DESIGN – a novel Desktop-as-a-Service solution with unique features that adapts to your needs

DESIGN

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State of the art and motivation

When it comes to working with applications, users and developers today often need to choose between:

1. **Native applications, deployed on premises**
2. **Public Cloud Software-as-a-Service (SaaS)**

Both scenarios have benefits. . .

Applications on premises	Software-as-a-Service
+ Privacy + Security	+ Only a browser required
+ Legacy application support	+ Synchronisation + backup
+ No vendor lock-in	+ Deployment effort

. . . but also several drawbacks

Applications on premises	Software-as-a-Service
- Operating system specific	- Trustworthiness of provider
- Client must be trustworthy	- Fear for a vendor lock-in
- Administration effort	- Privacy and security
- Manual backup and sync.	- No offline use
- Remote access challenging	- No legacy applications

It often feels like having to choose between. . .

or +

Break the chains!

Our challenge is the development and implementation of a novel DaaS service that combines all mentioned benefits and avoids the drawbacks – a system with unique characteristics called: DESIGN

Requirements for a modern DaaS

Requirements for a modern DaaS and ways to meet them

▶ Integrate unmodified Linux/Windows applications
  ⟹ **3 deployment ways for applications that isolate them for improved security and offer in total full compatibility:**
    1. Linux applications in Linux containers
    2. Windows applic. in Linux containers + Wine (if it runs)
    3. Windows applic. in Windows VMs (100% compatible)

▶ Keep it simple! Avoid further complexity!
  ⟹ **Export the GUI of applications only and not full desktops.** Several VNC and RDP implementations offer this feature

▶ Enable remote control and support every client!
  ⟹ **All interaction is done via the browser.** Gateways for VNC and RDP like Apache Guacamole make this happen

▶ Avoid security, privacy, and vendor lock-in issues
  ⟹ **Allow on-premises deployment and by Public Cloud ready.** This is done by using free software for all relevant components (except the Windows operating system inside the Windows VMs)

Architecture of the DESIGN DaaS
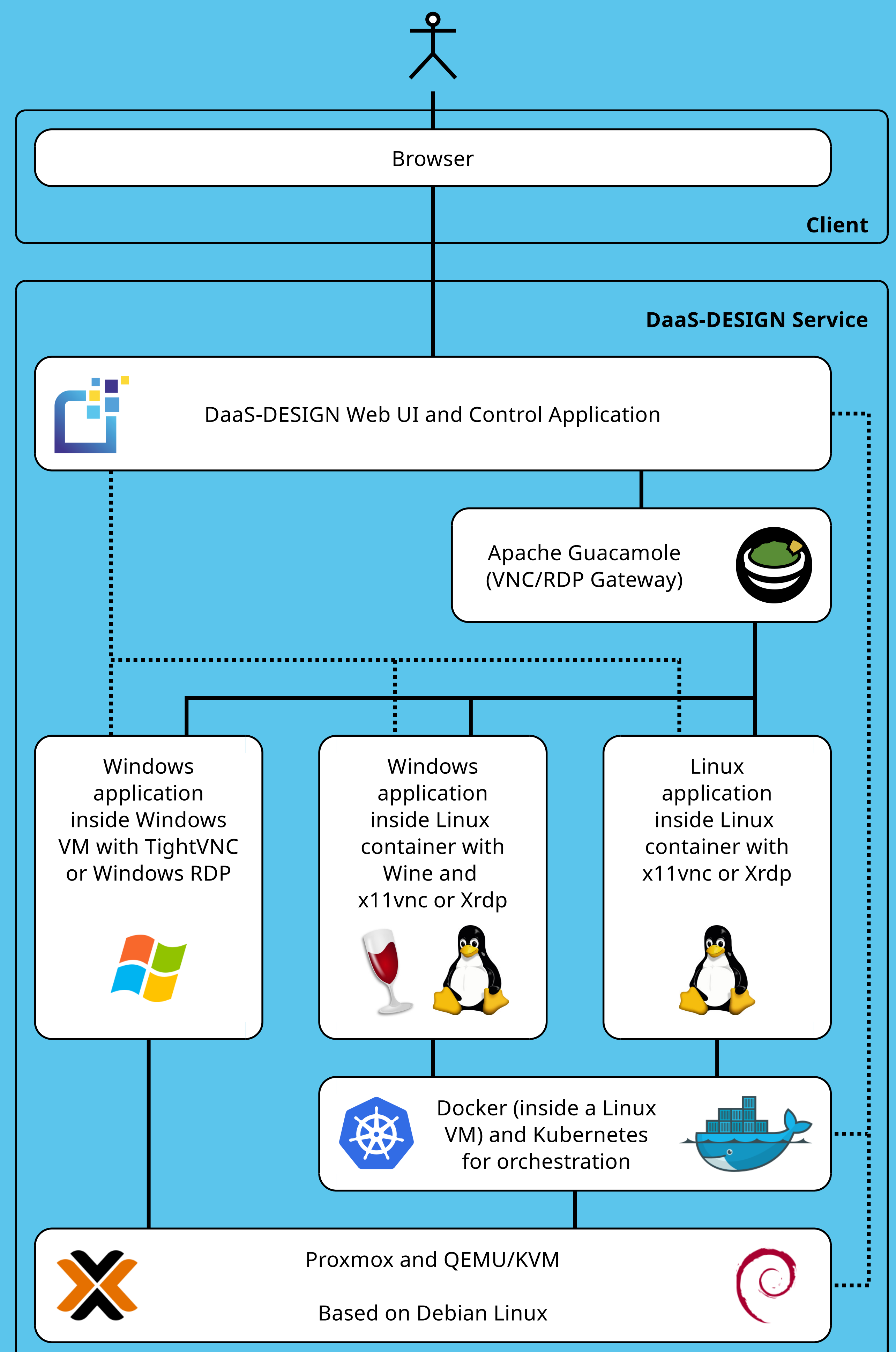
References

Christian Baun, Johannes Bouché.
Closing the Gap between Web Applications and Desktop Applications by designing a novel Desktop-as-a-Service (DaaS) with seamless support for Desktop Applications.
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Schedule

DESIGN will be available by autumn 2024

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