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OnGuard Help

Title page 1

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This page intentionally starts on an odd page, so that it is on the right half of an open book from the readers point of view. This is the reason why the previous page was blank (the previous page is the back side of the cover)

OnGuard Help

Printed: December 2015 in (whereever you are located)

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Last not least, we want to thank EC Software who wrote this great help tool called HELP & MANUAL which printed this document.

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Foreword

This is just another title page
placed between table of contents
and topics

1 Overview

OnGuard is a library of components, classes, and routines that allow you to protect your applications after they are released to the public. Using OnGuard, you could release an application that is partially functional so that users can try it. When a user is ready to purchase the fully functional application, you supply a release code to unlock all of the features (or the subset that the user is purchasing). You can make your application readily available to a large number of potential users, but still protect your investment. Application protection is accomplished through the use of *keys* to lock or restrict one or more features of an application and several types of *release codes* (or access codes) to enable them.

1.1 Contents

Contents

OnGuard is a library of components, classes, and routines that allow you to protect your applications after they are released to the public. Using OnGuard, you could release an application that is partially functional so that users can try it. When a user is ready to purchase the fully functional application, you supply a release code to unlock all of the features (or the subset that the user is purchasing). You can make your application readily available to a large number of potential users, but still protect your investment. Application protection is accomplished through the use of *keys* to lock or restrict one or more features of an application and several types of *release codes* (or access codes) to enable them.

Keys and Release Codes

TOgMakeKeys Component

TOgMakeCodes Component

Release Code Components

TOgCodeBase Class

TOgDateCode Component

TOgDaysCode Component

TOgNetCode Component

TOgRegistrationCode Component

TOgSerialNumberCode Component

TOgSpecialCode Component

TOgUsageCode Component

Detecting Changes to an EXE

TOgProtectExe Component

Single Instance Applications

OgFirst Unit

Low-Level Routines

API Reference

License

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1.2 History

Version 1.13 is the original source released by TurboPower.
Delphi 7 support was added in this release.
This release was ported to CLX.
The CLX port was then ported to FPC/Lazarus.
SongBeamer added packages for Delphi 2009 and Delphi 2010 and made some changes for Unicode support.

Version 1.14 was created by Roman Kassebaum.
This version only had packages for Delphi 2009 and Delphi 2010 with the new version number.
There were newsgroup postings saying it did not compile where the SongBeamer release did.

Version 1.15 was created by Andrew Haines.
Packages for Delphi XE through XE5 were added.
Source version numbers were updated.
A merge of the 1.13, 1.14, SongBeamer, CLX, and FPC/Lazarus ports was started.
Unit tests for a number of the API routines were created using Delphi XE5 and DUnit.
Unit test values were pulled from Delphi 6 running version 1.13.
The original HLP file was imported into a Help and Manual project.
The H&M project was exported to CHM and HxS files as well as HTML.
The help has been expanded to include the various types, files, and routines.
Screen shots have been added to the help file.
The SourceForge feature request 5 has been implemented.
The SourceForge bug reports 6, 7, 8, and 10 have been implemented.

As of 2015-Dec-07:
- support for Delphi XE8 has been added.
- support for Delphi 10 Seattle has been added.
- support for 64-bit has been started.
- ognetwrk.pas has been split to separate the visual/non-visual portions (see ognetwrkutil.pas for non-visual parts)
- The W1050 warnings in ogutil.pas have been "corrected".
- The W1058 warnings in ogutil.pas have been "corrected".
- new folder "bin" has been added to contain the compiler output files.
- DPK files for Delphi 3-7, 2005-2010, XE-XE4 have been updated for new files and structure (untested though)

As of 2015-Dec-09:
- Unit tests are available for XE5 through Delphi 10 Seattle.
- OgProExeUtil.IsExeTampered has been fixed.
- OgProExeUtil.IsFileTampered has been fixed.

- ComponentPlatformsAttribute has been added to define component/platform availability
- Split files out of G115_R230.bpl into G115Common_R230.bpl to enable VCL+FMX coexistence.
- source/fmx folder contains FMX specific files.

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1.4 Install

In the packages folder you will find the development tool package files.

To make it somewhat easier on people there are group files for Delphi 2009, 2010, XE3, XE5 - XE8, and Delphi 10 Seattle.

The naming convention used for the Delphi packages has the format GNNNPKVV.*.
Where:

NNN	product version. 115 = 1.15
P	Platform. _ = VCL, F = FMX, C = CLX, L = Lazarus
K	Kind of package. R = Runtime, D = Design
V	Delphi version. 70 = Delphi 7, 230 = Delphi 10 Seattle

All Delphi packages start with G115.
The digits at the end of the file name indicate the Delphi version number and are taken from the Delphi package version.

The installation order is:
1. Common Run time (if available)
2. Run time
3. Design

So for Delphi 10 Seattle you would compile:
G115Common_R230
G115_R230
G115_D230
G115FR230
G115FD230

The Common Run Time package contains all the platform neutral functionality.
These files do not depend on the VCL or FMX frameworks.

1.5 Contributors

The original project, v1.13, was open sourced by Turbo Power on 2003-Jan-07.
They released the help files, but not the help source, on 2003-Jan-21.
Packages for Delphi 3 through 7 and BCB 3 through 6 were available.

On 2009-Sep-29 Nick Hodges announces he has taken over the tpsfadmin account at Sourceforge.net.

On 2009-Jan-09 support for Delphi 2009 was released on Songbeamer (http://www.songbeamer.com/delphi/) .
This was based on the CVS files at Sourceforge.net.

Roman Kassebaum imported the files from CVS into SVN on 2009-Dec-16.
The package files for Delphi 2009 and 2010 were added by Roman Kassebaum on 2009-Dec-16. (r2, r3, r4)
He also changed the version number to 1.14 but only for these packages.

On 2009-Dec-20 Roman made some PAsniChar to PChar changes. (r6)
On 2009-Dec-21 Roman made some more PAnsiChar to PChar changes. (r7)

On 2009-Dec-23 support for Delphi 2010 was released on Songbeamer (http://www.songbeamer.com/delphi/) .
This was based on Roman's changes at Sourceforge.net.

On 2013-Oct-05 Roman Kassebaum announces he is now in control of the tpsfadmin account at Sourceforge.net.

On 2013-Dec-26 Andrew Haines announces (via Roman's blog) he has added Roman to the CLX fork as an admin.

On 2013-Dec-29 Andrew Haines requests access to the OnGuard project at Sourceforge.net.
On 2013-Dec-31 Roman adds Andrew to the developer group with access to the SVN code only.

Starting 2014-Jan-06 Andrew Haines initiated a merge of the 1.13 and 1.14 versions along with the Songbeamer fork, the Lazarus fork, and the CLX fork.
This was done to consolidate the changes made in each fork back into the original project.
At this time packages for Delphi XE through XE5 were added along with the CLX and Lazarus packages. (r9)
Unit tests were added to confirm the API functionality against the original 1.13 version. (r9)
Original help file imported into a Help & Manual project. (r9)
Examples for Lazarus and CLX added. (r10)
Original PDF manual added. (r11)
CHM, HxS, and HTML versions of documentation added. (r11)
Support for an Unlimited Usage code was added (Feature request 5). (r12)
Bug reports 6, 7, 8, and 10 were fixed.

PurePascal versions of Min, Max, RolX, and XorMem were added 2015-Jan-09. (r13)
These were merged from the Lazarus fork.

The old G113 and G114 packages were removed on 2014-Jan-14. (r14)

On 2014-Apr-11 support for OSX was added. (r15)
This included the first attempts at porting to FireMonkey (a.k.a. FMX).

On 2014-Jun-28 the tpsfadmin user removed Andrew Haines from the Admin role on the CLX fork.

On 2015-Jan-15 Roman Kassebaum forks the code to Github (http://github.com/TurboPack-XE8/).
Here he splits the project into two forks for VCL and FMX.
Both projects only support XE8, all other environments are removed.
He forks these projects again (http://github.com/TurboPack/) to support the current Delphi product: Delphi 10 Seattle.

On 2015-Jan-22 Marco Cantu contacts Andrew Haines to initiate a conversation regarding the status of the OnGuard library and "cleaning it up".
Andrew replied stating that he uses the library on Windows and Linux with Delphi 6, 2006, XE5, XE7, Kylix 3, and Lazarus and while he had experimented with FireMonkey it was a low priority. The backward compatibility and multi-environment support were more important than current Delphi language features.

On 2015-Feb-15 support for Delphi XE6 and XE7 was added. (r16)

Fixes for mismatched IF/IFEND were committed. (r17)
Removal of REGION entries committed thus restoring support for Delphi 3-7. (r17)

On 2015-Feb-17 the stamp was split out of ogproexe. (r18)

On 2015-Feb-22 support for code signing checks was added. (r19)
IFDEFs in ogproexe were cleaned up.
Warnings added for unsupported platforms added to ogproexe.

On 2015-Dec-06 it was asked in the ThirdParty.General newsgroup if OnGuard supported 64-bit.
Andrew Haines replied that it did not but he would add it to the list.

On 2015-Dec-07 support for XE8 and Delphi 10 Seattle was added. (r20)
OgNetWrk was split, OgNetWrkUtil contains non-visual API routines.
Unit tests for XE6, XE7, and XE8 were added.
64-bit support was added.

On 2015-Dec-08 the ComponentPlatformsAttribute was added to the component declarations for XE2 and up. (r21)
The IsExeTampered and IsFileTampered functions were fixed.

On 2015-Dec-09 the packages files for all Delphi platforms were fixed putting ognetwrk and ogproexe back into the runtime package. (r22)

On 2015-Dec-10 FMX support for Delphi 10 Seattle was added. (r23)
A new Common runtime package has been added containing files that are platform neutral and are used by VCL and FMX.
Old FMX files were removed from the source folder. (r24)
The VCL examples were fixed so they work on Win16, Win32, and Win64. (r25)
Andrew Haines discovers Roman Kassebaum has removed him as the admin on the CLX fork and requests it be restored.

On 2015-Dec-11 Roman restored Andrew as the admin on the CLX fork.
Andrew removed Roman and tpsfadmin as admins on the CLX fork.

2 Classes

TOgCodeBase

2.1 TOgCodeBase Class

The TOgCodeBase class is the ancestor class for the other "release code" components. It implements several properties and methods that are common for all of its descendants.

3 Components

	Delphi							FPC			Kylix
	Win 16	Win 32	Win64	MacOS	iOS	Android	Linux	UNIX	Win32	Win64	Linux
TOgMakeKeys	Yes	Yes	Yes				n/a				
TOgMakeCodes	Yes	Yes	Yes				n/a				
TOgDateCode	Yes	Yes	Yes				n/a				
TOgDaysCode	Yes	Yes	Yes				n/a				
TOgNetCode	Yes	Yes	Yes				n/a				
TOgRegistrationCode	Yes	Yes	Yes				n/a				
TOgSerialNumberCode	Yes	Yes	Yes				n/a				
TOgSpecialCode	Yes	Yes	Yes				n/a				
TOgUsageCode	Yes	Yes	Yes				n/a				
TOgNetCode	Yes	Yes	Yes				n/a				
TOgProtectEXE	Yes	Yes	Yes	No	No	No	n/a				

To allow for multi-platform support, the components have been renamed with a platform name. All the FMX components start with "TOgFMX" and the internal classes start with "TFMX".

3.1 TOgDateCode Component

TOgDateCode implements a Start/End Date release code. Use this release code when you need to limit the amount of time that an application (or specific features of an application) can be used. Both a start date and an end date are encoded into this release code. This allows you to detect a change to the computer's clock that results in a date outside of the date range or an attempt to alter the registry or INI file entry.

3.2 TOgDaysCode Component

TOgDaysCode implements a Number of Days Used release code. This release code limits the number of days that an application (or specific features) can be used. The application can be run an unlimited number of times each day.

3.3 TOgMakeCodes Component

TOgMakeCodes is a non-visual component that displays a dialog when its Execute method is called. The dialog allows you to create several types of release codes. Each release code consists of 8 bytes and is viewed and entered as 16 hexadecimal digits.

3.4 TOgMakeKeys Component

TOgMakeKeys is a non-visual component that displays a dialog when its Execute method is called. The dialog allows you to create and maintain keys. Keys are used to encode and decode the release codes that the other OnGuard components use.

3.5 TOgNetCode Component

TOgNetCode implements a Network Metering release code. This release code limits the number of concurrent instances of an application that are allowed to run on a network. It does this through the use of a network release code and a Network Access File. The use of a network release code is no different than other release codes, but there are additional maintenance issues related to the network file that your application must handle.

3.6 TOgProtectExe Component

The TOgProtectExe component allows you to detect changes to your EXE file. The size of the EXE file and a 32-bit CRC (Cyclical Redundancy Check) value are recorded in the EXE file and checked each time the application is run.

3.7 TOgRegistrationCode Component

TOgRegistrationCode implements a Simple Registration release code. This release code ties the user's name, company name, or some other textual data to the registration code.

3.8 TOgSerialNumberCode Component

TOgSerialNumberCode implements a Serial Number Registration release code. This release code ties a serial number to the release code. This release code is very similar to the Simple Registration release code. The only difference is in the data that is used as part of the code generation process. The Serial Number Registration release code uses a number instead of a text string.

3.9 TOgSpecialCode Component

TOgSpecialCode implements a Special Registration release code. This release code is based on a special value (a long integer) that can be used to indicate anything you like.

3.10 TOgUsageCode Component

TOgUsageCode implements a Usage Count release code. This release code limits the number of times an application can be executed.

4 Low-Level Routines

Generate Key Routines

- GenerateRandomKeyPrim
- GenerateMD5KeyPrim
- GenerateTMDKeyPrim

Modifier Routines

- ApplyModifierToKeyPrim
- CreateMachineID
- GenerateDateModifierPrim
- GenerateMachineModifierPrim
- GenerateStringModifierPrim
- GenerateUniqueModifierPrim

Hash Routines

- StringHashElf

Mixing Routines

- MixBlock

Utility Routines

- ExpandDate
- ShrinkDate
- BufferToHex
- BufferToHexBytes
- HexStringIsZero
- HexToBuffer
- GetCodeType
- GetExpirationDate

Date Code

- GetDateCodeValue
- InitDateCode
- IsDateCodeExpired
- IsDateCodeValid
- InitDateCodeEx
- GetDateCodeStart
- GetDateCodeEnd

Days Code

- DecDaysCode
- GetDaysCodeValue
- InitDaysCode
- IsDaysCodeExpired
- IsDaysCodeValid

Registration Code

- InitRegCode
- IsRegCodeExpired

- IsRegCodeValid
- IsRegCodeRegisteredTo

Serial Number Code

- GetSerialNumberCodeValue
- InitSerialNumberCode
- IsSerialNumberCodeExpired
- IsSerialNumberCodeValid

Special Code

- GetSpecialCodeValue
- InitSpecialCode
- IsSpecialCodeExpired
- IsSpecialCodeValid

Usage Code

- DecUsageCode
- GetUsageCodeValue
- InitUsageCode
- IsUsageCodeExpired
- IsUsageCodeValid

Network Code

- IsAppOnNetwork
- CheckNetAccessFile
- CreateNetAccessFile
- CreateNetAccessFileEx
- DecodeNAFCountCode
- GetNetAccessFileInfo
- EncodeNAFCountCode
- LockNetAccessFile
- ResetNetAccessFile
- UnlockNetAccessFile

Protect EXE

- IsExeTampered
- ProtectExe
- UnprotectExe
- IsFileTampered
- UpdateChecksum
- FileCRC32
- UpdateCRC32

Single Instance

- IsFirstInstance
- ActivateFirstInstance

Code Signing

- IsExeCodeSigned
- IsExeSignedByName
- IsFileCodeSigned

- IsFileSignedByName

5 Types

Enter topic text here.

```
{$IFDEF DELPHI22UP}                                  {AH.02}
ogLongInt = FixedInt;                              {AH.02}
{$ELSE}                                           {AH.02}
ogLongInt = LongInt;                               {AH.02}
{$ENDIF}                                          {AH.02}
PogLongInt = ^ogLongInt;                             {AH.02}

{$IFDEF Win16}
DWord      = LongInt;
PDWord     = ^DWord;
TGUID      = GUID;   {Delphi 1.0 defines it as GUID - Delphi 2.0 defines it as TGUID}
AnsiChar   = Char;
PAnsiChar  = PChar;
{$ENDIF}

{$IFDEF MACOS}
DWord      = Cardinal;
PDWord     = ^DWord;
{$ENDIF}

{$IFNDEF FPC}
PByte         = ^Byte;
PByteArray    = ^TByteArray;
TByteArray    = array [0..MaxStructSize div SizeOf(Byte) - 1] of Byte;
PLongInt      = ^LongInt;
{$ENDIF}
PLongIntArray = ^TLongIntArray;
TLongIntArray = array [0..MaxStructSize div SizeOf(LongInt) - 1] of LongInt;
PogLongIntArray = ^TogLongIntArray;                                  {AH.02}
TogLongIntArray = array [0..MaxStructSize div SizeOf(ogLongInt) - 1] of ogLongInt;   {AH.02}

TLongIntRec
PCode
TCode
TCodeType
TKey
TKeyType
TTMDContext
TMD5Context
TMD5Digest
T128Bit
T256Bit
TEsMachineInfoSet
TCodeStatus

TNetAccess
TNetAccessInfo
TGetFileNameEvent
```

```
PSignatureRec = ^TSignatureRec;
TSignatureRec = packed record
  Sig1   : DWord;                                    {!!.07}
  Sig2   : DWord;                                    {!!.07}
  Sig3   : DWord;                                    {!!.07}
  Offset : DWord;                                    {!!.07}
  Size   : DWord;                                    {!!.07}
  CRC    : DWord;                                     {!!.07}
  Sig4   : DWord;                                    {!!.07}
  Sig5   : DWord;                                    {!!.07}
  Sig6   : DWord;                                    {!!.07}
end;

TExeStatus = (
  exeSuccess,            {no error}
  exeSizeError,          {the file size has changed}
  exeIntegrityError,     {CRC does not match}
  exeNotStamped,           {the exe has not been stamped}
  exeAccessDenied         {share violation}                    {!!.05}
);

TCheckedExeEvent = procedure(Sender : TObject; Status : TExeStatus) of object;
```

6 Files

Enter topic text here.

6.1 OgConst

Enter topic text here.

6.2 OgUtil

Enter topic text here.

Types

```
{$IFDEF DELPHI22UP}                                    {AH.02}
ogLongInt = FixedInt;                                  {AH.02}
{$ELSE}                                                {AH.02}
ogLongInt = LongInt;                                   {AH.02}
{$ENDIF}                                               {AH.02}
PogLongInt = ^ogLongInt;                               {AH.02}

{$IFDEF Win16}
DWord      = LongInt;
PDWord     = ^DWord;
TGUID      = GUID;   {Delphi 1.0 defines it as GUID - Delphi 2.0 defines it as TGUID}
AnsiChar   = Char;
PAnsiChar  = PChar;
{$ENDIF}

{$IFDEF MACOS}
DWord      = Cardinal;
PDWord     = ^DWord;
{$ENDIF}

{$IFNDEF FPC}
PByte         = ^Byte;
PByteArray    = ^TByteArray;
TByteArray    = array [0..MaxStructSize div SizeOf(Byte) - 1] of Byte;
PLongInt      = ^LongInt;
{$ENDIF}
PLongIntArray = ^TLongIntArray;
TLongIntArray = array [0..MaxStructSize div SizeOf(LongInt) - 1] of LongInt;
PogLongIntArray = ^TogLongIntArray;                                    {AH.02}
TogLongIntArray = array [0..MaxStructSize div SizeOf(ogLongInt) - 1] of ogLongInt;   {AH.02}

TLongIntRec
PCode
TCode
TCodeType
TKey
TKeyType
TTMDContext
TMD5Context
```

TMD5Digest
T128Bit
T256Bit
TEsMachineInfoSet
TCodeStatus

Constants

```
DefAutoCheck      = True;
  DefAutoDecrease   = True;
  DefCheckSize      = True;
  DefStoreCode      = False;
  DefStoreModifier  = False;
  DefStoreRegString = False;

  OgVersionStr      = '1.15';

{magic values}
  DaysCheckCode    = Word($649B);
  DateCheckCode    = Word($A4CB);
  NetCheckCode     = Word($9341);
  RegCheckCode     = Word($D9F6);
  SerialCheckCode  = Word($3C69);
  UsageCheckCode   = Word($F3D5);
  SpecialCheckCode = Word($9C5B);

  {$IFDEF Win32}
  MaxStructSize = 1024 * 2000000; {2G}
  {$ELSE}
  MaxStructSize = 1024 * 64 - 1;  {64K}
  {$ENDIF}

  DefCodeType      = ctDate;
  DefKeyType       = ktRandom;

  BaseDate
```

Exceptions

```
 EOnGuardException = class(Exception);
  EOnGuardBadDateException = class(EOnGuardException);              {!!.15}
  EOnGuardClockIssueException = class(EOnGuardException);
```

Variables

```
 StrRes : TOgStringResource;
```

Routines

Generate Key Routines

- GenerateRandomKeyPrim

- GenerateMD5KeyPrim
- GenerateTMDKeyPrim

Modifier Routines

- ApplyModifierToKeyPrim
- CreateMachineID
- GenerateDateModifierPrim
- GenerateMachineModifierPrim
- GenerateStringModifierPrim
- GenerateUniqueModifierPrim

Hash Routines

- StringHashElf

Mixing Routines

- MixBlock

Utility Routines

- ExpandDate
- ShrinkDate
- BufferToHex
- BufferToHexBytes
- HexStringIsZero
- HexToBuffer
- GetCodeType
- GetExpirationDate
- OgFormatDate
- Max
- Min
- XorMem

- MyHashElf
- GetDiskSerialNumber
- GetDriveType
- HiWord
- CoCreateGuid
- timeGetTime

Date Code

- GetDateCodeValue
- InitDateCode
- IsDateCodeExpired
- IsDateCodeValid
- GetDateCodeStart
- GetDateCodeEnd
- InitDateCodeEx

Days Code

- DecDaysCode
- GetDaysCodeValue

- InitDaysCode
- IsDaysCodeExpired
- IsDaysCodeValid

Registration Code

- InitRegCode
- IsRegCodeExpired
- IsRegCodeValid
- IsRegCodeRegisteredTo

Serial Number Code

- GetSerialNumberCodeValue
- InitSerialNumberCode
- IsSerialNumberCodeExpired
- IsSerialNumberCodeValid

Special Code

- GetSpecialCodeValue
- InitSpecialCode
- IsSpecialCodeExpired
- IsSpecialCodeValid

Usage Code

- DecUsageCode
- GetUsageCodeValue
- InitUsageCode
- IsUsageCodeExpired
- IsUsageCodeValid

```
{$IFDEF Win16}
function GetDiskSerialNumber(Drive : AnsiChar) : LongInt;
{$ENDIF}
{$IFDEF LINUX}
function GetDiskSerialNumber(Drive : AnsiChar) : LongInt;
function MyHashElf(const Buf;  BufSize : LongInt) : LongInt;
{$ENDIF}
function Max(A, B : LongInt): LongInt;
function Min(A, B : LongInt) : LongInt;
procedure XorMem(var Mem1; const Mem2; Count : Cardinal);
function OgFormatDate(Value : TDateTime) : string;                    {!!.09}


{$IFDEF KYLIX}
function GetDriveType(drive:Integer): Integer;
function HiWord(l: DWORD):Word;
function CoCreateGuid(out guid: TGUID): HResult;
function timeGetTime: DWord;
{$ENDIF}
{$IFDEF FPC}
{$IFDEF LINUX}
function GetDriveType(drive:Integer): Integer;
```

```
function HiWord(l: DWORD):Word;
function CoCreateGuid(out guid: TGUID): HResult;
function timeGetTime: Cardinal;
{$ENDIF}
{$IFDEF FREEBSD}
function GetDriveType(drive:Integer): Integer;
function HiWord(l: DWORD):Word;
function CoCreateGuid(out guid: TGUID): HResult;
function timeGetTime: Cardinal;
{$ENDIF}
{$ENDIF}
```

6.3 OnGuard

The OnGuard unit provides all of the code components except for TOgNetCode.

Classes

TOgCodeBase

Components

TOgMakeKeys
TOgMakeCodes

TOgDateCode
TOgDaysCode
TOgNetCode
TOgRegistrationCode
TOgSerialNumberCode
TOgSpecialCode
TOgUsageCode

6.4 OgFirst

The OgFirst unit provides routines that allow you to detect when a second instance of an application is being executed and to force the previous instance of the application to become the active application.

ActivateFirstInstance

IsFirstInstance

Platform	Comments
Win16	
Win32	Creates a mutex using "PREVINST:" plus the GetWindowText function. If mutex fails then assume this is not the First Instance.
Win64	Creates a mutex using "PREVINST:" plus the GetWindowText function. If mutex fails then assume this is not the First Instance.
Kylix	Creates a ".lock" file in "/var/run/" using the application's ExeName.

	If this lock file already exists or can not be created then assume this is not the First Instance.
Android	
iOS	
OS X	

6.5 OgNetWrk

The OgNetWrk unit provides the network access component.

Types
TGetFileNameEvent

Components
TOgNetCode

6.6 OgNetWrkUtil

The OgNetWrkUtil unit provides the network access classes, types and API routines.

Types
TNetAccess
TNetAccessInfo

Routines
CheckNetAccessFile
CreateNetAccessFile
CreateNetAccessFileEx
DecodeNAFCountCode
EncodeNAFCountCode
GetNetAccessFileInfo
IsAppOnNetwork
LockNetAccessFile
ResetNetAccessFile
UnlockNetAccessFile

6.7 OgFile

This unit contain file related routines formerly located in ogutil.

GetFileSize
LockFile
UnlockFile
FlushFileBuffers

These routines are for multi-platform support.
Usually the Win32 and Win64 version is passed through to the Windows API function.

6.8 OgProExe

Enter topic text here.

Types

TCheckedExeEvent = procedure(Sender : TObject; Status : TExeStatus) of object;

Classes

TOgProtectExe

6.9 OgProExeUtil

Enter topic text here.

Types

```
TExeStatus = (
  exeSuccess,             {no error}
  exeSizeError,           {the file size has changed}
  exeIntegrityError,      {CRC does not match}
  exeNotStamped,          {the exe has not been stamped}
  exeAccessDenied         {share violation}
  {!!.05}
);
```

Routines

IsExeTampered
ProtectExe
UnprotectExe
IsFileTampered
UpdateChecksum
FileCRC32
UpdateCRC32

6.10 OnGuard1

This unit contains the TKeyGenerateFrm class.

The Key Type combo box contains the options:

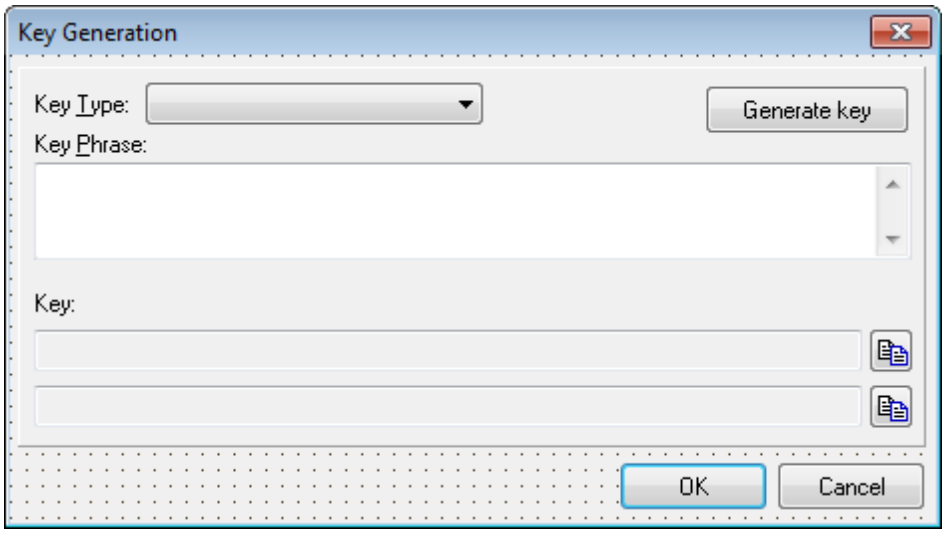
- Random

- Standard Text
- Case-sensitive Text

These values correspond to TKeyType.

VCL = OnGuard1.dfm
CLX = QOnGuard1.xfm
Lazarus = lcl\QOnGuard1

VCL



6.11 OnGuard2

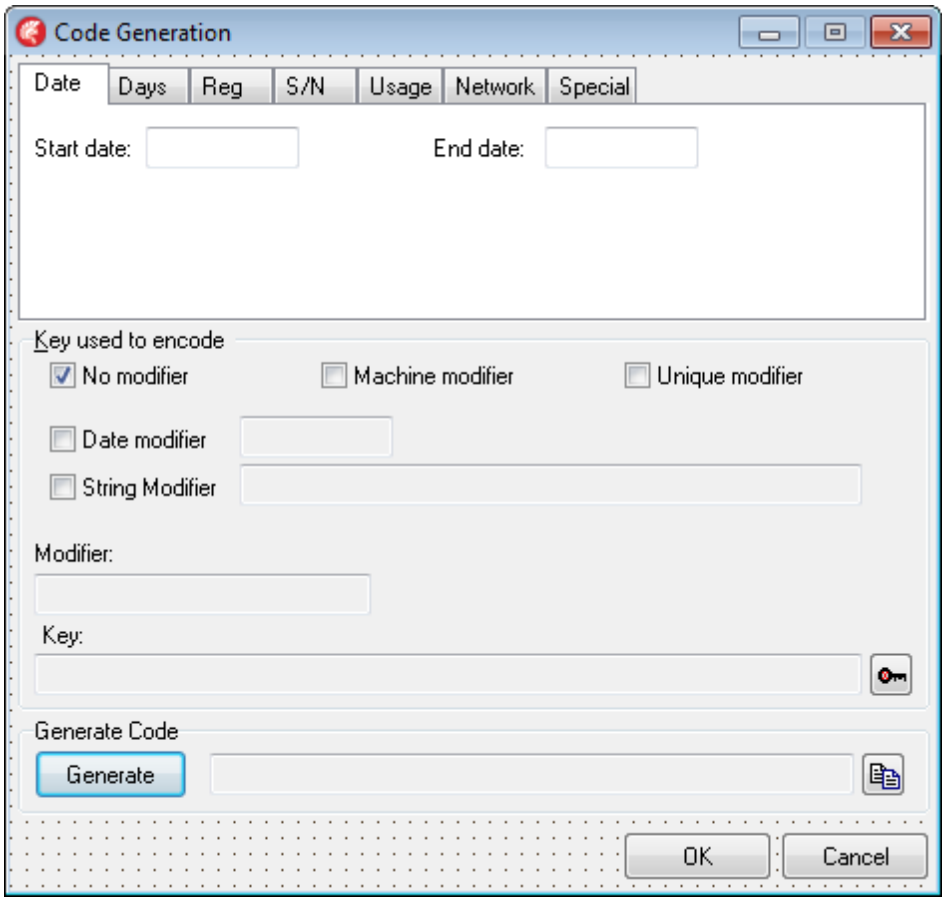
This unit contains the TCodeGenerateFrm class.

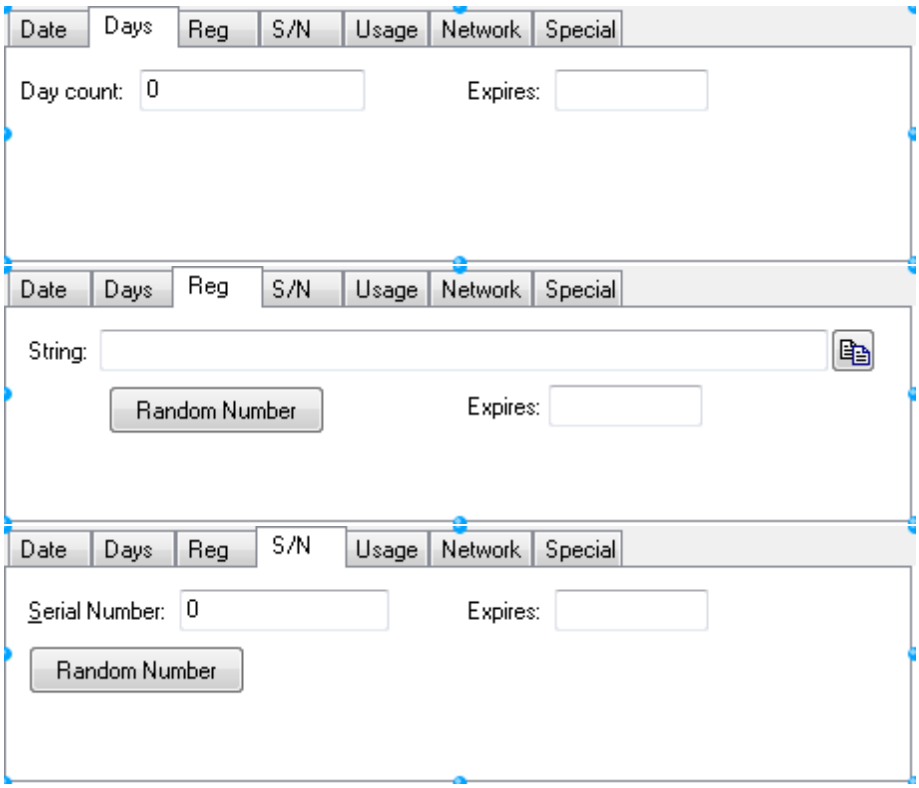
The tabs across the top represent the code type and must match the sequence in TCodeType.

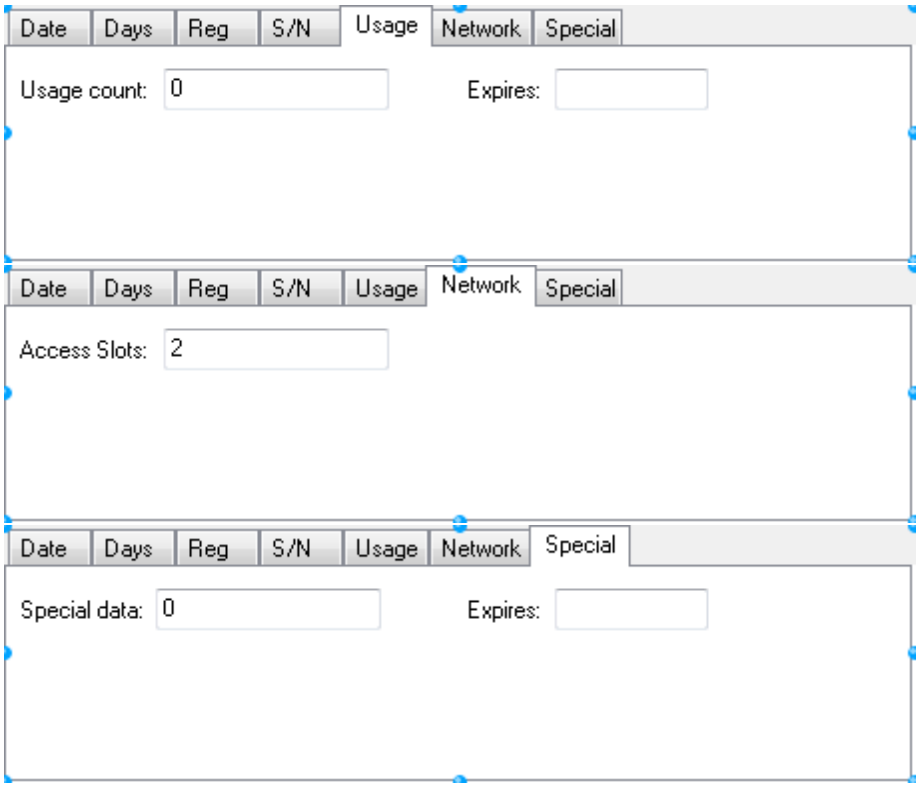
Clicking on the  button will open the key maintenance form in OnGuard3.

VCL = OnGuard2.dfm
CLX = QOnGuard2.xfm
Lazarus = lcl\QOnGuard2

VCL





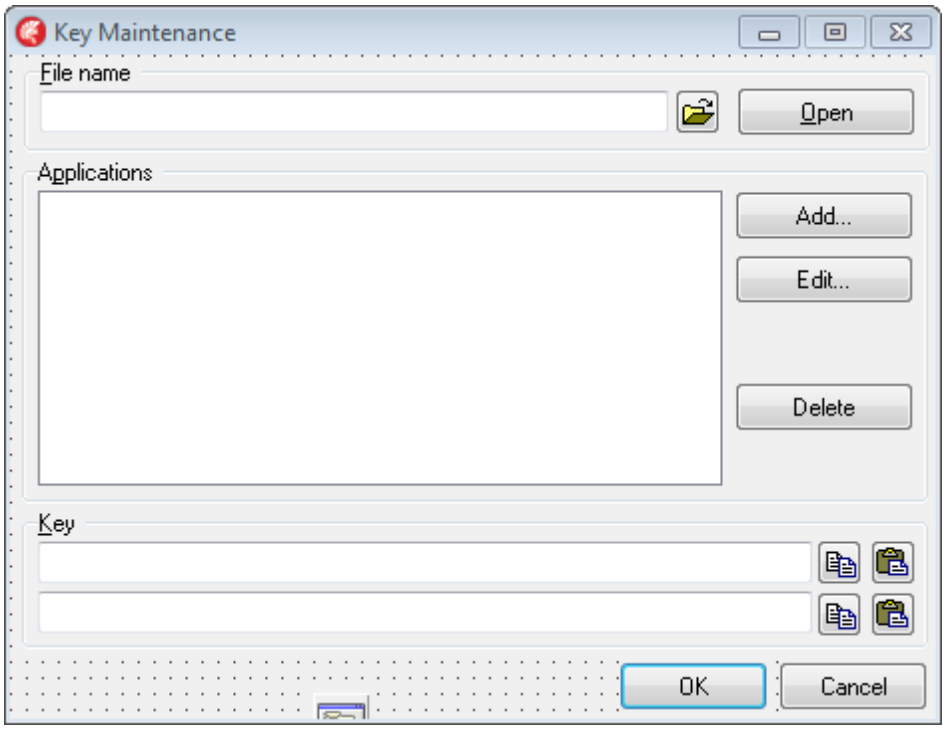


6.12 OnGuard3

This unit contains the TKeyMaintFrm class.

VCL = OnGuard3.dfm
CLX = QOnGuard3.xfm
Lazarus = lcl\QOnGuard3

VCL



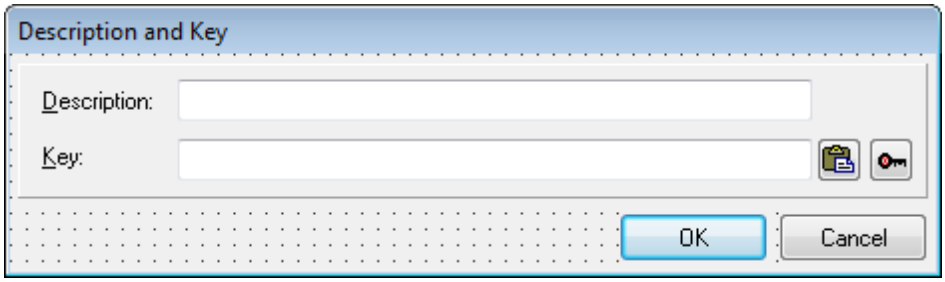
6.13 OnGuard4

This unit contains the TEditProductFrm class.

Clicking on the button will open the key generation form in OnGuard1.

VCL = OnGuard4.dfm
CLX = QOnGuard4.xfm
Lazarus = lcl\QOnGuard4

VCL



6.14 OnGuard5

The OnGuard5 unit contains the class TOgCodeProperty which is used as a Property Editor in the IDE.

The TOgCodeProperty.Edit method uses the TCodeGenerateFrm class found in OnGuard2.

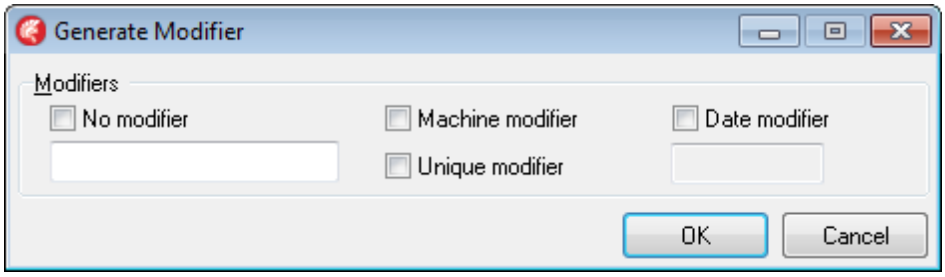
CLX = QOnGuard5
Lazarus = lcl\QOnGuard5

6.15 OnGuard6

The OnGuard6 unit contains the TModifierFrm class and the TOgModifierProperty class which is used as a Property Editor in the IDE.

VCL = OnGuard6.dfm
CLX = QOnGuard6.xfm
Lazarus = lcl\QOnGuard6

VCL



6.16 OnGuard7

The OnGuard7 unit contains the class TOgFileNameProperty which is used as a Property Editor in the IDE.

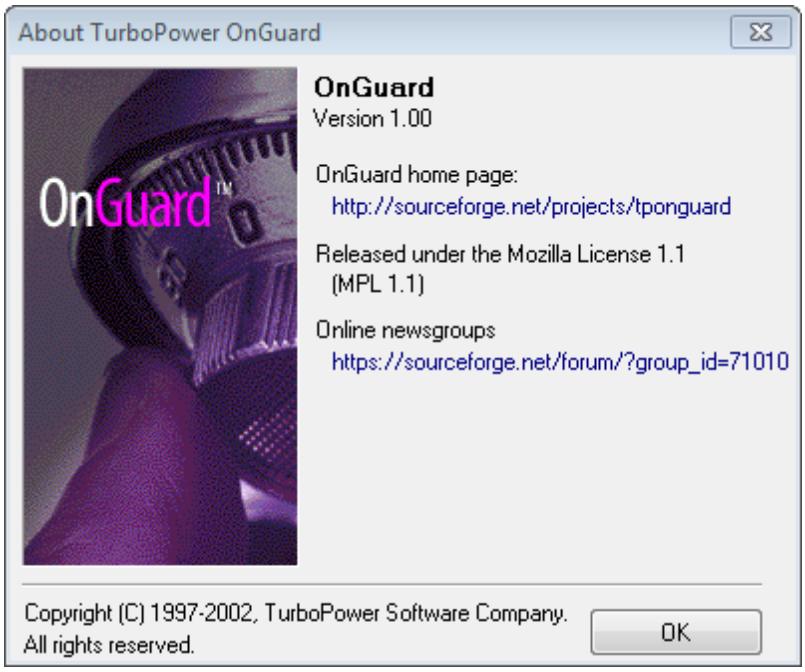
CLX = QOnGuard7
Lazarus = lcl\QOnGuard7

6.17 OgAbout0

This unit provides the About dialog.
It also provides the TOgAboutProperty which is used as a Property Editor in the IDE.

VCL = OgAbout0.dfm
CLX = QOgAbout0.xfm
Lazarus = lcl\QOgAbout0

VCL



6.18 OgReg

The OgReg unit contains the TOgCodeGenEditor class which is used as a Property Editor in the IDE. This unit also exposes the Register procedure used to register the components in Delphi.

The register procedure adds a component editor to TOgCodeBase with two actions: Generate Code and Generate Key.

TOgCodeBase is also given property editors:
- Code = TOgCodeProperty
- Modifier = TOgModifierProperty
- About = TOgAboutProperty

TOgProtectExe, TOgMakeCodes, and TOgMakeKeys are given the TOgAboutProperty property editor.

TOgMakeCodes and TOgMakeKeys are given the TOgFileNameProperty property editor on the KeyFileName property.

6.19 OgCodeSign

A set of API functions to validate a file with a digital certificate.
These functions are only supported on Windows.

Routines

IsExeCodeSigned
IsExeSignedByName
IsFileCodeSigned

IsFileSignedByName

The routines were implemented based on snippets from stackoverflow by Craig Peterson and TOndrej.

6.20 OgStamp

This file provides the type definitions and the constants required to provide the ability to stamp a file.
It is intended to be used in EXE, DLL, and BPL files.
You can use the OgProExe unit to stamp and validate these files.

Types

```
PSignatureRec = ^TSignatureRec;
TSignatureRec = packed record
  Sig1   : DWord;                    {!!.07}
  Sig2   : DWord;                    {!!.07}
  Sig3   : DWord;                    {!!.07}
  Offset : DWord;                    {!!.07}
  Size   : DWord;                    {!!.07}
  CRC    : DWord;                     {!!.07}
  Sig4   : DWord;                    {!!.07}
  Sig5   : DWord;                    {!!.07}
  Sig6   : DWord;                    {!!.07}
end;
```

Constants

{signature = '!~~@CRC32@~~' used before and after}

```
StoredSignature : TSignatureRec = (
  Sig1:$407E7E21;  Sig2:$33435243;  Sig3:$7E7E4032;
  Offset:1;  Size:2;  CRC:3;
  Sig4:$407E7E21;  Sig5:$33435243;  Sig6:$7E7E4032);
```

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TOgMakeKeys Component 22
TOgNetCode Component 22
TOgProtectExe Component 22
TOgRegistrationCode Component 22
TOgSerialNumberCode Component 22
TOgSpecialCode Component 22
TOgUsageCode Component 23

Endnotes 2... (after index)

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