

Lesson 20 – Publishing and Sharing in Power BI (Advanced)

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

Power BI handles large datasets by using in-memory compression for Import mode. In the Online Service, datasets over 1 GB require Power BI Premium. Premium Capacity increases limits (up to 400 GB per dataset), improves performance, and allows advanced features like incremental refresh, XMLA endpoint access, and more frequent refresh schedules.

2. What are the differences between Import mode, DirectQuery, and Live Connection in Power BI Service?

Import mode loads data into Power BI and offers fastest performance but requires refresh. DirectQuery queries the data source in real-time, useful for large or sensitive data. Live Connection is similar to DirectQuery but connects specifically to Analysis Services or Power BI datasets, keeping the model centralized.

3. Explain deployment pipelines in Power BI Online. What stages do they include?

Deployment pipelines help manage content across development, test, and production environments. The three stages are: Development (build and test reports), Test (validate with test users), and Production (final version for end users). This enables structured rollout and version control.

4. How can Power BI Service integrate with Microsoft Teams or SharePoint for collaboration?

Reports can be embedded directly into Teams channels or SharePoint pages using Power BI tabs or web parts. Users can view and interact with reports without leaving the platform, improving accessibility and team collaboration.

5. What is the XMLA endpoint in Premium and how does it benefit developers or enterprise BI teams?

XMLA endpoints allow external tools (like SSMS or Tabular Editor) to connect to Power BI datasets for advanced modeling, automation, and management. It benefits BI teams by enabling enterprise-grade model deployment, versioning, and integration with CI/CD pipelines.

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

Usage metrics reports show how often dashboards and reports are accessed and by whom. Audit logs (available in Microsoft 365 compliance center) provide detailed activity logs, such as viewing, sharing, publishing, or exporting data—important for governance and monitoring.

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

You can assign roles in a workspace: Admin, Member, Contributor, or Viewer. These roles define the level of access to publish, edit, delete, or just view content. Permissions can be customized to fit organizational needs.

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

Data governance can be enforced through sensitivity labels, certified datasets, usage auditing, Row-Level Security (RLS), workspace roles, and integrating Power BI with Microsoft Purview or Azure Information Protection.

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

RLS with DirectQuery can affect performance due to real-time filtering. For Live Connection, RLS must be defined in the source model (e.g., in SSAS). You cannot define RLS in Power BI for Live Connected models.

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

In Power Automate, use the 'Refresh a dataset' Power BI connector to trigger dataset refresh based on events. Alternatively, use the Power BI REST API to send a POST request to refresh a dataset programmatically, useful for integrating with external systems or custom triggers.