

C O D E R A G E

Building mobile apps that connects to Salesforce and SAP/R3

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Agenda

- Data Integration Challenges
- The Enterprise Connectors Solution
- Getting Started with Enterprise Connectors
- A Word About RAD Server
- Sales Force and SAP (NetWeaver) Demos

Data Integration Challenges

- Data are more decentralized than ever!
- Companies with advanced/consolidated IT have on average 20 different data sources / systems, most on-premise, but many in the SaaS model.
- There are different technologies and development paradigms used in solutions which will need to "talk" at some point.
- Producing consolidated and consistent results, gathering information from such diverse backgrounds, is a growing challenge...
- Challenges to Data Integration
 - <https://www.fhwa.dot.gov/asset/dataintegration/if10019/dip06.cfm>
- 7 Data Integration Difficulties
 - <https://www.bedrockdata.com/blog/7-data-integration-difficulties-for-todays-marketers>

Enterprise Connectors

- Easily move, integrate, and analyze data using the new FireDAC Enterprise Connectors – powered by CDATA
- These components allow you to integrate 80+ distinct data sources, simplifying connectivity in a standard model, using standard SQL commands
- Add-on for Delphi and C++ Builder (Trial available via GetIt)
- Version 10.2+
- Professional+
- Direct real-time access to live data
- No dependency on any cloud services or other intermediaries

Accounting

- FreshBooks
- Intacct
- Microsoft Dynamics GP
- QuickBooks Desktop
- QuickBooks Online
- QuickBooks Point-Of-Sale
- Reckon (Australia)
- Sage 50 UK
- Xero Accounting
- Kintone (Japan) *
- MoneyForward (Japan) *

CRM & Marketing

- Google AdWords
- Google Analytics
- Highrise
- HubSpot
- Magento
- MailChimp
- Marketo
- Microsoft Dynamics CRM
- NetSuite CRM
- Oracle Marketing (Eloqua)
- Oracle Sales Cloud
- Salesforce.com
- SalesforceChatter *
- SendGrid
- SugarCRM
- YouTube & Analytics
- Zoho CRM

ERP & Collaboration

- Basecamp
- Exact Online
- Google Calendar
- Google Contacts
- Google Drive
- JIRA
- Magento
- Microsoft Dynamics 365
- Microsoft Dynamics AX *
- Microsoft Dynamics GP
- Microsoft Dynamics NAV
- Microsoft Project
- Microsoft SharePoint
- NetSuite ERP
- Office 365
- SAP NetWeaver
- ServiceNow
- SharePoint Excel Services
- Smartsheet.com

NoSQL & Big Data

- 1010data *
- Apache Spark SQL *
- Azure Cosmos DB
- Azure Table
- Cassandra
- Couchbase *
- DynamoDB
- Elasticsearch
- Google BigQuery
- HBase
- HPCC Systems
- MongoDB
- xBase

eCommerce/Finance

- Authorize.Net
- E*TRADE *
- OFX Financial Accounts
- OpenExchangeRate *
- PayPal
- Quandl
- Square
- Stripe
- eBay

Docs & Files

- Box *
- CSV/TSV
- Microsoft Excel
- Google Sheets
- SharePoint Excel Services
- XML

Networking & Auth

- Email
- Microsoft Exchange
- JSON
- LDAP
- Microsoft Active Directory
- OData
- OFX Transactions
- RSS

Social Networking

- Facebook
- Force.com
- Instagram *
- Twitter

and more...

- Bing Search
- Google Gmail
- Google Search
- PowerShell *
- REST
- Twilio

Componentes FireDAC Standard

- Just like connecting with a typical RDBMS like MySQL or SQL Server. Use standard FireDAC components like *TFDManager*, *TFDConnection*, *TFDQuery*, etc.

```
FDConnection1.Name := 'SalesforceConnection';
FDConnection1.DriverName := 'CData.Fire.Salesforce';
with FDConnection1.Params as
  TFDPhysCDataSalesforceConnectionDefParams do begin
    ...
end;
FDConnection1.Connected := true;
FDQuery1.Active := true;
FDQuery1.Open('select * from Account where Industry =
  "Healthcare"');
```

SELECT with Inner JOIN

```
SELECT Account.Id, Account.Name, Account.Fax,
  Opportunity.AccountId, Opportunity.CloseDate
FROM Account
INNER JOIN Opportunity
  ON Account.Id = Opportunity.AccountId
```

Aggregate Functions

```
SELECT Name, AVG(AnnualRevenue) FROM Account GROUP BY
  Name
```

Update Data

```
UPDATE Account SET Name='John' WHERE Id = @myId
```

RAD Server



- The Perfect Backend for Delphi and C++Builder 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

RAD Server Architecture

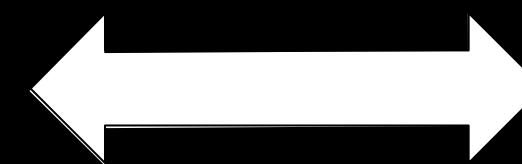
System Database



EMS Server

- Version
- API
- Users
- Groups
- Installations
- Push
- Edgemodules

Pluggable EMS
packages (*.bpl)



HTTP Clients



- Resource A1
- Resource A2

- Resource B1

- ...

C O D E R A G E 

Q&A

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More info: <https://wp.me/p7b9St-PM> and <https://wp.me/p7b9St-OQ>

Session demos: <https://github.com/flrizzato/CodeRageXII-US>



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