



Top 50



Azure Data Factory

Interview Questions



Here's the list of Azure Data Factory (ADF) 50+ Interview Questions (Including some Scenario based) These Questions hold some significance in interviews.

BASIC TO INTERMEDIATE :

- 1 . What are the main components of Azure Data Factory?
2. What are Linked Services in ADE and why are they important?
3. What types of triggers are available in ADF for pipeline execution?
4. What is the Copy Activity in ADE and how can you optimize its performance?
5. How does ADF handle running multiple pipeline tasks simultaneously ?
6. What is the Lookup activity in ADE and how is it used?

7. How do you monitor and troubleshoot ADF pipelines?

8. What are activities in ADE and can you name some important ones you've used?

9. What is the tumbling window trigger in ADE and when should you use it? 10. Can you explain the different ways to execute pipelines in ADF?

1 1. What are the main data sources supported by ADF?

12. What is the Get Metadata activity in ADF?

13. What's the difference between Mapping Data Flow and Wrangling Data Flow in ADF?

14. How do you work with dynamic content and parameters in ADF pipelines?

- 1 5. How do you manage schema changes in ADF?
16. What's the purpose of a Self-hosted Integration Runtime, and when would you use it?
17. How do you integrate ADF with Databricks or Synapse Analytics?
18. What are ARM templates, and how are they used in ADF?
19. How do you handle incremental data loading?
20. How would you implement SCD Type 2 in ADF?
21. What is the limit on the number of pipelines and entities in ADF?
22. Describe the steps for deploying ADF pipelines using CI/CD.
23. What new features does ADF v2 have compared to ADF V1 ?
24. How can you improve data movement speed in ADF?

25. How does nested looping work in ADF?

INTERMEDIATE TO ADVANCED
(scenario based)

1. How do you schedule when pipelines run in ADF?

2. How can you set up a stored procedure to run automatically in an ADF pipeline?

3. What different types of integration runtimes are there in Azure Data Factory, and when should you use each

4. What are Data Flows in Azure Data Factory?

5. How do you connect a Databricks notebook to ADF?

6. How would you handle errors and retries in ADF pipelines?

7. How would you take data from a CSV file in Azure Blob Storage and load it into an Azure SQL Database?

8. How can you use parameters and variables in ADF pipelines to make them flexible and reusable?

9. How would you make a pipeline run only after another pipeline finishes successfully?

10. How would you set up a solution that can choose the source and destination based on input parameters?

11. How do you change data in Azure Data Factory using data flow transformations?

12. How would you implement slowly changing dimensions (SCD) in Azure Data Factory?

13. How do you manage access and security in Azure Data Lake Storage

14. How do you connect ADF with CI/CD for deployment?

1 5. What is data lineage, and how would you show it in an Azure data pipeline?

16. What would you do if your data pipeline sometimes fails because of network problems?

17. How would you improve the performance of data partitioning in ADLS?

18. How would you set up incremental data loading from an on-premises SQL Server to an Azure SQL Database?

19. How would you create a data pipeline that processes and analyzes streaming data in real-time?

20. How would you copy data from several CSV files in Azure Data Lake Storage Gen2 to an Azure SQL Database?

21. How would you manage incremental data loading in ADF from a SQL database?

22. How do you design an effective ADF pipeline and what all metrics and considerations you should keep in mind while designing?

23. we have adf and databricks both, i can achieve transformation , fetching the data and loading the dimension layer using adf also but why do we use databricks if both have the similar

functionality for few things. why they made it? (just a thought process was required)

24. Can you share an example of when data pipeline monitoring missed an issue? How did you find and fix it?

25. What are the error handling mechanisms in ADF pipelines?

26. What steps would you take to set up logging and monitoring in ADF to track pipeline performance and failures?

27. How do you set up dependencies and run pipelines in parallel in ADF for efficient data processing?

28. What are some best practices to make Azure Data Factory pipelines perform better?

29. How can we load multiple(50)tables at a time using adf?