



# Azure Solution

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# 這節主要重點



- 大數據分析類型
- IoT 類型
- AI 類型
- Serverless

# 大數據分析/儲存類型





# Azure Synapse Analytics



- Data Warehouse Solution
- Massive Parallel Processing (MPP)
  - 同時間並行處理



A cloud-based Enterprise Data Warehouse.

[What is Azure Synapse Analytics?](#)



# Azure HDInsight



- 可以作為以下幾個的底層
  - [Apache Spark](#)
  - [Apache Hadoop](#)
  - [Apache Kafka](#)
  - [Apache HBase](#)
  - [Apache Storm](#)
  - [Machine Learning Services](#)



A fully-managed, open-source  
analytics service for  
enterprises

[What is Azure HDInsight?](#)



# Azure Databricks



- Databrick 的 雲端版本
- 可以讓資料科學家一起分析資料
  - 建立 Notebook



Apache Spark based  
analytics service.

[What is Azure Databricks?](#)

# IoT

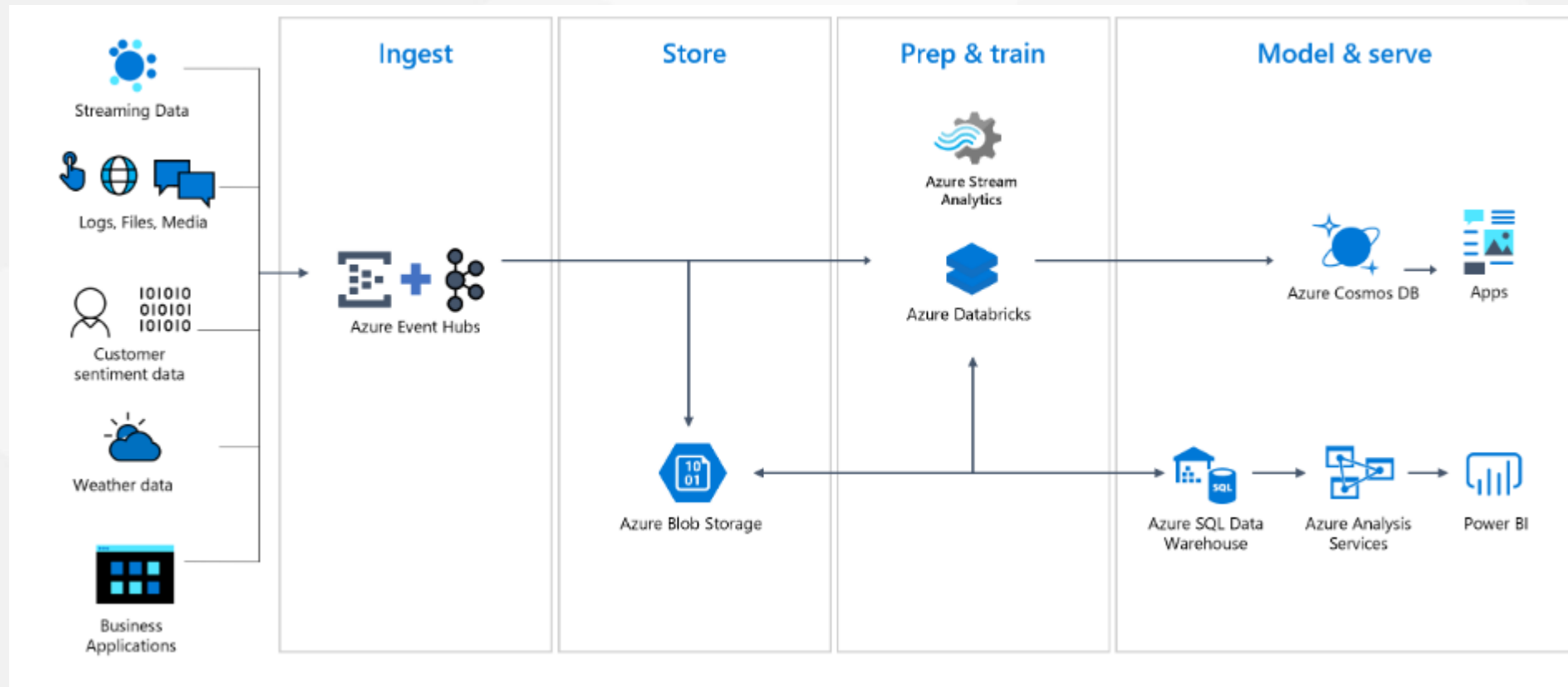




# IoT Hub



## • Event Hub + IoT 設備管理



<http://ilikesqldata.com/announcing-self-serve-experience-for-azure-event-hubs-clusters/>

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# IoT Central



- SaaS 服務
- 疊加在 IoT Hub 上面
  - Dashboard



[What is Azure IoT Central?](#)



# Azure Sphere



- secured, high-level application platform with built-in communication and security features for internet-connected devices.
- 3 個部分
  - 硬體 Micro Controller Unit (MCU)
  - 客製的 Linux 作業系統
  - Azure Sphere Security Service (AS3)
    - 確保連線是安全



[What is Azure Sphere?](#)

# AI





# AI



**Azure Machine Learning:** cloud-based to develop, train, and deploy machine learning models.

[What is Azure Machine Learning?](#)



**Azure Bot Service:** develop chatbot works with different channel.



**Cognitive Services:** pre-trained/custom train AI service.

[Azure Cognitive Services](#)

# Serverless





# Serverless



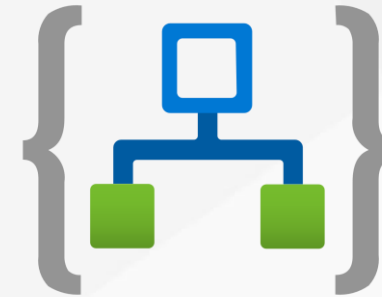
## Azure Functions



Run event-triggered code without having to explicitly provision or manage infrastructure

[Azure Functions documentation](#)

## Azure Logic Apps



automated scalable workflows, business processes, and enterprise orchestrations

[Azure Logic Apps documentation](#)

# 開發





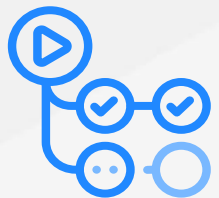
# 開發



**Azure DevOps:** DevOps total solution, from issue tracking to test



**GitHub:** version control and bug/task management.



**GitHub Actions for Azure:** build, test, and deploy from within GitHub.



**Azure DevTest Labs:** quickly create environments in Azure while minimizing waste and controlling cost.



# 結語





# 結語



- 針對不同的情境使用不同的服務



# 參考資料



- **Azure Fundamentals part 3: Describe core solutions and management tools on Azure**



# 歡迎訂閱、按贊 + 分享



- Alan Tsai 的學習筆記
- <https://blog.alantsai.net>
- FB粉絲頁
- <http://fb.alantsai.net>
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