

# WINDEV<sup>®</sup> Mobile

New  
Version

# 10

INTEGRATED  
DEVELOPMENT  
PLATFORM

Smartphone, Tablet,  
Pocket PC, Terminal  
Windows CE, Windows  
Mobile, Windows Phone 7,  
Android

Multi-platform code:  
Windows, .Net, Linux, Java, PHP,  
J2EE, XML, Internet, Tablet,  
Smartphone, Android, WP7,...



# DEVELOP 10 TIMES FASTER

[www.windev.com](http://www.windev.com)

# “YOU CAN START DEVELOPING FOR MOBILE DEVICES WITHIN 10 MINUTES”

"Network and telecom magazine"



Windows CE  
Windows Mobile  
Windows Phone 7  
Android



- WINDEV Mobile 16 is fantastic for developing on Smartphones, Tablet, Industrial devices and Pocket PC.
- Thanks to WINDEV Mobile 16 you develop really quickly (or you can reuse existing WINDEV code).
- Everything is in English.
- You can distribute your applications freely.

Smartphones and tablets are taking over the professional world. These "Pocket computers" now come with such compute power and storage capacity that they allow a comfortable and efficient use of dedicated applications.

With the WINDEV Mobile 16 IDE, creating robust applications for any mobile device is easy and very, very fast!

## CONTENT

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- 6 Smartphones and tablets (Android, Windows Phone 7)
- 10 Terminals (Windows CE and Windows Mobile)
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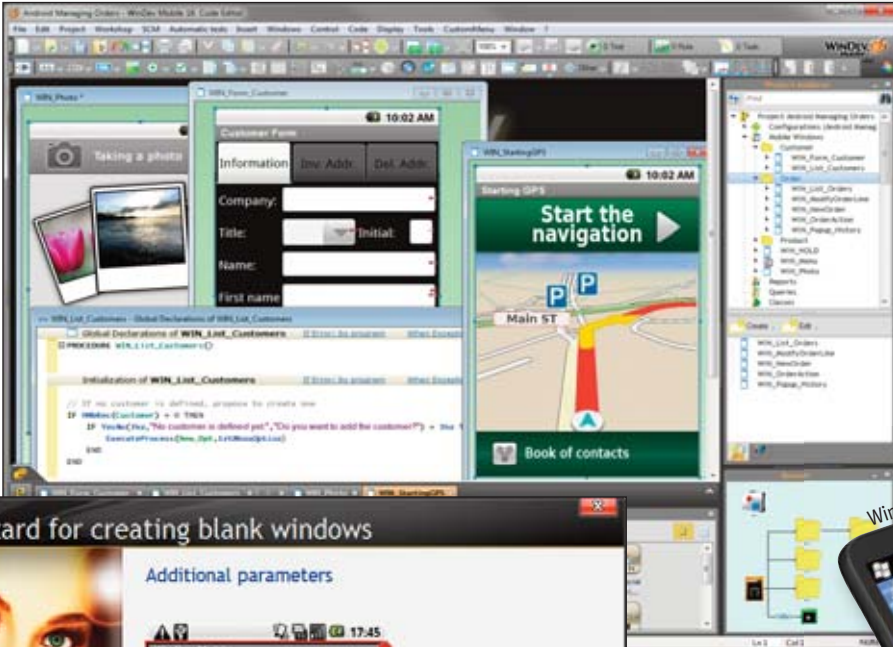


# BE MOBILE!

Multi-platform code:  
Windows, .Net, Linux, Java, PHP,  
J2EE, XML, Internet, Tablet,  
Smartphone, Android, WP7,...

Caution: if you're not familiar with WINDEV 16, we recommend you check the WINDEV brochure as well (either on the [windev.com](http://windev.com) site, or by requesting a copy from PC SOFT or from your distributor) so you can get additional details about basic features and about the compatible programming language (WLanguage). Or call us!

# DEVELOPING FOR MOBILE DEVICES



*A complete development environment, adapted for the "Mobile" world*

compatible from one system to another you can easily switch!  
This brochure covers all the types of development for mobile devices.

The first section concerns more specifically phone applications and the second section terminal applications, but your imagination is the limit!

## 16 THE DEVELOPMENT METHOD

### A STANDALONE DEVELOPMENT ENVIRONMENT

Regardless of the target equipment and the operating system, the way to develop with WINDEV Mobile 16 is similar.

The development environment is integrated, powerful, complete, intuitive and it is adapted to the specificities of mobile devices.

With WINDEV Mobile 16, it's never been easier to develop for mobile.

### CHOOSE FREELY!

The development of professional applications for mobile devices has evolved tremendously, this is due in large part to equipment and connectivity improvements.

Depending on the intended use, one will select a type of device and an operating system.

Usually, the choices are as follows:

- for professional or industrial applications (rugged terminals, point of sales, applications managing data), Windows Mobile or Windows CE are usually chosen. Though Android is starting to make inroads in this area.

- for personal applications, Android or Windows Phone 7 are usually chosen.

Of course, this is just a high-level view, and everybody can see benefits in developing an application on the device and OS of their choice!

With WinDev Mobile 16, you are free to choose. Since the windows and the code are

## 16 PORTABILITY OF YOUR APPLICATIONS

ANDROID, WINDOWS PHONE 7, WINDOWS CE, WINDOWS MOBILE,

...



With WINDEV Mobile, the same specially developed application can run on different Mobile OS  
WINDEV Mobile 16 works with Windows CE, Windows Mobile, Windows Phone 7 and Android...

### ALL MOBILES

Develop for all the Windows and Android mobile devices: phones, smartphones, pocket pc, terminals, rugged terminals, tablets, notebooks,...

### ALL MANUFACTURERS

Applications built with WINDEV Mobile 16 work on devices from all manufacturers: Datalogic, Intermec, Falcon, Symbol, PSC, PAXAR, Psion Teklogix, Pidion, Gotive, HHP...

All the smartphones and Pocket PCs are also supported: DELL, Qtek, Toshiba, HP, Asus, Acer, Compaq, Orange SPV, Samsung, Paragon, HTC, Motorola, Palm, Google, LG...

(continued from page 3)

## THE ENTIRE LIFE CYCLE IS SUPPORTED

WINDEV Mobile 16 comes with all the tools needed for managing the entire life cycle of applications: Merise and UML analysis generator, project dashboard, collaborative Source Code Manager, UI generator, 5GL language, debugger, programming documentation generator, schedule management,...

These generators are compatible with WINDEV (Windows, Java and Linux applications) and WEBDEV (Internet, Intranet sites and SaaS).



*Develop for Smartphones!*

## MOBILE SPECIFIC FEATURES

WINDEV Mobile 16 offers a lot of features specific to the use of these terminals, such as SMS reading, accelerometer management, compass management, GPS positioning, bar codes...

Integrating the various connection technologies (Bluetooth, Wi-Fi, infrared, GPRS, 3G, replication, synchronization, ...) with your company's Information System is child's play with WINDEV Mobile 16!

## POWERFUL USER INTERFACE EDITOR

WINDEV Mobile offers the most efficient UI generator in the world Building UIs is assisted for mobile devices. Edit controls are very powerful and offer a set of security mechanisms (required controls or not, authorized characters, etc.) and a lot of input formats.

## PROGRAM IN 5GL: 90% LESS CODE

Programming is done in WLanguage. This programming is compatible with Windows, Linux and the Internet. This 5th generation language allows you to develop up to 10 times faster, and remove up to 90% of lines of code. Easy to learn and very powerful, WLanguage saves previous time for development teams.

## "MOBILE" ORIENTED FUNCTION FAMILIES

WLanguage on Mobile includes specific function families adapted for mobile development.

Among these function families you'll find (these families are available based on the operating system used):

- CDB database

- SQLite database
- HyperFileSQL Mobile database
- SIM card
- Keyboard
- Touch tile (handled with finger)
- Dictaphone/Tape recorder
- Email
- Automatic run of application
- Serial, parallel and infrared ports
- SMS
- Socket
- System
- Telephony
- Gyroscope
- Accelerometer
- Compass
- GPS
- Location via telephone operator
- Wi-Fi
- Bluetooth
- Camera, Photo
- Etc...

These WLanguage functions allow easy programming of "mobile" oriented processes; here're some examples:

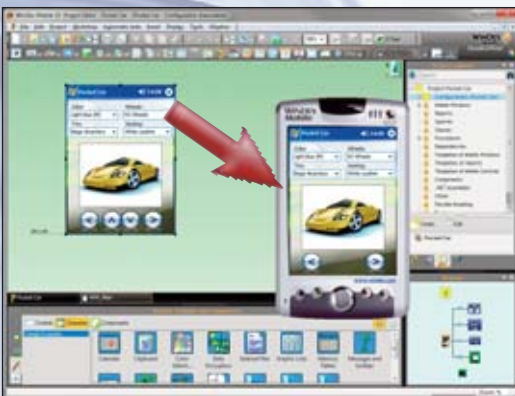
- read the address book
- standard access to device's system features
- retrieve the IMEI number (unique identifier) of the phone
- locate the phone
- read SMS
- read or write data on the Internet



## TEST AND DEBUGGING

### DEBUGGING ON THE PC THROUGH THE PROVIDED EMULATOR

Application tests are performed directly on the PC, thanks to a very powerful "simulation" mode. Here a window being created and its execution in "simulation" mode directly on the PC.



The user-friendly debugger offers advanced features: break points, resume, code modification on the fly, view variables' content...

### DEBUGGING THE ACTUAL TERMINAL FROM THE PC

In some cases, debugging on the actual terminal is required: special terminal, terminal using devices that can't be emulated on the PC, using the real data found in a mobile specific software (Outlook:

contents of e-mails, appointments, scanner, RFID ...)

Thanks to version 16, you can easily debug on the actual hardware, using real data.

Note that there is no additional software to install on the mobile device, because everything is controlled from the PC.

*Debug terminals and their special devices, or real data from the PC*



- retrieve the machine's serial number
- drive a "dictaphone" (start and stop by programming, start a process when the user presses the record button,...)
- disable (and enable) the device's sleep mode (useful to save batteries or to keep a 3G connection)
- get the access path (directory) of the SD card
- switch to T9 input mode
- etc...

## WINDEV COMPATIBILITY

You have WINDEV applications?

The compatibility between WINDEV and WINDEV Mobile is amazing: code, analyses, loopers, UML, classes, queries, controls (edit, table, splitter, etc.)!..

You can retrieve and share most of the code and UI. The project can be common to WINDEV and WINDEV Mobile.

Database programming is also the same.

Given the size of the screens, you just need to resize the windows, which is very easy to do with WINDEV Mobile 16!

Note that a project created with WINDEV Mobile can be opened in WINDEV.

## ACCESS TO APIS

You can access the hardware's APIs. If needed, you can code very specific processes.

## SCREEN RESOLUTION

WINDEV Mobile 16 supports all the screen sizes and resolutions, DPIs, as well as portrait and landscape modes.

## UNIVERSAL DATA ACCESS

Code for database access (in read or write mode) is compatible.

# 10 USER INTERFACE: IN 1 CLICK, BEAUTIFUL AND EFFICIENT

## UI: FANTASTIC

The WINDEV Mobile UI generator enables you to create quickly and without any required skill great-looking interfaces, that are also secure and easy to use

The "7-tab" technology is applied to manage, among other things, the graphic look of your screens.

## VERY POWERFUL CONTROLS

The available controls are very powerful and let you create user-friendly windows without any effort.

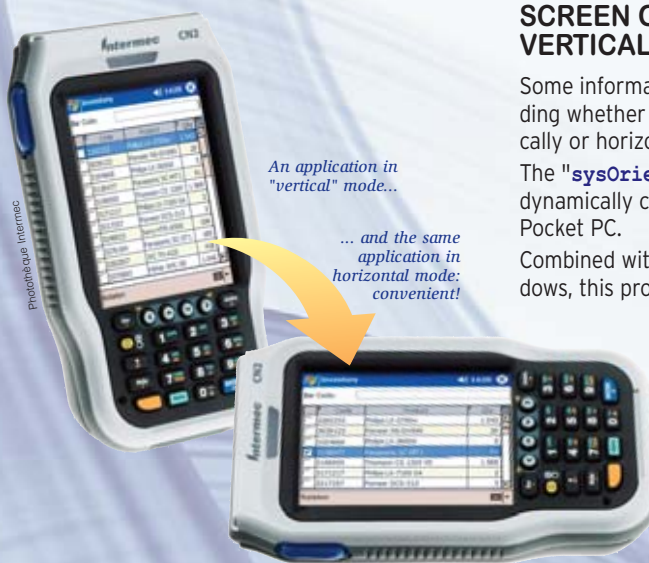
## CONTROL THE INTERNET

The information coming from Internet can be easily managed and included in the applications.



## A SINGLE APPLICATION FOR SEVERAL SCREEN SIZES

The anchor concept lets you build a single application, regardless of the terminal's screen size. More time saved!!



*An application in "vertical" mode...*

*... and the same application in horizontal mode: convenient!*

## SCREEN ORIENTATION: VERTICAL OR HORIZONTAL?

Some information is easier to read depending whether the screen is oriented vertically or horizontally.

The "**sysOrientation**" function lets you dynamically change the display on a Pocket PC.

Combined with the ability to dock windows, this provides great ease of use.



# PHONES AND TABLETS

(ANDROID & WINDOWS PHONE 7)



## ANDROID



**WINDEV Mobile 16** lets you create applications targeted for the Google Android operating system: smartphones, netbook, mobiles...



### CONTROLS SUPPORTED ON ANDROID

New types of controls are supported.

- Caption
- Radio button
- Button
- Looper
- Image
- Tab
- Formated static
- Internal window
- HTML control
- Edit control
- Check box
- List box
- Combo box
- Menu
- Progress Bar Control
- Template of control
- SuperControl

### HARDWARE PLATFORM DETECTION

In the development phase, WINDEV Mobile 16 detects the characteristics of the connected devices: resolution and DPI.

At run time, thanks to anchor technology, the application can easily manage the different resolutions and DPI.

### WLANGUAGE

More than 600 WLanguage functions are supported on Android, which opens an unlimited array of applications.

### SUPPORT FOR COMPASS AND ACCELEROMETER

The Android applications can be emulated via phone movements!



For example, a movement toward the right goes to the next form, a movement toward the left goes to the previous form, a movement toward the top positions at the beginning of the file and a movement toward the bottom positions at the end of the file.

Programming this type of interface is very easy with WINDEV Mobile 16.

The new **Sensor** family of functions allows you to offer this type of interface.

Among the supported actions:

- bump (sharp movement) (beginning and end)
- change of acceleration
- change of orientation
- orientation (compass).

This type of interface can be combined or co-exists with a standard interface (buttons,...)

## WIFI



Wi-Fi supports is very extensive in WINDEV Mobile 16.

The **WIFI** family of functions offers a large number of features, such as:

- access points detection
- connection to an access point
- add to/delete from the list of available networks
- connection status
- information about the connection
- encryption support for many formats: WEP, WPA, WPA2, WPA EAP, IEEE8021X...
- ...

## BLUETOOTH



WINDEV Mobile 16 offers extensive Bluetooth support.

The **BTxxx** family of functions offers a large number of features, such as:

- List of Bluetooth devices
- change in the phone's visibility
- accept connections
- get information about a device
- ...

## NOTIFICATION



*A notification, top left (here sales figures)*



### *The notification once expanded*

Icons found at the top of an Android home screen are "Notification" icons.

They can be "expanded" to show their details.

Thanks to the **Notif** family of WinDev Mobile 16 functions, it is easy to add icons (and their details) to the icon bar and to delete them, to perform sound notification, vibration and light up the LED.

For example: the application received a message, the information has been sent, the application is (or is not) connected, you have an appointment...

There are 4 types of notifications, all supported by WINDEV Mobile 16:

- notification in the home screen bar
- sound notification
- notification by vibration

- notification by turning on the LED light on the phone's face (in a chosen color).



*Turn on the phone LED in the color of your choice*

## TOAST



A Toast is an informational message that pops up in the middle or at the bottom of the screen to notify the user without requiring any validation.

Simply specify the text to display, where to display it and the duration of the display (short or long) thanks to the **ToastDisplay** function.



*Display a toast type message*

## HAPTIC FEEDBACK: MAKE YOUR PHONE VIBRATE!



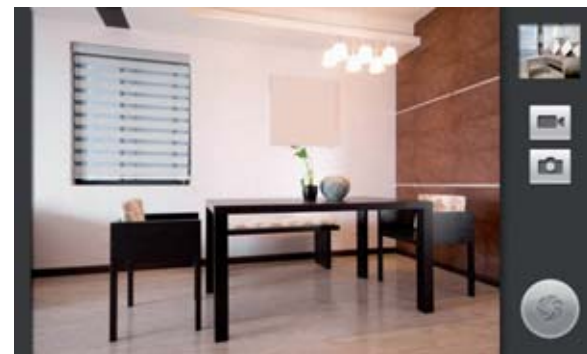
Thanks to the **HapticFeedback** property, you can make the phone vibrate when typing information.

## CONTACT LIST ACCESS

Reading, searching, creating, modifying and deleting contacts found in the phone is managed by WLanguage through the following **Contact** family of functions/



## CAMERA/PHOTO CONTROL



The camera control directly displays images captured by the phone's camera.

Photos and films are supported.

What is visualized can be stored (photos in JPG and PNG formats, film in mpg and 3gp formats).

The control also allows the display of photos and videos.

For example, an expert can take pictures and include them in a report, or the application can send them automatically to the

headquarters, and include them automatically in the relevant report (in WINDEV format or in Word for instances) The **Vidéo** functions let you use this type of control.

## QR CODE



QR bar codes are decoded.

An application can trigger the camera to acquire the QR bar code and decode its content automatically.

## CALL TO JAVA LIBRARIES

You can natively call the Java libraries provided by third-party: control a device,...

You can also directly enter Java code in lieu of WLanguage code (feature useful for troubleshooting!).

## SQLITE: NATIVE ACCESS



Native access to SQLite lets you natively access the data files found on Android devices via the usual WLanguage commands (**FileToScreen**, ...).

You can also access the files from a PC, to synchronize data for instance.

WINDEV 16 and WEBDEV 16 also offer native access to SQLite, which allows easy data synchronization from the back office.

## CLOSER LOOK AT 7 ANDROID FEATURES

Here's an example of features that are easily implemented in an Android application.

- Internet: Display a Web page (trigger the opening of the browser on a given page), an HTML control, clickable links.
- Option for preventing rotating the application
- Customize the back buttons, search, wheel, click on the wheel...
- Drawing functions: **dStartDrawing**, **dLine**, **dRectangle**, **dCopyImage**, etc...
- Image creation in 9-image mode.
- Evolution of the control style: by default,



*Android application on a tablet*

controls are created in the "Android" style, but custom styles can be used to get a different look.

- Application setup: ability to add files in the application during the generation, such as a database for instance.

This list is only an example of easily implemented features.

## DIRECT SETUP

Applications internal to the company are usually installed directly on the devices.

It's easy thanks to WINDEV Mobile 16.

## INSTALLATION VIA DEPLOYMENT ON ANDROID MARKET

Applications developed with WINDEV Mobile 16 are easily deployed on Android Market (for a free or paid distribution).

Detailed instructions are provided in the documentation that comes with the product.

## ANDROID EXAMPLES

A large number of examples are provided with Android.

Among these examples, you'll find:

- **Android FTP Client** : example of an FTP client built for Android devices



- **Android Explorer**: file explorer for Android
- **Android Managing Contacts**: custom contact management example
- **Android Managing orders**: order taking example (customer and product management etc.)
- **Android Registered** : attendance manager example (seminar, conference ...)



- **Android GPS**: example on GPS features use (longitude, latitude, altitude, speed and direction)

- **Android RSS Reader**: RSS stream reader with management of images and favorites

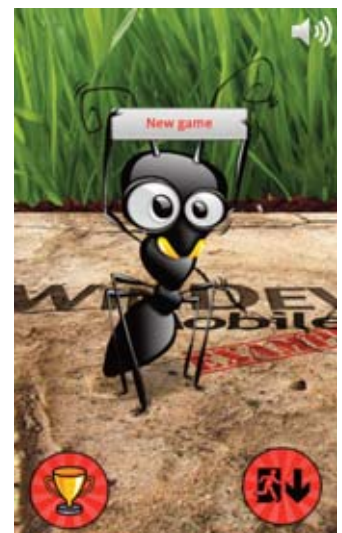
- **Android Password**: example of a password "briefcase" implementation (pin number, Internet sites, etc.)

- **Android Notes (reminder)**: graphic note taking implementation example

- **Android Speech Synthesis**: example of the use of speech synthesis features

- **Android System**: example of on how to use Android specific system features (toast, notifications, Wi-Fi...)

- **Game**: gaming example, usually meant to be distributed via Android Market



# WINDOWS PHONE 7



## NATIVE WP7 APPLICATIONS

**WINDEV Mobile 16** generates native applications (.xap) for WP7 (WP7 is the acronym for Windows Phone 7).

## SUPPORTED CONTROLS

The following controls are supported by WINDEV Mobile 16 on Windows Phone 7:

- Description: single/multi-line, formatted static, horizontal/vertical alignment...
- Image: jpg and png, 100% homethetic, centered, etc...
- Button: style,...
- Edit control: mask support, multiline available, alignment (left/right)
- HTML control
- Radio button/Check box
- Looper: can contain all types of controls.
- ...

Anchor support allows for an easy switch between portrait and landscape formats.

Plane management is also available.

Data persistence inside controls is supported.

Animation during the transition from one window to another is available by default without any coding.

## WLANGUAGE

Over 200 WLanguage functions are already supported.

Thread management is easy.

## API: NATIVE CALLS TO .NET ASSEMBLIES

You can call .Net assemblies from WLanguage code.

The classes of the assemblies are handled natively from the environment (call to the methods of these classes).



## VIRTUAL KEYBOARD

The keyboard is automatically supported. For example, if a control uses a numeric mask, during an input, the keyboard offered will be automatically switched to numeric entry

## HOME SCREEN

You can define the application's icon, and the image of the "wallpaper" (the picture that appears on the phone's home screen).



## CLOUD

Combined with one or more sites based on WEBDEV technology, access to the cloud is easy and powerful thanks to the [HttpRequest](#) family of functions.

Exchanging and storing data is easy, using your choice database (HyperFileSQL, MySQL, Oracle, ...)

## MANAGING LOCAL DATA

The "f" family of functions ([fOpen](#), [fWrite](#),...) is available, which allows you to store data locally on the phone.

## DEBUGGING

The debugger is available in "simulator" mode (in the WINDEV Mobile editor).

## MARKETPLACE

Windows Phone 7 applications are distributed via the Marketplace (App Hub, application distribution site managed by Microsoft). Applications developed with WINDEV Mobile 16 are, of course, also distributed this way.

## WP7 EXAMPLES

Several examples are available for WP7.

Among these, you will find:

- Managing the passwords
- Reminder manager (note)
- GPS location and SIM card
- Management of the accelerometer's compass
- Photo management



# WINDOWS MOBILE

**WINDEV Mobile 16** lets you of course develop applications for smartphones running Windows Mobile. This type of phone is widely used (existing customer base mainly).

The features supported on Windows Mobile are detailed in the following pages.



# TERMINALS

(WINDOWS MOBILE 5, 6.X, CE 4 AND 5, POCKET PC 2003)



## WINDOWS MOBILE & WINDOWS CE

Today, applications developed on Windows Mobile and Windows CE are mainly professional and industrial applications



WINDEV Mobile 16 lets you easily develop applications meant to run on Windows Mobile or Windows CE.

## A TRUE RAD FOR SMARTPHONE, POCKET PC, TABLET, RUGGED TERMINAL...

WINDEV Mobile 16 brings RAD to mobile. Professional development has never been so fast: RAD generates an application for you based on the data structures.

Startup screen, menus, table and form windows are automatically generated and allow you to create a real application directly usable in just a few minutes (10 minutes according to the independent magazine "Reseau et Telecom" (Network and telecom))»).

You build a proof of concept for a prospect or your management in record time.

Of course, traditional programming is also available: you create your applications then by defining your windows and by entering your code (5GL code, which allows for up to 90% less code than in 4GL).

## CONTROLS SUPPORTED IN WINDOWS MOBILE AND CE

WINDEV Mobile 16 supports all the needed controls for mobile:

- Caption
- Radio button
- Button
- Looper
- Image
- Tab
- Formated static
- Internal window
- HTML control
- Table
- ...
- Edit control
- Check box
- List box
- Combo box
- Menu
- Progress Bar Control
- Template of control
- SuperControl
- Chart
- Spin

## LARGE NUMBER OF SKIN TEMPLATES PROVIDED

In order to easily define a look adapted to your applications, a large number of ready-to-use skin templates are provided.

It lets you automatically give a spectacular look to applications you've created.



The "Media Center" skin template



The "ActivLeopard" skin template

## LOOPER CONTROLS

"Looper controls" are supported on WINDEV Mobile, which is very useful depending on the terminal.

## EASY CHARTS

A chart builder is available on Mobile: you create charts on Mobile devices without any programming.



Real time statistics

## TAPI ACCESS (TELEPHONY)

TAPI access (telephony functions) is done natively using WLanguage: automatically dial a phone number, ...



Your applications can automatically dial a telephone number

## CALL TO DLLS AND .NET ASSEMBLIES

Most add-on equipment vendors (GPS, scanner, bar code reader, RFID reader, etc.) provide drivers with their hardware. These drivers are provided in the form of native DLLs or sometime as .Net assemblies.

These communication modes via DLL or via a .Net assembly are supported by WINDEV Mobile 16.



## TYPES OF COMMUNICATIONS WITH WINDEV MOBILE



Use all the interface programs provided by device manufacturers

	Accès Distant (HF C/S)	E-Mail	FTP	HTTP	Telephony	SOAP J2EE .NET	Socket	SMS
ActiveSync	●	●	●	●		●	●	
Network card	●	●	●	●		●	●	
3G	●	●	●	●		●	●	
Infrared							●	
Smartphone or GSM access					●			●
WiFi	●	●	●	●		●	●	

### DYNAMIC COMPILATION

Dynamic compilation (creation, compilation and code execution by an application) is available on WINDEV Mobile 16.

### XML

The WLanguage XML functions are supported on Mobile. Programming Web services is very easy then.

### PRINTED REPORTS

WINDEV Mobile 16 lets you easily create reports thanks to the report generator included in the environment.

The report is created in standard PCL mobile format.

You can also create reports using the print commands from the **iPrint** family of WLanguage functions.

For printers that do not respect the PCL standard, you can also program the control sequences directly.

### BAR CODE PRINTING

Printing a bar code from a mobile is convenient!

Version 16 allows you to do it directly from an application on a mobile, via a connection between the mobile and the printer, or via the printer embedded in the terminal. The printer must simply be "PCL" compatible». The supported barcodes are: UPCA, UPCE, EAN13, EAN8, Interleaved 2 of 5, Codabar, MSI Code, Code 39, Code 93, Code 128, EAN 128, PDF 417, Datamatrix...

### RFID

Thanks to WINDEV Mobile 16 you can easily develop applications supporting the "RFID" technology».

The application remotely reads and writes information stored on a chip with an integrated antenna. The chip is embedded (or glued) inside an object or on packaging: complete traceability!



A reader, a RFID chip model (there are dozens of models)

## DEPLOYMENT: EASY

### SUPPORTED PROCESSORS

All the ARM architecture processors are supported.

### MSI AND CAB SETUP

The "MSI" standard is supported.

Generating mobile applications in "CAB" format (the entire application is stored in a .CAB file) lets you "paste" this .CAB file onto the Pocket PC which installs it later. The MSI format is also supported.

### APPLICATION UPDATE: ACTIVESYNC, GPRS, 3G, INTERNET

Application update is done automatically when connecting the PC through the standard ActiveSync software (see the WDSynchro tool below for configuring this automatic update).

But when using a mobile device, it is often very useful to be able to update an application remotely when needed.

This feature is also offered by applications developed using WINDEV Mobile 16.

### FRAMEWORK : COMMON TO SEVERAL APPLICATIONS

In order to optimize memory use on the PDA, a framework can be shared among several applications loaded on the machine. You can choose the framework elements to embed, in order to only install the needed modules, therefore limiting the size of the memory used.



## TOOLS

### SPECIAL TOOLS PROVIDED WITH THE PRODUCT

In addition to the usual tools (that come with WINDEV), WINDEV Mobile 16 comes with tools useful during the development, fine-tuning and presentation phases.

#### WDEXPLORER

WDEXPLORER lets you easily view from a PC the files and directories located on a mobile device.

#### WDCEDB

WDCEDB lets you view and access the data found in the CEDB files (.cdb) of a mobile device: appointments, contacts...

#### WDCAPTURE

WDCAPTURE lets you build from a PC screen copies or videos of what is displayed on the screen of the mobile device connected to the PC.

#### WDREGISTRY

WDREGISTRY lets you easily view the content of a mobile device's registry.

#### WDSYNCHRO

WDSYNCHRO lets you configure the synchronization that will be automatically performed by "ActiveSync" when the mobile device will be connected to the PC.



## DATABASES

### DATA ACCESS LOCAL, REAL TIME OR REPLICATED

Database access is done based on your needs and choices: local (data on the Pocket PC), or in real time where the device is used (wireless network), or in real time anywhere in the world (3G, GPRS), or by replication, the data is synchronized then (via ActiveSync or via replication).

### ALL DATABASES: HYPERFILESQL, ORACLE, SQL SERVER, AS/400, CEDB...

Your databases on your Pocket PC or your phone: it's easy!  
HyperFileSQL Mobile comes with your product. Native AS/400 access is also offered (additional).

### CEDB

WINDEV Mobile 16 also natively supports "CEDB" type files, which are used by a large number of standard applications on Pocket CE 4 and 5 (Outlook, Calendar...).



Your applications directly read and write in the Calendar, in Outlook, in the Task

list, retrieve data...

### ACCESS TO THE IS DATABASES

WINDEV Mobile provides easy access to existing IS databases. (Information System). Applications access in real time or via replication the current database, using wired or wireless connections.

### UNIVERSAL REPLICATION

WINDEV Mobile lets you synchronize files via "ActiveSync" or via the "Universal replication" mechanism, which allows replication between different databases (HyperFileSQL and Oracle for instance).

This very flexible and powerful mechanism allows "offline replication": for instance, you can receive a replica table by e-mail, run it directly on the mobile, and update the database directly on the mobile, without physical connection to a PC.

All the types of databases can be accessed by the universal replication.



## HYPERFILESQL MOBILE DATABASE: EMBEDDED AND FREE

### HYPERFILESQL: THE RELIABLE AND EASY SOLUTION

WINDEV Mobile comes with the powerful HyperFileSQL database. This easily embedded database doesn't require any administration.

### SECURITY: ENCRYPTION

HyperFileSQL allows data and index encryption. This is an important security feature for mobile devices that can easily be taken away from their owners.

The decryption key can be found in a table, or a program, entered by the user, or deduced from various elements.

### DIRECT LINK WITH HYPERFILESQL CLIENT/SERVER

WINDEV Mobile applications directly access data that are stored in the HyperFileSQL Client/Server databases (via Wi-Fi, Bluetooth, network, Internet, ...) This means that an application found on a mobile acts in real time on data, with the compatibility, ease of use and usual power of 5GL programming.

### RESUME CONNECTION

Reconnecting after an unscheduled disconnection (Wi-Fi or 3G drop) is automatic. The disconnected application reconnects while preserving all the contexts. This is an automatic security for your applications, and great comfort for your users.

### RECORD LOCKING

In HyperFileSQL Client/Server and in native AS/400, record (row) locking is managed automatically.

### FULL COMPATIBILITY

Compatibility between HyperFileSQL Classic, HyperFileSQL Client Server and HyperFileSQL Mobile is complete.

For example a database can be directly copied from a mobile to a HyperFileSQL Client/Server server.

### AUTOMATIC MODIFICATION OF THE HYPERFILESQL TABLES ON THE TERMINAL

If needed, the structure of the database found on the mobile will be updated directly from the mobile (not connected to a PC).

Your offline users can get database structure modifications via GPRS, 3G or the Internet for example. You don't need to connect the mobile device to the PC. Automatic modification in action on a Pocket PC.



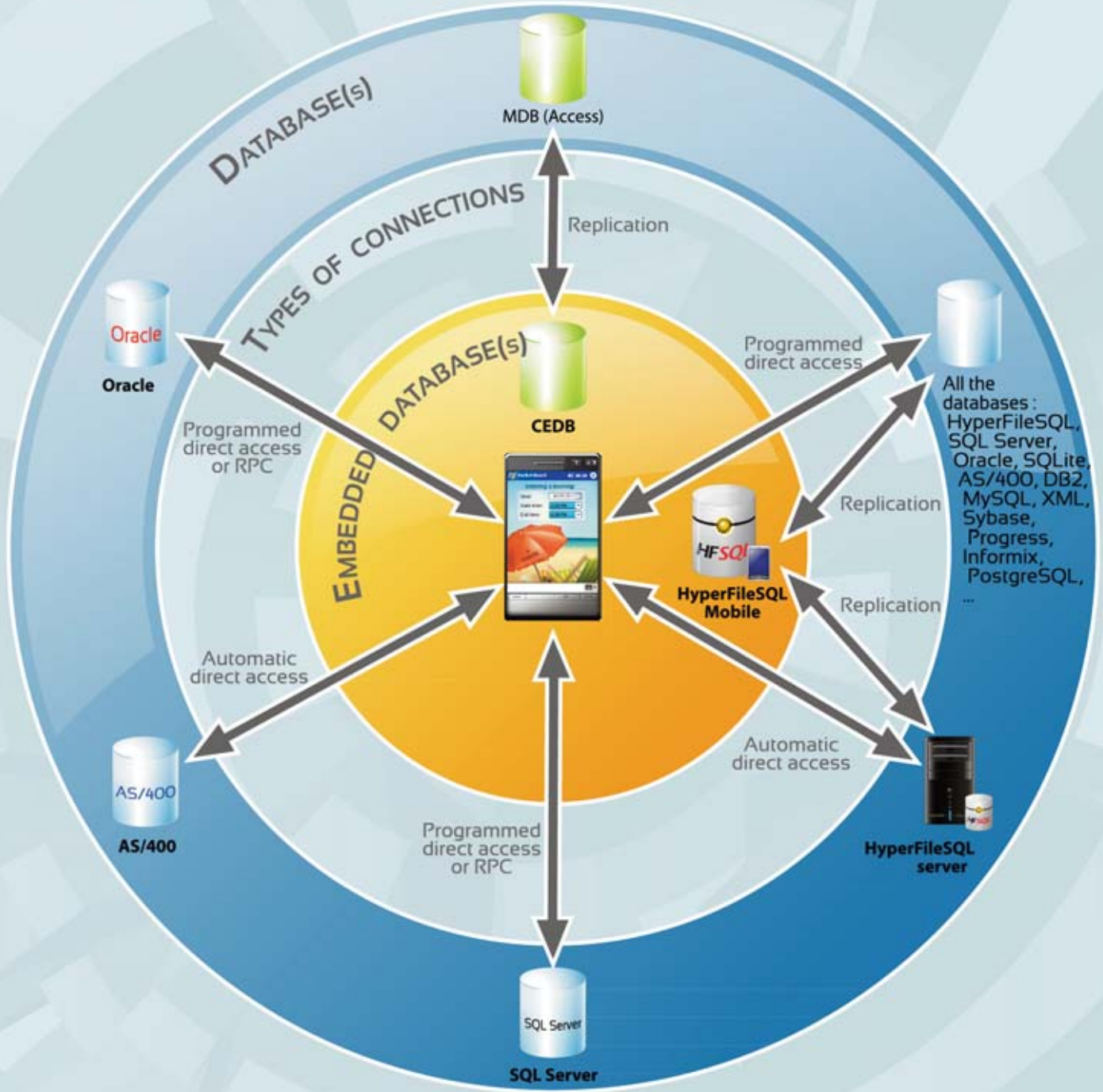
*Automatic modification in action on a Pocket PC*

HYPERFILESQL MOBILE MAXIMUM CAPACITY	
Columns per table	65,535
Keys per table	65,535
Key size	65,535 bytes
Rows per table	134 millions
Size of a table	2 GB
Row size	2 GB
Column size	65,535 bytes

FEATURES
128-bit encryptions
Referential integrity
Triggers
Import Export
Replication
Embedded
Compress/Decompress memos on the fly
TECHNOLOGIES
Automated maintenance
Concurrent access management for direct access to HyperFileSQL Client/Server
Zero administration
Automatically resume after problem
Automatic deployment



**Imagine,** gigabytes on a memory card. Only a few years ago this was the capacity of the hard drives on a desktop PCs! Now you can easily and at little cost embed large size (up to 300 million rows) secure databases onto your pockets, mobiles and phones.



## TYPES OF CONNECTION TO THE IS DATABASES

	Hyper FileSQL Classic	Hyper FileSQL C/S	SQL Server	Oracle	AS/400	Access	Any database
ActiveSync	●	●	●/●	●/●	●/●	●	●
Direct Access		●			●		
Access by RPC	●	●	●/●	●/●	●/●	●	●
Web Services	●	●	●/●	●/●	●/●	●	●
Socket	●	●	●/●	●/●	●/●	●	●
Direct stored procedures		●					

● Standard ● Through Native access, additional



### WHAT LINK TO THE PC?

- No link is required (you're not required to be connected to a PC to use an application)
- Unidirectional or bidirectional replication (synchronization)
- Infrared link
- Bluetooth
- WiFi
- Cable (ActiveSync or application controlled directly)
- Modem or Internet link
- Telephony (GPRS, 3G), directly integrated or linked
- Other methods



# 16 COMPONENTS AND EXAMPLES PROVIDED

(Windows mobile 5, 6.x, ce 4 and 5, Pocket PC 2003)

## COMPONENT PROVIDED WITH WINDEV MOBILE

### Pocket Signature

lets you easily include a ready-to-use 'Signature' control in you WinDev Mobile applications

### Pocket Limitations

lets you implement a time limit mechanism as well as a software activation mechanism on Pocket PC.

### Pocket GPS

Used to interrogate a GPS to retrieve a longitude, a latitude, a speed, an altitude.

### Pocket Falcon,

### Pocket Symbol,

### Pocket Datalogic,

### Pocket Intermec,

### Pocket Paxar :

Let you access features specific to the Pockets from these manufacturer.

### Pocket GANTT

Lets you display a Gantt chart in a memory table or in a window included with the component

### Pocket Login Management

Manages the user identification in an application from a login and a password.

### Pocket Directory picker

Directory picker for Pocket PC.

### PC Directory Picker

Selects a directory found on a Pocket PC from a standard WinDev PC application.

### PC File Picker

Selecting files found on a Pocket PC from a WinDev application.

## AMONG THE EXAMPLES PROVIDED WITH WINDEV MOBILE

### Pocket .Net

Use example for a .Net assembly (here to list the Wi-Fi networks)

### Pocket Managing Contacts

Contact management for Pocket PC.

### Pocket Managing Orders

Simplified management of orders/invoices

### Pocket Inventory

Lets you perform inventory management and save the results in a HyperFileSQL Database.

### Pocket RTF

Lets you put RTF text inside edit controls.

### Pocket Click on Chart

Offers a solution for pulling out a pie chart section on a simple user click.

### Pocket Registered

This example is an attendance manager. It is used to identify the people attending a meeting.

### Sending SMSs

"Pocket Sending SMS" project for Pocket PC or PC. These examples are used to send some SMSs.

### Pocket Virtual Keyboard

This example offers virtual keyboards that can be fully customized and certainly smaller than the standard keyboard of Pocket PCs.

### Pocket Map

This example is a light version of a well known WINDEV tool: WMap. This example is used to view and modify the data files in HyperFileSQL Mobile format directly on a Pocket PC.

### PC CDB Browser

This example lets you access the standard database (.cdb) found on a Pocket PC.

### Expenses

"Pocket Expense report" project usable on Pocket PC and PC.

These examples are used to manage expense reports. You have the ability to synchronize the data entered in the two projects

### Pocket FTPClient

This example shows the content on an FTP server. It is also used to download, rename or delete files.

### Using sockets

"Pocket Using Sockets" project usable on Pocket PC and PC.

These examples present the functions for managing the sockets

### PC Registry

This example shows how to handle a Pocket PC's registry from a PC.

### Poll

"Poll Pocket" project usable on Pocket PC and PC.

These examples are used to perform polls. The data can be synchronized.

### Pocket Loan

This example simulates loan calculations and displays the corresponding amortization tables.

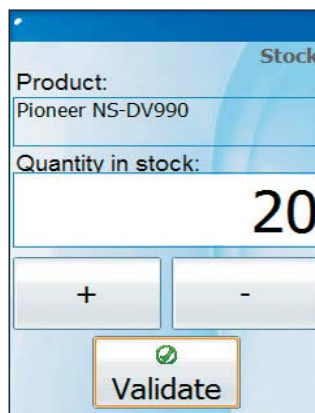
### Pocket Financial Functions

This example presents how to use financial functions.

### Stocks

"Pocket Stock" project usable on Pocket PC and PC.

These examples are used to manage the stocks. You have the ability to synchronize the data entered in the two projects.

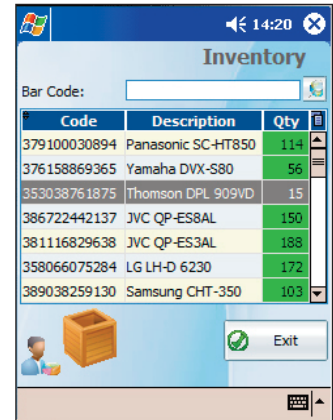


### Pocket Explorer

This example is a file explorer for Windows CE. You have the ability to list the files and directories found on a Pocket PC.

### Pocket Regular Expressions

This example explains how to use regular expressions and how to perform searches in character strings.



### Tasks

The PC Tasks application is used to enter a task list (with management of priorities, deadline, automatic reminder, ...).

### Pocket MIME Extraction

This example is used to extract the pieces found in email.

### Pocket Images

This example is used to browse a specific directory to find images.

### Pocket Password

This example presents a "box" of passwords. It can be used to manage password created when using Internet sites but also in applications or everyday life.

### Pocket Poker

This example is used to play poker on a Pocket PC.

### Pocket Tic Tac Toe

This example lets you play "Tic Tac Toe" on a Pocket PC. This example illustrates the use of the stylus and object movement.

### Pocket Slide Show



This example is an image viewer for Pocket PC. It lets you visualize images

### Pocket Pool of threads

This example presents the use of threads. Reminder: A thread is a process that runs in parallel to the current application.

### Pocket Statistics

This example performs various statistical calculations.

### Pocket Telephony

This example is a telephony application that can be used on a Pocket PC with phone access (GSM type).

### Pocket Persistence

This example presents how to use functions for managing persistent controls.

### Pocket ZIP

This example explains how to create and handle archives (".ZIP" files).

### Pocket Notes

This example lets you draw graphical "notes" and save them. You have the ability to enter some keywords to identify your notes.

### Shopping list management

"Pocket shopping list management" project usable on Pocket PC and PC.

These examples let you manage a list of stores, departments, products and purchases.

The data can be synchronized.

### Beach Reservation

"Pocket beach" project usable on Pocket PC and PC.

These examples are used to manage the bookings for private beaches. You have the ability to synchronize the data entered in the two projects.



### Pocket Animated

This example illustrates the image animation capabilities of WinDev Mobile.

### PC Photo Album

This example lets you import and/or export the photos found on a Pocket PC from a PC.

### PC Explorer

This example is used to view the files and directories found on a Pocket PC.

### Unicode socket

"Pocket Unicode Socket" project usable on Pocket PC and PC

These examples present the operating mode of sockets with Pocket PCs.

### Stopwatch

This example uses both an analog and digital stopwatch.

### APN

This example manages the device's camera.

These examples and components are provided with their source code.

Use these examples freely in your applications, or check out their architecture!

# See company TESTIMONIALS about WINDEV Mobile

Please visit [windev.com](http://windev.com)

## ACT NOW

### TRAINING: EASY!

WINDEV Mobile comes with a complete online help system, and its documentation: a tutorial guide, a programming guide and a conceptual guide.

### ORDER TODAY, DEPLOY IN A WEEK!

With the WINDEV Mobile Integrated Development Environment you can now develop on tablets, Smartphones and industrial terminals.

Mobile computing is taking over the world, WINDEV Mobile is your best ally for developing today and quickly, high performance applications on this hardware.

### Order today your copy of WINDEV Mobile 16!



# WINDEV<sup>®</sup> MOBILE

## EXAMPLES OF APPLICATIONS

Autonomous mobile application: order taking, delivery, meter reading, customer service, ...  
 Application with replication (physically, via Bluetooth or Wi-Fi, or by telephone or Internet)  
 Wireless local area network application: mobile communication with the enterprise's network in real time  
 Real time remote application, via simple 3G subscription

Control industrial machines by infrared  
 Application on a cell phone, with secure access to your enterprise's data for instance  
 Geolocalization application, trip optimization  
 Executive dashboard  
 Application to be distributed via a "Store" or a "Market"  
 And any other application you may dream up...

**BE MOBILE!**

## QUESTIONS ANSWERS

**The same copy of WINDEV Mobile 16 lets you create applications for Android, Windows Phone 7, Windows CE and Windows Mobile?**

Yes. And your code is compatible.

**Do I need to own WINDEV?**

No, WINDEV Mobile is a stand-alone software.

However, if you own WINDEV, you can retrieve your existing code and share data and projects with it.

**What is the main benefit of WINDEV Mobile 16?**

The simple fact that you can develop an application for mobile devices with the same ease-of-use as with WINDEV is a fantastic benefit!

**Do I need to pay royalties on applications developed using WINDEV Mobile?**

No, distributing applications and databases built using WINDEV Mobile is free, there's no royalty to pay PC SOFT. Deploy without restriction or risks!

**How does the development work?**

Development is done on a regular PC, the compiled application is tested directly on the PC. Then, it is transferred to the device. So, you only need a regular PC for development.

**Why is the Technical Support on WINDEV Mobile is free?**

PC SOFT trusts its products and therefore offers free technical support

for WINDEV Mobile. Fifteen inquiries (by phone or Internet) are offered\*.

**Is there a professional newsgroup for WINDEV Mobile?**

Yes; you can share your experience with the developer community.

**How long will it take me to get trained?**

If you know WINDEV, only one day is needed.

If you are not familiar with WINDEV, a week is enough.

*Do you have additional questions? Contact us, we're here to help!*

IDE for Pocket PC, Smartphone and industrial terminals, manages the complete application life cycle

Windows CE, Mobile, Android, Windows Phone 7

All in English

Free Hot Line\*

Free deployment, including the database

Compatible with WinDev and WebDev

Integrated environment

Teamwork

Specific "Pocket PC" and "SmartPhone" RAD

Audit

XML

Control Centers, Dashboard

Analysis Generator (UML, Merise, Flexible)

Documentation Generator (analysis, programming)

Component generator

Business rules and Requirements

Database Integrated HyperFileSQL Mobile (free unlimited distribution), compatible with HyperFileSQL

Automatically resume a connection

Replication

Support for CEDB databases (read, write)

SQL query generator

UI generator, adapted to the display size, with inheritance

Compatible 4GL language WebDev and WinDev

Simulator, debugger

Code Editor with assisted edit

Unit tests

Reading an SMS

Accelerometer, compass, GPS

ChartDesigner

Application translation (64 languages)

Open to Internet

Infrared link

Image management (BMP, ...)

Source Code Manager

Special (MSI, CAB, etc.) setup generator, access to Store and Market

Large number of examples

Tutorial in 1 week (1 day only if you're familiar with WINDEV)

Multi-platform code:

Windows, .Net, Linux, Java, PHP, J2EE, XML, Internet, Tablet, Smartphone, Android, WP7,...

