AlwaysUp Web Service User's Manual Version 15.0

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1. Introduction

AlwaysUp is a Windows utility that runs your application as a Windows Service, managing and monitoring it constantly to ensure 100% uptime. Find out more about AlwaysUp at the application web site:

https://www.CoreTechnologies.com/products/AlwaysUp/

The AlwaysUp Web Service, the subject of this document, is a free add-on application that enables users to access AlwaysUp via a web browser. Find out more about AlwaysUp Web Service at the application web site:

https://www.CoreTechnologies.com/products/AlwaysUp/AlwaysUpWebService/



2. Key Features

- <u>Start and stop</u> your AlwaysUp applications using your web browser.
- Works with <u>all major browsers</u>, including Firefox, Chrome, Internet Explorer, Safari, Edge and Opera.
- Very easy to configure and use.
- <u>Very efficient;</u> demands minimal CPU & memory resources.
- Fully standalone does not require a separate web server to be installed.
- <u>Supports HTTPS</u> for increased security.
- Supports reverse proxy configuration.
- Free technical support.
- No programming required!

But perhaps most important of all, the AlwaysUp Web Service components were designed and implemented by senior software engineers with over 20 years of real-world experience developing robust, mission-critical applications. Our software is of the highest quality, and we stand by it without reservation.



3. System Requirements

- Windows 11/10 or Windows Server 2022/2019/2016 (x86 and x64 versions).
- 20 MB free hard drive space for installation files.

AlwaysUp Web Service is designed to be extremely frugal with machine resources. It almost always consumes less than 1% of the CPU, less than 10MB of RAM, and doesn't fall victim to the "Memory Growth" characteristic of many applications today.



4. AlwaysUp Web Service

4.1. Overview

AlwaysUp Web Service is a Windows Service that runs entirely "in the background" and has no user interface. It can be manipulated using the "Control Panel" helper application (described later in this document), which is installed along with the Web Service and can be accessed via your web browser.

4.2. Accessing AlwaysUp Web Service using a Web Browser

The Web Service can be accessed from a web browser via the following URL:

http://<machine-name>:<port>

where <machine-name> is the name (or IP address) of the computer running AlwaysUp, and <port> is the TCP/IP port chosen for the Web Service. The default <port> value is 8585.

For example, if the Web Service were running on your machine called "fredpc" on port 8585, you would use:

http://fredpc:8585/

After entering the URL you will be presented with the Login page where you can provide the credentials necessary to use the Web Service.



4.2.1. Logging In

AlwaysUp Web Service @	т <mark>+</mark> х 1881-им б		- 🗆 ×
← → C' ŵ	i localhost:8585/login	♥ ☆	
AlwaysUp	o Web Service @ WIN-:	J88LE4P4S71: Lo	gin
Please enter your p Password:	Login	Web Service on this co	mputer.
Applications	<u>AlwaysUp Web Service Home</u> <u>Always</u> 2001-2018 Core Technologies Consulting	Up Home AlwaysUp FAQ S g, LLC. All rights reserved.	upport

Form the Login page, enter the password to authenticate yourself to the computer running the AlwaysUp Web Service. Note that this is not your Windows or e-mail password, but one setup exclusively for the Web Service via the Control Panel application (described in section 4.3). The default password set when the Web Service was installed is "password" (no quotes); please see section 4.3.3 for details on how the password can (should!) be changed.

Once you have typed in the correct password, click the "Login" button to be taken to the Applications page where your applications can be managed.



4.2.2. Managing your Applications

The Applications page lists the AlwaysUp applications installed on the computer:

	A	ways	Up W	eb Ser	vice @	WIN-	J88LI ;	× +		-		×
(←) → C ^a			i	localhost:8585/applicat	ions	▣ 90% … ♥ ☆	III\ 🗉					
	AlwaysUp Web Service @ WIN-J88LE4P4S71: Applications											
R	lesta	rt t	he c	ompu	iter						Lo	ogout
	3 ins	tall	ed, 1	l run	ning					Last update: 05:46	:55 PN	1 🍣
								Name -	State	Application & Arguments	Tags	
		1.	3	3		٢		OneDrive	Stopped	C:\Users\Administrator\AppData\Local\Microsoft \OneDrive\OneDrive.exe	Backu	р
		2.	3	-				Event Store	Stopped	C:\EventStore\EventStore.ClusterNode.exe		
	٠	3.		(i)		٢		AlwaysUpSimulator	Running	"C:\Program Files (x86)\AlwaysUp \AlwaysUpSimulator.exe" -random 100	Simula	ator
_	Applications AlwaysUp Web Service Home AlwaysUp Home AlwaysUp FAQ Support © 2001-2018 Core Technologies Consulting, LLC. All rights reserved.											

The applications can be started, stopped or reported on from this page. Running applications will feature the Running icon () on the left while those idle will not. Click on the Refresh icon () to refresh the page.

Starting an application

Click on the Start icon (to start an idle application. Note that only idle applications will feature the Start icon.

Restarting a running application

Click on the Start icon () to restart a running application. Note that idle applications will show this icon disabled ().



Stopping an application

Click on the Stop icon (icon to stop a running application. Note that only running applications will feature the Stop icon.

Viewing an application's settings

Click on the Settings icon (⁴) to view the application's settings.

Reporting on an application

Click on the Report icon () to view a report detailing the application's activities over the past week.

Viewing an application's output

If an application has been configured to capture its output to a file, click on the

View Output icon () to see the application's output file. You may also rightclick on the icon and select "Save Target As..." or "Save Link As..." to save the file to your hard drive.

4.2.3. Logging Out

Click on the "Logout" link (in the upper right of the Applications page) to end your session with the Web Service. Note that for security reasons, you will be automatically logged out after 5 minutes of inactivity.

4.2.4. Restarting the Computer

Click on the "Restart the computer" link (in the top-left of the Applications page) to restart the computer. As part of the restart procedure, Windows will notify all users logged in of the restart and will wait up to 60 seconds for them to save their work and log off.

This functionality will only be available when the "Allow users to restart/reboot the computer" option is checked in the Control Panel (see section 4.3.3).



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Note that AlwaysUp Web Service cannot cancel a restart once the request has been made but a user with sufficient administrative rights logged in to the PC may be able to interrupt the process.



4.3. The Control Panel Application

This helper application, accessible from your desktop's Start button menu, is used to manage the AlwaysUp Web Service. It can start or stop the Web Service or change its settings.

When it starts, you are presented with the "Status" screen:

AlwaysUp Web Service Control Panel	?	×
• Status View the current state of AlwaysUp Web Service. Start/ necessary.	Stop it as	
AlwaysUp Web Service is running @ port 8585 (HTTP Click the Stop button to stop it.	S).	
Click here to access the Web Service from your brows	er	
Click here to visit the AlwaysUp Web Service home pa	ge	
Stop Settings >>	Close	



4.3.1. Starting the Web Service

If the Web Service is not running, you will be given the opportunity to start it on the Status screen. Click the "Start" button.

AlwaysUp Web Service Control Panel	×
Image: Status View the current state of AlwaysUp Web Service. Start/Stop necessary.	it as
AlwaysUp Web Service is not running. Click the Start buttor to start it.	n
Click here to visit the AlwaysUp Web Service home page	
Start Settings >> Close	e



4.3.2. Stopping the Web Service

If the Web Service is running, you will be given the opportunity to stop it on the Status screen. Click the "Stop" button.



4.3.3. Changing the Web Service's Settings

From the Status screen, click on the "Settings >>" button to move to the Settings screen:

AlwaysUp Web Service Control Panel									
Settings Edit/View the Web Service settings. Click on the Save button to commit your changes.									
Specify a password to log in with your web browser									
	Password:	•••••	•••••						
	Session timeout:	12 hours		~]				
Start:	Start: Automatically, when the computer boots ~								
Port:	8585 🔹								
Bind to:	All IP addresses (t	he default)		~					
Allow	users to start and s	top service	s						
Allow	users to restart/reb	oot the cor	mputer						
🗹 Use s	Use secure connection (HTTPS)								
	<<	Status	Save >>	Close					

The available settings are:

Specify a password to log in with your web browser: Check this box to password-protect AlwaysUp Web Service. With this option active, you may be challenged with a login page whenever you access the site.

We recommend checking this option for security purposes. If you don't, anyone navigating to the AlwaysUp Web Service URL will be able to stop, start or restart your AlwaysUp applications/services. Indeed, the only time you may want to avoid password protection is when you've restricted access to the AlwaysUp Web Service URL by another protective method (e.g. network IP filtering).



Password: The password to be used when accessing the Web Service from the browser. Note that the default password set at installation is "password"; we strongly suggest that you change it to something more secure before deploying the Web Service.

Session timeout: After you've logged in by providing your password, AlwaysUp Web Service will keep you authenticated as long as you are using the site. However, you will need to log in again if you are idle for longer than the session timeout value.

You can set the session timeout to a value between 10 minutes and 7 days. The default is 30 minutes.

Note that all sessions are cleared whenever the Web Service starts. Therefore, even if you have not been idle for the duration chosen, you will be asked to reauthenticate after a restart.

Start: Specify if the Web Service is to be started automatically when the computer boots (the default), or manually from the Control Panel application.

Port: The TCP/IP port number on which to run the Web Service. You will use the port when accessing the Web Service via the browser. For example, if your machine is called "fredpc" and the port is set to 8585, the URL to access the Web Service would be:

http://fredpc:8585

The default value is 8585.

Bind to: This setting – only available on machines with multiple interfaces/IP addresses – can be modified to restrict the Web Service to "bind to" a single IP address. Once bound to an IP address, the Web Service will only be available via that IP address.

Allow users to start and stop services: If checked (the default), each application will feature a stop, start and restart button to perform that action when applicable. Uncheck this option if you want users to be "read-only" and not start or stop services.

Allow users to restart/reboot the computer: If checked (the default), the Applications web page will display a "Restart the computer" link in the upper right. Clicking it will reboot the PC, as described in section 4.2.4.



Use secure connection (HTTPS): If checked, AlwaysUp Web Service will use the more secure HTTPS protocol instead of the regular HTTP.

AlwaysUp Web Service uses certificate files located in the "certificates" subfolder of the installation directory (usually C:\Program Files

(x86)\AlwaysUpWebService). If you wish to use your own SSL certificate, simply overwrite the "certificate.pem" and "certificate-key.pem" files with your versions. **The file names must remain the same.**

Note: When using HTTPS, your browser may complain about our "self-signed" certificate. Rest assured that it is safe to proceed to the main page and you may want to install/trust the certificate so that you are not bothered next time.

For example, when using Internet Explorer please follow these steps to install the certificate:

- 1. Click **Continue to this website (not recommended)**. A red Address Bar and a certificate warning appear.
- 2. Click the Certificate Error button to open the information window.
- 3. Click View Certificates, and then click Install Certificate.
- 4. On the warning message that appears, click **Yes** to install the certificate.

For Firefox, simply visit the web site and select 'Permanently accept this certificate' when Firefox pops up the security window.

Other browsers will have similar procedures.

Note: On Windows 11/10/8 and Server 2022/2019/2016/2012 with UAC enabled, you may have to run your browser "as an Administrator" to be able to install the certificate.

Click on the "Save >>" button to save your settings. Note that the Web Service will be quickly restarted if it is running when you save.

Click on the "Close" button when you are done using the Control Panel application.



5. AlwaysUp Web Service API

The AlwaysUp Web Service API enables developers to control AlwaysUp applications from their own programs. It is built atop generic HTTP and XML technologies. The API is described in the documentation accompanying this product, and is also available at:

https://www.coretechnologies.com/products/AlwaysUp/AlwaysUpWebServ ice/AlwaysUpWebServiceAPI.pdf



6. Licensing & Registration

The AlwaysUp Web Service is a free add-on program used in conjunction with AlwaysUp. It can be freely used on any computer with AlwaysUp installed.

In addition, please see:

https://www.CoreTechnologies.com/products/AlwaysUp/

for the latest licensing and registration information for AlwaysUp. The software can be purchased there as well (Visa / MasterCard / PayPal accepted).



7. Troubleshooting and Reporting Problems

Please consult the AlwaysUp FAQ for troubleshooting tips and answers to frequently asked questions:

https://www.CoreTechnologies.com/products/AlwaysUp/AlwaysUp_FAQ.html

If you encounter a problem while using AlwaysUp, please send email to:

support@CoreTechnologies.com

Be sure to include the following information:

- Your Operating System
- The version of AlwaysUp Web Service in use
- The version of AlwaysUp in use
- Detailed steps for reproducing any software bugs/issues

Feel free to send requests for enhancements to the same address.





8. **Reverse Proxy Configuration**

AlwaysUp Web Service works well with reverse proxy servers.

The basic setup involves the proxy server passing the following headers when forwarding the web request:

- 1. X-Base-URL: The path/location where AlwaysUp Web Service is served on the proxy server.
- 2. X-Forwarded-For: The originating IP address of the client connecting the proxy server.

To illustrate how to specify the headers, let's review an example with NGINX.

If AlwaysUp Web Service is available at http://10.10.0.1:8585 and the proxy server would like to serve AlwaysUp Web Service at /alwaysup/, then the server section of the NGINX configuration file should look like this:

```
server {
      listen 80;
      location /alwaysup/ {
             proxy set header X-Base-URL /alwaysup/;
             proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
             proxy_pass http://10.10.0.1:8585/;
      }
}
```

With those settings in place on a proxy server named "proxy-server", your users will be able to access AlwaysUp Web Service at:

http://proxy-server/alwaysup/



8.1. SSL Configuration

Setup is a tad more complicated when working with HTTPS. Here is the NGINX configuration in that scenario:

```
server {
```

}

```
listen 443 ssl;
ssl_certificate "ssl/certificate.pem";
ssl_certificate_key "ssl/certificate-key.pem";
ssl_protocols TLSv1.2;
location /alwaysup/ {
    proxy_set_header X-Base-URL /alwaysup/;
    proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    proxy_pass http://10.10.0.1:8585/;
}
```

You can use the self-signed certificate files distributed with AlwaysUp Web Service (available in the "certificates" subfolder of the installation directory).

A sample NGINX configuration file is available at our website: <u>https://www.coretechnologies.com/products/AlwaysUp/AlwaysUpWebService/ex</u> <u>ample-nginx-reverse-proxy-configuration.conf</u>

8.2. NGINX Reverse Proxy Reference

- <u>NGINX Reverse Proxy</u>
- Using the Forwarded header
- <u>Configuring HTTPS servers</u>