GORDIC

GINIS 2022

Compatibility List - Technology

version 3.88.3

Contents

1 Initial information

GINIS is a modular information system that is capable of working in various environments.

GINIS runs in both thick client and web client architecture and supports 3 database systems. Several office system types, electronic documents storages and mailing systems are also supported.

GINIS is ready for on-premise or cloud deployment.

2 Supported database systems

The GINIS information system supports these database systems:

- Oracle Database
- IBM Informix Dynamic Server
- Microsoft SQL Server

Database system	Applicable edition	Applicable version
Oracle Database	Oracle 10 SE One, SE, EE	10.2.0.4 or higher (end of support in GINIS version 3.88)
	Oracle 11 SE One, SE, EE	11.2.0.3 or higher (end of support in GINIS version 3.88)
	Oracle 12.1 SE One, SE, EE	12.1.0.1 or higher (end of support in GINIS version 3.88)
	Oracle 12.2 SE2, EE	12.2.0.1 or higher
	Oracle 19 SE2, EE	19.4.0.0 or higher
	Multitenant / Container DB is not supported - GINIS Database can work as common non-CDB only	
	more on http://support.oracle.com	
	Data coding ANSI CP1250	
IBM Informix Dynamic Server	Workgroup Edition Advanced Workgroup Edition Enterprise Edition Advanced Enterprise Edition	11.70 xC5 or higher 12.10 xC12 or higher
	more on https://www.ibm.com/support/pages/node/320749	
	Data coding ANSI CP1250	

Microsoft SQL Server	Enterprise Edition Standard Edition Developer Edition Express Edition	2012 (until 12.7.2022) 2014 2016 2017 2019 (min. CU4)
	SQLServer on Linux	2017
		2019
	Running GINIS on SQL Server 2012 is guaranteed til 12.7.2022 (end of Microsoft support). There will be a charge for resolving any related issues. https://docs.microsoft.com/en-us/lifecycle/products/microsoft-sql-server-2012 Specific implementation issues on Linux will not be addressed.	
	SQL Server HW and SW requirements: https://docs.microsoft.com/en-us/sql/sql-server/install/hardware-and-software-requirements-for-installing-sql-server-ver15	
	Required settings for GINIS • authentication type: SQL Server + Windows (mixed mode) • communication protocol: TCP/IP	
	Recommended settings for GINIS • latest available Service Pack installed version list https://docs.microsoft.com/en-us/sql/database-engine/install-windows/latest-updates-for-microsoft-sql-server • SQL Server collation: Czech_CI_AS • Data and transaction log disk format: NTFS Allocation Unit Size 64 KB	
	Azure SQL Database Managed Instance Elastic Pool Single Database	
	Data coding new implementations (from 2019) - Unicode older implementations - ANSI CP1250 Azure SQL Database - Unicode Data migration to Unicode provided (as a service).	

To achieve reliable system operation, the database server needs to have sufficient resources (processor performance, physical RAM).
Estimation of minimal RAM for database server: 8 GB + (users_number * 100 MB)

3 Client environment

GINIS runs in both thick client and web client architecture.

The thick client is based on these technologies

- Win32

- MS .NET Framework

The thick client is created as a 32-bit program.

The web client is created in Microsoft .NET Framework. Runs in either 32-bit or 64-bit mode.

3.1 Thick client

Minimal requirements	
HW requirements	RAM min. 4 GB, disk space min. 10 GB RAM min. 8 GB, SSD and high performance CPU for some modules (GSAPOD01)
Display	screen resolution 1024×768 with 100% magnification color depth 32 bits
Operating system	Microsoft Windows 11 Microsoft Windows 10 Anniversary Update or higher Microsoft Windows 8.1 Microsoft Windows Server 2022 Microsoft Windows Server 2019 Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 Oper. system must support application language setting In case of incompatible changes caused by a Windows Update, GINIS will be fixed within 30 days after the update release. Running GINIS 2022 on Windows 7 or Windows Server 2008 R2 is not guaranteed. There will be a charge for resolving any related issues.
Database system client	*Oracle Database:* Oracle Client min. version 11.1.0.7, 11.2.0.2, 12.2.0.1 Oracle OLE DB provider min. version 11.1.0.7, 11.2.0.2, 12.2.0.1 (installation as a part of the GINIS client recommended) *Microsoft SQL Server:* Microsoft ODBC Driver 17 for SQL Server (x86 + x64) Microsoft OLE DB Driver 18 for SQL Server (x86 + x64) *IBM Informix DS:* 32 bit: Informix OLE DB provider version 3.70 TC8

Another system software	Microsoft.NET Framework ver. 4.8 (in some cases Microsoft.NET Framework ver. 3.5 is needed) Microsoft Internet Explorer 11 or Mozilla FireFox Microsoft Windows Installer 3.1 or higher Microsoft Visual C++ 2010 Redistributable (x86) Microsoft Visual C++ 2013 Redistributable (x86 Microsoft Visual C++ 2015-2019 Redistributable (x86
GINIS client automatic updates	Necessary settings: running permission for system service GSSINS01.EXE write permission to GINIS file directory write permission to Computer\$HKLM\backslash SOFTWARE$ registry key write permission to Computer\$HKCU\backslash SOFTWARE$ registry key permissions for system object registration (ActiveX, COM,OLE) and font and 3rd party MSI installation

3.2 Web client

Minimal requirements	
HW requirements	RAM min. 4 GB disk space min. 2 GB
Display	color depth 32 bits
Operating system	Microsoft Windows 11 Microsoft Windows 10 Microsoft Windows 8, 8.1 Microsoft Windows Server 2022 Microsoft Windows Server 2019 Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 In case of incompatible changes caused by a Windows Update, GINIS will be fixed within 30 days after the update release. Running GINIS 2022 on Windows 7 or Windows Server 2008 R2 is not guaranteed. There will be a charge for resolving any related issues.
Another system software	*Web client 01* Microsoft Internet Explorer 11 Mozilla FireFox 45 or lower (modal dialogues supported, el. signature not supported) Google Chrome 36 or lower (modal dialogues supported, el. signature not supported) Microsoft Windows Installer 3.1 or higher *Web client 05 (a new technology)* Microsoft Edge (updated) Mozilla FireFox (updated) Google Chrome (updated) Safari (updated)

Web browser settings (for appropriate webserver)	Active scripting - enabled (javascript) Cookies - enabled (for authorization only) Access data sources across domains (for verification in the state registry only)

Additional requirements (for client certificate signing)	IE11:
	  using GORDIC AX2 and GORDIC AXSecurity components
	  Initialization and scripting ActiveX - enabled
	For all browsers except Safari:
	  Gordic.Browser.Exensions (GBE)
	Safari:
	  Gordic.Browser.Exensions (GBE) isn't supported

4 Web application server

Minimal requirements	
HW requirements	RAM min. 8 GB disk space min. 8 GB SSD and high performance CPU for some modules (GWAPOD01)
Display	screen resolution 1024×768 color depth 32 bits
Operating system	Microsoft Windows Server 2022 Microsoft Windows Server 2019 Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 (appropriate language support is required) Running in Windows Server Core not supported. In case of incompatible changes in Windows o.s. caused by a Windows Update, GINIS will be fixed within 30 days after the update release. Running GINIS 2022 on Windows Server 2008 R2 is not guaranteed. There will be a charge for resolving any related issues.

Database system client	*Oracle Database:*
	    Oracle OLE DB provider min. version 11.1.0.7, 11.2.0.2, 12.2.0.1
	Microsoft SQL Server:
	  Microsoft OLE DB Drive 18 for SQLServer
	IBM Informix DS:
	  32 bit: Informix OLE DB provider version 3.70 TC8
	  64 bit: Informix OLE DB provider version 4.10.FC2

Another system software	Microsoft IIS 7 or higher with ASP.NET support installed Microsoft.NET Framework ver. 4.8 (in some cases Microsoft.NET Framework ver. 3.5 and Microsoft Web Services Enhancements 3.0 is needed) Microsoft Windows Installer 3.1 or higher WebSocket protocol support (recommended for thin client)

5 Office software support

Office software support in GINIS subsystems	
GINIS-SSL	• MS Office 2010 CZ, 2013 CZ, 2016 CZ • MS Office 2019 CZ, 2021 CZ • MS Office 365 CZ - Windows applications • OpenOffice Writer 3.0 or higher - basic support for generating data into form templates
Creating of documents	el. documents created with GINIS-REG or GINIS-FIK • MS Office 2010 CZ, 2013 CZ, 2016 CZ • MS Office 2019 CZ, 2021 CZ • MS Office 365 CZ - Windows applications
Reports created by GORDIC Report generator	• MS Office 2010 CZ, 2013 CZ, 2016 CZ • MS Office 2019 CZ, 2021 CZ • MS Office 365 CZ - Windows applications
RTF templates and grafical report export	OpenOffice Writer 3.0 or higher
Grafical report export to PDF format	Acrobat Reader ver. 9.0 or higher (PDF format ver. 1.4 or higher)
Recommended PDF viewers for PDF file preview	Foxit Reader ver. 7 or higher

Using the 32-bit MS Office edition is necessary for full integration with GINIS.
more on http://technet.microsoft.com/en-us/library/ee681792(v=office.15).aspx

6 Electronic document storage

Electronic document storage	
Supported storage types	• GORDIC WS DMS • ftp, sftp server • Azure Blob Storage
Electronic document storage with full-text	**Windows Search** • can run in Windows Server 2012 a Windows 8 or higher • can run only with WS DMS

7 Interface for mailing systems

E-mail support in GINIS modules	
E-registry	**E-mail reception** ▪ POP3,POP3S

Redistribution node - Mail - inbox	**E-mail download - thick client** • Extended MAPI (for 32-bit clients supporting E-MAPI - Microsoft Outlook 2010, 2013) • MAPI (for 32-bit clients that support MAPI - Microsoft Outlook Express, Windows Live Mail) • POP3, POP3S **E-mail download - web client** • POP3, POP3S **E-mail sending - thick client** • Extended MAPI (for 32-bit clients supporting E-MAPI - Microsoft Outlook 2010, 2013) • SMTP, SMTPS **E-mail sending - web client** • SMTP, SMTPS
General usage	**E-mail message format** ▪ MIME ▪ UUEncode (with SMTP protocol only)

8 Bar code support

Bar code support	
Bar code supported type	Code 39
TrueType fonts delivered with GINIS system	CK GINIS (for minimal 30 dot points) CK GINIS small (for minimal 15 dot points)

9 Digital signature and electronic sealing support

Digital signature support	
Digital signature view in Acrobat Reader	Acrobat Reader ver. 9.2 or higher
Rules for digital signature validation	On computer where validating process answers, it is necessary to install: • certificates of CA that have issued the certificate used for creating the validated digital signature • certificates of CA that have issued the certificate used for creating CRLs or OCSP answers

Qualified electronic seal support	
On-premise sealing	ProID card SafeNET HSM module
Remote sealing	I.CA RemoteSeal

10 Automatic scanner support

Scanner with automatic feeder support	
Document scanning	**resolution** • 300 DPI recommended • 600 DPI maximal file format **file format** • multipage TIFF recommended
Scanning software	**GINIS GSL and 3rd party SW** recommended SW • Tesseract OCR • ABBYY Fine Reader Engine 11,12 **GINIS MAS + 3rd party scan software** recommended scan software for GINIS MAS module • ABBYY Recognition server • Konica Minolta • Sirius

11 File conversion to PDF and PDF/A format

File conversion to PDF and PDF/A format	
Conversion to PDF/A format	**Server solutions** • GORDIC DKS - Document conversion server • Adobe Experience Manager Forms 6.4 • Adobe LiveCycle Enterprise Suite ver. 2 or 3 • Adobe LiveCycle Enterprise Suite ver. 4 (recommended according to PDF/A standard) • S602 Long-Term Docs **Conversion on client's PC (for thick client GINIS only)** • Microsoft Office 2010, 2013, 2016, 2019, 2021, 365 (recommended for best results according to PDF/A standard) • PDF Creator version 1.7.3
Conversion to PDF format	Server solutions • GORDIC DKS - Document conversion server • Adobe Experience Manager Forms 6.4 • Adobe LiveCycle Enterprise Suite ver. 2 or 3 or 4 • S602 Server Enterprise Edition (Print2PDF 8, 9, X) • S602 Long-Term Docs Conversion on client's PC (for thick client GINIS only) • PDF Creator version 1.7.3 or higher • Microsoft Office 2010, 2013, 2016, 2019, 2021, 365 • LibreOffice version 6.1, 6.2 • Software602 Print2PDF 8, 9, X

On the conversion computer can be installed just one MS Office version
(the combination of MS Office versions is not possible).

12 GORDIC DKS - Document conversion server

Operational requirements	
HW requirements	RAM min. 6 GB CPU - min 8 core, min. 16 core for el. signature validation
Operating system	Microsoft Windows 7 or higher Microsoft Windows Server 2008 R2 or higher

Another system software	**Required:**
	• Microsoft.NET Framework 4.7.2
	• PDFCreator version 1.7.3
	• FoxitReader 7 or higher
	• LibreOffice 32bit, version 6.1, 6.2, 6.3, 6.4, 7.0 (cannot be installed with OpenOffice together)
	• Internet Explorer 11
	• Ghostscript 32bit, 9.10 or higher
	• PDF24 9.0 or higher
	Optional:
	• Microsoft Office Word 2010, 2013, 2016, 2019, 2021 365
	• Microsoft Office Excel 2010, 2013, 2016, 2019, 2021 365
	• WKHTMLTOPDF (for conversion from EML and HTML to PDF)
	• Adobe Reader 10 or higher
	• Software602 Form Filler 4.52.29.13.0726 (for conversion from ZFO to PDF)

13 Microsoft Azure support

GINIS runs in hosting centers (clouds) as IaaS (as an application installed on virtual machines).

In addition, in Microsoft Azure environment is possible:

• to use Azure SQL Database

• to use Azure Blob Storage

• to run GINIS thin client as Azure WebApp

14 Multifactor authentication

Supported types of multifactor authentication	
Authentication type	TOTP
Supported mobile applications	• Google Authenticator • TOTP Authenticator (fy. Binaryboot)

15 GCL changes history

Changes 3.88.2 to 3.88.1

Client environment

+ Windows 11 and Windows Server 2022 support

Web application server

+ Windows Server 2022 support

Automatic scanner support

+ ABBYY Fine Reader Engine 12 support

Changes 3.88.1 to 3.86.4

Supported database systems

- SQL Server 2008/2008R2 support

+ SQL Server on Linux support

* Oracle database specification changed

Electronic document storage

- Microsoft SharePoint Services and Hitachi Content Archive Platform support ended