DOCKER

THE COMPACT CONTAINER PLATFORM
CLOUD AND CONTAINERIZATION TECHNOLOGY

Docker was designed in order to simplify the creation, deployment and execution of applications using containers. Containerization allows the user to run applications in a virtual environment by packaging all necessary elements such as files, libraries and other essential components together. Furthermore, containers play a vital role in DevOps processes as an integral part of automated software builds or as part of continuous deployment.

As simple as Lego: The core of Docker and its virtualized containers are applications that are bundled into images including all their dependencies. The images contain the application and its entire run-time environment and are then distributed via the Docker Registry. With this approach, it is simple to plug software together for seamless customization.

Fast & flexible: Containers and images are extremely compact compared to virtual machines, as Docker containers only include the data that is actually required by the application. In turn, this means huge savings for cloud environments — running on the exact same hardware provides significantly more instances.

Management via scripts: Management through scripting is another feature of Dockerfiles, which are usually just a few lines long and contain all the information required to create and start a Docker image.

ADVANTAGES OF DOCKER

· Porting applications to different machines and environments is quick and straightforward
· Increase of development velocity: collaboration on big projects is simplified, as parts of a project can be isolated into a container and tested independently
· Scalability of applications and services on-demand and in real time
· Noticeable reduction of IT costs, as hardware is used more efficiently
· Perfect for microservice architecture or as base for cloud-native applications

Containerization technologies like Docker or Kubernetes optimally support digitized processes when it comes to speed, sleekness and agility.

AERIS EXPERTISE – APPLICATIONS & ARCHITECTURES

· Design of system architecture and development of a microservices-based IoT application for processing of data streams for telematics
· Automatic, planned deployment of an application for user tests
· Docker is also used as an environment to build and test software

WHY DOCKER IS SO VALUABLE TO AERIS' CLIENTS

· Simple integration into an existing software development workflow
· Migration of existing software stacks to automatic builds with containers
· Integration of Docker into Jenkins
· Knowledge transfer to the development and operation teams of our clients