

# CROSS-PLATFORM DEVELOPMENT

Cross-platform code: Windows, .Net, Linux, Java, Mac, Internet, Cloud, SaaS, PHP, IoT, Android, iOS, ...

## DATABASE

### NATIVES CONNECTORS

- HFSQL
- SQL SERVER
- ORACLE
- AS/400
- MYSQL
- MARIADB
- DB2
- INFORMIX
- SYBASE
- PROGRESS
- POSTGRESQL
- SOLITE
- AZURE
- AND MORE

### HFSQL

SQL database

- Client/Server  
Windows et Linux
- Cluster
- Local, Embedded
- Network
- Cloud, HFSQLDrive
- Mobile  
Android, iOS, IoT
- UWP  
Universal Windows 10 App

### OLE DB

### ODBC

### BIG DATA

Hadoop, HBase, HDFS, Hive, Riak, Redis, MongoDB, Memcached, and more

### "HFSQL" CONTROL CENTER

Server administration, File viewing/editing, Query execution, Management of rights, Notifications, Dashboard, and more

### UNIVERSAL REPLICATION



Automatic export (Word, Excel, Open Office, XML, PDF, etc.), Automatic application lock, Input history, Persistence, UMC (User Macro-Code), Reports & Queries, Data from tables in 3D charts, Send reports by email, Automatic HFSQL data optimization, Automatic optimization of conflicts and integrity, Password and rights management, Automatic calculation in tables, Autocomplete, Automatic validation button, Remember window size and position, Resizable table rows, Automatic filter on table columns, Automatic RTF formatting bar, Context menu on images, Print table via right-click, Shortcut keys, Form copy, CTRL G: move through a multiline control, Calendar, Calculator, Repositionable Note, Tooltip, Window reorganization (position, size, color), Internet search, and more

## INTEGRATED DEVELOPMENT ENVIRONMENT (IDE, ALM)

DevOps environment in English, Spanish or French

- WEBIFICATION
- GDPR
- CONTINUOUS INTEGRATION
- STATIC AUDIT
- PROJECT PORTFOLIO
- BATCH BUILD

### COLLABORATIVE SOURCE CODE MANAGER: SCM, SCMDRIVE (CLOUD), GIT

Collaborative source code management, GUI, analysis, Branch management, Rights management, Comparison tool, Merge, and more

### MODELING: UML

Reverse modeling, 9 diagrams, Class generation, Import, and more

### FLEXIBLE MODELING

Modeling of processes, Workflow, Diagram, Reverse modeling of code

### QUERIES

Mathematical expression, SQL, Stores procedures, WLanguage functions, Full text, and more

### BUSINESS RULES

Link with the UI, IBR icon, ...

### MULTILINGUAL PROJECT SUPPORT

Translation tool, Automatic extraction and reintegration, 64 languages per application, Dictionary, ANSI, Unicode, and more

## INTERFACE

### UI, UX

Templates, Multiple inheritances, Internal windows and pages, File links, DataBinding, Preset actions, Automatic UI checker, MVP, Responsive Web Design, Skins, Skin templates, Planes, UI compilation errors, Layouts, Dynamic serving, MarkDown, Guided tour, and more

### Advanced controls:

Table, Chart, Dashboard, Scheduler, Word Processing, OCR, Spreadsheet, PDF Reader, Gantt Chart, Looper, Multimedia, Toast, Layout, Dockable Panel, Chart editor, Kanban, Flexbox, CSS Grid, and more

### Smart controls:

Button with Progress Bar, Timeline agenda, Menu with drawers, Finger signature, International phone number input, Product looper, Resource planning, Twitter timeline, Color picker, Login, PDF gallery, and more

**Standard controls:**  
Button, Static, Edit, Calendar, Combo Box, Radio Button, Check Box, TreeView, List Box, and more

### REPORT

Preview, Export (PDF, PDF/A, RTF, HTML, Word, Excel, Open Office, XML, etc.), Search, Template, Bookmark, Factur-x, Form and input, Archiving, Bookmark, DataBinding, Watermark, Pivot table, QR Code, PDF form, and more

### IMAGE EDITOR

Adjustment, Resizing, Transparency, Layers, Generation of 5 states and borders, and more

### "PROJECT MONITORING" CONTROL CENTER

- MANAGEMENT OF REQUIREMENTS
- MANAGEMENT OF TASKS AND SCHEDULES
- GANTT CHART
- SPRINT, BURNDOWN CHART
- KANBAN
- ...

### SECURITY

User Groupware, Password, Rights management, Encryption, Asymmetric encryption, Encryption, and more

### AVAILABLE RESOURCES

- 200 Examples, 30 Components, 47 Skin templates, RAD patterns, 150 Preset controls and templates, 200 Wizards, Online help, Tutorials, and more

- Community, Free hot line, Community documentation, and more

### AAD (Aided Application Development)

Object snapping, General help, Anchor errors and conflicts, Adapted controls at creation, and more

### TECHNICAL DOCUMENTATION

Generation by reverse analysis, Export (PDF, RTF, HTML, and more)

### MESSAGING

Attachment, Custom folder, Search, Annotation of document, and more

### BUG TRACKING

Statistics, Link with SCM, Task association, User feedback, and more

## PROGRAMMING

### HELP

Automatic generation, Automatic documentation of updates, and more

### RAD (Rapid Application Dev.)

Preset and custom patterns, Generation of windows and pages: Form, Table, Search, Table+Form, and more

### 5GL CODE (WLanguage)

Sets of procedures, Classes, Inheritance, Interface, Polymorphism, Threads, Associative arrays, Queues, Stacks, Lists, Hashtags, ANSI, Unicode, Script, and more

### COMPONENTS

Generation and Use, External, Internal, Internal with analysis, and more

### AUTOMATED TESTS

Unit tests, UI control, Scenario, Iteration, Automatic test generation, Code coverage, and more

### DEBUGGING

Local, Remote, Trace, Assert, Runtime log, Step by step, Breakpoint, Viewing the content of the variables, Modification of the code while debugging, Definition of the next statement to run, Dump, Real-Time Performance Profiler, and more

### AI (Artificial Intelligence)

OCR, Face and object recognition, Contours detection, and more

### PROFILING

Analyzing the performances, CPU time, Optimizations, Number and order of calls, and more

## GENERATION AND DEPLOYMENT

### WEBSITE

Static/Dynamic website, Cluster, SPA, PHP, AWP, HTML 5, CSS 3, AJAX, Websocket, JavaScript, TypeScript, and more

### .EXE

Windows, Linux, JIT, 32 et 64-bit, Service, UWP, and more

### JAVA

Windows, Linux, MacOSX, and more

### .NET

Generation and Use, Assembly, and more

### WEBSERVICES

Generation and Use, Assembly, SOAP, REST, and more

### MOBILE

Android, iOS, Wear OS, Apple Watch, Apple Vision Pro, Catalyst, IoT, Industrial devices (Zebra, etc.), and more

### SETUP, DEPLOYMENT AND AUTOMATIC UPDATE

Plug-in, With/Without UAC, Single User (DVD, USB Key, etc.), Live Update (data and applications: network, HTTP, cloud, push, multi-site), Customizable style book, Uninstaller, Google Play, App Store, MDM, Windows Store, In-app purchases and subscriptions, and more

### CLOUD COMPUTING

Generation and use of SaaS, SQL Azure, PaaS, Docker, and more

### DYNAMIC AUDIT

Analysis during operation: Execution Warnings, Non-fatal errors, Asserts, Memory content, Real-time analysis, and more

## EXISTING CODE

- Access
- C
- C#
- C++
- Cobol
- Fortran
- Python
- HTML/CSS
- Java
- Javascript
- TypeScript
- Pascal
- Kotlin
- VB
- and more

## EXTERNAL RESOURCES

- ActiveX
- Angular
- Apple Sign in
- API
- Beacon
- Blockchain, Bitcoin
- Bootstrap
- Chorus
- Carte Vitale
- CM 11/15
- Corba
- DDE
- DLL
- DLNA
- DMP
- DocX
- Facebook
- Fax
- Figma (import)
- FTP, FTPS, SFTP
- HTML
- HTTP
- iCalendar
- IMAP
- Instagram
- IoT
- J2EE
- JQuery
- JSON
- Matomo
- Modbus
- NFC
- OAuth
- OLE
- OPC
- OpenID
- POP
- Port série
- RPS
- SESAM
- SharePoint
- SMTP
- SOAP
- Socket
- TAP
- Tailwind
- Twain
- Tweeter
- UPNP
- XLS/XLSX
- XML
- YAML
- Youtube
- Websocket
- and more

## NATIVE CONNECTORS

to Third-Party Products

- Chorus Pro
- DMP
- DocuSign
- Dropbox
- Google
- Google Drive
- IoT
- JSON
- LDAP
- Lotus Notes
- MATLAB
- MQTT
- OneDrive
- Outlook
- RSS
- SAP R/3
- Salesforce
- Webservice
- XML
- and more

## MONITORING ROBOT

### MONITORING

- FTP and HTTP connectivity, Computer (Query, PING), NNTP, SMTP, HFSQL Client/Server server, external databases (by ODBC)  
- Activity of a WINDEV application, Log of a WEBDEV site, WEBDEV server, Disk space (SNMP), and more

### ALERT MESSAGE

Messaging, Control screen, WLanguage procedure, Email, SMS, and more

## PRODUCTION

### CONTROL CENTER "FEEDBACK"

Feedback management, Spool, Filter, Account, POP, Scheduling, and more

### TELEMETRY

Collection server (on-premises or in the cloud), Dashbord for results of collections: Deployed versions, Most frequently used features, Unused elements, Longest processes, Performance metrics, Device statistics, Report printing, Custom data, and more



This poster only presents some of the possibilities of the different environments

# DEVELOP 10 TIMES FASTER