



# InterBase

## An Introduction...





# Agenda

What is  
InterBase and  
why choose it?

Where is  
InterBase used

Connectivity  
Options

How to Use InterBase

Desktop

Mobile

API





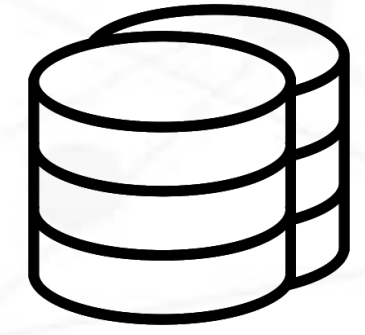
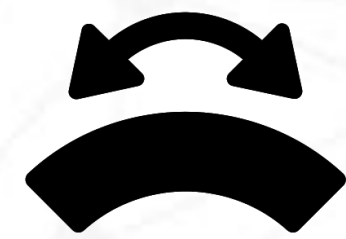
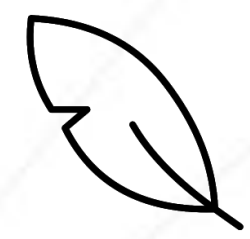
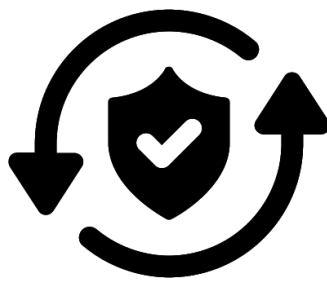
# What is InterBase?

And why choose InterBase?



# What is InterBase?

InterBase® is a **full-featured, high performance, ultrafast**, encryptable, scalable, relational and embeddable multi-platform SQL database with commercial-grade **data security, disaster recovery** and **change synchronization** for developers who are looking to embed a **low-cost, zero-admin, secure** database into their cross-platform connected applications. Global companies across a range of industries have a competitive advantage with InterBase® through advanced **data protection, security, speed** and **performance**.



Secure	Self-reliant	Resilient	Lightweight	Flexible	Efficient	Compliant
Cross-Platform Encryption Separate Security Login Reduced Exposure to Risk Role-Based User Security Encrypted Backups	Independent Operation Near-Zero Maintenance Rapid Crash Recovery Disaster Recovery	Live Backups Distinguished Data Dumps Fast Restores Write-Ahead Logging Point-in-Time Recovery	Small Footprint Fast Install Faster Data	Multi-Language Support Cross-Platform Support Server Data Storage Local Data Storage Single On-Disk Format	Log-Less Replication Data Change Subscriptions ChangeViews Data Tracking Role-Based User Security Early Fetch Data Deltas	ANSI SQL Stored Procedures and Triggers SQL-Based Performance Monitoring Open-Standards-Based Database Connectivity Multi-Gen Architecture/MVCC Event Alerts Customizable Generators



# InterBase® - SQL database for Mobile, Desktop, Server

## Overview

- Highly scalable, powerful, embeddable database.
- Small memory and on-disk footprint,
- Simple installation / deployment
- Near zero administration
- Encryption built into all paid versions\*
- Low TCO

## Security

- Embedded user & role based authentication
- Full database, table or column encryption
  - ~~DES (weak)~~
  - AES (strong 256bit) encryption
- Decryption by user / user role
- Allows developers to focus on creating fast, resilient applications.

## Disaster Recovery

- Journaling\*
- Data dumps
- Partial Backups

## Notable Features

- Full-featured DBMS
  - SQL92 compliant
  - SQL Domains
  - Table Spaces
  - Change Views
- ACID compliant / Multi-version architecture
- Automatic crash recovery
- SMP - Multiple core support
- Self-tuning engine
- Fully featured in all editions
- \*Some features limited in run-time royalty free IBLite
- Database monitoring and statistics built in

## Also....

- Window Direct I/O support & Amazon EC2 certified
- Tight integration into Embarcadero Development tools, but also works with Visual Studio, Xcode, Eclipse, Ruby, PHP etc
- ODBC





# InterBase Editions

## InterBase Server

1 to 100's of network users

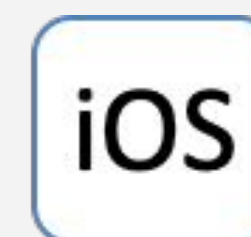
Fully featured,  
+ Server monitoring



## InterBase ToGo

Deeply Embedded

Fully featured  
Optimized for single app use





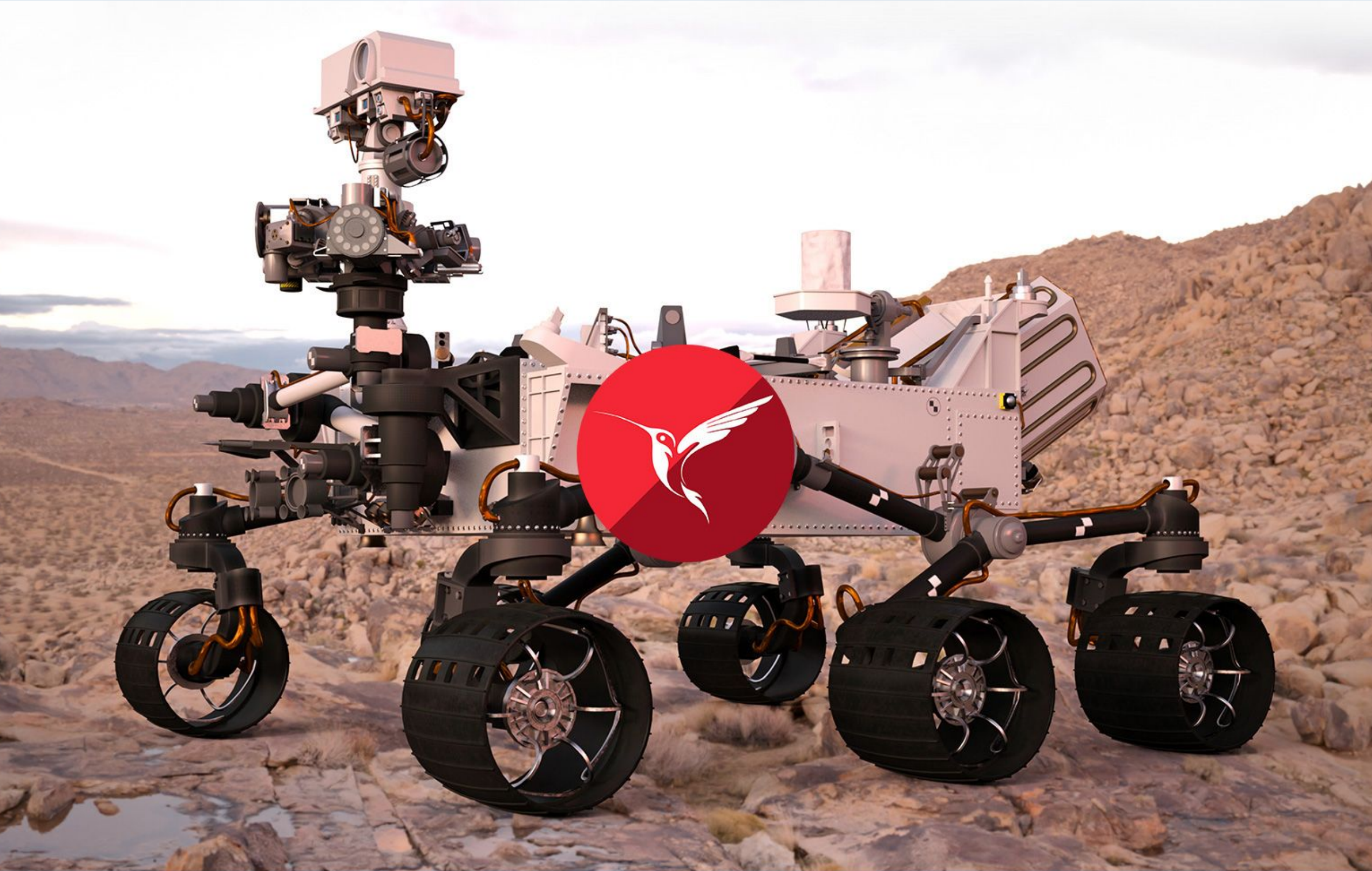


# Where is InterBase Used?

Customer Stories?







Hard to access?  
No on site DBA?

No problem!

When you need reliable embedded database **Trust InterBase**







# InterBase Customer: OpusCapita

**OpusCapita**  
E-invoicing

- OpusCapita e-invoicing service enables fully automated invoicing processes within Accounts Receivable and Accounts Payable.

Challenges	Results
<ul style="list-style-type: none"> <li>Reliable &amp; secure insertion of a high volume of database records, created from a number of customers.</li> <li>Scalability</li> <li>Rapid development of interoperability for new customers</li> </ul>	<ul style="list-style-type: none"> <li>Processing 500k+ new records a day</li> <li>InterBase provides fast server performance, while its small footprint reduces the cost of expensive hardware.</li> <li>Small development team using Delphi and InterBase delivering web and desktop clients</li> </ul>

*"The InterBase stored procedures and triggers are blazingly fast, and enabling rapid complex processing of data as it arrives into the system" Mikael Nilsson, Lead Developer*





# InterBase Customer: Bonev Soft Auditing Ltd



- BSoft is one of the biggest accounting software companies in Bulgaria.
- Over 20,000 AJUR customers, include Overgas Holding, Armeets, Sinergon Holding, Cargill, EY, PwC and the Bulgarian Military.
- Outgrows its original DBMS and chose InterBase

Challenges	Results
<ul style="list-style-type: none"> <li>● Database that scales from 1 or 2 users to 100's</li> <li>● Speed and scalability</li> <li>● Support customer ISO 27001 accreditation</li> </ul>	<ul style="list-style-type: none"> <li>● Huge cost savings for customers</li> <li>● New value (with near zero effort) <ul style="list-style-type: none"> <li>○ Write-a-head logging,</li> <li>○ Transparent encryption at rest,</li> <li>○ 64bit server (without client updates)</li> </ul> </li> <li>● Shared logic with mobile apps lowering dev-cycle cost</li> </ul>





# InterBase Customer: Management Plus



PROUD EYE CARE LEADERS MEMBER

- Electronic health record (EHR) and practice management software solutions for eye-care professionals since 1995
- Solo practitioners to multi-provider and multi-location
- Recently expanding mobile capabilities across multiple platforms

Challenges	Results
<ul style="list-style-type: none"> <li>● Regulatory requirements for healthcare technology certification</li> <li>● Diverse mix in customers size and needs</li> <li>● Small development team</li> <li>● Growing customers demands for mobile app</li> </ul>	<ul style="list-style-type: none"> <li>● 20% reduction in development time</li> <li>● Can now use a single platform for iOS, Android and Windows development</li> <li>● Strengthened in-house development capabilities</li> <li>● 15+ years of InterBase</li> </ul>







# InterBase Customer: Bio-Nuclear



- Distributor of quality clinical lab products and instruments
- 440 clinical laboratories, processing 50% of the Puerto Rico market.
- 1.6m tests annually.
- Selected InterBase as it provides cross-platform deployment options for customers and simpler setup than Microsoft SQL

Challenges	Results
<ul style="list-style-type: none"> <li>● Lack of connectivity with remote laboratories</li> <li>● Inefficient processes leading to low productivity</li> <li>● Reduced accuracy, slow response times</li> </ul>	<ul style="list-style-type: none"> <li>● Real-time connectivity across all laboratories</li> <li>● Increased security with centralized, encrypted database</li> <li>● Expanded business opportunities with mobile apps for patients</li> </ul>





# InterBase Customer: Bio-Nuclear



*“Because we are an extremely small development team, we needed a solution that was easy to maintain remotely at a reasonable cost, but had all the features of an enterprise database. InterBase is a lot easier to maintain [than Microsoft SQL] and is significantly less expensive. It is also fast, secure, works great between sites, and is near admin free, lowering the total cost of ownership compared to MSSQL. InterBase has enabled our developers time to focus solely on R&D rather than supporting existing laboratories databases. We can work on InterBase with confidence because we can rely on its scalability.”*

Senior Software Development Engineer Julio E. Rodriguez





# InterBase Customer: Par Springer-Miller



- Hospitality sector – Resorts, city-center hotels, destination spa and golf properties, timeshare properties and casino resorts.

Challenges	Results
<ul style="list-style-type: none"> <li>● High-performance SQL database</li> <li>● Multi-national support</li> <li>● Varying system requirement (including macOS, Linux, Windows)</li> <li>● Easy install via the web</li> <li>● Low maintenance database (Remote support as no onsite DBA)</li> <li>● High level data security</li> </ul>	<ul style="list-style-type: none"> <li>● Speed exceeds customer performance expectations</li> <li>● InterBase installs within minutes remotely, on minimal hardware</li> <li>● SpaSoft customers appreciate the zero maintenance</li> <li>● Global customer base, with unicode support enabling access to Asia</li> <li>● PA-DSS V1.2 validation</li> <li>● 15+ years of InterBase</li> </ul>







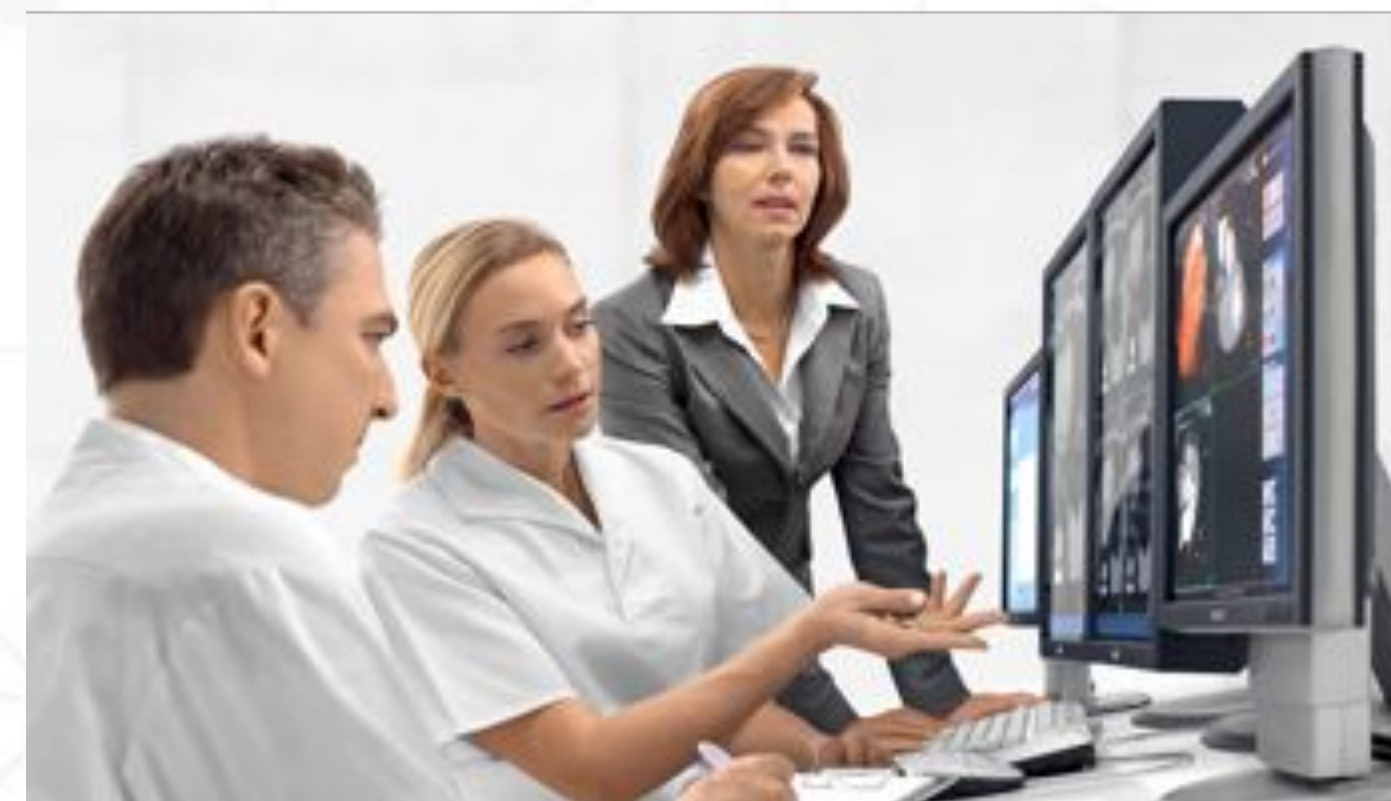
# InterBase Customer: Siemens Healthcare Diagnostics

Global leader in vitro diagnostics and performance driven solutions

14000+ employees, serving 30,000 customers in 120 countries

Uses Delphi & InterBase for their Microbiology division for control instrumentation, patient results, reports and more

**SIEMENS**  
medical





# InterBase Customer: Electrolux

Global leader in appliances

40 million units across 150 markets

Certus Management Information System (CMIS)

Vital performance statistics for washers



“It’s so simple to include  
InterBase in my application.  
InterBase is amazing!”  
—Magnus Flysjo, CMIS developer

*Thinking of you*  
**Electrolux**







# Case Studies on InterBase.com



## OpusCapita Success Story

InterBase's small footprint has helped Opus Capita offer speed and performance on lower hardware spec than leading competition. This has saved on both server hardware, and overall total cost of ownership.



## BSoft Success Story

With InterBase BSoft has scaled their database engine in response to customer requirements, pass maintenance cost savings onto customers, and provide real-time access to secure data with InterBase's first-class encryption.



## bit Time Success Story

bit Time uses InterBase because they don't want to worry about the backend database and they have many transactions so they need an ultra-fast database.



## PAR Springer - Miller Systems SpaSoft Success Story

SpaSoft's reputation relies on a system that is fast and performs well. Since InterBase SMP is one of the fastest native databases available, and its performance scales well on higher-end systems, the SpaSoft application can quickly respond to the application's queries.



## ManagementPlus Success Story

For ManagementPlus, Delphi and InterBase from Embarcadero Technologies have played an integral role in managing the company's growth since the beginning.



## Labinfo Systems / Bio-Nuclear Success Story

Labinfo uses InterBase because it provides cross-platform deployment options for customers and simple setup. InterBase is a full-featured, high performance, encryptable, multi-platform, and scalable relational database for developers working with cross-platform connected applications.

<https://interbase.com/resources/>







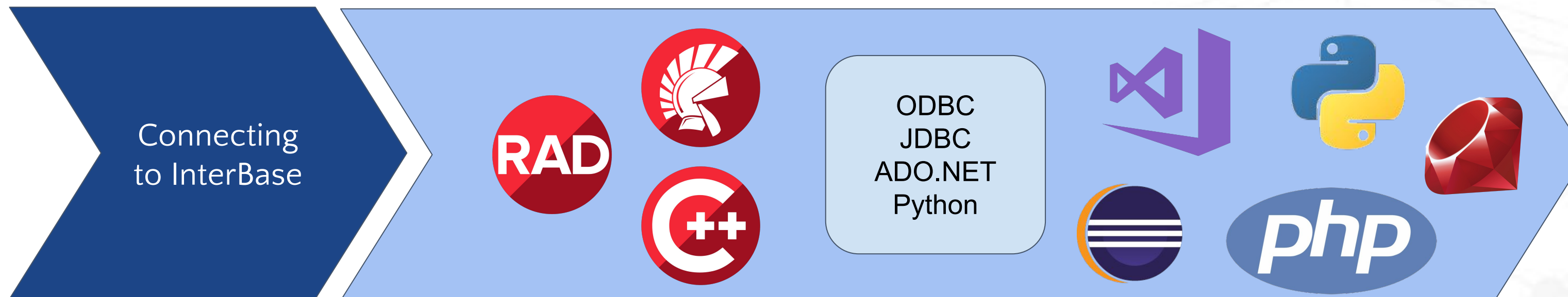
# Connecting to InterBase?

Languages and Option





# Connecting to InterBase



## Official Interbase Documentation:

[https://docwiki.embarcadero.com/InterBase/en/Main\\_Page](https://docwiki.embarcadero.com/InterBase/en/Main_Page)

## ADO.NET

GitHub : <https://github.com/Embarcadero/IB.NETDataProvider>

NuGet Drivers : <https://www.nuget.org/packages/InterBaseSql.Data.InterBaseClient/>

Entity Framework : <https://www.nuget.org/packages/InterBaseSql.EntityFrameworkCore.InterBase/>

## Python

<https://github.com/Embarcadero/InterBasePython>

## ODBC

<https://github.com/Embarcadero/InterBaseODBCDriver>





# Using InterBase

with RAD Studio







# Demo – IDE / IBConsole

Install, setup, first database





# Demo – Desktop App





# Demo – Mobile App







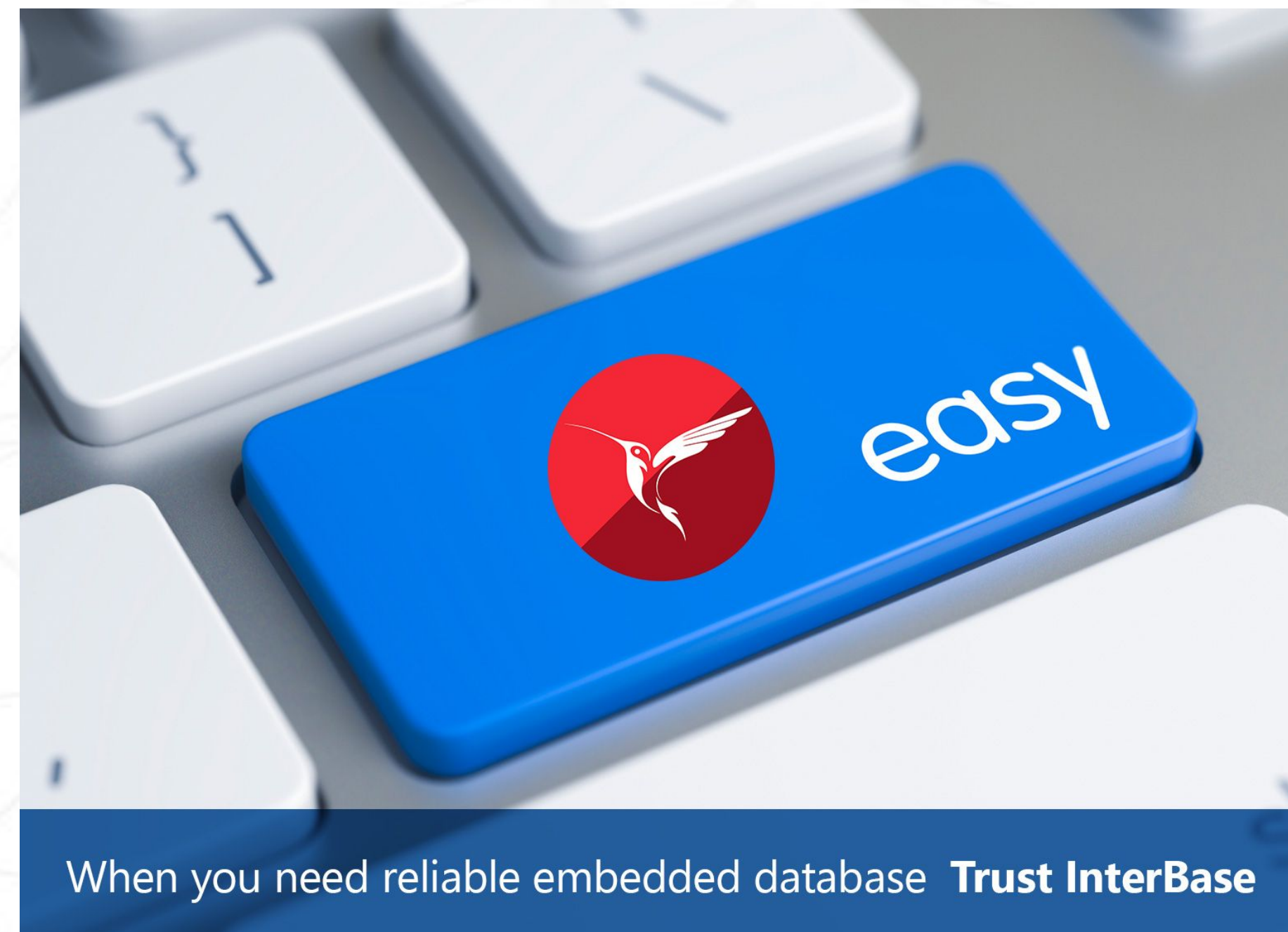
# Demo - InterBase API





# InterBase VAR Program

- Dedicated Partner Manager
- Volume license discounts
- Silent Install
- SDK Pack



When you need reliable embedded database **Trust InterBase**





# Q&A

Embed, Deploy, Relax

[www.embarcadero.com/products/interbase](http://www.embarcadero.com/products/interbase)

@InterBase

