## **IBM TRIRIGA Application Platform 3.7.0 Compatibility Matrix**

#### **Important**

This IBM® TRIRIGA® Application Platform 3.7.0 Compatibility Matrix was posted on **February 24, 2021** and may have been updated. **The only valid version of this document is currently posted on the <u>Compatibility Matrix for IBM TRIRIGA Products</u> page on IBM Support. Before using the information provided in this document, make sure that you have the most current version. You can use <u>My Notifications</u> on IBM Support to subscribe to "IBM TRIRIGA Application Platform" and receive updates when the Support page is updated.** 

The IBM TRIRIGA Application Platform Compatibility Matrix provides a list of application servers, database servers, web servers, third-party servers, third-party components and operating systems (collectively "Environments") with which the IBM TRIRIGA Application Platform is currently certified as of the date hereof.

New implementations are advised to install the most current versions of the supported third-party software. If you are on an IBM TRIRIGA Application Platform version where a required third-party product is not currently supported, you will need to upgrade to a more current IBM TRIRIGA Application Platform release in order to be in compliance with the supported Environments.

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Evolving computer software practices are leading to more agile responsive software management. Continuous delivery of software updates, such as the maintenance with Evergreen browsers such as Chrome and Firefox, may impact existing functionality. In such an event, IBM will review the changes, and fix of these situations may require platform and/or application fix packs to restore functionality.

To promote using current platform releases, adopting a continuous-delivery model, and to easily show customers and IBM TRIRIGA Support that a platform install may be due for an update, the Administrator Console's System Status now displays a warning if the platform build is over six months old. It is very important to keep up to date with platform releases and fix packs for security, stability, performance, and overall improvements.

To change the time period from six months, you can add the following property to the **TRIRIGAWEB.properties** file: **BUILD\_DATE\_WARNING=XXX**, where **XXX** is the number of days before the Administrator Console starts to display the warning message. Be aware that there is a risk when you remain on an un-patched platform version as bug fixes and vulnerability fixes are delivered with every fix pack.

See **IBM Support** for a complete list of supported versions of the IBM TRIRIGA Application Platform and IBM TRIRIGA Applications.

#### **IBM TRIRIGA Application Version**

Name	<b>Supported Version</b>	Notes
IBM TRIRIGA Applications	10.7.0, 10.6.1, 10.6.0, 10.5.3, 10.5.2, 10.5.1, 10.5.0	l Arabic Brazilian Portuguece Britich English (Zech Danish Dutch Einnich Erench – I

## **Database Compatibility**

See the **Best Practices for System Performance** for sizing and other recommendations.

Earlier versions may be compatible, but IBM TRIRIGA may require a database upgrade to be supported in the event the issue only occurs on earlier versions.

IBM TRIRIGA will support future versions of the vendor's database if the vendor does not remove, or explicitly or inadvertently disable, functionality that IBM TRIRIGA products rely on. Although future versions are supported, any issue that is introduced as a result of a database upgrade might require an IBM TRIRIGA Application Platform fix pack or upgrade to be fully supported.

<b>Database Options</b>	<b>Supported Version</b>	Notes
IBM DB2 Standard Edition for Linux, UNIX, and Windows	11.1.4	DB2 is only supported when DB2 is run on Linux or Windows Server 2019, 2016. Also supported on Enterprise Server Edition.
Oracle (Enterprise & Standard)	19.3.0	Oracle is only supported when run on Red Hat Enterprise Linux, AIX, or Windows Server 2019, 2016.
Microsoft SQL Server	2019, 2017	Microsoft SQL Server requires JDBCDriver JTDS 1.3.1 and is only supported on Windows 2019, 2016.

## **Application Server Compatibility**

The IBM TRIRIGA Application Platform installer requires a 64-bit Java 8 Virtual Machine in order to launch. In addition, a 64-bit Java 8 JDK that is supported by the Application Server vendor may be required as well. Detailed Java requirements are in the following table.

See the **Best Practices for System Performance** for sizing and other recommendations.

Application Server Options	Supported Version	Notes
IBM WebSphere Application Server Liberty Profile	20.0.0.2	IBM SDK Java 1.8_64 or Oracle Java SE 8 Update 141 or higher is required. Future Java updates are supported but might require a platform fix pack upgrade to be fully supported. The IBM TRIRIGA Application Platform is bundled with IBM WebSphere Application Server Liberty Profile version 20.0.0.2. Future fix packs for this version are also supported.
IBM WebSphere Application Server, IBM WebSphere Application Server Network Deployment	9.0.0.11	IBM WebSphere SDK Java Technology Edition 1.8_64 or higher is required.  Future fix packs are also supported. Future Java updates are supported but might require a platform fix pack upgrade to be fully supported. Important details about Network Deployment installation are <a href="here">here</a> .
Application Server Operating Systems	AIX 7.2 TL4 Linux Kernel 3.x to 5.x Windows Server 2019	IBM TRIRIGA Application Platform is compatible with the operating systems listed to the left and provides installers for each. Only 64-bit operating systems are supported. Future fix packs for these versions are also supported.

# **Desktop Client Compatibility**

Third-Party Components	Supported Version	Notes
Microsoft Excel Formats	.xls, .xlsx, .xlsm	Excel sheets that are saved in Microsoft Excel formatting are required if you use IBM TRIRIGA Offline forms. See the IBM TRIRIGA Offlining documentation for information on supported formulas.
Microsoft Project	2016	Used to import tasks into and export tasks from a Gantt section. TRIRIGA supports importing .mpp, .mpx, and .xml files. TRIRIGA supports exporting .mpx and .xml files.  MPX, Microsoft Project File Exchange Format, is a file format developed by Microsoft for sharing project data with other project management applications. Microsoft discontinued the ability to save in the MPX format with Microsoft Project 2000, but the ability to read .mpx files was supported through Microsoft Project 2013. The MPX format is not supported in Microsoft Project 2016.  MPP is Microsoft's proprietary format and is not supported for export by TRIRIGA.  XML, Extensible Markup Language, is Microsoft's only supported method for interchanging project data with other project management applications.
Microsoft Windows	10	Minimum hardware requirements: 2 GHz CPU, 4 GB RAM, 100 Mbps NIC, 1280x1024 resolution.
macOS	10.15, 10.14	Minimum hardware requirements: 2 GHz CPU, 4 GB RAM, 100 Mbps NIC, 1280x1024 resolution. CAD Integrator and the Workplace Reservation Manager add-in (VSTO) for Microsoft Outlook are not supported on macOS.
BIRT Report Designer	4.6	Required for BIRT Report development. Requires Java 8.
Browsers		For browser support requirements, see the <b>IBM TRIRIGA UX Framework &amp; Perceptive Apps</b> section below.

#### **IBM TRIRIGA UX Framework & Perceptive Apps**

IBM TRIRIGA will support future versions of a vendor's operating system or browser if the vendor does not remove, or explicitly or inadvertently disable, functionality that IBM TRIRIGA products rely on. Although future versions are supported, any issue that is introduced as a result of an operating system or browser upgrade might require an IBM TRIRIGA Application Platform fix pack or upgrade to be fully supported.

Operating	Minimum	
		Mada
Systems /	Supported	Notes
Browsers	Version	
Apple iOS		Applications that are built on the IBM TRIRIGA UX Framework, including IBM TRIRIGA Perceptive
(Safari,	13.4	Applications, support the minimum versions of the operating systems shown. For desktop
Chrome)		support requirements, see the <b>Desktop Client Compatibility</b> section above.
Google		IBM TRIRIGA supports the UX Framework components that TRIRIGA delivers and documents on
Android	10, 9	the UX component documentation page. Code added around components supplied by TRIRIGA,
(Chrome)		such as HTML, JavaScript, or third-party code, is the responsibility of the developer.
macOS (Safari,	10.15 Catalina	For information about offline support, see <u>UX Offline Mode</u> .
Chrome)	10.15 Catalina	IBM TRIRIGA UX components are available in Polymer version 3.1.0 and Polymer version 1.6.1.
Microsoft		The as-delivered IBM TRIRIGA UX Applications are rendered with Polymer version 3.1.0 and
Windows		Polymer version 1.6.1. For Polymer version 3.1.0, elements and components from the Polymer
tablet (Edge,	10	Catalog, such as iron and paper, are the most current versions as of <b>February 20, 2019</b> . For
Chrome)		Polymer version 1.6.1, elements and components from the Polymer Catalog, such as iron, paper,
		gold, and platinum, are the most current versions as of <b>October 20, 2016</b> .
Microsoft		Applications that are written on the IBM TRIRIGA UX Framework, including Perceptive
Windows		Applications, might need to be updated to support the version of Polymer delivered with the
laptop/desktop	10	IBM TRIRIGA Application Platform.
(Edge, Chrome,		TOW TRINGA Application Platform.
Firefox)		For information about Microsoft's support for Windows 10, see Windows lifecycle fact sheet.
Microsoft Edge	83	
Mozilla Firefox	74, ESR 68	These versions are the minimum versions that are supported for each browser.
Apple Safari	13	IBM TRIRIGA Perceptive Applications require the support of modern web specifications to
		function optimally. Only Evergreen browsers (Chrome, Firefox, Edge, and Safari) are supported
Google	83	when using Perceptive Applications or creating custom views in the IBM TRIRIGA UX Framework.
Chrome		
	<u> </u>	

#### IBM TRIRIGA Advanced Room Search

IBM TRIRIGA Advanced Room Search is a new add-in for Microsoft Outlook that is recommended to replace the IBM TRIRIGA Workplace Reservation Manager add-in (VSTO) for Microsoft Outlook. The Advanced Room Search add-in uses Microsoft's newer HTML5 add-in architecture and is delivered using the TRIRIGA UX Framework. For more information, see UX Room Search add-in for Outlook.

IBM TRIRIGA Advanced Room Search supports user authentication via standard TRIRIGA user name and password and Exchange identity token technology for Single Sign-On (SSO) solutions. It also supports Service Provider (SP) initiated SAML, OAuth, or OpenID Connect (OIDC) SSO. It does not support Identity Provider (IdP) initiated SSO. For more information, see Requirements for and limitations of SSO requests in the TRIRIGA Application Platform.

Supported Outlook Version	Supported Version	Notes
Windows: Outlook 2019 1902 Mac: Outlook 2019 16.28 Outlook for Microsoft 365 (continuous delivery)	10.7.0	IBM TRIRIGA Advanced Room Search functions interface with Microsoft libraries and API's which may be subject to continuous revisions by Microsoft. As a result, Advanced Room Search features may be vulnerable to unforeseen impact introduced by such changes.  There is a limitation where the Microsoft JavaScript Library does not support all functions (including those required by Advanced Room Search) when using Outlook for Microsoft 365 with Microsoft Exchange servers on premise. Microsoft has not yet published a roadmap that indicates when the library will be fully supported on Outlook for Microsoft 365 on premise.  Effective April 21, 2020, Office 365 is now renamed Microsoft 365.

#### **IBM TRIRIGA Workplace Reservation Manager for Outlook**

IBM TRIRIGA Workplace Reservation Manager add-in (VSTO) for Microsoft Outlook supports native, Basic, and NTLM technologies for providing user authentication. It does not support such technologies as SAML, OAuth, or other Single Sign-On (SSO) solutions. For more information, see <a href="Requirements for and limitations of SSO requests in the TRIRIGA">Requirements for and limitations of SSO requests in the TRIRIGA</a> <a href="Application Platform">Application Platform</a>.

Supported Outlook Version	Supported IBM Outlook Plugin Version	Notes
Outlook 2019 and 2016 Office application running on Microsoft Windows (MSI installation) Microsoft 365 Pro Plus Outlook v1808 or later running on Microsoft Windows (Microsoft Continuous delivery model)	1.3.7	IBM TRIRIGA Workplace Reservation Manager add-in (VSTO) for Microsoft Outlook requires the following prerequisite software: (1) Microsoft .NET Framework 4.5 (x86 or x64), (2) Microsoft Visual Studio 2010 Tools for Office Runtime version 10.0.40820 or later (x86 or x64).  Only supported on Windows 10. Internet Explorer 11 is required on the client machine for the Outlook add-in to display the Reserve tab. The prerequisite software can be downloaded from the Microsoft Download Center website.  For more information, see Integrating IBM TRIRIGA with Microsoft Exchange.  Microsoft Exchange support: IBM TRIRIGA supports connections to Microsoft Exchange for synchronizing meeting room requests and free/busy information. Supported versions of Exchange include Microsoft Exchange Online and Microsoft Exchange Server 2016. Exchange Online is part of the Microsoft 365 suite of products.  Future Outlook channel updates are supported but might require a plugin upgrade to be fully supported.  Effective April 21, 2020, Office 365 is now renamed Microsoft 365.

#### IBM TRIRIGA CAD Integrator / Publisher

IBM TRIRIGA CAD Integrator/Publisher supports native, Basic, and NTLM technologies for providing user authentication. It does not support such technologies as SAML, OAuth, or other Single Sign-On (SSO) solutions. For more information, see Requirements for and limitations of SSO requests in the TRIRIGA Application Platform.

Product	Supported Version	Notes
IBM TRIRIGA CAD Integrator / Publisher	12.7.0	Prior to installing IBM TRIRIGA CAD Integrator/Publisher, install Microsoft Visual C++ 2010 Redistributable Package (x86) on each workstation.  Installation requires full administrator access. A 64-bit operating system is required (such as Microsoft Windows 10, 64-bit). IBM SDK Java 1.8_64 or Oracle Java SE 8 Update 141 or higher is required. Future Oracle Java fix packs, but not necessarily updates, are supported but might require a fix pack.
Autodesk AutoCAD, Autodesk AutoCAD Architecture	2021, 2020, 2019, 2018	8 GB RAM recommended. AutoCAD requires a 64-bit JRE.
Bentley MicroStation	Connect Edition Update 15, 14, 13	8 GB RAM recommended. For large drawings, 16 GB RAM recommended.  All operating systems require a 64-bit JRE, and Microsoft .Net 4.6.2.  Future IBM TRIRIGA CAD Integrator/Publisher versions will support MicroStation Connect Edition.

#### **IBM TRIRIGA Connector for BIM**

IBM TRIRIGA Connector for BIM supports native, Basic, and NTLM technologies for providing user authentication. It also supports such technologies as SAML, OAuth, or other Single Sign-On (SSO) solutions. For more information, see Requirements for and limitations of SSO requests in the TRIRIGA Application Platform.

Product	Supported Version	Notes
	3.7.0.1, 3.7.0, 3.6.0, 2.6.0.3	IBM TRIRIGA Connector for BIM requires Java 8 64-bit JRE for installation.
Autodesk Revit	2021, 2020, 2019, 2018	Supported by IBM TRIRIGA Connector for BIM 3.7.0.1.
	2020, 2019, 2018	Supported by IBM TRIRIGA Connector for BIM 3.7.0.

# **IBM TRIRIGA Application Platform Connectors**

IBM TRIRIGA supports connections to these third-party systems. For support of the third party itself, contact the vendor directly.

Product	Supported Version	Notes
Esri ArcGIS Server	10.6	
Esri ArcGIS API for JavaScript	4.15	
ENERGY STAR Portfolio Manager	14	The ENERGY STAR Portfolio Manager Web Services API is used for the IBM TRIRIGA Connector for Energy Star Benchmarking. ENERGY STAR Portfolio Manager Web Services release notes can be found at the following link: Release Notes
IBM TRIRIGA Custom Class Loader	3.7.0	Integrations written for IBM TRIRIGA Custom Class Loader must be compatible with the IBM or Oracle Java 8 version that is specifically running on your application server.
IBM TRIRIGA Connector for Business Applications	3.7.0	Integrations built for IBM TRIRIGA Connector for Business Applications must be compatible with Apache CXF 3.1.16 web service framework. More information about Apache CXF can be found at the following link: <a href="Mapache CXF">Apache CXF</a> IBM TRIRIGA Connector for Business Applications documentation can found at the following link: <a href="Integrating data with the TRIRIGA Connector for Business Applications">Integrating data with the TRIRIGA Connector for Business Applications</a>

#### **IBM TRIRIGA CMIS**

Product	Supported Version	Notes
CMIS	1.1	IBM TRIRIGA can be configured to store documents in Enterprise Content Management (ECM) systems that support the Content Management Interoperability Services (CMIS) ECM gateway Version 1.1 of the CMIS standard, as established by OASIS. These gateways are specific to the vendor of your particular ECM and should be installed accordingly if one does not already exist in your organization.

#### Web Server & Third-Party Server Compatibility

IBM TRIRIGA Application Platform supports the connection to these third-party systems. For support of the third party itself, contact the vendor directly.

IBM has tested a number of configurations with the web servers listed and has confirmed that they are compatible with TRIRIGA as configured in our lab.

However, configuration of web servers or third-party products is the responsibility of client IT teams. Technologies such as secure protocols (SSL), Single Sign-On (SSO), firewalls, certificates and network configurations can have downstream impact on the TRIRIGA environment when misconfigured. IBM cannot support the configuration of these other technologies and might recommend the engagement of a services team.

Category	Product or Component	Notes
Virtualization Technologies	VMware ESXi Server, IBM SoftLayer, KVM, AWS EC2	The virtualization technologies listed are tested. IBM TRIRIGA might be compatible with other virtualization technologies that are compatible with the supported IBM TRIRIGA Application Platform operating systems. Issues that are found only occurring on virtualization technologies would require support tickets opened with the virtualization support vendor.  Database virtualization is not recommended. If virtualization of databases is unavoidable, dedicated fast storage for the database data files must still be used, with hard performance data supplied from the virtualization technology that is used to rule out that layer.
Third-Party Components	OpenText Brava! for IBM Solutions	Supported Version: 16.4 Enterprise
	Mail (Incoming and Outgoing)	SMTP is used for outbound email. The incoming mail agent can be configured for use with IMAP, IMAPS, POP3, POP3S.
	SAP Crystal Server	Supported Version: 2016. Only supported when run on Windows and Linux operating systems.  Effective April 3, 2021, IBM TRIRIGA will no longer support SAP Crystal Server on any new TRIRIGA versions, releases, or modifications. Existing Crystal Reports will need to be converted to BIRT reporting or other supported reporting alternative.
Single Sign-On	HTTP Header, Remote User, User Principal	IBM TRIRIGA is compatible with Single Sign-On (SSO) when SSO has been configured properly. After TRIRIGA properties are enabled for SSO, TRIRIGA authentication trusts tokens that are provided by properly configured application servers with SSO.  TRIRIGA Support can assist with configuring TRIRIGA properties for SSO, but due to the number of possible configurations and supported products and technologies, TRIRIGA Support cannot assist in the configuration of SSO with WebSphere Liberty, traditional WebSphere, or other web application servers. For more information, see <a href="Requirements for and limitations of SSO">Requirements for and limitations of SSO</a> requests in the TRIRIGA Application Platform.
		In this document, Single Sign-On (SSO) refers to the ability to have a single set of credentials that use a directory server for multiple applications. By definition, SSO is not the same as Seamless Sign-On, which may not challenge a user for credentials during the access process.

# **IBM TRIRIGA Application Platform Test Floor Configurations**

The following operating system and application server configurations were used in IBM TRIRIGA Application Platform certification efforts.

<b>Application Server</b>	<b>Supported Version</b>	OS: Windows Server 2019, 2016	OS: Linux Kernel 5.5
IBM WebSphere Application Server Liberty Profile	20.0.0.2	Yes	Yes
IBM WebSphere Application Server	9.0.0.11	Yes	Yes