

# Xbase++ 2.0

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## **New: Multi-Touch support**

Get touch support for your existing Xbase++ application without any code changes. For example, using touch gestures for panning through your data now is a standard feature of XbpBrowse and XbpQuickBrowse objects. Moreover, full-featured multi-touch applications with support for pan, rotate, zoom or tap gestures can be created using the new events supported by all existing Xbase Parts.

## **New: Layout Management**

With just a few lines of code, existing forms/dialogs can become resizable. Thanks to the new LayoutManager class supported by all Xbase Parts. Automated resizing of even large and complex dialogs based on a set of anchor rules has just become very easy. Try it out: this feature is becoming ever more important with all the different form factors and screen sizes out there.

## **New: Project Management**

Project management tools such as pbuild and the Xbase++ Workbench now have better support for large and complex team projects. Pbuild has been streamlined and optimized to support multi-directory and multi-target scenarios. In addition, the Xbase++ Workbench now stores all user-specific project information such as breakpoints, watchpoints or open files in a per-user project file. This significantly eases collaboration in a project team.

## **New: Xbase++ Workbench Debugger**

The Xbase++ Workbench debugger is more than 10 times faster compared to the old but still supported console debugger. We put a lot of effort into providing great performance for debugging larger Xbase++ applications. Various features have been added. The debugger can now attach to an existing Xbase++ process, which makes analysis of running applications a snap. You can even detach from a process being debugged, and let it continue outside the control of the debugger. A great feature if it comes to debugging services. Finally, <CXP/>-based dynamic web pages and web applications can now be debugged like any other Windows application.

## **New: PostgreSQL ISAM support**

Using the dbfupsizer tool you can move your existing dbf/ntx/cdx-based application data to the PostgreSQL server. Modernize your existing dbf/ntx/cdx-based application just by adding a few lines of code by making use of the PostgreSQL client/server system via the PostgreSQL DatabaseEngine. This can dramatically increase performance and reliability of your applications with almost no code changes. Full support for all ISAM commands and functions is provided.

## **New: Full Postgres SQL support**

With Universal SQL, you can transparently access the PostgreSQL server. Where PostgreSQL proprietary features are required, Pass-Through SQL can be used to send any type of SQL command to the server.

## **New: Full Advantage Database SQL support**

With Universal SQL, you can transparently access the Advantage Database Server. Where Advantage proprietary features are required, Pass-Through SQL can be used to send any type of SQL command to the server.

## **New: DataObjects**

The Xbase++ OOP model was extended to support the concept of object prototyping. It is now possible to dynamically add member variables to objects of the class DataObject or classes derived from it. We put a lot of effort into the fact that there are no performance penalties when using this feature. Dynamic members are as fast as native members! DataObjects are the new universal container in Xbase++ 2.0 for transporting all of your domain-specific data between the different layers of your application.

## **New: WebSocketHandler, WebHandler and HttpEndpoint**

Create a websocket server with just a few lines of code and push real-time data to the web or your mobile device. Create mobile applications for your POS or Warehouse solutions, and connect them to your local workstation via the wireless LAN. Connect your Xbase++ applications over the internet and exchange data in real-time like in a peer-to-peer network.

## **New: WebUI for Windows application**

Create views with HTML and CSS using the CXP View-Engine for your Windows application. The same technology, CXP, can be used to create views for your web or connected mobile application or your win32 rich client applications. Leverage a single area of knowledge HTML+CSS to create an appealing UI for web and desktop applications.

## **New: Long field names for DBF tables with FOXDBE**

The FOXDBE DatabaseEngine now detects an existing DBC and loads the table-specific meta information from the Visual FoxPro database containers. Long field names are therefore supported.

## **New: New data model for the Xbase++ 2.0 sample collection**

Although a number of samples are still missing, we decided to include a more complex and more consistent data model for all the samples, which are new in Xbase++ 2.0. The new data model is derived from Northwind and is provided as free dbf/cdx tables, Visual FoxPro database container with dbf/cdx tables and indexes, Advantage Database Dictionary with dbf/cdx tables and indexes, PostgreSQL database scripts and SQLite databases.

## **New: New database/table commands and various extensions**

The Visual FoxPro featureset has been carefully reviewed and where it made sense in terms of increased productivity or better command handling, the VFP features were added to the existing Xbase++ commands. Of course, new commands have been added, too!

## **New: Xbase++ Workbench is now included**

The Xbase++ Workbench, formerly known as Visual Xbase++ 2.0 IDE, is a solid environment for source code editing, debugging and project management. In addition to many fixes, new features have been added such as CXP-support, XML documentation, Intellihelp and code folding. Support for SQL statements and HTML files is also provided.

## **New: XbToolsIII functions register automatically**

When the XbToolsIII libraries are loaded then their functions are automatically registered and thus can be called dynamically out-of-the-box. Therefore the header files `_xbtnetw.ch`, `_xbtnetb.ch` and `_xbtbase.ch` became obsolete and are no longer part of the product.