



# Services

基

maXbox Starter 145 – Get a Service.

“Natura abhorret vacuum<sup>1</sup> – Spinoza.

Source: **1413\_services5jcl.pas**

[https://sourceforge.net/projects/maxbox5/files/examples/1413\\_services5jcl.pas/download](https://sourceforge.net/projects/maxbox5/files/examples/1413_services5jcl.pas/download)

**1406 U Go3 1form2.pas**

**1413\_services5jcl.pas**

WinSvc has all the Windows API methods you need. You can create the unit below for an easy class interface:

```
FHandle:= OpenSCManager(Pointer(FMachineName), Pointer(FDatabaseName),  
                        FdesiredAccess);
```

But you can also use the unit file **JclSvcCtrl.pas** from JEDI Components Library (JCL), which I demonstrate next.

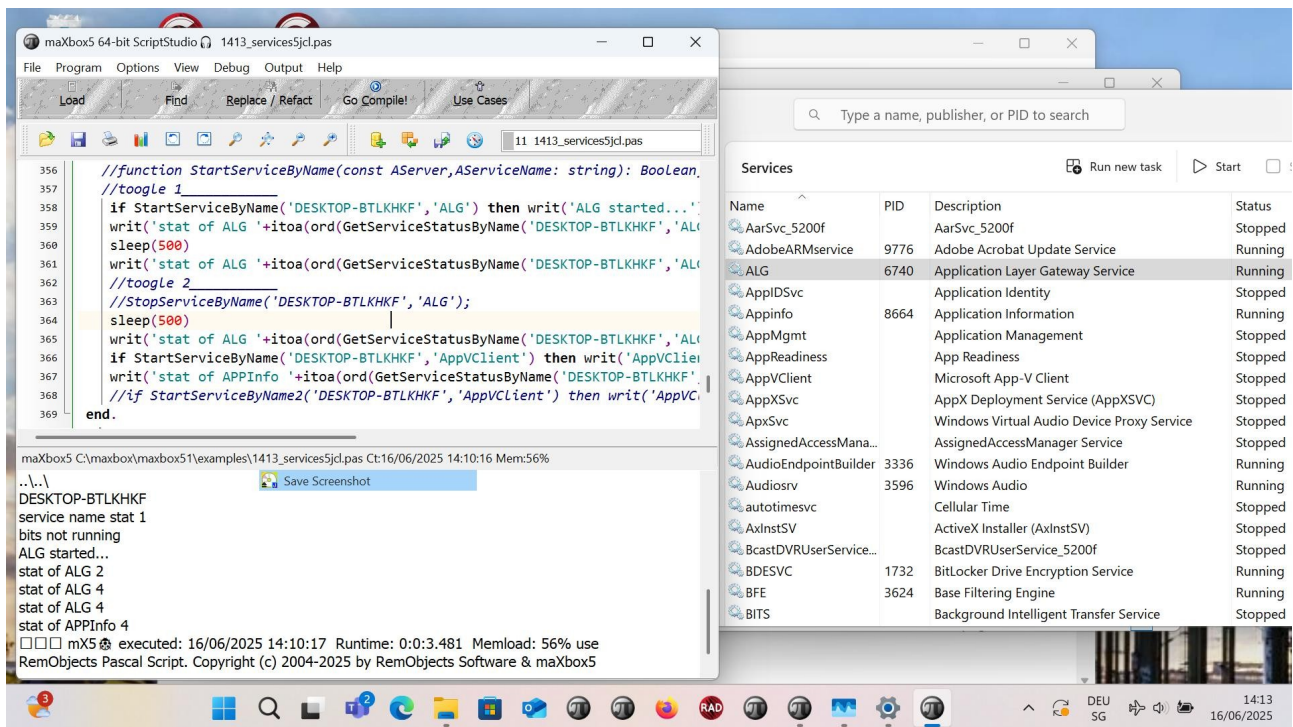
Also be aware the user must have proper rights to change service configurations. The best to run the script is to start maXbox with admin rights (Run as administrator) and you get the admission:

**const**

```
// Everyone in WinNT/2K or Authenticated users in WinXP  
EveryoneSCMDesiredAccess =  
    SC_MANAGER_CONNECT or  
    SC_MANAGER_ENUMERATE_SERVICE or  
    SC_MANAGER_QUERY_LOCK_STATUS or  
    STANDARD_RIGHTS_READ;  
  
LocalSystemSCMDesiredAccess =  
    SC_MANAGER_CONNECT or  
    SC_MANAGER_ENUMERATE_SERVICE or  
    SC_MANAGER_MODIFY_BOOT_CONFIG or  
    SC_MANAGER_QUERY_LOCK_STATUS or  
    STANDARD_RIGHTS_READ;  
  
AdministratorsSCMDesiredAccess = SC_MANAGER_ALL_ACCESS;  
DefaultSCMDesiredAccess = EveryoneSCMDesiredAccess;  
DefaultSvcDesiredAccess = SERVICE_ALL_ACCESS;
```

You can use file JclSvcCtrl.pas from JEDI Components Library (JCL) direct with helper functions which encapsulates the objects. I have written a pseudo example script #1413\_ **services5jcl.pas** that you could use. However, be aware that I didn't test it just a short time. But in this way it should work (error checks omitted):!

1 Nature recoils from emptiness -



1413\_services2\_mx5\_screenshot.png //1406\_1\_GoScreenshot2025-06-162815.png

As you can see the start and stop a service called **ALG** which stands for Application Layer Gateway Service. The function is called:

```
function StartServiceByName(const AServer, AServiceName: String): Boolean;
var
  ServiceHandle,
  SCMHandle: SC_HANDLE;
  P: PChar;
begin
  P := nil;
  Result := False;
  SCMHandle := OpenSCManager(PChar(AServer), nil, SC_MANAGER_ALL_ACCESS);
  if SCMHandle <> 0 then
  try
    ServiceHandle := OpenService(SCMHandle, PChar(AServiceName),
                                SERVICE_ALL_ACCESS);
    if ServiceHandle <> 0 then
      Result := StartService(ServiceHandle, 0, P);

    CloseServiceHandle(ServiceHandle);
  finally
    CloseServiceHandle(SCMHandle);
  end;
end;
```

We call that from the main:

```
if StartServiceByName('DESKTOP-BTLKHKF', 'ALG') then
  writ('ALG started...');
  writ('stat of ALG ' +
    itoa(ord(GetServiceStatusByName('DESKTOP-BTLKHKF', 'ALG'))));
```

```

sleep(500)
writ('stat of ALG '+
    itoa(ord(GetServiceStatusByName('DESKTOP-BTLKHKF','ALG'))));
//toogle 2
//StopServiceByName('DESKTOP-BTLKHKF','ALG');
sleep(500)

```

Between the two sleeps you can see two different states, namely 2 and 4:

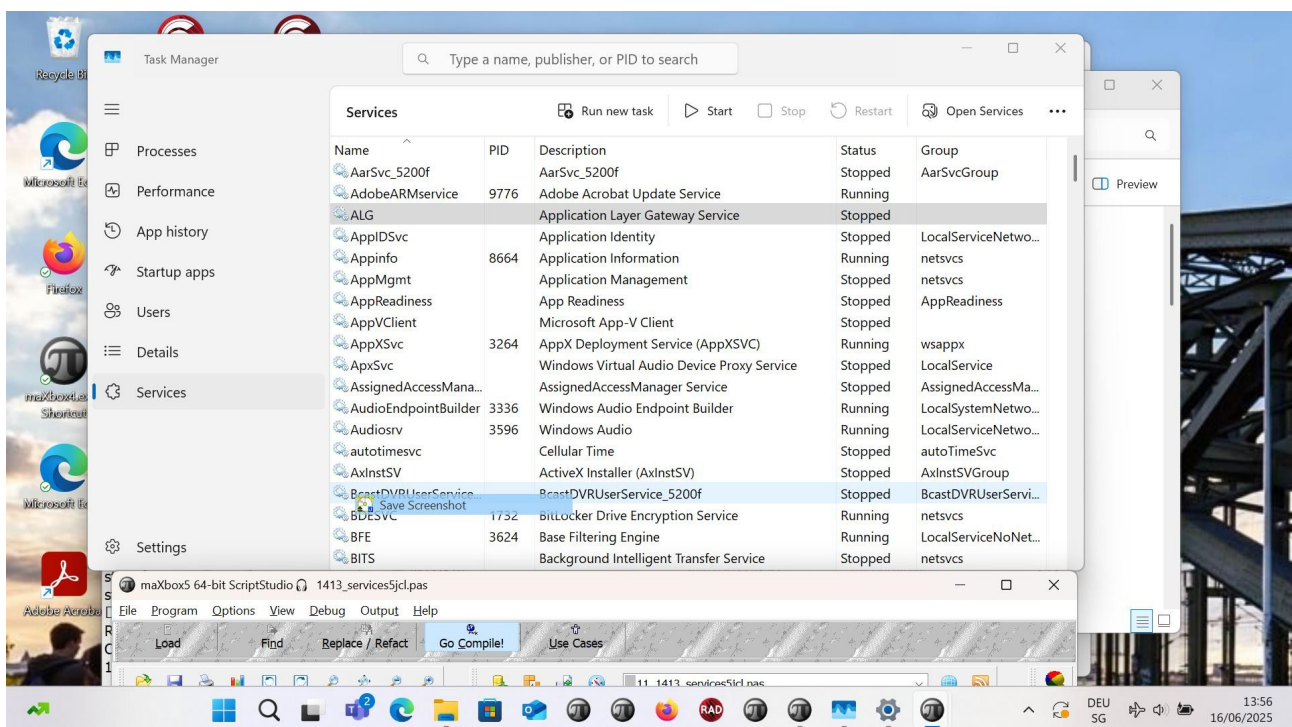
```

//GetServiceStatusWaitingIfPending(ServiceHandle: SC_HANDLE): DWORD;
{
    (ssUnknown,          // Just fill the value 0
     ssStopped,          // SERVICE_STOPPED
     ssStartPending,     // SERVICE_START_PENDING
     ssStopPending,      // SERVICE_STOP_PENDING
     ssRunning,          // SERVICE_RUNNING
     ssContinuePending,  // SERVICE_CONTINUE_PENDING
     ssPausePending,     // SERVICE_PAUSE_PENDING
     ssPaused);          // SERVICE_PAUSED }

```

So it changes from *ssStartPending 2* to *ssRunning 4*, on methods see first screenshot above.

Besides using the previous methods, if you need more control you can use WMI. With Win32\_Service class you have access to all information of the services installed on the machine and you can has access to methods: Start, Stop, Pause, Resume, Interrogate, Create, Delete, Change, ChangeStartMode...



1413\_services\_mx5\_screenshot.png

The User Account Control basically notifies you before changes are made to your PC - not all changes, but only those which require Administrator level permissions. These changes could have been initiated by the user, by the operation system, by genuine software - or even malware! Every

time such an administrator-level change is initiated, Windows UAC will prompt the user for approval or denial.

### **C:\Windows\System32\UserAccountControlSettings.exe**

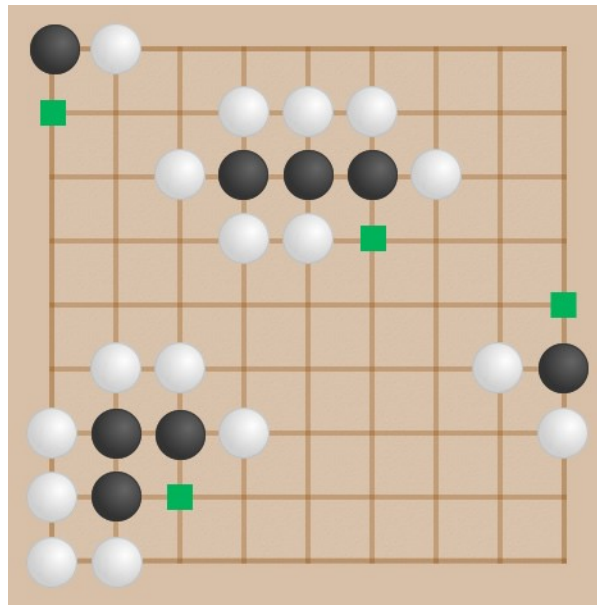
To start a service by its name in Delphi using the mentioned JCL (JEDI Code Library), you can use the `TjclSvcController` as a new customised class and `TJclNtService` classes provided by the JCL by your own steps beside the helper functions. Here's an not finished example of how to achieve this:

```
procedure DisableService(ServiceName: PChar);  
var SM: TServiceManager;  
begin  
    SM:=TServiceManager.Create('0','0');  
    try  
        //SM.Connect('0','0');  
        SM.OpenServiceConnection(ServiceName);  
        //not working with TServiceManager as is  
        //but its easy to fix, see below  
        SM.DisableService;  
    finally  
        SM.Free;  
    end;  
end;  
  
begin  
    try  
        StartServiceByName('YourServiceNameHere');  
        Writeln('Service started successfully.');    except  
        on E: Exception do  
            Writeln('Error: ', E.Message);  
        end;  
end.
```

A last and interesting call concerns the shell. If you are familiar with the console just do a console call from the script:

```
ShellExecute(0, nil, 'cmd.exe', 'sc config "the service name"  
                                start=disabled', nil, SW_HIDE);  
ShellExecute(0, nil, 'cmd.exe', 'sc config "the service name"  
                                start=auto', nil, SW_HIDE);  
ShellExecute(0, nil, 'cmd.exe', 'sc config "the service name"  
                                start=demand', nil, SW_HIDE);  
  
RunDosInMemo('cmd.exe /C sc config "ALG" start= disabled',Memo2);  
>>> [SC] ChangeServiceConfig SUCCESS  
RunDosInMemo('cmd.exe /C sc query "ALG"',Memo2);
```

The **sc config** command is a powerful tool in Windows that allows you to modify the configuration of a service. This command can change various parameters of a service, such as its start type, error control, binary path, dependencies, and more. It is particularly useful for system administrators who need to manage services on local or remote machines.



In September, Brian Kleiner represented Switzerland in the 17th Korea Prime Minister Cup (KPMC), in Gwangju. There were players from 53 countries present, with 6 rounds over three days of play. The organization from the hosts was excellent from start to finish, the late summer weather was ideal, and a good spirit reigned throughout. The long bus rides were rewarded with attractive views of the countryside, explanations from the guides, and several memorable visits – first to a beautiful bamboo forest park, and then to a Baduk (Go) factory, museum, and shop for souvenirs.

```

maxbox5 64-bit ScriptStudio 1397_Geolocation_distance12_uc.txt
File Program Options View Debug Output Help
Load Find Replace / Refact Go Compile! Use Cases
12 1397_Geolocation_distance12_uc.txt
195 //Hauptbahnhof, Bern, Switzerland', 'L_APIKEY', true);
196 sleep(500);
197 //toge:= API_GEOLocation_OSM9(URL_GEOLOCURL9,
198 // 'Gare du Nord, Paris, France', 'L_APIKEY', false);
199 //toge:= API_GEOLocation_OSM9(GEOLOCURL9, 'Athen', 'L_APIKEY', false);
200 //toge:= API_GEOLocation_OSM9(URL_GEOLOCURL9, 'Cafe Paris, Cologne', '', true);
201 //t_LatLong:= API_GEOLocation_OSM9(GEOLOCURL9, 'Gare du Nord, Paris, France', 'L_APIKEY');
202 //toge:= API_GEOLocation_OSM9(URL_GEOLOCURL9, 'Lindwurm, Klagenfurt, Austria', '', true);
203 toge:= API_GEOLocation_OSM9(URL_GEOLOCURL9, 'Gare de Est, Paris, France', '', true);
204 writ(jsonunescape((fromgeo.description),#13#10));
205 writ(jsonunescape((toge.description),#13#10));
206 writeln('Distance: '+format('%2.4f km ',
207 | [SphericalEarthDistance(fromgeo.lat,fromgeo.long, toge.lat,toge.long,1)]));
208 //OpenWeb('https://www.LatLong.net/c/?Lat='+fLats(t_LatLong.Lat)+'&Long='+fLats(t_LatLong.Long));
209 end.
210 end.
New Instance created of: 1397_Geolocation_distance12_uc.txt Row: 209-Col: 58 s: 8510 S
{"name": "Holiday Inn : Gare de l'est",
"display_name": "Holiday Inn : Gare de L'est, Rue du 8 Mai 1945, Quartier de la Porte-Saint-Martin, Paris 10e
Arrondissement, Paris, Île-de-France, France m\u00e9ropolitaine, 75010, France",
"boundingbox": [
"48.8758129",
"48.8759129",
"2.3589480",
"2.3590480"
]
}

```

MaxMatrix Time/Space:

The multiplication of past x future is a vector with the function:= known = f(changeable) [y=f(x)] as distance over time, so **distance** is a function of time: **d=f(t)**.

## Conclusion

The simple way is to use in unit file JclSvcCtrl.pas from JEDI Components Library (JCL) direct with helper functions which encapsulates the objects.

```
// helper functions
```

```
function GetServiceStatus(ServiceHandle: SC_HANDLE): DWORD;
```

```
function GetServiceStatusWaitingIfPending(ServiceHandle: SC_HANDLE):  
                                           DWORD;
```

```
function GetServiceStatusByName(const AServer, AserviceName: string):  
                                TJclServiceState;
```

```
function StopServiceByName(const AServer, AServiceName: string): Boolean;
```

```
function StartServiceByName(const AServer, AServiceName: string): Boolean;
```

Replace "YourServiceNameHere" with the actual name of the service you want to start. Ensure you have the necessary permissions to start services on the system. The JCL library must be installed and properly configured in your Delphi environment, in maXbox it's precompiled and built on board.

The **sc config** command is a powerful tool in Windows that allows you to modify the configuration of a service.

### Script:

[https://sourceforge.net/projects/maxbox5/files/examples/1413\\_services5jcl.pas/download](https://sourceforge.net/projects/maxbox5/files/examples/1413_services5jcl.pas/download)

### References:

[jcl/jcl/source/windows/JclSvcCtrl.pas at master · project-jedi/jcl](#)

[How to use the command 'sc' \(with examples\)](#)

[delphi - How do I Enable a Windows Service using the JCL? - Stack Overflow](#)



Doc and Tool: [maXbox5 - Manage Files at SourceForge.net](#)

**Max Kleiner 16/06/2025**