



Intro to Hadoop



13/13 points earned
(100%)

Quiz passed!

[Continue Course \(/learn/intro-to-big-data/peer/ir419/understand-by-doing-mapreduce\)](/learn/intro-to-big-data/peer/ir419/understand-by-doing-mapreduce)

[Back to Week 3 \(/learn/intro-to-big-data/home/week/3\)](/learn/intro-to-big-data/home/week/3)



1 / 1
points

1.
What does IaaS provide?



Hardware Only

Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/1rFeB/cloud-service-models-an-exploration-of-choices>) to review.



Computing Environment



Software On-Demand



1 / 1
points

2.

What does PaaS provide?

- ☐ Hardware Only
- ☒ Computing Environment

Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/1rFeB/cloud-service-models-an-exploration-of-choices>) to review.

- ☐ Software On-Demand
-



1 / 1
points

3.

What does SaaS provide?

- ☒ Software On-Demand

Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/1rFeB/cloud-service-models-an-exploration-of-choices>) to review.

- ☐ Computing Environment
- ☐ Hardware Only
-



1 / 1
points

4.

What are the two key components of HDFS and what are they used for?



NameNode for metadata and DataNode for block storage.



Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/PPIn5/the-hadoop-distributed-file-system-a-storage-system-for-big-data>) to review.



FASTA for genome sequence and Rasters for geospatial data.



NameNode for block storage and Data Node for metadata.



1 / 1
points

5.

What is the job of the NameNode?



Coordinate operations and assigns tasks to Data Nodes



Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/PPIn5/the-hadoop-distributed-file-system-a-storage-system-for-big-data>) to review.



Listens from DataNode for block creation, deletion, and replication.



For gene sequencing calculations.



1 / 1
points

6.

What are the three steps to Map Reduce?



Shuffle and Sort -> Map -> Reduce

- ☐ Shuffle and Sort -> Reduce -> Map
- ☐ Map -> Reduce -> Shuffle and Sort
- ☒ Map -> Shuffle and Sort -> Reduce

**Correct Response**

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/zFnWs/mapreduce-simple-programming-for-big-results>) to review.



1 / 1
points

7.

What is a benefit of using pre-built Hadoop images?

- ☐ Less software choices to choose from.
- ☒ Quick prototyping, deploying, and validating of projects.

**Correct Response**

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/scqrW/value-from-hadoop-and-pre-built-hadoop-images>) to review.

- ☐ Quick prototyping, deploying, and guaranteed bug free.
- ☐ Guaranteed hardware support.



1 / 1
points

8.

What is an example of open-source tools built for Hadoop and what does it do?

- ☐ Pig, for real-time and in-memory processing of big data.
- ☒ Giraph, for processing large-scale graphs.

Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/ta0WI/the-hadoop-ecosystem-welcome-to-the-zoo>) to review.

- ☐ Zookeeper, analyze social graphs.
- ☐ Giraph, for SQL-like queries.



1 / 1
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9.

What is the difference between low level interfaces and high level interfaces?

- ☒ Low level deals with storage and scheduling while high level deals with interactivity.

Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/ta0WI/the-hadoop-ecosystem-welcome-to-the-zoo>) to review.

- ☐ Low level deals with interactivity while high level deals with storage and scheduling.



1 / 1
points

10.

What is **NOT** a problem to look out for when you want to integrate your project with Hadoop?

- ☐ Infrastructure Replacement
- ☐ Advanced Algorithms
- ☐ Random Data Access
- ☐ Task Level Parallelism
- ☒ Data Level Parallelism



Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/0v0hF/when-to-reconsider-hadoop>) to review.



1 / 1
points

11.

What is **NOT** a major goal of Hadoop as covered in the slides?

- ☐ Handle Fault Tolerance
- ☐ Facilitate a Shared Environment
- ☒ Latency Sensitive Taks



Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/tyg7z/hadoop-why-where-and-who>) to review.

- ☐ Provide Value for Data
- ☐ Optimized for a Variety of Data Types
- ☐ Enable Scalability



1 / 1
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12.

What is the purpose of YARN?



Allows various applications to run on the same Hadoop cluster.



Correct Response

See this video (<https://www.coursera.org/learn/bigdata-introduction/lecture/7CLpB/yarn-a-resource-manager-for-hadoop>) to review.



Enables large scale data across clusters.



Implementation of Map Reduce.



1 / 1
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13.

What are the two main components for a data computation framework that were described in the slides?



Resource Manager and Container



Node Manager and Container



Node Manager and Applications Master



Resource Manager and Node Manager



Correct Response

See this video (<https://www.coursera.org/learn/intro-to-big-data/lecture/7CLpB/yarn-a-resource-manager-for-hadoop>) to review.



Applications Master and Container

