

# Power BI Assignment 2

## 1. Explain the advantages of Natural Queries in PowerBi with an example?

The Q&A feature in Power BI lets you explore your data in your own words by using natural language. Q&A is interactive, even fun. Often, one question leads to others as the visualizations reveal interesting paths to pursue. Asking the question is just the beginning. Travel through your data, refining or expanding your question, uncovering new information, zeroing in on details, or zooming out for a broader view. The experience is interactive and fast, powered by an in-memory storage.

Power BI Q&A is free and available to all users. In Power BI Desktop, report designers can use Q&A to explore data and create visualizations. In the Power BI service, everyone can explore their data with Q&A. Our mobile apps support Q&A, too. Use the Q&A virtual assistant in iOS and the Q&A visual on Android devices. If you have permission to edit a dashboard or report, you can pin your Q&A results.

## 2. Explain Web Front End(WFE) cluster from Power BI Service Architecture?

The **WFE** cluster uses Azure AD to authenticate clients, and provide tokens for subsequent client connections to the Power BI service. Power BI uses the **Azure Traffic Manager** (Traffic Manager) to direct user traffic to the nearest datacenter. Traffic Manager directs requests using the DNS record of the client attempting to connect, authenticate, and to download static content and files. Power BI uses the **Azure Content Delivery Network** (CDN) to efficiently distribute the necessary static content and files to users based on geographical locale.

## 3. Explain Back End cluster from Power BI Service Architecture?

The **Back-End** cluster determines how authenticated clients interact with the Power BI service. The **Back-End** cluster manages visualizations, user dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the Power BI service. The **Gateway Role** acts as a gateway between user requests and the Power BI service. Users don't interact directly with any roles other than the **Gateway Role**. **Azure API Management** eventually handles the **Gateway Role**.

4. What ASP.NET component does in Power BI Service Architecture?

5. Compare Microsoft Excel and PowerBI Desktop on the following features:

- Data import
- Data transformation
- Modeling
- Reporting
- Server Deployment
- Convert Models
- Cost

6. List 20 data sources supported by Power Bi desktop.

- SQL Server database
- Access database
- SQL Server Analysis Services database
- Oracle database
- IBM Db2 database
- IBM Informix database (Beta)
- IBM Netezza
- MySQL database
- PostgreSQL database
- Sybase database
- Teradata database
- SAP HANA database
- SAP Business Warehouse Application Server
- SAP Business Warehouse Message Server
- Amazon Redshift
- Impala
- Google BigQuery
- Google BigQuery (Azure AD)(Beta)
- Vertica
- Snowflake
- Essbase
- Actian (Beta)
- Amazon Athena
- AtScale cubes

- BI Connector
- Data Virtuality LDW
- Denodo
- Dremio Software
- Dremio Cloud (Beta)
- Exasol
- Indexima
- InterSystems IRIS (Beta)
- Jethro (Beta)
- Kyligence
- Linkar PICK Style / MultiValue Databases (Beta)
- MariaDB
- MarkLogic
- TIBCO® Data Virtualization