

Data Architect Job Description

Duties and Responsibilities:

- Identify strategic data requirements of an enterprise
- Determine how an enterprise's data will be stored and utilized
- Assess the enterprise's internal and external data and design blueprint to manage the available data
- Create inventory of enterprise's data and store data in easily accessible format
- Design and develop complex database management systems and separate public data from private ones
- Create back up plan to cater for the data needs of the company in times of emergency or cyber attack
- Collaborate with enterprise's management needs to create data models in line with the organizations need
- Research to collate new data and update the company's database from time to time
- Meld existing data architecture with new ones as technology emerges
- Learn new techniques for data modeling and management
- Ensure the protection of data from unauthorized persons.

Data Architect Requirements – Skills, Knowledge, and Abilities

- Education: A Bachelor's degree in information technology, computer science, or an IT related course is needed to start a career as a data architect. This would enable the individual to have an understanding of systems development life cycle, database design and management, and techniques for testing software projects
- Training: Additional training in data modeling techniques and database optimization is mandatory. It is such training that differentiates a data architect from other professionals in the IT world. Knowledge of SQL development may be required by some employers but mostly not for entry level data architect positions

- Innovative and good research skills: Data architecture requires individuals who can research to collate data and always learn new techniques of data management and security. So, a data architect must be a researcher with keen eye for innovation and learning new methods of doing things
- Good analytical and logical thinking skills: A data architect must be able to analyze large volume of data and develop appropriate blueprint to make it understandable and useable. He/she must be able to decipher codes into useable data
- Communication: A data architect must be a good communicator because data architects usually work as a member of a team. He/she is also expected to maintain constant communication with enterprise architecture unit, database management team, and the entire management. So, being able to explain things in plain language is very necessary.