Big Data, organisation and analysis

Building a REST API service

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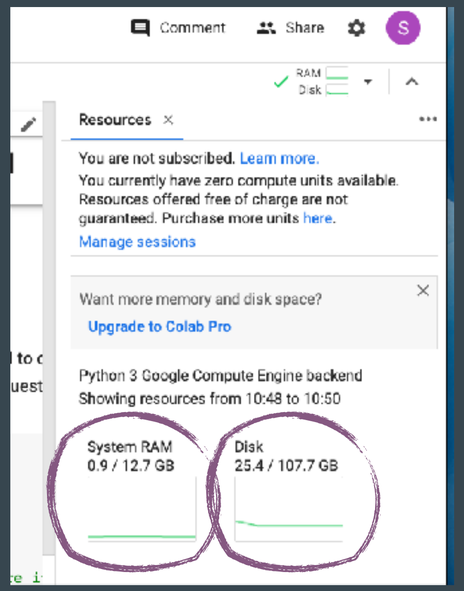
Recap on what we learned

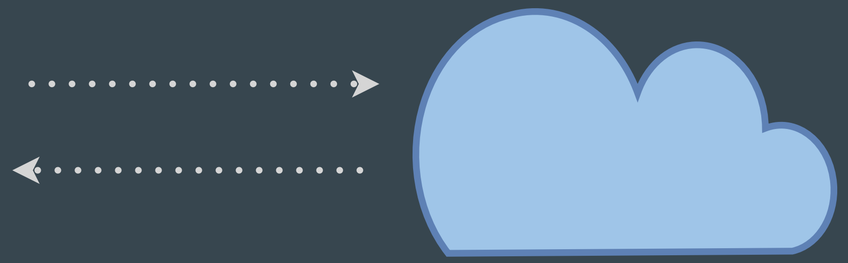
- So far, we have been learning...
  - What is virtualisation and the link with VMs and Containers
  - How these are forming Cloud computing services (e.g., Colab Notebooks)
  - How to create a “middleware” to access data
  - How to access REST APIs

Google Cloud service

Principle



our system

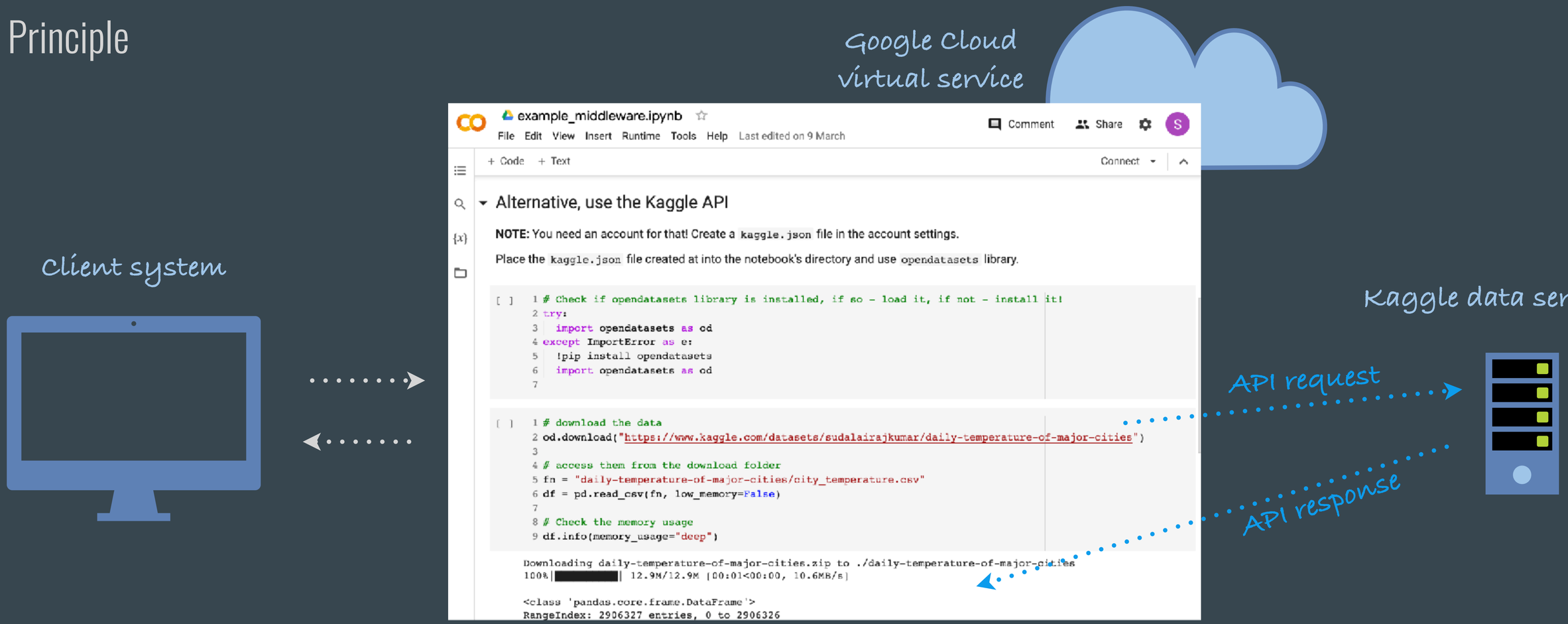


Virtual machine
or
Container

Google Cloud Server

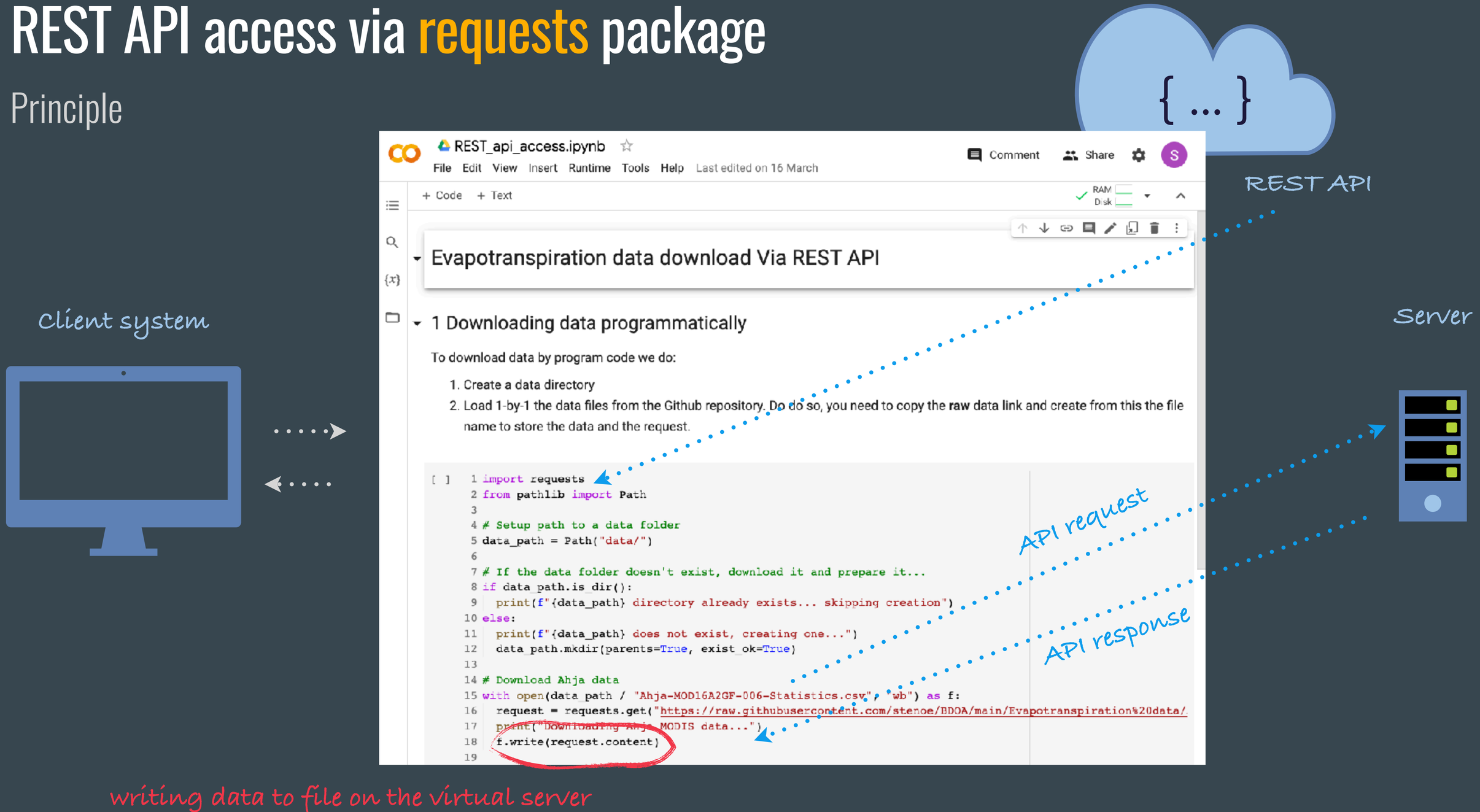
Data access via API

Principle



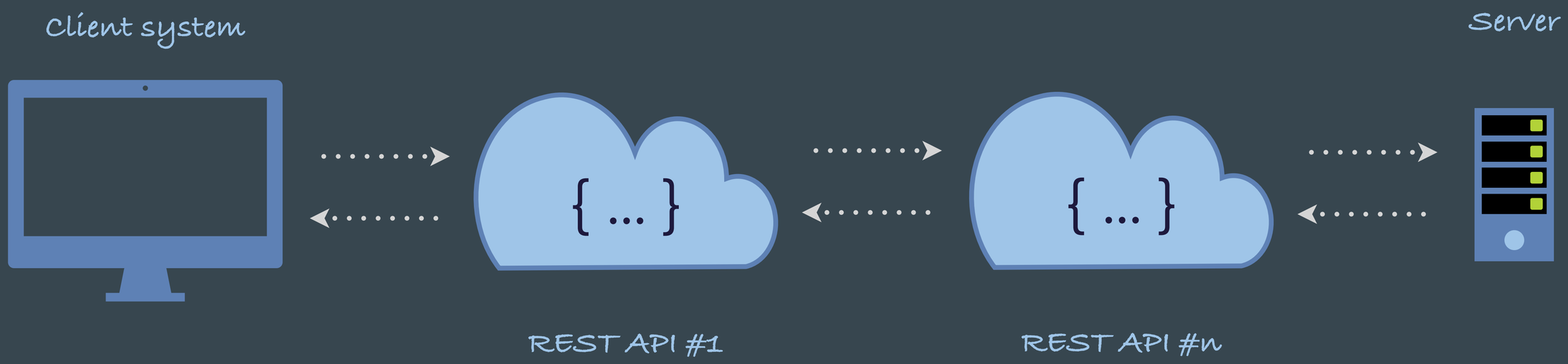
REST API access via requests package

Principle



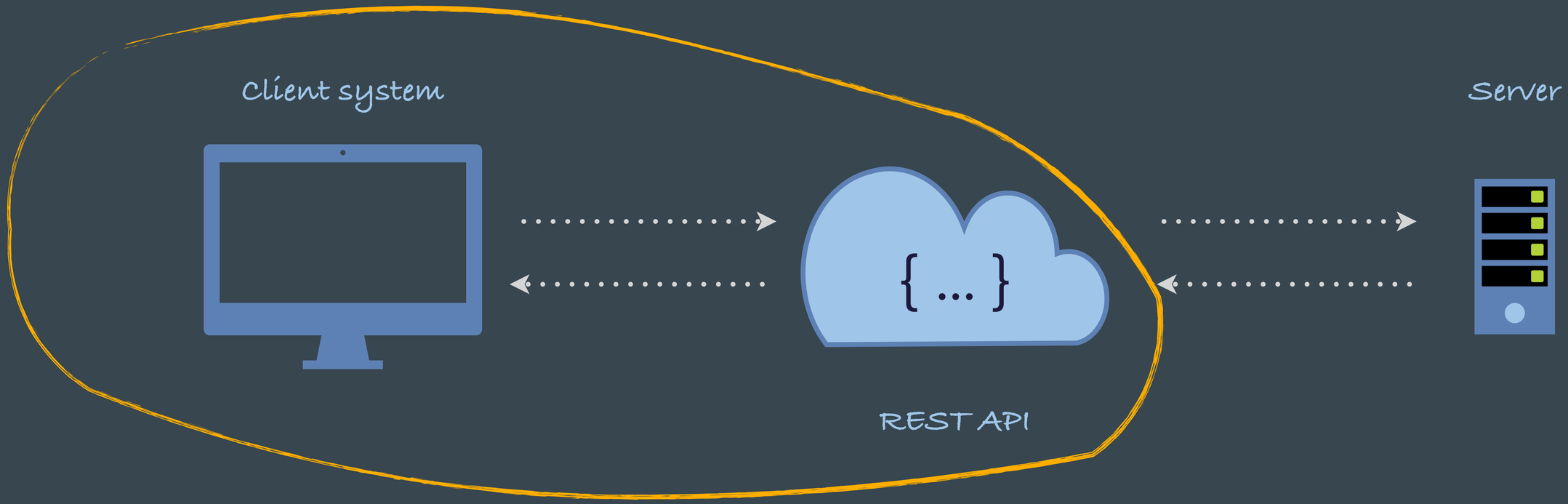
REST APIs can be chained

There can be more than one API layer, it can be many!



We need to know also how to build the “other side” - the server

- REST API is a client - server system
- So far we know how to use it as a client



Build a simple Docker server with REST API

- Step 1: Download Docker Desktop
- Step 2: Choose a Docker image (Some Linux version as example)
- Step 3: Create a simple REST API server

REST API

Principle