

F Key Function Custom the Second Development Instruction

Document information

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Demo sample code functionality is explained as follow:

There are multiple compression packages in **SourceCode** Directory: (the code between compressed packets is just different in called classes, others are the same)

FKey_RuggedPad16H.zip : sample templates for 16H models

FKey_RuggedPad62H.zip : sample templates for 62H models

FKey_RuggedPad82.zip : sample templates for 82 models

FKey_RuggedPadDevice.zip : Generic model templates. Other models can be modified in accordance with this template.

This article: FKey_RuggedPad62H code as an example instruction. Decompression Source Code directory FKey_RuggedPad62H.zip compression package. Please use Visual Studio 2015 software to open. **Source code** is C# language written.

I. Function logic description

- 1、 By adding boot plan tasks, use way of similar services to monitor F function button whether pressed. Each check interval 100ms.
- 2、 open thread to monitor.
- 3、 when listening to specified physical memory (specific address, if there is value to the specific address of consult FAE), when there is a change, starting calling external application procedure. Press F button again then the name of process judging, judging whether application name already exists, if exists will not call repeat, if not will be another call.

II. Code cruces instruction

1、 Need to call as follow

```
using WinExt.Device;
```

```
using WinExt.Registry;
```

```
using WinExt.WinAPR
```

```
using WinExt.WinIO;
```

Required dll file in dll folder can find. Adding quote is ok.

2、RuggedPad62H machine as example

State `private RuggedPad62H XDevice;` as operation object.

RuggedPad62H class including RuggedPad62H can operated peripheral configuration. Please notice WinExt.Device.dll update (for FAE ask for).

3、Create object

`XDevice = new RuggedPad62H();` //build operate object

`XDevice.KeyListener.OnKeyEvent += KeyListener_OnKeyEvent;` state monitor event.

`XDevice.KeyListener.Start(RuggedPad62H.FKEY);` //open monitor

KeyListener_OnKeyEvent: this monitor function can amend, adding own function.

4、Other

`User32.SwitchToThisWindow(fKeyStartProcess.MainWindowHandle, true);` //switch window

`User32.SetWindowPos(fKeyStartProcess.MainWindowHandle, User32.HWND_TOPMOST, 0, 0, 0, 0, User32.SWP_NOMOVE | User32.SWP_NOSIZE);` //Set call's application window to current active application window.

IRegisteredTask: plan task operation class.

See comments in source code for details.

III. Notice event

1、Notice to release called resource

Notice When in the window application exit is closed, calling resource is resource.

`XDevice.Dispose();` //release `RuggedPad62H` class resource.

`WinIo.Dispose();` //release WinIO resource.

2、 Notice registry key

Management tool and monitor service FKEY_REGEDITKEY_SUBKEY registry key need to keep consistent.

Such as, this code is:

```
private readonly string FKEY_REGEDITKEY_SUBKEY = @"SOFTWARE\XDevice\FKey";
```

3、 Notice different models

Notice different models need to call different class.

```
RuggedPad62H, call: XDevice = new RuggedPad62H();
```

```
RuggedPad16H, call: XDevice = new RuggedPad16H();
```

According to different machine modules called corresponding class can be, of course, in source code can use overall replacement method.

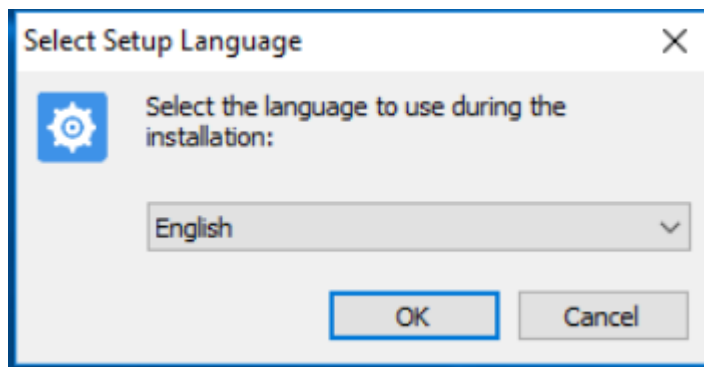
Demo paradigm installation and use instruction as follow:

I. Install

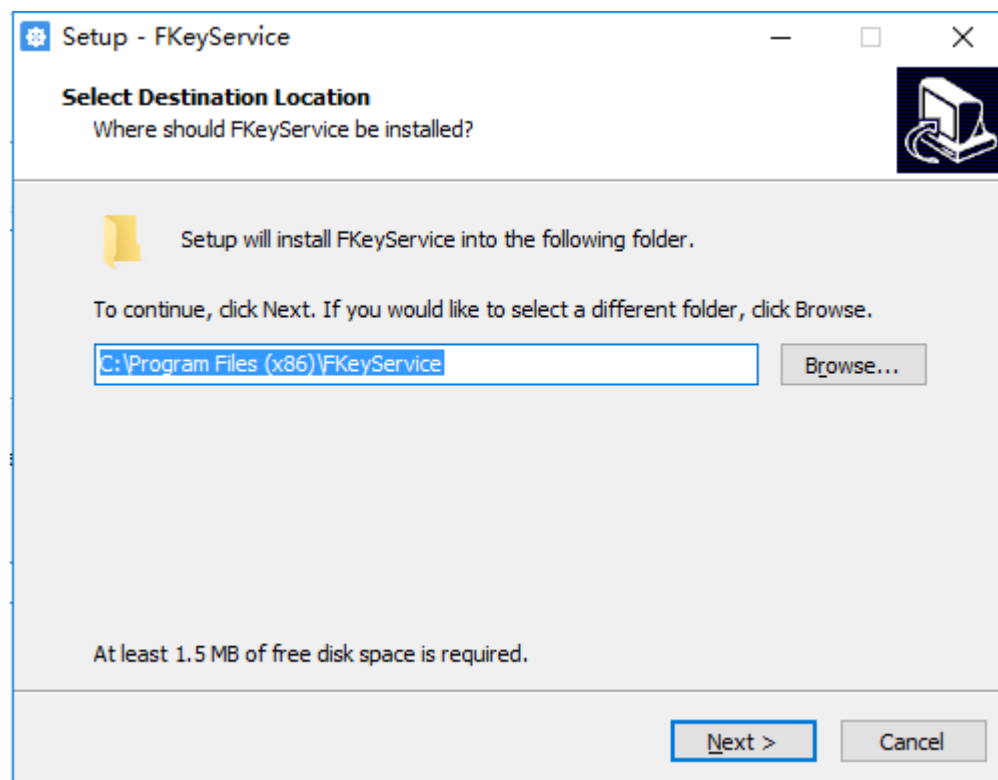
(1) Double click Setup directory **RuggedPad62H** folder FKeyService.exe installation. Note installation files should be put in English path. (installation package is to use Inno Setup Compiler tools made, packing method here don't introduced, FKeyService.exe is compiled by example code file package generation)

(2) install interface :

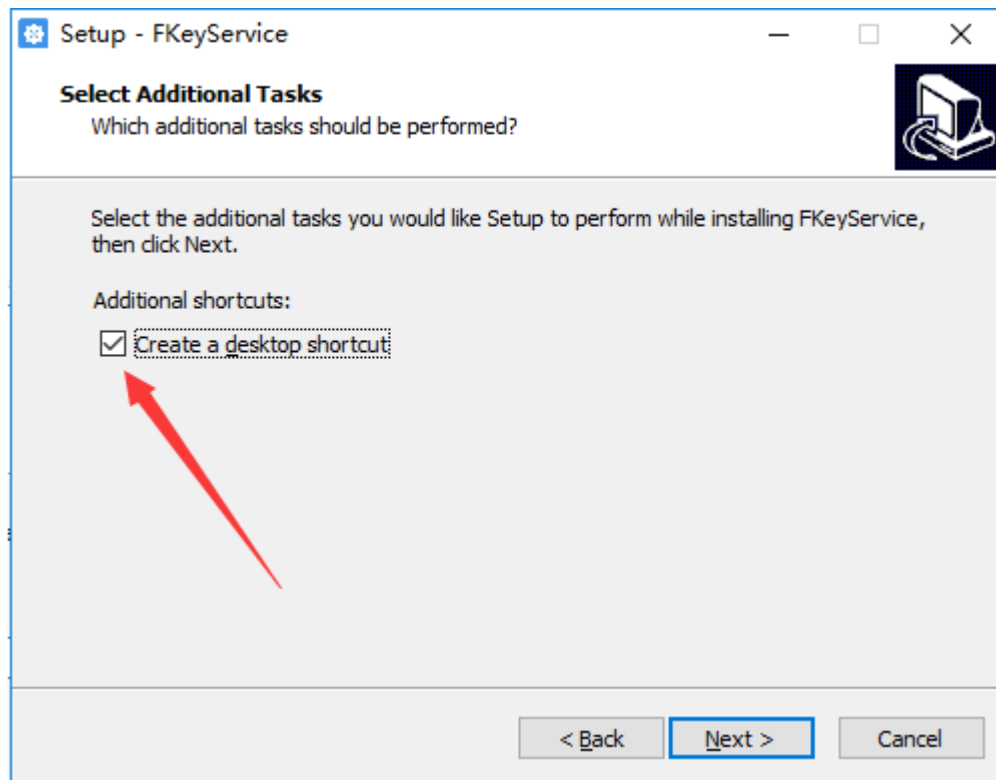
Maybe display language selection. Automatic English. As follow picture. When display UAC prompt, please let go.



Next is installation path selection, as shown below:

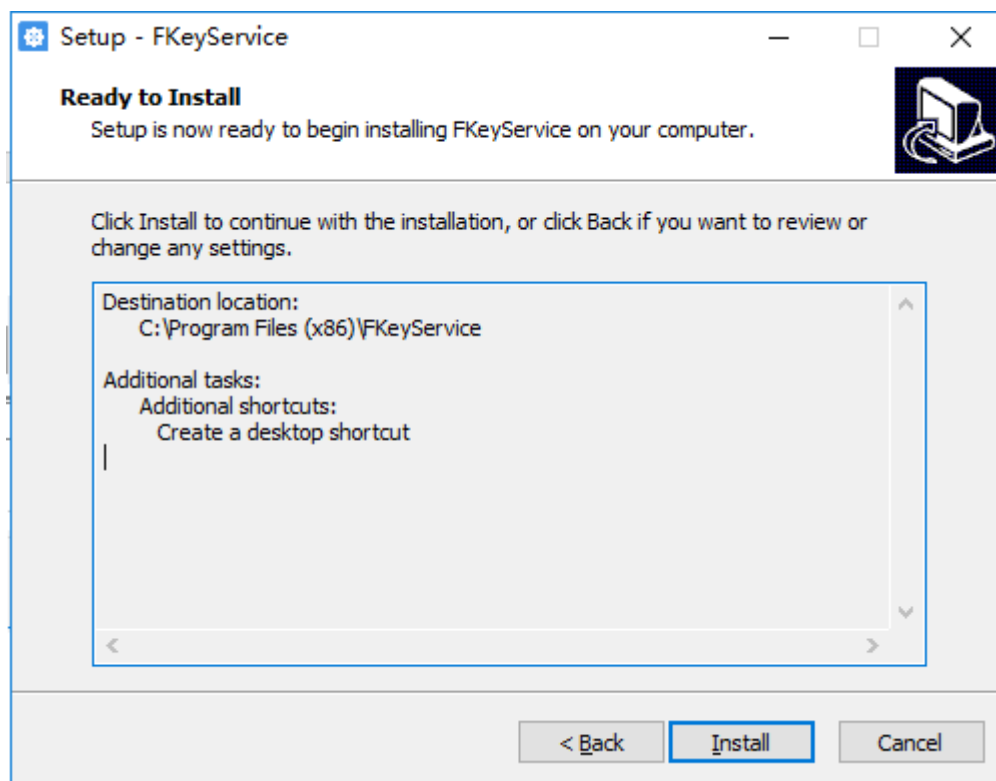


Installation path is OK by default, or you can modify path by yourself. Click next to continue.

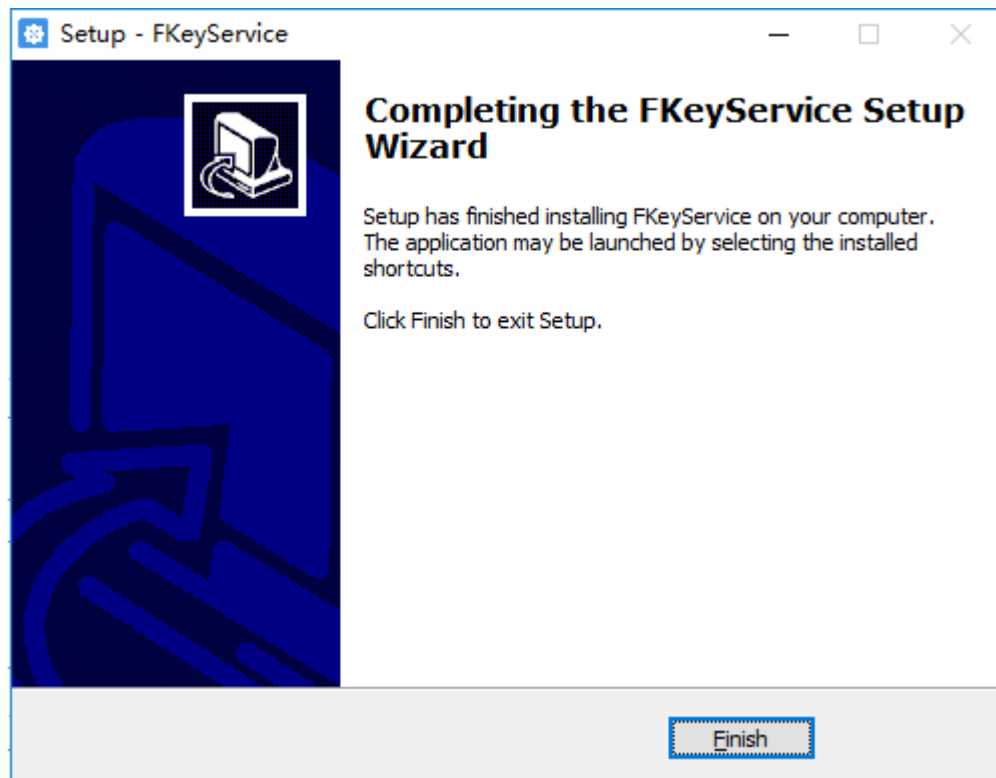


You can select to create a desktop shortcut, or not selected do not create.

Click next to continue.



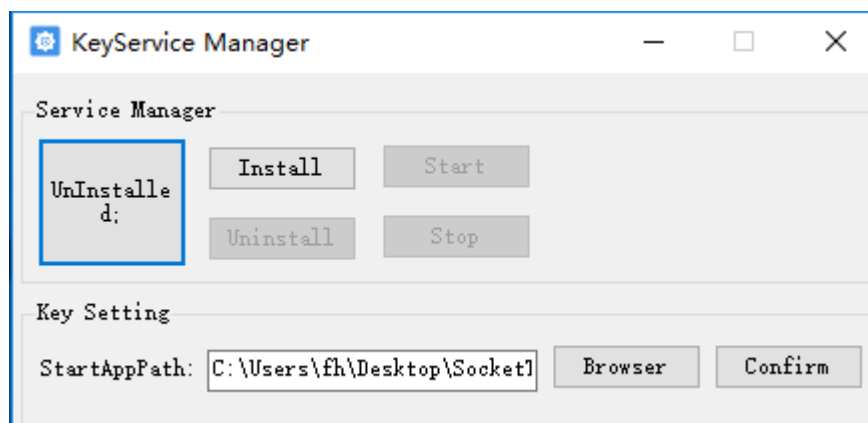
Click next to continue.



Click finish completed installation.

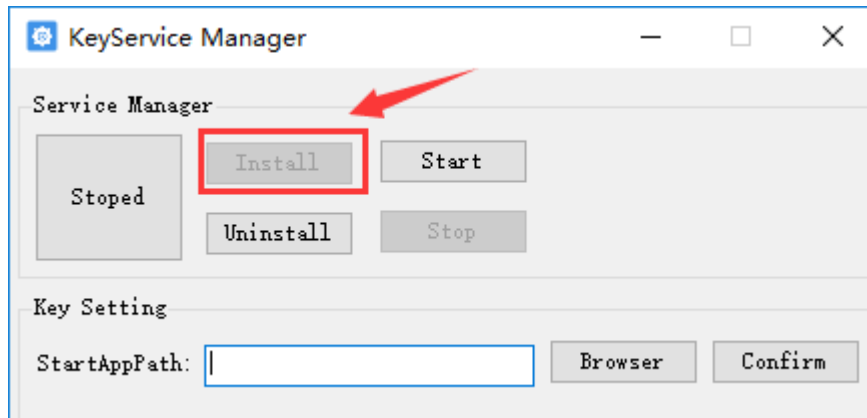
II. Configure

Double click on desktop icon F KeyService, open app application. (if there is no shortcut to establish your own installation directory to find)



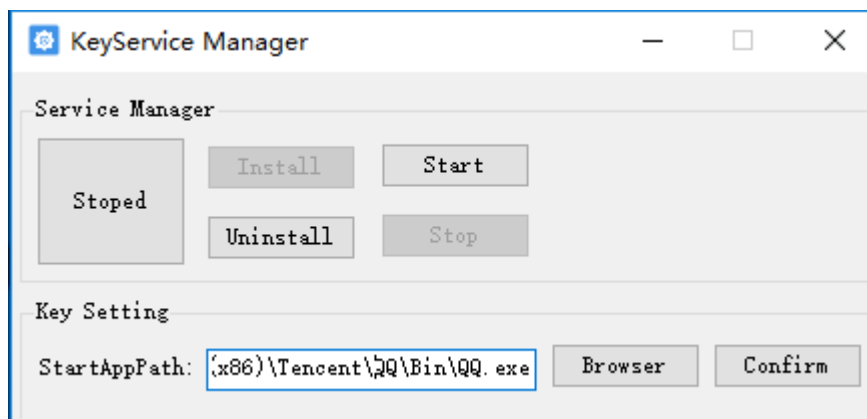
This tool is the software for defining F key function settings.

- (1) First, installation of monitoring F function key services: click Install can be installed. as shown follow picture.



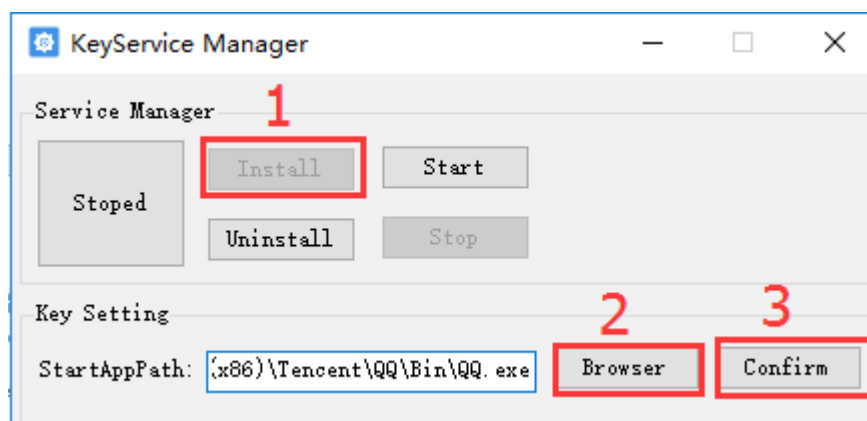
(2) Next, browse to shortcut lnk file for exe program that needs to be called with F key, or program. Click Browser button to start browsing.

Click Browser button start scanning.

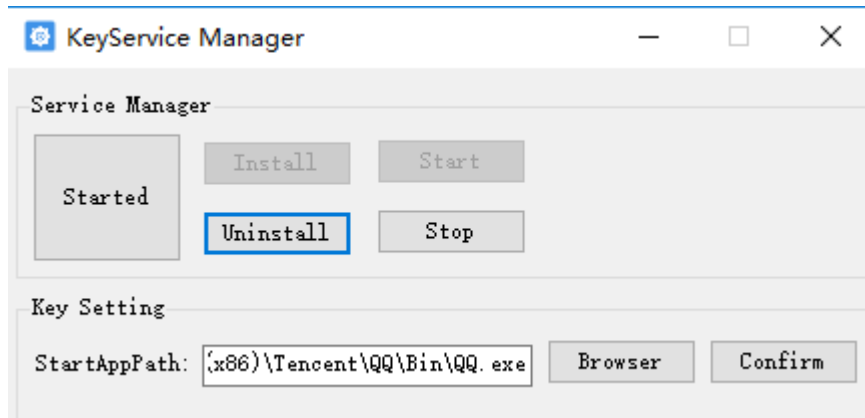


This example is to browse QQ software.

(3) The next, click Confirm confirm StartAppPath setting.



(4) Next, start the listening service of F function key. Click Start button, as follows:



Until now has been completed F key monitoring services, and open F function keys automatically call Tencent QQ software function. F function keys also can set up their own call into other software startup, please modify StartAppPath settings. Close "KeyService Manager" configuration tool.

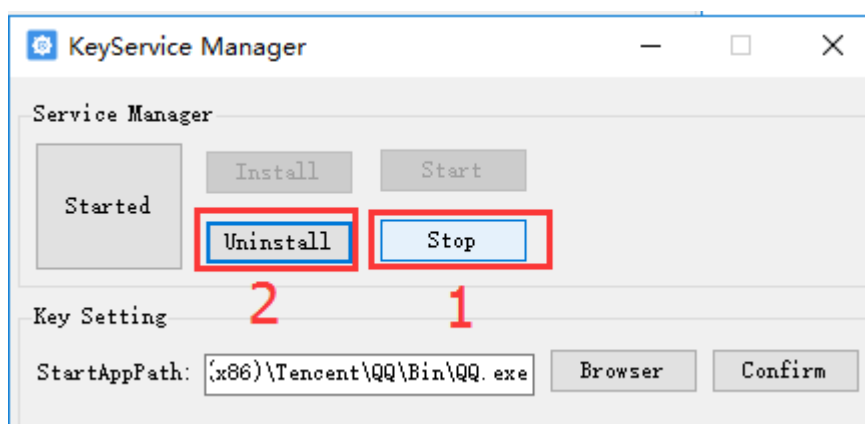
III. Using

Press F button will automatically run Tencent QQ. After QQ application is closed can using F button to call up QQ application again.

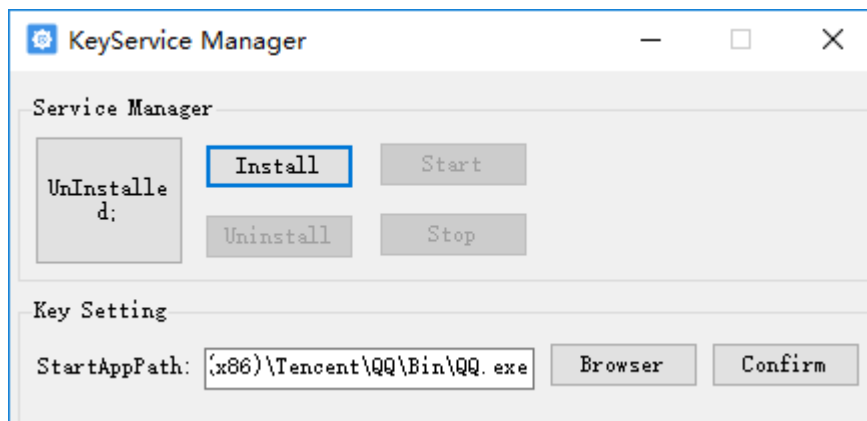
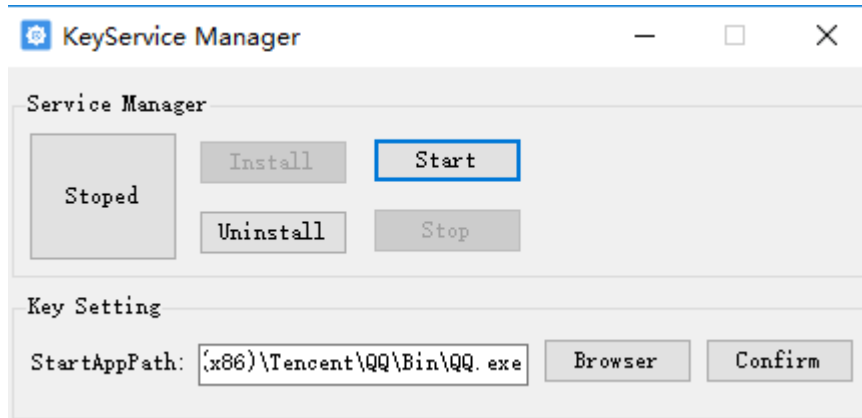
Computer restart can also be used

一、Uninstall


(1) Before uninstalling, you need to disable listening service for F function key. Run KeyService Manager software. as follows:

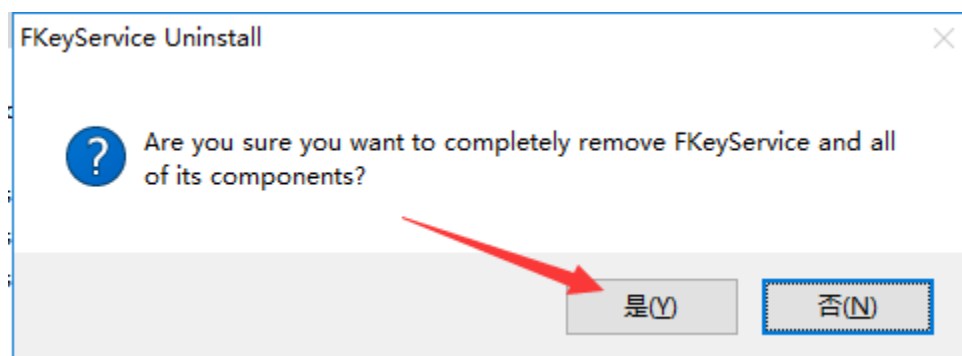


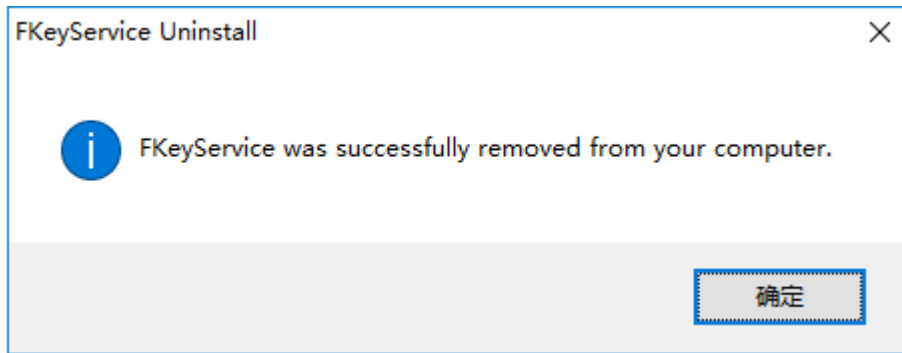
Click Stop button, stopping monitor service. Then click Uninstall uninstall monitor service.



As shown above, service that listens to F function key has been stopped and uninstalled. Next, uninstall management tool.

Uninstall management tool can be found  **unins000.exe** under installation path, double click uninstall, or uninstall in control panel - program uninstall.





IV. Notice event

Please uninstall listening service before using management tool to uninstall management tool, so as to avoid fact that service can not be uninstalled.