ActiveXperts Software Components

Advanced networking and communications capabilities

Easily integrate advanced networking and communications features into your applications. ActiveXperts software components are powerful, versatile and currently in use in numerous applications across the globe.

■ Software components overview

The core functionality and all protocol knowledge for ActiveXperts desktop applications are implemented our software components.

There are three components:

- Mobile Messaging Toolkit. SMS, Social Media and F-mail
- ActiveSocket. A rich collection of network communications protocols.
- ActiveComport. Serial port andTAPI communications

All components are ActiveX/COM components. This means they can be accessed in nearly all platforms that are available for Microsoft Windows.

Integrating ActiveXperts components in your own application is made easy by the large number of samples that are included. Every component includes working examples for all of these platforms and more:

- Visual C# .NET
- Visual Basic .NET
- ASP .NET (C# / VB)
- ASP 2.x
- Visual C++
- VBScript
- PowerShell
- VBA (Visual Basic for Applications)
- Borland Delphi
- HTML / JavaScript

In addition, each component supports the following features:

- Troubleshooting. Detailed logging is included in all protocols in all of our toolkits
- Portability. Every component has all of its functionality in a single .DLL file. This makes deploying one of our components as part of your own application a breeze
- Thread-safety. All protocols in our components are completely thread-safe and can be used in multithreaded environments
- ActiveX/COM. Almost all programming and scripting environments on Windows have built-in means of accessing ActiveX/COM components

■ Mobile Messaging Toolkit

This component has its focus on mobile messaging, that is, SMS, social media and e-mail.

The mobile messaging toolkit includes support for the following messaging options:

- SMS. Messages can be sent through GSM, HTTP, SMPP (Client and Server) and Dialup (TAP / XIO) connections.
- Pager. Use SNPP to send pager messages
- Social media. This includes support for Facebook, Twitter and Linked-In
- E-mail. Send through SMTP or receive through POP3

Each of these protocols is easily accessible. This is an example of sending an SMS message through the GSM protocol using a pre-configured TAPI device:

An example of authenticating and sending a status update through Twitter:

```
Authenticate on Twitter

Set objTwitter "CreateObject("AxMmToolkit.Twitter") 'Create the Twitter object

objTwitter.LoadConsumerKey "Consumer.key" 'Load your application key

WScript.Echo "LoadConsumerKey, result: "& objTwitter.LastError

strUrl = objTwitter.RequestAuthorization 'Request an authorization URL

WScript.Echo "RequestAuthorization, result: "& objTwitter.LastError

Set objIE = CreateObject( "InternetExplorer.Application") 'Create the Internet explorer object objIE.Navigate strUsi: objIE.Visible = 1 'Use IE to have the user log in 'Wait until the log in page is loaded

strVerify = inputbox( "Enter verifier", "verifier", "') 'Obtain the verification code objTwitter.RequestAccessToken strVerify 'Trade verifier for an access token WScript.Echo "RequestAccessToken result: "& objTwitter.LastError

objTwitter.Tweet "Tweet about our success!" 'Send out a Tweet

WScript.Echo "Tweet, result: "& objTwitter.LastError
```

Visit www.activexperts.com/mobile-messaging-component for more information.

ActiveSocket

This component implements a large number of IP-based protocols. Its main focus is monitoring and communicating with existing servers in a network.



An overview of the implemented protocols:

- DNS. Query servers running a domain name service
- FTP. Read and write files on a remote server
- HTTP. Quick and easy HTTP, includes connection pooling
- ICMP. Ping any server or workstation from your application
- IPtoCountry: Translate an IP address to a location
- MSN. Connect to Microsoft Live Messaging Service
- NTP. Query time services for the current time
- RADIUS. Centralized authentication and authorization
- RSH. Run commands and scripts on a remote Unix machine
- SCP. Secure file transfer protocol based on SSH
- SFTP. A more advanced secure file transfer protocol
- SNMP. V1 and V2 of the Simple Network
 Management Protocol. Supports SNMPTraps and
 MIB browsing
- SSH. Modern, secure alternative to RSH
- TCP. Write your ownTCP-based client/server application
- TFTP. Get or put single files for a remote TFTP host
- TraceRoute. Find the route to a specific host
- UDP. Create UDP based client/server applications
- Wake-On-LAN. Remote power-up machines on your LAN

SNMP is a widely used protocol to monitor hardware and software. Almost any device within reach of a network administrator supports SNMP to monitor or manager its properties.

ActiveSocket makes SNMP easy by offering, among its other protocols, a high-level API for getting and setting SNMP objects as well as sending and receiving SNMPTraps.

Here's an example that opens an MIB file and walks through all of its objects to print every value:

SMMP walker

Set objSnmp = CreateObject ("ActiveXperts.SnmpManager") ' Create the SNMP protocol object Set objConst = CreateObject ("ActiveXperts.ASConstants") ' Create the Constants object objSnmp.Initialize ' Initialize SNMP library ' Initialize SNMP library ' Load the MIB file ' Soript.Eoho "LoadhisFile, result: " & objSnmp.LastError objSnmp.CondMibFile, result: " & objSnmp.LastError ' Load the MIB file ' Soript.Eoho "Open, result: " & objSnmp.LastError ' Initialize SNMP connection ' Set objSnmpObject objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmp.CondMipFile, objSnmpObject ObjSnmpObject.OIDName ' Display the name ' Display the value ' Get the next SNMP object WEnd ' Close the connection objSnmp.Shutdown ' Close the connection ' Shutdown the library

HTTP is another protocol that's widely used today. From serving HTML pages to the end-user to being used as the primary carrier for SOAP and REST based web service API's. The ActiveSocket HTTP protocol implementation is particularly strong in its simplicity and high performance.

Smart connection pooling makes it a strong bet when performance is important. Whenever possible the HTTP component in ActiveSocket tries to re-use active HTTP sessions.

Here's an example that demonstrates how connection pooling is implemented:

Visit www.activexperts.com/network-component for more information.

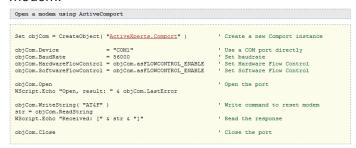
ActiveComport

Connect to any RS232 based device with just a few lines of code.

The following are commonly used features:

- TAPI support. Open aTAPI device just like a COM device
- Flow control. Use either hardware or software flow control
- Text and binary. Send and receive any kind of data

This is an example which opens a comport to reset a modem:



Visit www.activexperts.com/serial-port-component for more information.

Download your evaluation version at www.activexperts.com/download Requirements: Windows 2008 (R2) / 2003 / 8 / 7 / Vista / XP, 100MB of free disk space