



# Module 10 Reporting

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## **Module Objectives**



- Type of Reports in ADempiere
- Report Architecture
- Integration with Jasper Report
- Financial Report



#### Types of Reports



# **Standard Window** Reports



		ADempiere	Cu Re Or	te Promised stomer No ference No der Reference les Consultant	: Order Ref	123 erence 1234	
* New ** 8	0004 - 03/09/20	111					
rder Descript	ion from Business Par	rtner Definition					
	ion from Business Par Description	rtner Definition	List Price	Discount %	Unit Price	Line Net	
		rtner Definition	List Price	Discount %	Unit Price 90.00	Line Net	
Qty UoM	Description	rtner Definition				90.00	

- Report
- **Archived Reports**
- **Print Preview**
- **Print**

I.e., Sales Order Form, **Shipment Form** 

# **Standalone** Reports



11/01/2003

08/01/2002 3,144 0.00 **General Tabular** 

Discount

0.00

0.00

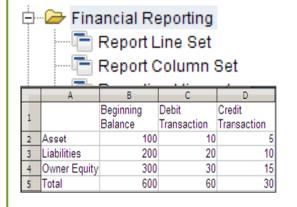
2,687

2,657

- Report **Accept Parameters**
- **Based on Views**

I.e., Open Items, **Invoice List** 

# **Financial** Reports



- **Data Cube**
- **Report Analysis** based on Acct **Code and Periods**

I.e., Balance Sheet, **Trial Balance** 

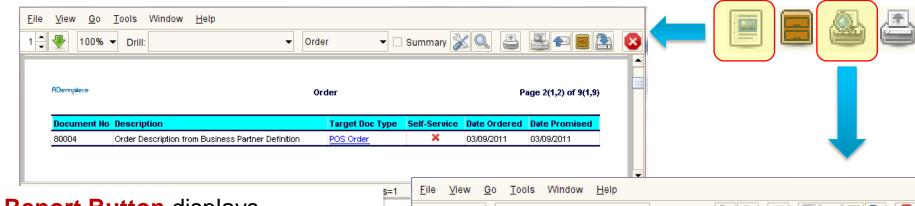




# Module 10.1 Working with Reports

#### Work with Reports





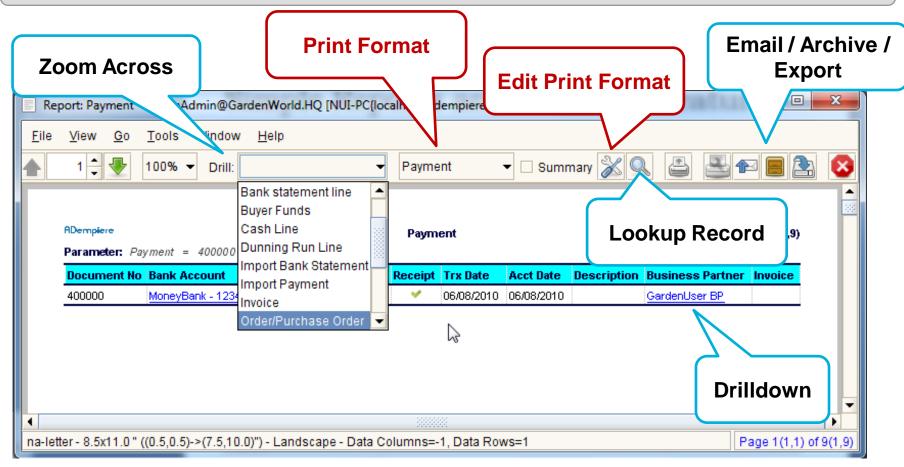
Report Button displays information of selected record Available in <a href="every">every</a> window / tab

Print Preview displays Form of Document Windows, i.e., Sales Order, Shipment Form, Payment Available in some window

▼ □ Summary Order Header **ADempiere** C&W Construction Date Promised : 03/09/2011 Unlimited Projects Corp. Customer No. : C&W Mr Manager Carl Boss Reference No : BP Ref No 123 100 Elm St Order Reference : Order Reference 1234 Sales Consultant : GardenAdmin BP Stamford, CT 03323 \*\* New \*\* 80004 - 03/09/2011 Order Description from Business Partner Definition **Qty UoM Description** List Price Discount % Unit Price Line Net Mary Consultant 100.00 90.00 90.00 1 Ea How To Plant 10.00 10.00 10.00 Sum E 100.00 USD 100.00 2%10 Net 30 Payment Term Note: Long Term Contracts are eligible for payment discounts. \*\* NO INVOICE \*\* na-retter - 8.5x11.0 " ((0.5,0.5)->(7.5,10.0)") - Portrait - Data Columns=25, Data Rows=1 Page 1 of 1

#### Work with Reports





6

#### **WORKSHOP**





### Working with Window Report



#### Login to ADempiere as Client

Username: GardenAdmin

Password: GardenAdmin

Role: GardenWorld Admin

Client: GardenWorld

**Organization:** Fertilizer

#### View Report of Purchase Order

Open Purchase Order window

With any record selected

Click on Report Button



Report of the Order Header will display

ADempiere				Order			Page 2(1,2) of 9(1,9)
Document No	Description	Target Doc Type	Self-Service	Date Ordered	Date Promised	Business Partner	Invoice Partner
800002	Starting Inventory	Purchase Order	×	01/22/2003	01/22/2003	Patio Fun, Inc.	Patio-Patio Fun, Inc.

#### Lookup Record

Click on **Lookup Record** icon



- Leave all criteria blank and click OK
- The report will now show all records.

#### Page 2(1,2) of 9(1,9) Order Document No Description Target Doc Type Self-Service Date Ordered **Date Promised Business Partner** 01/22/2003 Tree Farm Inc. Starting Inventory Purchase Order 01/22/2003 800001 Starting Inventory Purchase Order 01/22/2003 01/22/2003 Seed Farm Inc. 800002 Starting Inventory Purchase Order 01/22/2003 01/22/2003 Patio Fun. Inc

#### Drill Across

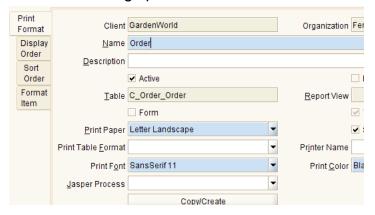
- Select **Drill** option to **Business Partner**
- Double Click on a record
- The Report for select Business Partner will be shown.

#### Review Print Format

- Back to **Purchase Order** Report
- **Print Format = Order**
- Click on Customize Report button



This will bring up Order's Print Format window

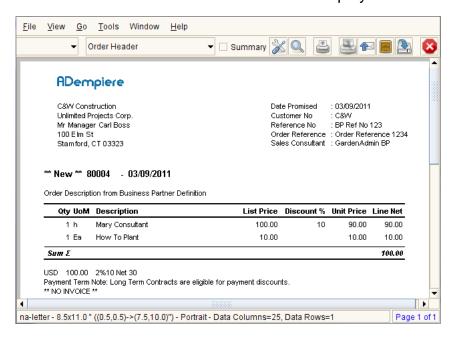


**Print Format** is **Application Dictionary** that control format of reports in ADempiere. This is an important window and we will visit it again in the following sections

### Working with Window Report

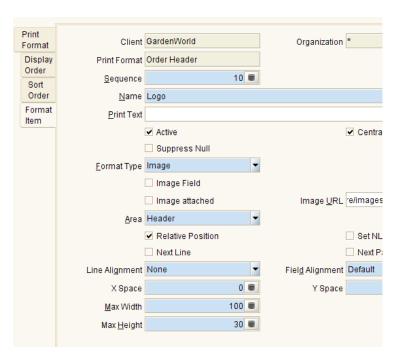


- View Purchase Order Form
  - Back to Purchase Order window
  - Click on Print Preview button
  - Purchase Order From will be displayed



- View Print Format of this From
  - Click on Customize button |
  - This will bring up Order's Print Format window for this Purchase Order Form

- Click on Format Item tab, this tab will display all formatting component of the report.
- For example, Logo, is the image with X / Y position, etc.



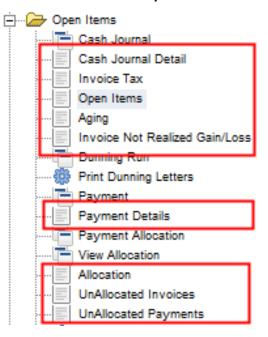
Although we can create or modify format using ADempiere's own Formatting, it is quite difficult.

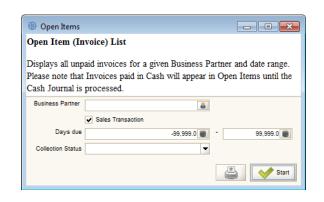
We will later on learn how to use **Jasper Report** Tools as a designer instead.

### Working with Standalone Report

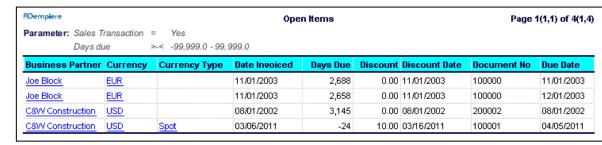


 Adempeire provide a lot of Standalone Reports out of the box. In every module, we can see relevant report icons as followings,





Click Start to generate the report.



- View Open Items Report
  - Click on Open Items report
  - As this is standalone report, parameter will be passed manually, dialog for report parameter will be shown

In contrary to the Print Format of Window Report which already link to the Window's Data Table, the Print Format of this Standalone Report will link to the Report View (Application Dictionary) in order to generate the result set.





# Module 10.2 Report Setup



#### Windows Related to Report Setup





# Report & Process (Master Data)

- ✓ Master Data of Report, i.e, Name, Help, etc.
- Input Parameters
- Security Access



#### **Print Format**

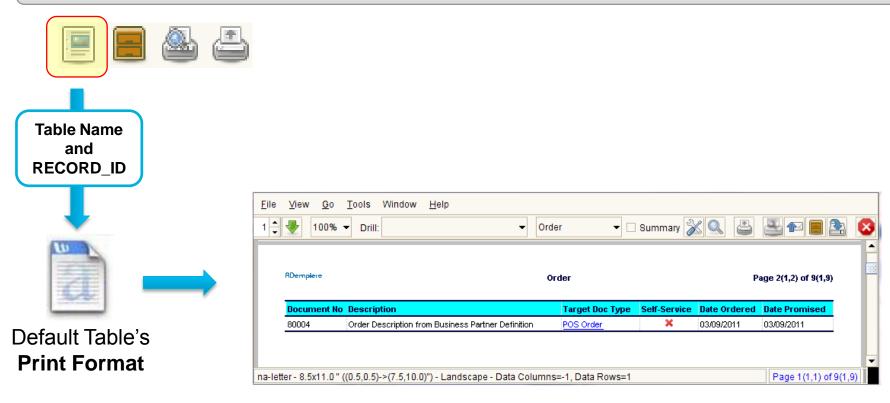
- Report Formatting
- ✓ Data Linkage to
  - Table and Column
  - Report View
- ✓ Optional Jasper Process (Overwrite)



# **Report View (Application Dictionary)**

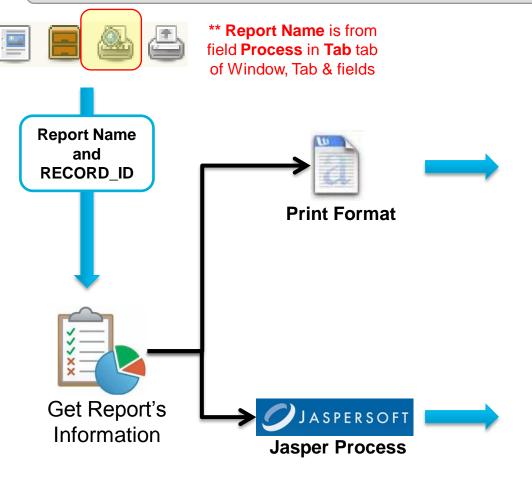
### How a Window find Report?

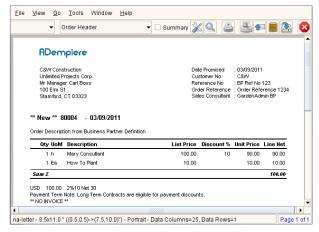




#### Print Preview Form (General)







#### **ADempiere Form**



**Jasper Form** 

#### Print Preview Form (Document)





\*\* Report Name is from field Process in Tab tab of Window, Tab & fields

Report Name and RECORD\_ID

#### **Special Report**

- Rpt C\_Order
- Rpt C\_Payment
- Rpt C\_InOut
- Rpt C Invoice
- Rpt .....
- Rpt .....



#### Find Print Format by DocType

- (1) Document Type (field print format)
- (2) Print Form (field default print formats)
- (3) Business Partner

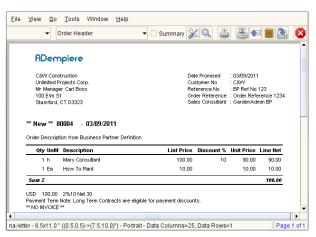
#### For example

Invoice: (3) then (1) then (2)

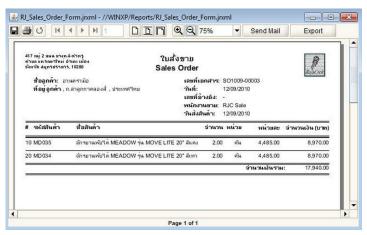
Order: (1) then (2)

Shipment: (1) then (2)





#### **ADempiere Form**



Jasper Form

#### Standalone Report



- - X

12/01/2003

08/01/2002

04/05/2011

11/01/2003

12/01/2003

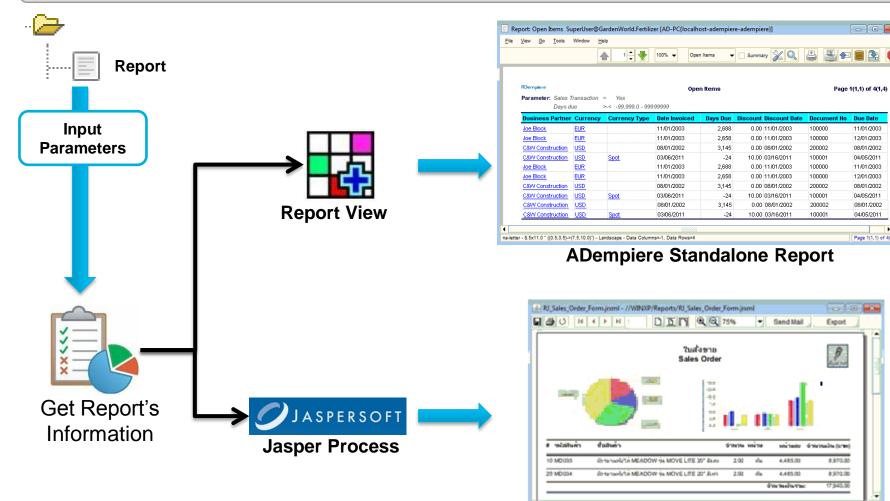
08/01/2002

04/05/2011

08/01/2002

04/05/2011

Page 1(1,1) of 4(1,4)



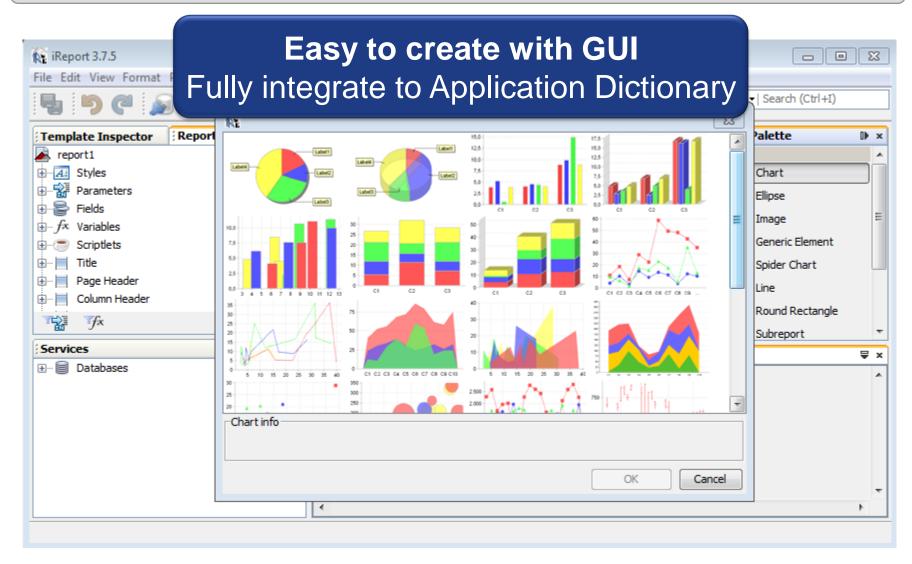




# Module 10.3 Working with Jasper Report

### Why Jasper Report





#### Scenario



- Create a new Standalone Tax Report with Jasper. This file will have a search criteria.
- Replace Sales Order form with Jasper Sales Order Form

#### Standalone Tax Report

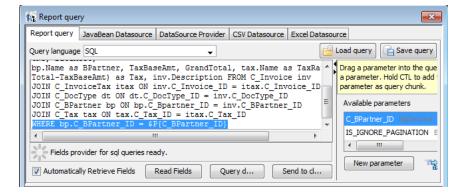


- Verify Sample TaxReport.jrxml
  - TaxReport.jrxml is the sample jasper file
    - Open TaxReport.jrxml file by Jasper I-Report
    - Click on Query button to see the SQL Query of this report. Note that there is still no criteria yet.



- Click on **Preview** to execute the Report. You will notice that it will simply return all records.
- Add Business Partner as criteria.
  - Click on SQL button again to open Report Query dialog.
  - Click New Parameter button
    - Parameter Name: C\_BPartner\_ID
    - Value Expression: Big Decimal
  - Click **OK** to save new parameter
  - Drag C\_BPartner\_ID to the query pane and add where clause

WHERE bp. C\_BPartner\_ID = \$P{C\_BPartner\_ID}



- Save change
- Click on **Preview** to execute the Report
- Jasper will ask for C\_BPartner\_ID, please supply any valid C\_Bpartner\_ID
- Now, the Jasper File is Valid and ready to deploy.
- Create Report in Application Dictionary
  - Login to ADempiere as System Admin
    - **Username:** SuperUser
    - Password: System
    - Role: System Administrator
  - Open Report & Process window.

#### Standalone Tax Report



Click New

Search Key: MyTaxReport

Name: My Tax Report

Report: Selected

Data Access Level: Client + Organization

Jasper Report: TaxReport.jrxml

Click Save

Click on Parameter tab

Click New

Name: My Tax Report

• DB Column Name: C BPartner ID

System Element: C BPartner ID

• Reference: Table Direct

Click Save

Register this report to Menu

Open Menu window.

Click New

Name: My Tax Report

• Action: Report

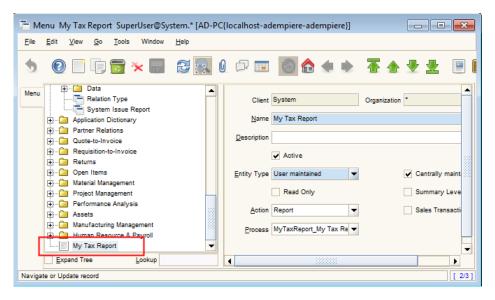
Process: My Tax Report

Click Save

- Notice that, the new Report icon appear on

the left pane

 You can actually drag the icon to move it to proper folder



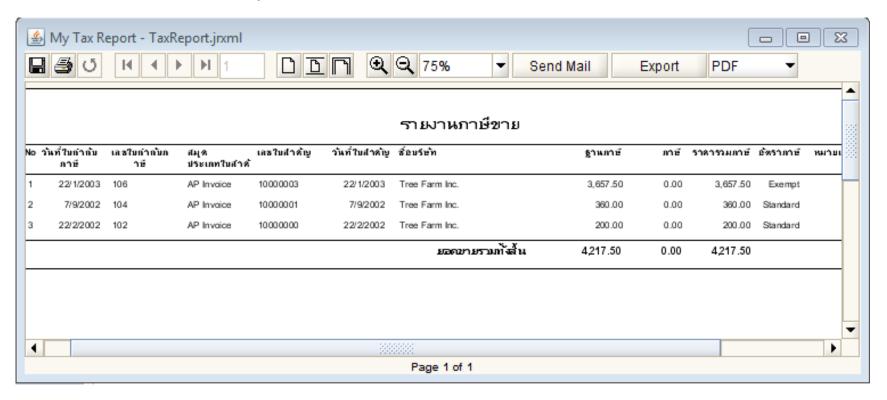
Deploy the Report, copy TaxReport.jrxml into C:\Adempiere\Reports folder

If path is not specified in Report & Process, C:\Adempiere\Reports is the default location

### Standalone Tax Report



- Run the report
  - Re-Login as GardenWorld Admin
  - Click on My Tax Report icon
  - A parameter dialog will appear, you can choose any Business Partner. I.e., Standard
  - Click OK to launch the report.



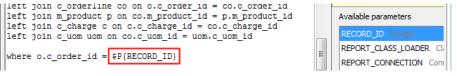
#### Use Jasper for Sales Order Form



- Verify Sample SalesOrder.jrxml
  - SalesOrder.jrxml is the sample jasper file
    - Open SalesReport.jrxml file by Jasper I-Report
    - Click on Query button to see the SQL Query of this report.

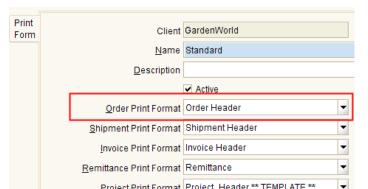


 Note that the SQL already have parameter RECORD\_ID, which will be the input parameter.



- Click on Preview to execute the Report
- Jasper will ask for RECORD\_ID, please supply any valid C\_Order\_ID, i.e., 1000001
- Create Report in Application Dictionary
  - Login to ADempiere as System Admin
    - Username: SuperUser
    - Password: System
    - Role: System Administrator

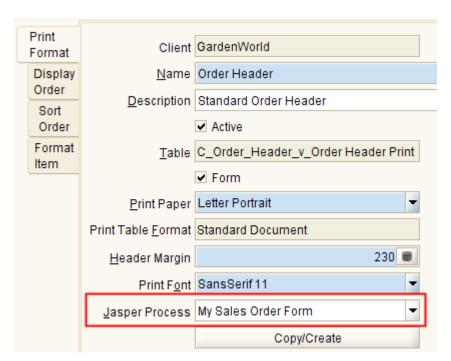
- Open Report & Process window.
- Click New
  - Search Key: MySalesOrderFrom
  - Name: My Sales Order Form
  - Report: Selected
  - Data Access Level: Client + Organization
  - Jasper Report: SalesOrderForm.jrxml
- Click Save
- There is no need to setup Parameter.
   RECORD\_ID will be passed by default.
- Register Sales Order Form in place of Print Format
  - Re-Login again as GardenWorld Admin
  - Open Print Form window
  - Lookup for record for GardenWorld



#### Use Jasper for Sales Order Form

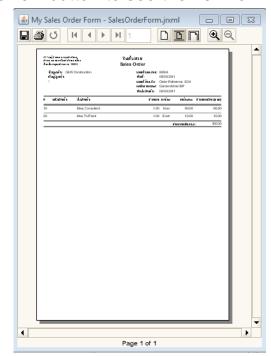


- Right click on Order Print Format field, and Zoom
- Print Format window will be opened
- Set the Jasper Process field to My Sales
   Order Form



 This Jasper Process will overwrite the Print Format for Sales Order form

- Deploy report, copy SalesOrderForm.jrxml into C:\Adempiere\Reports folder
- Use the Sales Order Form
  - Run Process Cache Reset to ensure that the new form is refreshed.
  - Open Sales Order window
  - On any valid Sales Order, click on Print Preview button to see the new form



#### **WORKSHOP**









# Module 10.4 Financial Reports

#### **Financial Reports**



- FN Reports are <u>unique</u>
- Sample of Reports are
  - Balance Sheets
  - Profit and Loss Statements
  - Statements of Account
  - Etc.
- ADempiere Tools
  - Report Line Set
  - Report Column Set
  - Reporting Hierarchy
  - Financial Report

# "They generally have two dimensional information"

"These dimensions are mapped into columns and lines (or rows)"

	A	В	U	D	E	F	G
		Beginning	Debit	Credit	Period	Ending	
1		Balance	Transaction	Transaction	Balance	Balance	Growth
2	Asset	100	10	5			
3	Liabilities	200	20	10			
4	Owner Equity	300	30	15			
5	Total	600	60	30			

#### **WORKSHOP**





#### **Create Report Line Set**



- We will create a configuration to display only the Asset, Liabilities, Owner Equity, and Total report line information.
- Login to ADempiere as Client

- Username: GardenAdmin

- Password: GardenAdmin

Role: GardenWorld Admin

Client: GardenWorld

Organization: Fertilizer

- Create Report Line Set
  - Open Report Line Set window
  - Click New

Organization: \*

Name: Account Information

- Click Save
- Create Report Line
  - Click Report Line tab and create Report Lines with following information,

Field	1 <sup>st</sup> data	2 <sup>nd</sup> data	3 <sup>rd</sup> data
Org	*	*	
Name	Asset	Liabilities	Owner Equity
Sequence	10	20	30
Line Type	Segment Value	Segment Value	Segment Value

- Create Report Source
  - For each record in the Report Line tab. Add and save the following information on Report Source tab

Field	1 <sup>st</sup> data	2 <sup>nd</sup> data	3 <sup>rd</sup> data
Report Line	Asset	Liabilities	Owner Equity
Туре	Account	Account	Account
Account Element	1 – Asset	2 – Liabilities	3 – Owner's Equity / Net Worth



For example, **1 – Asset** account shall contain a summed-up value taken from listed posting and non-posting accounts belonging to **1 – Asset** 

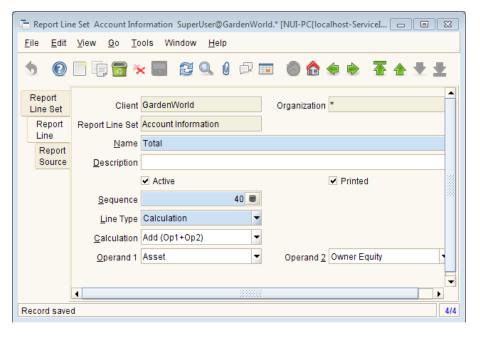
### Create Report Line Set



- Setup Total Line
  - Back to Report Line tab
  - Create Report Line with following information

Field	4 <sup>th</sup> data
Org	*
Name	Total
Sequence	10
Line Type	Calculation
Calculation	Add Range (Op1 to Op2)
Operand 1	Asset
Operand 2	Owner Equity

There is no need to set Record Source here





#### Create Report Column Set



- We now need to configure the **Beginning Balance, Debit Transaction, Credit Transaction,** and **Ending Balance**.
- Create Report Column Set
  - Open Report ColumnSet window
  - Click New
    - Organization: \*
    - Name: List of account balances
  - Click Save
- Create Report Column
  - Click Report Column tab and create Report Lines with following information,

The relative period 0 means the active period, and -1 means 1 period prior to the active period. You can also specify 1, which means 1 period after the active period.

And for calculation column, add the 2 records

Field	6 <sup>th</sup> data	7 <sup>th</sup> data	
Name	Deviation	Growth (%)	
Printed	Deselected	Selected	
Sequence	60	70	
Posting Type	Actual	Actual	
Amount Type	Blank	Blank	
Column Type	Calculation	Calculation	
Calculation	Subtract (Op1-Op2)	Percentage (Op1 of Op2)	
Operand 1	Ending Balance	Deviation	
Operand 2	Beginning Balance	Beginning Balance	

Field	1 <sup>st</sup> data	2 <sup>nd</sup> data	3 <sup>rd</sup> data	4 <sup>th</sup> data	5 <sup>th</sup> data
Name	Beginning Balance	Debit Transaction	Credit Transaction	Period Balance	Ending Balance
Sequence	10	20	30	40	50
Posting Type	Actual	Actual	Actual	Actual	Actual
Amount Type	Balance (acct sign)	Debit Only	Credit Only	Balance (acct sign)	Balance (acct sign)
Period Type	Total	Period	Period	Period	Total
Column Type	Relative Period				
Relative Period	-1	0	0	0	0

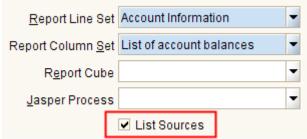
#### **Create Financial Report**



- Create Asset, Liabilities and Equity list report.
  - Open Financial Report window
  - Click New
    - Organization: \*
    - Accounting Schema: GardenWorld US/A/US Dollar
    - Calendar: GardenWorld Calendar
    - Name: Asset, Liabilities and Equity list
    - Report Line Set: Account Information
    - Report Column Set: List of account balances
  - Click Save
- Click on Create Report button and click OK on the criteria dialog box.

The report appears as follows (the actual numbers may vary with your installation, but the format generated should be the same)

- Enable List Source option
  - The previous step only see the summay.
  - To see the detail of the source of account, select the List Source option before Create Report.



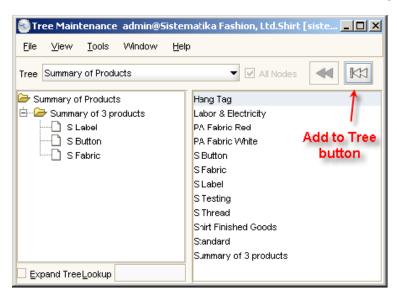
ADempiere			Asset, Liabilities and Equity list				Page 1 of 1	
Parameter:								
	Period	= Apr-09						
	Details/Source Fil	st = No						
	Update Balances	= Yes						
Name	Description	Beginning Balance	Debit Transaction	Credit Transaction	Period Balance	Ending Balance	Growth	
Asset			2,321.98	1,939.94	382.04	382.04		
Liabilities			1,572.00	1,868.00	296.00	296.00		
Owner Equity	у							
Total		0.00	3,893.98	3.807.94	678.04	678.04		

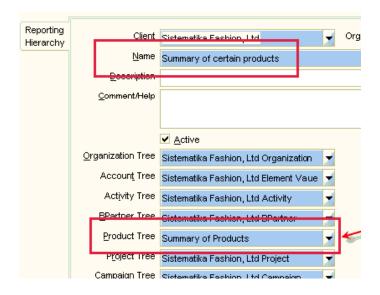
#### What else can be done with Financial Report?



#### More Specific Financial Report

 For our example, we will create a summarized report based on only the Product account schema element, and involving the following list of 3 products





#### Jasper and Financial Report

- ADempeire also allow Jasper to integrate with Financial Report
  - http://www.adempiere.com/index.php/HOWTO Use Jasper On Financial Reports

#### Test Your Knowledge



- 1. What are types of Reports in ADempiere?
- 2. What is Print Format?
- 3. What is the default path for Reports? And if we don't want to use default path, what can we do?

4. What is the mechanism that FN Report is being generated?

