

# HCL Unica 12.1.2 Supported Environments

Recommended Software Environments and Minimum System Requirements



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## Overview

This document lists the software environments and minimum system requirements recommended for the following HCL Unica products.

- Unica Platform
- Unica Campaign and Unica Optimize
- Unica Interact
- Unica Plan
- Unica Centralized Offer Management
- Unica Director
- Unica Journey
- Unica Deliver
- Unica Collaborate

## Environment Planning

This section provides an overview of both software and hardware pre-requisites and general environment considerations required for deploying the HCL Unica products.

## Product Dependencies

Several products in the HCL Unica suite require the installation of other products as pre-requisites. For additional information, please see the product-specific installation guide.

Installed Product	Required Companion Installation	
If you want to install this product...	...you must also install the products marked with the √ in the same row.	
	Unica Platform	Unica Campaign
Unica Campaign (includes Optimize)	√	
Unica Interact	√	√
Unica Plan	√	
Unica Platform		
Unica Centralized Offer Management	√	√
Unica Journey	√	
Unica Deliver	√	√
Unica Collaborate	√	√

## Installation Setup

- Terminal clients, SSH, or telnet clients used to connect to a UNIX command-line to run the HCL Unica installers or utilities must be set to UTF-8 character encoding. Using any other character encoding may result in information being missing or displayed incorrectly. See the 12.1.2 installation guides for additional details.



## Supported Locales

Locale	Unica Platform <sup>(a)</sup>	Unica Campaign (includes Optimize)	Unica Interact	Unica Plan	Unica Centralized Offer Management	Unica Journey	Unica Deliver	Unica Collaborate	Unica Director <sup>(b)</sup>
English	Y	Y	Y	Y	Y	Y	Y	Y	Y
French (France)	Y	Y	Y	Y	Y	Y	Y	Y	Y
German (Germany)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Japanese	Y	Y	Y	Y	Y	Y	Y	Y	Y
Korean	Y	Y	Y	Y	Y	Y	Y	Y	Y
Portuguese (Brazil)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Spanish (Spain)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chinese (Simplified)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chinese (Traditional)	Y	Y	Y	Y	Y	Y	Y	Y	Y
Italian	Y	Y	Y	Y	Y	Y	Y	Y	Y
Russian	Y	Y	Y	Y	Y	Y	Y	Y	Y

### Notes:

- a) Unica Platform supports only limited localization of product configuration(s)
- b) Unica Director V12.1.0.4 is supported with Unica 12.1.2. No new version for Unica Director is in Unica, version 12.1.2.

## Minimum System Requirements

The minimum system requirements are provided as guidance for hardware sizing for deployment of HCL Unica products in a non-production environment. Production deployments with higher performance requirements or data volumes require thorough sizing to estimate suitable configuration. The minimum system requirements listed in this document for each HCL Unica product are typically for Windows-based systems; comparable hardware configurations are required for supported UNIX-based and LINUX-based systems.

## All HCL Unica Products

Hardware Configuration	Infrastructure Element			
	Browser Client	Web Application Server	Campaign Analytical (listener) Server	System Table Database Server
Processor	2 GHz	2 GHz, 2 CPUs	2 GHz, 2 CPUs	2 GHz, 2 CPUs
RAM	512 MB	2 GB per CPU	2 GB per CPU	2 GB per CPU
Disk Space	N/A	1 GB	100 GB	100 GB

## Supported Environments

This section provides an overview of supported software components for deploying the HCL Unica suite of products.

### Software Support Matrix

Application Server <sup>(a)</sup> (with embedded Web Server)	Operating System <sup>(e)</sup>	System Table Database <sup>(c)</sup>	Campaign User Table Database <sup>(c, f)</sup>
<ul style="list-style-type: none"> <li>WebLogic<sup>(b)</sup> 12c <b>(12.2.1.3)</b></li> <li>WebSphere<sup>(d)</sup> 8.5.5 FP19,8.5.5 <b>FP20</b></li> <li>Tomcat v9.0.30 <sup>(a)</sup>, <b>v9.0.45</b></li> <li>JBOSS 7.1.x<sup>(l)</sup> ,<b>7.2<sup>(w)</sup></b></li> </ul>	<ul style="list-style-type: none"> <li>Windows Server <sup>(h,i)</sup> <b>2016</b>, 2012R2</li> </ul>	<ul style="list-style-type: none"> <li>DB2 <sup>(h)</sup> <b>11.1, 11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b> <sup>(o)</sup></li> <li>SQL Server <sup>(e)</sup> 2014, 2016 SP1, 2017, <b>2019</b></li> <li>MariaDB 10.4.x<sup>(r)</sup>, <b>10.5.9</b></li> <li>HCL OneDB<sup>®</sup> V1.0, <b>V2.0<sup>(t)</sup></b></li> </ul>	<ul style="list-style-type: none"> <li>DB2(h) 11.1, 11.5, DB2 (z/OS) (m) 10.1,11.0</li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, 19(12.2.0.3)(o)</li> <li>SQL Server (e) 2014, 2016 SP1, 2017, 2019</li> <li>Netezza NPS 7.2.x</li> <li>Teradata 15.0, 15.10,16.10(p), 16.20(p)</li> <li>MariaDB 10.4.x(r) , 10.5.9</li> <li>Amazon Redshift</li> <li>dashDB 10.6</li> <li>Apache Hive, Impala-based Hadoop Big Data(g)</li> <li>HCL OneDB<sup>®</sup> V1.0 , V2.0(t)</li> <li>Action-vector-5.1.0(v)</li> <li>PostgreSQL database(y)</li> <li>Google Big query(x)</li> <li>HP Vertica 7.1, 9.0.1(k)</li> </ul>
<ul style="list-style-type: none"> <li>WebLogic<sup>(b)</sup> 12c <b>(12.2.1.3)</b></li> <li>WebSphere<sup>(d)</sup> 8.5.5 FP19,8.5.5 <b>FP20</b></li> <li>Tomcat v9.0.30<sup>(a)</sup>, <b>v9.0.45</b></li> <li>JBOSS 7.1.x<sup>(l)</sup> ,<b>7.2<sup>(w)</sup></b></li> </ul>	<ul style="list-style-type: none"> <li>AIX 7.2 <b>TL4</b>, 7.1 TL5</li> <li>RHEL 7.x<sup>(i)</sup>, <b>8.x</b></li> <li>SUSE <b>12 SP3</b></li> </ul>	<ul style="list-style-type: none"> <li>DB2 <sup>(h)</sup> <b>11.1, 11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b> <sup>(o)</sup></li> <li>MariaDB 10.4.x<sup>(r)</sup>, <b>10.5.9</b></li> <li>HCL OneDB<sup>®</sup> V1.0,<b>V2.0<sup>(t)</sup></b></li> </ul>	<ul style="list-style-type: none"> <li>DB2(h) 11.1, 11.5, D 2 (z/OS) (m) 10.1,11,</li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, 19(12.2.0.3)(o),</li> <li>Netezza NPS 7.2.x</li> <li>Teradata 15.0, 15.10,16.10(p), 16.20(p)</li> <li>MariaDB 10.4.x, 10.5.9</li> <li>Amazon Redshift</li> <li>dashDB(n) 10.6</li> <li>Apache Hive, Impala-based Hadoop Big Data(g)</li> <li>HCL OneDB<sup>®</sup> V1.0, V2.0(t)</li> <li>Action-vector-5.1.0(v)</li> <li>PostgreSQL database(y)</li> <li>Google Big query(x)</li> <li>HP Vertica 7.1, 9.0.1(k)</li> </ul>

*It is recommended to use software versions that appear in bold in the above list. Starting with Unica 12.0, The end-of-service (EOS) date for HCL Unica products is 3 years after the initial release (official EOS dates are announced approximately 1 year prior to EOS). Products in bold have EOS dates that are on or beyond the EOS date of the HCL Unica product version, and thus will be supported throughout the full-service life of this release. If you use a product that does not appear in bold, be advised that its EOS date may be prior to the EOS of this release.*

## Operating System and Databases supported with HCL Unica Journey

Operating System	System Table Database <sup>(c)</sup>	Kafka Server <sup>(s)</sup>	Application Server	Java/JRE version
<ul style="list-style-type: none"> <li>Windows Server <sup>(l)</sup> 2016, <b>2012R2</b></li> </ul>	<ul style="list-style-type: none"> <li>Oracle <b>19(12.2.0.3)</b> <sup>(o)</sup></li> <li>SQL Server <sup>(e)</sup> 2014, 2016 SP1, 2017, <b>2019</b></li> <li>MariaDB 10.4.x<sup>(r)</sup>, <b>10.5.9</b></li> <li>HCL OneDB® V1.0, <b>V2.0</b></li> </ul>	Kafka Server <b>2.8.2, 3.4.0</b>	<ul style="list-style-type: none"> <li>WebSphere 8.5.5 FP19,<b>8.5.5 FP20</b></li> <li>Tomcat v9.0.30 <sup>(a)</sup>, <b>v9.0.45</b></li> <li>JBOSS 7.1.x<sup>(l)</sup>, <b>7.2</b><sup>(w)</sup></li> </ul>	Oracle JDK/JRE 1.8
<ul style="list-style-type: none"> <li>RHEL<sup>(l)</sup> 7.x, <b>8.x</b></li> </ul>	<ul style="list-style-type: none"> <li>Oracle <b>19 (12.2.0.3)</b> <sup>(o)</sup></li> <li>SQL Server <sup>(e)</sup> 2014, 2016 SP1, 2017, <b>2019</b></li> <li>MariaDB 10.4.x<sup>(r)</sup>, <b>10.5.9</b></li> <li>HCL OneDB® V1.0, <b>V2.0</b><sup>(t)</sup></li> </ul>	Kafka Server <b>2.8.2, 3.4.0</b>	<ul style="list-style-type: none"> <li>WebSphere 8.5.5 FP19,<b>8.5.5 FP20</b></li> <li>Tomcat v9.0.30 <sup>(a)</sup>, <b>v9.0.45</b></li> <li>JBOSS 7.1.x<sup>(l)</sup>, <b>7.2</b><sup>(w)</sup></li> </ul>	Oracle JDK/JRE 1.8

*It is recommended to use the latest version of the supported software versions highlighted in bold. Products appear in bold are actively supported with HCL Unica Journey.*

## HCL Unica Link Environment Support Details

HCL Unica Campaign and Journey v12.1.2 supports the following HCL Unica Link versions:

HCL Unica Link components	Installable packages and Version
HCL UNICA Link Framework V12.1.2 Multiplatform Multilingual e-Assembly	
HCL Link v1.1.2 Linux Design Server	Ink_design_server_1.1.2.0_linux.tar.gz
HCL Link v1.1.2 Runtime for Windows	Inkrt_1.1.2.0_win64.exe
HCL Unica JDBC Connector V12.1.2	HCL_Unica_JDBC_Connector_12.1.2.zip
HCL Link Connector DevKit v2.0 (File ID: LNK_Connector_DevKit_v2.0)	Link Connector Devkit V2_0.zip
HCL UNICA MailChimp Connector V12.1.2 Multiplatform Multilingual e-Assembly	
HCL Unica MailChimp Connector V12.1.2	HCL_Unica_MailChimp_Connector_12.1.2.zip
HCL Unica Facebook Connector V12.1.2	HCL_Unica_Facebook_Connector_12.1.2.zip
HCL Unica LinkedIn Connector V12.1.2	HCL_Unica_LinkedIn_Connector_12.1.2.zip
HCL UNICA Mandrill Connector V12.1.2 Multiplatform Multilingual e-Assembly	
HCL Unica Mandrill Connector V12.1.2	HCL_Unica_Mandrill_Connector_12.1.2.zip
HCL UNICA Salesforce Connector V12.1.2 Multiplatform Multilingual e-Assembly	

HCL Unica 12.1.2 Supported Environments

HCL Unica Link components	Installable packages and Version
HCL Unica Salesforce Connector V12.1.2	HCL_Unica_SalesForce_Connector_12.1.2.zip
HCL UNICA Twilio Connector V12.1.2 Multiplatform Multilingual e-Assembly	
HCL Unica Twilio Connector V12.1.2	HCL_Unica_Twilio_Connector_12.1.2.zip
HCL UNICA Google Connector v12.1.2	
HCL Unica Google Connector V12.1.2	HCL_Unica_Google_Connector_12.1.2.zip
HCL_UNICA_Twitter_Connector_V12.1.2 e-Assembly	
HCL Unica Twitter Connector V12.1.2	HCL_Unica_Twitter_Connector_12.1.2.zip

The following table describes all the supported version for Unica Link.

Application Server	Operating System	System Table Database	Kafka Server	Java/JRE version
Apache Tomcat 9.0.14 or later Node.js 10.15.1 or later Redis 5.0.3 or later MongoDB 4.0.5 or later HCL OneDB 1.0.1	Windows 10 Enterprise Windows 10 Pro Windows Server 2016 Windows Server 2019 Linux RedHat 7.3 or later Linux RedHat 8.x or later Ubuntu 18x or later	Not applicable	Kafka Server 2.0.x and later	Open JDK 11.0.8/JRE

Operating System and Databases supported with HCL Unica Director

Operating System <sup>(e)</sup>	System Table Database <sup>(c)</sup>	Active MQ	Java/JRE version
<ul style="list-style-type: none"> <li><b>Windows Server <sup>(h,i)</sup> 2016, 2012R2</b></li> </ul>	<ul style="list-style-type: none"> <li>DB2 <sup>(h)</sup> 11.1, <b>11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b> <sup>(o)</sup></li> <li>SQL Server <sup>(e)</sup> 2014, 2016SP1, <b>2017</b></li> </ul>	Apache Active MQ version 5.15.7	Oracle JDK/JRE 1.8
<ul style="list-style-type: none"> <li><b>AIX 7.2 TL4, 7.1 TL5</b></li> <li><b>RHEL 7.x<sup>(j)</sup>, RHEL 8<sup>(u)</sup></b></li> <li><b>SUSE 12 SP3</b></li> </ul>	<ul style="list-style-type: none"> <li>DB2 <sup>(h)</sup> 11.1, <b>11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b> <sup>(o)</sup></li> </ul>	Apache Active MQ version 5.15.7	Oracle JDK/JRE 1.8 AIX - IBM JDK/JRE 1.8

*It is recommended to use the latest version of the supported software versions highlighted in bold. Products appear in bold are actively supported with HCL Unica Director.*

Notes:

- a. The following are the HCL Unica –JRE/JDK requirements for different application servers. Director 12.1.0.4 is supported with Unica 12.1.2.
  - Oracle WebLogic Application Server is required to be running Oracle/Java JDK 1.8 with update 112 onwards. Other JDKs are not supported (for example, JRockit JDK).

- The support for JRE or JDK 1.8 is available from version 11.1 onwards.
    - Oracle JRE/JDK 1.8.281 version is supported by Unica Campaign from 12.1.1 release.
- b. Please find below considerations for Weblogic deployments.
- Clustering of HCL Unica products is not supported on WebLogic.
  - For Plan deployment in Weblogic patch number 26923558 is required to be applied. For details, go to [https://support.oracle.com/knowledge/Middleware/2331453\\_1.html](https://support.oracle.com/knowledge/Middleware/2331453_1.html)
- c. Support for system and user databases:
- The environment guide does not include supported environments/system requirements for installation of HCL Unica supported databases. Please refer to the vendor documentation for the respective databases.
  - Support for Oracle database includes both Standard and Enterprise editions.
  - DBC or ODBC drivers are neither bundled nor shipped with Unica products and the customers are required to procure and configure it.
  - The following are the supported database drivers:

Database	Supported Driver(s)
MS SQL Server 2014 SP1, 2016 SP1, 2017,2019	<ul style="list-style-type: none"> <li>• Version 6.4 (mssql-jdbc-6.4.0.jre8.jar),</li> <li>• Version 7.0 (mssql-jdbc-7.0.0.jre8.jar)</li> <li>• Version 7.4 (mssql-jdbc-7.4.1.jre8.jar)</li> </ul>
Oracle 12c Release (12.1.0.1,12.1.0.2, 12.2.0.1) Oracle 19c Release (12.2.0.3)	<ul style="list-style-type: none"> <li>• Oracle 12c Driver – 12.x (ojdbc8.jar)</li> <li>• Oracle 19c Driver – 19.x (ojdbc8.jar)</li> </ul>
IBM DB2 11.1.x,11.5	<ul style="list-style-type: none"> <li>• DB2 JDBC type4 driver (db2jcc4.jar)</li> </ul>
MariaDB 10.4.x, 10.5.9	<ul style="list-style-type: none"> <li>• JDBC - MariaDB Connector/J is for Java 8 version 2.5.2</li> <li>• ODBC - MariaDB ODBC Connector 3.1.6 (for RHEL 7.x and Microsoft Windows)</li> <li>• ODBC - MariaDB ODBC Connector 3.1.9 (for SUSE Linux)</li> <li>• ODBC - MariaDB ODBC Connector 3.1.7 (for RHEL 8.x)</li> </ul>
Amazon Redshift	<ul style="list-style-type: none"> <li>• Amazon Redshift ODBC driver (1.4.11.1000 – 64-bit)</li> <li>• Unix ODBC driver manager-2.3.7</li> </ul>
HCL OneDB® V2.0 <sup>(u)</sup>	<ul style="list-style-type: none"> <li>• HCL OneDB JDBC Driver - onedb-jdbc-8.1.0.0-complete.jar</li> <li>• HCL OneDB ODBC Driver - HCL OneDB Client SDK 1.0.0.0</li> </ul>
Actian vector 5.1.0 <sup>(w)</sup>	<ul style="list-style-type: none"> <li>• Linux - actian-vector-client-6.0.0-129-free-linux-ingbuildx86_64.tgz Windows - same version as of linux</li> </ul>
Google BigQuery <sup>(v)</sup>	<ul style="list-style-type: none"> <li>• SIMBA ODBC Driver – Version 2.1.23</li> </ul>

- d. Unica products are certified with WebSphere 8.5.5 FP20 - Base, Express, and Network Deployment (ND) 64-bit editions. For WebSphere - HCL Unica product clustering support is certified with WebSphere Network Deployment (ND) 64-bit edition only. Unica product clustering support is also certified with Tomcat and JBOSS. WAS 8.5.5 FP20 is now supported from 12.1.2 onwards.

#### HCL Unica 12.1.2 Supported Environments

- e. Support for SQL Server database is available only for installations on 64-bit versions of operating system. SQL Server 2012 and 2014 are supported for SP1 and higher. The SQL Server support for Unica Journey is available from version

## 12.1.0.3 and higher.

- f. This column is applicable for the Unica Campaign family of products. Unica Interact do not support Netezza, Teradata, Amazon Redshift, dashDB, HP Vertica, Databricks or Hadoop for customer profile tables. While using Interact, Campaign and Interact DBs must be of same type, for example, if Campaign system tables are in Oracle, all Interact DBs must also be in Oracle.
- g. Support for Unica Campaign uses data sources on Big Data platforms:
- Hive based Hadoop Big Data user data source is supported only on RHEL Operating Systems.
  - Hadoop Big Data instance running on Hive version 0.14 or higher is supported for the following vendors:
    - IBM BigInsights
    - Cloudera CDH
    - MapR
    - Apache HortonWorks
  - Connections to Hive based Hadoop Big Data instances are supported using select type of drivers and the drivers should be procured directly from the vendor. Following are the supported drivers:
    - a. Cloudera Hive ODBC Driver version 2.5.16 for Cloudera CDH
    - b. HortonWorks Hive ODBC Driver for Hadoop (Driver version compatible with Hadoop version)
    - c. Progress DataDirect Connect64(R) for ODBC Release 7.1.5 for other supported Big Data vendors
    - d. Progress DataDirect Connect64(R), ODBC Release 7.1.5 version on AIX Operating System for HortonWorks Big Data based on Hive
    - e. Cloudera Impala ODBC Driver 2.5.41 or higher for Cloudera Big Data based on Impala
  - The listed drivers are neither bundled nor shipped with Unica Campaign and the customer has to purchase/download and configure them.
  - Unica Campaign supports only “TextFile” format with Hive/Impala based Bigdata user data source.
  - Kerberos authentication is supported for Unica Campaign data sources on Hive/Impala based Cloudera Big Data platform and requires Campaign Analytical Server (listener) to be running on RHEL Operating system. Please refer to Unica Campaign installation guide for more details.
- h. Unica Campaign requires a 64-bit driver for DB2 on Windows. IBM DB2 11.1,11.5 is supported for system tables and for Campaign user tables only with BLU turned off.
- i. Windows Server x86-64 is supported for Standard and Datacenter Edition of 2012R2, 2016.
- j. HCL Unica version 12.1.2 supports all versions of RHEL 7.x and RHEL 8.x. HCL Unica does not support RHEL running on IBM Powersystems.
- k. Unica Campaign supports HP Vertica with the following caveats:
- HP Vertica is supported only on RHEL operating system.
  - Users must install the same version of HP Vertica client as the database version.
- l. JBOSS application server versions 7.1.x, 7.2.x are supported with the following caveats:
- JBOSS EAP 7.1.x is supported on Windows and RHEL Operating systems only.  
([https://access.redhat.com/articles/2026253#EAP\\_71](https://access.redhat.com/articles/2026253#EAP_71))
  - Oracle JDK/JRE v1.8 is required for JBOSS application servers running on Windows and RHEL operatingsystems.
- m. IBM DB2 on z/OS is supported only as user data source with the following caveats:
- DB2 10.1 z/OS and 11.0 z/OS with RSU1205 and PUT1205 are supported only with “New Function” mode
  - There is no out-of-the-box approach for Loaders on z/OS. Manually, the following procedure can be followed:



- 
- Set up USS Pipes on z/OS.
  - Write a stored procedure to invoke the DSNUTILU and a script to invoke the stored procedure.
  - Configure the loader to invoke the script.
- When leveraging temp tables, you must set the parameter “DB2NotLoggedInitially” to “FALSE” in the datasource properties for the database.
- n. IBM dashDB for Analytics is now known as IBM DB2 Warehouse on Cloud.
- o. Oracle database connectivity is also supported with ODBC connection, refer to Campaign Install guide for more details. Oracle Database versions 12.2.x and 19c with native client connectivity are supported with following caveats:
- On Oracle database server the following parameter needs to be added in “sqlnet.ora” file located under ORACLE\_HOME/network/admin:  
SQLNET.ALLOWED\_LOGON\_VERSION\_SERVER
  - Consult with your DBA for configuring an appropriate value for this parameter. Please refer to below link for more details: <https://docs.oracle.com/database/121/NETRF/sqlnet.htm#NETRF2016>
  - Oracle 19c is also supported with ODBC connectivity, User would not be required to edit the sqlnet.ora parameters as mentioned above while connecting with ODBC.
- p. Teradata Database versions 16.10 and 16.20 are supported for Unica Campaign user data source with the following caveat:
- For Unica Campaign Analytical Server deployed on Linux or AIX environments, the client and the database version of Teradata needs to be the same.
- q. Tomcat Application Servers 9.0.30, 9.0.45 are supported with the following caveats:
- Oracle JDK/JRE v1.8 on Windows is required for deployments on RHEL and SUSE operating systems.
  - IBM JDK / JRE v1.8 is required for deployments on AIX.
- r. MariaDB support has below considerations:
- MariaDB is not supported as system tables or user tables on AIX operating system.
  - Unica Deliver supports MariaDB from v12.1.0.3 (FP3) onwards.
  - Unica Journey supports MariaDB from version 12.1.0.3 (FP3) onwards.
- s. Unica Journey installer lays down Kafka Server 2.8.2, 3.4.0. Installation of Kafka instance bundled with Unica Journey is now supported on windows operating system. Please refer to tech note [https://support.hcltechsw.com/csm?id=kb\\_article&sysparm\\_article=KB0085551](https://support.hcltechsw.com/csm?id=kb_article&sysparm_article=KB0085551)
- Unica Journey 12.1.2 installer will lay down kafka 2.8.2, 3.4.0.
  - If you are using external kafka please use the supported kafka version mentioned in above table.
  - Unica Campaign , Unica Interact and Unica Deliver can also use this kafka
- t. For OneDB database installation and OneDB Client SDK installation, the following OS versions are supported
- Linux OS version: Kernel: 3.10.0 required.
  - AIX OS version: Operating system version: 7.2 required, OS Version, Patch: 7200-02 required
  - Unica Collaborate not yet support OneDB as system and user database.
  - Unica Journey v12.1.0.3 (FP3) onwards supports OneDB as system database
- u. RHEL8 support is available from 12.1 FP4 onwards.
- v. Unica Campaign supports Actian vector v5.1.0 database as user database from version 12.1.0.4 onwards.
- w. Unica products (including Journey) supports JBOSS 7.2 from 12.1.0.4 (FP4) onwards.

- x. Unica Campaign supports Google BigQuery as user database.
- y. Unica Campaign supports PostgreSQL version – 13.00.0000 as user database only on RHEL operating system.

## Client Web Browser Support

Browser <sup>(a,c)</sup>	Operating System
Internet Explorer 11 (32-bit and 64-bit)	Windows 7 SP1, Windows 8 SP1, Windows 10
Safari <sup>(b)</sup> Version 15.0 (15612.1.29.41.4, 15612)	Mac OS: BigSUR 11.4
Google Chrome for Business edition 96 or higher (32-bit and 64-bit).	Windows 7 SP1, Windows 8 SP1, Windows 10
Microsoft Edge version 96.0.1054.34 (Official build) (64-bit)	Windows 10

## Adobe Acrobat Support

Annotations using the Adobe Acrobat markup feature in Unica Plan are supported only on the following browsers:

Browser <sup>(a)</sup>	Operating System	Adobe Acrobat
Internet Explorer 11 (32-bit and 64-bit)	Windows 7 SP1, Windows 8 SP1, Windows 10	Adobe Acrobat Pro DC (17)
Safari <sup>(b)</sup> Version 14.1.1 (16611.2.7.1.4)	Mac OS: BigSUR 11.4	Adobe Acrobat Pro DC(17)

### Notes:

- a) For an improved user experience, set your screen resolution to 1600 x 900 and set “Size of the text, apps, and other items” under “Display Setting” > “Scale and layout” to 100%. Lower resolutions can result in some information not being properly displayed. If you use a lower resolution, maximize the browser window to see more content.
- b) Safari on iOS is not supported.

## Directory Server Support

Directory Server	Host Operating System
Microsoft Active Directory <sup>(a)</sup> 2012, 2012R2	Windows
Oracle(Sun) ONE Directory Server Enterprise Edition 11gR2	All O/S
IBM Security Directory Server (formerly known as Tivoli Directory Server) 6.4.0.8	All O/S

### Notes:

- a. Windows Integrated Login is available only for HCL Unica products installed on Windows systems through IIS deployment. For details, contact HCL Support.

## Authentication Provider Support

Authentication Provider	Host Operating System
Windows Active Directory Server 2012,2012R2	Windows
CA Single Sign On (formerly known as Siteminder) <sup>(b)</sup> 12.5	All O/S
IBM Security Access Manager (Formerly known as Tivoli Access Manager for eBusiness) <sup>(a) (b)</sup> 9.0.4, 8.0.1.3	All O/S
Federated Single Sign-On based on SAML 2.0 standards <sup>(c)</sup>	All O/S

### Notes:

- a. IBM Security Access Manager (Formerly known as Tivoli Access Manager for eBusiness) v8.0.1.3 is compatible with HCL Unica as authentication provider.
- b. Unica Centralized Offer Management, Interact and Plan work with HTTP methods such as GET, PUT, POST, PATCH, and DELETE. By default, these HTTP methods are not enabled on ISAM and Siteminder. For these Unica products to work with ISAM and Siteminder enable these methods.
- c. Unica Journey does not support Federated Single Sign-On based on SAML 2.0.

## Message Queue Support

For Interact Triggered Messages and Activity orchestrator, Apache Kafka 2.2.2 or later is supported.

If Apache Kafka is deployed in a cluster, then Apache ZooKeeper 3.5.5 or higher is supported.

## Kafka Support for Unica Content Integration

Optionally, in addition to in-memory mode, the Autosync feature for Content Integration framework can work with Kafka version 2.13-2.8.1.

## Reporting Server Support

Product	Reporting Tool	Supported System tables
Unica Campaign, Unica Interact, Unica Plan, Unica Deliver	IBM Cognos Analytics 11.0.9 <sup>(a)</sup>	<ul style="list-style-type: none"> <li>DB2 11.1, <b>11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b></li> <li>SQL Server 2014, 2016 SP1, 2017, <b>2019</b></li> </ul>
Unica Campaign <sup>(b,c)</sup> , Unica Interact <sup>(b,d)</sup> , Unica Deliver <sup>(b,c)</sup> , Unica Centralized Offer Management <sup>(b,c)</sup>	Insight 4.8.0	<ul style="list-style-type: none"> <li>DB2 11.1, 11.5</li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, 19(12.2.0.3)</li> <li>SQL Server 2014, 2016 SP1, 2017, 2019</li> <li>MariaDB 10.4.x, 10.5.9</li> <li>HCL OneDB® V1.0, <b>V2.0</b></li> </ul>
Unica Plan	Insight 4.8.0	<ul style="list-style-type: none"> <li>DB2 11.1, <b>11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b></li> <li>SQL Server 2014, 2016 SP1, 2017, <b>2019</b></li> <li>MariaDB <b>10.4.x</b><sup>(b)</sup>, 10.5.9</li> </ul>
Unica Collaborate	Insight 4.8.0	<ul style="list-style-type: none"> <li>DB2 11.1, <b>11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b></li> <li>SQL Server 2014, 2016 SP1, 2017, <b>2019</b></li> </ul>
Unica Campaign <sup>(d)</sup> Unica Deliver <sup>(d)</sup>	Open Insights	<ul style="list-style-type: none"> <li>DB2 11.1, <b>11.5</b></li> <li>Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, <b>19(12.2.0.3)</b></li> <li>SQL Server 2014, 2016 SP1, 2017, <b>2019</b></li> </ul>

### Notes:

- a. IBM Cognos Analytics 11.0.9 is supported with the following caveats:
  - IBM Cognos Analytics 11.0.9 server requires 32-bit Oracle client libraries to connect to Oracle database server (32- or 64-bit).
  - IBM Cognos Analytics 11.0.9 server requires 32-bit DB2 client libraries to connect to DB2 database server (32- or 64-bit).
  - IBM Cognos Analytics 11.0.9 server requires 32-bit SQL Server client libraries to connect to SQL Server database server (32- or 64-bit).
  - A separate reporting server is required and the minimum system requirements can be found in the IBM Cognos Analytics 11.0.9 Installation and Configuration Guide. IBM Cognos Analytics also requires a web server. For full compatibility information for IBM Cognos Analytics 11.0.9, see <http://www-01.ibm.com/support/docview.wss?uid=swg27047186>
- b. Unica Insights reports are supported with MariaDB for Unica Campaign, Unica Plan, Unica Deliver, Unica Interact, and Unica COM.
- c. Multilingual Unica Insights reports are supported for Unica Campaign and Unica Deliver.
- d. From Unica 12.1.2 release, Google Looker On premise version 21.4.22 is supported for Campaign and Deliver Open Insights Offering. Please note, Unica does not support Google Looker Cloud version. Unica supports Oracle, IBM DB2 and SQLServer databases Open data model for Campaign and Deliver products.

## Virtualization Software Support

With every HCL Unica release, HCL Unica products are certified for a specific set of operating systems as listed in this guide. HCL Unica also recognizes the growing presence of hardware virtual machine software and OS-level virtualization software (for example, VMWare, Microsoft Virtual Server, Solaris Containers) in customer environments. Following sections, outline our support policy on the same.

### Support of Virtualization Environments

HCL supports customers who run its products on any of the listed operating systems, irrespective of whether they are running a virtual machine in their environment. HCL supports any product-specific issues that occur while running within a virtual machine; however, HCL does not rigorously test our products inside of any virtual machine. As a result, virtual machines are supported as a compatible environment.

Virtualization software vendors support a set of certified operating systems and hardware. The customer and the virtual machine vendors are responsible for any interactions and/or issues that arise at the hardware or operating system layer as a result of their use of the virtualization software.

### Performance

The use of a virtual machine adds software overhead that may affect performance and/or scalability. Any statements on expected product performance on a hardware platform cannot be interpreted to apply to a virtual machine running on the same hardware platform.

### Troubleshooting Issues

HCL Technical Support is unable to accept virtual images from customers as troubleshooting tools due to licensing concerns with respect to third-party software products, which might be included in those images.

Should HCL customers who use its products inside a virtual machine experience issues, HCL customers will not be required to recreate and troubleshoot every issue in a non-virtualization environment. However, HCL does reserve the right to request our customers to diagnose certain issues in a supported operating system environment without the virtual image. HCL will make this request only when there is reason to believe that the virtual environment is a contributing factor to the issue.

## Supported Environments Revisions

This section provides an overview of changes in the supported software for this version of HCL Unica products.

### Newly Supported Software Versions

HCL Unica version 12.1.2 has added support for the following new versions of third-party software.

Supporting Software Entity	Supporting Software Version(s)
Application Server	WebSphere 8.5.5 <b>FP20</b>
Database and Drivers	One <b>DB v2.0</b>