

Write Short note on Lambda Architecture 8, 2, 5

Lambda architecture is a way of processing massive quantities of data (Big Data) that provides access to batch-processing and stream-processing methods with a hybrid approach. Lambda architecture is used to solve the problem of computing arbitrary functions. The lambda Architecture composed of 3 layers:

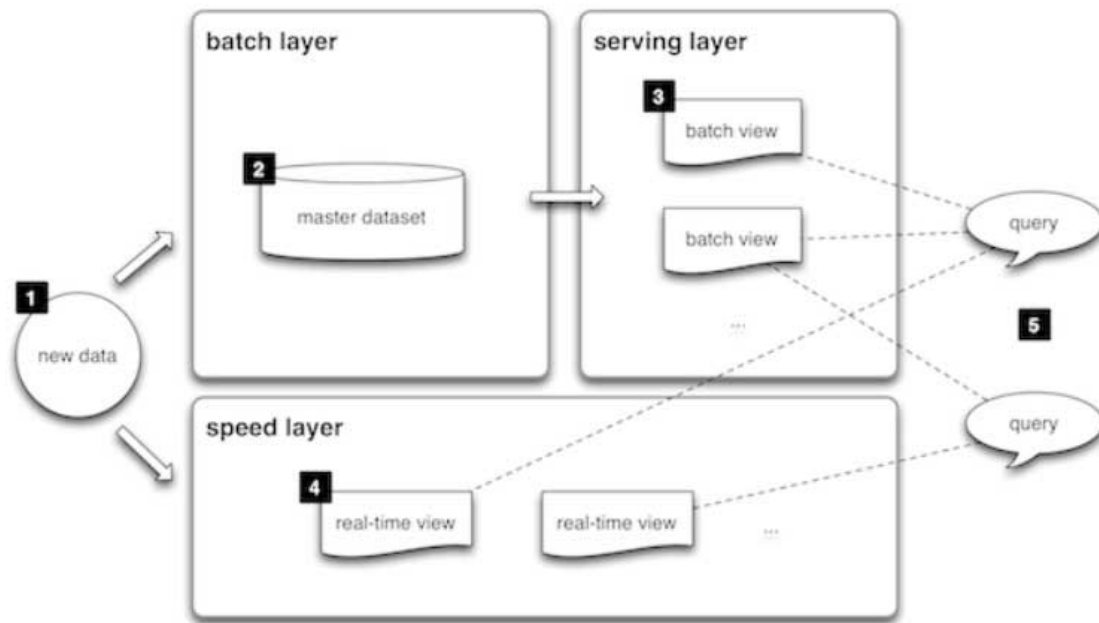
1. **Batch** : New data comes continuously, as a feed to the data system. It gets fed to the batch layer and the speed layer simultaneously. It looks at all the data at once and eventually corrects the data in the stream layer. Here we can find lots of ETL and a traditional data warehouse. This layer is built using a predefined schedule, usually once or twice a day. The batch layer has two very important functions:
 - To manage the master dataset
 - To pre-compute the batch views.

2. Serving Layer

The outputs from the batch layer in the form of batch views and those coming from the speed layer in the form of near real-time views get forwarded to the serving. This layer indexes the batch views so that they can be queried in low-latency on an ad-hoc basis.

3. Speed Layer

This layer handles the data that are not already delivered in the batch view due to the latency of the batch layer. In addition, it only deals with recent data in order to provide a complete view of the data to the user by creating real-time views.



Source: Databricks