



Containerization in the Industrial Internet of Things Market

Smartphone users take containerization or sandboxing of applications for granted. It's the reason that if one app crashes on your phone, your other apps and the phone's operating system continue working. It's also the reason why if one app gets hacked on your phone, the hacker does not gain access to data in any other app.



Machfu [Industrial IoT Solution](#) helps industrial systems take advantage of containerization approaches that improve operation, maintenance, and security. In the enterprise IT world, containers can decouple computational workloads from the computing substrate on which they run. This allows deployment of multiple workloads across racks and scaling the hardware resources as necessary to handle the workloads. Machfu IIoT Solution's curated [Industrial Application Development Android Platform](#) serves as a containerization scheme that's proven in massive scale.

The benefits of containerization in the machine market include:

- **Virtual Machines** – A container can act like a lightweight virtual machine but without incurring the significant overhead that comes from simulating every aspect of the target machine within the host machine.
- **Partitioning** – Containers allow systems to avoid “dependency hell,” by providing strong partitioning between application components on a target machine.
- **Enhanced Security** – Containers allow enhanced security policies and constraints to be imposed on an application by constraining the container engine itself.
- **Orchestration Systems** – Containerization systems include or interoperate with orchestration systems that provide the means to dispatch containers to host machines and determine which containers should be dispatched to which hosts.

For a much deeper dive into containerization approaches for the Industrial Internet of Things (IIoT), please read our recent article in Mission Critical magazine.