

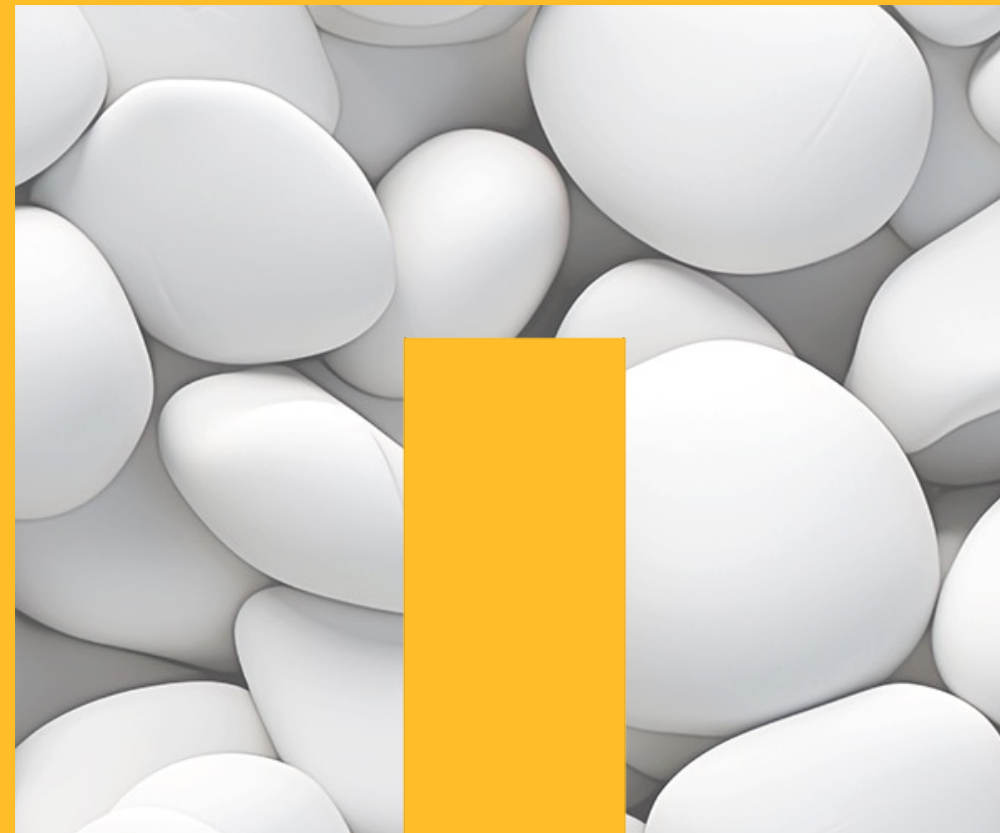
VMWARE – QUO VADIS

**OSS alternatives and strategies for a life after
VMware**

Alexander Wirt

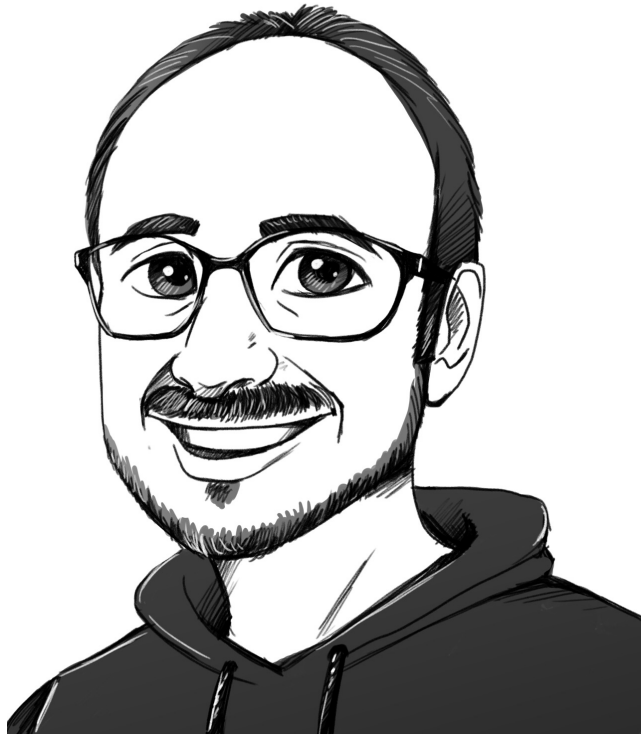
Senior Manager Professional Services

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Who I am

and what entitles me to speak here?



Alexander Wirt

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- OSS since 1997
- Member of several OSS Projects (i.e. Debian)
- Debian Listmaster, Backports ftpmaster, salsa.d.o admin
- Up with credativ since 2004, nowadays credativ is NetApp
- Technical Lead, Project Lead, Scrum Master

Why are we here?

The VMWare / Broadcom debacle

- Broadcom purchased VMWare
- Many license models are not available anymore
- Depending on usecases, pricing can be up to 8 times higher than before
- Broadcom acted in an eat or die manner



Let's talk about migration

Migration is not always easy

- Migration is possible, but not a no-brainer
- ESX is usually more than just a VM
 - (Virtual) Networks
 - Security considerations
 - Permissions
 - Everything around it
- New knowledge is needed
- Support models may be problematic
- OSS smells „fishy“
- „was nichts kostet, kann nichts taugen“



Let's talk about migration

With migration come new opportunities

- Every new start brings the chance to do it right
- Use the current momentum to move things forward
- If you plan to move to a Container first strategy, this is maybe your chance
- Automation gives you the abstraction to be more flexible in the future to prevent another vendor lock in
 - It can also help to support hybrid cloud setups



Let's talk about migration

But do it wisely

- Before migration comes planning
- Sufficient time should be planned for a migration
- If you lack experience, it is advisable to call in external help
- Please don't expect a migration with zero downtimes
- not every workload has to be migrated immediately
- if possible: take your time to gain experience with the new system. If this is not possible, make sure that you have access to qualified support



WHY OPENSOURCE?

Why Open Source?

- No vendor lock in
- Cost efficiency
- Flexibility and customization
- Transparency and security
- OSS forms the internet as it is
- „Doing the right thing“



(OSS) ALTERNATIVES

Proxmox VE

- Based on Linux KVM
 - Also supports LXC
- Multi-Master Cluster
- ESX Importer
- Automation
 - Terraform
 - Ansible
 - Kubernetes cluster API provider
- No builtin DRS
 - <https://proxlb.de> as external manager



PROXMOX

OpenStack

- Complex, Enterprise Solution
- In use at Telecommunication, public authorities, banks, airlines, etc.
- Very flexible
- Allows billing and creation of own workflows / interfaces
- Supports VM's, Bare Metal and Kubernetes
- Self Service, API oriented
- Supports multiple Hypervisors
- Supports live migration within the same hypervisor technologies



Kubernetes / OKD / OpenShift

- Management of Virtual Machines in Kubernetes
- API oriented
- Allows combining container and VM workloads
- Fairly new



Apache Cloudstack

- Manages multiple Hypervisors
- Supports live migration within the same hypervisor technologies
- Can manage a lot of hypervisor hosts
- Allows complex setup, also via slow links



All the others I missed

- Xcp-ng
- Bhyve
- Ovirt

THE MISSING BITS

What is missing

- VDI
- Enterprise Backup
 - Veem announced Proxmox Support and supports OpenShift & Kubernetes
 - Rubrik announced Proxmox & OpenShift Support
 - NetApp Astra Control backups Kubernetes & OpenShift (and a also does lot more)
 - Bacula supports KVM (libvirt) & Proxmox
- ...

CONCLUSION



There is a life after VMWare



Don't expect to get a 1:1 replacement



Invest some time in planning to choose the right tool and architecture



if in doubt, ask someone



Plan enough time for the migration



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