

# KAÏNA-COM TRAINING CATALOGUE

## Introduction to Big Data Architecture

---



**Nos locaux**  
KAÏNA-COM France  
LE CARRÉ HAUSSMANN II  
6 Allée de la Connaissance  
77 127 Lieusaint



**Contact**  
+33(0)9 50 20 91 64



**E-mail**  
info@kaina-com.fr



**Site Internet**  
www.kaina-com.fr

## KDS010 – Introduction to Big Data Architecture

---

**Reference** KDS010

---

**Experience**

- Beginner
- Intermediate
- Advanced

---

**Duration** Training Program:

- 1 day

---

**Training Method**

- I: i-learning, individual training (web-based training)
- V: v-learning, virtual class
- C: c-learning, classroom training

**KAÏNA-COM**  
LE CARRÉ HAUSSMANN II,  
6 Allée de la Connaissance  
77127 Lieusaint - France

---

**Price** 688,50 € HT

---

**Prerequisite** The course requires experience and knowledge of traditional computer systems architectures

---

**Audience** This course is aimed to provide CTOs, Architects, Technical leaders and Team leaders an insight of the way data at large scale could be used within their organizations and how commonly it is done.

---

*Continued on next page*



## **KDS010 – Introduction to Big Data Architecture, Continued**

### **Objective**

This course takes a look at the Big Data landscape and provides basic understanding of Big Data concepts, technologies and their applications. By providing real usage examples it allows participants to understand better how Data could be used to better serve their businesses while introducing few implementation best practices. This course is aimed to provide CTOs, Architects, Technical leaders and Team leaders an insight of the way data at large scale could be used within their organizations and how commonly it is done. It should serve as an entry point to examine what is possible. The course requires knowledge of traditional computer systems architectures.

---

*Continued on next page*



## KDS010 – Introduction to Big Data Architecture, Continued

### Course Contents

#### Course Contents :

Table 1: KDS010 - Course Contents

Chapter	Description
<b>Introduction</b>	<ul style="list-style-type: none"> <li>• Brief History</li> <li>• Big Data / Data Science / Analytics</li> <li>• Collection of data from different sources (internal/external)</li> <li>• Open Source Tools</li> </ul>
<b>Big Data</b>	<ul style="list-style-type: none"> <li>• Sample Usages <ul style="list-style-type: none"> <li>– Scaling Data</li> <li>– IoT</li> </ul> </li> <li>• Volume Velocity Variety</li> <li>• Structured vs. Unstructured Data</li> <li>• Immutable Data</li> <li>• System Requirements</li> <li>• NoSQL</li> <li>• Ability to access and process data</li> <li>• Stream Processing</li> </ul>
<b>Analytics</b>	<ul style="list-style-type: none"> <li>• Sample Usages <ul style="list-style-type: none"> <li>– Page Rank</li> <li>– Marketing</li> </ul> </li> <li>• Decoupled Systems – ETL</li> <li>• Data Lake</li> <li>• Analytics vs, traditional warehouse</li> </ul>
<b>Data Science</b>	<ul style="list-style-type: none"> <li>• Sample Usages <ul style="list-style-type: none"> <li>– Vision (OCR, face, logo, label)</li> <li>– NLP (syntax analysis, sentiments, ...)</li> </ul> </li> <li>• Machine Learning <ul style="list-style-type: none"> <li>– Supervised Learning</li> <li>– Unsupervised Learning</li> <li>– Clustering</li> </ul> </li> <li>• Deep Learning</li> </ul>

*Continued on next page*



## KDS010 – Introduction to Big Data Architecture, continued

---

### Course Contents, continued

Chapter	Description
<b>Tools</b>	<ul style="list-style-type: none"><li>• Processing Frameworks<ul style="list-style-type: none"><li>– Hadoop</li><li>– Spark</li><li>– Stream Processing</li><li>– Apache BEAM</li></ul></li><li>• Storage Tools</li><li>• Search Engines</li><li>• Analytics</li><li>• Visualization</li><li>• Machine Learning</li><li>• Deep Learning</li><li>• Software Infrastructures</li></ul>
<b>Big Data on the Cloud</b>	<ul style="list-style-type: none"><li>• Evolution</li><li>• Storage</li><li>• Analytics</li><li>• Machine Learning</li><li>• Serverless Computing</li></ul>
<b>Conclusion</b>	<ul style="list-style-type: none"><li>• Sample Architectures</li></ul>
<b>The End</b>	<ul style="list-style-type: none"><li>• Q&amp;A</li><li>• Course's Evaluation</li></ul>

---

