INTRODUCTION

WELCOME TO AVLOCK SIMPLE

If you are a Delphi programmer and you need to market your software securely, and you want your potential customers to evaluate your products before buying them, then AVLock SIMPLE is the solution you are looking for.

In addition, with this small component you will be able to manage the entire licensing cycle of your application through the Internet, namely:

- The user starts the trial period.
- The user makes a payment requesting a temporary or permanent license.
- Through the DevPanel, you configure the requested license, which will be applied automatically once the user restarts the application.
- Temporary or permanent licenses can be generated.
- The user's license can be modified at any time.
- Optionally you can manage up to 12 modules in the application.
- Through the DevPanel you can modify the user's license at any time.

Also:

- Allows offline licensing operations to be carried out through registration keys.
- Allows granting licenses to be shared among a limited number of users and managing the process over the Internet using the DevPanel.
- Allows you to manage the number of concurrent instances of your application.
- Allows you to configure your application to be installed on a removable disk such as a pendrive, memory stick, etc.
- Through the registration mechanism of AVLock SIMPLE, the application is linked to certain codes obtained from the computer such as BIOS, CPU, Hard Disk, etc. Called The InstallCodeSources. Then, based on these sources, the InstallCode is calculated. Finally, the InstallCode is used to calculate the registry key. In this way, when you register the Key, the application will be linked to only one computer and will not work on other computers.

Assume the following scenario:

After a long time of hard work, you finally finished your best app. Now you want to market it and you need your potential customers to be able to evaluate it before deciding to buy. But also, it is necessary to achieve a safe way. For this we have several alternatives in mind:

1) When the user installs your app, it should work in a restricted way (only a basic set of features enabled), also the user can request a free trial period to evaluate your app with all features enabled (for example, for 30 days) or purchase the product to permanently activate all functions.

2) When the user installs your app, his trial period should start automatically for some days (for example 30 days) and when the trial period ends, the user can request a trial period extension (for example 15 days) After this, the app stops working properly. Likewise, at any time the user must have the option to purchase and activate their application.

3) Eventually, you want to add some additional modules (special utilities) that users can purchase through additional payments. But they should also have the option to evaluate a trial period before the actual purchase.

4) You want each license to be for one machine only and therefore the user can only run the app on the registered machine and not be able to manipulate some data in some way to activate your app on another machine e.g. copying all files and registry data.

5) You want your application to be able to be installed on a removable disk (pendrive, memory stick, etc.) to run on any computer.

With AVLock SIMPLE you will be able to manage all these functionalities.

How much does it cost?

AVlock SIMPLE comes in two different presentations:

1. Standard Edition: With a free period of 30 days in order to be able to evaluate it and then a cost of USD $44.95 per year of subscription. It includes the DevPanel developer panel that allows access to your users' data, example applications, utility programs and php scripts except cp6.php and ed6.php which are only delivered with the developer edition.

2. **Pro Edition**: It has an one-time cost of USD $199.95 and a lifetime subscription. It contains everything from the standard version plus the cp6.php and ed6.php files with functionality equivalent to the DevPanel.

2. Developer Edition: It has an one-time cost of USD $299.95 and a lifetime subscription. Contains everything from the Pro version plus the source code of the component.

These prices could be modified without prior notice.This is the AVLock website

PREPARATION

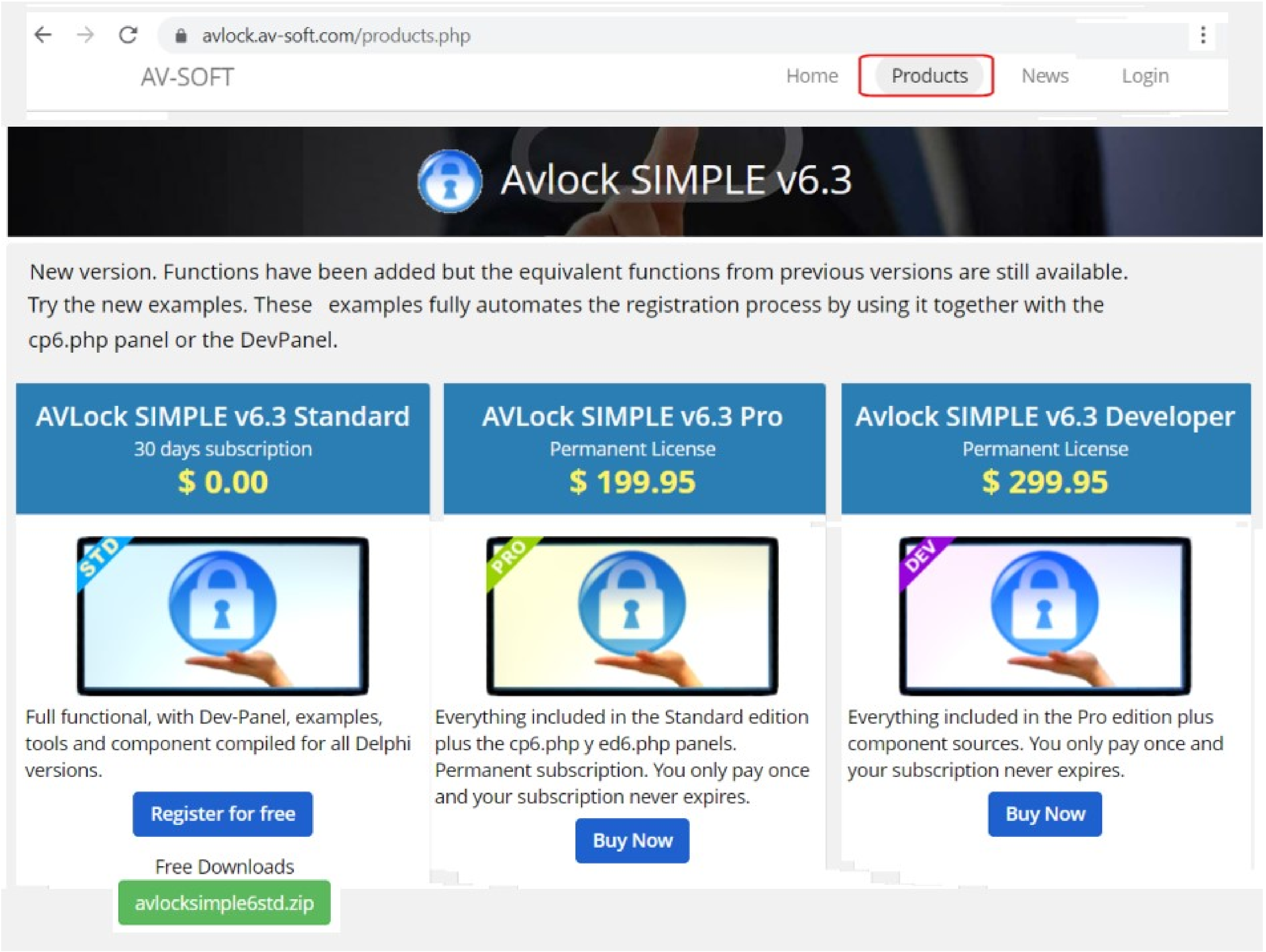
These are the necessary steps to prepare the work environment and start working with AVLock SIMPLE.

This topic covers the following items:

- Free registration
- Install the component
- Before Installing the OLM

FREE REGISTRATION

The first thing you should do is enter the AV-SOFT site https://avlock.av-soft.com and enter "Products" how you can see in the screenshot below, and click on the "Register for free" button ”:



New version. Functions have been added but the equivalent functions from previous versions are still available. Try the new examples. These examples fully automates the registration process by using it together with the cp6.php panel or the DevPanel.

AVLock SIMPLE v6.3 Standard
30 days subscription
$ 0.00

Full functional, with Dev-Panel, examples, tools and component compiled for all Delphi versions.

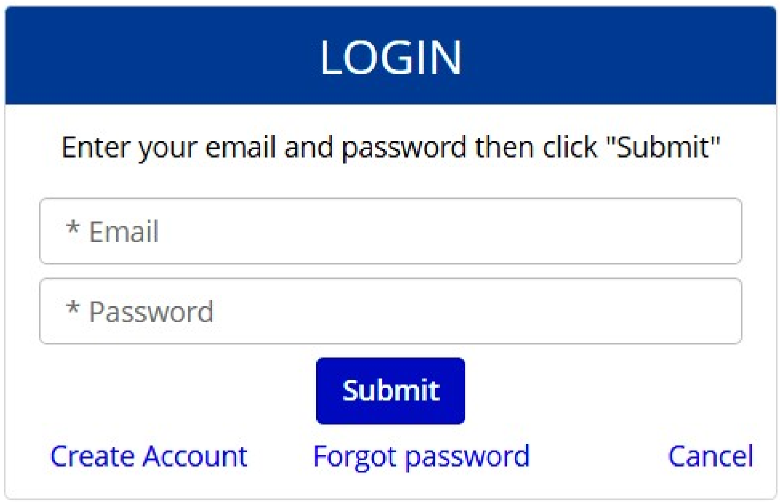
AVLock SIMPLE v6.3 Pro
Permanent License
$ 199.95

Everything included in the Standard edition plus the cp6.php y ed6.php panels. Permanent subscription. You only pay once and your subscription never expires.

Avlock SIMPLE v6.3 Developer
Permanent License
$ 299.95

Everything included in the Pro edition plus component sources. You only pay once and your subscription never expires.

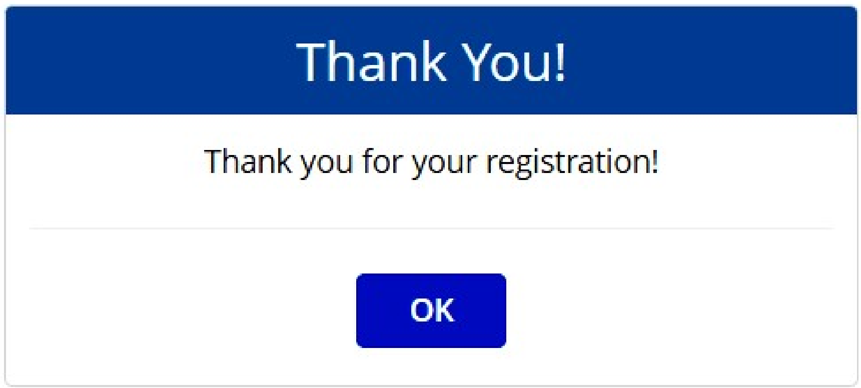
By clicking on "Register for free" the Login screen is displayed that you can see below:


LOGIN

Enter your email and password then click "Submit"

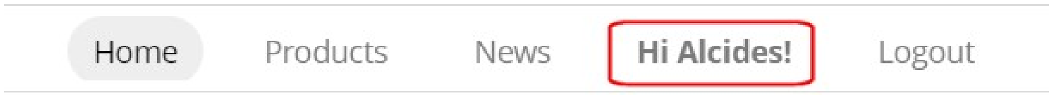
If you already have an account

If you are already a registered user, enter your email and password and click [Submit] and you will automatically be registered to the standard version of AVLock SIMPLE and you will see the following message:

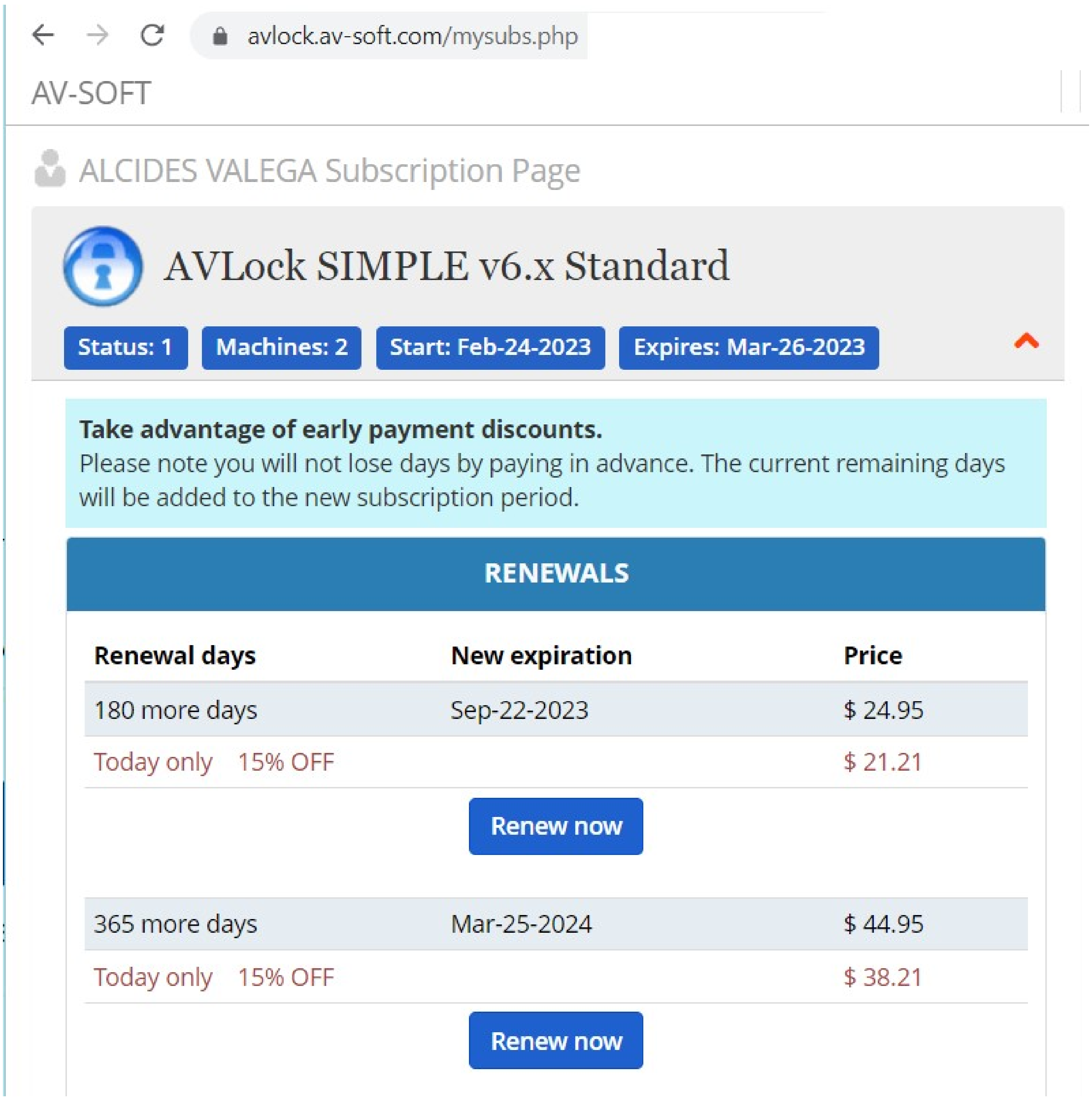

Thank You!

Thank you for your registration!

After clicking [OK], click on the menu option with your name:



And your subscription page will be presented with all your account details and links for downloads, renewals and upgrades:



ALCIDES VALEGA Subscription Page

AVLock SIMPLE v6.x Standard

Status: 1 Machines: 2 Start: Feb-24-2023 Expires: Mar-26-2023

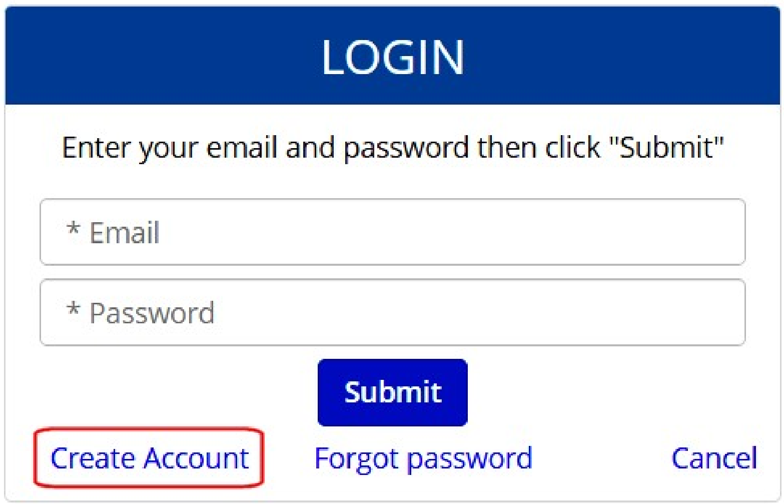
Take advantage of early payment discounts.
Please note you will not lose days by paying in advance. The current remaining days will be added to the new subscription period.

RENEWALS

Renewal days	New expiration	Price
180 more days	Sep-22-2023	$ 24.95
Today only 15% OFF		$ 21.21
365 more days	Mar-25-2024	$ 44.95
Today only 15% OFF		$ 38.21

If you don't have an account yet

If you are not yet registered, you must click on "Create Account" in order to create your account:

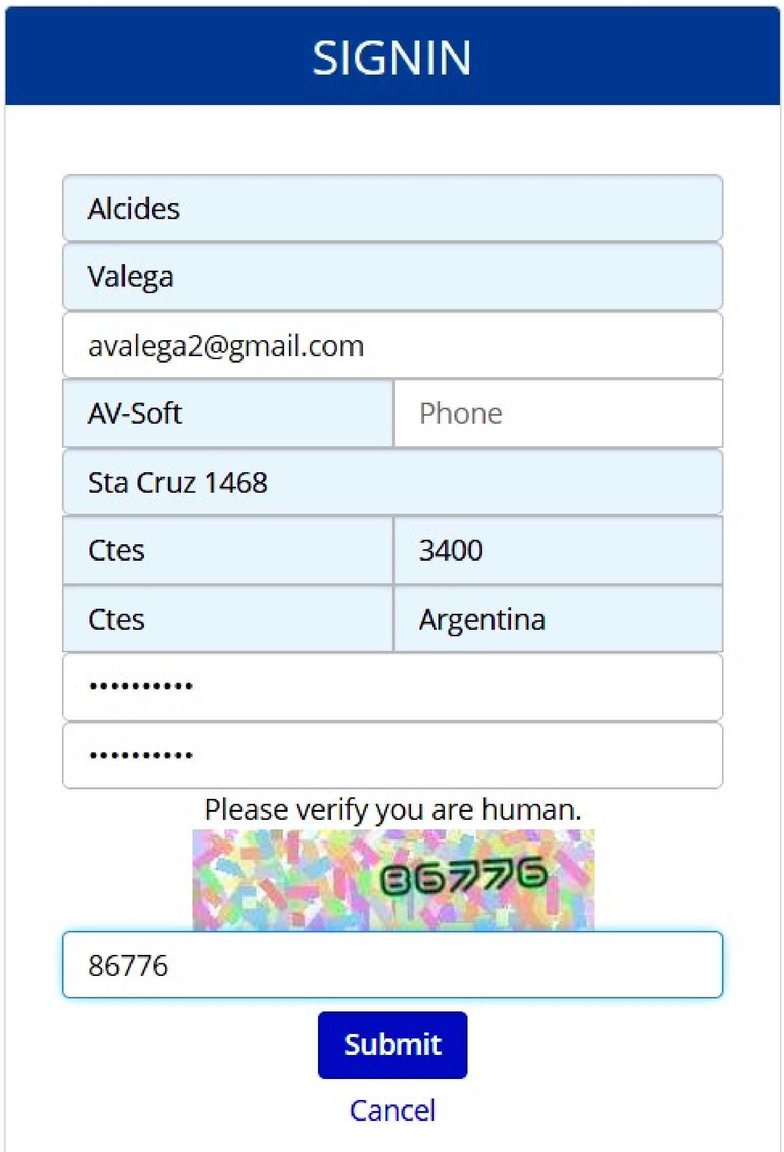


LOGIN

Enter your email and password then click "Submit"

Then you will see the following screen where you must enter your data. Those with an asterisk (*) are required.

You will also need to enter the number shown in the image below in order for the site to verify that you are a human and not a robot.



SIGNIN

Alcides

Valega

avalega2@gmail.com

AV-Soft | Phone

Sta Cruz 1468

Ctes | 3400

Ctes | Argentina

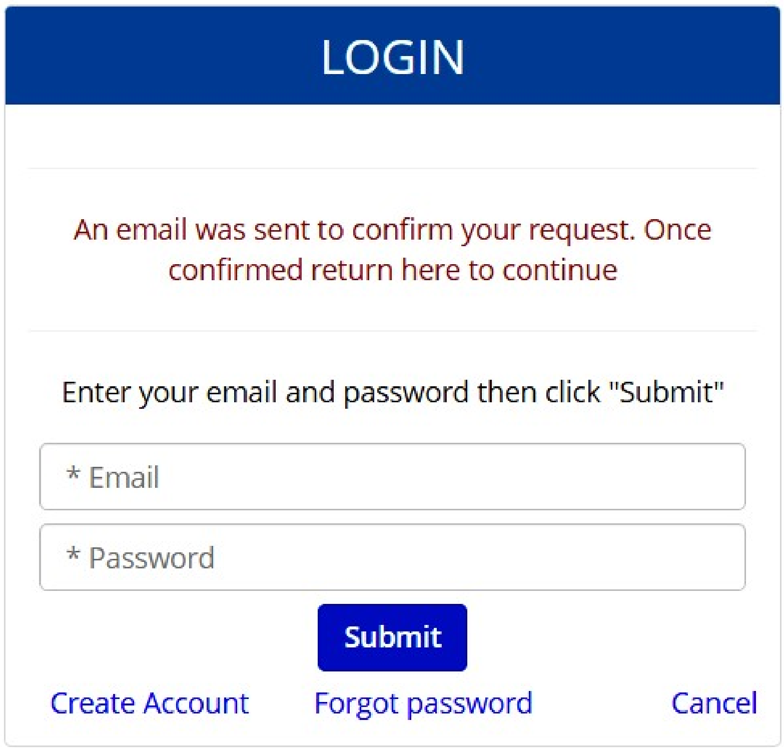
••••••••••

••••••••••

Please verify you are human.

86776

After clicking [Submit] you will be sent an email to continue the registration process, and the LOGIN form will be presented again as you can see below:

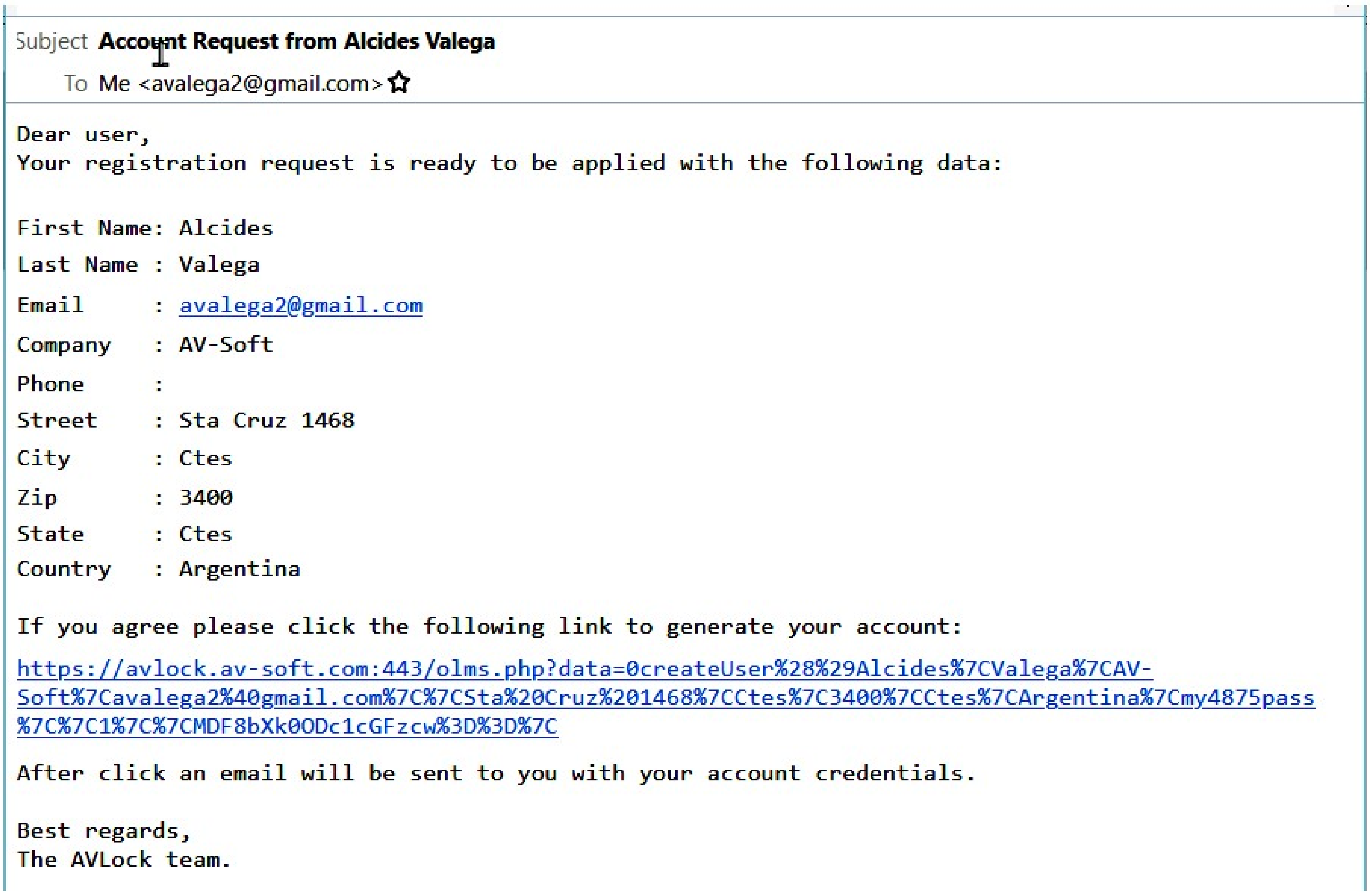


LOGIN

An email was sent to confirm your request. Once confirmed return here to continue

Enter your email and password then click "Submit"

Before proceeding with this form, you must go to your mailbox to confirm your request.
You will receive an email like the following:


Subject **Account Request from Alcides Valega**
To Me <avalega2@gmail.com>

```
Dear user,
Your registration request is ready to be applied with the following data:

First Name: Alcides
Last Name : Valega
Email     : avalega2@gmail.com
Company   : AV-Soft
Phone     :
Street    : Sta Cruz 1468
City      : Ctes
Zip       : 3400
State     : Ctes
Country   : Argentina

If you agree please click the following link to generate your account:
https://avlock.av-soft.com:443/olms.php?data=0createUser%28%29Alcides%7CValega%7CAV-
Soft%7Cavalega2%40gmail.com%7C%7CSta%20Cruz%201468%7CCtes%7C3400%7CCtes%7CArgentina%7Cmy4875pass
%7C%7C1%7C%7CMDF8bXk0ODc1cGFzcw%3D%3D%7C

After click an email will be sent to you with your account credentials.

Best regards,
The AVLock team.
```

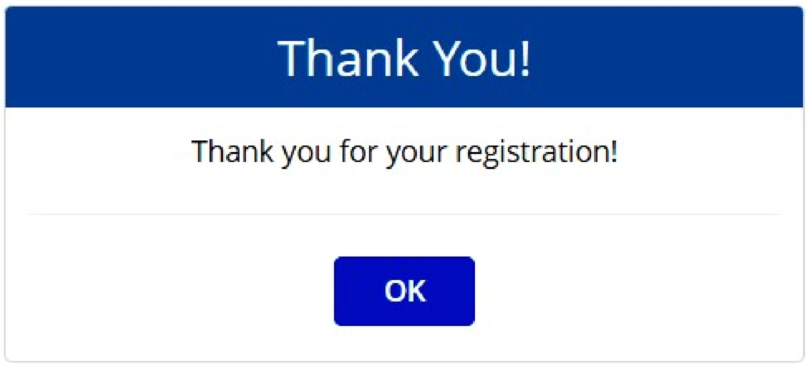
After clicking the link, you will see the following message in the browser:
"Registration successfully applied.. An email has been sent to you with more details."

NOTE: If you are already registered with the email you entered, you will receive this other message:
"Registration can not be applied. . (Error: Email Already Exists). An email has been sent to you with more details."

If the registration was successful you will receive a new email like the following:

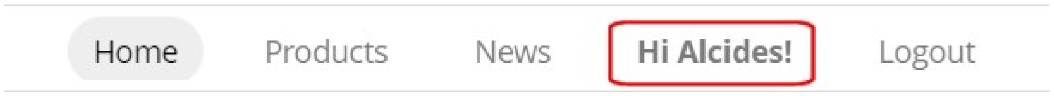
Dear user,
Your registration request has been successfully accomplished.
These are your license credentials:
----------------------------
Email : xxxxxxx@xxxxx.com
Password : xxxxxx
----------------------------
Best regards,
The AVLock Team.

To continue with the process you must return to the LOGIN form, enter your email and password and click [Submit] . You will see the following on the screen:

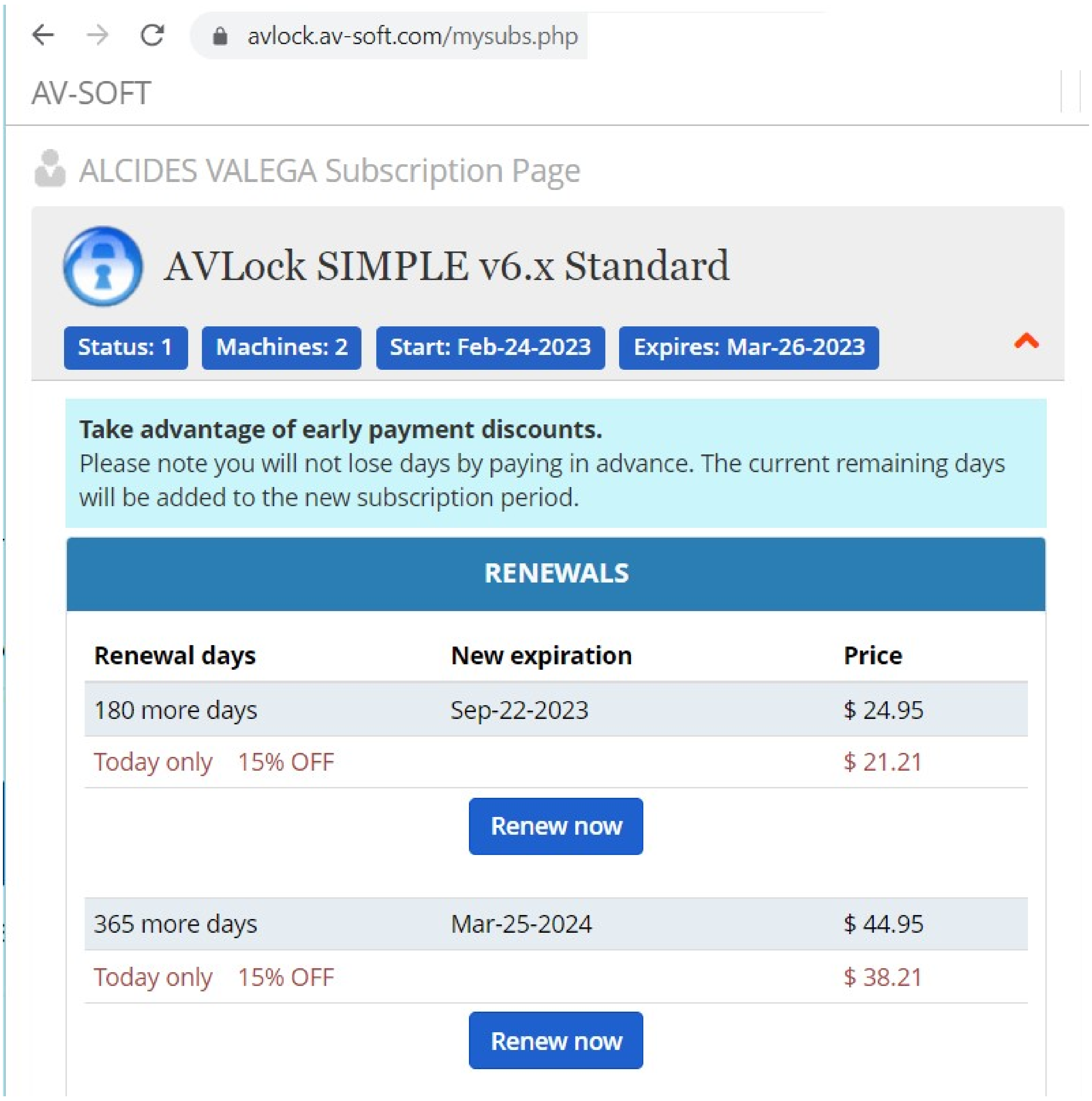

Thank You!

Thank you for your registration!

After clicking [OK], click on the menu option with your name.



And your subscription page will be presented with all your account details and links for downloads, renewals and upgrades:



ALCIDES VALEGA Subscription Page

AVLock SIMPLE v6.x Standard

Status: 1 Machines: 2 Start: Feb-24-2023 Expires: Mar-26-2023

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Please note you will not lose days by paying in advance. The current remaining days will be added to the new subscription period.

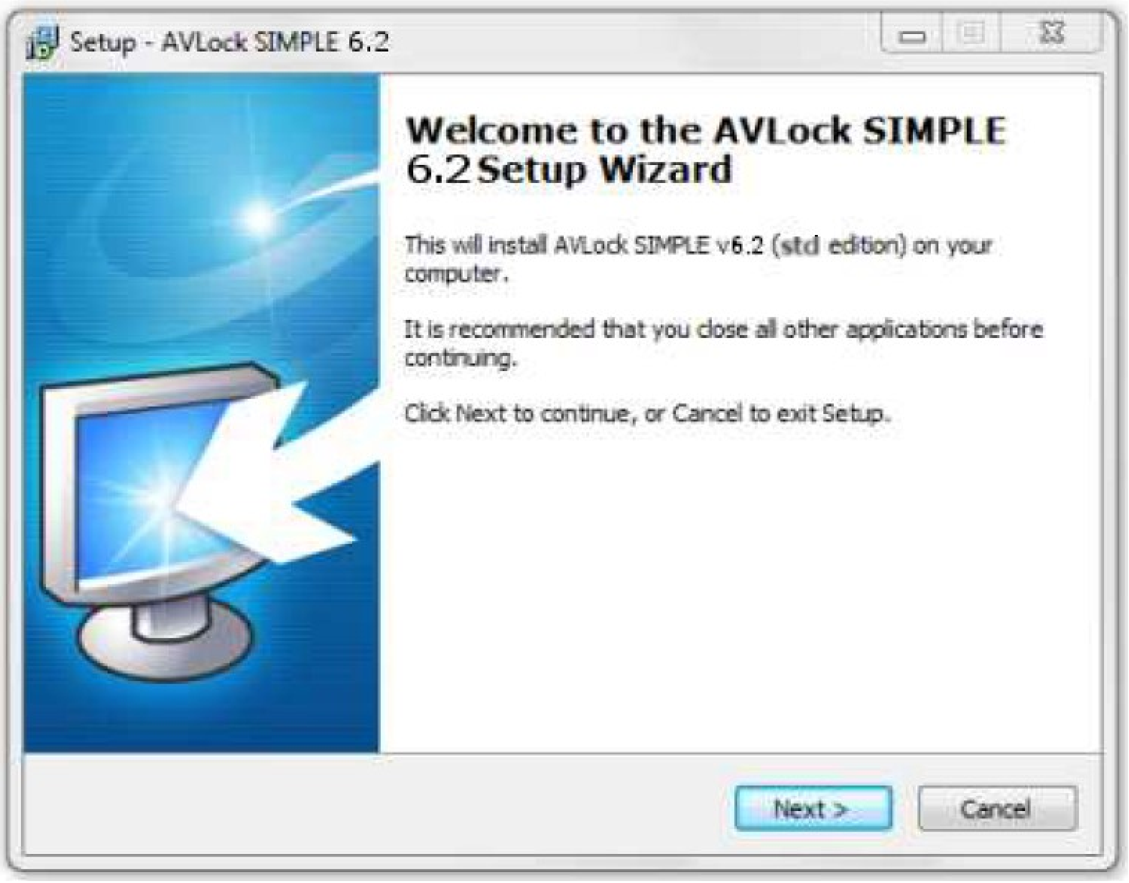
RENEWALS

Renewal days	New expiration	Price
180 more days	Sep-22-2023	$ 24.95
Today only 15% OFF		$ 21.21
365 more days	Mar-25-2024	$ 44.95
Today only 15% OFF		$ 38.21

COMPONENT INSTALLATION

After registering for free you can download the corresponding package
From the Standard version.
The AVLock SIMPLE package comes as an executable (exe) file packaged inside from a zip file. The names for each of the versions are as follows:
For the standard edition: avlocksimple6std.exe packaged inside avlocksimple6std.zip
For developer edition: avlocksimple6dev.exe packaged inside avlocksimple6dev.zip

To install them follow these steps:
1) Unpack the zip file of the version you want to install.
2) Run the exe file, (eg avlocksimple6std.exe for the standard version) and the installation process will begin. Below you can see the first screen:


Setup - AVLock SIMPLE 6.2

Welcome to the AVLock SIMPLE 6.2 Setup Wizard

This will install AVLock SIMPLE v6.2 (std edition) on your computer.

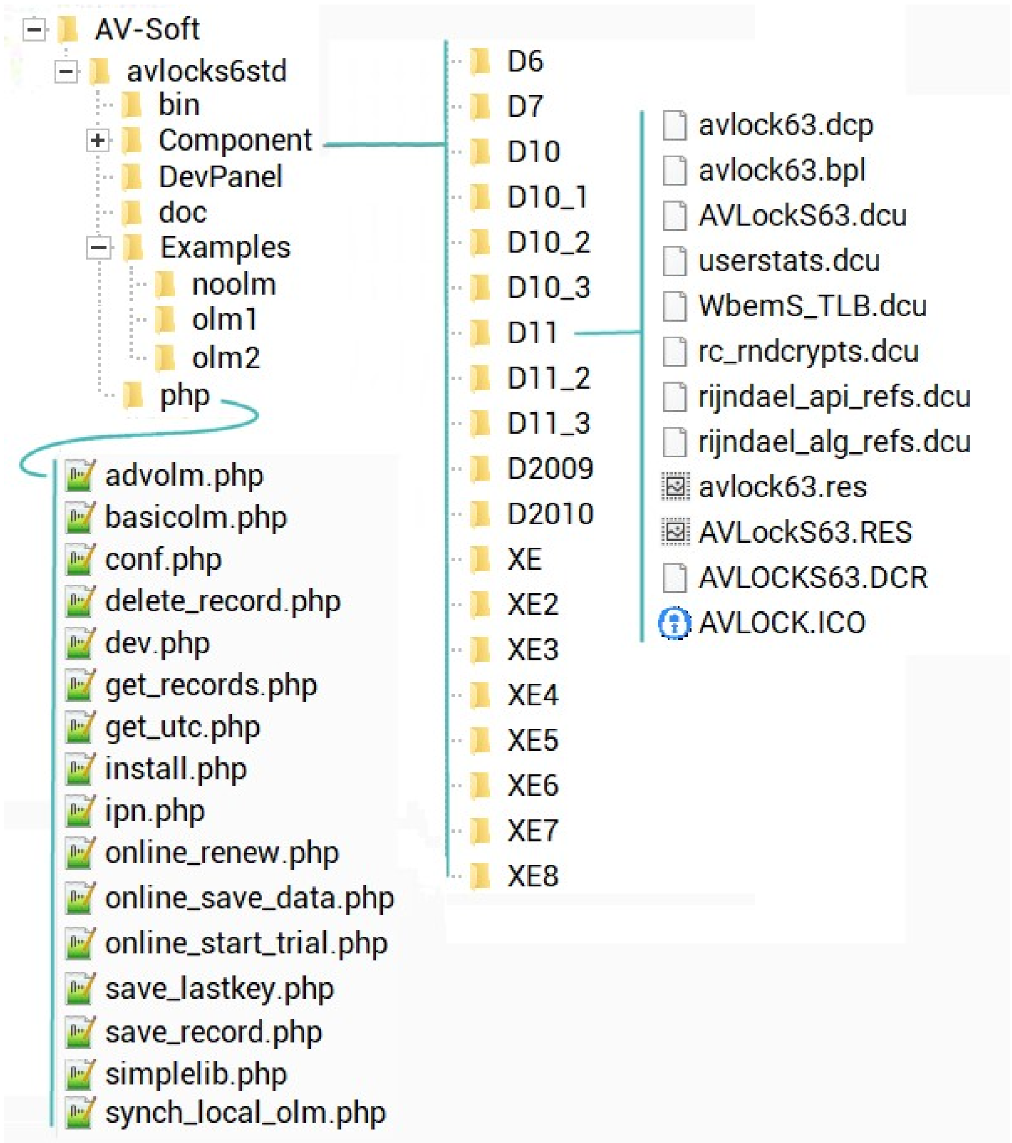
It is recommended that you close all other applications before continuing.

Click Next to continue, or Cancel to exit Setup.

Click on [Next >] to go to the next screen where you must select the
where you want to install the AVLock SIMPLE files. By default it will be installed in C:\av-soft\avlocks6std for the standard version.

Follow the process until the installation is complete:

Leaving the default options of the installer you will get the following scheme of folders inside the root directory C:\



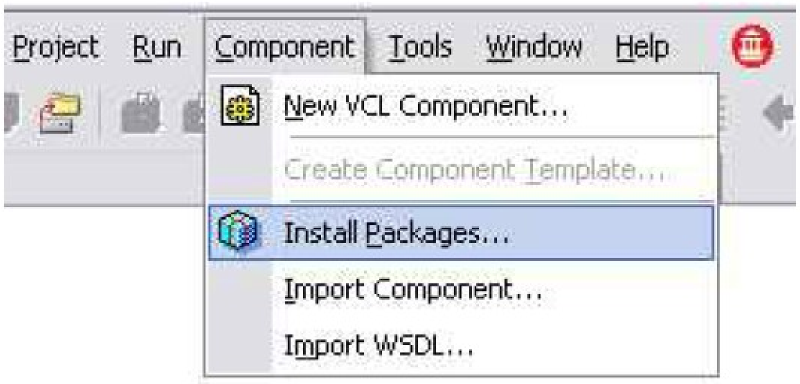
```
AV-Soft
  avlocks6std
    bin
    Component
    DevPanel
    doc
    Examples
      noolm
      olm1
      olm2
    php

Component:
  D6
  D7
  D10
  D10_1
  D10_2
  D10_3
  D11
  D11_2
  D11_3
  D2009
  D2010
  XE
  XE2
  XE3
  XE4
  XE5
  XE6
  XE7
  XE8

D11:
  avlock63.dcp
  avlock63.bpl
  AVLockS63.dcu
  userstats.dcu
  WbemS_TLB.dcu
  rc_rndcrypts.dcu
  rijndael_api_refs.dcu
  rijndael_alg_refs.dcu
  avlock63.res
  AVLockS63.RES
  AVLOCKS63.DCR
  AVLOCK.ICO

php:
  advolm.php
  basicolm.php
  conf.php
  delete_record.php
  dev.php
  get_records.php
  get_utc.php
  install.php
  ipn.php
  online_renew.php
  online_save_data.php
  online_start_trial.php
  save_lastkey.php
  save_record.php
  simplelib.php
  synch_local_olm.php
```

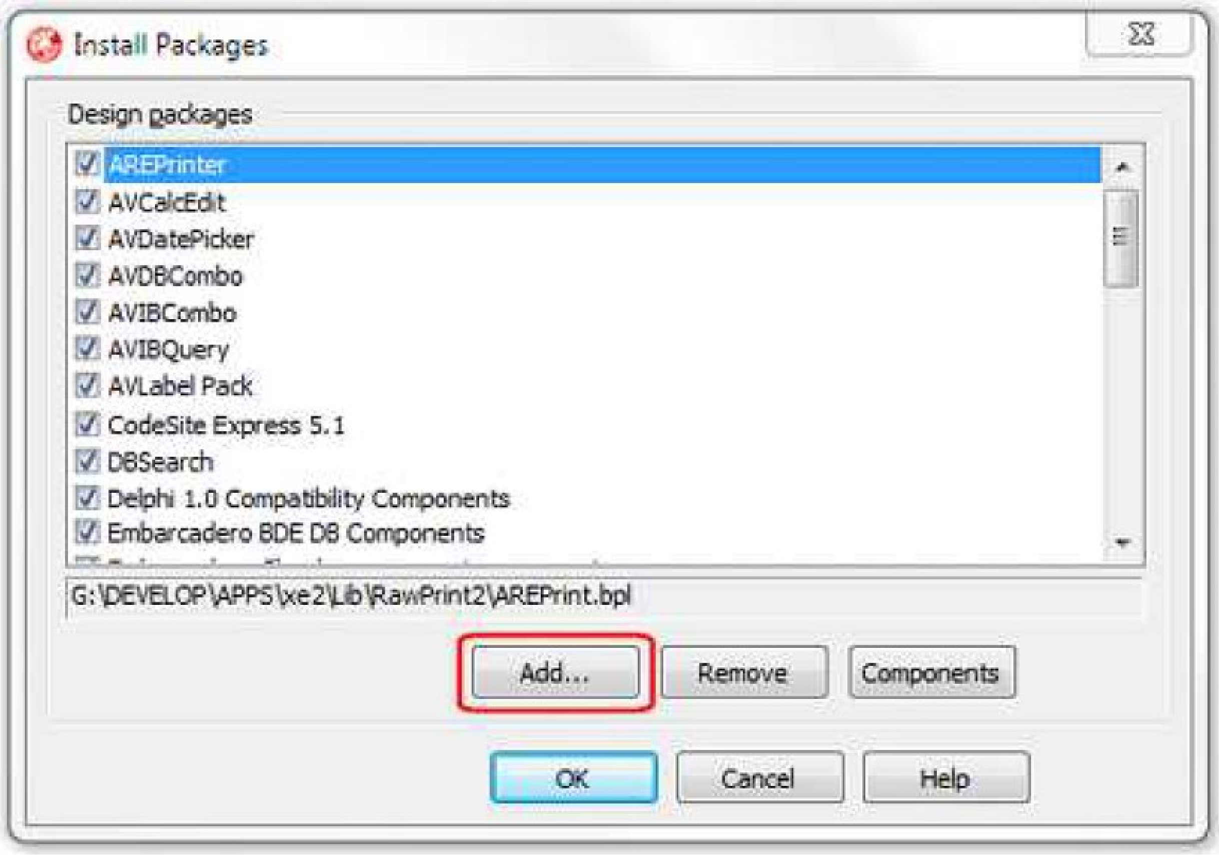
As you can see in the image above compiled versions of the component are included for each of the Delphi versions.

The php folder contains the OLM (Online License Manager) files. It is very convenient for you to install it, although you can choose not to use it, see the example “noolm” that allows you to control applications in places where there is no internet access.

3) Install the component corresponding to your version of Delphi

For each of the versions, the avlock63.bpl file is included, which can be installed very easily. The following describes how to do it with the package for the XE2 version of Delphi.
From your Delphi IDE select "Component > Install Packages...".

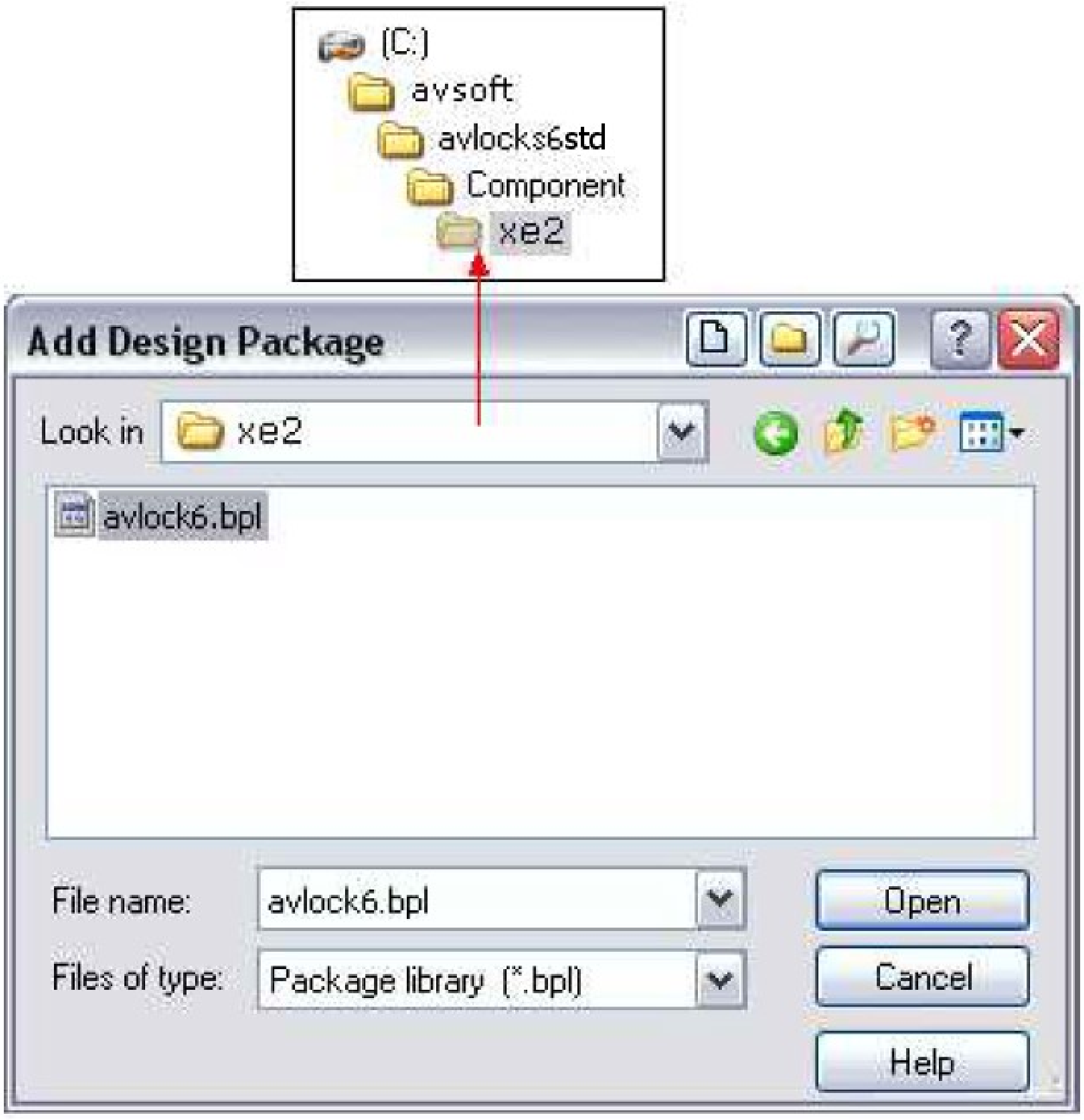




☑ AREPrinter
☑ AVCalcEdit
☑ AVDatePicker
☑ AVDBCombo
☑ AVIBCombo
☑ AVIBQuery
☑ AVLabel Pack
☑ CodeSite Express 5.1
☑ DBSearch
☑ Delphi 1.0 Compatibility Components
☑ Embarcadero BDE DB Components

G:\DEVELOP\APPS\xe2\Lib\RawPrint2\AREPrint.bpl

Click the [Add...] button and select the avlock63.bpl package from the "C:\avsoft\avlocks6std\component\xe2" folder.



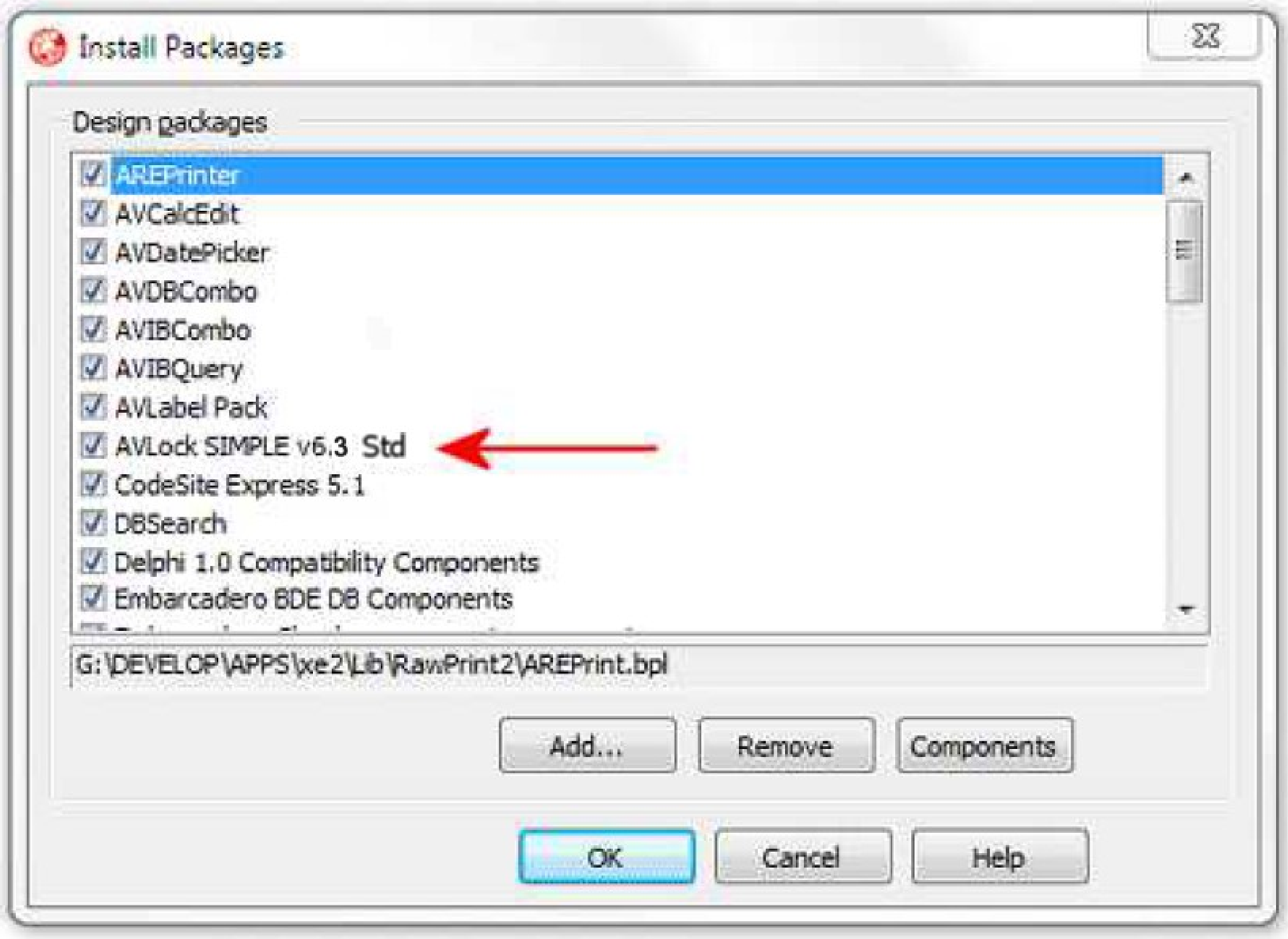
Look in: xe2

avlock6.bpl

File name: avlock6.bpl

Files of type: Package library (*.bpl)

Finally click the [Open] button and you will see "AVLock SIMPLE v6.3 Std" in the list of installed packages:

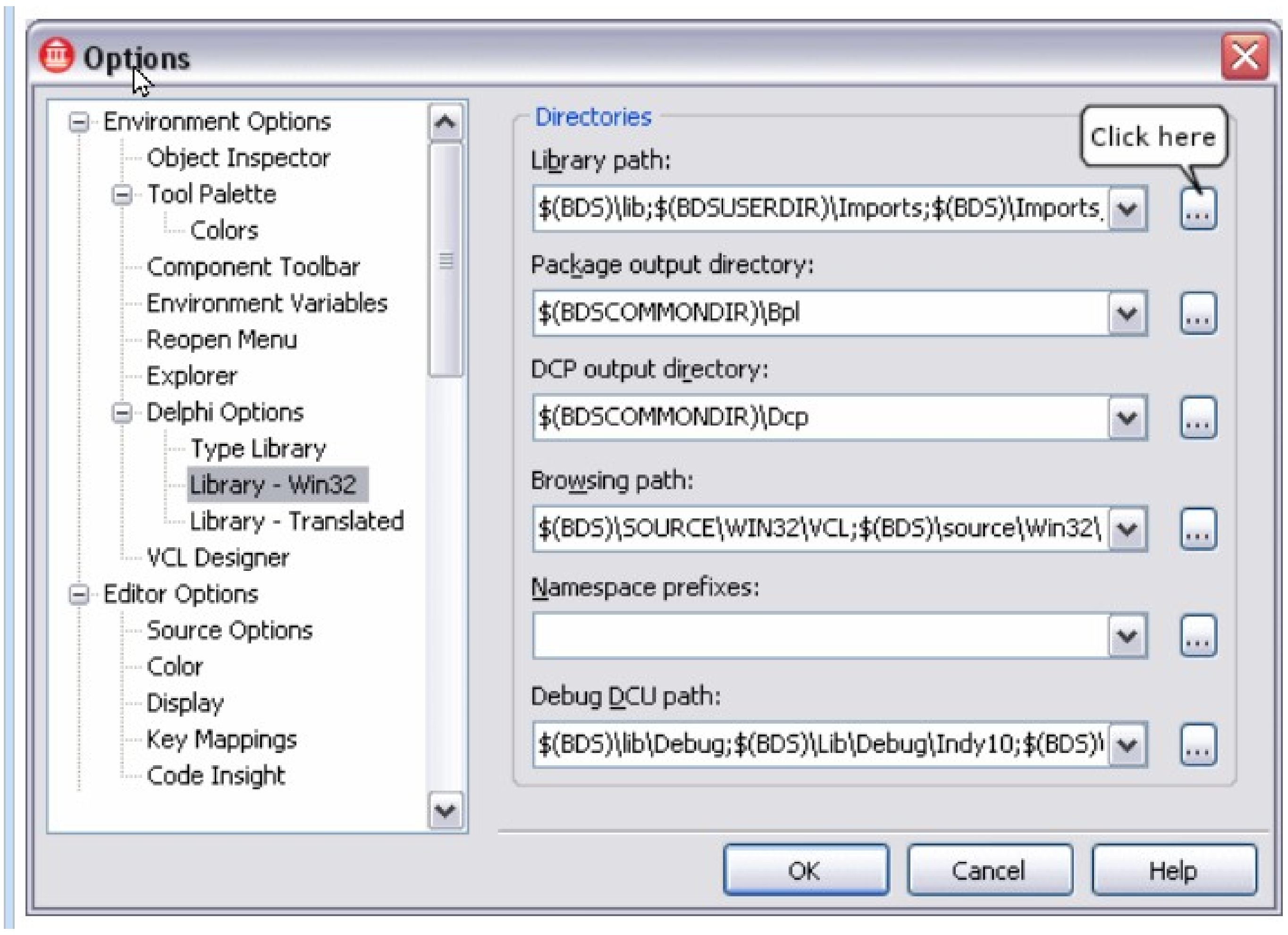


Design packages

- ☑ AREPrinter
- ☑ AVCalcEdit
- ☑ AVDatePicker
- ☑ AVDBCombo
- ☑ AVIBCombo
- ☑ AVIBQuery
- ☑ AVLabel Pack
- ☑ AVLock SIMPLE v6.3 Std
- ☑ CodeSite Express 5.1
- ☑ DBSearch
- ☑ Delphi 1.0 Compatibility Components
- ☑ Embarcadero BDE DB Components

G:\DEVELOP\APPS\xe2\Lib\RawPrint2\AREPrint.bpl

Check your Library Path in (Tools > Options > Environment Options > Delphi Options > Library - Win32 > Library path).



Directories

Library path: $(BDS)\lib;$(BDSUSERDIR)\Imports;$(BDS)\Imports

Package output directory: $(BDSCOMMONDIR)\Bpl

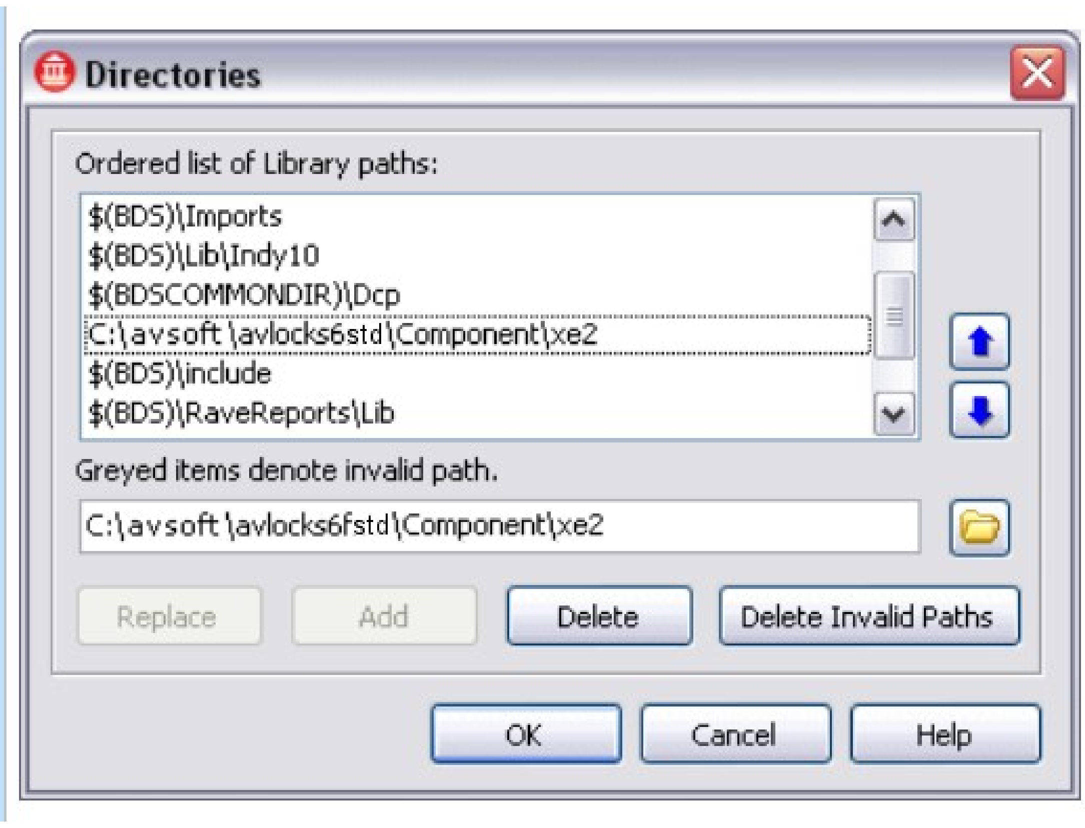
DCP output directory: $(BDSCOMMONDIR)\Dcp

Browsing path: $(BDS)\SOURCE\WIN32\VCL;$(BDS)\source\Win32\

Namespace prefixes:

Debug DCU path: $(BDS)\lib\Debug;$(BDS)\Lib\Debug\Indy10;$(BDS)\

Click where the figure above indicates and you will see the following screen:



Ordered list of Library paths:

```
$(BDS)\Imports
$(BDS)\Lib\Indy10
$(BDSCOMMONDIR)\Dcp
C:\avsoft\avlocks6std\Component\xe2
$(BDS)\include
$(BDS)\RaveReports\Lib
```

Greyed items denote invalid path.

```
C:\avsoft\avlocks6fstd\Component\xe2
```

There should have an entry (only one) pointing to the folder where the component files are (eg: C:\avsoft\avlocks6std\Component\xe2). If you don't have this entry you must create it manually and if you have more than one entry for AVLock SIMPLE delete the ones that do not apply.

I have tried to make this help as clear and complete as possible, however it is possible that aspects have not been considered. If you notice something is missing or have found errors or have any ideas that could be useful to improve this help, please let me know.

Alcides Valega
Autor de AVLock SIMPLE

BEFORE INSTALLING THE OLM

Items covered in this topic
- A Hosting Account
- Create a MySql Database
- Copy the OLM Files to your Server

In the folder and file scheme that we have already seen, there is the php_std folder that contains the php scripts that make up the OLM of the standard version. For the developer version it is php_dev

To Install the OLM you will need:

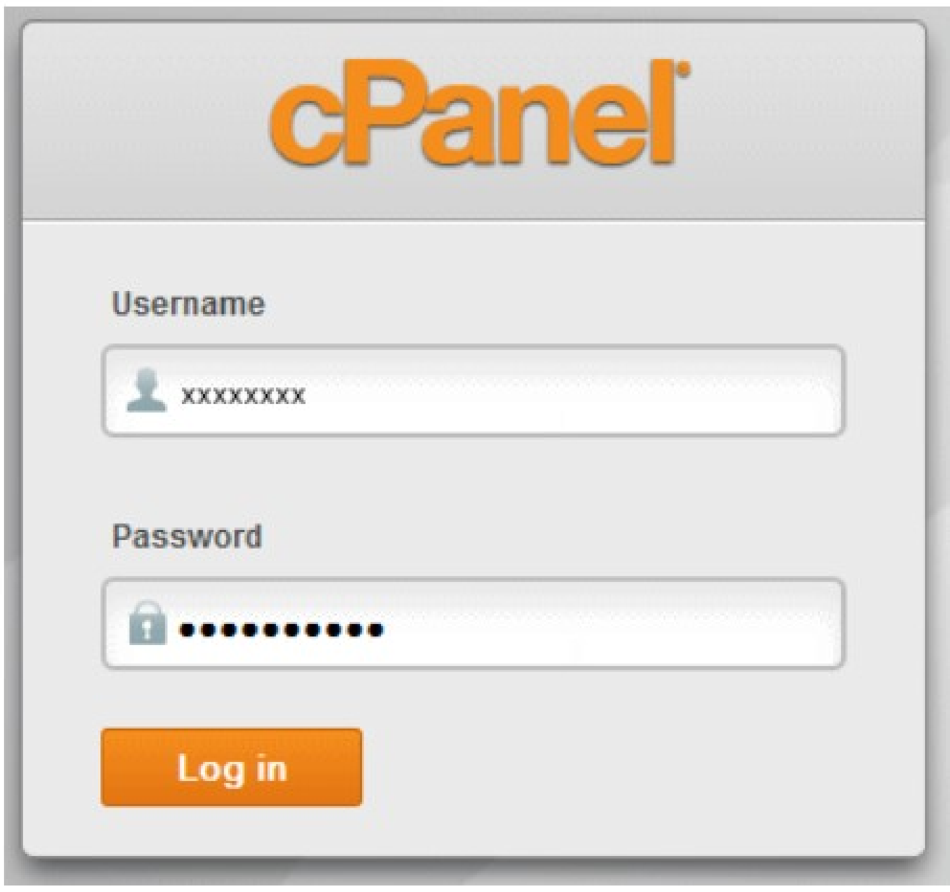
1. A hosting account, preferably Linux with CPanel, with PHP v5.3 or higher with MySqli and MCript extensions.

2 If you have the Advanced OLM you must create a MySql database on your server (hosting account), or use an existing database.

3 Copy the corresponding files (PHP scripts) to your web server.

1. A hosting account

Preferably it should be a Linux-based hosting with CPanel. The CPanel is accessed from a web browser with the following url: http://<your-domain>:2082 here <your-domain> must be replaced by the domain assigned to your hosting account. You will be presented with a screen where you will need to enter your account name and password:



cPanel

Username

xxxxxxxx

Password

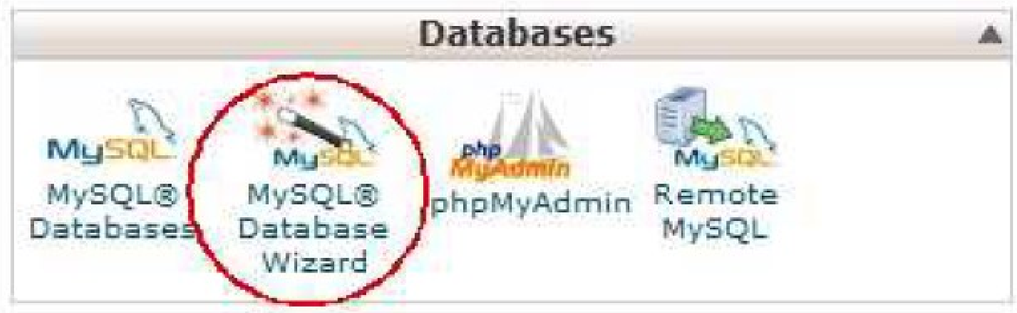
•••••••••••

Log in

It may also be useful to have an FTP client. I use WinSCP https://winscp.net/eng/download.php

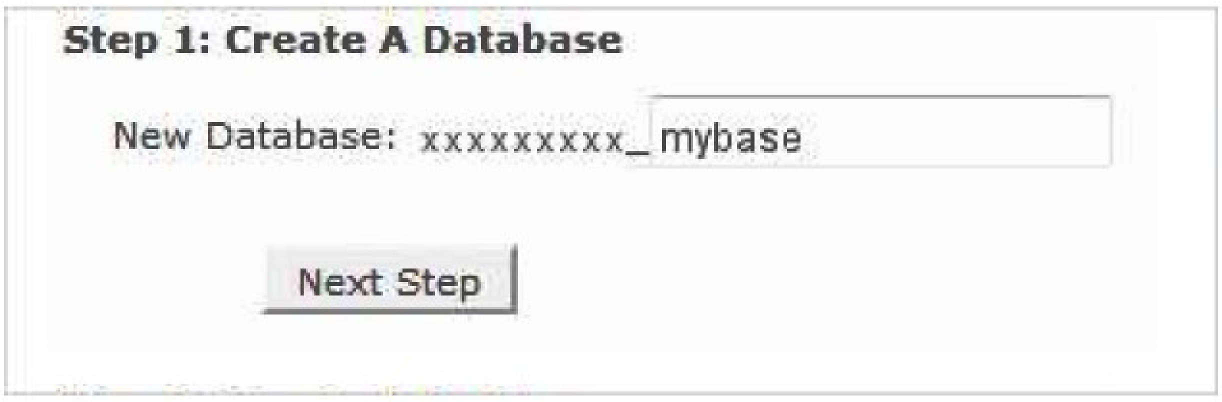
2. Create a MySql Database

If you already have one created, you can skip this point. You only have to remember the name of the database, the username and the password (password).
In the CPanel go to the Databases section and select the "MySQL Database Wizard" option.



You will enter the wizard to create a new database that consists of several steps:

In step 1 you will need to enter a name for the database, in the example we put "mybase".
Where we put xxxxxxxxx the username of the hosting account is displayed.

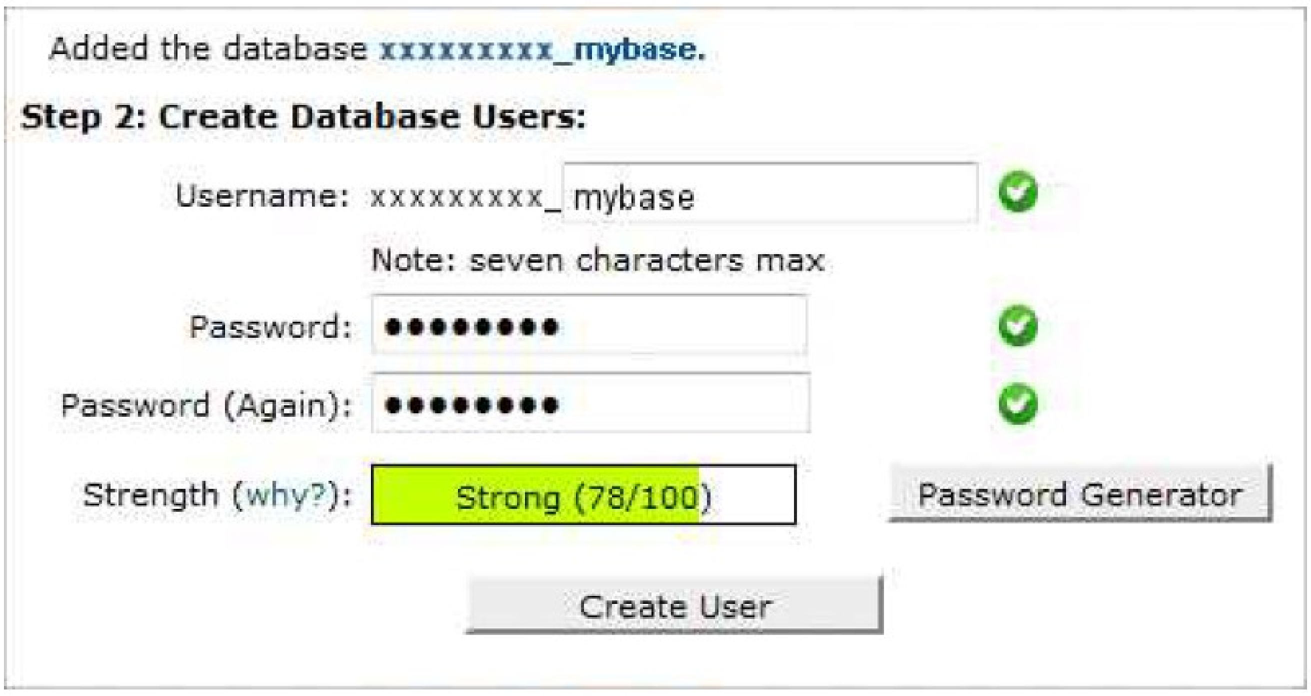


Step 1: Create A Database

New Database: xxxxxxxxx_ mybase

Next Step

After clicking on "Next Step" Step 2 is presented where you must create the name and password of the user associated with the database, in the example we put mybase. It is convenient to put the same name as the database.



Added the database xxxxxxxxx_mybase.

Step 2: Create Database Users:

Username: xxxxxxxxx_ mybase ✓

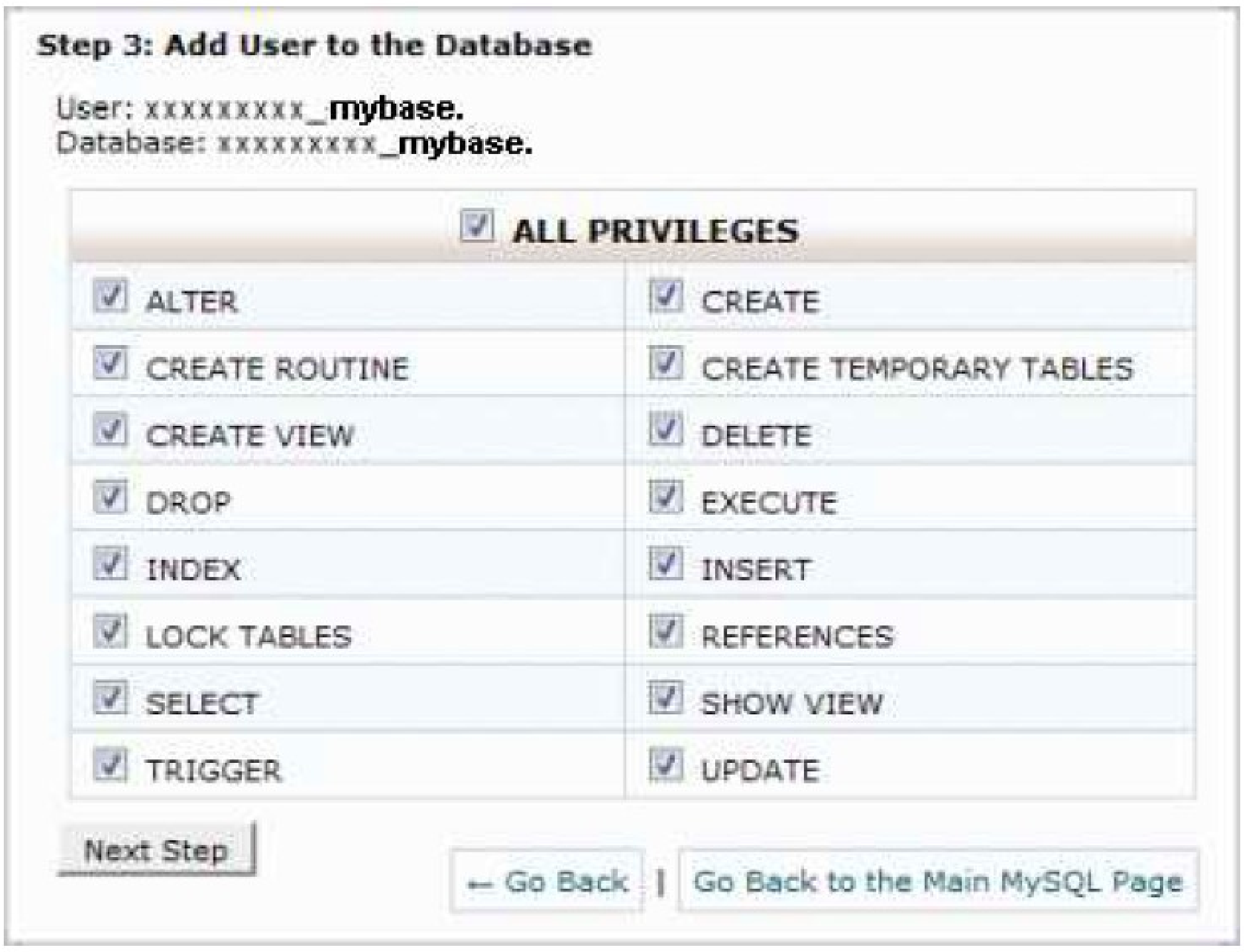
Note: seven characters max

Password: •••••••• ✓

Password (Again): •••••••• ✓

Strength (why?): Strong (78/100)

By clicking on "Create user", the user is created and we go to the next screen (Step 3) where we assign the privileges of the user that we have created. Select "ALL PRIVILEGES" as seen in the image below.

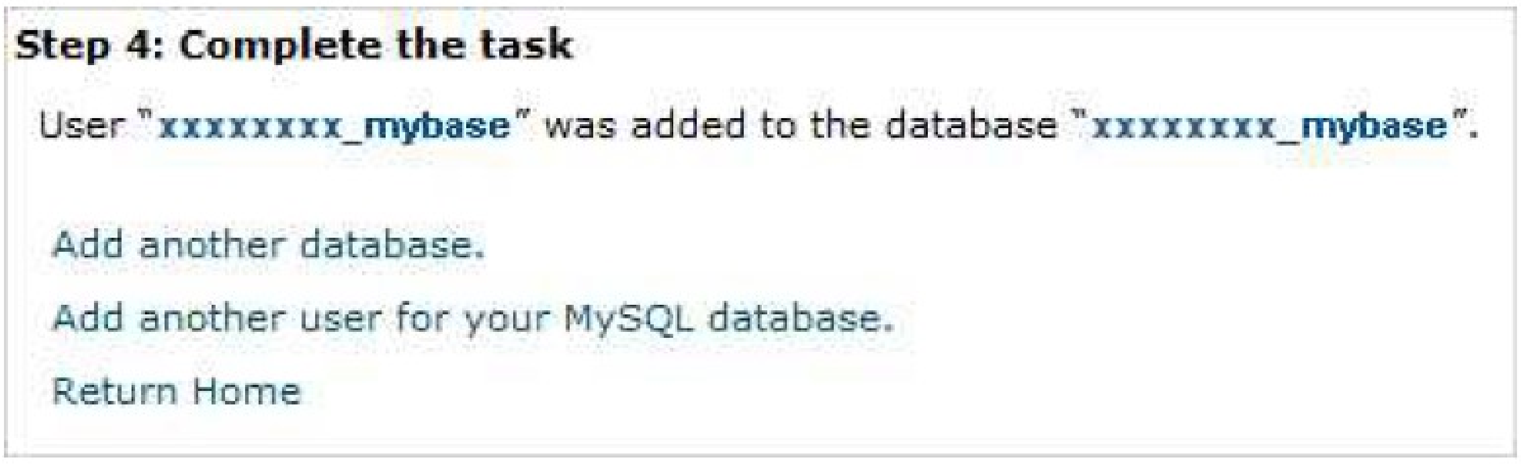


Step 3: Add User to the Database

User: xxxxxxxxx_mybase.
Database: xxxxxxxxx_mybase.

☑ ALL PRIVILEGES	
☑ ALTER	☑ CREATE
☑ CREATE ROUTINE	☑ CREATE TEMPORARY TABLES
☑ CREATE VIEW	☑ DELETE
☑ DROP	☑ EXECUTE
☑ INDEX	☑ INSERT
☑ LOCK TABLES	☑ REFERENCES
☑ SELECT	☑ SHOW VIEW
☑ TRIGGER	☑ UPDATE

After clicking on "Next Step" we go to the last screen (Step 4). We are shown the name of the database created and the username associated with it.



Step 4: Complete the task

User "xxxxxxxx_mybase" was added to the database "xxxxxxxx_mybase".

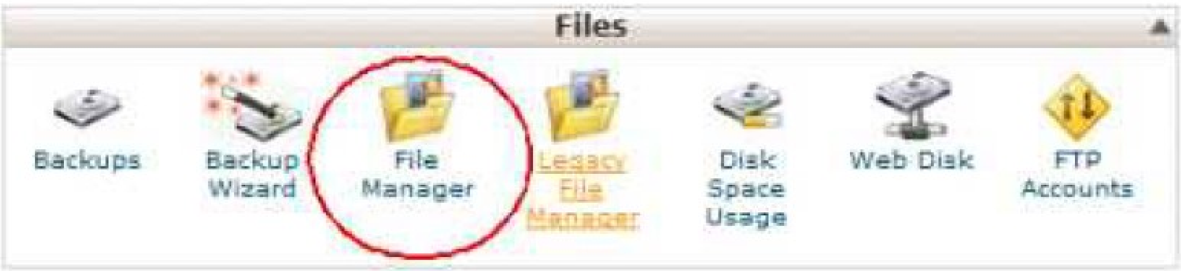
Add another database.

Add another user for your MySQL database.

Return Home

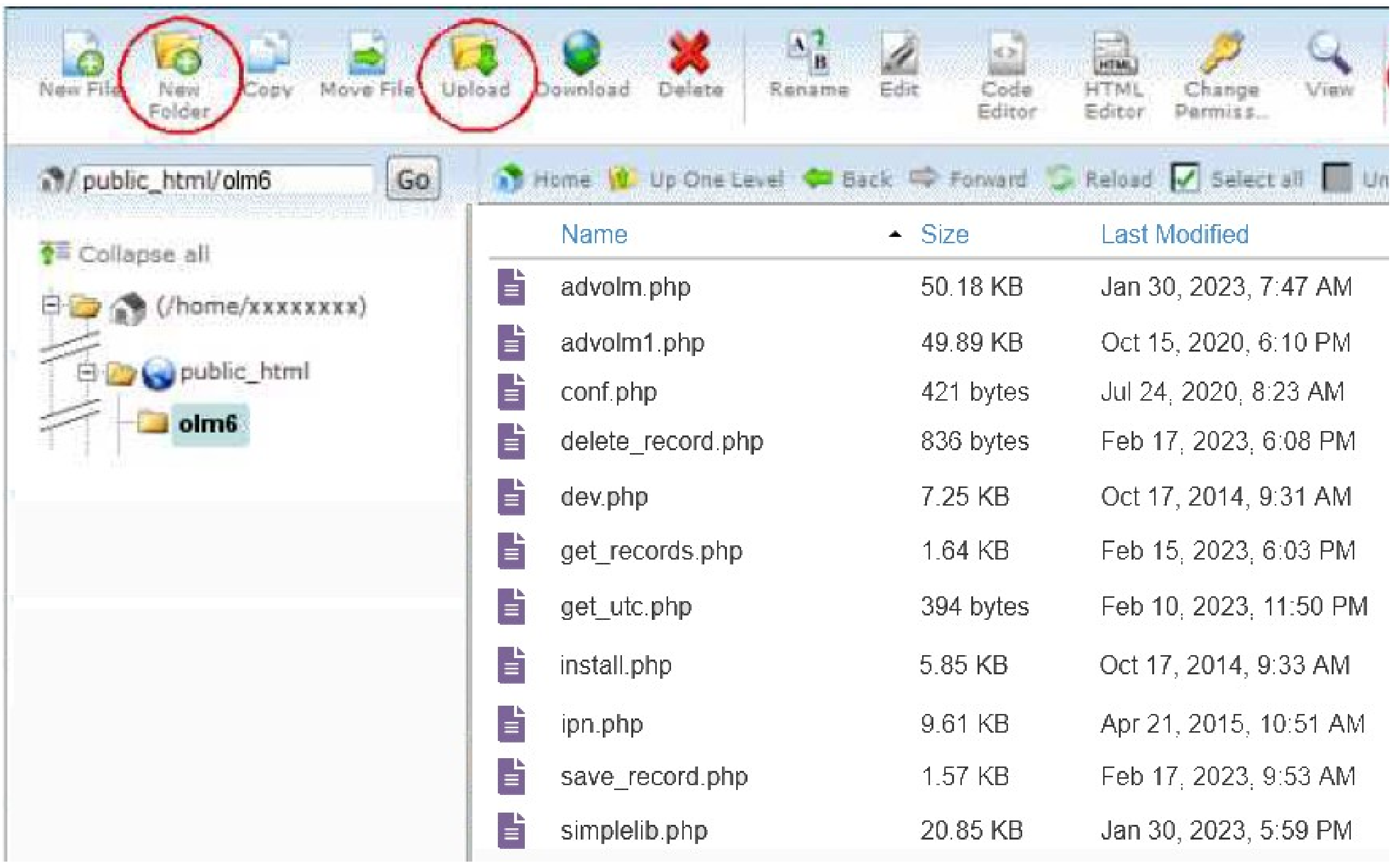
3. Copy the OLM files to your server

The files you need to copy are the PHP scripts that come in the php_std folder for the standard version. Enter the CPanel of your hosting and go to the "Files" section and there select "File Manager".



The file manager window will open. Below in the image the options that we are going to use were highlighted. Here not all the folders are shown, only those that interest us for the task that we are going to carry out. When you open the manager you will not see the "olm6" folder, you will have to create it and then copy the olm php files.

It should finally look like the screenshot below shows.



Name	Size	Last Modified
advolm.php	50.18 KB	Jan 30, 2023, 7:47 AM
advolm1.php	49.89 KB	Oct 15, 2020, 6:10 PM
conf.php	421 bytes	Jul 24, 2020, 8:23 AM
delete_record.php	836 bytes	Feb 17, 2023, 6:08 PM
dev.php	7.25 KB	Oct 17, 2014, 9:31 AM
get_records.php	1.64 KB	Feb 15, 2023, 6:03 PM
get_utc.php	394 bytes	Feb 10, 2023, 11:50 PM
install.php	5.85 KB	Oct 17, 2014, 9:33 AM
ipn.php	9.61 KB	Apr 21, 2015, 10:51 AM
save_record.php	1.57 KB	Feb 17, 2023, 9:53 AM
simplelib.php	20.85 KB	Jan 30, 2023, 5:59 PM

OLM Installation

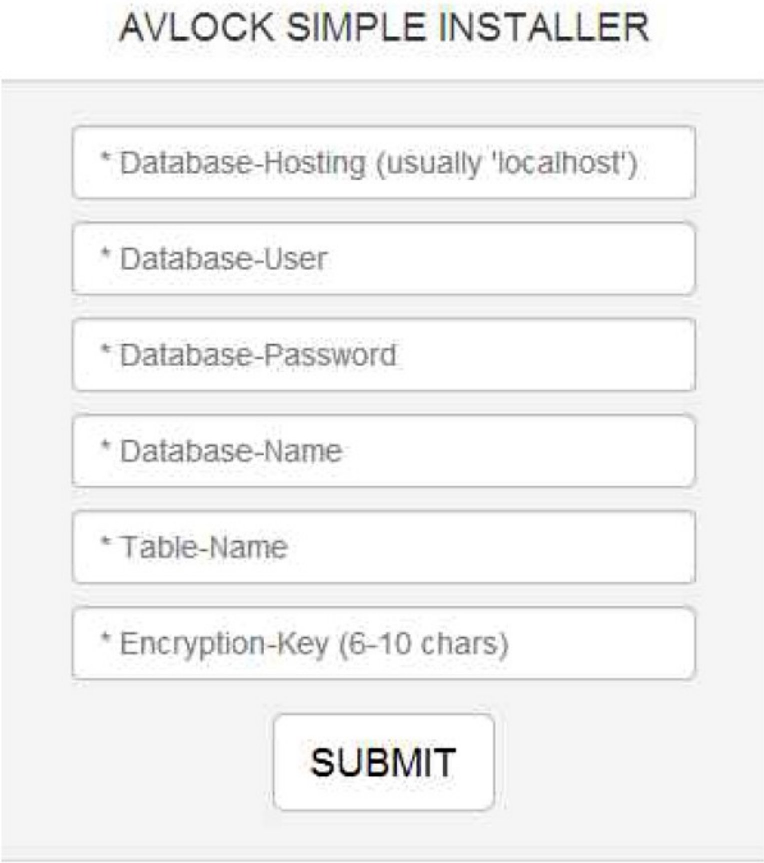
In the previous topic "Before Installing the OLM" it was explained how to create a database on your hosting and how to copy the OLM files to your server. If you followed the steps correctly you should have the following file and folder scheme on your server:

- The new version 6.x comes with the scripts advolm.php, simplelib.php, install.php, dev.php and conf.php.

To start the installation you must run the installer install.php.

For example, if your website is mywebsite.com and you uploaded the scripts to /public_html/olm6, from your browser access the following url: http://mywebsite.com/olm6/install.php

You will see the following form on the screen where you must enter the configuration data:



AVLOCK SIMPLE INSTALLER

* Database-Hosting (usually 'localhost')

* Database-User

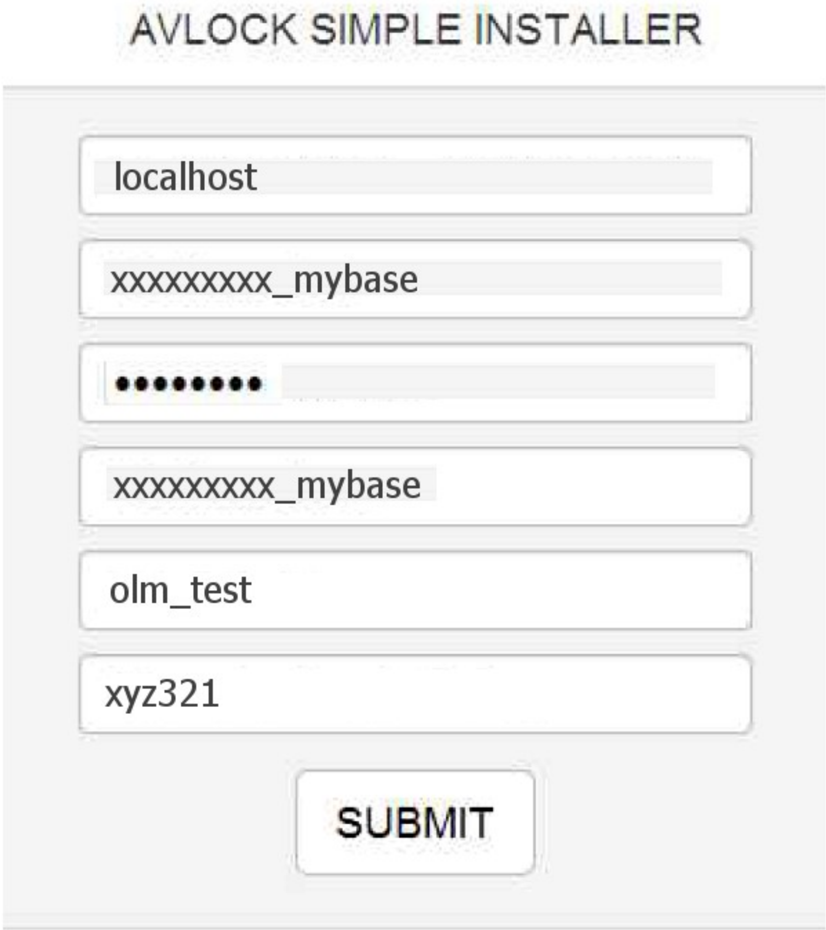
* Database-Password

* Database-Name

* Table-Name

* Encryption-Key (6-10 chars)

Below you can see the same screen with the data entered.
We are using the same values used when creating the database.



AVLOCK SIMPLE INSTALLER

localhost

xxxxxxxxx_mybase

•••••••••

xxxxxxxxx_mybase

olm_test

xyz321

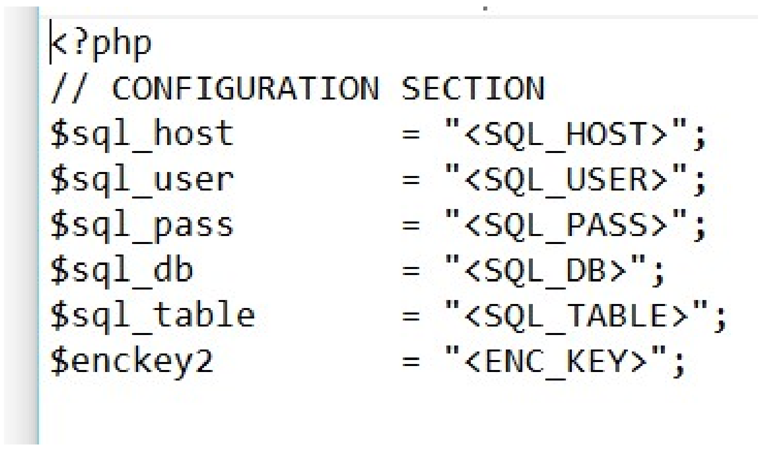
In Database-Hosting localhost is usually used. When creating the MySql database with cPanel, it is a good practice to map the username to match the database name. After clicking SUBMIT you will see the following message:

Congratulations! Installation completed successfully. As a security measure you must remove the install.php file.

Where you are informed that the installation has completed successfully and to delete the install.php file as a security measure.

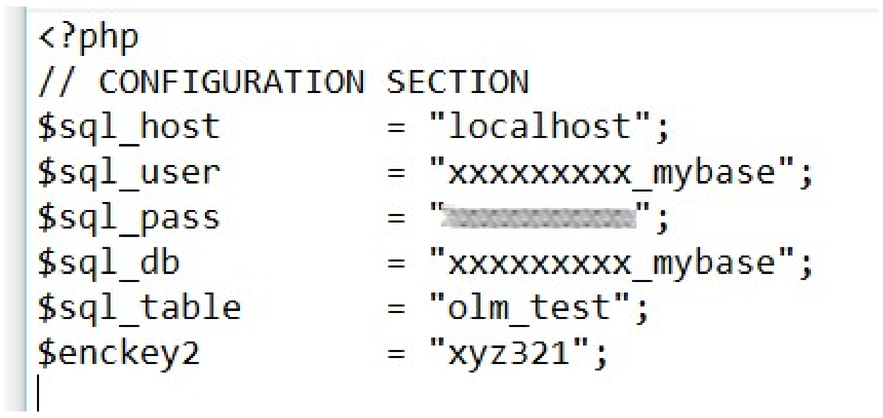
You can also do the installation manually by creating the table with PHPMyAdmin and modifying the conf.php file as shown below:

Original conf.php filel



```
<?php
// CONFIGURATION SECTION
$sql_host        = "<SQL_HOST>";
$sql_user        = "<SQL_USER>";
$sql_pass        = "<SQL_PASS>";
$sql_db          = "<SQL_DB>";
$sql_table       = "<SQL_TABLE>";
$enckey2         = "<ENC_KEY>";
```

Modified conf.php file



```
<?php
// CONFIGURATION SECTION
$sql_host        = "localhost";
$sql_user        = "xxxxxxxxx_mybase";
$sql_pass        = "[redacted]";
$sql_db          = "xxxxxxxxx_mybase";
$sql_table       = "olm_test";
$enckey2         = "xyz321";
```

To do the tests we have installed the OLM at https://avlock.av-soft.com/olm6

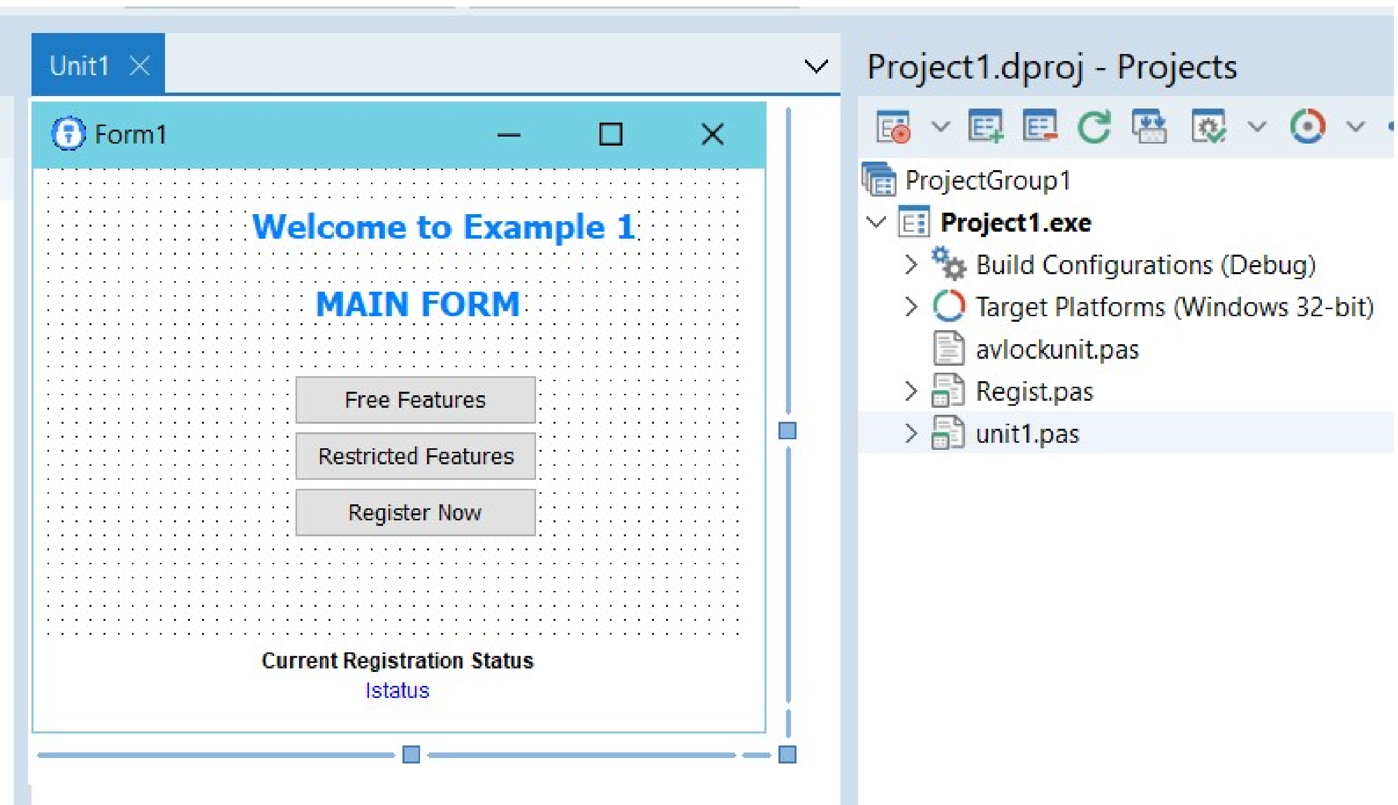
I have tried to make this help as clear and complete as possible, however it is possible that aspects have not been considered. If you notice something is missing or have found errors or have any ideas that could be useful to improve this help, please let me know.

Alcides Valega
Autor de AVLock SIMPLE

EXAMPLES

NOOLM Example

We are going to start by explaining a very simple example that does not require an internet connection to work.
Our example consists of two forms:
- The main form "Form1" which would be the main form of your application.
- The "Regist" forms is where the user can carry out the registration process and see its status.
Below is its schematic in the Delphi IDE:



The Main Form "Form1"

As we can see in the image above, we have three buttons, two of them to access two modules. each of these modules represents access to a functionality of your application that can be controlled by AVLock. The third button is to access the registration data.
In this example we have only 2 modules, but we could control up to a maximum of 12 as it will look like in the OLM2 example. The first of the modules is not controlled, so it will always be available, but the second is only activated when the registration is active.

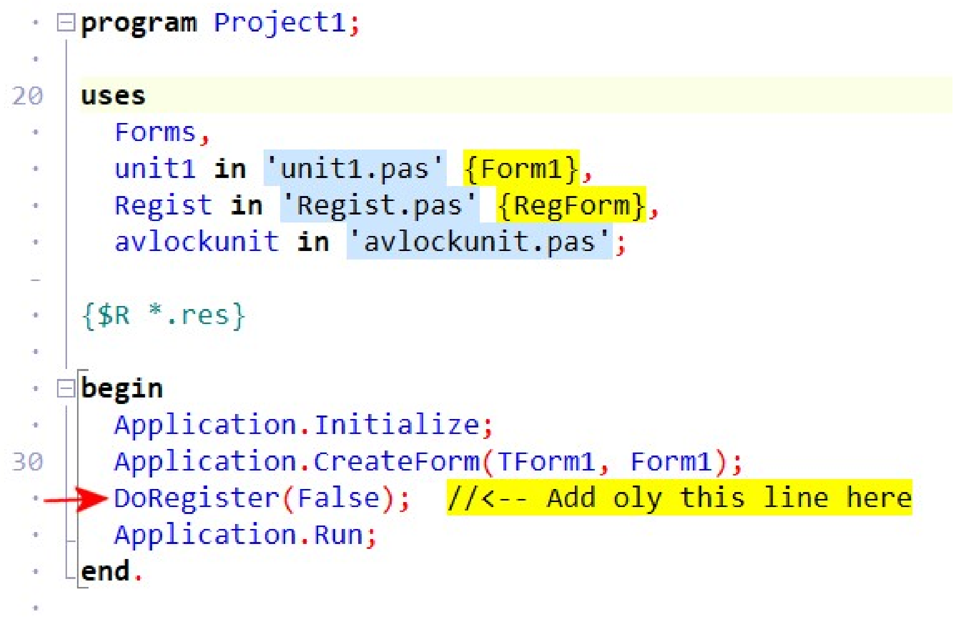
The code for "Project1"

Here we have added a line that will allow us to control the application with AVLOCK. Notice the call to the DoRegister procedure, defined in the avlockunit as

```
procedure DoRegister(force:boolean);
```

This procedure gets the registration status and saves it to the keydata registry.
You can also access the registration form to allow you to see the status and register a new key. This access is controlled by the force parameter. When true the form is always accessed and when false it is only accessed when the key has expired or will expire soon so that the user can renew their license.

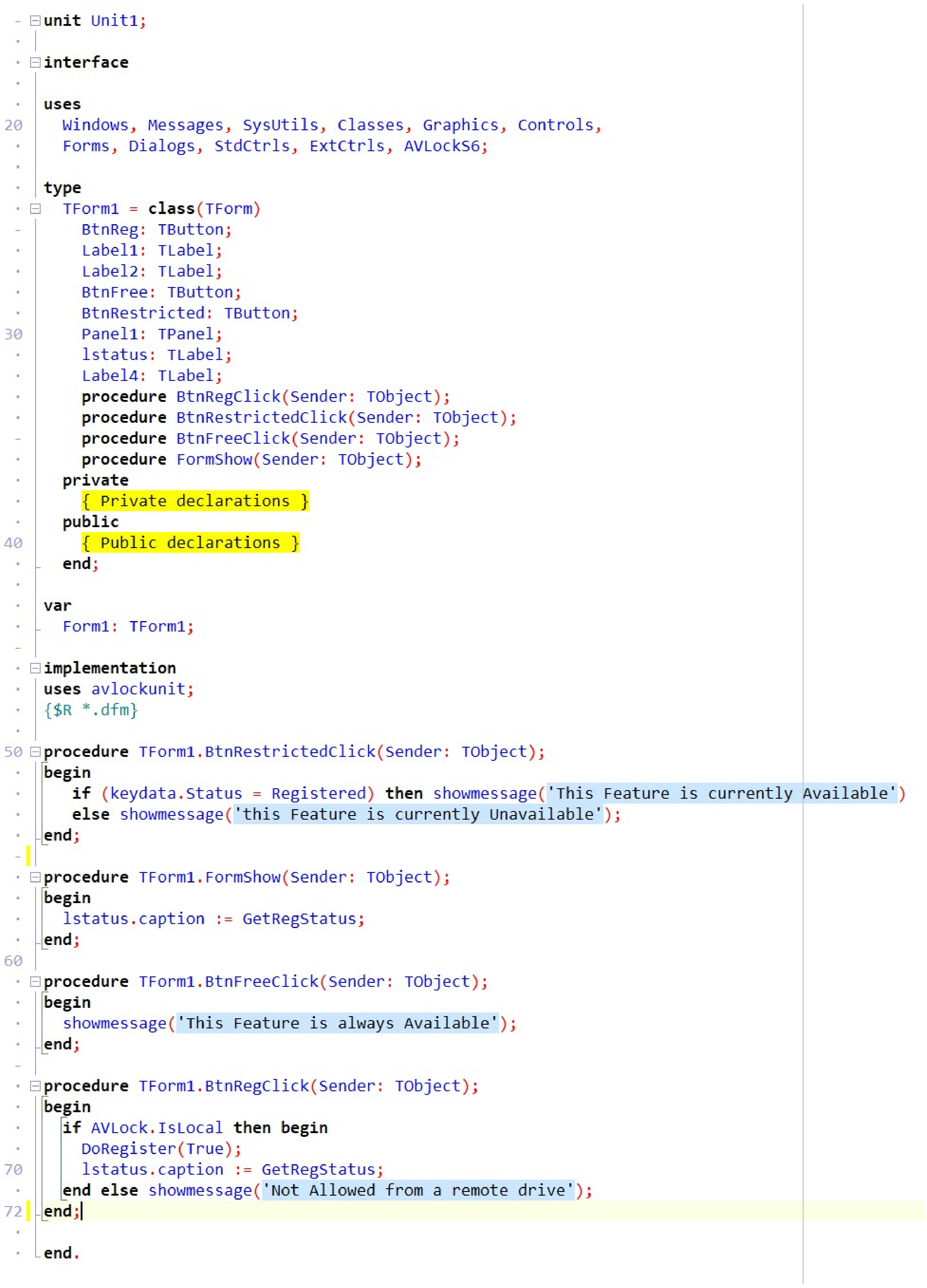
This line of code, instead of being placed here, can be placed in the OnCreate event of Form1, achieving the same effect.



```
program Project1;

uses
  Forms,
  unit1 in 'unit1.pas' {Form1},
  Regist in 'Regist.pas' {RegForm},
  avlockunit in 'avlockunit.pas';

{$R *.res}

begin
  Application.Initialize;
  Application.CreateForm(TForm1, Form1);
  DoRegister(False);  //<-- Add oly this line here
  Application.Run;
end.
```

The code for "Form1"

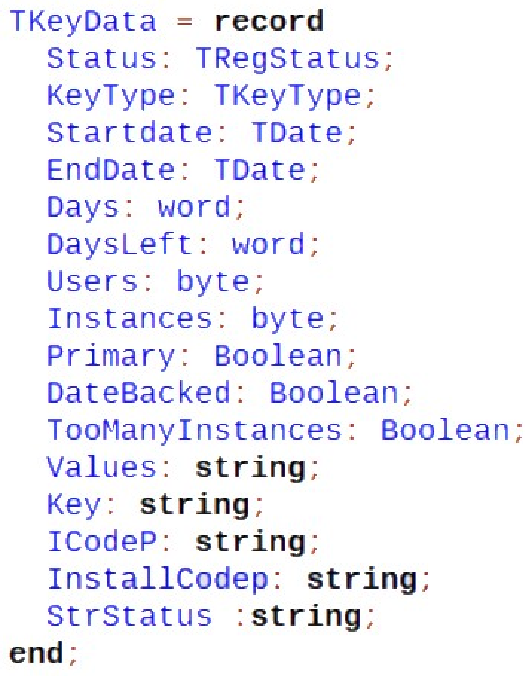
Below you can see the code for unit1 which is the unit associated with Form1.
In the uses clause we include a reference to the AVLockS6 component and avlockunit, this is necessary to access the component and avlockunit functions.



```
unit Unit1;

interface

uses
  Windows, Messages, SysUtils, Classes, Graphics, Controls,
  Forms, Dialogs, StdCtrls, ExtCtrls, AVLockS6;

type
  TForm1 = class(TForm)
    BtnReg: TButton;
    Label1: TLabel;
    Label2: TLabel;
    BtnFree: TButton;
    BtnRestricted: TButton;
    Panel1: TPanel;
    lstatus: TLabel;
    Label4: TLabel;
    procedure BtnRegClick(Sender: TObject);
    procedure BtnRestrictedClick(Sender: TObject);
    procedure BtnFreeClick(Sender: TObject);
    procedure FormShow(Sender: TObject);
  private
    { Private declarations }
  public
    { Public declarations }
  end;

var
  Form1: TForm1;

implementation
uses avlockunit;
{$R *.dfm}

procedure TForm1.BtnRestrictedClick(Sender: TObject);
begin
   if (keydata.Status = Registered) then showmessage('This Feature is currently Available')
   else showmessage('this Feature is currently Unavailable');
end;

procedure TForm1.FormShow(Sender: TObject);
begin
  lstatus.caption := GetRegStatus;
end;

procedure TForm1.BtnFreeClick(Sender: TObject);
begin
  showmessage('This Feature is always Available');
end;

procedure TForm1.BtnRegClick(Sender: TObject);
begin
  if AVLock.IsLocal then begin
    DoRegister(True);
    lstatus.caption := GetRegStatus;
  end else showmessage('Not Allowed from a remote drive');
end;

end.
```

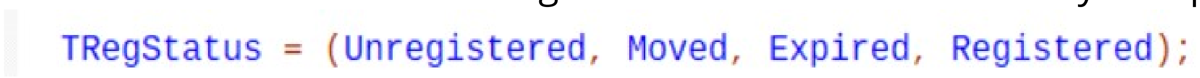
The DoRegister procedure of the avlockunit is also called here, but with the parameter force = true and associated with the “BtnReg” button in order to allow viewing the status and registering a new key at any time.

As we have already seen, this procedure gets the registration status and saves it in the keydata registry. Below you can see the fields that make up this record defined in the component and declared in the avlockunit:



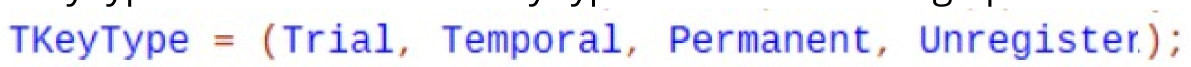
```
  TKeyData = record
    Status: TRegStatus;
    KeyType: TKeyType;
    Startdate: TDate;
    EndDate: TDate;
    Days: word;
    DaysLeft: word;
    Users: byte;
    Instances: byte;
    Primary: Boolean;
    DateBacked: Boolean;
    TooManyInstances: Boolean;
    Values: string;
    Key: string;
    ICodeP: string;
    InstallCodep: string;
    StrStatus :string;
  end;
```

The Status field contains the registration status and these are your options:



```
TRegStatus = (Unregistered, Moved, Expired, Registered);
```

The KeyType field contains the key type with the following options:



```
TKeyType = (Trial, Temporal, Permanent, Unregister);
```

StartDate is the start date of the authorized license period.

EndDate is the end date of the authorized license period.

Days is the number of days authorized.

DaysLeft contains the number of days until expiration.

Users is the number of users (computers) that the user can install.

Instances is the number of instances that can be run on each of the installed computers.

Primary is true when the license type is primary and false when it is secondary (dependent on a primary).

Datebaked is true when the system date was manipulated by pushing it back in order to have more license days available.

ToManyInstances is true when all authorized instances have already been instantiated.

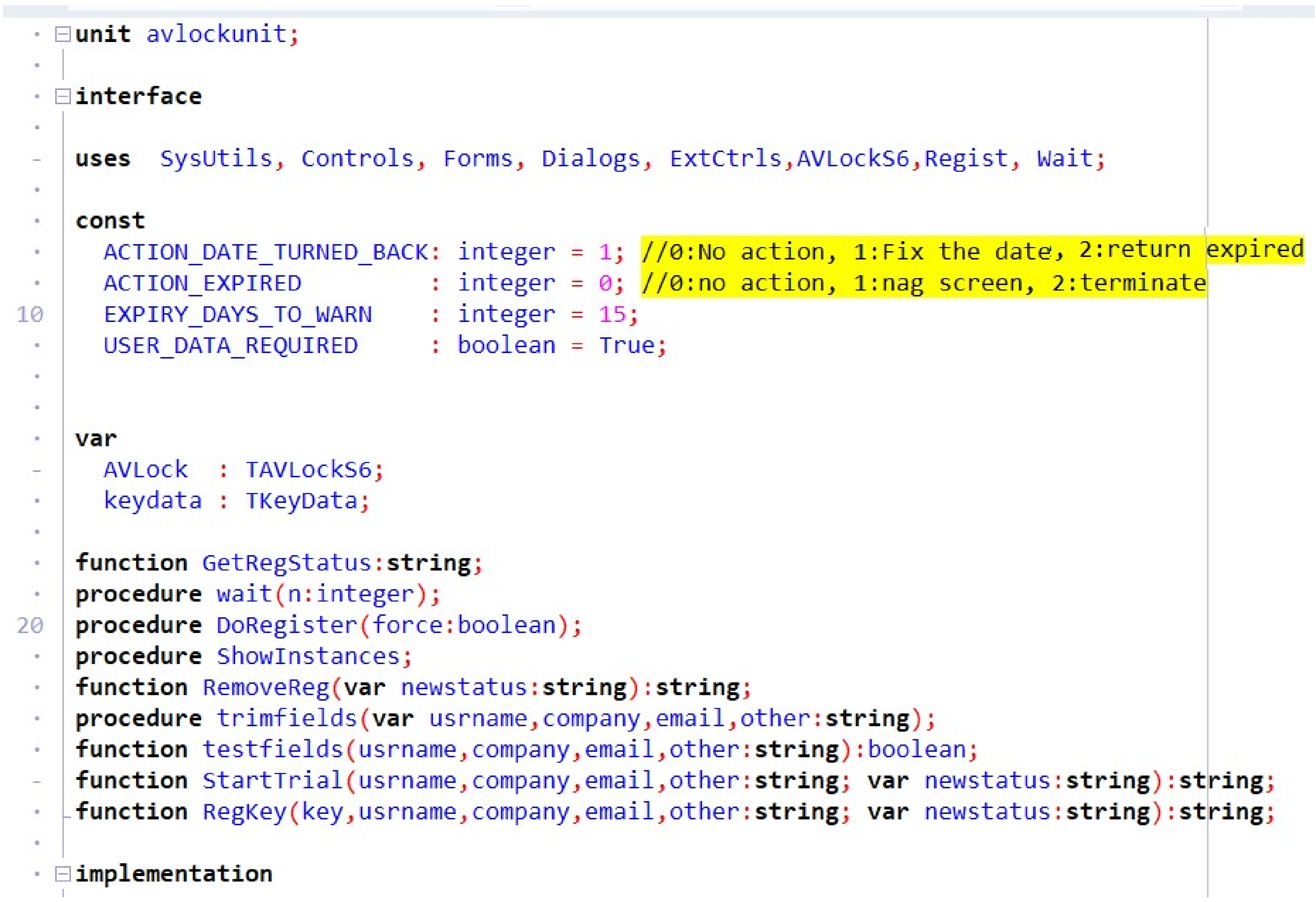
Values is a field that allows you to manage modules in the application. See example OLM2.

Key is the currently valid registration key.

StrStatus is a string that contains the registration status in textual form.

The avlockunit file

This unit contains all the functions that allow us to control the application through the AVLock Simple component. Below you can see the interface section of it:



```
unit avlockunit;

interface

uses  SysUtils, Controls, Forms, Dialogs, ExtCtrls,AVLockS6,Regist, Wait;

const
  ACTION_DATE_TURNED_BACK: integer = 1; //0:No action, 1:Fix the date, 2:return expired
  ACTION_EXPIRED         : integer = 0; //0:no action, 1:nag screen, 2:terminate
  EXPIRY_DAYS_TO_WARN    : integer = 15;
  USER_DATA_REQUIRED     : boolean = True;


var
  AVLock   : TAVLockS6;
  keydata : TKeyData;

function GetRegStatus:string;
procedure wait(n:integer);
procedure DoRegister(force:boolean);
procedure ShowInstances;
function RemoveReg(var newstatus:string):string;
procedure trimfields(var usrname,company,email,other:string);
function testfields(usrname,company,email,other:string):boolean;
function StartTrial(usrname,company,email,other:string; var newstatus:string):string;
function RegKey(key,usrname,company,email,other:string; var newstatus:string):string;

implementation
```

Here we see that the uses clause refers to the AVLockS6 component. Some configuration parameters are declared as constants, namely:

ACTION_DATE_TURNED_BACK: integer = 1; //0:No action, 1:Fix the date, 2:Return expired
This parameter determines the behavior of the application when the user pushes back the system date, so it is assumed that it could be to use the application when the license has already expired.
By default its value is 1 (fix the date) which is the recommended option that corrects the system date automatically, but in case of not having internet it returns expired.

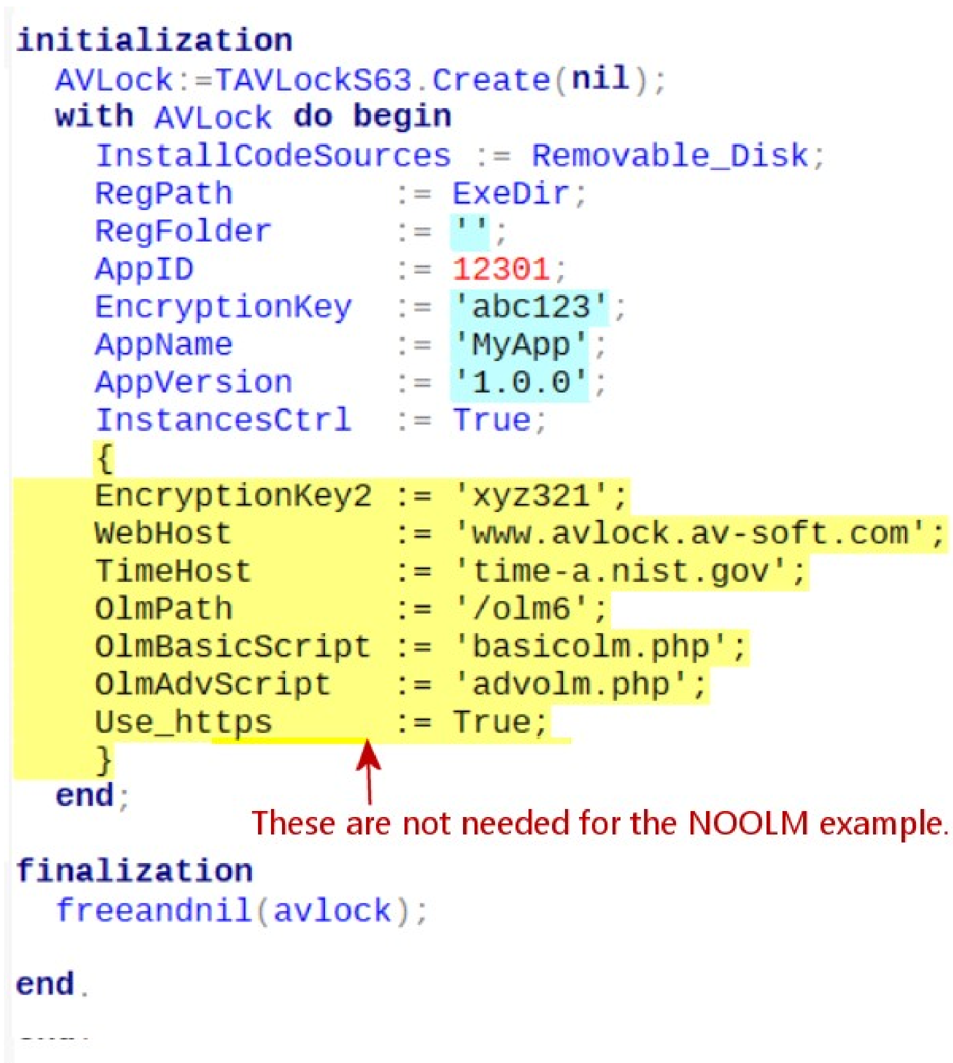
ACTION_EXPIRED : integer = 0; //0:no action, 1:nag screen, 2:terminate
This parameter determines the behavior of the application when the application is in the expired state. In cases where the application offers free features, as in the case of this example ("Free Features" button), the values 0 or 1 should be used. In this example, with option 1, a countdown is displayed that slows down access to the application in such a way that the user feels encouraged to deactivate it by registering.

USER_DATA_REQUIRED : boolean = True;
If this parameter is True, the user must complete their personal data before being able to register.

Next, the AVLock and keydata variables are declared:

var
AVLock : TavlockS6;
Keydata: TJeyData;

We have already seen about keydata so now we will focus on AVLock. It is declared in the interface but its fields are set in the initialization section, as seen below:



```
initialization
  AVLock:=TAVLockS63.Create(nil);
  with AVLock do begin
    InstallCodeSources := Removable_Disk;
    RegPath           := ExeDir;
    RegFolder         := '';
    AppID             := 12301;
    EncryptionKey     := 'abc123';
    AppName           := 'MyApp';
    AppVersion        := '1.0.0';
    InstancesCtrl     := True;
    {
    EncryptionKey2 := 'xyz321';
    WebHost        := 'www.avlock.av-soft.com';
    TimeHost       := 'time-a.nist.gov';
    OlmPath        := '/olm6';
    OlmBasicScript := 'basicolm.php';
    OlmAdvScript   := 'advolm.php';
    Use_https      := True;
    }
  end;

finalization
  freeandnil(avlock);

end.
```

These are not needed for the NOOLM example.

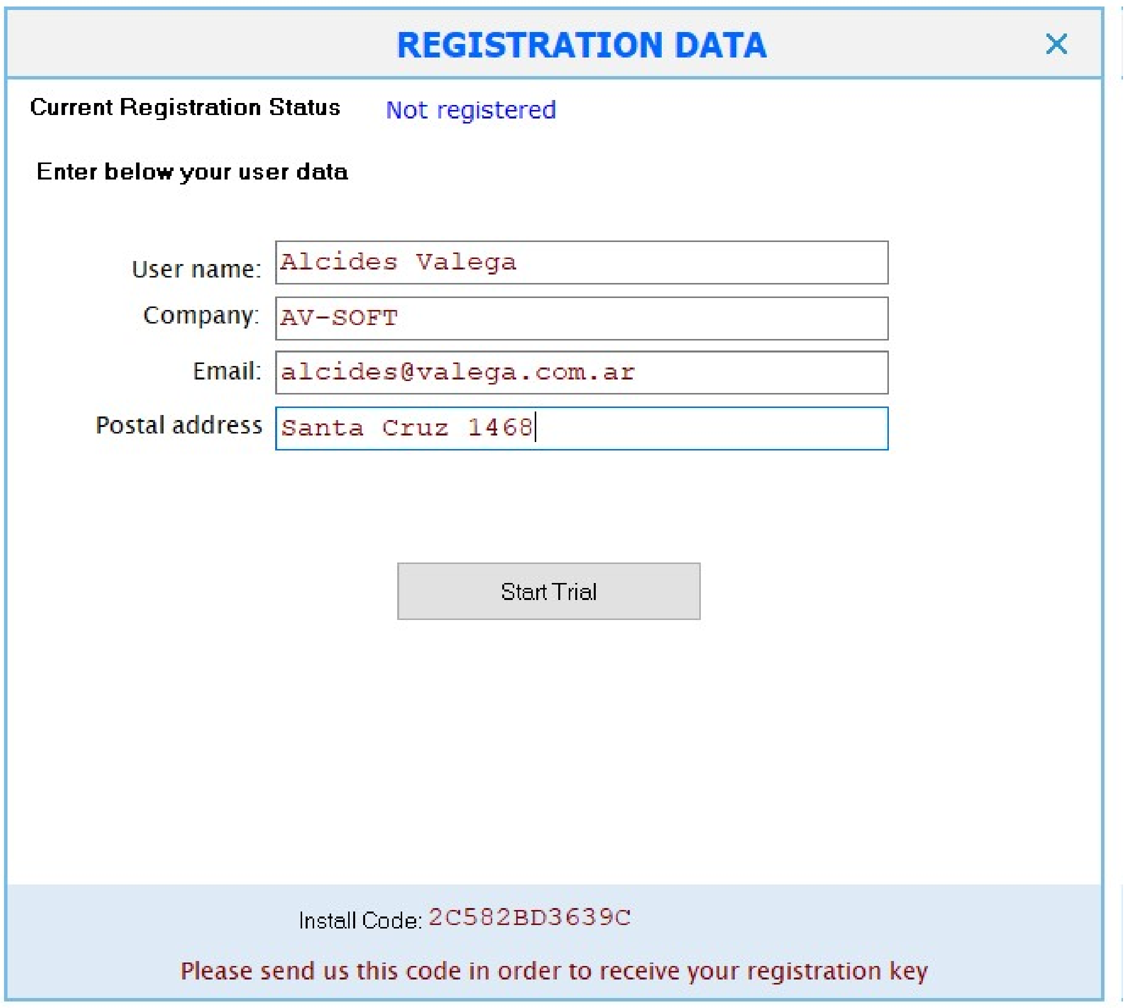
ASIGNACIÓN	DETAIL
InstallCodeSources := Removable_Disk;	The InstallCodeSources property determines how the InstallCode property value is obtained. Values can be Machine_Data, User_Data, or Removable_Disk. We recommend the use of Removable_Disk because it calculates the InstallCode based on the serial number of the disk where the executable of your application is located, which allows installing the application in a portable way.
RegPath := ExeDir;	This property determines where the *.avr registration file will be saved. Options are CommonDocuments, ProgramData, RoamingAppData, LocalAppData, ExeDir, Other. The option used in the example is ExeDir which causes the *.avr file to be saved in the executable folder.
RegFolder := '';	Here you can place the name of the folder where you want the *.avr registration data file to be saved. It will be better understood with an example. Assuming that the executable of the application is in c:\myapp and we set RegFolder='myfolder' and also have RegPath=ExeDir, the *.avr file will be saved in c:\myapp\myfolder.
AppID := 12301;	The AppID is a number that identifies your application. You must enter a different number for each application you control with AVLock.
EncryptionKey := 'abc123';	The EncryptionKey property is a keyword that is used with the Rijndael algorithm to encrypt the data associated with the registration. Place here a sequence of 8 to 16 characters.
EncryptionKey2 := 'xyz321';	The EncryptionKey2 property is a keyword that is used with the Rijndael algorithm to encrypt the data that is transferred between the OLM and the application. Place here a sequence of 8 to 16 characters. It must match the value of the following variables in the OLM php scripts: $encryptionkey2 in genkeys5lib.php and $enckey2 in conf.php.
AppName := 'MyApp';	It is the name that identifies the application.
AppVersion := '1.0.0';	It is the version of the application.
WebHost := 'www.avlock.av-soft.com';	It is the domain associated with your website. In this example we put the one we use in our tests. Feel free to use it for your practices as well.
TimeHost := 'time-a.nist.gov';	It is the server that allows obtaining the current system date.
OlmPath := '/olm6';	The folder on the server where the OLM is located.
OlmBasicScript :=	It is the name of the script used for the basic OLM.

'basicolm.php';	
OlmAdvScript := 'advolm.php';	It is the name of the script used for the advanced OLM.
InstancesCtrl := True;	If True, application instance control is performed. Its default value is False.
Use_https := True	Defines whether SSL (Secure Socket Layer) is used on your website.

How AVLock works in this example

1. The user gets your app by downloading it from your website or some other means.
2. When starting the application, the registration form is presented where the user must enter their personal data and press the [Start Trial] button in order to start the trial period.
3. At the end of the trial period or before its end, the user can ask you (the developer) for a registration key in order to register the application for a certain period of time or permanently.
4. You generate the key with the GenKey utility and send it to the user, via email or any other means.
5. The user receives the registration key and enters it into the corresponding form and presses the [Register] button.

2. When starting the application, the registration form is presented where the user must enter their personal data and press the [Start Trial] button in order to start the trial period.


REGISTRATION DATA

Current Registration Status Not registered

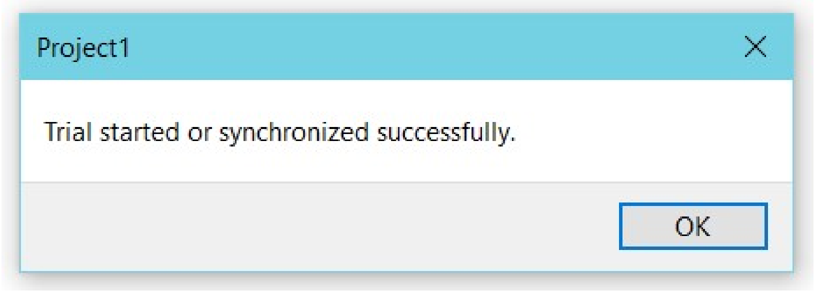
Enter below your user data

User name: Alcides Valega
Company: AV-SOFT
Email: alcides@valega.com.ar
Postal address Santa Cruz 1468

Install Code: 2C582BD3639C

Please send us this code in order to receive your registration key

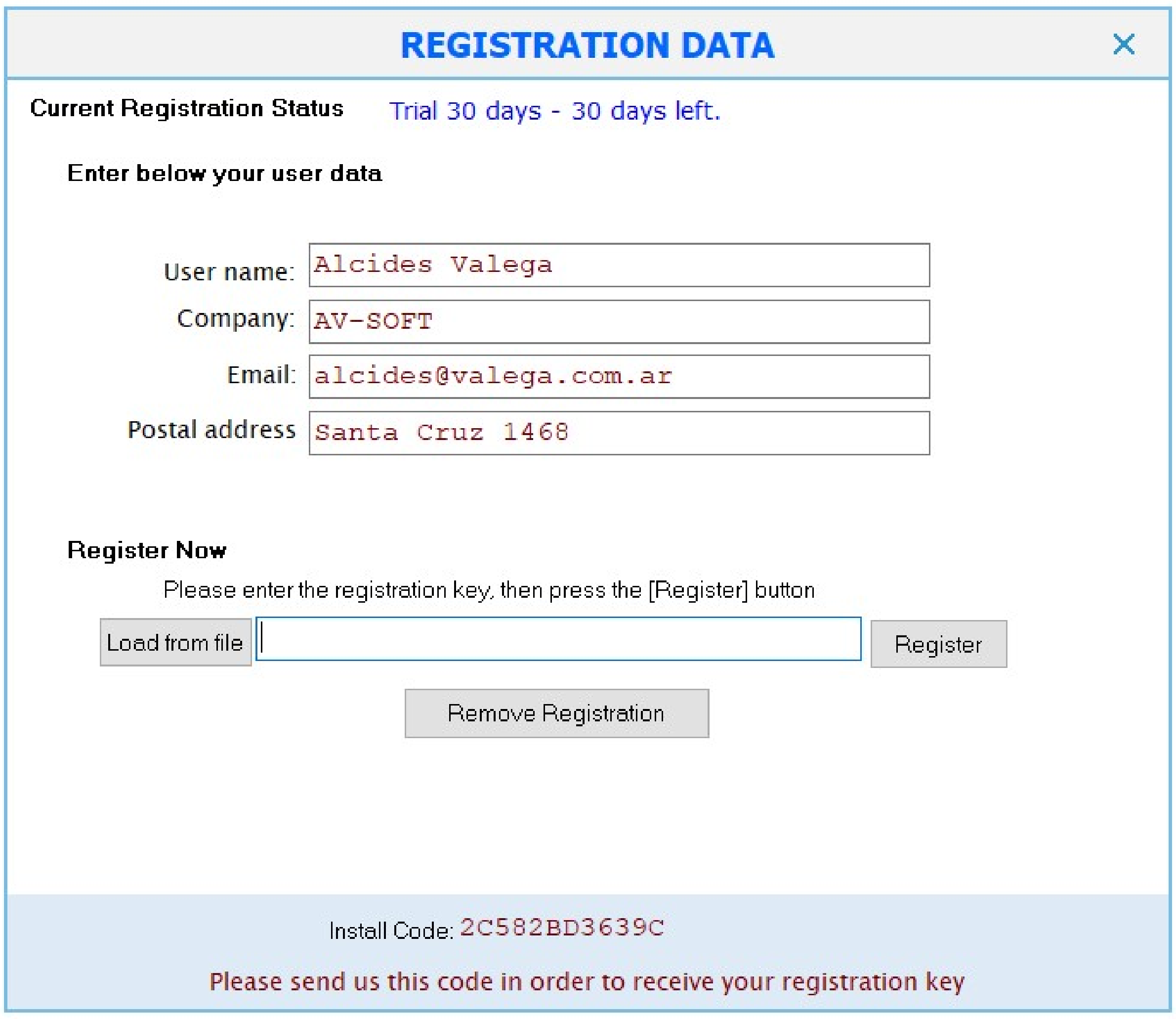
After clicking the [Start Trial] button the following message is displayed:


Project1

Trial started or synchronized successfully.

Now we can see what the registration form looks like. Where it was showing “Not registgered” it now shows “Trial 30 days – 30 days left”.

Also at the bottom we see under the title "Register Now" a place where you can enter a registration code. Next we will see how to use it to renew the status of the license.



REGISTRATION DATA ×

Current Registration Status: Trial 30 days - 30 days left.

Enter below your user data

User name: Alcides Valega

Company: AV-SOFT

Email: alcides@valega.com.ar

Postal address: Santa Cruz 1468

Register Now

Please enter the registration key, then press the [Register] button

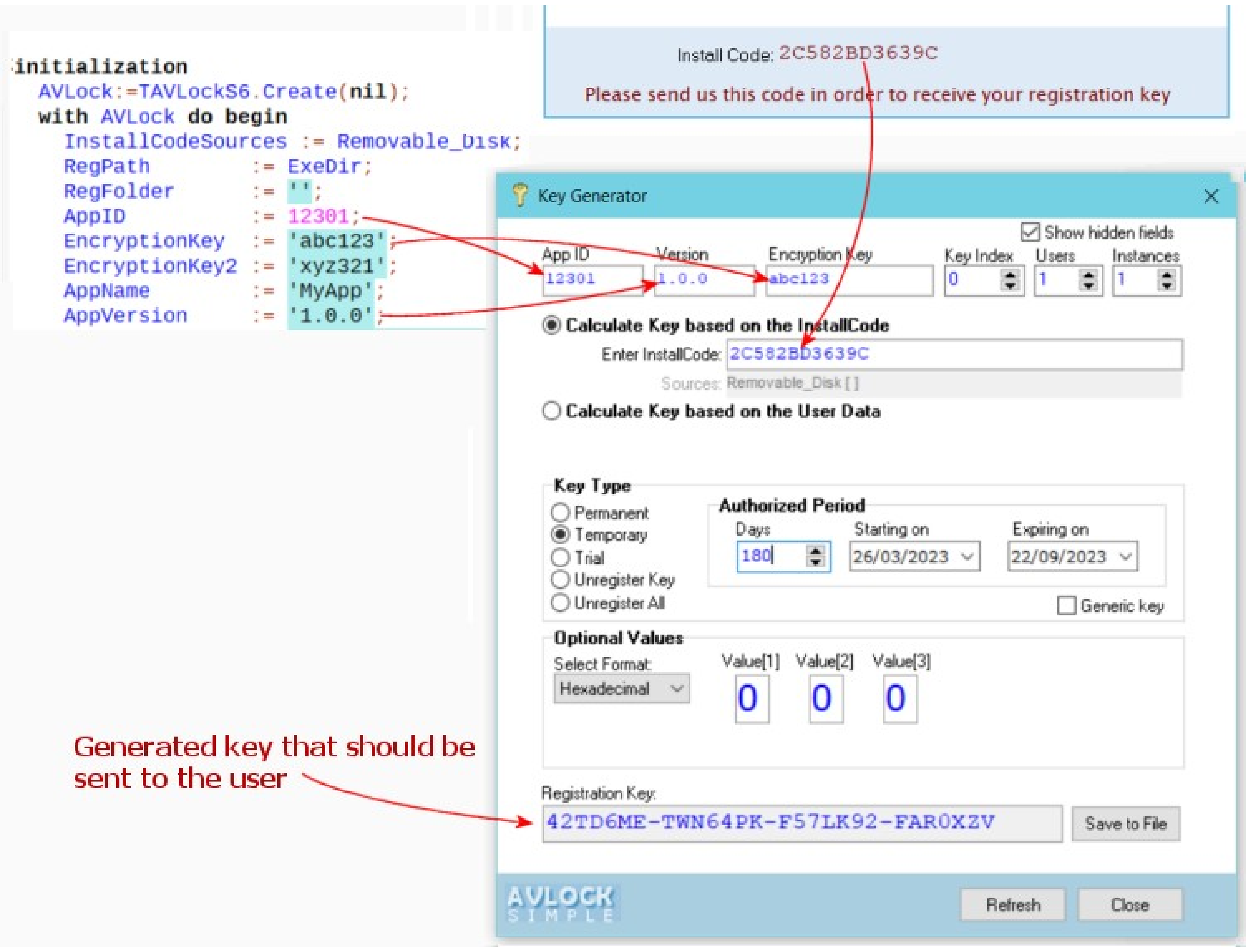
Install Code: 2C582BD3639C

Please send us this code in order to receive your registration key

Here is also the "Remove Registration" button that was added so that during your practices you can delete the registration data to continue testing. Remove this button in the final version of your app.

3. At the end of the trial period or before its end, the user can ask you for a registration key in order to register the application for a certain period of time or permanently.

4. You generate the key with the GenKey utility and send it to the user, via email or any other means. Below you can see where to get the data to use:



```
initialization
  AVLock:=TAVLockS6.Create(nil);
  with AVLock do begin
    InstallCodeSources := Removable_Disk;
    RegPath            := ExeDir;
    RegFolder          := '';
    AppID              := 12301;
    EncryptionKey      := 'abc123';
    EncryptionKey2     := 'xyz321';
    AppName            := 'MyApp';
    AppVersion         := '1.0.0';
```

Install Code: 2C582BD3639C

Please send us this code in order to receive your registration key

Key Generator ×

☑ Show hidden fields

App ID: 12301

Version: 1.0.0

Encryption Key: abc123

Key Index: 0

Users: 1

Instances: 1

● Calculate Key based on the InstallCode

Enter InstallCode: 2C582BD3639C

Sources: Removable_Disk [ ]

○ Calculate Key based on the User Data

Key Type

○ Permanent
● Temporary
○ Trial
○ Unregister Key
○ Unregister All

Authorized Period

Days: 180

Starting on: 26/03/2023

Expiring on: 22/09/2023

☐ Generic key

Optional Values

Select Format: Hexadecimal

Value[1]: 0

Value[2]: 0

Value[3]: 0

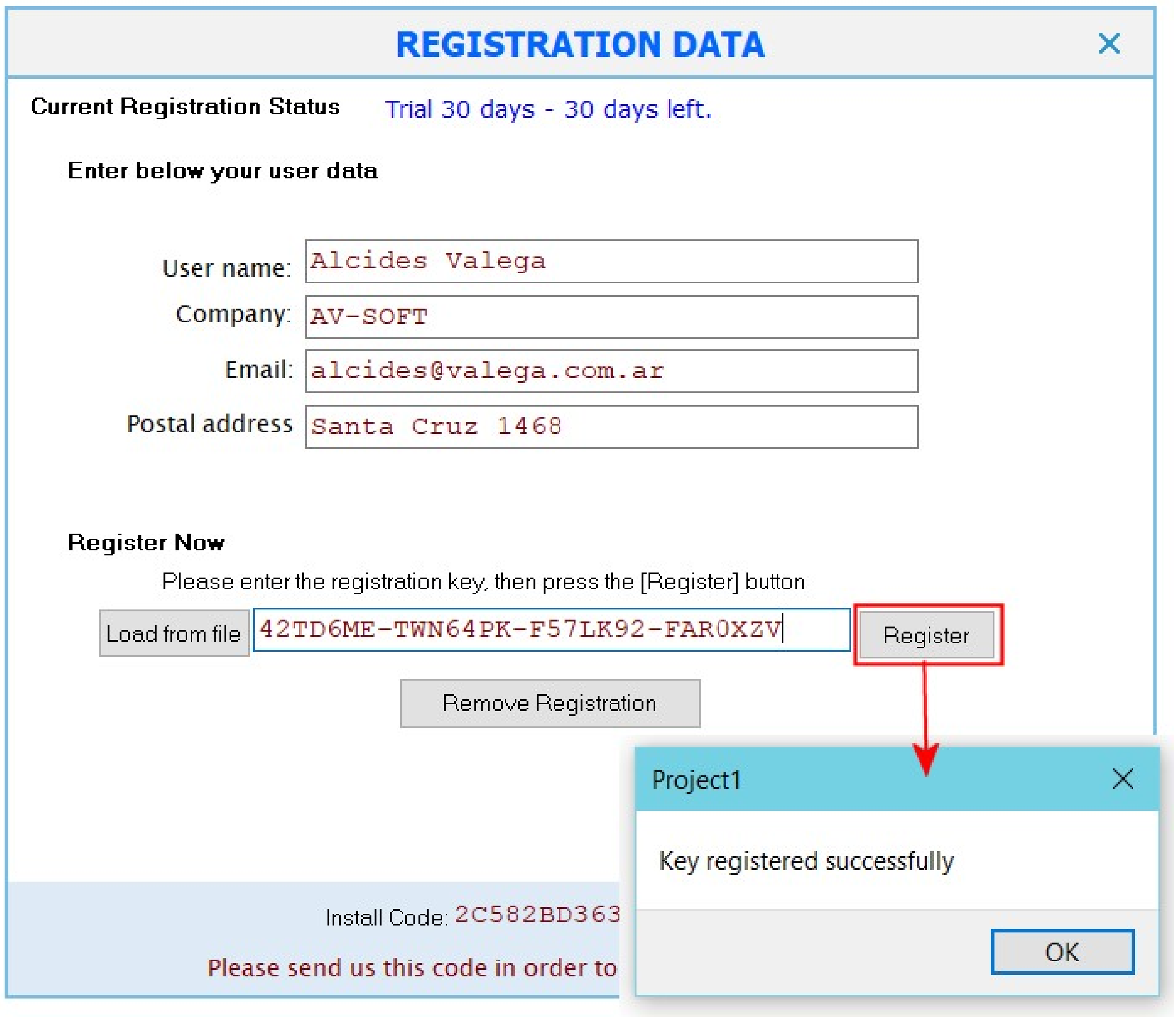
Registration Key: 42TD6ME-TWN64PK-F57LK92-FAR0XZV

Generated key that should be sent to the user

For “Key Index” always use 0. The users field determines the number of PCs that can be registered with the same key and the instances, how many instances of the application can be running simultaneously on each PC.

Here we have generated a temporary key for 180 days, starting on March 26, 2023 and ending on September 22, 2023. The Values field was left at zero because it will not be used in this example.

5. The user receives the registration key and enters it into the corresponding form and presses the [Register] button.



REGISTRATION DATA

Current Registration Status Trial 30 days - 30 days left.

Enter below your user data

User name: Alcides Valega

Company: AV-SOFT

Email: alcides@valega.com.ar

Postal address Santa Cruz 1468

Register Now

Please enter the registration key, then press the [Register] button

42TD6ME-TWN64PK-F57LK92-FAR0XZV

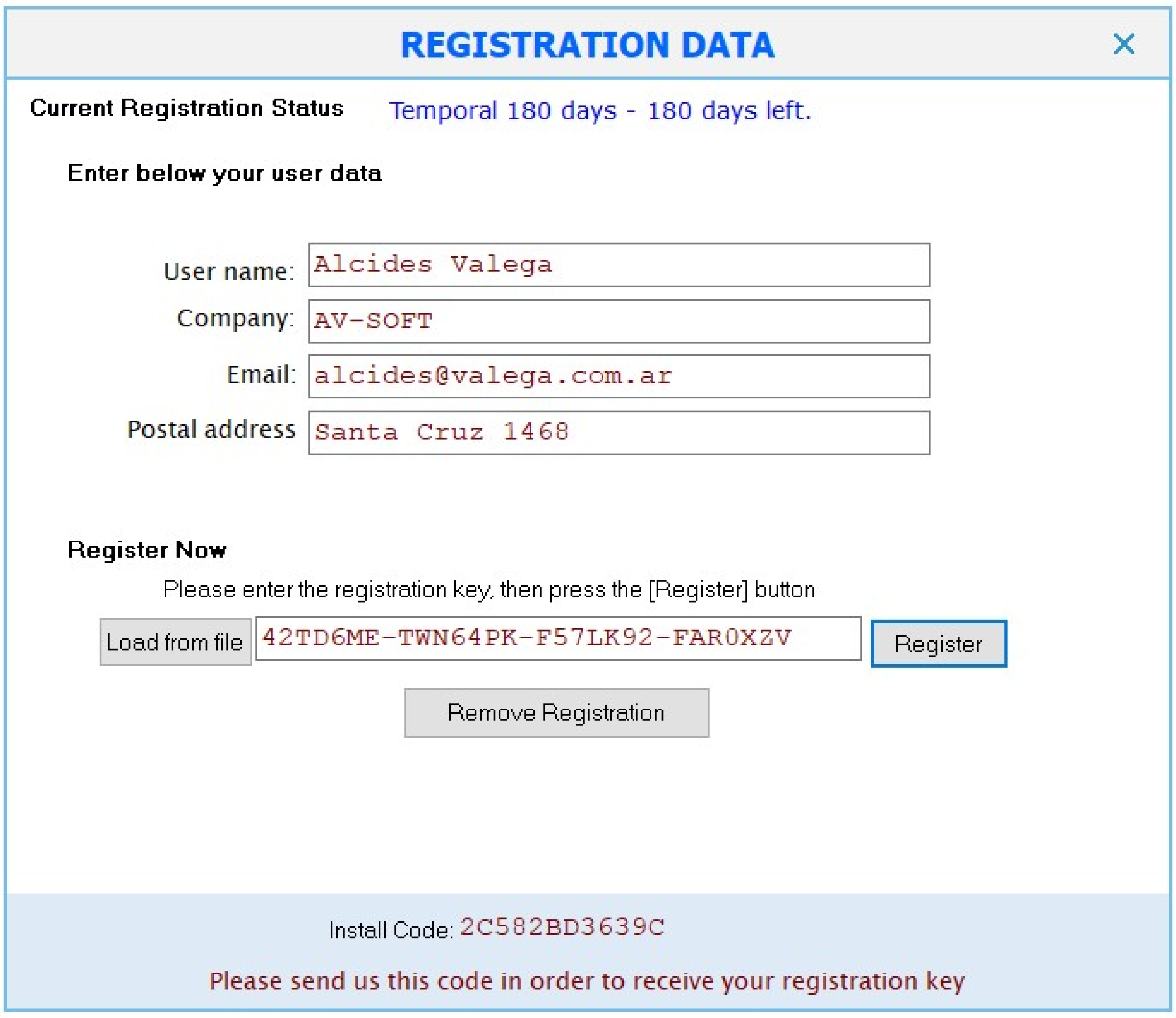
Install Code: 2C582BD363

Please send us this code in order to

Project1

Key registered successfully

You will be able to see how the registration status changes immediately. Now as “Temporary 180 days – 180 days left”.



REGISTRATION DATA

Current Registration Status Temporal 180 days - 180 days left.

Enter below your user data

User name: Alcides Valega

Company: AV-SOFT

Email: alcides@valega.com.ar

Postal address Santa Cruz 1468

Register Now

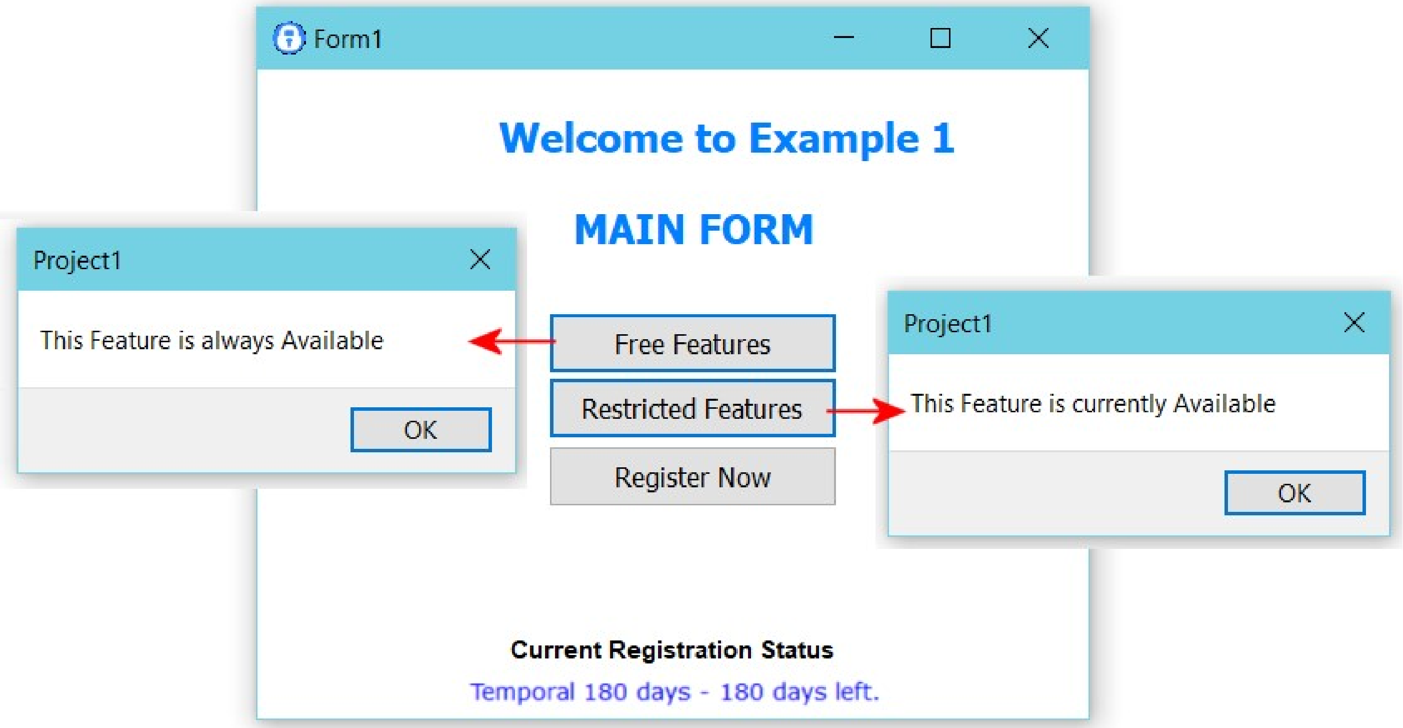
Please enter the registration key, then press the [Register] button

42TD6ME-TWN64PK-F57LK92-FAR0XZV

Install Code: 2C582BD3639C

Please send us this code in order to receive your registration key

When closing the registration form we can see the status of each of the modules by clicking on the corresponding buttons.

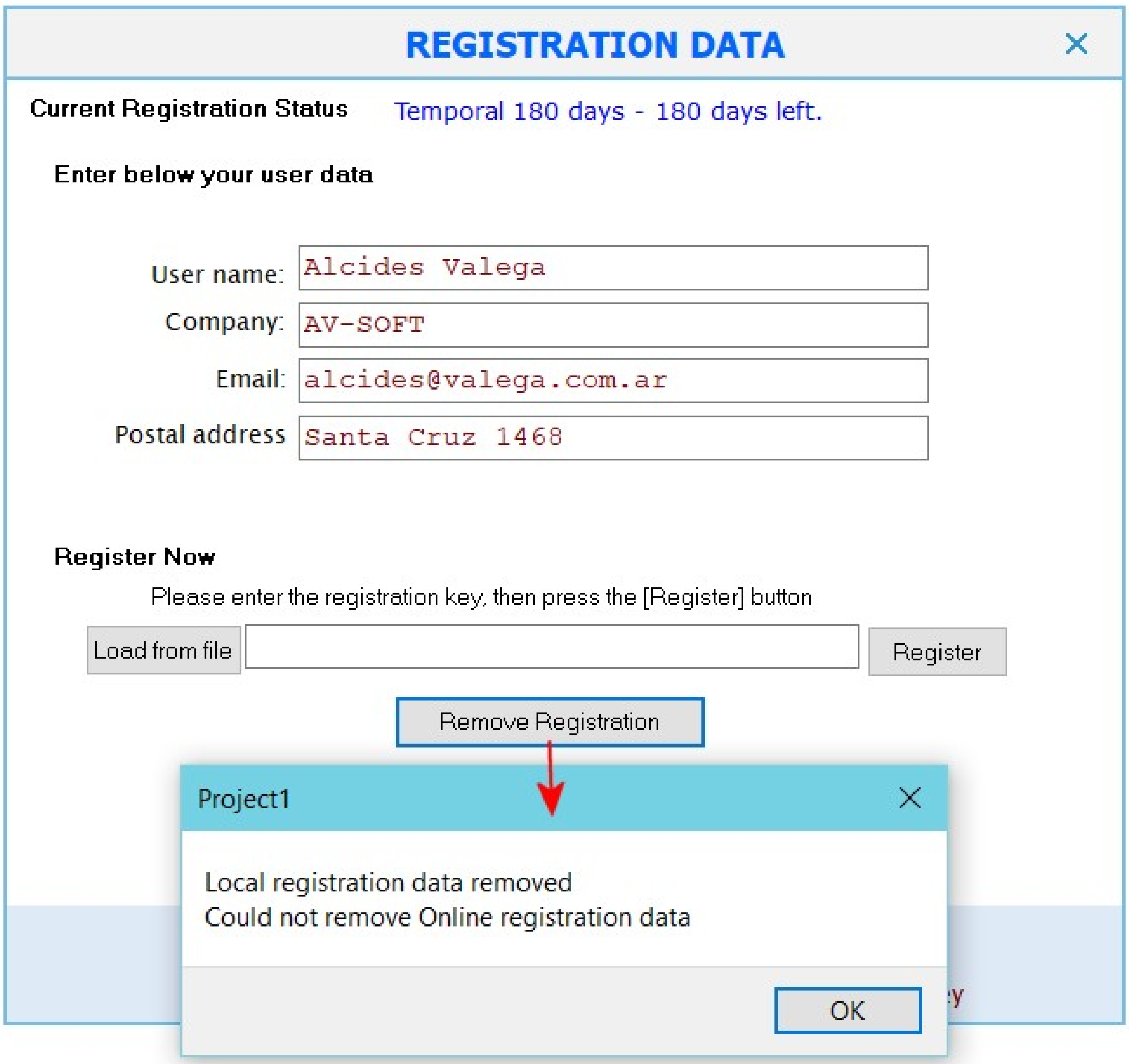


This Feature is always Available

This Feature is currently Available

Current Registration Status
Temporal 180 days - 180 days left.

Finally we tried the [Remove Registration] button. Don't forget to remove this button in the final version of your app



Current Registration Status Temporal 180 days - 180 days left.

Enter below your user data

User name: Alcides Valega

Company: AV-SOFT

Email: alcides@valega.com.ar

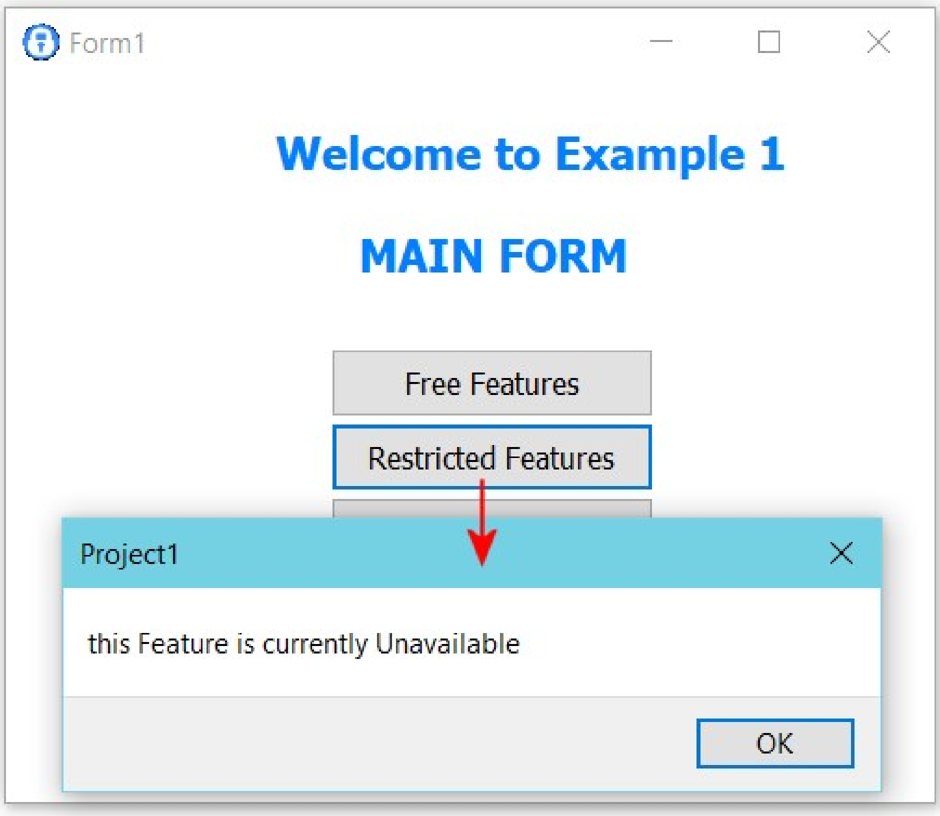
Postal address Santa Cruz 1468

Register Now

Please enter the registration key, then press the [Register] button

Local registration data removed
Could not remove Online registration data

When closing the registration form we can see the status of each of the modules by clicking on the corresponding buttons. Now “Restricted Features” is not available but “Free Features” is still available.



this Feature is currently Unavailable

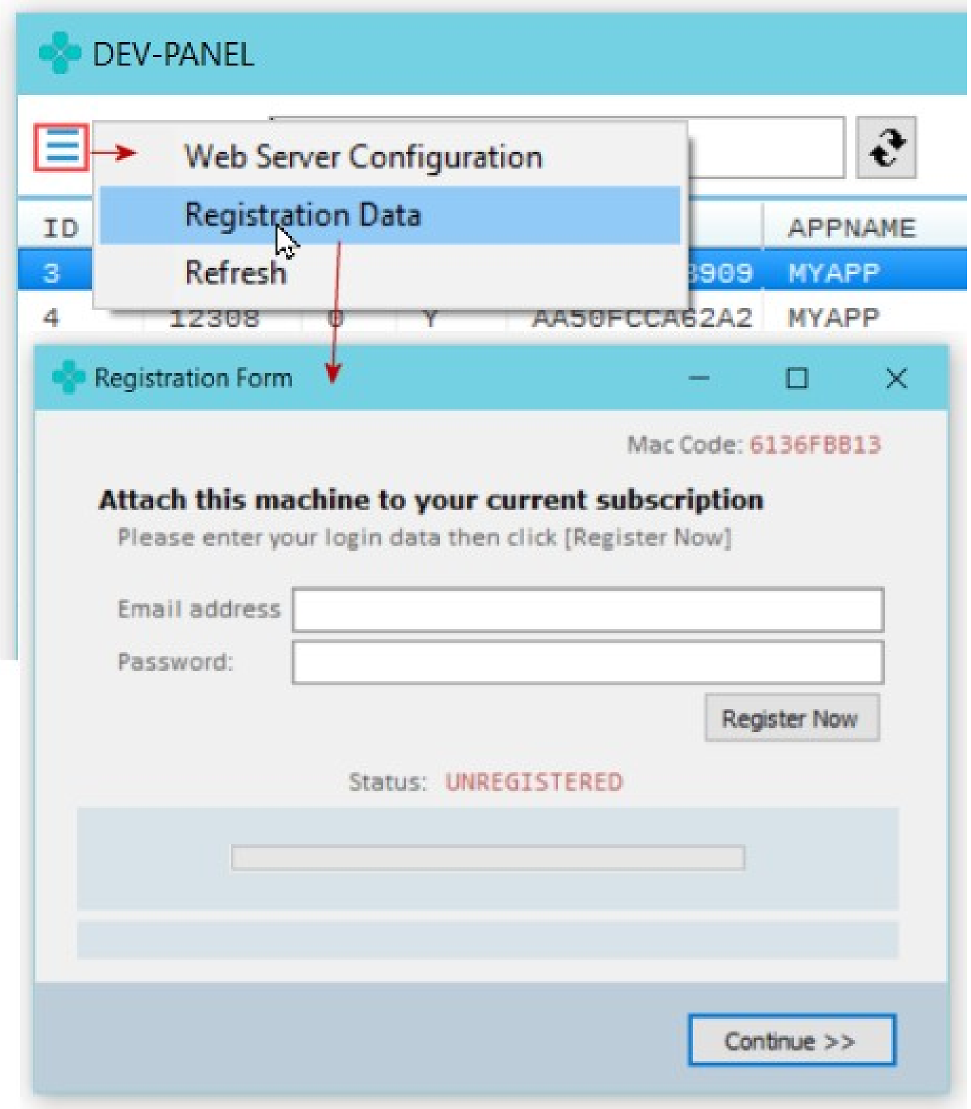
The DevPanel

Before continuing with the OLM (Online License Manager) examples, it is necessary to know the DevPanel since through this we will control the licenses of all users who use applications that use the OLM to register, such as the OLM1 and OLM2 examples that we will see later. forward..

Below we can see a screenshot of the DevPanel configured to access my test site. Feel free to use it to do your practices. Most of the logs here are from AVLock users who have been testing the component.

Registration and configuration

Start by registering the DevPanel with your credentials. The same ones you use to login to the AVLock site:
https://avlock.av-soft.com/index.php



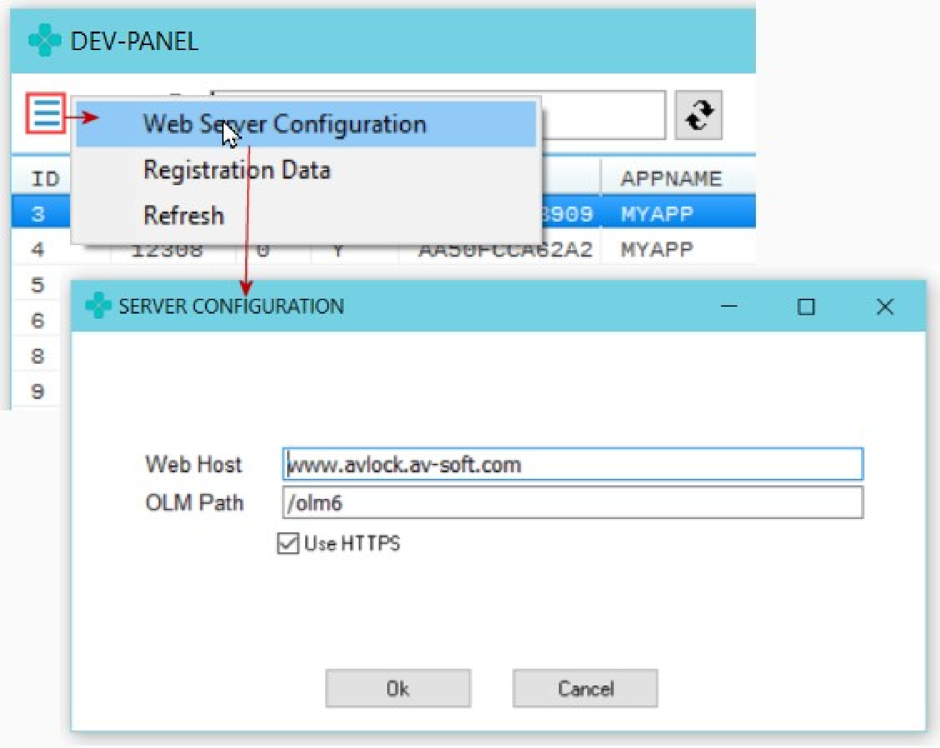
Mac Code: 6136FBB13

Attach this machine to your current subscription

Please enter your login data then click [Register Now]

Status: UNREGISTERED

Then enter the data for access to the server, in this case to my test site.

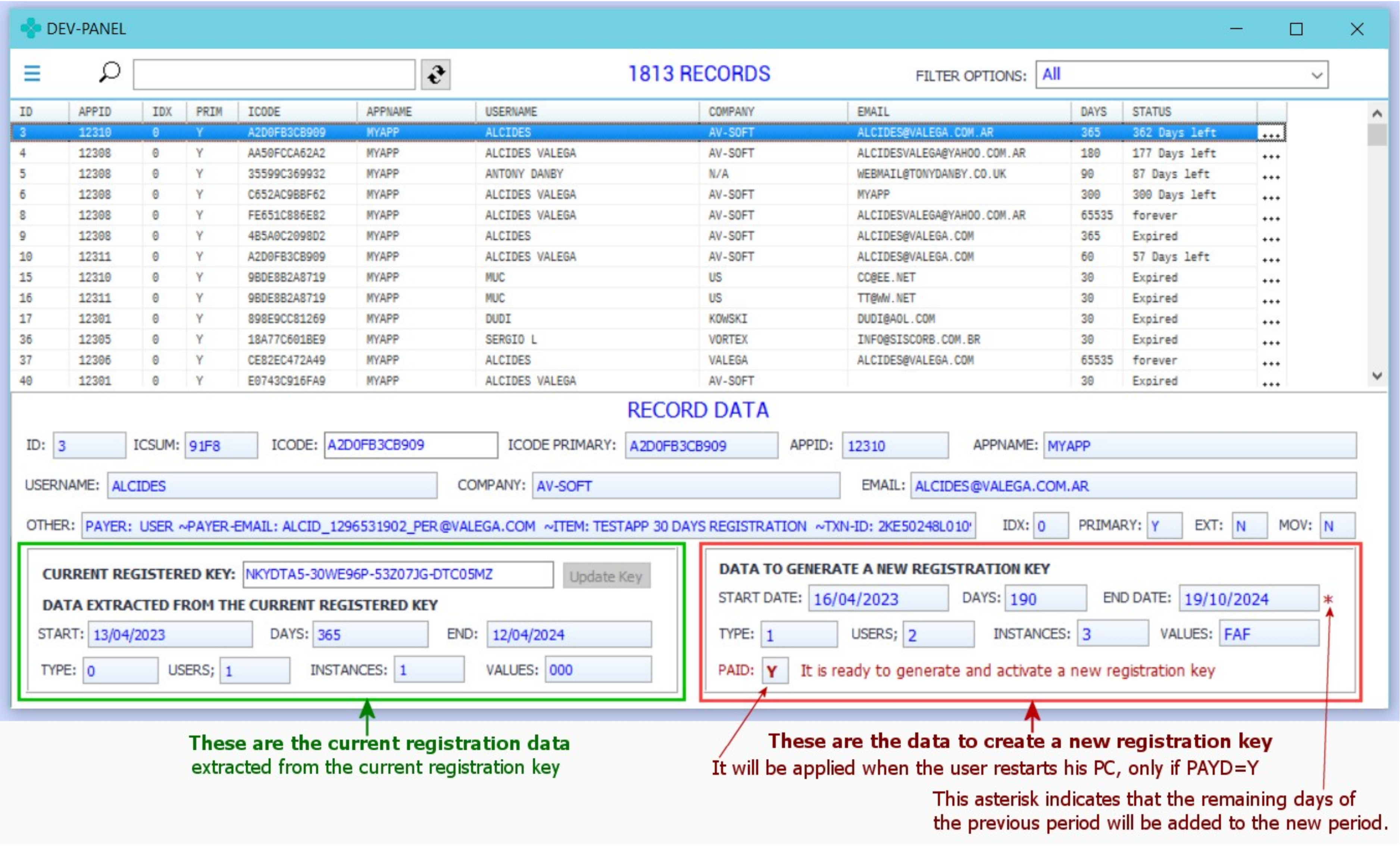


Web Host: www.avlock.av-soft.com

OLM Path: /olm6

☑ Use HTTPS

Once the previous steps have been completed correctly, you will be able to see the following screen with all the records that AVLock users entered when carrying out their practices.



1813 RECORDS

FILTER OPTIONS: All

ID	APPID	IDX	PRIM	ICODE	APPNAME	USERNAME	COMPANY	EMAIL	DAYS	STATUS	
3	12310	0	Y	A2D0FB3CB909	MYAPP	ALCIDES	AV-SOFT	ALCIDES@VALEGA.COM.AR	365	362 Days left	...
4	12308	0	Y	AA50FCCA62A2	MYAPP	ALCIDES VALEGA	AV-SOFT	ALCIDESVALEGA@YAHOO.COM.AR	180	177 Days left	...
5	12308	0	Y	35599C369932	MYAPP	ANTONY DANBY	N/A	WEBMAIL@TONYDANBY.CO.UK	90	87 Days left	...
6	12308	0	Y	C652AC9BBF62	MYAPP	ALCIDES VALEGA	AV-SOFT	MYAPP	300	300 Days left	...
8	12308	0	Y	FE651C886E82	MYAPP	ALCIDES VALEGA	AV-SOFT	ALCIDESVALEGA@YAHOO.COM.AR	65535	forever	...
9	12308	0	Y	4B5A0C2098D2	MYAPP	ALCIDES	AV-SOFT	ALCIDES@VALEGA.COM	365	Expired	...
10	12311	0	Y	A2D0FB3CB909	MYAPP	ALCIDES VALEGA	AV-SOFT	ALCIDES@VALEGA.COM	60	57 Days left	...
15	12310	0	Y	9BDE8B2A8719	MYAPP	MUC	US	CC@EE.NET	30	Expired	...
16	12311	0	Y	9BDE8B2A8719	MYAPP	MUC	US	TT@WW.NET	30	Expired	...
17	12301	0	Y	898E9CC81269	MYAPP	DUDI	KOWSKI	DUDI@AOL.COM	30	Expired	...
36	12305	0	Y	18A77C601BE9	MYAPP	SERGIO L	VORTEX	INFO@SISCORB.COM.BR	30	Expired	...
37	12306	0	Y	CE82EC472A49	MYAPP	ALCIDES	VALEGA	ALCIDES@VALEGA.COM	65535	forever	...
40	12301	0	Y	E0743C916FA9	MYAPP	ALCIDES VALEGA	AV-SOFT		30	Expired	...

RECORD DATA

ID: 3 ICSUM: 91F8 ICODE: A2D0FB3CB909 ICODE PRIMARY: A2D0FB3CB909 APPID: 12310 APPNAME: MYAPP

USERNAME: ALCIDES COMPANY: AV-SOFT EMAIL: ALCIDES@VALEGA.COM.AR

OTHER: PAYER: USER ~PAYER-EMAIL: ALCID_1296531902_PER@VALEGA.COM ~ITEM: TESTAPP 30 DAYS REGISTRATION ~TXN-ID: 2KE50248L010' IDX: 0 PRIMARY: Y EXT: N MOV: N

CURRENT REGISTERED KEY: NKYDTA5-30WE96P-53Z07JG-DTC05MZ

DATA EXTRACTED FROM THE CURRENT REGISTERED KEY

START: 13/04/2023 DAYS: 365 END: 12/04/2024

TYPE: 0 USERS; 1 INSTANCES: 1 VALUES: 000

DATA TO GENERATE A NEW REGISTRATION KEY

START DATE: 16/04/2023 DAYS: 190 END DATE: 19/10/2024 *

TYPE: 1 USERS; 2 INSTANCES: 3 VALUES: FAF

PAID: Y It is ready to generate and activate a new registration key

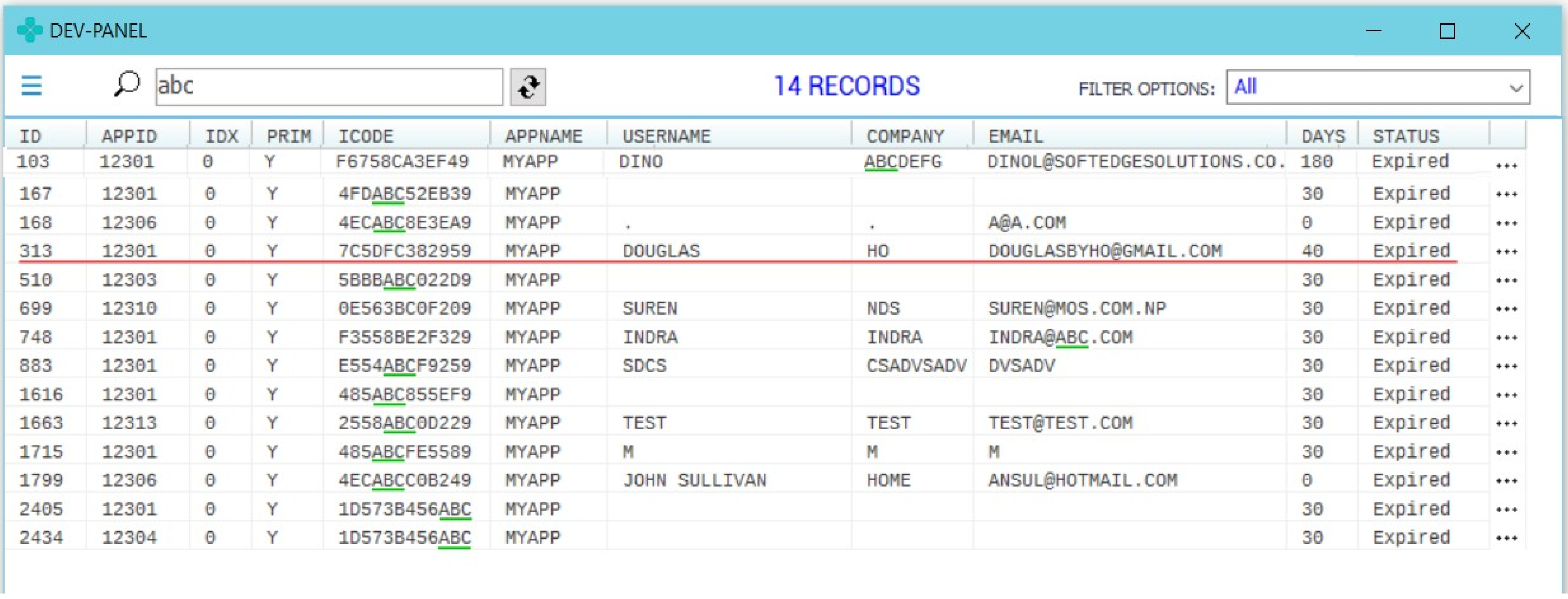
These are the current registration data
extracted from the current registration key

These are the data to create a new registration key
It will be applied when the user restarts his PC, only if PAYD=Y

This asterisk indicates that the remaining days of the previous period will be added to the new period.

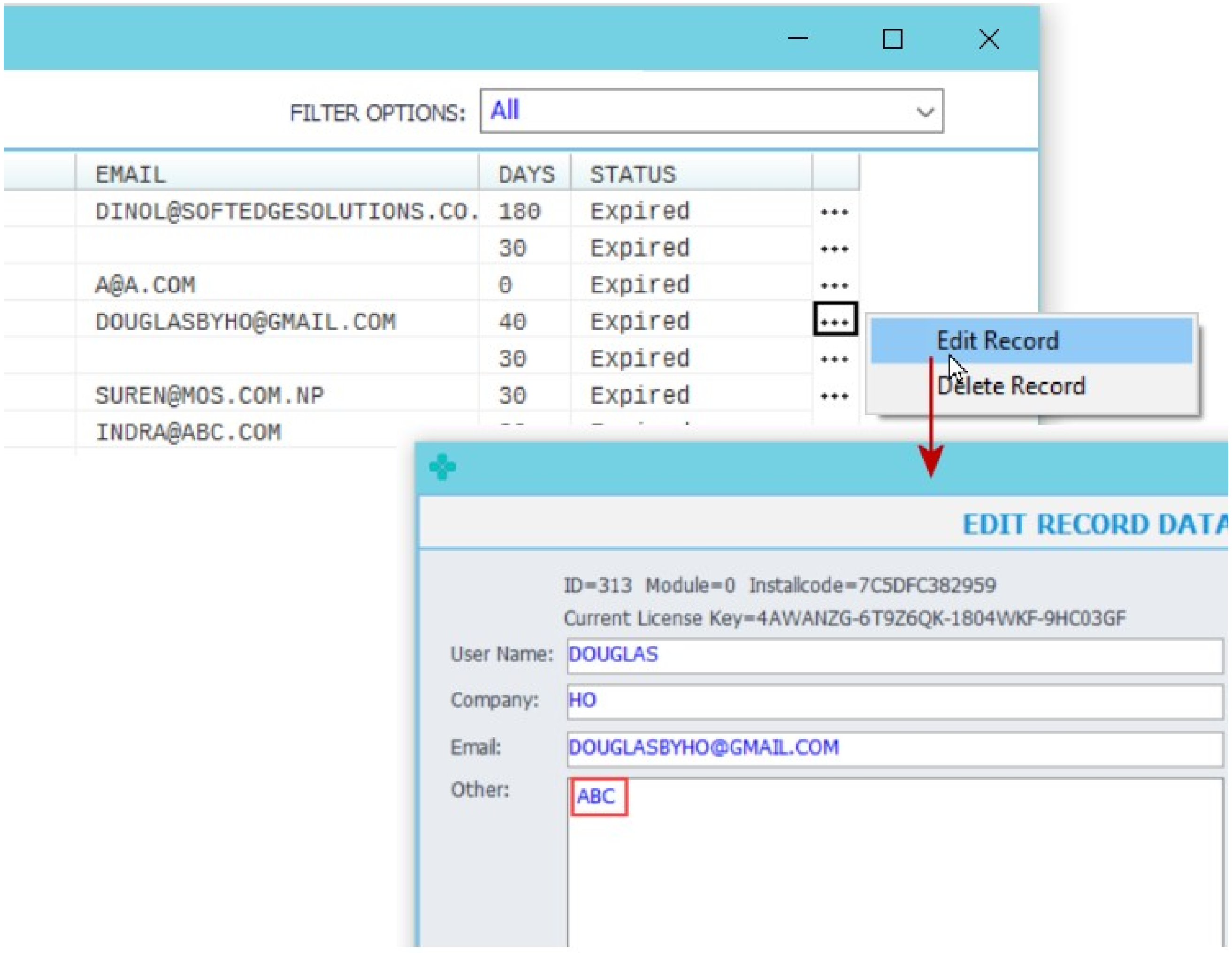
The Filter

Through this utility you can filter the records instantly. This affects all the fields of the records. Let's see below a screenshot where we have entered the search argument "abc" in the filter:



ID	APPID	IDX	PRIM	ICODE	APPNAME	USERNAME	COMPANY	EMAIL	DAYS	STATUS	
103	12301	0	Y	F6758CA3EF49	MYAPP	DINO	ABCDEFG	DINOL@SOFTEDGESOLUTIONS.CO.	180	Expired	•••
167	12301	0	Y	4FDABC52EB39	MYAPP				30	Expired	•••
168	12306	0	Y	4ECABC8E3EA9	MYAPP	.	.	A@A.COM	0	Expired	•••
313	12301	0	Y	7C5DFC382959	MYAPP	DOUGLAS	HO	DOUGLASBYHO@GMAIL.COM	40	Expired	•••
510	12303	0	Y	5BBBABC022D9	MYAPP				30	Expired	•••
699	12310	0	Y	0E563BC0F209	MYAPP	SUREN	NDS	SUREN@MOS.COM.NP	30	Expired	•••
748	12301	0	Y	F3558BE2F329	MYAPP	INDRA	INDRA	INDRA@ABC.COM	30	Expired	•••
883	12301	0	Y	E554ABCF9259	MYAPP	SDCS	CSADVSADV	DVSADV	30	Expired	•••
1616	12301	0	Y	485ABC855EF9	MYAPP				30	Expired	•••
1663	12313	0	Y	2558ABC0D229	MYAPP	TEST	TEST	TEST@TEST.COM	30	Expired	•••
1715	12301	0	Y	485ABCFE5589	MYAPP	M	M	M	30	Expired	•••
1799	12306	0	Y	4ECABCC0B249	MYAPP	JOHN SULLIVAN	HOME	ANSUL@HOTMAIL.COM	0	Expired	•••
2405	12301	0	Y	1D573B456ABC	MYAPP				30	Expired	•••
2434	12304	0	Y	1D573B456ABC	MYAPP				30	Expired	•••

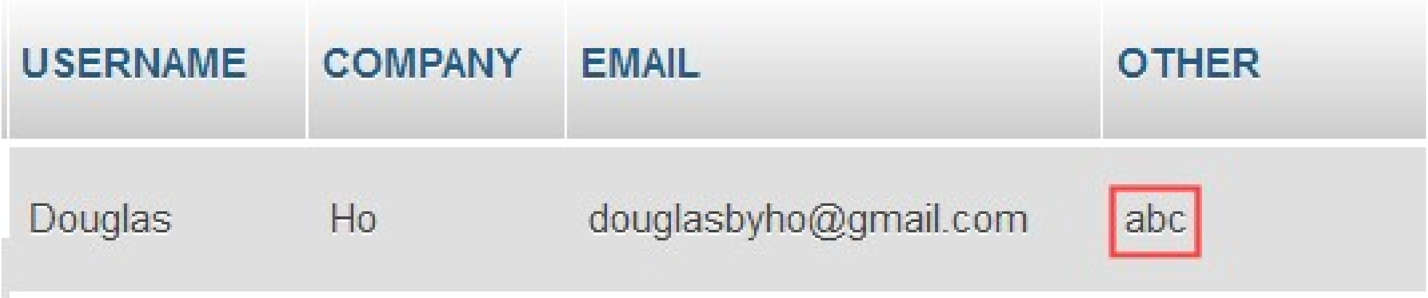
We have underlined in green the places where "abc" appears in the visible fields, but in the record with ID=313 it is not visible, that does not mean that it does not exist, since not all the fields are shown on the screen. To check it, we enter the three dots [...] to see the editing form and we can see below that the search argument “abc” is in the OTHER field. As you can see, there is no difference between upper and lower case:



EMAIL	DAYS	STATUS	
DINOL@SOFTEDGESOLUTIONS.CO.	180	Expired	•••
	30	Expired	•••
A@A.COM	0	Expired	•••
DOUGLASBYHO@GMAIL.COM	40	Expired	•••
	30	Expired	•••
SUREN@MOS.COM.NP	30	Expired	•••
INDRA@ABC.COM			

ID=313 Module=0 Installcode=7C5DFC382959
Current License Key=4AWANZG-6T9Z6QK-1804WKF-9HC03GF
User Name: DOUGLAS
Company: HO
Email: DOUGLASBYHO@GMAIL.COM
Other: ABC

We could also see it in the data in the database on the server through PHPMyAdmin.



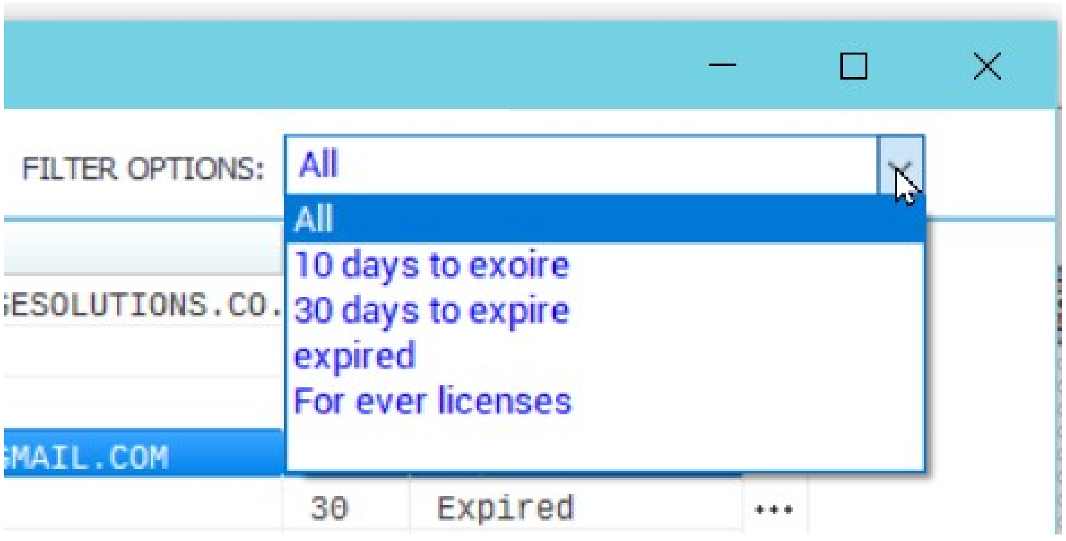
USERNAME	COMPANY	EMAIL	OTHER
Douglas	Ho	douglasbyho@gmail.com	abc

The Refresh button

Clicking on this button re-reads all the data from the server. It is necessary if you want to see the correct data when the registry has been modified, especially when the modification occurs when the user restarts the application and a new registration key is generated.

Filter Options

Below you can see the filter options. This can be useful when you want to see the records that are going to expire soon.



FILTER OPTIONS: All

How to Control the Application from the DevPanel

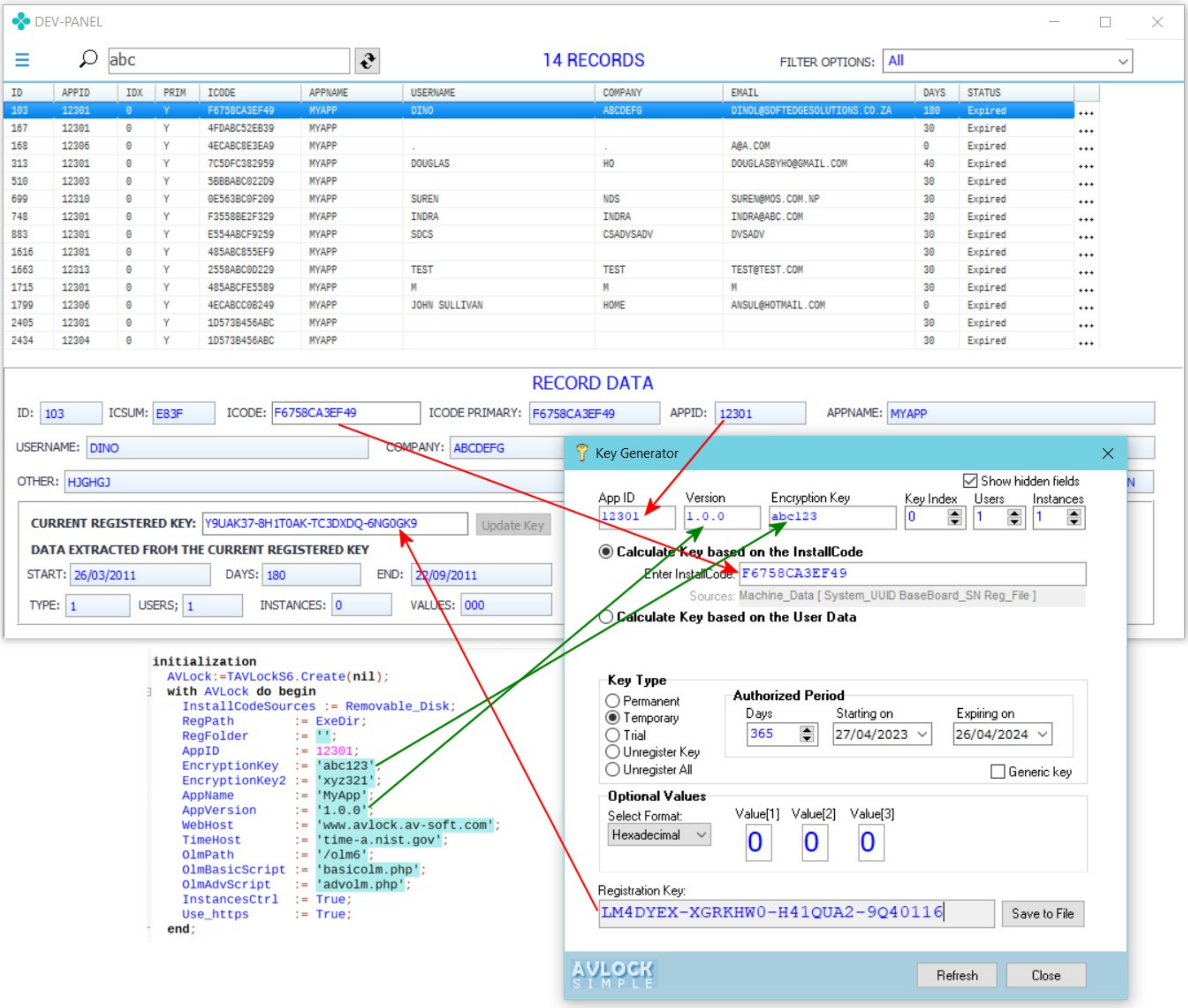
There are two ways to change the registration status of the application on the user's PC.

1. Generating a new registration key using the KeyGen key generator.
2. Entering the necessary data to generate a new key when the user restarts the application.

In both cases the new key will take effect after the user restarts the application. Below we will describe both options in detail:

1. Generating a new registration key using the KeyGen key generator.

See in the image below the data that you must use to create the new key:



DEV-PANEL

abc

14 RECORDS

FILTER OPTIONS: All

ID	APPID	IDX	PRIM	ICODE	APPNAME	USERNAME	COMPANY	EMAIL	DAYS	STATUS
103	12301	0	Y	F6758CA3EF49	MYAPP	DINO	ABCDEFG	DINOL@SOFTEDGESOLUTIONS.CO.ZA	180	Expired
167	12301	0	Y	4FDABC52EB39	MYAPP				30	Expired
168	12306	0	Y	4ECABC8E3EA9	MYAPP	.	.	A@A.COM	0	Expired
313	12301	0	Y	7C5DFC382959	MYAPP	DOUGLAS	HO	DOUGLASBYHO@GMAIL.COM	40	Expired
510	12303	0	Y	5BBBABC022D9	MYAPP				30	Expired
699	12310	0	Y	0E563BC0F209	MYAPP	SUREN	NDS	SUREN@MOS.COM.NP	30	Expired
748	12301	0	Y	F3558BE2F329	MYAPP	INDRA	INDRA	INDRA@ABC.COM	30	Expired
883	12301	0	Y	E554ABCF9259	MYAPP	SDCS	CSADVSADV	DVSADV	30	Expired
1616	12301	0	Y	485ABC855EF9	MYAPP				30	Expired
1663	12313	0	Y	2558ABC0D229	MYAPP	TEST	TEST	TEST@TEST.COM	30	Expired
1715	12301	0	Y	485ABCFE5589	MYAPP	M	M	M	30	Expired
1799	12306	0	Y	4ECABCC0B249	MYAPP	JOHN SULLIVAN	HOME	ANSUL@HOTMAIL.COM	0	Expired
2405	12301	0	Y	1D573B456ABC	MYAPP				30	Expired
2434	12304	0	Y	1D573B456ABC	MYAPP				30	Expired

RECORD DATA

ID: 103 ICSUM: E83F ICODE: F6758CA3EF49 ICODE PRIMARY: F6758CA3EF49 APPID: 12301 APPNAME: MYAPP

USERNAME: DINO COMPANY: ABCDEFG

OTHER: HJGHGJ

CURRENT REGISTERED KEY: Y9UAK37-8H1T0AK-TC3DXDQ-6NG0GK9

DATA EXTRACTED FROM THE CURRENT REGISTERED KEY

START: 26/03/2011 DAYS: 180 END: 22/09/2011

TYPE: 1 USERS; 1 INSTANCES: 0 VALUES: 000

```
initialization
  AVLock:=TAVLockS6.Create(nil);
  with AVLock do begin
    InstallCodeSources := Removable_Disk;
    RegPath          := ExeDir;
    RegFolder        := '';
    AppID            := 12301;
    EncryptionKey    := 'abc123';
    EncryptionKey2   := 'xyz321';
    AppName          := 'MyApp';
    AppVersion       := '1.0.0';
    WebHost          := 'www.avlock.av-soft.com';
    TimeHost         := 'time-a.nist.gov';
    OlmPath          := '/olm6';
    OlmBasicScript   := 'basicolm.php';
    OlmAdvScript     := 'advolm.php';
    InstancesCtrl    := True;
    Use_https        := True;
  end;
```

Key Generator

☑ Show hidden fields

App ID: 12301 Version: 1.0.0 Encryption Key: abc123 Key Index: 0 Users: 1 Instances: 1

● Calculate Key based on the InstallCode

Enter InstallCode: F6758CA3EF49

Sources: Machine_Data [System_UUID BaseBoard_SN Reg_File]

○ Calculate Key based on the User Data

Key Type

○ Permanent
● Temporary
○ Trial
○ Unregister Key
○ Unregister All

Authorized Period

Days: 365 Starting on: 27/04/2023 Expiring on: 26/04/2024

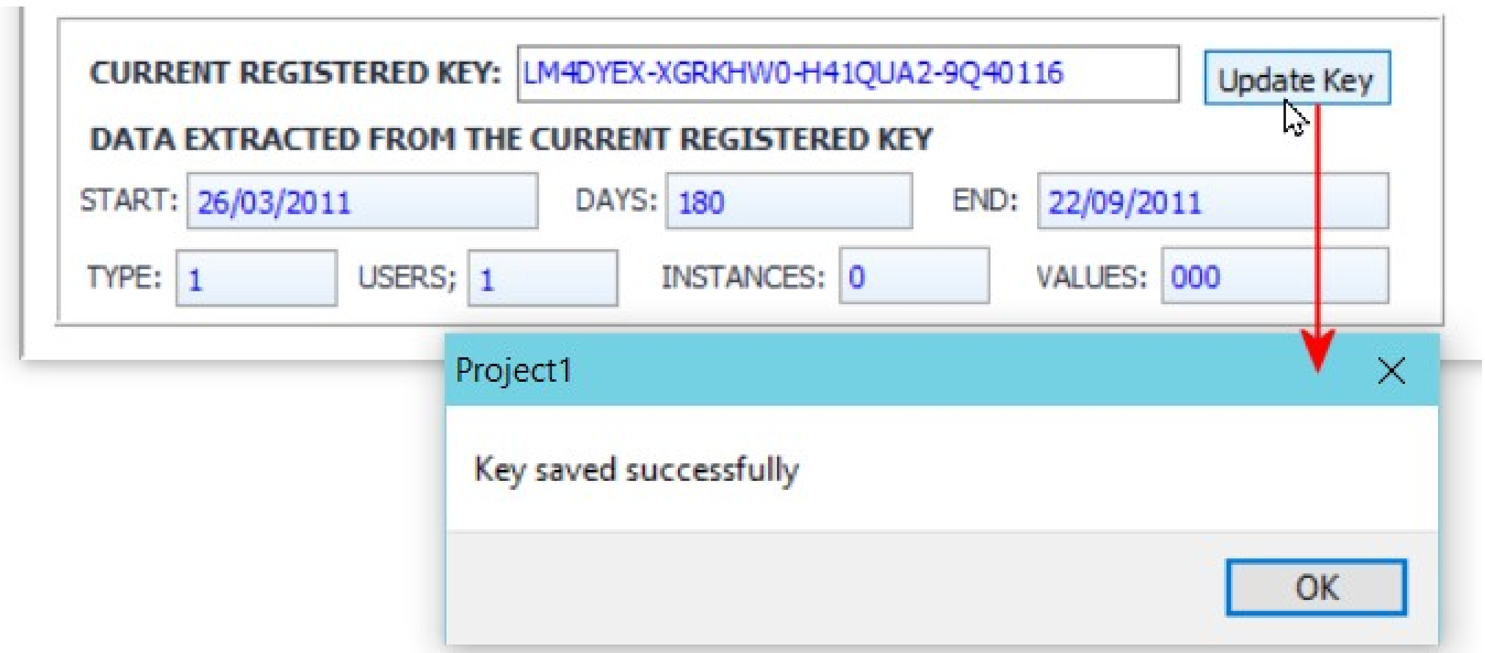
□ Generic key

Optional Values

Select Format: Hexadecimal Value[1]: 0 Value[2]: 0 Value[3]: 0

Registration Key: LM4DYEX-XGRKHW0-H41QUA2-9Q40116

Once the new key has been entered, we press the [Update Key] button to save the new key.



CURRENT REGISTERED KEY: LM4DYEX-XGRKHW0-H41QUA2-9Q40116

DATA EXTRACTED FROM THE CURRENT REGISTERED KEY

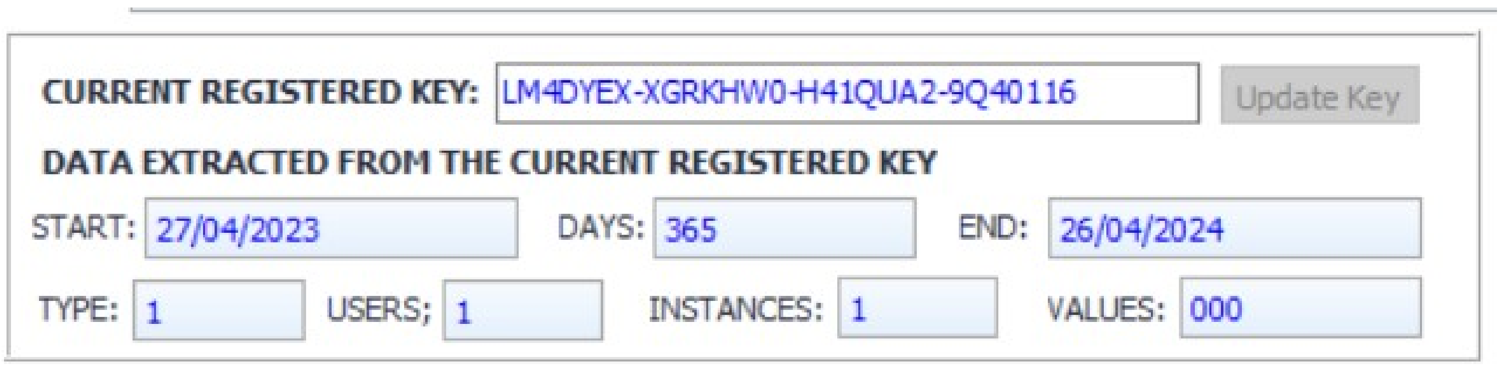
START: 26/03/2011 DAYS: 180 END: 22/09/2011

TYPE: 1 USERS; 1 INSTANCES: 0 VALUES: 000

Project1

Key saved successfully

Below we can see the new key with the data extracted from it.



CURRENT REGISTERED KEY: LM4DYEX-XGRKHW0-H41QUA2-9Q40116

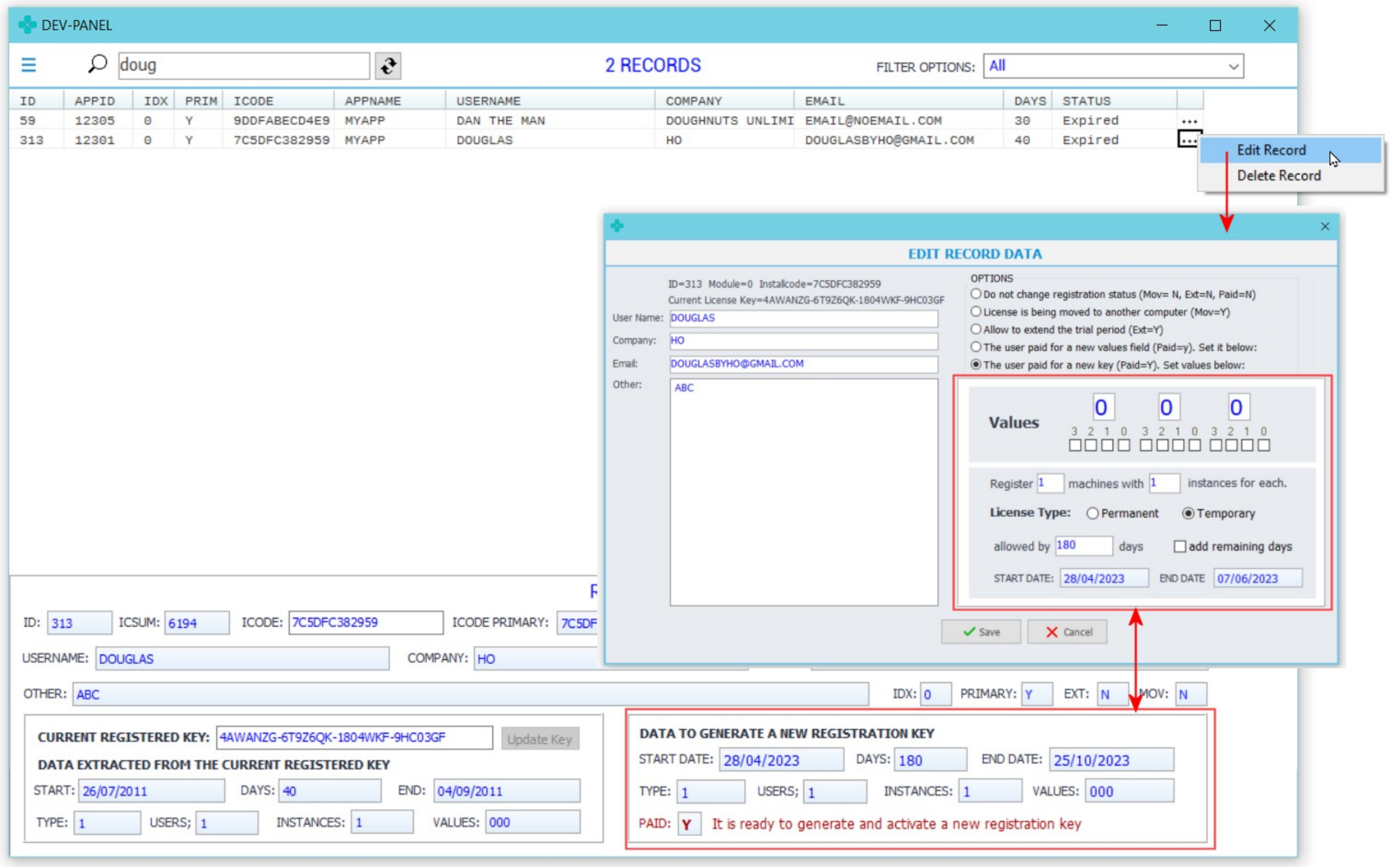
DATA EXTRACTED FROM THE CURRENT REGISTERED KEY

START: 27/04/2023 DAYS: 365 END: 26/04/2024

TYPE: 1 USERS; 1 INSTANCES: 1 VALUES: 000

The next time the user starts the application the new registration data will be applied.

1. Entering the necessary data to generate a new key when the user restarts the application.



ID	APPID	IDX	PRIM	ICODE	APPNAME	USERNAME	COMPANY	EMAIL	DAYS	STATUS
59	12305	0	Y	9DDFABECD4E9	MYAPP	DAN THE MAN	DOUGHNUTS UNLIMI	EMAIL@NOEMAIL.COM	30	Expired
313	12301	0	Y	7C5DFC382959	MYAPP	DOUGLAS	HO	DOUGLASBYHO@GMAIL.COM	40	Expired

EDIT RECORD DATA

ID=313 Module=0 Installcode=7C5DFC382959
Current License Key=4AWANZG-6T9Z6QK-1804WKF-9HC03GF

User Name: DOUGLAS
Company: HO
Email: DOUGLASBYHO@GMAIL.COM
Other: ABC

OPTIONS
○ Do not change registration status (Mov= N, Ext=N, Paid=N)
○ License is being moved to another computer (Mov=Y)
○ Allow to extend the trial period (Ext=Y)
○ The user paid for a new values field (Paid=y). Set it below:
● The user paid for a new key (Paid=Y). Set values below:

Values 0 0 0
3 2 1 0 □□□□ 3 2 1 0 □□□□ 3 2 1 0 □□□□

Register 1 machines with 1 instances for each.
License Type: ○ Permanent ● Temporary
allowed by 180 days □ add remaining days
START DATE: 28/04/2023 END DATE 07/06/2023

ID: 313 ICSUM: 6194 ICODE: 7C5DFC382959 ICODE PRIMARY: 7C5DF
USERNAME: DOUGLAS COMPANY: HO
OTHER: ABC IDX: 0 PRIMARY: Y EXT: N MOV: N

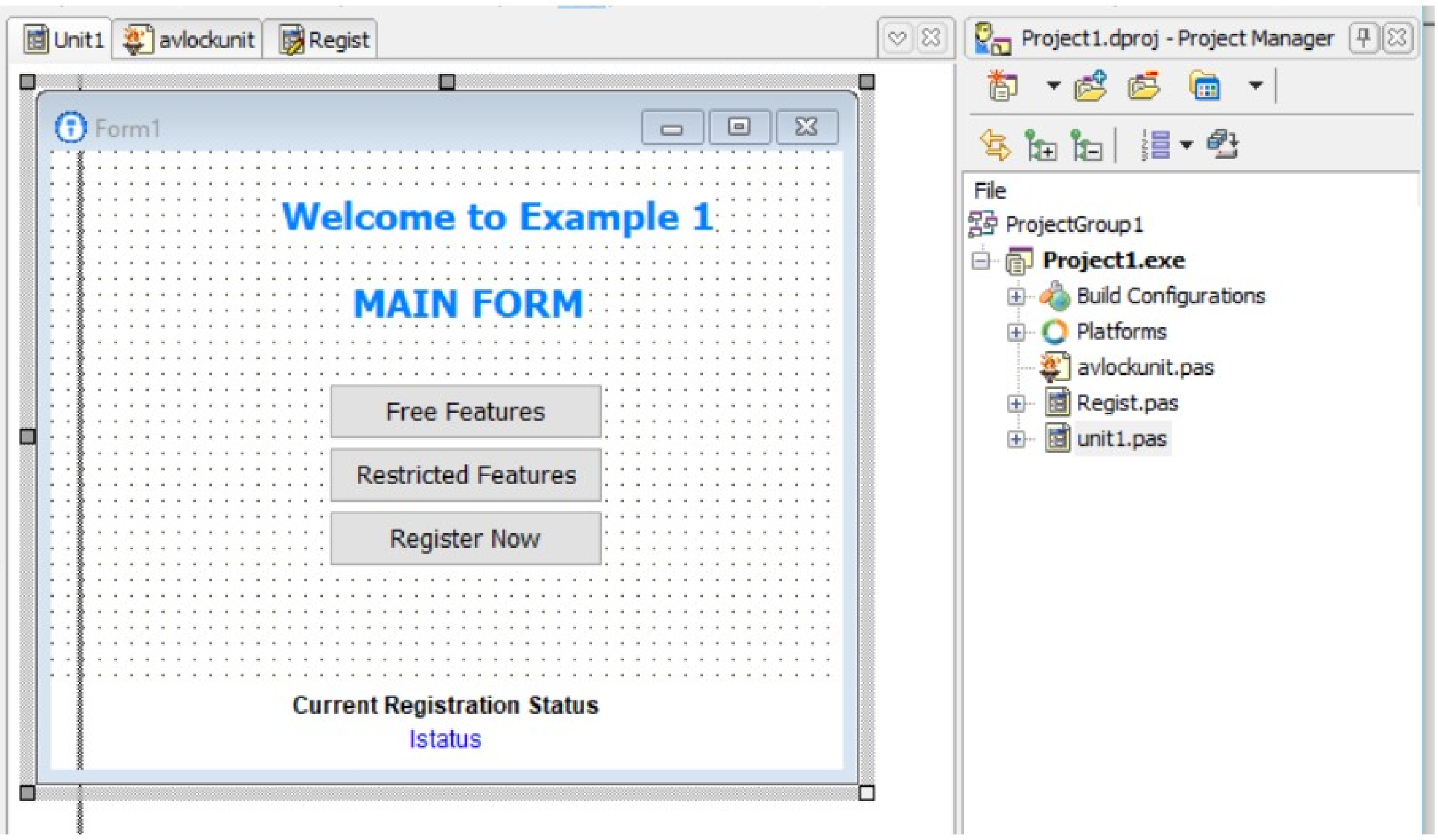
CURRENT REGISTERED KEY: 4AWANZG-6T9Z6QK-1804WKF-9HC03GF Update Key
DATA EXTRACTED FROM THE CURRENT REGISTERED KEY
START: 26/07/2011 DAYS: 40 END: 04/09/2011
TYPE: 1 USERS; 1 INSTANCES: 1 VALUES: 000

DATA TO GENERATE A NEW REGISTRATION KEY
START DATE: 28/04/2023 DAYS: 180 END DATE: 25/10/2023
TYPE: 1 USERS; 1 INSTANCES: 1 VALUES: 000
PAID: Y It is ready to generate and activate a new registration key

OLM1 Example

We are going to start by explaining a very simple example that uses the scheme
general that we will use in all the examples.
Our example is composed of two forms and an auxiliary unit:
- The main form "Form1" which would be the main form of your application.
- The "Regist" form, which is where the user can carry out the registration process and see its status.
- Avlockunit.pas is the auxiliary unit where we include most of the functionality and configuration in the initialization section.

Below is its schematic in the Delphi IDE:

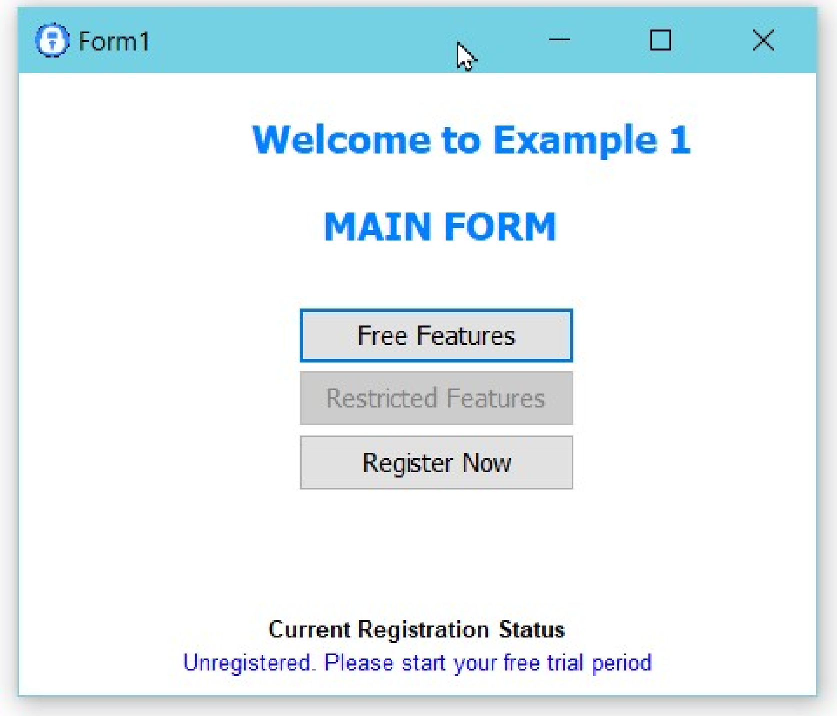


In the main form we have three buttons:
1. “Free features” The functionalities associated with this button will always be available, even when the authorized period has already expired.
2. "Restricted Features" The functionalities associated with this button will only be available when the registration status is "Registered"
3. "Register now" This button allows access to the registration form.

The registration form is accessed with the DoRegister procedure:
procedure DoRegister(force:boolean);
If (force=true) it is accessed unconditionally, this is how it is accessed from the “Register Now” button.
If (force=false) it is only accessed when the state is expired or will expire soon, this is how it is accessed from the OnCreate event handler, this way the user will be notified that it is time to renew the license.

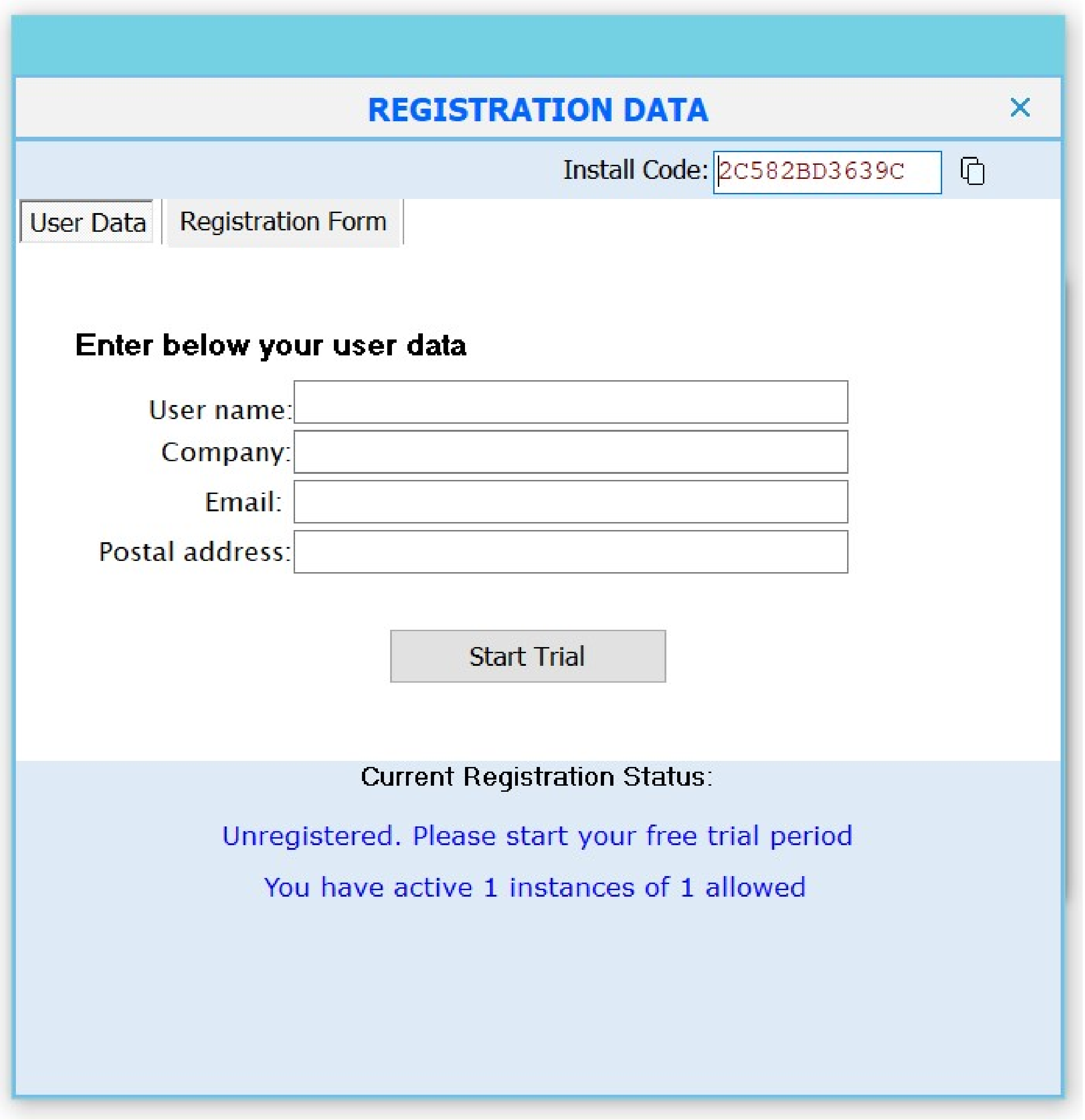
The package includes all the source code for the examples. You might want to take a look at it to get an idea of how it's structured.

Now let's see step by step how to control this example through the DevPanel.
When we first start the example, we are presented with the main form as seen below:



Unregistered. Please start your free trial period

Notice that the registration status is “Unregistered”. By clicking on the “Register Now” button we are presented with the registration form:



REGISTRATION DATA

Install Code: 2C582BD3639C

Enter below your user data

User name:

Company:

Email:

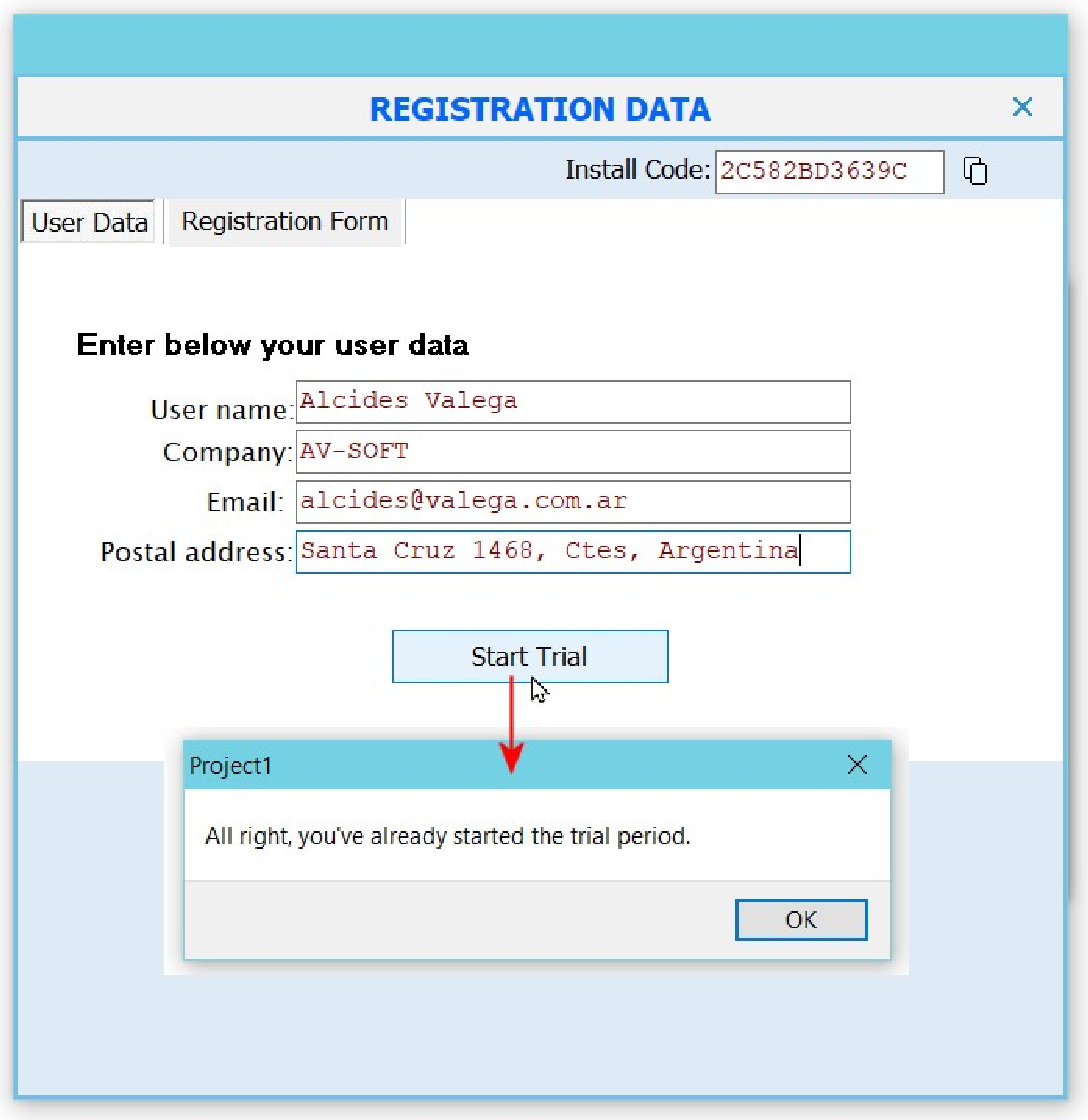
Postal address:

Current Registration Status:

Unregistered. Please start your free trial period

You have active 1 instances of 1 allowed

To register you must enter the data and click on the "Start Trial" button. As it's shown in the following:



REGISTRATION DATA

Install Code: 2C582BD3639C

Enter below your user data

User name: Alcides Valega

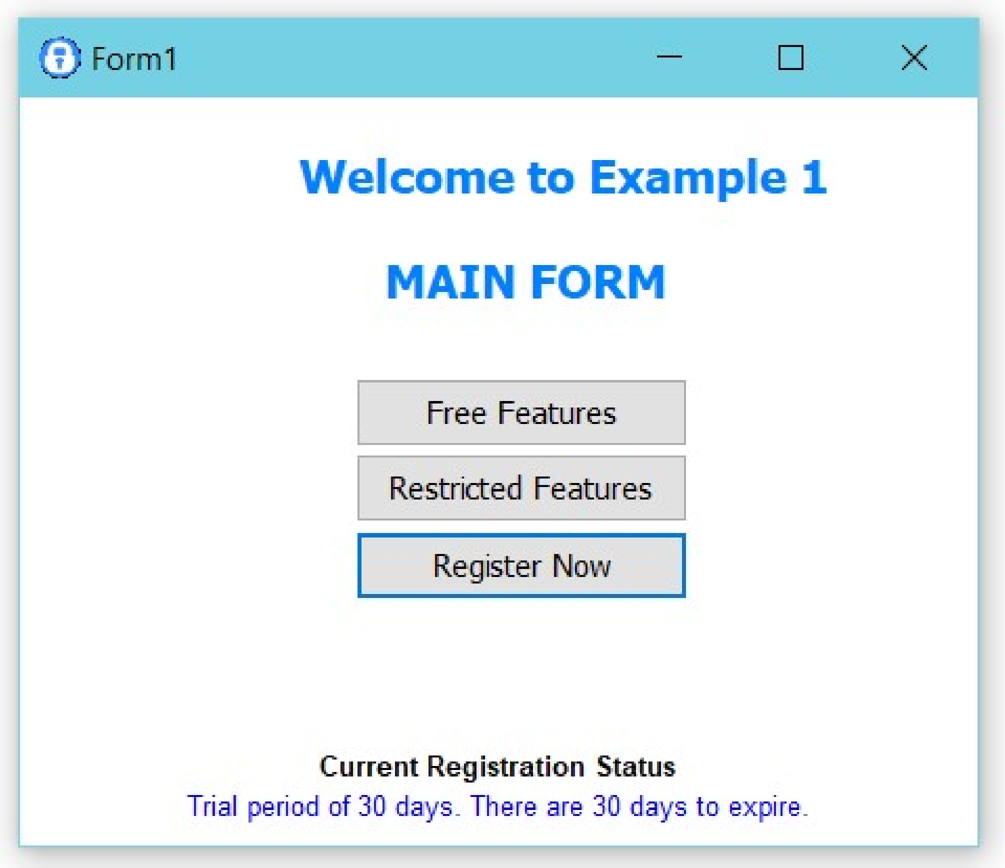
Company: AV-SOFT

Email: alcides@valega.com.ar

Postal address: Santa Cruz 1468, Ctes, Argentina

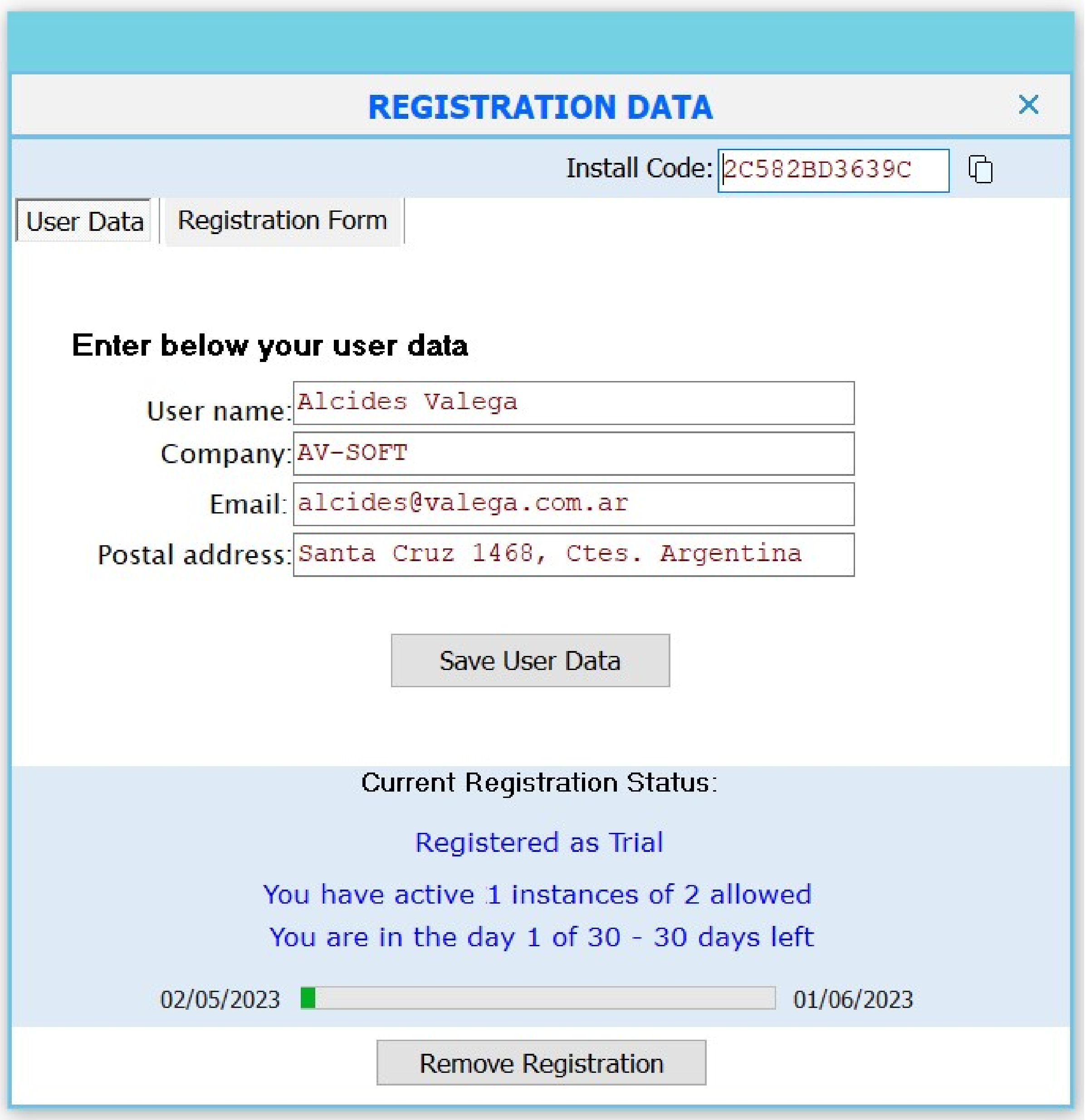
All right, you've already started the trial period.

We immediately return to the main form where we can see the changes made. Now the “Restricted Features” button is enabled and the message at the bottom shows the new registration status:



Current Registration Status
Trial period of 30 days. There are 30 days to expire.

We enter the registration form again with the “Register Now” button. We can see that we are on day 1 of the authorized 30-day period.
We can also see the “Remove Registration” button at the bottom of the form. We will use it only during the tests to eliminate the registration data and to be able to restart the process as if it were the first entry to the example. Later in your application it would be convenient to delete it.



Install Code: 2C582BD3639C

User name: Alcides Valega
Company: AV-SOFT
Email: alcides@valega.com.ar
Postal address: Santa Cruz 1468, Ctes. Argentina

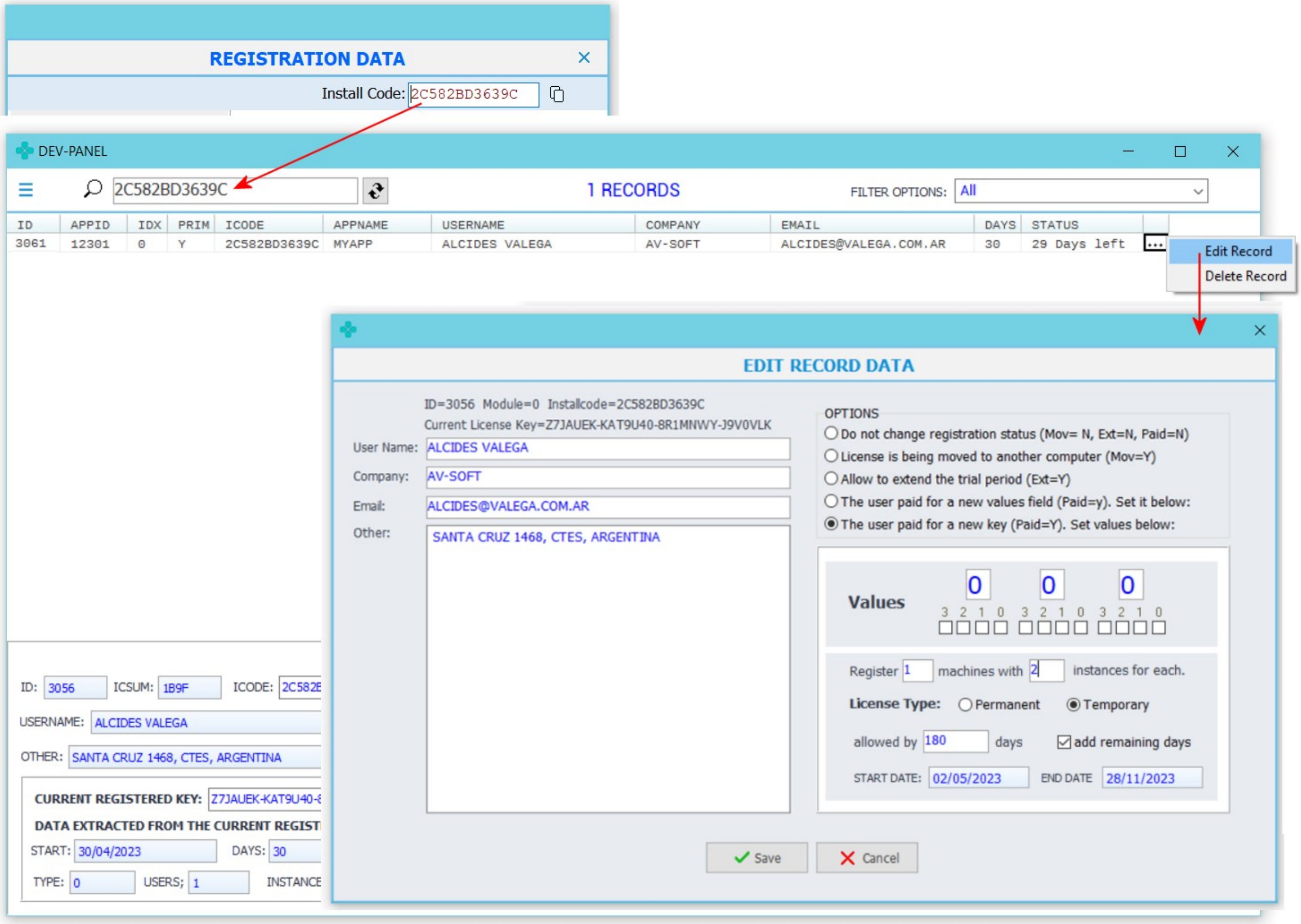
Current Registration Status:

Registered as Trial

You have active 1 instances of 2 allowed
You are in the day 1 of 30 - 30 days left

02/05/2023 01/06/2023

Now we are going to see how we can manage the registration status from the DevPanel.
In order to locate the recently created record in the DevPanel, we copy the Installcode from the form as shown in the image below. You will immediately see the corresponding record.
From the three dots [...] access the registry editing form and select the option “The user paid for a new key (Paid=Y)”.



REGISTRATION DATA

Install Code: 2C582BD3639C

DEV-PANEL

2C582BD3639C — 1 RECORDS — FILTER OPTIONS: All

ID	APPID	IDX	PRIM	ICODE	APPNAME	USERNAME	COMPANY	EMAIL	DAYS	STATUS
3061	12301	0	Y	2C582BD3639C	MYAPP	ALCIDES VALEGA	AV-SOFT	ALCIDES@VALEGA.COM.AR	30	29 Days left

ID: 3056 ICSUM: 1B9F ICODE: 2C582E

USERNAME: ALCIDES VALEGA

OTHER: SANTA CRUZ 1468, CTES, ARGENTINA

CURRENT REGISTERED KEY: Z7JAUEK-KAT9U40-8

DATA EXTRACTED FROM THE CURRENT REGIST

START: 30/04/2023 DAYS: 30

TYPE: 0 USERS; 1 INSTANCE

EDIT RECORD DATA

ID=3056 Module=0 Installcode=2C582BD3639C

Current License Key=Z7JAUEK-KAT9U40-8R1MNWY-J9V0VLK

User Name: ALCIDES VALEGA

Company: AV-SOFT

Email: ALCIDES@VALEGA.COM.AR

Other: SANTA CRUZ 1468, CTES, ARGENTINA

OPTIONS

- ○ Do not change registration status (Mov= N, Ext=N, Paid=N)
- ○ License is being moved to another computer (Mov=Y)
- ○ Allow to extend the trial period (Ext=Y)
- ○ The user paid for a new values field (Paid=y). Set it below:
- ● The user paid for a new key (Paid=Y). Set values below:

Values 0 0 0

3 2 1 0 □□□□ 3 2 1 0 □□□□ 3 2 1 0 □□□□

Register 1 machines with 2 instances for each.

License Type: ○ Permanent ● Temporary

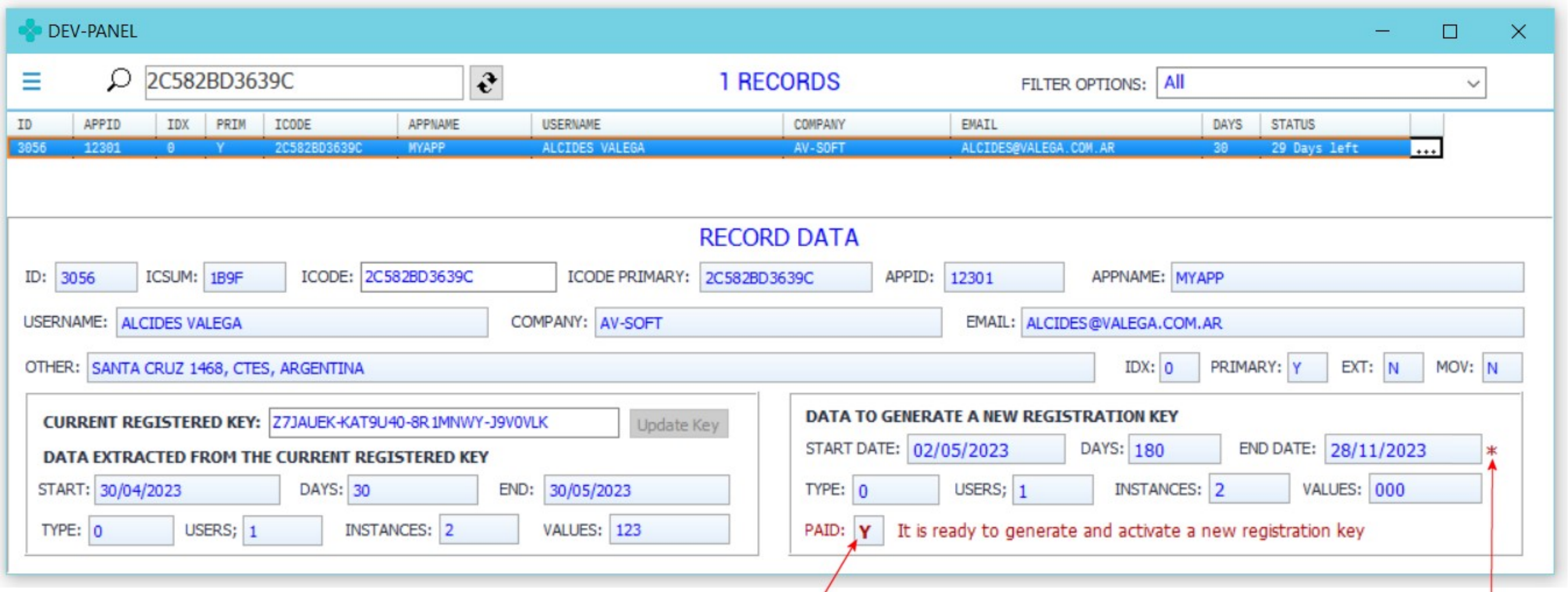
allowed by 180 days ☑ add remaining days

START DATE: 02/05/2023 END DATE 28/11/2023

Then modify the registration data as requested by the user. In this case, for a single machine, 2 instances, a 180-day temporary license. And we mark that the remaining days of the previous period are added to the new period, in this case there are 30 days that will be added to the 180 indicated. It is important to save these days because otherwise the user would have to wait until the last day of the current period to renew the license and this way the user can renew their license at any time without losing days of use.

In this example we do not use the Values field, so we leave it at 000.

Finally we click on the “Save” button to save the data. See the screenshot below. Notice that the field PAID=Y, which is indicating that the user has paid for a new license, in this case temporary for 180 days :



DEV-PANEL

2C582BD3639C — 1 RECORDS — FILTER OPTIONS: All

ID	APPID	IDX	PRIM	ICODE	APPNAME	USERNAME	COMPANY	EMAIL	DAYS	STATUS
3056	12301	0	Y	2C582BD3639C	MYAPP	ALCIDES VALEGA	AV-SOFT	ALCIDES@VALEGA.COM.AR	30	29 Days left

RECORD DATA

ID: 3056 ICSUM: 1B9F ICODE: 2C582BD3639C ICODE PRIMARY: 2C582BD3639C APPID: 12301 APPNAME: MYAPP

USERNAME: ALCIDES VALEGA COMPANY: AV-SOFT EMAIL: ALCIDES@VALEGA.COM.AR

OTHER: SANTA CRUZ 1468, CTES, ARGENTINA IDX: 0 PRIMARY: Y EXT: N MOV: N

CURRENT REGISTERED KEY: Z7JAUEK-KAT9U40-8R1MNWY-J9V0VLK

DATA EXTRACTED FROM THE CURRENT REGISTERED KEY

START: 30/04/2023 DAYS: 30 END: 30/05/2023

TYPE: 0 USERS; 1 INSTANCES: 2 VALUES: 123

DATA TO GENERATE A NEW REGISTRATION KEY

START DATE: 02/05/2023 DAYS: 180 END DATE: 28/11/2023 *

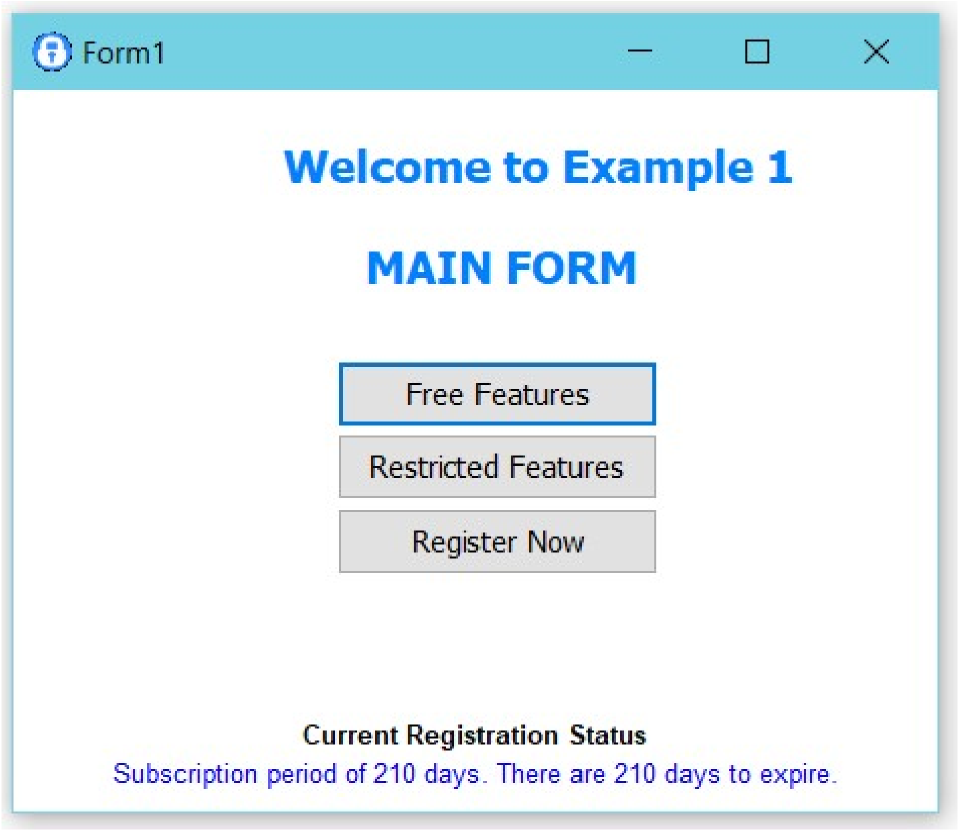
TYPE: 0 USERS; 1 INSTANCES: 2 VALUES: 000

PAID: Y It is ready to generate and activate a new registration key

(PAID=Y) means that this data will be applied when the user restarts the application

This asterisk indicates that the remaining days of the previous period will be added to the new period

Since the “add remaining days” check box has been marked, the remaining days of the current period will be added to the 180 days, in this case the 30 days remaining from the trial period, so the new period will be 210 days. See below the screenshot after having restarted the application:

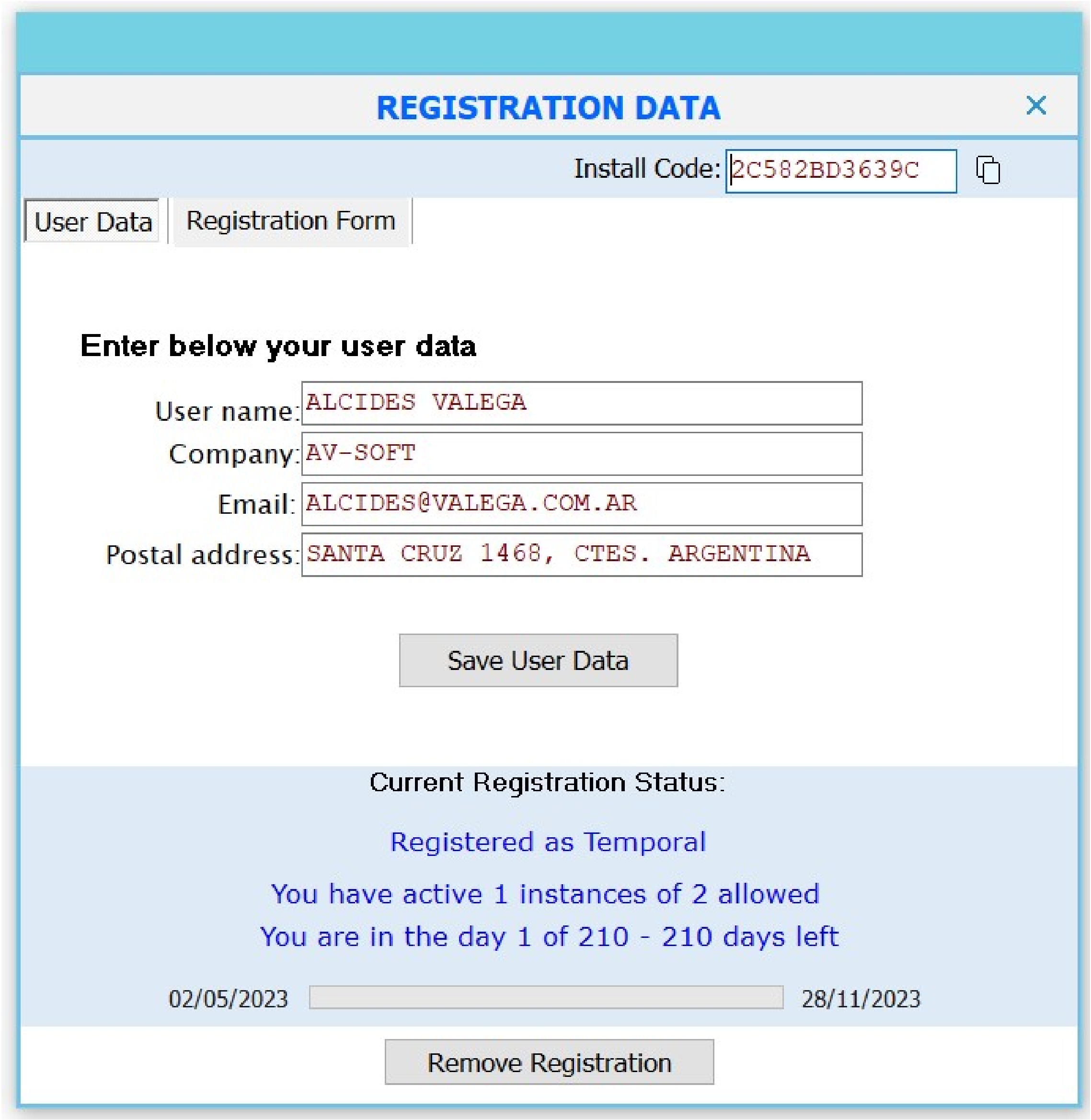


Welcome to Example 1

MAIN FORM

Current Registration Status
Subscription period of 210 days. There are 210 days to expire.

By clicking on the "Register Now" button we can see the details of the registration status:



Install Code: 2C582BD3639C

Enter below your user data

User name: ALCIDES VALEGA
Company: AV-SOFT
Email: ALCIDES@VALEGA.COM.AR
Postal address: SANTA CRUZ 1468, CTES. ARGENTINA

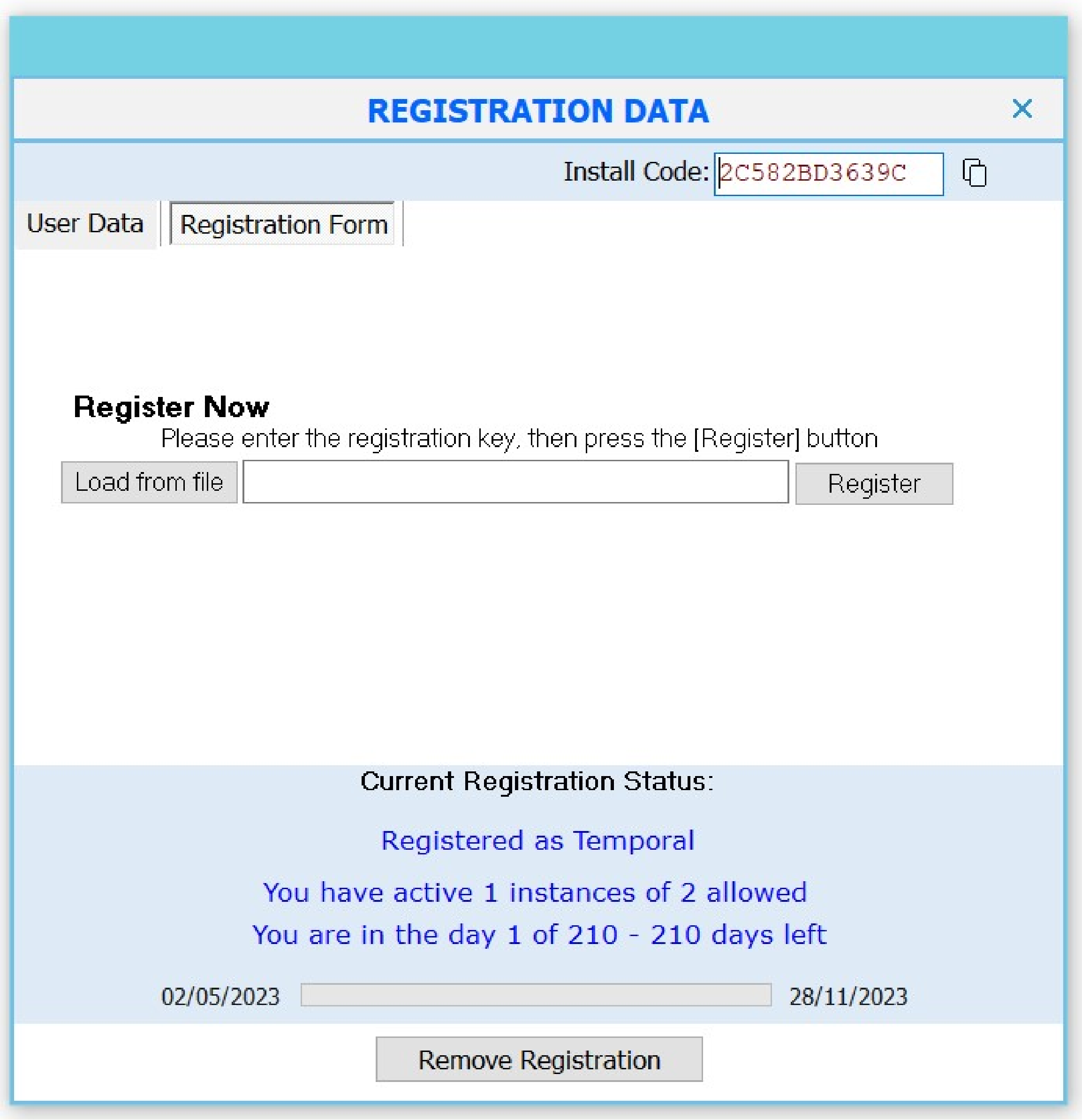
Current Registration Status:

Registered as Temporal

You have active 1 instances of 2 allowed
You are in the day 1 of 210 - 210 days left

02/05/2023 28/11/2023

Below we show the “Registration form” tab. Allows you to register a new license through a new key generated with the GenKey utility as we did in the “noolm” example.



Install Code: 2C582BD3639C

Register Now

Please enter the registration key, then press the [Register] button

Current Registration Status:

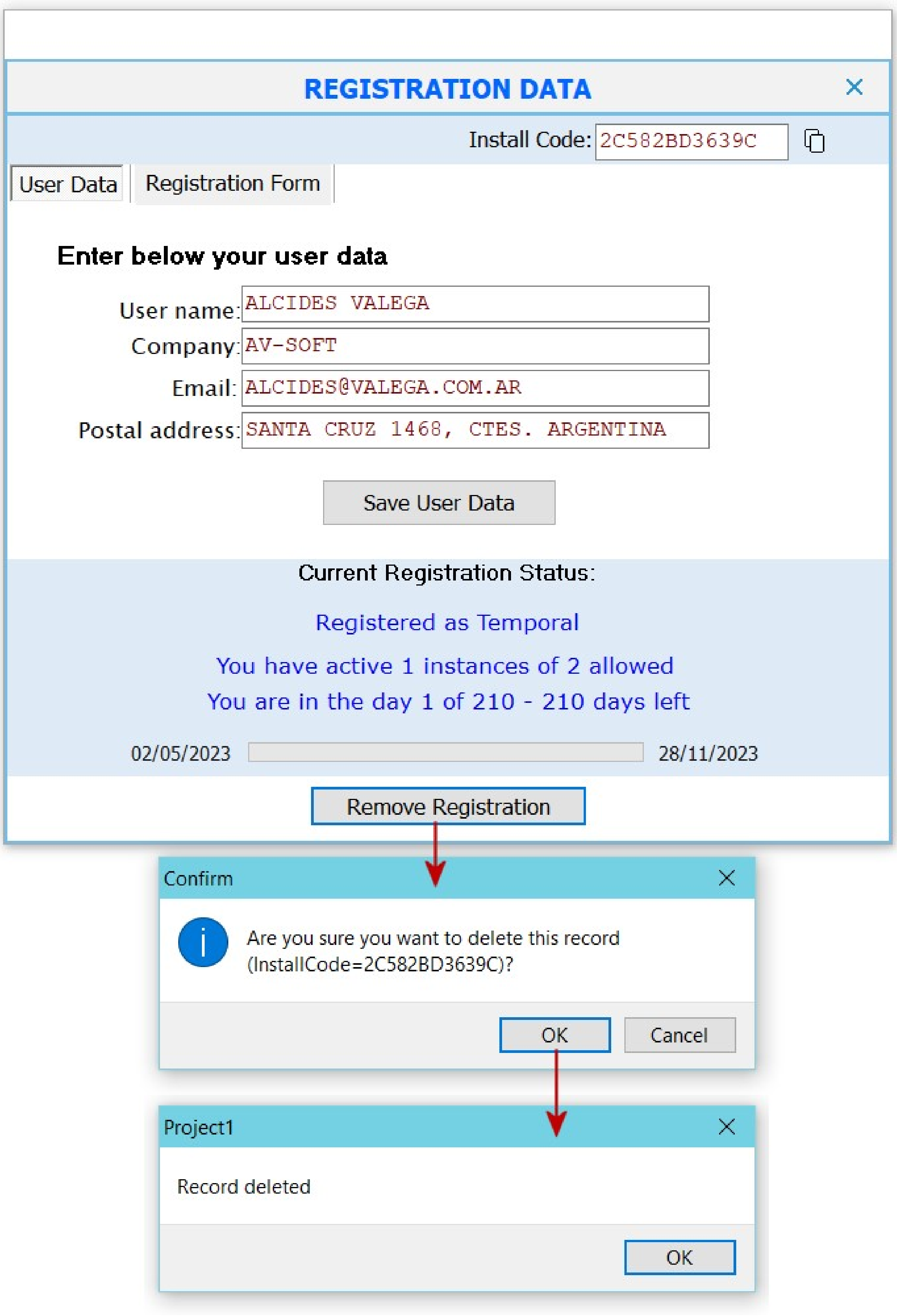
Registered as Temporal

You have active 1 instances of 2 allowed

You are in the day 1 of 210 - 210 days left

02/05/2023 28/11/2023

The “Remove Registration” button allows you to delete the registration from the database and the data stored locally. This allows us to test the entire process again from scratch.



Install Code: 2C582BD3639C

Enter below your user data

User name: ALCIDES VALEGA
Company: AV-SOFT
Email: ALCIDES@VALEGA.COM.AR
Postal address: SANTA CRUZ 1468, CTES. ARGENTINA

Current Registration Status:

Registered as Temporal

You have active 1 instances of 2 allowed

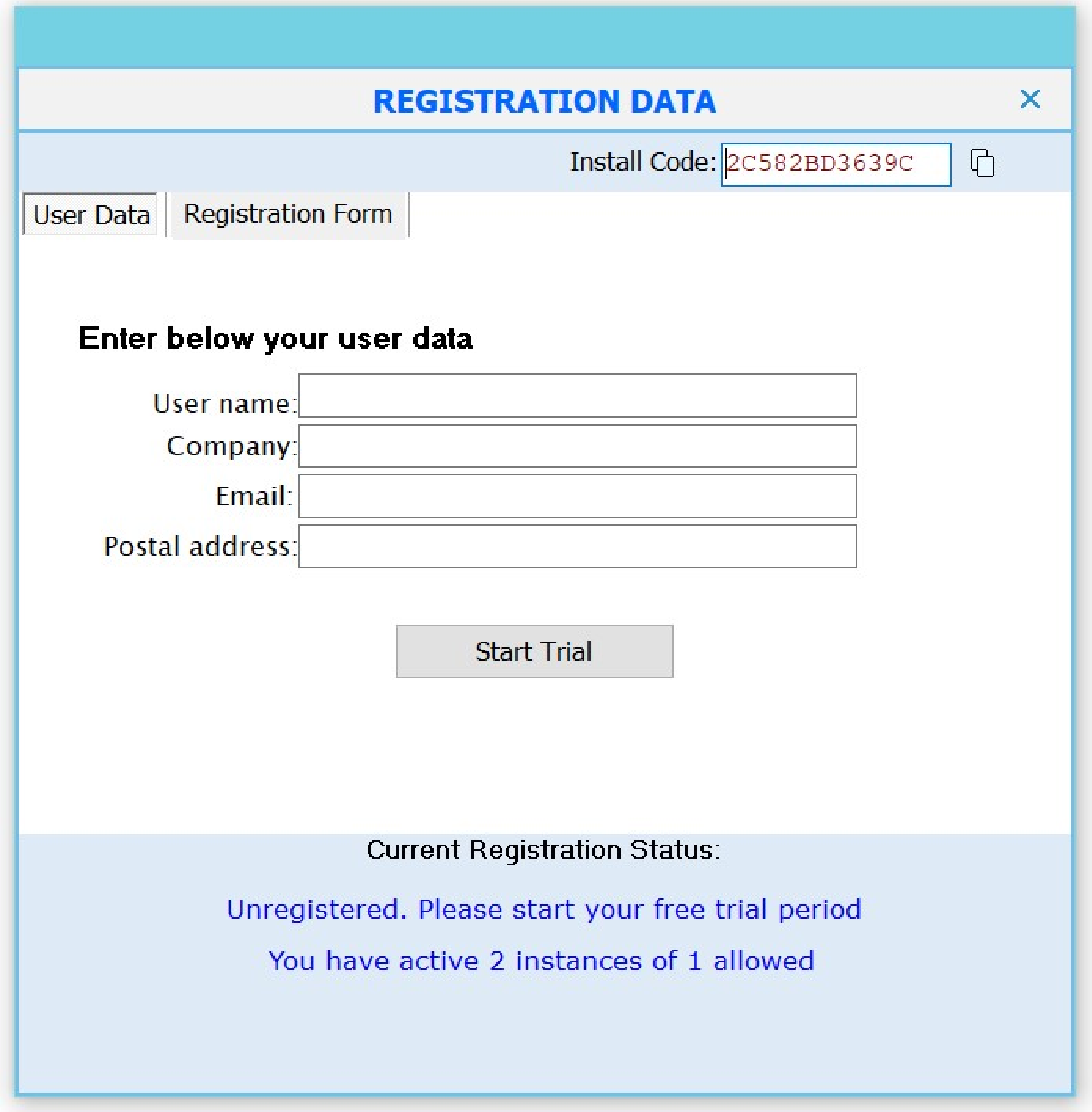
You are in the day 1 of 210 - 210 days left

02/05/2023 28/11/2023

Are you sure you want to delete this record (InstallCode=2C582BD3639C)?

Record deleted

And in this way we return to the initial situation, Not Registered.



REGISTRATION DATA

Install Code: 2C582BD3639C

Enter below your user data

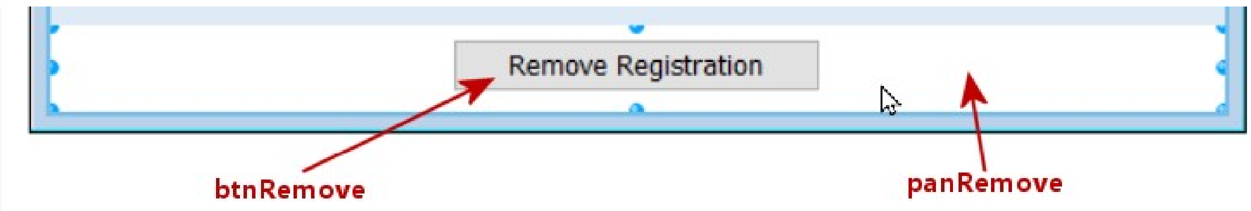
User name:
Company:
Email:
Postal address:

Current Registration Status:

Unregistered. Please start your free trial period

You have active 2 instances of 1 allowed

Once the tests are finished you can remove the “panRemove” panel and the “btnRemove” button. See the image below:

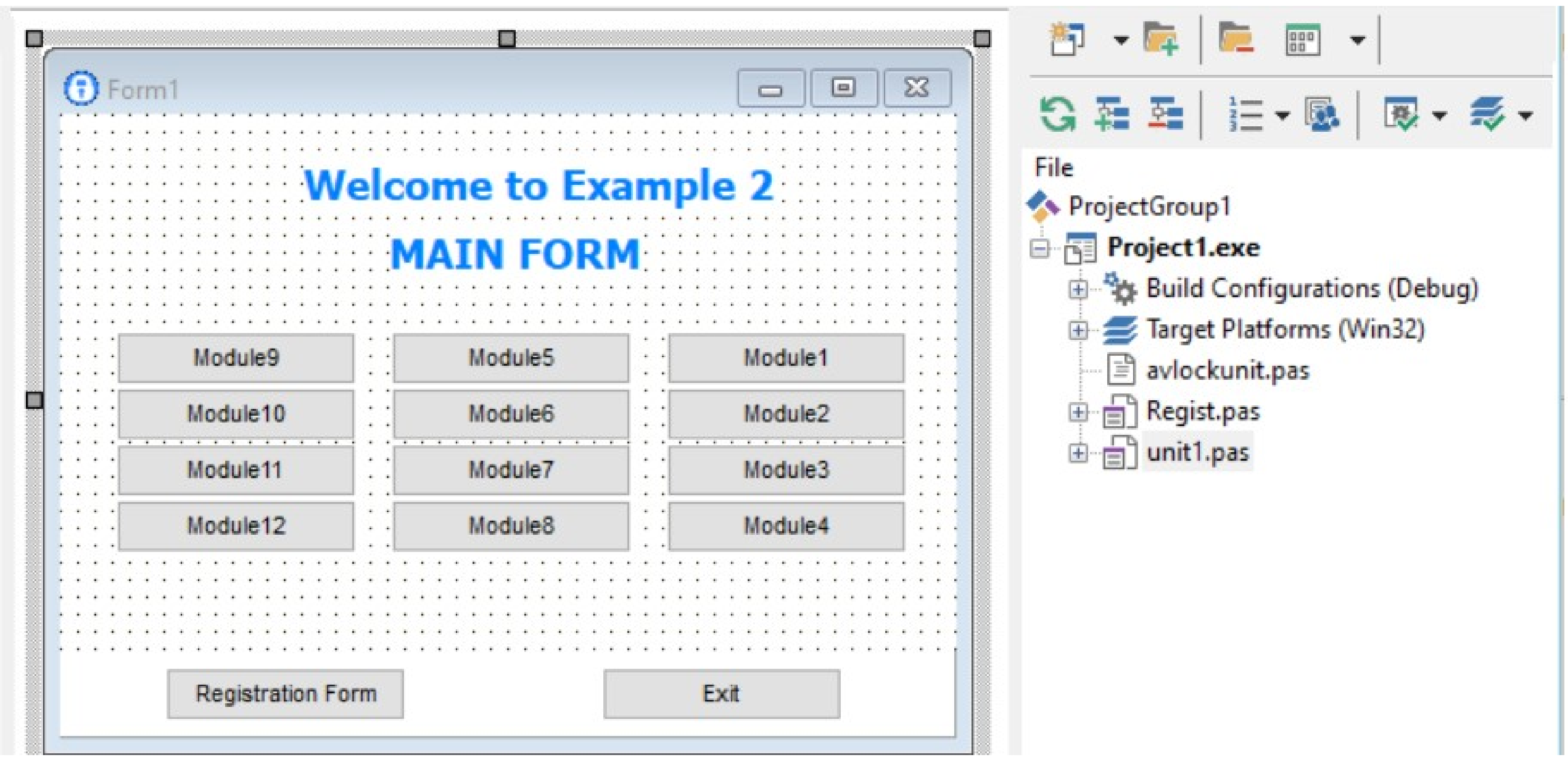


Also remove the code associated with these elements.

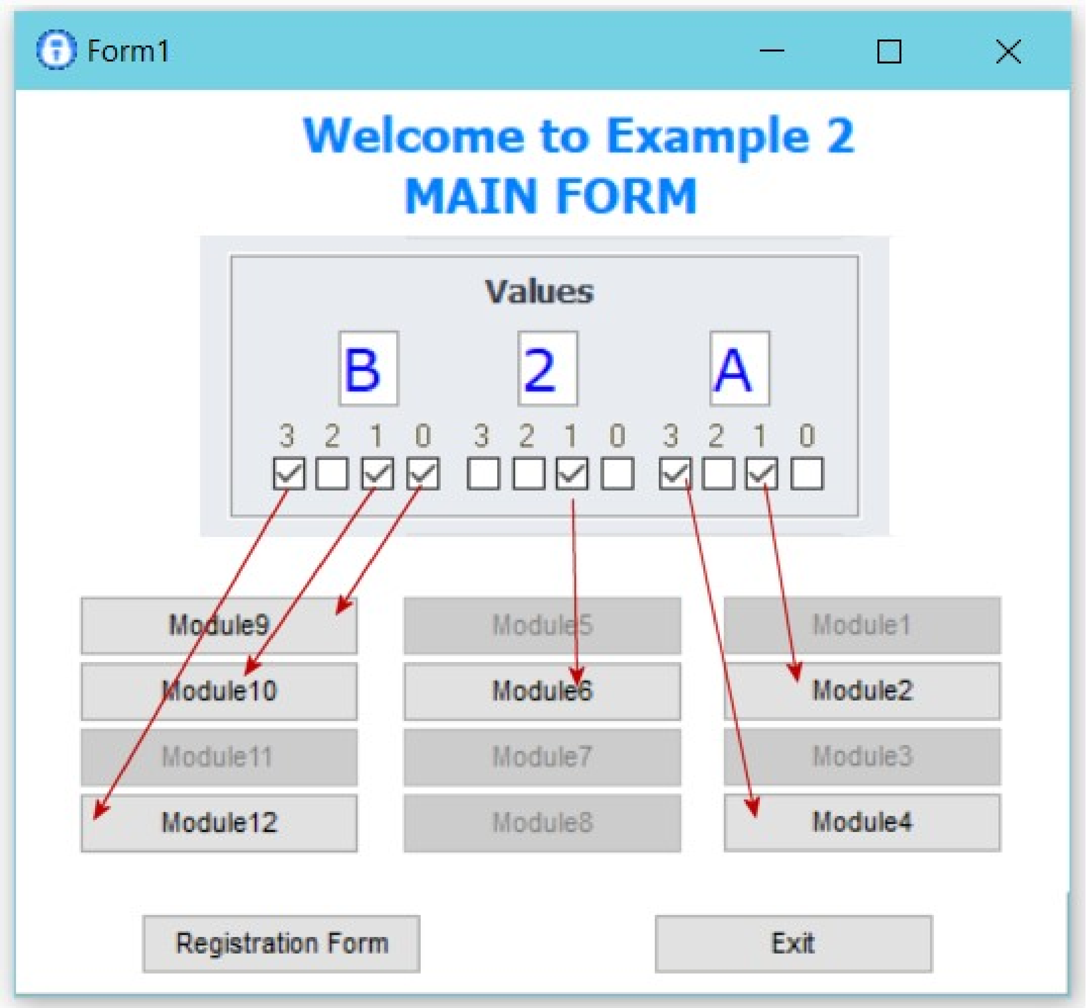
OLM2 Example

Example 2 has the same operating scheme as example 1. The only difference is that in this case the Values field is used to manage 12 application modules. Below we see in the main form the 12 buttons that allow access to these modules. The Values field supports 3 hexadecimal digits. Each of these digits admits 4 bits (a nibble), so in total we have 12 bits that will allow us to enable/disable each of the modules in the example.

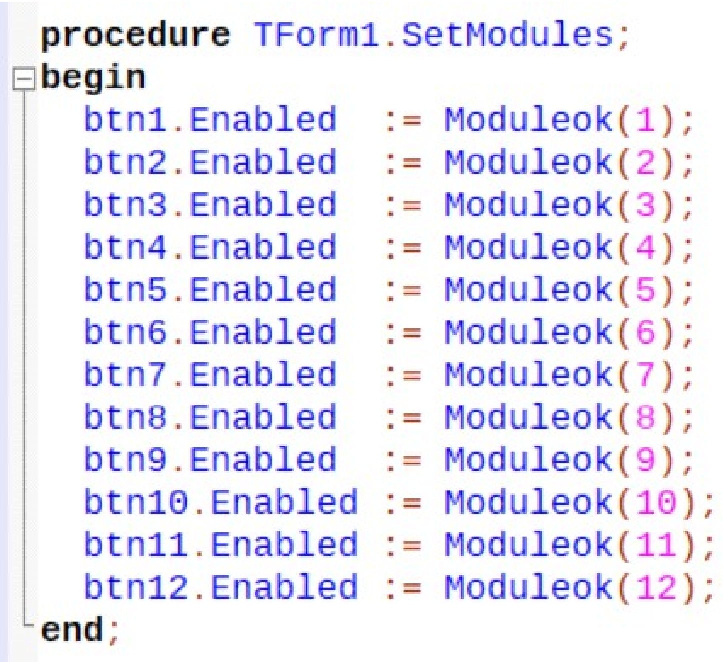
Below is the main form in the Delphi IDE:



The image below shows how the module buttons are enabled/disabled based on each bit of the Values field. For more information see the section on the DevPanel utility.

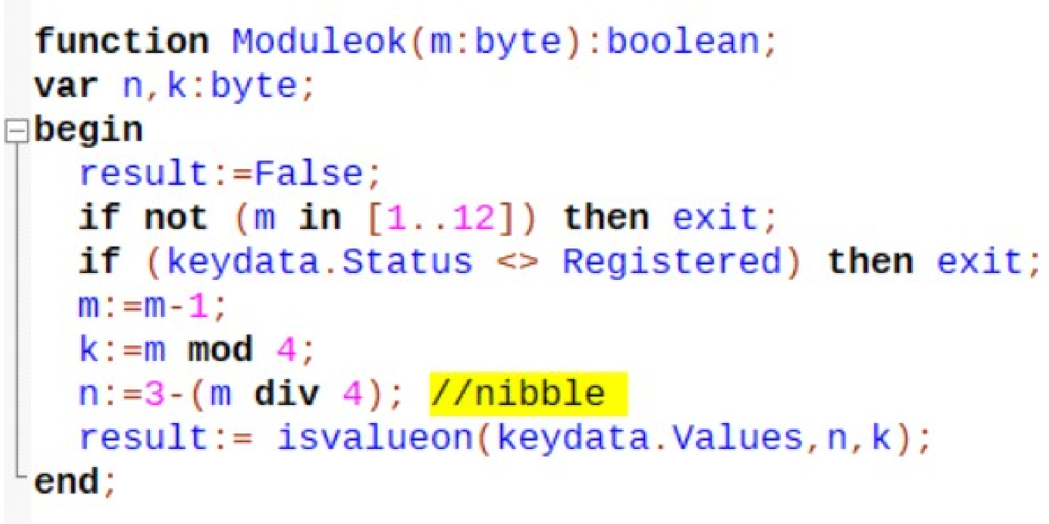


Below we can see the code of the SetModules procedure of the main unit unit1.php that allows to activate/deactivate the buttons of the modules according to the value contained in the Values field.



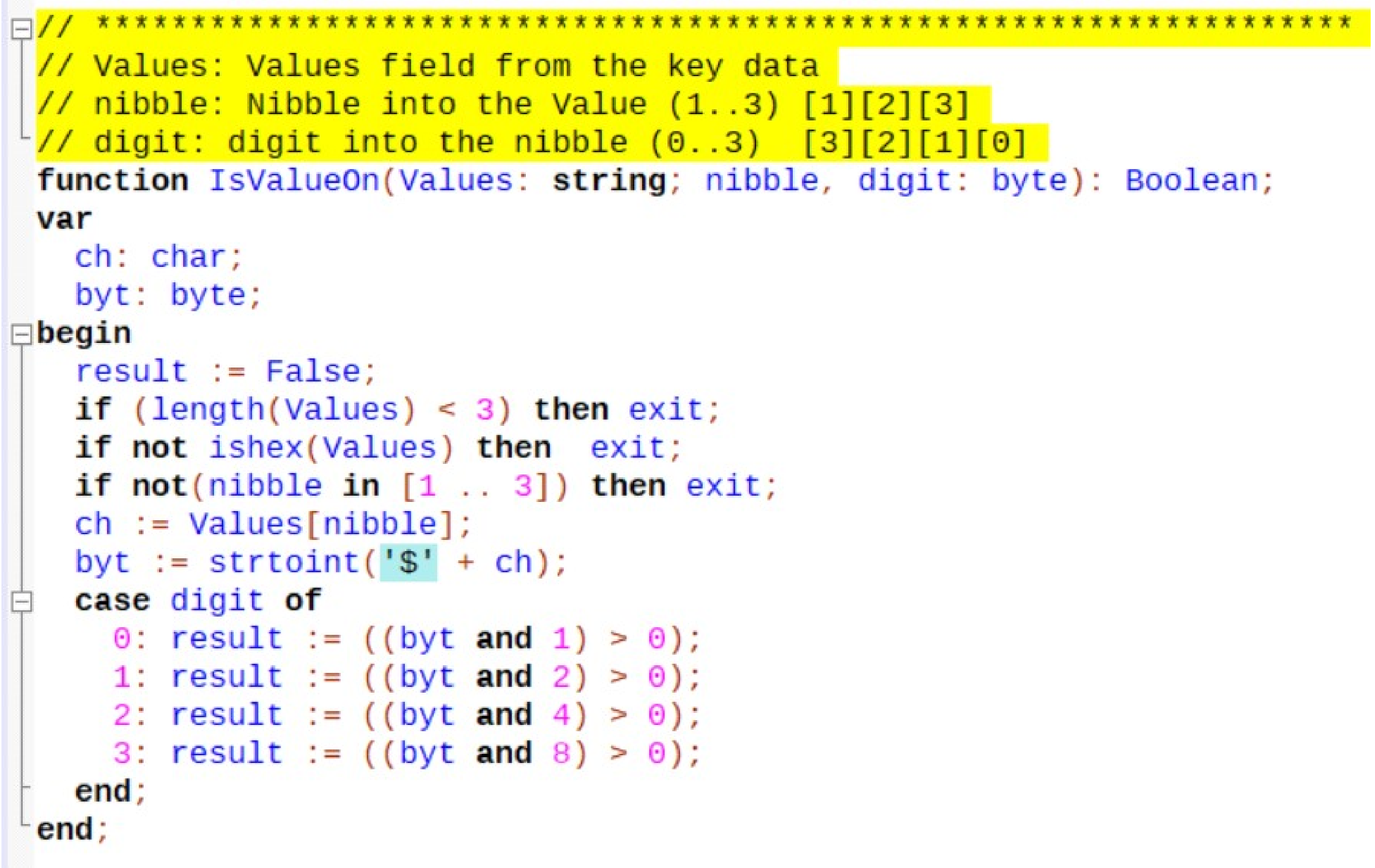
```
procedure TForm1.SetModules;
begin
  btn1.Enabled  := Moduleok(1);
  btn2.Enabled  := Moduleok(2);
  btn3.Enabled  := Moduleok(3);
  btn4.Enabled  := Moduleok(4);
  btn5.Enabled  := Moduleok(5);
  btn6.Enabled  := Moduleok(6);
  btn7.Enabled  := Moduleok(7);
  btn8.Enabled  := Moduleok(8);
  btn9.Enabled  := Moduleok(9);
  btn10.Enabled := Moduleok(10);
  btn11.Enabled := Moduleok(11);
  btn12.Enabled := Moduleok(12);
end;
```

In turn, this procedure uses the Modulesok function of the avlockunit.pas unit whose code we can see below:



```
function Moduleok(m:byte):boolean;
var n,k:byte;
begin
  result:=False;
  if not (m in [1..12]) then exit;
  if (keydata.Status <> Registered) then exit;
  m:=m-1;
  k:=m mod 4;
  n:=3-(m div 4); //nibble
  result:= isvalueon(keydata.Values,n,k);
end;
```

And finally, the Moduleok function uses the isvalueon function of the component whose source code is in the AVLockS6.pas unit. This code is part of the component code and is only available in the developer version.



```
// ******************************************************************
// Values: Values field from the key data
// nibble: Nibble into the Value (1..3) [1][2][3]
// digit: digit into the nibble (0..3)  [3][2][1][0]
function IsValueOn(Values: string; nibble, digit: byte): Boolean;
var
  ch: char;
  byt: byte;
begin
  result := False;
  if (length(Values) < 3) then exit;
  if not ishex(Values) then  exit;
  if not(nibble in [1 .. 3]) then exit;
  ch := Values[nibble];
  byt := strtoint('$' + ch);
  case digit of
    0: result := ((byt and 1) > 0);
    1: result := ((byt and 2) > 0);
    2: result := ((byt and 4) > 0);
    3: result := ((byt and 8) > 0);
  end;
end;
```

I have tried to make this help as clear and complete as possible, however it is possible that aspects have not been considered. If you notice something is missing or have found errors or have any ideas that could be useful to improve this help, please let me know.

Alcides Valega
Autor de AVLock SIMPLE