



GoPlant Enterprise Edition Installation







Contents

	• ~
Enterprise Edition Installation Prerequisites:	3
Pre-installation Information:	4
GoPlant Installation and Configuration Pre-Installation Checklist	.4
MS SQL Database Installation Required Settings	.4
Microsoft IIS Server Installation Required Settings	.4
Database Installation Procedure:	6
Web Site Installation Procedure:	0
Scheduled Task Installation:	3
Post Installation Tasks:1	8
Licensing GoPlant:	21

Conventions Used in this Manual

Click: Position the mouse over an item and press the mouse button.

Link, Hyperlink: Text displayed on your browser that will display a new GoPlant screen when you click on it. Links are usually displayed in blue, with an underline.

Hierarchy: GoPlant organizes resources into a "tree" whose branches and sub-branches (possibly many levels of sub-branches) are known as Storage groups. The resource "tree" is usually envisioned upside-down, with the trunk of the tree (the root group) at the top.

Screen, Page, Web Page: A screen displayed in your Web browser.

Select: Use the mouse to highlight an item or choose from a list of items.





Enterprise Edition Installation Prerequisites:

The server or virtual machine that will run the GoPlant application must meet the requirements outlined in a separate document – GoPlant Enterprise Requirements. Installation options allow you to host the GoPlant web site and database on one server or two.

Enterprise Edition Network Layout:

GoPlant supports access from desktop browsers and mobile clients across both public and private networks. Examples of public networks include the Internet and cellular data networks. While installation options allow you to host the GoPlant web site and database on one server, we recommend a two-server installation to optimize database performance.

Only ports 80, 443 (for secure https://), and 1433 for the SQL database connection are required to be open on the web server. If a non-standard port is used on the SQL server for database connectivity this should be updated appropriately. The web site may also be used on a non-standard port if required, but the port identification will need to be added to the URL settings on the device upon Mobile Application installation. The IIS server is the only item that talks with the GoPlant database. Mobile devices and web browsers never attach to the SQL server directly.

A single database user may be configured for the IIS server to access the SQL database. This may also be a Domain account if AD is being used for authentication.



Note: GoPlant may be installed on one server computer

NOTE: Two servers are shown as the typical installation. GoPlant may also be installed on one server adequately sized to handle both the Database and IIS server.





Pre-installation Information:

GoPlant Installation and Configuration Pre-Installation Checklist

To set up a GoPlant system, you will need to perform the following steps:

- 1. Obtain the GoPlant software. Place the files in an easily accessible location by both the IIS server and SQL server.
- If you have not done so already, install Microsoft SQL Server on the Database server machine.
 Please refer to the Microsoft installation information to ensure proper installation. The Database server may or may not be different from the Web server.
- 3. Install or configure the Database server or another server with Internet Information Services (IIS). Please refer to the Microsoft installation information to ensure proper installation.
- 4. Have your GoPlant Serial Number handy. This information will be in the USB drive shipped to you or the License certificate. The Serial Number is used to create a Key Code that is sent to <u>goplant.techsupport@skf.com</u> to generate a License Key specific to your servers.

MS SQL Database Installation Required Settings

- 1. MS SQL database should be set up with Mixed Authentication mode if you plan on using SQL authentication for database access.
- SQL server installation: Server Configuration Collation Database Engine Collation page should be set to "SQL_Latin1_General_CP1_CI_AS". This is the North American installation default and cannot be changed.
- 3. MS SQL networking TCP/IP protocol connections turned on via 1433 or other designated port. TCP/IP protocol connection is used for IIS server to connect to the MS SQL GoPlant database.

Microsoft IIS Server Installation Required Settings

- 1. Components required in the Web Server (IIS) Roles and Features Wizard (must be checked and installed):
 - a. Web Server Common HTTP Features HTTP Redirection
 - b. Web Server Performance Dynamic Content Compression





- c. Web Server Security Basic Authentication
- d. Web Server Security URL Authentication
- e. Web Server Security Windows Authentication
- f. Application Development .NET Extensibility 4.8 or greater
- g. Application Development ASP.NET 4.8 or greater
- h. Application Development ISAPI Extensions
- i. Application Development ISAPI Filters
- 2. ASP.NET 4.8 or greater must be registered and available to IIS installations.
- 3. The GoPlant configuration will add the ExtensionlessUrlHandler-Integrated-4.0 to the Handler Mappings. This cannot be blocked by a system IIS setting.
- 4. If IIS Request filtering is enabled, then the following HTTP Verbs must be allowed: GET, POST, DELETE, and OPTIONS.
- 5. CORS must be enabled or installed on the IIS server.
- 6. The GoPlant website API must have the following settings for HTTP Response Headers. The values and items listed are defaults but cannot be changed by local security policy or IIS settings:
 - a. Access-Control-Allow-Methods values GET, PUT, POST, DELETE, HEAD, OPTIONS inherited Local.
 - b. Access-Control-Allow-Origin value * inherited Local.
 - c. Access-Control-Allow-Headers values Origin, X-Requested-With, Content-Type, Accept, UUID inherited Local.





Database Installation Procedure:

- 1. Log into the database server machine as a Windows Administrator (see Chapter 1, *Installing GoPlant*).
- 2. Open Microsoft SQL Server Management Studio and login with an account that has permissions to own and create databases.
- These instructions include creating a GoPlant login account on SQL for use by the IIS web site. If you are using a Domain or other security account, then creating this username is unnecessary. However, it will be important to substitute your user account for all "GoPlant" user account use in this documentation.
- 4. Expand the Security Folder and Right-Click on the "Logins" folder. Choose 'New Login...'







5. Enter 'GoPlant' for the Login Name. Choose the SQL Server Authentication radio button. Uncheck all three boxes for the Password settings as shown:

🚦 Login - New			_	×
Select a page	🖵 Script 🔻 😯 Help			
 Server Roles User Mapping Securables Status 	Login name: Vindows authentication SQL Server authentication Password: Confirm password: Specify old password Old password: Enforce password policy User must change password	GoPlant tion vord at next login		arch
• •	O 11 11 127 1			

- 5. Enter the password "P@ssw0rd" for this user. If you wish to use a different password (not this default), please update it and note for later use throughout the instruction.
- 6. Click the 'OK' button to accept the new user. If your security settings do not allow the SQL Server user login rights, then use a Domain account or another account that may be used for IIS server connection to the database. In the rest of these instructions, use that username instead of 'GoPlant' user.





7. Right-click on the 'Databases' folder and select "New Database...".



8. Enter the Database name - GoPlant. Leave the defaults for all other settings unless instructed by a database administrator or IT person.

Select a page	🖵 Script 🔻 😮	Help						
 General Options Filegroups 	Database nam	e:	GoPlant					
	Owner:		<default></default>					
	✓ Use full-text	t indexing						
	Use full-text	t indexing	Filegroup	Initial Sizo	Autogrowth	/ Maveiz	70	
	Use full-text	t indexing File T	Filegroup	Initial Size	Autogrowth	/ Maxsiz	ze	

- 9. Click on the OK button to create the database.
- 10. Locate the new GoPlant database in the navigation pane on the left-hand side.
- 11. Right-click on the database and choose "New Query". This will select the proper database and prepare for loading the GoPlant SQL file scripts.





12. From the menu choose the open folder icon. Locate and open the GoPlant database initialization script, GoPlant DB Initialize.sql, in the installation folder.



13. Run the database initialization script with the 'Execute' button in the menu.



Note that if you are using a database Login Name other than GoPlant, this script may report errors around configuring the GoPlant user. Those errors may safely be ignored.

14. From the menu choose the open folder icon. Locate and open the GoPlant database update script, GoPlant DB Update Version XXXX.Y.sql, in the installation folder.



15. Run the database update script with the 'Execute' button in the menu.

File Edit View Query Project Tools	Window Help
💿 • 💿 👌 • 🕤 - 🖆 💾 🚰 🔎 New O	Query 過命命命 法企会 フ・ペー図 - 🍺
🗧 🛱 🥞 🖌 GoPlant 🔹 🕨 Exe	ecute ↓ \$P\$ 韓田 聖 - 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1
Object Explorer → 平 × Go	Plant DB Update Vlant (goplant (81)) 🗢 🗙
Connect - 🕴 🍟 🔳 🍸 🖒 🚸	
🖃 🗑 goplant-dev-db.cveho3xg0qgh.us-east	
😑 🗰 Databases	EDECLARE @DataBaseVersion AS DECIMAL(7,2)
🕀 🏙 System Databases	SELECT (DataBaseVersion = CAST([SettingValue] AS DECIMAL(7,2)) FROM [dbo].[Settings] WHERE [SettingName] = 'release' AND [SettingLabel] = 'release'
Database Snapshots	PRINT Database the_memo()+ is currently at version + casi(guatabaseversion as vakchak(is)); PRINT (schema "+ (URRENT USER + "");
🖃 👹 GoPlant	PRINT 'Current User "' + SYSTEM USER + '"';
	<pre>PRINT 'This File is "CombinedCurrent.sql";</pre>
🕡 🗰 Views	
🗉 🛑 External Resources	DECLARE @TotalMemory VARCHAR(20) = ';
🗉 📁 Synonyms	<pre>DECLARE @CPUCount VARCHAR(20) = '';</pre>
🕀 📁 Programmability	BEGIN TRY
🕀 📁 Service Broker	SET @TotalMemory = (SELECT CAST(total_physical_memory_kb AS VARCHAR(20)) FROM sys.dm_os_sys_memory); PRINT 'Total Memory=' + CAST(@TotalMemory AS VARCHAR(50));
🗉 🛑 Storage	SEI (gCPUCount = (SELECI CASI(cpu_count AS VARCHAR(20)) FROM sys.dm_os_sys_into); PRINI "CPU Count=" + CASI(gCPUCount AS VARCHAR(50));
🗉 📕 Security	

16. This completes the database set up. Please continue to the "Web Site Installation Procedure"





Web Site Installation Procedure:

- 1. Log into the GoPlant IIS Web server with account that has permissions to modify the web site files as well as start/stop the Microsoft IIS server instance.
- Locate the C:\inetpub and create a new folder named "GoPlant" for the web site folder. Note that this folder may be located anywhere that the IIS server has security permissions according to your company policy. If this default location is not used, please adjust the instructions accordingly and document your installation changes to this manual.
- 3. Locate the 'GoPlant Website' folder in the installation files and copy the zip file to a location where it can be unzipped.
- 4. Once unzipped, copy all the web site sub folders and files into the C:\inetpub\GoPlant web site folder.
- 5. Within the web site folder, locate the API sub folder and the ..\API\web.config file.
- Locate the <connectionStrings> section of the new web.config XML file. Your original premise installation contains specific Data Source, Initial Catalog, User ID, and Password data. These four (4) data items need to be updated in the new file with the same values from your original file.
- The new web.config XML file contains placeholder values to aid in text replacement.
 DATASOURCE can be used in a find and replace command (<ctrl> h keyboard shortcut in NotePad) to find and replace with the original data source value from the original web.config file.
- 8. Values to replace are: **DATASOURCE**, **DATABASENAME**, **USERID**, **PASSWORD**
- 9. The values in step #8 are all capitals with two "**" at the beginning and the end to avoid confusion with any other strings in the web.config file. The "**" should be replaced as well replace the entire "**XXXXXXXX*" string.
- 10. Once all four (4) placeholder value items are replaced in the new web.config XML file, please save this file. (There should be no "**" characters in the file, only the proper string values for the file)
- 11. Open the Microsoft IIS Manager UI
- 12. Expand the 'Sites' folder in the left-hand tree view. Right-click on the 'Sites' folder and choose 'Add Web Site..."
- 13. Enter all required information for your installation. The site name is "GoPlant" in the create web site pop-up window. Locate the folder created above for the web site and place that path in the





'Physical path:". Bind the website to "All Unassigned" IP address or the address required for your installation.

- 14. Expand the GoPlant web site folder now listed under the 'Sites' in the left-hand tree view. Rightclick on the "api" folder and choose 'Convert to Application". Leave all settings as default.
- 15. If you plan on creating IIS server certificates for use with https://, please follow external guides or instructions on completing this task. You can then also bind the website to the https:// port and choose the proper SSL certificate.
- 16. This completes the file updates and configuration changes required for the web site.
- 17. Complete all installation steps before starting the web site.
- 18. Please continue to the "Installation of cURL on the IIS Server".





Installation of cURL on the IIS Server:

- 1. Login to the web server machine as a Windows Administrator.
- 2. Under the 'GoPlant Scheduled Tasks' folder locate the 'cURL for Windows' folder from the installation files to the server.
- 3. Select the installer based upon either a 32-bit or 64-bit server machine Operating System.
- 4. Depending upon your server, you may have to install the Microsoft Visual C++ 2015 Redistributable.
- 5. Check the box "I accept the terms in the License Agreement".
- 6. Click on the 'Install' button.
- 7. After cURL software installation, please continue to "Scheduled Task Installation".





Scheduled Task Installation:

- 1. Before creating the scheduled task in this section, the cURL software must be installed.
- The GoPlant scheduled task update should only be done by end users familiar with Windows Server functionality. These instructions are high-level and assume inherent knowledge of server software.
- 3. Obtain the GoPlant Task XML (*.xml) file from the installation files.
- Log into the GoPlant IIS Web server with account that has permissions to run and modify the Windows Task Scheduler. A link is in the Administration Tools of the server or can be found in the Server Manager.
- 5. Open the Task Scheduler.
- 6. Create a folder for GoPlant for the GoPlant scheduled task. Name the folder GoPlant in order to easily find it later. Select the folder to display the tasks in the center pane.

Task Scheduler		- 🗆 ×
File Action View Help		
🗢 🔿 🖄 📰 🚺		
Task Scheduler (Local)	Name Status Triggers Next Run Time Last Run Time Last Run Result Author Created	Actions
🗸 🐻 Task Scheduler Library		GoPlant 🔺
GoPlant		💿 Create Basic Task
/		🕭 Create Task
		Import Task
		Display All Running Tasks
	C >>	🗃 Disable All Tasks History
		뜸 New Folder
		× Delete Folder
		View 🕨
		Refresh
		? Help
	, '	





7. Right-Click in the center pane folder listing and choose 'Import Task...' from the pop-up menu.

Task Scheduler		– 🗆 ×
File Action View Help		
 	Name Status Triggers Next Run Time Last Run Result Author Created Create Basic Task Create New Task Refresh	Actions GoPlant Create Basic Task Create Task Display All Running Tasks Disable All Tasks History New Folder Delete Folder View Refresh Help

8. Locate the file GoPlant_Recurring_Task.xml, and once highlighted click 'Open' button. The Create Task window will open.

٩					Cre	eate Tas	¢			x
General	Trigg	Jers Actions	Conditio	ons	Settings					
Name:	GoPlant_Recurring_Task									
Locatio	ocation: \Example									
Author		SERVER-01\F	AS							
Descrip	tion:									
Securi	ty opti	ons								
When	n runni	ng the task, us	e the foll	owing	g user acc	ount:				
SYST	M								Change User or Gro	oup
O Ru	in only	when user is l	ogged or							
💿 Ru	in whe	ther user is log	jged on o	r not						
	Do n	ot store passw	ord. The	task v	will only h	ave access	to local cor	mputer r	esources.	
🗆 Ru	in with	highest privil	eges							
🗌 Hide	den	Configu	re for: 🛛	Vindo	ows Vista	[™] , Window	s Server™ 20	008		~
									ОК С	ancel

9. Edit the user account if required. The Security account running the task should have access to the





computer and be able to execute web services and the curl.exe executable described in the task. NOTE: If you use a named account, you will be required to update the password any time the account security policy requires it to be changed.

10. Click on the 'Actions' tab. This will display the command line criteria for executing the GoPlant web service API.

G	Create Task	x
General Triggers Acti	ons Conditions Settings	
When you create a tas	k, you must specify the action that will occur when your task starts.	
Action	Details	
Start a program	"C:\Program Files\cURL\bin\curl.exe" http://GoPlant/api/svc/housekeeper	
< New Ed	it Delete	
	OK Cance	





11. Double-click on the 'Start a program' entry. This will bring up the "Edit Action" window shown below. The highlighted portion is the only changes required for your specific server. Edit the beginning of the command to correspond with your internal GoPlant web site. Command can be http:// or https://, followed by the name of your GoPlant web site – "GoPlant" is used in the example below. Do not modify anything beyond this as it specifies the API call. Next, verify that the "Program/script:" string matches the full path to the curl.exe program as it is installed on your server.

•	Edit Action X	
General	You must specify what action this task will perform.	le le
When y	Action: Start a program 🗸	ite
Action	Settings	
Start a	Program/script: "C:\Program Files\cURL\bin\curl.exe" Browse	ei la
	Add arguments (optional): http:// <mark>GoPlant</mark> /api/svc/ł	- F
< New	Start in (optional):	te v es
	OK Cancel	Cancel

**NOTE: If the URL address for your GoPlant installation is changed the scheduled task must be updated as well.

**NOTE: If you specify https://, you may also need to pass the -k argument to cURL to ignore certificate checking.





12. Click 'OK' to close the "Edit Action" window. Click 'OK' to close and create the Task. This completes the creation of the GoPlant Windows scheduled task.

C	Create Task	×
General	Triggers Actions Conditions Settings	
When	you create a task, you must specify the action that will occur when your task starts.	
Actio	po Detaile	
Start	a program "C:\Program Files\cURL\bin\curl.exe" http://GoPlant/api/svc/housekeeper	
<	III >	
Ne	ew Edit Delete	
	OK Cance	ł





Post Installation Tasks:

- 1. Log into the GoPlant IIS Web server with an account that has permissions to run and modify the Windows Task Scheduler.
- 2. Locate and Open the Microsoft IIS Manager User Interface (UI).
- 3. Browse to the IIS Server icon in the left-hand tree view.
- 4. Start the GoPlant web site.
- 5. Open the Windows Task Scheduler. A link is in the Administration Tools of the server or can be found in the Server Manager.
- 6. Locate the folder for GoPlant (if created earlier) or determine the location of the GoPlant scheduled task. Select the folder to display the task in the center pane. Select the task listed for GoPlant, and then right-click and enable it. Ensure that the status is ENABLED for the GoPlant task.

Task Scheduler		-		×				
File Action View Help								
🗢 🄿 🙍 📰 🚺 🖬								
(D) Task Scheduler (Local)	Name Status Triggers Next Run Time Last Run Time Last Run Result Author Created Actions							
V 🐻 Task Scheduler Library	© GoPlant Recurring Task Ready At 12:02 A 1/11/2023 12 11/30/1999 The task has EC2A 1/10/2023 9:24:18 PM	GoPlant		^				
Solution		💿 Create Basic Task						
		🐌 Create Task						
		Import Task						
		Display All Running Tasks						
		Disable All Tasks History						
	General Trigger Actions Conditions Settings History	Mew Folder						
	Checker inggers Actions Conditions Security	× Delete Folder						
	Name: GoPlant_Kecurring_Task	View		•				
	Location: \GoPlant\GoPlant	Refresh						
	Author:	🕜 Help						
	Description:	Selected Item		•				
		Run						
		End End						
		Disable						
	Security options	Export						
	When running the task, use the following user account:	Properties						
	Run only when user is logged on	🗙 Delete						
	P	1 m		*				

7. Use a web browser to login to GoPlant. You may use the "starthere" username with "pass1" as the password. This user account should be modified and replaced with your own administrator type account.





8. Navigate to the 'ADMIN' area:

CASHBOARD	پ MANAGER	🔅 ADMIN	⊥ ⊕	,						SKF admin Demos	GUPLANT
Email Se GoPlant Asset Se Report S External Event Lo API Setti	ttings Settings ettings Tag Settings ß ngs App	lly	Ema IP / Use Pas	ail Settings MTP Server Address mail.mycompar ser username ******** onfirm Password *******	y.com	Port 25					
			S) Ta:	System Email Addr	taskmgr@go alerts@gopla	plant.com ant.com	Test Test				

9. The first set up item is email settings. Please enter your email server DNS name or IP address, port, and username/password information if it is required to relay email. Update the System Email Addresses so they match your company's domain. Your IT department may need to whitelist the GoPlant server as a mail relay. Use the Test buttons to ensure email can be sent from the server.

Email Settings	Empil Settings							
GoPlant Settings								
Asset Settings								
Report Settings	IP Address Port							
External Tag Settings	maii.mycompany.com							
Event Log	User							
API Settings	mailusername							
	Password							
Apply ********								
Confirm Password								

	System Email Addresses							
	Task Manager goplant.tasks@mycompany.com Test							
	Task Manager goplant.tasks@mycompany.com Test Alerts goplant.alerts@mycompany.com Test							

C





10. The second set up item is Report Settings. Please update the "Output Folder for Scheduled Reports" entry to a folder on your server where you would like GoPlant's scheduled reports to be saved.

CASHBOARD	پچ MANAGER	REPORTS	ADMIN	1	D	GoPlant Administrator Helios Solar	GRPLANT
Email Settings GoPlant Settings Asset Settings Vibration Settings Authentication Settings Report Settings		F	Report Setti Setting LoLo Condition	ngs		Value #CC3333 #FF9933	
Externa	al Tag Settings		Normal			#99CCCC	
Event Log			Hi Condition			#FF6633	
API Se	ttings		HiHi Condition			#FFFF66	
	Арр	ly	State conditior	1		#ffe1c2	
			Output Folder	for Sch	eduled Reports	D:\Scheduled_Reports	
			Display Asset	QR Cod	des in Reports		





Licensing GoPlant:

GoPlant will run on a grace period for three days without being licensed. To ensure that you do not experience an outage, please begin the license process immediately after installation. You will need to have the license key provided by SKF to complete this process. If you do not have a license key, please contact goplant.techsupport@skf.com.

- 1. Open an HTML 5 compatible Web Browser.
- 2. Type your **GoPlant URL** in the address bar (example: http://goplant). The **Login** page appears.



3. Log into GoPlant, then click **GOPLANT** at the top right-hand portion of the page. The **About GoPlant** window opens. (Your version will display; the image below is simply an example)







- 4. Click Apply License button.
- 5. Enter the License Key sent from SKF and click Apply License.

Apply License	×
License Key	
	Apply License

6. Licensing is now complete.

Copyright Notice

Information contained in this document is proprietary to SKF USA and may be used or disclosed only with written permission from SKF USA. This document, or any part thereof, may not be reproduced without the prior written permission of SKF USA.

This document refers to numerous products by their trade names, in most, if not all, cases these designations are Trademarks or Registered Trademarks by their respective companies.

This document and the related software described in this manual are supplied under license or nondisclosure agreement and may be used or copied only in accordance with the terms of the agreement. The information in this document is subject to change without notice and does not represent a commitment on the part of SKF USA, Inc.

The names of companies and individuals used in examples in the manuals, and in any sample databases provided, are fictitious and are intended to illustrate the use of the software. Any resemblance to actual organizations or individuals, whether past or present, is purely coincidental.