

1. How does Power BI handle large datasets in the Online Service, and what is the role of Premium Capacity?

- In the **Online Service**, datasets are limited in size depending on the license.
 - **Pro users**: Dataset size limited to 1 GB, storage up to 10 GB per user.
 - **Premium Capacity**: Allows much larger datasets (up to 400 GB per dataset with compression, depending on SKU). It also provides dedicated resources (more memory, faster performance, higher refresh rates).
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2. Differences between Import mode, DirectQuery, and Live Connection in Power BI Service

- **Import**: Data is copied into Power BI's in-memory model. Very fast, but refreshes are required.
 - **DirectQuery**: Data stays in the source system. Queries are sent live every time. Slower, but always up-to-date.
 - **Live Connection**: Connects directly to an Analysis Services model or Power BI dataset (no data stored in the report).
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3. Explain deployment pipelines in Power BI Online. What stages do they include?

- **Deployment pipelines** help manage report lifecycle (dev → test → prod).
 - **Stages**:
 - **Development** – Build and design reports.
 - **Test** – Validate data, check RLS, and formatting.
 - **Production** – Publish for end-users.
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4. How can Power BI Service integrate with Microsoft Teams or SharePoint for collaboration?

- Power BI reports can be **embedded into Teams channels** (using the Power BI app).
 - Reports and dashboards can also be **embedded into SharePoint Online pages**, allowing seamless collaboration.
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5. What is the XMLA endpoint in Premium and how does it benefit developers or enterprise BI teams?

- **XMLA endpoint** (available in Premium and Premium per User) lets BI teams connect to datasets as if they were SQL Server Analysis Services models.
- **Benefits**: Advanced scripting (DAX, Tabular Editor), external tools integration, automation, and enterprise-level governance.

6. Describe how usage metrics and audit logs work in Power BI Service

- **Usage metrics:** Show report usage stats (views, unique users, most popular pages). Useful for monitoring adoption.
- **Audit logs:** Captured in Microsoft 365 compliance center. Show detailed actions (who viewed, exported, shared reports, etc.) for governance and security.

7. How do you manage workspace access and permissions for different users?

- In each workspace, users can be assigned roles:
 - **Viewer:** Read-only access.
 - **Contributor:** Can edit and publish content.
 - **Member:** Manage content, permissions.
 - **Admin:** Full control of the workspace.

8. How can data governance be enforced in Power BI Service?

- Through **sensitivity labels** (classify data as Confidential, Public, etc.).
- **RLS and Object-Level Security** to limit access.
- **Audit logs** and monitoring.
- **Deployment pipelines** to control promotion of content.

9. What are the limitations of Row-Level Security when using DirectQuery or Live Connection?

- Performance may be slower because filters are applied at the source level.
- Complexity increases with large queries.
- Some sources don't fully support RLS in DirectQuery mode.
- With Live Connection to SSAS, RLS must be managed in the source model (not Power BI).

10. Explain how you can refresh a dataset via Power Automate or REST API

- **Power Automate:** Create a flow that triggers dataset refresh (manual button, schedule, or event-driven).
- **REST API:** Use `POST /refreshes` endpoint for programmatic control, allowing automation scripts to refresh datasets.