

Data handling methods of Meta

Service	Meta
Object Storage	Haystack
Relational Database	Meta RDS
NoSQL Database	Cassandra
Messaging	Kafka
Blockchain	Libra

Here are one-line explanations for each of Meta's data handling methods

1. **Object Storage (Haystack)**: A highly scalable, fault-tolerant storage system for large files and objects.
2. **Relational Database (Meta RDS)**: A managed relational database service for structured data, based on MySQL and PostgreSQL.
3. **NoSQL Database (Cassandra)**: A distributed, open-source NoSQL database for handling large amounts of unstructured or semi-structured data.
4. **Messaging (Kafka)**: A distributed streaming platform for high-throughput, fault-tolerant data processing and event-driven architecture.
5. **Blockchain (Libra)**: A decentralized, open-source blockchain platform for secure, transparent, and scalable data management.

These data handling methods enable Meta to efficiently manage and process vast amounts of data across its services.

AI services provided by Meta

1. Open source services:

- a. **LLaMA** (Large Language Model Meta AI): An open-source large language model.
- b. **PyTorch**: An open-source machine learning library.
- c. **FAIR** (Facebook AI Research): Open-source AI research and models.
- d. **Detectron2**: Object detection and segmentation.
- e. **ParlAI**: Conversational AI framework.

Here are the use cases for each:

LLaMA

- Use Cases:
Chatbots: Human-like conversations.
Language Translation: Accurate text translation.
Content Creation: Automated writing.
Sentiment Analysis: Emotion detection.
Text Summarization: Condensing long texts.
- Benefits:
Enhanced language understanding.
Improved accuracy.
Increased efficiency.
Customizable.
- Industries:
Customer Service.
Marketing.
Healthcare.
Education.

PyTorch

- Use Cases:
Image Classification: Object recognition.
Natural Language Processing (NLP): Text analysis.
Speech Recognition: Voice-to-text.
Reinforcement Learning: Autonomous systems.
- Benefits:
Rapid prototyping.
Dynamic computation graphs.
Modular architecture.

- Community support.
- Industries:
Computer Vision.
Autonomous Vehicles.
Healthcare.
Finance.

FAIR

- Use Cases:
Research: Advancing AI state-of-the-art.
Model Development: Creating custom AI models.
Education: Teaching AI concepts.
- Benefits:
Open-source.
Collaborative.
Cutting-edge research.
Community-driven.
- Industries:
Academia.
Research Institutions.
AI Development.

Detectron2

- Use Cases:
Object Detection: Identifying objects.
Segmentation: Image masking.
Tracking: Object movement analysis.
- Benefits:
High accuracy.
Real-time processing.
Flexibility.
Scalability.
- Industries:
Autonomous Vehicles.
Surveillance.
Healthcare.
Robotics.

ParlAI

- Use Cases:
Chatbots: Conversational interfaces.
Virtual Assistants: AI-powered support.
Customer Service: Automated support.
- Benefits:
Improved user experience.
Enhanced engagement.
Increased efficiency.
Customizable.
- Industries:
Customer Service.
Marketing.
Healthcare.
Education.

2. Paid services:

- a. Meta AI Studio: A paid platform for creating, sharing, and discovering AIs.
- b. Meta AI APIs: Paid APIs for text, image, and video analysis.
- c. Meta Quest Pro: A paid VR headset with AI-powered features.
- d. Workplace: A paid collaboration platform with AI-driven tools.

Deployment Services provide by Meta

Meta does not offer standalone public deployment services like AWS or Google Cloud. However, it does provide several tools and frameworks that can facilitate the deployment of AI models and applications, particularly within its ecosystem. Some of these include:

1. PyTorch: An open-source machine learning library that supports model training and deployment, widely used for research and production.
2. TorchServe: A model serving framework for deploying PyTorch models, allowing developers to easily manage and scale their AI applications.
3. Facebook's Deployment Tools: While not public, Meta uses its own infrastructure and tools for deploying applications and services at scale.

4. Developer APIs: Meta provides APIs for integrating AI functionalities into apps, which can help with deployment within their platforms.

Meta Developer APIs Pricing

Meta's developer APIs offer a mix of free and paid plans, depending on the specific API, usage, and requirements. Here's a general outline:

1. Free Tier:

Limited requests per day/month (varies by API).

Basic features and support.

2. Paid Plans:

- a. Meta AI APIs

Text Analysis: \$0.0005-\$0.005 per request.

Image Analysis: \$0.005-\$0.05 per request.

Video Analysis: \$0.01-\$0.1 per request.

- b. Meta Cloud APIs

Cloud Functions: \$0.000004-\$0.004 per invocation.

Cloud Storage: \$0.01-\$0.1 per GB-month.

- c. Meta Platform APIs

Facebook API: Free-\$0.005 per request.

Instagram API: Free-\$0.005 per request.

Pricing Factors:

1. Request volume.
2. Data storage.
3. Compute resources.
4. Support levels.

- Please note that prices may vary depending on:

1. Location.
2. Industry.
3. Specific use cases.
4. Custom agreements.

OLLaMA:

Ollama stands for (Omni-Layer Learning Language Acquisition Model), a novel approach to machine learning that promises to redefine how we perceive language acquisition and natural language processing. At its core, Ollama is a groundbreaking platform that democratizes access to large language models (LLMs) by enabling users to run them locally on their machines. Developed with a vision to empower individuals and organizations, Ollama provides a

user-friendly interface and seamless integration capabilities, making it easier than ever to leverage the power of LLMs for various applications and use cases.

Here are some example models that can be downloaded:

Model	Parameters	Size	Download
Llama 3.2	3B	2.0GB	<code>ollama run llama3.2</code>
Llama 3.2	1B	1.3GB	<code>ollama run llama3.2:1b</code>
Llama 3.1	8B	4.7GB	<code>ollama run llama3.1</code>
Llama 3.1	70B	40GB	<code>ollama run llama3.1:70b</code>
Llama 3.1	405B	231GB	<code>ollama run llama3.1:405b</code>
Phi 3 Mini	3.8B	2.3GB	<code>ollama run phi3</code>
Phi 3 Medium	14B	7.9GB	<code>ollama run phi3:medium</code>
Gemma 2	2B	1.6GB	<code>ollama run gemma2:2b</code>
Gemma 2	9B	5.5GB	<code>ollama run gemma2</code>
Gemma 2	27B	16GB	<code>ollama run gemma2:27b</code>
Mistral	7B	4.1GB	<code>ollama run mistral</code>
Moondream 2	1.4B	829MB	<code>ollama run moondream</code>
Neural Chat	7B	4.1GB	<code>ollama run neural-chat</code>
Starling	7B	4.1GB	<code>ollama run starling-lm</code>
Code Llama	7B	3.8GB	<code>ollama run codellama</code>
Llama 2 Uncensored	7B	3.8GB	<code>ollama run llama2-uncensored</code>
LLaVA	7B	4.5GB	<code>ollama run llava</code>
Solar	10.7B	6.1GB	<code>ollama run solar</code>

Performance Comparison:

