

# Enabling ODBC and JDBC Drivers for Progress OpenEdge Business Logic

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**PROGRESS**  
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# Agenda

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- What We Have Now
- Limitations
- How to Overcome Limitations – Solution
- Enable ODBC/JDBC Drivers
- Configurations
- Demo
- Q & A

# What We Have Now

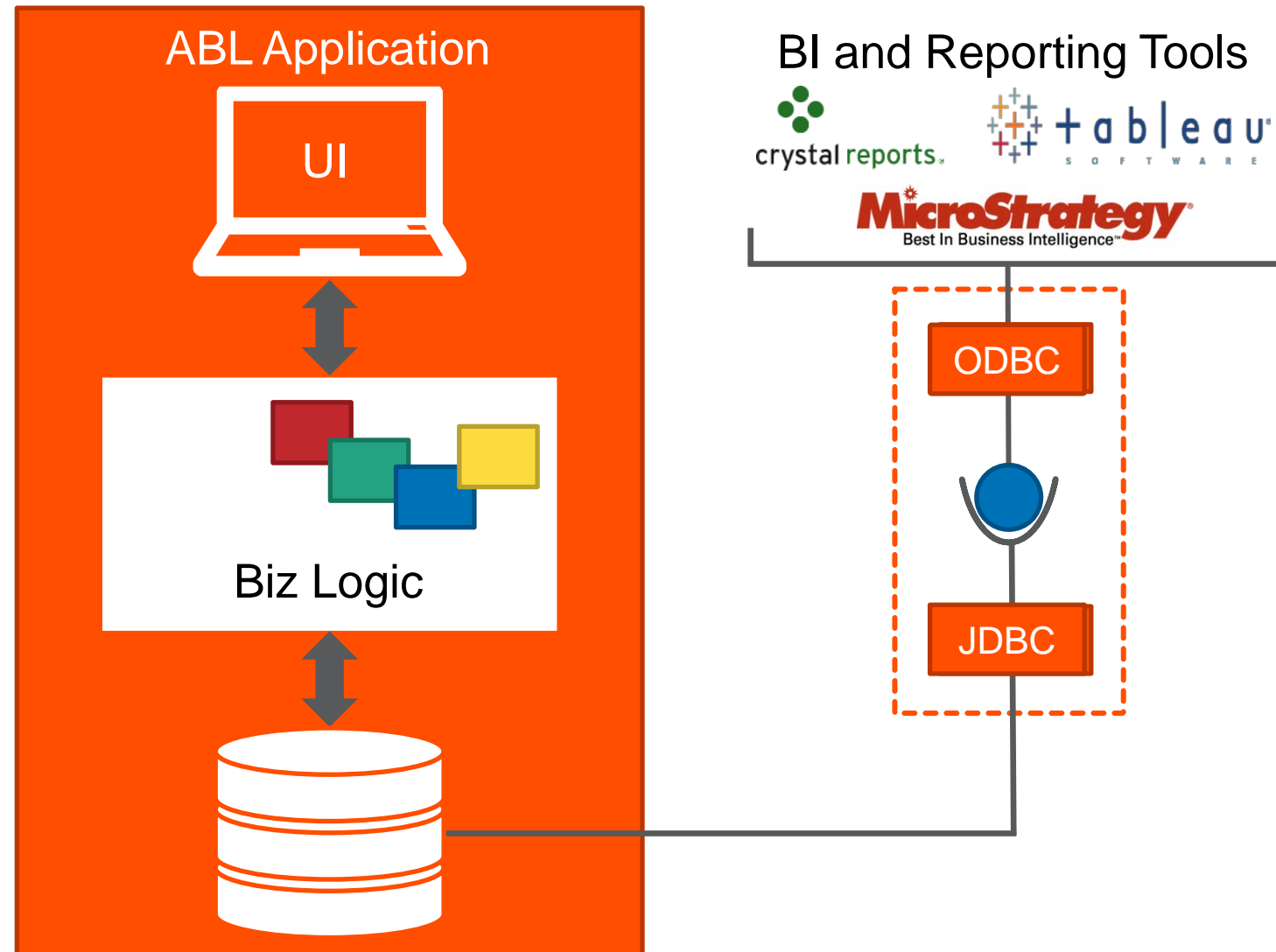
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OpenEdge has ODBC  
and JDBC driver

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

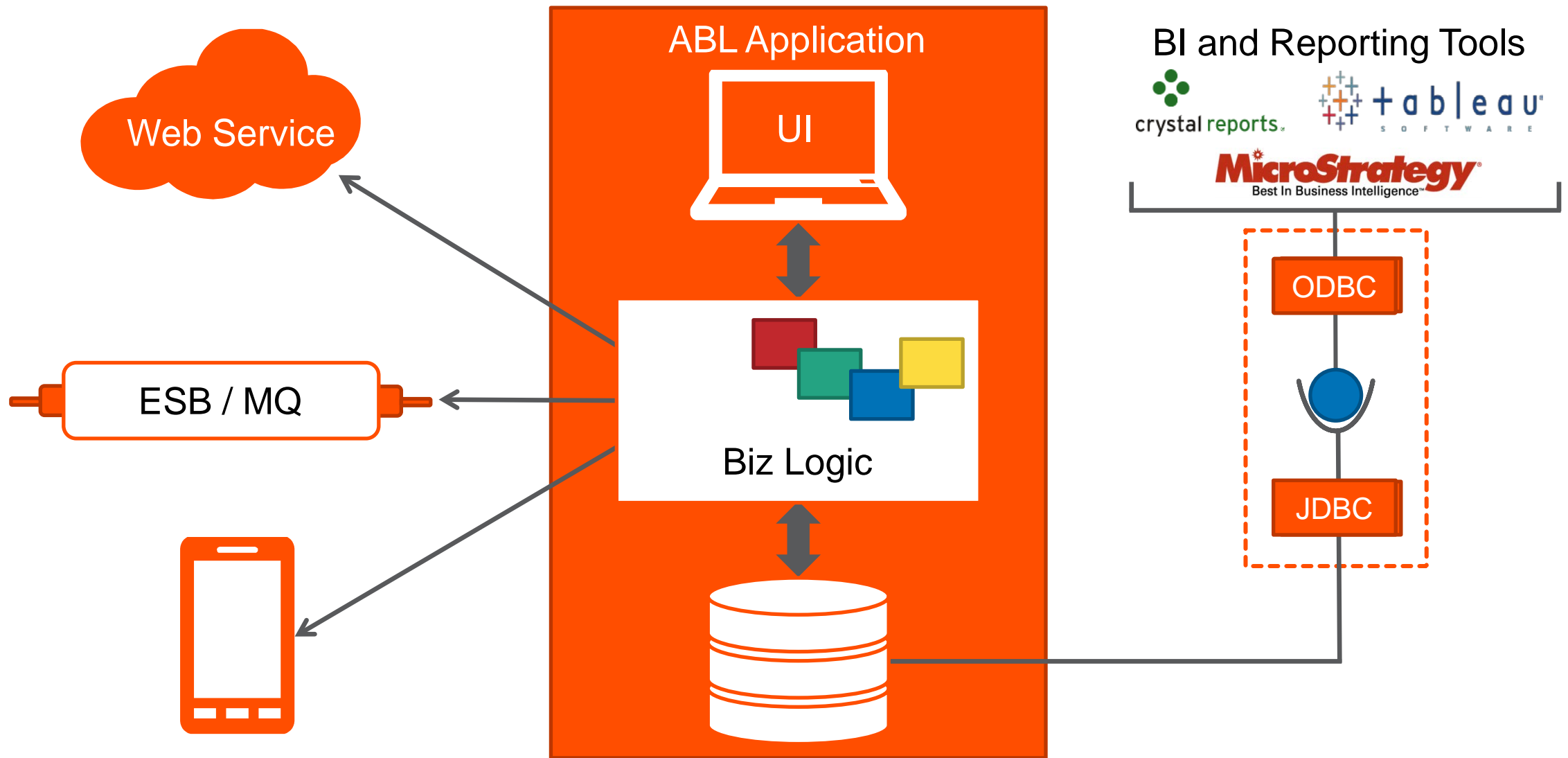


# ABL Applications – Procedures

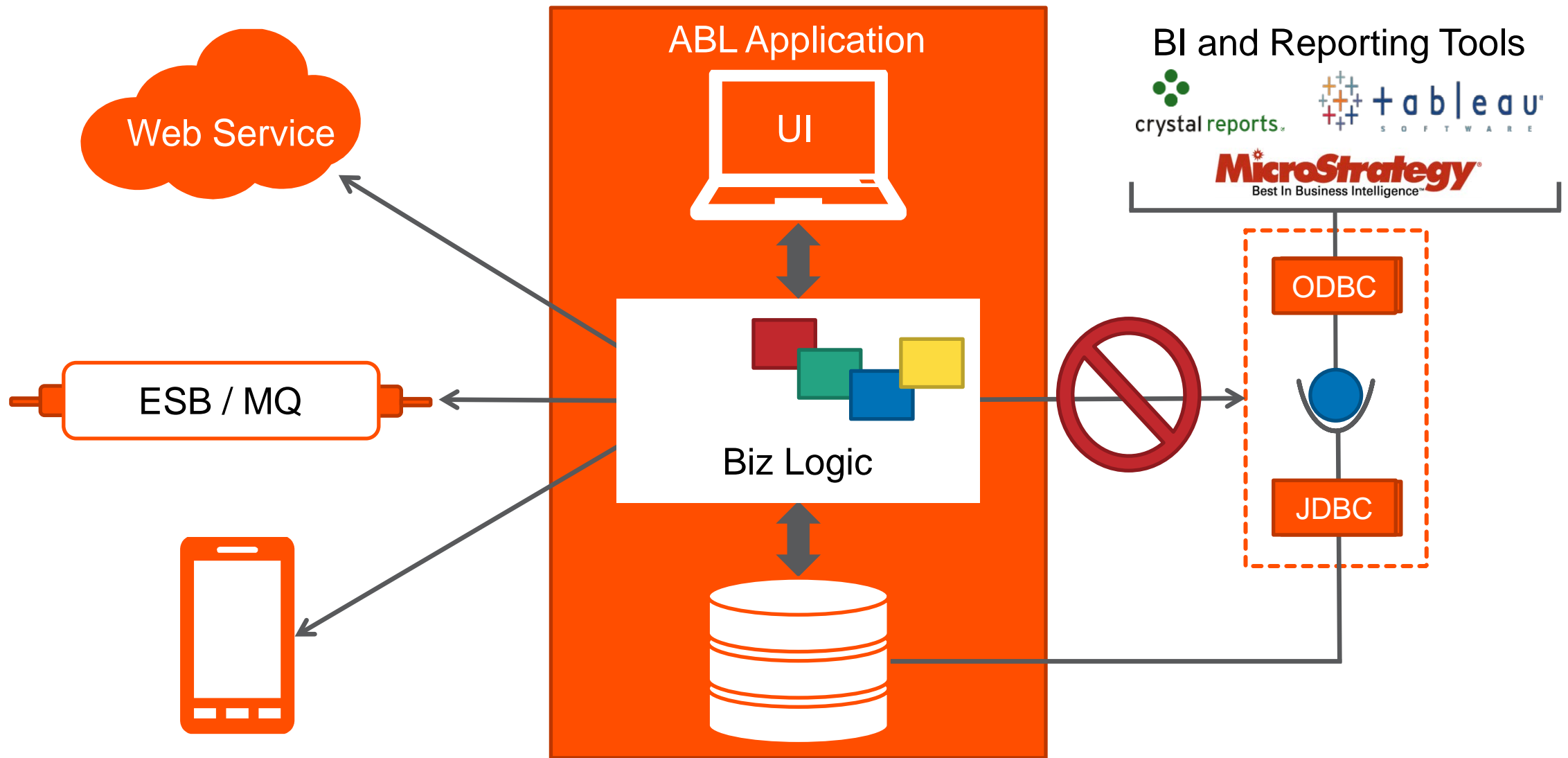
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	ABL procedures will have temp-table and Prodataset
	These object may mapping 1:1 with OpenEdge DB
	Two or more tables data into one TempTable/ProDataSet
	Business Logic

# Typical Progress OpenEdge Application



# Typical Progress OpenEdge Application



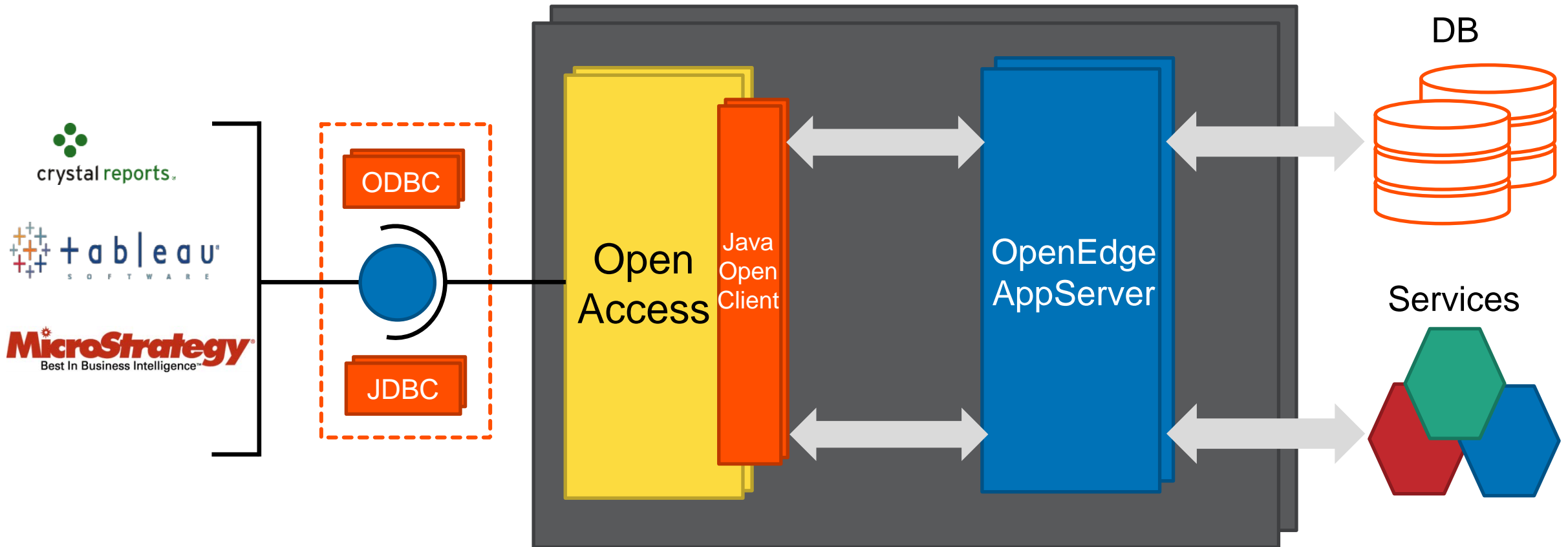
# Why BI Need an Access to ABL Business Logic

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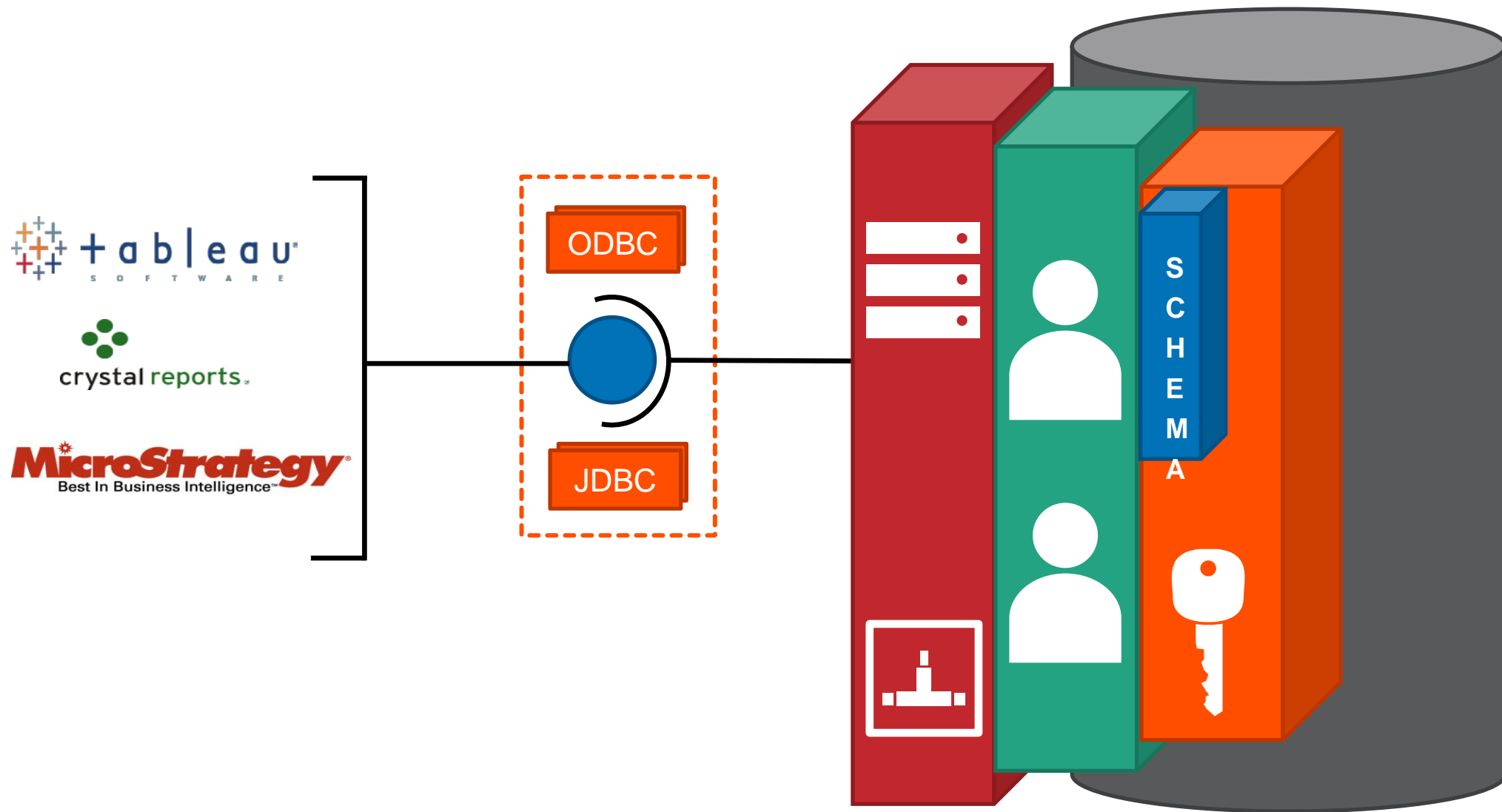
1	Real-time data access
2	Fact based decisions
3	Combined data from different data sources
4	<div>Security</div> <div>Control on data exposure to tools</div> <div>Add one more level of security to access</div>



# Solution Architecture



# Required to Enable Drivers



# OpenEdge Application Server – Properties

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- Broker section in Ubroker properties will have details to know where DB is running and port information
- Appserver is running and port details
- And also we can provide user credentials

[UBroker.AS.oabroker]

appserviceNameList=oabroker

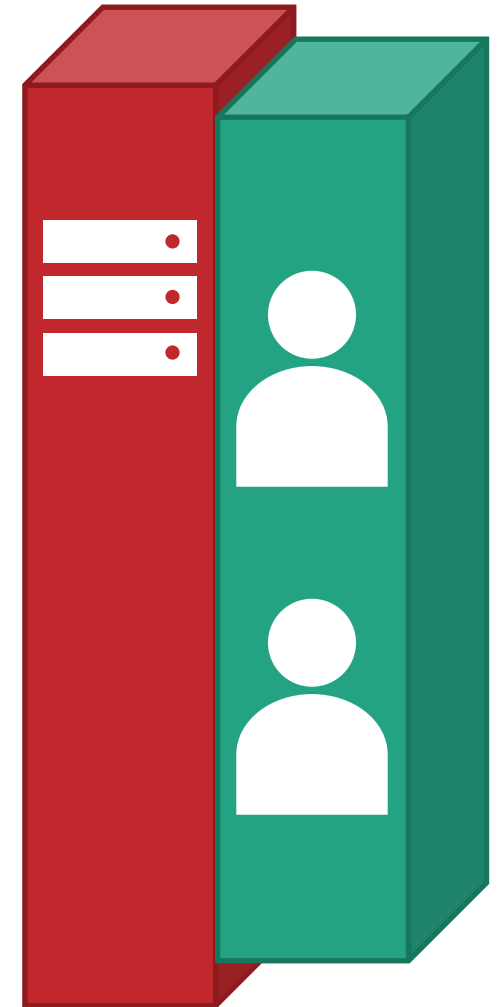
environment=oabroker

operatingMode=State-free

password=

portNumber=3097

**srvrStartupParam=-db sports2000 -H localhost -S 2929**

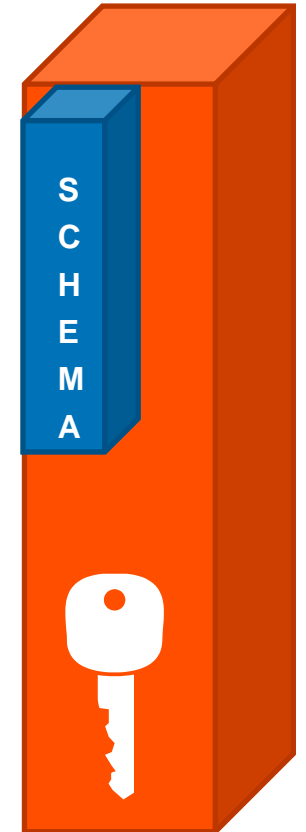


# JSDO Catalog

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## 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

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

# JSDO Catalog – Schema and Operations

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

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

# 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

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## ■ Application Server

[UBroker.AS.oabroker]

appserviceNameList=oabroker

environment=oabroker

operatingMode=State-free

password=

portNumber=3097

**srvrStartupParam=-db sports2000 -H localhost -S 2929**

## ■ OpenAccess

- Where is OpenAccess broker

- **AppServerURL=<AppSrvURL>;AppServerInfo=<AppSrvInfo>;SessionModel=<0/1>;**

- Where is Schema information – JSON file

- **DataSourceIPProperties: Session\_Properties=<location of json file>**

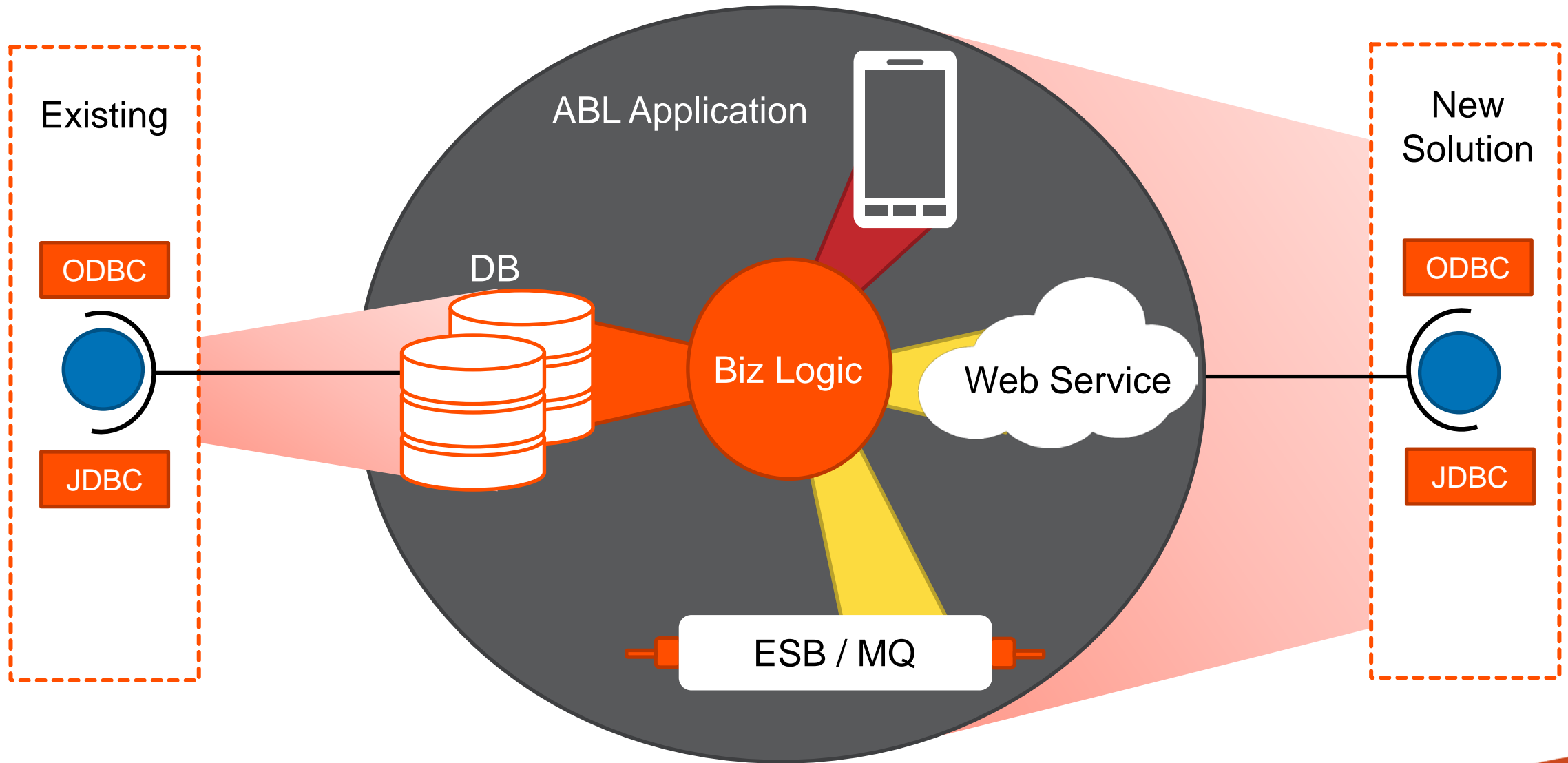
# How Many Steps

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Demo

# Full Driver Access



# Summary

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

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