



GORDIC®

Informační systémy pro státní správu,
samosprávu a bankovníctví

GINIS 2019

Compatibility List - Technology

version 3.82.8

© 1993 - 2019 GORDIC spol. s r. o.

Contents

1.	Initial information	2
2.	Supported database systems	2
3.	Client environment	3
3.1.	Thick client	4
3.2.	Thin client	5
4.	Web application server	6
5.	Office software support	6
6.	Electronic document storage	7
7.	Interface for mailing systems	8
8.	Bar code support	8
9.	Digital signature and electronic sealing support	9
10.	Automatic scanner support	9
11.	File conversion to PDF and PDF/A format	10
11.1.	GORDIC DKS - Document conversion server	11
12.	Microsoft Azure support	11

1. Initial information

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

GINIS runs in both thin client and thick 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	Standard Edition ONE Standard Edition Standard Edition 2 Enterprise Edition	10.2.0.4 or higher, 11.2.0.3 or higher, 12.1.0.1, 12.1.0.2, 12.2.0.1 (Multitenant / Container DB is not supported - DB GINIS Database can work as common non-CDB only)
	<i>more on</i> http://support.oracle.com	
IBM Informix DS	C-Innovator Edition Growth Edition Ultimate Edition Choice Edition	11.70 xC5 or higher
	<i>more on</i> http://www-01.ibm.com/support/docview.wss?rs=630&uid=swg27013343	

Microsoft SQLServer	Enterprise Edition	2008, 2008 R2
	Standard Edition	2012
	Workgroup Edition	2014
	Developer Edition	2016
	Express Edition	2017
<p>SQL Server HW +SW requirements : http://msdn.microsoft.com/en-us/library/ms143506.aspx</p> <p>Required settings for GINIS :</p> <ul style="list-style-type: none"> • authentication type: SQL Server + Windows (mixed mode) • communication protocol: TCP/IP <p>Recommended settings for GINIS:</p> <ul style="list-style-type: none"> • latest available Service Pack installed version list http://sqlserverbuilds.blogspot.cz/ 		
<p>Azure SQL Database</p> <ul style="list-style-type: none"> • Managed Instance • Elastic Pool • Single Database 		

To achieve reliable system operation, the database server needs to have sufficient resources (processor performance, physical RAM).

Estimation of minimal RAM for database server: 1 GB + (users_number * 50 MB)

3. Client environment

GINIS runs in both thin client and thick 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 thin client is created in Microsoft .NET Framework.

Runs in either 32-bit or 64-bit mode.

3.1. Thick client

Minimal requirements	
RAM	min. 4 GB, extra 2 GB for some modules (GSAPOD01)
Hard disk space	min. 10 GB
Display	screen resolution 1024×768 with 100% magnification color depth 32 bits
Operating system	<p>Microsoft Windows 10 Anniversary Update or higher Microsoft Windows 8.1 Microsoft Windows 7 + SP1 Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 Microsoft Windows Server 2008 R2 + SP1</p> <p>Oper. system must support application language setting</p> <p>In case of incompatible changes caused by a Windows Update, GINIS will be fixed within 30 days after the update release.</p>
Database system client	<p><i>Oracle Database:</i> 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</p> <p>(installation as a part of the GINIS client recommended)</p> <p><i>Microsoft SQL Server:</i> Microsoft MDAC 2.8 or higher</p> <p><i>IBM Informix DS:</i> 32 bit: Informix OLE DB provider version 3.70 TC8</p>
Another system software	<p>Microsoft.NET Framework ver. 4.7.2 (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++ 2015 Redistributable (x86)</p>

3.2. Thin client

Minimal requirements	
RAM	min. 4 GB
Hard disk space	min. 2 GB
Display	color depth 32 bits
Operating system	<p>Microsoft Windows 10 Microsoft Windows 8, 8.1 Microsoft Windows 7 + SP1 Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 Microsoft Windows Server 2008 R2 + SP1</p> <p>In case of incompatible changes caused by a Windows Update, GINIS will be fixed within 30 days after the update release.</p>
Another system software	<p><i>Web client 01</i> 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</p> <p><i>Web client 05 (a new technology)</i> Microsoft Internet Explorer 11 Microsoft Edge (updated) Mozilla FireFox (updated) Google Chrome (updated)</p>
Web browser settings (for appropriate webserver)	<p>Active scripting - enabled (javascript) Cookies - enabled (for authorization only) Access data sources across domains (for verification in the state registry only)</p>
Additional requirements (for client certificate signing)	<p>IE11:</p> <ul style="list-style-type: none"> • using GORDIC AX2 and GORDIC AXSecurity components • Initialization and scripting ActiveX - enabled

4. Web application server

Minimal requirements	
RAM	min. 4 GB
Hard disk space	min. 4 GB
Display	screen resolution 1024×768 color depth 32 bits
Operating system	<p>Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2012 Microsoft Windows Server 2008 R2 + SP1</p> <p>(appropriate language support is required) Running in Windows Server Core not supported.</p> <p>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.</p>
Database system client	<p><i>Oracle Database:</i> Oracle OLE DB provider min. version 11.1.0.7, 11.2.0.2, 12.2.0.1</p> <p><i>Microsoft SQL Server:</i> Microsoft MDAC 2.8 or higher</p> <p><i>IBM Informix DS:</i> 32 bit: Informix OLE DB provider version 3.70 TC8 64 bit: Informix OLE DB provider version 4.10.FC2</p>
Another system software	<p>Microsoft IIS 7 or higher with ASP.NET support installed Microsoft.NET Framework ver. 4.7.2 (in some cases Microsoft.NET Framework ver. 3.5 is needed) Microsoft Web Services Enhancements 3.0 Microsoft Windows Installer 3.1 or higher WebSocket protocol support (recommended for thin client)</p>

Recommendation: High load consuming applications (GWAPOD01) need high performance HW (CPU with high core frequency, SSD)

5. Office software support

Office software support in GINIS subsystems	
GINIS-SSL	<p>MS Office 2010 CZ MS Office 2013 CZ</p>

	MS Office 2016 CZ 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 MS Office 2013 CZ MS Office 2016 CZ
Reports created by GORDIC Report generator	MS Office 2010 CZ MS Office 2013 CZ MS Office 2016 CZ
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	for Windows 7: Adobe Reader ver. 9,10 for Windows 8.1, 10: Foxit Reader ver. 7

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](http://technet.microsoft.com/en-us/library/ee681792(v=office.15).aspx)

6. Electronic document storage

Electronic document storage	
Supported storage types	<ul style="list-style-type: none"> • GORDIC WS DMS • ftp, sftp server • Microsoft SharePoint Services ver. 3.0 • IBM/Panagon FileNet ver. 5.3 or higher • Hitachi Content Archive Platform • Azure Blob Storage
Electronic document storage with full-text	<ul style="list-style-type: none"> • Windows Search <ul style="list-style-type: none"> can run in Windows Server 2012 a Windows 8 or higher can run only with WS DMS • Microsoft Indexing Services <ul style="list-style-type: none"> can run only in Windows Server 2008 R2 /Windows 7

7. Interface for mailing systems

E-mail support in GINIS modules	
E-registry	E-mail reception <ul style="list-style-type: none"> • POP3, POP3S
Redistribution node - Mail - inbox	E-mail download - thick client <ul style="list-style-type: none"> • Extended MAPI (for 32-bit clients that support E-MAPI - <i>Microsoft Outlook</i>) • MAPI (for 32-bit clients that support MAPI - <i>Microsoft Outlook Express, Windows Live Mail</i>) • POP3, POP3S E-mail download - thin client <ul style="list-style-type: none"> • POP3, POP3S E-mail sending - thick client <ul style="list-style-type: none"> • Extended MAPI (for 32-bit clients supporting E-MAPI - <i>Microsoft Outlook</i>) • SMTP, SMTPS E-mail sending - thin client <ul style="list-style-type: none"> • SMTP, SMTPS
General usage	E-mail message format <ul style="list-style-type: none"> • 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	<p>On computer where validating process answers, it is necessary to install:</p> <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 300 DPI recommended 600 DPI maximal file format <ul style="list-style-type: none"> multipage TIFF recommended
Scanning software	GINIS GSL (ABBYY Fine Reader Engine 11 required) GINIS MAS + 3rd party scan software recommended scan software for GINIS MAS module <ul style="list-style-type: none"> 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	<p>Server solutions</p> <ul style="list-style-type: none"> • GORDIC DKS - Document conversion server • Adobe LiveCycle Enterprise Suite ver. 2 or 3 • Adobe LiveCycle Enterprise Suite ver. 4(recommended according to PDF/A standard) • S602 Long-Term Docs <p>Conversion on client's PC (for thick client GINIS only)</p> <ul style="list-style-type: none"> • Microsoft Office 2010, 2013, 2016 (recommended for best results according to PDF/A standard) • PDF Creator version 1.7.3
Conversion to PDF format	<p>Server solutions</p> <ul style="list-style-type: none"> • GORDIC DKS - Document conversion server • Adobe LiveCycle Enterprise Suite ver. 2 or 3 or 4 • S602 Server Enterprise Edition (Print2PDF 8, 9, X) • S602 Long-Term Docs <p>Conversion on client's PC (for thick client GINIS only)</p> <ul style="list-style-type: none"> • PDF Creator version 1.7.3 or higher • Microsoft Office 2010, 2013, 2016 • LibreOffice version 4.1 - 4.3, 5.0 - 5.3 • 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)

11.1. GORDIC DKS - Document conversion server

Operational requirements	
RAM	min. 2 GB
Operating system	Microsoft Windows 7 or higher Microsoft Windows Server 2008 R2 or higher
Another system software	<p>Required:</p> <ul style="list-style-type: none"> • Microsoft.NET Framework 4.7.2 • PDFCreator version 1.7.3 • FoxitReader 7 • LibreOffice 32bit, version 6.1, 6.2 • Internet Explorer 11 • Ghostscript 32bit, 9.10 or higher <p>Optional:</p> <ul style="list-style-type: none"> • Microsoft Office Word 2010, 2013, 2016 • Microsoft Office Excel 2010, 2013, 2016 • WKHTMLTOPDF (for conversion from EML and HTML to PDF) • Adobe Reader 10 • Software602 Form Filler 4.52.29.13.0726 (for conversion from ZFO to PDF)

12. 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