

Enabling ODBC and JDBC Drivers for OpenEdge Business Logic

Susan Houniet
Progress Software



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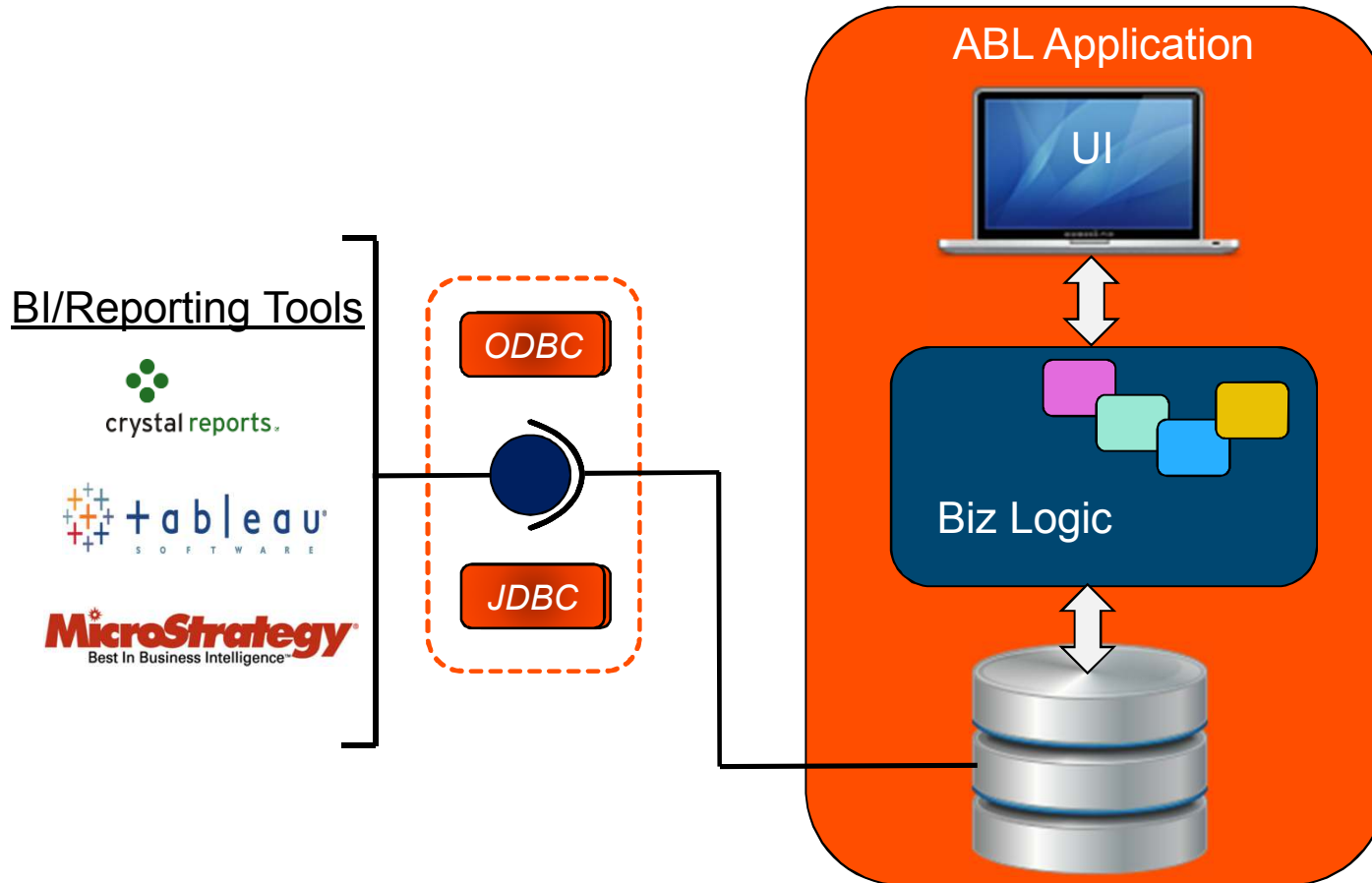
Agenda

- What we have now
- Limitations
- How to overcome Limitations – Solution
- Enable ODBC/JDBC drivers
- Configurations
- Demo
- Q & A

What we have now

- OpenEdge has ODBC and JDBC drivers. These drivers are part of OpenEdge installation and also we can get these drivers from “SQL-Client Access” installations.
- These drivers support access to OpenEdge DB i.e. persistent data.

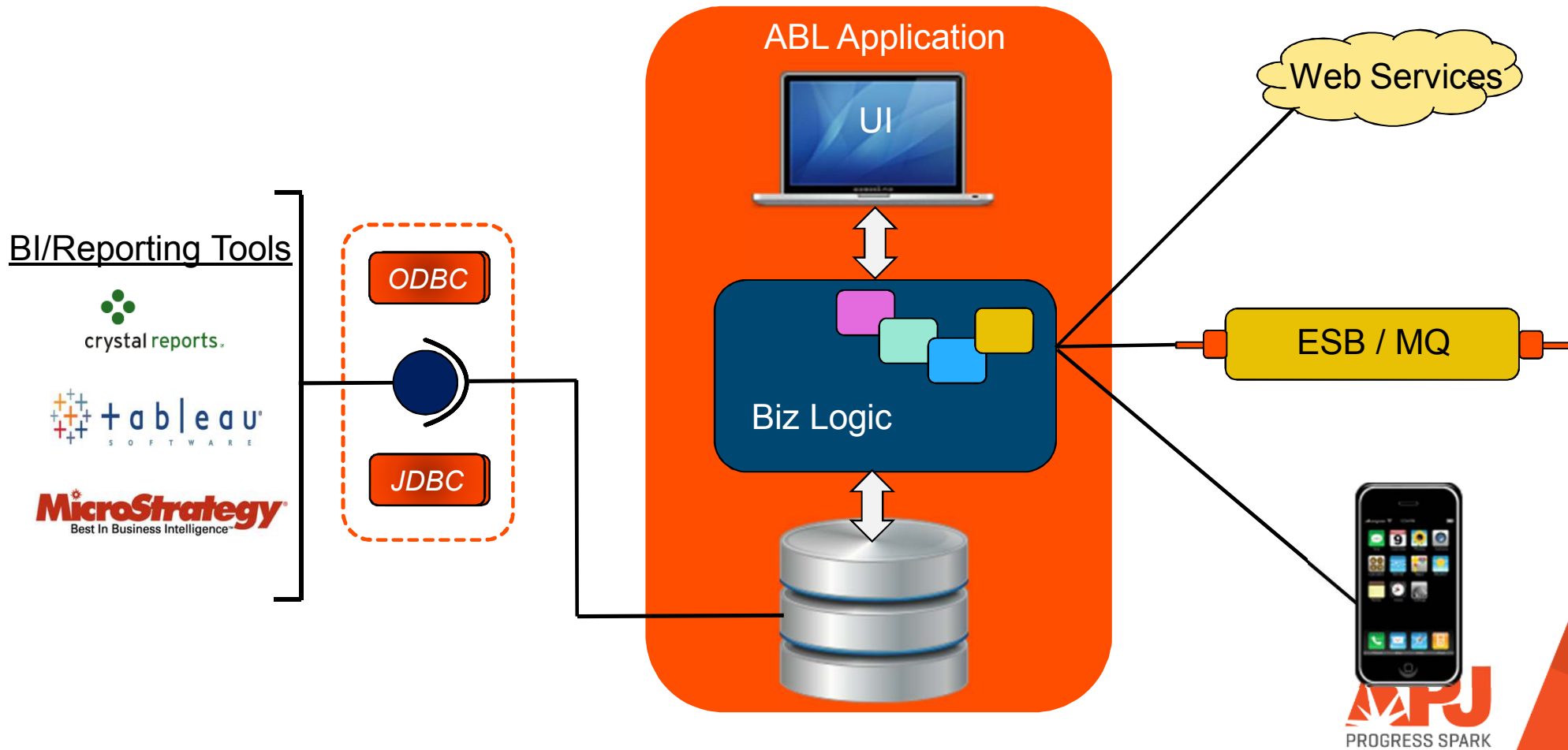
What we have now Cont.



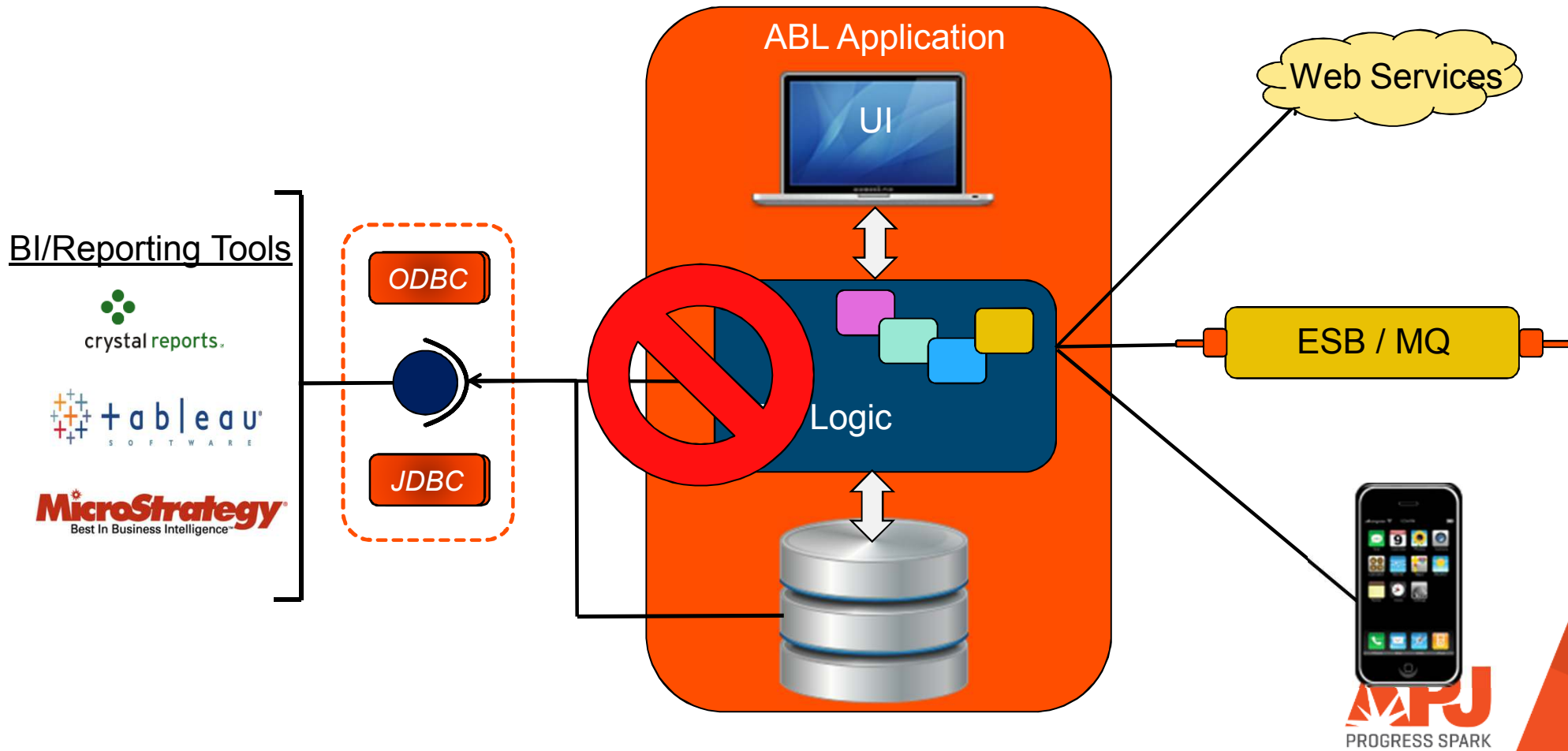
ABL Applications – Procedures

	ABL procedures will have temp-table and Prodataset
	These object may mapping 1:1 with OpenEdge DB
	Two or more tables data into one TempTable/ProDataSet
	Business Logic

What we have now Cont.



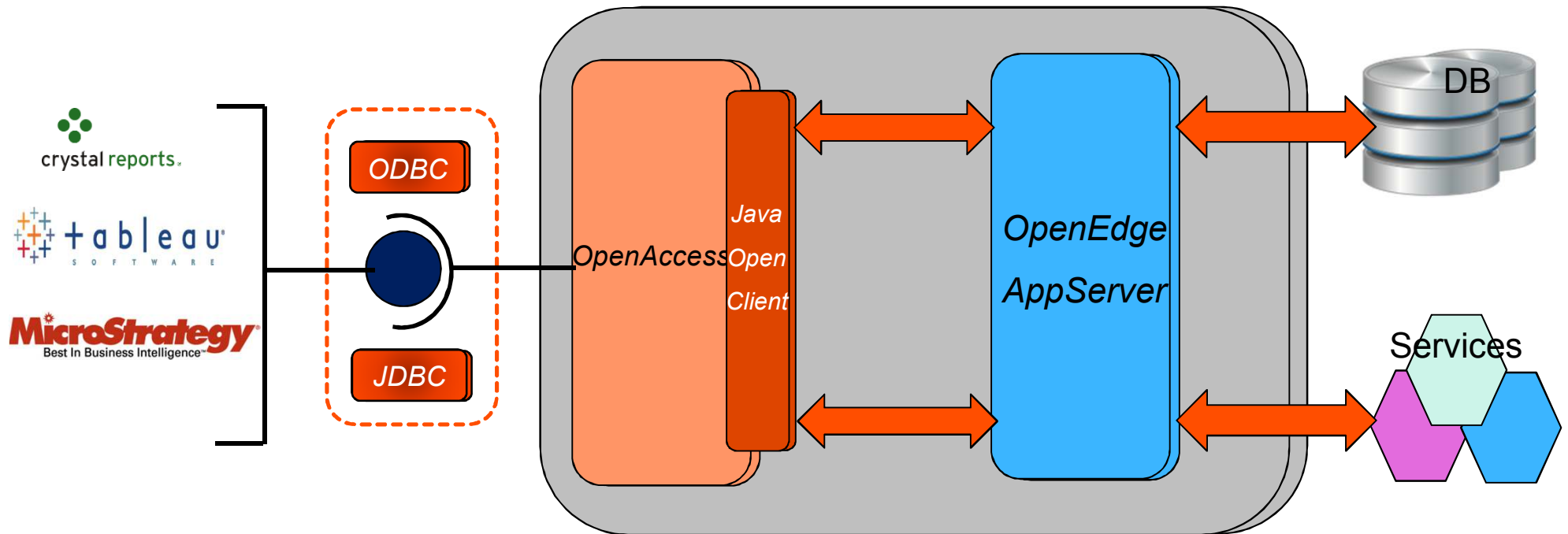
What we have now Cont.



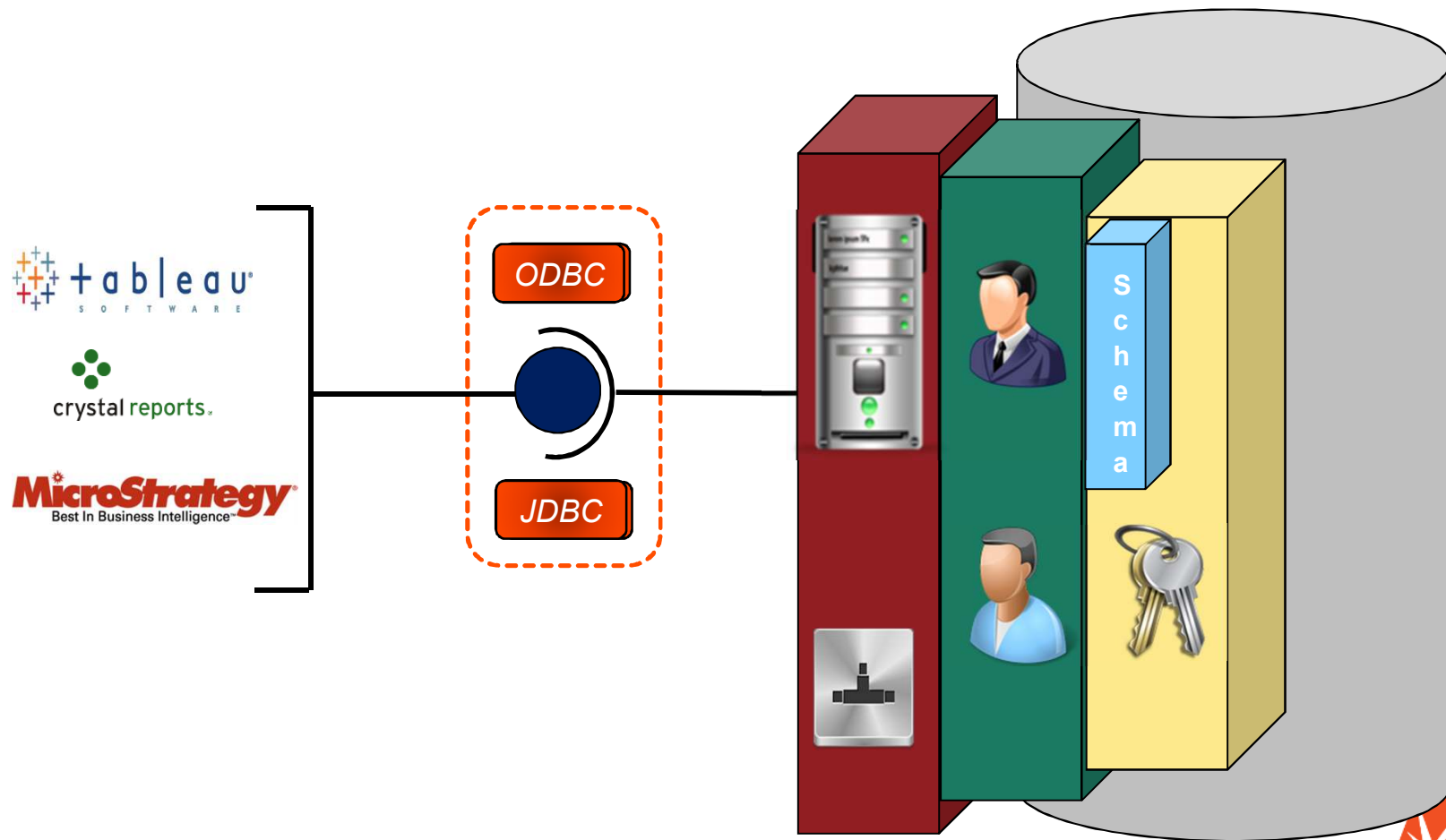
Why BI Need an Access to ABL Business Logic

1	Real-time data access
2	Fact based decisions
3	Combined data from different data sources
4	Security Control on data exposure to tools Add one more level of security to access

Solution architecture



What is required to enable drivers



OpenEdge Application Server - Properties

- Broker section in Ubroker properties
 - DB – Host and port.
 - Appserver Host and port.
 - And also we can provide user credentials.

[UBroker.AS.oabroker]

appserviceNameList=oabroker

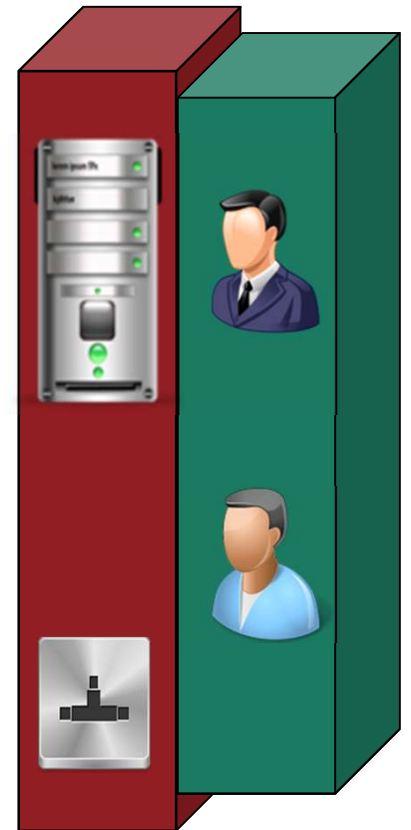
environment=oabroker

operatingMode=<Free/Managed>

password=

portNumber=<portnumber>

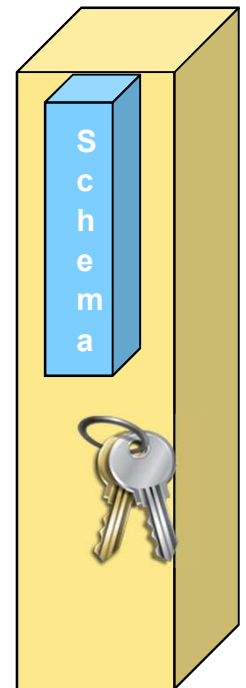
srvrStartupParam=-db <DBNAME> -H <Hostname> -S <Port>



JSDO catalog

Database schema and Operations (CRUD) on each table

- Expose these information in the form JSDO catalog as JSON file.
- JSON file has two section
 - Schema
 - Temptable/ProDataSet name and filed details..
 - Operations
 - CRUD operation support in defined schema.



JSDO catalog

```
[ //Applications
  { //Application
    name
    resources : [ // Resources
      { // Resource
        schema [    ]
        operations [  ]
      }
    ]
  }
]
```

JSDO catalog – Schema and Operations

```
"resources": [{  
  "name":  
  "schema": {  
    "properties": {"name": {  
      "items": {  
        "Column Name": {  
          "abIType",  
        },  
      }  
    }  
  }  
}
```

```
"operations": [ {  
  "type": "create/read/update/delete",  
  "params": [{  
    "name":  
    "type":  
  }]  
},  
]
```

```
[ //Applications  
{ //Application  
  name  
  resources : [ // Resources  
    { // Resource  
      schema [ ]  
      operations [ ]  
    }  
  ]  
}]
```

JSDO Operations - Temp-Table

CRUD
Operation

PROCEDURE CreateRecords:

DEFINE INPUT-OUTPUT PARAMETER TABLE FOR tt.

PROCEDURE ReadRecords:

DEFINE INPUT PARAMETER *filterString* AS CHARACTER.

DEFINE INPUT PARAMETER *maxrow* AS INTEGER.

DEFINE INPUT PARAMETER *orderby* AS CHARACTER.

DEFINE OUTPUT PARAMETER TABLE FOR tt.

PROCEDURE UpdateRecords:

DEFINE INPUT-OUTPUT PARAMETER TABLE FOR tt.

PROCEDURE DeleteRecords:

DEFINE INPUT-OUTPUT PARAMETER TABLE FOR tt.

JSDO Operations - ProDataSet

CRUD
Operation

PROCEDURE CreateRecords:

DEFINE INPUT-OUTPUT PARAMETER DATASET FOR dset.

PROCEDURE ReadRecords:

DEFINE INPUT PARAMETER *filterString* AS CHARACTER.

DEFINE INPUT PARAMETER *maxrow* AS INTEGER.

DEFINE INPUT PARAMETER *orderby* AS CHARACTER.

DEFINE OUTPUT PARAMETER DATASET FOR dset.

PROCEDURE UpdateRecords:

DEFINE INPUT-OUTPUT PARAMETER DATASET FOR dset.

PROCEDURE DeleteRecords:

DEFINE INPUT-OUTPUT PARAMETER DATASET FOR dset.

Configurations

- Application Server

[UBroker.AS.oabroker]

appserviceNameList=oabroker

environment=oabroker

operatingMode=<Free/Managed>

password=

portNumber=<portnumber>

srvrStartupParam=-db <DBNAME> -H <Hostname> -S <Port>

- OpenAccess

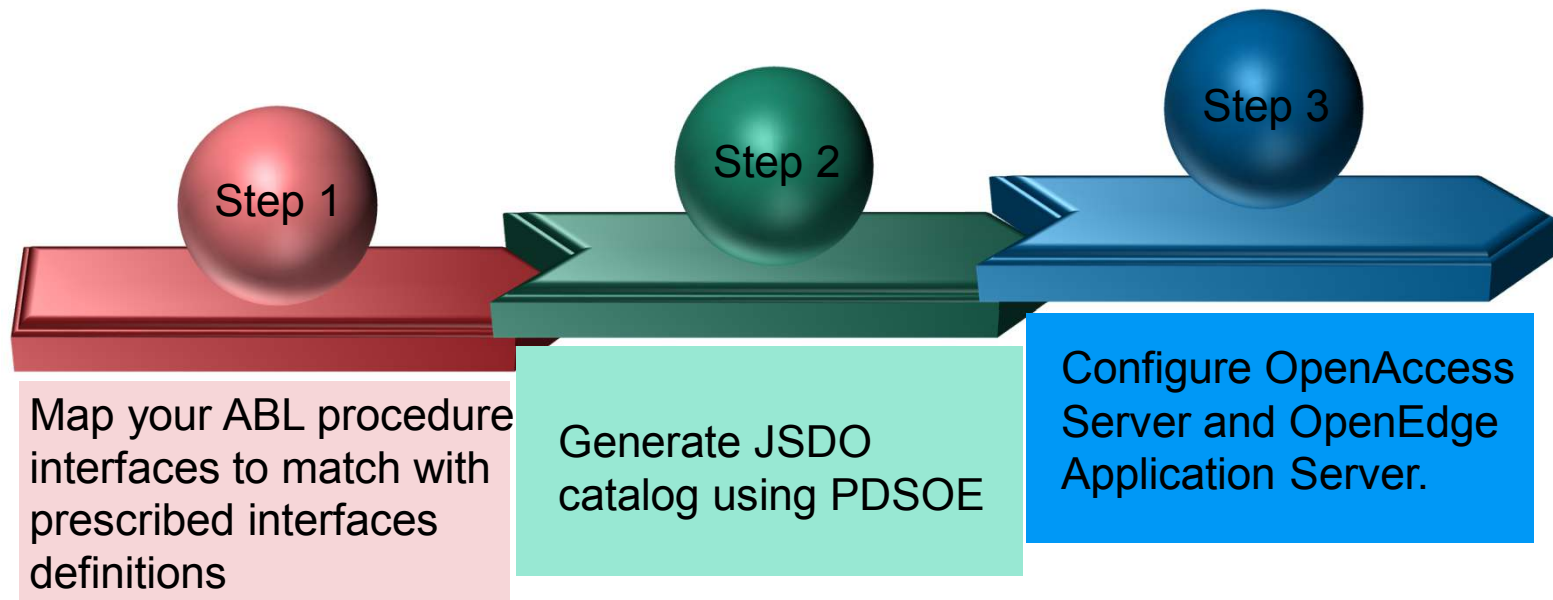
- Where is OpenAccess broker

- AppServerURL=<AppSrvURL>;AppServerInfo=<AppSrvInfo>;SessionModel=<Free/Managed>

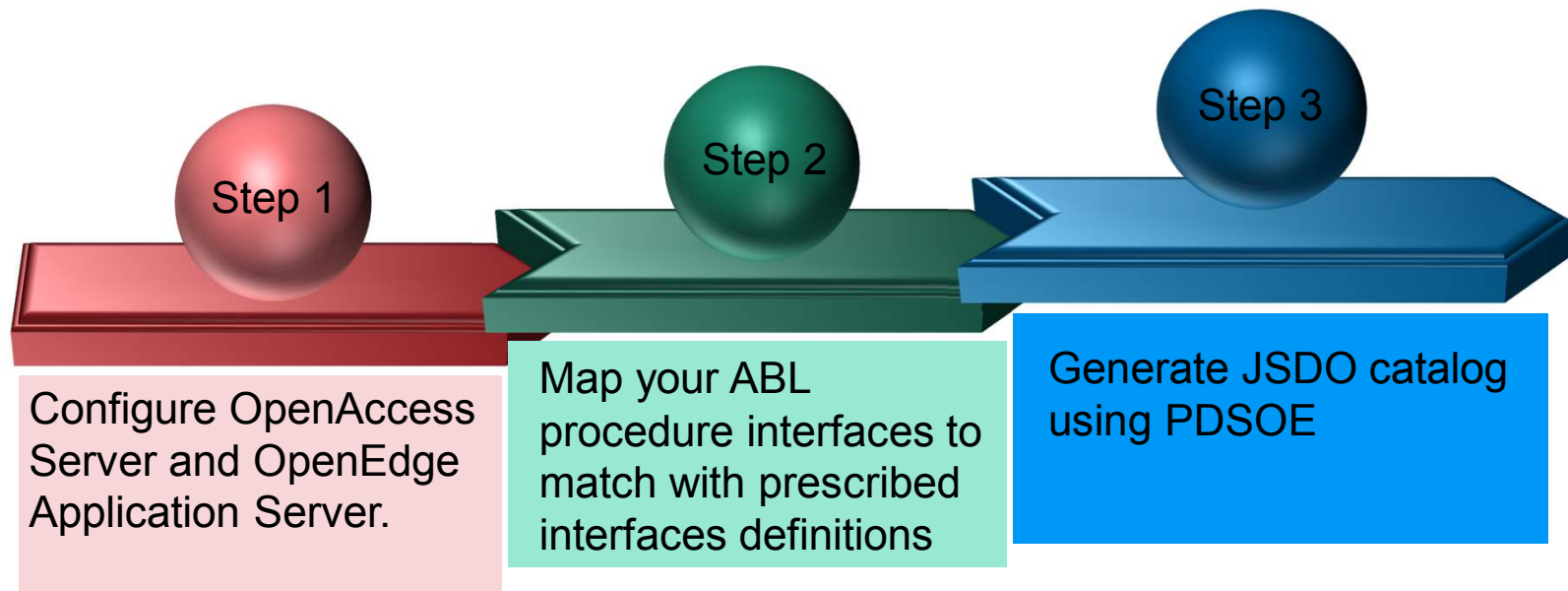
- Where is Schema information – JSON file

- ABL_CATALOG_PATH=<location of json file>

How many steps

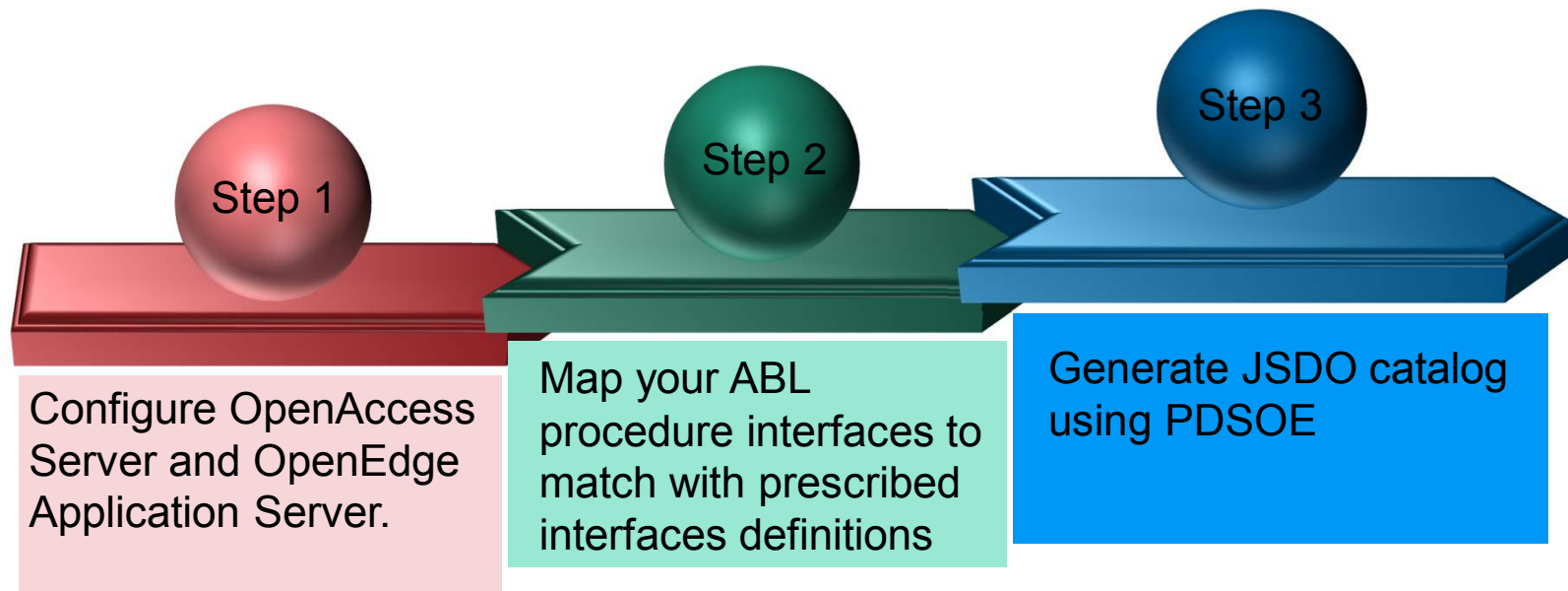


How many steps

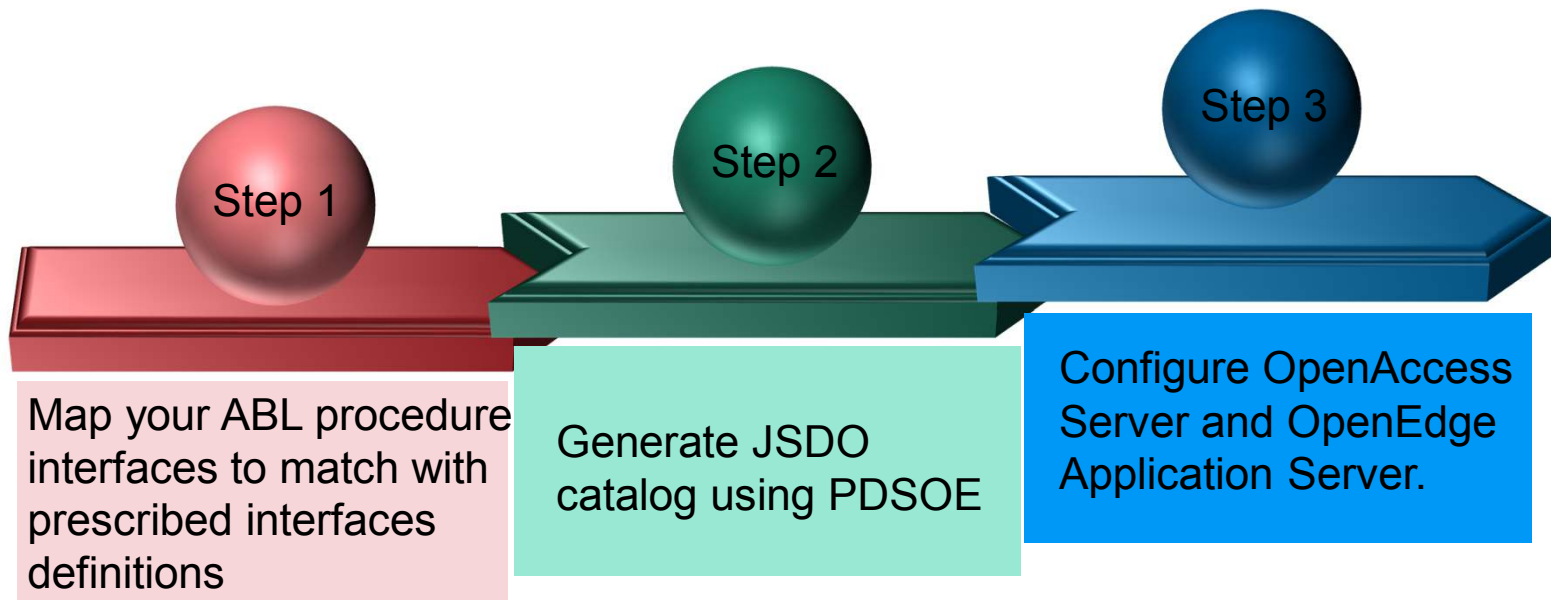


Demo

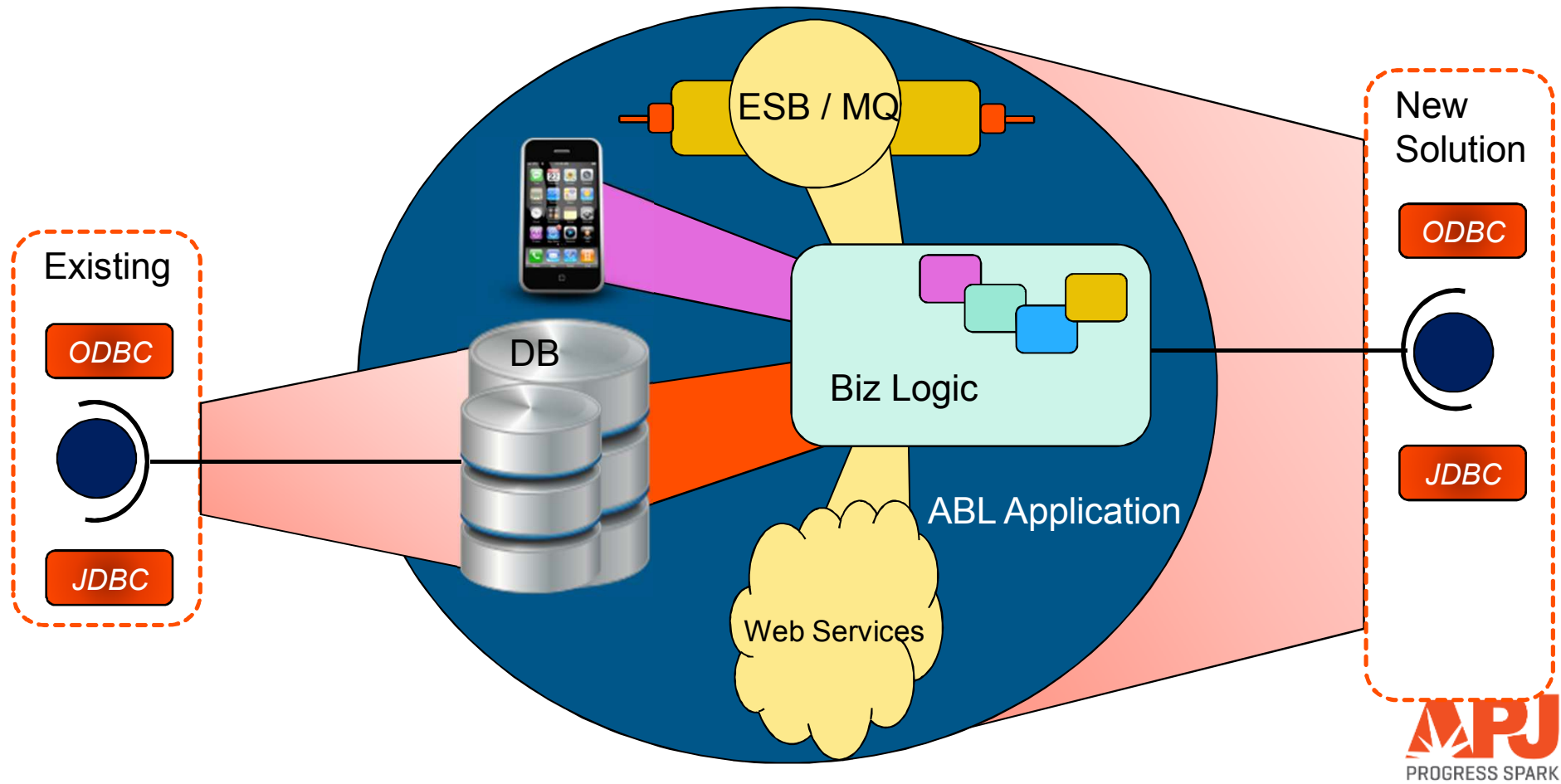
How many steps



Three Steps



Full Driver Access



Summary

1	Support ODBC/JDBC drivers for OpenEdge business logic
2	Simple steps
3	Resources OpenAccess – https://www.progress.com/products/open-access OpenAccess for OpenEdge Application server – ESD

Connectivity across various data sources

[Relational Data]



[Big Data]



[On-Premise Data]



[Marketing Operations Data]



[CRM Data]



[Data Warehouse]



[Cloud Data]



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