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4 Reasons Why Open Source Application Container Platform Is A Good Idea

Table
of Content

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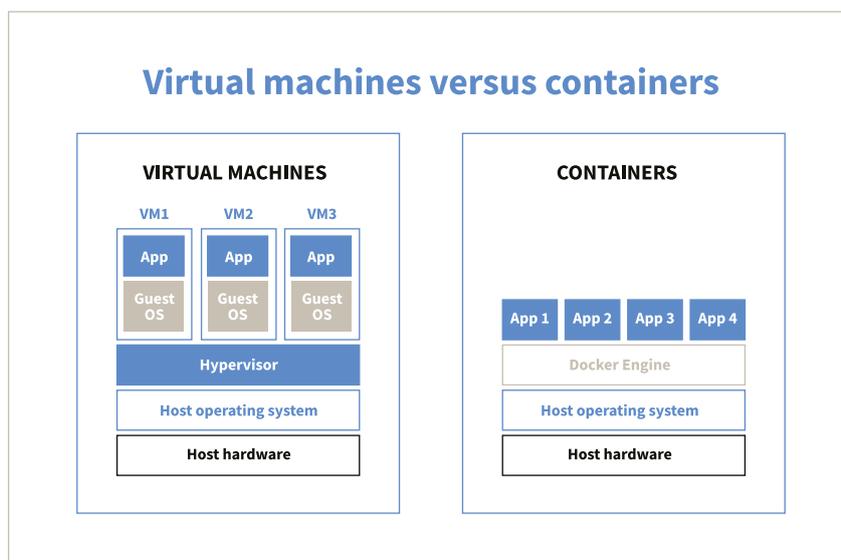
What's so great about application container management tools, anyway?

IT Team Leaders, Managers, and CIOs are process and efficiency oriented individuals who are always looking for ways to increase capabilities across their operations. Container management tools are a great way to achieve a higher level of efficiency while also increasing the accuracy of application development. These innovative IT management tools take containerization, which is a technology that already provides a great number of efficiencies, and gives IT Managers greater control over the containerization process. This control allows for the automation of software container creation, deployment, destruction, and scaling based on the particular organization's needs.

Container management tools also provide a myriad of other benefits including application development facilitation, build automation, container storage, software health management, and multiple languages or framework support.

Virtual machines versus containers

VIRTUAL MACHINES

VM1	VM2	VM3
App	App	App
Guest OS	Guest OS	Guest OS

Hypervisor

Host operating system

Host hardware

CONTAINERS

App 1	App 2	App 3	App 4

Docker Engine

Host operating system

Host hardware

Containers share the host's operating system which means that containers don't consume as much space as virtual machines. This makes the host operating system more efficient and run faster. A more efficient and faster host operating system means more calculations and better container management.

Why Open Interface Platforms Can Change Your Business

Open source application container management is the process of opening up container management duties to other users and developers. In other words, an open API container management platform gives freeform access to developers and users in an effort to increase efficiencies and visibility within the software.

This is a fantastic way to organize and regulate your organization's application development for a few very important reasons...
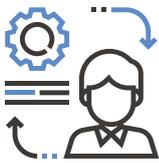
Wider Developer Base

One of the biggest struggles that IT Managers and CIOs face when managing projects and developing new technologies is a stagnant or unchanging group of developers. While it is great to have a group of reliable developers to lead the charge, it is also good to supplement with a wider base of application or software developers. An open source application container platform allows IT project leaders to do just that.

The benefits of a wider developer base for container management are numerous. First and foremost, open API platforms allow for unparalleled quality of products. This is certainly true with regard to container management. One of the key aspects of exemplary container management is the development of robust automation that allows for standardized containerization across the software or operating system. For example, this particular advantage grants access to the newest versions of certain technologies like the most up to date version of PHP in a container. The stringent standardization afforded to an organization by open source platforms also allows for a more coherent and comprehensive product pipeline from source to update cycle. A wider developer base that is provided by an open interface application container platform provides countless developers to build new features or enhancements. The number of system upgrades are multiplied exponentially when container management is open source. Opening up your container management to a wider developer base also allows you to benefit from a strong and experienced community.

Quicker Bug Fixes

No matter how skilled, educated, and experienced your team, system errors or bugs are almost guaranteed to show up in your container management processes. For example, in 2017 a major container management platform experienced a **security vulnerability that could have allowed a hacker to access corporate networks.** This could have caused major issues for some of the system users if an update was not released quickly.

While all bugs are not as potentially dangerous as the security issue presented above, bugs can make container management very difficult to handle for various organizations and can be downright frustrating. Thankfully, utilizing an open API container platform like **Adfinis SyGroup's** solution does, is a great way to quickly fix bugs in your system. An open interface solution like Adfinis SyGroup's provides

highly skilled developers to quickly fix any failure or flaw in your container management program that may cause unexpected results. As you know well, bugs cost your organization money. In fact, the Austrian software company Tricentis estimated that the total cost of bugs, glitches, and security failures in 2016 topped out at $1.1 trillion. If you're interested in reducing the cost associated with bug fixes or eliminating them all together, an open source application container platform is an option worth considering. Some open source solutions are even taking it a step further when considering eliminating bugs as a development issue. For example, the quality assurance process of Adfinis SyGroup's partner Red Hat also helps to minimize and mitigate security issues that can slip onto the production system by using a regularly updated base image security system.
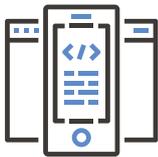
Increased Portability Across Platforms

In today's mobile business and technology age, managers and their teams are required to operate within many different environments both physically and digitally. This means that the software and applications that they use must be versatile as well. Unfortunately, operating systems restrictions can tie down IT managers and their teams. This means that they cannot produce work while on-the-go or easily work with other groups.

Thankfully, open interface application containerization platforms offer a fantastic solution to portability issues across working environments. Open source containerization requires that the system can be manipulated on multiple platforms. Fortunately, open source containerization is not tied to a particular operating system like virtual machines. In other words, where a virtual machine requires a quasi-operating system to be built for proper deployment, open source containerization only requires application decomposition. An open API container platform allows your team to further compartmentalize cross-functional containers so that they are more easily dealt with and development can proceed at a more rapid pace.
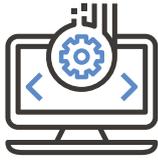
Super Scalability

Today's business and tech climate require fast reactions and extreme flexibility. Technology is advancing at a rapid pace and this means that users require faster reactions to errors and upgrades than they once did. However, matching the development of solutions to the user expectations created by their interactions with other kinds of technology is no easy task. The scalability or the ability to adapt to increasing demands, of a program or system is an essential consideration when choosing a new system for your team.
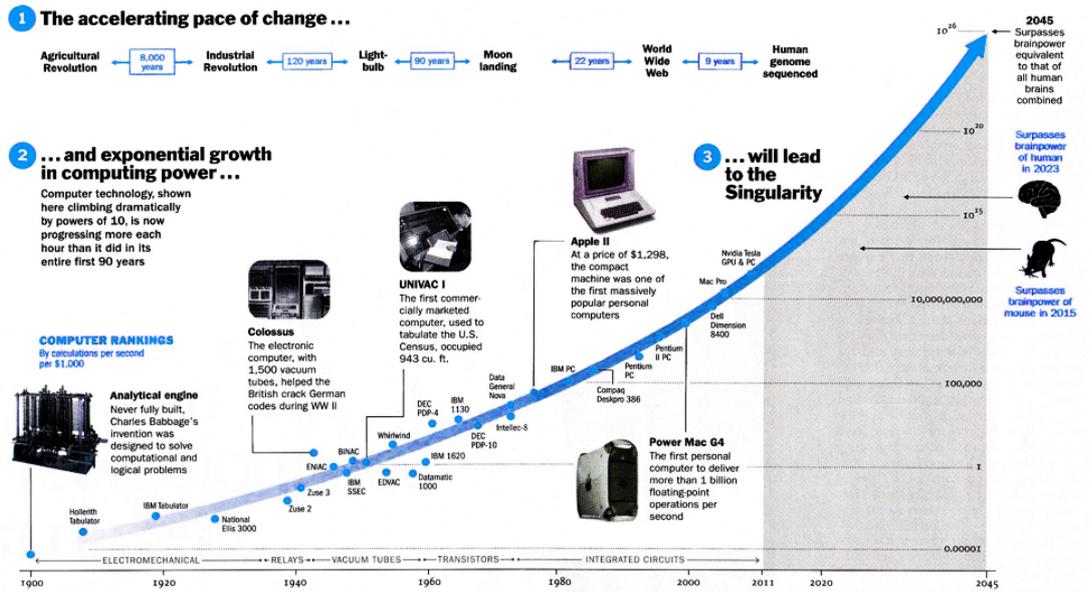
This chart from Time demonstrates the rapid pace of technological advacement in several areas from the start of the agricultural revolution to the present day and beyond. Techology has and will only continue to grow exponentially as the machine that we have created advance in their artificial intelligence.

An open API container platform can do wonders for helping your team reach KPIs and goals that are important to your company or operation especially in regard to scalability. Application management via containers is already a great way to scale the products you are developing according to the demand. This is because containers can be created in seconds due to their lack of operating system restrictions. Containers take a lot less time to build and maintain than a traditional virtual machine or other application management method. Open source application container management multiplies the effectiveness of containers exponentially because there are more developers and system managers at hand to add containers to keep up with demands of scale. In other words, an open interface application container management platform can help you and your team keep up with increased user demand through rapid containerization or a larger developer base.

Final Thoughts on Vendor Independent Application Container Management

The challenges that IT professionals face today are unlike any other challenges their predecessors ever had to deal with during their time. More and more our processes are becoming digital and we are in need of more developers than ever. As a result, our organizations need tools to help our teams tackle the challenges that lay ahead. Open interface application container platforms like **Adfinis SyGroup's** solutions are a great way to empower your team and thousands of developers to wrestle problems that are slowly closing in on many organizations in the development community.

Open interface solutions are the future and may provide a "one size fits all" fix for some of the programming or developing challenges that face us today. Container management is no different. Open source application container management platforms can help shape your company or organization's reputation as a premium option in your marketplace because it provides a wider developer base, faster fixes for bugs or errors, increased portability and supports and offers flexible scalability to keep up with user demands.

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