HCL Unica V12.0 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 all of the following HCL Unica products, formerly known as "IBM Marketing Software" in previous releases:

- Unica Campaign (Includes Unica Optimize formerly known as Contact Optimization)
- Unica Interact
- Unica Plan (Formerly known as Marketing Operations)
- Unica Platform
- Unica Centralized Offer Management
- Unica Director

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	√	√

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. Please see the 12.0 installation guides for additional details.

Supporting Infrastructure Bundles

HCL Unica bundles the following supporting infrastructure with the purchase of select products:

- IBM WebSphere Application Server 8.5.5 (Base edition) is bundled with the following products:
    - Unica Campaign and products that require Unica Campaign as a pre-requisite
    - Unica Plan

- IBM Cognos Analytics 11.0.9 is bundled with the following products:
    - Unica Campaign
    - Unica Plan

- IBM DB2 Workgroup Edition 11.1 is bundled with the following products for deployment of system tables as an option:
    - Unica Campaign and products that require Unica Campaign as a pre-requisite

- o Unica Plan

- BIRT 4.6.0 is bundled with the following products:

  - o Unica Campaign

  - o Unica Plan

  - o Unica Interact

All other third-party software and drivers are not provided with HCL Unica products and must be purchased and installed separately.

Supported Locales

Locale	Unica Platform (a)	Unica Campaign (includes Optimize)	Unica Interact	Unica Plan	Unica Centralized Offer Management
English	Y	Y	Y	Y	Y
French (France)	Y	Y	Y	Y	Y
German (Germany)	Y	Y	Y	Y	N
Japanese	Y	Y	Y	Y	N
Korean	Y	Y	Y	Y	N
Portuguese (Brazil)	Y	Y	Y	Y	N
Spanish (Spain)	Y	Y	Y	Y	N
Chinese (Simplified)	Y	Y	Y	Y	N
Chinese (Traditional)	Y	Y	Y	Y	N
Italian	Y	Y	Y	Y	N
Russian	Y	Y	Y	Y	N

Notes:

a) Unica Platform supports only limited localization of product configuration(s)

b) Unica Centralized Offer Management support for other locales will be available in subsequent fix pack(s).

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 [a] (with embedded Web Server)	Operating System [e]	System Table Database [c]	Campaign User Table Database [c, f]
• WebLogic[b] 12c **(12.2.1.3)** • WebSphere[d] 8.5.5 **FP16** • Tomcat v**9.0.30** [r] • JBOSS **7.1.x**[l]	• Windows Server [h,i] **2016**, 2012R2	• DB2 [h] 11.1, **11.5** • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** [p] • SQL Server [e] 2014, 2016 SP1, **2017** • **MariaDB 10.4.x**[s]	• DB2[h] 11.1, **11.5,** DB2 (z/OS) [m] 10.1,11.0 • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** [p] • SQL Server [e] 2014, 2016 SP1, **2017** • Netezza NPS **7.2.x** • Teradata 15.0, 15.10,16.10[q], **16.20**[q] • **MariaDB 10.4.x**[s] • Amazon Redshift[n] • dashDB[o] **10.6** • Apache Hive, **Impala** based Hadoop Big Data[g]
• WebLogic[b] 12c (**12.2.1.3**) • WebSphere[d] 8.5.5 **FP16** • Tomcat v**9.0.30**[r] • JBOSS 7.1.x[l]	• AIX 7.2 **TL4**, 7.1 TL5 • RHEL **7.x**[j] • SUSE **12 SP3**	• DB2 [h] 11.1, **11.5,** • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** [p] • **MariaDB 10.4.x**	• DB2[h] 11.1, **11.5,** DB2 (z/OS) [m] 10.1,11, • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)**[p] • Netezza NPS **7.2.x** • Teradata 15.0, 15.10,16.10[q], **16.20**[q] • **MariaDB 10.4.x** • Amazon Redshift[n] • dashDB[o] **10.6** • Apache Hive, **Impala** based Hadoop Big Data[g] • HP Vertica 7.1,**9.0.1**[k]

*When possible, 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 Director:

Operating System [(e)]	System Table Database [(c)]	Active MQ	Java/JRE version
• **Windows Server** [(h,i)] 2016, **2012R2**	• DB2 [(h)] 11.1, **11.5** • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** [(p)] • SQL Server [(e)] 2014, 2016 SP1, **2017**	Apache Active MQ version 5.15.7	Oracle JDK/JRE 1.8
• **AIX 7.2** TL4, **7.1 TL5** • **RHEL** 7.x[(j)] • **SUSE** 12 SP3	• DB2 [(h)] 11.1, **11.5** • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** [(p)]	Apache Active MQ version 5.15.7	Oracle JDK/JRE 1.8 AIX - IBM JDK/JRE 1.8

When possible, recommendation is 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. Following are the HCL Unica –JRE/JDK requirements for different application servers:

   i. Oracle WebLogic Application Server is required to be running Oracle/Java JDK 1.8 with update 112. Other JDKs are not supported (e.g., JRockit JDK).

   ii. JRE/JDK 1.8 is supported from the 11.1 release of HCL Unica.

b. Clustering of HCL Unica products is not supported on WebLogic.

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.

   • JDBC/ODBC drivers are neither bundled nor shipped with Unica products and the customer is required to procure and configure it.

   • Following are the supported database drivers:

Database	Supported Driver(s)
MS SQL Server 2014 SP1, 2016 SP1, 2017	• Version 6.4 (mssql-jdbc-6.4.0.jre8.jar), • Version 7.0 (mssql-jdbc-7.0.0.jre8.jar)
Oracle 12c Release (12.1.0.1,12.1.0.2, 12.2.0.1) Oracle 19c Release (12.2.0.3)	• Oracle 12c Driver – 12.x (ojdbc8.jar) • Oracle 19c Driver – 19.x (ojdbc8.jar)
IBM DB2 11.1.x,11.5	• DB2 JDBC type4 driver (db2jcc4.jar)
MariaDB 10.4.x	• JDBC - MariaDB Connector/J is for Java 8 version 2.5.2 • ODBC - MariaDB ODBC Connector 3.1.0
Amazon Redshift	• Amazon Redshift ODBC driver (1.4.3.1000-1 – 64-bit) • Unix ODBC driver manager-2.3.7

d. HCL Unica products are certified with WebSphere 8.5.5 FP16 - 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. HCL Unica product clustering support is also certified with Tomcat and JBOSS.

e. Support for SQL Server database is only for installations on 64-bit versions of operating system. SQL Server 2012 and 2014 are supported for Service Pack 1 and higher.

f. This column is applicable for the Unica Campaign family of products. Unica Interact does not support Netezza, Teradata, Amazon Redshift, dashDB, HP Vertica, Databricks or Hadoop for customer profile tables. When using the Unica Interact product, Campaign and Interact databases must be of the same type e.g., If Campaign system tables are in Oracle, all Interact databases must also be in Oracle.

g. Support for Unica Campaign user 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:
    i. IBM BigInsights
    ii. Cloudera CDH
    iii. MapR
    iv. 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 12.0 supports all versions of RHEL 7.x. HCL Unica does not support RHEL running on IBM Power systems.

k. Unica Campaign supports HP Vertica with the following caveats:

- HP Vertica is supported only on RHEL operating system.

- User should install the same version of HP Vertica client as the database version.

l. JBOSS application server version 7.1.0 is 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)
    - Oracle JDK/JRE v1.8 is required for JBOSS application servers running on Windows and RHEL operating systems.

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:
        i.   Set up USS Pipes on z/OS.
        ii. Write a stored procedure to invoke the DSNUTILU and a script to invoke the stored procedure.
        iii. 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. Unica Campaign does not provide built-in database loader functionality for the Amazon Redshift user database.

o. IBM dashDB for Analytics is now known as IBM DB2 Warehouse on Cloud.

p. Oracle Database versions 12.2.x and 19c 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

q. 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.

r. Tomcat Application Server 9.0.30 is 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.

s. MariaDB is not supported as system tables or user tables on AIX operating system.

Client Web Browser Support

Browser[a,c]	Operating System
Internet Explorer 11 (32-bit and 64-bit)	Windows 7 SP1, Windows 8 SP1, Windows 10
Safari[b] 11.0.3 or above	Mac OS Sierra 10.13.3
Google Chrome for Business edition 79 or higher (32-bit and 64-bit).	Windows 7 SP1, Windows 8 SP1, Windows 10

Adobe Acrobat Support

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

Browser[a]	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[b] 11.0.3 or above	Mac OS Sierra 10.13.3	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.

c) Chrome is supported for Unica Platform, Unica Campaign, Unica Optimize, Unica Interact and Unica Plan.

   HCL can certify support only for the officially released versions of web browsers from vendors. Under such circumstances, there may be a latency between the time a web browser is released and when HCL can certify support for it. HCL will strive its best to certify the officially released browser version at the earliest, through the next available service release cycle, typically delivered in a cumulative fix, fix pack or refresh pack of current releases. In instances where the certification may entail more than one fix and/or significant code updates, official certification will be deferred to the next major/minor release of Unica.

Directory Server Support

Directory Server	Host Operating System
Microsoft Active Directory[a] 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, refer to this article:

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/W3a9d2a3c495a_47b6_97a9_e2b8 f68b2e88/page/NTLMv2%20authentication%20with%20IBM%20Unica%20Marketing%20Platform

Authentication Provider Support

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

Message Queue Support

For Interact Triggered Messages and Activity orchestrator, Apache Kafka 2.2.1 or later is supported.

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

Reporting Server Support

Product	Reporting Tool	Supported System tables
Unica Campaign, Unica Interact, Unica Plan, Unica Centralized Offers	IBM Cognos Analytics 11.0.9[a]	• DB2 11.1, **11.5** • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** • SQL Server 2014, 2016 SP1, **2017**
Unica Campaign, Unica Interact, Unica Plan, Unica Centralized Offer Management	BIRT 4.8.0[b]	• DB2 11.1, **11.5** • Oracle 12.1.0.1, 12.1.0.2, 12.2.0.1, **19(12.2.0.3)** • SQL Server 2014, 2016 SP1, **2017**

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. BIRT reporting is not supported for Unica system tables on MariaDB databases.

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 12.0 has added support for the following new versions of third-party software:

Supporting Software Entity	Supporting Software Version(s)
Operating System	• AIX 7.2 TL4, 7.1 TL5
Application Server	• Tomcat 9.0.30 • WebSphere 8.5.5 FP16
Database and Drivers	• DB2 11.5 • Oracle 19 (12.2.0.3) • MariaDB 10.4.x
Campaign User Database and Drivers	• DB2 11.5 • Oracle 19 (12.2.0.3) • MariaDB 10.4.x

Discontinued Support Software Versions

HCL Unica version 12.0 has discontinued support for the following versions of third-party software:

Supporting Software Entity	Supporting Software Version(s)
Operating System	• AIX 7.1 TL4, TL3
Database	• System and user tables - DB2 10.1.x , 10.5.x • System and user tables- Oracle 11gR2 (11.2.0.4) • System and user tables – SQL Server 2012 • User tables – Netezza 6.0, 7.0,7.1 • User tables -Teradata 14.10
Amazon Redshift	User database driver connection using PostgreSQL ODBC driver
Cache Management Support with Interact	WebSphere eXtremeScale