Section 6: Reporting & BIRT in Maximo

Q1. What reporting options are available in Maximo?

Maximo provides multiple reporting options:

- 1. BIRT Reports Default embedded reporting tool (design using Eclipse BIRT).
- 2. Ad Hoc (QBR) Reports End users can create simple on-demand reports from applications.
- 3. Cognos Integration For advanced analytics, dashboards, KPIs.
- 4. External Tools (Power BI, Tableau, Crystal Reports) Possible via database views or API.
- >> In interviews, always highlight BIRT and Ad Hoc because they are most widely used.

Q2. What is a BIRT Report in Maximo?

BIRT = Business Intelligence and Reporting Tools, an open-source reporting framework integrated into Maximo.

Reports are built using Eclipse BIRT Designer and deployed into Maximo via the Report Administration application.

Reports can include tables, charts, parameters, and can be scheduled.

Q3. What are the main steps to create a BIRT report in Maximo?

- 1. Install Eclipse BIRT Designer with Maximo BIRT libraries.
- 2. Create a new report design (.rptdesign) file.
- 3. Define Data Source usually the Maximo database.
- 4. Define Data Set SQL queries to fetch data.
- 5. Design report layout (tables, charts, groups).
- 6. Add Parameters if needed (e.g., site, date).
- 7. Test the report in Eclipse.
- 8. Import report into Maximo using Report Administration.
- 9. Grant security access for users to run it.

Q4. What is an Ad Hoc (QBR) Report in Maximo?

QBR = Query-Based Reporting.

End users can create reports directly from the 'Select Action -> Run Reports' menu in applications.

No developer needed.

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Users can select attributes, filters, sorting, grouping, and export to Excel.

Stored in Maximo's database (not Eclipse).

Q5. What is the difference between BIRT and QBR reports?

Feature BIRT QBR (Ad Hoc)

Created by Developers End Users

Tool Eclipse BIRT Designer Maximo UI

Complexity Complex (charts, joins, sub-reports) Simple (columns, filters, grouping)

Deployment Imported into Maximo Auto-generated in database

Best Use Management/Operational Reports Quick Analysis by users

Q6. How do you pass parameters in a BIRT report?

Parameters are defined in Data Set Query using? placeholders.

Example:

SELECT * FROM workorder WHERE siteid = ?

Then link the parameter to a report parameter (e.g., siteid).

At runtime, Maximo prompts users to input values.

Parameters can also be defaulted from application fields (e.g., current record's SiteID).

Q7. What are the key files in a BIRT report?

.rptdesign - Main report design file.

.rptlibrary - Shared libraries (styles, templates, scripts).

.properties - For multi-language labels.

Report XML definition - Used in Maximo to register the report.

Q8. What are report object structures in Maximo?

Report Object Structures (ROS) are metadata definitions that define which objects and relationships are available for reporting.

Used in QBR reports and as a data source for BIRT reports.

Example: A ROS for Work Orders might include WORKORDER -> ASSET -> LOCATION.

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Q9. How do you migrate BIRT reports between environments?

- 1. Export the report .zip from Report Administration.
- 2. Import the .zip into the target environment (Dev -> Test -> Prod).
- 3. Ensure required libraries and ROS exist.
- 4. Test report output.

Q10. Can we schedule reports in Maximo?

[YES]

Reports can be scheduled using Report Administration -> Schedule Reports.

Users can define:

- Frequency (daily, weekly, monthly).
- Distribution method (email, saved file).
- Parameters.

Useful for automatic delivery of recurring reports.

Q11. How do you secure reports in Maximo?

Security is managed via Security Groups.

Reports can be restricted by:

- Application (only visible in certain apps).
- Security Group (only certain roles can run it).
- Data Restrictions (e.g., site-level data access).

Q12. Have you created a custom BIRT report in your project? (Interview scenario question)

>> Yes. In my last project, I created a custom Work Order Aging Report using BIRT.

I connected the report to the WORKORDER table and joined with ASSET and LOCATIONS.

Added parameters for SiteID and Work Order Status.

Designed the report with grouping by Asset and included charts to show open vs. closed work orders.

After testing in Eclipse, I imported the .rptdesign file into Maximo Report Administration and assigned access to the Maintenance Planner role.

This reduced manual Excel work and helped planners track overdue work orders efficiently.