

NoSQL Training Week

for Data Architects, Data Modelers, & Data Scientists

*Get hands-on experience with several NoSQL products
and master when to use each*

NoSQL databases are rapidly appearing as replacements for relational databases. The decision process to choose a particular type of database (e.g. relational, document, column, key-value, in-memory) is often vendor- and project-driven, leading to a short-term solution that can be challenging to support and integrate with existing solutions. The decision must instead be made at a program/enterprise level, requiring knowledge of organizational data as well as knowledge of application requirements – data architects, data modelers, and in some cases data scientists therefore need to possess NoSQL knowledge to make these important database decisions.

The goal of this five-day class is to provide you with hands-on experience with various NoSQL databases and products in an educational (not sales) environment, so that you can help projects decide on the best database for their particular needs, without incurring support, integration, and security costs.

Each day is dedicated to a NoSQL database and then on Friday we recap and do a series of NoSQL architecture and modeling challenges reinforcing what was learned during the week. For example, at a recent offering of this course, here is what was covered each day:

- **Monday:** Couchbase (Key-value and JSON-based Document)
- **Tuesday:** Redis (In-memory)
- **Wednesday:** Neo4j (Graph)
- **Thursday:** MarkLogic (XML-based Document)
- **Friday:** NoSQL data architecture and modeling challenges, such as reverse engineering a document into a logical data model, contextualizing unstructured data, and incorporating a graph into an enterprise architecture.

We can work with you to select different types of databases and products depending on your particular needs. For each NoSQL database we cover a minimum of these five topics:

1. **Explanation.** Learn about NoSQL and where this particular product fits in terms of its design and function.
2. **Uses cases.** Explore many actual examples where this product has been used successfully.
3. **Architecture.** Know where the product fits within an enterprise architecture. For example, is the product designed for transactions or for larger more complex structures? Are relationships valued more than properties? Data lakes or analytical systems? ACID- or BASE- compliant?
4. **Modeling.** Understand how conceptual, logical, and physical models lead to a robust product implementation and know the processes and approaches to building each model.
5. **Primer.** Practice using the product. If there are computers in the training room, each attendee can install the product and practice loading and querying data. Hands-on can also take the form of practicing with pencil and paper.

This course can be customized for your organization. Contact Steve Hoberman at me@stevehoberman.com to set up a phone call to learn more about your particular NoSQL training needs.