

# Get to know Firebird in 2 minutes

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## Introduction

If you are reading this paper, this is probably your first encounter with the **Firebird** RDBMS. This paper will present to you the main features of the Firebird database. At the end, I am sure you will be anxious to download its lightweight installer and try it out yourself.

## History

**Firebird** is derived from Borland InterBase 6.0 source code. It is **open source** and has **no** dual license. Whether you need it for commercial or open source applications, **it is totally FREE!**

**Firebird** technology has been in use for 20 years, which makes it a very **mature** and **stable** product.

## Major Features

Don't be fooled by the installer size! Firebird is a fully featured and powerful RDBMS. It can handle databases from just a few KB to many Gigabytes with good performance and almost free of maintenance!

Below is a list of some of the Firebird's major features:

- \* Full support of **Stored Procedures and Triggers**
- \* Full **ACID** compliant **transactions**
- \* **Referential Integrity**
- \* **Multi Generational Architecture**
- \* Very **small footprint**
- \* Fully featured internal language for Stored Procedures and Triggers (**PSQL**)
- \* Support for **External Functions** (UDFs)
- \* Little or **no need for** specialized **DBAs**
- \* Almost **no configuration** needed - just install and start using!
- \* **Big community** and lots of places where you can get free and good support
- \* Optional single file **embedded version** - great to create CDROM catalogs, single user or evaluation versions of applications



- \* Dozens of **third party tools**, including GUI administrative tools, replication tools, etc.
- \* **Careful writes** - fast recovery, no need for transaction logs!
- \* **Many ways to access your database**: native/API, dbExpress drivers, ODBC, OLEDB, .Net provider, JDBC native type 4 driver, Python module, PHP, Perl, etc.
- \* **Native support** for all **major operating systems**, including Windows, Linux, Solaris, MacOS.
- \* **Incremental Backups**
- \* **64bits** builds available
- \* Full **cursor** implementation in PSQL
- \* **Monitoring** Tables
- \* **Transaction** and **connection triggers**
- \* **Temporary** Tables

## Try it now!

Trying Firebird is a very simple task. The installer size usually is **less than 5MB** (depending on the operating system of your choice) and fully automated. You can download it from the [Firebird main site](#). The latest **stable** release is **version 2.1**.

You will notice that Firebird server comes in three flavors: **SuperServer**, **Classic** and **Embedded**. You can start with SuperServer. Right now, Classic is recommended for use with SMP machines and some other specific situations. SuperServer shares its cache among the database connections and uses threads to handle each connection. Classic starts one independent server process for each connection made.

The **embedded** version is an **amazing** variation of the server. It is a **fully featured Firebird server packed in just a few files**. It is very easy to [deploy](#), since there is **no need to install** the server. It is ideal for CDROM catalogs, demos or standalone desktop applications.

Firebird comes with a full set of command line utilities that allow you to create databases, retrieve database statistics, run SQL commands and scripts,

perform backups and restores, etc. If you prefer to use a GUI (Graphical User Interface) tool, there are lots of options to choose from, including free ones. Check the list at the end of this paper for a good start.

On **Windows**, you can run Firebird as a **service** or in **application mode**. The installer can create an icon in the Control Panel that you can use to manage the server (start, stop, etc).

## Documentation

There are a lot of papers, FAQs and articles that you may want to check in the Firebird main site. Also, you can check if your country has a localized community site or discussion list, so you can get support in your native language.

All this information can be found digging around in the Firebird main site. Also, check [www.firebirdnews.org](http://www.firebirdnews.org) to get up to date with the most recent news related to Firebird.

## For all sized databases

Some people thinks that Firebird is a RDBMS to be used with just small databases and a few connections. **They are wrong!** Firebird is being used with many big databases and lots of connections. A good example was shown in [Softool'06](#), where Avarda (russian ERP) was running with a Firebird 2.0 Classic server and an average of **100 simultaneous connections** accessing a **120Gb** Firebird database with **700 million records!** Server was a SMP machine (2 CPUs - Dell PowerEdge 2950) and 6GB RAM.

## Tools & Components

Here you can find a list with some interesting resources including tools, drivers, etc. Please **check** the [official Firebird site](#) for a **more complete** and up to date **list**.

### GUI Administration tools

- \* [IBExpert \(has personal FREE version\)](#)
- \* [DB Workbench](#)
- \* [FlameRobin \(Open Source, runs on Windows, Linux, MacOSX and FreeBSD\)](#)
- \* [Firebird Development Studio](#)

### Drivers and access components

#### Delphi components

- \* [IB Objects](#)
- \* [FIBPlus](#)
- \* [UIB \(Unified InterBase Components\)](#)
- \* [Zeos](#)
- \* [MDO](#)

#### ODBC

- \* [Gemini ODBC driver](#)
- \* [Firebird ODBC Driver](#)

- \* [EasySoft](#)

## OLEDDB

- \* [ZStyleGroup](#)
- \* [IBProvider](#)

## Java

- \* [JayBird](#)

## .Net Provider

- \* [Firebird .Net Provider](#)

## C++

- \* [IBPP](#)

## Internet

- \* [PHP](#)
- \* [Python](#)
- \* [Perl](#)

## Replication tools

- \* [IBReplicator](#)
- \* [FBReplicator](#)
- \* [Replication Manager](#)

## Support and resource links

- \* [Firebird related News](#)
- \* [FireBase \(in Portuguese\)](#)
- \* [IBPhoenix](#)
- \* [CFLP \(in Portuguese\)](#)
- \* [Supporting lists and groups](#)
- \* [IBase \(Russian\)](#)
- \* [Firebird Developers Magazine](#)

## Misc

- \* [Fyracle - Oracle mode Firebird](#)
- \* [Firebird 2.1 new features](#)
- \* [Firebird 2008 RoadMap](#)

## Papers and documentation

- \* [Firebird Official Documentation Project](#) (QuickStart and general guides)
- \* [FirebirdFAQ](#)
- \* [FB Online Manual](#) (Admin, PHP, PSQL, etc.)

## Would you like to help?

Due to the nature of an **Open Source** project, **anyone** can **contribute** by developing new features or fixing bugs. If you want to become a member of the *Firebird Development Team*, download the [Firebird source code](#) from *sourceforge* and study it. Also, you may join the [fbdevel](#) discussion list to get in touch with other developers (note: *fbdevel* is not a general support list, so don't ask support questions there, instead use [firebird-support](#) for free community support).

You don't need to be a *coder* to help the project. Become a **member** of the **Firebird Foundation** or make a **donation** and you will be **helping** to **fund** core developers so they can invest more time working in the project.

Thanks for these two minutes...