ArcGIS Deprecated Features

Mid-Year 2020

Updated Deprecated Features Plan for Mid-Year 2020 includes planned changes in platform and functionality with the release of ArcGIS 2.6, ArcGIS Enterprise 10.8.1, ArcGIS Online, and other Esri applications.

Note changes in ArcGIS Runtime SDK from 100.8 through 100.0 can be found in the last section of this document

The ArcGIS Deprecated Features is updated twice a year, roughly in line with each ArcGIS release.

With each release, we assess the platforms we support and the functionality in the ArcGIS platform and adjust these based on customer needs and technology trends. The purpose of this document is to provide as much advance notice as possible regarding these changes.

This document also includes the Year-End 2019, Mid-Year 2019, and Year-End 2018 updates for reference.

This version of the ArcGIS Deprecated Features supersedes all older versions of this document.

For a definition of *deprecation*, see http://en.wikipedia.org/wiki/Deprecation.

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Mid-Year 2020 update

ArcGIS Pro 2.6

Support for Solve Vehicle Routing Problem

ArcGIS Pro 2.6 will be the last release that will support the Solve Vehicle Routing Problem geoprocessing tool. Esri recommends all customers wishing to perform Vehicle Routing Problem analysis in ArcGIS Pro should begin their workflow using the Make Vehicle Routing Problem Analysis Layer geoprocessing tool or the Vehicle Routing Problem button in the Network Analysis dropdown on the Analysis ribbon. For Vehicle Routing Problem analysis using python, use the Network Analyst python module (https://pro.arcgis.com/en/pro-app/arcpy/network-analyst/what-is-the-network-analyst-module.htm).

Customers wishing to publish a Vehicle Routing Problem geoprocessing service should use the Publish Routing Services utility (https://enterprise.arcgis.com/en/server/latest/administer/windows/publishing-routing-services.htm).

Support for IBM Informix and IBM Db2 for z/OS from ArcGIS Pro

Since the initial release of ArcGIS Pro 1.0 there has not been support for Informix and Db2 for z/OS with either query layers or enterprise geodatabases. With the upcoming release of ArcGIS Pro 2.6, we have had a few questions regarding our long-term plans for their support with ArcGIS Pro. Based on current business demand, there are no definitive plans on our development roadmap to extend either query layer or enterprise geodatabase support with ArcGIS Pro. If your organization has a requirement for support of the mentioned databases from ArcGIS Pro, please contact your Esri account manager or international distributor. Note Esri's support for these databases will continue as long as there is support for ArcGIS Desktop 10.x.

Support of user-schema geodatabases in Oracle

We are announcing the deprecation of user-schema geodatabases in Oracle. ArcGIS 10.6.1 and ArcGIS Pro 2.1 was the last release to support creation. ArcGIS 10.8.1 and ArcGIS Pro 2.6 will be the last release to support upgrading user-schema geodatabases. Connecting to existing user-schema geodatabase will still be supported, though not recommended. The ability to connect to a user-schema geodatabase will be removed in a subsequent release. Please note that we have had the following warning in our documentation since ArcGIS 10.1: "Be aware that the amount of time it takes to connect to the Oracle database will increase as the number of user-schema geodatabases you create and use increases. This is especially true if the user-schema geodatabases contain a mix of geodatabase tables and tables that are not registered with the geodatabase."

Support of the SDEBINARY type

We are announcing the deprecation of the SDEBINARY type in Oracle and SQL Server. Though existing SDEBINARY feature classes can be read with current ArcGIS Pro versions, ArcGIS Pro does not support the creation of binary feature classes. ArcGIS 10.x continues to support the creation and usage of SDEBINARY feature classes. We encourage customers to move to SQL spatial types as further development work is focused on those. Functionality, such as non-versioned archiving, branch versioning, utility network, and the ArcGIS parcel fabric created using ArcGIS Pro, are only supported on SQL spatial types. SQL spatial types, which store spatial data directly in the shape column, have been the default for Oracle (ST_Geometry) since ArcGIS 9.2 and SQL Server

(Geometry) since ArcGIS 10.1.

ArcGIS Enterprise 10.8.1

Support for Location Allocation and Vehicle Routing Problem network analysis via Map Services
ArcGIS Enterprise 10.8.1 will be the last release to support SOAP access to Location Allocation and Vehicle Routing Problem network analysis layers via map services with the network analysis capability. Future releases will only support publishing and consuming Location Allocation and Vehicle Routing Problem network analysis layers via geoprocessing services. After 10.8.1, Location Allocation and Vehicle Routing Problem layers in map services will still be available for visualization but will not be available for network analysis. Any customers consuming Location Allocation or Vehicle Routing Problem network analysis layers via map services are encouraged to move to geoprocessing services.

End of support for Internet Explorer 11 (Updated June 2020)
The initial deprecation of the Internet Explorer 11 browser for use with ArcGIS Online and ArcGIS Enterprise was announced early 2020. Esri is now announcing that support for Internet Explorer 11 will end with the December 2020 update to ArcGIS Online and the next major release of ArcGIS Enterprise currently planned for early 2021.

As new releases and capabilities of ArcGIS Online and ArcGIS Enterprise will continue to leverage new and evolving web browser technology, Esri strongly encourages our customers to use web browsers that are maintained and enhanced. As Microsoft no longer enhances Internet Explorer 11 with support for newer web standards, Esri can no longer ensure our new functionality works as intended or performs as expected.

Therefore, after December 2020, Esri will no longer test future updates and releases with Internet Explorer 11, nor fix problems specific to this browser. Internet Explorer 11 will continue to be supported on ArcGIS Enterprise 10.8.1 and prior in accordance with the ArcGIS Enterprise product lifecycle. Users are highly recommended to move to a modern browser such as Mozilla Firefox, Google Chrome, or the new Microsoft Edge. If you have any questions or concerns, please reach out to your Esri account team or international distributor.

End of support for Microsoft Edge Legacy
Support for the Microsoft Edge Legacy browser will end with the December 2020 release of ArcGIS Online and the next major release of ArcGIS Enterprise planned for early 2021. With these releases, the new Microsoft Edge based on Chromium will be the only supported version of Edge. Users of Microsoft Edge Legacy are encouraged to upgrade to the new Microsoft Edge.

Background: the Microsoft Edge browser included with current versions of Windows 10 is known by Microsoft as Microsoft Edge Legacy after the new Microsoft Edge based on Chromium was released in January 2020: https://support.microsoft.com/en-us/help/4533505/what-is-microsoft-edge-legacy

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ArcGIS Online

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Other Notes

Support for the ArcGIS License Manager for Linux
Following the release of ArcGIS 10.8.1, the ArcGIS License Manager for Linux will move to a modern application architecture and no longer support 32-bit Linux. When this change happens the ArcGIS License Manager for Linux will support 64-bit only.

Support for OGC WFS Services
[This note was inadvertently left out of a prior Deprecated Features update.] The ArcGIS 10.5 series was the last series to support OGC WFS services deployed on a geodata service. Esri will continue to support OGC WFS services deployed on a map service.

Spatial Analysis service Field Calculator REST API (Updated 7/06/2020)
The Field Calculator REST API described at https://developers.arcgis.com/rest/analysis/api-reference/field-calculator.htm is deprecated as of the current release and will no longer be supported in next major ArcGIS release. Developers are highly encouraged to move to the Feature Service Calculate API described at https://developers.arcgis.com/rest/services-reference/calculate-feature-service-layer-.htm for workflows that involve updating field values in a feature service layer.

Year-End 2019 update

ArcGIS Pro 2.5

Support for PostgreSQL 9.6.x (Added April 2020)
Our normal process for the last few years has been to drop support for the oldest version of PostgreSQL when a new major version is released, as we normally support three versions of PostgreSQL. PostgreSQL has been providing major releases in Q3 or Q4, which has fit in our schedule of *.1 releases of ArcGIS (and the matching ArcGIS Pro releases). Based on recent customer feedback, we have concluded that we will continue to support PostgreSQL 9.6.x with ArcGIS 10.8.1.

We now plan to drop support of PostgreSQL 9.6.x at the 10.9(.0) cycle and support PostgreSQL 10, 11 and 12. Going forward we are likely to change to dropping the oldest version of PostgreSQL with .0 releases of ArcGIS.

Support for SQL Server 2014
The next release of ArcGIS Pro (2.6) will be the last release that supports SQL Server 2014.

Support for Informix from ArcGIS Pro

Since the initial release of ArcGIS Pro 1.0 there has not been support for Informix with either query layers or enterprise geodatabases. With the upcoming release of ArcGIS Pro 2.5, we have had a few questions regarding our long-term plans for Informix with ArcGIS Pro. Based on current business demand, there are no definitive plans on our development roadmap to extend either query layer or enterprise geodatabase support for Informix with ArcGIS Pro. If your organization has a requirement for Informix support from ArcGIS Pro, please contact your Esri account manager or international distributor. Note Esri's support for Informix will continue as long as there is support for ArcGIS Desktop 10.x.

Support for IBM® DB2® 10.5 for Linux, Unix, and Windows
ArcGIS 2.6/10.8.x is the last release we support IBM's DB2 Version 10.5 for Linux, UNIX, and Windows.

Support for Geocoding
ArcGIS Pro 2.6 will be the last release that will support the Create Address Locator geoprocessing tool. The next major release after ArcGIS Pro 2.6 will no longer allow the building of locators with this tool. Esri recommends all customers prepare for this change by beginning to use the Create Locator geoprocessing tool. ArcGIS Pro 2.6 will also be the last release of Pro where locators created with the Create Address Locator geoprocessing tool are supported locally in Pro. Locators published to versions of ArcGIS Enterprise that support these locators will continue to work.

ArcGIS Enterprise 10.8

Support for PostgreSQL 9.6.x (Added April 2020)
Our normal process for the last few years has been to drop support for the oldest version of PostgreSQL when a new major version is released, as we normally support three versions of PostgreSQL. PostgreSQL has been providing major releases in Q3 or Q4, which has fit in our schedule of *.1 releases of ArcGIS (and the matching ArcGIS Pro releases). Based on recent customer feedback, we have concluded that we will continue to support PostgreSQL 9.6.x with ArcGIS 10.8.1.

We now plan to drop support of PostgreSQL 9.6.x at the 10.9(.0) cycle and support PostgreSQL 10, 11 and 12. Going forward we are likely to change to dropping the oldest version of PostgreSQL with .0 releases of ArcGIS.

Support for Geocoding
ArcGIS Enterprise 10.8.1 will be the last release that will support locators created with the Create Address Locator geoprocessing tool. The next major release after ArcGIS Enterprise 10.8.1 will no longer allow the publishing of locators created with this tool. Esri recommends all customers prepare for this change by building their locators with the Create Locator tool found in ArcGIS Pro 2.3 and newer.

Support for Internet Explorer 11
Use of Internet Explorer 11 with ArcGIS Online and ArcGIS Enterprise is deprecated as of the current releases. Users are highly encouraged to move to a modern browser such as Mozilla Firefox, Google Chrome, or Microsoft Edge for all applications. While Internet Explorer 11 continues to be supported in ArcGIS Online (December 2019 update) and ArcGIS Enterprise 10.8.x, use of Internet Explorer 11

is generally discouraged, and support will be discontinued at a future release. Additional notice will be provided prior to the removal of support.

Support for SQL Server 2014
ArcGIS Enterprise 10.8.x will be the last release that supports SQL Server 2014.

Support for IBM® DB2® 10.5 for Linux, Unix , and Windows
ArcGIS 2.6/10.8.x is the last release we support IBM's DB2 Version 10.5 for Linux, UNIX, and Windows

Web ADF
The Web ADF has been formally retired since January 1, 2018. For Web ADF applications that may still be in production, this is a notification that Esri Basemaps may no longer work in these applications.

ArcGIS Online

Support for Internet Explorer 11
Use of Internet Explorer 11 with ArcGIS Online and ArcGIS Enterprise is deprecated as of the current releases. Users are highly encouraged to move to a modern browser such as Mozilla Firefox, Google Chrome, or Microsoft Edge for all applications. While Internet Explorer 11 continues to be supported in ArcGIS Online (December 2019 update) and ArcGIS Enterprise 10.8.x, use of Internet Explorer 11 is generally discouraged, and support will be discontinued at a future release. Additional notice will be provided prior to the removal of support.

ArcGIS Survey123 and ArcGIS QuickCapture

Support for Windows 7, Windows 10, iOS 11 and Android 4.4 with Survey 123 and QuickCapture
The following platforms will be deprecated in ArcGIS Runtime version 100.7, which means these will be deprecated in Survey 123 and QuickCapture as well:

- Support for Windows 7 will be deprecated. The last release to support Windows 7 will be ArcGIS Runtime version 100.7.
- Support for Windows 10 version 1703 will be deprecated. With the 100.7 release, the minimum will be Windows 10 version 1709.
- Support for iOS 11 will be deprecated. The last release to support iOS11 will be ArcGIS Runtime version 100.7.

With AppStudio for ArcGIS 4.1 release, last month, support for Android 4.4 has been dropped. Minimum version is now Android 5.0 for 32 bit and 6.0 for 64 bit. This affects Survey123 3.7 release and any other apps built with AppStudio 4.1.

ArcGIS Maps for Office

ArcGIS Maps for Office planned 2020.1 release (added December 2019)
Support for Windows Server 2008 R2 and Windows 7 Service Pack 1
With the 2020.1 release, ArcGIS Maps for Office will no longer support Windows Server 2008 R2 and Windows 7 Service Pack 1. Organizations using these versions of the Microsoft operating system will need to upgrade to a newer Microsoft operating system in order to use this version of ArcGIS Maps for Office.

ArcPad

Update on ArcPad Retirement
The retirement date for ArcPad 10.2.6 has been extended to December 31, 2021. ArcPad will continue to be supported through December 31, 2021, at which time the product will be retired, and support will end.

As of January 1, 2020, ArcPad licenses will only be available to existing customers that are current on maintenance and will no longer to sold to new customers.

AppStudio for ArcGIS

Support for Windows 7 and iOS 11
Support for Windows 7 is deprecated. The last release to support Windows 7 will be AppStudio 4.3.
Support for Windows 10 version 1703 is deprecated. With the 4.3 release, the minimum will be Windows 10 version 1709.
Support for iOS 11 is deprecated. The last release to support iOS 11 will be AppStudio 4.3.

CityEngine Basic

Update on CityEngine versions
With the release of CityEngine 2019.0 we will no longer two separate version of CityEngine, Advanced and Basic. We have merged them into a single version that supports all three licensing models, Named User, Concurrent, and Single Use, and contains all the features available in both versions. Existing CityEngine Basic customers will be upgraded to the new full version.

ArcGIS Earth Supported 3D Formats (added March 2020)

With the release of ArcGIS Earth 1.10.1 the following 3D model formats DXF, X, PLY, STL, IFC, BLEND will no longer be supported.

Mid-Year 2019 update

ArcGIS Enterprise Application Server Provider (ASP) License (Added June 2019, Updated August 2019 and January 2020 - Internal Only)

Esri is announcing that ArcGIS Enterprise Application Service Provider (ASP) License is deprecated and will be retired over the next several years. We recommend customers begin migration planning at least

six months to a year before the current expiration date of licenses.

Customers are offered a variety of migration paths to consider, leveraging expanded capabilities of the Esri Geospatial Cloud, new business approaches and licensing models.

Customers can look to their account team to assist in the migration planning process. It starts with completion of an ASP Migration Discovery form. By understanding the unique needs of each customer, recommendations can be developed for technology options and the business approach to refresh the solutions that used ASP licenses.

We are committed to working with customers to identify the best path for their business, enable the customer organization with appropriate licensing, and maintain value delivered to customer clients.

Customers with ASP licenses expiring before October 1, 2020, may be granted a one-year extension.

ArcGIS Enterprise 10.7.1

Support for IBM Netezza DBMS (Added June 2019)
ArcGIS 10.7.x is the last release we support IBM's Netezza DBMS. Esri's Product Life Cycle Support Policy (see http://downloads2.esri.com/support/TechArticles/Product-Life-Cycle.pdf) means that Netezza will be supported for several more years into the future. Customers who are currently using Netezza as their DBMS are encouraged to contact their Esri or International Distributor account manager to discuss alternative data base options. However, any customer currently using Netezza has long exit ramp to make their plans against.

Support for IBM® Db2® 10 for **z/OS (Added June 2019)**
ArcGIS 10.7.x is the last release we will support IBM'sDb2 10 for z/OS.

Support for the Eclipse Plugin (Added June 2019)
ArcGIS 10.7.1 will be the last release to ship an Eclipse plugin as part of the ArcObjects SDK and ArcGIS Enterprise SDK. Future releases will include a new Maven-based approach for getting access to samples and starter templates.

Support for Red Hat Enterprise Linux 6.x and derivatives (Added August 2019)
ArcGIS Enterprise 10.8.x will be the last release series to support Red Hat Enterprise Linux 6.x (RHEL 6.x) and its derivatives such as CentOS 6.x. Please be aware that Red Hat Enterprise Linux 6.x will be retired by Red Hat in November 2020. After this date Red Hat Enterprise Linux 6.x and its derivatives will not be a supported operating system for any version of ArcGIS Enterprise. Esri highly recommends customers start planning to move their workloads to a newer version of Red Hat Enterprise Linux or similar ahead of the November 2020 retirement date.

ArcGIS Server SOAP API support (Added September 2019)
Using the SOAP API endpoints in ArcGIS Server is deprecated. The existing SOAP API continues to be supported but will receive no future enhancements or updates. There are no current plans to remove SOAP API support entirely, but any new development should be based on the REST API and higher-level APIs and SDKs that consume REST endpoints. Existing applications that make use of the

SOAP API are encouraged to move to REST API endpoints as part of future maintenance and enhancements.

AppStudio for ArcGIS

Support for web-based configurable app templates (added June 2019)
The user experience for creating native apps through the AppStudio website (appstudio.arcgis.com) will be disabled with the release of AppStudio for ArcGIS 4.0 (Aug 2019). Those wanting to create a native app using an app template can do so using the tools included with the AppStudio Desktop application.

Support for generating standalone app install files at the base license level (added June 2019 and updated August 2019)
At the AppStudio 4.0 release (Aug 2019) the base license level AppStudio (included with every Creator User Type) will no longer include the ability to create standalone app install files (binary files) using the cloud make service. Going forward apps created using the base level license will be shared within an ArcGIS organization using the AppStudio Player app. Creating standalone app install files will only be included with a license of AppStudio Developer Edition (previously AppStudio Standard).

Support for Android x86 apps (added June 2019)
AppStudio for ArcGIS 3.3 (released April 2019) is the last version of AppStudio to support generating Android x86 install files (apk files). Going forward to support x86 Android devices (primarily Android phones and tablets with Intel chips) you will need to build your app for ARMv7.

Support for Android 4.4 KitKat (added June 2019)
AppStudio for ArcGIS 4.0 (Aug 2019) will be the last release of AppStudio to support building apps for Android version 4.4 (KitKat).

Year-End 2018 update

ArcGIS Desktop, Engine, ArcReader 10.7.1 and ArcGIS Pro 2.4 (Updated June 2019)

Support for Windows 7
ArcGIS Desktop, Engine, ArcReader 10.7.x, and Pro 2.4.x will be the last releases to support Windows 7. Please be aware that Microsoft ended mainstream support for Windows 7 on January 13, 2015 and extended support ends on January 14, 2020. As such Windows 7 will not be supported with 10.7.x, and earlier versions of Desktop, Engine and ArcReader after Jan 2020. Esri highly recommends customers start planning to move their ArcGIS Desktop, Engine, and ArcReader workloads to a newer version of Windows such as Windows 10 well before (i.e. 2019) of the January 14, 2020 retirement date.

Support for 32-bit SQL Server 2014 Express
ArcGIS Desktop 10.7.x series of releases will be the last releases to include a 32-bit version of SQL Server Express. Future releases will only include a 64-bit version of SQL Server Express and will

require a 64-bit operating system.

ArcGIS Enterprise 10.7 (added February 2019)

Support for direct upgrades from ArcGIS Server 10.2.x and Portal for ArcGIS 10.2.x
ArcGIS Enterprise 10.7.x will be the last major release series to support direct upgrades from the 10.2 series of the ArcGIS Server and Portal for ArcGIS software components. This includes versions 10.2, 10.2.1, and 10.2.2. Future releases will support upgrades from version 10.3 onwards

Support for generating raster tile caches in EXPLODED format
Support for generating new raster tile caches in the EXPLODED cache format for map and image services is deprecated as of ArcGIS Enterprise 10.7. New caches should be generated using the much more efficient compact cache format introduced first in ArcGIS 10.0 and later enhanced in ArcGIS 10.3. Serving existing caches in the EXPLODED format will continue to be supported by ArcGIS Enterprise.

Pre-built SOAP stubs with the ArcGIS Server SOAP SDK
The ArcGIS Enterprise 10.7.x release series will be the last to include pre-built Java SOAP stubs with the ArcGIS Server SOAP SDK. While SOAP interfaces and the SOAP SDK will continue to be supported, developers are highly encouraged to use the newer REST APIs or higher-level APIs such as the ArcGIS API for JavaScript or the ArcGIS Runtime SDKs. Developers that continue to use SOAP interfaces, and need SOAP stubs, should build and maintain stubs using the programming language and environment of their choice.

Support for using the Oracle 11g client for connection
We are announcing the deprecation of the use of the Oracle 11g clients in connecting to Oracle from ArcGIS software. 10.7.1 will be the last release to support the Oracle 11g clients. After 10.7.1 making a database connection to Oracle will require the use of an Oracle 12c client. Note this only affects the Oracle client version. We will still support users connecting to an Oracle 11g (11.2.0.4) database.

Support for PostgreSQL 9.5
ArcGIS 10.7 and Pro 2.3.x will be the last releases to support PostgreSQL 9.5. At ArcGIS 10.7.1 and Pro 2.4 the minimum versions we will be supporting are PostgreSQL 11.2, 10.7 and 9.6.12.

ArcGIS Online (added December 2018)

ArcGIS Online December 2018 Release
With the December release Traditional Chinese is no longer supported in Help. Maps and Apps Gallery Story Map Crowdsource, Compare Analysis, Compare Scenes, Map Carousel, Map Tools, and Simple Map Viewer are retired (officially, they are in Mature Phase and no longer in the app gallery, but in reality, they're deprecated).

ArcGIS for AutoCAD (added December 2018)

Support for Windows 7

The update for ArcGIS for AutoCAD scheduled for release in 2019 will not support Windows 7. Please be aware that Microsoft ended mainstream support for Windows 7 on January 13, 2015 and extended support ends on January 14, 2020. As such Windows 7 will not be supported with the ArcGIS for AutoCAD 2019 release. Esri highly recommends customers start planning to move their ArcGIS for AutoCAD workloads to a newer version of Windows such as Windows Server 10 ahead of the 2020 retirement date.

Insights Release Planned March 2019 (added December 2018)

Planned March 2019 release – Insights support for ArcGIS Enterprise 10.6 and 10.5.1
With the release planned March 2019, Insights will no longer support ArcGIS Enterprise 10.6, nor 10.5.1. Organizations needing to deploy Insights March release will need to be on ArcGIS Enterprise 10.7 or 10.6.1. Insights 3.1 will be the last release to be supported on ArcGIS Enterprise 10.6 and 10.5.1.

Planned March 2019 release – Insights support of directly connecting to Microsoft SQL Server 2012
Insights 3.1 is the last version where Esri supports connecting directly to Microsoft SQL Server 2012. Insights 3.2 (planned for March) will not support directly connecting to SQL Server 2012.

Note that this deprecation should not be confused with Insights connecting to ArcGIS Server or ArcGIS Enterprise services that utilize a SQL Server 2012 database. Insights will still support connecting to ArcGIS REST services that utilize a SQL Server 2012 database.

ArcGIS Enterprise 10.7 (added October 2018)

Support for Windows Server 2008 R2 (new)
ArcGIS Enterprise 10.7.x will be the last release series to support Windows Server 2008 R2. Please be aware that Windows Server 2008 R2 will be retired by Microsoft on January 24th, 2020. After this date Windows Server 2008 R2 will not be a supported operating system for any version of ArcGIS for Server and ArcGIS Enterprise. Esri highly recommends customers start planning to move their server workloads to a newer version of Window Server such as Windows Server 2016 ahead of the 2020 retirement date.

Support for ArcGIS Server custom identity stores (new)
ArcGIS Enterprise 10.7.x will be the last release series to support for ArcGIS Server custom identity stores built with ASP.NET and Java. Esri recommends moving to ArcGIS Enterprise and use a technology such as enterprise logins based on SAML to integrate with identity stores beyond Active Directory and LDAP.

Support for database enforced user-level security in Oracle databases (new)
ArcGIS Enterprise 10.7.x will be the last release series to support the database enforced user-level security features for Oracle that is described in the Integrating ArcGIS Server security with an Oracle database help topic. This feature was limited in functionality and only applied to map services. Esri recommends looking at alternative configurations to provide similar security. Options include

hosted feature layer views for hosted layers and building a custom Server Object Interceptor (SOI) for server-based layers published from ArcMap or ArcGIS Pro.

Support for Operations Dashboard (added November 2018)
Following the release of the new Operations Dashboard experience alongside ArcGIS Enterprise 10.6, the old Operations Dashboard 10.3.4 is retiring on January 1st, 2019. Beginning with ArcGIS Enterprise 10.7 the old Operation View items can no longer be created, and existing items can no longer be edited. The Windows application will not be provided for download alongside ArcGIS Enterprise 10.7 via My Esri. In the next major release of ArcGIS Enterprise, old Operation View items will no longer be able to be opened. Esri encourages all users of the old Operations Dashboard application to move their dashboards to the new web-centric experience and make use of the many enhancements available with the new Dashboard items.

Support for PostgreSQL 9.4 (new February 2018)

ArcGIS 10.6 will be the last release where we support PostgreSQL 9.4, which was released in December 2014. Beginning with the ArcGIS 10.6.1 release we are adding support for PostgreSQL 10 and we will be dropping support for PostgreSQL 9.4.

Support for SQLite 3.8.4.3 and 3.9.1 (new February 2018)

ArcGIS 10.6 will be the last release where we support SQLite 3.8.4.3 and 3.9.1. Beginning with the ArcGIS 10.6.1/Pro 2.2 release we are adding support for SQLite 3.22.0 and we will be dropping support for SQLite 3.8.4.3 and 3.9.1. We will continue support at ArcGIS 10.6.1/Pro 2.2 for SQLite 3.14.1, 3.16.2, 3.19.3 compatibility with non-Esri software.

ArcGIS Online (added November 2018)

Support for Operations Dashboard (new)
Following the December 2017 release of Operations Dashboard, the old Operations Dashboard 10.3.4 is retiring on January 1st, 2019. Beginning with the March 2019 release of ArcGIS Online the old Operation View items can no longer be created, and existing items can no longer be edited. The Windows application will no longer be available for download in the marketplace. Esri encourages all users of the old Operations Dashboard application to move their dashboards to the new web-centric experience and make use of the many enhancements available with the new Dashboard items. In a future update to ArcGIS Online, old Operation View items will no longer be able to be opened. Esri encourages all users of the old Operations Dashboard application to move their dashboards to the new web-centric experience and make use of the many enhancements available with the new Dashboard items.

10.13).

Support for Android:
ArcGIS Survey123 for ArcGIS version 2.8 will be the last release to support Android 4.0.3-4.0.4 (Ice Cream Sandwich) and Android 4.1-4.3.1 (Jelly Bean). In the next release, the minimum Android version will be Android 4.4 (KitKat).

Online and Insights in ArcGIS Enterprise supports Teradata database. The next release of Insights for ArcGIS 3.0 (July 2018) will not support Teradata. This decision is driven by customer usage and customer demand for Insights supporting Teradata.

ArcGIS Runtime SDKs 100.x

ArcGIS Runtime SDK for Android

- Version 100.8:
  - The classic geocode locator format (*.loc) will not be supported after ArcGIS Runtime version 100.9. After that release, only the newer *.loz locators, introduced with ArcGIS Pro 2.3 and ArcGIS Runtime 100.5, will be supported.
- Version 100.7:
  - Support for Android API level 19 (Android 4.4, KitKat) is deprecated. With the 100.8 release, the minimum will be API level 21 (Android 5.0, Lollipop).
- Version 100.6: (Added August 2019)
  - 3D model formats DXF, X, PLY, STL, IFC, BLEND are deprecated.
- Version 100.2 is the last release to support:
  - Android development for API levels 15(Android 4.0.3-4.0.4), 16 (Android 4.1-4.1.1), 17 (Android 4.2 - 4.2.2), and 18 (Android 4.3). With the 100.3 release, the minimum will be API 19 (Android 4.4).

ArcGIS Runtime SDK for iOS

- Version 100.8:
  - The classic geocode locator format (*.loc) will not be supported after ArcGIS Runtime version 100.9. After that release, only the newer *.loz locators, introduced with ArcGIS Pro 2.3 and ArcGIS Runtime 100.5, will be supported
- Version 100.7: (Updated April 2020)
  - Support for iOS 11 is deprecated. With the 100.8 release, the minimum will be iOS 12.
  - Support for iOS Simulators that use OpenGL ES are deprecated. Version 100.8 will upgrade Runtime's rendering pipeline on iOS devices from OpenGL ES to Metal. With version 100.8, development workflows that use the iOS Simulator for testing must use an iOS Simulator that supports Metal to visualize maps and scenes. To use version 100.8 with an iOS Simulator, the following minimum conditions must be met:
    - Catalina (macOS 10.15)
    - XCode 11
    - iOS 13 Simulator

    If an earlier macOS, XCode, or iOS version is needed, then developers need to use a physical device for development and testing.
- Version 100.6: (Added August 2019)

- 3D model formats DXF, X, PLY, STL, IFC, BLEND are deprecated.

- Version 100.5: (Added August 2019)
  - The static framework (installed under ${HOME}/Library/SDKs/ArcGIS/iOS/Static by the SDK package installer) is being deprecated at 100.5.0. It will be removed at a future release. Please use the dynamic framework instead which is available through CocoaPods or installed by the SDK package installer under ${HOME}/Library/SDKs/ArcGIS/iOS/Dynamic. Refer to the install and setup topic for more information on how to configure your Xcode project. Dynamic frameworks are the preferred way of distributing custom iOS libraries since iOS 8 and reduce both the app's executable file size and initial memory footprint.
- Version 100.3:
  - Support for iOS 10 is deprecated. With the 100.5 release, the minimum will be iOS 11.
- Version 100.1 is the last release to support:
  - XCode 8. With the 100.2 release, the minimum will be Xcode 9.
  - iOS 9. With the 100.2 release, the minimum will be iOS 10.
- Version 100.0:
  - Will not support iOS 8. Only iOS 9 and 10 will be supported.

ArcGIS Runtime SDK for Java

- Version 100.8: (Updated 6/29/2020)
  - Support for Red Hat Enterprise versions 7.4 and 7.5 is deprecated in this release. A minimum of Red Hat Enterprise 7.6 will be required at the next release.
  - Support for Ubuntu 16.04 LTS is deprecated in this release. A minimum of Ubuntu 18.04 LTS will be required at the next release.
  - Support for Citrix XenDesktop 7.6 is deprecated. Customers are encouraged to migrate to Citrix new product line, branded Citrix Virtual Apps and Desktops. A minimum of Citrix Virtual Apps and Desktops 7 1912 LTSR will be supported at the next release.
  - The classic geocode locator format (*.loc) will not be supported after ArcGIS Runtime version 100.9. After that release, only the newer *.loz locators, introduced with ArcGIS Pro 2.3 and ArcGIS Runtime 100.5, will be supported.
  - ArcGIS Runtime Local Server version 100.9 will be last release to support ArcGIS Desktop 10.x packages (created in ArcMap). The release of ArcGIS Runtime Local Server after 100.9 will require packages to be created with ArcGIS Pro. Note, ArcGIS Runtime Local Server can be used with newer versions of the ArcGIS Runtime SDKs for Java.
- Version 100.7: (Updated March 2020) (Added (April 2020)
  - Support for ArcGIS Desktop 10.x packages with ArcGIS Runtime Local Server is deprecated. Version 100.9 will be the last ArcGIS Runtime Local Server release to support ArcGIS Desktop 10.x packages. The next version will require packages to be created with ArcGIS Pro.
  - Support for VMWare Horizon View 6.5 is deprecated. A minimum of VMWare Horizon 7.0 will be required at the next release.
  - Support for Citrix XenDesktop 7.17 and 7.18 is deprecated. A minimum of Citrix XenDesktop 7.6 will be required at the next release.

- Support for Citrix Virtual Apps and Desktops 7 1909 is deprecated. A minimum of Citrix Virtual Apps and Desktops 7 1912 LTSR will be required at the next release.
- Support for Windows 7 is deprecated. With the 100.8 release, the minimum will be Windows 10 version 1803.
- Support for Windows 10 version 1709 is deprecated. With the 100.8 release, the minimum will be Windows 10 version 1803.

- Version 100.6: (Added August 2019 and updated February 2020)
  - Support for Windows 7 is deprecated. The last release to support Windows 7 will be version 100.7.
  - Support for Windows 10 version 1703 is deprecated. With the 100.7 release, the minimum will be Windows 10 version 1709.
  - Support for SuSE 12 is deprecated. With the 100.7 release, the minimum will be SuSE 15.
  - Support for Red Hat Enterprise Linux Server versions 7.0-7.3 is deprecated. With the 100.7 release, the minimum will be 7.4.
  - Support for macOS10.13 (High Sierra) is deprecated. With the 100.7 release, the minimum will be macOS 10.14 (Mojave).
  - 3D model formats DXF, X, PLY, STL, IFC, BLEND are deprecated.
- Version 100.3:
  - Support for Ubuntu 14.04 is deprecated. With the 100.5 release, the minimum will be Ubuntu 16.04.
  - Support for Java 8 is deprecated. With the 100.5 release, the minimum will be Java 11.
  - Support for macOS Sierra (version 10.12) is deprecated. With the 100.4 release, the minimum will be macOS High Sierra (10.13).
- Version 100.1 is the last release to support:
  - macOS El Capitan (version 10.11). The 100.3 release will support macOS Sierra (version 10.12) and macOS High Sierra (version 10.13).
- Version 100.0:
  - Will not support Linux 32-bit devices. Note, ArcGIS Runtime Local Server 100.x will not be supported on 32-bit Linux.

ArcGIS Runtime SDK for macOS

- Version 100.4:
  - Version 100.5 of the Runtime SDK will be the last release of a dedicated ArcGIS Runtime SDK for macOS. If you are currently using ArcGIS Runtime SDK for macOS we encourage you to consider our ArcGIS Runtime SDKs for Java or Qt.
- Version 100.3 is the last release to support:
  - macOS Sierra (10.12). With the 100.4 release, the minimum will be macOS High Sierra (version 10.13).
- Version 100.1 is the last release to support:
  - XCode 8. With the 100.2 release, the minimum will be XCode 9.
  - macOS El Capitan (version 10.11). The 100.3 release will support macOS Sierra (version 10.12) and macOS High Sierra (version 10.13).
- Version 100.0:

- Will not support Yosemite. Only Sierra and El Capitan will be supported.

ArcGIS Runtime SDK for .NET

- Version 100.8: Updated 6/29/2020
  - Support for iOS Simulators that use that use OpenGL ES are deprecated. ArcGIS Runtime's rendering pipeline on iOS devices will move from OpenGL ES to Metal with the next version. In subsequent releases, development workflows that use the iOS Simulator for testing must use an iOS Simulator that supports Metal to visualize maps and scenes and will require the following minimum conditions:
    - Catalina (macOS 10.15)
    - XCode 11
    - iOS 13 Simulator

    If an earlier macOS, XCode, or iOS version is needed, then developers need to use a physic device for development and testing.

  - Support for Citrix XenDesktop 7.6 is deprecated. Customers are encouraged to migrate to Citrix new product line, branded Citrix Virtual Apps and Desktops. A minimum of Citrix Virtual Apps and Desktops 7 1912 LTSR will be supported at the next release.
  - The classic geocode locator format (*.loc) will not be supported after ArcGIS Runtime version 100.9. After that release, only the newer *.loz locators, introduced with ArcGIS Pro 2.3 and ArcGIS Runtime 100.5, will be supported.
  - ArcGIS Runtime Local Server version 100.9 will be last release to support ArcGIS Desktop 10.x packages (created in ArcMap). The release of ArcGIS Runtime Local Server after 100.9 will require packages to be created with ArcGIS Pro. Note, ArcGIS Runtime Local Server can be used with newer versions of the ArcGIS Runtime SDKs for NET (WPF API only).

- Version 100.7: (Updated March 2020) (Added April 2020)
  - Support for Android API level 19 (Android 4.4, KitKat) is deprecated. With the 100.8 release, the minimum will be API level 21 (Android 5.0, Lollipop).
  - Support for iOS 11 is deprecated. With the 100.8 release, the minimum will be iOS 12.
  - Support for ArcGIS Desktop 10.x packages with ArcGIS Runtime Local Server is deprecated. Version 100.9 will be the last ArcGIS Runtime Local Server release to support ArcGIS Desktop 10.x packages. The next version will require packages to be created with ArcGIS Pro.
  - Support for VMWare Horizon View 6.5 is deprecated. A minimum of VMWare Horizon 7.0 will be required at the next release.
  - Support for Citrix XenDesktop 7.17 and 7.18 is deprecated. A minimum of Citrix XenDesktop 7.6 will be required at the next release.
  - Support for Citrix Virtual Apps and Desktops 7 1909 is deprecated. A minimum of Citrix Virtual Apps and Desktops 7 1912 LTSR will be required at the next release.
  - Support for Windows 7 is deprecated. With the 100.8 release, the minimum will be Windows 10 version 1803.
  - Support for Windows 10 version 1709 is deprecated. With the 100.8 release, the minimum will be Windows 10 version 1803.

- Version 100.6: (Added August 2019)
    - Support for Windows 7 is deprecated. The last release to support Windows 7 will be version 100.7.
    - Support for Windows 10 version 1703 is deprecated. With the 100.7 release, the minimum will be Windows 10 version 1709.
    - 3D model formats DXF, X, PLY, STL, IFC, BLEND are deprecated.
- Version 100.3:
    - Support for iOS 10 is deprecated. With the Update 5 release, the minimum will be iOS 11.
    - 100.3 is the last release to support:
        - Development of UWP apps for the ARM32 architecture.
        - Project templates (WPF, Xamarin.Android, and Xamarin.iOS) and local NuGet repository within Visual Studio 2015. NuGet packages can be referenced within Visual Studio 2015 from NuGet.org or downloaded to the existing Esri local NuGet repository (%localappdata%\Esri\NuGet). With the 100.4 release the ArcGIS Runtime SDK for .NET Visual Studio extension (.vsix) will require Visual Studio 2017.
- Version 100.2 is the last release to support:
    - NET Framework versions 4.5.2 and 4.6. With the 100.3 release, the minimum will be 4.6.1.
    - Development with Visual Studio 2012 or 2013. With the 100.3 release, the minimum will be Visual Studio 2015.
    - Xamarin.Android development for API levels 15(Android 4.0.3-4.0.4), 16 (Android 4.1-4.1.1), 17 (Android 4.2 - 4.2.2), and 18 (Android 4.3). With the 100.3 release, the minimum will be API 19 (Android 4.4).
    - Xamarin.iOS development for iOS 9. With the 100.3 release, the minimum will be iOS 10.
    - UWP and Xamarin.Forms UWP development for Windows 10 version 1607 (OS build 14393) and 1703 (OS build 15063). With the 100.3 release, the minimum will be version 1709 (OS build 16299), which is also known as the Fall Creators Update.

ArcGIS Runtime SDK for Qt

- Version 100.8: Updated 6/29/2020
    - Qt Framework 5.12.6 is deprecated in this release. A minimum of 5.15 LTS will be required at the next release.
    - Support for Red Hat Enterprise versions 7.4 and 7.5 is deprecated in this release. A minimum of Red Hat Enterprise 7.6 will be required at the next release.
    - Support for Ubuntu 16.04 LTS is deprecated in this release. A minimum of Ubuntu 18.04 LTS will be required at the next release.
    - Support for Citrix XenDesktop 7.6 is deprecated. Customers are encouraged to migrate to Citrix new product line, branded Citrix Virtual Apps and Desktops. A minimum of Citrix Virtual Apps and Desktops 7 1912 LTSR will be supported at the next release.
    - The classic geocode locator format (*.loc) will not be supported after ArcGIS Runtime version 100.9. After that release, only the newer *.loz locators, introduced with ArcGIS Pro 2.3 and ArcGIS Runtime 100.5, will be supported.

- ArcGIS Runtime Local Server version 100.9 will be last release to support ArcGIS Desktop 10.x packages (created in ArcMap). The release of ArcGIS Runtime Local Server after 100.9 will require packages to be created with ArcGIS Pro. Note, ArcGIS Runtime Local Server can be used with newer versions of the ArcGIS Runtime SDKs for Qt.

- Version 100.7: (Updated March 2020) (Added April 2020)
  - Support for Android API level 19 (Android 4.4, KitKat) is deprecated. With the 100.8 release, the minimum will be API level 21 (Android 5.0, Lollipop).
  - Support for iOS 11 is deprecated. With the 100.8 release, the minimum will be iOS 12.
  - Support for ArcGIS Desktop 10.x packages with ArcGIS Runtime Local Server is deprecated. Version 100.8 will be the last ArcGIS Runtime Local Server release to support ArcGIS Desktop 10.x packages. The next version will require packages to be created with ArcGIS Pro.
  - ArcGIS Runtime Local Server version 100.9 will be last release to support ArcGIS Desktop 10.x packages (created in ArcMap). The release of ArcGIS Runtime Local Server after 100.9 will require packages to be created with ArcGIS Pro. Note, ArcGIS Runtime Local Server can be used with newer versions of the ArcGIS Runtime SDKs for Qt.
  - Support for VMWare Horizon View 6.5 is deprecated. A minimum of VMWare Horizon 7.0 will be required at the next release.
  - Support for Citrix XenDesktop 7.17 and 7.18 is deprecated. A minimum of Citrix XenDesktop 7.6 will be required at the next release.
  - Support for Citrix Virtual Apps and Desktops 7 1909 is deprecated. A minimum of Citrix Virtual Apps and Desktops 7 1912 LTSR will be required at the next release.
  - Support for Windows 7 is deprecated. With the 100.8 release, the minimum will be Windows 10 version 1803.
  - Support for Windows 10 version 1709 is deprecated. With the 100.8 release, the minimum will be Windows 10 version 1803.
- Version 100.6: (Added August 2019 and updated February 2020)
  - Support for Windows 7 is deprecated. The last release to support Windows 7 will be version 100.7.
  - Support for Windows 10 version 1703 is deprecated. With the 100.7 release, the minimum will be Windows 10 version 1709.
  - Support for SuSE 12 is deprecated. With the 100.7 release, the minimum will be SuSE 15.
  - Support for Red Hat Enterprise Linux Server versions 7.0-7.3 is deprecated. With the 100.7 release, the minimum will be 7.4.
    - On Red Hat systems, support for the GCC 4.x compiler is deprecated. With the 100.7 release, the minimum will be GCC 5.3.1.
  - Support for macOS 10.13 (High Sierra) is deprecated. With the 100.7 release, the minimum will be macOS 10.14 (Mojave).
  - 3D model formats DXF, X, PLY, STL, IFC, BLEND are deprecated.
- Version 100.3:
  - Support for iOS 10 is deprecated. With the 100.5 release, the minimum will be iOS 11.
  - Support for Ubuntu 14.04 is deprecated. With the 100.5 release, the minimum will be Ubuntu 16.04.

    - Support for macOS Sierra (version 10.12) is deprecated. With the 100.4 release, the minimum will be macOS High Sierra (10.13).
- Version 100.2 is the last release to support:
    - Android development for API levels 15(Android 4.0.3-4.0.4), 16 (Android 4.1-4.1.1), 17 (Android 4.2 - 4.2.2), and 18 (Android 4.3). With the 100.3 release, the minimum will be API 19 (Android 4.4).
    - Windows 32-bit support for Qt. Customers who require Windows 32-bit support for ArcGIS Runtime SDK 100.2 for Qt will need to request it.
- Version 100.1 is the last release to support:
    - macOS El Capitan (version 10.11). The 100.2 release will support macOS Sierra (version 10.12) and macOS High Sierra (version 10.13).
    - Qt SDK versions 5.6.2, 5.8, 5.9.0 and 5.9.1. With the 100.2 release, the minimum will be Qt SDK 5.9.2.
    - Visual Studio 2015 compiler. With the 100.2 release, the minimum will be the Visual Studio 2017 compiler.
    - iOS 9. With the 100.3 release, the minimum will be iOS 10.
- Version 100.0 is the last release to support:
    - XCode versions older than 8.2.x. With the 100.1 release the minimum will be XCode 8.2.1.
    - Qt SDK version 5.7.x. The Qt Company is not releasing patches on this version any longer.