TARGUS INC.

Targus Wi-Fi Auto-Switch Utility

User Manual

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V. 2.00.008

Thee DocKtor

This manual intends guiding users through the basic and advanced installation of the 'Targus Wi-Fi Auto-Switch Utility' version 2 and its various options

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Introduction

This manual intends guiding users through the basic and advanced installation of the 'Targus Wi-Fi Auto-Switch utility' and supported options.

The 'Targus Wi-Fi Auto-Switch utility' is intended to work with these Microsoft operating systems: Windows 7, Windows 8.1, and Windows 10. It runs as a service which automatically disables built-in Wi-Fi and wireless WAN (4G) network adapters when connected to a Targus docking station LAN (hard wire) connection. Optionally it replaces (spoofs, clones) a MAC address of any connected Targus Giga Ethernet network adapter with the MAC address of one of the Wi-Fi or wireless WAN (4G) network adapters from an attached laptop device. The 'Targus Wi-Fi Auto-Switch utility' ensures using the fastest connection for network traffic and optionally provides selective access to network resources restricted by MAC address filtering. In an office environment this reduces redundant network connections and supports seamless transfer from wired to wireless network connections.
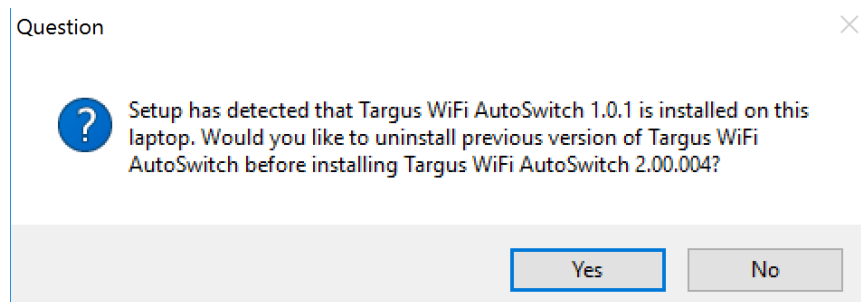
Requirements

The Targus Monitors utility is configured to work with the following Targus Universal Docking Station (UDS) models: ACP70, ACP71, ACP77, DOCK110, DOCK120, DOCK130, DOCK150, DOCK160, DOCK171, DOCK177, DOCK180, and DOCK410.
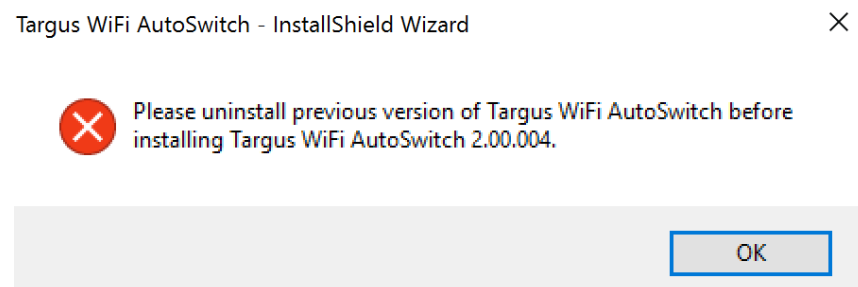
In addition, the Targus Monitors utility is configured to work with the following Microsoft Operating systems: Windows 7, Windows 8.1 and Windows 10.

Updating from a Previous Version.

If your PC has Targus WiFi AutoSwitch version 1 or an earlier version 2 installed, it must be uninstalled for the updated version 2 to be installed. If the version 2 installer detects that version 1 is installed, the following dialog is presented. Click "Yes" to uninstall version 1 and continue the version 2 installation.
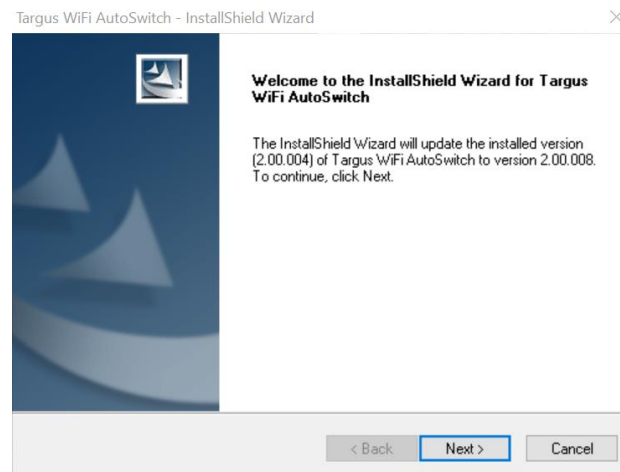
Question   ✕

?   Setup has detected that Targus WiFi AutoSwitch 1.0.1 is installed on this laptop. Would you like to uninstall previous version of Targus WiFi AutoSwitch before installing Targus WiFi AutoSwitch 2.00.004?

                              Yes   No

Click "Yes" to uninstall version 1 and continue the version 2 installation.

Targus WiFi AutoSwitch - InstallShield Wizard   ✕

✕   Please uninstall previous version of Targus WiFi AutoSwitch before installing Targus WiFi AutoSwitch 2.00.004.
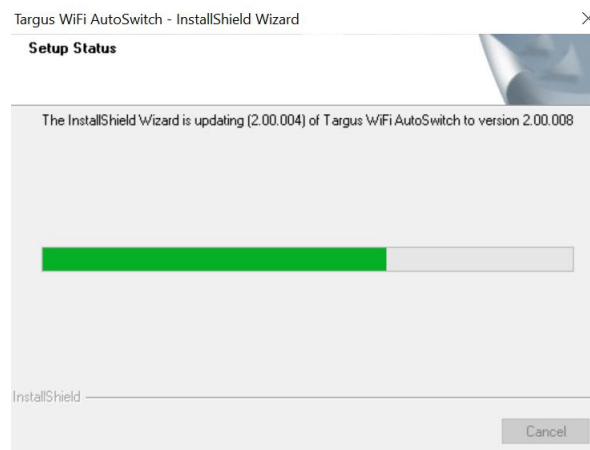
                                          OK

Clicking "No" will not enable the Targus WiFi AutoSwitch Installation. Click "OK" to abort.
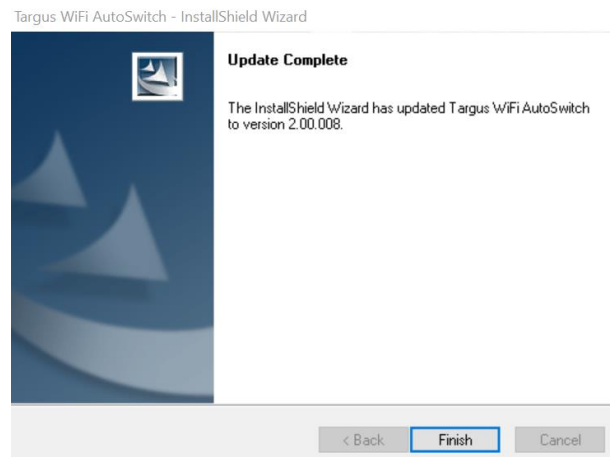
If the version 2 installer detects that an older version is installed, the following dialog is presented. Click "Next" to uninstall the current version and continue the version 2 update.
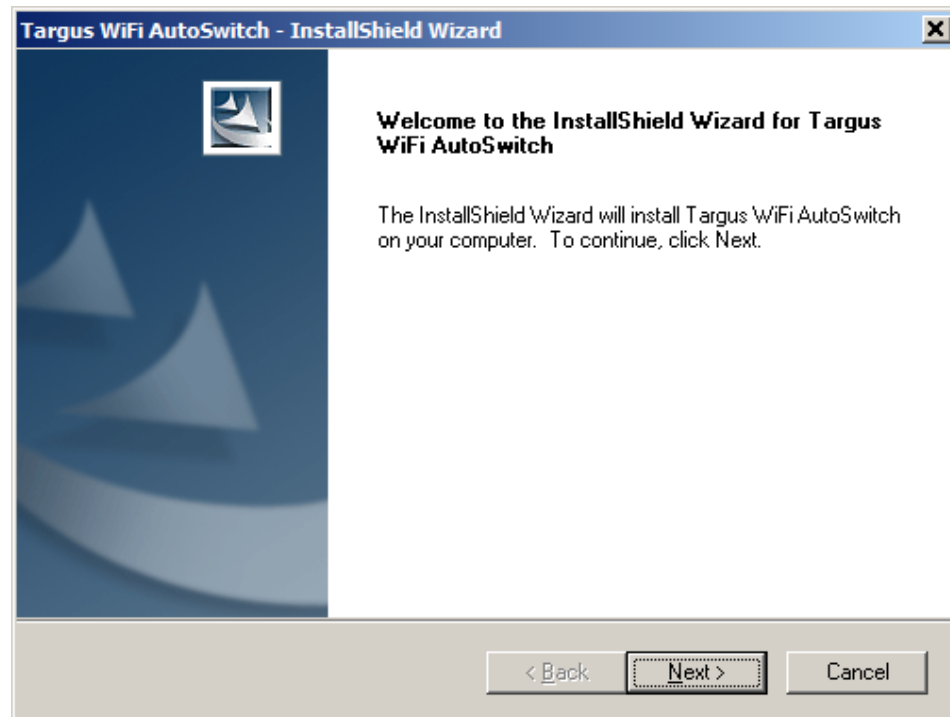
The Update process will proceed.

Followed by the 'Installation Complete' dialog. Clicking "Finish" completes the update and starts the utility.
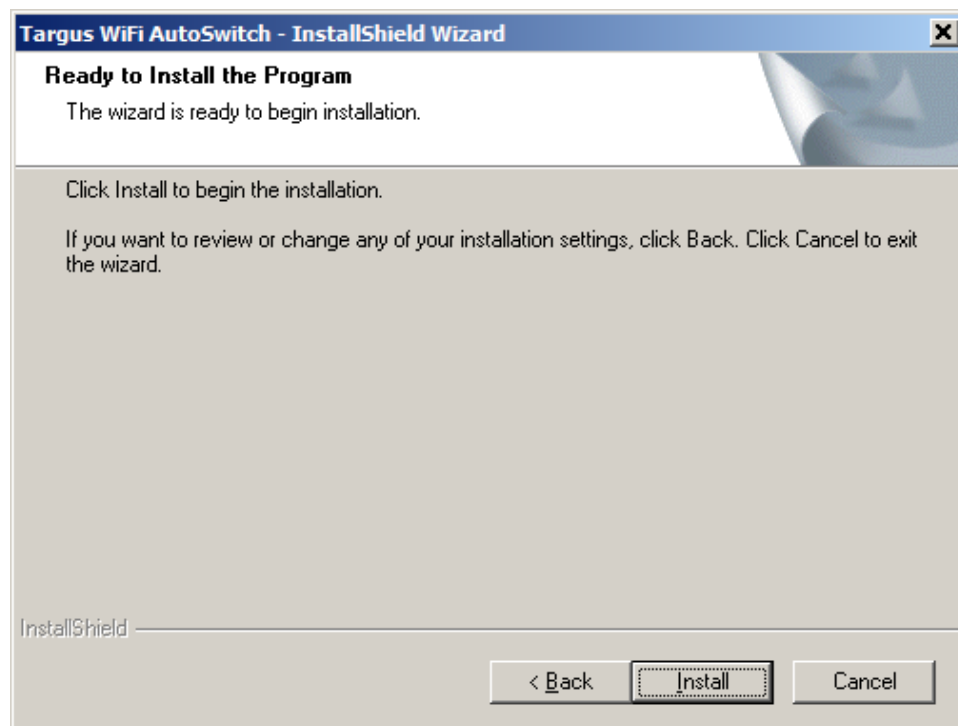
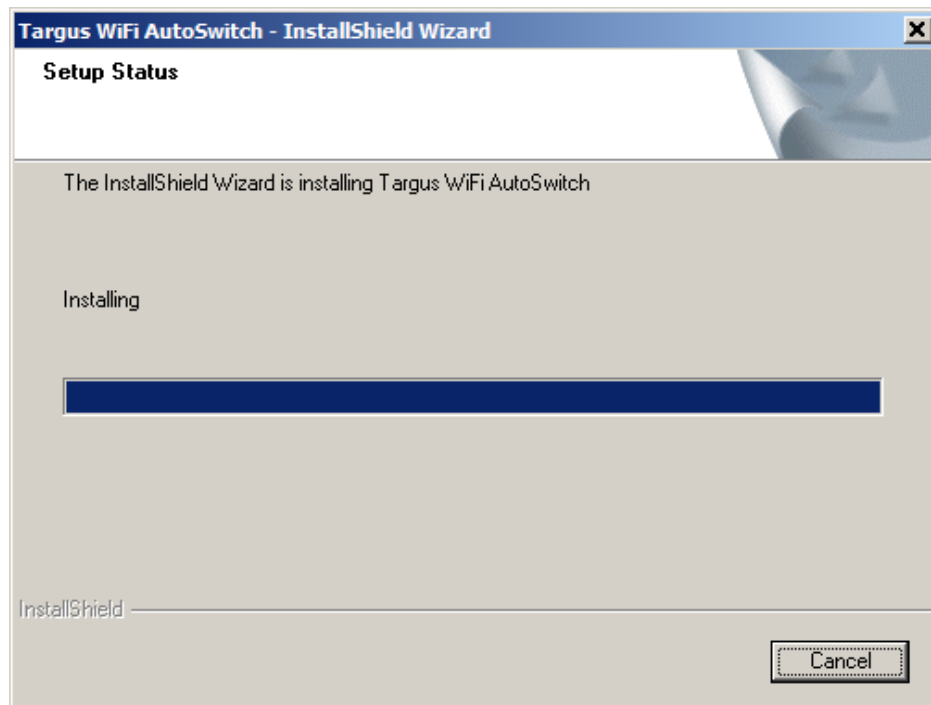## Basic Installation via Windows GUI

The basic installation requires running the program executable which spawns the following dialog.
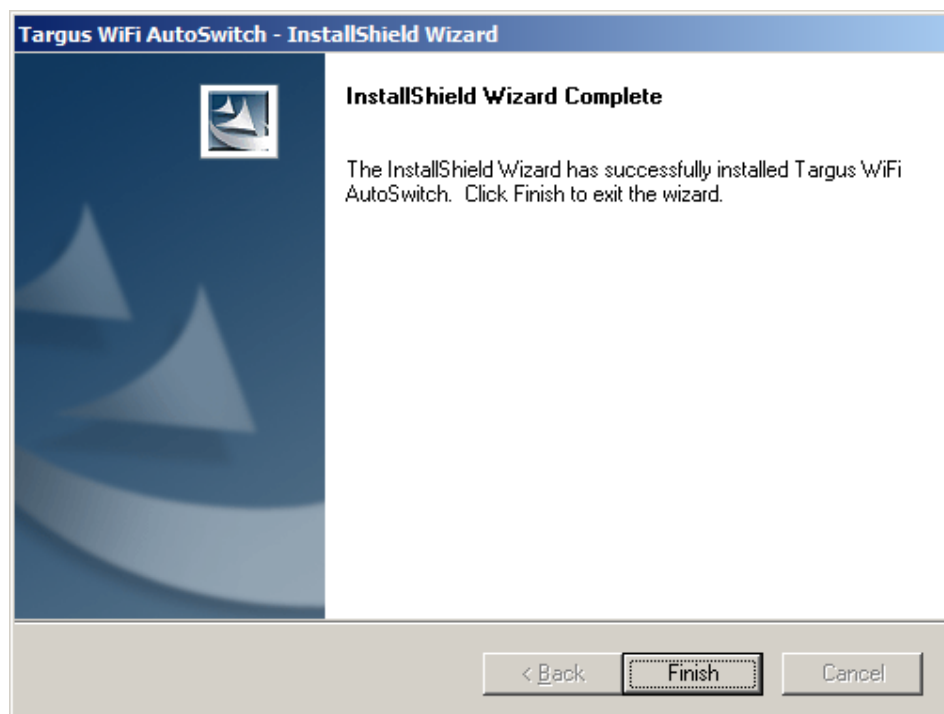

Click **Next**.

At this point the application is ready to be installed. Click "Install".

'Targus Wi-Fi Auto-Switch utility' will now install.

Followed by the 'Installation Complete' dialog. "Finish" completes the basic installation and starts the utility.

Basic Usage

Once the 'Targus Wi-Fi Auto-Switch utility' is installed it will work automatically without further need for user interaction. Results can be displayed on the network admin console or by subsequent access to network resources previously unavailable.

Action to Perform	Observations/Results
Connect your Targus Docking Station	All Wi-Fi and Wireless WAN network adapter(s) will be disabled. MAC Address of the Targus Giga Ethernet network adapter will be optionally replaced by the MAC Address of the Wi-Fi and Wireless WAN network adapter built into the attached laptop.
Disconnect the Targus Docking Station	The Wi-Fi and Wireless WAN network adapter(s) will be re-enabled. MAC Address of the Targus Giga Ethernet network adapter will be reset to the factory value.

Advanced Installation Options

The 'Targus Wi-Fi Auto-Switch utility' offers additional installation options. Using the Windows Command Line for launching 'Setup' of the 'Targus Wi-Fi Auto-Switch utility' gives administrators advanced options. (See below)

Utility Enabled/Disabled

This option enables or disables the 'Targus Wi-Fi Auto-Switch utility' by choosing one of the following Enabled (REG_DWORD) values:

0 = 'Targus Wi-Fi Auto-Switch utility' is disabled

1 = 'Targus Wi-Fi Auto-Switch utility' is enabled (default)

This option can be set during installation or update on the Command Line:
SetupAutoswitch.exe /z"-disable" or SetupAutoswitch.exe /z"-enable"

Following installation changes to the corresponding registry entry can be performed:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\WIFIAS64\Parameters\Enabled (on 64-bit versions of Windows) or
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\WIFIAS32\Parameters\Enabled (on 32-bit versions of Windows)
A restart of the 'Targus Wi-Fi Auto-Switch utility' service will be required in order for this option to take effect.

CloneEnabled

This option enables or disables the 'Targus Wi-Fi Auto-Switch utility' MAC address cloning by choosing one of the following CloneEnabled (REG_DWORD) values:

0 = 'Targus Wi-Fi Auto-Switch utility' MAC Address cloning is disabled

1 = 'Targus Wi-Fi Auto-Switch utility' MAC Address cloning is enabled (default)

This option can be set during installation or update on the Command Line:
SetupAutoswitch.exe /z"-clone" or SetupAutoswitch.exe /z"-noclone"

Following installation changes to the corresponding registry entry can be performed:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\WIFIAS64\Parameters\ CloneEnabled (on 64-bit versions of Windows) or
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\WIFIAS32\Parameters\ CloneEnabled (on 32-bit versions of Windows)
A restart of the 'Targus Wi-Fi Auto-Switch utility' service will be required in order for this option to take effect.

UpdateEnabled
This option enables or disables the 'Targus Wi-Fi Auto-Switch utility' update functionality by choosing one of the following UpdateEnabled (REG_DWORD) values:

0 = 'Targus Wi-Fi Auto-Switch utility' update is disabled (default)

1 = 'Targus Wi-Fi Auto-Switch utility' update is enabled

This option can be set during installation or update on the Command Line:

SetupAutoswitch.exe /z"-update" or SetupAutoswitch.exe /z"-noupdate"

Following installation changes to the corresponding registry entry can be performed:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\ WIFIAS64\Parameters\UpdateEnabled (on 64-bit versions of Windows) or HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\ WIFIAS64\Parameters\UpdateEnabled (on 32-bit versions of Windows)

A restart of the 'Targus Wi-Fi Auto-Switch utility' service will be required in order for this option to take effect.

Silent Installation
For deployment of the 'Targus Wi-Fi Auto-Switch utility' across multiple machines the 'Targus Wi-Fi Auto-Switch utility' setup supports an unattended setup mode by using the Command Line options /hide_progress and "-silent":
SetupAutoswitch.exe /hide_progress /z"-silent"

Several options may be specified during setup or update providing the 'Targus Wi-Fi Auto-Switch utility' parameters along with unattended setup mode by using a Command Line entry as:
SetupAutoswitch.exe /hide_progress /z"-silent -enable -noclone" or SetupAutoswitch.exe /hide_progress /z"-silent –disable -noupdate"

What it Does

'Targus Wi-Fi Auto-Switch utility' Service

The 'Targus Wi-Fi Auto-Switch utility' is installed and runs as a service which is configured to start automatically. In case a user with administrative privileges stops the 'Targus Wi-Fi Auto-Switch utility' the service then will restart automatically on reboot.

On 'start-up' the service first tries detecting an administratively enabled Targus Giga Ethernet network adapter (Windows device of class "Network Adapter" with proprietary Vendor ID (VID) 17E9 and Product ID (PID) 4306).

Please note: The 'Targus Wi-Fi Auto-Switch utility' service will ignore administratively disabled or disconnected Targus Giga Ethernet network adapters. If a Targus Giga Ethernet network adapter is not present or not connected to LAN, then the 'Targus Wi-Fi Auto-Switch utility' service will go to sleep until it receives notification about the arrival of devices matching the class "Network Adapter" or network cable connection.

Once a connected Targus Giga Ethernet adapter arrives (as a result of Targus Docking Station or network cable connection) the 'Targus Wi-Fi Auto-Switch utility' service will enumerate and administratively disable all Wi-Fi and Wireless WAN (4G modem) network adapters.

The 'Targus Wi-Fi Auto-Switch utility' will optionally replace the MAC Address of Targus Giga Ethernet adapter by MAC Address of built-in Wi-Fi or Wireless WAN (4G modem) network adapter.

The 'Targus Wi-Fi Auto-Switch utility' service will monitor the connection status of the Targus Giga Ethernet network adapter and will enable all built-in Wi-Fi or Wireless WAN (4G modem) upon cable disconnection.

The 'Targus Wi-Fi Auto-Switch utility' service will release IPv4 addresses of network adapters it disables if one obtained from DHCP server.

Once the Wi-Fi and Wireless WAN (4G modem) adapters are disabled and Targus Giga Ethernet MAC address is optionally replaced, the 'Targus Wi-Fi Auto-Switch utility' service will sleep until a Windows device of class "Network Adapter" removal or network cable disconnection occurs.

Once the Targus Giga Ethernet will be removed (as a result of Targus Docking Station disconnection) or disconnected from the LAN, the 'Targus Wi-Fi Auto-Switch utility' service will optionally reset the MAC address of a Targus Giga Ethernet network adapter by deleting the MAC address value in Windows Registry and reloading the Targus Giga Ethernet network. The built-in Wi-Fi and Wireless WAN (4G modem) network adapters will enabled.

The 'Targus Wi-Fi Auto-Switch utility' Tray Application

Along with the 'Targus Wi-Fi Auto-Switch utility' service the setup sequence installs the 'Targus Wi-Fi Auto-Switch utility' Tray Application which provides status/state information. Users without administrative privileges can control the 'Targus Wi-Fi Auto-Switch utility' service functionality by enabling and disabling.

The 'Targus Wi-Fi Auto-Switch utility' Tray Application is set to start automatically for every interactive session.

The 'Targus Wi-Fi Auto-Switch utility' Tray Application provides information about the state and status by changing a notification icon, tooltip text and by displaying notification balloons.

The 'Targus Wi-Fi Auto-Switch utility' Tray Application allows users without administrative privileges to enable or disable the 'Targus Wi-Fi Auto-Switch utility' service and cloning option by selecting a corresponding option from a context pop-up menu available on right-button mouse click on the 'Targus Wi-Fi Auto-Switch utility' Tray Application icon located in the Windows taskbar notification area.

Icon	Severity	Description/Required Response
	Error	'Targus Wi-Fi Auto-Switch utility' service is not installed. Reinstall the application.
	Warning	'Targus Wi-Fi Auto-Switch utility' service is installed but not started. Start the service.
	Information	'Targus Wi-Fi Auto-Switch utility' service is installed and started but disabled. Enable 'Targus Wi-Fi Auto-Switch utility' from context menu.
	Information	'Targus Wi-Fi Auto-Switch utility' service is installed, started and enabled. Connect Targus Docking Station or network cable.
	Information	'Targus Wi-Fi Auto-Switch utility' service is installed, started and enabled. Targus Docking Station is connected, built-in Wi-Fi or Wireless WAN (4G modem) are disabled, and MAC Address of Targus Giga Ethernet Adapter is optionally replaced (spoofed, cloned).

Task Tray Icon Functionality

If the Tray Application is enabled, users can Right Click on the task tray icon and then left click to Disable the utility, Disable/Enable Cloning, check for updates to the utility (updates are not part of Windows Update), determine the version via the About, or Exit the utility.

Known Issues

- In case a WMI issue is present on a machine where WMI cannot communicate with the network adapter the 'Targus Wi-Fi Auto-Switch utility' may not work.
  The 'Targus Wi-Fi Auto-Switch utility' uses WMI to set and retrieve various properties for both Targus Giga Ethernet and MAC Address source network adapters.
- In rare cases notification requests may appear as a sequence of several messages.
- 'Windows 10' testing revealed notification balloon appearance inconsistencies where balloons are either missing or distorted.

Support

Support is available through phone and/or email. Please don't hesitate to contact us with any questions or issues.