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LABWORKS v6.9

Hardware and Software Guide

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1 General Description

LABWORKS LIMS 6.9 is a suite of Laboratory Information Management System (LIMS) applications from Labworks, LLC. This document describes the required hardware and software to install and run LABWORKS 6.9 application. Please note that we do support the versions that software was qualified on (Qualified column). In the Supported column, we will only list supported versions on which the software was not explicitly qualified.

2 Hardware Requirements

2.1 Server Hardware Requirements

Hardware Component	Minimum Specification	Recommended Specification
Memory (RAM)	2 GB	16 GB
Processor	2 x 2.0 GHz or higher dual core processor	4 x 3.0 GHz or higher quad core processor
Free Space Required on Hard Drive	150 GB	250 GB + 1 GB per User per year

2.2 Client Hardware Requirements

Hardware Component	Minimum Specification	Recommended Specification
Memory (RAM)	2 GB	4 GB
Processor	2 GHz or higher single core processor	3.0 GHz or higher dual core processor
Free Space Required on Hard Drive	10GB	20 GB

2.3 Webserver Hardware Requirements (Optional)

Hardware Component	Minimum Specification	Recommended Specification
Memory (RAM)	4 GB	16 GB*
Processor	2 x 2.0 GHz or higher dual core processor	4 x 3.0 GHz or higher dual core processor
Free Space Required on Hard Drive	50 GB	100 GB

**only for 64 bit systems, one would need more than 4GB RAM*

3 Software Requirements

3.1 Required Software for Database - Oracle

Software	Qualified	Supported
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Operating System	- Windows Server 2008R2 - Windows Server 2012 - Windows Server 2016 - Windows Server 2019	☐ List of Operating Systems Supported
Oracle	10gR2 11gR2 12c 19c	10gR2 11gR2 12c 19c
Oracle Installation	- Oracle Standard Edition - Oracle Enterprise Edition	- Oracle Standard Edition - Oracle Enterprise Edition
Oracle Character Set	UTF8, AL32UTF8	UTF8, AL32UTF8, we8mswin1252
Oracle Features	☐ Partitioning optional (Oracle Enterprise Only)	☐ Partitioning optional (Oracle Enterprise Only)

3.2 Required Software for Database – SQL Server

Software	Qualified	Supported
Operating System	- Windows Server 2008R2 - Windows Server 2012 - Windows Server 2016 - Windows Server 2019	- Windows Server 2008 R2 - Windows Server 2012 - Windows Server 2016 - Windows Server 2019
SQL Server	- SQL 2008 R2 - SQL 2012 - SQL 2014 - SQL 2016 - SQL 2017	- SQL 2008 R2 - SQL 2012 - SQL 2014 - SQL 2016 - SQL 2017
SQL Installation	- SQL Standard Edition - SQL Enterprise Edition	- SQL Standard Edition - SQL Enterprise Edition

3.3 Required Software for Client

Software	Qualified	Supported
Operating System	Windows 10	- Windows 10 - Windows Server 2008R2 - Windows Server 2012 - Windows Server 2016 - Windows Server 2019
Microsoft Office	- Office 2010 - Office 2013 - Office 2016	- Office 2010 - Office 2013 - Office 2016

Oracle Client (If applicable)	☐ Oracle 12c, 11g Release 2 Client 32 Bit • Only the full Oracle client is qualified. ☐ Oracle	☐ Oracle 12c, 11g Release 2 Client 32 Bit • Only the full Oracle client is qualified. ☐ Oracle
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3.4 Required Software for Webserver (Optional)

Software	Qualified	Supported
Operating System	- Windows Server 2008 R2 Standard/Enterprise (64-bits) - Windows Server 2012 STD/ENT - Windows Server 2016 STD/ENT - Windows Server 2019	- Windows Server 2008 R2 Standard/Enterprise (64-bits) - Windows Server 2012 STD/ENT - Windows Server 2016 STD/ENT - Windows Server 2019
Internet Information Services (IIS)	- IIS 7 - IIS 8.5 - IIS 10 This should be installed and running, to confirm: Control Panel -> Administrative Tools -> Internet Services Manager Application will run in 32 bit mode. Make sure "Default Web Site" is started.	- IIS 7 - IIS 8.5 - IIS 10 This should be installed and running, to confirm: Control Panel -> Administrative Tools -> Internet Services Manager Application will run in 32 bit mode. Make sure "Default Web Site" is started.
.NET Framework	.NET Framework 4.0 Application Pool Enable 32 bit applications.	.NET Framework 4.0 Application Pool Enable 32 bit applications.
Network	Net service connectivity to the Oracle/SQL database from the Webserver. Clients must be able to connect to the Webserver. All clients must be able to resolve the same name to browse to the Webserver.	Net service connectivity to the Oracle/SQL database from the Webserver. Clients must be able to connect to the Webserver. All clients must be able to resolve the same name to browse to the Webserver.
Microsoft Office (Standard, Professional, or Enterprise)	Required for Excel Calculations - Excel 2007 - Excel 2010 - Excel 2013 - Excel 2016/Office 365	Required for Excel Calculations - Excel 2007 - Excel 2010 - Excel 2013 - Excel 2016/Office 365
Oracle Client	Oracle 12c, 11g Release 2 & Oracle 10gR2 Client, 19c Client	Oracle 12c, 11g Release 2 & Oracle 10gR2 Client, 19c Client
Software	Qualified	Supported

	<i>Only the full Oracle client is qualified.</i>	<i>Only the full Oracle client is supported.</i>
Other Applications	Bartender 10.0+ is required if printing Bartender labels from Sample Login	Bartender 10.0+ is required if printing Bartender labels from Sample Login