

Getting and setting the user and system environment variables

This tip informs how to read environment variables for either the user or the system. It also shows how to permanently update system and user environment variables.

```
function GetEnvVariable(Name: string; User: Boolean = True): string;
var
  Str: array[0..255] of char;
begin
  with TRegistry.Create do
    try
      if User then
        begin
          RootKey := HKEY_CURRENT_USER;
          //OpenKey('Environment', False);
          OpenKeyReadOnly('Environment', False);
        end
      else
        begin
          RootKey := HKEY_LOCAL_MACHINE;
          //OpenKey('SYSTEM\CurrentControlSet\Control\Session ' +
          // 'Manager\Environment', False);
          OpenKeyReadOnly('SYSTEM\CurrentControlSet\Control\Session ' +
            'Manager\Environment', False);
        end;
      Result := ReadString(Name);
      ExpandEnvironmentStrings(PChar(Result), Str, 255);
      Result := Str;
    finally
      Free;
    end;
  end;
end;

procedure SetEnvVariable(Name, Value: string; User: Boolean = True);
var
  rv: DWORD;
begin
  with TRegistry.Create do
    try
      if User then
        begin
          RootKey := HKEY_CURRENT_USER;
          OpenKey('Environment', False);
          WriteString(Name, Value);
        end
      else
        begin
          RootKey := HKEY_LOCAL_MACHINE;
          OpenKey('SYSTEM\CurrentControlSet\Control\Session ' +
            'Manager\Environment', False);
        end;
      WriteString(Name, Value);
      SendMessageTimeout(HWND_BROADCAST, WM_SETTINGCHANGE, 0, LParam
        (PChar('Environment')), SMTO_ABORTIFHUNG, 5000, rv);
    finally
      Free;
    end;
  end;
end;
```

On Windows NT, 2000, XP or Vista attempting to write system environment variables will require the user to have administrative privileges.

Note the change to use *OpenKeyReadOnly* rather than *OpenKey* in *GetEnvVariable*. This was done to avoid needing registry write permissions.

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