Data Sources
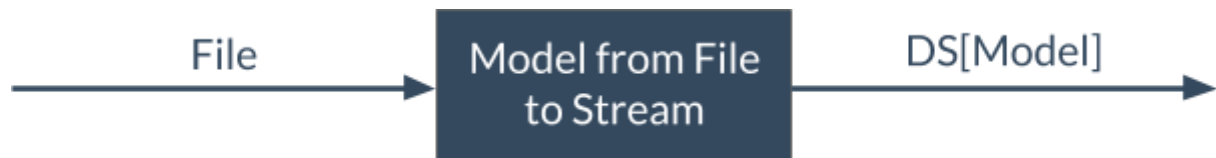
Parses a text file containing implicit ratings with a user ID, a item ID, and optionally a timestamp.
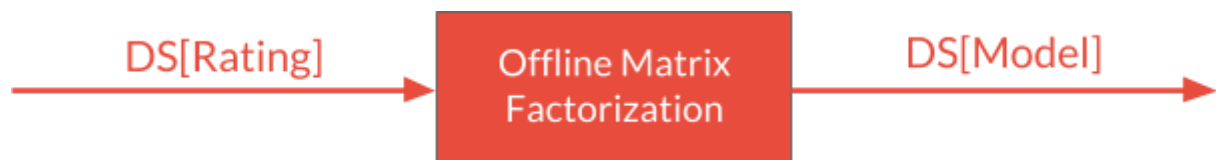
| File | → | Implicit Data to Rating | → | DS[Rating] |

Parses a vector model from a file written by a VectorModelToFileSink.

| File | → | Model from File to Stream | → | DS[Model] |

Transformations

A use-case for PS: matrix factorization with SGD.

| DS[Rating] | → | Offline Matrix Factorization | → | DS[Model] |

A use-case for PS: online matrix factorization with SGD and TopK generator with LEMP.

| DS[Rating] | DS[Model] | → | TopK Generator with LEMP & Online Learning | → | DS[userId, TopK] |

A use-case for PS: online matrix factorization with SGD.
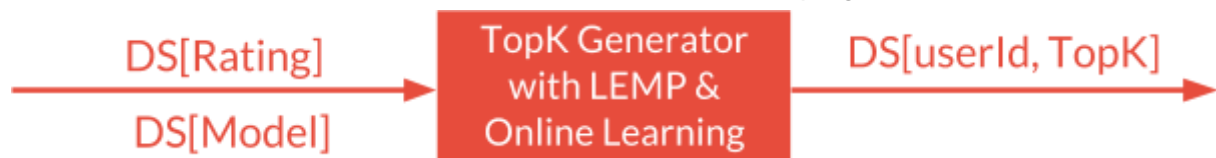
| DS[Rating] | → | Online Matrix Factorization | → | DS[Model] |
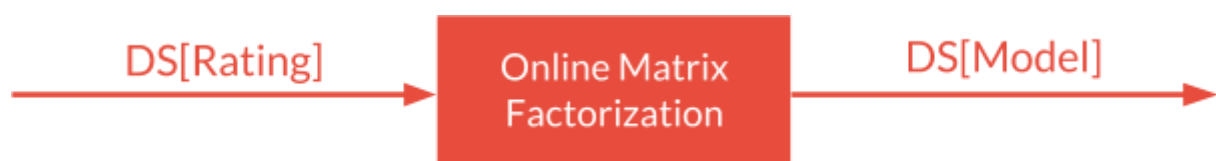
A use-case for PS: TopK Generation with LEMP.
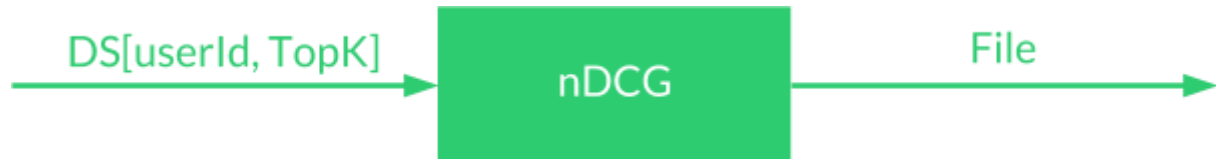
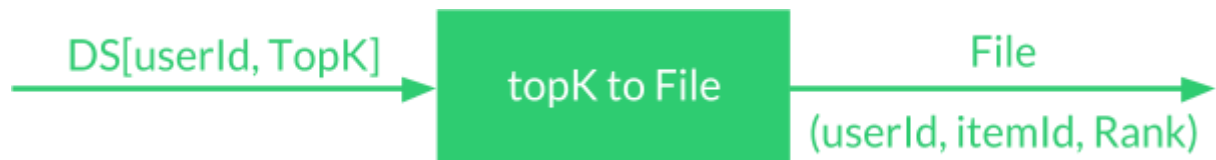| DS[Rating] | DS[Model] | → | TopK Generator with LEMP* | → | DS[userId, TopK] |
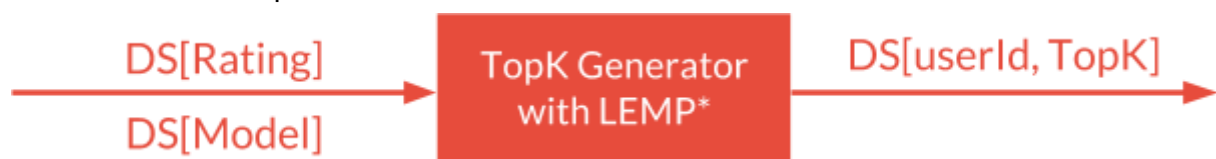
Data Sinks

Evaluates nDCG from TopK output of a recommender system, and writes it to a human-readable text file, or a CSV file that can be used for plotting.

DS[userId, TopK] → **nDCG** → File

Writes the TopK recommendations of users into a file.

DS[userId, TopK] → **topK to File** → File
(userId, itemId, Rank)

Prints a vector model of user and item vectors to a file.

DS[Model] → **Vector model to File** → File(s)*