Lesson 20

Topic: Publishing and Sharing in Power BI

Prerequisites: Give a written brief explanation for all questions.

1. How does Power BI handle large datasets in the Online Service, and what is the role of Premium Capacity in this?
2. What are the differences between Import mode, DirectQuery, and Live Connection in Power BI Service?
3. Explain deployment pipelines in Power BI Online. What stages do they include?
4. How can Power BI Service integrate with Microsoft Teams or SharePoint for collaboration?
5. What is the XMLA endpoint in Premium and how does it benefit developers or enterprise BI teams?
6. Describe how usage metrics and audit logs work in Power BI Service.
7. How do you manage workspace access and permissions for different users?
8. How can data governance be enforced in Power BI Service?
9. What are the limitations of Row-Level Security when using DirectQuery or Live Connection?
10. Explain how you can refresh a dataset via Power Automate or REST API.

1. Large datasets & Premium Capacity

- *In the Service, datasets have size limits (1 GB for Pro).*

- ***Premium Capacity** increases limits (up to 400 GB), improves performance, and provides dedicated resources.*

2. Import vs DirectQuery vs Live Connection

- ***Import**: Data is loaded into Power BI. Fast, but needs refresh.*

- ***DirectQuery**: Data stays in the source, queries are sent live. Real-time, but slower.*

- ***Live Connection**: Connects directly to an Analysis Services model or a published dataset. No data stored in Power BI.*

3. Deployment pipelines

- *Used for enterprise lifecycle management of reports.*

- *Stages: **Development → Test → Production**.*

4. Integration with Teams & SharePoint

- *Reports can be embedded in **Teams channels** or **SharePoint pages**.*
- *Enables collaboration and easy access without leaving those apps.*

5. XMLA endpoint (Premium)

- *A special connection endpoint in Premium.*
- *Allows tools like SSMS or external BI apps to connect to datasets.*
- *Benefits: advanced modeling, scripting, and enterprise-scale management.*

6. Usage metrics & audit logs

- ***Usage metrics**: Show who views reports, and how often.*
- ***Audit logs**: Track user actions (access, exports, sharing). Helps governance and compliance.*

7. Workspace access & permissions

- *Roles: **Admin, Member, Contributor, Viewer**.*
- *These control what each user can do in the workspace.*

8. Data governance in Service

- *Achieved through certified datasets, RLS, audit logs, and data loss prevention (DLP) policies.*

9. RLS limitations with DirectQuery/Live Connection

- *RLS works, but filters are pushed back to the data source.*
- *Can slow down queries, and not all sources fully support RLS.*

10. Refreshing dataset with Power Automate or REST API

- ***Power Automate**: Build a flow with the "Refresh dataset" action.*
- ***REST API**: Developers can call POST /refreshes to trigger a refresh programmatically.*