

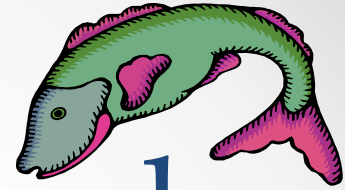
QSS Advanced Reporting Platform



Welcome

- In this session we'll explore the Advanced Reporting Platform.
- Presenter:
 - Will Hoehn, QSS
- Materials:
 - Printed copy of these slides

Topics to be covered



- QARP? What's a Qarp
- QSS online data store
 - What about QORDS?
 - Accessing the online data store with generic tools
- Jaspersoft
 - Business Intelligence tool
 - Simple Ad hoc reporting
 - Complex report generation, charting, crosstabs, and dashboards
 - Output capability to variety of formats including PDF, HTML, Excel, RTF, ODT, CSV, and more
 - Role based permissions

QARP

Accessible data combined with Jaspersoft's Business Intelligence Package

- Consists of three components...
 - Your data (QSS databases)
 - Finance data
 - HR information
 - Employee demographic data
 - Credentials
 - Leave records
 - Payroll
 - Payroll Deductions
 - Payroll Deduction History
 - Payroll History
 - Retirement Reporting History
 - Fixed Assets
 - Online data store
 - Denormalized data from QSS databases
 - Jaspersoft
 - Business Intelligence Reporting tool



QSS Online Data Store

- Database designed for ease of data access
 - De-normalized data reduces needs for Joins
 - Isolated from production data to avoid contention of server resources
 - Available for Version H, and Version L

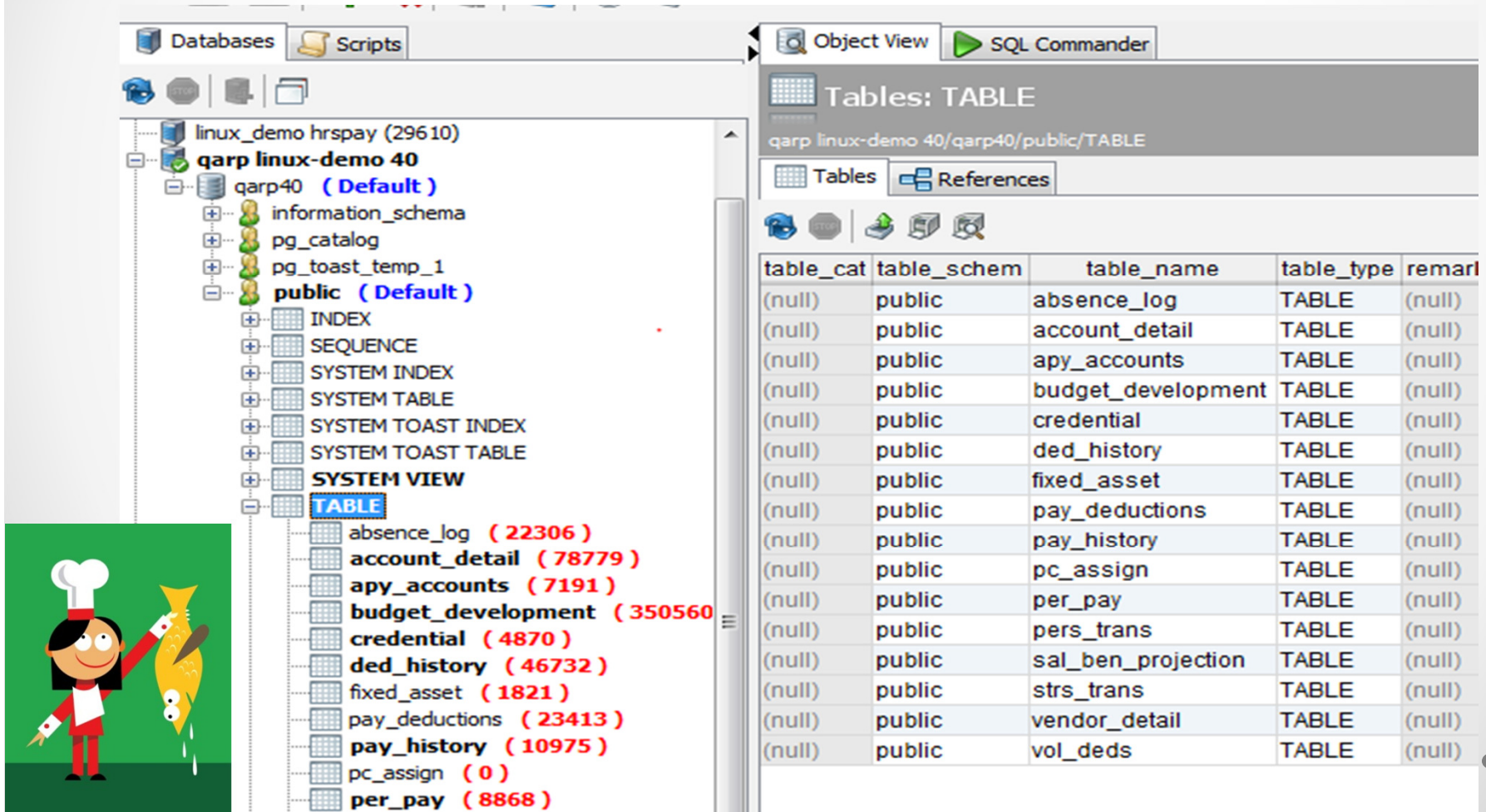
How is QARP different from QORDS?

- QORDS is a separate QSS product that also creates de-normalized databases for Version H or Version L data.
- QORDS is not a pre-requisite for using QARP
- The QARP data store is a superset of QORDS
 - QORDS consists of separately licensed modules by product area
 - QORDS maintained separate databases for each licensed module
 - QORDS does not include any reporting tools
 - **QARP is not licensed by individual product area**
 - **QARP maintains a single data store**
 - **QARP comes with Jaspersoft reporting tools**




Let's take a peak at the QARP database with dbvisualizer...

- We'll do some live stuff on screen now!



The screenshot shows the dbvisualizer interface. On the left, a tree view displays the database structure for 'qarp linux-demo 40', including schemas like 'information_schema', 'pg_catalog', 'pg_toast_temp_1', and 'public'. Under 'public', various database objects are listed, with 'TABLE' selected. On the right, the 'Object View' shows a list of tables in the 'public' schema. Below the table list, a table displays the details of the selected table.

table_cat	table_schem	table_name	table_type	remarks
(null)	public	absence_log	TABLE	(null)
(null)	public	account_detail	TABLE	(null)
(null)	public	apy_accounts	TABLE	(null)
(null)	public	budget_development	TABLE	(null)
(null)	public	credential	TABLE	(null)
(null)	public	ded_history	TABLE	(null)
(null)	public	fixed_asset	TABLE	(null)
(null)	public	pay_deductions	TABLE	(null)
(null)	public	pay_history	TABLE	(null)
(null)	public	pc_assign	TABLE	(null)
(null)	public	per_pay	TABLE	(null)
(null)	public	pers_trans	TABLE	(null)
(null)	public	sal_ben_projection	TABLE	(null)
(null)	public	strs_trans	TABLE	(null)
(null)	public	vendor_detail	TABLE	(null)
(null)	public	vol_deds	TABLE	(null)

Cartoon chef holding a fish: 

Jaspersoft

- “The World’s Most Widely Used Business Intelligence Software.”*
- Part of the open source community
- Play in the same market space as
 - Cognos BI (now owned by IBM)
 - Hyperion (bought out by Oracle)
 - Business Objects (bought out by SAP)
- Java based reporting tool
- Can be imbedded in Java-EE and Web based applications
- Report definitions make use of xml (jrxml) files

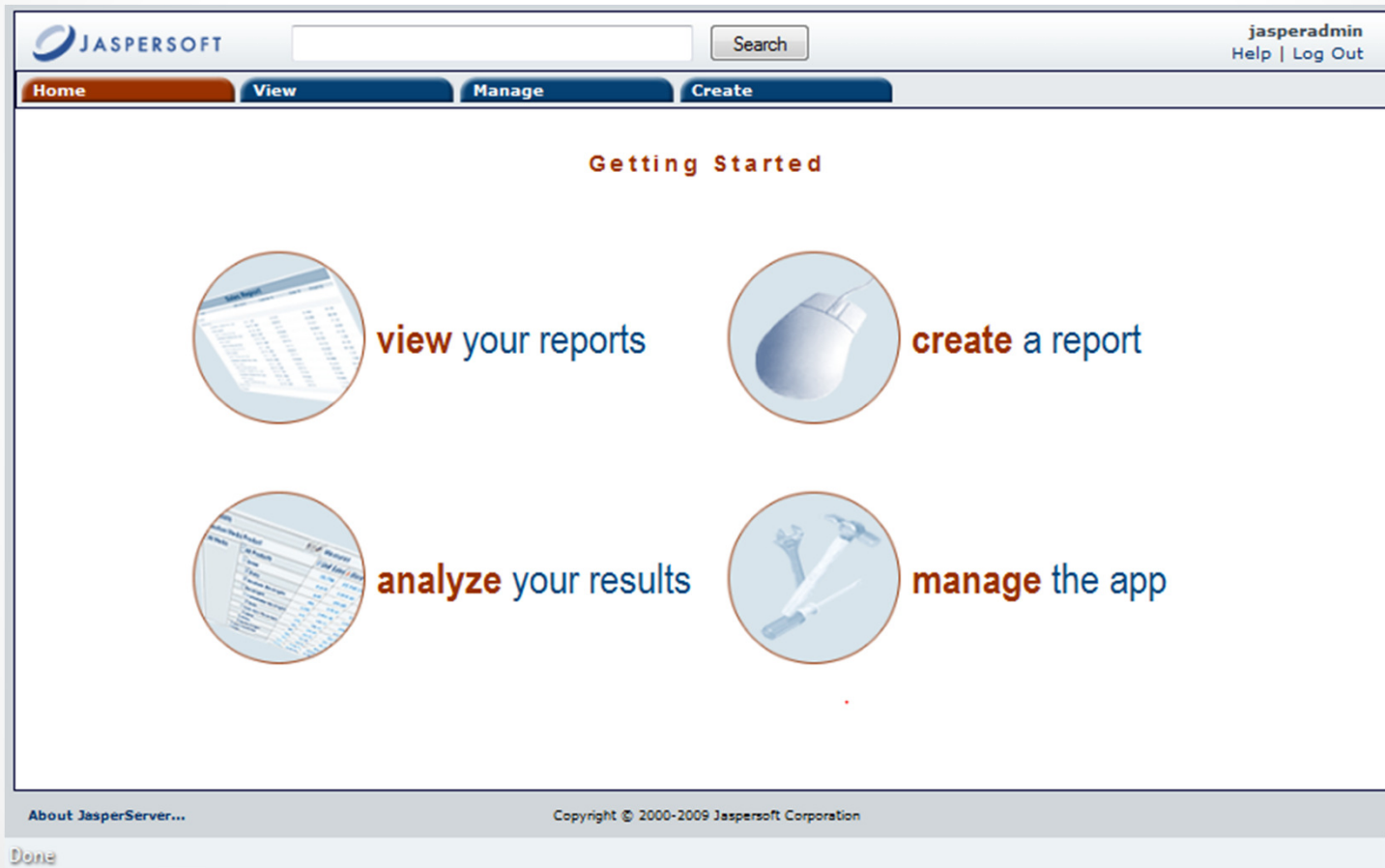
* According to Jaspersoft’s website, so it must be true!

Anticipated uses

- Ad hoc reporting
- Disseminate reporting capabilities to a wider set of users
- Friendlier, less intimidating, access to data for casual users
- Ability for analysts to create sophisticated reports, charts, crosstabs, and dashboards to meet local user needs via iReport

Using the Web Interface

We'll conduct a live demo...



- August 22, 2012 QSS Webinar
- QSS Advanced Reporting Platform

Creating an ad hoc report

The QSS domain used in this example allows complete access to the QARP database. Domains may be used to restrict table and column access.

Choose whether this will be a report, chart, or a crosstab.

Select a Topic or Domain and pick a report type. Domains allow you to choose your own data.

Topics Domains

- Domains
 - QSS linux demo school district
 - Simple Domain
 - Supermart Domain
- Public

Table

Chart

Crosstab

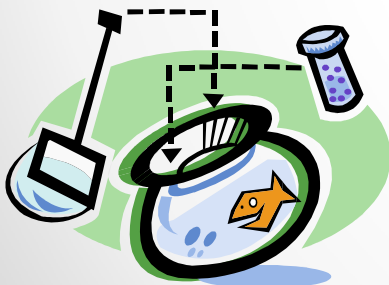
Choose Data

Cancel

Demonstration for conference

Select items to include

- Can select entire table, or individual fields.



Choose Ad Hoc Data DATA > FILTERS > DISPLAY >

Select a domain: /Domains/QSS linux demo school

Choose items to include in your report:

	Selected it
<input type="checkbox"/> public_budget_development	
<input type="checkbox"/> public_credential	
<input type="checkbox"/> public_ded_history	
<input type="checkbox"/> public_fixed_asset	
<input type="checkbox"/> public_pay_deductions	
<input type="checkbox"/> public_pay_history	
<input type="checkbox"/> public_pc_assign	
<input checked="" type="checkbox"/> public_per_pay	
<input type="checkbox"/> ann_base_date	
<input type="checkbox"/> appel	
<input type="checkbox"/> appl_ssn	
<input type="checkbox"/> area_code	
<input type="checkbox"/> audit_date	
<input type="checkbox"/> audit_id	
<input type="checkbox"/> audit_time	
<input type="checkbox"/> bilingual	
<input type="checkbox"/> birth_date	

Navigation buttons: > < <<

Design the report layout

Drag fields from the left area onto the report area. Right click fields to indicate options such as sorting /grouping /filtering

The screenshot displays the QSS Advanced Reporting Platform interface. On the left, a domain tree for 'QSS linux demo school district' is shown under '(select...)'. Fields include public_per_pay, bu_no, bu_no_name, emp_type, emp_type_name, ethnic, ethnic_name, extref_no, first_name, hire_date, last_name (highlighted with a blue box), work_loc1, work_loc1_name, zip_code, and Spacer. On the right, a report titled 'Sample ad hoc report' is displayed in 'Table' view. The report has columns for Last Name, First Name, Ref No., Bargaining Unit, Employee Type, and Ethnic. The data rows list employees such as ADAMS CAROL, ADAMS CYNTHIA, ADAMS DENISE, ADAMS DONNA, ADAMS GWEN, ADAMS MARY, ADAMS MARY JO, ADAMS MICHELLE, BUSH ANNELLA, BUSH CAROLE, BUSH DEBORA, BUSH DIANNE, and BUSH EMILIE.

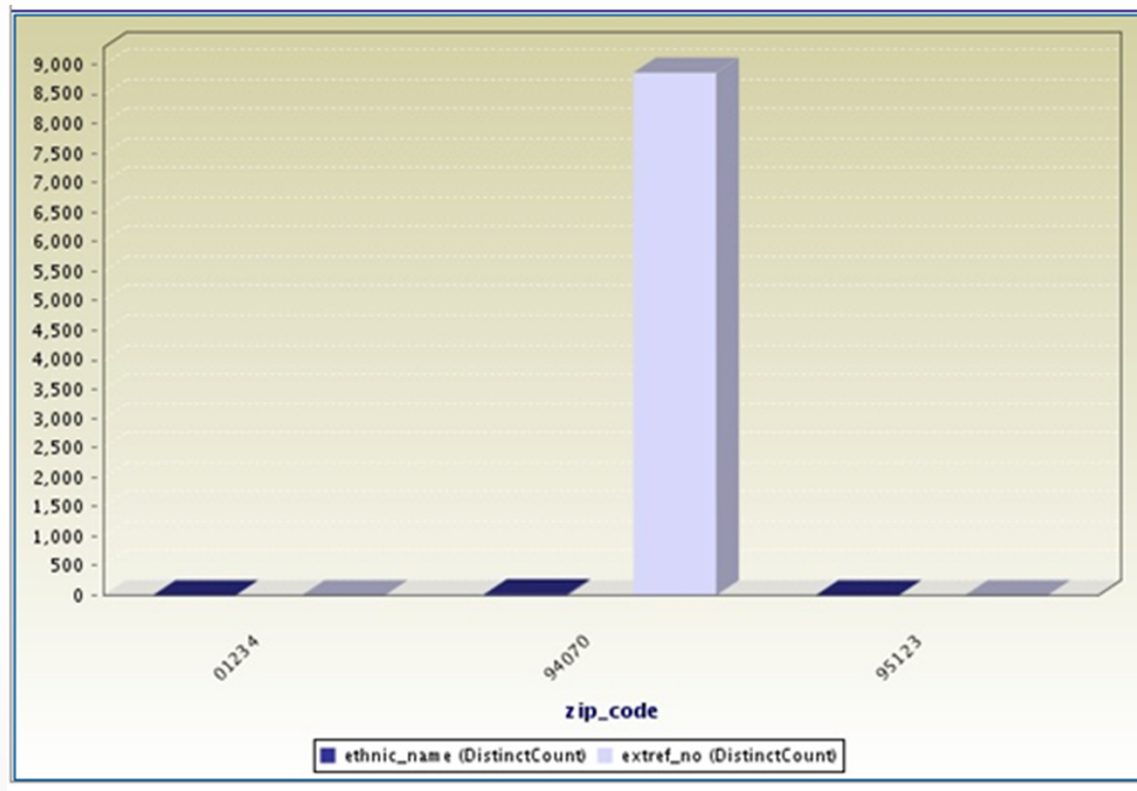
Last Name	First Name	Ref No.	Bargaining Unit	Employee Type	Ethnic
ADAMS	CAROL	100207	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
ADAMS	CYNTHIA	101814	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
ADAMS	DENISE	103123	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
ADAMS	DONNA	107544	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
ADAMS	GWEN	105597	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	ASIAN - ((
ADAMS	MARY	102091	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, TEMPORARY	WHITE ((
ADAMS	MARY JO	108373	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
ADAMS	MICHELLE	108511	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PROB 2	FILIPINO
BUSH	ANNELLA	100661	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
BUSH	CAROLE	102751	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
BUSH	DEBORA	106075	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
BUSH	DIANNE	100682	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((
BUSH	EMILIE	105231	QSS PUPIL PERSONNEL ASSOC	CERTIFICATED, PERMANENT	WHITE ((

Sample Crosstab

- Sample cross tab. Arrows expand / collapse row and column summaries

		bu_no_name	▶ UNASSIGNED	▼ QSS EDUCATION ASSOCIATION				
zip_code	ethnic_name	emp_type_name	emp_type_name Totals	CERTIFICATED, PERMANENT	CERTIFICATED, PROB 2	CERTIFICATED, PROB 1	CERTIFICATED, TEMPORARY	CERTIFICATED, PROB 1B
▼ 94070		# Ref No.	4,750	0	0	0	0	0
	WHITE (CAUCASIAN)		492	1,064	83	76	26	17
	HISPANIC OR LATINO		206	130	25	13	3	2
	ASIAN - OTHER		54	18	0	2	2	0
	AFRICAN AMERICAN		31	11	3	3	0	0
	FILIPINO		12	11	0	2	11	1
	ASIAN - JAPANESE		2	24	1	1	0	1
	AMERICAN INDIAN		2	13	0	1	2	0

Sample bar chart



Getting started

- Define QARP as a data source
- Create Domain that uses the data source

JASPERSOFT Search

Home View Manage Create

Edit Domain ● DATA and DESIGN > ● RESOURCES

Data Source
Select from Repository:
/datasources/qarp-postgresql Browse...

Design
Edit Upload
File has been created. Launch Designer again to edit.
Launch Domain Designer...

Properties
Display Name:
QSS linux demo school district
Location:
/Domains Browse...
Description (optional):
Demonstration for conference

Cancel < Back Next > Save

Role based permissions

- Access to tables can be defined by Domain
- Access to Domains limited by Permissions

Assign Permissions by Role
by Role | **by User**

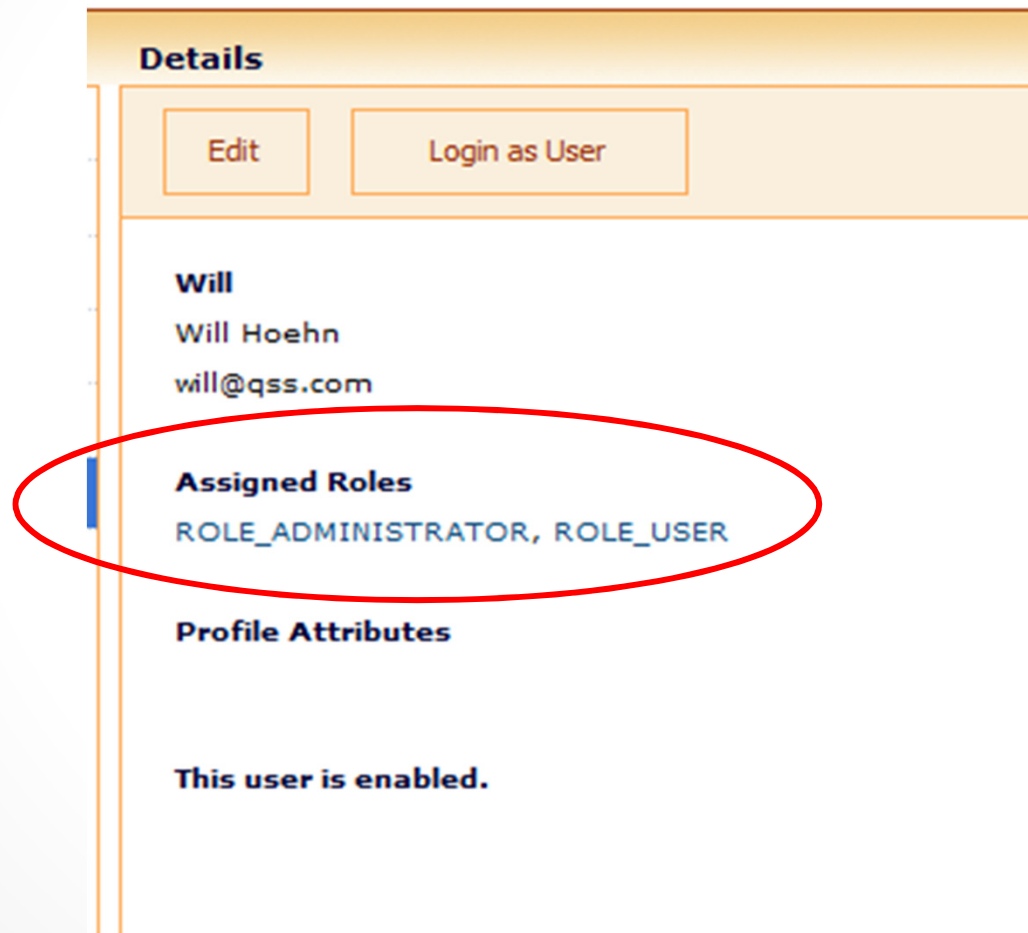
Permissions for: **/Domains/QSS**

Role Name	Permission Level
ROLE_USER	Read Only *
ROLE_ADMINISTRATOR	Administer *
ROLE_ANONYMOUS	Read Only
ROLE_SUPERMART_MANAGER	Read Only
ROLE_DEMO	Read Only
ROLE_LIMITED (organization_1)	Read Only
qssHRLimited (organization_1)	Read Only

** indicates inherited permission level*

Role named "Role_User" has Read Only access to Domain named "QSS"

Assign Users to Roles



The screenshot shows a user details page with a header 'Details' and two buttons: 'Edit' and 'Login as User'. Below the buttons, the user's name 'Will', full name 'Will Hoehn', and email 'will@qss.com' are listed. The 'Assigned Roles' section is circled in red and shows 'ROLE_ADMINISTRATOR, ROLE_USER'. Below this, the 'Profile Attributes' section is empty, and a status message at the bottom states 'This user is enabled.'

Details

Edit Login as User

Will
Will Hoehn
will@qss.com

Assigned Roles
ROLE_ADMINISTRATOR, ROLE_USER

Profile Attributes

This user is enabled.

Folders and Reports also by Permission

- This example is for a specific report. The asterisks indicate that permissions were inherited from a higher level.

Assign Permissions by Role

by Role | **by User**

Permissions for: **/reports/qssVendHist**

OK Cancel Apply

Role Name	Permission Level
ROLE_USER	Read + Write + Delete *
ROLE_ADMINISTRATOR	Administer *
ROLE_ANONYMOUS	No Access *
ROLE_SUPERMART_MANAGER	No Access *
ROLE_DEMO	No Access *
ROLE_LIMITED (organization_1)	Read Only *
qssHRLimited (organization_1)	Read Only *

OK Cancel Apply

** indicates inherited permission level*

iReport – Desktop tool for developing reports

Designer for JasperReports 3.7.1.1

iReport PROFESSIONAL 3.7.1.1
JASPERSOFT

NetBeans IDE and NetBeans Platform are based on software from netbeans.org, which has been dual licensed under the Common Development and Distribution License (CDDL) and the GNU General Public License version 2 with Classpath exception. For more information please visit www.netbeans.org.

Product Version: iReport Professional 3.7.1.1
Java: 1.6.0_24; Java HotSpot(TM) Client VM 19.1.1-1
System: Windows 7 version 6.1 running on x86; UTF-8; en_US (ireportpro)
Userdir:

Close

JASPERSOFT Welcome to iReport

Recent reports

file_1298412868592

Quick start

Follow these three steps to create your first report

Step 1: Create a database connection or setup a data source. Click on the icon to run the connection setup wizard.

Step 2: Create a new report. Click on the icon to run the report wizard.

Step 3: Press the Preview button (in the designer window tab) to run and preview your report.

Spotlight

NEW JasperReports Professional 4.0

Resource Center

- JasperForge.org
- [Report Home Page](#)
- [Report forum](#)
- [Report bug tracker](#)

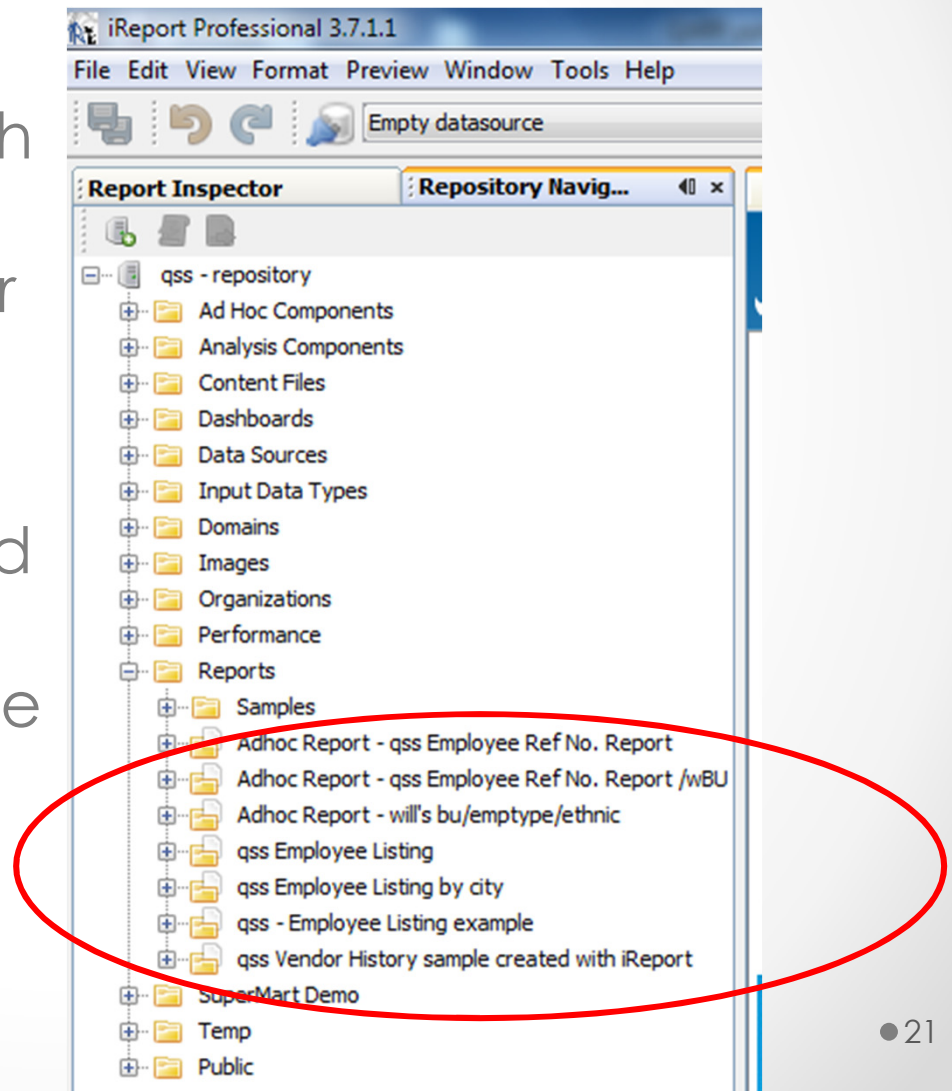
Report Problems Window

iReport output

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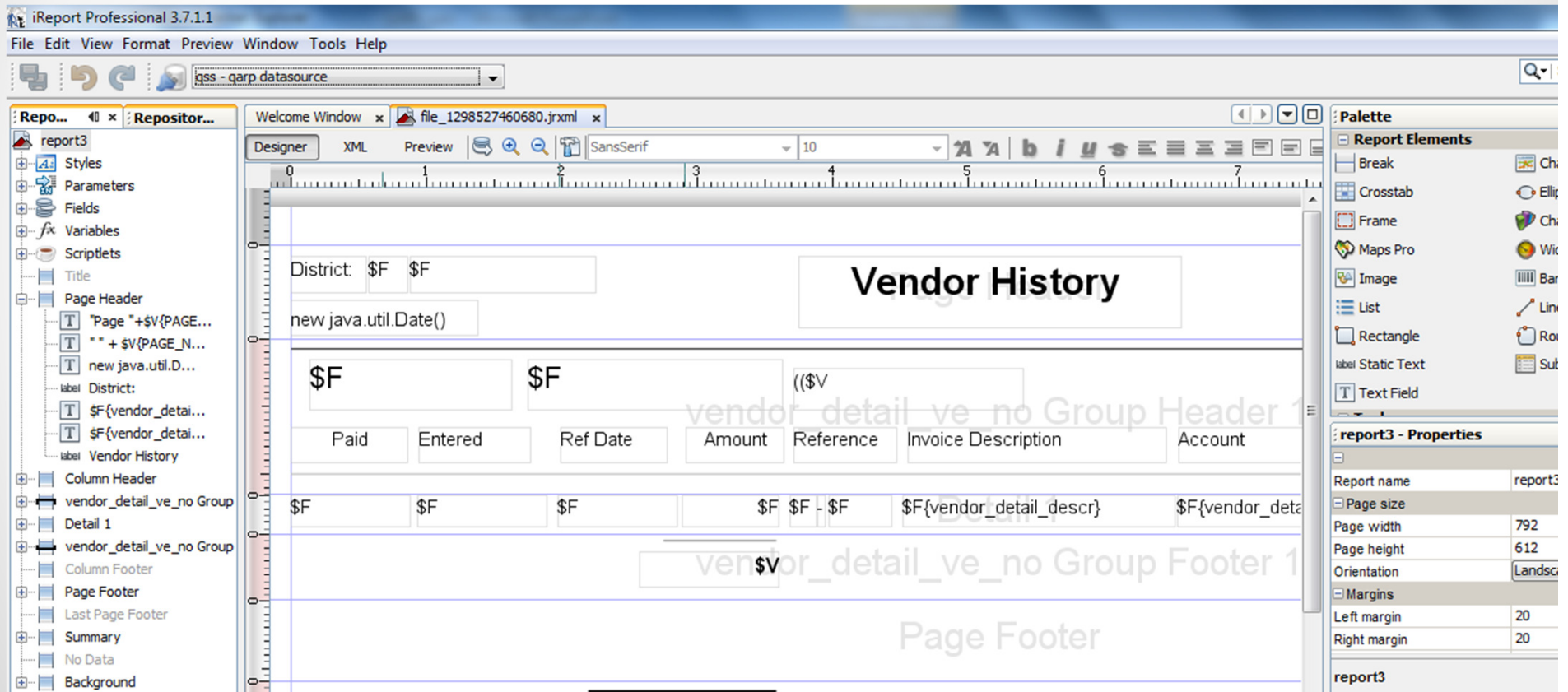
iReport can access the Jaspersoft repository

- Reports developed with iReport can be published to the Jasper repository
- Reports developed and saved via the web interface are accessible to iReport



iReport – full IDE for report development

- May be perplexing to the newcomer...



- August 22, 2012 QSS Webinar
QSS Advanced Reporting Platform

Vendor History

02/23/2011

016061 3M Library Systems

Paid	Entered	Ref Date	Amount	Reference	Invoice Description	Account	Check#
	02/09/2010	09/01/2009	32.77	PV - 000497	ASC1050792 PO#000977	01.3010.0.1110.1001.4200.940.6015.00	0
			32.77				

012212 A & A Portables

Paid	Entered	Ref Date	Amount	Reference	Invoice Description	Account	Check#
07/21/2009	07/20/2009	07/21/2009	68.88	CL - 900932	433182	01.0000.0.0000.8200.5632.920.5835.00	16249883

07/21/2009
07/21/2009
07/21/2009
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07/21/2009
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07/21/2009
07/21/2009
07/21/2009
07/21/2009
07/21/2009
07/21/2009

Vendor History

02/23/2011

012212 A & A Portables (Continued)

Paid	Entered	Ref Date	Amount	Reference	Invoice Description	Account	Check#
07/21/2009	07/20/2009	07/21/2009	90.88	CL - 900944	433169	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	325.26	CL - 900945	433170	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.88	CL - 900946	433178	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.90	CL - 900947	433179	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.88	CL - 900948	433183	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.90	CL - 900949	433184	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.90	CL - 900950	433185	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.90	CL - 900951	433186	01.0000.0.0000.8200.5632.920.5835.00	16249883
07/21/2009	07/20/2009	07/21/2009	90.88	CL - 900952	433180	01.0000.0.0000.8200.5632.920.5835.00	16249883
			2020.97				

000062 A-1 Saw & Mower

Paid	Entered	Ref Date	Amount	Reference	Invoice Description	Account	Check#
------	---------	----------	--------	-----------	---------------------	---------	--------

Sample Vendor History report created with iReport.

Qarpe diem?

