

O'REILLY®

Data Ingestion

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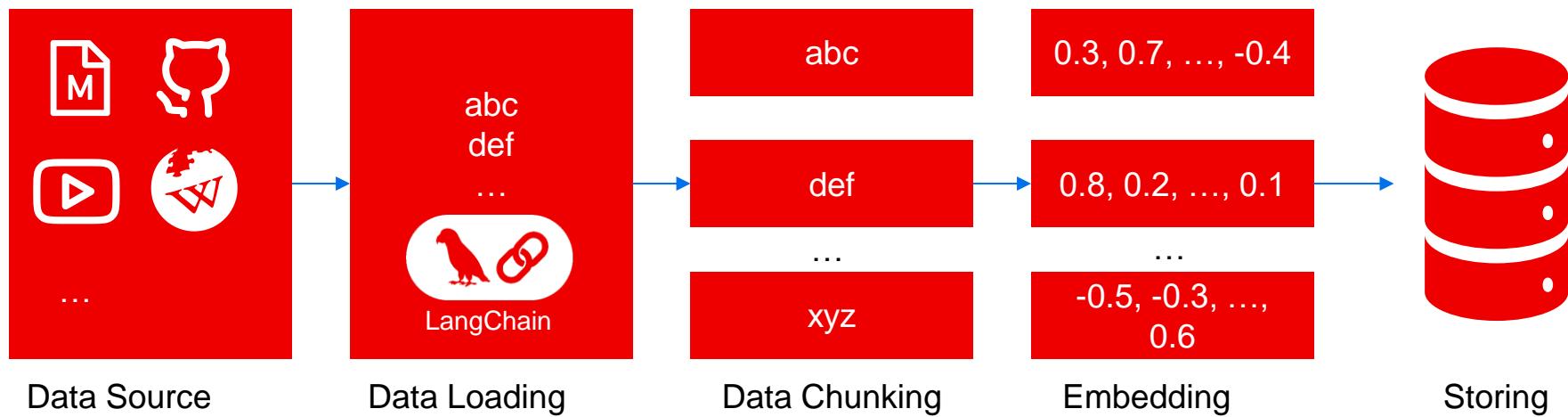
Learning Objectives

By the end of this module, you will:

- Know the data ingestion steps
- Understand the process
- Know about LangChain capabilities

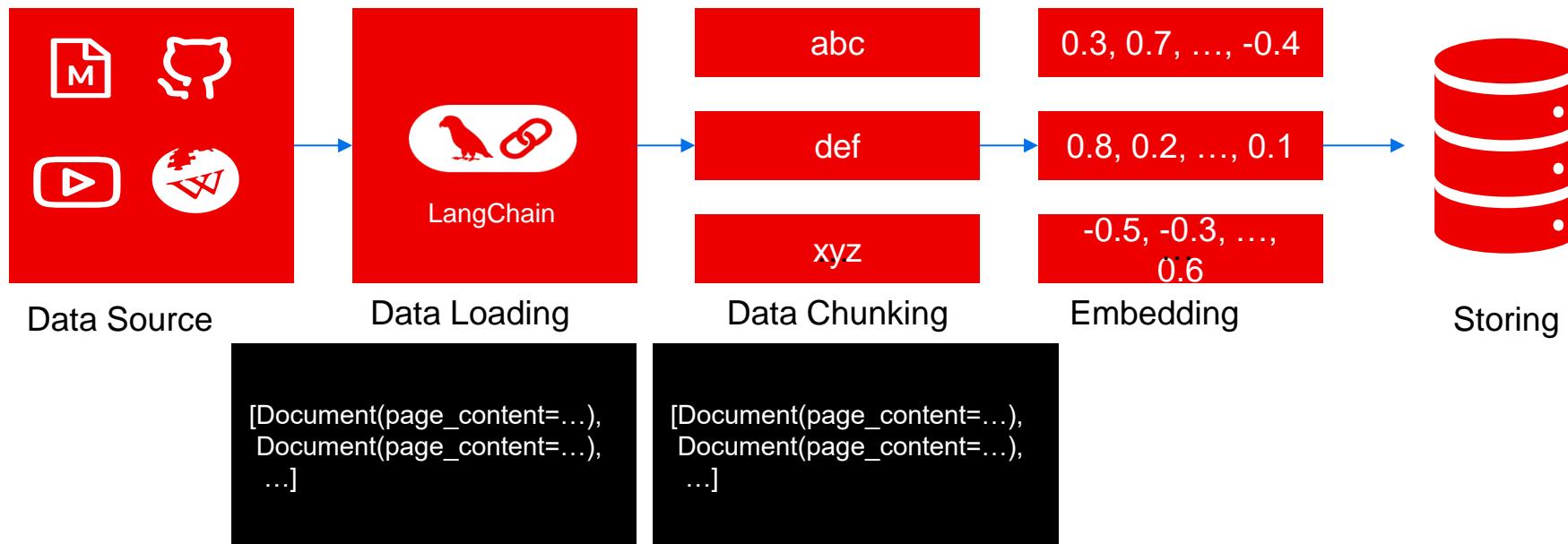


Data Ingestion Process





Data Types





Additional Resources

The screenshot displays the LangChain website's architecture diagram and associated resources.

Architecture Diagram:

- LangSmith:** Observability layer.
- LangServe:** Deployments layer, providing "Chains as Rest APIs" in Python.
- Templates:** Reference Applications layer, also in Python.
- LangChain:** Cognitive Architectures layer, featuring "Chains", "Agents", and "Retrieval Strategies". It supports Python and JavaScript.
- LangChain-Community:** Integrations Components layer, containing "Model I/O", "Retrieval", and "Agent Tooling". It also supports Python and JavaScript.
- LangChain-Core:** Protocol layer, detailing "LCEL - LangChain Expression Language" with features like Parallelization, Fallbacks, Tracing, Batching, Streaming, Async, and Composition.

Resources and Tutorials:

- Tutorials:** LangSmith, LangGraph, LangServe.
- How-to guides:** LangSmith, LangGraph, LangServe.
- Conceptual guide:** LangSmith, LangGraph, LangServe.
- Ecosystem:** LangSmith, LangGraph, LangServe.
- Versions:** Overview, Release Policy, Packages, v0.2.
- Security:**
- Observability:** LangSmith.
- Deployments:** LangServe.
- Reference Applications:** Templates.
- Tooling:** LangChain, LangChain-Community.
- LCEL - LangChain Expression Language:** LangChain-Core.
- Additional resources:** Security, Integrations, Contributing.
- Development:** Debugging, Playground, Evaluation, Annotation, Monitoring.
- API reference:** LangSmith, LangGraph, LangServe.
- Ecosystem:** LangSmith, LangGraph, LangServe.
- Contributing:**

Source: <https://python.langchain.com/>

The background features a vibrant red-to-yellow gradient. Overlaid on this gradient are several semi-transparent, overlapping circles in shades of red, orange, and yellow, creating a dynamic, layered effect.

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