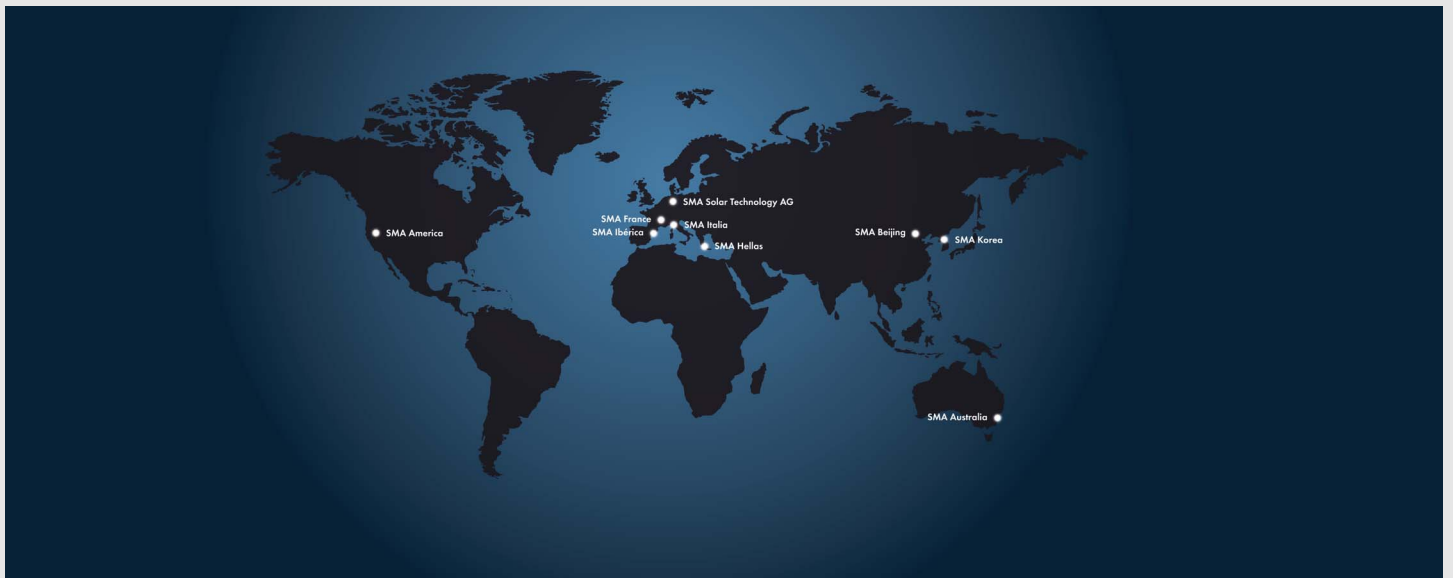




Setting up the local FTP server

Configuring a local FTP server for the receipt of the PV plant data via the FTP Push function of the **SUNNY WEBBOX**.



Contents

This guide describes how you install and configure an FTP server on your computer using the program "FileZilla Server version 0.9.31 beta". "FileZilla Server" is an Open Source program, which you can download free from the internet (see <http://filezilla-project.org>). The steps for configuring the FTP server are specifically described for FileZilla Server. Other FTP server software for use on a local computer or on an internet server is configured similarly.

Additionally, this guide describes how you configure and test the FTP Push function of the Sunny WebBox. The second part of this guide describes how you configure the Sunny WebBox and is valid for every FTP server.

1 Requirements

In order that you are able to load the data of your PV plant using the FTP Push function of the Sunny WebBox to a local FTP server, the following requirements must be met:

- You have good knowledge of Ethernet networks.
- You have a PV plant to which a Sunny WebBox is connected.
- The Sunny WebBox must be connected to an Ethernet network and be in operation.
- You have the access data for the "installer" user group of the Sunny WebBox.
- The Sunny WebBox FTP Push function is not active.
- You have writing access to the hard disk of your computer.

2 Installing and configuring FileZilla Server

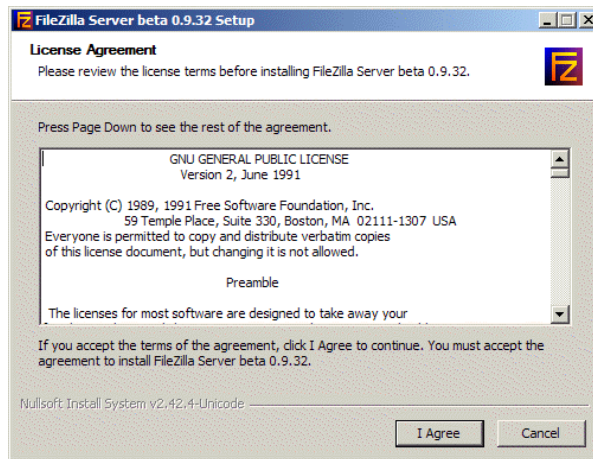
2.1 Installing FileZilla Server

During the installation of an FTP server in the network you must meet safety precautions in order to protect the FTP server from unauthorized access by third parties. If you have questions regarding the security of your network, please contact your network administrator.

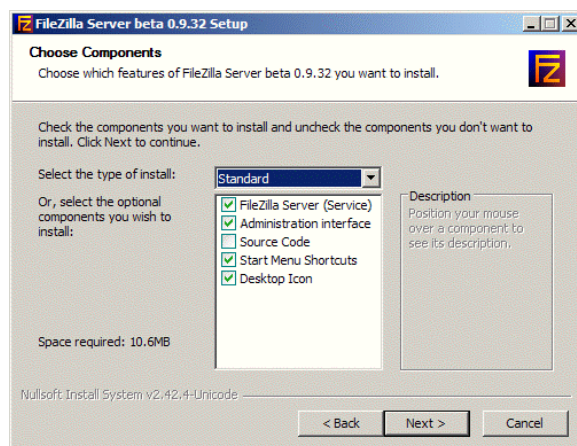
This guide is valid for the FileZilla Server version 0.9.31 beta. For later versions of the FileZilla Server the descriptions are probably similar and therefore recognizable. If you have questions regarding the installation and configuration of the FTP server, please contact your network administrator.

1. Download the current FileZilla version from the internet at <http://filezilla-project.org>
2. Start the "FileZilla Server" installation program.
 - The "FileZilla Server" setup assistant starts.

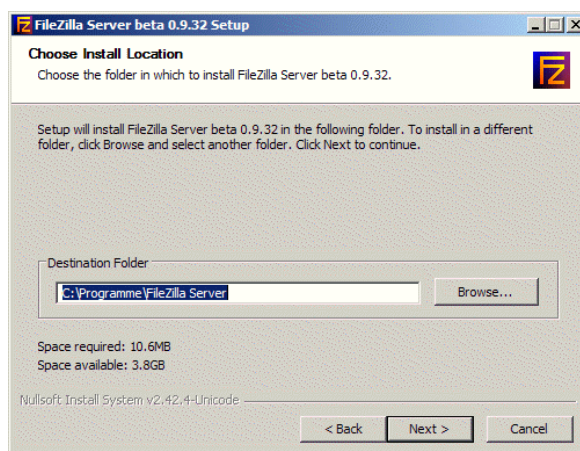
3. Select [I Agree] to accept the licence agreement.



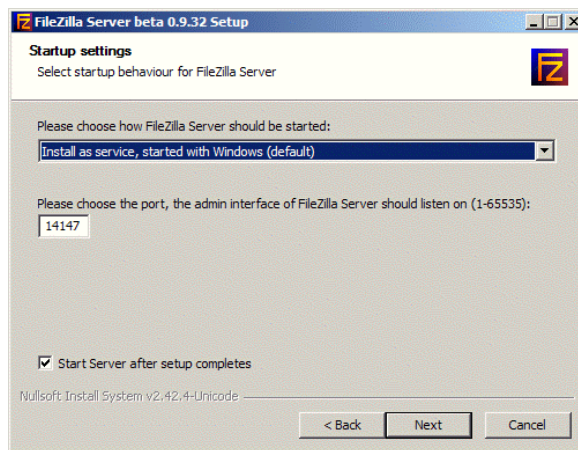
4. Select standard installation and select [Next >].



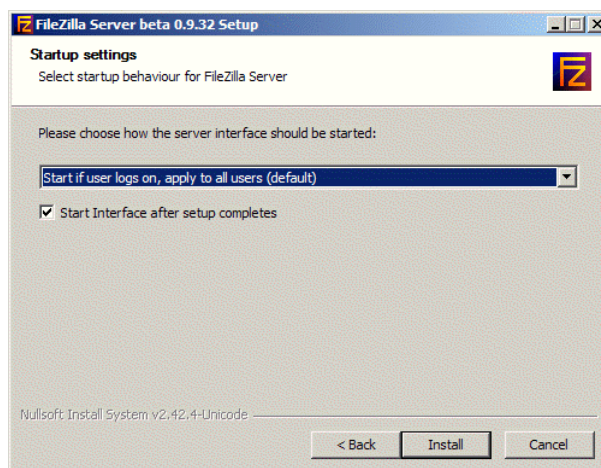
5. Select the directory to which the FileZilla Server program is to be installed and select [Next >]



6. Select the start mode "Install as service, started with Windows (default)" from FileZilla and enter the Port "14147". This value is preset as standard.



7. Select the start mode "Start if user logs on, apply to all users (default)" of the interface from the server and select [install]. This value is preset as standard.



The FileZilla Server installation starts.

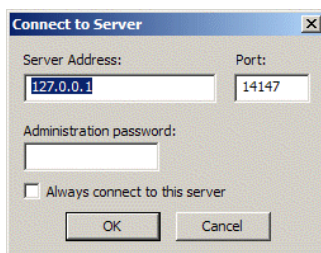
8. Once the installation is complete, select [Close].

FileZilla Server is installed.

2.2 Configuring FileZilla Server

1. Start "FileZilla Server".

The "Connect to Server" window opens.



2. Enter the following into the "Connect to Server" window:

Field	Settings
"Server Address"	127.0.0.1
"Port"	14147
"Administration password"	Define the FTP server administrator password.

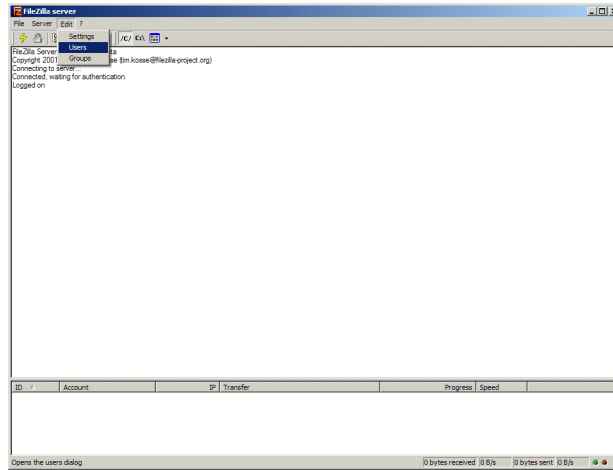
Password Quality

In order to increase the security of your password, please note the following points when selecting a password:

- Select a password with a minimum of 8 characters. The longer the password, the more secure it is.
- Do not select names or popular terms (for example "Dog", "Cat", "House").
- Do not use data related to your person as passwords (e.g. names of persons or pets, personal or ID numbers, car license plates).
- Do not repeat names or terms (e.g. househouse, catcat).
- Use a combination of upper and lower case letters, special characters and numbers.
- Do not use number and letter combinations which are consecutive on a keyboard (e.g. 12345, qwerty).

3. Select [OK].

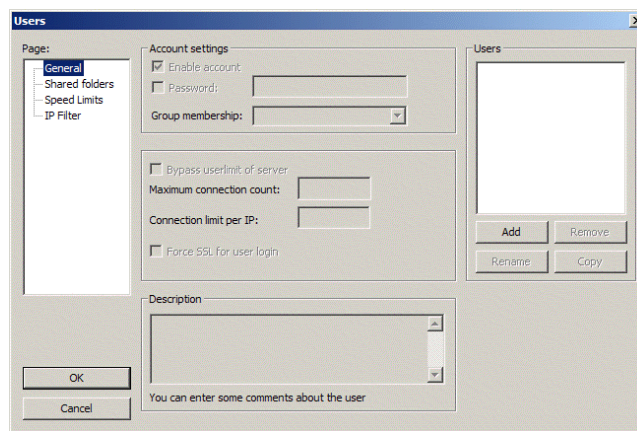
- ☑ The main window of FileZilla Server opens.



Configuring a user account

4. Select "Edit > Users" in the main menu.

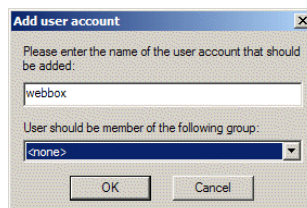
- ☑ The "Users" window opens



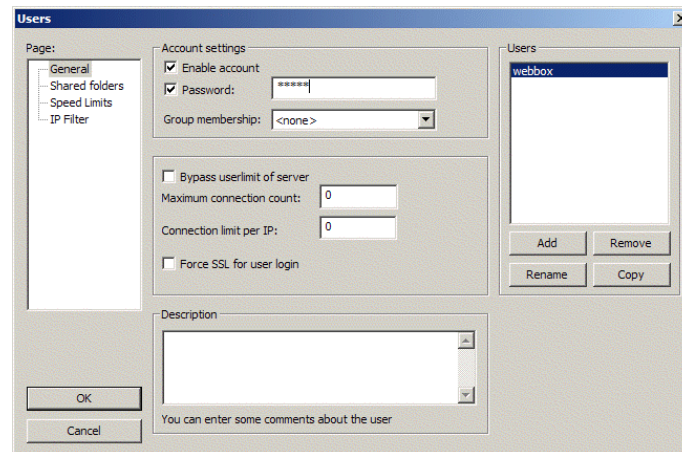
5. In the "Pages" area, select "General".

6. In the "Users" area, select [Add].

- ☑ The "Add user account" opens.



7. Enter the name "webbox" for the user account.
8. Select [OK].
9. In the "users" window under the area "Account settings" select the "Enable account" checkbox.
10. In the "Password" entry field, define a password with which the Sunny WebBox will be logged into the FTP server.



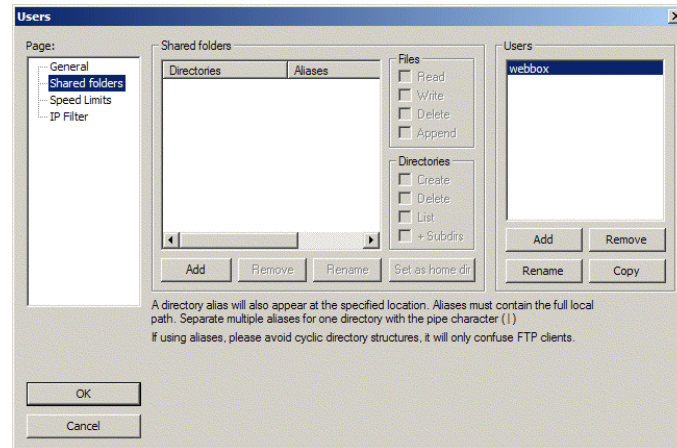
Password Quality

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- Do not repeat names or terms (e.g. househouse, catcat).
- Use a combination of upper and lower case letters, special characters and numbers.
- Do not use number and letter combinations which are consecutive on a keyboard (e.g. 12345, qwerty).

Configuring general storage for the FTP server

11. In the "Pages" area select the "Shared folders" sub-area.



12. In the "Shared folders" sub-area, select [Add].

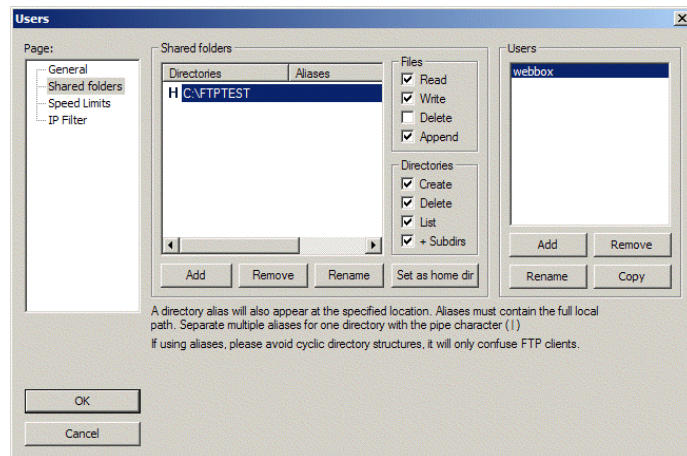
The "Folder search" window opens.

13. Select folder, under which the FTP server shall store the received data from the Sunny WebBox.

14. In the "Directories" field, mark the selected folder and select "Set as home dir".

15. In the "Shared folders" area assign write-access and read-access for the folder you have just selected:

Area	Field	Settings
"Files"	"Read"	<input checked="" type="checkbox"/>
	"Write"	<input checked="" type="checkbox"/>
	"Delete"	<input type="checkbox"/>
	"Append"	<input checked="" type="checkbox"/>
"Directories"	"Create"	<input checked="" type="checkbox"/>
	"Delete"	<input checked="" type="checkbox"/>
	"List"	<input checked="" type="checkbox"/>
	"Subdirs"	<input checked="" type="checkbox"/>



16. Select [OK].

- The FTP server is configured and active. You can now configure and test the FTP Push function of the Sunny WebBox.

3 Configuring and testing FTP Push of the WebBox

1. On the Sunny WebBox start page, log in as installer.
2. Select "WebBox > Settings > Data transmission".
3. In the "FTP Push settings" area, set "Use FTP Push service" to "yes".
 - Further entries are now possible.
4. Enter the IP address of the computer on which the FileZilla Server is installed into the "FTP server" field (e.g. 10.12.13.75). In the "Port" field, enter "21".
5. In the "Upload directory" enter "/".
6. Set "Use authentication" to "yes".
 - Further entries are now possible.
7. In the "User name" field, enter "webbox".
8. In the "password" field, enter the password that you input during the setting up of a user account for the "webbox" user (see page 7).

FTP-Push Einstellungen	
FTP-Push Service verwenden:	<input checked="" type="radio"/> ja <input type="radio"/> nein
FTP Server:	<input type="text" value="10.12.13.75"/> Port: <input type="text" value="21"/>
Upload Verzeichnis:	<input type="text" value="/"/>
Authentifizierung verwenden:	<input checked="" type="radio"/> ja <input type="radio"/> nein
Benutzername:	<input type="text" value="webbox"/> Passwort: <input type="password" value="....."/>
FTP Verbindung testen:	<input type="button" value="testen"/>

9. Click the [test] button in the "Test FTP connection" field.
 - The Sunny WebBox sends a test file to the FTP server.
10. Check whether the Sunny WebBox transferred the test file successfully into directory of the FTP server.
11. If the Sunny WebBox does not successfully transfer the test file, check the configuration of the "FileZilla Server" and the Sunny WebBox. If necessary, adjust the FileZilla Server and the Sunny WebBox settings. If necessary advise the network administrator and ask after network settings.
12. If the Sunny Webbox has successfully transferred the test file, compare the content of the transferred test file with the data of your Sunny WebBox (see Sunny WebBox manual).
 - The FTP Push function is configured.

4 Troubleshooting

The event list of the Sunny WebBox and the user interface of "FileZilla Server" display faults, which could arise during the transmission of data using the FTP Push function.

Calling up the event list of the Sunny WebBox.

1. Log into the Sunny WebBox.
2. Select "WebBox > Events".

Calling up the event list of the FTP server (Windows).

In order that the event list displays messages from "FileZilla Server", the user interface of "FileZilla Server" must be started.

1. Select "Start > Programs > FileZilla Server > Start FileZilla Server"
 - The FTP is running.
2. Select "Start > Programs > FileZilla Server > FileZilla Server Interface".
 - The log-in screen of "FileZilla Server" opens.
3. Select [OK].
 - The user interface has started.

If you minimize the window of the user interface, the info area of the tasklist shows an icon. In order to display the user interface, click on the icon with the right mouse button and select [Restore] from the list.

Problem	Cause and solution
<p>The Sunny WebBox does not load any data onto the local FTP server.</p>	<ul style="list-style-type: none"> • Error 530: false password or username entered. <ul style="list-style-type: none"> - Check whether the password and username in WebBox and "FileZilla Server" are identically entered respectively.
	<ul style="list-style-type: none"> • Error 550: No right, to write data to the target folder or the folder is not found. <p>Target folder is not found in the FTP server.</p> <ul style="list-style-type: none"> - Check whether the configured target folder in the "Shared folders" exists in the FTP server. This folder is the home directory and is marked with an "H" - see section "Configuring general storage for the FTP server" (page 8). <p>Write-access and read-access of the target folder are incorrectly configured.</p> <ul style="list-style-type: none"> - Configure the write-access and read-access - see section "Configuring general storage for the FTP server" (page 8).
	<ul style="list-style-type: none"> • Error 10060: The Sunny WebBox can not connect with the FTP server. <p>This error only appears in the event list of the Sunny WebBox.</p> <ul style="list-style-type: none"> - Check whether the FTP server is running. If the FTP server is not running, then start it. Select "Start > Programs > FileZilla Server > Start FileZilla Server".
	<ul style="list-style-type: none"> • Error 11001: Network error - the FTP server can not connect with the network. <p>This error only appears in the event list of the "FileZilla Server".</p> <ul style="list-style-type: none"> - Check whether your firewall is preventing the FTP server from connecting with the network. - Please contact your network administrator and if necessary change the settings of your firewall.