

the current state of



Mark Hlawatschek







SALTSTACK



ANSIBLE



puppet



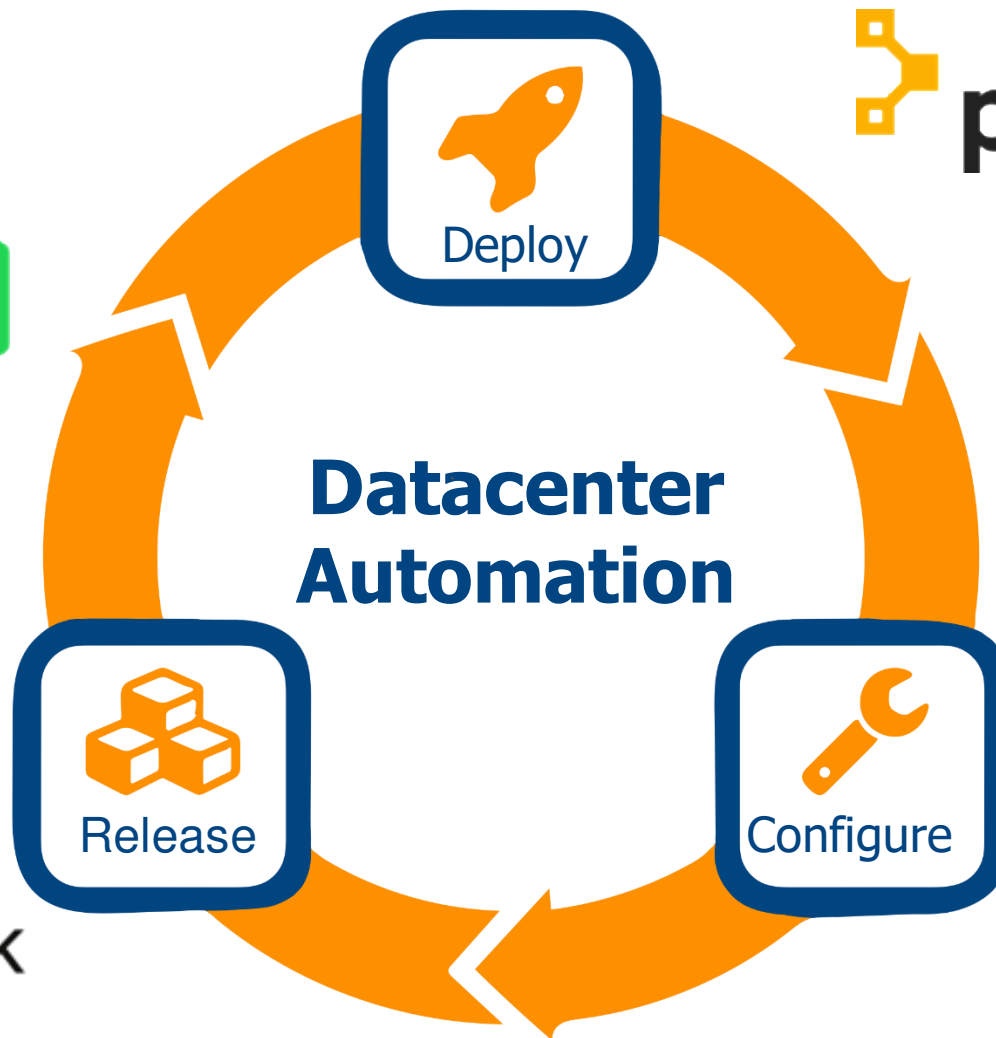
RED HAT
OPENSIFT



RANCHER



kubernetes



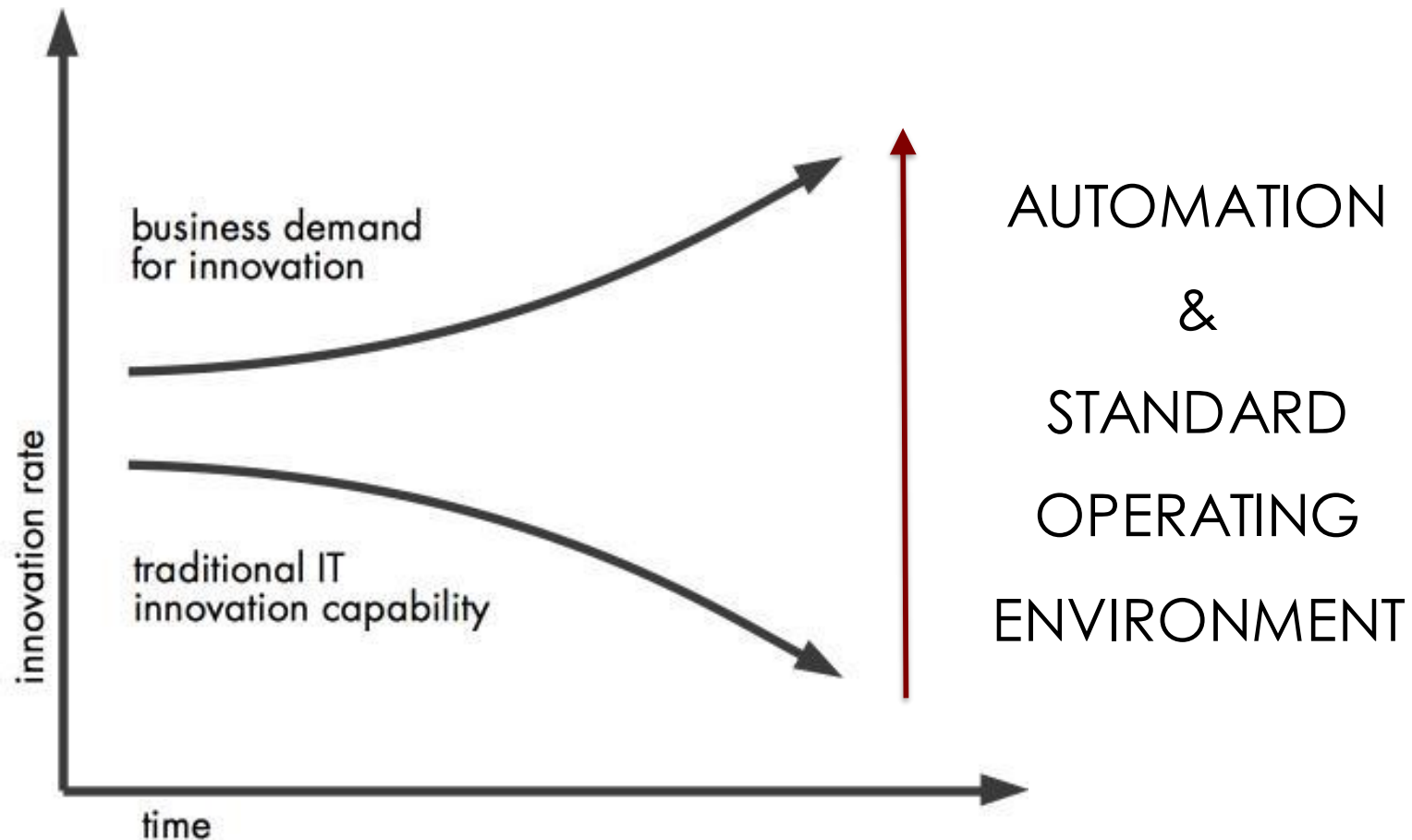
orcharhino

DEPLOY RUN CONTROL SIMPLIFY YOUR DATACENTER

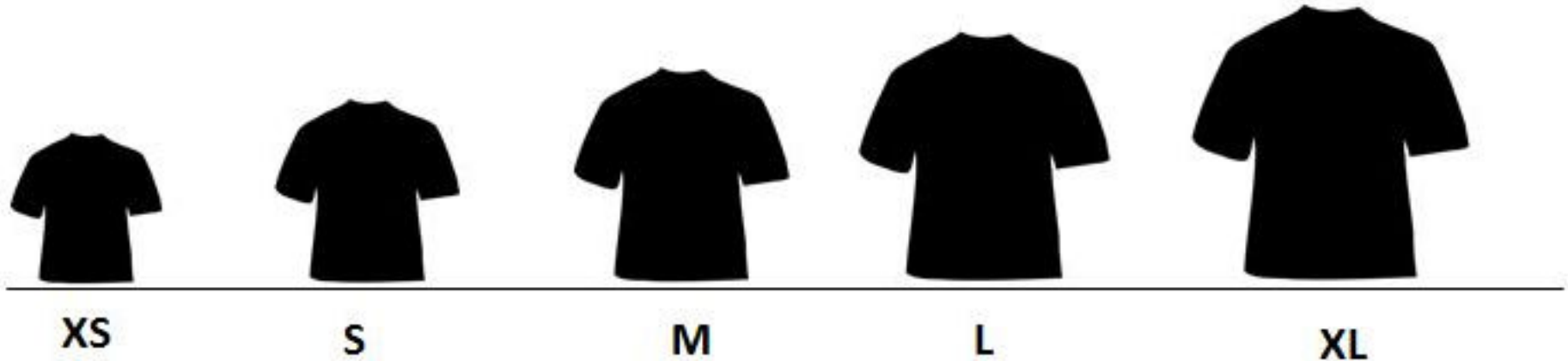
Recurring Tasks



Simplify your datacenter



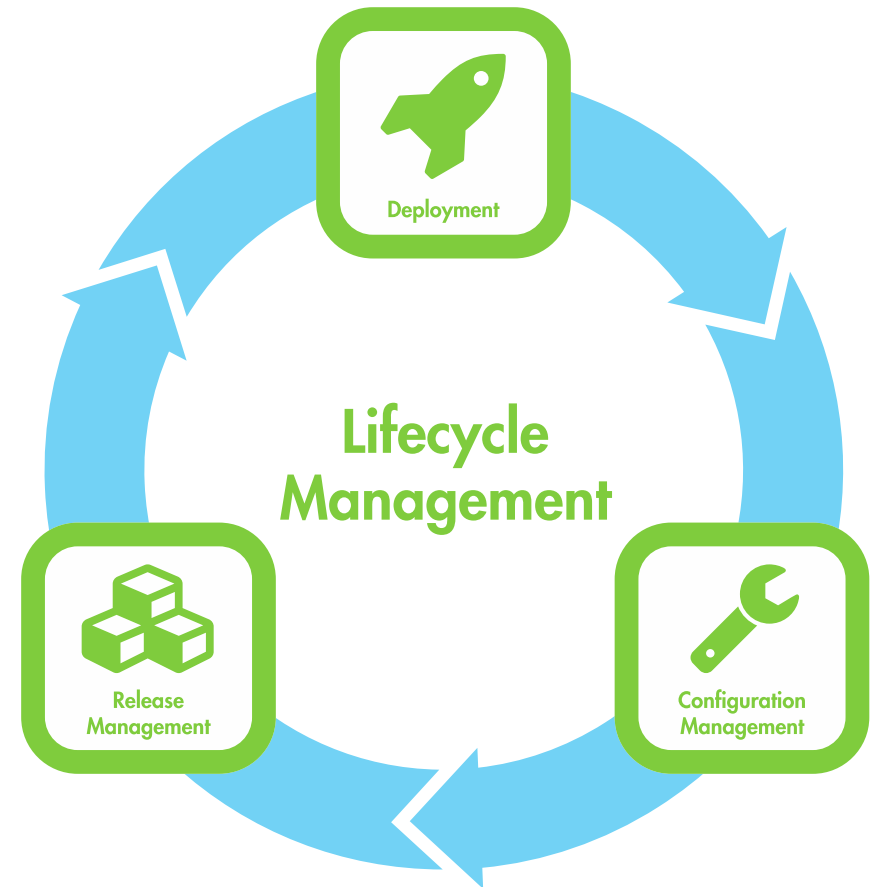
- SOE - Standard Operating Environment
- Standardization for automation and reproducibility



orcharhino Features:

- Server Deployment
- Lifecycle- & Patchmanagement
- Configuration Management
- Compliance Reporting
- Remote Management

⇒ Full Life Cycle
Servermanagement

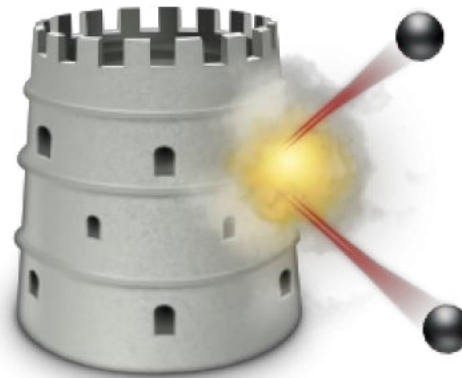


orcharhino consists of several Open Source Projects:

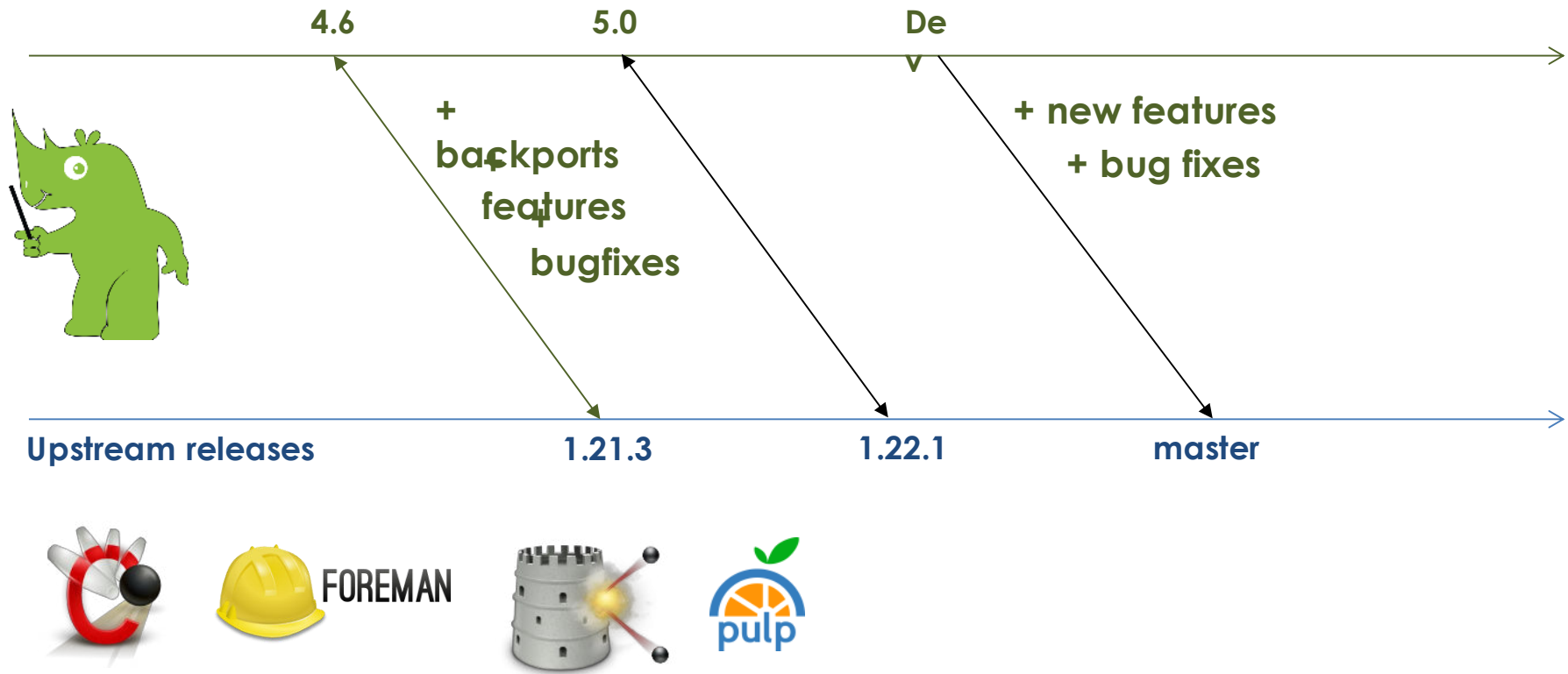
- Foreman
- Katello
- Pulp
- Candlepin
- and many more community projects... (plugins etc.)



FOREMAN



- Open Source Development
- New Release every 6 - 8 weeks



- Deploy new servers on
 - Bare metal
 - Virtual machines (VM)
 - Cloud providers
- Manage DHCP and DNS
- Different hypervisors & cloudprovider:



oVirt

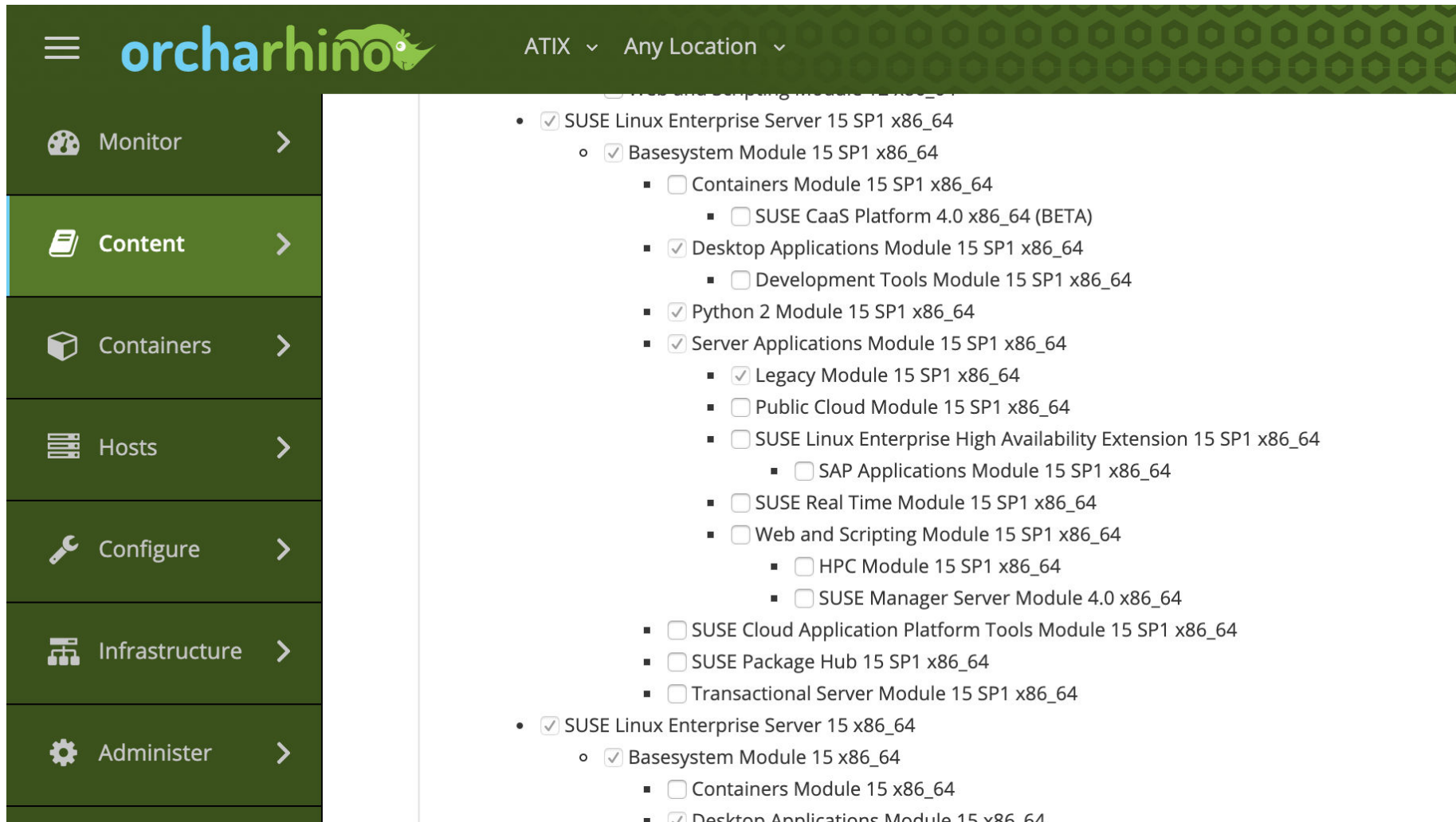


- Configuration management tools:
 - Puppet
 - Ansible
 - SaltStack
- Describe configuration of application using code
- Centralized management
- Receive new status reports automatically



- Manage package versions and updates for all servers
- Get errata (security) information
- Main enterprise Linux distributions
- supported





The screenshot shows the Orcharhino SCC Manager web interface. The left sidebar contains navigation links: Monitor, Content (highlighted), Containers, Hosts, Configure, Infrastructure, and Administer. The main content area displays a tree view of software modules for 'ATIX' at 'Any Location'. The tree structure is as follows:

- ☒ SUSE Linux Enterprise Server 15 SP1 x86_64
 - ☒ Basesystem Module 15 SP1 x86_64
 - ☐ Containers Module 15 SP1 x86_64
 - ☐ SUSE CaaS Platform 4.0 x86_64 (BETA)
 - ☒ Desktop Applications Module 15 SP1 x86_64
 - ☐ Development Tools Module 15 SP1 x86_64
 - ☒ Python 2 Module 15 SP1 x86_64
 - ☒ Server Applications Module 15 SP1 x86_64
 - ☒ Legacy Module 15 SP1 x86_64
 - ☐ Public Cloud Module 15 SP1 x86_64
 - ☐ SUSE Linux Enterprise High Availability Extension 15 SP1 x86_64
 - ☐ SAP Applications Module 15 SP1 x86_64
 - ☐ SUSE Real Time Module 15 SP1 x86_64
 - ☐ Web and Scripting Module 15 SP1 x86_64
 - ☐ HPC Module 15 SP1 x86_64
 - ☐ SUSE Manager Server Module 4.0 x86_64
 - ☐ SUSE Cloud Application Platform Tools Module 15 SP1 x86_64
 - ☐ SUSE Package Hub 15 SP1 x86_64
 - ☐ Transactional Server Module 15 SP1 x86_64
 - ☒ SUSE Linux Enterprise Server 15 x86_64
 - ☒ Basesystem Module 15 x86_64
 - ☐ Containers Module 15 x86_64
 - ☒ Desktop Applications Module 15 x86_64

Red Hat Repositories



orcharhino ATIX Any Location

Monitor Content Containers Hosts Configure Infrastructure Administer

Red Hat Repositories

Available Search

Filter by Product RPM

Available Repositories

ON ☐ Recommended Repositories ⓘ

100 per page 1-11 of 11 1 of 1

- > **Red Hat Ansible Engine 2.6 RPMs for Red Hat Enterprise Linux 7 Server**
rhel-7-server-ansible-2.6-rpms
- > **Red Hat Enterprise Linux 5 Server - Extended Life Cycle Support (RPMs)**
rhel-5-server-els-rpms
- > **Red Hat Enterprise Linux 6 Server (RPMs)**
rhel-6-server-rpms

Enabled Repositories

Export as CSV

100 per page 1-17 of 17 1 of 1

- Red Hat Enterprise Linux 7 Server - Extended Update Support RPMs x86_64 7.6**
rhel-7-server-eus-rpms
- Red Hat Enterprise Linux 7 Server - Extended Update Support RPMs x86_64 7Server**
rhel-7-server-eus-rpms
- Red Hat Enterprise Linux 7 Server - Extras RPMs x86_64**
rhel-7-server-extras-rpms

Debian/Ubuntu Repositories



← → ↻ or.demo.atix/products/30/repositories?page=1&per_page=100 ☆ | 🌐 | 👤

orcharhino

Monitor >

Content >

Containers >

Hosts >

Configure >

Infrastructure >

Administer >

ATIX ▾ Any Location ▾

🔔 Mark Hlawatschek ▾

Ubuntu 18.04 Select Action ▾

[Products](#) » [Ubuntu 18.04](#) » [Repositories](#) 📏

Details

Repositories

Tasks

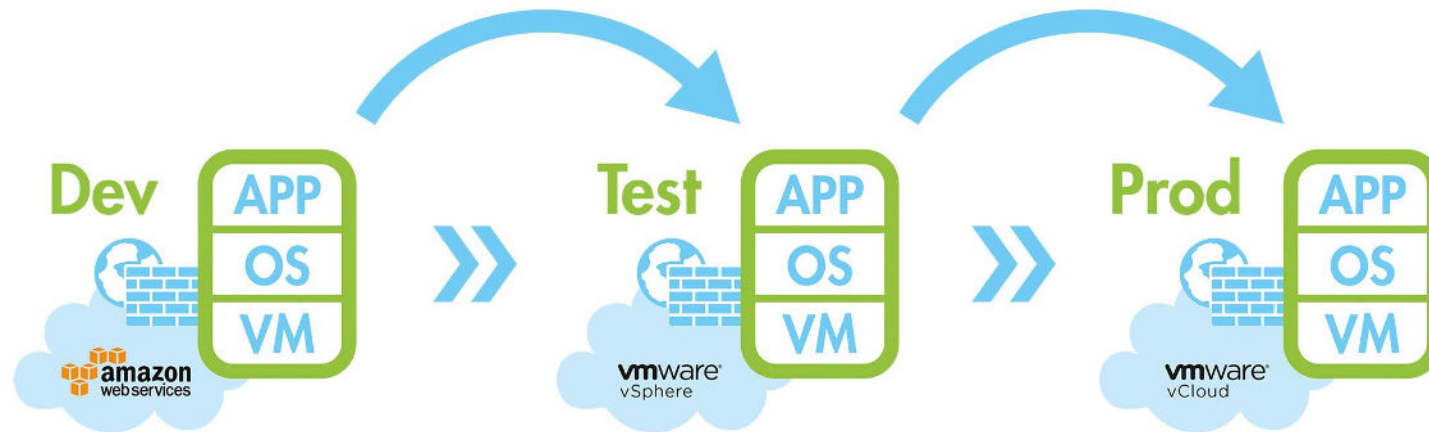
▾

0 of 4 Selected

☐	Name	Type	Sync Status	Content
☐	bionic main restricted	deb	Success about 14 hours ago	6441 deb Packages 0 Errata
☐	bionic-security main restricted	deb	Success about 14 hours ago	3824 deb Packages 377 Errata
☐	bionic-updates main restricted	deb	Success about 14 hours ago	5360 deb Packages 0 Errata
☐	ntp dependencies	deb	N/A	2 deb Packages 0 Errata

100 ▾ per page

Showing 1 - 4 of 4 << < 1 of 1 > >>



- Use your defined life cycle environment
- Like: development → testing → production
- Packages, patches and configuration based on lifecycle step (dev, test, prod)

orcharhino

ATIX ▾ Any Location ▾

Monitor

Content

Containers

Hosts

Configure

Infrastructure

Administer

Composite SLES 15 SP1

Publish New Version Select Action ▾

Content Views » Composite SLES 15 SP1 » Versions ⇄

Details Versions Content Views History Tasks

Filter... Search ▾

Version	Status	Environments	Content	Description	Actions
Version 5.0	Promoted to Development (Sep 06, 12:43 PM)	Library Development	14838 Packages 261 Errata (112 ⚠ 149 🛑 0 🛡)	post or 4.6 upgrade puppet 6	Promote ▾
Version 3.0	Promoted to Testing (Sep 06, 12:33 PM)	Testing	14093 Packages 158 Errata (68 ⚠ 90 🛑 0 🛡)	post or 4.5 upgrade	Promote ▾
Version 2.0	Promoted to Production (Sep 06, 12:32 PM)	Production	13886 Packages 133 Errata (58 ⚠ 75 🛑 0 🛡)	post or 4.4.1 upgrade	Promote ▾
Version 1.0	Promoted to Testing (Jul 13, 03:45 PM)		13764 Packages 117 Errata (49 ⚠ 68 🛑 0 🛡)		Promote ▾

100 ▾ per page Showing 1 - 4 of 4 << < 1 of 1 > >>

- Security Report
- Compliance Report
- Configuration Report
- Updates Report
- Auditing



Host Subscription Status			×
	Count		
 Invalid		0	
 Partial		0	
 Valid		10	
 Unknown		0	
 Unregistered		3	
Total Content Hosts		13	

Compliance and Scoring

There were no failed or uncertain rules. It seems that no action is necessary.

Rule results

19 passed

Severity of failed rules

0

Score

Scoring system	Score	Maximum	Percent
urn:xccdf:scoring:default	100.000000	100.000000	100%

■ Ansible Modules

<https://github.com/theforeman/foreman-ansible-modules>

```
- name: "Create a host"
  foreman_host:
    username: "admin"
    password: "changeme"
    server_url: "https://orcharhino.example.com"
    name: "new_host"
    hostgroup: „Ubuntu18“
    state: present
```

■ Hammer CLI

```
hammer host create \  
--name "new_host" \  
--hostgroup "ubuntu18" \  
--organization-id 1 \  
--location-id 1\  

```

■ API

```
curl -request GET --insecure --user ORUSER:PASSWORD \
https://or.demo.atix/api/v2/hosts/centos7.demo.atix | \
python -m json.tool
```

```
{
  "all_parameters": [
    ],
  "all_puppetclasses": [
    {
      "id": 133,
      "module_name": "foreman_scap_client",
      "name": "foreman_scap_client"
    },
  ],
  "architecture_name": "x86_64",
  ...
  "uuid": "5027beac-6bb9-9b13-5a38-e617158b2df3"
}
```


- Web Installer
- Quality assurance
- Improvements
- Support
- Documentation
- Enterprise features by ATIX:
 - Snapshot Management
 - Debian, Ubuntu-Support
 - Oracle and SUSE-Integration
- Errata:
 - CentOS, Ubuntu, Debian



Installation and Configuration

orcharhino installer

1 Basic Configuration
Configure the admin account

2 HTTP Proxy
Use a HTTP proxy

3 Networking Capabilities
Manage DHCP, DNS, TFTP

4 Operating Systems
Choose operating systems

5 Configuration Management
Choose Puppet, Ansible, Salt

6 Compute Resources
Choose compute resources

7 Plugins
Choose additional plugins

Operating Systems

- Suse Linux Enterprise Server 12 SP2 ☐
- Suse Linux Enterprise Server 12 SP3 ☐
- Suse Linux Enterprise Server 12 SP1 ☐
- Suse Linux Enterprise Server 11 SP4 ☐
- Suse Linux Enterprise Server 15 ☒
- CentOS 7.X ☒
- CentOS 6.X ☐
- Ubuntu 16.04 LTS ☐
- Ubuntu 18.04 LTS ☐
- Debian Stretch ☒
- Oracle Linux 7 ☐

(1)

(2)

Previous

Next

Finish

← → ↻ or.demo.atix/hosts ☆ | 🔍 | 👤

orcharhino ATIX ▾ Any Location ▾ 🔔 👤 Mark Hlawatschek ▾

Monitor > Content > Containers > **Hosts** > Configure > Infrastructure > Administer >

Hosts

Filter ... 🔍 Search 📄

Export Select Action ▾ Create Host

0 of 17 selected

☐	Power	Name	Operating system	Puppet Environment	Model	Host group	Last report	Actions
☐	🔌	centos6.demo.atix	CentOS 6	production	vcenter.dem...	CentOS 6	18 minutes a...	Edit ▾
☐	🔌	centos7.demo.atix	CentOS 7	production	vcenter.dem...	CentOS 7	26 minutes a...	Edit ▾
☐	🔌	centos7-proxy.demo.atix	CentOS 7	production	vcenter.dem...	CentOS 7/Proxy	19 minutes a...	Edit ▾
☐	🔌	debian10.demo.atix	Debian 10	production	vcenter.dem...	Debian 10	26 minutes a...	Edit ▾
☐	🔌	debian9.demo.atix	Debian 9	production	vcenter.dem...	Debian 9	27 minutes a...	Edit ▾
☐	🔌	linuxstammtisch-centos7.demo.atix	CentOS 7	production	vcenter.dem...	CentOS 7	12 minutes a...	Edit ▾
☐	🔌	oracle7.demo.atix	Oracle Linux 7	production	vcenter.dem...	Oracle Linux 7	22 minutes a...	Edit ▾
☐	🔌	proxy.demo.atix	CentOS 7	production	VMware Virtu...		10 minutes a...	Edit ▾
☐	🔌	rhel7.demo.atix	RHEL 7	production	vcenter.dem...	RHEL 7	25 minutes a...	Edit ▾
☐	🔌	rhel8.demo.atix	RHEL 8	production	vcenter.dem...	RHEL 8	24 minutes a...	Edit ▾
☐	🔌	sles12sp4.demo.atix	SLES 12 SP4	production	vcenter.dem...	SLES 12 SP4	20 minutes a...	Edit ▾
☐	🔌	sles15sp1.demo.atix	SLES 15 SP1	production	vcenter.dem...	SLES 15 SP1	18 minutes a...	Edit ▾
☐	🔌	stammtisch-ubuntu.demo.atix	Ubuntu 18.04 LTS	production	vcenter.dem...	Ubuntu 18.04	5 minutes ago	Edit ▾
☐	🔌	ubuntu16.demo.atix	Ubuntu 16.04 LTS	production	vcenter.dem...	Ubuntu 16.04	29 minutes a...	Edit ▾
☐	🔌	ubuntu18.demo.atix	Ubuntu 18.04 LTS	production	vcenter.dem...	Ubuntu 18.04	26 minutes a...	Edit ▾
☐	🔌	win2016.demo.atix	Windows 2016 Server	production	vcenter.dem...	Windows 2016	18 minutes a...	Edit ▾
☐	🔌	win2019.demo.atix	Windows 2019 Server	production	vcenter.dem...	Windows 2019	21 minutes a...	Edit ▾

Install host



📄 New in Progress

- ✅ completed - Set up compute instance leo-harles.demo.atix
- ✅ completed - Query instance details for leo-harles.demo.atix
- ✅ completed - Create DHCP Settings for leo-harles.demo.atix
- ✅ completed - Create IPv4 DNS record for leo-harles.demo.atix
- ✅ completed - Create Reverse IPv4 DNS record for leo-harles.demo.atix
- ✅ completed - Deploy TFTP PXELinux config for leo-harles.demo.atix
- ✅ completed - Deploy TFTP PXEGrub2 config for leo-harles.demo.atix
- ✅ completed - Deploy TFTP PXEGrub config for leo-harles.demo.atix
- 🔄 running - Deploy TFTP iPXE config for leo-harles.demo.atix
- ⏸ pending - Fetch TFTP boot files for leo-harles.demo.atix
- ⏸ pending - Power up compute instance leo-harles.demo.atix
- ⏸ pending - Cleanup PuppetCA certificates for leo-harles.demo.atix
- ⏸ pending - Enable PuppetCA autosigning for leo-harles.demo.atix



- orcharhino Website: <https://orcharhino.com>
- orcharhino Webinar: <https://orcharhino.com/webinar>
- Meet us at OSAD: <https://osad-munich.org>
 - Workshop: <https://osad-munich.org/workshops/#foreman>
- orcharhino docs: <https://docs.orcharhino.com>
- Get your own: <https://orcharhino.com/downloads>

- The Linux and Open Source Company
- Open Source Datacenter Automation



Consulting



Engineering



Support



Training





**Mark
Hlawatsche
k**

 **hlawatschek@atix.de**

 **@hla_mark**

 **www.xing.com/profile/Mark_Hlawatschek**

 **www.linkedin.com/in/mark-hlawatschek**

Installer Demo



The image shows a web browser window displaying the Orcharhino installer. The browser's address bar shows the URL `192.168.78.11:8015/?token=98dedcd0463a664b95ef45d613f4bf12d4dee8f61ca109fc`. The page has a green header with the "orcharhino" logo and the word "installer". On the left, there is a vertical sidebar with seven numbered steps: 1. Basic Configuration (highlighted in blue), 2. HTTP Proxy, 3. Networking Capabilities, 4. Operating Systems, 5. Configuration Management, 6. Compute Resources, and 7. Plugins. The main content area is titled "Basic Configuration" and contains five input fields: "Admin password", "Confirm password", "Admin email", "Organization", and "Location". At the bottom right of the main area, there are three buttons: "Previous", "Next", and "Finish".