

# Demobuilder

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# Demobuilder

- Using open source, community and meritocracy to build and share **standard, high quality product VMs and demos**
- Field initiative, initially targeted internally at customer-facing technical associates, e.g. SAs/consultants/GSS
- <http://demobuilder.gps.hst.ams2.redhat.com/>
- <http://post-office.corp.redhat.com/mailman/listinfo/demobuilder-list>
- <https://github.com/RedHatEMEA/demobuilder/>

# Project aims

- Standard, high quality VM images suitable for beginners and experts
- Images always fresh and up-to-date (CI/CD)
- **Anyone can add or improve VM images** (send a pull request!)
- Demo documentation/instructions/best practices included
- Multi-target (RHEL/Fedora/OSX + Vagrant, RHEV, OpenStack, VMware, AWS, etc.)
- Use standard resources to improve quality and save everyone time

# v1 (September 2015)

- Standard OpenShift 3.0.1 demos in three flavours
- Standard VM image for running WebEx
- Documented and tested demo walk through, download instructions, etc.
- Simply requires laptop (RHEL/Fedora/OSX) + vagrant
- Download image and go!

# OpenShift demo images

Name	Download size	Notes; suggested use cases
All-in-one	2.5GB	Vanilla; replicate customer issues / experiment with product
Offline	3.5GB	Offline; for use with no net connection
Offline (Jim's demo)	4.5GB	Offline, also includes JBoss Developer Studio; use for customer demos

Demo!

# Roadmap

- Internal announcements and enablement
- Crowdsource further improvements to OpenShift demos
- Add further product VMs
  - e.g. OpenStack, JBoss products, Atomic, Satellite, Storage etc.
- Auto export/import RHEV, OpenStack, VMware and AWS images
  - e.g. to EMEA demo central, SALAB, regional demo labs, OS1, etc.
- Investigate extending VM images to partners
- See/create issues in GitHub...

# Call to action!

- Many thanks to the following people for already joining the demobuilder community, testing, suggesting improvements and/or sending patches:
  - Andy Downs
  - Johnray Fuller
  - Christian Horn
  - Ian Lawson
  - Keith Lynch
  - Ivan McKinley
  - James Read
  - Nabeel Saad
  - Ed Seymour
  - Jaen Swart
  - and others...



# Call to action!

- Try out the demos and provide feedback
- Join the community and help us move faster
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- <http://post-office.corp.redhat.com/mailman/listinfo/demobuilder-list>
- <https://github.com/RedHatEMEA/demobuilder/>

# Developing Demobuilder

- **You don't need to be an expert developer**
  - bug reports, RFEs, one line improvements and docs all help
- Read the developer documentation in /docs
- **Subscribe to demobuilder-list for discussions and help**
- Create GitHub issues for bugs and RFEs
- E-mail [jminter@redhat.com](mailto:jminter@redhat.com) to be added to the GitHub team (so issues can be assigned to you, etc.)
- Send GitHub pull requests with improvements!

# Installing Demobuilder

- For now, use Fedora 22 (either bare-metal or in a VM with nested virt enabled)
- Remember to do `git clone --recursive`
- Consider enabling passwordless sudo/libvirt access
- Run `./build.sh` to verify prereqs
- Edit `config.yml` to add your RHN credentials
- At a minimum, download `rhel-server-7.1-x86_64-dvd.iso` and place in `/isos`

# Building a development VM image

- Run `./build.sh` to list buildable images
- `DEBUG=true ./build.sh rhel-server-7`
- `DEBUG=true ./build.sh rhel-server-7:gui`
- Development images are built in `tmp/` and moved to `build/` on success
- Currently, building an intermediate layer expects the parent layer already to be built

# Running a development VM image

- `utils/createsnap.sh build/rhel-server-7:gui.qcow2 snap`
- `utils/run.sh snap`
- `utils/ssh.sh root@$IP`
- `vncviewer :0`
- `...`
- `kill $QEMUPID`
- `rm snap`

# Creating a new intermediate layer

- `cp -a layers/@template layers/rhel-server-7:gui:newlayer`
- Edit the following:
  - `config.yml`
    - layer metadata (name, maintainers, description, required VM parameters (if different from parent))
  - `@docs/index.html`
    - end-user documentation in Markdown format
  - `@target/install`
    - install script run in VM to create new layer
    - probably subscribes RHN channels, installs RPMs, downloads other stuff, configures services, etc., etc.
    - `utils/vm-functions` provides initial primitives to help with this
    - see other install scripts for inspiration
- `DEBUG=true ./build.sh rhel-server-7:gui:newlayer`

# Building a finalized VM image

- `./build.sh rhel-server-7:gui:newlayer:vagrant-libvirt`
- Finalized images are built in `tmp/` and moved to `releases/` on success

# Thanks! Questions?

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