

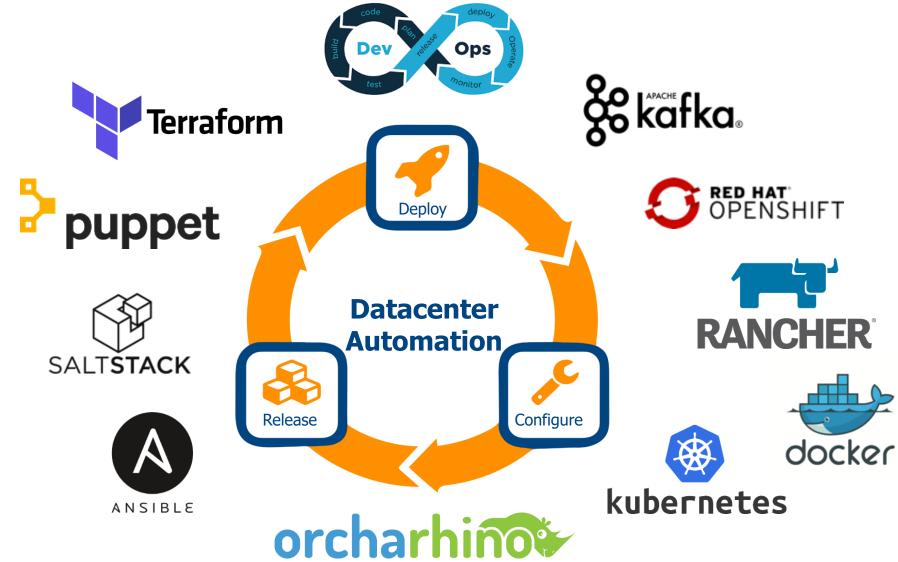
Lifecycle-management with orcharhino

October 5th, 2021

Dr. Jonas Trüstedt

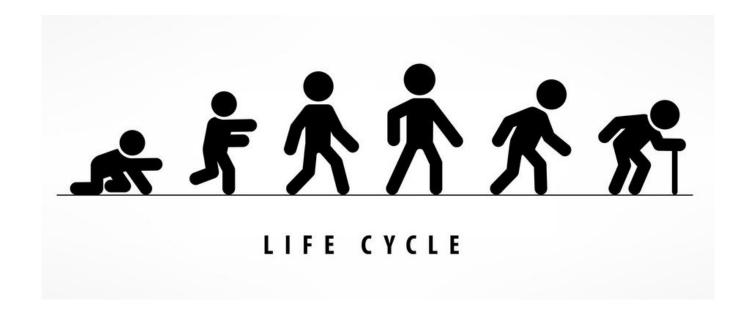












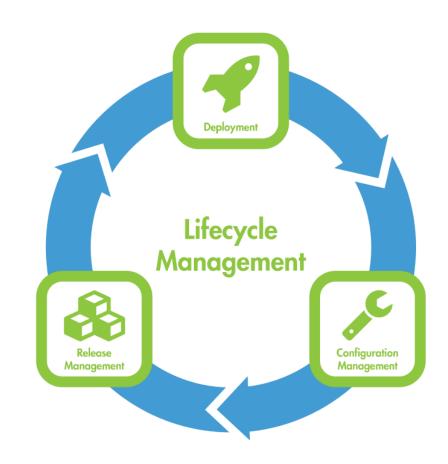


Lifecycle-management for IT



Consists of multiple components:

- Deployment
- Configuration-Management
- Patch- & Releasemanagement





Why do I need "lifecycle-management"?



Deployment:

- Reproducible deployments
- Automated deployments

Configuration management

- Centralized
- Possibility to rollout new configuration automatically
- → Automation & reduce errors





Why do I need "lifecycle-management"?



Patch- & Releasemanagement

- Control installed packages and patches
- Staging (Dev > Test > Prod)
- Information of available (security) patches/errata

→ Stability & Quality







Patchmanagement



Installable Errata

Security:

Bug Fix:

Enhancement:

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Patchmanagement

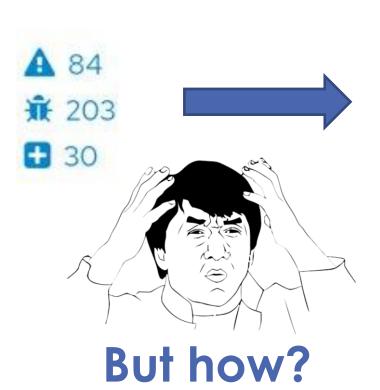


Installable Errata

Security:

Bug Fix:

Enhancement:



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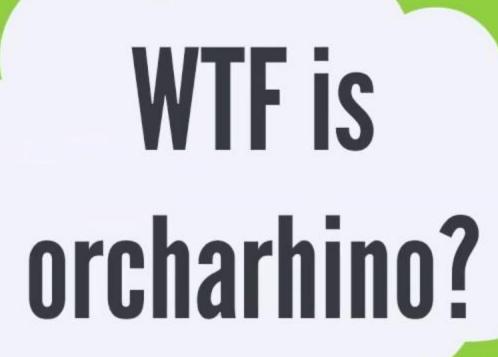


Slide 7: surprise – we have a tool for it















orcharhino – a multipurpose tool for automation



- Deployment of new machines
- Configuration-management
- Repository-server & -management
- Administer frozen patchlevels
- Staging through environments





Repository-mirror for common Linux distributions



- Mirror for rpm- and debrepositories
- Client for all common enterprise linux OS
- Integration for errata (security patches)



















Information of the current patch-status of all systems



- Information of available (security) patches/errata
- Trigger installation via GUI/CLI/API
- Control consumed subscriptions and attached repositories

→ Control over Packages, Patches & Releases

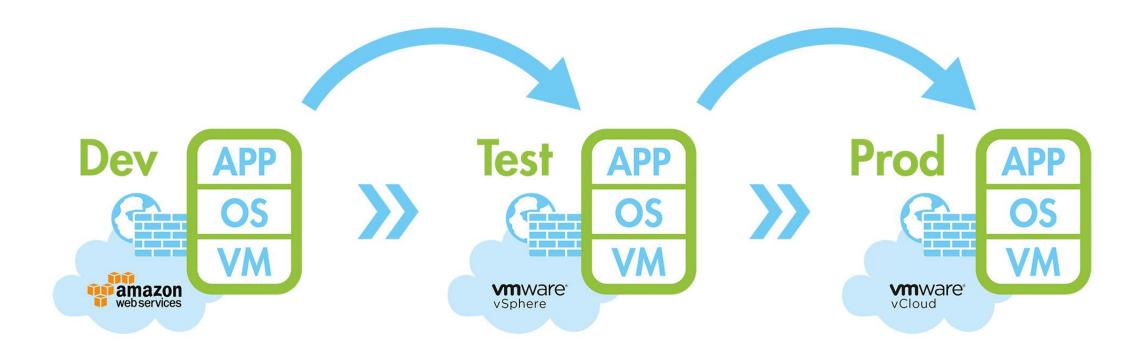
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Release-management: staging of new (package) releases







Deployment with orcharhino



- Deployment of new machines
 - Virtual machines
 - Baremetal
 - Cloud-instances
- Multiple deployment mechanisms
 - Networkbased
 - Imagebased
- Deployment based on patchlevel of environment





Deployment with orcharhino



Orchestration of

- Hypervisors
- Cloud providers



















Configuration-Management with orcharhino



Integration of different tools:

- Ansible
- Puppet
- Saltstack
- → Combination possible









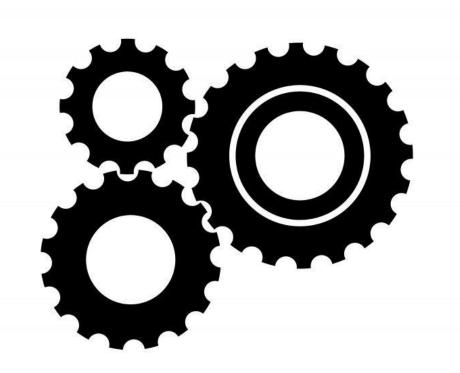
Combine configuration management and deployment



Create predefined templates consisting of:

- Operating system details
- Hypervisor & VM-Settings
- Lifecycle Environment
- Deployment details
- Configuration management

→ Deployment of fully configured machine





Application Centric Deployment



- Application instances with multiple host/roles
- Install, configure, connect via Ansible
- Deployment, configuration and clustersetup in one workflow
- Example: ELK-stack, Kubernetes, Galera-Cluster



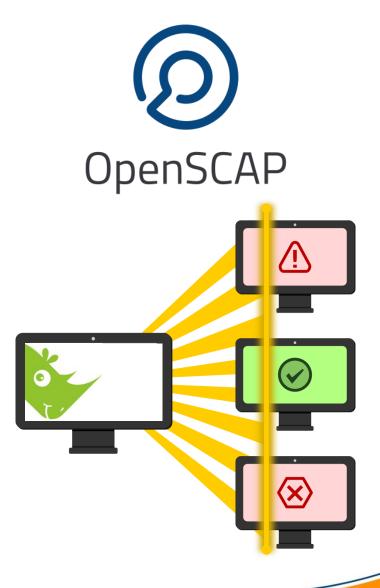


Compliance Reports using OpenSCAP Policies



OpenSCAP compliance reporting

- Distribute compliance policies
- Check and collect reports regulary
- Benefit in audits



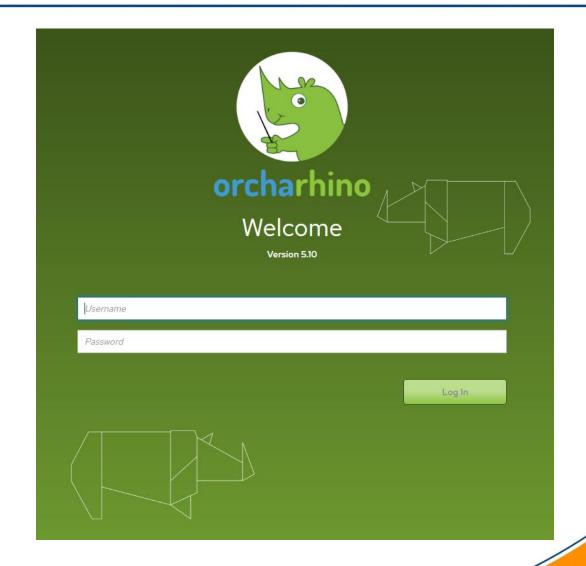


Role-based access control



Role-based permissions

- Organizations/Locations
- Custom-filters (based on facts/properties)
- Granular permission layers





Selfservice



Selfservice capabilities:

- Predefined templates
- Restricted permissions
- Restriction to certain environments
- Integration via REST API in existing solutions

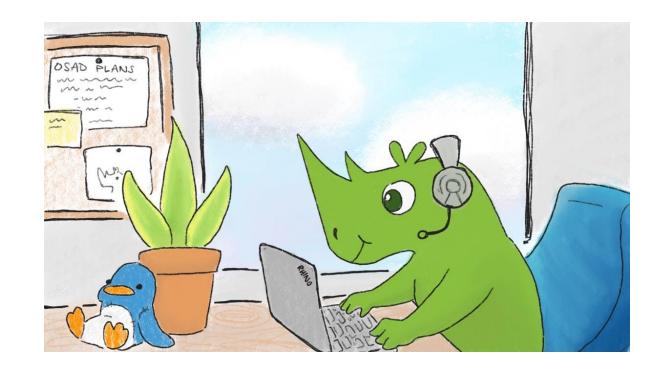




Advantages of using orcharhino

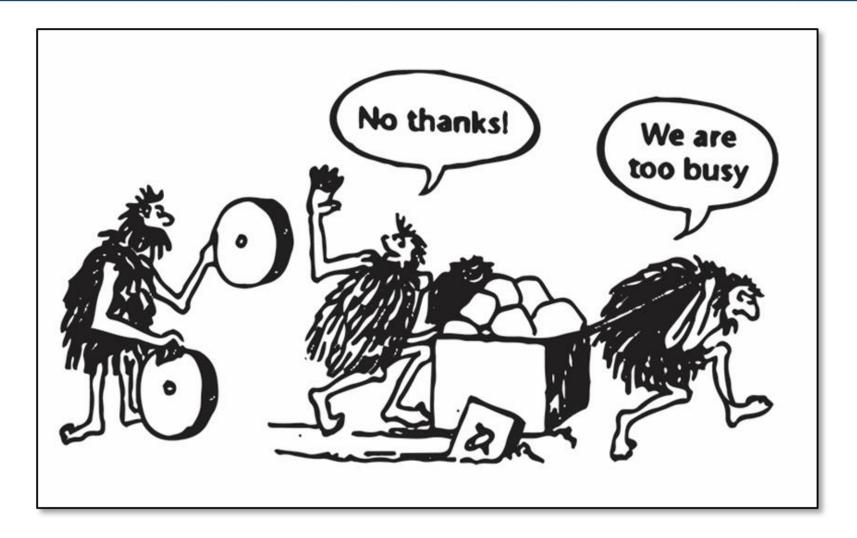


- One tool to orchestrate the complete lifecycle
- Standardize and automate workflows
- Support for all common Linux distributions & different configuration management tools
- Tested and stable releases
- Support & Trainings











Summary – simplify your datacenter administration



- Orchestrate your packages/patches
 & releases
- Implement lifecycle/staging environments for more stability
- Improve deployments with combination of configuration management
- Monitor the patchable vulnerabilities and compliance
- → Get a demo or trial



