**Document History:**

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| --- | --- | --- | --- |
| Version | Author | Date | Change Description |
| 1.0 | John McFarland | 08-7-2015 | SOP Documented |
| 2.0 | John McFarland | 09-18-2015 | Updated for v10.0 |
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**Glossary of Terms:**

|  |  |
| --- | --- |
| Term | Definition |
|  |  |
| Use commands | (in parentheses) |
| IBM Technical Contact | 'Prasad Bandaru' <pbandaru@us.ibm.com> |
| Project Contacts | Mark Porter & Bryant Oster |

**Summary:**

This standard operating procedure is to be used to create a (basic) Guardium\_10.0 Virtual Appliance instance from the vendor provided in .ISO format.

**Note\* This document is based on the v9.5 build and the vendor documentation has not changed.**

**There may be some subtle version differences, but the overall process is unchanged.**

It is understood that additional vendor configuration & collaboration is required for each of these build requests and is the responsibility of the requester and vendor. This document is intended to provide the first stage of that build process.

Coordinate with the project technical contacts (Mark Porter & Bryant Oster) and the IBM technical contact as needed.

**Business stakeholders:**

Stakeholders limited to the Midrange Lifecycle and Operations teams and EIS Security team responsible for creating and supporting a Guardium Virtual Appliance

**Recurrence:**

This procedure is to be followed as needed to create a Guardium Virtual Appliance as requested through the PDP.

**Required Permissions:**

* Administrative access to vCenter on the ESX cluster
* Administrative access to the source files [*\\vmpip-hvapps01\Incoming$*](file:///\\vmpip-hvapps01\Incoming$)

**Required Software: (None)**

**Prerequisites:**

1. Virtual Appliance Name (provided though PDP process)
2. IP Reservation, subnet, gateway, DNS name entry, DNS server IP (provided through PDP process)
3. Access to Guardium ISO
4. Appropriate ICCU Datastore location to move and access Guardium.auto.iso

**Procedure 1: Pre-Install**

**This virtual appliance is built from an iso image that needs to be pulled from a datastore accessible from the requested cluster.**

* **Locate an appropriate and accessible datastore based on information provided in the PDP**
* **Access** [**\\vmpip-hvapps01\Incoming$\vGuardium\iso**](file:///\\vmpip-hvapps01\Incoming$\vGuardium\iso)
* **Move the Security\_Guardium\_Product\_Image\_V10.0\_DVD.iso file to target datastore**
* **For additional build reference, print out:** [**Installing IBM InfoSphere Guardium in a Virtual Machine**](https://itcomposites.lmig.com/Sites/Midrange/Integration/InternalDocuments/Project%20Documents%20and%20Deliverables/Guardium/GuardiumVABuild.wss.pdf)

**Procedure 2: Create Virtual Machine**

| Step | Action | Screen Shot (as applicable) |
| --- | --- | --- |
|  | Review PDP Request for Prerequisites. |  |
|  | Identify correct ESX cluster and VLAN virtual appliance is to be deployed, as well as appropriate datastore for staging the auto.iso. |  |
|  | Log into ESX cluster. Set focus on cluster.  Select File, New, Virtual Machine |  |
|  | Select ‘Typical’ for configuration, Next |  |
|  | Name the virtual appliance (Must start with VC) and select appropriate location – Next: |  |

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| --- | --- | --- |
|  | Specify Specific Host  Select Next. |  |
|  | Select appropriate Storage.  Select Next |  |
|  | Select Guest OS as Linux RHEL 5 (64bit) – Next: |  |
|  | Select correct vlan (from PDP provided information) and default NIC |  |
|  | Set virtual disk size at 300GB w/ Thick Provisioned Lazy Zeroed – Next: |  |
|  | Check “Edit the virtual machine settings before completion’. - Finish |  |
|  | Add to properties:  16GB RAM, 4 CPU – click Finish  This completes the initial configuration and creates the VM. |  |
|  | Once the VM is ready, highlight (right click) and Edit Settings. On the cd/DVD drive1, select Datastore ISO File. Point to the datastore where you loaded the auto.iso file from the Pre-Install Steps:    llll |  |
|  | Select the: **Security\_Guardium\_Product\_Image\_V10.0\_DVD.iso**, click OK  Note, this image is for reference only.  Please use appropriate/requested iso. |  |
|  | Click the “Connect at Power on’ box, click OK |  |
|  | The ISO build starts: Open a console on new machine to verify. Build process takes around 10-20 minutes. |  |
|  | Guardium Install starts |  |
|  | At the EULA, page down to bottom, hit ‘q’ to quit and type ‘yes’ to agree  Build will complete. |  |
|  | As the initial setup screen come up, make the choice between COLLECTOR or AGGREGATOR:  1. To build a Collector --> Choose the **Standard Installation (non CM)** – Default - When installing the Collector, just make sure that this option is selected  2. To build an Aggregator or CM --> Choose the "**Aggregator or Central Manager (CM)**" option.  **NOTE\* Skip steps 20 & 21 if not prompted for specific input.**  ***Skip any redundant and/or unrequired steps that relate to the specific request.*** |  |
|  | Once installed, the password screen comes up.  Password Setting: this is a little tricky because it doesn’t matter if you change the initial password or not, you will still need to change it after initial logon. Do nothing and in 10 seconds it (the cli password) defaults to ‘guardium’. And **there is no visible output when entering the passwords**  So make sure your caps lock is off. Make note of the new password you have entered after first login.  MAKE NOTE OF ALL ENTERED PASSWORDS  Repeat PW entries for both the GUI Admin and Access Manager when prompted, again, **there is no visible output when entering the passwords.** |  |
|  | **Disregard if selected in step 19**  At this point the choice will be offered to choose between building:   1. Collector (col) 2. Aggregator (agg or cmp)   Refer to request for this choice.  **Request will state either col, agg or cmp.**  System will reboot after selection. |  |
|  | Once at login screen, this is the point to enter and change initial PW. |  |
|  | Once logged in, the network configuration is next:  Use the commands :  *store network interface ip <ip\_address>*  *store network interface mask <subnet\_mask>* |  |
|  | To enter the default gateway, use command:  *store network routes def <default\_router\_ip>* |  |
|  | No SMNP entry required. Skip step.  DNS server IP entry.  (store network resolver 1 <DNS server IP>) |  |
|  | Store system host name & system domain name:  (store system hostname <server name>)  (store system domain <domain name>) |  |
|  | Restart system before changing time zone: restart system w/ (restart system)  Time Zone defaults to EDT, so no change needed.  Store the date and time in the format: YYY-mm-dd hh:mm:ss  Use command (store system clock datetime <date\_time>) |  |
|  | Once the clock is changed, system will request gui restart.  Use command (restart gui) as requested. |  |
|  | Install License Key:  System is now ready to install the license key.  Follow steps in doc ‘Installing IBM InfoSphere Guardium in a Virtual Machine’  This can be done from the gui or the cli.  Gui access: https://<IP\_address>:8443/sqlguard    This key is located in the uploaded files on a Notepad doc:  [\\vmpip-hvapps01\Incoming$\vGuardium\v10.0\Guardium\_10\_GA](file:///\\vmpip-hvapps01\Incoming$\vGuardium\v10.0\Guardium_10_GA)  v10.0\Security\_Guardium\_Collector\_Base\_Product\_Key\_V10.0  Or:  W1thMDI3NzFlMmU2NDEwYjIyZjVhZDhkZDFmYWY4NWViMF1df3t/bn8bAAAAAAAAAAAAACwxLCUsRzUwMDAgICAgICwtMSwtMSwwLDIwOTktMDEtMDEgMDA6MDA6MDAsMSwAACxMLVRFU1gtOVZCVE5V  Note\* This key may only apply to the Collector builds. Customer (Chris Riley) has the Aggregator license key and can apply. |  |
|  | At this point the basic build configuration is complete and potentially ready for requester/vendor for security patching and any additional configuration.  **Final configurations are normally done via a GUI and the responsibility of the requestor and/or vendor.** | Helpful documentation:  [Deployment Checklist](https://itcomposites.lmig.com/Sites/Midrange/Integration/InternalDocuments/Project%20Documents%20and%20Deliverables/Guardium/Deployment%20Checklist%20v1.0.pdf)  [Installing IBM InfoSphere Guardium in a Virtual Machine](https://itcomposites.lmig.com/Sites/Midrange/Integration/InternalDocuments/Project%20Documents%20and%20Deliverables/Guardium/GuardiumVABuild.wss.pdf) |