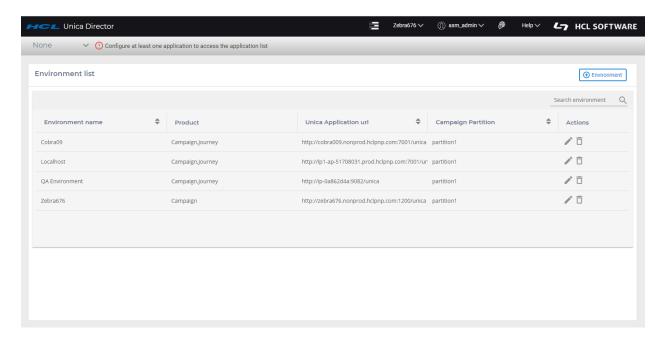


To be able to perform various functionalities on the Unica director, at least one application should be configured.

To configure an application, click on the **Configure** button on the application listing page. In the above screenshot, user can configure campaign application.

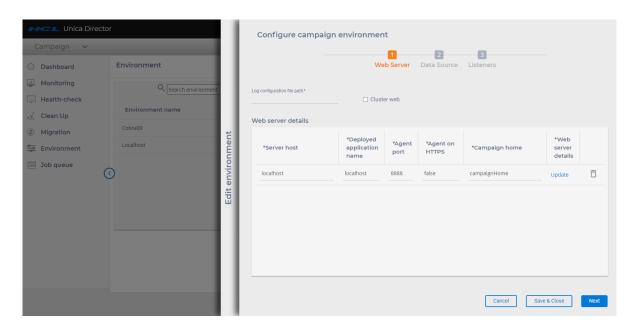
When no applications are configured

If user creates an environment, but does not configure any application, on login to that environment, they will see below screen.



Configure Campaign application

1. Web Server



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.

Application Servers - Web Servers:

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

- 1. Server Host: Enter the fully qualified host name where the application server is running.
- 2. Deployed Application Name: Enter the Unica 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.
- 3. Agent port: Specify the Unica Director Agent port.
- 4. Agent on HTTPS: Set this to True or False as applicable.
- 5. Campaign home: Specify the Campaign home.
- 6. 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 Unica 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 Unica 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

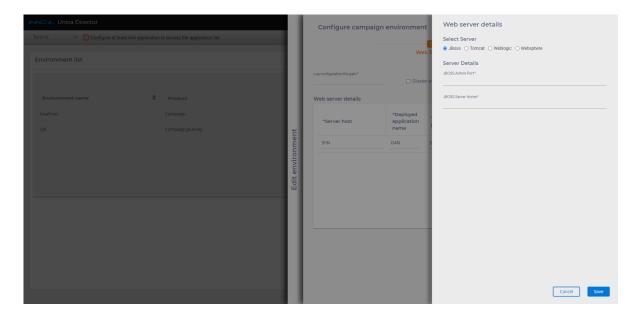
- Server on https -> Is Weblogic Server on https
- Weblogic Server Home -> Path of Weblogic Home e.g. C:\webservers\WL12213

ServerType - If the Server Type selected is "Tomcat"

Tomcat JMX Port -> JMX port for Tomcat

ServerType - If the Server Type selected is "JBoss"

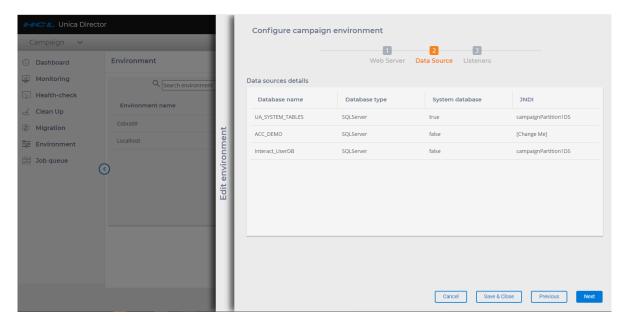
- JBoss Admin Port Management http port/console port which you can get from standalone.xml file
- JBoss Server Home JBoss Application Server installation directory.
- 7. After entering all the required Webserver information and other required fields please click on 'Save'. Your configuration data will be saved and available for use in (Unica Director).



After having saved the web server details, click on **Next**.

Data Sources

Data source details will be auto populated. Refer below screenshot:



8. Add the Listener Details

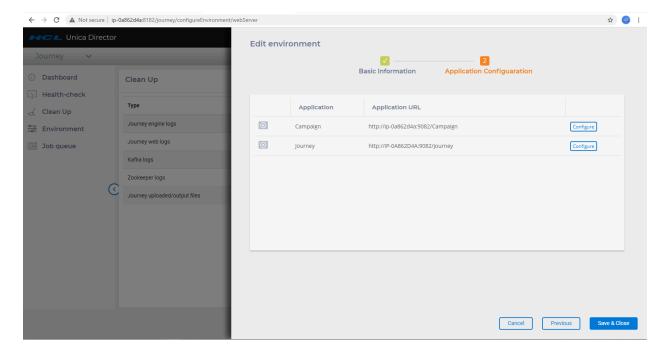
Listeners: Listener host and ports fields are auto populated. You must enter information in the fields.

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

- Agent Port: Specify the Unica Director Agent port.
- Campaign home: Specify the Campaign home.
- Agent on HTTPS. You should select True/False.
- 9. Click on **Save and Close**. Application Campaign will be configured.
 - **Note:** For each partition, you will have to create a new environment.

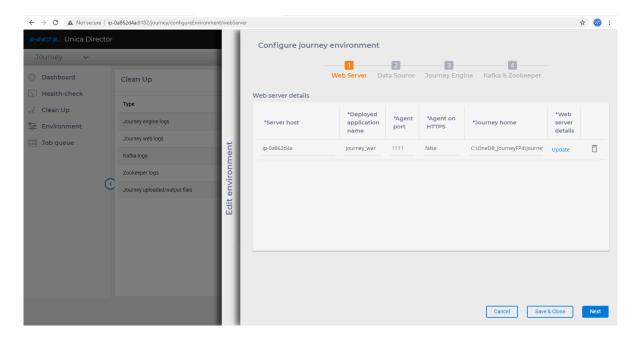
Configure Journey Application

After adding basic information for an environment, user can see all the application that are available in that environment.



Click on **Configure** button next to Journey:

1. Web Server



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 Unica Journey application name:
 - For Websphere, Tomcat and JBOSS you can specify the application name given while deploying Journey.war file. This name is used to start and stop the application from the Health Check screen.
- c. Agent port: Specify the Unica Director Agent port.
- d. Agent on HTTPS: Set this to True or False as applicable.
- e. Journey home: Specify the Journey home.
- f. Web Server Details: Click Update. Select the type of server, that is, Websphere, Tomcat or JBoss:

ServerType - If the Server Type selected is **WebSphere**:

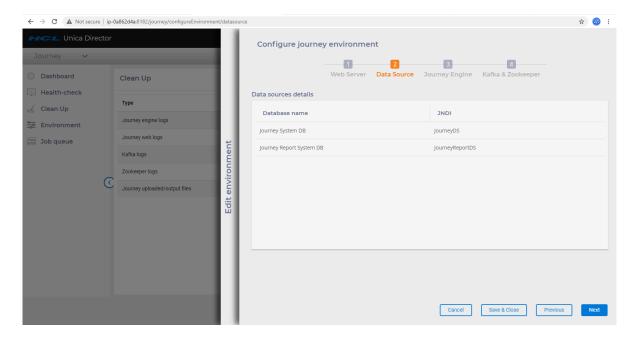
- WebSphere Profile Path > Specify the Application server profile location.
 Example: /opt/ IBM/WebSphere/AppServer/profiles/AppSrv01
- WebSphere Server Name > Specify the Application server name where Unica
 Journey application is deployed. For example WebSphere by default has
 server name as server1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

ServerType - If the Server Type selected is **Tomcat**

∘ Tomcat JMX Port > JMX port for Tomcat.

ServerType - If the Server Type selected is **JBoss**

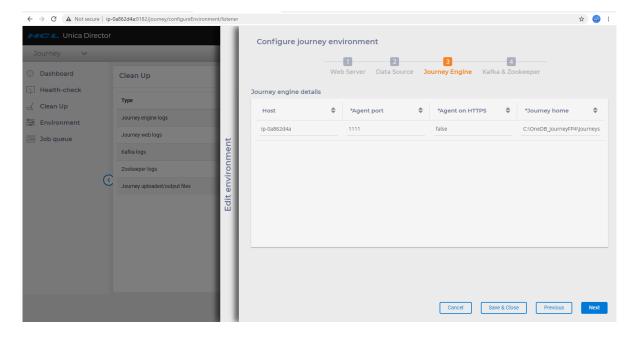
- JBoss Admin Port Management http port/console port which you can get from standalone.xml file.
- JBoss Server Home JBoss Application Server installation directory.
- g. Click on Save. Configured data will be saved and available for use in (UnicaDirector).
- 2. Data Sources



For Journey the details of data sources- JNDI are pre-populated. User don't need to add or update anything here. Below two data sources-JNDI automatically populated.

| Database name | JNDI |
|--------------------------|-----------------|
| Journey System DB | JourneyDS |
| Journey Report System DB | JourneyReportDS |

3. Journey Engine

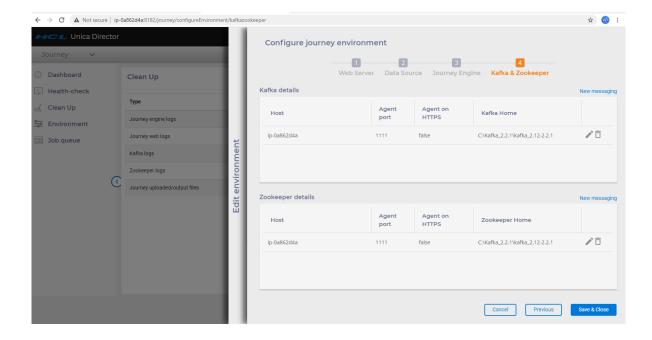


For Configuring Engine on Director:

- Need IPof system where agent and engine are running.
- Need port of director agent.
- Need Engine Home, path where engine is installed.
- For Linux Env scripts folder should be in <JOURNEY_HOME>/Engine.

Engine can be stopped/started/Restarted from Director. Logs of Engine can be deleted /Downloaded from Director

4. Kafka Zookeeper

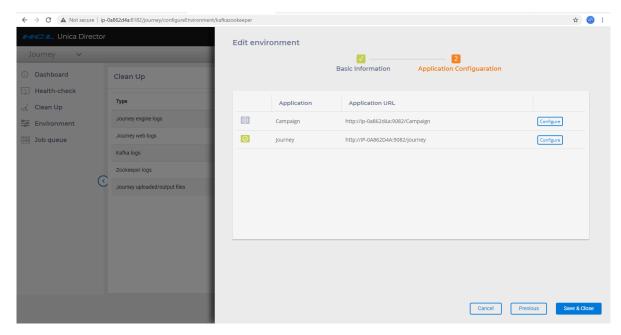


Kafka - For version 12.1.0.4, only one instance of Kafka per application is applicable. Agent need to deploy on the same server with kafka to track the details, for that agent details such as port number, host name should be entered in the configuration. Kafka home path too needs to be added to for tracking the status. System usage and current status can be only tracked after adding the following details on configuration pages.

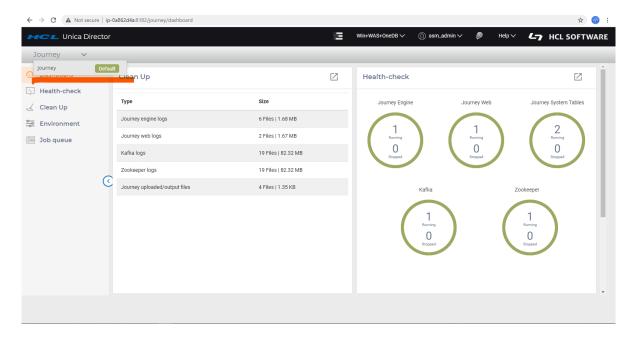
Zookeeper - For version 12.1.0.4, only one instance of zookeeper per application is applicable. Other configurations are same Kafka.

For Journey application to be successfully configured, details for all above 4 components are mandatory. There are two ways to verify if Journey application is successfully configured:

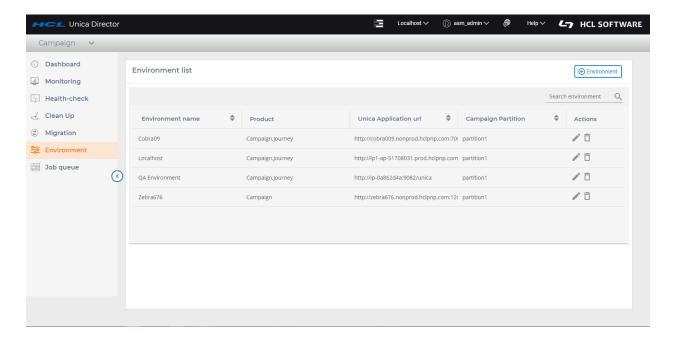
1. A green status icon on the application configuration page



2. Journey will be available in the application dropdown



Modify Environments



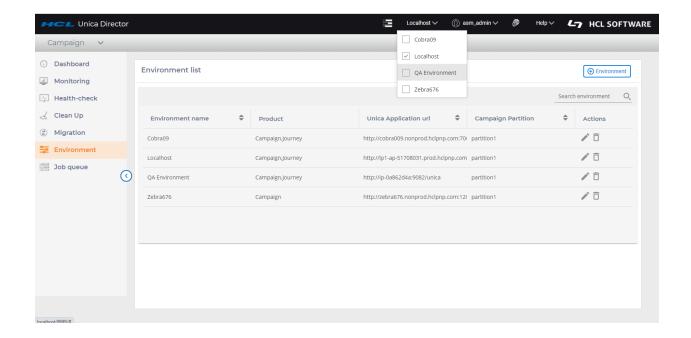
You can modify an existing environment by clicking on the 'edit' icon (the pencil shape) under the Actions column of the environment you want to edit.

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.

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.

Switching to a different Environment



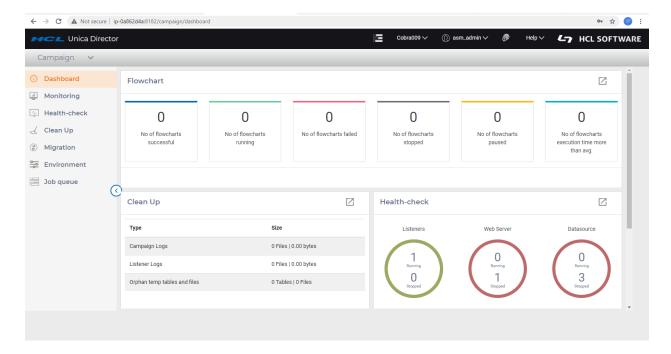
- 1. Select the environment to work on from the top right corner.
- 2. You will be prompted for the Marketing Platform login user ID and password.

Application

Once an environment is added and applications successfully configured, user can access different functionalities. For example, User can:

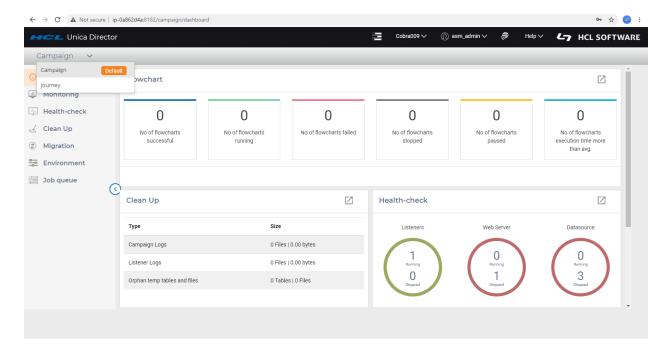
- 1. Check the Web server status for application Campaign for the QA environment.
- 2. Clean Journey engine logs for Journey application for the QA environment and so on.

User must login to the environment to which they want to monitor and access various functionalities. Once logged in, user is presented with the Dashboard page of default application. For example. In Below screenshot, user is logged in to **Cobra009** environment and the default application is **Campaign**.



The first view is the Dashboard view, hence Campaign dashboard.

To view all the application that are configured in an environment, user can click on the dropdown as seen in below screenshot. The default application is Campaign as indicated by the orange tag next to Campaign.

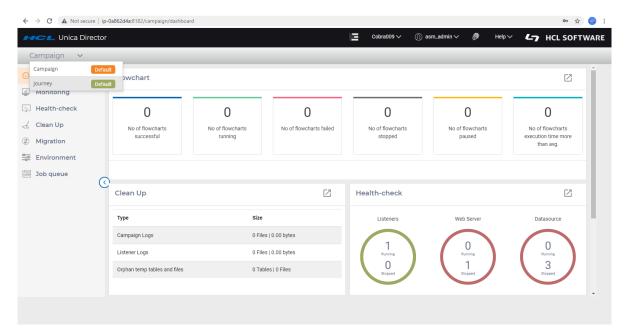


All the links that appear on the left panel are part of campaign. So if user clicks on Health check, it would show up details of Campaign health check and if user clicks on Clean up, it would show up the Campaign clean up items. To switch to **Journey** application, user will have to click on **Journey** and the default dashboard page of Journey would be presented.

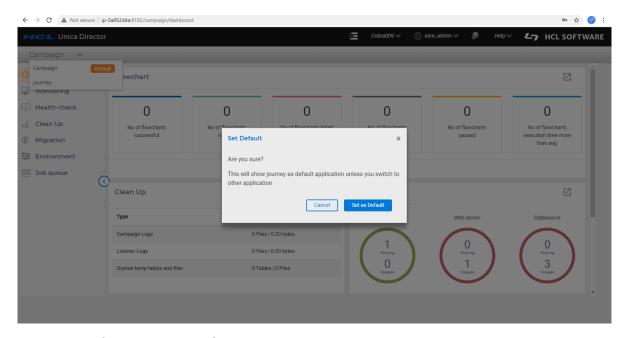
Changing the default view

To Change to a different default view:

1. Click on the green tag default next to application



2. User will be prompted with below message



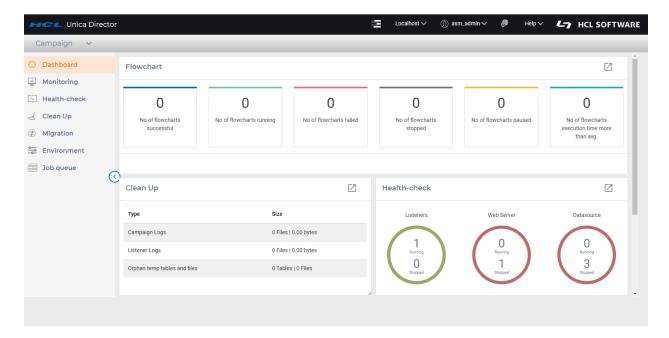
- 3. On user confirmation, the default application will be changed.
- 4. Next time when the user logs in, they will now be presented with the dashboard of Journey application.

Chapter 5. Dashboard

HCL Unica Director default screen after logging on, is the Dashboard. Each application has its own Dashboard. For example, Campaign Dashboard has details related to Flowchart, Cleanup and Health-Check etc. In Journey Dashboard, details for Journey Cleanup, Journey Health check can be seen.

Campaign Dashboard

To view the Campaign dashboard, log in to an environment that has Campaign application configured. Select Campaign from the application dropdown. The default link is the dashboard view.



HCL Unica Director provides a dashboard for Campaign application that comprises of below:

- · 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,

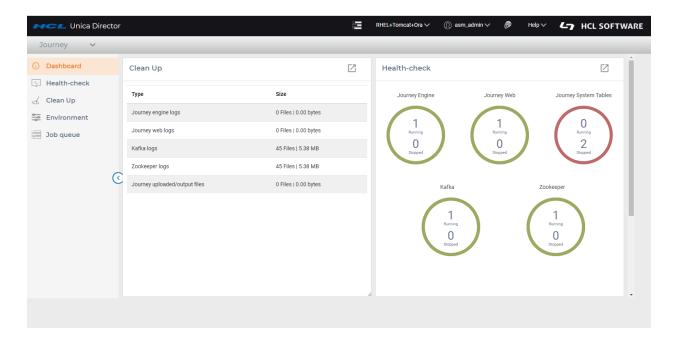
• Environment related data such as Environment name, Partition, Application URL and the Product. Note: Scrolling down may be required to reach this section

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.

Journey Dashboard

To view the Journey dashboard, log in to an environment that has Journey application configured. Select Journey from the application dropdown. The default link is the dashboard view.



HCL Unica Director provides a dashboard for Journey application that comprises of below:

- Cleanup It has statistics of all the log files that are associated with Journey. For eg. Journey engine shows the count of files and their total size.
- Health Check This has a chart representation that provides a quick summary of status of Journey engine, Kafka instance, Journey system tables etc.
- Environment Shows a list of the environments that are available.

Chapter 6. Monitoring

Purpose

HCL Unica 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 option is available only for Campaign application

Monitoring Dashboard

Unica 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

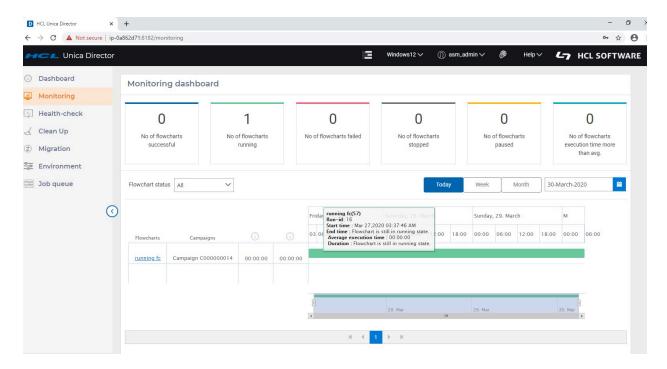
Unica Director provides user capability to see flowchart execution statistics of "Today" (covering the last 24 hours), "Week" (covering the last 7 days) and "Month" (Covering the last 30 days), or for a specific date selected from the provided calendar. The flowchart execution statistics will be shown 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. HCL Unica Director does not show the flowchart information of flowcharts scheduled in the Unica 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 Unica 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

Unica Campaign publishes the flowchart information to Unica Director using Message Queue. Data is pushed from Unica Campaign to Message Queue and consumed and flowchart information stored, Unica 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 Unica 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

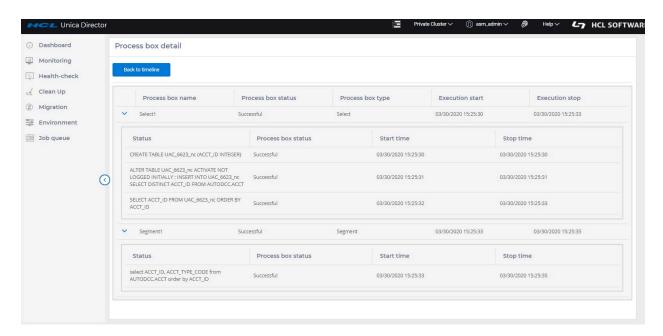
The following table describes the valid flowchart states, colour and the actions that are available on the Monitoring dashboard page.

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

Unica Director does not show the information of flowcharts scheduled in the Unica 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 Unica Director Flowchart Monitoring feature in HCL 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 Unica Platform Administrator's Guide.

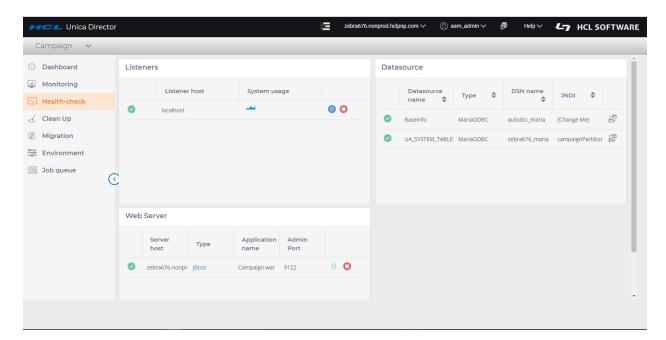
Chapter 7. Health Check

Purpose

The HCL Unica Director Health Check screen provides a snapshot of the availability of the various application (Campaign and Journey) servers in selected environment (only one environment can be monitored at a time).

Campaign Health Check

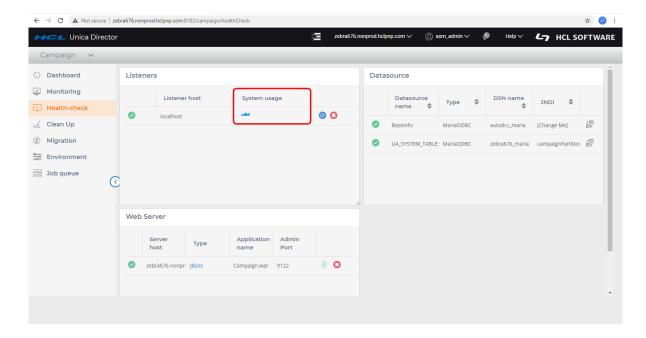
Campaign Listener Health



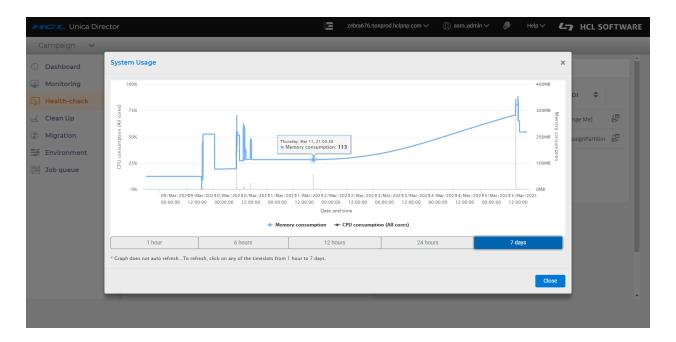
- 1. Availability: started or stopped status.
- 2. Restart, Start or stop the Listener.

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. Unica 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.

Note:

- Unica Director %CPU Graph can display beyond 100% utilization. The calculation is
 %CPU = (Total Threads on all CPUs / 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 Unica 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 HCL Unica Director:

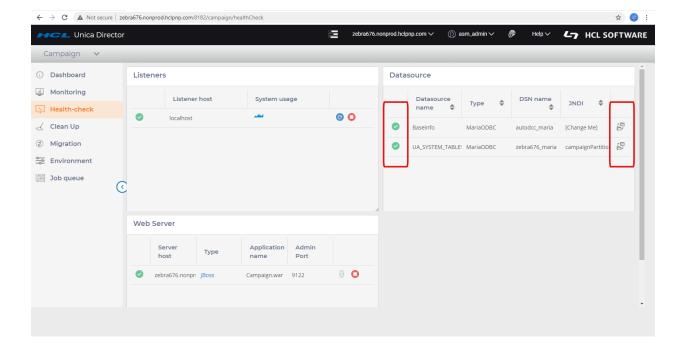
1. The Listener can be started and stopped through Unica Director is when it is installed as a Windows service, and the start-stop status is reflected on the Services.msc application page

- 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:/HCL/Unica/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 Unica 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 Unica Director.

Docker supports auto restart of listener. If director is configured with Campaign running on Docker, then Campaign listener stop functionality would work but Docker deployment will auto start the listener.

Campaign 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.

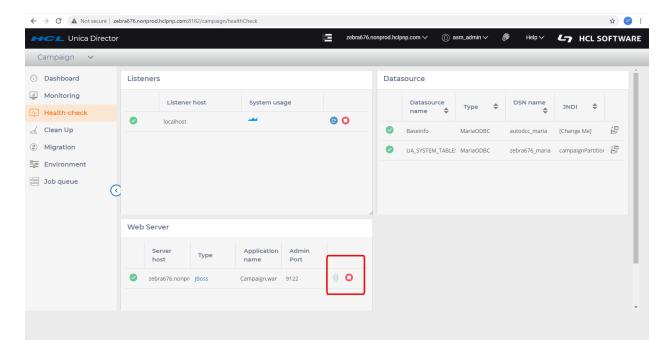
The following columns are listed on the screen:

- 1. Data Source Name
- 2. Type: This is typically the data source template type such as Oracle, MariaDB, SQL Server, Informix.
- 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 (WebSphereWebsphere/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 Unica 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 Unica Director

Start operation on Websphere

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

Supported Application Servers:

- Oracle Weblogic only standalone deployment
- IBM Websphere 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.
- 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

- 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
- 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 wasdmin 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

Journey Health Check

Journey Engine Health

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

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

- In case of a engine cluster, the status of each engine is shown and user can perform start and stop engine on any of the engine node.
 - Engine host system usage: Shows the graph CPU and Resident Set Size (RSS)
 Memory utilization on Engine and Journey web application machines for all
 Operating Systems.

System Usage

- 1. System usage displays CPU Utilization and Memory Consumption of Journey Engine and its sub-process for Last 1 hr, 6hrs, 12 hrs, 1 day and 7 days.
- 2. Unica Director shows RSS memory Consumption on health check screen for RHEL Linux / SUSE/ Windows and AIX operating systems.
- 3. Memory Consumption displays memory used by the Journey Engine (unica_aclsnr) and its sub-process (unica_aclsnr, unica_acsvr).
- 4. 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.
- 5. Please use the Reset Zoom option to remove zoom feature from the Graph.

Notes

- Unica Director %CPU Graph can display beyond 100% utilization. The calculation is
 %CPU = (Total Threads on all CPUs / 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 engine, then Unica 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 Engine as Service through HCL Unica Director:

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

Journey Data Source

All the data sources from the selected environment are listed

The connectivity of all data sources configured in Platform from all the Journey 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, MariaDB, OneDB, SQL Server
- 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/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 WebSphere application server nodename. e.g. zebra658Node01. Applicable to WebSphere 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

 Start/Stop operation of JOurney application is supported from Director for webservers -Tomcat, JBoss, Websphere.

Start operation on Websphere

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

Supported Application Servers:

- IBM Websphere Application Server Standalone
- Tomcat standalone
- 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.
- 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 Journey Application.

- 3. Getting the status and Start/stop actions can only be performed on Journey application deployments. These cannot be performed on the application server profile.
- 4. 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
- 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 wasdmin tool to get the status of the application server node.
- 2. For TOMCAT, we are using JMX to connect to the application server.
- 3. For JBOSS we are using JBOSS CLI to get the application status and start / stop actions.
- -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 Journey deployment

Chapter 8. Clean up/Download temporary files, tables and log files

Purpose

The HCL Unica Director Clean-up feature enables the removal of various logs and temporary work items. Based on Application type i.e Campaign or Journey, the clean up screen will have different items.

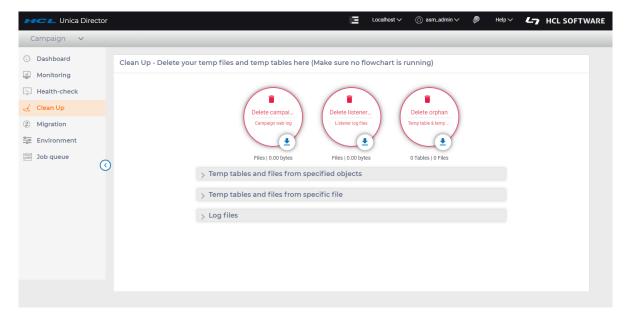
Campaign Clean up

Campaign Clean up includes:

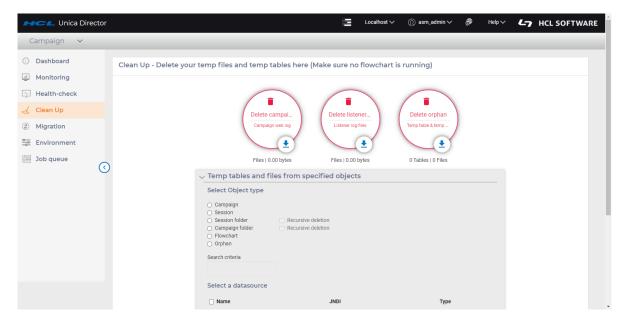
- · Campaign web log, listener log and orphans.
- Temporary tables and files from specified objects based on selected object and/or data source.
- Temporary tables and files from specific file based on input files selected.
- · Clean-up of log files.

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

1. Ensure that no flowchart is running.

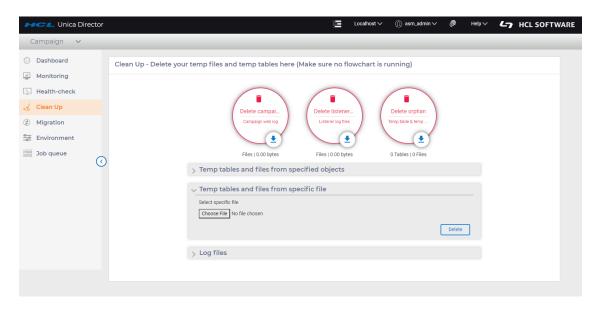


2. In the Campaign web log, Listener log files or orphan on the User Interface, click the **Download** icon to download the files or click **Delete** to delete the Campaign web log, Listener log files or orphan.

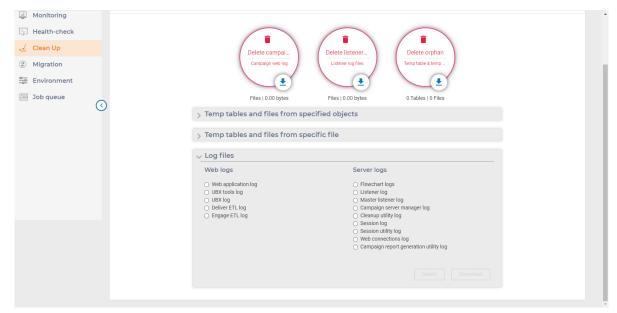


- 3. To download or delete temporary tables and files from specified objects, in the Temp tables and files from specified objects section,
 - a. Select Object type from choices on the screen (Campaign, Session, Session folder, Campaign folder, Flowchart or Orphan).

- 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, Unica Deliver 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:

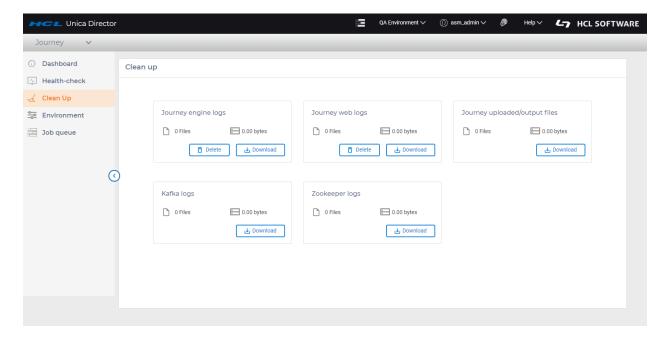
- Flowchart logs
- Web application log
- Unica Deliver ETL log
- Import Error log
- Engage ETL log
- Listener log
- Master listener log
- Campaign Server Manager log
- Cleanup utility log
- Session utility log
- Sessions log
- UBX log
- Web connections log
- UBX tools log

Note: If the log files do not exist on any of the Unica Campaign web app machine or Unica 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.

Journey Clean up

Login to an environment which has Journey application. On the application dropdown on top left, select Journey. This will open all the options available for Journey.

Click on Clean up on the left menu bar.



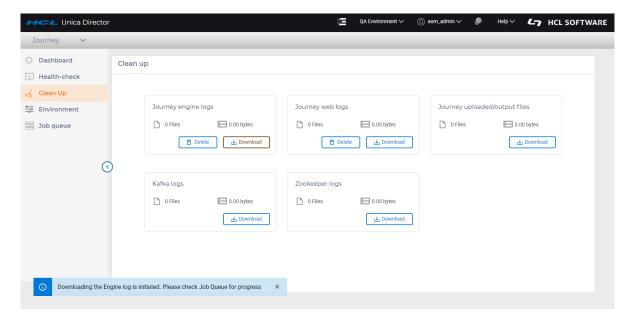
Note: User can delete the Journey engine logs and Journey web logs.

Journey Cleanup has below options:

- 1. Journey Engine logs
 - Engine logs capture the working of engine application, as per the LOG. Level defined (INFO, WARN, DEBUG), files are created on Roll over bases, with each file size 50MB (can be changed in LOG4j2.xml).
 - Engine Logs hold all information related to exceptions and information related to processing of audience data.

Path of Engine logs is to be defined under log4j2.xml file under conf folder in Engine Home. Property **APP_ROOT_LOG** holds the value which defines path for creating logs.

- a. Delete On clicking on delete button all files, except the current log file, are deleted from the location, once the files are deleted, they cannot be recovered.
- b. Download User can download journey engine logs. After clicking on **Download**, a job is triggered and a notification is shown to the user. See below screenshot.



To download the files, user has to navigate to the Job queue page, which shows the current status of the action taken. Once the download is available, user can see a link on the job queue page from which they can download the logs.

2. Journey Web logs

- Web logs capture the working of web application, as per the LOG. Level defined (INFO, WARN, DEBUG), files are created on Roll over bases, with each file size 50MB (can be changed in LOG4j2.xml).
- Web Logs hold all information related to exceptions and information related to processing of user activities.

Path of web logs is to be defined under log4j2.xml file under conf folder in Web Home. Property **APP_ROOT_LOG** holds the value which defines path for creating logs.

- a. Delete On clicking on delete button all files, except the current log file, are deleted from the location. Once the files are deleted they cannot be recovered.
- b. Download User can download journey web logs. After clicking on "Download", a job is triggered and a notification is shown to the user.

To download the files, user must navigate to the Job queue page, which shows the current status of the action taken. Once the download is available, user can see a link on the job queue page from which they can download the logs.

c. File size and File counts - On Clean up page user can see number of files and its size too

3. Journey upload/output files

Journey has a property spring.entity.files.upload.defaultPath which is used to configure the path of uploaded files (For example, entrysource files). User can get the count of files or Download the files using this feature.

4. Kafka logs

For version 12.1.0.4, only one instance of Kakfa per application is applicable.

These are the kafka server and controller logs, with different log levels, files re-created on rollover basis. Pattern, logging level and roll over can be changed in log4j.properties file in Config directory.

For version 12.1.0.4, it is assumed logs are generated on its default location i.e., in logs directory in app home. Perform the following operations on files.

- a. File size and File counts Display number of files and its size too.
- b. Download You can download Kakfa logs. After clicking on **Download**, a job is triggered, and a notification is shown to the user.

To download the files, user must navigate to the Job queue page, which shows the current status of the action taken. Once the download is available, user can see a link on the job queue page from which they can download the logs.

5. Zookeeper logs

For version 12.1.0.4, only one instance of zookeeper per application is applicable.

These are the zookeeper server logs, with different log levels, files re-created on rollover basis. If app home for kafka and zookeeper are same, we are assuming the logs are getting generated on the same location as of kafka i.e., logs directory in app home path. If the app home for kafka and zookeeper are not same it means zookeeper is standalone in that case we are reading the logs from location mentioned against key zookeeper.log.dir in log4j.properties directory in conf directory.

Pattern, logging level and roll over can be changed in the same log4j.properties directory. Perform the following operations on files.

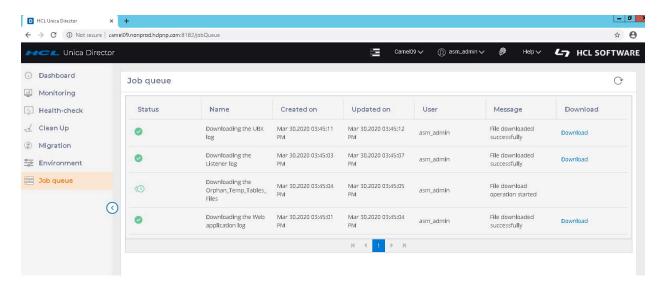
- a. File size and File counts Display number of files and its size too.
- b. Download User can download zookeeper logs. After clicking on **Download**, a job is triggered, and a notification is shown to the user.

To download the files, user must navigate to the Job queue page, which shows the current status of the action taken. Once the download is available, user can see a link on the job queue page from which they can download the logs.

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 HCL Unica 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.



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:
 - Campaign Listener/Journey Engine Start / Stop / Restart
 - Application Start / Stop
 - · Cleanup Page:
 - Campaign /Journey Engine web log Delete / Download
 - Campaign Listener/Journey Engine 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
- eMesage 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
- Journey Uploaded/output files Download
- Kafka logs Download
- Zookeeper logs Download

Actions <u>not</u> 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.

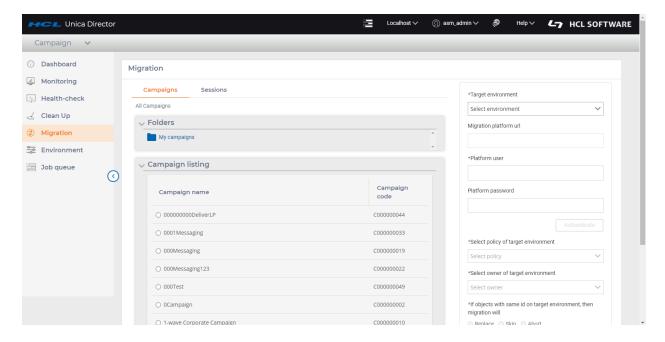
Refresh button: You can Refresh the Job Queue page to get the latest status of user actions performed in Unica Director application.

Note: Job Queue page does not auto-Refresh.

Chapter 10. Migration

Purpose.

To facilitate the migration of a campaign, session or flowchart from one environment to another. Migration option is only available for Campaign.



- 1. In the left navigation pane of the HCL Unica Director, click Migration.
- 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.
- Select the Target environment. The Migration Marketing Platform url is autopopulated.
- 6. Enter the Unica Platform user and Unica 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**.

- 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. HCL Unica Director does not support migration of campaigns / flowcharts when Plan 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 plan 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 Unica Platform, Increase the value for "Token Lifetime" setting from "Affinium|Manager|miscellaneous" of Platform to any value more than 15 sec, for eg: 9999, to make migration work in HCL Unica 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.

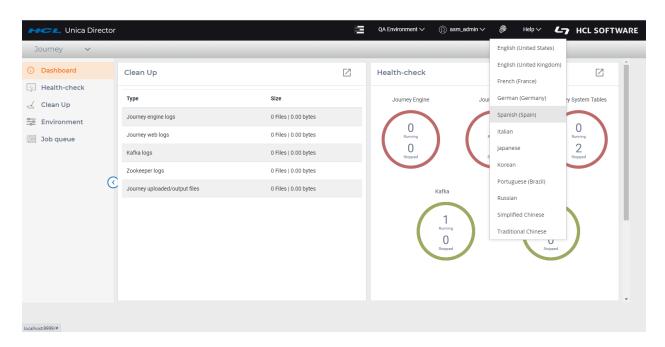
5. Unica Director uses campaign utility unica_acsesutil for migration, in case any error occurred while migrating using Unica director, user can check unica_acsesutil.log for more information at <Campaign_home>/logs/unica_acsesutil.log

Note: Migration of Journey is not supported.

Chapter 11. Localization Support

HCL Unica 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 HCL Unica 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 HCL Unica Director

Under circumstances described below, the flowchart execution status is not communicated to Unica 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 HCL Unica 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 Unica 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"