

Auto-resizing and centring forms on screen

Calling this procedure from the form's *OnActivate* event will resize the form in proportion to the screen resolution – I do my programming on resolution 1280×768 hence the constants – once the form height and width has been calculated it can then be centred.

Note – form should be set to `autoresize` and `AutoScroll := False` at least while being re-calculated. Also the font size for the form should be (probably) 12 for the font to be resized downwards for 800×600 – all controls should be set to `ParentFont := True` so they will resize.

While this works exactly for the old screen resolutions which were all more or less in proportion there is nothing which will resize screens properly for the newer stretched screens, eg. for 1280×960 and 1280×1024. The min ratio calculated is `scrx / screenx = 1` so the form stays with original measurements.

```
uses
  math, windows;

const
  screenx = 1280;
  screeny = 768;

procedure tform1.autosizeall ;
var
  scrx, scry, k: integer ;
  ratio: double;
begin
  scrx:= GetSystemMetrics(SM_CXSCREEN); {finds screen resolution x value}
  scry:= (GetSystemMetrics(SM_CYSCREEN)); {finds screen resolution y value}

  ratio:=min(scrx/screenx, scry/screeny);
  {takes the smaller ratio and makes sure you dont make the window
  too big for the screen}

  scaleby(trunc(ratio*100), 100);
  {scales all controls and attempts to place them in the correct position}

  {to centre the form on the screen}
  form1.Left:=centreleft(form1.width);
  form1.Top:=centretop(form1.Height) ;

end;
```

This code refers to two functions: *centreleft* and *centretop*. These are defined as follows:

```
function centreleft(fw: integer): integer;
  {calculates the form.left}
var
  smcx: integer;
begin
  smcx:=GetSystemMetrics(SM_CXSCREEN);
  centreleft:=(smcx-fw) div 2;
end;

function centretop(fh: integer): integer;
  {calculates the form.top}
var
  smcy: integer;
begin
  smcy:=GetSystemMetrics(SM_CYSCREEN);
  centtop:=(smcy-fh) div 2;
end;
```

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