

Tungsten RPA

Technical Specifications

2025.2

TUNGSTEN
AUTOMATION

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Table of Contents

Introduction.....	5
Configurations supported.....	6
Languages supported.....	8
RPA applications.....	8
Tungsten Automation products.....	9
Requirements.....	10
Windows systems.....	10
Linux systems.....	12
Docker containers.....	13
Web servers.....	14
Considerations and limitations.....	14
Tomcat.....	14
Windows and Linux.....	15
Docker.....	15
Authentication.....	16
SAML.....	16
OAuth clients.....	16
Service providers.....	16
Browsers.....	17
Databases.....	17
Optional requirements.....	19
Desktop Automation Service.....	19
Document Transformation Service.....	19
Process Discovery.....	20
Process Discovery Agent requirements.....	20
Process Discovery Analyzer requirements.....	21
Synchronizer with Robot Lifecycle Management.....	22
Tungsten Analytics for RPA.....	22
Compatible product requirements.....	24
Tungsten Insight.....	24
Tungsten SignDoc.....	24
Tungsten TotalAgility.....	24

Introduction

The technical specifications in this document apply to Tungsten RPA 2025.2 versions.

RPA is an extensible platform that connects with other Tungsten Automation technologies to automate content-intensive workflows. RPA connects with third-party cognitive services.

 Only versions of third-party solutions that were released and tested *before* the release date of this RPA version are included.

The memory and disk space required to support RPA are listed in this document. These requirements are for RPA only and do not include memory or disk space required for the operating system, environment, and other software.

Configurations supported

The following table lists support for configurations of RPA applications and components.

Application	Windows	Linux	Docker	Web server
Design Studio	Yes	Yes	No	No
Desktop Automation Service	Yes	No	No	No
Document Transformation Service	Yes	No	No	No
Kaplets	Yes	Yes	Yes	Yes
Management Console	Yes	Yes	Yes	Yes
Process Discovery Agent	Yes	No	No	No
Process Discovery Analyzer	Yes	Yes	Yes	No
Robot File System	Yes	Yes	Yes	Yes
RoboServer	Yes	Yes	Yes	No
Synchronizer with Robot Lifecycle Management	Yes	Yes	Yes	No
Tungsten Analytics for RPA	Yes	No	No	No

The following image shows the primary RPA components followed by examples of additional components. Your configuration can include compatible Tungsten Automation and third-party products.

Design Studio

Develop and test robots

Management Console

Schedule robots and application management

RoboServers

Run Robots

Additional Components

Document Transformation Server

Robot File System

Kapplet Server

...

Languages supported

Supported languages vary based on the configuration of the operating system, product, and application as listed in the following topics.

- [RPA applications](#)
- [Tungsten Automation products](#)

RPA applications

The following table lists languages supported for RPA applications. In some configurations, only English is supported.

Tungsten RPA documentation is available in English, French, and Japanese languages.

Products	Environments	Languages
<ul style="list-style-type: none"> • Design Studio • Desktop Automation Service • Document Transformation Service • Kapplets • Management Console • Process Discovery Agent • RoboServer • Robot File System • Synchronizer with Robot Lifecycle Management • Tungsten Analytics for RPA 	Windows	<ul style="list-style-type: none"> • English • French • Japanese
<ul style="list-style-type: none"> • Process Discovery Analyzer 		English
<ul style="list-style-type: none"> • Design Studio • Kapplets • Management Console • RoboServer • Robot File System • Synchronizer with Robot Lifecycle Management 	Linux	<ul style="list-style-type: none"> • English • French • Japanese
<ul style="list-style-type: none"> • Process Discovery Analyzer 		English
<ul style="list-style-type: none"> • Process Discovery Analyzer • RoboServer 	Docker	English
<ul style="list-style-type: none"> • Kapplets • Management Console • Robot File System • Synchronizer with Robot Lifecycle Management 		<ul style="list-style-type: none"> • English • French • Japanese

Tungsten Automation products

The following table lists languages supported for Tungsten Automation products compatible with RPA.

Products	Languages
Tungsten Insight	<ul style="list-style-type: none">• English• French• Japanese
Tungsten SignDoc	<ul style="list-style-type: none">• English• French• Japanese
Tungsten TotalAgility	<ul style="list-style-type: none">• English• French• Japanese

Requirements

This topic describes the minimum and recommended hardware, operating systems, and software for installing and using Tungsten RPA.

Based on your environment and configuration, see the following topics:

- [Windows systems](#)
- [Linux systems](#)
- [Docker containers](#)
- [Web servers](#)
- [Authentication](#)
- [Browsers](#)
- [Databases](#)

Windows systems

Minimum system requirements must be met to install and use the following Tungsten RPA applications in a Windows environment:

- Design Studio
- Kapplets
- Management Console
- RoboServer
- Robot File System
- Synchronizer with Robot Lifecycle Management

Category	Specification
Hardware	<p>Minimum:</p> <ul style="list-style-type: none"> • Intel Core i5 2.8 GHz CPU or AMD equivalent • 8 GB RAM • 7 GB free disk space (2 GB for installation and 5 GB for operation) <p>Recommended:</p> <ul style="list-style-type: none"> • Intel Core i5 (4 Cores, 4 Threads, 2.8 GHz) • 16 GB RAM • 2 GB free disk space for installation • 5 GB free disk space for operation
Client operating systems	<ul style="list-style-type: none"> • Microsoft Windows 11 Pro or Enterprise • Microsoft Windows 10 Pro or Enterprise (64-bit)
Server operating systems for running: <ul style="list-style-type: none"> • Kapplets • Management Console • RoboServer • Robot File System • Synchronizer 	<ul style="list-style-type: none"> • Microsoft Windows Server 2022 • Microsoft Windows Server 2019
Required third-party technologies for running: <ul style="list-style-type: none"> • Design Studio • RoboServer 	<ul style="list-style-type: none"> • If you are using the built-in Excel, one of the following is required: <ul style="list-style-type: none"> • Microsoft 365 • Microsoft Office versions 2024, 2021, or 2019 <p>Some features of the built-in Excel may not be compatible with Microsoft 365.</p> • Python versions 3.5 and newer are supported. Python is only required if you are using the Connectors (Custom Action step) that use Python scripts. The package must be configured for the Python version that is used. The <code>six</code> package must be present in the Python installation. • Java and .NET are required if you have APIs that call Robots. <ul style="list-style-type: none"> • Java 17 and newer versions available at the time of release. • The .NET API targets .NET Standard 2.0, building applications on either .NET (Core) 2.0 to 6.0, or .NET Framework 4.7.2 and newer versions available at the time of release. Using the .NET API, any .NET-based application can become a client to an RPA instance.

For applications and products not listed in this table, see the following topics:

- [Optional requirements](#)
- [Compatible product requirements](#)

Linux systems

Minimum system requirements must be met to install and use the following Tungsten RPA applications in a Linux environment:

- Design Studio
- Kapplets
- Management Console
- RoboServer
- Robot File System
- Synchronizer with Robot Lifecycle Management

Specification	Description
Hardware	Same hardware requirements as for Windows .
Client operating systems	Ubuntu 24.04 LTS
Web application servers	See Web servers for Management Console and Robot File System requirements.
Required third-party technologies for using: <ul style="list-style-type: none"> • Design Studio • RoboServer 	The following packages must be installed: <ul style="list-style-type: none"> • libasound2 • libatk-bridge2.0-0 • libatk1.0-0 • libatspi2.0-0 • libblkid1 • libbsd0 • libcairo2 • libcjson1 • libcups2 • libc6 • libdbus-1-3 • libdrm2 • libexpat1 • libffi7 • libgbm1 • libgcc-s1 • libgcrypt20 • libglib2.0-0 • libgl1 • libglvnd0 • libglx0 • libgpg-error0 • libgssapi-krb5-2 • libicu66

Specification	Description
	<p>To install libc6, you may need to add the Ubuntu 24.04 repository:</p> <pre>deb http://security.ubuntu.com/ubuntu focal-security main</pre> <p>to the following:</p> <pre>/etc/apt/sources.list</pre> <ul style="list-style-type: none"> • liblzma5 • liblz4-1 • libmount1 • libnspr4 • libnss3 • libpango-1.0-0 • libpcre2-8-0 • libpcre3 • libsdl2-ttf-2.0-0 • libsdl2-2.0-0 • libselinux1 • libsqlite3-0 • libsystemd0 • libxau6 • libxcb1 • libxcomposite1 • libxdamage1 • libxdmcp6 • libxext6 • libxfixes3 • libxkbcommon0 • libxrender1 • libxrandr2 • libx11-6 • xvfb • zlib1g

For applications and products not listed in this table, see the following topics:

- [Optional requirements](#)
- [Compatible product requirements](#)

Docker containers

Minimum system requirements must be met to use the following Tungsten RPA applications and components in a Docker container:

- Management Console

- RoboServer
- Robot File System
- Synchronizer with Robot Lifecycle Management

Specification	Description
Hardware	Same hardware requirements as for Windows .
Web application servers	See Docker configuration in a web server for Management Console and Robot File System requirements.
Required third-party technologies	Tested with Docker 24 and newer versions available at the time of release. For more information, refer to "Docker tools for Tungsten RPA deployment" in the <i>Tungsten RPA Administrator's Guide</i> .

For applications and products not listed in this table, see the following topics:

- [Optional requirements](#)
- [Compatible product requirements](#)

Web servers


Minimum requirements must be met to run compatible Tungsten RPA applications in an Apache Tomcat open-source web server, based on the environment and configuration.

- [Considerations and limitations](#)
- [Tomcat](#)
- [Windows and Linux](#)
- [Docker](#)

Considerations and limitations

Management Console and Kapplets require a high bandwidth and low-latency network between the Management Console, Kapplets, and the database containing their data. They must be located in close proximity.

If Management Console and Kapplets are placed far away from their database and/or each other, they both can potentially run into deadlocks and timeouts.

 Windows Integrated Authentication only works when the underlying operating system is Windows-based.

Tomcat

Compatible Tomcat and Java versions:

- Apache Tomcat 9.0.99 and newer 9.0 versions.

i Apache Tomcat versions 10.x and 11.x are not supported.

- Java 17 or newer versions available at the time of release.
Tested with the latest Eclipse Temurin Java 17 version.

Windows and Linux

Minimum system requirements must be met to use the following Tungsten RPA applications in a web server in a Windows or Linux environment:

- Management Console
- Kapplets
- Robot File System

Specification	Description
Hardware	See Windows , which also applies to Linux systems.
Browsers	See Browsers .
Web servers	See Tomcat .
DBMS	See Databases .
Git integration for Management Console	See Robot Lifecycle Management .
SSO integration for Management Console	See Authentication .

Docker

Minimum system requirements must be met to use the following Tungsten RPA applications in a web server within a Docker container:

- Management Console
- Kapplets
- Robot File System

i Windows Integrated Authentication does not work when Management Console runs in a Docker container.

Specification	Description
Hardware	See Windows .
Browsers	See Browsers .

Specification	Description
Required third-party technologies	Tested with Docker 24 and newer versions available at the time of release. For more information, refer to "Docker tools for Tungsten RPA deployment" in the <i>Tungsten RPA Administrator's Guide</i> .
DBMS	See Databases .
Git integration	See Robot Lifecycle Management .
SSO integration	See Authentication .

Authentication

Integrate SSO and OAuth authentication on the Management Console.

- [SAML](#)
- [OAuth clients](#)
- [Service providers](#)

For a list of client applications to authenticate on the Management Console, refer to "Service authentication" in the *Tungsten RPA User's Guide*.

To manage users and groups, refer to "Users & groups" in the *Tungsten RPA User's Guide*.

SAML

The Management Console SSO integration is based on the SAML standard and is verified for the following providers:

- Okta
- Azure
- OneLogin


OAuth clients

To manage clients that are authenticated using Management Console, use an OAuth client in RPA to connect with a service provider. Refer to "OAuth clients" in the *Tungsten RPA User's Guide*.

Service providers

The following service providers are supported for creating applications for authentication:

- Box
<https://developer.box.com>

 Box limits the lifetime timeout to one hour. Use this service provider only for Robots, not for Basic Engine Robots.

- Dropbox
<https://www.dropbox.com/developers>
- Facebook
<https://developers.facebook.com>
- Google
<https://console.developers.google.com/apis/library>
- Kintone
<https://kintone.dev>
- LinkedIn
<https://developer.linkedin.com>
- Microsoft Azure AD 2.0
<https://docs.microsoft.com>
- Salesforce
<https://developer.salesforce.com>
- Salesforce sandbox
<https://developer.salesforce.com>
- X (formerly Twitter)
<https://developer.x.com>

Browsers

The following browsers were tested on Windows and Linux systems with the newest versions available at the time of release.

- Google Chrome
- Microsoft Edge
- Mozilla Firefox

Databases

Management Console and Kapplets require a high bandwidth and low-latency network between the Management Console, Kapplets, and the database containing their data. They must be located in close proximity.

If Management Console and Kapplets are placed far away from their database and/or each other, they both might potentially run into deadlocks and timeouts.

The following databases and versions are compatible:

- Microsoft SQL Server 2022
- Microsoft SQL Server 2019
- MySQL 8.0 to 8.0.22 and 8.4
- Oracle 19c

Using the RPA-provided Oracle script in compatibility mode is not supported. For details, refer to the Knowledge Portal article "[ORA-00972 Error Creating Management Console tables in Oracle.](#)"

- PostgreSQL 16

For configuration requirements for a Management Console database, refer to "Create a new database" in the *Tungsten RPA Administrator's Guide*.


Optional requirements

This topic describes the minimum and recommended hardware, operating systems, and software for installing and using the following optional Tungsten RPA applications:

- [Desktop Automation Service](#)
- [Document Transformation Service](#)
- [Process Discovery](#)
- [Synchronizer with Robot Lifecycle Management](#)
- [Tungsten Analytics for RPA](#)

Desktop Automation Service


Meet the following minimum and recommended hardware, operating systems, and software for installing and using Tungsten RPA Desktop Automation Service.

 Only Windows systems are supported.

Specification	Description
Hardware	Minimum: <ul style="list-style-type: none">• Intel Core i5 2.8 GHz CPU or AMD equivalent• 8 GB RAM• 2 GB for installation• 5 GB for operation Follow the requirements of the applications to be automated.
Client operating systems	<ul style="list-style-type: none">• Microsoft Windows 11 Pro or Enterprise• Microsoft Windows 10 Pro or Enterprise (64-bit)
Server operating systems	<ul style="list-style-type: none">• Microsoft Windows Server 2022• Microsoft Windows Server 2019
Required third-party technologies	.NET version 4.8. For dependencies and prerequisites, refer to the <i>Tungsten RPA Installation Guide</i> .

Document Transformation Service

Meet the following requirements for using Document Transformation Service with RPA and compatible Tungsten Automation products.

Specification	Description
Client operating systems	<ul style="list-style-type: none"> Microsoft Windows 11 Pro or Enterprise Microsoft Windows 10 Pro or Enterprise (64-bit)
Server operating systems	<ul style="list-style-type: none"> Microsoft Windows Server 2022 Microsoft Windows Server 2019
Required third-party technologies	<ul style="list-style-type: none"> PowerShell version 3 or newer to execute the script Microsoft .NET version 4.8 and DirectX <p>For dependencies and prerequisites, refer to the <i>Tungsten RPA Installation Guide</i>.</p>
Coexistence with Tungsten Automation products	<p>Transformation components:</p> <ul style="list-style-type: none"> Tungsten RPA Thin Client Server Tungsten RPA Document Transformation Server Tungsten RPA Project builder Tungsten TotalAgility transformation components <p> These products and components cannot be installed on the same computer as Tungsten Transformation (formerly Kofax Transformation Modules).</p>
Requirements	<ul style="list-style-type: none"> Refer to "Install Document Transformation components" in the <i>Tungsten RPA Installation Guide</i>. Refer to the <i>Tungsten TotalAgility Technical Specifications</i> on the Tungsten TotalAgility product documentation portal. The Transformation components of TotalAgility cannot be installed on the same machine as Tungsten Transformation. Refer to the <i>Tungsten Transformation Technical Requirements</i> on the Tungsten Transformation product documentation portal. Transformation cannot be installed on the same machine as the Transformation Toolkit.

Process Discovery

Meet the minimum and recommended hardware, operating systems, and software for installing and using Tungsten RPA Process Discovery Agent and Process Discovery Analyzer.

- [Process Discovery Agent requirements](#)
- [Process Discovery Analyzer requirements](#)

Process Discovery Agent requirements

Meet the minimum and recommended hardware and software for installing and using Process Discovery Agent.

Specification	Description
Hardware	<p>Minimum:</p> <ul style="list-style-type: none"> • Intel Core i5 2.8 GHz CPU or AMD equivalent • 8 GB RAM • 80 MB free disk space for installation • 1 GB free disk space for operation <p>Recommended:</p> <ul style="list-style-type: none"> • Intel Core i5 (4 Cores, 4 Threads, 2.8 GHz) • 16 GB RAM • 80 MB free disk space for installation • 5 GB free disk space for operation
Required third-party technologies	Use .NET version 4.7.2 and newer versions.
Client operating systems	<ul style="list-style-type: none"> • Microsoft Windows 11 Pro or Enterprise • Microsoft Windows 10 Pro or Enterprise (64-bit)

Process Discovery Analyzer requirements

Based on the environment and server configuration, see the following topics:

- [Windows with Process Discovery Analyzer](#)
- [Linux with Process Discovery Analyzer](#)
- [Docker with Process Discovery Analyzer](#)

Windows with Process Discovery Analyzer

Specification	Description
Hardware	<p>Minimum:</p> <ul style="list-style-type: none"> • Intel Core i5 2.8 GHz CPU or AMD equivalent • 8 GB RAM • 800 MB free disk space for installation • 10 GB free disk space for operation <p>Recommended:</p> <ul style="list-style-type: none"> • Intel Core i7 (8 Cores, 16 Threads, 3.8 GHz) • 32 GB RAM • 800 MB free disk space for installation • 10 GB free disk space for operation
Client operating systems	<ul style="list-style-type: none"> • Microsoft Windows 11 Pro or Enterprise • Microsoft Windows 10 Pro or Enterprise (64-bit)
Server operating systems	<ul style="list-style-type: none"> • Microsoft Windows Server 2022 • Microsoft Windows Server 2019

Linux with Process Discovery Analyzer

Specification	Description
Hardware	See Hardware for Process Discovery Analyzer.
Operating systems	Ubuntu 24.04 LTS
Required third-party technologies	The following packages must be installed: <ul style="list-style-type: none"> • libgomp1 • libgfortran3 • libgcc1 • libreadline5

Docker with Process Discovery Analyzer

Specification	Description
Hardware	See Hardware for Process Discovery Analyzer.
Required third-party technologies	Tested with Docker 24 and newer versions available at the time of release. Refer to the "Docker tools for Tungsten RPA deployment" in the <i>Tungsten RPA Administrator's Guide</i> .

Synchronizer with Robot Lifecycle Management

To use the Synchronizer with Robot Lifecycle Management functionality, access to a Git repository is required.

The following Git services are compatible:

- Git 2.42
- Bitbucket
- GitHub


For more information, including instructions for configuring the Management Console, refer to the *Tungsten RPA Best Practices Guide*.

Tungsten Analytics for RPA

Minimum requirements must be met to use Tungsten Analytics for RPA.

Tungsten Analytics for RPA is an extension of RPA that produces a graphical business intelligence dashboard based on data collected while RPA robots and Process Discovery Agents are working.

For more information, including installation instructions, refer to "Tungsten Analytics for RPA" in the *Tungsten RPA User's Guide*.

 Be sure to use the Tungsten Analytics for RPA version that is delivered with your version of Tungsten RPA.

Specification	Description
Hardware	Refer to the <i>Insight Technical Specifications</i> on the Insight product documentation portal.
Databases	<ul style="list-style-type: none"> • Microsoft SQL Server 2022 • Microsoft SQL Server 2019 • MySQL 8.0 to 8.0.22 and 8.4
Authentication	Windows user authentication requires access to all Tungsten Analytics for RPA databases.
Compatible Tungsten Automation software	<ul style="list-style-type: none"> • Insight 6.5.0 (formerly Kofax Insight) • Tungsten Analytics 2.9 is designed to use Insight 6.5.0. <p>For a detailed list of version compatibility, refer to "Upgrade from previous version" in the <i>Tungsten RPA User's Guide</i>.</p>

Compatible product requirements

This topic describes requirements for using compatible versions of Tungsten Automation software products with RPA applications.

- [Tungsten Insight](#)
- [Tungsten SignDoc](#)
- [Tungsten TotalAgility](#)

Tungsten Insight

Tungsten Insight 6.5.0 (formerly Kofax Insight) is compatible with RPA Management Console.

- Refer to the *Insight Technical Specifications* on the Insight product documentation portal.
- Although Insight 6.5.0 is required as the base platform, we recommend that it not be installed on the same computer as the Management Console.
- For Insight products, install the Tungsten RPA-specific dashboards.
- Install Insight on a separate server than Tomcat. Running Tomcat and Insight on the same server is not recommended.

Tungsten SignDoc

On Windows and Linux operating systems, Tungsten SignDoc is compatible with Design Studio and RoboServer.

On web servers, Tungsten SignDoc Standard is supported in an installation that includes a Windows Service or Docker container.

For detailed requirements, options, and compatible products, refer to the *Tungsten SignDoc Technical Specifications* on the Tungsten SignDoc product documentation portal.

The following versions are compatible with Tungsten RPA:

- Tungsten SignDoc Standard 3.3
- Tungsten SignDoc Standard 3.2

Tungsten TotalAgility

The following versions are compatible with RPA Management Console and RoboServer:

- Tungsten TotalAgility 8.x
- Tungsten TotalAgility 7.11.x
- Tungsten TotalAgility 7.10.x
- Tungsten TotalAgility 7.9.x

For more information, refer to the *Tungsten TotalAgility Technical Specifications* on the Tungsten TotalAgility product documentation portal.

Tungsten TotalAgility Quick RPA enables users to orchestrate RPA robots by placing robots in a dedicated workflow.

- Users must have access permissions to the Designer, Process, and Work type areas of TotalAgility for using the Quick RPA application.
- For more information, refer to the *Tungsten TotalAgility Quick RPA Help* on the Tungsten TotalAgility product documentation portal.