When to use bulk api?

- Bulk API is based on REST principles and is optimized for loading or deleting large sets of data. Example: You have new client and they want to move their data from existing system to Salesforce.

- Salesforce processes batches in the background. So there is no problem of network speed. Once the records are upload, Salesforce will process it internally.

- We can easily control API calls using standard features (setup menu).

- We can also load data with Data Loader using CSV files

- Easiest way to use Bulk API is to enable it for processing records in Data Loader using CSV files.

Parallel Vs Serial Mode

We can process record using Bulk API V1.0 or V2.0. By default bulk API records are process using parallel mode, where multiple records are process in multiple batches. It might throw record lock or record lookup issue. Record lookup issue is where one records is being processed in one batch and referenced record is being processed in other batch, so it will create issue in processing. To avoid that situation we can go with serial mode or we can organize related records in same batch.

Serial mode processing is only possible in Bulk API V1.0. Bulk API V2.0 only process record in parallel mode.