

Rollbase for OpenEdge Dudes

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Your Feedback Matters

Best Tweets

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Topics Covered in This Session

- What is **Progress Pacific**
- What is **Progress Rollbase**
- Rapid App Dev (**RAD**) in Rollbase
- How to use **Progress OpenEdge** with Rollbase
- How to get more information

What Is Progress Pacific?



What Is Progress Pacific?

From the beginning, Progress has helped **business professionals** build powerful **applications** with purpose

Business professionals have unique requirements:

1. Need **simplicity** without having to rely on deep technical skills
2. Need to connect to critical **data**
3. Need to see before they build
4. Need to show **results** right away
5. And they need to do it without a long, expensive IT project



Rapid
development



Data driven

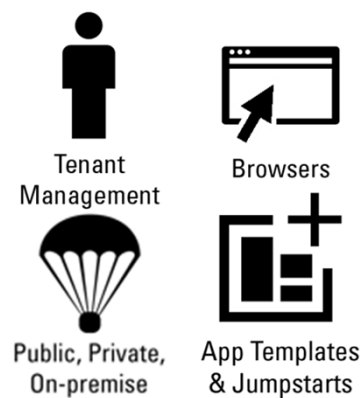


Open standards

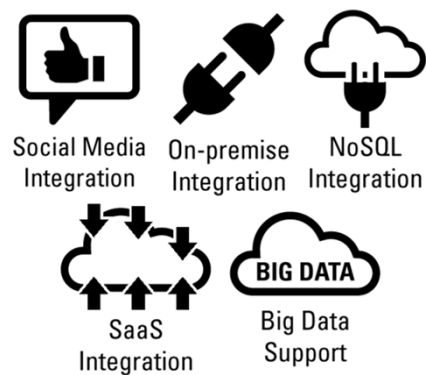




PROGRESS ROLLBASE



PROGRESS DATADIRECT



PROGRESS EASYL



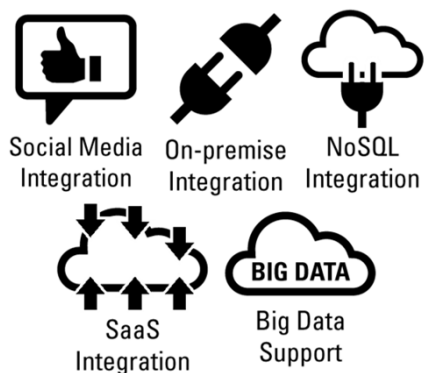
COMMUNITY

CONSISTENT USER EXPERIENCE





PROGRESS DATADIRECT



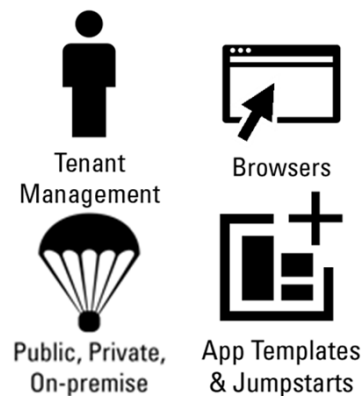
PROGRESS CORTICON



PROGRESS EASL



PROGRESS ROLLBASE

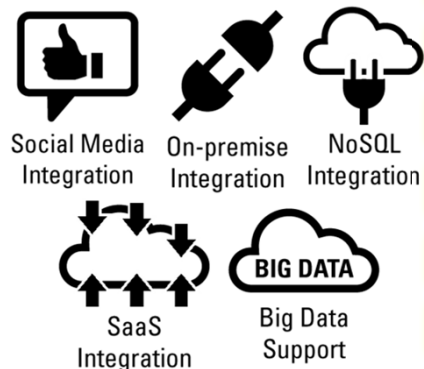


COMMUNITY

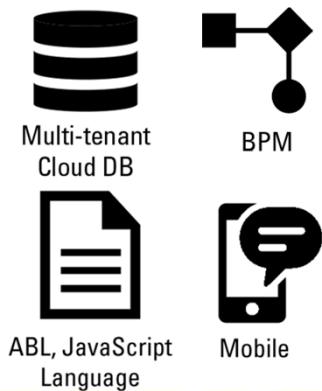
CONSISTENT USER EXPERIENCE



PROGRESS DATADIRECT



PROGRESS OPENEDGE



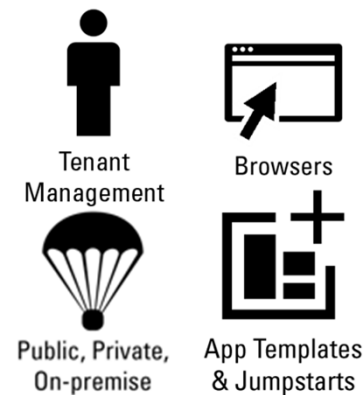
PROGRESS CORTICON



PROGRESS EASL



PROGRESS ROLLBASE



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Progress and Rollbase Recognized

Progress in Magic Quadrant for Enterprise application Platform as a Service (aPaaS).

Magic Quadrant

Figure 1. Magic Quadrant for Enterprise Application Platform as a Service



Rollbase, Inc. ...has been named a Gartner Research "Cool Vendor in PaaS" for 2013.



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Progress and Rollbase Recognized

Progress in Magic Quadrant for Enterprise application Platform as a Service (aPaaS).

Magic Quadrant

Figure 1. Magic Quadrant for Enterprise Application Platform as a Service, Worldwide



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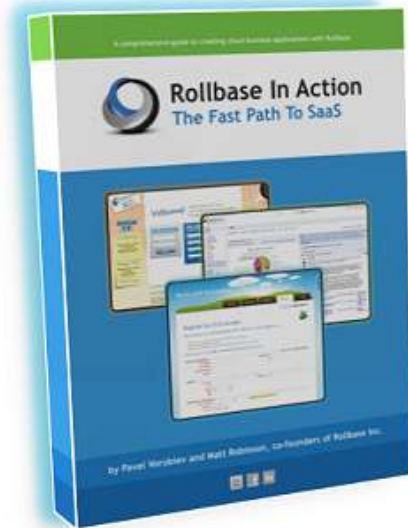
Progress Rollbase – Rapid App Development for Two Personas

Business Users can...

- Build powerful data-driven apps without coding
- Build integrations b/w Rollbase apps without coding
- Work with developers to ensure the right solution is built

Developers can go much further with...

- JavaScript on client-side and server-side (Rhino)
- Custom JSPs and Java-based business logic
- Rollbase APIs: REST, SOAP, AJAX, SQL, JDBC, D2C
- Integrate with OpenEdge Business Logic and DB
- Integrate 3rd party libraries and products



What Is Progress Rollbase?



What Is **PROGRESS** Rollbase?

Progress Rollbase is a **cloud platform for development and delivery of software as a service (SaaS) business applications** using point & click, drag & drop tools in a standard web browser with a minimal amount of code.

Rollbase continues to extend Progress' commitment to empowering business users and other people who are not professional programmers to enable them create their own applications.

Rollbase: Build Data-driven Applications on Any Cloud for Any Device



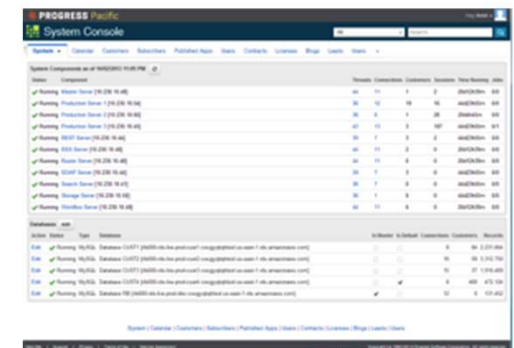
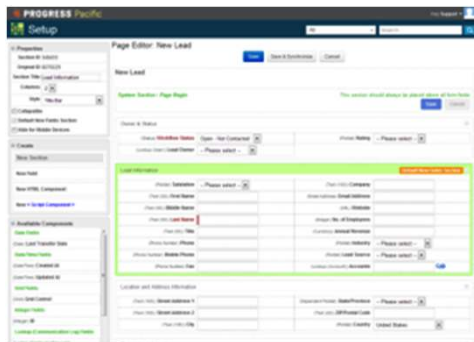
- **Drag & drop** development enables business users to create apps without coding
- Developers can go much further with **JavaScript**, **APIs** and custom components



- Publish and deploy applications to one or more tenants
- Choose your hosting environment **public**, **hybrid** or **private** cloud



- Central dashboard to **manage** servers, databases, tenants, users, applications and more
- **Monitor** system components and user activity, access tenants to provide support, resource metering, etc.

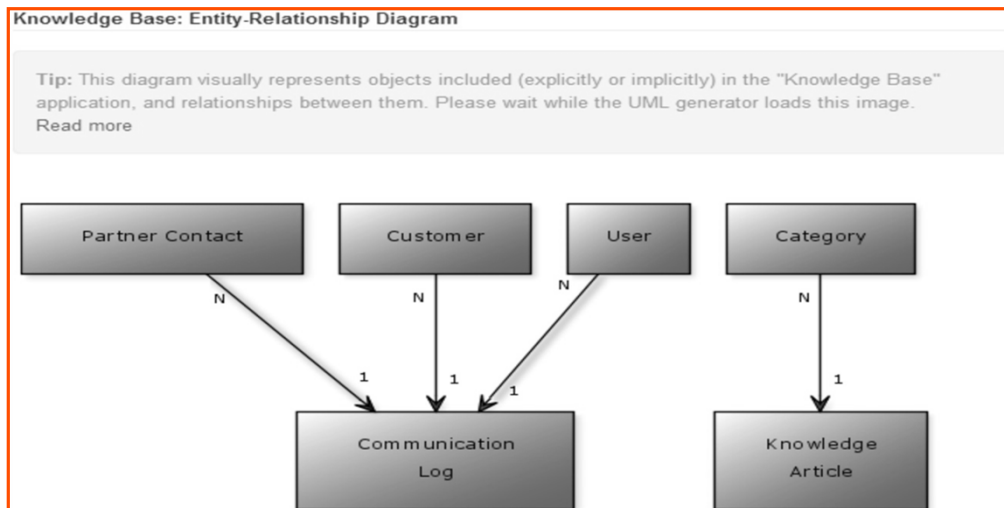


Progress Rollbase in Action



Core Concepts: Objects, Fields, Relationships and Cardinalities

| Objects New Object Import from... Filter By Application All | | | | | |
|---|-----------------------------------|----------|-----------------------------------|-------------------|---------------------|
| Action | Object ▲ | Deployed | Attributes | Integration Name | Last Updated |
| Edit | Approval | ✓ | Workflow | \$APPROVAL | 06/14/2013 05:07 PM |
| Edit | Catalog Item | ✓ | | catalog_item1 | 06/24/2013 10:12 AM |
| Edit | Category | ✓ | Workflow | category | 07/04/2013 02:25 PM |
| Edit | Communication Log | ✓ | Communication Log | COMMLOG | 07/04/2013 02:25 PM |
| Edit | Customer | ✓ | Contact, Location, Portal Visitor | customer5 | 06/24/2013 10:12 AM |
| Edit | Department | ✓ | | \$ORG_DEPT | 06/13/2013 11:23 AM |
| Edit | Function | ✓ | | \$ORG_FUNC | 06/13/2013 11:23 AM |
| Edit | Group | ✓ | Organization | \$GROUP | 06/13/2013 11:23 AM |
| Edit | Knowledge Article | ✓ | Workflow | knowledge_article | 07/04/2013 02:25 PM |



- Applications are data-driven – Objects are the core business entities
- Objects have properties and attributes associated with them
- Objects have Fields associated with them
- Object relationships and cardinalities are modeled visually
- Underlying database physics are completely hidden – it's aPaaS!

Create Object

The screenshot displays the Progress Pacific Setup application. The main window shows the 'Object: New Object' form, which includes fields for Singular Name, Plural Name, Record Name, Integration Name, and Description. A tip explains that objects are like database tables. The form also includes a 'Save' button and a 'Cancel' button.

Overlaid on the right is a detailed view of the 'Object: Customer' configuration. This panel includes tabs for Fields (8), Relationships, Pages (9), Views (1), Templates, Reports, Charts, Gauges, Triggers, Buttons, Data Maps, and Permissions. It features 'Edit', 'Delete', and 'More actions...' buttons for both the object and its attributes.

The 'Fields' tab is active, showing a table of fields for the 'Customer' object:

| Action | Field Label | Data Type | Integration Name | Def. Value | Text Index | Track Changes |
|--|-------------|-------------|------------------|--------------------------|-------------------------------------|--------------------------|
| Edit Events Permissions | Comments | Text Area | comment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Edit Permissions | Created At | Date/Time | createdAt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Edit Permissions | Created By | User Link | createdBy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Edit Validation Events Permissions | Customer | Record Name | name | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Edit Permissions | ID | Integer | id | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Building the User Interface (UI)

The screenshot displays the 'Page Editor: View Category' interface. On the left, a sidebar contains a 'Properties' panel (showing 'No component selected'), a 'Create' panel with options like 'New Section', 'New Field', 'New HTML Component', and 'New < Script Component >', and an 'Available Components' panel listing various field types such as 'List Components', 'Comments Table', 'Lookup (Knowledge Article) Fields', 'Knowledge Article', 'Process Fields', 'Workflow Process', and 'Report Link Fields'. The main editor area shows a 'View Category' page layout with a 'System Section - Page Begin' header and a 'Category Information' section containing fields for 'Actions', 'Category', '# Articles in this category', and 'Description'. A 'System Information' section at the bottom includes 'Created By', 'Created At', and 'Tags' fields. A 'Create New Field' dialog is open in the foreground, prompting the user to choose a 'Field Type' (currently set to 'Text') and providing 'Next >' and 'Cancel' buttons. A tip at the bottom of the dialog states: 'Tip: Advanced fields such as Auto-Number, File Upload, Image Upload, Captcha, etc, cannot be created from within the Page Editor. To create new advanced fields you must edit the object definition.'

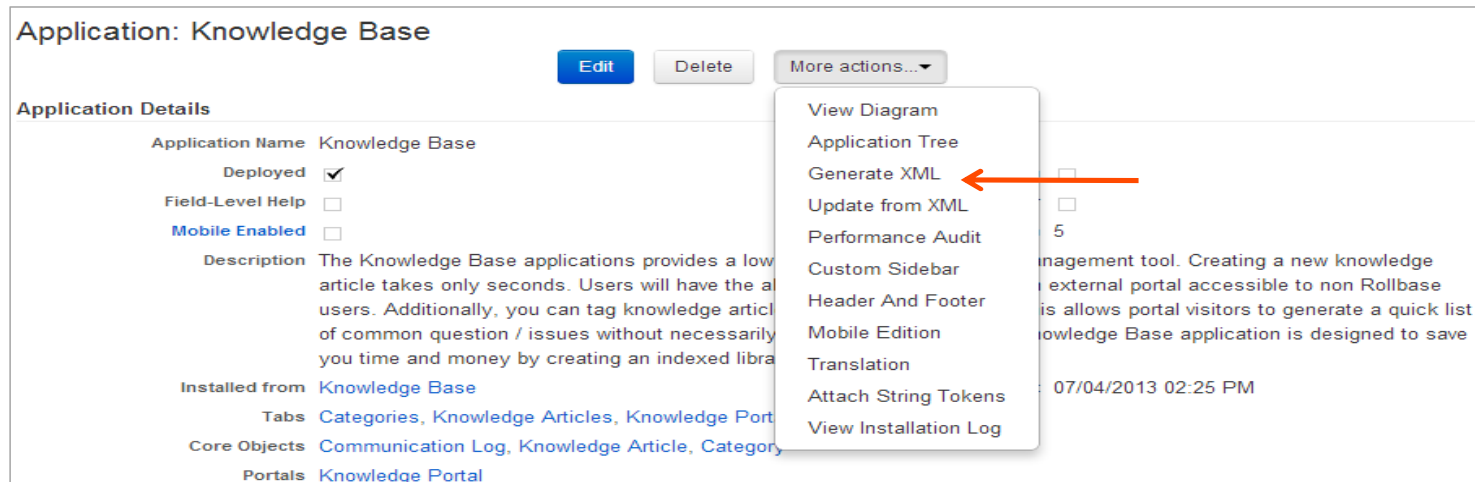
- Build UI using integrated WYSIWYG editor
- UI Tabs are automatically generated for each Object
- Page elements are created and edited using drag-and-drop
- Changes immediately reflected in the UI

Publishing Applications

The screenshot shows a web application interface for defining a new portal. The top navigation bar includes links for 'Personal Setup', 'Applications Setup', and 'Administration Setup'. The current page is 'Application Setup > Portals > New'. The main heading is 'Portal: New Portal'. Below this, there are 'Save' and 'Cancel' buttons. The 'Define Portal' section contains several fields: 'Portal Name' (a text input field), 'Is Deployed' (a checkbox), 'Use HTTPS' (a checked checkbox), 'Field-Level Help' (a checkbox with a tooltip), 'Powered By Logo' (a checkbox), 'Language' (a dropdown menu set to 'English'), 'Date Format' (a dropdown menu set to '07/22/2013 05:19 AM'), 'Time Zone' (a dropdown menu set to '(GMT+01:00) Central European Time (CET) Europe/Amsterdam'), and 'Description' (a text area). The 'Language' dropdown is highlighted with a red box. The 'Description' text area has a '[German]' label next to it. On the left side, there is a sidebar with 'APPLICATIONS' and 'Setup' tabs, and a 'RECENT ITEMS' list containing various application and object names.

- Applications can be published and accessible via a user-facing Portal
- Several portals can be defined per application
- Fine-grained (user/role) authentication and access control fully configurable

Installing and Updating Applications



- Application composition is described in an XML document (Application tree)
- Install and upgrade Applications by installing the provided XML
- Supports fine-grained control for sub-components (Locked, Partially Locked, Unlocked)
- Applications are versioned and can be rolled back if necessary

Advanced Topics

Article ID: JavaScript Event Handlers

Save Cancel

JavaScript Event Handlers

You can use integration names of other Knowledge Article fields to reference them in event handling code for your **Article ID** field. Note that these other fields may or may not be present on a particular page.

Event Handlers Helper

Article ID

onChange = "

onclick = "

onfocus = "

onblur = "

onkeypress = "

Workflow Actions New Workflow Action Reorder

| Action | Order No ▲ | Action Name |
|----------------------------------|------------|-------------|
| Edit Clone Del Permissions | 1 | Internal |
| Edit Clone Del Permissions | 2 | External |
| Edit Clone Del Permissions | 3 | Archived |

- Powerful AJAX API for Applications demanding a rich, interactive browser experience
- On-premise Rollbase supports the integration of external databases (e.g. OpenEdge DB)
- Rollbase has powerful facilities:
 - Triggers
 - Workflow
 - Server-side JavaScript logic

Progress Rollbase Applications

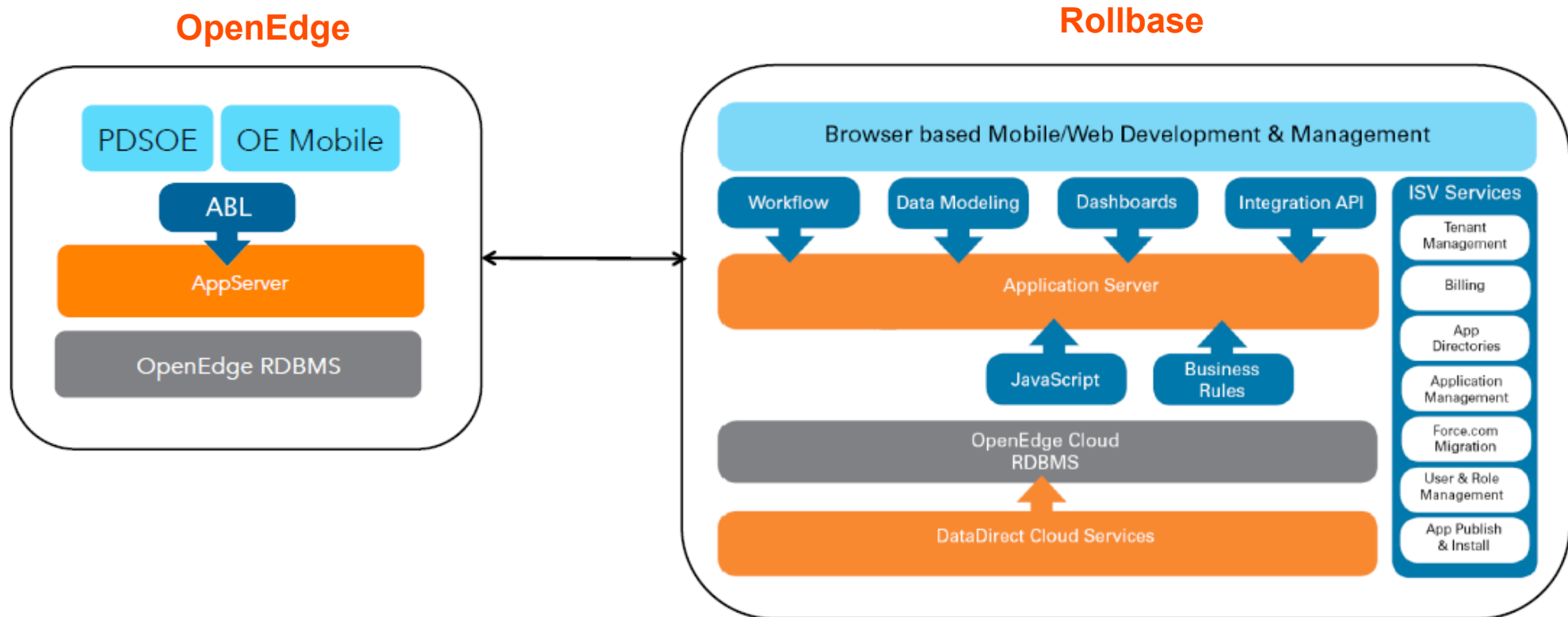


Over 10,000 users in 10 languages

Progress Rollbase with OpenEdge



Extending OpenEdge Applications by Adding Web Components



When to Integrate OpenEdge and Rollbase

- New Application as an existing OE Application
- New Module to extend an existing OE Application
- New Module to replace part of an existing OE Application

*Need to THINK in terms of How the Applications are being used
and the business purpose (Record – Engagement – Differentiation)*

How to Integrate Rollbase and OpenEdge: 6 Options

1. OpenEdge Service Objects
2. Progress DataDirect Cloud
3. External Tables
4. External tables with auxiliary databases
5. Web Services / SOAP
6. Java Open Client

But What If I Don't Use an AppServer?

Preferred Approach Is External Tables + OpenEdge RDBMS

■ Requirements

- OpenEdge RDBMS
- Private Rollbase

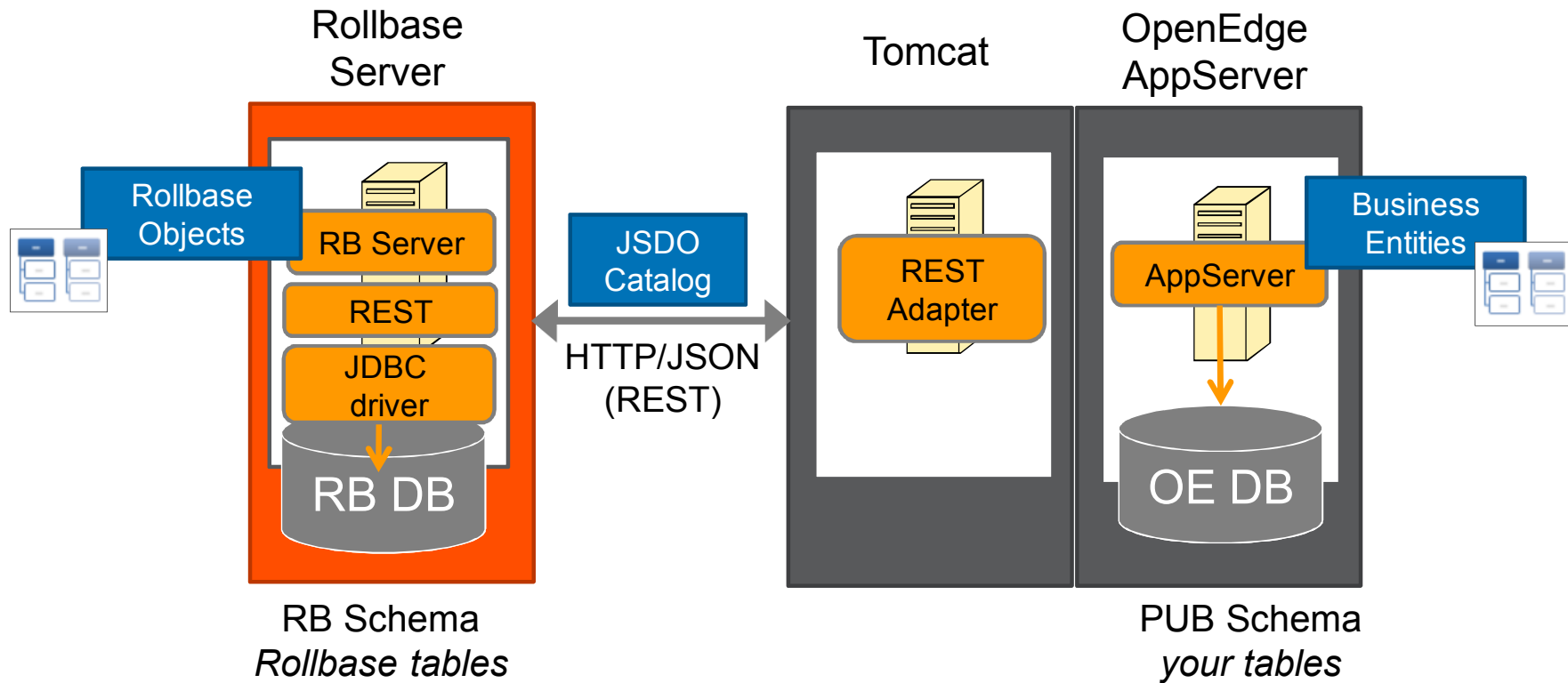
■ Steps

- Add the Rollbase schema to an existing OpenEdge RDBMS
- Modify Rollbase to use the existing OE DB with new schema
- Create a new object using External tables

■ Result

- Access to your data

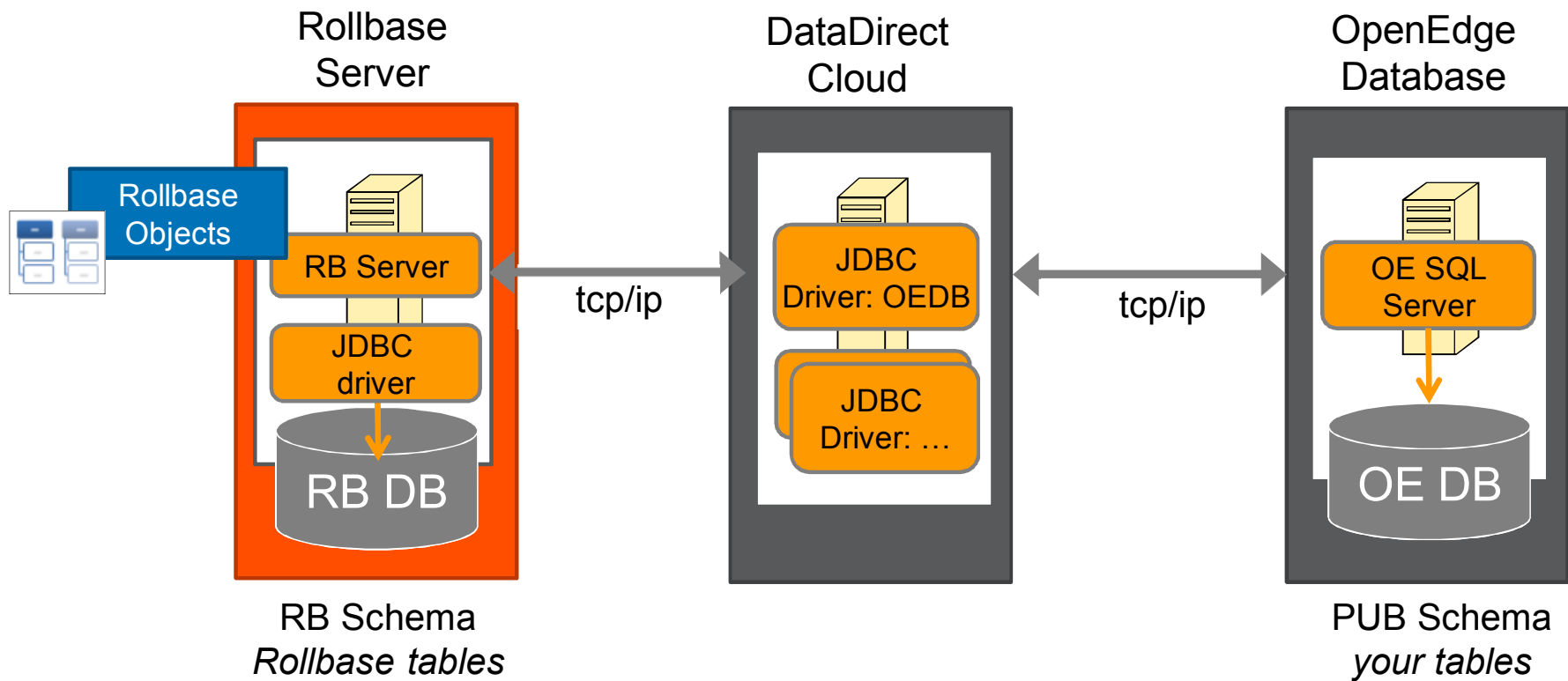
Option 1: OpenEdge Service Objects – The Preferred Approach



Option 1: OpenEdge Service Objects: The “Preferred” Approach

- **Rollbase Business Entities (i.e. Objects) based on OpenEdge “Business Entities”**
 - ✓ OERA-certified
 - ✓ Builds on JavaScript Data Object (JSDO) Catalog in OpenEdge Mobile
 - ✓ First priority for Rollbase work: “Parity with native objects”
- **Phased implementation – current functionality:**
 - Tenant-based identity
 - Single Table ProDataSet
 - Direct CRUD support - INVOKE done in ObjectScript
- **Limitations:**
 - Requires AppServer and REST Adapter

Option 2: DataDirect Cloud + OpenEdge RDBMS



Option 2: DataDirect Cloud + OpenEdge RDBMS

- **DataDirect Cloud Server runs in Amazon cloud**

- ✓ Served by OpenEdge RDBMS
- ✓ Your application's data are on *your* server
- ✓ Enables building new, hosted, customized Web Applications on Partner and DEU platforms
- ✓ 10.2B onward

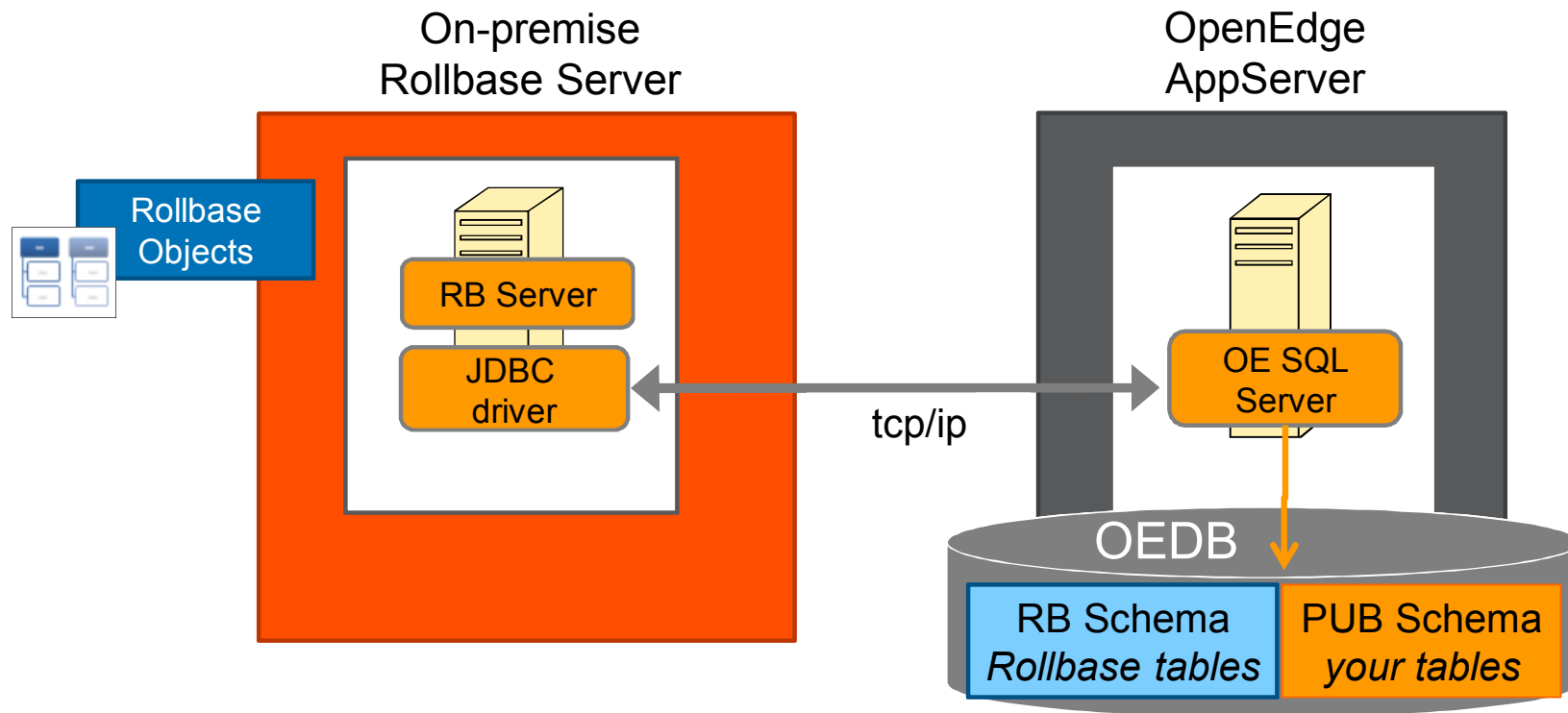
- **Rollbase runs either hosted or on-premise**

- Rollbase talks to D2C
- D2C talks to your server

- **Limitations:**

- Latency can be high
- Access to Database, not Business Logic
- Requires detailed knowledge of data

Option 3: External Tables in OpenEdge RDBMS



One and only one database

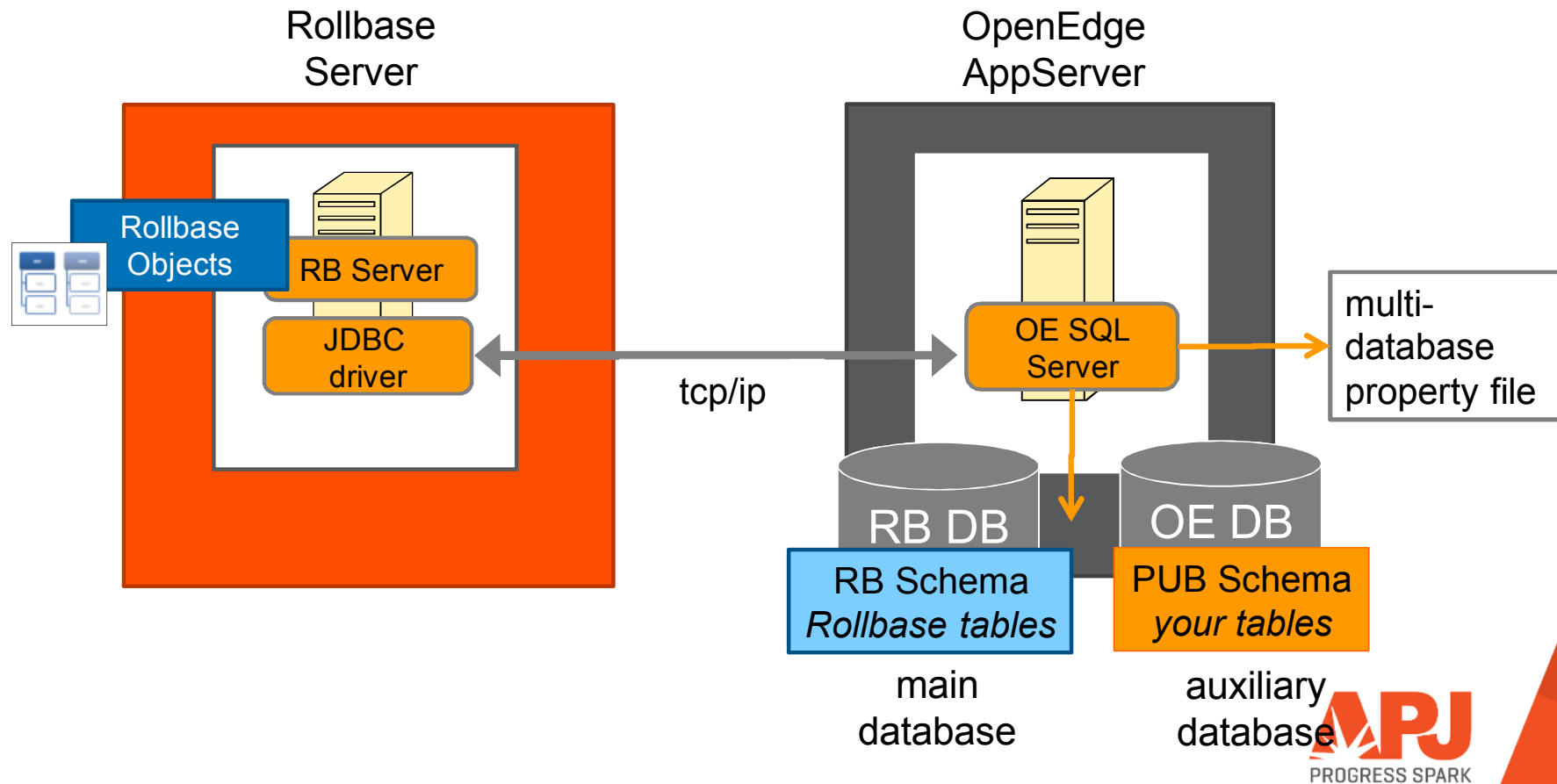
Option 3: "External" Tables – On Premise Only

- **Rollbase on-premise has a database**
 - Rollbase has about 25 tables
 - Tables used by Rollbase are in the RB schema
 - Do not touch these tables
- **The "external" tables **must** be in the SAME database**
 - In a different schema, e.g. PUB

Limitations:

- Cannot modify schema in Rollbase
- Requires detailed knowledge of data
- Must be in shared namespace and single database
- Must have a unique numeric column or text column

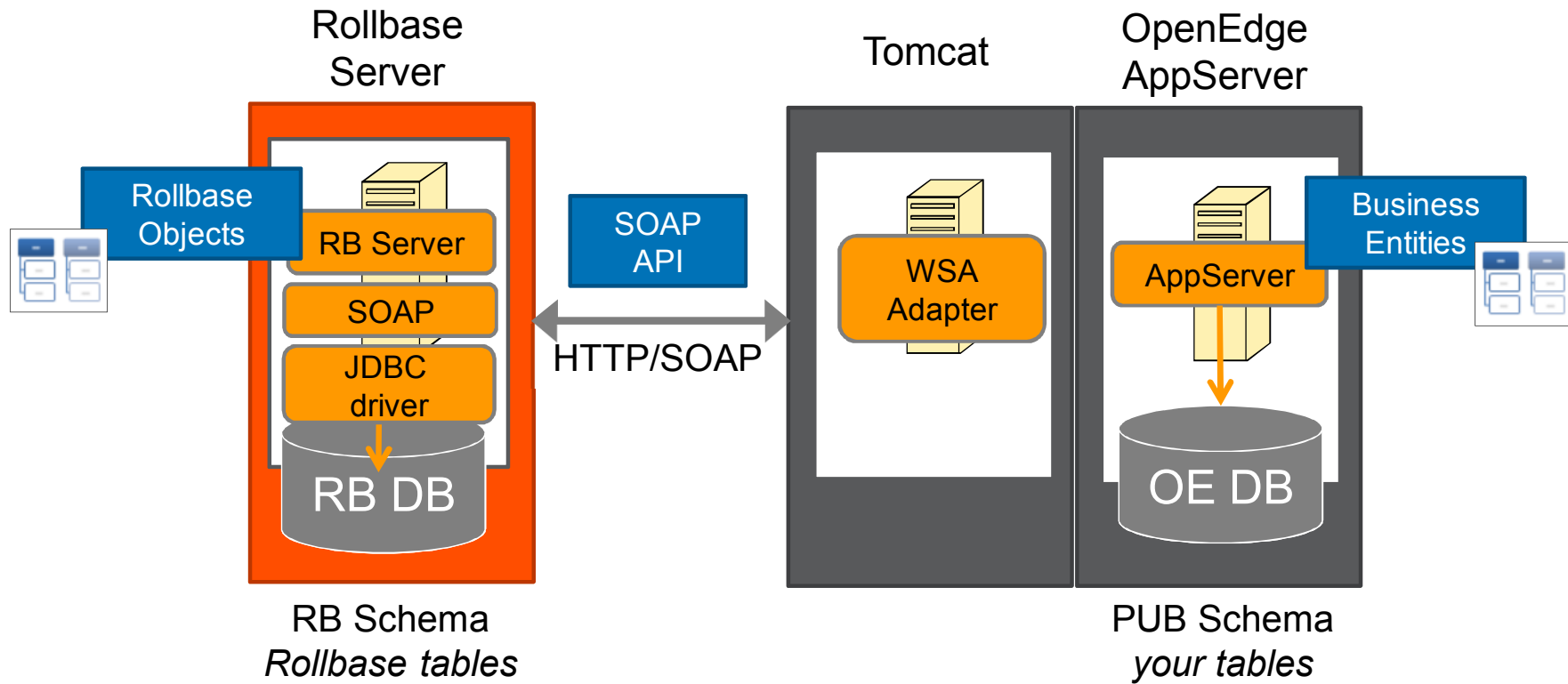
Option 4: External Tables in External OpenEdge RDBMS



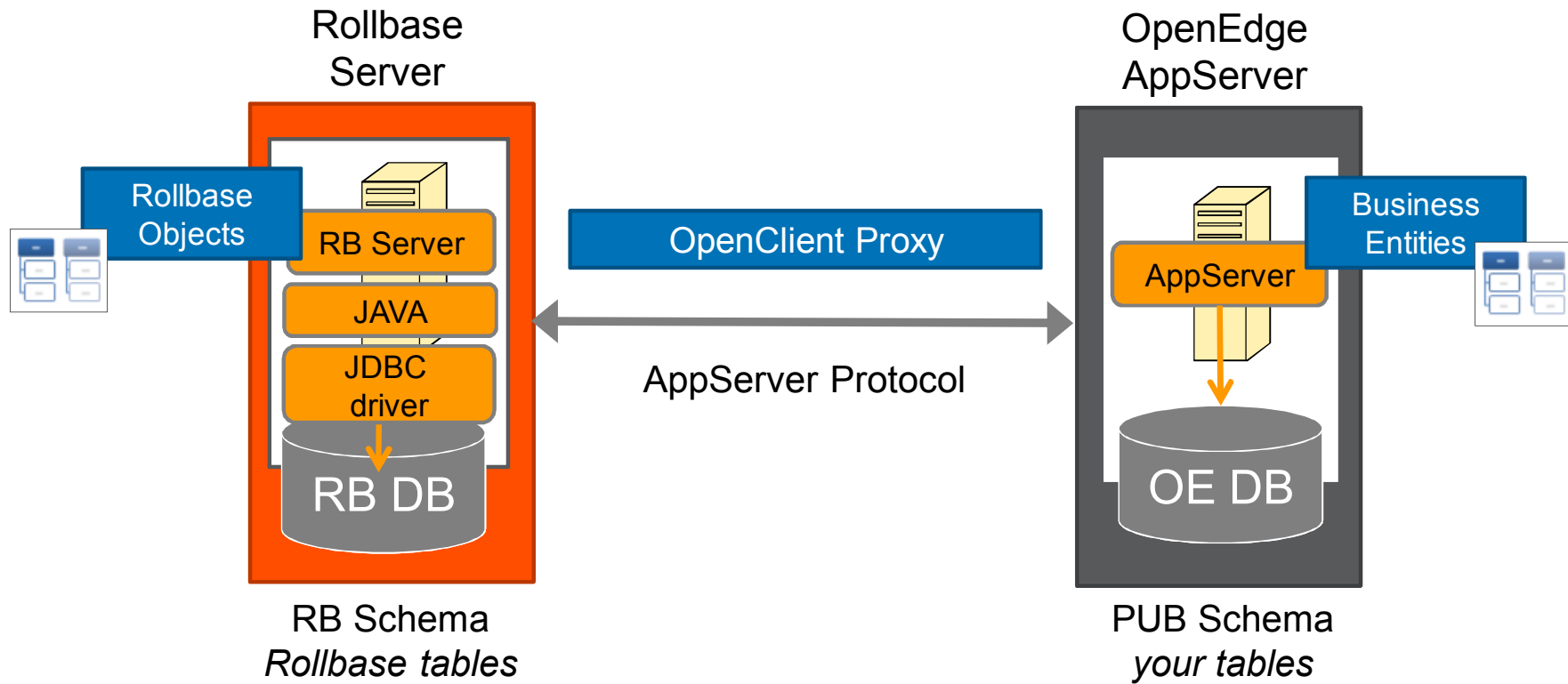
Option 4: External Tables with Auxiliary Databases

- **OpenEdge SQL Server process serves data from *multiple* databases**
- **Main database is read-write**
 - Contains Rollbase tables only
- **Auxiliary databases are *read-only* to Rollbase**
 - Auxiliary db contains your application's tables
 - Must be on same system as main database
 - Property file describes auxiliary database and names the tables therein
 - User id for main and auxiliary db must be the same
 - Rollbase thinks there is just *one* database

Option 5: Web Services / SOAP



Option 6: Java Open Client



Demos

OpenEdge Service Objects

| Type | Description |
|---|---|
| <input type="radio"/> Progress Rollbase XML File | This option will install application developed in another Customer and serialized as XML file. |
| <input type="radio"/> Salesforce.com (Force.com) | This option will import your currently active Salesforce.com application including all of its objects, fields, page layouts and data. |
| <input type="radio"/> Convert MS Access Database | MS Access JDBC Driver is not available. Please consult Chapter 18 on how to purchase and install it. |
| <input checked="" type="radio"/> OpenEdge Service | Import Objects and Relationships from uploaded OpenEdge JSDO catalog file |
| <input type="radio"/> Mobile Project Backup | This option will create mobile application from a project backup archive (zip artifact) |

External Tables

What do you want to create?

☐ A new Object (with Tab)
Objects are like database tables which you can manage visually. Select this option if you want to create a new object for storing and managing data. The system will also create a new Tab for navigating this object's pages.

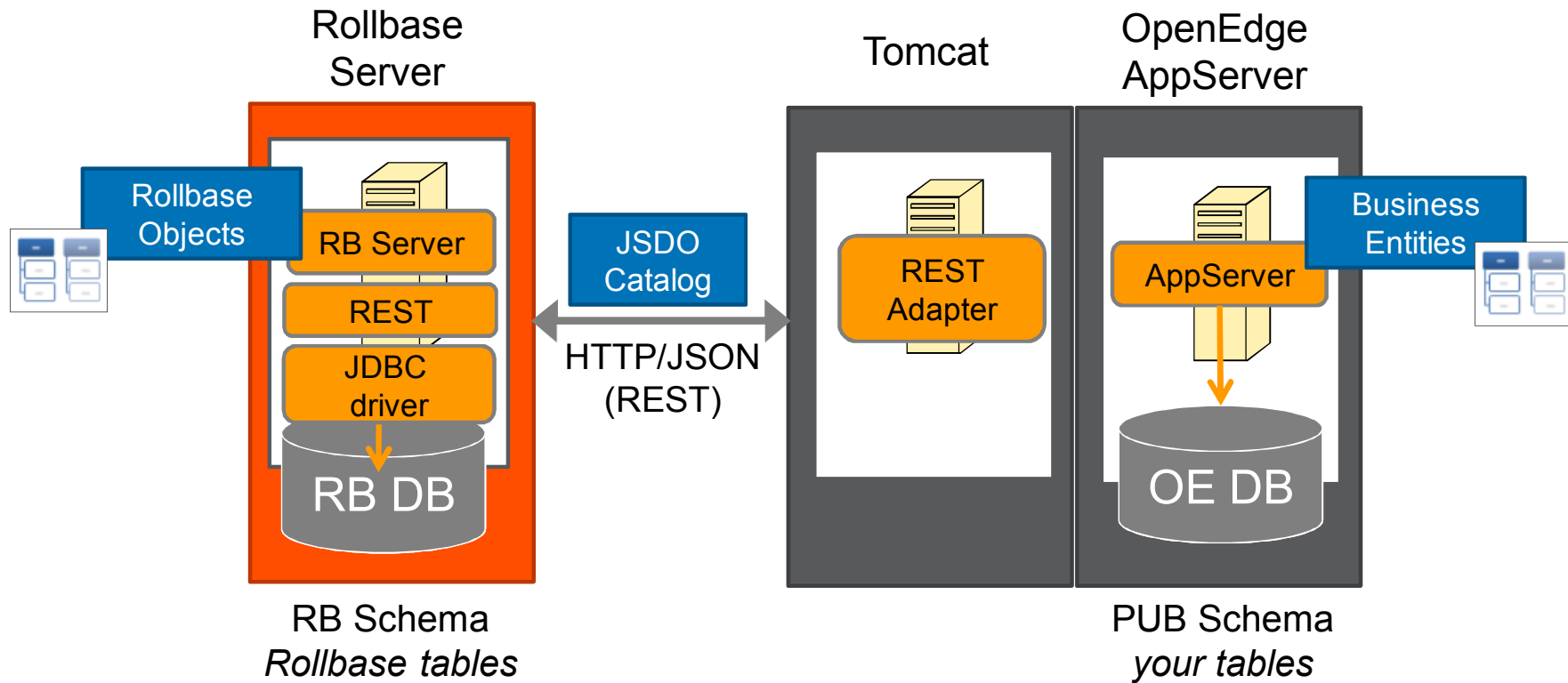
☒ A new Object (with Tab) from an External Metadata
This option will help you create a new object faster by using data from an existing spreadsheet file or other external metadata to help define object fields.

☐ A new Tab
Tabs are ways to organize different pages in your applications. You can use tabs to display custom pages or embed other websites inside your application.

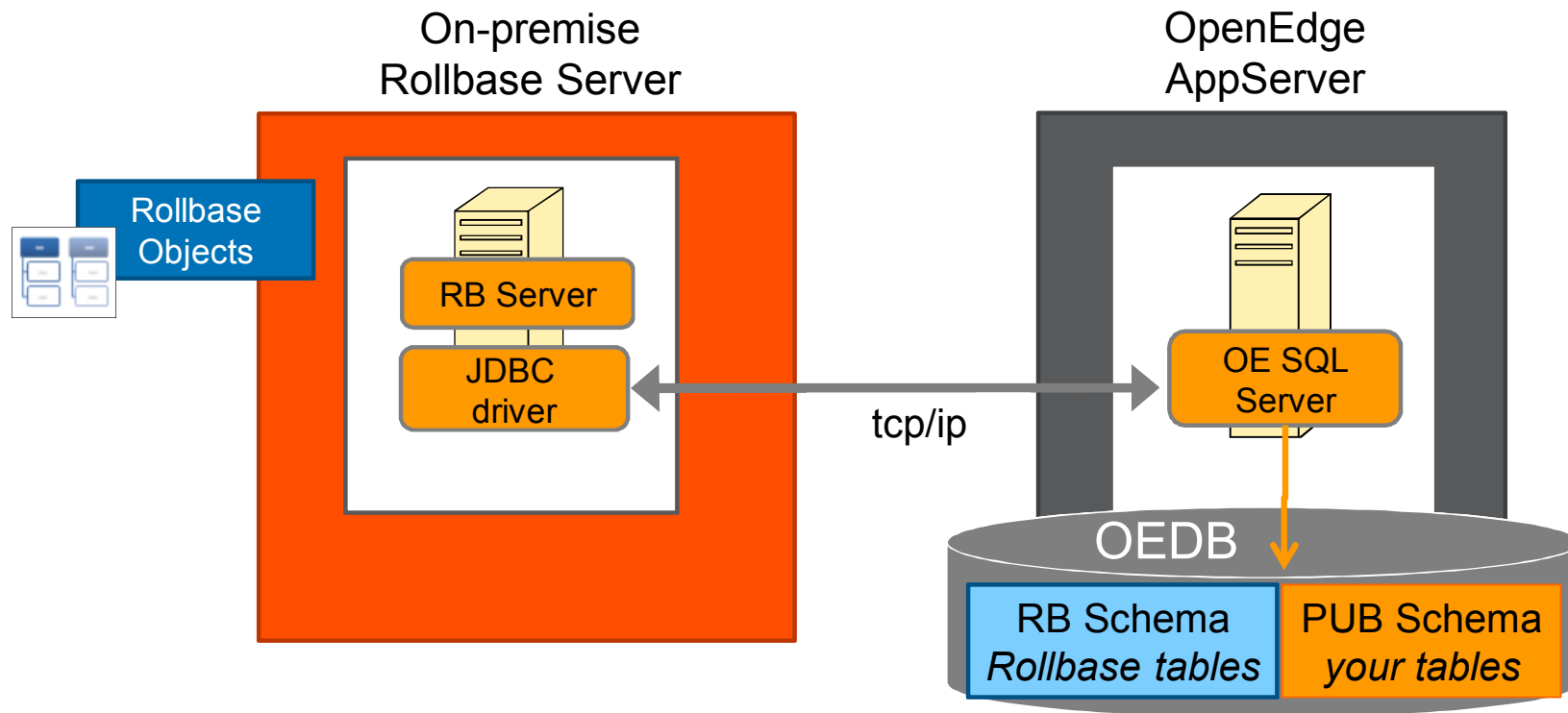
Create

Cancel

DEMO: OpenEdge Service Objects – The Preferred Approach



DEMO: External Tables + OpenEdge RDBMS



One and only one database

OpenEdge Service Objects – The Preferred Approach

- **Requirements**

- Application Server
- Progress Developer's Studio

- **Steps**

- Create a Mobile Application using the Express Mobile process in PDSOE
- Create a new object in Rollbase using the JSON file from the Express Mobile project

- **Result**

- Access to your AppServer logic and data

Documentation References

| Topic | Where |
|--------------------------|--|
| Rollbase | Rollbase in Action |
| OpenEdge Service Objects | Rollbase In Action, Appendix C, Using External Tables as Rollbase Objects |
| OpenEdge Service Objects | Rollbase In Action, Appendix E, Creating Rollbase Objects From OpenEdge Services |
| DataDirect Cloud | Rollbase In Action, Using Rollbase With DataDirect Cloud |
| JSDO | White Paper: Accessing the Progress OpenEdge AppServer from Progress Rollbase using JSDO Code |
| OpenClient | White Paper: Rollbase access to ABL Business Logic via OpenClient |

In Summary...

■ **Rollbase is:**

- A drag & drop, point & click, object based, WYSIWYG, browser based development tool
- That also allows publishing of multi-tenant (through Portals) applications
- Updating of applications, monitoring and metering support
- Cloud hosted or On-Premise

■ **Rollbase can access your OpenEdge Application or Database**

- Preferred method is using the OpenEdge Services Object (11.3.2)
- Hosted Rollbase can access OpenEdge DB using DataDirect (10.2B+)
- On-Premise can access the OpenEdge DB directly with External Tables
- And there are more ways...

■ **Help is available**

- See the document resources
- We will continue to improve and add functionality

Your Feedback Matters

Best Tweets

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#APJSPARK



Take 10 Surveys

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Take 10 surveys and stand a chance in the lucky draw!

bit.do/apjspark



Questions

Question 1: Is Pacific the Same as Arcade?

Yes or No

Question 1: Is Pacific the Same as Arcade?

No

Arcade is a **self-service** hosting environment for OpenEdge Business applications, however it does not provide any services or management features.

- No application architecture rules
- Good first-step the Cloud and SaaS

Rollbase is a cloud development and **fully managed** hosting environment for Rollbase Business applications. It includes platform services and management features

- Apps must be n-tier
- Full Cloud/SaaS environment

Question 2: Can I Use WebSpeed with Rollbase

Yes or No

Question 2: Can I Use WebSpeed with Rollbase

No, not today...

Progress is moving towards a universal architecture based on tomcat

- Pacific WebSpeed expected in 2015

WebSpeed is a server-side technology and will continue to be fully supported.

- Based on older-style JSP where Server does “all” the work”
- Can integrate WebSpeed pages using iFrame in Rollbase

Now Your Questions





PROGRESS

In Summary...

- You can support separate OpenEdge and Rollbase Applications
 - OpenEdge application is Client/Server
 - Can be used to provide existing app on web and mobile devices
- You can create new module in Rollbase for existing OpenEdge Application
 - OpenEdge application in n-tier
 - Can be launched from existing OpenEdge app

If On-Premise , use...

OpenEdge Service Objects

- On-Premise/Private Cloud
- HTTPS (moving to native)
- Basic-Auth/HTTPS
- OpenEdge 11.3.2+

If Rollbase is hosted, use...

DataDirect Cloud

- OE On-premise
- Database Security/SSL
- OpenEdge 10.2B+

Limited use for External tables

- mostly read-only
- don't rely on OE triggers
- one database/PUB schema
- latest OE is best