

TrustBuilder IDHub – now running on resource-saving Docker technology

In today's age of digitization and connectivity, companies must make sure that their expensive IT-infrastructure operates in the most cost-effective way. To do so, more and more companies are switching from virtualization to container technology to run their applications. Compared to virtualization, container technology saves more resources, is easier to configure and maintain, and provides more flexibility than other platforms and devices. To facilitate this development, the identity and access management product vendor TrustBuilder has presented its newest feature: 'TrustBuilder on Docker'. It will allow TrustBuilder customers to run the TrustBuilder Identity Hub on Docker technology – the most popular container technology currently on the market.

For many years, organizations saved resources by deploying applications with virtualization technology. This technology enabled them to operate several applications from a single device. Every application is provided with its own virtual operating system, which becomes a virtual machine. During the early stage of digitization, this was a cost-effective method that enabled organizations to grow without increasing their hardware estates. However, as organizations grew, the number of use cases – and therefore applications – grew over the years. Adjusting and maintaining all these virtual machines became a task too complex to fulfil. Each virtual machine had its own operating system which needed a growing amount of data space. So, when a new, improved technology came up, it soon became a serious competitor to virtualization technology.

Container technology – fewer costs, more flexibility

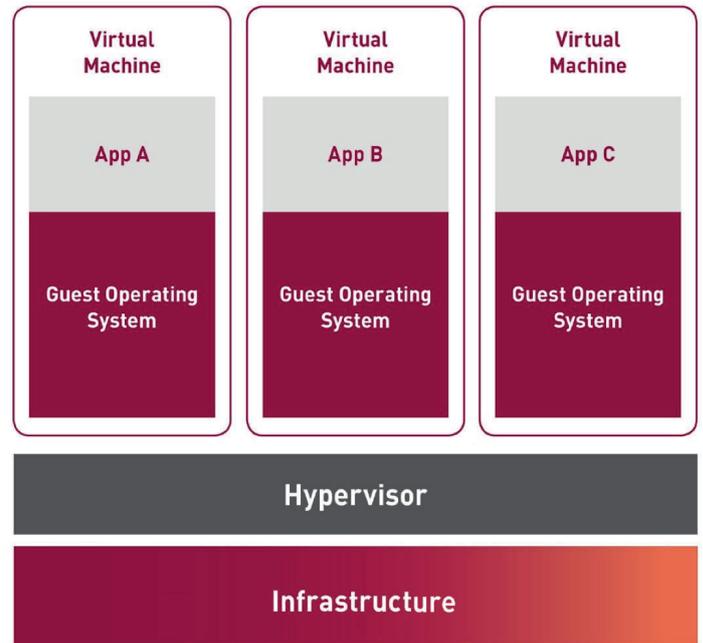
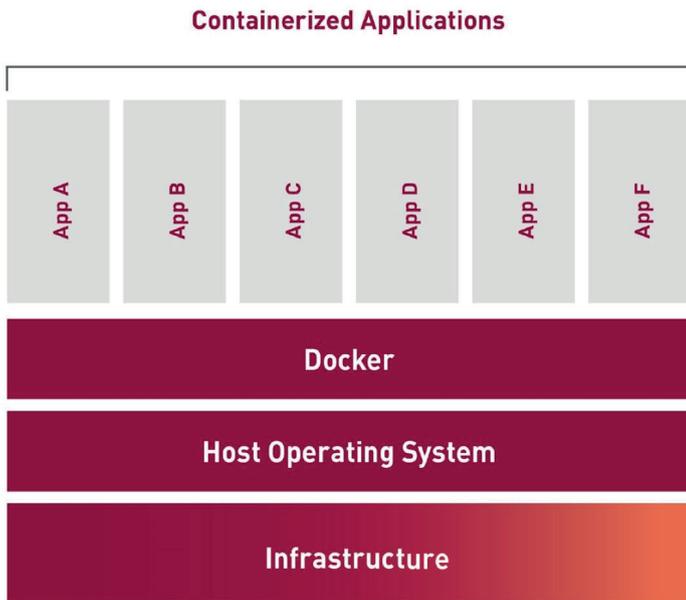
Container technology provides a complete runtime environment for applications. Yet, in contrast to virtualization technology, it allows several applications to be connected to one operating system. This comes with several advantages:

Firstly, as containerized applications can share an operating system, resources can be spared. Whereas a virtual machine can be as large as several gigabytes, a container is usually under 100 megabytes. Servers, therefore, can host many more containers than virtual machines.

Secondly, container technology allows complex applications to be separated into modular systems. In doing so, they are easier to configure and reconfigure.

Thirdly, containerization frees applications from external dependencies and allows them to run in different IT environments without difficulty. In doing so, applications perform the same in a testing and a regular environment – even when the network topologies, security policies and storage capacities are not identical.

Finally, containerized applications can start up instantly. Whereas virtual machines need some minutes to boot, container technology allows applications to run immediately.



According to a [recent Gartner-poll from March 2018](#), 65% of respondents stated that their company was planning to deploy container technology by the end of 2017. In a [Diamanti-survey from the same year](#), 47% of respondents stated that their company planned to implement container technology in 2018. No wonder, then, that in 2017 a [451 Research market monitor](#) forecasted that the application container market would grow to \$2.7 billion by 2020 – with an annual growth rate of about 40%.

To enjoy the full resource-saving potential of containerization, companies must increase the number of container-running applications to the feasible maximum. Still, many IT product vendors only offer their products within virtualization technology. This problem also applies to Customer Identity and Access Management (CIAM) solutions. That is why TrustBuilder developed a new feature for its famous IDHub – TrustBuilder on Docker.

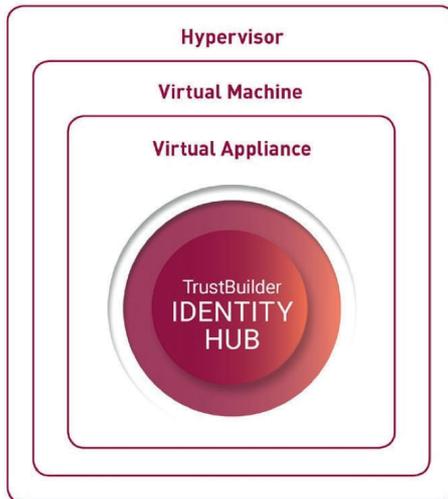
TrustBuilder on Docker – a containerized CIAM solution ...

TrustBuilder on Docker enables the TrustBuilder IDHub to run on container technology – operational not just in the Cloud but also On-Premises. The first container technology supported will be Docker – currently the most popular container technology on the market and according to the [Forrester New Wave Enterprise Container Platform, Q4 2018 Report](#), a leader in the enterprise container platform category.

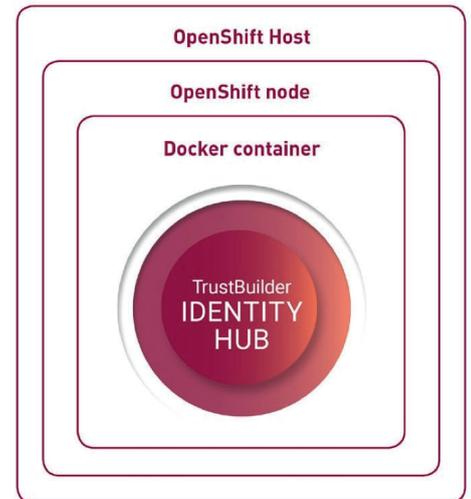
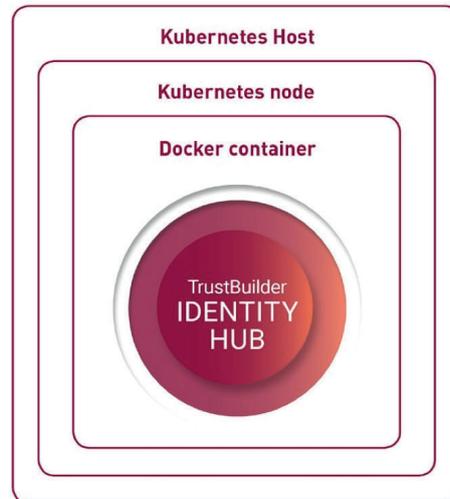
... that also supports the orchestration solutions Kubernetes and Openshift

As companies usually operate a large number of containerized applications, they need an orchestration solution to manage them. Docker provides Docker Swarm for this purpose. Yet, currently two other orchestration solutions for Docker containerization are the leaders in this field: Kubernetes and Openshift. Especially large companies that need enterprise-class features often favour these two solutions. That is why TrustBuilder on Docker will also support Kubernetes and Openshift – a decision that will also help to mitigate customers' security concerns.

Existing packaging



NEW – 2 Docker flavors:



Handling the security risks of a containerized CIAM solution

One of the most significant security weak spots of Docker containerized applications is that running them with Docker requires root-level privileges. Docker uses the Docker daemon to run its containerized applications and this daemon – at least currently – needs root privileges by default. Attackers, therefore, simply have to hack a Docker containerized application to gain root access to the Docker host.

But there is a way out. Even though Docker requires root access, containerized application services in general do not. Orchestration solutions like Kubernetes and Openshift, for example, enable their customers to run their Docker containers without root-level privileges. While Kubernetes is flexible and provides its users with the option to forbid or allow root-level privileges for running a container, Openshift has a stricter security policy. It solely allows Docker containers to run without root-level privileges. Thus, the risks of attacks on Docker containers are significantly lowered, providing TrustBuilder on Docker with the level of security necessary for a trustworthy CIAM solution.

Five good reasons to choose TrustBuilder on Docker

TrustBuilder on Docker customers will benefit from several advantages. The five most significant ones are:

- **Reduced TCO** – As the containerized IDHub needs fewer resources than the virtualized version, the company saves a significant amount on total cost of ownership.
- **Easy to implement, adjust, and maintain** – The development, testing, acceptance and production process of a new application is simplified as container applications can easily be transferred from one IT environment to another. Application maintenance is also significantly simplified.
- **Automatic scaling up of containers** – Containers can scale up dynamically. They can adapt to peak load almost instantaneously, and offload capacity that the client does not have On-Premises to the cloud. In doing so, peak traffic can be handled easily.
- **High security** – As a CIAM product vendor, TrustBuilder is committed to operating only within the most secure technologies – like Kubernetes and Openshift. Kubernetes leaves it up to its users to run their Docker containers without risky root-level privileges and Openshift does not allow them at all.
- **Portability to cloud and On-Premises** – Most cloud-based infrastructure-as-a-Service and Platform-as-a-Service solutions are compatible with Docker, allowing the containerized IDHub to run easily in the cloud.

The company

TrustBuilder is a European product vendor of a state-of-the-art Identity and Access Management (IAM) solution. The company came to existence in December 2017 as a successor to the systems integrator company SecurIT, bringing on board almost 20 years of experience in implementing IAM solutions. Its TrustBuilder IDHub is a novel approach towards an IAM solution that can tackle all challenges today's web- and API-access management tools are facing, but still remains user-friendly and flexible regarding a company's requirements. Based in Belgium, the heart of Europe, the company's customers currently supervise more than 40 million digital user identities.

For more information go to www.trustbuilder.com