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 1: ////////////////////////////////////////////////
 2: App Distribution Tutorial
 3: _____
 4: maXbox Starter 64 -Installation Routines - Max Kleiner
 5:
 6: "Love comes unseen; we only see it go."
 7:     - Henry Austin Dobson
 8:
 9:
10: If you have a large number of computers that all need new programs or apps
    installed, it can be very time-consuming to sit and click at each machine and
    manually start the installation programs.
11:
12: If you write a simple script program and distribute it to each computer, you can
    have the users start the installation on their own by running the script.
13: The following installs an application from a specified media source by download,
    unpack and copy the files to a destination path.
14:
15: First you should check the environment and test Registry or the service file path
    to be well prepared (see also script 202_systemcheck.txt):
16:
17: Const    REGPATH3= '\Software\Microsoft\Internet Explorer\TypedURLs';
18:          REGROOT3= HKEY_CURRENT_USER;
19:
20:    Writeln(DateTimeGMTToHttpStr(Now))
21:    writeln(SystemCheck)
22:    writeln('Machine or host name is: '+getHostName)
23:    writeln('User name is: '+getUserName)
24:    writeln('Domain name is: '+domainname('localhost'));
25:    writeln('IP Address of own Host: '+GetHostByName(getHostName));
26:    writeln('Registry read test of url2: '
27:                   +RegRead(REGROOT3, REGPATH3, 'url2'))
28:    writeln('Services File Path is: '+ServicesFilePath);
29:
30: then you write more system information to a log file for analysing problems during
    installation, deinstallation or app distribution:
31:
32:    if (OSCheck(true) and
33:            not getIsAdmin) then writeln('os check true -not admin');
34:
35:    writeln('Shell Version is: '+intToStr(GetShellVersion));
36:    WriteLog(ExePath+'systemchecklog.txt',memo2.text)
37:    //ExecuteShell('cmd','/k systeminfo > systeminfo_dell.txt')
38:    ExecuteShell('cmd','/c systeminfo > systeminfo_machine.txt')
39:    SearchAndOpenFile('systeminfo_machine.txt')
40:
41: >>>
42:    Host Name:              MAXBOX8
43:    OS Name:                Microsoft Windows 8.1
44:    OS Version:             6.3.9600 N/A Build 9600
45:    OS Manufacturer:        Microsoft Corporation
46:    OS Configuration:       Standalone Workstation
47:    OS Build Type:          Multiprocessor Free
48:    Registered Owner:       Max
49:
50: Next you want support for digitally signed installs and uninstalls, including dual
    signing (SHA1 & SHA256).
51:
52: Const SOURCESHA1 = '1829B720F343E4A8E89B6D05FA3009007E6E1A9A';
53:
54: So log the steps and compare the SHA1 file before installation: The location of the
    update can be a local, UNC or network path.
55:
56: Const DESTPATH = 'examples\astroids_res\';
57:        SOURCEPATH = 'http://www.softwareschule.ch/examples/astroids_res.zip';
58:        SOURCEFILE = 'astroids_res.zip';
59:
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 60:     If DirectoryExists(Exepath+DESTPATH) then begin
 61:        //ProcessMessagesOFF;
 62:        //SetAstro_Form
 63:        PlaySound(Exepath+DESTPATH+'\sounds\music.wav', 0, SND_ASYNC);
 64:     end else begin
 65:        makeDir(exepath+DESTPATH)
 66:        showmessageBig2('box download astroids_res.zip from: '+
 67:          SOURCEPATH+' to ..\examples\astroids_res\',true);
 68:      if DownloadFile(SOURCEPATH,
 69:             Exepath+'examples\astroids_res.zip')
 70:      then begin
 71:        DeCompress(Exepath+DESTPATH,
 72:          exepath+'examples\astroids_res.zip');
 73:        writeln('downloaded and unpackeded, music starts...!')
 74:        //ProcessMessagesOFF;
 75:        //SetAstro_Form;
 76:        PlaySound(DESTPATH+'\sounds\music.wav',0,SND_ASYNC or SND_LOOP);
 77:      end;
 78:    end;
 79:
 80: For better reading I did not replace all string literals with a const for example
     the DeCompress() Method gets the zip name 'astroids_res.zip' and unpacks it to the
     DESTPATH. But you see the const DESTPATH ('examples\astroids_res\')is relative to
     get more flexibilty on network drives or cloud shares.
 81:
 82: When you need Admin Rights you can try this:
 83:
 84:    ExecuteShell('cmd','/c runas "/user:Administrator" '+
 85:                        ExePath+'maXbox4.exe')
 86:    or C:> net user Administrator /active:yes
 87:
 88: In the end you will hear a sound for check the script, thats a sound check!
 89: Classically, scripts are sets of commands which are invoked manually. The exact
     method of invoking scripts varies from application to application. Installations
     are created by means of scripts, which are in the end just agile ASCII text files.
 90:
 91: Script files are usually edited from inside the Setup program.
 92:
 93: C:\maXbox\mX46210\maxbox4\examples\828_install_routine.txt
 94:
     https://sourceforge.net/projects/maxbox/files/Examples/13_General/828_install_routine.txt/
 95:
 96: After you have finishing writing the script, the next and final step is select "Go
     Compile" in maXbox. What this does is create a complete, ready-to-run Setup program
     based on your script. By default, this is created in a directory named Exepath
     under the directory or UNC path containing the script or what destination you need.
 97:
 98: function GetInstallScript(const S_API, pData: string): string;
 99: var ts: TStrings;
100: begin
101:    with TIdHTTP.create(self) do begin
102:      try
103:        ts:= TStringList.Create
104:        ts.Add('install='+HTTPEncode(pData));
105:        result:= Post(S_API,ts);
106:      finally
107:        ts.Free;
108:        Free;
109:      end;
110:    end
111: end;
112:
113: We are going to create a class called TStringStream that inherits some methods from
     TStream which is why it is passed into the definition of HttpPostURL(). This
     snippet can be used to run allmost all HTTP Post API commands independent of
     language or the command line tool and use it from a script. But sentiment analysis,
     deploy or installation routines are not a once and done effort.
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114:
115: Ref:
116:
117:     http://www.softwareschule.ch/box.htm
118:     http://www.jrsoftware.org/ishelp/
119:     http://www.softwareschule.ch/examples/sentiment2.txt
120:
121: Doc:
122:     https://maxbox4.wordpress.com
123: >>> https://basta.net/speaker/max-kleiner/
124: >>> https://entwickler-konferenz.de/speaker/max-kleiner/
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