# Installation and administrator manual

# **VEGA Inventory System**

Local server version





Document ID: 55767







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# 1 About this document

# 1.1 Function

This instructions manual has all the information you need for installation of the server-based software "VEGA Inventory System".

# 1.2 Target group

Basic knowledge of server-based Windows software such as "*Microsoft*<sup>®</sup> Internet Information Services" and "*Microsoft*<sup>®</sup> SQL Server<sup>®</sup>" is required in order to understand this document.



	2 Introduction
Hardware requirements	2.1 System requirements
naraware requiremente	3.1 GHz (64-bit processor) or faster Multi-core CPU, 8 GB RAM, 100 GB free memory space Recommended:
	Quad-core CPU or better, 16 GB or more RAM, 160 GB free memory space
	Greater computing capacity is required for larger "VEGA Inventory System" installations with a large number of measuring points and users that have to be managed.
Supported operating systems	<ul> <li>Windows-Server<sup>®</sup> 2012</li> <li>Windows-Server<sup>®</sup> 2012 R2</li> <li>Windows-Server<sup>®</sup> 2016</li> </ul>
Supplementary software	<ul> <li>Microsoft<sup>®</sup> Internet Information Services (is installed by the setup)</li> <li>Microsoft<sup>®</sup> Visual C++<sup>®</sup> 2013 Redistributable Package x86 (is installed by the setup)</li> <li>Microsoft<sup>®</sup> .NET Framework 4.0 (is installed by the setup)</li> </ul>
Supported databases	<ul> <li>Microsoft<sup>®</sup> SQL Server<sup>®</sup> 2012 Express, Standard, Business and Enterprise Edition</li> <li>Microsoft<sup>®</sup> SQL Server<sup>®</sup> 2014 Express, Standard, Business and Enterprise Edition</li> <li>Microsoft<sup>®</sup> SQL Server<sup>®</sup> 2016 Express, Standard and Enterprise Edition</li> </ul>
	Which edition of the SQL Server <sup>®</sup> is needed depends on the size of the total system, the number of CPU cores and the features required. The size of the database depends on the number of measuring points and the frequency of the data transmission. The free Express Edition suffices for small individual projects (up to 10 GB). For a larger num- ber of measuring points, a high-end SQL Server Edition is required. Any language setting may be used for the supplementary software. It is assumed that the respective standard values were used for the installation of the supplementary software.
	2.2 Overview of the VEGA Inventory System software
	The <b>Web portal</b> is the VEGA Inventory System user interface. It is a Web application (ASP.NET) that is executed in Microsoft <sup>®</sup> Internet Information Services. The following browsers are supported for display of the web pages:
	<ul> <li>Internet Explorer (from version 9)</li> <li>Edge</li> <li>Eirefox</li> </ul>

- EdgeFirefox
- Chrome
- Safari
- Opera



The following Windows services are installed automatically with the setup:

- The VIS Eventworker receives time-intensive tasks of the Web portal and processes them in the background.
- The VIS Importer imports the measured value packets to the SQL Server database.
- The VIS Mailer is responsible for sending e-mails and text messages.
- The VIS Scheduler takes over time-controlled tasks such as the checking of missing data transfers and sending of time-controlled messages.
- The VIS Validator checks incoming measured value packets and passes them on to the VIS Importer after a successful check.

Select an item to view its description.	Name 📩	Description	Status	Startup Type	Log On As
	🔍 VIS CryptoInbox		Running	Automatic	Local System
	🖓 VIS Eventworker		Running	Automatic	Local System
	🔍 VIS Importer		Running	Automatic	Local System
	🔍 VIS Mailer		Running	Automatic	Local System
	🔍 VIS Scheduler		Running	Automatic	Local System
	🔍 VIS Validator		Running	Automatic	Local System

Fig. 1: Required Windows services



# 3 SQL Server

Microsoft<sup>®</sup> SQL Server<sup>®</sup> in the versions 2012/2014/2016 as Express, Standard, Business or Enterprise Edition are used as database.

Which edition of the SQL Server<sup>®</sup> is needed depends on the size of the total system, the number of CPU cores and the features required. The size of the database depends on the number of measuring points and the frequency of the data transmission. The free Express Edition suffices for small individual projects (up to 10 GB). For a larger number of measuring points, a high-end SQL Server Edition is required. Any language setting may be used for the supplementary software. It is assumed that the respective standard values were used for the installation of the supplementary software.

As an option, you can use an already existing SQL Server instance or install a separate version on the Inventory System server.

#### Note:

The SQL Server must be configured and ready for operation before executing the Inventory System setup.

## 3.1 Authorization for database access

Microsoft<sup>®</sup> SQL Server<sup>®</sup> is used as a database server. The server is managed by the SQL Server Management Studio.

The user account under which the VEGA Inventory System components are run needs the authorisation to access the VEGA Inventory System database. The SQL Server must support the "SQL Server Authentication Mode" for authentication. This is defined in the server settings which are opened by the "Properties" context menu as shown below.



Object Explorer			₹₽×		
Connect - 🖳 🖳 🍸 👩 🔏					
🖃 🔂 monkey-dbsrv02 (SQL Server 12.0.4100 - c-)					
🕀 🚞 Databases		Connect			
Security		Disconnect			
E Server Objects		Register			
⊞		New Query			
🗄 🛄 Management		Activity Monitor			
🕀 🚞 Integration Services Cat					
🗉 📸 SQL Server Agent		Start			
		Stop			
		Pause			
		Resume			
		Restart			
		Policies +			
		Facets			
		Start PowerShell			
		Reports •			
		Refresh			
		Properties			
	_				



B	Server Properties - monkey-dbsrv02 – 🗖 🗙
Sence a page Concel Concel Concetions Database Settings Advanced Permissions	Script  V  Script  V  Script  V  Script  V  Script  V  Script  Script  V  Script  Script  V  Script  Script
Connection Server: markey-doav02 Connection: as If Vew connection properties Progress Ready	Password: Options Enable C2 audit tracing Cross database ownership chaining
	OK Cancel

# 3.2 Configuration of the SQL Server for remote access

After installation, the TCP/IP protocol is not activated as a standard communication protocol for the SQL Server<sup>®</sup>. If VEGA Inventory System and SQL Server<sup>®</sup> are not on the same server this protocol must be activated, otherwise no connection to the SQL Server can be established.





There you have to click the node "SQL Server Network Configuration -> Protocols for <Instance name of the SQL Server>". The TCP/ IP protocol must be activated on the right-hand side. To activate, right click on the protocol and select the "Enable" entry in the drop-down menu. Then the SQL Server service must be restarted.



The SQL Server service is also started with the "SQL Server Configuration Manager" under the "SQL Server Services" node. Right click on the SQL Server service and select the "Restart" entry in the drop-down menu.



# 3.3 Maintenance of the VEGA Inventory System database

The VEGA Inventory System database should be maintained regularly, e.g. according to a maintenance schedule, for optimum operation. Such maintenance includes the following topics:

- Data and logfile management
- Index fragmentation
- Statistics
- Recognition of damages
- Backups

Description of such maintenance is not part of this document.



# 4 User account and setup download

#### 4.1 Access data

After receipt of your order confirmation, you will receive an e-mail with a link to the login page of the VEGA Web portal. Via this link, you first have to create a personal password. After that, you can download the setup software.

#### Note:

The link in the e-mail has a validity of seven days. Within this period, the password must be created and the setup software downloaded.



Fig. 7: E-mail with link for creating the password

You can select the requested menu language via the list box in the upper section of the login page.

Enter your own password and click "Reset password".

#### Note:

The password must have at least eight characters and at least one special character.



INVENTORY SYSTEM Reset password	
Email	
test@example.com	
Password	
Password	
Password confirmation	
Password confirmation	
Reset password	

Fig. 8: Password assignment

After creating the password you are automatically registered in the VEGA Inventory portal and can download the setup software.

# 4.2 Download the setup software

The setup software can be downloaded under "*Workspace - Up-dates*". The target folder can be selected via the settings of your web browser.

Click "Download" and wait until the setup file is downloaded.



Fig. 9: Download of the setup software



# Note:

With your license, you are allowed to make a copy of the software as a backup copy of the original.



# 4.3 Installation

The following steps are performed the first time that the setup program is run:

Each step can be stopped by selecting the "*Cancel*" function, which then aborts the installation. This also cancels all changes carried out on the server.

Step 1: Language selection

Select the language for the dialogues of the setup program. Click "OK".

	VEGA Inventory System - InstallShield Wizard 💌
ځ	Select the language for the installation from the choices below.
	English (United States) V
	OK Cancel

Step 2:

#### Prerequisites

The following software is downloaded and installed, unless it is already installed. An Internet connection is required for this.

- Microsoft<sup>®</sup> Visual C++<sup>®</sup> 2013 Redistributable Package (x86)
- .NET Framework
- IIS



#### Step 3:

#### Start dialogue

The start dialogue is displayed.





Step 4:

#### Welcome dialogue

The welcome dialogue is displayed. Click "Next".

병 VEGA Inve	VEGA Inventory System - InstallShield Wizard					
	Welcome to the InstallShield Wizard for VEGA Inventory System					
	The InstallShield(R) Wizard will install VEGA Inventory System on your computer. To continue, dick Next.					
	NOTE: VEGA Inventory System requires Microsoft SQL Server 2008 Express or above to be installed and available					
	WARNING: This program is protected by copyright law and international treaties.					
	< Back Next > Cancel					

Step 5:

#### License agreement

The license agreement dialogue shows the user the terms of use of the VEGA Inventory System. These must be accepted in order to continue with the installation. Click "*Next*".



岁 VEG/	Inventory System - InstallShield Wizard			
License Agreement Please read the follow				
	INVENTORY SYSTEM			
End User Licen	ce Agreement			
VEGA Inventory Sys	tem - Local Server Software			
Preamble				
This End-User Licence Agreement (hereinafter referred to as "Agreement") is a legally binding contract between you as an individual or a legal person or any affiliated companies or other entities (hereinafter referred to as "You") and				
○ I accept the terms in t	ne license agreement Print ms in the license agreement			
InstallShield				
	< Back Next > Cancel			

Step 6:

#### Configuration of the database server

The database server and the name of the database must be specified.

A database user who has administration rights for the database server must be specified for this. This database user is only used during installation.

尚 V	EGA Inventory Sy	vstem - Install	Shield Wizard	i X	
Database Server Select database s	r server and authenticati	ion method	IN		
Database server th	nat you are installing to SS	:	~	Browse	
Connect using: Windows authentication credentials of current user Server authentication using the Login ID and password below					
Login ID: Password:	sa				
<u>N</u> ame of database	catalog:				
VIS InstallShield				Browse	
u istalionicia —		< Back	Next >	Cancel	
Click " <i>Next</i> ".					



#### Step 7:

#### Configuration of database user and administrator access

This page defines the database user with which the VEGA Inventory System Web application or the Windows services access the database server (*Database user or Database password*). If the user does not yet exist, it is created and configured by the setup, otherwise is must be configured manually for access to the database.

In addition, an initial user account with administrator rights is configured for the login to the VEGA Inventory System. An e-mail address and a password (*Administrator e-mail or Administrator password*) are required for this.

岁· VEGA Inventory System - InstallShield Wizard				
Configuration	VEGA			
	INVENTORY SYSTEM			
Database	VIS Administrator			
Database Username	Administrator E-Mail			
visuser	test@example.com			
Database Password	Administrator Password			
••••				
Confirm Database Password	Confirm Administrator Password			
••••	••••••			
nstallShield				
	<back next=""> Cancel</back>			

Click "Next".

Step 8:

#### Configuration of the Website

This dialogue enables the user to select the name for the virtual directory in the Internet Information Services.

If installed as a default website, the VEGA Inventory System can be addressed directly via the public IP address of the server or the DNS entries referring to this IP.

Example: http://127.0.0.1:80/



谩	VIS	x
Wysite		VEGA
		INVENTORY SYSTEM
Website Name		
VIS		
$\bigcirc$ Install as default website		
<ul> <li>Install as custom website</li> </ul>		
Domain Name		
vis.local		
Port		
80		
InstallShield		
	< Back	Next > Cancel

If installed as a custom website, a freely configurable binding is created for the VEGA Inventory System in the IIS. The domain name and the port must be configured for this.

1	VIS	×
Website		VEGA
		INVENTORY SYSTEM
Website Name		
VIS		
<ul> <li>Install as default website</li> </ul>		
○ Install as custom website		
Domain Name		
Port		
80		
InstallShield		
	< Back Ne:	xt > Cancel

Click "Next".

Step 9:

# Start installation

The installation process starts after clicking on the "Install" button.



B VEGA Inventory System - InstallShield Wizard	x
The wizard is ready to begin installation.	EGA
INV	ENTORY SYSTEM
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Cl exit the wizard.	ick Cancel to
InstallShield	
< Back Instal	Cancel

A progress bar and the current status are displayed during installation.

世 V	/EGA Inventory System - InstallShield Wizard
	VEGA Inventory System gram features you selected are being installed.
P	Please wait while the InstallShield Wizard installs VEGA Inventory System. This may take several minutes.
	Status:
	Copying new files
InstallShield -	
Installof licit -	< Back Next > Cancel

Step 10:

#### Setup finished

The dialogue shown below appears when the installation is finished and indicates whether or not the installation was successful.

If the installation was successful, a link is displayed via which you can open the VEGA Inventory System. The previously configured administrator access must be used as a login.

The checkbox in this dialogue must be activated in order to view the detailed installation logfile after the installation is complete. Click to "*Finish*".





#### Note:

After successful installation of VEGA Inventory System, you must make sure that the latest updates and service packs are always installed on the computer system that is used for operating VEGA Inventory System.

# 4.4 Changing/Removing installation

The following dialogue is displayed if the setup program is run again after previously being successfully installed.



#### **Repair installation**

Accidentally deleted files can be restored using this option.



#### **Remove installation**

All VEGA Inventory System components are uninstalled and all files are deleted.



#### Note:

The database is not affected by the deinstallation. This must be deleted manually for security reasons. The Windows functions for the IIS are also retained.



# 5 Setup

# 5.1 Start VEGA Inventory System for the first time

To display measured values in the VEGA Inventory System, suitable signal conditioning instruments must deliver the required measured values. You can find details on the configuration and setup of these signal conditioning instruments in the respective operating instructions and in the operating instructions of VEGA Inventory System.

Note: The setup of the Inventory System with all settings is only possible when measured values are being sent from a VEGA signal conditioning instrument.

Open your browser and either enter "*localhost*" or the IP address of this server. In the appearing login window, you enter the e-mail address with corresponding password assigned during installation.

# 5.2 System configuration

Chose in the left navigation section the menu item "*Configuration* - *System settings*" and configure the options described below.

In general		E-mail	
Portal, URL	https://vis.vega.com	SMTP sender	inventory.noreply@vega.com
Portal, e-mail	support.inventory@vega.com	SMTP 1 Host	per par second
Max. lines data export	10000	SMTP 1 User	
Max. number of	300	SMTP 1 Password	
measurement loops in the graphic PDF		SMTP 2 Host	
Standard layout	Standard layout *	SMTP 2 User	
		SMTP 2 Password	
		History graph per attachment	10
SMS		Scheduler	
Active	8	Delete messages after	8
Sender (name)	VEGAVIS	(months)	6
AccountId		Delete message history after (months)	0
(massenversand.de)		Delete messages after	1000
Password	5	(amount)	
Max. number of SMS per notification	5	Google Maps	
Max. number of characters per SNS	150	Active	2
		API type	Promium •
		Key	
		Client ID	
		Channel	
Google Analytics		Crypto inbox	
Active	*	Active	8
Tracking ID (UA-XXXXXXXX)		Port	443

Fig. 23: Configure system settings

## **General information**

Portal URL	The Portal URL is used in the notification e-mails and also the " <i>Pass-word forgotten</i> " function.
Portal, e-mail	E-mail address of the administrator used for notification e-mails.
Max. lines, data export	Here you can configure the max. number of lines that can be exported during the data export.



Max. number of measur- ing points in the graphic PDF	In the visualisation, you can export the measuring points displayed in the tab " <i>Graphic</i> " as a PDF. Here you can configure the max. number of measuring points which can be added to a PDF during this export. The larger this figure, the longer the creation period of the PDF.
Max. number of points in the chart	Here, you can determine the number of points displayed in the chart. The larger the number, the more detailed the chart. Also, the required duration for displaying them in the browser increases.
Standard layout	Here, a plant operator can be selected, the layout (colours, logo and sub-title) of which are used for the login screen and user interface.
	E-mail
SMTP settings	Here, you can configure the e-mail transmission of notifications in the VEGA Inventory System. For this you need a sender address as well as an SMTP server. A second SMTP server can be entered in case the first one does not function correctly.
Diagram per attachment	Notifications can have attachments with an up-to-date diagram of the linked measuring points. This value limits the number of diagrams per attachment because the time for generation can be very long when there is a large number of measuring points.
	SMS
	Here, you can activate and configure the SMS transmission of notifications in the VEGA Inventory System. For the SMS transmission an account with Massenversand.de is required ( <u>https://www.massenversand.de</u> ). Additional costs are incurred with SMS transmission.
	Scheduler
	Every night, the Scheduler Windows service cleans the database from old messages/notifications. Here, you can configure under which conditions the Scheduler shall delete the messages or notifications.
	Google Analytics
	Here, you can activate and configure the tracking of the us- age of the VEGA Inventory System with Google Analytics. You can find further information of Google Analytics under: https://www.google.com/analytics/#?modal_active=none
	Google Maps
	Here, you can activate and configure the map view in the VEGA Inventory System. Take note of the " <i>Terms of Service</i> " of Google Maps ( <u>https://developers.google.com/maps/terms</u> ) and buy a Premium Key, if necessary.

# **Crypto Inbox**

Here, you can activate and configure the Crypto Inbox-Windows service. The Crypto Inbox enables a reliably encrypted transmis-



sion (TLS/PSK) of the measured values between signal conditioning instrument and VEGA Inventory System.

# 5.3 Maintenance

On the maintenance page, functions for system maintenance are available to the VEGA Inventory System administrator. These functions are used for rectifying faults or diagnosis and must not be executed during normal operation. To do so, click on the menu item "*Workspace*" in the left navigation section, to open the dashboard and click on the link "*Maintenance*".

Maintenance			
Cache		Update tasks	Support
To reduce loading times, the data are cache for various grid views and autor cached data are not up-th-date. They here. The cache can be updated as of destimental effects. The required time data and can be up to several minutes	matically updated. If the can be updated manually ten as desired without any depends on the amount of	When the VEGA breentery System is updated, ance-enly update tasks are executed automatically (e.g., for data migration), 3, due to an error, these upater tasks cannot be standed by the setup procedure, they can be started here by hand later. This function must be called upoint ynten you are prompted to do so. If all update tasks have been correctly executed, this butter has no function.	If you want to report an error in your VEGA Inventory System insulation, you can download a 207 file, here which certains important elementation for the support. Then send this file via e- mail to your VEGA support. Download support file
Update measurement loop cache		Sitert update lasks	
Lipdate user ceche			

Fig. 24: Configure maintenance functions

Cache	To reduce the loading times, the data for some grid views are stored in a cache and updated automatically. Should the data in the cache be one-time not up-to-date, you can update them here manually. The cache can be updated as often as required without any disadvan- tages. The respective period depends on the data volume and can take several minutes.
Update tasks	While updating the VEGA Inventory System non-recurring update tasks will be executed automatically, if necessary (e.g. for data migration). If due to an error, this update task could not be started by the setup, it is possible to start it manually later on. This function must be only called if you are requested to do so. If all update tasks are executed correctly, this button will be passive.
Support	If you want to report an error in your VEGA Inventory System installa- tion, you can download a PDF file here that contains important sup- port information. Send this file by e-mail to your VEGA support.
Error Log	In the Error Log, the VEGA Inventory System administrator can see the error protocol. This can be useful for the diagnosis of problems. If you are not sure, contact your VEGA support.
	5.4 Admin messages
	Via the menu item Admin messages, the VEGA Inventory System administrator can manage message texts. An administrator can use this feature, for example, to send information regarding maintenance or new developments. This message can be created in several languages. It is displayed as long as it is specified in the fields " <i>Valid from</i> " and " <i>Valid until</i> ".



Message DE	***Aufgrund von Wartungsarbeiten am VEGA Inventory System Server wird der Zugriff am Mittoch, 02:00.2201 zwischen 15:00 und 16:30 Uhr (MES2, UTC+2) vorübergehend nur bedingt möglich sein.***
Appendix DE	↓ Select file
Message EN	*** Due to maintenance work on the VEGA Inventory System Server, access on 02/02/2017 3:00 PM to 4:30 PM (GMT, UTC + 2) will be temporarily limited. ***
Appendix EN	+ Select file
Message FR	***En raison de travaux de maintenance sur le serveur VEGA Inventory System le 02.02.2017 entre 15:00 et 16:30 (UTC+2), l'accès au système sera restreint. ***
Appendix FR	
Message IT	*** Due to maintenance work on the VEGA Inventory System Server, access on 02/02/2017 3:00 PM to 4:30 PM (GMT, UTC + 2) will be temporarily limited. ***
Appendix IT	♣ Select file
Valid from	02/02/2017 09:00
Valid until	02/02/2017 17:00 🗐 🖸 02/02/2017 12:51
Last change	-

Fig. 25: Create Admin messages

# 5.5 Creating a Supervisor account

Generally, the IT administrator is not the responsible or supervising person of the plant. Further configuration and setup is carried out by the person responsible for the project. For this person, a supervisor account must be created. The Supervisor has all rights and configuration possibilities including creating other users. The Supervisor configures the VEGA Inventory System according to the individual requirements and is the contact person for all supplementary users.

**sor ac-** Choose in the left navigation section the menu item "*Configuration - User*" and click to "*Add*."

Choose under "*Role*" the entry "*Supervisor*" from the listbox. Enter the necessary data in the entry mask and click on the button "*Generate new password*". Complete the process with the button "*Save*".

Create Supervisor account

55767-EN-170407

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te user				
User account data				
Plant operator *	Default			
Company				
Customer number				
Email *				
Role *	Supervisor V			
Salutation *	Mr.			
First name *				
Last name *				
Language	German 🗸			
Time zone *	(UTC+01:00) W. Europe Standard Tim 🔽			
Phone				
Mobile (SMS, format: +44- 7712-123456				
Fax				
Password *				
Deactivated				
Description	_			
		Generate new password!	Save	С

Fig. 26: Create the Supervisor account

Now select the new user and go to the tab "*General*". Then click the button "*Send change password link*". The Supervisor now receives an e-mail with a link with which he can log into the system and assign his own password.

# 5.6 Further setup

You can find the further setup in the operating instructions "VEGA Inventory System (local server version) – Configuration, first steps". For this, you do not need any special administrator or IT knowledge.



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