

# SpagoBI light integration with ADempiere

## Preface

What we are going to present is an example of integration between two tools / solutions for Erp and Business Intelligence: Adempiere and SpagoBI.

Imagine a scenario where we have an established use of Adempiere in our company, resulting in the creation of a database constantly enriched by the data generated by the application.

Assume further the need for a solution for Business Intelligence by which to derive useful information on the progress of our company , based on data constructed by Adempiere usage.

The choice of this example falls on SpagoBI as Business Intelligence solution.

## Prerequisites

We are on a Windows Server 2003 platform in which we have installed our Adempiere version on JBoss, based on Oracle XE 10g database.

For Adempiere installation refer to [http://www.adempiere.com/index.php/ADempiere\\_Installing](http://www.adempiere.com/index.php/ADempiere_Installing).

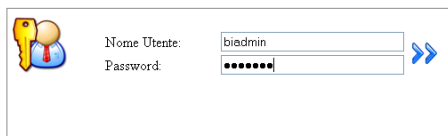
Suppose then that we have installed SpagoBI on the same machine, on Tomcat 6.0 (other possible choices are JBoss or WebSphere), based on MySql database .

For SpagoBI installation refer to <https://wiki.spagobi.org/xwiki>.

## Tutorial

In the following example we will face an integration that can be defined “light”, as we are going to create a direct connection to the Adempiere data, without the construction of a specific data warehouse.

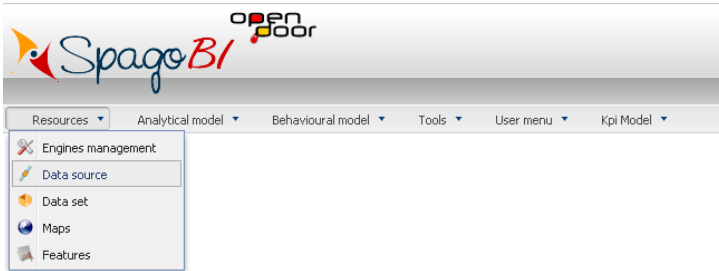
We perform the login with our administrator account

The image shows a login form for SpagoBI. It features a small icon of a person with a key on the left. To the right of the icon are two input fields: 'Nome Utente:' with the text 'biadmin' and 'Password:' with a masked password '\*\*\*\*\*'. There are blue arrows pointing to the right next to the password field.

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The first step will be to define a data source within SpagoBI, identifiable in the Adempiere database.

On menu item *Resources* we select *Data source* menu item



and we define a Jdbc data source:

The image shows the SpagoBI web interface with the 'Detail Data Source' configuration form. The form has the following fields:

- LABEL**: Adempiere \*
- DESCRIPTION**: Adempiere
- DIALECT**: Oracle (Oracle 9i/10g)
- TYPE**:  Jndi  Jdbc
- JNDI NAME**: (empty)
- URL**: jdbc:oracle:thin:@host:1521:xe
- USER**: Adempiere
- PASSWORD**: (masked with dots)
- DRIVER**: oracle.jdbc.driver.OracleDriver

This data source can now be used to create various documents used in the SpagoBI engines. We can see an example with the JasperReport engine, with the definition and execution of a jasper document created with iReport.

So we have our report (link), in which is defined a query that gets data relating to invoices and customers of our company:

```
select NAME as BPARTNER, SUM(TOTALLINES) as FATTURATO
from RV_C_INVOICE, C_BPARTNER
where RV_C_INVOICE.AD_CLIENT_ID = '1000000'
AND RV_C_INVOICE.AD_ORG_ID = '1000000'
AND RV_C_INVOICE.C_BPARTNER_ID = C_BPARTNER.C_BPARTNER_ID
AND to_char(RV_C_INVOICE.dateinvoiced,'YYYY') BETWEEN $P{Anno_I} AND $P{Anno_F}
AND RV_C_INVOICE.ISSOTRX = 'Y'
GROUP BY RV_C_INVOICE.ad_client_id, RV_C_INVOICE.ad_org_id, Name
```

order by Name

We proceed to define and insert the document inside the SpagoBI, entering the menu item *Analytical model* -> *Documents development*:

**DOCUMENT DETAILS**

Label: OS\_Invoice\_BPartner \*  
Name: OS\_Invoice\_BPartner \*  
Description: OS\_Invoice\_BPartner  
Type: Report  
Engine: JasperReport  
Data Source: Adempiere  
State: Development  
Refresh seconds: 0  
Criptable:  True  False  
Visible:  True  False  
Visibility restrictions:  
Template: OS\_Invoice\_Bpartner.jrxml Sfoglia...

**Show document templates**

- Functionalities Tree
  - osmosit
  - Sviluppo
    - Jasper
    - Olap
    - Doc Composti
    - Qbe
    - Kpi
    - Demo

Data source      Jrxml source

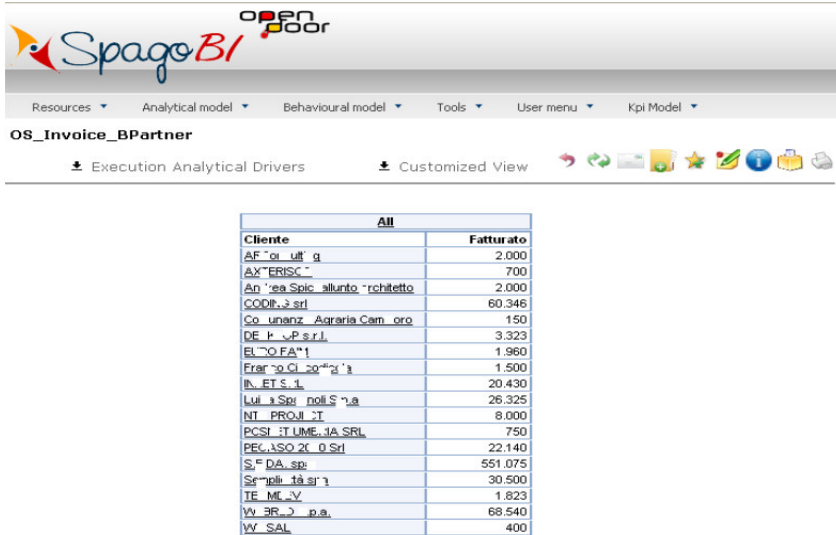
We linked our previously defined data source, chosen JasperReport engine and performed the upload of report as jrxml source. On the right we have defined the path of the document within the tree.

We back to menu *Documents development*, seek the document just added within the tree, execute it:

**OBJECTS TREE**

- Documents tree
  - Functionalities
    - osmosit
      - kpi
      - Vendite
      - Strumenti
      - Ticket
    - Sviluppo
      - federico
        - Jasper
          - DW\_Customers
          - DW\_Invoice\_Anno
          - DW\_Invoice\_BPartner
          - DW\_Invoice\_CH\_Mese
          - DW\_Invoice\_Mese
          - DW\_IR\_Clienti
          - DW\_Top\_Customers
          - Eleno Ticket
          - OS\_Report\_Parametri
          - OS\_Report\_Tempo
          - OS\_Ticket\_Cliente
          - OS\_Ticket\_Tipo
          - Os\_Report\_Orders
          - Ticket Cliente
          - Ticket Tipo
        - Olap
        - Doc Composti
          - DW\_DC\_Vendite
        - Qbe

The result, our report:



The screenshot shows the SpagoBI web interface. At the top, there is a navigation bar with the SpagoBI logo and the text 'open door'. Below the navigation bar, there are several dropdown menus: 'Resources', 'Analytical model', 'Behavioural model', 'Tools', 'User menu', and 'Kpi Model'. The main content area is titled 'OS\_Invoice\_BPartner' and includes a toolbar with icons for 'Execution Analytical Drivers' and 'Customized View'. Below the toolbar, there is a table with the following data:

All	
Cliente	Fatturato
AF "oi ult' g	2,000
AX "ERISC"	700
An "ea Spic allunto "rchiletto	2,000
CODIF. J srl	60,346
Co unanz Agraria Cam oro	150
DE It v p s r l	3,323
EL "O FA" i	1,960
Frar "o Cl "o" "a' s	1,500
IN ET S L	20,430
Lul " Sp" nol S " a	26,325
NT PROJ IT	8,000
PCSI IT LIME JA SRL	750
PEGLISO 20 0 Srl	22,140
S " DA sp	551,075
Sr " pl" "a s r l	30,500
TE ME V	1,823
Vv BR "o p a	68,540
W SAL	400

## Conclusions

The chosen example shows how, with extreme simplicity, we can connect to an Adempiere data source, define and process documents for SpagoBI engines.

The example can be extended to other engines: Qbe, Jpivot, Jpalo, Kpi ecc.

Availing the persistent data and the organization views of Adempiere, that are already in itself a discrete data warehouse, use of another Open Source solution for Business Intelligence as SpagoBI makes it possible to obtain an analysis on different levels of detail and a management control of a company.