Handling Large Datasets & Premium Capacity

Power BI Online Service handles large datasets more efficiently with Premium Capacity, which offers larger storage, higher refresh limits, and improved performance. Premium allows datasets up to 400 GB and enables advanced features like incremental refresh.

Import Mode vs DirectQuery vs Live Connection

Import Mode: Data is loaded into Power BI and optimized for performance but has dataset size limits. DirectQuery: Queries data directly from the source in real-time but may be slower. Live Connection: Connects directly to Analysis Services or existing Power BI semantic models without storing data.

Deployment Pipelines

A feature in Power BI Service for enterprise BI lifecycle management. It includes three stages: Development, Test, and Production. Reports and datasets can be promoted between these stages in a controlled manner.

Integration with Teams and SharePoint

Power BI reports can be embedded directly into Microsoft Teams channels or SharePoint Online pages, enabling collaboration and easy access within productivity tools.

XMLA Endpoint in Premium

XMLA endpoint allows enterprise BI teams to connect external tools (SSMS, Visual Studio, Excel) to Power BI datasets for advanced modeling, governance, and automation. Available only with Premium/PPU.

Usage Metrics & Audit Logs

Usage metrics show how often a report/dashboard is viewed and by whom. Audit logs (via Microsoft 365 Compliance Center) provide detailed activity logs for governance and monitoring user actions.

Managing Workspace Access & Permissions

Admins can assign roles like Viewer, Contributor, Member, or Admin within workspaces. This controls who can view, edit, or publish content.

Data Governance in Power BI

Governance is enforced using sensitivity labels, data lineage, certified datasets, RLS, and integration with Microsoft Information Protection and Azure Active Directory.

RLS Limitations with DirectQuery/Live Connection

RLS works, but performance may be affected since filters are passed to the source on every query. With Live Connection to Analysis Services, RLS must be defined in the source model, not Power BI.

Refreshing via Power Automate or REST API

Datasets can be refreshed on demand using Power Automate flows or Power BI REST API. This allows automation beyond the standard scheduled refresh in the Service.