VMI Endorsement

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Outline

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Set up a process assuring that a Virtual Machine Image (VMI)/ Virtual Appliance (VA) published in AppDB is well-configured, secure and up-to-date



Image types

Туре	Description	Managed by
EGI	General purpose images available to everybody. Based on largely used Oses.	EGI
VO-specific	VO specific images, available to a specific VO and customized for specific purposes.	VO



Activities

A1. Creation

A2. Configuration

A3. Hardening

A4. Publishing



Activities

Activity	Description
A1. Creation	Create an image ready to be used by a Resource Provider.
A2. Configuration	Configuration assures that packages are up to date and no wrong default configurations are left for any applications/ services
A3. Hardening	Security is provided by applying CSIRT guidelines for the VMI Endorsement
A4. Publishing	Make image available on AppDB with proper tags, metadata, links

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Comments

- EGI images endorsed by EGI, VO images by VO expert
- fedcloud.egi.eu is an intermediate case
 - VO expert is responsible
 - EGI experts closely help the VO with creating and applying their procedures
- EGI images will be the pilot to set up the process for VO images
 - From policies to procedures
 - Starting with Ubuntu and CentOS7
- Procedures are *image-specific* (especially creation and configuration)
- All the activities must be as much automated as possible
- In any case procedures must be straightforward and «step-by-step»



Documentation and Communication

- All the activities must be documented
 - Central wiki page
 https://wiki.egi.eu/wiki/Virtual_Machine_Image_Endorsement
 - External links (i.e. policies)
- Documentation schema provided on the wiki
- SSO group available: <u>vm-image-endorsement@mailman.egi.eu</u>



EGI images

Activity	Initial activity	Ongoing activity
A1. Creation	Create the procedure for a given image	Use the recipe to create/update the image according to a given policy (on security issue, on request, every X days)
A2. Configuration	Create VMI configuration procedure for a given image	Apply VMI configuration procedure to a given image
A3. Hardening	Create VMI hardening procedure for a given image based on guidelines	Apply VMI hardening procedure to a given image
A4. Publishing	Publish the image on AppDB	Publish the image on AppDB



VO images

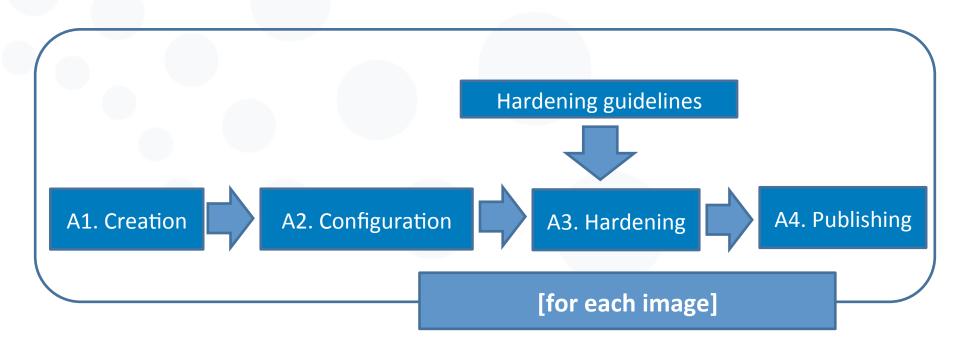
Activity	Initial activity	Ongoing activity			
A1. Creation	Set up the procedure for a given image	Use the procedure to create/update the image according to a given policy (on security issues needed), every X days			
A2. Configuration	Create VMI configuration procedure for a given image	App V Figuration procedure iven image			
A3. Hardening	Create VMI hardening process of plug given image based on guid pes	Apply VMI hardening procedure to a given image			
A4. Publishing	Pulls the hage on AppDB	Publish the image on AppDB			
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With the help of EGI (docs, support)



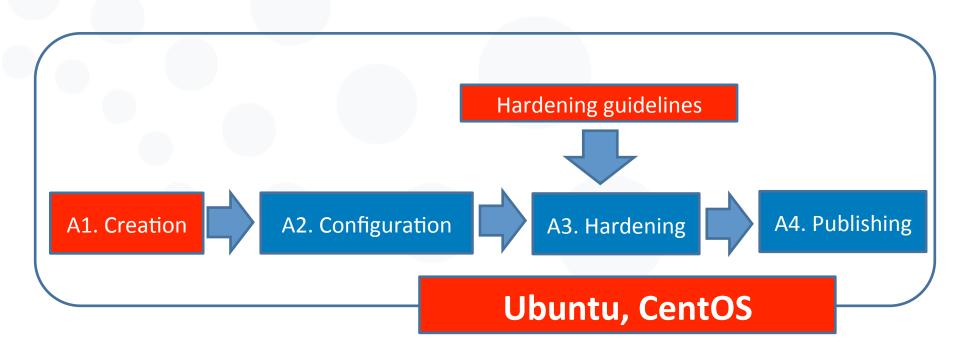
Workflow





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Current status





Action items

- 1. [Fernandez] Applying the workflow to
- EGI CentOS6 → DONE
- EGI CentOS7 → Work in progress
- EGI Ubuntu12 → DONE
- EGI Ubuntu14 → DONE
- 2. [CSIRT] Create hardening guidelines
- 3. [Spinoso] Add a "general requirements" table so that we can easily understand if a VM is not compliant to the rules
- 4. [Spinoso] Add few rules about when updating an image is needed
 - "Security_issue OR monthly"

Thank you for your attention.

Questions?

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