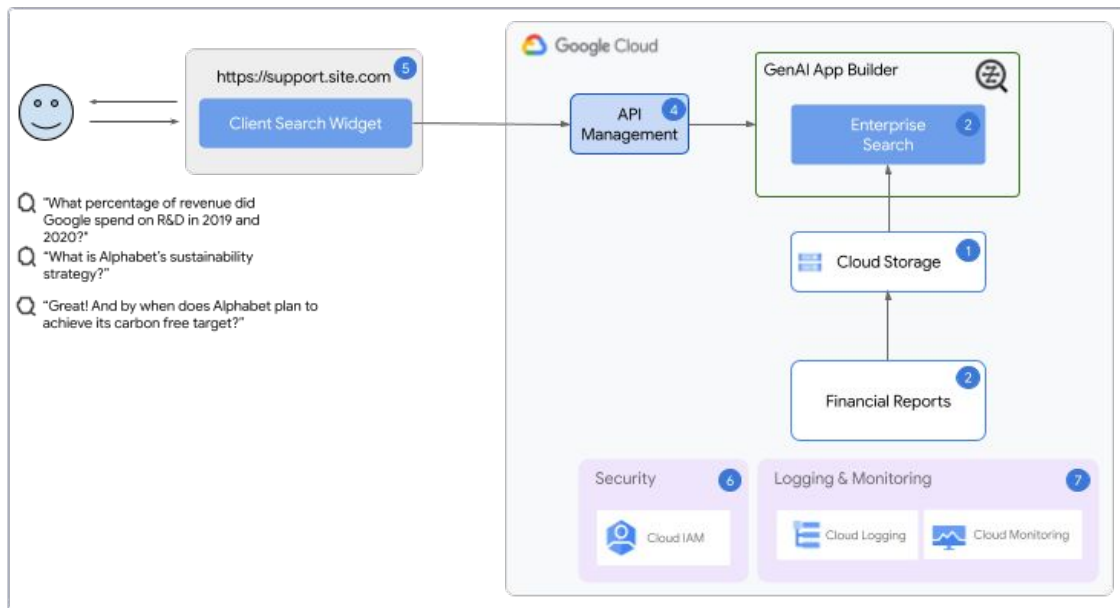


Reference Architecture

Finding diamonds in the rough, faster^[Financial Services]

This reference architecture shows configuring Gen AI App Builder platform for helping investment managers make faster and better decisions.

Use case: Investment managers are responsible for handling the financial planning, investing and managing investment portfolios on their clients' behalf and answering client questions based on their current portfolio activities. As part of their job, they need to research topics that could impact their clients' portfolios including the analysis of vast amounts of financial reports (i.e 10-K forms). With the power of Google's Enterprise Search, investment advisors are enabled to generate meaningful, digestible and actionable insights from their available information for selected investment products (stocks, bonds, etc..) derived from potentially vast amounts of data including news, analyst reports and annual reports.



Components Description

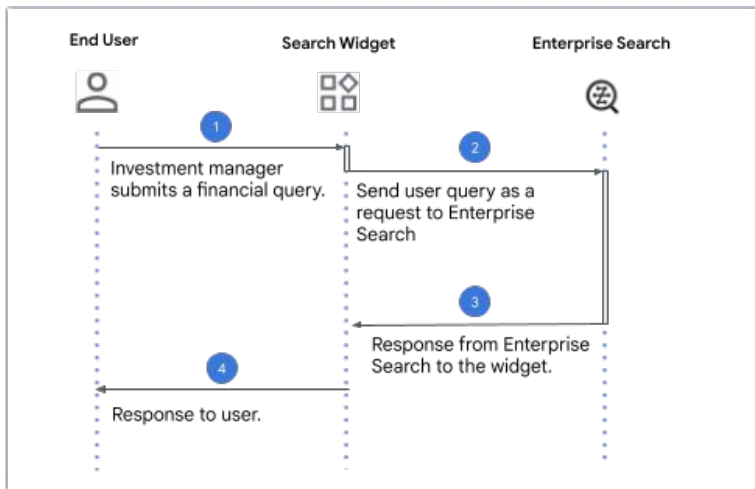
- 1 **Google Cloud Storage** is used to store financial documents to be searched and analyzed.
- 2 **Document loader** financial documents are loaded and indexed.
- 3 **Enterprise Search** is a search platform for developers to build AI enabled, LLM-enriched, embedded, search capabilities and vertical solutions.
- 4 **API Management** to build, manage, and secure API endpoints with tools such as Cloud Functions, Cloud Run, API Gateway, Apigee, etc.
- 5 **Enterprise Search** provides HTML code for a Widget to embed on a page.
- 6 **Security:** Enterprise Search leverages Identity and Access Management of Google Cloud.
- 7 **Logging/Monitoring:** Enterprise Search provides metrics such as click through rate, devices, etc.

User Interaction Diagram

Finding diamonds in the rough, faster^[Financial Services]

This diagram shows the user interaction flow between components in the reference architecture configuring Gen AI App Builder platform for helping investment managers make faster and better decisions.

Use case: Investment managers are responsible for handling the financial planning, investing and managing investment portfolios on their clients' behalf and answering client questions based on their current portfolio activities. As part of their job, they need to research topics that could impact their clients' portfolios including the analysis of vast amounts of financial reports (i.e 10-K forms). With the power of Google's Enterprise Search, investment advisors are enabled to generate meaningful, digestible and actionable insights from their available information for selected investment products (stocks, bonds, etc..) derived from potentially vast amounts of data including news, analyst reports and annual reports.



User Interaction Flow

- 1 User interacts with Search widget on website to submit a query.
- 2 The user query from Search widget is sent to the Enterprise Search service. Enterprise search performs a search on the corpus e.g. support documents. A key feature of Enterprise Search is a semantic understanding of search queries, which means that it can understand the meaning of a query and return results that are more relevant to the user's intent.
- 3 Enterprise Search responds back to the user query with top *n* search results, summarizes the result and includes citations (references) to the documents from where information was retrieved with title, a snippet, and a URL.
- 4 The response from Enterprise Search to the user query is sent to the Search widget and to the user on their device.