Architecture in the cloud

The Well-Architected Review by T-Systems closely examines your existing cloud architectures so they can be improved. This involves a precise analysis of all applications. You receive valuable insights into the status of your applications. Once our experts have completed their evaluation, you’ll have options that give you more control and reduce risks right away. And of course, we work closely with the individuals at your company who are responsible for the respective applications to ensure their needs are met. The architecture redesign covers all the key factors that impact security, availability, and efficiency.

One cloud—thousands of options. AWS makes it all possible, but things can get chaotic. And chaos means security and efficiency are at risk. Our AWS Well-Architected Review makes order out of that chaos by ensuring adherence to a carefully designed architecture. By following best practices for the cloud, you can ensure all aspects and requirements are taken into account.

The extensive capabilities of AWS present a challenge to businesses. How can you get the most out of a cloud migration? What’s the best way to deal with cloud-native application architectures? Pursuing any of these objectives can cause security vulnerabilities and excessive costs. Reliable applications that offer high availability are essential for any modern enterprise. Many applications are business critical and can cause significant financial losses if they fail.
What it looks like in practice

Experienced and certified T-Systems architects conduct a workshop with you to analyze the existing architecture and determine which optimizations to implement. The framework for analyzing the architecture is based on AWS best practices for design and operation of cloud-based applications as detailed in Amazon’s Well-Architected Framework.

The AWS Well-Architected Framework is based on five pillars:

- **Operational excellence**: This pillar focuses on optimizing operations and monitoring systems. The objective is to continuously increase the amount of value added by optimizing structures, processes, and workflows.
- **Security**: Protecting data and systems has the highest priority. This includes measures to protect privacy and data integrity, for instance by implementing appropriate access controls or using monitoring to detect security breaches.
- **Reliability**: By avoiding errors and establishing rapid, automated system restoration procedures in the event an application goes down, high availability is achieved. The architecture is designed to detect resource bottlenecks and request additional capacity. Avoiding downtime that results from improper configurations and temporary network errors. Corresponding measures as necessary include automated scaling, backup, recovery, and managing modifications.
- **Performance efficiency**: Optimized use of AWS resources, even during periods of fluctuating demand or varying system requirements and technologies—specifically, selecting the right services and resource types while taking modern architecture paradigms into consideration such as serverless architectures.
- **Cost optimization**: Comprehensive analysis and adaptation of resource consumption to avoid and reduce unnecessary costs. Capacity reservation and resource optimization are potential measures here.

What value can you expect?

Companies that commission a Well-Architected Review are seeking to use cloud environments and the features they offer at maximum impact and efficiency. They want the ability to scale applications without neglecting security.

And they get the following results:

- Faster application development and deployment
- Minimized risk
- Sound decisions
- Insights from AWS best practices
- An evaluation by an independent third party
- A plan for continuous improvement

What’s the process like?

In an initial telephone consultation, the application to be reviewed is selected. We also discuss any questions you may have about the conditions of the engagement.

It usually makes sense for the review to take place at your facilities. This makes it easier for your technical staff and the individuals responsible for the application to attend. The selected application is presented. Our AWS experts then discuss in detail the purpose, architecture, and requirements with respect to the five principles of the Well-Architected Framework. This stock-taking phase normally requires four to five hours.

Next, results are evaluated and specific improvements are suggested. You receive a proposal for a roadmap to implement these medium- and long-term objectives.

And now it’s up to you. Because you get to decide how the measures are implemented and on what schedule. It’s comforting to know, however, that AWS supports you during the implementation by providing service credits upon request.

Our architects are here to assist you. Get in touch with us today.

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