



## **OUR PRACTICE**

Akadio, an HDF Group affiliate company has worked diligently across academic, research, commercial, and government verticals to establish itself as one of the experts in advanced scale data consultancy. Our software architecture and development expertise are structured around high performance I/O processing, scalability, NoSQL solutions, and customized data enablement strategies.

## **OUR SERVICES**

### **HPC Consulting**

The use case for “Big Compute” and the need for HPC systems that supported these cases are historically found within the scientific research, engineering, and government communities. They were the typical users who rely on HPC for complex application and data processing. However, the user base has expanded due to the increased demand for more data and the information and insights that can be created from mining the data. This shift has created a large demand for Akadio’s expertise within high performance computing, event processing, and data warehousing. Our highly experienced experts can provide you on demand resources for system analysis and project planning to system design, deployment, and best practices.

### **NOSQL**

As the market transitions from RDBMS to use of NoSQL, there is an increased requirement to tie these systems together in order to aggregate data. The challenge many organizations face is the ability to scale multiple data sources. Customers understand that they need to correlate data for analytics using data repositories in the cloud or on prem. Our works with its customers to understand their requirements and end results while tying their various RDBMS and NoSQL sources together. Taking this approach, we work with various functional teams across the organization to ensure acceptance of firm wide goals are understood. In addition to our HDF5 expertise, we have expertise in other NoSQL solutions (such as MongoDB, Apache Cassandra, CouchDB, etc.) so we have the flexibility to implement the right solution for our customers.

### **Data Enablement**

In this new, digital technology age, companies are required to have data governance plans and strategies used to manage their data life cycles -enabling them to enhance business intelligence capabilities, develop better processes, and increase revenues through enhanced customer experiences. Through our combined expertise and experiences in data governance best practices, data standards, meta data strategies, and working knowledge of many of the latest software/infrastructure technologies available (including cloud, IoT, and AI), our can help teams expedite organizational data initiatives while demonstrating short-term successes and long-term return on investment (ROI) for the organization.

## HDF5 Solutions

Akadio's scientists and engineers have extensive experience in applying various HDF technologies including HDF4®, HDF5®, HDF Kita™ cloud, custom connectors, binaries, and compression libraries across a wide variety of industries and scientific fields. Our expert guidance and assistance through early HDF technical decisions will ensure project success and avoid missteps. Our In-depth knowledge on best practices and industry data formats and standards for data schema design and metadata management will help you create and/or implement a schema that solves your unique challenges. We can even help you improve performance and functionality through software health checks and performance tune-ups of your applications.

## OUR PROCESS

From the start of our sales process through proposal acceptance, delivery, and completion, our practice has been developed to accomplish the project goals and ensure an ROI. A typical engagement consists of the following:

1. Initial Engagement –One of our Business Development Directors accompanied by one of our Sr. Architects or Engineers will be present to listen and learn and are available to answer any questions you may have. Preliminary meetings consist of an introductory call and a technical call. Depending on the complexity of the ask, we will follow up with additional technical calls. If the conversations move forward, we then move onto the next step.
2. Rough Order of Magnitude (ROM) and/or a Statement of Work (SOW) –We want to fully understand your goals, the scope of work, your expectations from our team and our expectations from yours. To help mitigate risk, we usually take a phased approach when providing a solution.

Example: A typical phased engagement would incorporate a phase 1 where we help to identify a problem and/or create or prototype a solution. Only after the proposed solution is tested and vetted, we can move onto a second phase where we can help implement the solution.

At this step, we will introduce you to more members of our team including our Contracts Manager and technical lead.

3. Services Agreement –Once we agree on a SOW, it will be incorporated into a Services Agreement. We can provide our standard Services Agreement for your review or you can provide us with your standard Agreement. Our work with various government and commercial organizations has made us very flexible and we will work with your team or point of contact (POC) to make this process as painless as possible.
4. Kickoff Meeting –Once a Services Agreement is executed, we will schedule a kick off meeting to establish/clarify roles and responsibilities, introduce new members of the team (if applicable), and discuss our initial project plan/framework and timelines. At this point, you will be assigned an HDF Group Project Lead.

5. Weekly Status Meeting –The Project Lead will establish weekly status meetings and sprints for the remainder of the project as well as internal document and project tracking tools (we use Atlassian’s Confluence and JIRA systems). In addition, our teams can integrate ourselves to your internal processes and tools if you don’t want to use ours. The Project Lead will be your main contact at this point. During this step we will close collaborate with your team as we perform some or all of the following:
  - Discovery & Analysis –evaluation and research
  - Diagnosis - diagnosing any issues which may necessitate redefining the problem
  - Prototyping
  - Assisting with implementation of recommended solutions
  - Building a consensus and commitment around corrective actions
  - Facilitating client learning –that is, teaching clients how to resolve similar problems in the future
  - Per management improving organization effectiveness –lasting solution/incorporating future needs
  
6. Project Closeout - Upon the completion of the project, we make sure that you are satisfied with the deliverables. It is part of our best practices to document all the steps we took and our findings. We want to ensure that our clients can move forward with or without us so a final report detailing findings or next steps (if applicable) will be provided.

## OUR DIFFERENCE

Every consulting practice has a formal engagement process and methodology for reaching your project goals. What sets Akadio apart from the rest are the values that we incorporate in the way we work with our clients. At every step we want to ensure these values are shown in everything we do:

**Transparency** throughout the process to manage expectations on both sides which leads to building **Trust** with our clients knowing our decisions always have them in mind first which encourages **Teamwork** and collaboration so we can learn from each other, share ideas, and work towards a common goal while

**Teaching** clients (and sometime ourselves) on how to solve similar problems in the future to ensuring a

**Return on Investment** for the client is achieved and organizational goals are met