



## PeopleSoft NW RUG

How Can Oracle Business  
Intelligence Publisher Serve  
Your PS 9.2 Reporting Needs?

Presented by:

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# Agenda

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- Introductions
- SpearMC Solutions Overview
- Reporting Tools Overview
- BI Publisher Overview
- Examples, Tips, and Tricks
- Questions and Answers



# Introductions

# Introductions

## Randy Johnson

- SpearMC Managing Director
- PeopleSoft Financials, Financial Controls and Reporting Expert
- Certified PeopleSoft v9.x Financials
- 20+ Years Experience...majority PeopleSoft

## Shahin Islam

- SpearMC Technical Specialist
- Solution Architect
- Custom Development & Upgrades
- 16 + Years of PeopleSoft implementation experience

## You

- Who is learning about BI Publisher for the first time?
- Who works at an organization that uses BI Publisher, but has not been involved with it themselves?
- Who is a BI Publisher guru?



# SpearMC Solutions Overview

# About SpearMC

## Who is SpearMC?



- SpearMC is a full-service consulting and technology services firm with **specific focus on Oracle/PeopleSoft Applications**
- Our Local and well-connected network of top-tier Business Analysts, Technical Leads, Developers and Project Managers **keep travel related costs to a minimum**
- It is our goal to provide top-tier **professional services at competitive rates**

# Our Expertise...



**Personal  
Service**

**Professional  
Results**

- ✔ **Project Management**
- ✔ **Operations Improvement**
- ✔ **Business Intelligence**
- ✔ **Education**
- ✔ **IT Strategy/Architecture**
- ✔ **Application Development**
- ✔ **ERP Integration**
- ✔ **Recruiting/Support**



# Reporting Tools Overview



# Reporting Tools

## Tools bundled with PeopleSoft



- SQR
- Query
- nVision
- Crystal Reports
- BI Publisher

# SQR

➤ **Very powerful—full database access within a "report"**

➤ **Modular**

- re-use logic in building blocks
- override delivered logic

➤ **Part of the Oracle family**

➤ **Built-in support for debugging**

➤ **Programmer-centric**

- quick to build and run
- requires a technical resource

➤ **Lots of knowledge in the PeopleSoft community**

```
#include 'setenv.sqc'  
#include 'number.sqc'  
#include 'trancntl.sqc'  
#include 'reset.sqc'  
#include 'curdtta.sqc'  
#include 'datetime.sqc'  
#include 'dateath.sqc'  
#include 'timeath.sqc'  
#include 'prcsapi.sqc'  
#include 'prcsdef.sqc'  
  
|Reset Printer Procedure  
|Get Current Date Time  
|Routines for date and time formatting  
|SQR date arithaetic procedures  
|SQR time arithaetic procedures  
|Update Process Request API  
|Update Process Request variable declare
```

# SQR

## Key Factors

SQR talent

Data more important than presentation

Build reporting tables;  
performance requirements

## Concerns

Buried business logic

External Migration

# Query

## ➤ Empowers business users

- Solve their own problems
- Explore data

## ➤ Built-in features

- Security (including new security optimization)
- Query Access Server (instant web service)
- Translate tables
- Embedded URLs
- Output to Excel

[View All](#) | [Rerun Query](#) | [Download to Excel](#) | [Download to XML](#)

	Course	Descr	Session	Start	Length	Instructor
1	1033	Introduction to CRM	332	05/18/2009	3.0	GXI - Gina Isenberg
2	1034	Call Desk Essentials	353	06/15/2009	2.0	AGH - Anita G Harris
3	1005	General Ledger I	107	03/03/2008	5.0	MEB - Mary Belknap
4	1005	General Ledger I	111	07/21/2008	5.0	SAS - Scott M. Sarris
5	1005	General Ledger I	284	02/18/2008	5.0	DHS - Doug Shore
6	1005	General Ledger I	292	03/17/2008	5.0	JCO - John Coscia
7	1005	General Ledger I	305	11/10/2007	5.0	TEP - Tracy Paugh
8	1009	Payables	145	03/03/2008	5.0	TEP - Tracy Paugh
9	1009	Payables	146	04/07/2008	5.0	EAL - Elizabeth A Lerner
10	1009	Payables	147	06/02/2008	5.0	TEP - Tracy Paugh

## ➤ Outsource processing criteria/logic to query and business users

# Query

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## Key Factors

Tabular data

Dynamic criteria

Users want spreadsheets

## Concerns

Shared (copied) private queries

Poorly written queries

# nVision



## ➤ Power of Excel

## ➤ Tightly connected to PeopleSoft data

- Ledgers
- Trees

## ➤ Matrix layout plus nPlosion provides quick access to details

## ➤ Drill-down into additional reports

# nVision

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## Key Factors

Data requires interactive analysis

Financial, ledger data

## Concerns

nVision talent

Setup and maintenance

# Crystal Reports



## ➤ GUI Report Designer

- Drag-and-drop
- Preview look and feel

## ➤ Query-driven data

## ➤ Many delivered reports are in based on Crystal



# Crystal Reports

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## Key Factors

Presentation matters

Based upon underlying queries

## Concerns

External migration

Non-Oracle solution

# BI Publisher

- Formerly called XML Publisher
- Report designer is Microsoft Word
- Query or Connected Query as data source
- Output to HTML, PDF, Rich Text, or Excel
- Split data into multiple reports (Bursting)
  - Post to report repository with security per report
  - Enable search by report data
- Templates enable one report with multiple formats

```
<rowset name="PgmDefn" size="1708" count="1">
  <row>
    <szLastUpdDttm>2011-11-10-13.39.08.000000</szLastUpdDttm>
    <szLastUpdOprId>TKUMMER01</szLastUpdOprId>
    <szObjectOwnerID></szObjectOwnerID>
    <nUseCount>1</nUseCount>
    <bUseUpdate>1</bUseUpdate>
    <iVersion>25236</iVersion>
    <lSwapVersion>0</lSwapVersion>
    <nSwapNum>0</nSwapNum>
    <szProjectName>G9_EMAIL_NOTIF</szProjectName>
    <szLanguageCd>ENG</szLanguageCd>
    <szProjectDescr>Email Notifications</szProjectDescr>
    <szTgtServerName></szTgtServerName>
    <szTgtDBName></szTgtDBName>
    <szTgtOprId></szTgtOprId>
    <fReportFilter>16232832</fReportFilter>
    <eTargetOrientation>0</eTargetOrientation>
    <eCompareType>1</eCompareType>
    <fKeepTgt>31</fKeepTgt>
    <nCommitLimit>50</nCommitLimit>
    <szCompRelease></szCompRelease>
    <szCompRelDttm></szCompRelDttm>
    <bMaintenanceProject>0</bMaintenanceProject>
    <bUseDbFieldNameAttrib>0</bUseDbFieldNameAttrib>
    <szReleaseLabel></szReleaseLabel>
    <szReleaseDttm></szReleaseDttm>
    <nDescrLongLen>414</nDescrLongLen>
    <hDescrLong> HANDLE
  </row>
</rowset name="char" size="414" count="1">
```

# BI Publisher

## Key Factors

Presentation matters

Business analysts involved

Multiple formats

Online: Print page

Based upon underlying queries

## Concerns

Keep template simple

Performance for large volume



# BI Publisher Setup

# Data Sources

## Query

- Users can build data source
- Delivered page runs query-based BIP reports
- End-to-end report development without a single line of code

## XML File

- Good for external sources of data
- Recommended for large volumes

## Rowset

- Deprecated (8.50)
- Provides developer with very dynamic data source
- Component buffer

## XMLDoc

- Deprecated (8.50)
- Can be generated from a rowset
- Enables transformation with XSL

# Creating a Report

**Data Source**

Data Source Type: PS Query  
Data Source ID: XRFWIN

**Data Source Properties**

Description: XRFWIN  
Object Owner ID: PeopleTools  
Registered Date/Time: 01/06/06 2:31:18PM Registered By:  
Last Update Date/Time: 02/28/06 4:26:18PM Updated By:

**Related Files**

File Type	File	Generate F
Sample Data File	<a href="#">XRFWIN.XML</a>	<a href="#">Regenerat</a>
Schema File	<a href="#">XRFWIN.XSD</a>	<a href="#">Regenerat</a>

Definition Template Output Properties Security Bursting

Report Name: XRFWIN

**Data Source**

Data Source Type: PS Query  
Data Source ID: XRFWIN  
Data Source Description: XRFWIN

**Report Properties**

Report Description: Cross Reference Window Listing  
\*Report Status: Active  
\*Report Category ID: ALLUSER All PeopleSoft User  
Object Owner ID: PeopleTools  
\*Template Type: RTF  
Retention Days:   
Registered Date/Time: 01/06/2006 2:33:09PM Registered By: PTDMO  
Updated Date/Time: 02/28/2006 4:26:18PM Updated By: PPLSOFT  
Download: [Data Schema](#) [Sample Data](#)

Create a Data Source

Design the report

Create a Report Definition

Determine Run Location

- Choose where the data will come from (Query, PeopleCode, or file), then create Data Source Definition.
- Use the sample data form the Data Source with the Microsoft Word plug-in to create the report template.
- On the report definition, select the Data Source, then upload the template. Run a sample report from here.
- Run control, push button, or report manager. If query-based, use the delivered Query-BIP run control.

# Connected Query

Connected Query provides the ability to create a single XML file based on a set of queries with parent-child relationships

- A Connected Query is a hierarchical object built with existing PeopleSoft Queries
- A parent query can nest “n” levels of child queries and any child query can have “m” sibling queries within a hierarchy
- The output for connected query is always an XML file
- Connected Query can be used as a data source for XML Publisher reports

## Connected Query Manager

Connected Query QE\_EMPLOYEE\_REPORTING\_DETAILS

Public

\*Status Active

Properties

### Description

Description Employee Reporting Rollup

Comments Employee Reporting Details based on QE\_PERS\_DATA tree

### Parent Query Selection

Parent Query QE\_DEPARTMENTS\_ROLLUP\_PERS

View Query

### Connected Query Structure

	Field1	Field2	Field3
QE_DEPARTMENTS_ROLLUP_PERS	A.SETID	A.TREE_NAME	B.TREE_NAME
QE_EMPLOYEE_FROM_PERSDATA_TREE	A.SETID	A.TREE_NAME	A.TREE_NAME
QE_EMPLOYEE			
QE_DEPARTMENT_DATA			

# Descriptive Names

**Issue:** Every time you run a report it would output the exact same filename, thus overriding your existing file

## Solution

The following variables are now supported:

- %ASD% will insert the As-Of Date
- %RID% will insert the Report ID
- %BTV% will insert the burst field value
- %field% where field is the name of a field from the XML data that lies below the first repeating field

**Example:** If you have an EMPLID field, use %EMPLID%, at runtime the value of that field will be used. All burst key candidates on the on the bursting page are eligible.

Definition | Template | **Output** | Properties | Security | Bursting

Report Name: XRFWIN

General

Runtime Output Format Options

Format Type	Enabled	Default
HTML	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PDF	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RTF	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XLS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Output Location

\*Location: Any

File Name: Menu Listing as of %ASD%



# Bursting

Let the report data do the work:

- Generate reports per customer, employee, department...
- Select template and language
- Post to report manager with data-specific security
- Report-specific search keys

Definition Template Output Properties Security **Bursting**

Report Name: QE\_BURST\_PUB

**Bursting**

Burst by: CUST\_ID  Enforce Unique Burst Value

**Template**

Template controlled by: SETID

**Template Application Criteria**

*Data Value	*Template ID	Language		
CRM01	QE_BURST_PUB_1		+	-
CRM02	QE_BURST_PUB_2	Japanese	+	-
CRM03	QE_BURST_PUB_3	French	+	-

**Burst Security**

Security Join Table: SEC\_SETID\_CLS

Security Field: OPRCLASS Security ID Type: Permission List

**Field Mapping**

Security Join Table Field	Data Source Field		
SETID	SETID	+	-

**Search Keys**

Search Field		
COUNTRY	+	-
NAME1	+	-
SETID	+	-



# Examples, Tips, and Tricks

# Job Codes by Job Family

- Requirement: Show four jobs per page, tiled horizontally
- Job Family might have just 2 or 3, or might have 15 jobs
- Option 1: Group jobs in the RTF template
- Option 2: After generating XML, use XSLT in PeopleCode to create groups of four
- Chose Option 2 in order to keep the template simple. Many things are possible in templates, but focus on what it does well: **Bullets and Bold**.
  - use PeopleCode + pure XSLT to do the heavy lifting
  - store XSLT in html definitions
  - use built-in function TransformEx
  - don't try to do it all at once

Table titled "Lorem Ipsum" showing job codes grouped by job family. The table has columns for Job Family, Title, Job Code, and Break. The content is filled with placeholder text and job codes.

Job Family	Title	Job Code	Break
Job Family 1	Job Title 1	Job Code 1	Break 1
Job Family 1	Job Title 2	Job Code 2	Break 1
Job Family 1	Job Title 3	Job Code 3	Break 1
Job Family 1	Job Title 4	Job Code 4	Break 1
Job Family 2	Job Title 5	Job Code 5	Break 2
Job Family 2	Job Title 6	Job Code 6	Break 2
Job Family 2	Job Title 7	Job Code 7	Break 2
Job Family 2	Job Title 8	Job Code 8	Break 2
Job Family 2	Job Title 9	Job Code 9	Break 2
Job Family 2	Job Title 10	Job Code 10	Break 2
Job Family 2	Job Title 11	Job Code 11	Break 2
Job Family 2	Job Title 12	Job Code 12	Break 2
Job Family 2	Job Title 13	Job Code 13	Break 2
Job Family 2	Job Title 14	Job Code 14	Break 2
Job Family 2	Job Title 15	Job Code 15	Break 2

# Job Codes by Job Family

## Key Factors

- Presentation mattered: Result was a polished PDF served up from the company's intranet
- Multiple layouts: Organization changes were in process, so not all Job Families used new format
- Push button: Added a push button to the Job Family page so report could be previewed before it was posted to intranet

## Concerns

- Keep template simple

# Invoicing in PS 9.2 Billing

- **Delivered: Create an app engine for each different report (aka invoice)**
- **Client had six different invoices and the potential for adding more**
- **Business analyst desired a standardized but flexible solution**

**INVOICE**  
INVOICE # [100]  
DATE: SEPTEMBER 30, 2012

**[Your Company Name]**  
[Your Company Slogan]  
[Street Address], [City, ST ZIP Code]  
Phone [000.000.0000] Fax [000.000.0000]  
[e-mail]

TO: [Name]  
[Company Name]  
[Street Address]  
[City, ST ZIP Code]  
[Phone]  
Customer ID [ABC12345]

SALESPERSON	JOB	PAYMENT TERMS	DUE DATE
		Due on receipt	

QTY	DESCRIPTION	UNIT PRICE	LINE TOTAL

**We decided on a convention: Invoice Layout Id would match Template Id.  
Created a single new app engine to generate any invoice.**

# Invoicing in PS 9.2 Billing

## Key Factors

- Business analyst involvement:  
The analyst created all the report templates
- Multiple layouts: By business unit or by customer the invoice requirements changed

## Concerns

- Need for technical resource



# Questions and Answers



[www.SpearMC.com](http://www.SpearMC.com)



# Contact Information



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