Syracuse University
School of Information Studies

Applications of Opensource in Big Data Management with Examples

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Code Walkthroughs and Demonstrations

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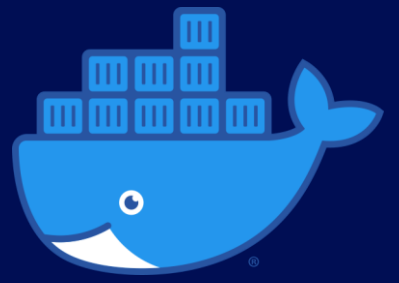
Setting Up Your Computer

Basic Docker Commands



Jupyter and Spark Introduction

Jupyter Notes

- Access at http://localhost:8888
- Password is SU2orange!

Object Storage and HDFS

Object Storage / HDFS Notes

- The Minio S3 compatible storage http://localhost:9001
  - User name is **minio**
  - Password is **SU2orange!**
- HDFS is accessible at http://localhost:50070/

Spark Data Transformations

Two Part Video On Transformations

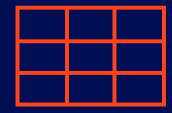
PART I

- File Formats
- Adding Schema
- 3 Ways to Reference a column.
- Column Transformations
- Row Transformations
- Sorting

PART II

- Aggregates
- Joins
- Unions
- Nested Columns
- Explain / DAG

Spark SQL



MongoDb Basics

MongoDb Notes

- The MongoDb Server is http://localhost:27017
- The Mongo Admin UI is http://localhost:8881
  - User name is **admin**
  - Password is **mongopw**

Accessing MongoDb from Spark

Neo4j Basics

Neo4j Notes

- The Neo4j Server is http://localhost:7687
- The Neo4j Admin UI is http://localhost:7474
  - No Username or Password

Accessing Neo4j from Spark

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