

# Maximo Reporting Upgrade

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## *Report and Data Options*

### *BIRT Reporting*

Configuration

Design

Development

Administration

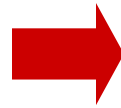
Execution

Property Settings, Cron Tasks and Objects

### *Cognos Reporting*

## *Reference Materials, Index and Questions*

## *Report and Data Options*



1. History
2. Reporting Options/Versions
3. Comparison - BIRT vs Cognos
4. Report Strategy
5. Data Analysis Options

## *BIRT Reporting*

Configuration

Design

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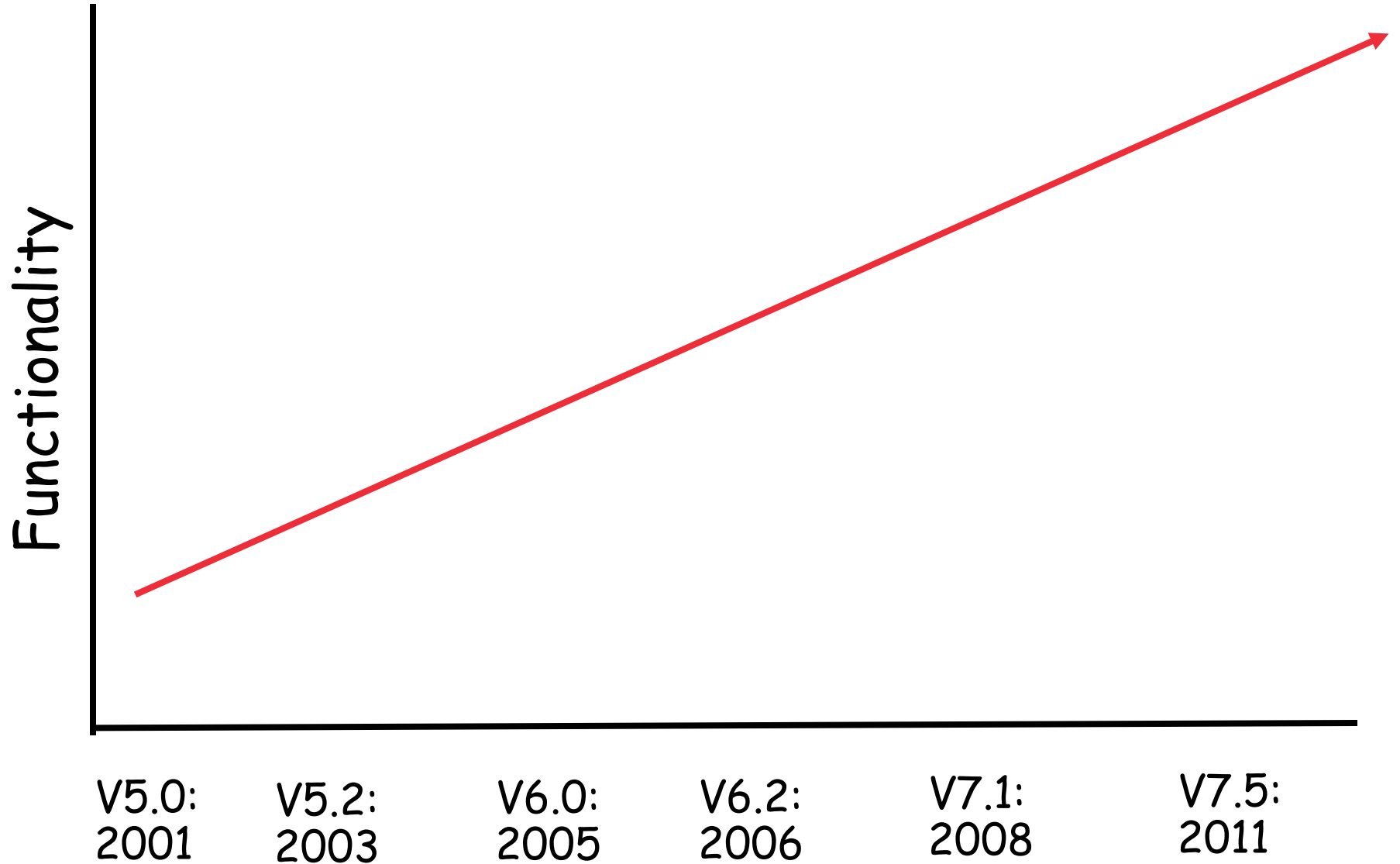
Property Settings, Cron Tasks and Objects

## *Cognos Reporting*

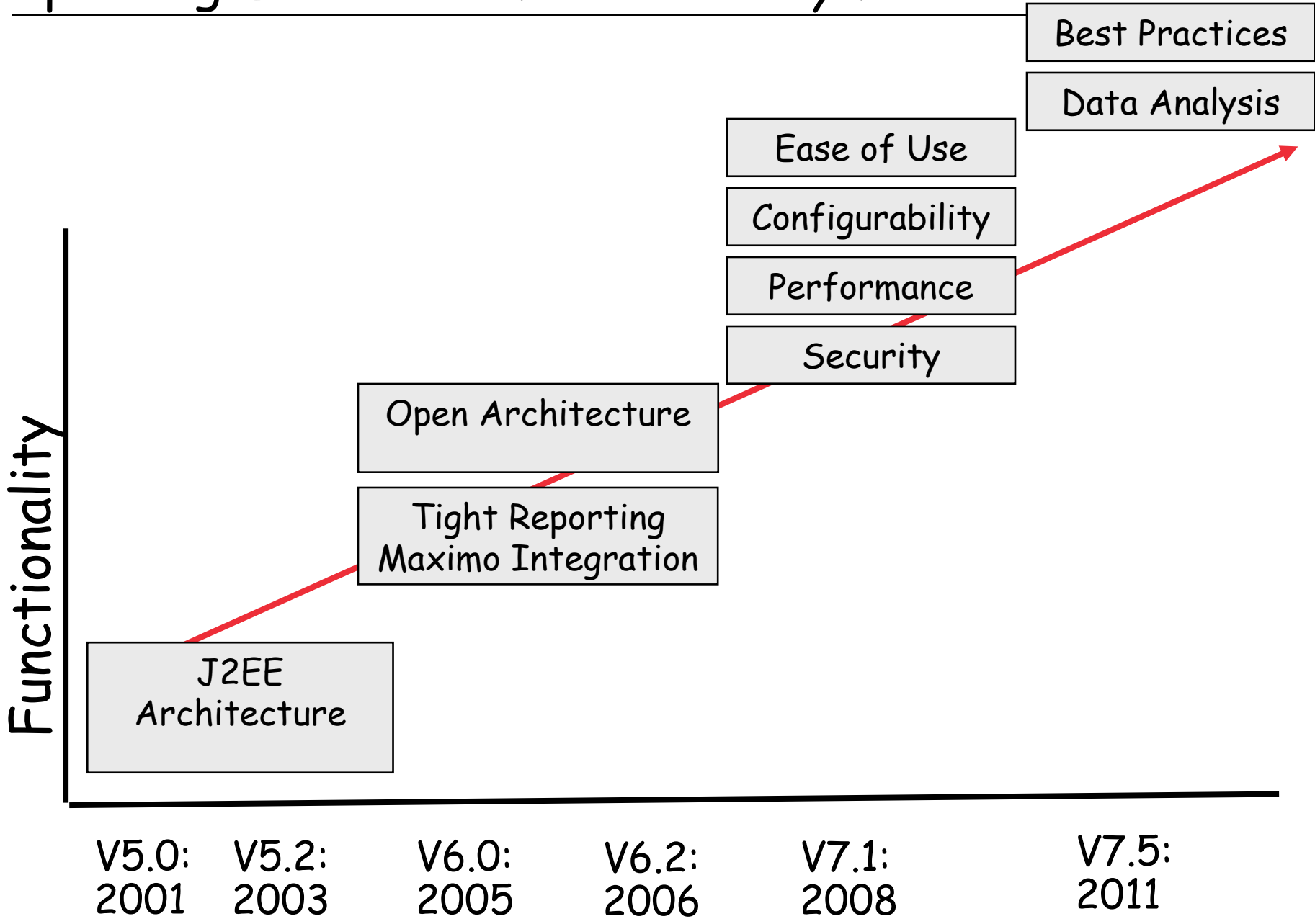
## *Reference Materials and Questions*

# Reporting Evolution: 10 Years

History



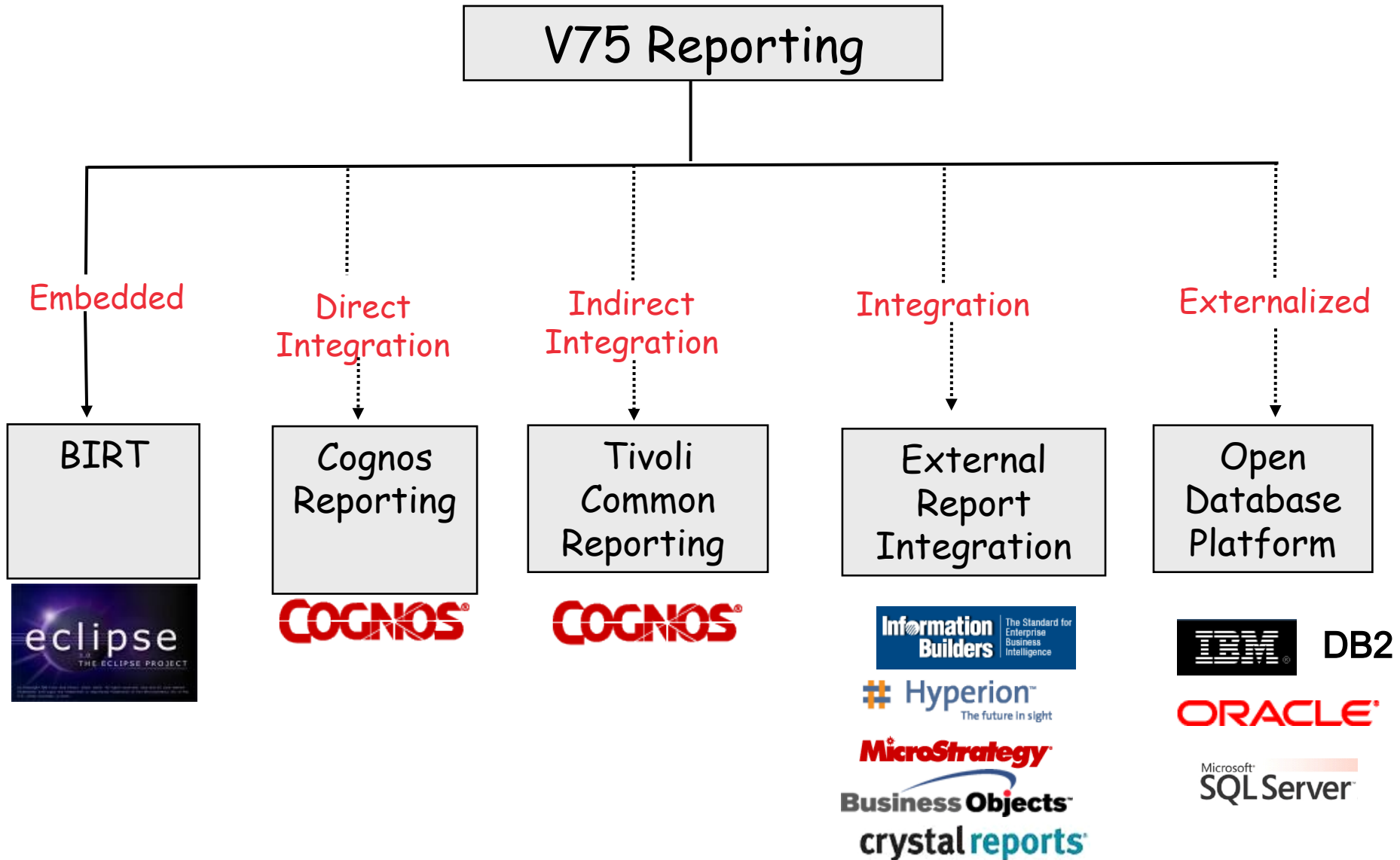
# Reporting Evolution: *Functionality Focus*



# Functionality Focus drove embedded reporting tool in V7

Specific Reasons for change included....

1. Eliminate complex installations
2. Eliminate synchronization issues
3. Minimize 3<sup>rd</sup> Party Platform support issues
4. Capitalize on Existing Features within Maximo



# Maximo Reporting Tools

Options

	6.X	7.1x	7.5x
Embedded	Actuate	BIRT	BIRT

## Integration Options

	6.X	7.1x	7.5x
Business Objects/Crystal	✓	✓	
External Report Integration	✓	✓	✓
Open Database Platform	✓	✓	✓
Cognos Reporting - Direct		✓	✓
Cognos Reporting - TCR		✓	✓
V7RI - BIRT Reporting	✓		



# Maximo Reporting Tools



## *Component Comparison*

	6.X	V7 BIRT	V7 Cognos
Report Engine	iServer	BIRT	Cognos
Administration	(1) Management Console (2) V6 Report Admin	(1) V7 Report Admin	(1) Cognos Admin (2) V7 Report Admin
Report Display	Active Portal	Report Viewer	Cognos Portal
Report Development	erdPro	BIRT Designer	Report Studio
	eSpreadsheet		
Ad Hoc Reports	eQuery	QBR	Query Studio

# Maximo Reporting Tools - BIRT Version Support

Versions

Maximo Release	6.X	7.1x	7.5x
	V7RI*	BIRT	BIRT

Release	Date	Eclipse	BIRT
7.1 to 7.1.1.4	May 2008	3.2.2	2.1.2
7.1.1.5 to 7.5.0.2	June 2009	3.4.2	2.3.2
7.5.0.3+	July 2012	3.7.1	3.7.1

\*V7RI integration to V7.1, 7.5x available beginning with Maximo 626

# Maximo Reporting Tools - Integration Options Version Support

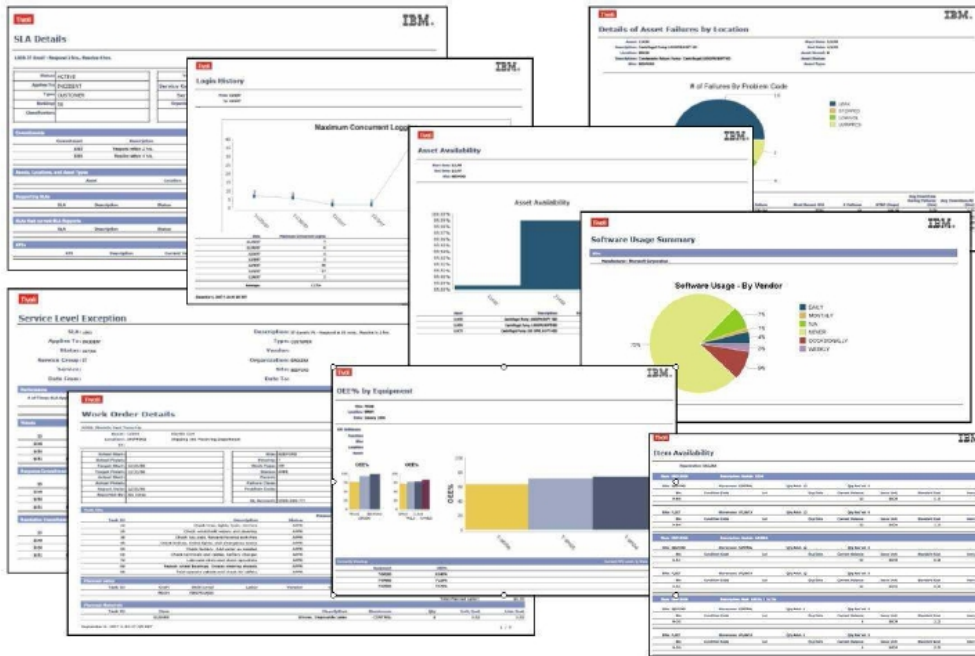
	6.X	7.1.16+	7.5.0.0-7.5.0.2	7.5.0.3+
Cognos Reporting - Direct	N/A	8.4	8.4.1	8.4.1, 10.1.1
Cognos Reporting - TCR/Cognos	N/A	1.3/8.4	2.1/8.4.1	2.1.1/8.4.1

	6.X	7.1x	7.5x
Business Objects/Crystal	BOXI Release 1	BOXI Release 2	N/A
External Report Integration	Version Independent		
Open Database Platform	Version Independent		

# BIRT V7 Embedded Reporting Tool

## Options

Deepest level of report integration, including silent installation and seamless integration, enabled by capitalizing on Maximo functionality



The screenshot shows the 'Work Order Tracking' application interface. A 'Change Status' dialog box is open, displaying the following information:

- New Status:** Approved
- Status Date:** 9/24/09 7:01 PM
- Print Work Orders?:**  (indicated by a red arrow)
- Change work order status in back ground?:**
- Notification E-mail for Work Order Generation:** m.wilson@helwig.com

The background shows a table of work orders with columns for ID, Description, and Scheduled Start.

The screenshot shows the 'Request Page' interface. The 'Schedule Availability' section contains the following table:

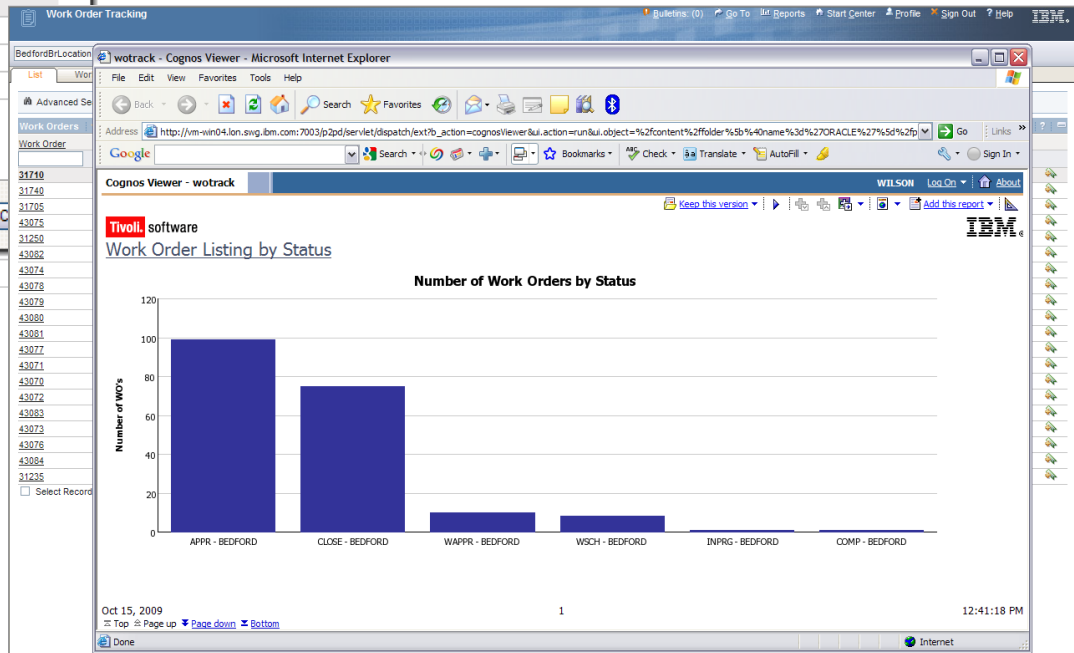
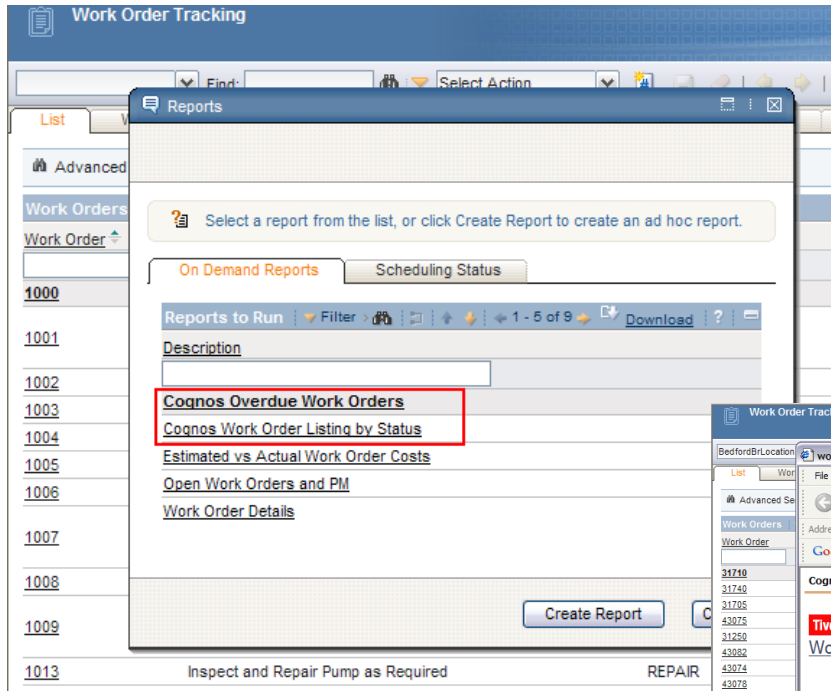
Day	Start Time	End Time
SUNDAY	12:00 AM	11:59 PM
MONDAY	12:00 AM	6:59 AM
MONDAY	6:01 PM	11:59 PM
TUESDAY	12:00 AM	6:59 AM
TUESDAY	6:01 PM	11:59 PM
WEDNESDAY	12:00 AM	6:59 AM
WEDNESDAY	6:01 PM	11:59 PM
THURSDAY	12:00 AM	6:59 AM
THURSDAY	6:01 PM	11:59 PM
FRIDAY	12:00 AM	4:59 AM

The 'Schedule' section below the table has the following options:

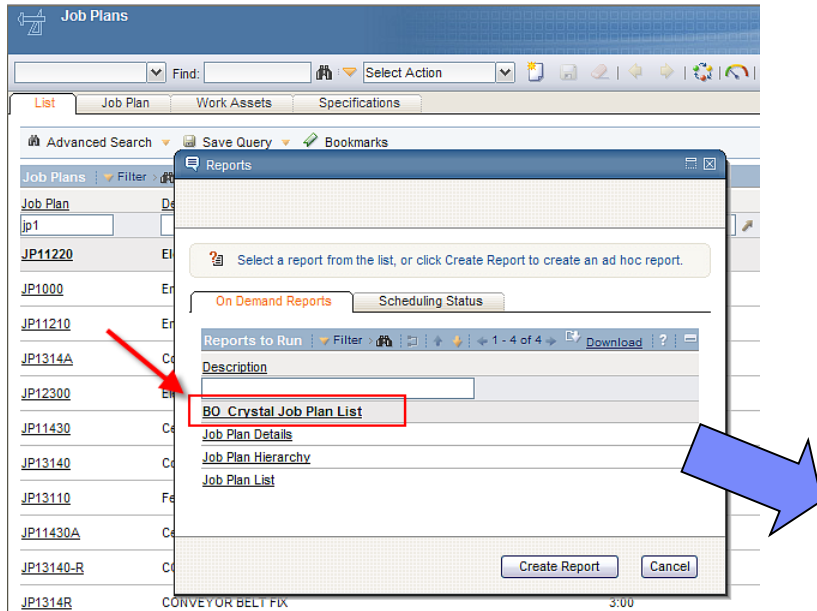
- At this Time:**  (indicated by a red arrow)
- Recurring:**

### Access to Cognos Reports within V7 Applications

Synchronization of Security Groups, Dynamic Report Display



### Integration to legacy reporting tool



The screenshot shows the 'Job Plan List' report output. The table contains the following data:

Job Plan	Description	Duration	Priority	Organization	Site
APPLREQ	Application Request	00:00	3		
AUTOTRANS	Automatic Transmission Service	03:00	2	EAGLENA	FLEET
ENGSESV	ENGINE SERVICE - SPF343 DECK	03:00	1	EAGLENA	FLEET
INS-PC	PC Inspection	01:00	3	EAGLENA	BEDFORD
INS-SUBSYS	General Inspection of Major Subsystems	03:00	9	EAGLENA	BEDFORD
INS1002	Fire Extinguisher Inspection	00:00	0	EAGLENA	BEDFORD
INS11200	HVAC System Inspection	02:30	9	EAGLENA	BEDFORD
INS11300	Reciprocating Compressor Inspection	03:00	9	EAGLENA	BEDFORD
INS11460	Burner Gas Fired Inspection	03:00	9	EAGLENA	BEDFORD
INS12100	Electric Cart/Forklift Inspection	01:00	7	EAGLENA	BEDFORD
INS12200	Overhead Crane Inspection	01:00	7	EAGLENA	BEDFORD
INS13141	PKG Machine, Elevator & Drainpan Inspection	03:00	9	EAGLENA	BEDFORD
INS15210	Inspect and Adjust Westinghouse Overcurrent Relay	01:00	8	EAGLENA	BEDFORD
IT-ACC-DIS	Disable IT Accounts	00:00	1		
IT-ACC-NEW	Create IT Accounts	00:00	2		
IT-ISSUE	New Employee Asset Issue	00:00	2	EAGLENA	
JP1000	Emergency Pipe Repair	05:00	9	EAGLENA	BEDFORD
JP11210	Emergency Generator Overhaul	04:00	8	EAGLENA	BEDFORD
JP11220	Electrical Panel Test	01:30	9	EAGLENA	BEDFORD
JP11430	Centrifugal Pump Service- 12 Month	03:00	8	EAGLENA	BEDFORD
JP11430A	Centrifugal Pump Service- 3 Month	01:00	8	EAGLENA	BEDFORD
JP12300	Electric Cart Tune-Up	01:00	7	EAGLENA	BEDFORD
JP13110	Feeder System Service	02:00	8	EAGLENA	BEDFORD
JP13140	Conveyor Belt 12 Month Service	04:00	8	EAGLENA	BEDFORD
JP13140-R	CONVEYOR BELT FIX	03:00	2	FAGI PNA	RPFORD

Maximo 6

BusinessObjects Crystal Reports  
XI SP1 (BOXI Release 1)

Maximo 7.1 Only

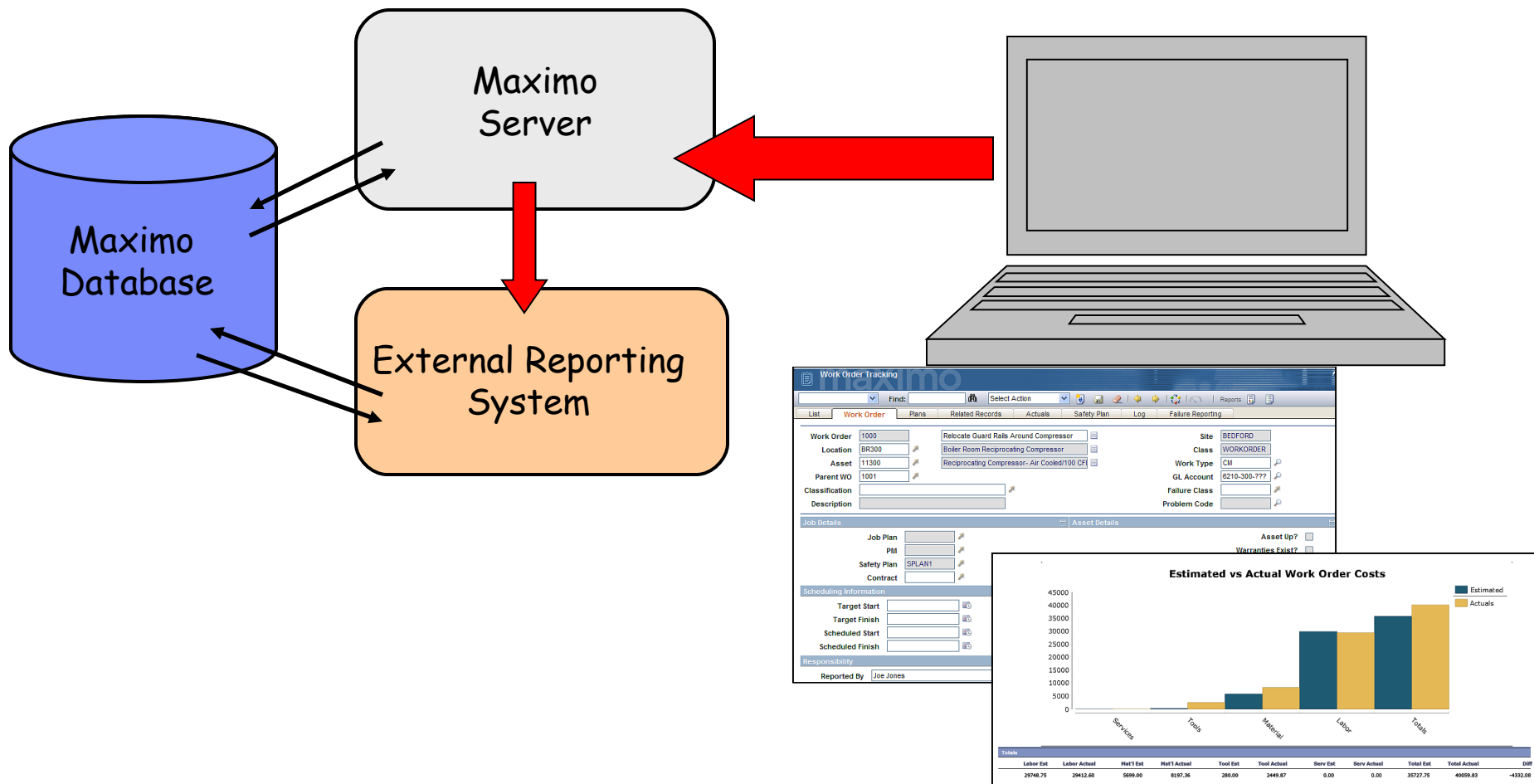
BusinessObjects Crystal Reports  
XI SP2 (BOXI Release 2)

\*Integration no longer available with Maximo 7.5

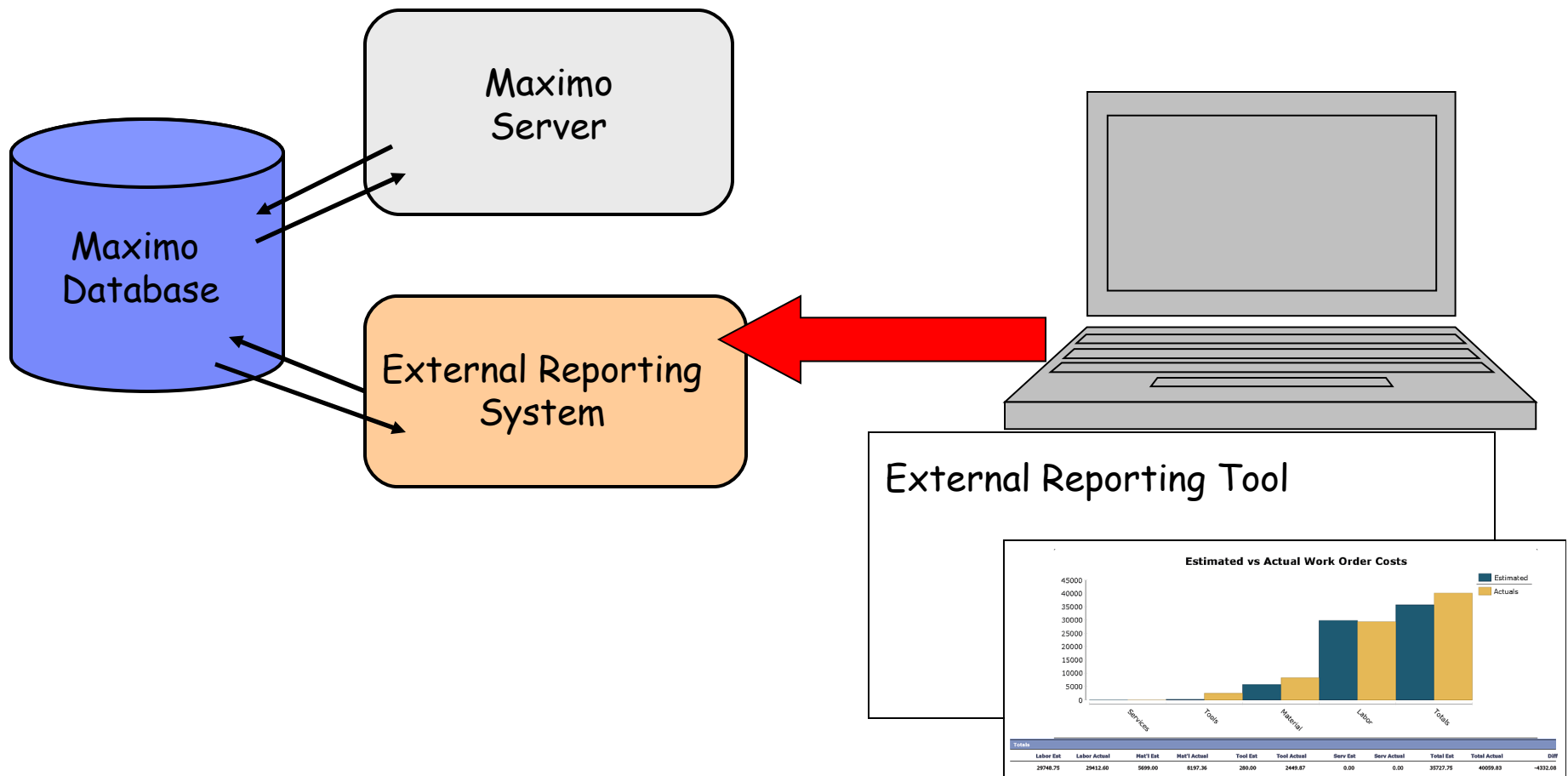
# External Report Integration

Options

Creating powerful, value add reports *internal* to Maximo Framework

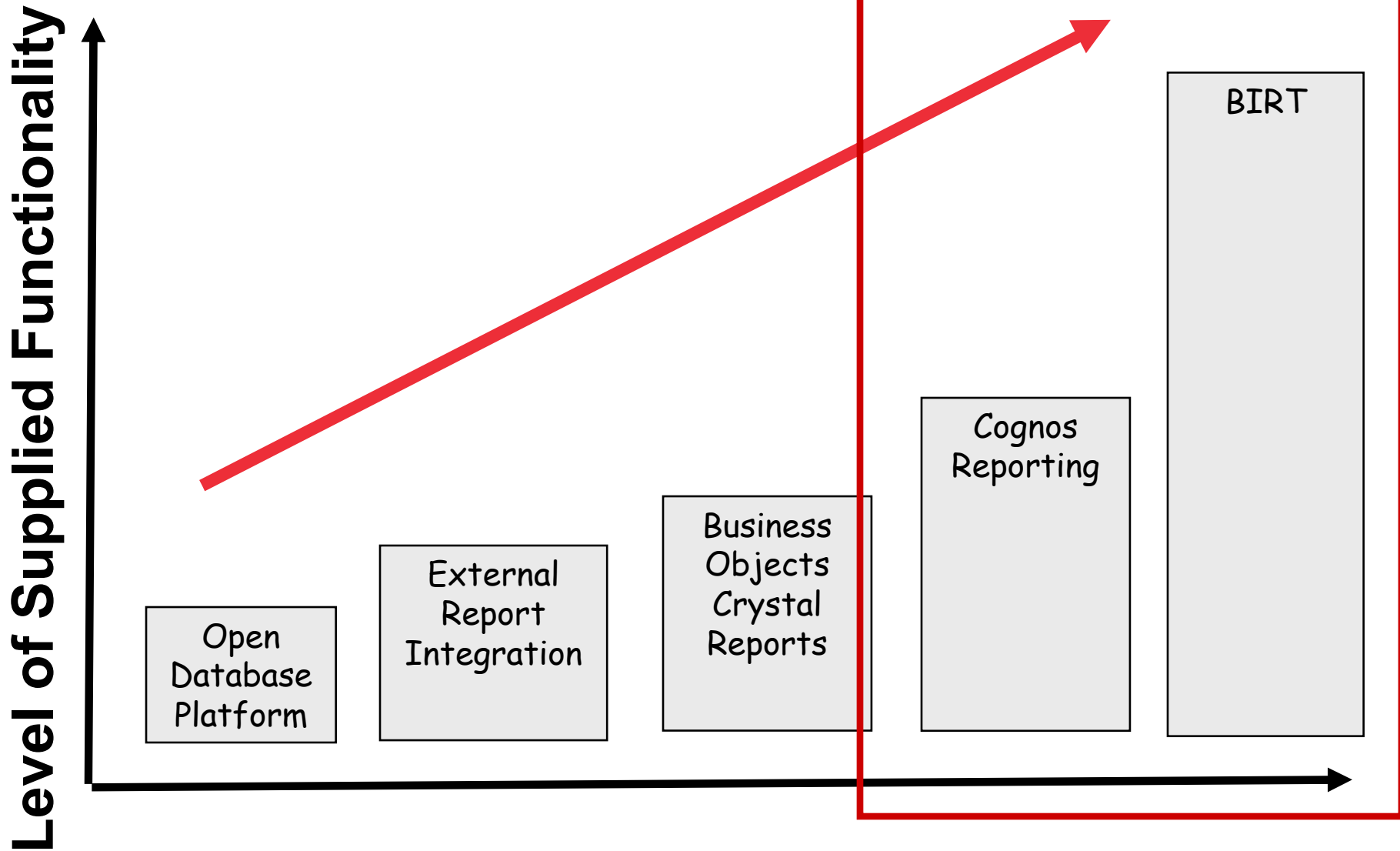


Creating powerful, value add reports *external* to Maximo Framework





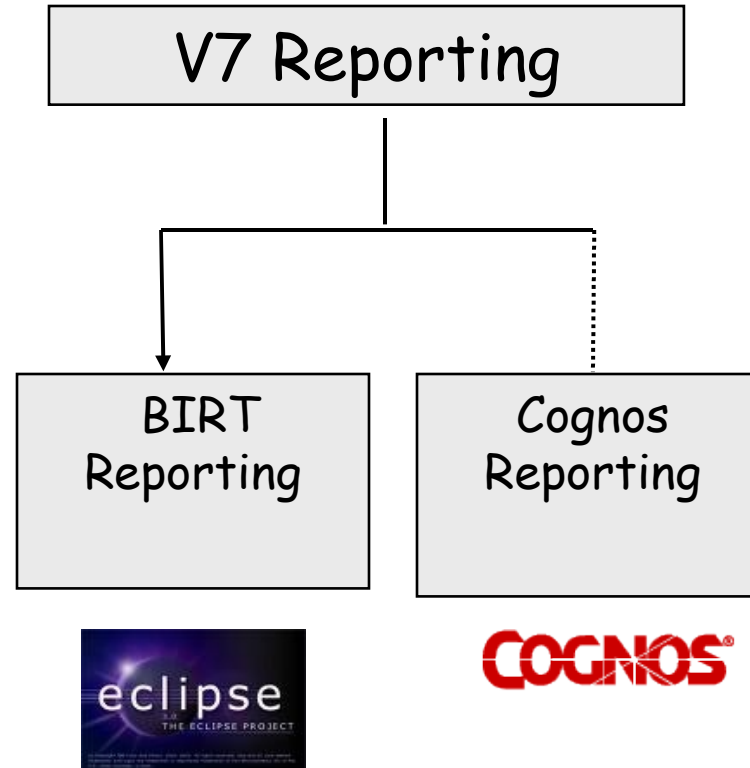
# 'Out of the Box' Functionality Comparison



# V7 Embedded vs Integrated Reporting Comparison

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Comparing functionality of tools *within V7* Environment



# V7 BIRT-Cognos Comparison Includes

Comparison

Role - Process	Actions include
Report Developer - Developing Reports	Meta Data vs Sql, Delivered Reports, Training, Logging
Administrator - Managing Reports	Installation, Security, Single Administration, Multi-Language
End User - Accessing Reports within V7 environment	Inside application, utilizing application query, data restrictions
End User - Working with Report Output	Printing, Scheduling, Emailing
Ad Hoc Reports - Creating Ad Hoc Reports	Parameters, Graphs, Calculations, Training, UI
Ad Hoc Reports - Managing, Security Features	Edit, Access, Meta data, Security

\*Full Comparison available at <http://ibm.co/xJKa6D>

## End User Accessing Reports within V7 environment

The screenshot displays the Cognos Work Order Tracking application. A 'Reports' dialog box is open, showing a list of reports to run. The 'Cognos Overdue Work Orders' report is highlighted with a red box. Below the dialog, the 'Service Level Agreements' table is visible, showing a list of SLAs with columns for SLA, Description, Applies To, Type, Service Group, and Service.

Annotations:

- A blue arrow points from the text 'Application Run Report Action' to the 'Reports' dialog box.
- A blue arrow points from the text 'Quick Link Toolbar Icons' to the toolbar icons in the main application window.

SLA	Description	Applies To	Type	Service Group	Service
1001	IT Generic P1 - Respond in 30 mins., Resolve in 2 hrs.	INCIDENT	CUSTOMER	IT	
1002	IT Generic P2 - Respond 4 hrs., Resolve 8 hrs.	INCIDENT	CUSTOMER	IT	
1003	IT Email - Respond 2 hrs., Resolve 4 hrs.	INCIDENT	CUSTOMER	IT	EMAIL

# Reporting Comparison

Comparison

## END USER - *Accessing Reports within V7 Environment*

	V7 BIRT	Cognos
One Click Printing from V7 (Direct Print, Direct Print with Attachments)	✓	
V7 Application action initiates Report Action (Ex. Change in Status, Workflow)	✓	
Always utilizes V7 Application Query	✓	
Always passes V7 Data Restrictions	✓	
Seamless V7 user experience...Reporting has similar UI, minimal additional training	✓	
Accessible Outside V7		✓
Launch to Other Reports, Report Actions		✓

# Cognos Ad Hoc Reports: Query Studio

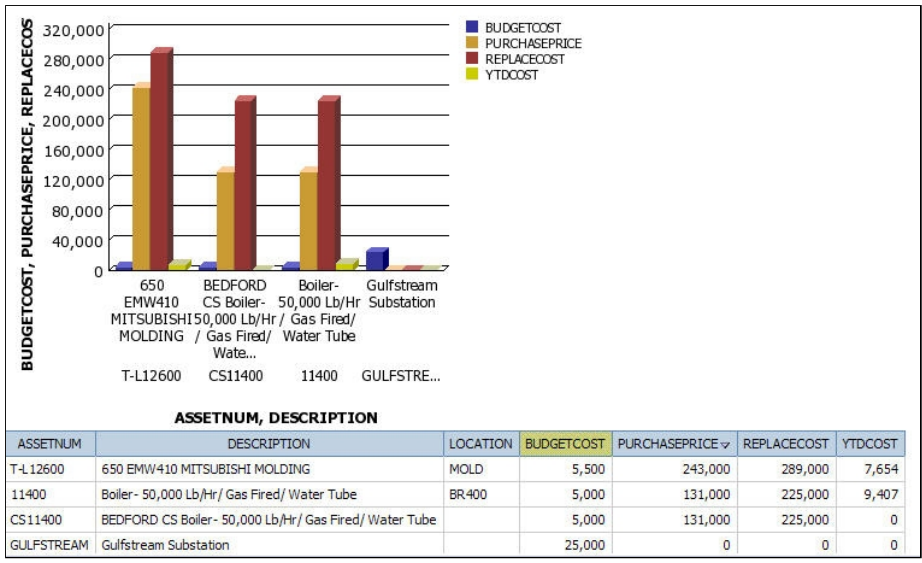
# Maximo Ad Hoc Report QBR

### Asset Purchase Price History Report

Grouped By Location

ASSETTYPE: IT, PRODUCTION  
PURCHASEPRICE: Greater than or equal to 1

LOCATION	ASSETNUM	Asset Description	ASSETTYPE	PURCHASEPRICE
5THFLOOR	19998	IT (UNSPSC),Computer_Equipment,Computer,Desktop, 64.00 MB, 4.00 GB, 266.00 PROSPEED	IT	1,300
	20001	Server with upgrades	IT	2,000
	21000	Database software for the desktop	IT	99
<b>5THFLOOR</b>				<b>3,399</b>
6THFLOOR	2002	Server with upgrades	IT	1,700
<b>6THFLOOR</b>				<b>1,700</b>
ADDR2001	7000	Standard Laptop Computer	IT	1,200
	7001	Windows XP Operating System	IT	240
	7003	Laser printer (local)	IT	700
	7100	Standard Laptop Computer	IT	1,225
<b>ADDR2001</b>				<b>3,365</b>
ADDR2002	9999	COMP_EQU,COMPUTER,DESKTOP, 266.00 GHZ, 64.00 MB, 4.00 GB	IT	2,100
	A7700	Standard Desktop (Configured)	IT	1,450



ASSETNUM	DESCRIPTION	LOCATION	BUDGETCOST	PURCHASEPRICE	REPLACECOST	YTD COST
T-L12600	650 EMW410 MITSUBISHI MOLDING	MOLD	5,500	243,000	289,000	7,654
11400	Boiler- 50,000 Lb/Hr/ Gas Fired/ Water Tube	BR400	5,000	131,000	225,000	9,407
CS11400	BEDFORD CS Boiler- 50,000 Lb/Hr/ Gas Fired/ Water Tube		5,000	131,000	225,000	0
GULFSTREAM	Gulfstream Substation		25,000	0	0	0

### Reporting: Approved Bedford POs

Site: BEDFORD Company: VERIZON

PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1084	Verizon Order	WAPPR		103.00	1	MATERIAL				100.00	100.00
1085	Longfellow Project Adds	WAPPR		156.45	1	ITEM	560-00	ITEM	Tubing, Copper-1 In ID X .020 In Wall	100.00	149.00

Site: BEDFORD Company: SINKING

PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1077	Adobe Software	APPR		12,300.00	1	ITEM	ACROBAT_8	ITEM	Adobe Acrobat Version 8	100.00	12,300.00

Site: BEDFORD Company: OFFRUS

PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1026	Items for Project ICL-898 per Max	WAPPR		46.00	3	ITEM	230-00	ITEM	Elbow, Street- 90 Deg, 1		2.50
1026	Items for Project ICL-898 per Max	WAPPR		46.00	2	ITEM	231177	ITEM	Guide- Carton Machine	2.00	29.00
1026	Items for Project ICL-898 per Max	WAPPR		46.00	1	ITEM	231177	ITEM	Guide- Carton Machine	1.00	14.50

Site: BEDFORD Company: KENNEDY

PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1021	DJIO-Rev1 Project	WAPPR		0.00	1	ITEM	560-00	ITEM	Tubing, Copper-1 In ID X .020 In Wall		0.00
1022	Hardware Items for Bob	APPR		6.19	2	ITEM	0-0031	ITEM	Elbow, Street- 1-1/8 In X 90 Deg		2.50
1022	Hardware Items for Bob	APPR		6.19	1	ITEM	900810	ITEM	Lubricator Assembly		3.69
1023	Kennedy Order	APPR		40.00	1	ITEM	584-LD	ITEM	Lidwasher- 1/2 In	10.00	40.00

### Reporting: Asset Specification and Work Order Details

Asset: 11400 Description: Central Pump 100GPM/50THD Location: BR400 Parcel: 11400 Relating Item: PUMP/DO Linear: N Site: BEDFORD Asset Tag: 8423 Type: Fe

Asset	ASSETSPECID	End Base Measure	End Reason	Start Base Measure	Start Out of Measure	Start Measure	Mandatory?
11400	136						N
11400	138						N
11400	200						N
11400	201						N
11400	202						N
11400	203						N
11400	204						N

Work Order	Work Type	Status	Status Date	Target Start	Target Finish	Scheduled Start
91991	EM	APPR	10/12/01	3:45:43 PM	10/13/01	10:57:43 PM
2155	EM	CLOSE	10/23/98	3:45:35 PM	10/23/98	3:45:35 PM
88111	EM	CLOSE	4/29/98	3:45:49 PM	4/29/98	3:45:49 PM
89041	EM	CLOSE	4/29/99	3:45:47 PM	4/29/99	3:45:47 PM
90061	EM	CLOSE	6/23/00	3:45:39 PM	6/23/00	3:45:39 PM
91041	EM	CLOSE	7/17/01	3:45:38 PM	7/17/01	3:45:38 PM
87091	EM	CLOSE	11/20/98	8:45:59 PM	11/19/98	6:45:52 PM
91011	EM	CLOSE	6/9/01	3:45:41 PM	6/9/01	3:45:41 PM
88051	EM	CLOSE	4/27/98	3:45:46 PM	4/27/98	3:45:46 PM
89051	EM	CLOSE	10/21/99	3:45:44 PM	10/23/99	3:45:44 PM
91011	EM	CLOSE	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM
2433	EM	CLOSE	12/2/99	8:47:58 PM	11/23/99	8:33:34 PM
7492	CP	CLOSE	6/9/98	1:01:00 PM		
4294	EM	CLOSE	10/2/99	3:45:36 PM	10/2/99	3:45:36 PM
90121	EM	CLOSE	1/2/01	3:45:40 PM	1/2/01	3:45:40 PM

Creation: Access only from Cognos

Build content for ad hoc report by selecting fields made available from Cognos package (Published ROS)

The screenshot shows the IBM Cognos 8 BI Query Studio interface. At the top, the title bar reads "IBM Cognos 8 BI Query Studio - New". Below the title bar is a menu bar with "Menu" and a list of options: "Insert Data", "Edit Data", "Change Layout", "Run Report", and "Manage File". The "Insert Data" option is highlighted with a red box, and a red arrow points to it. Below the menu is a toolbar with various icons for file operations and formatting. Below the toolbar is a font and size selection area. On the left side, there is a tree view showing the "Asset Details for Friday Demo" package. The tree view includes "Business Logic View", "Asset", "Locations", and "Sparepart". Under "Sparepart", several fields are listed: ASSETNUM, DESCRIPTION, ISSUEDQTY, ITEMNUM, ITEMSETID, ORGID, QUANTITY, SITEID, and SPAREPARTID. On the right side, there is a data table with three columns: ASSETNUM, DESCRIPTION, and LOCATION. The table contains 13 rows of data.

ASSETNUM	DESCRIPTION	LOCATION
1001	Fire Extinguisher	MOFLOOR1
1002	Fire Extinguisher	MOFLOOR2
1003	Fire Extinguisher	MOFLOOR3
1004	Fire Extinguisher	MOFLOOR4
1005	Fire Extinguisher	CONF400
1006	Fire Extinguisher	OFF401
1007	Fire Extinguisher	OFF402
1008	Windows XP Operating System	OFF301
1009	Laser printer (local)	OFF301
1010	Windows XP Operating System	SWSTOCK
1011	Windows XP Operating System	SWSTOCK
1012	Windows XP Operating System	SWSTOCK
1013	Windows XP Operating System	SWSTOCK

# Continue to Build Cognos Ad Hoc Report

## Add Filters, Calculations and Define Sorting

**IBM Cognos 8 BI Query Studio - New**

Menu: Insert Data, **Edit Data**, Change Layout, Run Report, Manage File

Font: [Font] Size: [Size] B I U [Color] [Background Color]

Filters:  
 LOCATION:  
 BUDGETCOST: Greater than or equal to 1  
 PURCHASEPRICE: Descending order

ASSETNUM	DESCRIPTION	LOCATION	BUDGETCOST	PURCHASEPRICE	REPLACECOST
T-L12600	650 EMW410 MITSUBISHI MOLDING	MOLD	5,500	243,000	289,000
11400	Boiler - 50,000 Lb/Hr / Gas Fired/ Water Tube	BR400	5,000	131,000	225,000
CS11400	BEDFORD CS Boiler - 50,000 Lb/Hr / Gas Fired/ Water Tube		5,000	131,000	225,000
L-M450	AMW410 MITSUBISHI MOLDING	MOLD	3,500	120,000	170,000
L-M460	AMW410 MITSUBISHI MOLDING				
L-M430	150 AMW410 MITSUBISHI MOLDING				
11200	HVAC System - 50 Ton Cool Cap/ 450000 Btu Heat				
13140	Conveyor System - Pkg. Dept.				
T-L12210	FREZZEL AUTO WASH				
T-L12211	FREZZEL AUTO WASH,				
L13110	WASH LINE #1				
L13160	WASH LINE #2				
TRM3100	HICKORY BARRELS				

Add Filters, Calculations and Define Sorting,

Active Asset Costs

Add Graphs

**IBM Cognos 8 BI Query Studio - New**

Menu: Insert Data, Edit Data, **Change Layout**, Run Report, Manage File

Filters:  
 LOCATION:  
 BUDGETCOST: Greater than or equal to 5,000  
 PURCHASEPRICE: Descending order

**Active Asset Costs**

Legend: BUDGETCOST (Blue), PURCHASEPRICE (Yellow), REPLACECOST (Red), YTD COST (Green)

Asset	BUDGETCOST	PURCHASEPRICE	REPLACECOST	YTD COST
T-L12600	5,500	243,000	289,000	
CS11400	5,000	131,000	225,000	
11400	5,000	131,000	225,000	
GULFSTRE...				



# Maximo Ad Hoc Reports - QBR

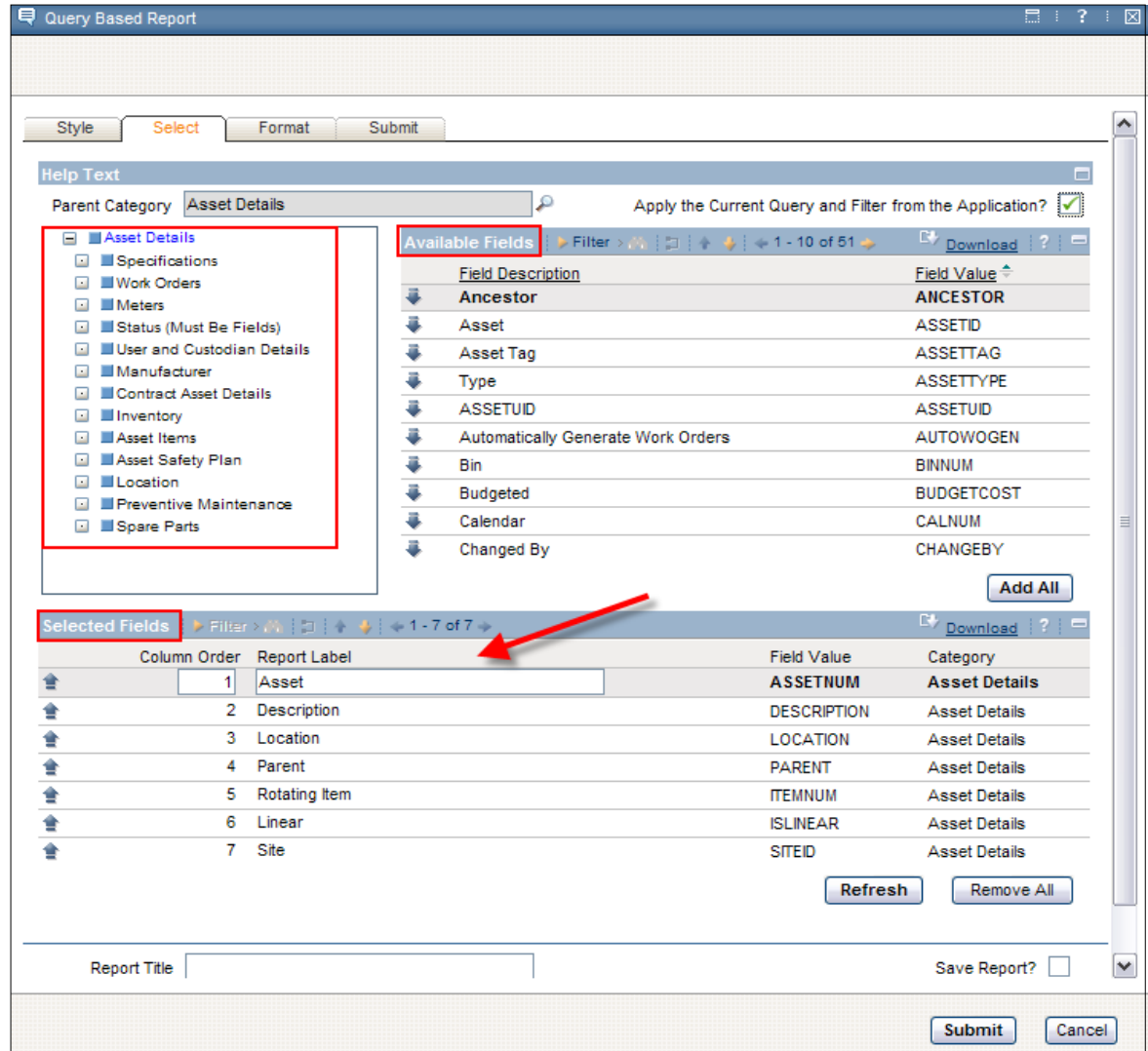
Comparison

## Creation



Access only from Maximo

Utilize tabs to create inputs for report. Define type of report on Style tab. Choose fields on Select Tab from made available by ROS.



Query Based Report

Style Select Format Submit

Help Text

Parent Category  Apply the Current Query and Filter from the Application?

**Available Fields** Filter 1 - 10 of 51

Field Description	Field Value
Ancestor	ANCESTOR
Asset	ASSETID
Asset Tag	ASSETTAG
Type	ASSETTYPE
ASSETUID	ASSETUID
Automatically Generate Work Orders	AUTOWOGEN
Bin	BINNUM
Budgeted	BUDGETCOST
Calendar	CALNUM
Changed By	CHANGEBY

**Selected Fields** Filter 1 - 7 of 7

Column Order	Report Label	Field Value	Category
1	Asset	ASSETNUM	Asset Details
2	Description	DESCRIPTION	Asset Details
3	Location	LOCATION	Asset Details
4	Parent	PARENT	Asset Details
5	Rotating Item	ITEMNUM	Asset Details
6	Linear	ISLINEAR	Asset Details
7	Site	SITEID	Asset Details

Report Title  Save Report?

Submit Cancel

# Continue to Build Maximo Ad Hoc Report

Comparison

Application's Query and Filter can be directly applied to ad hoc report

Assets

BRAssets Find: Select Action

Assets Filter 1 - 5 of 5

Asset	Description	Location	Parent	Rotating Item
11430	Centrifugal Pump 100GPM/60FT HD	BR430	11400	PUMP100
23972	Motor- 10hp/1 Frame/440v/3			
11450	Centrifugal Pu			
49332	Motor- 10hp/1 Frame/440v/3			
11460	Burner, Gas F			

Query Based Report

Apply the Current Query and Filter from the Application?

Available Fields

Field Description	Field Value
Ancestor	ANCESTOR
Asset	ASSETID
Asset Tag	ASSETTAG
Type	ASSETTYPE
ASSETUID	
Automatically Generate Work Orders	

Define parameters, sorting and grouping

Query Based Report

Filtering

Filter First By: Report Label

Grouping

Sort First By:

Select Value

Category	Report Label	Field Value
Asset Details	Asset	ASSETNUM
Asset Details	Description	DESCRIPTION
Asset Details	Location	LOCATION
Asset Details	Parent	PARENT
Asset Details	Rotating Item	ITEMNUM
Asset Details	Linear	ISLINEAR
Asset Details	Site	SITID

# Ad Hoc Reporting Comparison

Comparison

## *Creating Ad Hoc Reports*

	V7 Ad Hoc (QBR)	Cognos Query Studio*
Ad Hoc Features - Multiple tables, sort, group, edit, parameters...	✓	✓
Can add graphs, calculations		✓
Create report view and define locations		✓
Direct utilization of application query	✓	
Create/Execute within V7 applications	✓	
Only available from Cognos Portal		✓
Same V7 UI...Minimal training required	✓	
Export to report developer tool for additional manipulation	✓	✓

## Reference Materials

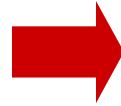
Report Comparison	Comparison of Embedded BIRT reporting to Integrated Cognos reporting	<a href="http://ibm.co/xJKa6D">http://ibm.co/xJKa6D</a>
Presentation Download	Direct Link to tool comparison presentation	<a href="http://ibm.co/M13JUV">http://ibm.co/M13JUV</a>

## CONCLUSION:

Utilize Features and Reporting tools

*....most important to your users and business needs!*

## *Report and Data Options*



### *BIRT Reporting*

Configuration

Design

Development

Administration

Execution

1. History
2. Reporting Options
3. Comparison - BIRT vs Cognos
4. Report Strategy
5. Data Analysis Options

### *Cognos Reporting*

### *Reference Materials and Questions*

# Direction: Continue Open Reporting Strategy



Strategic Reporting



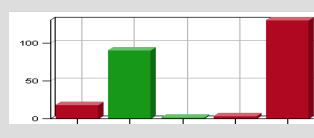
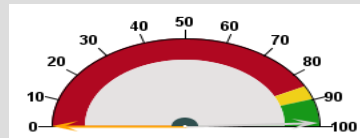
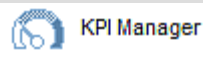
Ad Hoc Reporting



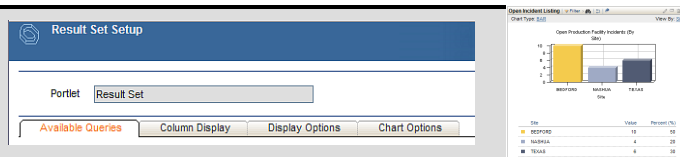
Operational Reporting



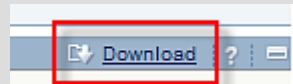
KPIs



Result Sets



Data Download



A1	A	B	C	D	E	F	G
1	Asset	Location	Parent	Rotating Item	Linear	Site	
2	1100 HVAC System-50 Ton Cool Cap 450000	BR300		N		BEDFORD	
3	11210 Heat Cap						
4	11210 Circulation Fan-Centrifugal 20/000 CFM	BR210	11200	N		BEDFORD	
5	11211 Motor Starter-Size 2440b/3ph/60cy	BR210	11210	N		BEDFORD	
6	11210 Emergency Generator	BR300		N		BEDFORD	
7	11240 Circulation Fan-Centrifugal 20/000 CFM	BR240	11200	N		BEDFORD	
8	11250 Circulation Fan-Centrifugal 20/000 CFM	BR300	11200	N		BEDFORD	
9	11300 Reciprocating Compressor-Air Cooled/100 CFM	BR300		N		BEDFORD	
10	11340 Motor Starter-Size 4/NEMA (7.5A/4.7kW/400V)	BR300	11300	N		BEDFORD	

Maximo Business Intelligence

Cross Product Data Analysis

# Upgrade Recommendation....

## Evaluate All Data Analysis Options!

Strategic Reporting

Cognos

Ad Hoc Reporting



Cognos

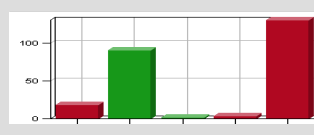
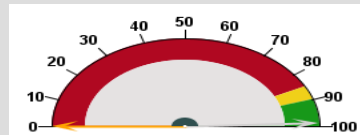
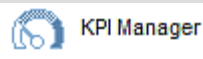
Operational Reporting



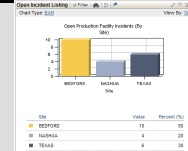
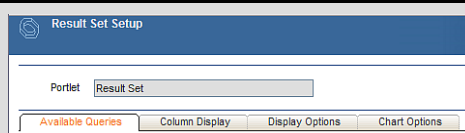
Business Objects  
Cognos

SAS

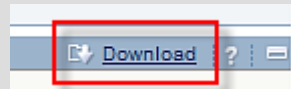
KPIs



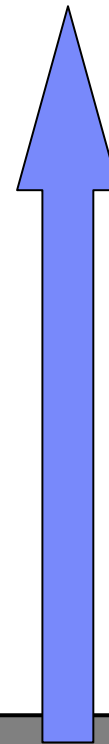
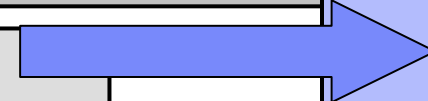
Result Sets



Data Download



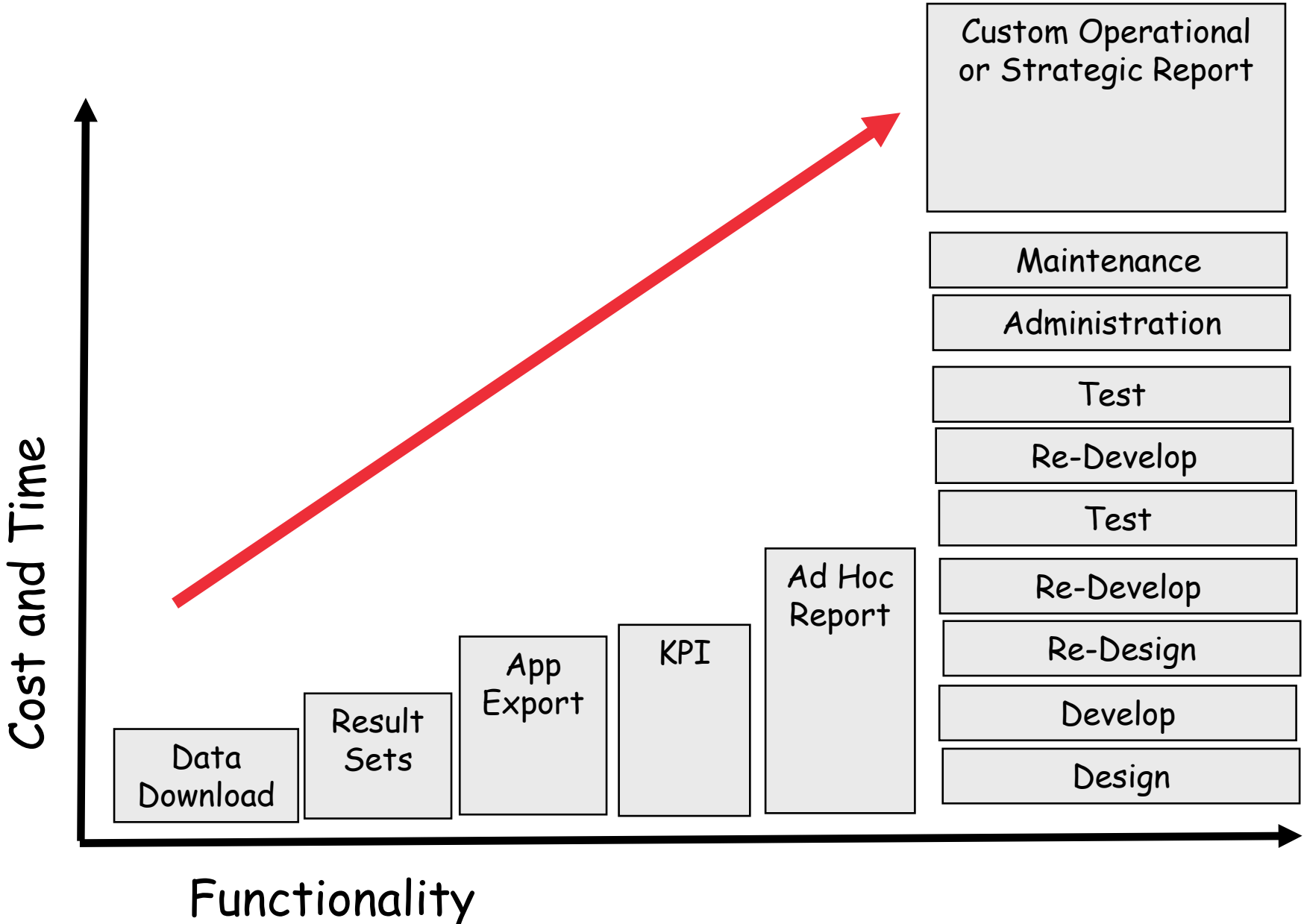
A1	A	B	C	D	E	F	G
1	Asset						
2	1100	MVC System-50 Top Cool Cap 450000	Location	Parent	Rotating Item	Linear	Site
3			BR200			N	BEDFORD
4		11210	Circulation Fan- Centrifugal 20/000 CFM	BR210	11200	N	BEDFORD
5		11211	Motor Starter- Size 2440b/3ph/50cy	BR210	11210	N	BEDFORD
6		11230	Emergency Generator	BR230		N	BEDFORD
7		11240	Circulation Fan- Centrifugal 20/000 CFM	BR240	11200	N	BEDFORD
8		11250	Circulation Fan- Centrifugal 20/000 CFM	BR200	11200	N	BEDFORD
9		11300	Reciprocating Compressor- Air Cooled/100 CFM	BR300		N	BEDFORD
10		11340	Motor Starter- Size 4NEMA (7.5A/4/7.5kVA/230V)	BR300	11300	N	BEDFORD



Cross Product Data Analysis

Maximo Business Intelligence

# Data Analysis: Cost vs Functionality Comparison





# Data Download - List Tab

Data Options

Maximize use of application's filter and/or query to immediately download your results for additional analysis in Microsoft Excel.

The screenshot shows the 'Report Administration' application interface. The 'List' tab is selected. A 'Where Clause' dialog box is open, displaying the current query: `lastrundate is null or lastrundate < '01-01-2011'`. A red box highlights the 'Download' button in the top right corner of the application window. A red arrow points from the 'Download' button towards the Microsoft Excel window shown in the next image.

The screenshot shows the Microsoft Excel application window with the following data:

Report Folder	Report File Name	Description	Application	Report Type	Created By	Priority	
ASSET	asset_costrollup_update.rptdesign	Maintenance Cost Rollup Update	ASSET	BIRT			
ASSET	asset_po.rptdesign	Asset Purchase Order Details	ASSET	BIRT		2	
ASSET	mgmt_sw.rptdesign	Managed Software Detail	ASSET	BIRT			
ASSET	oeeqpi_by_asset.rptdesign	Overall Equipment Effectiveness By Asset	ASSET	BIRT			
ASSETCAT	class_hierarchy.rptdesign	Classification Hierarchy	ASSETCAT	BIRT			
ASSETCAT	class_struct.rptdesign	Classification Details	ASSETCAT	BIRT		2	
BUYER	mrprint.rptdesign	MR Details	BUYER	BIRT			

# Result Set - Start Center

Data Options

Using the same or different application query, you can enable a set of fields or graph for display on the Start Center.

Welcome, Mike Wilson

- KPI Manager
- Security Groups
- Object Structures

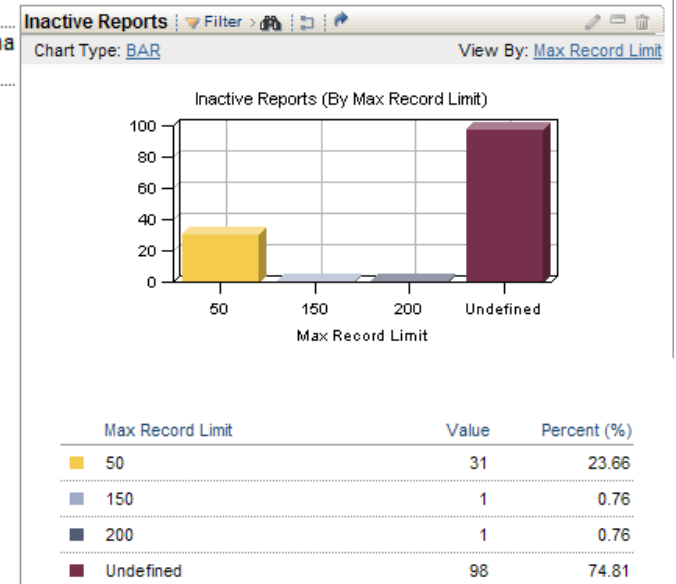
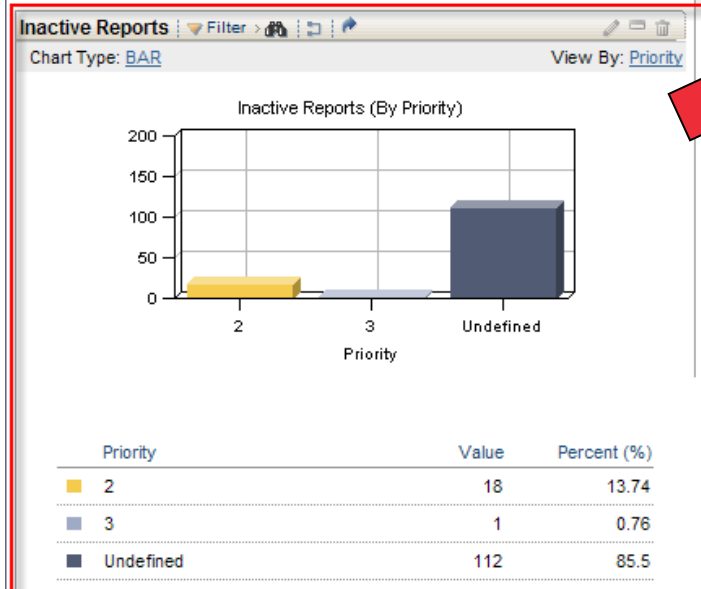
**Report List**

- Report Usage
- Database Configuration
- Asset Measurement History
- Overall Equipment Effectiveness By Site

1 - 4 of 4

Inactive Reports

Application	Description	Last Run Date	Max Record Limit
ASSET	Maintenance Cost Rollup Update		
ASSET	Asset Purchase Order Details		50
ASSET	Managed Software Detail		
ASSET	Overall Equipment Effectiveness By Asset		
ASSETCAT	Classification Hierarchy		50
ASSETCAT	Classification Details		200
BUYER	MR Details		50
CHANGE	Change List		
COLLECTION	Collection List		
COLLECTION	Collection Ana		

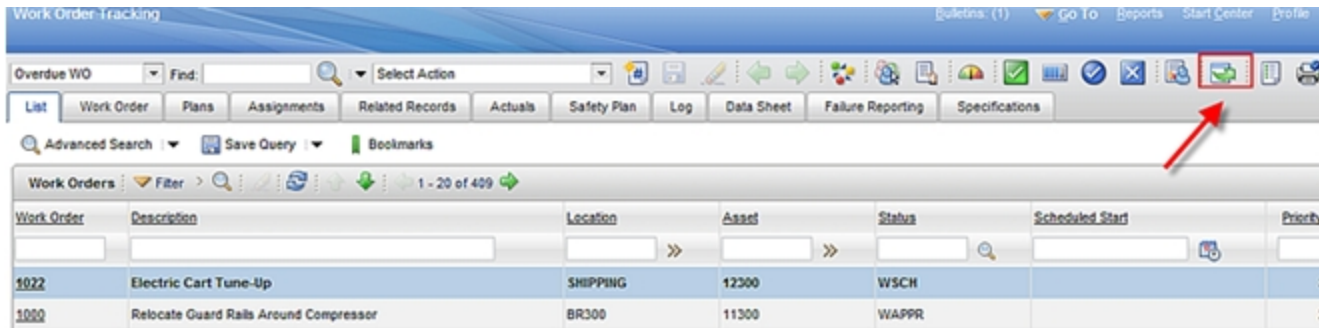


# Application Export (Data Download +)

Data Options

Enables you to export multiple database objects and attribute fields using your application's filter and/or query

Capitalizes on the power of an object structure



The screenshot shows a Microsoft Excel spreadsheet with the following data:

	DB	DC	DD	DE	DF	DG	DH	DI	DJ	
1	WO.WONUM	WO.WOPRIORI	Y.WO.WOR	Y.WO.WOR	A.ASSETNUM	A.ASSETTAG	A.CALNUM	A.CHANGEBY	A.CHANGEDATE	A.DESCRPTION
2	1022		3 PM		12300	12559 COMPANY1	MAXIMO	1999-03-10T22:10:15-05:00		Electric Cart
3	1000		2 CM		11300	4286 COMPANY1	WILSON	2005-02-07T10:15:13-05:00		Reciprocating Compressor-
4	5004		5 CM		13110	13403 COMPANY1	MAXIMO	1999-03-11T15:31:13-05:00		Feeder System
5	5006		2 CM		13143	13436 COMPANY1	MAXIMO	1999-03-11T15:32:00-05:00		Chain Wash Assembly

\*Base feature in 7.1, significant enhancements 7.5

# KPI - Start Center

Data Options

Visual indicators displaying status against predefined targets.

KPI Manager

Find:  Select Action

List KPI Historical Trends

KPI Name ACTIVEADHOC Daily Active Ad Hoc Reports

### Query Details

Select \* `select count(reportname) from report`

Where `where lastrundate < sysdate and userid is not null`

Ad Hoc Reporting  
Last Run: 2/27/11 6:00 PM

Related Report	Status	KPI	Actual	Target	Variance
	<span style="color: red;">■</span>	Daily Active Ad Hoc Reports (%)	9	25	-16
	<span style="color: red;">■</span>	% Ad Hoc Reports (%)	0	50	-50
	<span style="color: green;">■</span>	Number of Ad Hoc Reports	9	25	-16

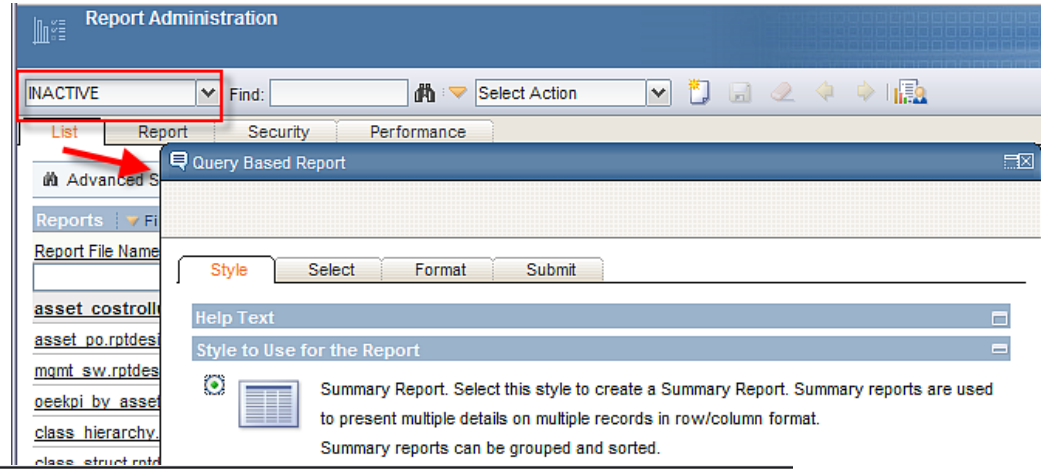
Report Admin KPIs  
Last Run: 2/27/11 6:29 PM

Related Report	Status	KPI	Actual	Target	Variance
	<span style="color: green;">■</span>	Daily Active Reports (%)	74	25	49
	<span style="color: red;">■</span>	Scheduled Report Jobs (%)	0	60	-60
	<span style="color: green;">■</span>	Successful Report Jobs (%)	100	99	1

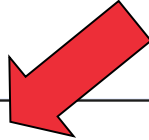
# Ad Hoc Reporting (QBR Reporting)

Data Options

Enables users to create their own reports from within the various applications



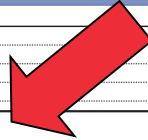
Tivoli. software



Report Details	
Description	Report File Name
Item Order Status	item_orderstatus.rptdesign

Security Application Access	
Group	Application
MAXADMIN	ITEM
OPSMGR	ITEM
PURCHASING	ITEM
ITASSETMGR	ITEM
ITEMMGR	ITEM
MAINTENANCE	ITEM
MIGRATIONMGR	ITEM



2/27/11 6:36 PM

Tivoli. software

## Inactive Reports grouped by Application

Application: ASSET									
Report File Name	Description	Report Folder	Report Type	Created By	Priority	Last Run By	Last Run Date	Last Run Duration	
asset_po.rptdesign	Asset Purchase Order Details	ASSET	BIRT		2				
asset_costrollup_update.rptdesign	Maintenance Cost Rollup Update	ASSET	BIRT						
mgmt_sw.rptdesign	Managed Software Detail	ASSET	BIRT						
asset_snolan_1288347191.rptdesign	Nolan's Asset Ad Hoc Report	ASSET	BIRT	SNOLAN		SNOLAN	10/29/10 6:13:22 AM	0:00:01	
oeeqpi_by_asset.rptdesign	Overall Equipment Effectiveness By Asset	ASSET	BIRT						

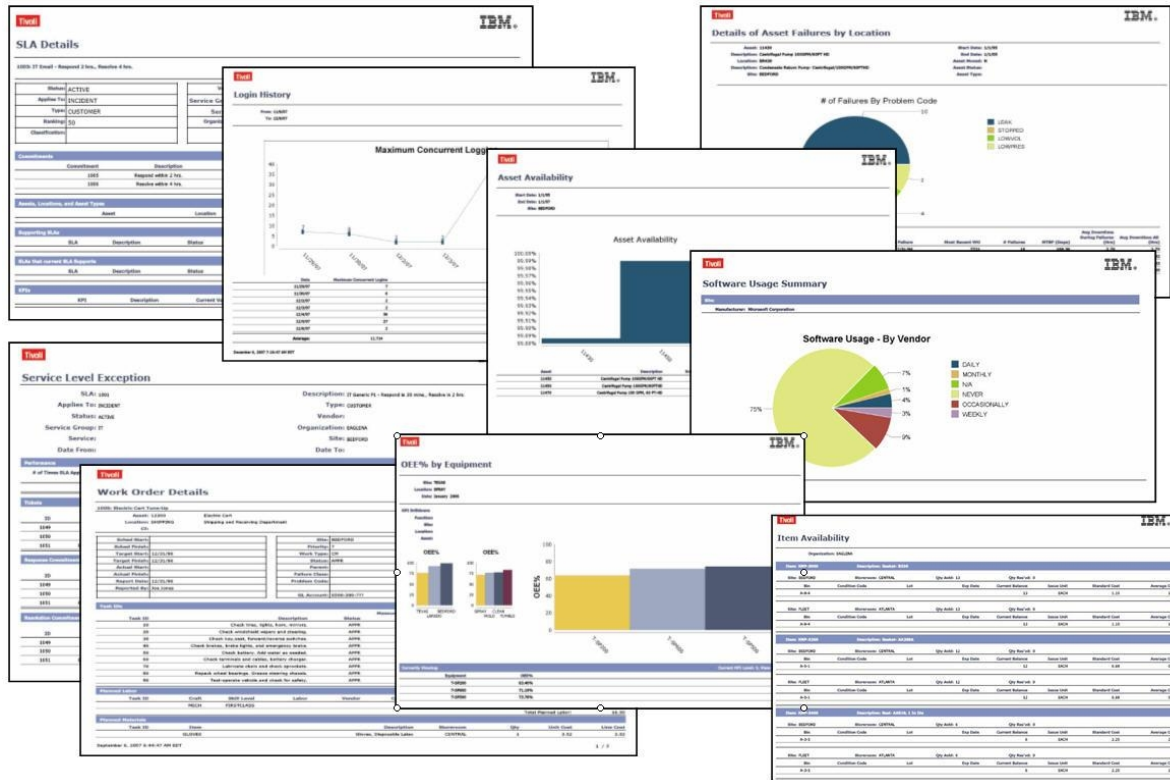
  

Application: ASSETCAT									
Report File Name	Description	Report Folder	Report Type	Created By	Priority	Last Run By	Last Run Date	Last Run Duration	
class_struct.rptdesign	Classification Details	ASSETCAT	BIRT		2				
class_hierarchy.rptdesign	Classification Hierarchy	ASSETCAT	BIRT						

# Operational/Strategic Reporting

Data Options

Custom reports. Includes day-day detail reports, period ending analysis reports, or those with complex graphs, calculations or unique scenarios (ex. Database updates).



# Reference Materials: Report Upgrade Resources

## Report Upgrade Planning Guides

Version 7.1	Details Data Analysis and Report Options for V7.1	<a href="http://ibm.co/LszhDD">http://ibm.co/LszhDD</a>
Version 7.5	Details Data Analysis and Report Option for V7.5	<a href="http://ibm.co/IfDdZF">http://ibm.co/IfDdZF</a>

Table of Contents  
from V7.5  
Guide



What Data Analysis Options are available? .....	5
Query by Example, QBE or Application List Download .....	7
RS. Result Sets .....	8
Application Export .....	9
QBR (Query Based Reporting) or Ad Hoc Reporting .....	11
OR: Operational Report .....	13
SR: Strategic Report .....	14
Understanding Report Options .....	15
V7.5 Report Options Functionality Comparison .....	17
BIRT - Version 7.5 Releases .....	18
Cognos 8.4 Reporting - Version 7.5 Releases .....	23
External Report Integration - Version 7.5 Releases .....	27
Open Database Platform - Version 7.5 Releases .....	29
Developing Custom Reports .....	30
Embedded Reporting Tool .....	31
Customizing Out of the Box Reports .....	32
Use Ad Hoc Reporting as a base for Custom Report Development .....	36
Cognos Report Integration .....	40
Query Studio .....	40
Report Studio .....	43

# Reference Materials: Report Upgrade Resources

## Report Wiki Pages

Data Analysis	Highlights Data Analysis Options	<a href="http://ibm.co/KONsRV">http://ibm.co/KONsRV</a>
Version 7.1	Report Options for V7.1	<a href="http://ibm.co/OXfH77">http://ibm.co/OXfH77</a>
Version 7.5	Report Option for V7.5	<a href="http://ibm.co/NWWUUw">http://ibm.co/NWWUUw</a>

## Version 7.5

- [1 Version 7.5](#)
- [2 Version 7.5 Open Reporting Architecture](#)
- [3 Version 7.5 Upgrade Planning Guide](#)
- [4 BIRT Reporting](#)
- [5 Cognos Reporting](#)
- [6 External Report Integration \(ERI\)](#)
- [7 Open Database Platform \(ODP\)](#)

### BIRT Reporting

BIRT, Business Intelligence and Reporting, is the embedded reporting tool in the Version 7.5 Releases. As the embedded reporting tool, it enables the deepest levels of integrations throughout the various Maximo applications, providing a seamless integration for your users.

Reporting with BIRT in Version 7.5 includes a variety of features including one click direct printing, emailing, scheduling, report usage and monitoring and 100's of delivered reports accessible [here](#). Additionally, ad hoc reporting is available for your business users to create their own reports by selecting fields, sorting, grouping, filtering. These reports can then be shared with others, emailed, scheduled and edited to meet changing business needs.

A snapshot of the available BIRT Reporting User documentation is detailed below. To find the full listing of documentation, including information on how to customize reports to meet your individual business needs, designing reports, configuring performance enablers and logging, reference this url: <http://ibm.co/pxUyp6> or click [here](#).

Document Name	Description	Version	Reference Number	Revision #	Last Posting Date
<a href="#">V75 ReportBooklet</a>	Contains listings, file names, descriptions, details on parameters, formatting (grouping, sorting) and a pdf copy of each of the OOB (Out of the Box) Delivered Reports.	7.5	1497942		4/28/2011
<a href="#">V75 Report Feature Guide</a>	Details how the embedded report engine is utilized, including a review of the file structure, installation and database structure. Includes information on Security, Scheduling, Administration, Queuing, and Property Files.	7.5	1498433	2	5/14/2012
<a href="#">V75 OBR Ad Hoc Reporting</a>	Details how users can Create and Execute Ad Hoc Reports, and the Administrative setup work involved, including how to create Report Object Structures.	7.5	1498285	1	9/19/2011
<a href="#">V75 Report Development Guide</a>	Intended for the Report Developer, contains detailed information and examples on developing reports within Design Tool, database access, parameters, common development techniques like hyperlinks and date formats and various debug features and utilities. Also contains information on installing and configuring the Report Design tool.	7.5	1498572	2	1/30/2012
<a href="#">V75 Report Toolbar Access Direct Print Guide</a>	Describes functionality that can be configured with BIRT Reports to enable their quick display, including Browser View, Direct Print and Direct Print with Attachments. Details report requirements, property files and troubleshooting techniques.	7.5	1498665	3	5/16/2012
<a href="#">V7 Report Localization</a>	Details report localization setup features and functionality. Includes 2 detailed use cases to enable localization for your custom reports.	7.1 and 7.5	1505045	2	6/7/2012



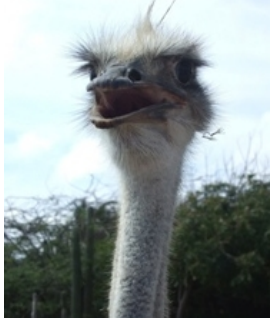
## *BiLog Best Practices*

V7 Data Analysis Options	Before investing in custom reports, recommends you first evaluate the other data analysis options	<a href="http://ibm.co/Ii50rq">http://ibm.co/Ii50rq</a>
Investing in Report Object Structures (ROS)	Details use of ROS in QBR Ad Hoc Reporting, Application Exporting and Cognos Meta Data	<a href="http://ibm.co/ILbI7y">http://ibm.co/ILbI7y</a>
Engage in OnLine Resources	Highlights SMC and key reporting sites/urls	<a href="http://ibm.co/IiRGjq">http://ibm.co/IiRGjq</a> <a href="http://ibm.co/Q1HxRk">http://ibm.co/Q1HxRk</a>

**Asset Management**  
 Connect, learn, and share with the experts



BiLog: The Best...V7 Best Practices Data Analysis Options



<b>Demo</b>	Recap of Reporting Best Practices, including Evaluating All Data Analysis Options	<a href="http://bit.ly/Oe9xy3">http://bit.ly/Oe9xy3</a>
<b>FAQ</b>	Reporting Best Practices	<a href="http://ibm.co/LsN6lG">http://ibm.co/LsN6lG</a>

## Best Practices\_Are there Reporting Best Practice Recommendations?

[View](#) [Edit](#) [Attachments \(0\)](#) [Info](#)

Added by [PamDenny](#), last edited by [PamDenny](#) on Mar 27, 2012 ([view change](#))  
 Labels: [report](#) [faqs](#) [pulse2012](#) [EDIT](#)

During the Pulse Reporting Presentation, three Reporting Best Practice Recommendations were made, which included:

### 1. Evaluate All Data Analysis Options

Within the Version 7 Portfolio, there a number of different features you can utilize to analyze non-reporting data option, can be a very streamlined, efficient way to provide this data to

- Data Download
- Result Sets
- Application Exporting
- Key Performance Indicators (KPIs)
- Ad Hoc Reporting
- Custom Operational Reports

The image shows a YouTube video player interface. At the top, there is the YouTube logo, a search bar, and a 'Browse' button. Below that, the video title 'Maximo Version 7 Reporting - Features and Best Practices' is displayed. Under the title, there is a channel name 'ibmpulse', a 'Subscribe' button, and a video count '348 videos'. The main video area shows a thumbnail with the text 'Maximo Version 7 Reporting - Features and Best Practices' and the IBM logo. Below the thumbnail, the presenter's name 'Pam Denny, IBM' is listed along with her email 'pdenny@us.ibm.com' and Twitter handle 'andbfo\_denny'. At the bottom of the thumbnail, the 'Pulse2012' logo is visible with the tagline 'Optimizing the World's Infrastructure' and the event details 'March 4-7 MGM Grand - Las Vegas, Nevada'.

## *Report and Data Options*

### *BIRT Reporting*

Configuration

Administration

Design

Development

Execution

Property Files, Cron Tasks, Database Objects

### *Cognos Reporting*

### *Reference Materials and Questions*

# V7 BIRT Reporting Features



Immediate	Printing	Cluster	Environment
Direct Print	Export to File	Cron Schedule	Reporting Dbase
Print Attachments	Scheduling	Prop Settings	BROS
Report Viewer	Email File	Parm Localization	Platform Support
QBR Creation	Email URL	Label Localization	Queuing
Public QBRs	View Schedules	Data Localization	Record List Portlet
Edit QBRs	Edit Schedules	Time Zones	Extending QBRs
QBR Filters	QBR Grouping	Schedule Only	Schedule Only
Graphs, Charts	QBR Priority	Priority	Reserve Processing
Export Files	QBR Order	Order	Record Limits
Upgrades	Calculations	Cloned Apps	Schedule Limits
Tool Configuration	Logging Features	Multi-Apps	Import Files
Database Access	Hyperlinks	Access Points	Report Access
SQL Statements	Database Updates	Parameters	Usage
Templates	Grouping	Data Restrictions	Maintenance
Custom file & Directory	Hierarchies	Where Clause	ROS Cardinality
Property Files	Rich Text Format	Delivered Reports	ROS Relationships

**V7 Reporting**

*Report and Data Options*

*BIRT Reporting*

**Configuration**



Administration

Design

Development

Execution

Key Features

1. Architecture

2. Installation

3. System Configuration

4. Reference Materials

*Cognos Reporting*

*Reference Materials and Questions*

# V7 Report *CONFIGURATION KEY* Features

---



1. Increasing Configuration Options
  - Single/Multiple Report Server Environments
  - Off loading of Report Scheduling Functionality
  - Ease of Reporting Database Configuration
2. Elimination of Separate Report Installation and Configuration
3. Utilization of Open Source Reporting Tool
  - Flexibility in Data Sources

# Configuration Comparison

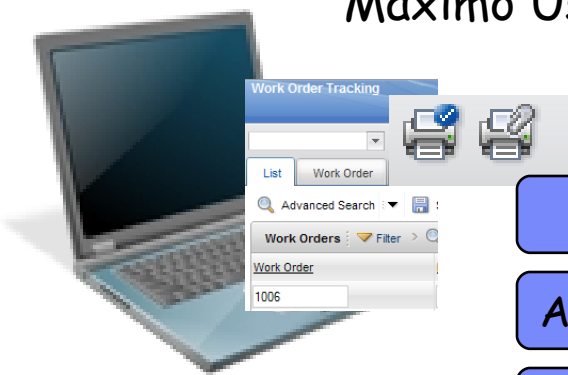
Config

	Version 6x	Version 7
Architecture	Separate + Embedded	Embedded in V7 →Capitalizes on Maximo Functionality
Installation	Separate iServer Install, Configuration, Encyclopedia, Licensing	No separate install or Repository
Licensing	Maximo database only + Can no longer extend reporting usage (Dec 2010)	Open Source. Can utilize multiple data sources
Separate Report Server?	Yes	Configurable via BROS
Secondary Datasource	Configurable	Automated in Report Admin App

# V6 Reporting Architecture

Maximo User

Report Developer



- Browser
- Adobe Reader
- JRE

- erdPro
- eSpreadsheet
- JRE

Client

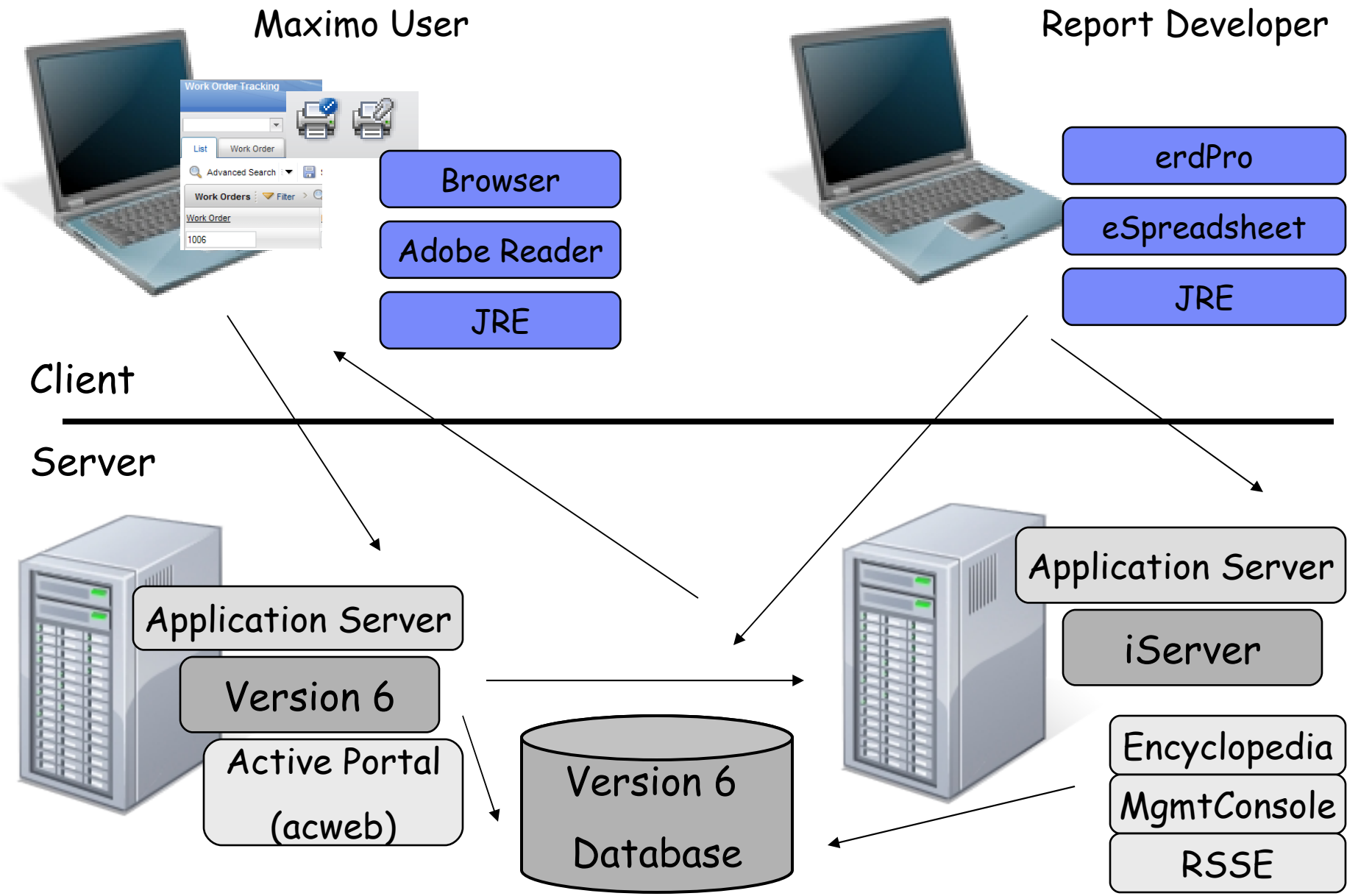
Server



- Application Server
- Version 6
- Active Portal (acweb)

- Application Server
- iServer

- Encyclopedia
- MgmtConsole
- RSSE

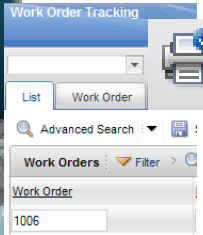




# V7 BIRT Reporting Architecture

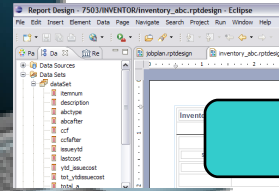
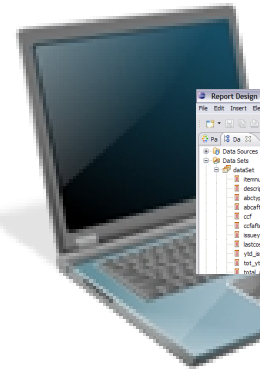
Configuration  
Architecture

Maximo User



- Browser
- Adobe Reader
- JRE

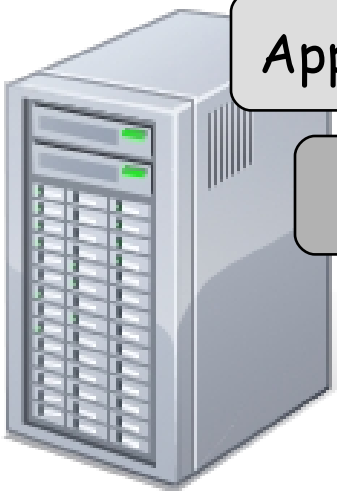
Report Developer



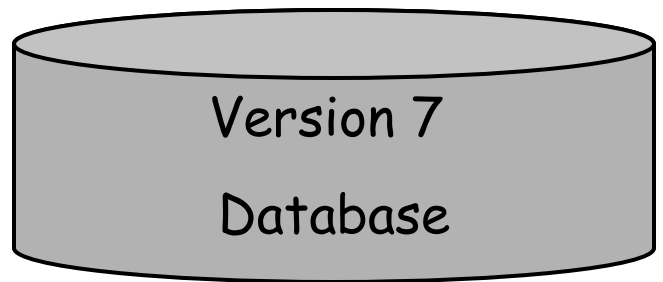
- Eclipse
- BIRT Designer
- JRE

Client

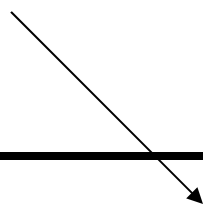
Server



- Application Server
- Version 7
- Eclipse
- BIRT Engine
- BIRT Viewer



Report Design Files



# V6-V7 Key Architecture Differences

	Version 6	Version 7
Report Server	Separate from Maximo	Included in Maximo
Report Viewer	ACWEB needs to be deployed on Maximo server	Automatically embedded in Maximo
Security Groups	Held in Actuate Server via RSSE Synchronization or LDAP	Single location - Maximo Database or LDAP
Report Repository	Encyclopedia on Actuate server	Maximo Database
Administration	(1) Actuate Management Console + (2) Maximo Report Administration	(1) Maximo Report Administration

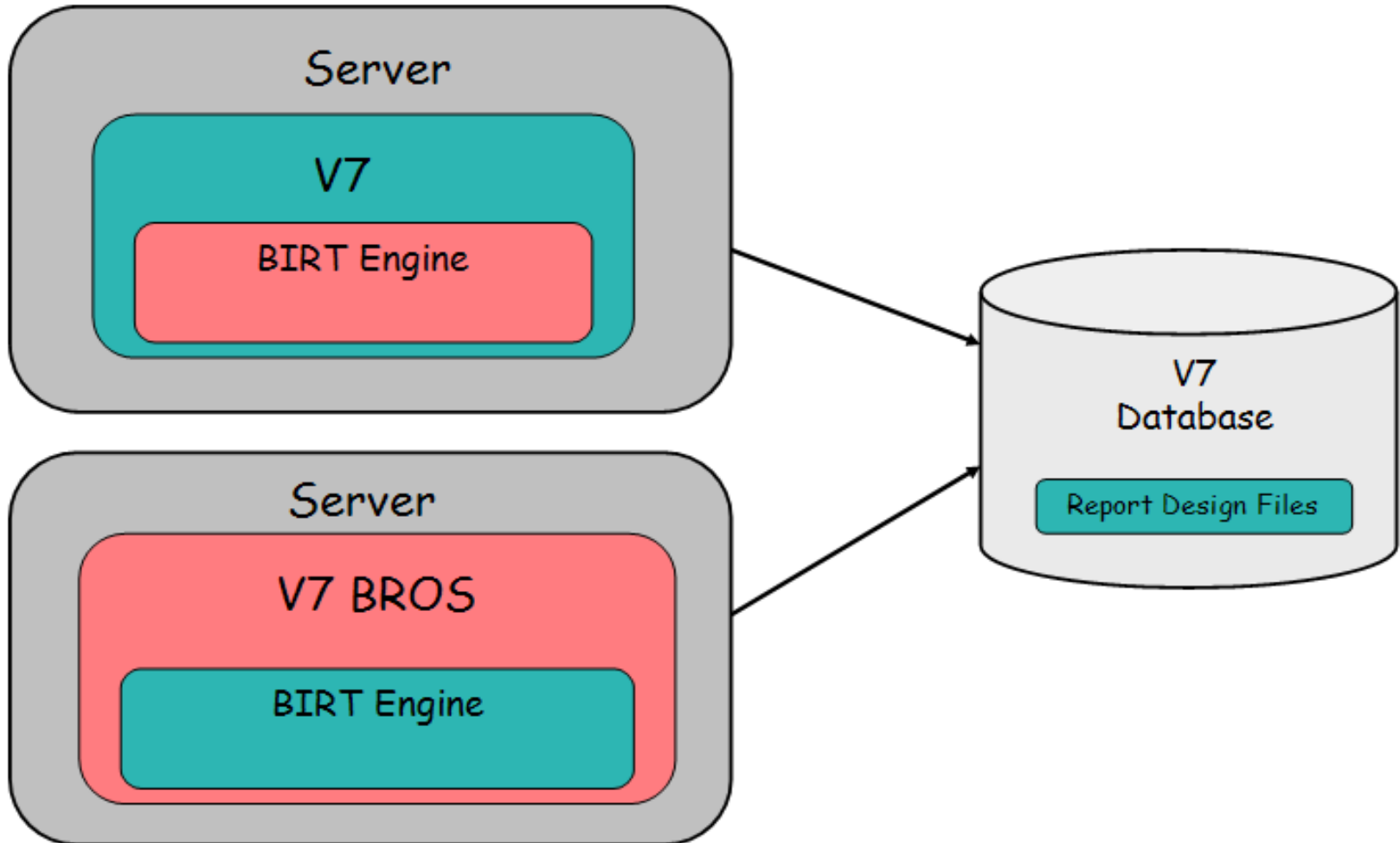
# V7 Report Server Installation

---

- No separate install for V7 Reporting  
Reporting installed with Maximo Installed/Deployed  
Only separate step is to generate Report Request Pages  
in Maximo's Report Administration application
- No build/deployment of ACWEB on Maximo Application  
Server
- No synchronization of security groups thru RSSE
- No separate Report Server Maintenance and  
Administration  
Ex. Sysadmin password for ACADMIN

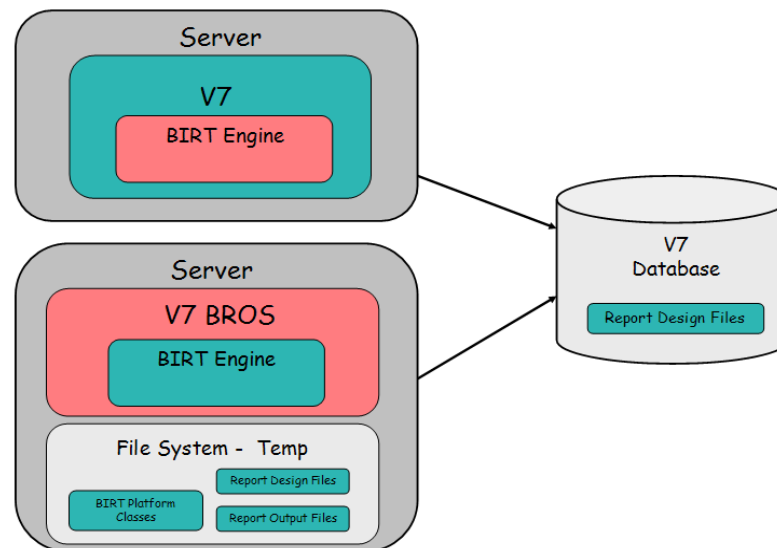
# V7 BIRT: BROS (BIRT Report Only Server)

Maximo + Reporting can be on Individual Servers



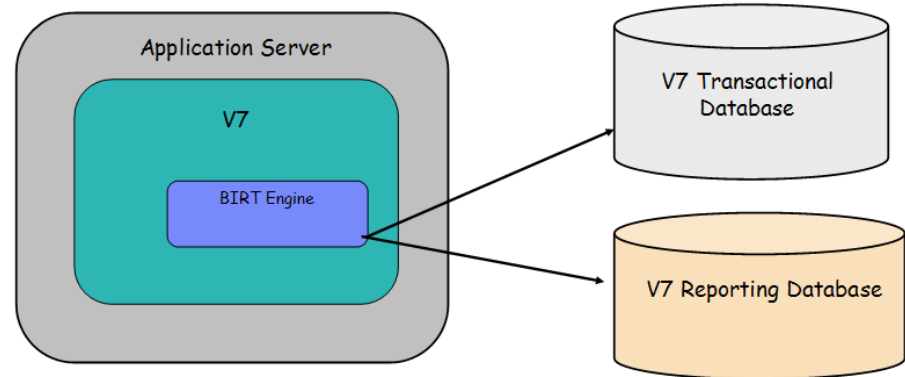
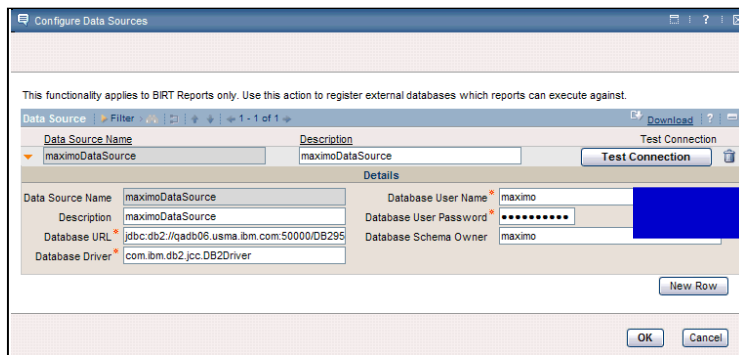
# BIRT Report Only Server (BROS) Notes

1. Improved Processing for large, heavy report environments
2. Install via Maximo Install. Configure via property settings (mxe.report.birt.viewerurl)
3. Temporary file requirements diverted to V7 BROS Server
4. Direct Print/Direct Print with Attachments and QBR Creation do not execute from BROS
5. Setup Details in Report Performance Guide <http://ibm.co/NsXMRr>



# Replicated/Secondary Database

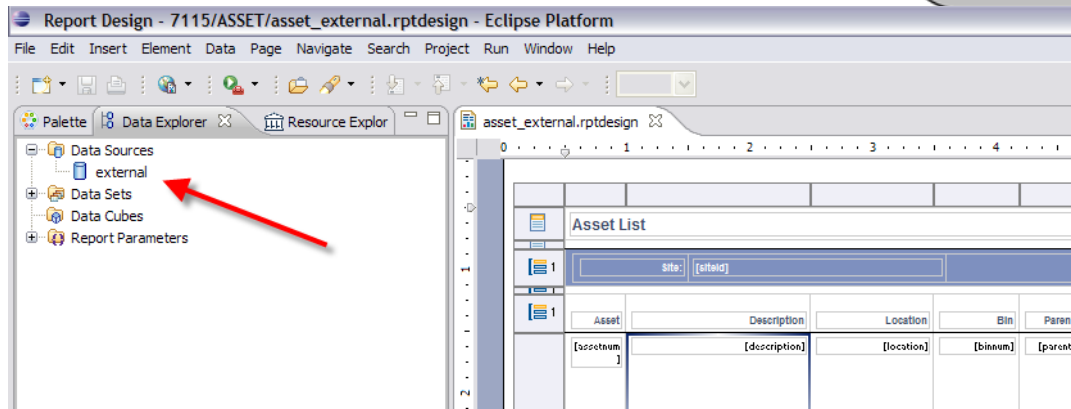
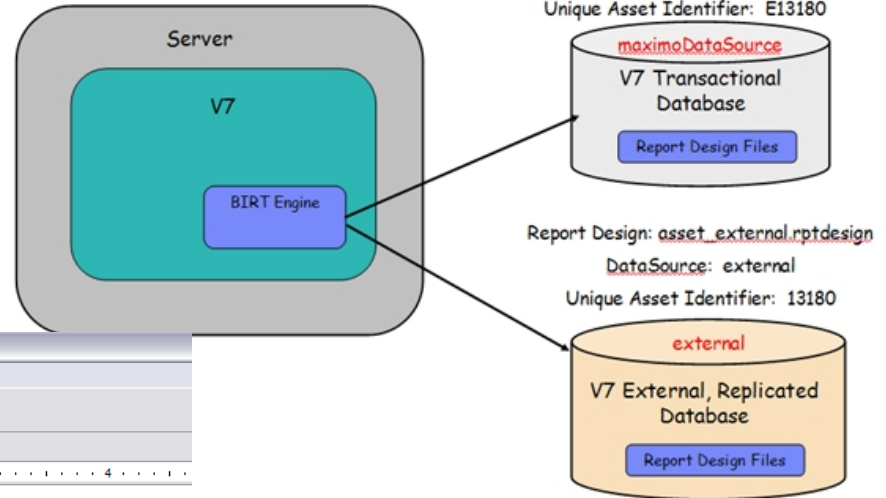
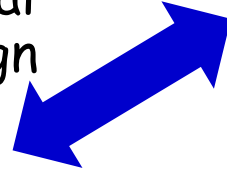
1. Requested to off-load report processing from live, transactional database to replicated database
2. New action in V7 Report Administration enables quick configuration
  - All reports then execute from Secondary Database
3. Configuration details in 'Enabling secondary Database Configuration' available at <http://ibm.com/MrqmUe>



# Or.....Additional Database Configuration Options

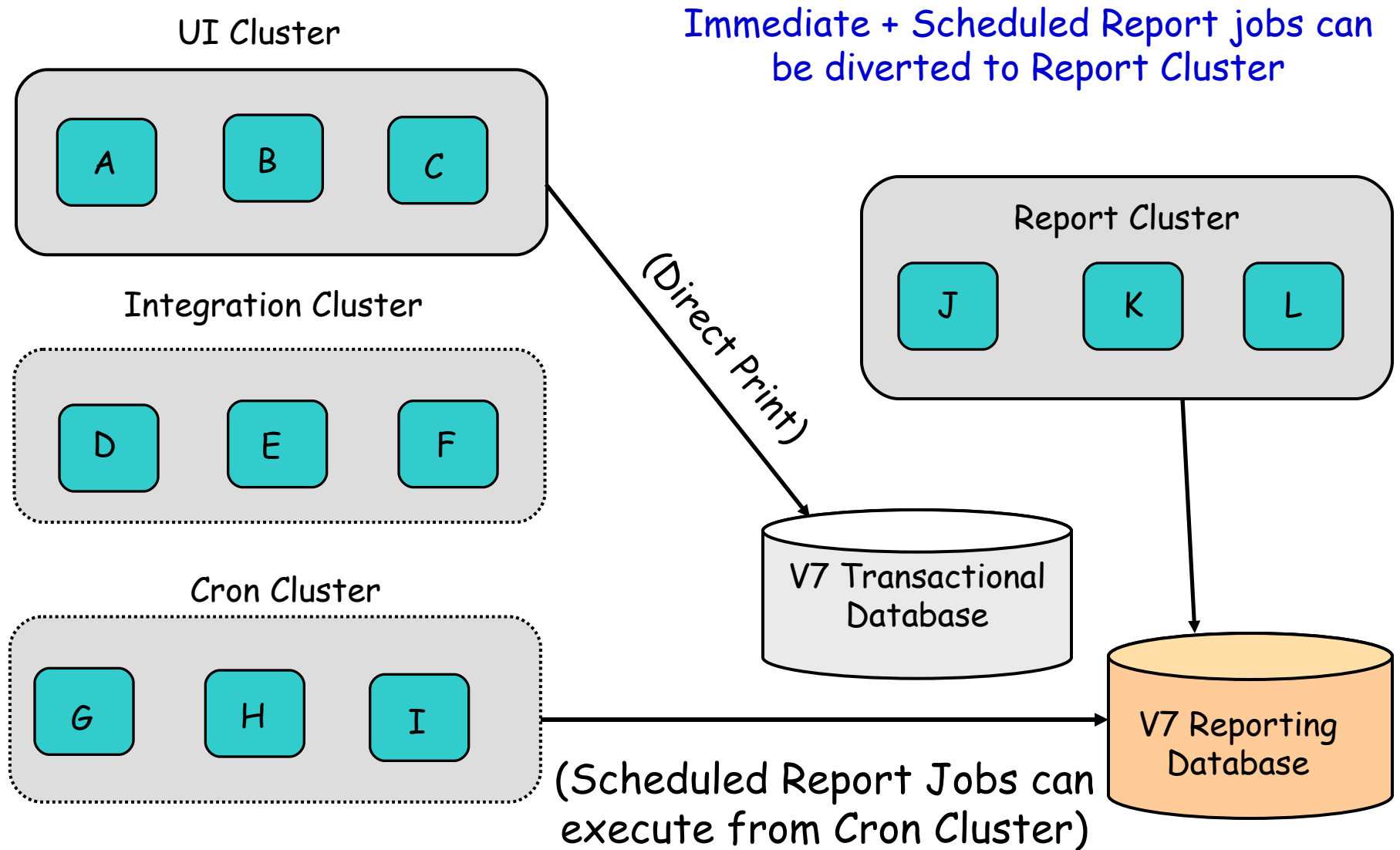
1. You can select a subset of reports to execute from 2ndry database (ex. Asset Cost Rollup - Complex Reports)
2. Configuration details in 'Enabling secondary Database Configuration' available at <http://ibm.co/MrqmUe>

Configure for individual report in Report Design tool



# V7 Report Architecture → Increasing Flexibility

Configuration  
Options





# Reference Materials: Configuration

Configuration

V7 Report Database	How to enable secondary database configuration	<a href="http://ibm.co/MrqmUe">http://ibm.co/MrqmUe</a>
V7 Report Performance	Details Performance Enablers and Features	<a href="http://ibm.co/NsXMRr">http://ibm.co/NsXMRr</a>
Report Performance Best Practices	Wiki Page highlighting V7 Performance Information	<a href="http://ibm.co/MgpYti">http://ibm.co/MgpYti</a>

Table of Contents  
V7 Report Performance Guide



V7 Report Performance Overview.....	3
Configuration.....	6
1. Configuration: Clustering.....	7
2. Configuration: BIRT Report Only Server.....	10
Configuration Recommendations and Notes:.....	17
3. Configuration: Replicated, Reporting Databases.....	18
4. Configuration: Hardware.....	19
Designing.....	22
1. Design: Analysis Options.....	23
2. Design: Format Impacts.....	25
Developing.....	29
Administration.....	30
1. Administration: Record Limits.....	31
2. Administration: Queuing.....	33
3. Administration: Performance Tab.....	36
4. Administration: View Report Processing.....	37
Execution.....	38
1. Execution - Scheduling.....	39
2. Execution: Schedule Only Reports.....	41
3. Execution - Schedule Only Reports - Reserved Processing Time.....	45
4. Execution - Report Usage.....	49

*Report and Data Options*

*BIRT Reporting*

Configuration

Administration



Design

Development

Execution

Property Files, Cron Tasks, Database Objects

Key Features

1. Repository, Import

2. Security

3. Report Object Structures

4. Report Administration Application

5. Access - Direct Print, Report Portlet

6. Localization

*Cognos Reporting*

*Reference Materials and Questions*

1. Single Report Administration/Maintenance
2. Capitalization or Maximo Functionality/Processes
3. Minimization of different processes for different reports
4. Increasing flexibility/usage in ad hoc reporting enablers (ROS vs individual report design files)

# V6-V7 Report Repository Comparison

## Storage location of Report Design Files

	Version 6x	Version 7
Repository	Encyclopedia	V7 Database
Location	Actuate Report Server	V7 Database
Process to load Repository (Admin/Install)	(1) Batch Utility (2) Individually in Management Console	(1) Import Utility (2) Individually in V7 Report Administration
Process to load Repository (Admin/Install)	(1) Post thru erdPro (2) Individually in Management Console	(1) Import Utility (2) Individually in V7 Report Administration
Properties File	N/A	Reporttools.properties

Design Files

REPORTDESIGN

REPORTDEPEND

REPORTPARAM

Text Values

REPORTLABEL

L\_REPORTLABEL

REPORTLOOKUP

L\_REPORTLOOKUP

Ad Hoc Design Values (Editing)

REPORTADHOC

REPORTADHOCFIELD

Security

REPORTAPPAUTH

REPORTAUTH

REPORTOSAUTH

Executing Jobs

REPORTJOB

Usage

REPORTUSAGELOG

Parent Object

**REPORT**

Report Data Source

REPORTDS

REPORTDSPARAM

Report List Portlet

REPORTLISTCFG

Scheduled Jobs

REPORTSCHED

Reserved Processing

REPORTPROCRESERVE

REPORTPROCSCHED

Scheduled Report Output  
(Email URL)

REPORTOUTPUT

REPORTOUTPUTCNT

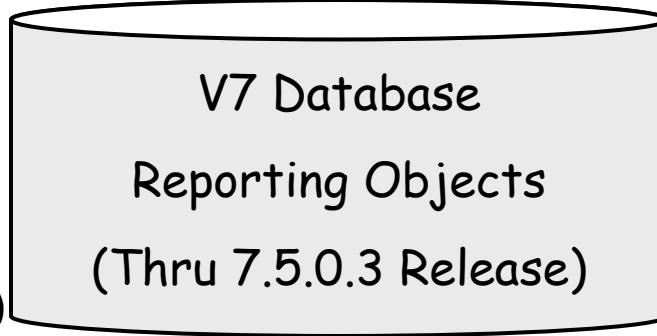
REPORTOUTPUTAUTH

Queuing

REPORTRUNQUEUE

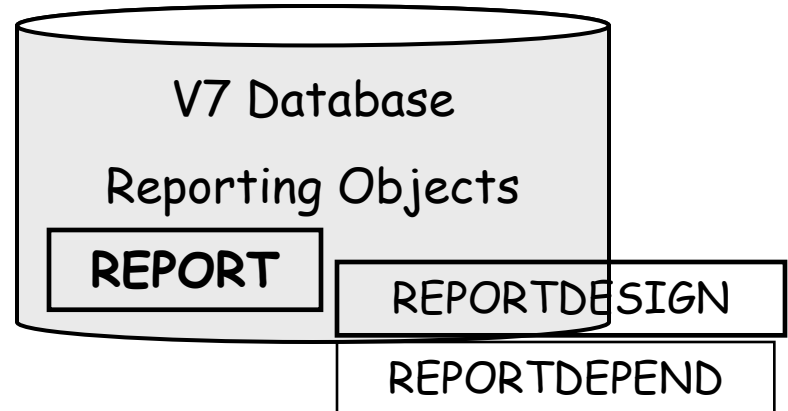
REPORTRUNLOCK

REPORTRUNPARAM



# Importing Reports into V7 Database Repository

Report Designs,  
Libraries, and  
Resource files



Import Utilities

(All, Application or Single Report)



```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

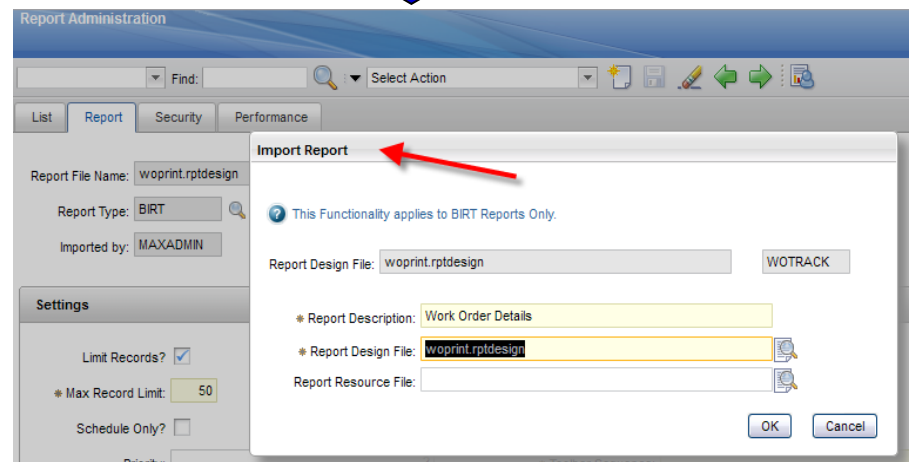
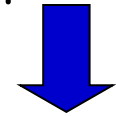
C:\>cd harrier local build\local build\reports\birt\tools

C:\harrier local build\local build\reports\birt\tools>importreports
Unable to locate tools.jar. Expected to find it in C:\harrier local build\local
build\tools\java\lib\tools.jar
Buildfile: .\importreports.xml

init:
[echo] Using the following settings:
[echo] hostname: localhost
[echo] port: 7001
[echo] ssl: false
[echo] username: wilson
```

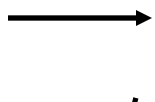
Action in Report Admin

(Single Report File Only)



# Report Importing Property File

1. Reporttools.properties used to importing/exporting of report design files via command utilities
2. Also, enables exporting of files from database to local location for updates/modification
  - Ex. For QBR Extension/Report Enablement
3. UN/PW optional. Can enter these values directly in console.



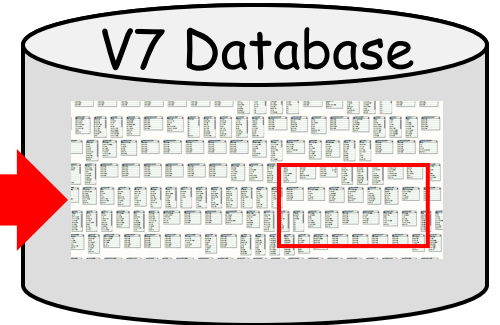
```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>cd c:\
C:\>cd local_75\reports\bi\tools
C:\local_75\reports\bi\tools>importreports app ASSET
Unable to locate tools.jar. Expected to find it in C:\local_75\tools\java\bin\tools.jar
Build file: C:\local_75\reports\bi\tools\importreports.xml

init:
[input] skipping input as property maximo.report.bi.username has already been set
[input] skipping input as property maximo.report.bi.password has already been set
[echo] Using the following settings:
[echo] hostname: localhost
[echo] port: 7001
[echo] ssl: false

app:
[echo] Importing Reports.
[importreports] Importing reports from: C:\local_75\reports\bi\tools\..\reports
[importreports] Importing reports for app: ASSET
[importreports] Importing reports defined in: reports.xml
[importreports] Importing report: asset_availability.rptdesign
```

Importing



```
reporttools.properties

# Maximo or IP address of the machine that has MAXIMO application running in an App Server
maximo.report.bi.username=localhost
# HTTP port of the application server (the port used to access maximo from browser)
maximo.report.bi.port=7001
# Indicate whether the SSL connection is enabled or not
maximo.report.bi.ssl=false
# Note that has access to perform the operation. If you will enter this value at the command prompt, comment the password line below.
maximo.report.bi.userName=reporttools
# Password of the user that has access to perform the operation. If you will enter this value at the command prompt, comment the password line below.
# Output folder used for the export operation
maximo.report.bi.outputFolder=../..../out
# Output folder used for the update operation
maximo.report.bi.update.outputFolder=../..../bi\out
# Indicate whether the report updates should be saved to the database
maximo.report.bi.updateToDatabase=true
# Output folder and file name of the top file for updates
maximo.report.bi.updateFile=../..../update.log
# Classes for reporttools. If Maximo instance is changed from "dev", then replace the "dev" with the instance name.
maximo.report.bi.outputName=dev/reporttools
```

Exporting



reporttools.properties

Guide	User Type	URL
<a href="#">V71 Report Feature Guide</a>	Administrator	<a href="http://ibm.co/Q4s8ji">http://ibm.co/Q4s8ji</a>
<a href="#">V71 Report Developers Guide</a>	Developer	<a href="http://ibm.co/Mv8rjl">http://ibm.co/Mv8rjl</a>
<a href="#">V75 Report Feature Guide</a>	Administrator	<a href="http://ibm.co/NXBQNU">http://ibm.co/NXBQNU</a>
<a href="#">V75 Report Developers Guide</a>	Developer	<a href="http://ibm.co/Lb2bfx">http://ibm.co/Lb2bfx</a>
<a href="#">V7503 Report Developers Guide</a>	Developer	TBA

Table of Contents  
V75 Report Feature Guide



Importing Report Designs into the V75 Database.....	73
Set Up: reporttools.properties.....	74
Import Command Utility.....	76
Export Command Utility.....	78
Export Example.....	79
Additional Export Details.....	80



## V6-V7 Security Comparison

V6: Synchronized Maximo Security Groups thru RSSE

Report Access set in Actuate Management Console

Specific for Unique reporting tool

V7: Single Security Group Repository (Maximo Database)

Report Access set in Maximo Report Administration

Same security settings for all reporting tools

Security Access at Maximo Group Level

# V7 Report Security Levels

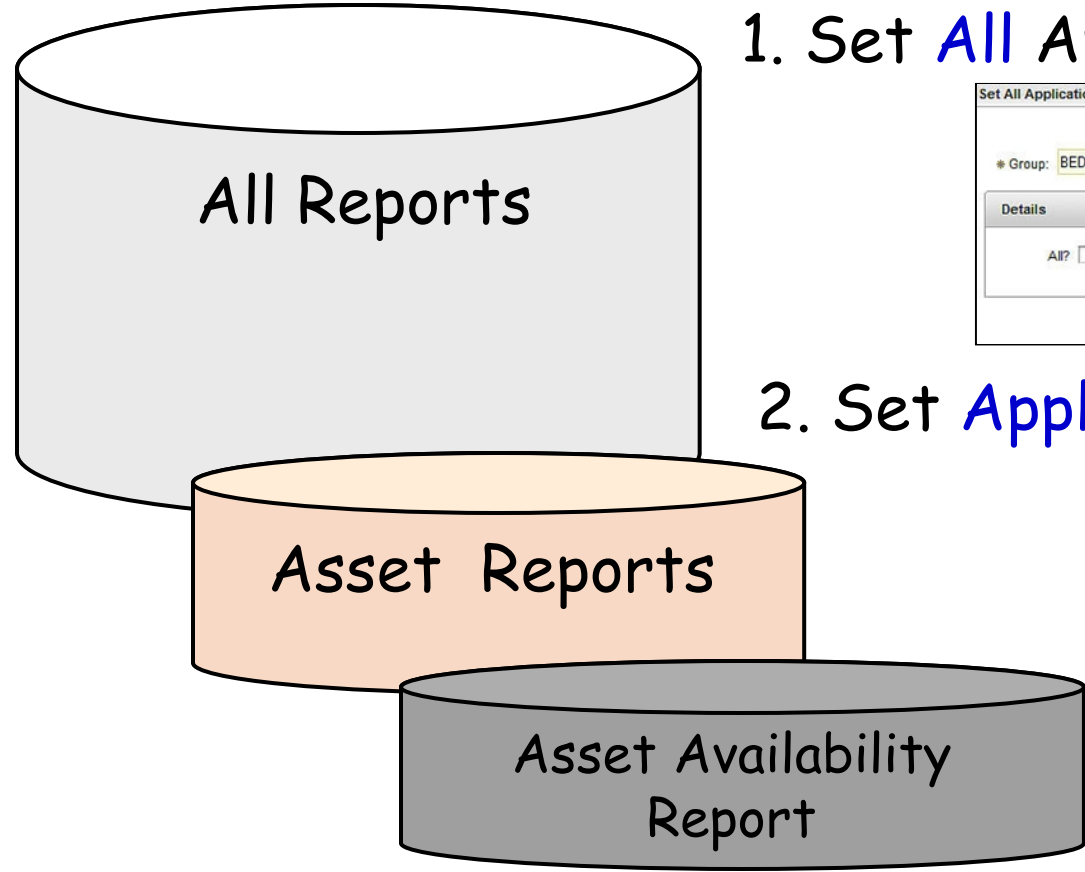
	Application Defined	Applies to
Which security groups can run reports?	Security Group - Run Report	All Report Types
What reports can security groups execute?	Report Administration	All Report Types
What data can user see in his report?	Multiple	BIRT Reports
Which security groups can create Ad Hoc (QBR) reports?	Security Group - Create Report	V7 Ad Hoc (QBR) Only
Which security groups who can create reports - can also enable Public report access?	Security Group - Enable Create Report Public Access	V7 Ad Hoc (QBR) Only
Which ROS can security groups access for their individual report creation?	Report Administration - Set Report Object Structure Security	V7 Ad Hoc (QBR) Only

Blue Text - New in V7

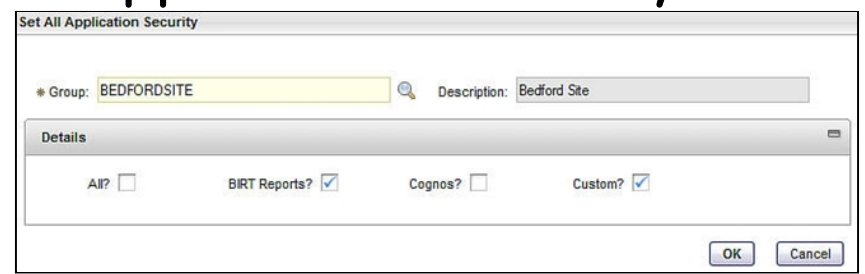
Reference: V7 Feature Guides or <http://ibm.co/NuDJFh>

# What reports can security groups execute?

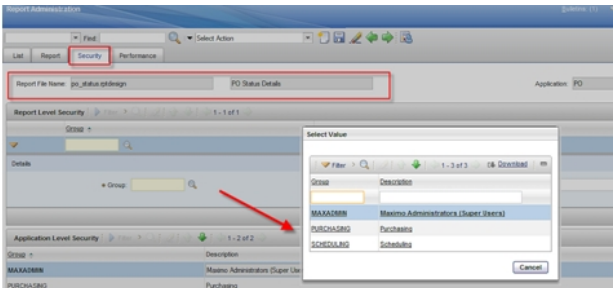
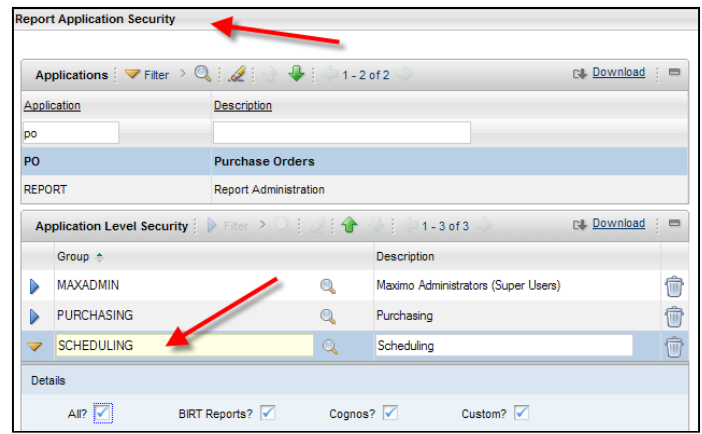
Defined in Report Administration application



1. Set **All** Application Security Action



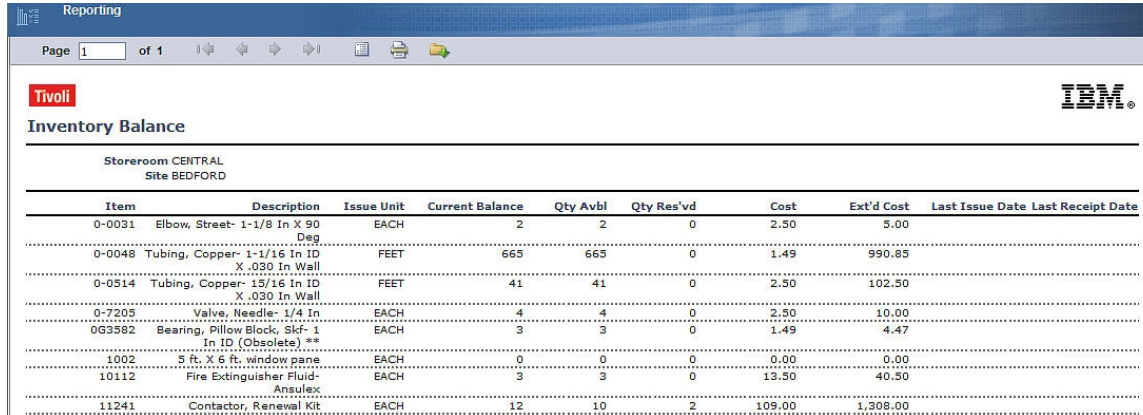
2. Set **Application** Security Action



3. Individual Report Security Access set on Security Tab of Specific Report

# What data can user see in his report?

So users see data they have access to.....



Reporting

Page 1 of 1

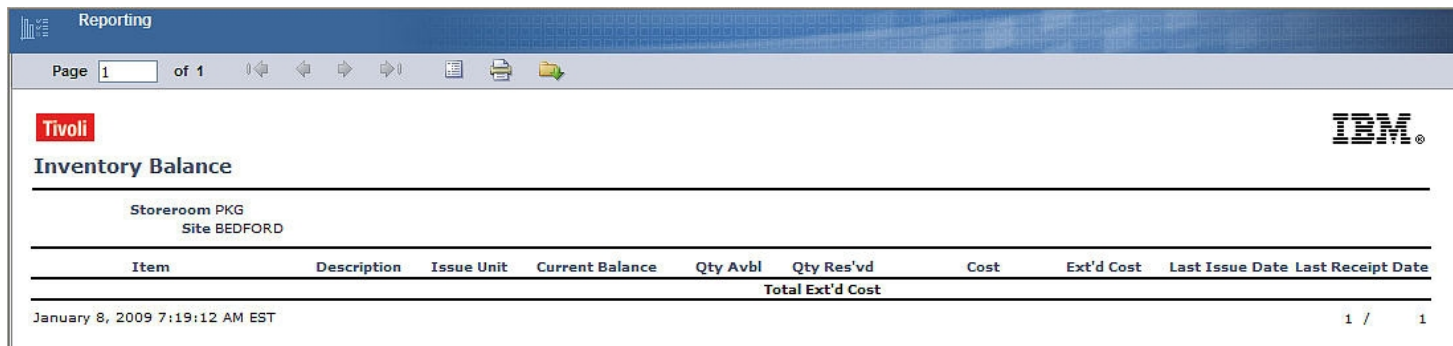
Tivoli IBM

Inventory Balance

Storeroom CENTRAL  
Site BEDFORD

Item	Description	Issue Unit	Current Balance	Qty Avbl	Qty Res'vd	Cost	Ext'd Cost	Last Issue Date	Last Receipt Date
0-0031	Elbow, Street- 1-1/8 In X 90 Deg	EACH	2	2	0	2.50	5.00		
0-0048	Tubing, Copper- 1-1/16 In ID X .030 In Wall	FEET	665	665	0	1.49	990.85		
0-0514	Tubing, Copper- 15/16 In ID X .030 In Wall	FEET	41	41	0	2.50	102.50		
0-7205	Valve, Needle- 1/4 In	EACH	4	4	0	2.50	10.00		
0G3582	Bearing, Pillow Block, Skf- 1 In ID (Obsolete) **	EACH	3	3	0	1.49	4.47		
1002	5 ft. X 6 ft. window pane	EACH	0	0	0	0.00	0.00		
10112	Fire Extinguisher Fluid- Ansulex	EACH	3	3	0	13.50	40.50		
11241	Contactora, Renewal Kit	EACH	12	10	2	109.00	1,308.00		

And not the data they don't have access to.



Reporting

Page 1 of 1

Tivoli IBM

Inventory Balance

Storeroom PKG  
Site BEDFORD

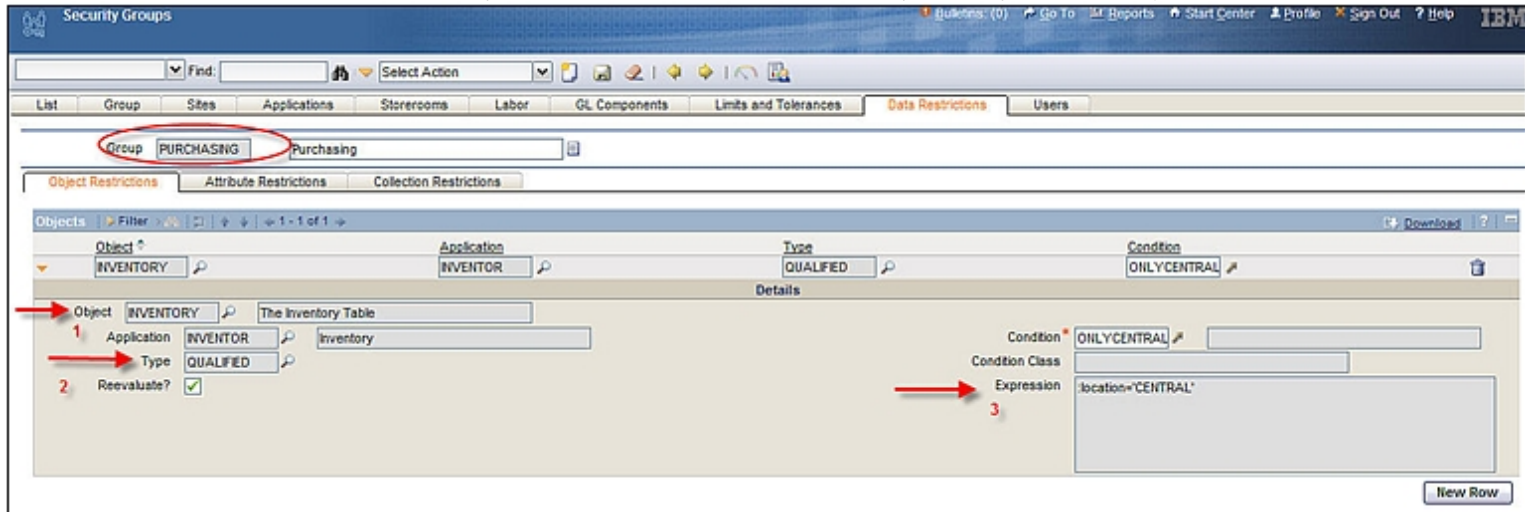
Item	Description	Issue Unit	Current Balance	Qty Avbl	Qty Res'vd	Cost	Ext'd Cost	Last Issue Date	Last Receipt Date
							Total Ext'd Cost		

January 8, 2009 7:19:12 AM EST

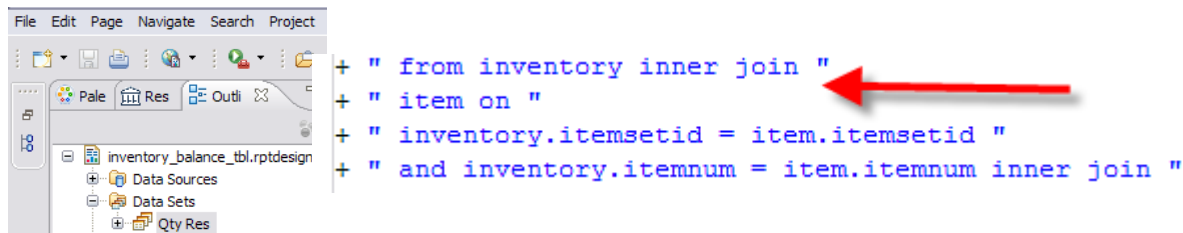
1 / 1

# Data Restrictions - 4 Report Requirements

1. Enabled on main object of application
2. Qualified data restriction type
3. Conditional Expression uses proper syntax



4. Report design file uses main object of application



Step-by-Step Instructions in V71 and V75 Report Feature Guides

# Which security groups can create Ad Hoc (QBR) reports?

Security

Define in Security Group Application  
Security Group *must have access to both* Run Reports and Create Reports

Security Groups

Find: [ ] Select Action [ ]

List Group Sites Applications Storerooms Labor GL Components Limits and Tolerances Data Restrictions Users

Group: MAXADMIN Maximo Administrators (Super Users)

Applications Filter 1 - 1 of 1

Options for Purchase Orders Filter 1 - 3 of 3

Filter 1 - 4 of 4

Description	Grant Access?
Report, Reports	
<b>Create Report</b>	
Delete Report Button	
Enable Create Report (Ad Hoc) Public Access	
<b>Run Reports</b>	

Purchase Orders

Reports

Select a report from the list, or click Create Report to create an ad hoc report.

On Demand Reports | Scheduling Status

Reports to Run Filter 1 - 4 of 4 Download

Description
PO Status Details
Purchase Order Details Report
Vendor Performance
Vendor Performance By Item

Create Report Cancel

Enables 'Create Report'  
Access within selected  
application



Which security groups who can create reports - can also enable Public report access?

Define in Security Group Application Security Group *must first have access to* Create Reports

Query Based Report

Style Select Format Submit

Help Text

Style to Use for the Report

Summary Report. Select this style to create a Summary Report. Summary reports are used to present multiple details on multiple records in row/column format. Summary reports can be grouped and sorted.

Detail Report. Select this Style to Create a Detail Report. Detail reports present details on individual records in categories by separating the individual records by page breaks. Detail reports are dynamically organized by categories.

Report Title\* Asset Analysis of Buffalo Site Save Report?

Public?  Close Window?

Submit Cancel

After granting access, creator of report can set 'Public' Access (Similar to application query access)

Resulting QBR report available to EVERYONE security group

Report Administration

Find: Select Action

List Report **Security** Performance

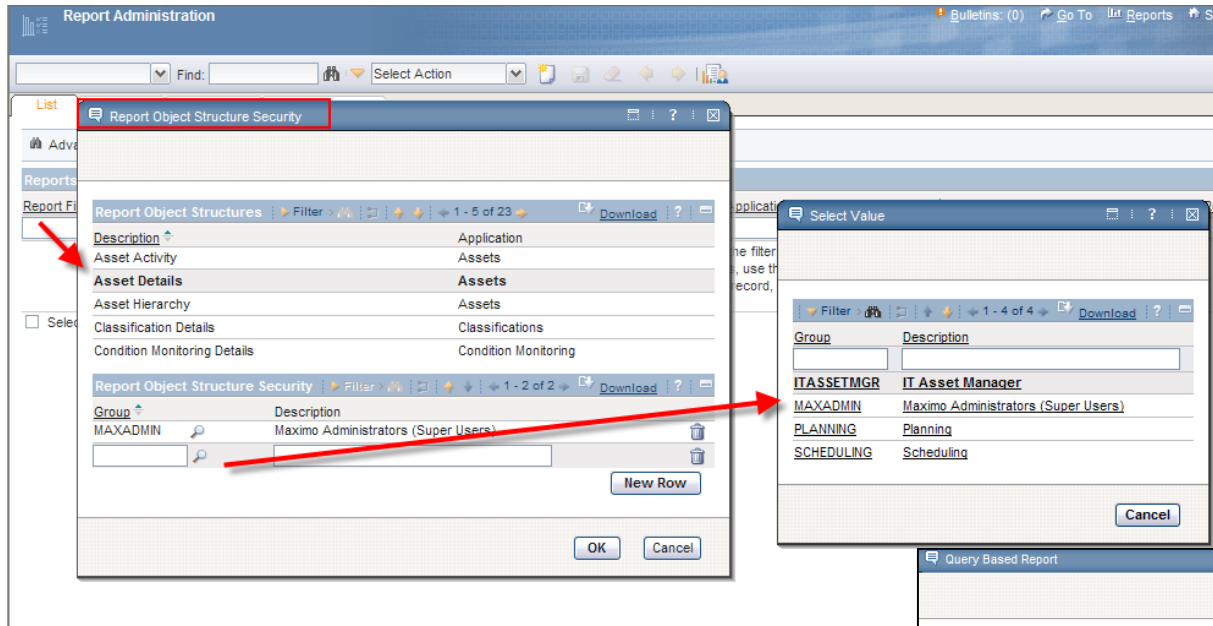
Report File Name asset\_wilson\_1295287472.rptdesign Asset Analysis of Buffalo Site

QBR Created By WILSON

Report Level Security Filter 1 of 1

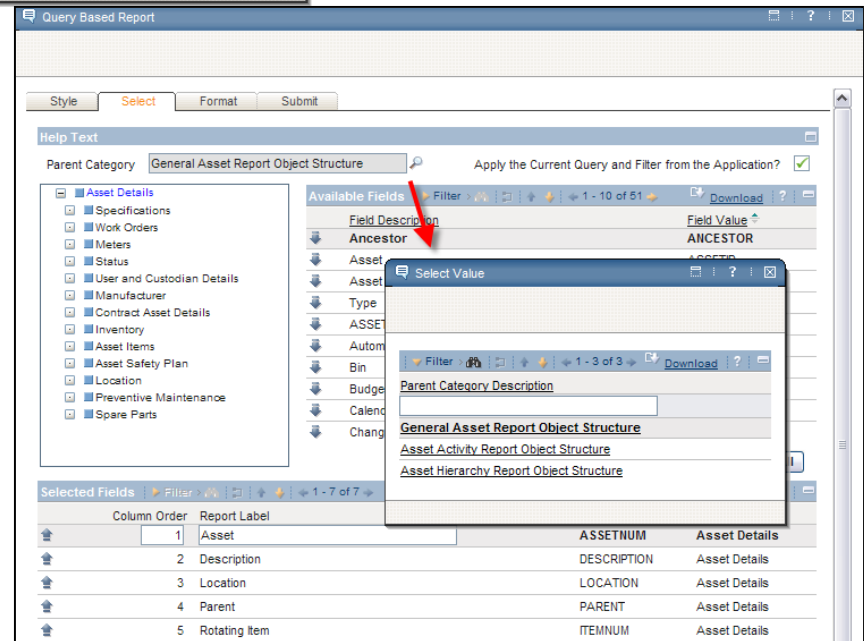
Group	Description
EVERYONE	All Maximo Users

# Which ROS can security groups access for their individual report creation?



Specify in Report Administration which groups have access to which ROS

Enables User to select from Multiple Parent Categories (Report Object Structures.) when creating QBR report





# Reference Materials: Security

Guide	User Type	URL
<a href="#">V75 Report Feature Guide</a>	Administrator	<a href="http://ibm.co/NXBQNU">http://ibm.co/NXBQNU</a>
<a href="#">V71 Report Feature Guide</a>	Administrator	<a href="http://ibm.co/Q4s8ji">http://ibm.co/Q4s8ji</a>
<a href="#">V75 Report Developers Guide</a>	Developer	<a href="http://ibm.co/Lb2bfX">http://ibm.co/Lb2bfX</a>
<a href="#">V7503 Report Developers Guide</a>	Developer	TBA

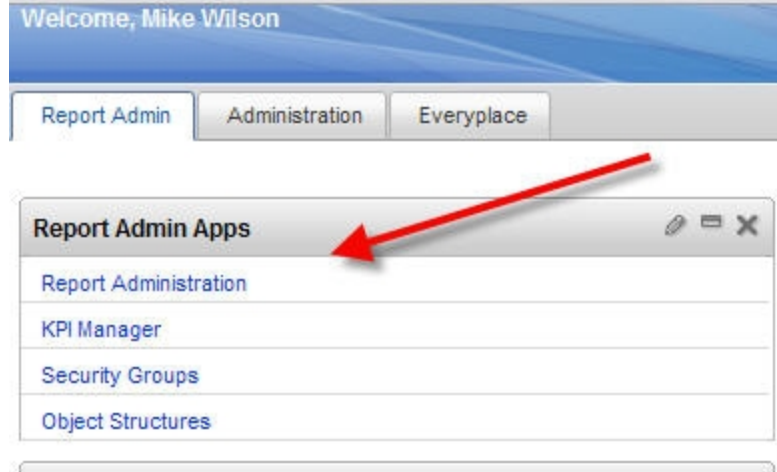
Table of  
Contents



Report Security.....	61
Which security groups can run reports?.....	62
What reports can security groups execute?.....	63
How Security and Report Access Work Together .....	64
Security Notes - Data Restrictions.....	66

V75 Report  
Feature Guide

# V7 Key Reporting Applications



Report Administration: Security, Maintenance, Monitoring

KPI Manager: Defining and Configuring KPIs

Security Groups: Set Run Report, QBR Report Access

Object Structure: Define Report Object Structures (ROS) for QBR, Cognos Meta Data and Application Exporting

# Object Structure Application

## Enhanced in V7 for Reporting

The screenshot displays the 'Object Structures' application interface. The main window shows the 'Object Structure' tab for 'REP\_ASSET'. The 'Consumed By' field is highlighted with a red box and contains the value 'REPORTING'. A red arrow points to the 'Consumed By' field. The 'Select Fields' dialog box is open, showing a list of objects under the 'ASSET' category. The 'ASSET' object is selected in the dialog.

Object Structure: REP\_ASSET    Asset Details

\* Consumed By: REPORTING    Reporting

Application: ASSET

Outbound Definition Class:

Inbound Processing Class:

Source Objects for REP\_ASSET    Filter >

Object	Parent Object	Object Location
ASSET		ASSET
ASSETSPEC	ASSET	ASSET/ASSE
WORKORDER	ASSET	ASSET/WORK
ASSETMETER	ASSET	ASSET/ASSE
ASSETSTATU!	ASSET	ASSET/ASSE

Select Fields

- ASSET
  - ASSETSPEC
  - WORKORDER
  - ASSETMETER
  - ASSETSTATUS
  - ASSETUSERCUST
  - COMPANIES
  - CONTRACTASSET
  - INVENTORY
  - ITEM
  - JPASSETSPLINK
  - LOCATIONS
  - PM
  - SPAREPART
  - ASSETOPSKD
  - ASSETMNTSKD

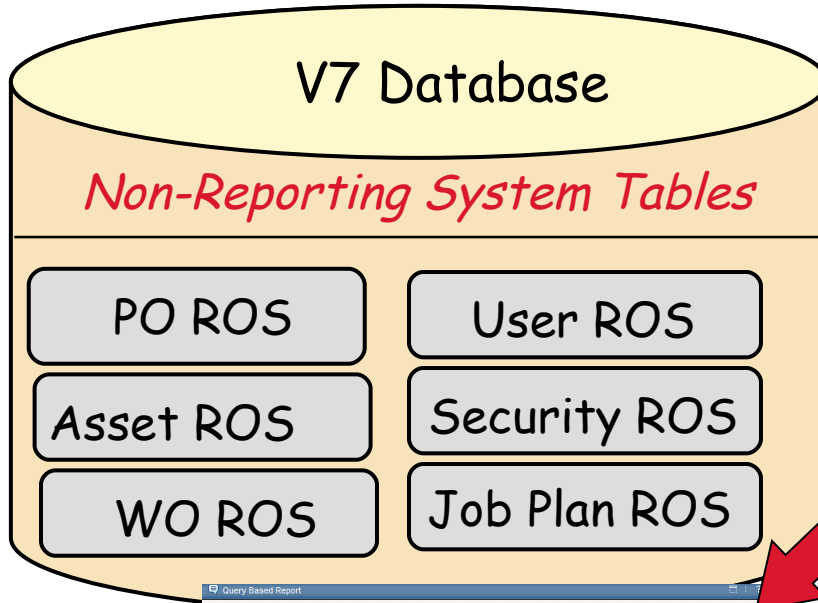
Cancel

\*Depending on products you are licensed for, 20+ ROS delivered OOB

# Report Object Structures (ROS)

Admin  
ROS

## Enable multi table selection for QBR/Ad Hoc Reporting



The "Object Structures" interface shows a search bar with "Find:" and "Select Action" dropdowns. A red box highlights the "Object Structure" tab. Below, the "Object Structure" is set to "REP\_ASSET" and "Consumed By" is "REPORTING". The "Application" is "ASSET". A table below lists "Source Objects for REP\_ASSET":

Object	Parent Object	Object Location Path
ASSET		ASSET
ASSETSPEC	ASSET	ASSET/ASSETSPEC
WORKORDER	ASSET	ASSET/WORKORDER
ASSETMETER	ASSET	ASSET/ASSETMETER
ASSETSTATUS	ASSET	ASSET/ASSETSTATUS

ROS enable Maximo Ad Hoc Reporting thru multiple table creation

The "Query Based Report" interface shows a "Parent Category" of "Asset Details" and a list of "Available Fields" including Ancestor, Asset, Asset Tag, Type, ASSETUD, Automatically Generate Work Orders, Bin, Budgeted, Calendar, and Changed By. The "Selected Fields" section shows a report layout with columns for Asset, Description, Location, Parent, Rotating Item, Linear, and Site.

The "Reporting software" interface shows "Asset specification and Work Order Details". It includes a table for "Specifications" and a table for "Work Order" data.

Asset	Description	Location	Parent	Rotating Item	Linear	Site	Asset Tag	Type	Failure Class	Installation Date	Inventory Cost
11450	Centrifugal Pump	88450	11400	PUMP10M	N	BEEDF04D	6423		PUMPS	5/26/96	9.50

Asset	ASSETSPEC	End Date	End Measure	Start Date	Start Measure	Start Unit of Measure	Start Measure	Mandatory?
11450	158							N
11450	159							N
11450	200							N
11450	201							N
11450	202							N
11450	203							N
11450	204							N

Work Order	Work Type	Status	Station Date	Station Date	Target Start	Target Finish	Scheduled Start	Scheduled Finish
91091	EM	APPR	10/12/01	3:45:43 PM	10/12/01	10:37:43 PM	10/12/01	10:37:43 PM
91092	EM	CLOSE	10/23/98	3:45:39 PM	10/23/98	3:45:39 PM	10/23/98	3:45:39 PM
90941	EM	CLOSE	6/29/99	3:45:43 PM	6/29/99	3:45:43 PM	6/29/99	3:45:43 PM
90942	EM	CLOSE	6/29/99	3:45:47 PM	6/29/99	10:37:47 PM	6/29/99	10:37:47 PM
90961	EM	CLOSE	6/29/99	3:45:39 PM	6/29/99	3:45:39 PM	6/29/99	3:45:39 PM
91061	EM	CLOSE	7/17/01	3:45:38 PM	7/17/01	3:45:38 PM	7/17/01	3:45:38 PM
91091	EM	CLOSE	11/20/98	6:45:02 PM	11/20/98	11:21:45 AM	11/20/98	11:21:45 AM
91051	EM	CLOSE	6/8/01	3:45:41 PM	6/8/01	3:45:41 PM	6/8/01	3:45:41 PM
90901	EM	CLOSE	8/7/98	3:45:46 PM	8/7/98	3:45:46 PM	8/7/98	3:45:46 PM
90961	EM	CLOSE	10/21/99	3:45:44 PM	10/21/99	3:45:44 PM	10/21/99	3:45:44 PM
91071	EM	CLOSE	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM
91021	EM	CLOSE	12/29/99	8:41:58 PM	1/23/00	3:45:44 PM	1/23/00	3:45:44 PM
7492	CP	CLOSE	6/7/96	1:51:00 PM				
90121	EM	CLOSE	1/31/01	3:45:36 PM	1/31/01	3:45:36 PM	1/31/01	3:45:37 PM
90121	EM	CLOSE	1/31/01	3:45:40 PM	1/31/01	3:45:40 PM	1/31/01	3:45:40 PM

# Reference Materials: Report Object Structures

Guide	Description	URL
<a href="#">V75 QBR Guide</a>	Creating ROS Examples	<a href="http://ibm.co/NHykq4">http://ibm.co/NHykq4</a>
<a href="#">V71+ QBR Guide</a>	Creating ROS Examples	<a href="http://ibm.co/NfUcOV">http://ibm.co/NfUcOV</a>
<a href="#">Creating/Customizing ROS Wiki Page</a>	Includes examples of adding LD and Audit objects to ROS	<a href="http://ibm.co/NCBf8K">http://ibm.co/NCBf8K</a>
<a href="#">Extending ROS for Application Exporting</a>	Example of multiple uses of ROS	<a href="http://ibm.co/NCBEYS">http://ibm.co/NCBEYS</a>
<a href="#">Maximizing Use of ROS Best Practice</a>	Bilog detailing benefits of investing in ROS, including multiple links	<a href="http://ibm.co/ILbI7y">http://ibm.co/ILbI7y</a>

Wiki Page  
example of  
enabling LD for  
WO ROS



Database Configuration

Find:  Select Action

List Object Attributes Indexes Relationships

Object WORKORDER \*The WORKORDER Table Status

Relationships Filter 1 - 1 of 1

Relationship	Child Object	Where Clause	Remarks
LONGDESCRIPTION	LONGDESCRIP	ldkey=:workorderid and ldowntable = *WORKORDER	

Details

Relationship: LONGDESCRIPTION Child Object: LONGDESCRIP

Where Clause: ldkey=:workorderid and ldowntable = \*WORKORDER Remarks: Relationship added to enable Report Object Structure for Workorder to Long Description Table

# V7 Report Administration

Admin

RepAdmin

## Multiple New Tabs, Attributes to enable single report administration application

The screenshot displays the 'Report Administration' web application interface. At the top, there is a navigation bar with 'Bulletins: (0)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below this is a search bar with 'Find:' and a 'Select Action' dropdown. A tabbed interface shows 'List', 'Report', 'Security', and 'Performance' tabs, with a red arrow pointing to the 'Performance' tab. The main content area is divided into two sections: 'Report Details' and 'Settings'.

**Report Details:**

- Report File Name: woprint.rptdesign
- Work Order Details: [Text Field]
- Application: WOTRACK
- Report Type: BIRT
- Imported by: MAXADMIN
- \* Report Folder: WOTRACK
- Last Import Date: 7/2/12 12:05 PM

**Settings:**

- Limit Records?
- \* Max Record Limit: 50
- Schedule Only?
- Priority: 2
- No Request Page?
- Use Where Clause?
- Display Order: [Text Field]
- \* Toolbar Sequence: 2
- Browser View?
- \* Browser View Location: NONE
- Direct Print?
- \* Direct Print Location: ALL
- Direct Print with Attachments?
- \* Direct Print with Attachments Location: NONE

Buttons at the bottom right: 'Generate Request Page' and 'Preview'.

# Report Admin - New V7 Security Tab

Highlights which security groups have access to report at report and application level

Can add/remove security groups at Report Level

The screenshot displays the 'Report Administration' interface. At the top, there are navigation links for 'Bulletins: (0)', 'Go To', 'Reports', and 'Start Cent'. Below this is a search bar with 'Find:' and a 'Select Action' dropdown. The main navigation tabs are 'List', 'Report', 'Security' (highlighted with a red box), and 'Performance'. The 'Report File Name' is 'woprint.rptdesign', the 'Work Order Details' is 'Work Order Details', and the 'Application' is 'WOTRACK'. The 'Report Level Security' section (also highlighted with a red box) shows a table with one entry: 'MAINTENANCI' (Group) and 'Maintenance Crew' (Description). Below this is a 'Details' section showing 'Group: MAINTENANCI' and 'Description: Maintenance Crew'. The 'Application Level Security' section (highlighted with a red box) shows a table with three entries: 'MAXADMIN' (Group) and 'Maximo Administrators (Super Users)' (Description), and 'OPSMGR' (Group) and 'Operations Manager' (Description).

Group	Description
MAINTENANCI	Maintenance Crew

Group	Description
MAXADMIN	Maximo Administrators (Super Users)
OPSMGR	Operations Manager

# Report Admin - New V7 Performance Tab

Highlights individual report performance and enablers in 3 sections

1. Historical Values: Last Run Values from **REPORTUSAGELOG**
2. Settings: Performance Enabling Settings, ex. Record Limits
3. Reserved Processing Time: For Schedule Only Reports

The screenshot displays the 'Report Administration' interface, specifically the 'Performance' tab. The interface is divided into three main sections, each highlighted with a red box:

- Historical Values:** This section shows the 'Last Run Date' as 7/17/12 8:23 PM, 'Last Run By' as WILSON, and 'Last Run Duration (HH:MM:SS)' as 0:00:23.
- Settings:** This section includes a 'Limit Records?' checkbox which is checked, with a '\* Max Record Limit' of 50. It also shows a 'Priority' of 2 and a 'Schedule Only?' checkbox which is unchecked.
- Reserved Processing Time:** This section is currently empty, showing a filter and a count of 0 - 0 of 0.

The top of the interface includes a navigation bar with 'Buletins: (0)', 'Go To', 'Reports', 'Start Center', and 'Profi'. Below this is a search bar with 'Find:' and a 'Select Action' dropdown. The main content area has tabs for 'List', 'Report', 'Security', and 'Performance'. The 'Performance' tab is active, showing the 'Report File Name' as 'woprint.rptdesign', 'Work Order Details', and 'Application' as 'WOTRACK'.



# Report Admin - Report Usage

In addition to information on Performance Tab...

The screenshot shows the 'Report Administration' interface with the 'Performance' tab selected. The 'Report File Name' is 'woprint.rptdesign'. The 'Historical Values' section displays the following information:

Last Run Date:	7/17/12 8:23 PM	Last Run Duration (HH:MM:SS):	0:00:23
Last Run By:	WILSON		

Delivered report highlights usage, run times

Report Usage									
Report Name:	Asset Measurement History				File Name:	asset_measurehist.rptdesign			
Application:	ASSET								
	Start Date	End Date	Run Time (HH:MM:SS)	User	Application	Scheduled?	Email File Type	Success?	
	7/17/12	3:38:03 PM	7/17/12 3:38:07 PM	00:00:04	WILSON	ASSET	N	Y	
Report Name:	PO Status Details				File Name:	po_status.rptdesign			
Application:	PO								
	Start Date	End Date	Run Time (HH:MM:SS)	User	Application	Scheduled?	Email File Type	Success?	
	7/15/12	1:00:36 PM	7/15/12 1:00:46 PM	00:00:09	LIBERI	PO	Y	XLS	N
	7/8/12	1:00:19 PM	7/8/12 1:00:31 PM	00:00:13	LIBERI	PO	Y	XLS	N
	7/2/12	12:06:37 PM	7/2/12 12:06:47 PM	00:00:10	LIBERI	PO	Y	XLS	N

Notes:

1. Usage information held in REPORTUSAGELOG
2. REPORTUSAGECLEANUP Cron task clears data from REPORTUSAGELOG for configured time period

# Report Admin - V7 Updated Record Limits

V6: Could define 'Detail' report which enabled report to execute against 200 records or less

V7: Configurable. Set 'Limit Records' field and **you** define the Maximo Record limit **by report**

REPORT.DETAILED and REPORT.RECORDLIMIT

**Benefit:** Prevents End Users from Executing Large Queries, causing negative performance impacts

The screenshot displays the 'Report Administration' web interface. The 'Settings' section is expanded, showing various configuration options for the report 'woprint.rptdesign'. A red arrow points to the 'Limit Records?' checkbox, which is checked, and the 'Max Record Limit' field, which is set to 50. Other settings include 'No Request Page?', 'Use Where Clause?', 'Display Order', 'Toolbar Sequence', 'Browser View?', 'Browser View Location', 'Direct Print?', 'Direct Print Location', and 'Direct Print with Attachments?'. The 'Generate Request Page' and 'Preview' buttons are visible at the bottom right.

# V7 Report Admin Action Menu

*12 New Actions* for Security, Importing, Viewing Processing and Managing Reports



The screenshot displays the 'Report Administration' web interface. At the top, there is a search bar with a 'Find:' label and a magnifying glass icon. Below this are four tabs: 'List', 'Report', 'Security', and 'Performance'. The 'Report' tab is selected. The main area shows report details: 'Report File Name: woprint.rptdesign', 'Report Type: BIRT', and 'Imported by: MAXADMIN'. Below this is a 'Settings' section with several options: 'Limit Records?' (checked), '\* Max Record Limit: 50', 'Schedule Only?' (unchecked), and 'Priority:'. On the right side, a 'Select Action' dropdown menu is open, listing 12 actions. The first three actions are highlighted in blue: 'View Report Processing', 'View Scheduled Reports', and 'Set Application Security'. The remaining actions are: 'Set All Application Security', 'Set Report Schedule Limits', 'View Group Security', 'Import Report', 'Import Library File', 'View Report Dependencies', 'View Library File', 'Set Report Object Structure Security', 'Configure Data Sources', 'Add to Bookmarks', 'Duplicate Report', 'Delete Report', 'Launch Cognos Administration', and 'Run Reports'. A red box highlights the entire 'Select Action' menu.

# V7 Report Administration Action Menu

Admin/Actions

Action	Description	Introduced
View Report Processing	Displays reports that are either being processed by the report engine, or are in the queue waiting to be processed	7.1.1.4
View Scheduled Reports	Enables the administrator a view of all the scheduled reports currently in the system.	7.1.1.1
Set Application Security	Grants report security access to all reports within a selected application	7.1.1.1
Set All Application Security	Grants reports security access to all reports for all applications that a security group has access to	7.1.1.1
Set Report Schedule Limits	Enables you to limit the number of report schedule requests your users submit	V7.5.0.0
View Group Security	Displays which applications the selected group has report access to	7.1.1.1

# V7 Report Administration Action Menu

Admin/Actions

Action	Description	Introduced
Import Report	Imports individual report into V75 database repository	V7.1.1.1
Import Library File	Imports individual library into V75 database repository	V7.1.1.1
View Report Dependencies	Displays report files that the selected file is dependant on	V7.1.1.1
View Library File	Displays all library files in V75 database repository	V7.1.1.1
Set Report Object Structure Security	Report Object Structures (ROS) enable Ad Hoc Reporting. This action defines which security groups have access to the individual ROS that can be available within an application	V7.1.1.6
Configure Data Sources	Enables use of non-production database for report execution	V7.1.1.1

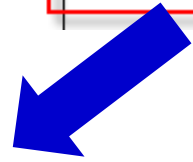
## V7x Feature Guides

V75 page 99

<http://ibm.co/NXBQNU>



Set All Application Security	Grants reports security access to all reports for all applications that a security group has access to	Page 103
Set Report Schedule Limits	Enables you to limit the number of report schedule requests your users submit	Page 109
View Group Security	Displays which applications the selected group has report access to	Page 104
Import Report	Imports individual report into V75 database repository	Page 105



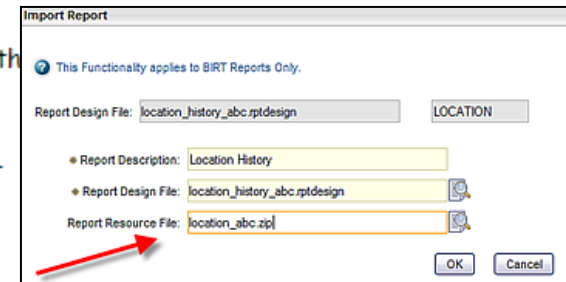
For each action, details functionality and key notes

### Individual Report Importing thru Report Administration

If you have modified only a single report, or are registering a small number of reports, you may want to use the Report Administration application to import these report designs. To do this, locate the individual design file, and from the action menu, select 'Import Report'.

#### Notes:

1. Libraries must be imported before report designs. If the report design references a library that has not been imported, the report design will not import.
  - If the report references an existing library (MaximoSystemLibrary.rptlibrary) that is already in the database, you do not need to import another copy of that library.
2. Importing overwrites the existing records in the database with the new design/and or dependant report files.



*Report and Data Options*

*BIRT Reporting*

Configuration

Administration



Design

Development

Execution

Property Files, Cron Tasks, Database Objects

Key Features

1. Repository, Import

2. Security

3. Report Object Structures

4. Report Administration Application

5. Access - Direct Print, Report Portlet

6. Localization

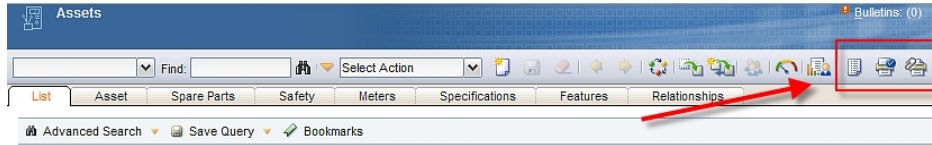
*Cognos Reporting*

*Reference Materials and Questions*

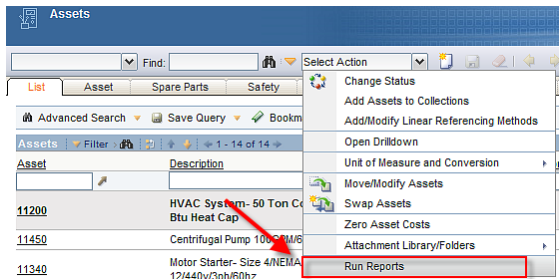
# Report Access - V7 Updates

## Inside Application

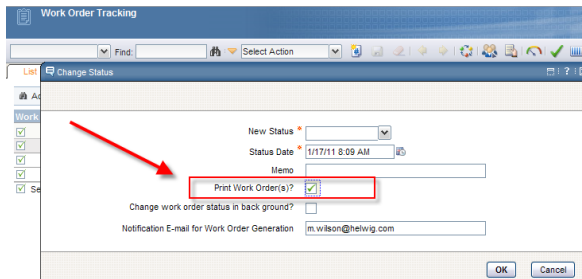
### Toolbar Access - Updated V7



### Run Reports Action - Updated V7

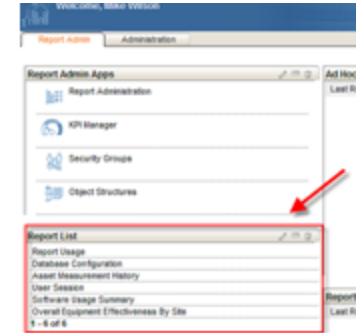


## Status Change



## Outside Application

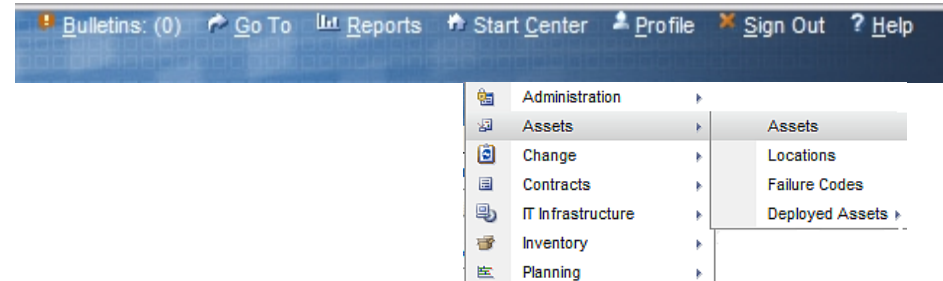
### Report List Portlet - New V7



## Multi KPI Linkage - Updated V7



## Report Menu





# V7 Report Toolbar Access (Quick Link Icons)

## *Updated Functionality in V7*

BV = Browser View 

Displays report in separate report browser session by clicking on icon from application toolbar






DP = Direct Print 

Prints report to your default printer by clicking on icon from application toolbar

DPA= Direct Print with Attachments 

Prints report and any printable attachments to your default printer by clicking on icon from application toolbar

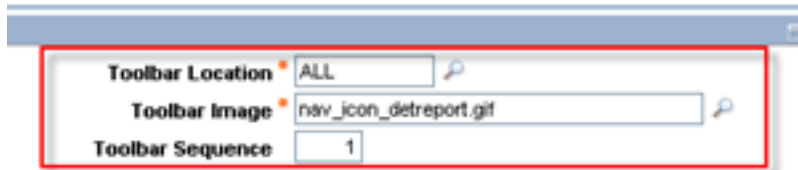
# V6-V7 Toolbar Access Comparison

	Version 6x	Version 7x
Direct Link to Report	QL = Quick Link 	BV = Browser View 
Icon File	nav_icon_detreport.gif	nav_icon_detreport.gif
Database Fields		REPORT.QL, REPORT.QLLOC
Direct Print		DP = Direct Print 
Icon File	nav_icon_overview.gif	nav_icon_PrintToDefault.gif
Database Fields	REPORT.DP	REPORT.DP, REPORT.DPLOC
DP w/Attachments		DPA = DP with Attachments
Icon File	nav_icon_printwithattachments.gif	nav_icon_PrintWithAttachments.gif
Database Fields	REPORT.PAD	REPORT.PAD 

# Toolbar Access - Key V7 Updates

1. DP/DPA enabled in V7 with iText (V7.5)\*
2. No updates required to report design files (Prior override to method/addition of hidden parameter in V6)
3. Only print 'printable' attachments in V7\*\*
4. Increasing flexibility to configure reports in V7
  - V6 single report configuration vs V7 multi configuration

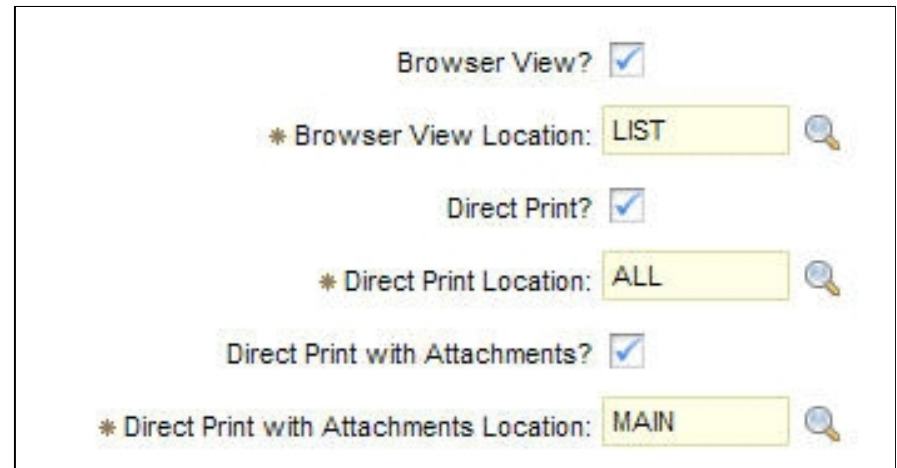
## Report Admin Settings - V6



A screenshot of the Report Admin Settings interface for V6. The settings are displayed in a table-like format with a red border around the input fields. The settings are:

Toolbar Location	ALL
Toolbar Image	nav_icon_detreport.gif
Toolbar Sequence	1

## Report Admin Settings - V7



A screenshot of the Report Admin Settings interface for V7. The settings are displayed in a table-like format with a black border around the input fields. The settings are:

Browser View?	<input checked="" type="checkbox"/>
* Browser View Location:	LIST
Direct Print?	<input checked="" type="checkbox"/>
* Direct Print Location:	ALL
Direct Print with Attachments?	<input checked="" type="checkbox"/>
* Direct Print with Attachments Location:	MAIN

\*V7.1 DP/DPA enabled via SmartJPrint

\*\*Printable files include pdf, jpg, txt, Microsoft files etc

# Direct Print (DP) Process in V7.5



Version 7.5

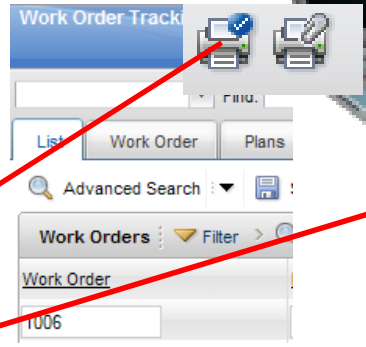
1

User initiates DP request



2

Server processes report request. Gets report pdf and passes back 'script injected pdf' to client Adobe Reader



JRE 1.6

Adobe Reader

3

Adobe prints to user's default printer



Task Title			
Task ID	Description	Status	Measurement
01	Check tank, split tank, replace	APPS	Value
02	Check wheelband rollers and cleaning	APPS	0

Work Order Details		
1006 Electric Cart Train-Up	Electric Cart	Job Name: DP12100
Asset: 12300	Location: 000000	Requester: 00100
CD:	Shipping and Receiving Department	
Actual Work:	Bill: 001000	Job Date: 01/12/00
Actual Finish:	Working: 1	Requester: 00100
Target Work:	Work Type: CR	Label:
Target Finish:	Module: APPS	Version:
Actual Work:	Project:	Owner:
Actual Finish:	Failure Class:	Owner Group:
Report Date:	Problem Code:	Service:
Approved By: The User	CD Account: 000-300-111	Service Group:
		Class/Location:



# How V7 Report files and attachments printed

File Type	Printing Mechanism
PDF (Including Report File and any PDF attachments)	iText thru Client's Adobe Reader
Images and Text Files (.jpg, .gif, .txt, .csv)	Java Print Functionality
Microsoft Documents (.doc, xls, ppt)	Local, Client Active X Controls (Not Active X from V7 Server) <i>**Internet Explorer Only</i> Firefox does not support Active X Controls

# Reference Materials: Toolbar Access

Document/Wiki Page	User Type	URL
<a href="#">V75 Report Toolbar Access</a>	Administrator	<a href="http://ibm.co/KgsJfp">http://ibm.co/KgsJfp</a>
<a href="#">V71 Report Toolbar Access</a>	Administrator	<a href="http://ibm.co/HcYTXz">http://ibm.co/HcYTXz</a>
<a href="#">V7 Duplex Direct Printing</a>	Wiki Page	<a href="http://ibm.co/Hgw8V8">http://ibm.co/Hgw8V8</a>
<a href="#">V7 Report Design Guide</a>	Designer	<a href="http://ibm.co/O0sNf2">http://ibm.co/O0sNf2</a>

Overview .....	3
Browser View (BV).....	4
Direct Print (DP).....	6
Direct Print with Attachments (DPA).....	8
Application Toolbar Configuration Details.....	10
Application Toolbar Configuration Field Details.....	11
Application Toolbar Display Examples .....	12
Direct Print and Direct Print with Attachment Architecture.....	13
Client Machine Prerequisites.....	13
Adobe Reader Recommended Settings.....	14
Internet Explorer Recommended Settings.....	17
Direct Printing Process.....	19
Direct Printing with Attachments Process.....	20
Additional Information - Direct Print with Attachments.....	21
Trouble Shooting - General tips.....	22
Key Property Files for DP, DPA Functionality.....	24

## Table of Contents

## V75 Report Toolbar Access



# Report Access: Report List Portlet

## New Functionality in V7

1. Listing of favorite reports in Start Center Portlet
2. Any Report type (BIRT, Cognos etc) can be configured
3. Configure for reports with User Inputted Parameters

The screenshot displays the IBM Cognos Report Administration interface. On the left, the 'Report Admin Apps' sidebar is visible, with the 'Report List' portlet highlighted in a red box. A red arrow points from this portlet to the main content area. The main content area shows the 'Ad Hoc Reporting' section, which includes a 'Number of Ad Hoc Reports' gauge and a 'Security Groups' table. The 'Security Groups' table has a 'Report List Setup' entry highlighted in a red box. Below this, the 'Options for Report List Setup' table is shown, with a 'Grant Access' checkbox checked for the 'Read/Modify access to Report List Portlet' row. A red arrow points to this checkbox.

Description	Main Object/Table
report list	
<b>Report List Setup</b>	Report List Portlet

Description	Grant Access
Read/Modify access to Report List Portlet	<input checked="" type="checkbox"/>

## Notes:

1. Must enable Security Group access to 'Report List Setup' (Report Portlet application)
2. Additional details in V7 Report Feature Guides <http://ibm.co/NXBQNU>



## *Capitalizing on Maximo Functionality/Processes*

### 1. Property Files used to enable report design localization

-- Consistent process for all report types

(V6: Database Updates for .rox, actuatei18ntext.properties for .dox)

### 2. Label Tab in Report Administration no longer used in V7

# V7 Report Localization

Guide	Description	URL
Localization Guide	Details how localization enabled for request pages, labels and data	<a href="http://ibm.co/NA62Rm">http://ibm.co/NA62Rm</a>
Wiki Pages	<a href="http://ibm.co/ncGP1h">http://ibm.co/ncGP1h</a>	<a href="http://ibm.co/nqoi2T">http://ibm.co/nqoi2T</a>
BiLog...Localization	Links to localization docs and wiki pages	<a href="http://ibm.co/POtTIa">http://ibm.co/POtTIa</a>

Information on how localization works, set up steps and how to enable for your custom reports



Reporting

Page 2 of 2

**Tivoli** software

**Details of Asset Failures**

Asset	11430	Start Date	1/1/95
Description	Centrifugal Pump 100GPM/60FT HD	End Date	1/1/05
Location	BR430	Asset Moved	N
Description	Condensate Return Pump- Centrifugal/100GPM/60FTHD		
Site	BEDFORD		

Problem Code	Description	Most Recent Failure	Most Recent WO	# Failures
<a href="#">LEAK</a>	Leaking	7/31/96	<a href="#">2221</a>	10
<a href="#">STOPPED</a>	Stopped	7/13/99	<a href="#">6951</a>	6
<a href="#">LOWVOL</a>	Low Volume	7/11/96	<a href="#">2551</a>	4

## *Report and Data Options*

### *BIRT Reporting*

Configuration

Administration

**Design** 

Development

Execution

#### Key Features

1. Best Practice Recommendations
2. Understand Report Capabilities
3. Understand User Requirements
4. Communicate thru Report Spec
5. Report Community

Property Files, Cron Tasks, Database Objects

## *Cognos Reporting*

## *Reference Materials and Questions*

1. Focus on Report Design Phase
2. Best Practices to include ALL data analysis options
3. Increased sharing of information  
Ex. Report Design Document  
SMC Report Community

## Understand Report Capabilities

- Report Types
- Parameters
- Content
- System Level Functionality

*AND*

## Understand User Requirements

- Purpose of Report
- How it will be accessed within Maximo
- Page Size and Orientation

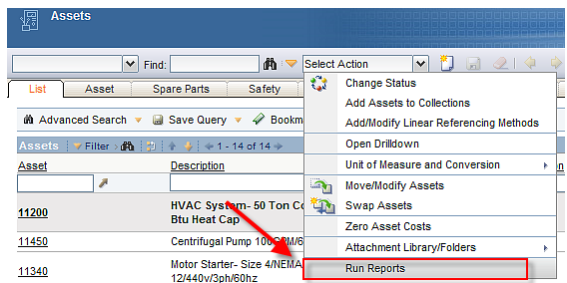
*AND*

## Communicate thru Report Specification

# Maximo Report User Access

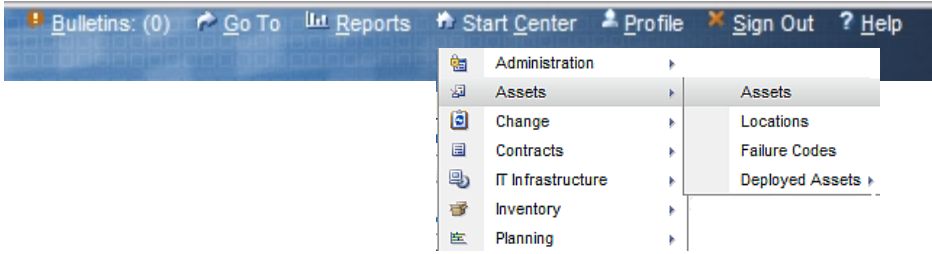
## Inside Application

Select Action - Run Reports

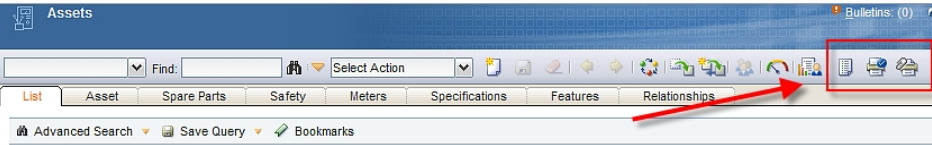


## Outside Application

Report Menu



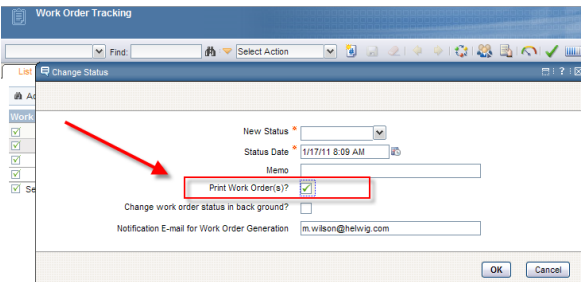
## Toolbar Icons



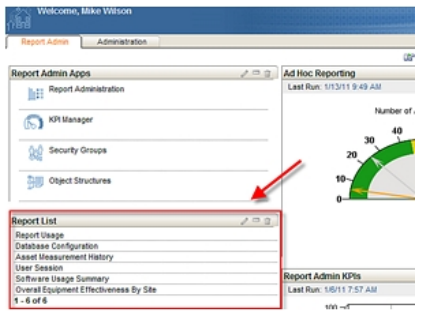
## KPI Linkage



## Status Change



## Report List Portlet



1. Parameterized Reports
2. Application Report (Launch in Context)
3. Both. Parameterized and Application Report

# 1. Parameterized Reports

Design

The screenshot displays a software interface for managing assets and reports. The main window is titled 'Assets' and contains a search bar, a 'Select Action' dropdown, and a list of asset categories: List, Asset, Spare Parts, Safety, Meters, and Specification. Below this is an 'Advanced Search' section with 'Save Query' and 'Bookmarks' options. The 'Assets' list shows two records: 11450 and 11430. A 'Reports' panel is overlaid on the interface, showing a list of reports to run. A red arrow points from the 'Details of Asset Failures' report in this list to the 'Parameters' section of the report configuration. The 'Parameters' section includes input fields for Site, Location, Asset, Start Date, End Date, Asset Type, Asset Status, and Asset Moved?. A red arrow points from the 'Parameters' section to the 'Details of Asset Failures by Location' report. This report includes a pie chart showing the number of failures by problem code. The pie chart data is as follows:

Problem Code	Number of Failures
LEAK	10
STOPPED	6
LOWVOL	4
LOWPRES	2

In V7, maximum number of parameterized values increased in a single report to 23. This includes up to 15 Non-Date Time Parameters, and 8 Date-Time parameters.



# 2. Application Report (Launch in Context)

Assets

Find: [ ] Select Action [ ]

List Asset Spare Parts Safety Meters Specifications Features Relationships

Advanced Search Save Query Bookmarks

Assets Filter 1 - 14 of 14

Asset	Description	Location
11200	HVAC System- 50 Ton Cool Cap/ 450000 Btu Heat Cap	BR200
11450	Centrifugal Pump 100GPM/60FTHD	BR450
11340	Motor Starter- Size 4/NE 12/440v/3ph/60hz	
11320	Emergency Generator	

Fill in the fields in the Parameters section below and click Submit to run the report. If no parameters are displayed, the report will execute against the current/selected record set. Optionally, fill out the Schedule and Email Sections to schedule report run times and receive the scheduled report via email.

Parameters

Schedule

Immediate  
 At this Time [ ]

Asset Details

11430: Centrifugal Pump 100GPM/60FT HD

Site: BEDFORD	Type:
Status: OPERATING	Priority: 2
Maintain Hierarchy? N	Serial Number: 377-9A
Parent: 11400	Location: BR430
Parent Description: Boiler- 50,000 Lb/Hr/ Gas Fired/ Water Tube	Location Desc: Condensate Return Pump- Centrifugal/ 100GPM/60FTHD

Purchase Details

Vendor	Manufacturer	Install Date	Warranty Exp Date	Purchase Price	Replace Cost
IR	IR	4/7/95	1/29/11	18500.00	23000.00

Downtime

Asset Up?	Total Downtime	Changed By	Changed Date
1	40.5	WILSON	2/9/05 8:01:37 AM

Sub Assemblies

Asset	Asset Description	Location	Location Description
23972	Motor- 10hp/1750rpm/TEFC/254T Frame/440v/3ph/60hz	BR431	Motor- 10hp/1750rpm/TEFC/254T Frame/440v/3ph/60hz

# 3. Both. Parameterized and Application Report

Request Page

AND

Fill in the fields in the Parameters section below and click Submit to run the report. If no parameters are displayed, the report will execute against the currently selected record set. Optionally, fill out the Schedule and Email Sections to schedule report run times and receive the scheduled report via email.

Parameters

Location \* BR

Schedule

Rotating Item

pump

CSPUMP10

PUMP100

PUMP100

PUMP100

PUMP100

PUMP100

PUMP100

PUMP100

PUMP100

Assets

Asset Description

CS11430 BEDFORD FT-H

11480 Centr

11470 Centr

12222 Centr

CROSS\_SITE Centr

MYPUMP Centr

11450 Centr

11430 Centr

Select Records

Reporting

Page 1 of 2

Tivoli software

Asset Details

11430: Centrifugal Pump 100GPM/60FT HD

Site:	BEDFORD	Type:	
Status:	OPERATING	Priority:	2
Maintain Hierarchy?	N	Serial Number:	377-9A
Parent:	11400	Location:	BR430
Parent Description:	Boiler- 50,000 Lb/Hr/ Gas Fired/ Water Tube	Location Desc:	Condensate Return Pump- /60FTHD

Purchase Details

Vendor	Manufacturer	Install Date	Warranty Exp Date	Purchase Price
IR	IR	4/7/95	1/29/11	18500.00

Downtime

Asset Up?	Total Downtime	Changed By	Changed Date

# Parameter Comparison



	Application	Parameterized	Both
Example	Asset Details	Details of Asset Failures	Custom
Number of Parameters	0	8	8
Dynamic - Multiple Query Variations	✓		
Record Limits	✓		
Minimize Clicks	✓		
Browser View	✓		
Direct Print	✓		
Direct Print with Attachments	✓		
Best Access outside Application		✓	

- Purpose of Report
- How it will be accessed within Maximo
- Page Size and Orientation



- Confirms understanding of report requirements
  - Work thru any design questions before report developed
  - Enables traceability of design changes
  
- Details report requirements for Report Developer, who
  - May be located in different physical location
  - May have different primary language
  - May be working on multiple reports for multiple users
  
- Clarifies report requirements for QA/Test

1. Specification Details
2. Report Details
3. Parameters
4. Report Content
5. Report Mockup
6. Testing Considerations

# Inventory Balance

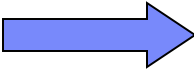
## Report Specification

ABC Corporation

### Specification Details

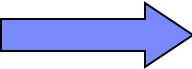
This document is intended to convey the details and requirements of the report specified above.

#### Document Control Information



	Name and Title	Company	Date
Author	Pam Denny, Designer	IBM	7/3/12
Approver	Wilson, IT Admin	ABC Company	7/3/12
Owner			

#### Revision Control Information



Number	Revision Description	Changed By	Date
	Original Release	Pam Denny	7/3/12
1	Added subheader 1 formatting notes	Pam Denny	7/12/12

# Breaking down and detailing requirements

## Report Details

### File and Layout Details

	Details
Title	Inventory Balance
File Name	Inventory_balance_abc.rptdesign
Application(s) Report Accessed From	Inventory
Directory Folder Where Report Stored	INVENTOR
XML File Name	reports_abc.xml
Properties File Name	properties_abc.xml
Report Type	List Report
Report Base (Template, Delivered Report, or Ad Hoc Report)	Maximo List Template
Page Size	Letter
Page Orientation	Portrait

### Subheader 1 Fields

Display Value	Field Value	Format Notes
Item	INVENTORY.ITEMNUM	
Description	ITEM.DESCRPTION	
Issue Unit	INVENTORY.ISSUEUNIT	
Current Balance	Sum(INVBALANCES.CURBAL) where Condition Code is the Same for Item #	Number. 2 decimal places
Qty Avbl	Current Quantity – Quantity Reserved	Number. 2 decimal places
Qty Res'vd	Sum(INVRESERVE.RESERVEDQTY) where Condition Code is the Same for Item #	Number. 2 decimal places
Cost	Dependant on MAXVARS Value. See Note 4 below.	Number. 2 decimal places
Ext'd Cost	Cost * Current Balance	Number. 2 decimal places
Last Issue Date	Max(MATUSETRANS.ACTUALDATE) where MATUSETRANS.ISSUETYPE = ISSUE	Date Only. Short Format.
Last Receipt Date	Max(MATRECTRANS.ACTUALDATE) where MATRECTRANS.ISSUETYPE = RECEIPT	Date Only. Short Format.



Service Management Connect - Virtual Community to Network/Share/Learn from other Maximo Report Users

<http://ibm.co/zFmoP2>

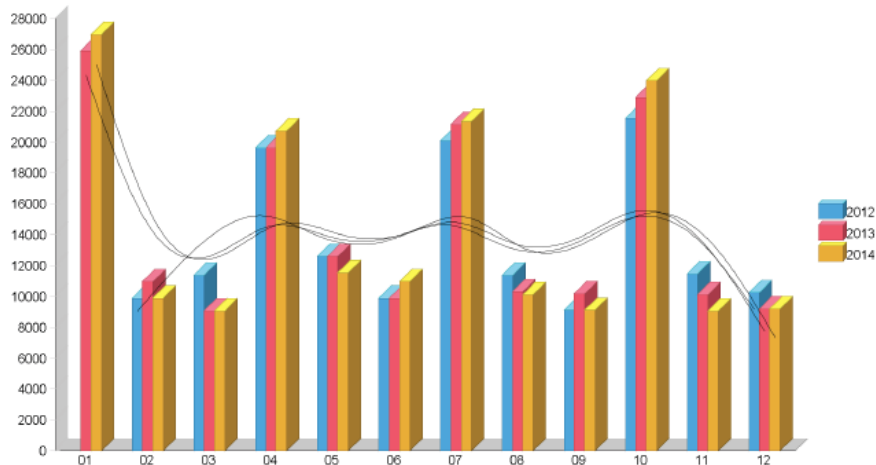
## Maximo Reporting

61 members | Updated by 0YH8\_Samanth\_Prasad | Jul 4 | Tags: analysis, asset\_management, bilog, birt, cognos, custom, data, ibmeam, maximo, oob, report, smc\_am\_reports, v7

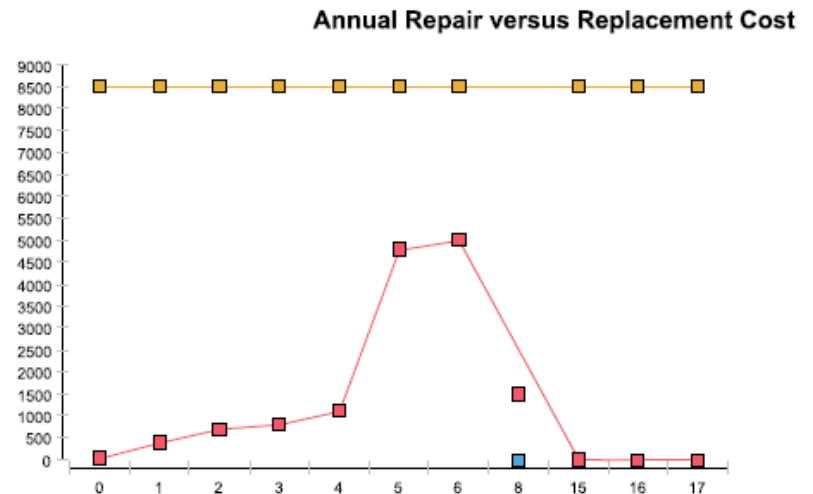
Welcome to the Maximo Asset Management Reporting community! Join and use this technical community to connect with other Maximo Report Developers, Administrators Users. You can also share your report examples and best practices - and learn from others! Check out the Files on the left han

## File Sharing

Forecast PM Costing by Months



Average Maintenance Cost per year by Rotable Asset Type



Information	Description	Location
V7 Report Design Guide	Reviews design considerations including access, templates and parameters	<a href="http://ibm.co/O0sNf2">http://ibm.co/O0sNf2</a>
V7 Report Page Information	Details Page Size, Orientation and Area	<a href="http://ibm.co/MR3rn4">http://ibm.co/MR3rn4</a>
Report Design Wiki Page	Tips on items to consider when designing a report	<a href="http://ibm.co/LVvIKO">http://ibm.co/LVvIKO</a>
BiLog: Flexibility...Report Parameters Types and Benefits	Recap of functionality including details, links, errors	<a href="http://ibm.co/rZKVPO">http://ibm.co/rZKVPO</a>

**Considerations when designing reports**

Reports contain defined sql, sorting, grouping and fields resulting in formatted data set. They can also be enabled for security access.

Each individual report must be designed, developed, tested and maintained. Therefore, it is critical that

**What Application will the report be accessed from?**

Reports are associated with applications. Therefore, early in the design phase you must decide which application can be passed correctly to a report.

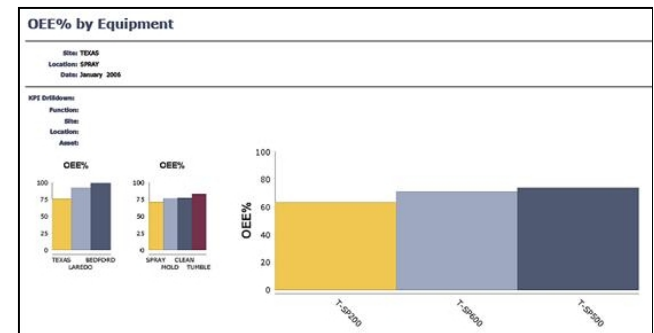
**Tip**  
There must be a relationship between the application and the report or the report application.

**Should you include graphs?**

Reports can have a variety of graphs including pie, bar, and line charts. Additionally, control limits can be line, and line with control limits.

For a list of delivered reports with graphs see the [V71 Report Booklet](#) or the [V75 Report Booklet](#).

Rendering a graph within a design file affects report performance. If a report needs to be available for [Considerations](#) for additional details.



*Report and Data Options*

*BIRT Reporting*

Configuration

Administration

Design

**Development**



Execution

- Key Features
1. Report Design Tool
  2. File Structure
  3. Development Process
  4. Custom Reports

Property Files, Cron Tasks, Database Objects

*Cognos Reporting*

*Reference Materials and Questions*

# V7 Report *Development KEY* Features

KEY

Eclipse Use/Skill Set common among Developers

Report XML Design Files

Ease of identifying V7 design file changes

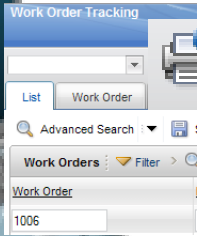
- Proprietary V6 design files prevented this

Multiple Resources Available on How-To's/Customizations

# V7 BIRT Reporting Architecture

Development  
Designer

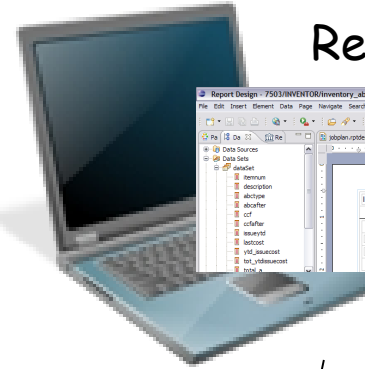
Maximo User



- Browser
- Adobe Reader
- JRE

Client

Report Developer



- Eclipse
- BIRT Designer
- JRE

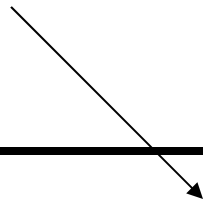
Server



- Application Server
- Version 7
- Eclipse
- BIRT Engine
- BIRT Viewer



Report Design Files



# BIRT Designer 3.7.1 Install

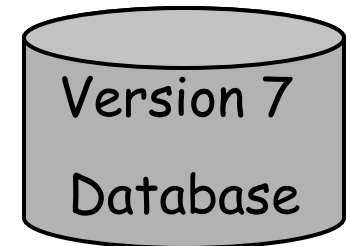
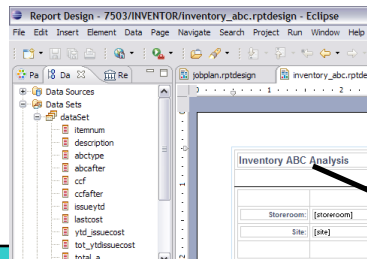
1. Download Report Designer
2. Configure Report Designer for V7x
3. Update mxreportdatasources.properties  
(Optional encryption for un/pw values available in 7.5)
4. Access the BIRT Designer
5. Import V7x Project



Eclipse

BIRT Designer

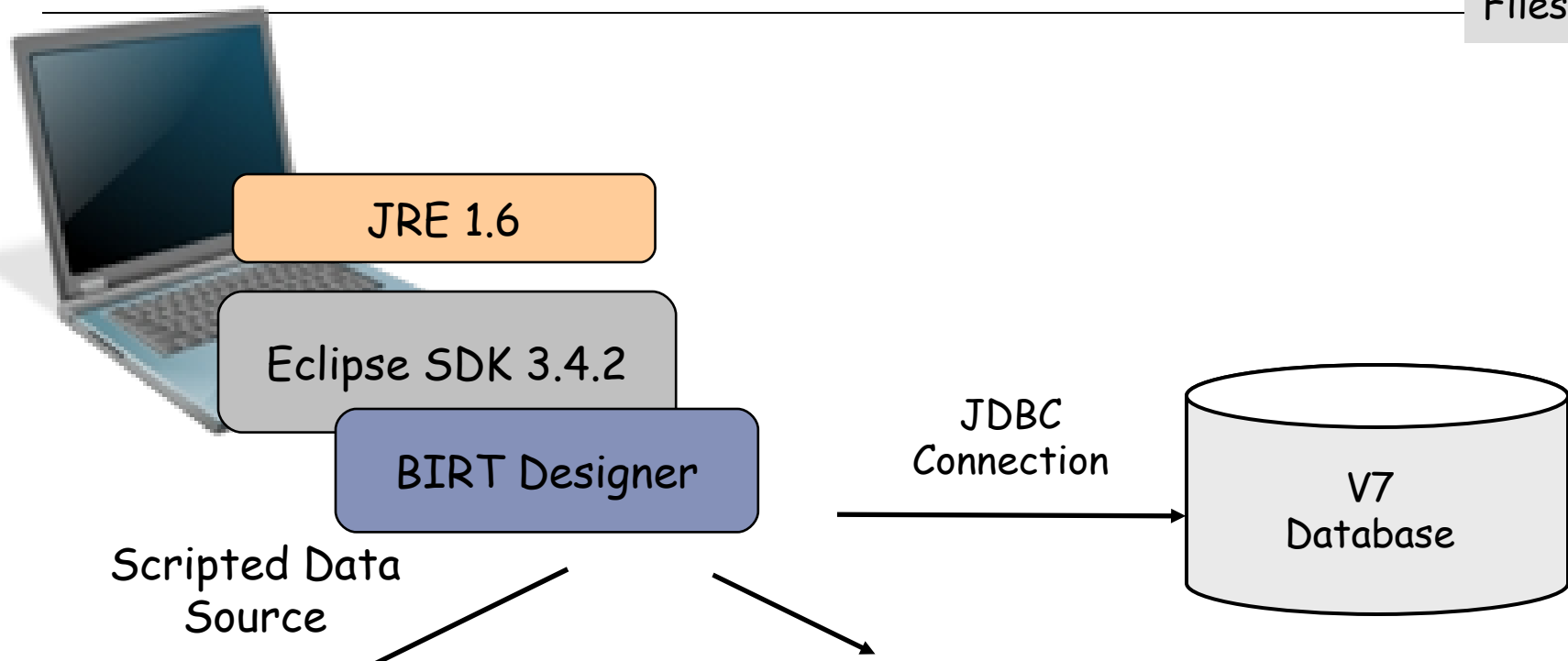
JRE



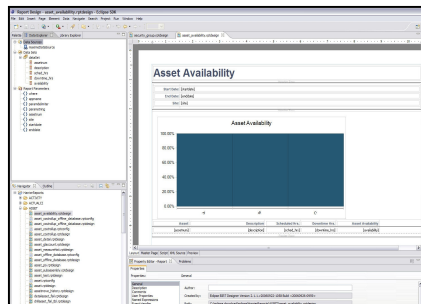
mxreportdatasources.properties\*

```
maximoDataSource.url=jdbc:db2://localhost:50000/DB2973A
maximoDataSource.driver=com.ibm.db2.jcc.DB2Driver
maximoDataSource.username=maximo
maximoDataSource.password=maximo
maximoDataSource.schemaowner=maximo
```

# V7 Reporting: Design Files



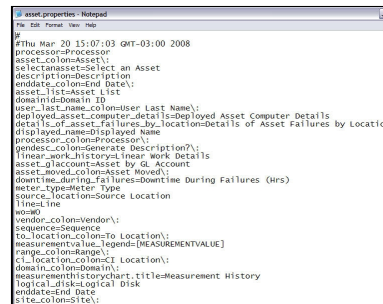
## 1. Design File



Defines report content/format

<V75>\reports\birt\reports\app

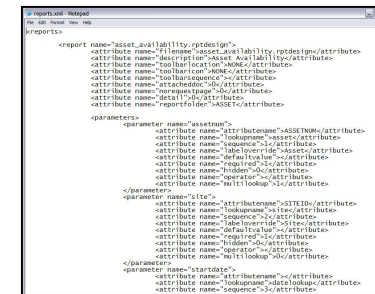
## 2. Properties File



Details Text Values

<V75>\reports\birt\libraries

## 3. Reports.xml File



For Importing Report

<V75>\reports\birt\reports\app

# V7 Reporting: Design File Structure

File Name	File Dependency	Description	Location
jobplan.rptdesign		Job Plan List Design File	<V7>\reports\ birt\reports\JOBPLAN
	MaximoSystem Library. rptlibrary	Maximo System Library	<V7>\reports\ birt\libraries
	Resources (.gif files)	Logo Files	<V7>\reports\ birt\libraries
jobplan.properties		Text Values of Column Labels, Title	<V7>\reports\ birt\libraries
reports.xml		Information on report and its parameters. Used for Importing	<V7>\reports\ birt\reports\JOBPLAN



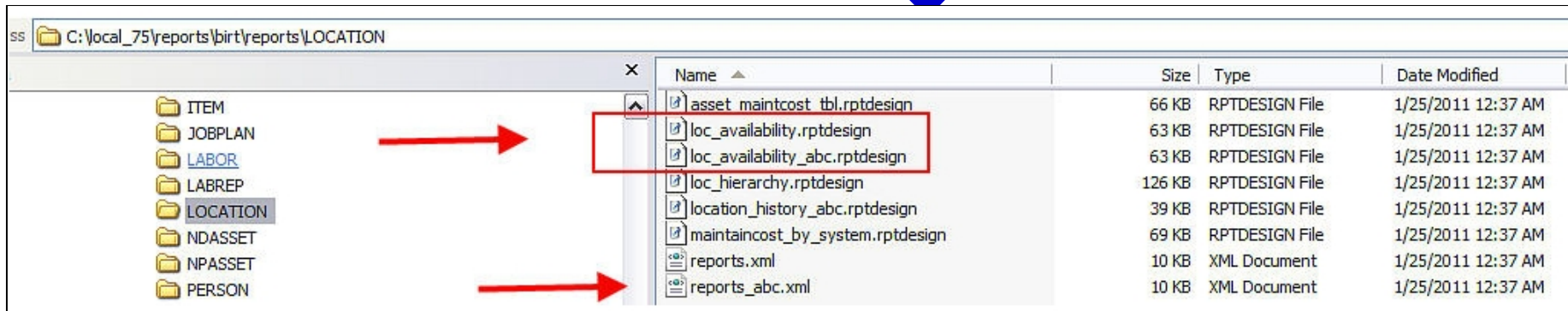
# V6 vs V7 Report File Comparison

File Name		Version 6	Version 7
Design File	Specifies report content, format	.rod (Report, eQuery) .vts (eSS)	.rptdesign
Compiled Design File	Compiled report file	.rox (Report), .dox (eQuery) .vtf (eSS)	NA
Report Output	Report Results	.roi, .doi	NA
Library File	Reusable Features	.rol	.rptlibrary
Template	Base of report design file	.rod	rpttemplate
Property File	Text Values	Within .rod file	.properties
Resource File	Images	Within .rod file	.zip

# V7 Report Development: Custom File Structure

Guide	Description	URL
V75, V71 Report Development Guides	Detailed text, screenshots	<a href="http://ibm.co/Lb2bfx">http://ibm.co/Lb2bfx</a>
		<a href="http://ibm.co/Mv8rjl">http://ibm.co/Mv8rjl</a>
Wiki and BiLog	Additional screenshots	<a href="http://ibm.co/Q7Hani">http://ibm.co/Q7Hani</a>
BiLog	And information	<a href="http://ibm.co/uuRU8y">http://ibm.co/uuRU8y</a>

File structure recommendations to insure fix packs/releases do not over-write your customizations

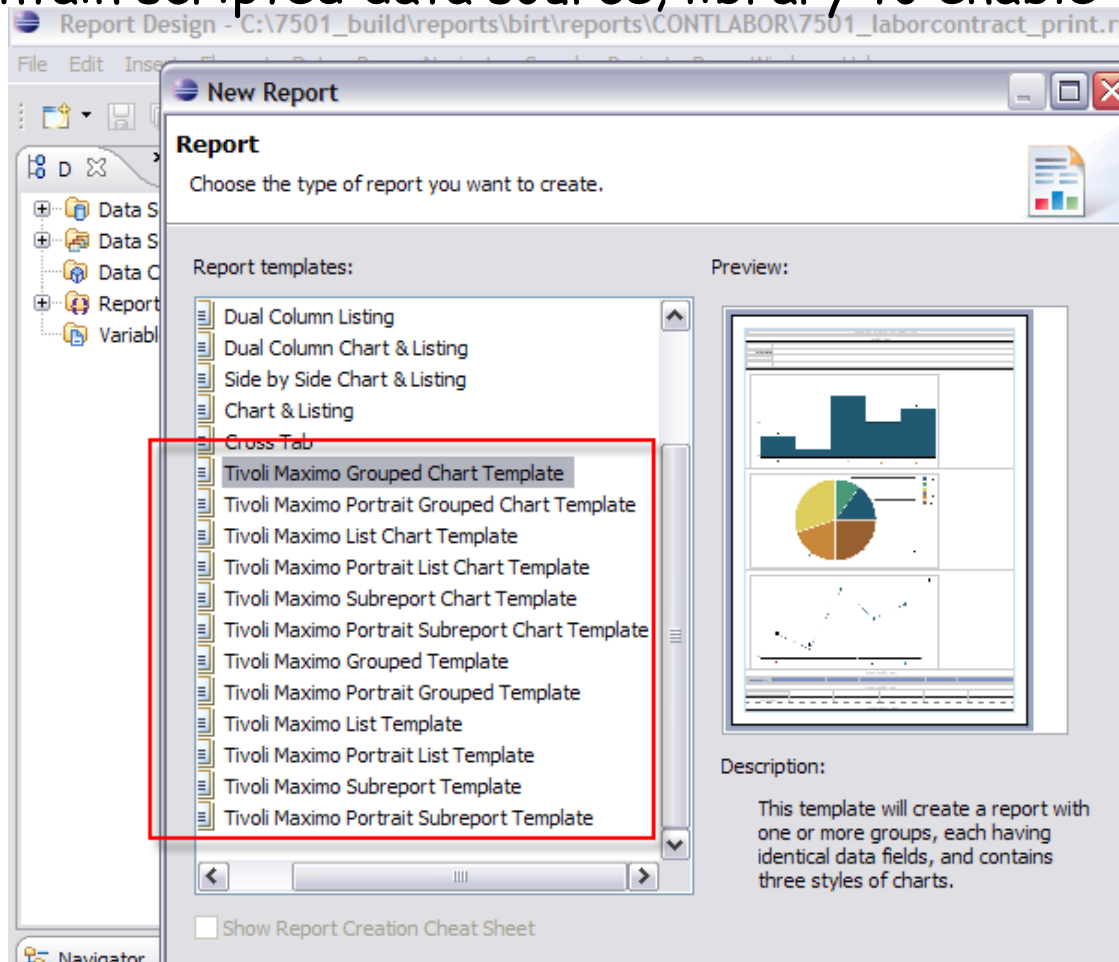


# Report Development Process

Open Up BIRT Report Designer

Select Maximo report template\* (Needed to enable integration)

-Contain scripted data source, library to enable V7 integration



\*or a copy of delivered report or exported QBR

# Top Level Report Development Steps

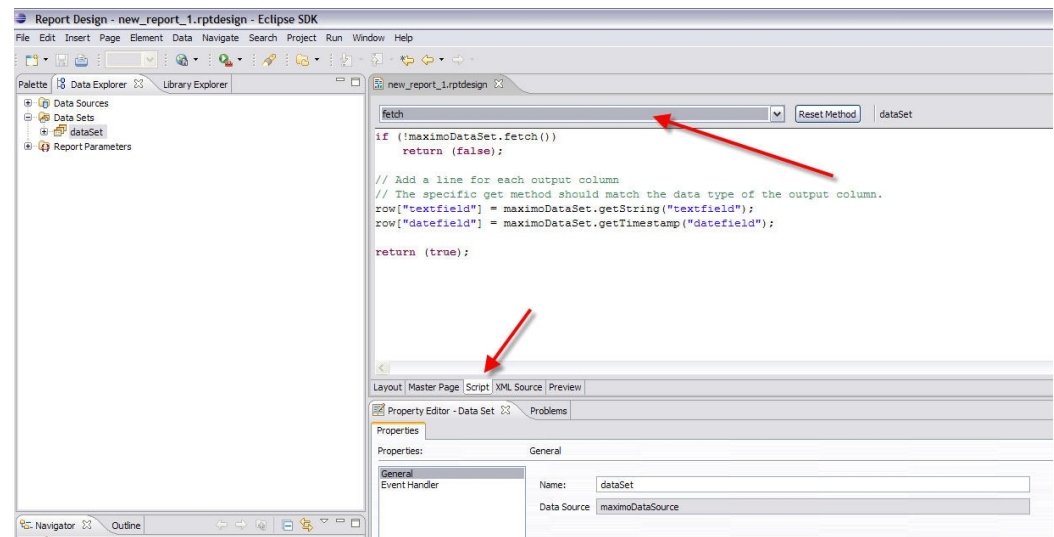
1. Specify the query
2. Create the output columns
3. Update Fetch to map the query columns to the output columns
4. Format the report
5. Define the property file

## Step-by-step example in V7 Report Development Guides

V75: <http://ibm.co/Lb2bfx>

V7503: TBA

V71: <http://ibm.co/Mv8rjl>



# Maximo-Specific Report Development Details

Guide	Description	URL
<a href="#">V75 Report Development</a>	Provide details on installing and configuring BIRT Designer	<a href="http://ibm.co/Lb2bfx">http://ibm.co/Lb2bfx</a>
V7503 Report Development	Step-by-step instructions of creating first report	Available August 2012
<a href="#">V71 Report Development</a>	Numerous other details including data sets, methods, parameters, hyperlinks and RTF	<a href="http://ibm.co/Mv8rjl">http://ibm.co/Mv8rjl</a>

Subset of Table of Contents from V75 Report Development Guide



Queries in the Fetch Method.....	59
Testing for Null.....	60
Scalar Functions.....	60
Enabling Rich Text Formatting.....	61
Bound Parameters.....	65
Unbound parameters.....	66
Specifying Bound parameters in the report design.....	68
Specifying Unbound parameters in the report design.....	68
Multi-select or single-select unbound parameters.....	68
Parsing Unbound Parameters.....	70
Creating Custom Report Parameter Lookups.....	71
A. Using valuelists for parameter lookups with fields that have domains.....	72
B. Using existing lookups.....	76
C. Modifying existing lookups.....	77
Parameter Notes.....	82
Number of Parameter Values.....	82
Utilizing Parameter Values on a Report's Request Page.....	82
Boolean Parameter Values.....	82
Optional Parameters.....	83
YORN Lookup.....	83
Viewing Parameters.....	84

# V7 Report Development: Tips to get Started

Guide	Description	URL
Developing Reports - Where to Start Details	Wiki page with Links to customization examples, guides and best practices	<a href="http://ibm.co/Nxs8oZ">http://ibm.co/Nxs8oZ</a>
BiLog: ..How to get Started with V7 Report Development	BiLog on getting started with report development	<a href="http://ibm.co/AxpHwy">http://ibm.co/AxpHwy</a>

## Developing Reports - Where to Start Details

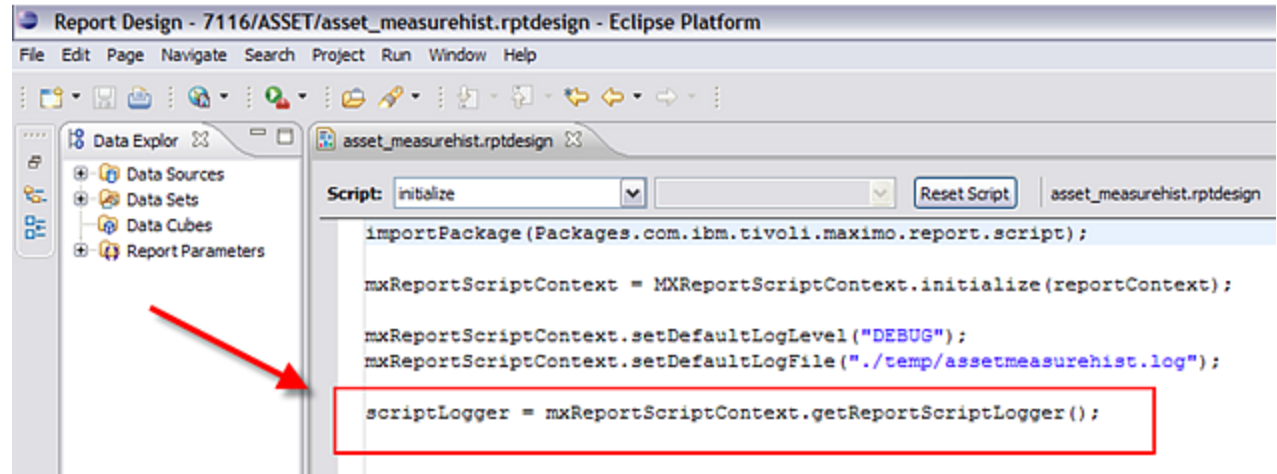
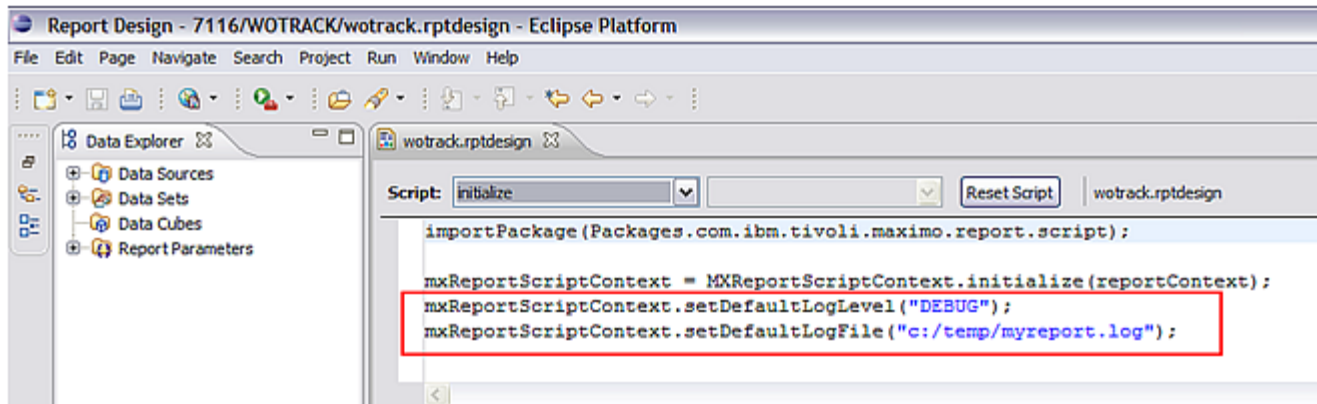
Wiki Page with report development info/links



- [1 Prerequisite Recommendations](#)
  - [1.1 Evaluate all Data Analysis Options](#)
  - [1.2 Confirm Report Specification Available](#)
  - [1.3 Insure Technical Skills of Report Developer](#)
  - [1.4 Confirm Familiarity with Maximo Database and Relationships](#)
  - [1.5 Install and Configure BIRT Report Development Tool for Version 7](#)
- [2 Key Reference Materials for Developing Reports](#)
  - [2.1 Report Developer's Guide](#)
  - [2.2 V7 Report Booklets](#)
  - [2.3 Modifying Delivered Reports](#)
  - [2.4 Utilizing Ad Hoc Reporting for Report Development](#)
  - [2.5 Custom report file structure recommendations](#)
- [3 Other Key Information](#)
  - [3.1 Custom Report Techniques](#)
  - [3.2 Report Reference Material Matrix](#)

# Troubleshooting Report Design files

<p>Report Logging Information</p>	<p>Details logging features within report designer, and also how to enable within Maximo</p>	<p><a href="http://ibm.co/OkwSxt">http://ibm.co/OkwSxt</a></p>
-----------------------------------	----------------------------------------------------------------------------------------------	----------------------------------------------------------------



# Modifying Delivered Reports Details

Modifying the Work  
Order Details Report  
in V7

How to customize  
delivered report example

<http://ibm.co/OYDX4v>

Step by Step Instructions of...  
How to delete fields... and enable others in Work Order Details Report

```
Script: open [v] [v] [v] Reset Script planned.LaborDataSet
1 plannedLaborDataSet = MXReportDataSetProvider.create(this.getDataSource().getName(), this.getName());
2 plannedLaborDataSet.open();
3
4 var sqlText = new String();
5
6 // Add query to sqlText variable.
7 sqlText = "select wplabor.laborcode,wplabor.craft, wplabor.skilllevel, wplabor.vendor, wplabor.contractnum, "
8 + "wplabor.quantity, wplabor.orgid, wplabor.laborhrs, wplabor.rate, "
9 + "(wplabor.quantity * wplabor.laborhrs * wplabor.rate) as linecost, "
10 + "workorder.istask, workorder.taskid, wplabor.ratehaschanged "
11 + "from wplabor, workorder "
12 + "where workorder.wonum = wplabor.wonum "
13 + "and ((workorder.parent = " + rows[0]["wonum"].replace('/','g','') + " and workorder.taskid is not null) "
14 + "or (workorder.wonum = " + rows[0]["wonum"].replace('/','g','') + " and workorder.taskid is null)) "
15 + "and wplabor.siteid = workorder.siteid "
16 + "and wplabor.siteid = " + rows[0]["siteid"] + " "
17 + "and wplabor.orgid = " + rows[0]["orgid"] + " "
18 + "order by workorder.taskid "
19 ;
20
21 plannedLaborDataSet.setQuery(sqlText);
```

Property Editor - Table [v] Problems [v]

Properties Binding Groups Map Highlights Sorting Filters

Name	Display Name	Data Type	Expression	Function	Filter	Aggregate On
contractnum		String	dataSetRow["c...			N/A
quantity		Decimal	dataSetRow["q...			N/A
orgid		String	dataSetRow["o...			N/A
laborhrs		String	dataSetRow["la...			N/A
rate		Decimal	dataSetRow["r...			N/A
linecost		Decimal	dataSetRow["li...			N/A
istask		Decimal	dataSetRow["is...			N/A
taskid		Decimal	dataSetRow["t...			N/A
ratehaschanged		Integer	dataSetRow["r...			N/A
data item		Decimal	Total.sum(rowf...			N/A

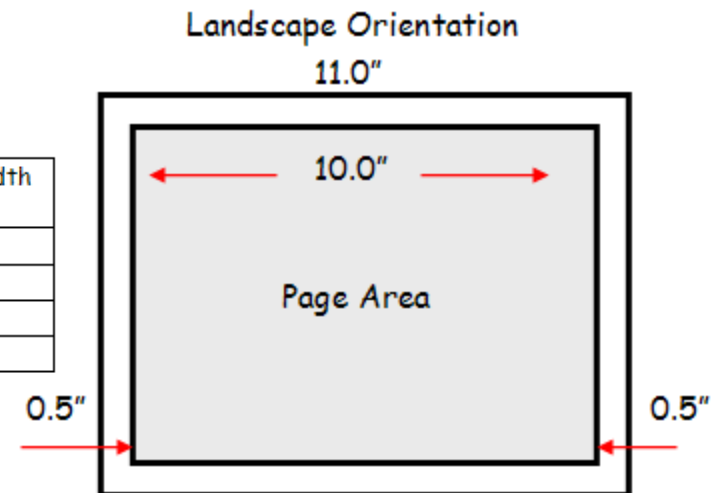


# Report Page Size Info/Customizations

Guide	Description	URL
V7 Page Size/Orientation Information	Doc detailing delivered page options, and how you can implement custom sizes	<a href="http://ibm.co/NORHNW">http://ibm.co/NORHNW</a>
Custom Report Page Details	Wiki Page describing page options and links for more details	<a href="http://ibm.co/OH4TEH">http://ibm.co/OH4TEH</a>
..Custom Report Page Sizes	BiLog Highlighting information	<a href="http://ibm.co/J8KpbA">http://ibm.co/J8KpbA</a>

## Details Include....

Description	Size	Orientation	Page Width	Margin Values	Available Width for Text
maximoLandscape	Letter	Landscape	11"	2 at 0.5" each	10"
maximoPortrait	Letter	Portrait	8.5"	2 at 0.5" each	7.5"
A4MaximoLandscape	A4	Landscape	297mm = 11.7"	2 at 0.5" each	10.7 "
A4MaximoPortrait	A4	Portrait	210mm = 8.27"	2 at 0.5" each	7.27"



# Key Bookmarks for Other Report Customizations

Report Reference Materials: <http://ibm.co/niokIv>

Report Customization Guides		
Document Name	Description	Version
Customizing out of the box BIRT reports <a href="#">Guide</a>	Details how to customize out of the box BIRT reports by deleting and adding new fields. The Work Order Details report is used as an example to step you through this process.	7.1 and 7.5
V7 BIRT Report Page <a href="#">Information</a>	Reviews the components impacting report page sizes and orientation used in the V7 BIRT Reports. It also details how you can customize them to meet your individual business needs.	7.1 and 7.5
Enabling Bar Codes in Reports <a href="#">Guide</a>	Details how to implement bar code fonts for use within BIRT reports.	7.1 and 7.5
Adding username to a V7 Report <a href="#">Details</a>	Provides instructions on adding the username who executed report to the report's header section	7.1 and 7.5
Changing Logos in BIRT Reports <a href="#">Details</a>	Discusses how you can change the logos displayed within the V7 reports to your unique company logos.	7.1 and 7.5
V7 Report Update Utility <a href="#">Guide</a>	Details report update utilities which can be used to automate the process of applying updates to report designs, rather than manually editing each report.	7.1 and 7.5

Report Wiki Home Page: <http://ibm.co/oKTTp5>

- Scroll down page to development/customization sections

## Custom Report Development Best Practices

**IBM.** [Developing Reports - Where to Start Details](#): Recommendations for Report Developers on how to start learning to develop V7 BIRT reports.

**IBM.** [Custom Report Best Practices Details](#): Details best practices for defining your file structure, report xml and properties file for your modified or custom reports.

**IBM.** [Custom Report Development - Database and Reference Information Details](#): Lists tools for identifying database objects, attributes and relationships

**IBM.** [Custom Reports - Report Logos Details](#): Details how you can change all reports to use your custom report logos in three simple steps.

**IBM.** [Custom Report Modifying Out of the Box Reports Details](#): Detailed example of modifying a delivered report - Work Order Details

**IBM.** [Custom Report Page Details](#): Details page size, orientation and available area for field display

**IBM.** [Custom Report Techniques Details](#): Highlights various ways you can customize your reports with bar code fonts, dynamic images and other techniques

*Report and Data Options*

*BIRT Reporting*

Configuration

Administration

Design

Development

Execution



Key Features

- Ad Hoc Reporting
- 2. Emailing
- 3. Scheduling
- 4. Delivered Reports

Property Files, Cron Tasks, Database Objects

*Cognos Reporting*

*Reference Materials and Questions*

# V7 Report *Execution KEY* Features

KEY

Ad hoc reporting - Users create own reports

- Utilizing Maximo UI/Functionality -> Less Training

Utilizing Maximo Email functionality

- Separate mailer.rod no longer required
- PDF, XLS and URL attachment options

User Scheduling

- User manages his own schedules - edit, delete

V6 Execution Features Not Available

1. Persistent Reports (.roi)
2. Progressive Reports (page 1 of 50 pages displayed immediately)

# In V7....Over 150 Enterprise, Operational Report Delivered

Work Order Details, Details of Asset Failures, Asset Availability, Inventory ABC, Vendor Performance...

The image displays a collage of various IBM operational reports. The reports include:

- SLA Details:** A table showing service level agreement information with columns for status, priority, and team.
- Login History:** A line graph titled "Maximum Concurrent Logins" showing login activity over time.
- Asset Availability:** A bar chart showing the availability of assets across different categories.
- Software Usage Summary:** A pie chart titled "Software Usage - By Vendor" showing the distribution of software usage by vendor.
- Service Level Exception:** A table detailing service level exceptions with columns for date, time, and description.
- Work Order Details:** A detailed table listing work orders with columns for work order number, description, and status.
- OEE% by Equipment:** A bar chart showing Overall Equipment Effectiveness (OEE) percentages for different equipment.
- Dims Availability:** A table showing dimensions availability with columns for dimension name, status, and location.

# Increasing Need for Users to Create their Own Reports

## *What's Driving This?*

- Dynamic Business or Project Needs
- Increasing Skill Set of Users
- Users have Multi-Role Jobs

# Two Types of V7 Reports Available

Enterprise, Operational Reports  
for *Heavy, Multi-User* Access

Ad Hoc, or QBR Reports  
*Created by Individual V7 Users*

**Asset Availability**

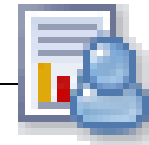
Asset	Description	Schedule No.	Description No.	Asset Availability
T-12000	ROLL FLOW #2	2400	506.91	97.9%
T-12006	ROLL FLOW #2	2400	434.93	98.24%
T-12020	PREZEL AUTO WASH	2400	319.83	98.63%
T-12021	PREZEL AUTO WASH	2400	231.17	98.98%

**Approved Bedford POs**

PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1004	Hardware Order	WARRP		100.00	1	MATERIAL				100.00	100.00
1005	Longflow Project Addr	WARRP		154.43	1	ITEM	540-00	ITEM	Tubing, Copan 1 In ID 7.000 In Wdg	100.00	149.00

Created in BIRT Report Designer  
Requires Database/Java Skills  
Complex Calculations, Graphs  
Fixed Content/Format

*Created on Fly*  
*No Database/Java Skills Needed*  
*Variable Content/Format*



# QBR (Ad Hoc) Report Creation



Within Application , Select 'Create Report'  
On First Tab, Select Type of Report you want to Create

## *Detail or Summary QBR Report Type*

Detail Reports  
give you most  
flexibility in  
field  
selection.

Summary  
reports  
enable you to  
define sorting  
and grouping

The screenshot shows a window titled "Query Based Report" with a toolbar containing "Style", "Select", "Format", and "Submit" buttons. Below the toolbar are two dropdown menus: "Help Text" and "Style to Use for the Report". Under "Style to Use for the Report", there are two radio button options:

-  Summary Report. Select this style to create a Summary Report. Summary reports are used to present multiple details on multiple records in row/column format. Summary reports can be grouped and sorted.
-  Detail Report. Select this Style to Create a Detail Report. Detail reports present details on individual records in categories by separating the individual records by page breaks. Detail reports are dynamically organized by categories.

At the bottom of the window, there are input fields for "Report Title" and "Public?", and checkboxes for "Save Report?" and "Close Window?". "Submit" and "Cancel" buttons are located at the bottom right.



# Ad Hoc **Summary** Report Example

Execution  
AdHoc/QBR

## Multiple Details for Multiple Records - User Defined Groupings

Reporting

Page 1 of 1

Tivoli IBM

### Approved Bedford POs

Site: BEDFORD		Company: VERIZON									
PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1084	Verizon Order	WAPPR		105.00	1	MATERIAL				100.00	100.00
1085	Longfellow Project Adds	WAPPR		156.45	1	ITEM	560-00	ITEM	Tubing, Copper-1 In ID X .030 In Wall	100.00	149.00
Site: BEDFORD		Company: SWKING									
PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1077	Adobe Software Contract	APPR		12,300.00	1	ITEM	ACROBAT_8	ITEM	Adobe Acrobat Version 8	100.00	12,300.00
Site: BEDFORD		Company: OFFRUS									
PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1026	Items for Project IKL-898 per Max	WAPPR		46.00	3	ITEM	230-00	ITEM	Elbow, Street- 90 Deg, 1 In		2.50
1026	Items for Project IKL-898 per Max	WAPPR		46.00	2	ITEM	231177	ITEM	Guide- Carton Machine	2.00	29.00
1026	Items for Project IKL-898 per Max	WAPPR		46.00	1	ITEM	231177	ITEM	Guide- Carton Machine	1.00	14.50
Site: BEDFORD		Company: KENNEDY									
PO	Description	Status	Follow-up Date	Total Cost	Line	Line Type	Item	Item Type	Item Description	Quantity	Line Cost
1021	DJIO-Rev1 Project	WAPPR		0.00	1	ITEM	560-00	ITEM	Tubing, Copper-1 In ID X .030 In Wall		0.00
1022	Hardware Items for Bob	APPR		6.19	2	ITEM	0-0031	ITEM	Elbow, Street- 1-1/8 In X 90 Deg		2.50
1022	Hardware Items for Bob	APPR		6.19	1	ITEM	900810	ITEM	Lubricator Assembly		3.69
1023	Kennedy Order	APPR		40.00	1	ITEM	584-LO	ITEM	Lockwasher- 1/2 In	10.00	40.00

# Ad Hoc **Detail** Report Example

Multiple Details for Single Record (1:N Relationships)\*  
Page Breaks used to separate multiple records

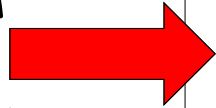
Reporting												
Page 1 of 7												
Tivoli software												IBM
Asset Specification and Work Order Details												
Asset Details												
Asset	Description	Location	Parent	Rotating Item	Linear	Site	Asset Tag	Type	Failure Class	Installation Date	Inventory Cost	
11450	Centrifugal Pump 100GPM/60FTHD	BR450	11400	PUMP100	N	BEDFORD	6423		PUMPS	5/26/96	9.50	
Specifications												
Asset	ASSETSPECID	End Base Measure	End Measure	Start Base Measure	Start Unit of Measure	Start Measure	Mandatory?					
11450	198						N					
11450	199						N					
11450	200						N					
11450	201						N					
11450	202						N					
11450	203						N					
11450	204						N					
Work Orders												
Work Order	Work Type	Status	Status Date	Status Date	Target Start	Target Start	Target Finish	Target Finish	Scheduled Start	Scheduled Start	Scheduled Finish	Scheduled Finish
91091	EM	APPR	10/12/01	3:45:43 PM	10/12/01	3:45:43 PM	10/13/01	10:57:43 PM	10/12/01	3:45:43 PM	10/13/01	10:57:43 PM
2155	EM	CLOSE	10/23/98	3:45:35 PM	10/23/98	3:45:35 PM	10/24/98	3:45:35 PM	10/23/98	3:45:36 PM	10/23/98	3:45:36 PM
88111	EM	CLOSE	4/29/98	3:45:49 PM	4/29/98	3:45:49 PM	4/29/98	3:45:49 PM	4/29/98	3:45:49 PM	4/29/98	3:45:49 PM
89041	EM	CLOSE	6/3/99	3:45:47 PM	6/3/99	3:45:47 PM	6/4/99	10:57:47 PM	6/3/99	3:45:47 PM	6/4/99	10:57:47 PM
90061	EM	CLOSE	6/23/00	3:45:39 PM	6/25/00	3:45:39 PM	6/25/00	3:45:39 PM	6/24/00	3:45:39 PM	6/25/00	3:45:39 PM
91061	EM	CLOSE	7/17/01	3:45:38 PM	7/17/01	3:45:38 PM	7/19/01	3:45:38 PM	7/17/01	3:45:38 PM	7/19/01	3:45:38 PM
87091	EM	CLOSE	11/30/98	8:48:09 PM	11/19/98	6:45:02 PM	11/23/98	1:21:45 AM	11/19/98	6:45:02 PM	11/25/98	1:21:45 AM
91051	EM	CLOSE	6/8/01	3:45:41 PM	6/8/01	3:45:41 PM	6/8/01	3:45:41 PM	6/8/01	3:45:41 PM	6/8/01	3:45:41 PM
88051	EM	CLOSE	8/7/98	3:45:46 PM	8/7/98	3:45:46 PM	8/7/98	3:45:46 PM	8/7/98	3:45:46 PM	8/7/98	3:45:46 PM
89081	EM	CLOSE	10/21/99	3:45:44 PM	10/23/99	3:45:44 PM	10/23/99	3:45:44 PM	10/23/99	3:45:44 PM	10/23/99	3:45:44 PM
91071	EM	CLOSE	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM	7/24/01	3:45:42 PM
2433	EM	CLOSE	12/2/99	8:47:58 PM	11/23/99	2:04:46 AM	11/24/99	8:33:34 PM	11/23/99	2:04:46 AM	11/25/99	8:33:34 PM
7492	CP	CLOSE	6/9/96	1:01:00 PM								
4394	EM	CLOSE	10/3/99	3:45:36 PM	10/3/99	3:45:36 PM	10/3/99	3:45:36 PM	10/3/99	3:45:37 PM	10/4/99	3:45:37 PM
90121	EM	CLOSE	1/3/01	3:45:40 PM	1/3/01	3:45:40 PM	1/4/01	3:45:40 PM	1/3/01	3:45:40 PM	1/4/01	3:45:40 PM

\*For **Single** Asset Record (11430), it has **Multiple** Specification and Work Order Records

# 2nd Step -- Select Tab: **Select Fields**

Execution  
AdHoc/QBR

Users select fields to their report from Table Category Drilldown. (Parent-Child Table Relationships.)



Selected Fields section shows what user has added.



Query Based Report

Style **Select** Format Submit

Help Text

Parent Category **Asset Details** Apply the Current Query and Filter from the Application?

**Asset Details**

- Specifications
- Work Orders
- Meters
- Status (Must Be Fields)
- User and Custodian Details
- Manufacturer
- Contract Asset Details
- Inventory
- Asset Items
- Asset Safety Plan
- Location
- Preventive Maintenance
- Spare Parts

**Available Fields**

Field Description	Field Value
Ancestor	ANCESTOR
Asset	ASSETID
Asset Tag	ASSETTAG
Type	ASSETTYPE
ASSETUID	ASSETUID
Automatically Generate Work Orders	AUTOWOGEN
Bin	BINNUM
Budgeted	BUDGETCOST
Calendar	CALNUM
Changed By	CHANGEBY

**Selected Fields**

Column Order	Report Label	Field Value	Category
1	Asset	ASSETNUM	Asset Details
2	Description	DESCRIPTION	Asset Details
3	Location	LOCATION	Asset Details
4	Parent	PARENT	Asset Details
5	Rotating Item	ITEMNUM	Asset Details
6	Linear	ISLINEAR	Asset Details
7	Site	SITEID	Asset Details

Report Title  Save Report?

Submit Cancel

# 3rd Step: Format Tab: Filters, Sorting and Grouping

Execution  
AdHoc/QBR

Parameters can be defined for any type of report.

Sorting, Grouping can be applied to Summary Reports

The screenshot shows the 'Query Based Report' interface with the 'Format' tab selected. The 'Filtering' section is highlighted with a red box. A red arrow points from the text 'Parameters can be defined for any type of report.' to the 'Filtering' section. Another red arrow points from the text 'Sorting, Grouping can be applied to Summary Reports' to the 'Select Value' dialog box. The dialog box shows a list of fields for selection, including 'Asset Details', 'Asset', 'ASSETNUM', 'Description', 'DESCRIPTION', 'Location', 'LOCATION', 'Parent', 'PARENT', 'Rotating Item', 'ITEMNUM', 'Linear', 'ISLINEAR', and 'Site', 'SITID'.

Category	Report Label	Field Value
<a href="#">Asset Details</a>	<a href="#">Asset</a>	<a href="#">ASSETNUM</a>
<a href="#">Asset Details</a>	<a href="#">Description</a>	<a href="#">DESCRIPTION</a>
<a href="#">Asset Details</a>	<a href="#">Location</a>	<a href="#">LOCATION</a>
<a href="#">Asset Details</a>	<a href="#">Parent</a>	<a href="#">PARENT</a>
<a href="#">Asset Details</a>	<a href="#">Rotating Item</a>	<a href="#">ITEMNUM</a>
<a href="#">Asset Details</a>	<a href="#">Linear</a>	<a href="#">ISLINEAR</a>
<a href="#">Asset Details</a>	<a href="#">Site</a>	<a href="#">SITID</a>

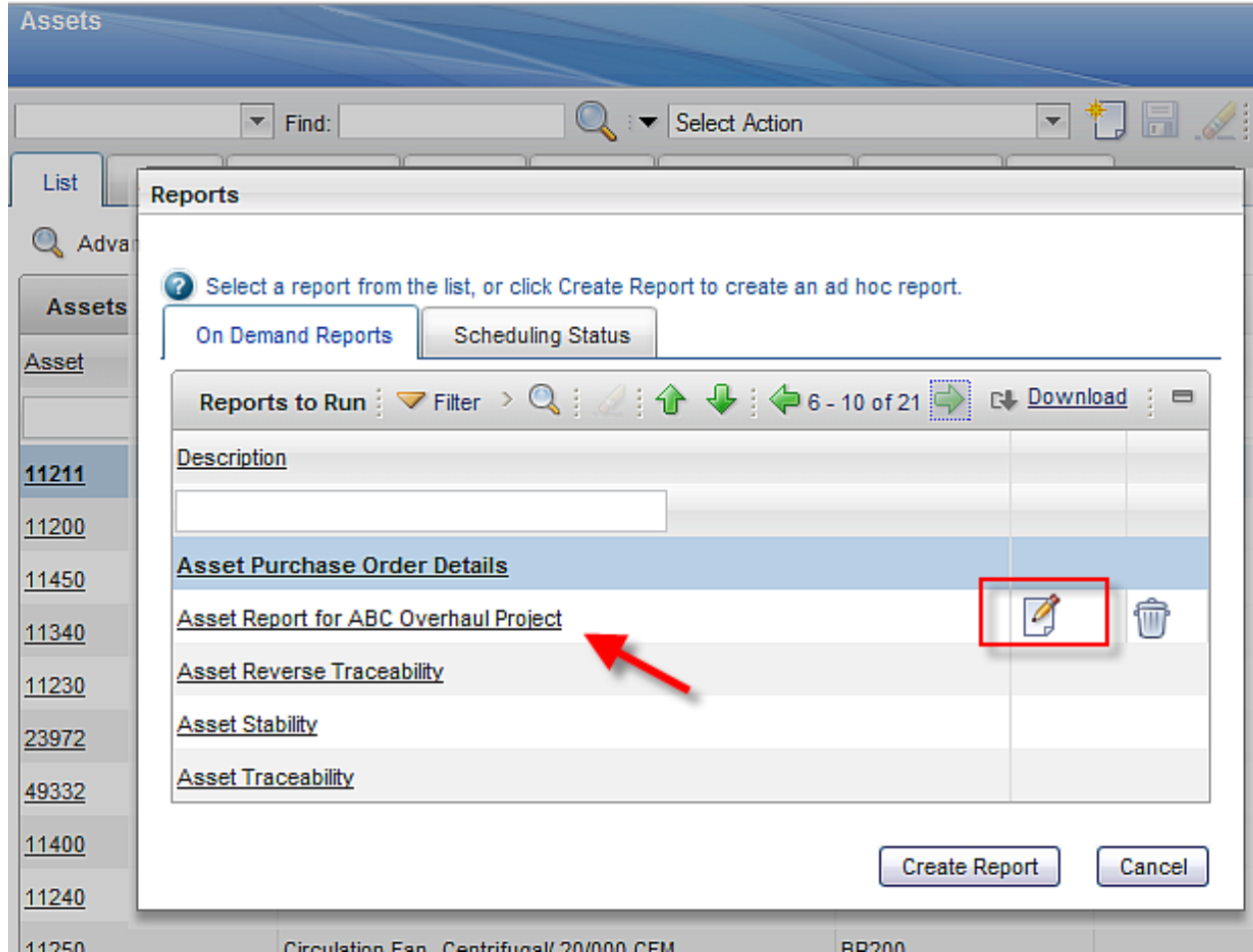
# Your Custom, Individualized Report quickly results!

Execution  
AdHoc/QBR

Reporting												
Page 1 of 7												
Tivoli. software												
Asset Specification and Work Order Details												
Asset Details												
Asset	Description	Location	Parent	Rotating Item	Linear	Site	Asset Tag	Type	Failure Class	Installation Date	Inventory Cost	
11450	Centrifugal Pump 100GPM/60FTHD	BR450	11400	PUMP100	N	BEDFORD	6423		PUMPS	5/26/96	9.50	
Specifications												
Asset	ASSETSPECID	End Base Measure	End Measure	Start Base Measure	Start Unit of Measure	Start Measure	Mandatory?					
11450	198						N					
11450	199						N					
11450	200						N					
11450	201						N					
11450	202						N					
11450	203						N					
11450	204						N					
Work Orders												
Work Order	Work Type	Status	Status Date	Target Start	Target Finish	Scheduled Start	Scheduled Finish					
91091	EM	APPR	10/12/01 3:45:43 PM	10/12/01 3:45:43 PM	10/13/01 10:57:43 PM	10/12/01 3:45:43 PM	10/13/01 10:57:43 PM					
2155	EM	CLOSE	10/23/98 3:45:35 PM	10/23/98 3:45:35 PM	10/24/98 3:45:35 PM	10/23/98 3:45:36 PM	10/23/98 3:45:36 PM					
88111	EM	CLOSE	4/29/98 3:45:49 PM	4/29/98 3:45:49 PM	4/29/98 3:45:49 PM	4/29/98 3:45:49 PM	4/29/98 3:45:49 PM					
89041	EM	CLOSE	6/3/99 3:45:47 PM	6/3/99 3:45:47 PM	6/4/99 10:57:47 PM	6/3/99 3:45:47 PM	6/4/99 10:57:47 PM					
90061	EM	CLOSE	6/23/00 3:45:39 PM	6/25/00 3:45:39 PM	6/25/00 3:45:39 PM	6/24/00 3:45:39 PM	6/25/00 3:45:39 PM					
91061	EM	CLOSE	7/17/01 3:45:38 PM	7/17/01 3:45:38 PM	7/19/01 3:45:38 PM	7/17/01 3:45:38 PM	7/19/01 3:45:38 PM					
87091	EM	CLOSE	11/30/98 8:48:09 PM	11/19/98 6:45:02 PM	11/23/98 1:21:45 AM	11/19/98 6:45:02 PM	11/25/98 1:21:45 AM					
91051	EM	CLOSE	6/8/01 3:45:41 PM	6/8/01 3:45:41 PM	6/8/01 3:45:41 PM	6/8/01 3:45:41 PM	6/8/01 3:45:41 PM					
89081	EM	CLOSE	10/21/99 3:45:44 PM	10/23/99 3:45:44 PM	10/23/99 3:45:44 PM	10/23/99 3:45:44 PM	10/23/99 3:45:44 PM					
91071	EM	CLOSE	7/24/01 3:45:42 PM	7/24/01 3:45:42 PM	7/24/01 3:45:42 PM	7/24/01 3:45:42 PM	7/24/01 3:45:42 PM					
2433	EM	CLOSE	12/2/99 8:47:58 PM	11/23/99 2:04:46 AM	11/24/99 8:33:34 PM	11/23/99 2:04:46 AM	11/25/99 8:33:34 PM					
7492	CP	CLOSE	6/9/96 1:01:00 PM									
4394	EM	CLOSE	10/3/99 3:45:36 PM	10/3/99 3:45:36 PM	10/3/99 3:45:36 PM	10/3/99 3:45:37 PM	10/4/99 3:45:37 PM					
90121	EM	CLOSE	1/3/01 3:45:40 PM	1/3/01 3:45:40 PM	1/4/01 3:45:40 PM	1/3/01 3:45:40 PM	1/4/01 3:45:40 PM					

# Ability to Edit Ad Hoc Report available

Execution  
AdHoc/QBR



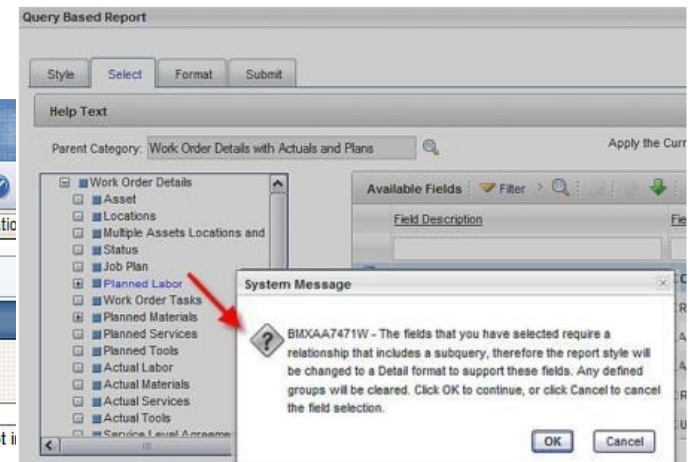
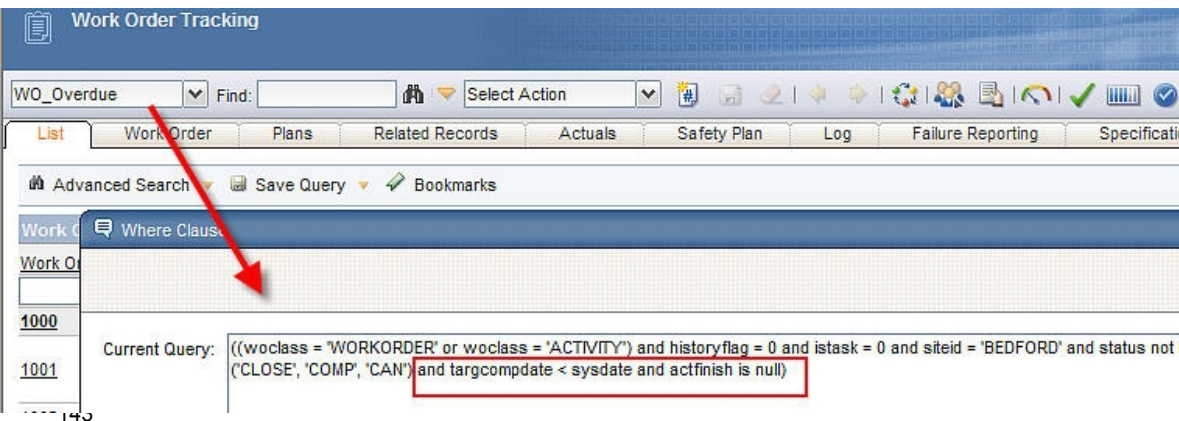
Key Point:  
User who  
creates Ad  
Hoc Report  
can edit it - or  
use it to  
create a new  
Ad Hoc  
Report

# V7 QBR Information

Guide	Description	URL
V75 QBR Guide	Detailed step-by-step explanation of QBR and ROS creation	<a href="http://ibm.co/NHykq4">http://ibm.co/NHykq4</a>
V71 QBR Guide	Like 75 guide, for V71	<a href="http://ibm.co/NfUcOV">http://ibm.co/NfUcOV</a>
Best Practices	Wiki page detailing best practices Ex. Applying application query to QBR	<a href="http://ibm.co/LYNMnL">http://ibm.co/LYNMnL</a>
BiLogs	Multiple BiLogs detailing QBRs	<a href="http://ibm.co/LuIc6k">http://ibm.co/LuIc6k</a>

BiLog detailing complex relationships

Wiki page detailing app query



# V7 Report Emailing

Execution  
Email

	6.x	7.1	7.5
Email pdf file	✓	✓	✓
Email xls file		7116+	✓
Email to URL			✓
Email to Maximo & Non-Maximo Users	✓	✓	✓
Email report in browser after execution			
Retain report output in Maximo	✓ .roi files		Partial Email URL
Functionality enabled thru	Actuate. mailer.rox	Maximo	Maximo



# V7 Email Format

Select on Report's Request Page.

*Report Must be scheduled to be emailed.*

Email with File Attachment

Request Page

Help Text

Parameters

Schedule

Immediate

At this Time 6/1/11 4:00 AM

Recurring

Email

# To: lucy@abc.corp

Subject: Asset Detail Analysis

Comments:

File Type:

PDF

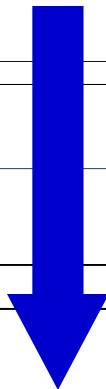
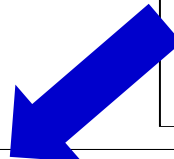
XLS

Report Delivery Format:

Email with a file attachment

Email with a file URL

Submit Cancel



 **Asset Measurement History**  
to: Bob Jones  
Custom expiration date: 04/01/2110  
04/01/2011 12:59 PM  
[Show Details](#)

 [Asset\\_Measurement\\_History\\_01Apr2011\\_0100PM.pdf](#)

Email to URL

 **Asset Move History Report**  
to: Bob Jones  
Custom expiration date: 03/28/2110  
03/28/2011 04:34 PM  
[Show Details](#)

You have been given access to a scheduled report. To access the report, click the following link:

[http://qarh06.swg.usma.ibm.com:7001/maximo/ui/login?event=loadapp&value=rptoutput&additionalEvent=sqlwhere&additionalEventValue=\(jobnum='1009'\)&forcereload=true&uisessionid=LIC](http://qarh06.swg.usma.ibm.com:7001/maximo/ui/login?event=loadapp&value=rptoutput&additionalEvent=sqlwhere&additionalEventValue=(jobnum='1009')&forcereload=true&uisessionid=LIC)

# Email URL Format

Execution

Email

URL brings user to **Report Viewer** application

The screenshot displays the Report Viewer application interface. At the top, there is a navigation bar with 'Bulletins: (1)', 'Go To', 'Reports', 'Start Center', 'Profile', 'Sign Out', and 'Help'. Below this is a 'Select Action' dropdown menu. The main content area is divided into two sections. On the left, there is a 'Description' field and a list of report outputs, with 'Asset Measurement History' selected. On the right, there is a table with columns for 'Created By' and 'Created Date'. The table contains one entry: 'WILSON' and '1/20/12 1:45 PM'. A red arrow points to a download icon in the rightmost column of this table. The report content itself is a PDF viewer showing a line chart titled 'Measurement History' with data points and a legend. The chart shows a fluctuating line with a significant dip around 1/19/12 7:43 AM. The legend includes 'MEASUREMENTVALUE', 'LOWERWARNING', 'UPPERWARNING', 'LOWERACTION', and 'UPPERACTION'.

Created By	Created Date	Download
WILSON	1/20/12 1:45 PM	Download

Key Points:

1. Excellent for large reports - no SMTP Server Constraints
2. For Maximo users only
3. Report Viewer application holds report output
4. REPORTOUTPUTCLEANUP Cron Task maintains content
5. Data stored in REPORTOUTPUT, REPORTOUTPUTCNT, REPORTOUTPUTAUTH

# Report Email Info & Reference Materials

Execution  
Email

	Description	
V75 Report Feature Guide	Detailed Emailing Section Available	<a href="http://ibm.co/NXBQNU">http://ibm.co/NXBQNU</a>
V71 Report Feature Guide	Detailed Emailing Section Available	<a href="http://ibm.co/Q4s8ji">http://ibm.co/Q4s8ji</a>
BiLog: Email URL Introduction	Design logic behind Email url functionality	<a href="http://ibm.co/NB3Nxa">http://ibm.co/NB3Nxa</a>
BiLog: Email URL Details	Recap of functionality including details, links, errors	<a href="http://ibm.co/LvDjij">http://ibm.co/LvDjij</a>
BiLog: Email URL Details	Details impact of property setting <code>mxe.email.content.type</code>	<a href="http://ibm.co/L8Dlxc">http://ibm.co/L8Dlxc</a>

# V7 Report Scheduling

	6.x	7.1	7.5
At This Time	✓	✓	✓
Recurring	✓	✓	✓
Admin modify schedule	✓	✓	✓
User modify schedule		✓	✓
Report schedule limits		7114+	✓
Schedule Only Reports	.	7114+	✓
Schedule Only Reports - Reserved Processing Time			✓
Functionality enabled thru	Actuate	Maximo*	Maximo*

\*Maximo Report Scheduling enabled with REPORTSCHEDULE Cron task

# V7 Report Scheduling

Options: At this Time (Single Future Date) *or* Recurring Scheduled Report Request

Request Page

Help Text

Parameters

Schedule

Immediate

At this Time

Recurring

Email

\* To:

Subject:

Comments:

Select Value

Select Schedule or Time Interval

Select a date interval and then Preview to see the dates.

Every  hour(s), on minute

Every  day(s), at time

Every  week(s), on day   at time

Every  month(s),

on day  at time



on the   of the month, at time

Date Preview

4/7/11 12:00 AM
4/8/11 12:00 AM
4/9/11 12:00 AM
4/10/11 12:00 AM
4/11/11 12:00 AM
4/12/11 12:00 AM
4/13/11 12:00 AM
4/14/11 12:00 AM
4/15/11 12:00 AM
4/16/11 12:00 AM
4/17/11 12:00 AM
4/18/11 12:00 AM
4/19/11 12:00 AM
4/20/11 12:00 AM

Preview

OK Cancel



# V7 User can manage their own report schedules!

Execution  
Schedule

## Reports

? Select a report from the list, or click Create Report to create an ad hoc report.

On Demand Reports

Scheduling Status

Schedules You Can Edit Filter > 1 - 3 of 3 Download

	Report Name	Type	Next Run Time	
▶	Security Group Access	Recurring	4/7/11 8:30 AM	🗑️
▶	Asset Measurement History	Recurring	4/10/11 5:00 AM	🗑️
▶	Vendor Performance	Recurring		

New in V7!  
In Maximo 5/6, only  
Administrators could  
edit and/or delete.

Reports

Schedules You Can Edit Filter > 1 - 3 of 3 Download

	Report Name	Type	Next Run Time	
▶	Security Group Access	Recurring	4/7/11 8:30 AM	🗑️
▼	Asset Measurement History	Recurring	4/10/11 5:00 AM	🗑️
▶	Vendor Performance	Recurring	4/11/11 6:00 PM	🗑️

Schedule

Report Name:

At this Time   
 Recurring

Email

\* To:   
Subject:   
Comments:

File Type: Report Delivery Format:

# V7 Schedule Only Reports

Configure Complex, Batch Reports to *run only via Schedules*

The screenshot shows the 'Report Administration' window with the 'Report' tab selected. The 'Report File Name' is 'sw\_usage.rptdesign' and the 'Report Type' is 'BIRT'. In the 'Settings' section, the 'Schedule Only?' checkbox is checked and circled in red. Other settings include 'Limit Records?' (unchecked), 'Max Record Limit' (empty), 'Priority' (empty), 'No Request Page?' (unchecked), 'Use Where Clause?' (unchecked), and 'Display C' (partially visible). The 'Parameters' section shows a table with one parameter: 'manufacturer'.

User only sees  
Schedule Ability

The 'Request Page' dialog box contains a message: 'Fill in the fields in the Parameters section below and click Submit to run the report. If no parameters are displayed, the report will execute against the current/selected record set. Optionally, fill out the Schedule and Email Sections to schedule report run times and receive the scheduled report via email.' The 'Parameters' section has a 'Manufacturer\*' field. The 'Schedule' section has 'At this Time' selected with a calendar icon and 'Recurring' with a search icon. The 'Email' section has 'To\*', 'Subject', and 'Comments' fields. 'Submit' and 'Cancel' buttons are at the bottom.

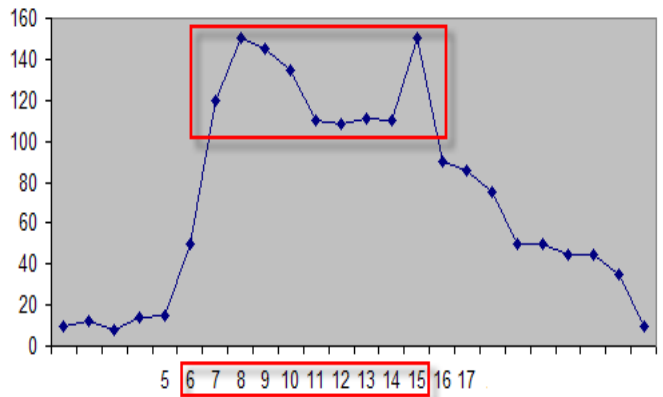
## Benefits:

1. Scheduling can be offloaded to Cron Server
2. Scheduling more efficient than running immediately

# Schedule Only Reports + Reserved Processing Times

## Additional Configuration Option

1. Identify Peak Processing Hours



2. Admin configures complex reports to *not* execute during peak times

Report Administration

Report File Name:  Maintenance Cost Rollup

Settings

Limit Records?  Priority

Max Record Limit

**Schedule Only?**

Reserved Processing Time

Day	Start Reserve	End Reserve
MONDAY	6:00 AM	4:00 PM
TUESDAY	6:00 AM	4:00 PM

Details

Day:  Time Zone:

Start Reserve:  Total Reserved Hours:

End Reserve:



# Reserved Processing Times Results

## 3. User Sees Day, Times complex report *CAN* be Executed

Request Page

Schedule Availability Filter > 1 - 9 of 9 Download ?

Day	Start Time	End Time
SUNDAY	12:00 AM	11:59 PM
MONDAY	12:00 AM	5:59 AM
MONDAY	4:01 PM	11:59 PM
TUESDAY	12:00 AM	5:59 AM
TUESDAY	4:01 PM	11:59 PM
WEDNESDAY	12:00 AM	11:59 PM
THURSDAY	12:00 AM	11:59 PM
FRIDAY	12:00 AM	11:59 PM
SATURDAY	12:00 AM	11:59 PM

Time Zone

Schedule

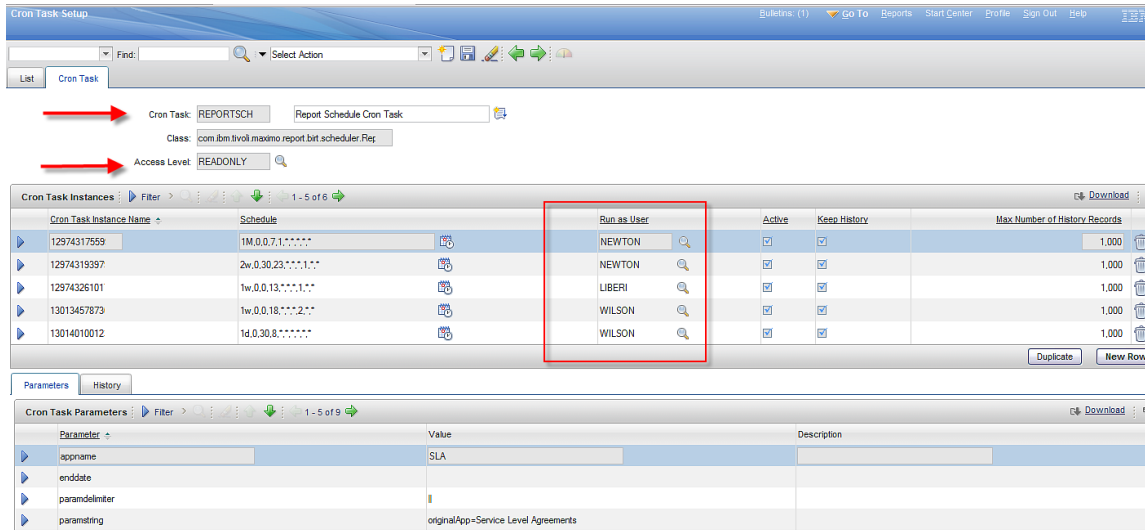
At this Time

Recurring

Submit Cancel

# V7 Report Scheduler Enablers

1. REPORTSCHEDULE Read Only Cron Task  
Separate Instance for each scheduled report job  
Cron task parameters vary widely amongst report jobs

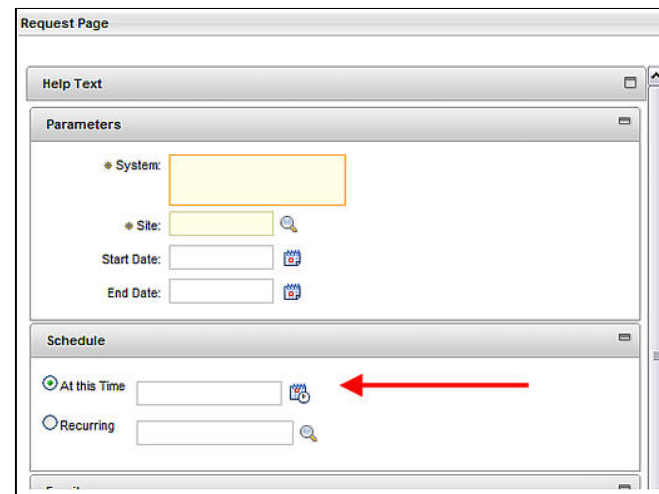
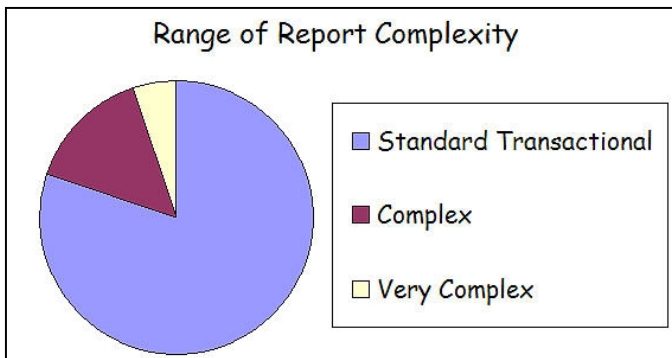


2. Database Objects  
REPORTSCHED, REPORTPROCRESERVE,  
REPORTPROCSCHED  
  
REPORT.SCHEDULEONLY

# Scheduling Key Info & Reference Materials

Document	Description	Location
V75 Report Feature Guide	Scheduling Section	<a href="http://ibm.co/NXBQNU">http://ibm.co/NXBQNU</a>
V71 Report Feature Guide	Detailed Emailing Section Available	<a href="http://ibm.co/Q4s8ji">http://ibm.co/Q4s8ji</a>
BiLog: Performance Enablers....Schedule Only Reporting	Details range in report complexity - and how schedule only reporting can be used	<a href="http://ibm.co/OciLZs">http://ibm.co/OciLZs</a>

## 80/20 Rule - Report Complexity BiLog



## *What they offer/How you can use*

- Enable Starting Point
- Deliver Source, Tools for Customizing and Creating
- Present Clear, Value-Add Analysis Reports
- Provide 'How to' Code
  - Custom Parameter Lookups
  - Drilldown with History
  - Sql on Unknown Tables
  - Graphics with Control Limits
  - Hidden Fields

# How you can find information in delivered reports

## V7 Report Booklet: Multiple details on delivered reports

A	B	C	D	E	H	I	J
Name	Description	Additional Report Description Details?	Report File Name	Graph	Enabled for Rich Text Formatting?	Configurable BV, DP, DPA, Limits Enabled?	Parame
4 <a href="#">Asset Details</a>	Displays the details of an asset. Sections included on the report include: Purchase Details, Downtime, Sub Assemblies, Spare Parts, Meters, Specification, Linear Details, Features and Relationships. Sections are only included for an Asset if it includes data. Any costs displayed on this report only reflect the costs that have been rolled up to the asset - they do not include any open costs that have not yet been rolled up through the Asset Cost Rollup Report.		asset_details.rptdesign			Yes	DP, Seq=3, Record Limit = 50
	Using Yellow and Red Control Limit Values, displays Meter Readings by Date in Line Chart Format. A page break separates the details, which are displayed in ascending order of Measurement Date. This enables review of the most recent measurements first. Can be executed against			Line Chart with Upper and Lower Control			Asset Site*

## Multiple worksheets with variety of details

V75 Reports	Additional V75 Report Desc	Base 75 IS Reports	<b>Report 75 Updates</b>	Reference Materials
-------------	----------------------------	--------------------	--------------------------	---------------------

Application	Report Name	Report Design File	Status
User	Error Codes Report	serviceability.rptdesign	Added
Report Administration	Report Schedule Limits and Maintenance	reportschedule.rptdesign	Added
Inventory	Shipment Details	shipment.rptdesign	Added
Asset Link Results	Asset Link Result Detail	asset_link_result.rptdesign	Retired
Deployed Assets - Computers	Managed Software Detail	mgmt_sw.rptdesign	Retired

# Delivered Report Version Comparison

## Listing of Delivered report, file names by Release

Delivered Report Name	Maximo App (s)	Maximo 6 File Name	Included in 7.1	Maximo 7.1 File Name	Included in 7.5	Maximo 7.5 File Name
1 Summary of Asset Failures by Location	Asset	sumasset_fail_tbl_act.rox	Yes	sumasset_fail.rptdesign	Yes	sumasset_fail.rptdesign
2 Details of Asset Failures	Asset	detailasset_fail_tbl_act.rox	Yes	detailasset_fail.rptdesign	Yes	detailasset_fail.rptdesign
3 Drilldown into Asset's Failures	Asset	drillasset_fail_tbl_act.rox	Yes	drillasset_fail.rptdesign	Yes	drillasset_fail.rptdesign
4 Asset Availability	Asset	asset_availability_act.rox	Yes	asset_availability.rptdesign	Yes	asset_availability.rptdesign
5 Asset Cost Rollup	Asset	asset_costrollup_act.rox	Yes	asset_costrollup.rptdesign, asset_costrollup_update.rptdesign	Yes	asset_costrollup.rptdesign, asset_costrollup_update.rptdesi

Including totals added, retired

-Reasons for retirement include list reports replaced by QBR, or report value no longer available

# Reports Delivered in Version 6	140
# Reports Added from V6 to V7.1	38
# Reports Removed from V6 to V7.1	24
# Reports Delivered in Version 7.1	154
# Reports Added from V7.1 to V7.5	3
# Reports Removed from V6 to V7.1	15
# Reports Removed for Industry Solution	2
# Reports Delivered in Version 7.5	140

# V7 Delivered Report Information

Guide	Description	URL
V75 Report Booklet	V75 Delivered Report listing	<a href="http://ibm.co/SIOne2">http://ibm.co/SIOne2</a>
V71 Report Booklet	V75 Delivered Report listing	<a href="http://ibm.co/Nyc9ac">http://ibm.co/Nyc9ac</a>
Delivered report analysis by release	Comparison of delivered reports by V6, V71, V75 releases	<a href="http://ibm.co/POFirk">http://ibm.co/POFirk</a>
	BiLog on Report Comparison	<a href="http://ibm.co/zku82O">http://ibm.co/zku82O</a>
Wiki Page	How to Maximize use of report booklet	<a href="http://ibm.co/nk5EHb">http://ibm.co/nk5EHb</a>

Sample information from V75 Report Booklet



**Details of Asset Failures**

This report includes parameter examples using date/time lookups.  
 The majority of the V7.5 OOB reports containing date parameters are date only as the parameters are unbound (attribute value null).  
 However, date parameters can be date/time values if the field can be bound (attribute value is populated).  
 This report is an example having a date/time parameter values as its parameter is bound as shown in the screen shot below.  
 More information on parameters, including bound and unbound, can be found in the V75 Report Feature Guide.

The screenshot shows the 'Report Administration' window with the following details:

- Report File Name:** Details of Asset Failures
- Report Type:** BILOG
- Report Folder:** ASSET
- Reported by:** BRAXADIN
- Last Report Date:** 5/19/09 7:34 AM
- Parameters:**
  - Site: \*
  - Location: \*
  - Asset: \*
  - Start Date: \*
  - End Date: \*
  - Asset Type: \*
  - Asset Status: \*
  - Asset Moved?: N
- Parameter Details:**
  - Parameter Name: StartDate
  - Attribute Name: ALLNO FAILDATE
  - Lookup Name: (empty)
  - Display Name: Start Date
  - Display Sequence: 4
  - Required?: \*
  - Multi-Lookup Enabled?: \*
  - Default Value: (empty)
  - Operator: ==

*Report and Data Options*

*BIRT Reporting*

Configuration

Administration

Design

Development

Execution

Property Files, Cron Tasks, Database Objects

*Cognos Reporting*

*Reference Materials and Questions*



Design Files

REPORTDESIGN

REPORTDEPEND

REPORTPARAM

Text Values

REPORTLABEL

L\_REPORTLABEL

REPORTLOOKUP

L\_REPORTLOOKUP

Ad Hoc Design Values (Editing)

REPORTADHOC

REPORTADHOCFIELD

Security

REPORTAPPAUTH

REPORTAUTH

REPORTOSAUTH

Executing Jobs

REPORTJOB

Usage

REPORTUSAGELOG

Parent Object

REPORT

V7 Database  
Reporting Objects  
(Thru 7.5.0.3 Release)

Report Data Source

REPORTDS

REPORTDSPARAM

Report List Portlet

REPORTLISTCFG

Scheduled Jobs

REPORTSCHED

Reserved Processing

REPORTPROCRESERVE

REPORTPROCSCHED

Scheduled Report Output  
(Email URL)

REPORTOUTPUT

REPORTOUTPUTCNT

REPORTOUTPUTAUTH

Queuing

REPORTRUNQUEUE

REPORTRUNLOCK

REPORTRUNPARAM

Property Setting	Description
<code>mxe.report.birt.viewerurl</code>	Used for BIRT Report Only Server (BROS) Configuration
<code>mxe.sessiontoken.timeoutseconds</code>	Token based session timeout used in the authentication of the user to BROS the Report Server.
<code>mxe.report.birt.maxconcurrentrun</code>	Manages the number of BIRT immediate and Scheduled Reports that can be run concurrently
<code>mxe.report.birt.queueidletimeseconds</code>	Frequency that the Queue Manager polls the Queue for new report jobs
<code>mxe.report.birt.disable.queuemanager</code>	Defines whether the queue manager is enabled. If the queue manager is disabled (value set to 1) scheduled reports will not be executed on the server.

Property Setting	Description
mxe.Reportsinapage	Defines the number of reports to display in the Report Window
mxe.report.adhoc.editWithGroupAccess	Enable editing of Ad Hoc report when any security group has access to the report.
mxe.email.content.type	<p>Impacts display of email text received from the Comment section of the report request page.</p> <p>Reference Blog: <a href="http://ibm.co/JOKHEr">http://ibm.co/JOKHEr</a></p>
<b>JVM Property Settings</b>	
mxe.report.birt.tempfolder	Location of temporary folder for BIRT Runtime and temporary files created during the report execution process.
io.tmpdir	Used for intermittent, individual BIRT report file generation. Deleted when report completes execution.

DP/DPA Property Settings	Description
mxe.activex	Can ActiveX Controls be used for DP and DPA?
mxe.directprint.inherited.attachment	Should inherited docs be enabled for Direct Print with Attachments?
mxe.doclink.defaultPrintDocWithReport	Default value of printing attached document if printable type
mxe.report.AttachDoc.validateURL	Should the URL of the attached document be validated before printing from the V7 Server?
mxe.directprint.javaconsole.debug	Enables troubleshooting output to Java Console for DP, DPA
mxe.directprint.printtime.wait	Maximum duration (secs) the current print process waits before moving to the next process (*For reports, PDF Attachments only)

Cron Task	Description
REPORTSCHEDULE	Scheduling of BIRT Reports. (*READ ONLY CRON TASK)
REPORTLOCKRELEASE	Monitors the locks on report jobs
REPORTUSAGECLEANUP	Determines frequency that entries in REPORTUSAGELOG Table are deleted
REPORTOUTPUTCLEANUP	Determines frequency that scheduled report outputs in the Report Viewer application are deleted. (Introduced in 7.5.0.0)
REPORTADHOCLOCINST	Determines the frequency that newly created Ad Hoc Report Request Pages are enabled in multi-language environments. (Introduced in 7.5.0.1)

## *Report and Data Options*

### *BIRT Reporting*

Configuration

Administration

Design

Development

Execution

Property Files....

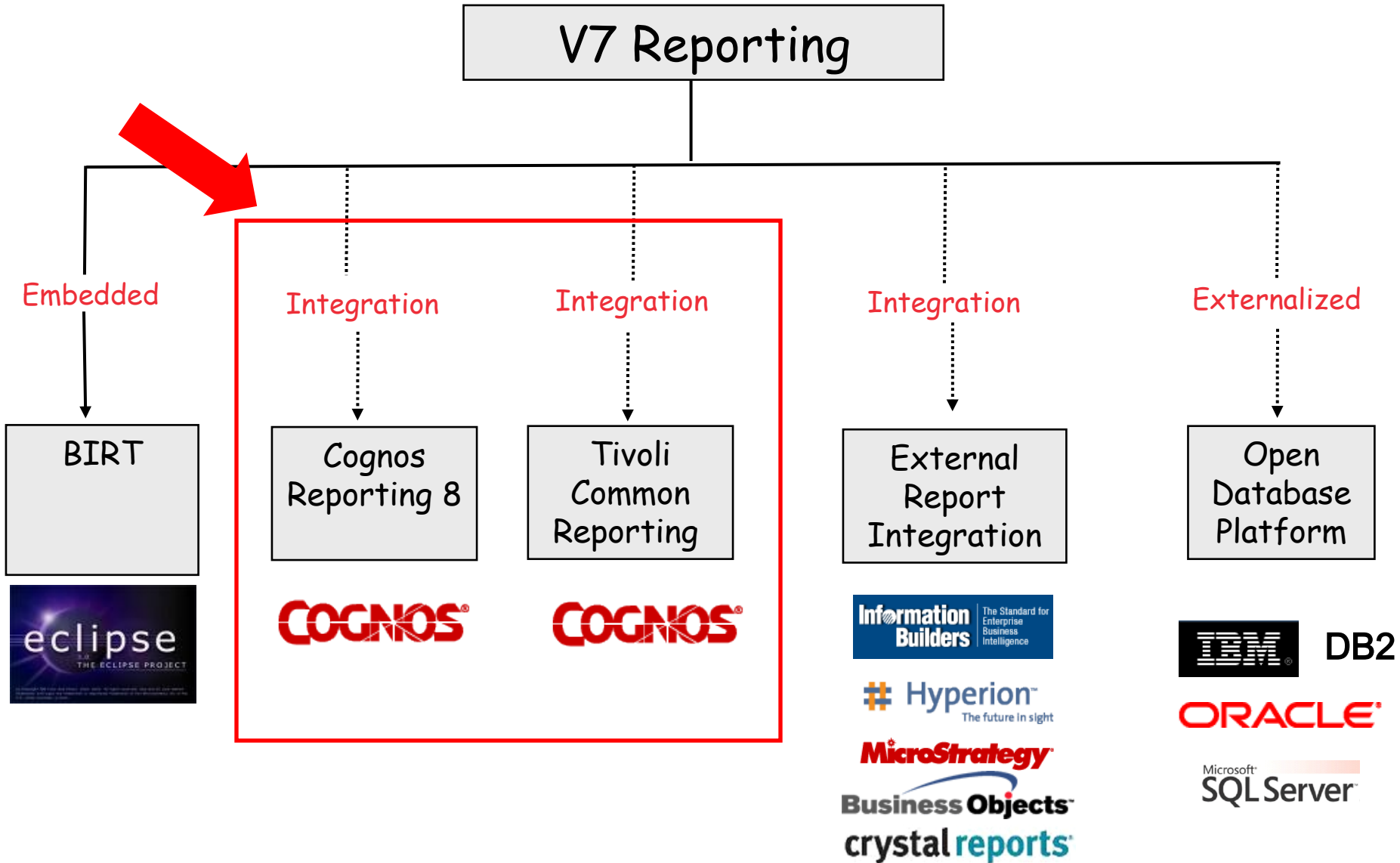
1. Overview and BI Roadmap
2. Enablement: Direct, TCR  
InDirect
3. Integration Details
4. Reference Materials

### *Cognos Reporting*



## *Reference Materials, Index and Questions*

# V7 Open Reporting Architecture Portfolio



# Cognos Integration can be enabled 2 Ways....

## 1. Direct

-Client has Cognos License

Maximo V7



Cognos

## 2. InDirect Thru TCR

-Separate Download/Install from Passport Advantage

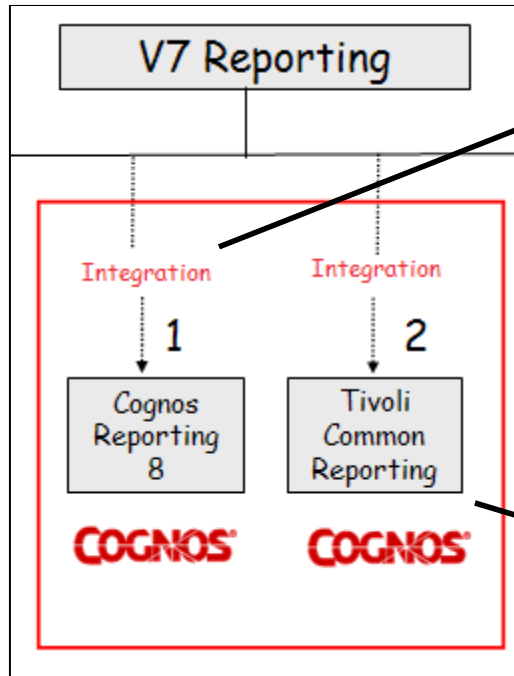
Maximo V7



TCR



Cognos



\*TCR = Tivoli Common Reporting



## Direct vs InDirect TCR Cognos Integration Comparison

	Direct	InDirect - TCR
Provided at No Additional Cost		✓
Utilized by Multiple Tivoli Products		✓
Maximizes Cognos Portal Real Estate	✓	
Minimizes Platform Restrictions	✓ ✓	
Does not Require Additional Overhead/Footprint/Maintenance		

*1. Visibility and Seamless Integration*

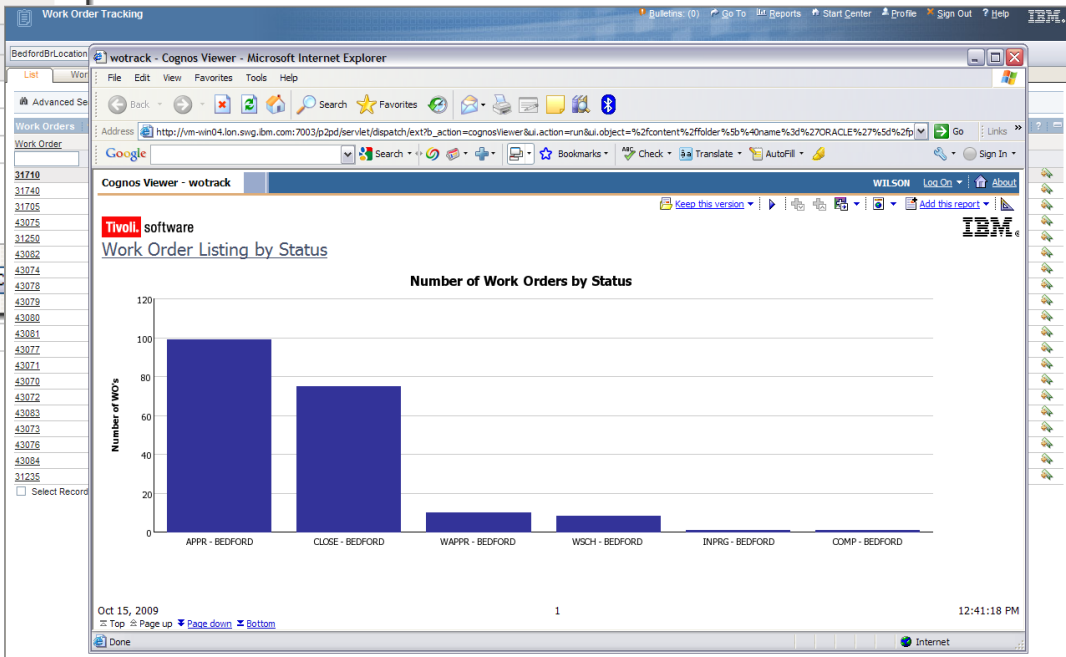
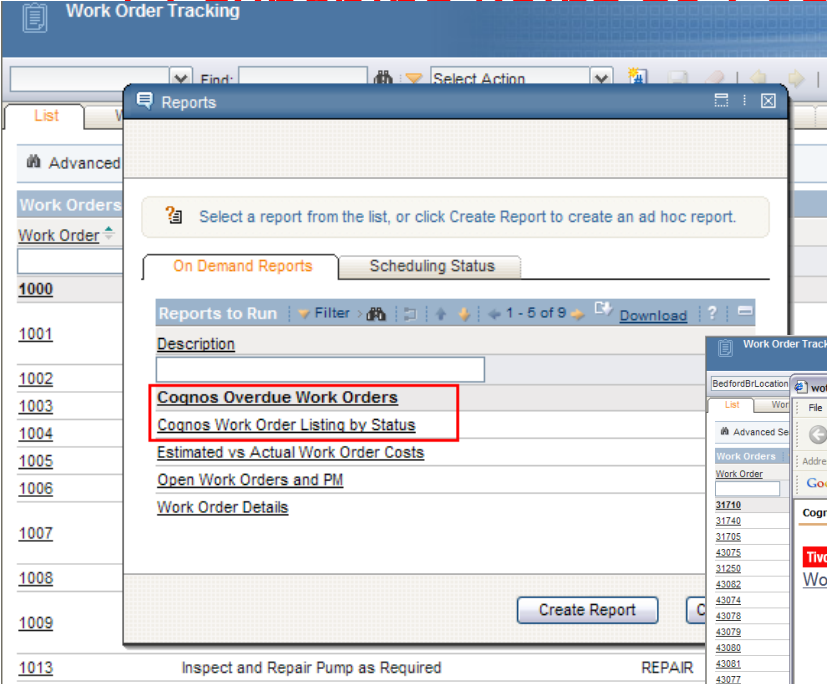
*2. Dynamic Creation of Cognos Meta Data*

# Value: Visibility and Seamless Integration

## Visibility of Cognos Reports within Maximo

### Launching Point to Cognos Portal

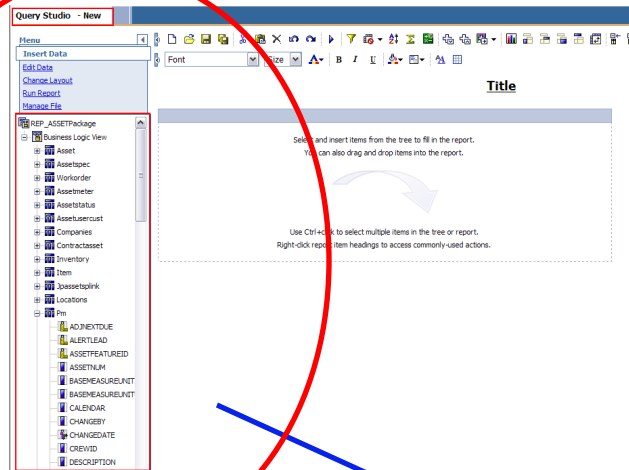
Synchronization of Security Groups, Dynamic Report Display



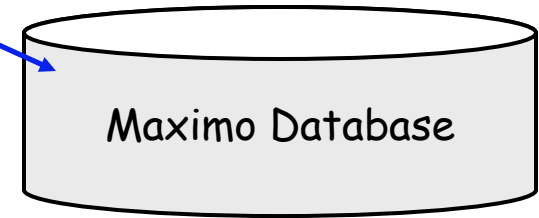
## Dynamic Meta Data Publishing



In Cognos, Report Developer creates reports based on Meta Data Packages -Not Traditional sql statements



Asset PM Analysis					
ASSETNUM	DESCRIPTION	LOCATION	INSTALLDATE	PHNUM	NEXTDATE
A8011	Standard Desktop Computer	HISTOOCK			
444564	Tridem Trailer, Aluminum B/Ber, PC20630,	UBR22		444564#C	
T2004	1997 Utility 53R Trailer	DALTERM			
T2010	1997 Great Dane 48ft Trailers	CALGARY			
11200	HVAC System- 50 Ton Cool Cap/ 450000 Btu Heat Cap	BR200	Jun 2, 1998 12:00:00 AM	IC-11200	Jun 28, 1999 12:00:00 AM
1004	Fire Extinguisher	MOPFLOOR4	Mar 28, 2001 12:00:00 AM		
2006	Fire Extinguisher	OFF402	Mar 28, 2001 12:00:00 AM		
11340	Motor Starter- Size 4#NEMA 12/440v/3ph/60Hz	BR300	May 31, 1994 12:00:00 AM		
1001	Fire Extinguisher	MOPFLOOR1	Mar 28, 2001 12:00:00 AM		
T2005	1997 Great Dane 48ft Trailers	DALTERM			
T2001	1997 Great Dane 48ft Trailers	CALGARY			
L12510	STAMPING MACH	SHIPPING	Sep 4, 1999 12:00:00 AM		
61003	Freightliner #61003	FLTGAR			
A7801	Standard Desktop Computer	OFF304	Jul 14, 2004 12:00:00 AM		
13180	Lubrication System	BRM3100	Aug 27, 1998 12:00:00 AM		
A5007	95 FLD112 TRACTOR	DALTERM			
SPFD1602	Trailer Mounted Stimulation Pumper	OLFLD		SPFD1602	Oct 14, 1998 12:00:00 AM
1032	Windows XP Operating System	SWETOCK			
3226	Windows XP Operating System	SWETOCK			
V10216	MS IIS6	OFF305			



\*Key to Maximo Integration Process: How to quickly enable availability of these Cognos Packages that reflect Client Database Customizations

# Why these Features are Important...

<b>Removes</b> Complexity of FM Tool	Significantly Reduces Resources Required for Creation and Maintenance of Packages  - Prior Barrier to Product Acceptance
<b>Removes</b> FM Platform Constraints	Opens up Functionality to Non-Windows Clients
<b>Produces</b> Cognos Meta Data (Package)	Required to begin any Cognos report development
<b>Produces</b> .cpf file which can be opened in FM	Enables additional client extensions (ex. Override OS Business Rules) + Use by Other Cognos Products
<b>Captures</b> Client's Unique Database Customizations	Huge. Client's require their Database Customizations for reporting

# How Does Streamlined Package Publishing Process Work?

## Access Object Structure application in V7

..Bring up ROS (Report Object Structure)

The screenshot shows the 'Object Structures' application interface. At the top, there is a search bar and a 'Select Action' dropdown. Below that, there are tabs for 'List' and 'Object Structure'. The main area contains a form with fields for 'Object Structure' (REP\_ASSET), 'Consumed By' (REPORTING), and 'Application' (ASSET). Below the form is a table titled 'Source Objects for REP\_ASSET' with columns for Object, Parent Object, and Object Location Path. The 'PM' row is highlighted with a red box. To the right, a 'Select Fields' dialog box is open, showing a tree view of database objects under the 'ASSET' root. The 'PM' object is selected in this dialog, with a red arrow pointing from the table to it. A larger red arrow points from the dialog box towards the text on the right.

Object	Parent Object	Object Location Path
JPASSETSPLINK	ASSET	ASSET/JPASSETSPLINK
LOCATIONS	ASSET	ASSET/LOCATIONS
PM	ASSET	ASSET/PM
SPAREPART	ASSET	ASSET/SPAREPART

Object: PM  
Parent Object: ASSET  
Object Location Path: ASSET/PM  
Reporting Description: Preventive Maintenance

- ASSET
  - ASSETSPEC
  - WORKORDER
  - ASSETMETER
  - ASSETSTATUS
  - ASSETUSERCUST
  - COMPANIES
  - CONTRACTASSET
  - INVENTORY
  - ITEM
  - JPASSETSPLINK
  - LOCATIONS
  - PM
  - SPAREPART

ROS are collections of related database objects joined together via maxrelationships

# Publish ROS To Cognos as Application Package

The screenshot shows the 'Object Structures' window with a context menu open over the 'ASSET' object. The menu items include 'Exclude/Include Fields', 'Inbound Setting Restrictions', 'Generate Schema/View XML', 'Add/Modify Alias', 'Duplicate Object Structure', 'Delete Object Structure', 'Add to Bookmarks', and 'Publish as Cognos Package'. A red arrow points to the 'Publish as Cognos Package' option.

Object	Parent Object	Object Location Path
ASSET		ASSET
ASSETSPEC	ASSET	ASSET/ASSETSPEC
WORKORDER	ASSET	ASSET/WORKORDER
ASSETMETER	ASSET	ASSET/ASSETMETER
ASSETSTATUS	ASSET	ASSET/ASSETSTATUS

- ASSET
  - ASSETSPEC
  - WORKORDER
  - ASSETMETER
  - ASSETSTATUS
  - ASSETUSERCUST
  - COMPANIES
  - CONTRACTASSET
  - INVENTORY
  - ITEM
  - JPASSETSPLINK
  - LOCATIONS
  - PM
  - SPAREPART

The screenshot shows the 'Object Structures' window with a 'System Message' dialog box open. The message text is: 'BMXAA7415E - Succeeded in publishing the Object Structure as Cognos Package.' A red arrow points from the 'Publish as Cognos Package' option in the previous screenshot to the 'System Message' dialog box.

Object	Parent Object
ASSET	
ASSETSPEC	ASSET
WORKORDER	ASSET
ASSETMETER	ASSET
ASSETSTATUS	ASSET

# Launch to Cognos

Cognos

IBM Cognos Connection

Public Folders | My Folders

Public Folders

- Name
- [Asset Details](#)
- [Inventory Details](#)
- [Item Details](#)
- [Person Details](#)
- [Work Order Details](#)

A red arrow points from the 'Asset Details' folder to the 'Asset Details' table in the Query Studio screenshot below.

V7 Application Packages Available

Query Studio - New

Menu

- Insert Data
- Edit Data
- Change Layout
- Run Report
- Manage File

Font | Size | B | I | U

**Asset Details**

ASSETNUM	DIRECTION	LOCATION	INSTALLDATE	ASSETTYPE	FAILURECODE	MANUFACTURER
1001		MOFLOOR1	Mar 28, 2001 12:00:00 AM			ANSUL
1002		MOFLOOR2	Mar 28, 2001 12:00:00 AM			ANSUL
1003		MOFLOOR3	Mar 28, 2001 12:00:00 AM			ANSUL
1004		MOFLOOR4	Mar 28, 2001 12:00:00 AM			ANSUL
1005		CONF400	Mar 28, 2001 12:00:00 AM			ANSUL
1006		OFF401	Mar 28, 2001 12:00:00 AM			ANSUL
1007		OFF402	Mar 28, 2001 12:00:00 AM			ANSUL
1008		OFF301				
1009		OFF301				
1010		SWSTOCK				MICROSOFT
1011		SWSTOCK				MICROSOFT
1012		SWSTOCK				MICROSOFT
1013		SWSTOCK				MICROSOFT
1014		SWSTOCK		IT		MICROSOFT
1015		SWSTOCK				MICROSOFT
1016		SWSTOCK				MICROSOFT

A red arrow points from the 'Run Report' menu item to the 'Asset Details' table.

Developer quickly able to create custom reports based on selected application package



# Enhancements By Release and Roadmap

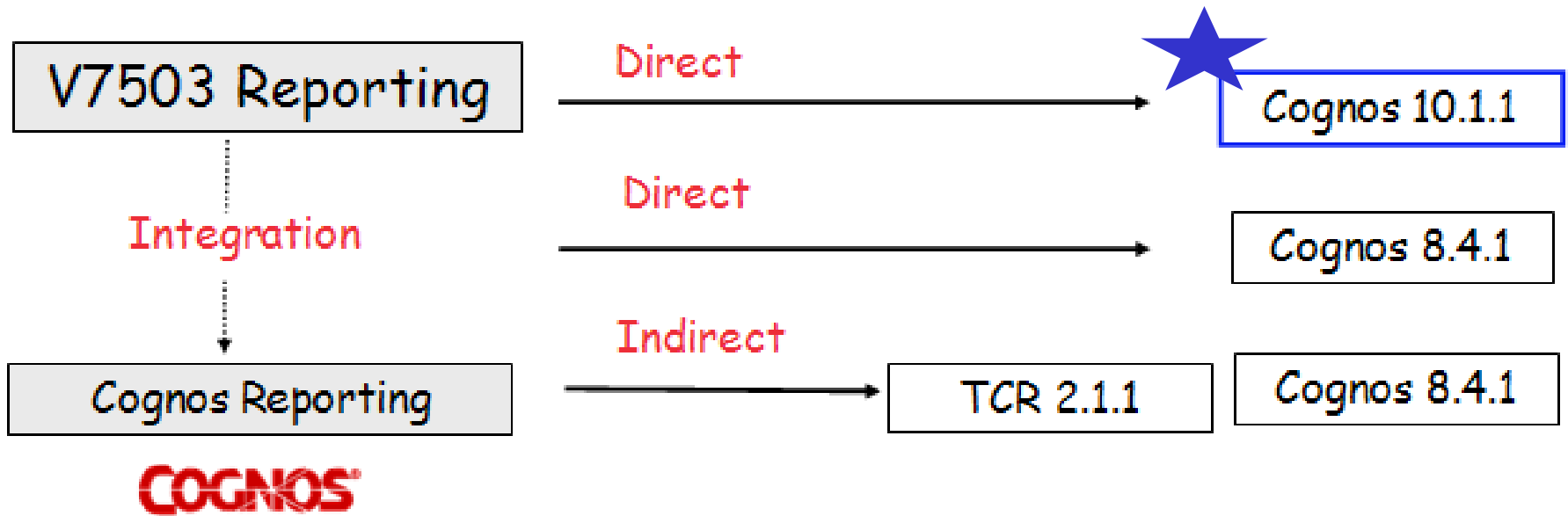
Cognos

Release	Description	Timing
V7.1.1.6	Initial Release	December 2009
V7.5.0.0	Platform Upgrade Cognos 8.4 → Cognos 8.4.1 TCR 1.2 → TCR 2.1	April 2010
V7.5.0.0	Publish Package Descriptions	April 2010
V7.5.0.0	Enable direct launch to Cognos Portal	April 2010
V7.5.0.3	Upgrade to Cognos 10.1.1	July 2012

# Configuration Options Enabled

7.5.0.3+

- ★ 1. Direct: V7.5.0.3 -> Cognos 10.1.1 (New)
- 2. Direct: V7.5.0.3 -> Cognos 8.4.1
- 3. TCR Indirect: V7.5 -> TCR 2.1.1 -> Cognos 8.4.1



V7.5.0.3 Available July 2012

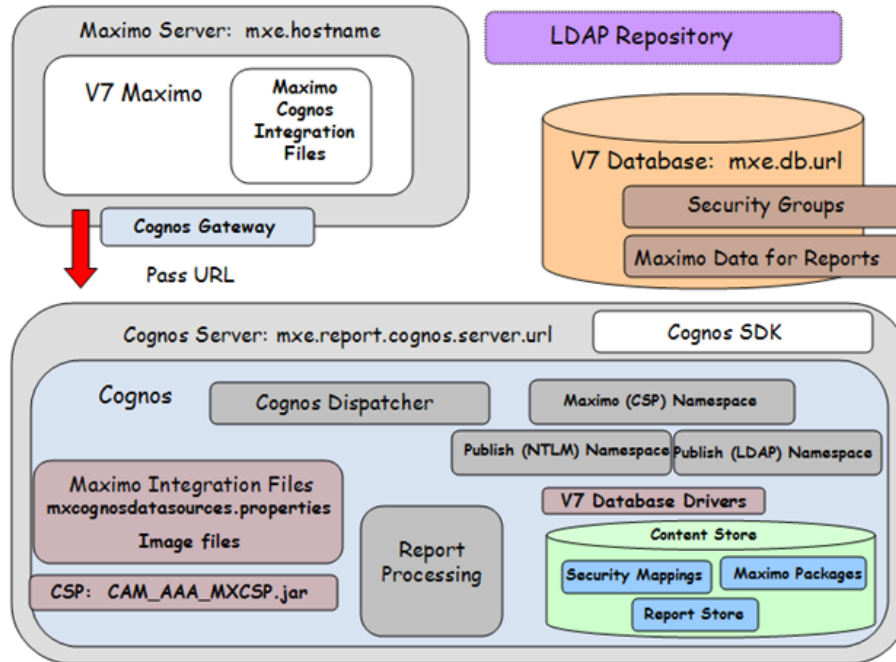
## V7 Cognos Installation Instructions: How to Install

Type	Location
V75 DIRECT Cognos 841	<a href="http://ibm.co/MnIOyP">http://ibm.co/MnIOyP</a>
V75 TCR INDIRECT Cognos 841	<a href="http://ibm.co/GDIVzv">http://ibm.co/GDIVzv</a>
V71 DIRECT Cognos 84	<a href="http://ibm.co/Q7ZLAH">http://ibm.co/Q7ZLAH</a>
V71 TCR INDIRECT Cognos 84	<a href="http://ibm.co/QcNHwV">http://ibm.co/QcNHwV</a>

Install	SetUp	Configure	Meta Data	Admin
Install V7.5	2. V7.5 Create Unique Database User for use in Cognos Authorization	5. Cognos: Create Namespaces. 1 for CSP, 1 for MetaData	8. Configure Cognos SDK	11. V7.5 Report Admin: Register Cognos Test Reports
1. Cognos: Install Cognos 8.4 SP1	3. V7.5: Edit & Copy mxccognosdatasources.properties file	6. V7.5: Configure Maximo Property Files for Cognos	9. Set End Point Properties	12. Cognos: Import Report Test Design Files to Cognos
	4. V7.5: Copy to Cognos (1) CSP Jar (2) Database Drivers (3) Images	7. Cognos: Create Data Source	10. Publish Cognos Packages	

## V7 Cognos Integration: How it Works

Type	Location
Version 7.5 Cognos Integration	<a href="http://ibm.co/NPsTKR">http://ibm.co/NPsTKR</a>
Version 7.1 Cognos Integration	<a href="http://ibm.co/NJOynV">http://ibm.co/NJOynV</a>



Scroll down the page - to the Demos Section

Two demos available

1. Creating Cognos Package, and resulting Query Studio report
2. Details of how V7-Cognos Integration works

#### Demos

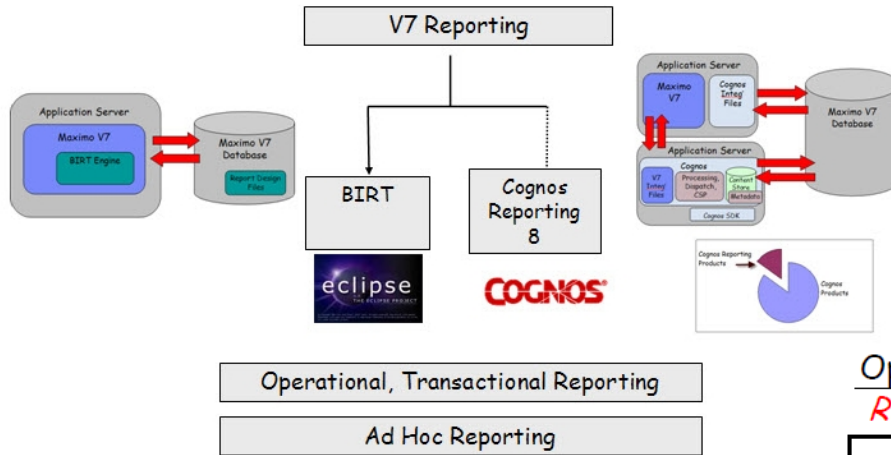
IBM. [Demo-Creating Ad Hoc Report in Cognos Details](#) **NEW!**

IBM. [Maximo Cognos Integration Overview](#)<sup>g</sup>: Highlights integration including accessibility, security, administration and meta data packaging.

# Cognos-BIRT (QBR) Comparison Details

Cognos

Wiki Page and linked PPT comparing the 2 tools



..as they are included within the Maximo applications

## Operational Reporting Functionality Comparison

IBM

### REPORT DEVELOPER

	V7 BIRT	Cognos
Utilizes Meta Data - Less sql knowledge required		✓
Web Based Tool. No Configuration Required		✓
Starting Point - Export Ad Hoc Reports for Extensions	✓	✓
Starting Point - 100's of reports delivered out of the box	✓	
Code modifications required to enable V7 Report Execution		✓
Database Updates enabled from report	✓	
Extensive Validation within Designer		✓
Extensive Training, Documentation, Resources Available		✓

<http://ibm.com/xJKa6D>

## Major Report Enhancements by Release <http://ibm.co/GWHgXz>

### Version 7.5 - April 2011

Functionality	Description	News Alert	Functionality Detailed In	Document Reference #	Revision #	BiLog* Posting
QBR Editing	Ability to edit saved QBRs	<a href="http://bit.ly/iYvuAS">http://bit.ly/iYvuAS</a>	V75 QBR Ad Hoc Reporting	1498285	1	<a href="http://ibm.co/msSWnF">http://ibm.co/msSWnF</a>
QBR ROS	Use of same object multiple times in ROS	<a href="http://bit.ly/mqeHka">http://bit.ly/mqeHka</a>	V75 QBR Ad Hoc Reporting	1498285	1	<a href="http://ibm.co/owWwLc">http://ibm.co/owWwLc</a>
Email URL	Email report content to url within V7	<a href="http://bit.ly/kv7mTv">http://bit.ly/kv7mTv</a>	V75 Report Feature Guide	1498433		<a href="http://ibm.co/mAzOH3">http://ibm.co/mAzOH3</a>
Rich Text	Display report content in rich text format	<a href="http://bit.ly/jBvBJb">http://bit.ly/jBvBJb</a>	V75 Report Developer's Guide	1498572	1	<a href="http://ibm.co/kAW6Uy">http://ibm.co/kAW6Uy</a>
Import Updates	Security Password Enhancements	<a href="http://bit.ly/iD3Z8w">http://bit.ly/iD3Z8w</a>	V75 Report Feature Guide	1498433		
Designer Updates	New Properties Features	<a href="http://bit.ly/iDbiKJ">http://bit.ly/iDbiKJ</a>	V75 Report Developer's Guide	1498572	1	
Schedule Limits	Limit Schedule reports	<a href="http://bit.ly/mPS6G3">http://bit.ly/mPS6G3</a>	V75 Report Feature Guide	1498433		<a href="http://ibm.co/mY4KNe">http://ibm.co/mY4KNe</a>
Direct Print Updates	Updated architecture	<a href="http://bit.ly/lscNU1">http://bit.ly/lscNU1</a>	V75 Report Toolbar Access	1498665		
Logging	Engine and Designer Updates	<a href="http://bit.ly/koSUMk">http://bit.ly/koSUMk</a>	V7 Logging Guide	1423974		
OOB Reports	Delivered report updates	<a href="http://bit.ly/ipJGx8">http://bit.ly/ipJGx8</a>	V75 Report Booklet	<a href="http://bit.ly/iND1CX">http://bit.ly/iND1CX</a>		<a href="http://ibm.co/nk5EHb">http://ibm.co/nk5EHb</a>
Error Codes	New Report Content	<a href="http://bit.ly/ipJGx8">http://bit.ly/ipJGx8</a>	V75 Report Booklet	<a href="http://bit.ly/iND1CX">http://bit.ly/iND1CX</a>		<a href="http://ibm.co/nk5EHb">http://ibm.co/nk5EHb</a>
Integration: Cognos	Cognos Package Naming	<a href="http://bit.ly/lQeJBO">http://bit.ly/lQeJBO</a>	V75 Maximo Cognos Integration Guide	1500935	2	
Integration: Cognos	Additional Access Points	<a href="http://bit.ly/kiBlmu">http://bit.ly/kiBlmu</a>	V75 Maximo Cognos Integration Guide	1500935	2	
Integration: Cognos	Updated Platform Support	<a href="http://bit.ly/kiBlmu">http://bit.ly/kiBlmu</a>	V75 Maximo Cognos Installation Guide	1500030	2	
Integration: Cognos	Delivered Integration Updates	<a href="http://bit.ly/lNzmv">http://bit.ly/lNzmv</a>	V75 Report Planning Guide	1497938	1	

## Cognos Reporting FAQs

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Added by [PamDenny](#), last edited by [PamDenny](#) on Jan 23, 2012  
Labels: (None) [EDIT](#)

Below please find a listing of questions on the Maximo-Cognos Report Integration available in Version 7.

- [Entitlement How Is the V7 Cognos Integration Licensed?](#)
- [Entitlement What is TCR?](#)
- [Entitlement Which Option is best for my environment?](#)
- [Integration Can we integrate to Cognos to Maximo so it is seamless?](#)
- [Integration Does Cognos understand Maximo MBO relationships?](#)
- [Integration What are Namespaces Used for?](#)
- [Integration Why do we need a Maximo Cognos Endpoint?](#)
- [Meta Data Can I extend a V7 Cognos Package?](#)
- [Meta Data Do the Report Object Structures include Custom Tables?](#)

Cognos FAQs

<http://ibm.co/oKTTp5>

## Report and Data Options

### *BIRT Reporting*

Configuration

Administration

Design

Development

Execution

Property Files, Cron Tasks, Database Objects

### Cognos Reporting

Reference Materials, Index and Questions



Site	Description	Short URL
Maximo Report Community	Your Maximo Reporting Peers	<a href="http://ibm.co/zFmoP2">http://ibm.co/zFmoP2</a>
Report Wiki - Reference Materials	Report reference materials by release	<a href="http://ibm.co/niokIv">http://ibm.co/niokIv</a>
Report Wiki - Enhancements	Report features by release	<a href="http://ibm.co/GWHgXz">http://ibm.co/GWHgXz</a>
User Forum	Q&A - Maximo Technical	<a href="http://ibm.co/LqOsRf">http://ibm.co/LqOsRf</a>
Maximo Blogs	Latest best practice, functionality info	<a href="http://ibm.co/GGGyzu">http://ibm.co/GGGyzu</a>

# V75 Maximo Reporting Guides Referenced

Reference

Guide	Short URL
V75 Report Feature Guide	<a href="http://ibm.co/NXBQNU">http://ibm.co/NXBQNU</a>
V75 Report Development Guide	<a href="http://ibm.co/Lb2bfx">http://ibm.co/Lb2bfx</a>
V75 QBR Guide	<a href="http://ibm.co/NHykq4">http://ibm.co/NHykq4</a>
V75 Report Booklet	<a href="http://ibm.co/SIOne2">http://ibm.co/SIOne2</a>
V75 Report Toolbar Access	<a href="http://ibm.co/KgsJfp">http://ibm.co/KgsJfp</a>
V75 Upgrade Planning Guide	<a href="http://ibm.co/NWWUUw">http://ibm.co/NWWUUw</a>
V7 Report Design	<a href="http://ibm.co/O0sNf2">http://ibm.co/O0sNf2</a>
V7 Report Performance	<a href="http://ibm.co/NsXMRr">http://ibm.co/NsXMRr</a>

# Presentation Index

---

## Report And Data Options

1. History.....	Page 4
2. Reporting Options/Versions.....	Page 7
3. Comparison - BIRT vs Cognos .....	Page 18
4. Report Strategy.....	Page 30
5. Data Analysis Options.....	Page 32
6. Reference Materials .....	Page 39

## V7 Report Configuration ..... Page 45

Key V7 Features .....	Page 46
1. Architecture.....	Page 47
2. Installation .....	Page 51
3. System Configuration Options.....	Page 52
Reference Materials .....	Page 57

# Presentation Index

---

<b>V7 Report Administration</b> .....	Page 58
Key V7 Features .....	Page 59
1. Repository/Import.....	Page 60
2. Security... ..	Page 65
3. Report Object Structures.....	Page 74
4. Report Administration.....	Page 78
4. Access - Toolbar, Portlet.....	Page 88
6. Localization.....	Page 97
<b>V7 Report Design</b> .....	Page 99
Key V7 Features .....	Page 100
1. Best Practices.....	Page 101
2. Understand Report Capabilities.....	Page 102
3. Understand User Requirements.....	Page 108
4. Report Specifications .....	Page 109
5. Report Community.....	Page 113

# Presentation Index

---

<b>V7 Report Development</b> .....	Page 115
Key V7 Features .....	Page 116
1. Report Design Tool.....	Page 117
2. File Structure... .....	Page 119
3. Process.....	Page 123
4. Custom Reports .....	Page 126
<b>V7 Report Execution</b> ..... .....	Page 131
Key V7 Features .....	Page 132
1. Ad Hoc Reporting.....	Page 133
2. Emailing.....	Page 144
3. Scheduling.....	Page 148
4. Report Booklet .....	Page 156

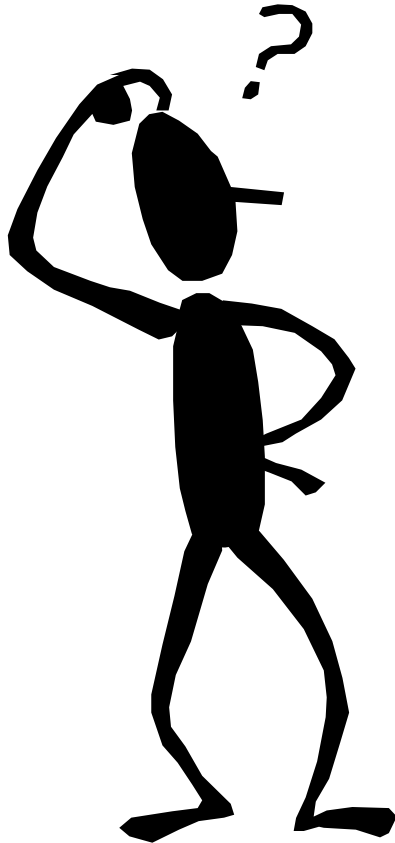
# Presentation Index

---

<b>V7 Miscellaneous</b> .....	Page 161
Database Objects .....	Page 162
Property Settings.....	Page 163
Cron Tasks.....	Page 166
<b>Cognos Reporting</b> .....	Page 167
Enablement- Direct vs TCR Indirect.....	Page 169
Integration Details.....	Page 171
Enhancements/Roadmap.....	Page 178
Reference Materials .....	Page 180
<b>V7 Recap of Report Reference Materials/Sites</b> .....	Page 185

---

QUESTIONS??



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