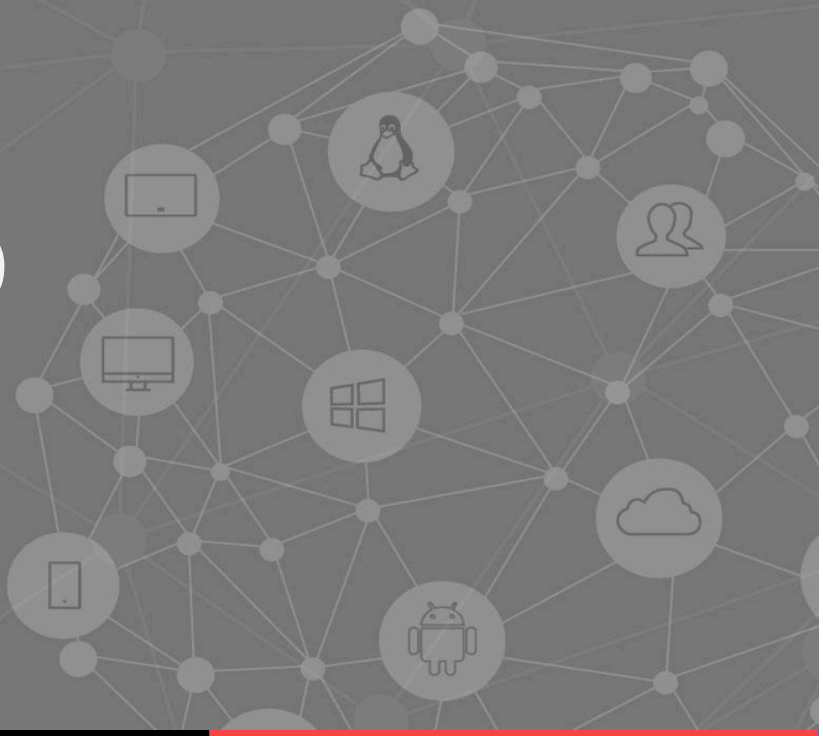
DelphiDay italian conference

Delphi Day, June 7 2018

Delphi 10 Tokyo for Windows 10 and More



Presented by

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Twitter @marcocantu

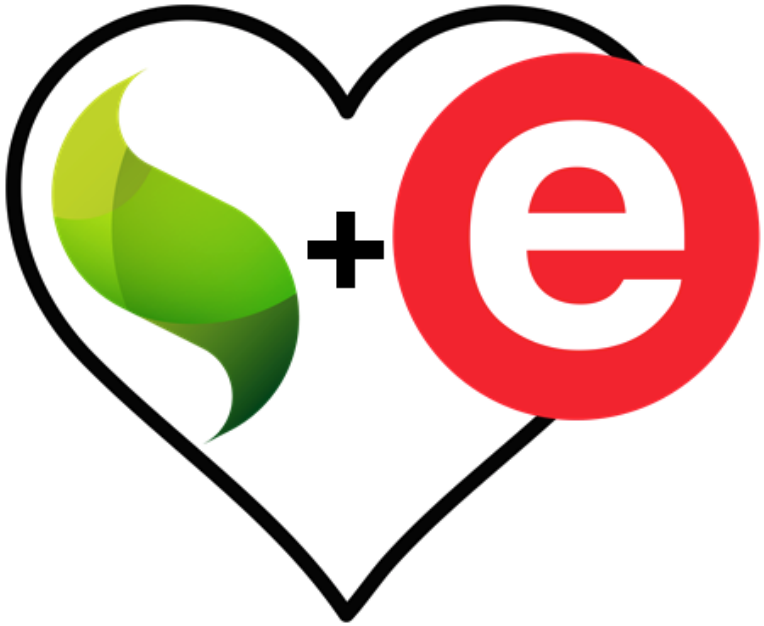
Embarcadero for Developers

Focused on Tools for Developers

RAD Studio, Delphi, C++Builder

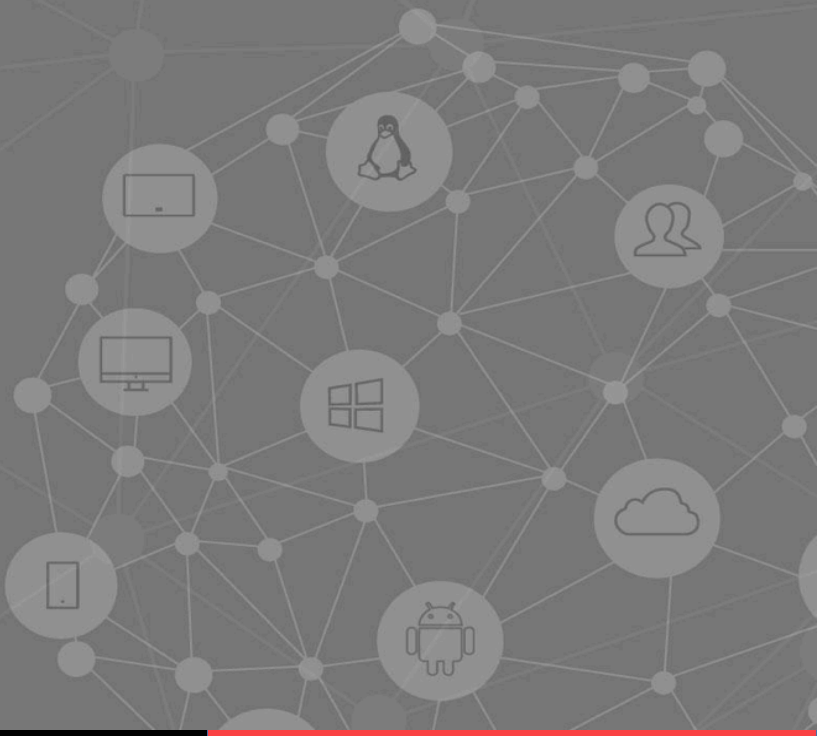
ExtJS, ExtReact, Sencha Architect

InterBase Database



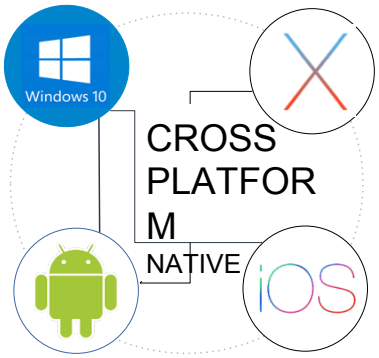
A Business Unit of Idera, Inc

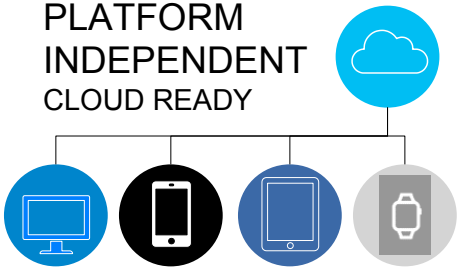
WHAT IS DELPHI?

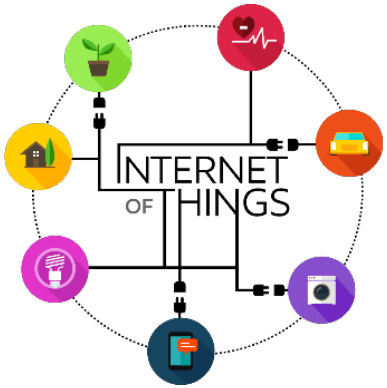


What is Delphi?

The fastest way to develop cross-platform native apps with flexible cloud services and broad IoT connectivity







Delphi Cornerstones

Native Delphi compilers for multiple platforms producing optimized and secure applications

Flexible mix of Modern OOP and fast RAD development

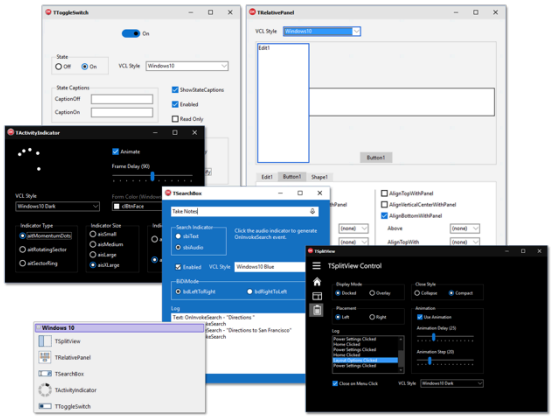
Extensive focus on code migration to modern OSes and UIs

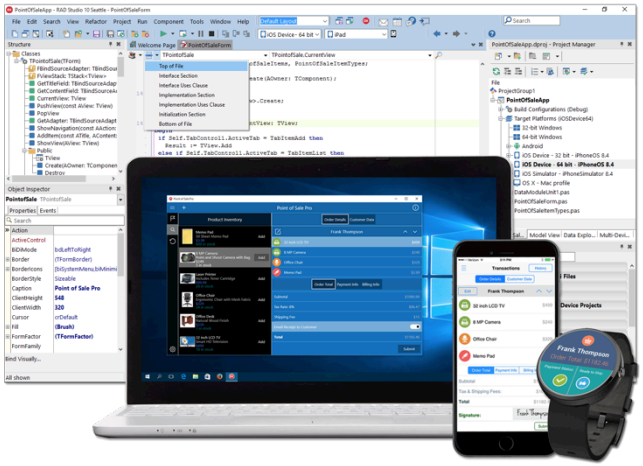
Enterprise and Data Centric architectures

Active Third-Party Vendors Ecosystem

Fast, Visual Development

Delphi provides powerful VCL controls for Windows 10 and enables FMX cross-platform development for Windows, Mac, iOS and Android





Delphi Platform Support

Target the latest versions of major operating systems with one codebase!

Windows 10
April 18 Update

macOS Sierra
macOS High Sierra

Linux 64-bit (Ubuntu and Red Hat Enterprise)
Delphi Only

Android N and O

iOS 10 iOS 11

Delphi Language Summary

De-Facto Modern Object Pascal programming language

High-performance native compilers for 5 platforms, 32/64 bit

Best easy-to-use, complete, OOP, RAD language

Leverage a large community of Delphi developers

- In all industries and at all latitudes

(New) Large-Memory enabled Delphi stand-alone compilers

Planned: Record init/finalization, nullable types, nicer syntax

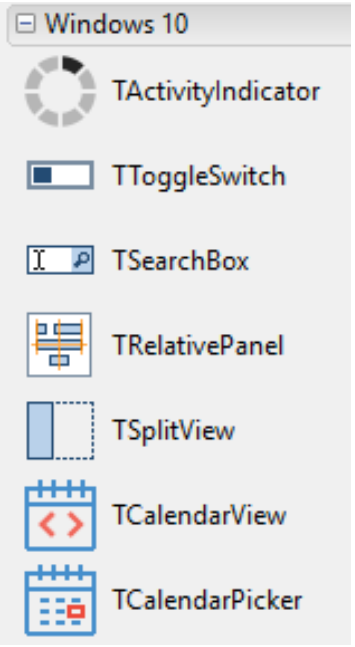
Why Windows 10?

- 500 Million Installed Base
  - ~28% Market share and growing
  - Enterprise Adoption Gains expected with Win7 EOL in Jan 2020
- VCL offers the best migration path to Windows 10
  - Retains support for older versions of Windows
  - Deploy to Windows 10 store via project Centennial

VCL and Windows are and will remain a key focus of Delphi

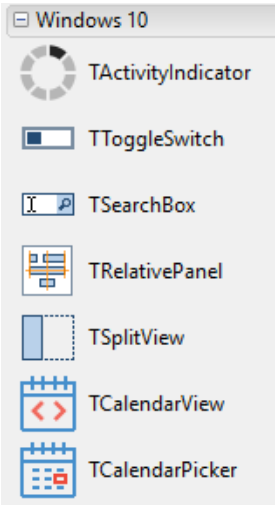
VCL: The Best Solution for Windows 10

The best UI controls library for Windows
Includes direct access to Win32 APIs, COM Shell Controls, WinRT new APIs
VCL controls corresponding common Windows 10 UI elements (but not limited to Windows 10)
Style your existing VCL apps
Publish VCL apps on Windows Store via Desktop Bridge

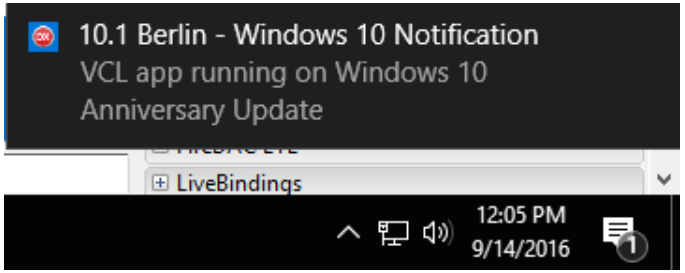


What's in the VCL for Windows 10

- Styling
  - Windows 10 specific styles
- New VCL Components
  - 5 components introduced in 10 Seattle, 2 in Berlin, 4 in Tokyo
  - Implemented in VCL, work also on Win7
  - Look like WinRT counterparts, but no dependency

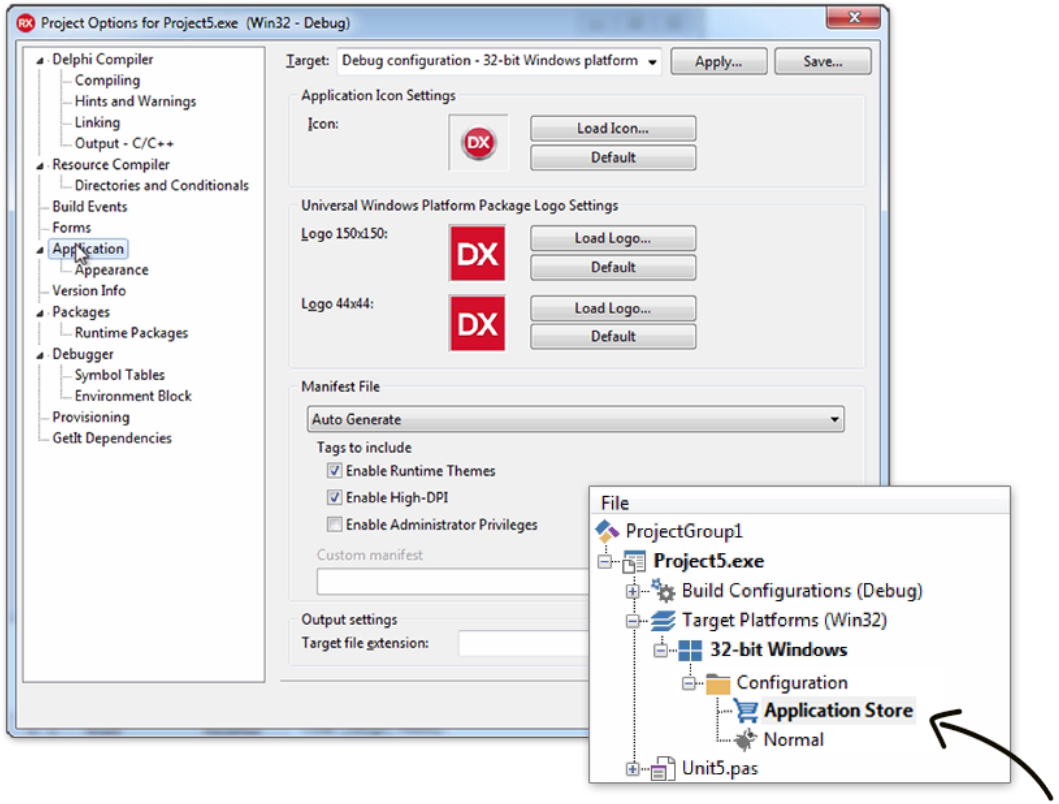


WINRT based components



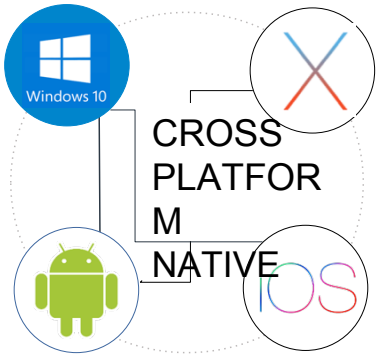
- Share Contracts
  - TSharingContract (VCL)
  - TShareContract (RTL)
- Notifications
  - http://community.embarcadero.com/blogs/entry/taskbar-notification-badge-support-in-windows-10-anniversary-update
- Bluetooth LE

Windows 10 Store support in IDE

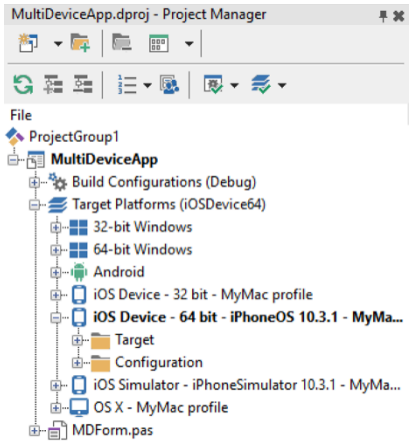


Cross-Platform, Native Apps

Write your UI once, customize at design time, deploy everywhere!

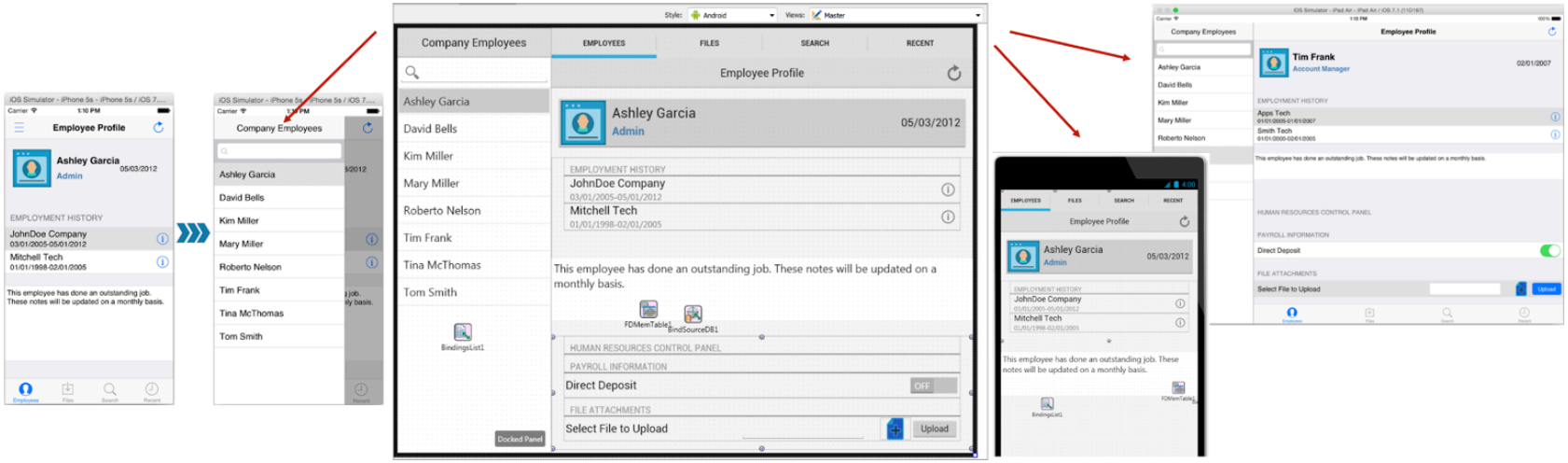


- Native platform compilers for maximum performance and security
  - 5 operating systems,
  - CPUs: 32bit and 64bit CPUs, Intel and ARM
- Cross platform runtime library and database access
  - Single-source multi-device architecture
- FireMonkey visual component library
  - Flexible designers, styling and platform components



Best in Industry: FireUI Multi-Device Designer

- Shared master and specific views
- Visually customize forms for different platforms and form factors



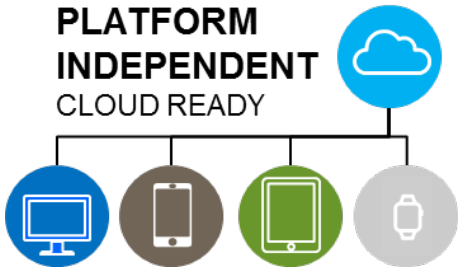
FireDAC: High-Performance Data

High-performance, easy-to-use, enterprise database connectivity, in-memory data caching and processing

Universal data access, with database specific features: No drivers required and full source code provided

Works on all server and client platforms, mobile included

Cloud Services

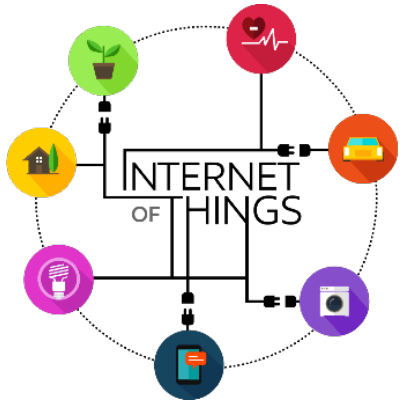


- AWS and Azure support
  - Access to storage, tables, queuing
- Backend-as-a-Service (BaaS) providers
  - Including Parse API (now hosted by other vendors), Kinvey
- REST and HTTP client libraries for direct access
  - Based on platform libraries, native HTTPS support
- FireDAC NoSQL database access
  - Full support for MongoDB, on premise or in cloud

Internet of Things Capabilities

Extend your desktop and mobile apps to IoT

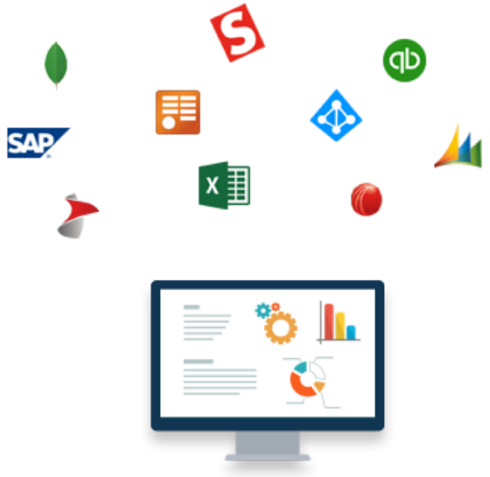
- Connectivity
  - Bluetooth, Bluetooth LE, and Wifi
- Control
  - Ready-to-use IoT components
  - Proximity awareness, BeaconFence
- Actionable Data
  - Sensors data collection
- Device Management
  - Distributed device monitoring with ThingPoints



Enterprise Connectors

Connecting to Any Application is as Easy as Connecting to a Database

- RAD Studio Add-On
  - Extend Delphi Apps with SaaS, NoSQL, & Big Data Connectivity.
- 80+ Sources and Growing
  - 45 Connectors in Enterprise
  - 80 Connectors in Enterprise Plus
- Direct Real Time Access
- Trial versions available via GetIt
- Royalty Free Distribution
  - Per-developer Royalty Free Distribution Rights
  - Build Rights with valid current subscription



Annual Developer Subscription: ongoing updates, upgrades and releases

RAD Server

The Perfect Backend for Delphi and C++Builder (and ExtJS) Apps!

Implement RAD Server services in Delphi or C++Builder

- Easy REST API End-Point Publishing
- Server Metadata Publishing based on Swagger.io
- Mobile Push Notifications
- User/Group Management
- API Usage Analytics
- User Location/Proximity and BeaconFence
- IoT Edge Modules and ThingPoints

InterBase 2017: Embed, Deploy, Relax!

Self-tuning, High Performance SQL-92 Relational Database Management System

InterBase Server:
- Windows
- Linux

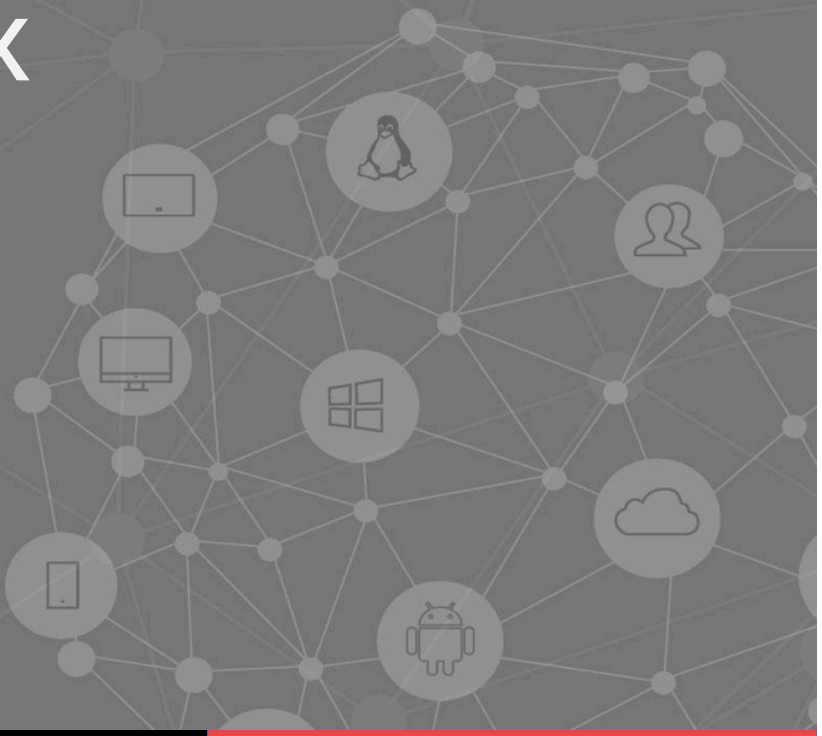
IBToGo:
- Windows
- MacOS
- iOS
- Android
- Linux

IoTA
INTERNET OF THINGS AWARDS
WINNER
Most Innovative
Use of Data

New hot features:
- Changed Views
- Derived tables
- Server-wide performance monitoring
- Common table expressions

... and more

What's New in RAD Studio 10.2.x



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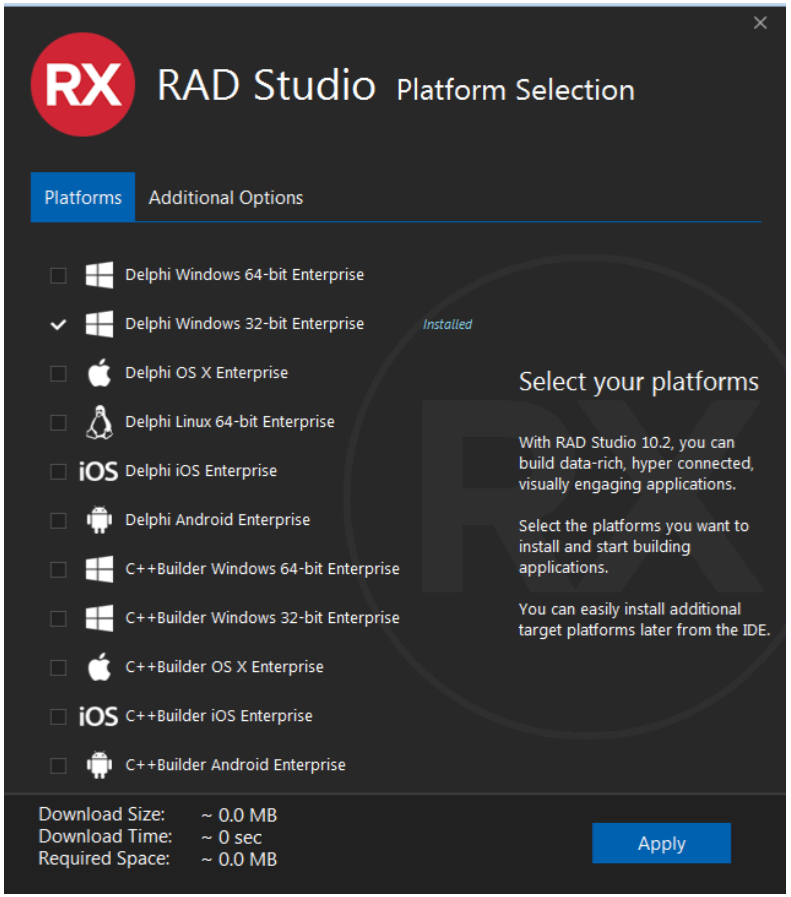
Improved Install Experience

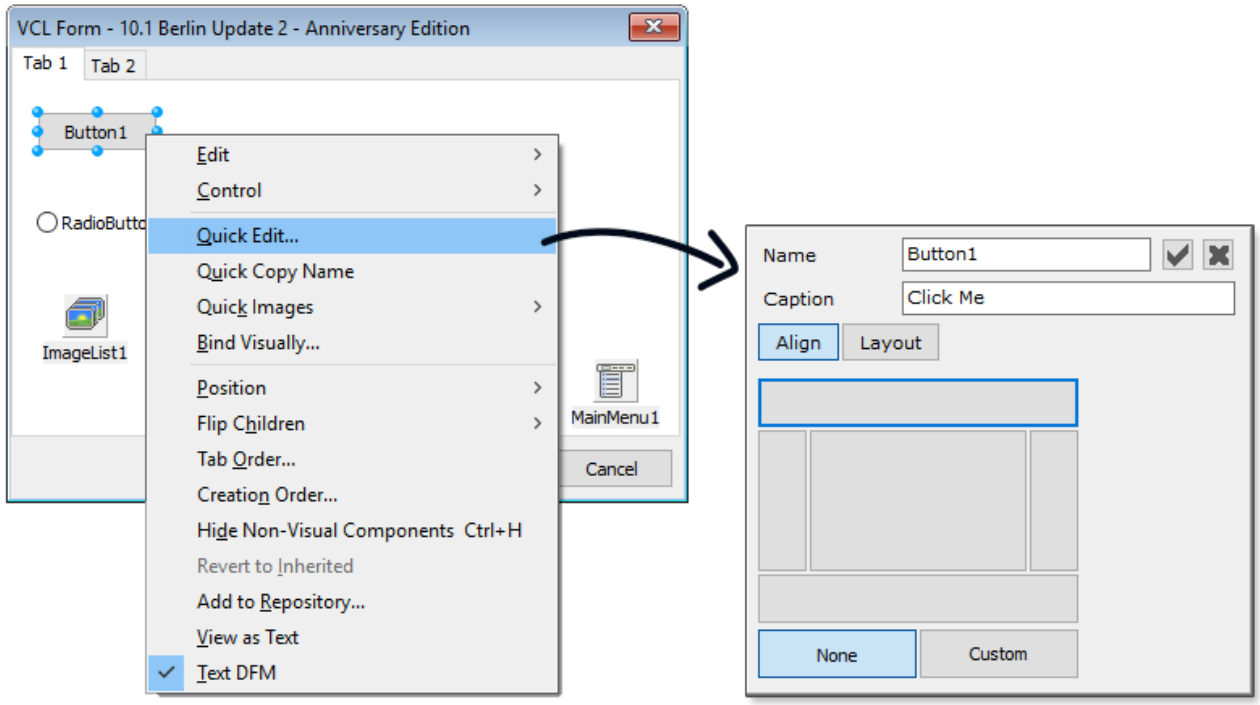
- Base Install + Platforms
  - Initial “base install” builds a bare, working system
  - Followed by platforms
  - Platforms can be added any time
  - Gives a *very fast* install (~10min)
  - Based on GetIt technology
- Traditional installer is still available (ISO image)



Quick Edits

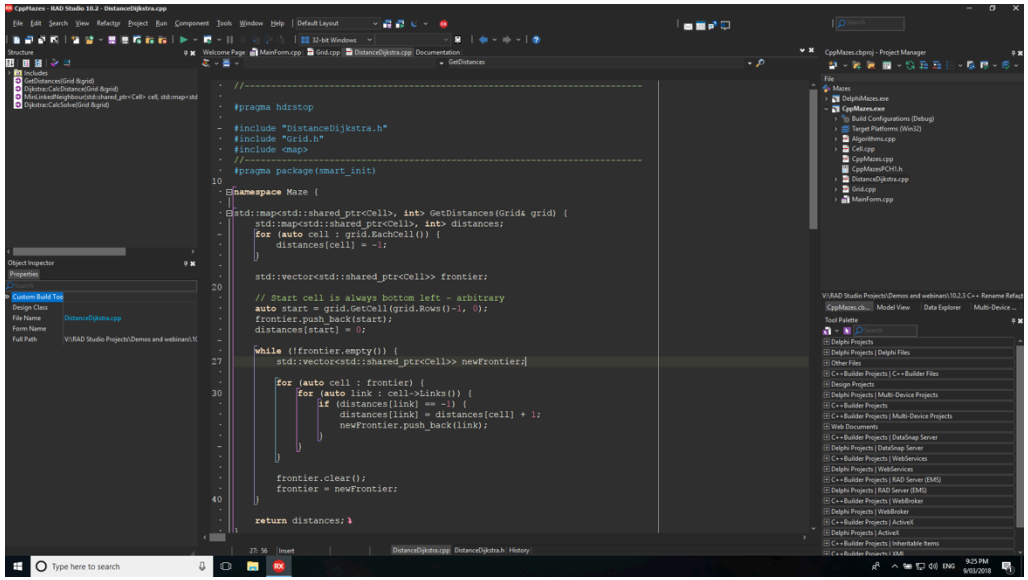
Introduced in 10.1.2 (Berlin Update 2) for VCL

And for FMX in 10.2.2!



Dark Theme

- Charcoal: inspired by other productivity applications
  - Common request
  - Easy on the eyes (not high contrast)
  - VCL & FMX designers *not* themed: ‘real’
  - Toggle IDE and editor themes together, but also separately

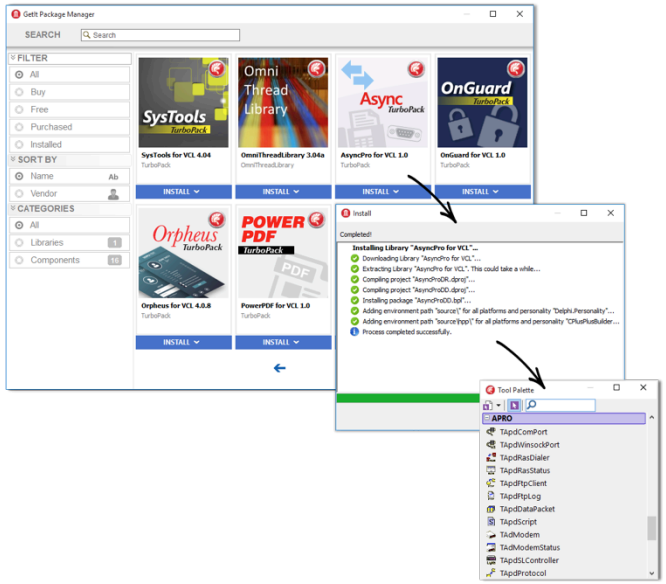


Get It Package Manager

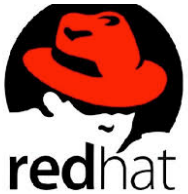
Extend the IDE with hundreds of component packages

Open source and commercial

Now includes new categories and hundreds of additional trial versions and ready-to-use controls and components



Delphi Linux Support



Focus on Linux 64-bit Servers

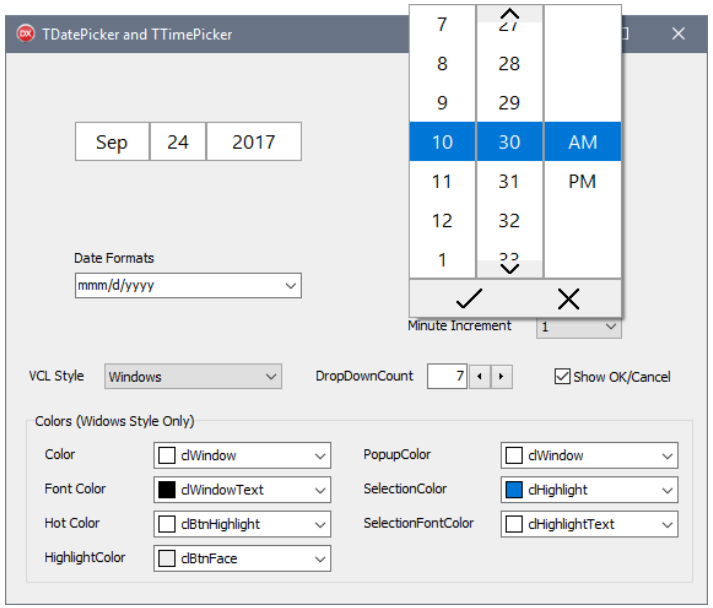
Officially supporting

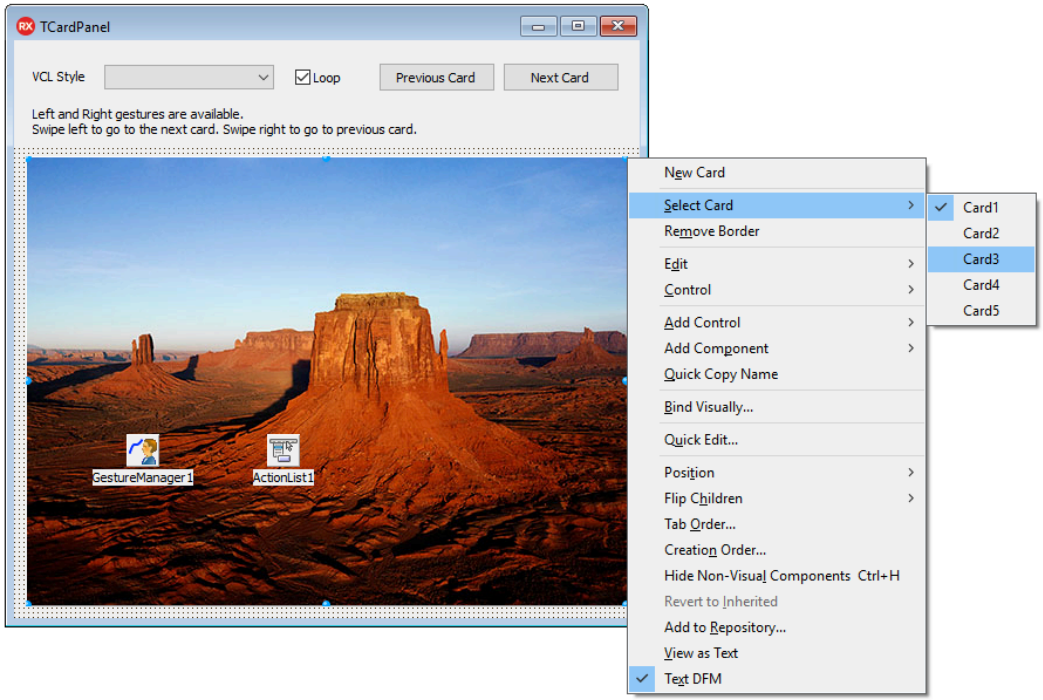
- Ubuntu 16.x LTS
- RedHat Enterprise 7
- Works on most distributions

Server side technologies only

- RTL, DB RTL, IOUtils and file system access, FireDAC, HTTP, REST, Cloud, WebBroker, Apache integration, DataSnap, EMS/ RAD Server, JSON, XML, SOAP, Indy, IoT, and more

New VCL Controls

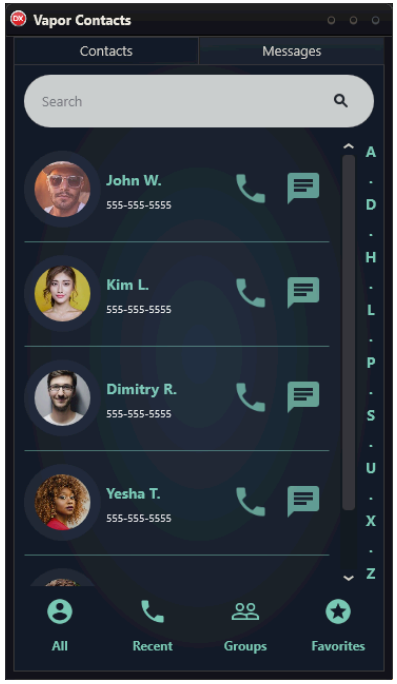




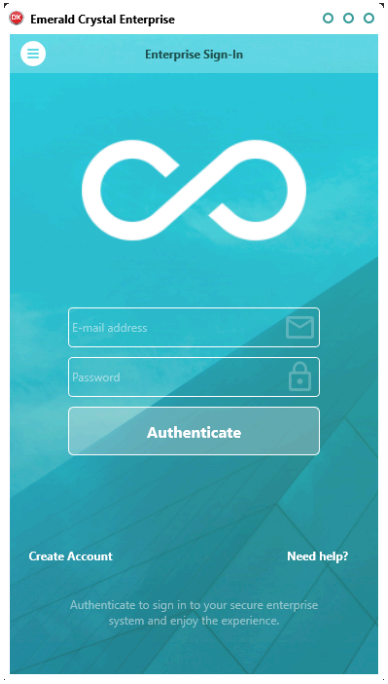
Inclusion of Mobile Support in Delphi Professional Edition

- With 10.2.3, new purchases of Delphi Professional edition include mobile support
- Also included for existing customers on Delphi Professional with active Update Subscription

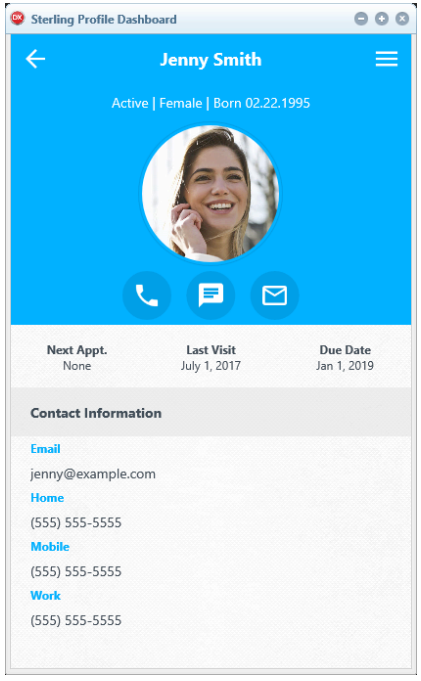
FireMonkey UI Templates



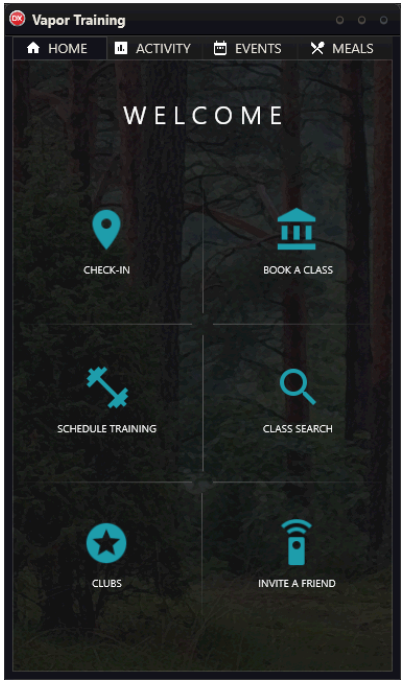
Contacts Screen



Login Screen



Profile Screen



Home Screen

RAD Server Support Evolution

- **Additional Product Focus**

  Use RAD Server for building JSON REST web services, with strong database connectivity and Enterprise services access and Sencha ExtJS solution for building a web app calling the web services

- **RAD Server Deployment License Inclusion**

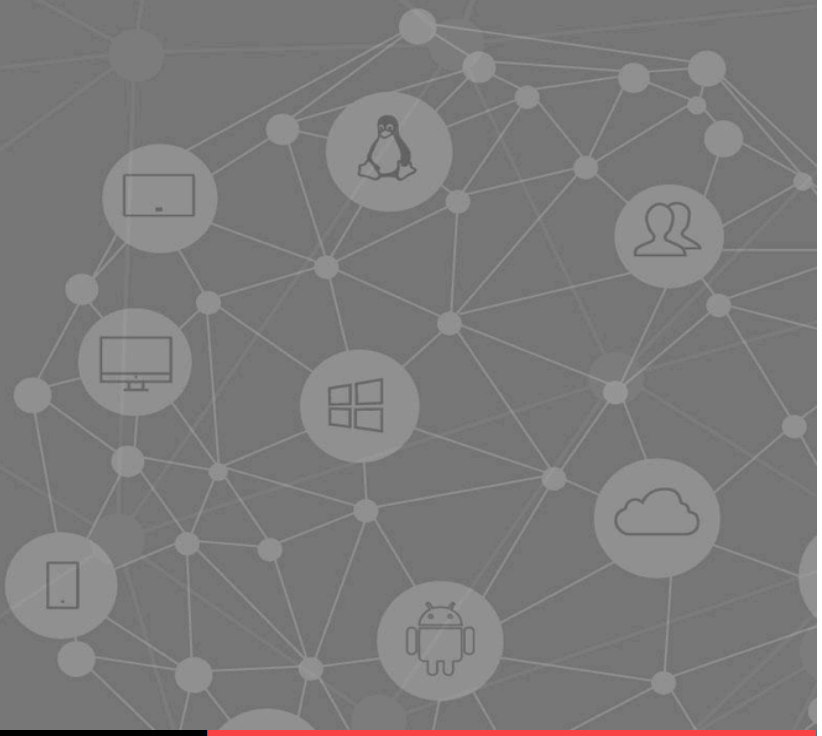
  RAD Server Single Site License ***included*** with Enterprise and Architect Editions -- for New licenses, Upgrades and Update Subscription customers

  An additional $5k Value included in Enterprise and Architect editions

Key Quality Enhancements

- VCL High DPI and Style quality
- FireMonkey quality across multiple platforms
- IDE/Install GetIt quality
- MIME support improvements for REST Client library
- Support for more recent Google Ads and Maps services
- Android threading and TEdit improvements

What's Coming in RAD Studio



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Roadmap Priorities**

- Compilers quality and improvements
  - Latest C++/CLANG + Delphi language enhancements
- VCL/Windows support for the latest Windows 10
- Multi-Device Platform completion
  - Support all 64-bit platforms (macOS, later Android)
  - Native controls for all platforms (Android and macOS)
- Additional IDE cleanup and modernization
  - Focus on CodeInsight for large projects
- Web Development via RAD Server + ExtJS
  - New wizards and helpers

** Features are not committed until GA of product

RAD Studio for (more) Developers

Deliver more to new and active subscription customers

- 1 RAD Server deployment license included in Enterprise and above
- Mobile support (iOS and Android) included in Delphi and C++Builder Professional editions

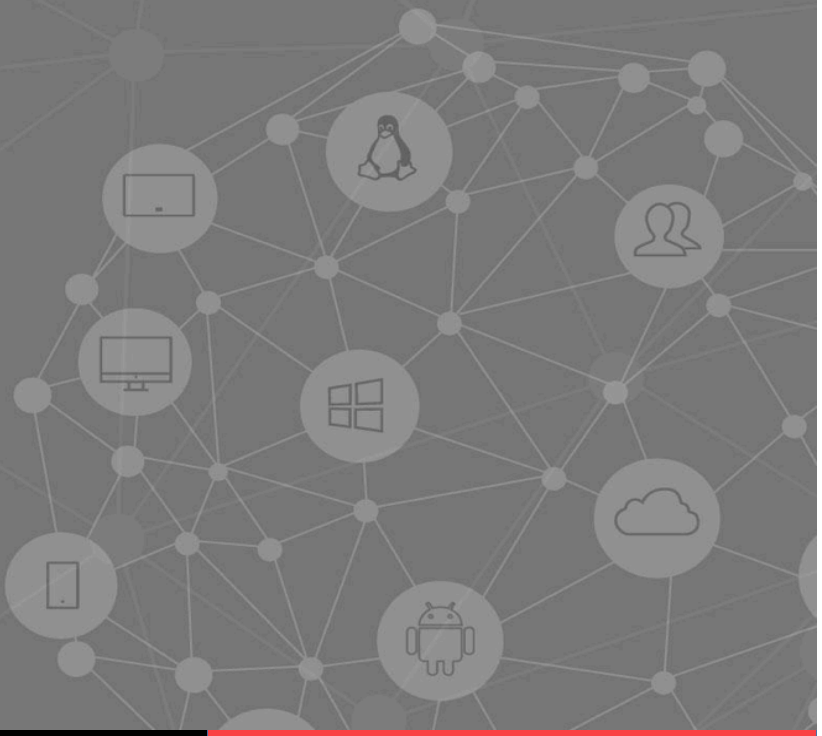
Spread awareness and usage of the product

- *Planned:* Significantly expand our free Starter product offering (free for non-professional use)

More Information

www.embarcadero.com
- Product details

https://community.embarcadero.com
- Blogs
- Events
- Forums

http://docwiki.embarcadero.com/RADStudio/
- Latest online documentation

Thank you!