System requirements for NET

Installation NET Design, Engineering, Operations Release NET 12

	Minimum requirement	Recommended specification
Operating System	Microsoft Windows 10 Anniversary Update 64-bit (1604 or higher) (Home, Professional, Enterprise)	
.NET Framework	Microsoft .NET Framework 4.8	
Autodesk AutoCAD Map 3D	Autodesk AutoCAD Map 3D 2022.0.1 – Autodesk AutoCAD 2022.1.3 oder neuer Autodesk AutoCAD Map 3D 2023.0.2 – Autodesk AutoCAD 2023.1.1 oder neuer Autodesk AutoCAD Map 3D 2024.0.1 – Autodesk AutoCAD 2024.1 oder neuer	
Processor	2 core 2,4 GHz	4 core 3,2 GHz
Memory	8 GB	16 GB
Disk Space	10 GB free HDD memory	10 GB free SSD memory
	If the project data is to be stored on this system, more hard disk space is required depending on the project size.	
Network	LAN/WLAN connection	1 Gbit Ethernet connection
Display Resolution	Conventional Displays: 1920 x 1080 with True Color	High Resolution & 4K Displays: Resolutions up to 3840 x 2160
	Scaled displays (4K displays) are not yet fully supported and may cause display problems. Autodesk AutoCAD Map 3D 2021 is generally recommended when using such displays.	
Internet Connection	Not required	Permanent Internet connection
Database	Sqlite (in DWG-File)	
	Oracle 11g, 12c, 19c (not for NET Design)	
	PostgreSQL (not for NET Design) – Requires TKI PostgreSQL industry model provider	

ⓘ **Note on NET Design**
With NET Design in combination with Comsof Fiber Designer the calculation times scale very well with the available CPU processing power. If you frequently calculate planning projects with Comsof Fiber Designer, you can benefit from significantly reduced calculation times when using a modern and fast multi-core CPU.

System requirements for NET

PostGIS Database

	Minimum requirement	Recommended specification
Operating System (Linux)	Debian 9 (stretch), 10 (buster), 11 (bullseye) and unstable (sid)	
	Ubuntu 16.04 (xenial), 18.04 (bionic), 20.04 (focal), 20.10 (groovy)	
	Red Hat Enterprise Linux/CentOS/Oracle Enterprise Linux 8	
	Red Hat Enterprise Linux/CentOS/Oracle Enterprise Linux/Scientific Linux 7	
	Fedora 32, 33	
Operating System (Windows)	MS Windows 10 or higher	
	MS Windows Server 2016 or higher	
PostgreSQL Version	10	13.1
PostGIS Version	2.2	3.1.0
Processor	1 core 1,0 GHz	4 core 2,0 GHz
Memory	2 GB	16 GB
Disk Space	512 MB free HDD memory	512 MB free SSD memory
	Depending on the size and number of projects stored in the database, additional space on the hard disk is required.	
Network	Not required	1 Gbit Ethernet connection

ⓘ **Note**

The above information is provided for guidance only. If many users need to access the database or very many projects are stored in the database, the requirements should be adjusted accordingly. In this case, however, changes to the configuration of PostgreSQL are also necessary. Please contact our support or sales team for more information.

System requirements for NET

FlexNet Embedded Network license server

The network licence server is only necessary if the client systems do not have direct access to the Internet. This server is useful for a large number of users or if the connection to the TKI licence server is slow.

	Minimum requirement	Recommended specification
Operating System (Linux)	CentOS 6.0 - 7.0	
	Red Hat Enterprise Linux 6.x - 7.x	
Operating System (Windows)	MS Windows 10 or higher	
	MS Windows Server 2016 or higher	
.NET Framework	.NET Framework 4.5 to 4.8 (only Windows)	
Java	Oracle Java JRE 8 or OpenJDK JRE 8	
Processor	2 core 2,0 GHz	4 core 2,0 GHz
Disk Space	4 GB	4 GB
Memory	500 MB free HDD memory	500 MB free SDD memory

ⓘ **Note**
The Oracle version of Java is no longer free. The version from AdoptOpenJDK is recommended.

https://adoptopenjdk.net/?variant=openjdk8&jvmVariant=hotspot

NET

System requirements for NET

Establishment NET Cloud

NET Cloud enables high-performance access to network data via the web. The networks are available on mobile devices.

The solution includes two applications:

- Access via web browser with network view and ticket system
- Access via app for creating and linking of photos and documents

NET Cloud is always hosted as SaaS (cloud-based software) in Microsoft Azure and does not require any servers at the customer or TKI.

Depending on the installation of the NET Engineering licences

- On-premises → installed at the customer
- Hosted → Licences and databases are provided by TKI in hosting

the other requirements for NET Cloud differ.

	On-Premises	Hosted
NET Cloud instance	NET Cloud is hosted as SaaS (cloud-based software) in Microsoft Azure and does not require any additional servers at the customer or TKI. The data is stored exclusively in German data centres.	
Use via browser on mobile device or computer	The current browser versions of Chrome or Firefox are supported MS Windows Server 2016 and higher A permanent internet connection is required	
Use via the native NET Cloud Photo App	Download via Android or IOS store for tablet or smartphone Operating system: current iOS (min.14) or Android (min. 10) A permanent internet connection is required Photos can also be uploaded at a later date	
Geoserver	The geoserver must be dimensioned depending on the size of the databases, the number of layers and the number of expected accesses. Details can be found in the Geoserver guide https://docs.geoserver.org/main/en/user/production/index.html A good server start configuration includes the following: • Processor: 4 CPU cores @ 2 GHz • RAM: 8 GB • Hard disc space: 80 GB +	For hosting customers, the geoserver is provided and configured by TKI in hosting.
NET REST Server	The NET Rest Server is provided to all customers on a TKI server. For on-premises customers, only a client application is installed, which establishes access to the database and addresses the IMBatch. This application requires a computer dimensioned for AutoCAD as well as a valid NET Engineering and PGP licence. The runtime environment of this application is .NET 6. This server only requires an outgoing connection so that it can communicate with the REST server hosted by TKI.	The NET Rest Server is provided to all customers on a TKI server. For customers in hosting, the IMBatch application is provided and configured by TKI in hosting.
Database for the projects projects to be published	The projects to be published in NET Cloud must use PostgreSQL as the database.	

System requirements for

NET Build

NET Build is the cloud solution for the digital construction site. All construction phases, from work preparation to project and field management, construction control and monitoring to invoicing and documentation of the work performed are mapped digitally. The solution includes two applications:

- Portal application: for scheduling and dispatching work orders during construction, incl. dashboard
- Mobile application: for order processing by construction crews in the field, including ticket system and photos (damage management), as well as measurements

	Minimum requirement	Recommended specification
Operating System	Linux	
	Windows	
Webbrowser	all common and current web browsers are supported	
Mobile native APP	Download via Android® or iOS® Store	
Mobile devices	Use of Android® or iOS®-based mobile devices: • recommended: Tablet • User account per mobile device	
Mobile Access Requirements	For iOS®: • Current or supported iOS® operating systems, where those operating systems are up-to-date. For a listing of versions and statuses, you may use this link as a reference. • No vintage or obsolete phone technologies (as classified by Apple) – https://support.apple.com/en-gb/HT201624 • The Software will not operate properly on any device with less than 4GB of RAM.	For Android®: • Current or supported Android® operating systems, where those operating systems are up-to-date and continue to receive security updates. For listing of versions and statuses, you may use this link as a reference; • Standard Android fonts and sizing; • No vintage or obsolete phone technologies; • The Software will not operate properly on an Android Go device or on any Device with less than 4GB of RAM.
Screen (Portal Application)	Full HD Monitor (1920 x 1080)	2 Full HD Monitor (1920 x 1080)
Internet connection	Mobile application: Offline-capable	Portal application: Permanent internet connection