Day 2 Operations of Cisco VIM Insight

The following topic guides you the details about the Day 2 Operations of Cisco VIM Insight.

Shutting Down Cisco VIM Unified Management

To stop the Cisco VIM Insight Container services, shut down Cisco UCS VIM Insight by running the **systemctl stop `service`** command.

Step 1   Log in to a server in which the Insight container is running.

Step 2   Stop the Insight service by running the following command from the Shell window:

```
systemctl stop docker-insight
```

a) Check the status of Insight Container by running the following command: **docker ps -a | grep** insight.

```
STATUS
Up 6 seconds
```

b) Check the status of the service by running the following command:

```
systemctl staus docker-insight
```

The following information is displayed

```
Docker-insight.service – Insight Docker Service
Loaded: loaded (/usr/lib/systemd/system/docker-insight.service; enabled; vendor preset: disabled)
Active: inactive (dead) since <Date and Time since it was last active>
```

Restarting Cisco VIM Unified Management

Step 1   Log In to the server in which the Insight container was stopped.

Step 2   Restart the Insight service by running the following command from the shell window:

```
systemctl restart docker-insight
```

a) Check the status of Insight container by running the following command: **docker ps -a | grep** insight.

```
STATUS
Up 6 seconds
```

b) Check the status of the service by running the following command:

```
systemctl status docker-insight
```

The following output is displayed:

```
Docker-insight.service - Insight Docker Service
Loaded: loaded (/usr/lib/systemd/system/docker-insight.service; enabled; vendor preset: disabled)
Active: active (running) since <Date and Time when it got active.>
```

Restoring VIM Insight

Cisco VIM Unified Management can be restored to its previous running state which existed at the time of backup.

✎

Note   It is not recommended to run the Unified Management on the node on which restore operation is performed.

Step 1   Re-image the Insight management node with the ISO version with which you want to restore the node, and with the same IP address that is used before the failure of the node.

Note   Skip Step 1 if re-image is done with the ISO during management node restore. Insight restore can also be performed without re-image with ISO. Uninstall the Insight through bootstrap_insight.py and then restoring it by following below mentioned steps but this needs to be only done when you face issues with Insight and not in case of management node failure.

Step 2   Navigate to /var/cisco/insight_backup/ directory at the remote server where the backup directory was copied during the backup operation.

Step 3   Copy the backup file to the /var/cisco/insight_backup/ directory of the re-imaged management node. For example, to copy the backup directory from the remote host 20.0.0.5 to the management node /var/cisco/insight_backup/directory, execute the following command sequence: rsync -e ssh -rtvpX --numeric-ids root@20.0.0.5:/var/cisco/insight_backup/backup_2017-01-09_14-04-38 /var/cisco/insight_backup.

Step 4   In /var/cisco/insight_backup/backup_<date-time> directory, execute the following command:

```
# ./insight_restore -h

insight_restore  : Cisco VIM Insight Restore Script
----------------------------------------------------

 Usage: ./insight_restore


 -v          : Enable verbose mode

 -h          : To display this help message


    # ./insight_restore
    This will initiate an Insight install with the backed up data.

VIM Insight restore logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log

Management Node Validations!
+-----------------------------+--------+-------+
| Rule          | Status | Error |
+-----------------------------+--------+-------+
| Check Kernel Version    |  PASS | None |
| Check Docker Version    |  PASS | None |
| Check Management Node Tag    |  PASS | None |
| Check Bond Intf. Settings    |  PASS | None |
| Root Password Check      |  PASS | None |
| Check Boot Partition Settings |  PASS | None |
| Check LV Swap Settings    |  PASS | None |
| Check Docker Pool Settings   |  PASS | None |
| Check Home Dir Partition    |  PASS | None |
| Check Root Dir Partition    |  PASS | None |
| Check /var Partition     |  PASS | None |
| Check LVM partition      |  PASS | None |
| Check RHEL Pkgs Install State |  PASS | None |
+-----------------------------+--------+-------+




Insight standalone Input Validations!
+-------------------------------------------+--------+-------+
| Rule          | Status| Error |
+-------------------------------------------+--------+-------+
| Insight standalone schema validation      | PASS | None |
| Valid key check in Insight Setup Data     | PASS | None |
| Duplicate key check In Insight Setup Data | PASS | None |
| CVIM/Insight workspace conflict check     | PASS | None |
| Check registry connectivity               | PASS | None |
| Check Email server for Insight            | PASS | None |
+-------------------------------------------+--------+-------+

Setting up Insight, Kindly wait!!!
Cisco VIM Insight Installed successfully!
+----------------------+-----------+-----------------------------------------------------+
| Description     | Status     | Details |
+----------------------+--------+-----------------------------------------------------+
| VIM Insight UI URL    | PASS | https://<br_api:9000> |
| VIM UI Admin Email ID | PASS | Check for info @: <abs path of insight_setup_data.yaml> |
| | |                  |
| VIM UI Admin Password | PASS | Check for info @ /opt/cisco/insight/secrets.yaml |
| VIM Insight Workspace | PASS | /root/<insight_ws>                                  |
+------------------+-------+-----------------------------------------------------+

Cisco VIM Insight Autobackup Service Info!
```

```
+-----------------------+--------+----------------------------------------------+
| Description           | Status | Details                                      |
+-----------------------+--------+----------------------------------------------+
| VIM Insight Autobackup | PASS  | [ACTIVE]: Running 'insight-autobackup.service' |
+-----------------------+--------+----------------------------------------------+

VIM Insight restore successfully completed!

Done with VIM Insight restore!
VIM Insight restore logs are at: /var/log/insight/bootstrap_insight/

As the summary table describes, your VIM Insight workspace is restored and hence you need to use
bootstrap_insight.py from the mentioned workspace for performing any actions from here on.
```

Step 5   Run the following command, to verify Insight status after the restore operation.

```
# cd /root/<insight_ws>
# ./bootstrap_insight.py –a install-status
                     Cisco VIM Insight Install Status!
+----------------------+-----------+----------------------------------------------+
| Description          | Status    | Details                                      |
+----------------------+--------+-------------------------------------------------+
| VIM Insight Setup    | PASS | Success                                          |
| VIM Insight Version  | PASS | <release_tag>                                    |
| VIM Insight UI URL   | PASS | https://<br_api:9000>                            |
| VIM Insight Container | PASS | insight_<tag_id>                                |
| VIM Mariadb Container | PASS | mariadb_<tag_id>                                |
| VIM Insight Autobackup| PASS       | [ACTIVE]: Running 'insight-autobackup.service'|
| VIM Insight Workspace | PASS | /root/installer-<tag_id>/insight              |
+----------------------+--------+-------------------------------------------------+
```

Reconfiguring VIM Unified Management

UM reconfigure action provides you with three major functionalities:

1. Reconfigure Insight TLS Certificate.

2. Switch from Self Signed TLS Certificate to 3[rd]Party TLS Certificate.

3. Reconfigure Insight MySQL Database Password.

Note   Unified Managment reconfigure is not allowed after an update, as the update is an intermediate stage between rollback and commit.

Reconfiguring Insight TLS Certificate

As the Insight web-service is protected by TLS, hence reconfigure action provides flexibility to change the existing TLS Certificate. As there were two approaches to configure it, there are also two approaches to change it.

Reconfiguring 3rd Party TLS Certificate

If you had provided your own TLS Certificate before Insight Installation through PEM_PATH key in insight_setup_data.yaml, then perform the following steps to reconfigure it.

Step 1   # cd <path insight_setup_data.yaml>

Step 2   Open insight_setup_data.yaml file # vi insight_setup_data.yaml

Step 3   Edit the insight_setup_data.yaml to change value of PEM_PATH key to point to path of your new valid TLS Certificate. Save the file after editing. For example: PEM_PATH: "/root/new_tls.pem"

Note   Only change in value of the PEM_PATH key is allowed during reconfigure. Any change that is detected in insight_setup_data.yaml other than PEM_PATH value results in failure of Insight reconfigure.

Step 4   # cd <insight_ws>

```
            # ./bootstrap_insight.py –a reconfigure -f <path_to insight_setup_data.yaml>

   VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log

            Perform the action. Continue (Y/N)y

Management node validation!
+------------------------------+--------+-------+
| Rule | Status | Error |
+------------------------------+--------+-------+
| Check Kernel Version |  PASS | None |
| Check Docker Version |  PASS | None |
| Check Management Node Tag |  PASS | None |
| Check Bond Intf. Settings |  PASS | None |
| Root Password Check |  PASS | None |
| Check Boot Partition Settings |  PASS | None |
| Check LV Swap Settings |  PASS | None |
| Check Docker Pool Settings |  PASS | None |
| Check Home Dir Partition |  PASS | None |
| Check Root Dir Partition |  PASS | None |
| Check /var Partition |  PASS | None |
| Check LVM partition |  PASS | None |
| Check RHEL Pkgs Install State |  PASS | None |
+------------------------------+--------+-------+


Insight standalone input validation!
+-------------------------------------------+--------+-------+
| Rule                                      | Status | Error |
+-------------------------------------------+--------+-------+
| Insight standalone schema validation      |  PASS  | None  |
| Valid key check in Insight setup data     |  PASS  | None  |
| Duplicate key check In Insight setup data |  PASS  | None  |
| CVIM/Insight workspace conflict check     |  PASS  | None  |
| Check registry connectivity               |  PASS  | None  |
| Check Email server for Insight            |  PASS  | None  |
+-------------------------------------------+--------+-------+

WARNING!! reconfigure will have few secs of Outage for Insight!

Cisco VIM Insight Already Exists!
+----------------------+--------+------------------------------------------------------+
| Description          | Status | Details                                              |
+----------------------+--------+------------------------------------------------------+
| VIM Insight UI URL   | PASS   | https://<br_api:9000>                                |
```

```
| VIM UI Admin Email ID | PASS  | Check for info @: <abs path of insight_setup_data.yaml> |
|                       |       |                                                         |
| VIM UI Admin Password | PASS  | Check for info @ /opt/cisco/insight/secrets.yaml        |
| VIM Insight Workspace | PASS  | /root/<insight_ws>                                      |
        +----------------------+--------+----------------------------------------------------------+


Cisco VIM Insight backup Info!
+----------------------+--------+----------------------------------------------------------------+
| Description          | Status | Details                                                        |
+----------------------+--------+----------------------------------------------------------------+
| Insight backup Status| PASS   | Backup done @                                                  |
|                      |        | /var/cisco/insight_backup/backup-<release_tag>-<date_time>    |
+----------------------+--------+----------------------------------------------------------------+

Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"

As the summary table describes Insight gets autobacked up after reconfigure at /var/cisco/insight_backup
 to preserve the latest state of Insight.
```

Reconfiguring Self Signed TLS Certificate

If you had created a new TLS Certificate through tls_insight_cert_gen.py before Insight Installation, follow the steps to reconfigure it.

Step 1 Run the following commands to reconfigure the self signed TLS certificate:

```
# cd <insight_ws>
# ./tls_insight_cert_gen.py -h
usage: tls_insight_cert_gen.py [-h] [--overwrite] --file INSIGHTSETUPDATA
TLS cert generator Insight

optional arguments:
  -h, --help         show this help message and exit
--overwrite, -o      Overwrite Insight certificates if already present in   openstack config directory
--file INSIGHTSETUPDATA, -f INSIGHTSETUPDATA
 Location of insight_setup_data.yaml
    # ./tls_insight_cert_gen.py -f <path insight_setup_data.yaml> --overwrite
  This will overwrite the existing TLS certificate.

Management node validation
+-------------------------------+-------+-------+
| Rule                          |Status | Error |
+-------------------------------+-------+-------+
| Check Kernel Version          | PASS  | None  |
| Check Ansible Version         | PASS  | None  |
| Check Docker Version          | PASS  | None  |
| Check Management Node Tag      | PASS  | None  |
| Check Bond Intf. Settings     | PASS  | None  |
| Root Password Check           | PASS  | None  |
| Check Boot Partition Settings | PASS  | None  |
| Check LV Swap Settings        | PASS  | None  |
| Check Docker Pool Settings    | PASS  | None  |
| Check Home Dir Partition      | PASS  | None  |
| Check Root Dir Partition      | PASS  | None  |
| Check /var Partition          | PASS  | None  |
| Check LVM partition           | PASS  | None  |
```

```
| Check RHEL Pkgs Install State  |  PASS  | None |
+------------------------------+--------+-------+

Insight standalone input validation
+------------------------------------------+--------+-------+
| Rule                                     | Status | Error |
+------------------------------------------+--------+-------+
| Insight standalone schema validation     | PASS   | None  |
| Valid key check in Insight setup data    | PASS   | None  |
| Duplicate key check In Insight setup data| PASS   | None  |
| CVIM/Insight workspace conflict check    | PASS   | None  |
| Check registry connectivity              | PASS   | None  |
| Check Email server for Insight           | PASS   | None  |
+------------------------------------------+--------+-------+

Generating a 4096 bit RSA private key
...................................................................................................++
.......++
writing new private key to '../openstack-configs/insight.key'
```

Step 2 Use the following command, to run the bootstrap:

```
# ./bootstrap_insight.py –a reconfigure –f <path_to insight_setup_data.yaml>
VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log

Perform the action. Continue (Y/N)y

Management node validations
+------------------------------+--------+-------+
| Rule                         | Status | Error |
+------------------------------+--------+-------+
| Check Kernel Version         |  PASS  | None  |
| Check Ansible Version        |  PASS  | None  |
| Check Docker Version         |  PASS  | None  |
| Check Management Node Tag     |  PASS  | None  |
| Check Bond Intf. Settings    |  PASS  | None  |
| Root Password Check          |  PASS  | None  |
| Check Boot Partition Settings |  PASS  | None  |
| Check LV Swap Settings       |  PASS  | None  |
| Check Docker Pool Settings   |  PASS  | None  |
| Check Home Dir Partition     |  PASS  | None  |
| Check Root Dir Partition     |  PASS  | None  |
| Check /var Partition         |  PASS  | None  |
| Check LVM partition          |  PASS  | None  |
| Check RHEL Pkgs Install state |  PASS  | None  |
+------------------------------+--------+-------+

Insight standalone input validation
+------------------------------------------+--------+-------+
| Rule                                     | Status | Error |
+------------------------------------------+--------+-------+
| Insight standalone schema validation     | PASS   | None  |
| Valid key check in Insight setup data    | PASS   | None  |
| Duplicate key check In Insight setup data| PASS   | None  |
| CVIM/Insight workspace conflict check    | PASS   | None  |
| Check registry connectivity              | PASS   | None  |
| Check Email server for Insight           | PASS   | None  |
+------------------------------------------+--------+-------+

WARNING!! Reconfiguration will have few secs of outage for Insight
Cisco VIM Insight Already Exists!
+----------------------+--------+---------------------------------------------------------+
| Description          | Status | Details                                                 |
+----------------------+--------+---------------------------------------------------------+
```

```
| VIM Insight UI URL    | PASS  | https://<br_api:9000>                              |
| VIM UI Admin Email ID | PASS  | Check for info @: <abs path of insight_setup_data.yaml> |
|                       |       |       |                     |
| VIM UI Admin Password | PASS  | Check for info @ /opt/cisco/insight/secrets.yaml   |
| VIM Insight Workspace | PASS  | /root/<insight_ws>                                 |
+----------------------+-------+----------------------------------------------------------+


Cisco VIM Insight backup Info!
+----------------------+-------+----------------------------------------------------------------+
| Description          | Status| Details
|
+----------------------+-------+----------------------------------------------------------------+
| Insight backup Status| PASS  | Backup done @
|
|                      |       | /var/cisco/insight_backup/insight_backup_<release_tag>_<date_time>|
+----------------------+-------+----------------------------------------------------------------+

Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"

Insight gets autobacked up after reconfiguration at /var/cisco/insight_backup, to preserve the latest
 state of Insight.
```

Switch from Self Signed TLS Certificate to 3rd Party TLS Certificate

If you had created a new TLS Certificate through tls_insight_cert_gen.py before Insight Installation and now want to switch to your own TLS Certificate then perform the following steps.

Note   You cannot switch from 3rd Party TLS Certificate to Self Signed TLS Certificate.

Step 1   To switch from self-signed TLS Certificate to 3rd party TLS certificate, open and edit the insight_setup_data.yaml to add PEM_PATH by running the following command:

```
# cd <path insight_setup_data.yaml>
# vi insight_setup_data.yaml
Edit the insight_setup_data.yaml to add PEM_PATH key to point to path of your new valid TLS Certificate.
 Save the file after editing.
For example:
PEM_PATH: "/root/new_tls.pem"
```

Step 2   Following is the command to run the bootstrap:

```
# cd <insight_ws>
 # ./bootstrap_insight.py –a reconfigure –f <path_to insight_setup_data.yaml>

VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Perform the action. Continue (Y/N)y

Management node validation
+-----------------------------+--------+-------+
```

```
| Rule                         | Status | Error |
+------------------------------+--------+-------+
| Check Kernel Version         | PASS   | None  |
| Check Ansible Version        | PASS   | None  |
| Check Docker Version         | PASS   | None  |
| Check Management Node Tag    | PASS   | None  |
| Check Bond Intf. Settings    | PASS   | None  |
| Root Password Check          | PASS   | None  |
| Check Boot Partition Settings| PASS   | None  |
| Check LV Swap Settings       | PASS   | None  |
| Check Docker Pool Settings   | PASS   | None  |
| Check Home Dir Partition     | PASS   | None  |
| Check Root Dir Partition     | PASS   | None  |
| Check /var Partition         | PASS   | None  |
| Check LVM partition          | PASS   | None  |
| Check RHEL Pkgs Install State| PASS   | None  |
+------------------------------+--------+-------
```

```
Insight standalone input validation
+------------------------------------------+--------+-------+
| Rule                                     | Status | Error |
+------------------------------------------+--------+-------+
| Insight standalone schema validation     | PASS   | None  |
| Valid key check in Insight setup data    | PASS   | None  |
| Duplicate key check In Insight setup data| PASS   | None  |
| CVIM/Insight workspace conflict check    | PASS   | None  |
| Check registry connectivity              | PASS   | None  |
| Check Email server for Insight           | PASS   | None  |
+------------------------------------------+--------+-------+
```

```
WARNING!! Reconfiguration will have few secs of outage for Insight!

Cisco VIM Insight Already Exists!
+----------------------+--------+----------------------------------------------------------+
| Description          | Status | Details                                                  |
+----------------------+--------+----------------------------------------------------------+
| VIM Insight UI URL   | PASS   | https://<br_api:9000>                                    |
| VIM UI Admin Email ID| PASS   | Check for info @: <abs path of insight_setup_data.yaml>  |
|                      |        |                                                          |
| VIM UI Admin Password| PASS   | Check for info @ /opt/cisco/insight/secrets.yaml         |
| VIM Insight Workspace| PASS   | /root/<insight_ws>                                       |
        +----------------------+--------+----------------------------------------------------------+
```

```
Cisco VIM Insight backup Info!
+----------------------+-------+----------------------------------------------------------------+
| Description          | Status| Details                                                        |
|
+----------------------+-------+----------------------------------------------------------------+
| Insight backup Status| PASS  | Backup done @
|
|                      |       | /var/cisco/insight_backup/insight_backup_<release_tag>_<date_time>|
+----------------------+-------+----------------------------------------------------------------+
```

```
Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"

Insight gets autobacked up after reconfiguration at /var/cisco/insight_backup to preserve the latest
 state of Insight.
```

Reconfiguring Insight MySQL Database Password

There are two approaches to reconfigure the MySQL DB password:

1. System generated Insight DB password.

2. User supplied Insight DB password.

System-generated Insight DB Password

Following are the steps to generate MySQL Insight DB password:

Step 1   To generate the Insight DB Password run the following command:

```
# cd <insight_ws>
 # ./bootstrap_insight.py -a reconfigure -f <path_to insight_setup_data.yaml> --regenerate_secrets

VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Perform the action. Continue (Y/N)y
Management node validation
+------------------------------+--------+-------+
| Rule                         | Status | Error |
+------------------------------+--------+-------+
| Check Kernel Version         | PASS   | None  |
| Check Docker Version         | PASS   | None  |
| Check Management Node Tag     | PASS   | None  |
| Check Bond Intf. Settings    | PASS   | None  |
| Root Password Check          | PASS   | None  |
| Check Boot Partition Settings | PASS   | None  |
| Check LV Swap Settings       | PASS   | None  |
| Check Docker Pool Settings   | PASS   | None  |
| Check Home Dir Partition     | PASS   | None  |
| Check Root Dir Partition     | PASS   | None  |
| Check /var Partition         | PASS   | None  |
| Check LVM partition          | PASS   | None  |
| Check RHEL Pkgs Install State | PASS   | None  |
+------------------------------+--------+-------+

Insight standalone input validation
+------------------------------------------+--------+-------+
| Rule                                     | Status | Error |
+------------------------------------------+--------+-------+
| Insight standalone schema validation     | PASS   | None  |
| Valid key check in Insight setup data    | PASS   | None  |
| Duplicate key check In Insight setup data | PASS  | None  |
| CVIM/Insight workspace conflict check    | PASS   | None  |
| Check registry connectivity              | PASS   | None  |
| Check Email server for Insight           | PASS   | None  |
+------------------------------------------+--------+-------+

WARNING!! reconfiguration will have few secs of Outage for Insight!

Cisco VIM Insight Already Exists!
+----------------------+--------+-------------------------------------------------------------+
| Description          | Status | Details                                                     |
+----------------------+--------+-------------------------------------------------------------+
| VIM Insight UI URL   | PASS   | https://<br_api:9000>                                       |
| VIM UI Admin Email ID | PASS  | Check for info @: <abs path of insight_setup_data.yaml> |
```

```
|                       |        |                                   |
| VIM UI Admin Password | PASS   | Check for info @ /opt/cisco/insight/secrets.yaml         |
| VIM Insight Workspace | PASS   | /root/<insight_ws>                                      |
        +---------------------+-------+--------------------------------------------------------+

Cisco VIM Insight backup Info!
+---------------------+-------+----------------------------------------------------------+
| Description         | Status | Details                                                 |
+---------------------+-------+----------------------------------------------------------+
| Insight backup Status | PASS | Backup done @                                           |
|                       |      | /var/cisco/insight_backup/backup-<release_tag>-<date_time> |
+---------------------+-------+----------------------------------------------------------+
Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"
As the summary table describes Insight gets autobacked up after reconfigure at /var/cisco/insight_backup
 to preserve the latest state of Insight.
```

Step 2   Verify the password change by running the following command:

```
# cat /opt/cisco/insight/secrets.yaml
 DB_ROOT_PASSWORD: <new_db_password>
```

User-supplied Insight DB Password

Step 1   To provide your own MYSQL DB Password follow the below steps:

Note   Your new DB password must contain alphanumeric characters and should be at least 8 characters long.

```
# cd <insight_ws>
# ./bootstrap_insight.py –a reconfigure –f <path_to insight_setup_data.yaml> --setpassword

VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Perform the action. Continue (Y/N)y
Password for DB_ROOT_PASSWORD: <enter_valid_db_password>

Management node validation
+------------------------------+--------+-------+
| Rule                         | Status | Error |
+------------------------------+--------+-------+
| Check Kernel Version         | PASS   | None  |
| Check Ansible Version        | PASS   | None  |
| Check Docker Version         | PASS   | None  |
| Check Management Node Tag     | PASS   | None  |
| Check Bond Intf. Settings    | PASS   | None  |
| Root Password Check          | PASS   | None  |
| Check Boot Partition Settings | PASS  | None  |
| Check LV Swap Settings       | PASS   | None  |
| Check Docker Pool Settings   | PASS   | None  |
| Check Home Dir Partition     | PASS   | None  |
| Check Root Dir Partition     | PASS   | None  |
| Check /var Partition         | PASS   | None  |
| Check LVM partition          | PASS   | None  |
| Check RHEL Pkgs Install State | PASS  | None  |
+------------------------------+--------+-------+

Insight standalone input validation
+--------------------------------------------+--------+-------+
```

```
| Rule                                      | Status | Error |
+-------------------------------------------+--------+-------+
| Insight standalone schema validation      | PASS   | None  |
| Valid key check in Insight setup data     | PASS   | None  |
| Duplicate key check In Insight setup data | PASS   | None  |
| CVIM/Insight workspace conflict check     | PASS   | None  |
| Check registry connectivity               | PASS   | None  |
| Check Email server for Insight            | PASS   | None  |
+-------------------------------------------+--------+-------+
WARNING!!Reconfiguration will have few secs of Outage for Insight!

Cisco VIM Insight Already Exists!
+----------------------+--------+----------------------------------------------------------+
| Description          | Status | Details                                                  |
+----------------------+--------+----------------------------------------------------------+
| VIM Insight UI URL   | PASS   | https://<br_api:9000>                                    |
| VIM UI Admin Email ID| PASS   | Check for info @: <abs path of insight_setup_data.yaml>  |
|                      |        |                                                          |
| VIM UI Admin Password| PASS   | Check for info @ /opt/cisco/insight/secrets.yaml         |
| VIM Insight Workspace| PASS   | /root/<insight_ws>                                       |
      +--------------------+--------+----------------------------------------------------------+

Cisco VIM Insight backup Info!
+----------------------+-------+-----------------------------------------------------------+
| Description          | Status| Details                                                   |
|                      |       |                                                           |
+----------------------+-------+-----------------------------------------------------------+
| Insight backup Status| PASS  | Backup done @                                             |
|                      |       |                                                           |
|                      |       | /var/cisco/insight_backup/insight_backup_<release_tag>_<date_time>|
+----------------------+-------+-----------------------------------------------------------+
Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"

As the summary table describes Insight gets autobacked up after reconfigure at /var/cisco/insight_backup
 to preserve the latest state of Insight.
```

Step 2   Verify the password change by running the following command:

```
# cat /opt/cisco/insight/secrets.yaml
DB_ROOT_PASSWORD: <new_db_password>
```

Reconfiguring Unified Management SMTP Server

Unified Management requires a valid SMTP Server to send mails to users (Pod-Admin, UI-Admin, and regular users). If SMTP Server goes down, you can reconfigure it.

Following values can be reconfigured:

- INSIGHT_SMTP_SERVER

- INSIGHT_EMAIL_ALIAS_PASSWORD (only needed for Authenticated SMTP server)

- INSIGHT_EMAIL_ALIAS

- INSIGHT_SMTP_PORT (optional, defaults to 25)

Step 1   Run the following command to reconfigure the SMTP server:

```
# cd <path insight_setup_data.yaml>
Open insight_setup_data.yaml file
# vi insight_setup_data.yaml
Edit the insight_setup_data.yaml to change value of INSIGHT_SMTP_SERVER key. Save the file after
editing.
```

Step 2   Run the bootstrap command as follows:

```
# cd <insight_ws>
# ./bootstrap_insight.py –a reconfigure –f <path_to insight_setup_data.yaml>
VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Perform the action. Continue (Y/N)y

Management node validation
+-----------------------------+--------+-------+
| Rule                        | Status | Error |
+-----------------------------+--------+-------+
| Check Kernel Version        | PASS   | None  |
| Check Ansible Version       | PASS   | None  |
| Check Docker Version        | PASS   | None  |
| Check Management Node Tag    | PASS   | None  |
| Check Bond Intf. Settings   | PASS   | None  |
| Root Password Check         | PASS   | None  |
| Check Boot Partition Settings | PASS | None  |
| Check LV Swap Settings      | PASS   | None  |
| Check Docker Pool Settings  | PASS   | None  |
| Check Home Dir Partition    | PASS   | None  |
| Check Root Dir Partition    | PASS   | None  |
| Check /var Partition        | PASS   | None  |
| Check LVM partition         | PASS   | None  |
| Check RHEL Pkgs Install State | PASS | None  |
+-----------------------------+------- -+-------+

Insight standalone input validation
+--------------------------------------------+--------+-------+
| Rule                                       | Status | Error |
+--------------------------------------------+--------+-------+
| Insight standalone schema validation       | PASS   | None  |
| Valid key check in Insight setup data      | PASS   | None  |
| Duplicate key check In Insight setup data | PASS   | None  |
| CVIM/Insight workspace conflict check      | PASS   | None  |
| Check registry connectivity                | PASS   | None  |
| Check Email server for Insight             | PASS   | None  |
+--------------------------------------------+--------+-------+
WARNING!! Reconfiguration will have few secs of Outage for Insight!

Cisco VIM Insight Already Exists!
+----------------------+--------+----------------------------------------------------------+
| Description          | Status | Details                                                  |
+----------------------+--------+----------------------------------------------------------+
| VIM Insight UI URL    | PASS   | https://<br_api:9000>                                    |
| VIM UI Admin Email ID | PASS   | Check for info @: <abs path of insight_setup_data.yaml> |
|                      |        |                                                          |
| VIM UI Admin Password | PASS   | Check for info @ /opt/cisco/insight/secrets.yaml         |
| VIM Insight Workspace | PASS   | /root/<insight_ws>                                       |
+----------------------+--------+----------------------------------------------------------+

Cisco VIM Insight backup Info!
+---------------------+-------+------------------------------------------------------------------+
| Description         | Status| Details
|
```

```
+--------------------+------+---------------------------------------------------------------+
| Insight backup Status| PASS  | Backup done @
|
|                     |       | /var/cisco/insight_backup/insight_backup_<release_tag>_<date_time>|
+--------------------+------+---------------------------------------------------------------+

Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"

Insight gets autobacked up after reconfiguration at /var/cisco/insight_backup to preserve the latest
 state of Insight.
```

Reconfiguring Unified Management LDAP Server

Insight supports both LDAP and LDAP over SSL (LDAPS) for an Active Directory (AD) environment. If the LDAP server is down or if you need to change any of its configuration, execute Insight reconfigure acion.

Step 1 Reconfigure the LDAP(s) server:

a) Run the following command to open insight_setup_data.yaml file:

```
# cd <path insight_setup_data.yaml>
```

b) Edit the insight_setup_data.yaml, using the following command, to change the value of LDAP keys.
:

```
# vi insight_setup_data.yaml
```

LDAP keys are listed below:

- LDAP_MODE: This key can be reconfigured only to 'True', to allow the user to switch only from No-LDAP to LDAP, and not vice-versa.

- LDAP_SERVER: This key is reconfigurable to switch to new LDAP server.

- LDAP_PORT: Reconfiguration of this key is allowed.

- LDAP_ADMIN: Reconfiguration of this key is allowed.

- LDAP_ADMIN_PASSWORD: Reconfiguration of this key is allowed.

- LDAP_SECURE: This key can be reconfigured only to 'True', to allow the user to switch from non-secure LDAP to secure LDAP connection, and not vice-versa.

- LDAP_CERT_PATH: This key can be reconfigured, to switch from Self-signed certificate to CA-signed certificate, and not vice-versa.

c) Save the edited file.

Step 2 Run the bootstrap command

```
# cd <insight_ws>
# ./bootstrap_insight.py -a reconfigure -f <path_to insight_setup_data.yaml>

VIM Insight reconfigure logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Perform the action. Continue (Y/N)y
```

```
Management node validation
+----------------------------+--------+-------+
| Rule                       | Status | Error |
+----------------------------+--------+-------+
| Check Kernel Version       | PASS   | None  |
| Check Ansible Version      | PASS   | None  |
| Check Docker Version       | PASS   | None  |
| Check Management Node Tag  | PASS   | None  |
| Check Bond Intf. Settings  | PASS   | None  |
| Root Password Check        | PASS   | None  |
| Check Boot Partition Settings | PASS | None  |
| Check LV Swap Settings     | PASS   | None  |
| Check Docker Pool Settings | PASS   | None  |
| Check Home Dir Partition   | PASS   | None  |
| Check Root Dir Partition   | PASS   | None  |
| Check /var Partition       | PASS   | None  |
| Check LVM partition        | PASS   | None  |
| Check RHEL Pkgs Install State | PASS | None  |
+----------------------------+--------+-------

Insight standalone input validation
+--------------------------------------------+--------+-------+
| Rule                                       | Status | Error |
+--------------------------------------------+--------+-------+
| Insight standalone schema validation       | PASS   | None  |
| Valid key check in Insight setup data      | PASS   | None  |
| Duplicate key check In Insight setup data  | PASS   | None  |
| CVIM/Insight workspace conflict check      | PASS   | None  |
| Check registry connectivity                | PASS   | None  |
| Check Email server for Insight             | PASS   | None  |
+--------------------------------------------+--------+-------+

WARNING!! Reconfiguration will have few secs of Outage for Insight!

Cisco VIM Insight Already Exists!
+----------------------+--------+-------------------------------------------------------+
| Description          | Status | Details                                               |
+----------------------+--------+-------------------------------------------------------+
| VIM Insight UI URL   | PASS   | https://<br_api:9000>                                 |
| VIM UI Admin Email ID | PASS  | Check for info @: <abs path of insight_setup_data.yaml> |
|                      |        |                                                       |
| VIM UI Admin Password | PASS  | Check for info @ /opt/cisco/insight/secrets.yaml       |
| VIM Insight Workspace | PASS  | /root/<insight_ws>                                    |
      +----------------------+--------+-------------------------------------------------------+

Cisco VIM Insight backup Info!
+----------------------+-------+-------------------------------------------------------+
| Description          | Status| Details                                               |
+----------------------+-------+-------------------------------------------------------+
| Insight backup Status| PASS  | Backup done @                                         |
|                      |       | /var/cisco/insight_backup/insight_backup_<release_tag>_<date_time>|
+----------------------+-------+-------------------------------------------------------+

Done with VIM Insight reconfigure!
VIM Insight reconfigure logs are at: "/var/log/insight/bootstrap_insight/"

Insight gets autobacked up after reconfiguration at /var/cisco/insight_backup to preserve the latest
 state of Insight.
```

Update VIM Insight

VIM Insight Update provides you the feature to switch to a new Insight release.

Following are some of the key points:

Step 1   The update action will make the old docker containers of insight and mariadb in exit state and bring up new ones with the new tag.

Step 2   The old containers and images are restored until you perform the **Commit** action.

Step 3   Update is an intermediate action, from this state either you can do a **Commit** action to settle for the current version or do a **rollback** to revert back to the old version.

Step 4   The old workspace will be preserved in case you want to do a rollback to the previous version.

Step 5   After update your Insight workspace will be the new workspace you just extracted out of the tar ball.

Step 6   After an update operation, backup and reconfigure action is not allowed from either old or new Insight workspace.

Note   Do not delete your old Insight workspace until you have successfully performed a **Commit** to the new Insight update.

Update Scenarios

Update action has the following scenarios:

- Insight and mariadb containers gets updated to a new tag.

• Either insight or mariadb container gets updated to a new tag.

Update VIM Insight with Internet Access

Following are the steps to update VIM Insight:

Step 1 Get the new installer tar ball, which will be available after each release.

Extract the tar ball to get the new Insight workspace by running the following command:

```
# tar -xvzf mercury-installer.tar.gz
```

Step 2 Update the VIM insight by running the following commands:

```
# cd /root/<new_insight_ws>/insight/
/bootstrap_insight.py -a update

VIM Insight update logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Management Node validation!
+------------------------------+--------+-------+
| Rule                         | Status | Error |
+------------------------------+--------+-------+
| Check Kernel Version         | PASS   | None  |
| Check Docker Version         | PASS   | None  |
| Check Management Node Tag    | PASS   | None  |
| Check Bond Intf. Settings    | PASS   | None  |
| Root Password Check          | PASS   | None  |
| Check Boot Partition Settings| PASS   | None  |
| Check LV Swap Settings       | PASS   | None  |
| Check Docker Pool Settings   | PASS   | None  |
| Check Home Dir Partition     | PASS   | None  |
| Check Root Dir Partition     | PASS   | None  |
| Check /var Partition         | PASS   | None  |
| Check LVM partition          | PASS   | None  |
| Check RHEL Pkgs Install State| PASS   | None  |
+------------------------------+--------+-------+

Insight standalone input validation
+-------------------------------------------+--------+-------+
| Rule                                      | Status | Error |
+-------------------------------------------+--------+-------+
| Insight standalone schema validation      | PASS   | None  |
| Valid key check in Insight setup data     | PASS   | None  |
| Duplicate key check In Insight setup data | PASS   | None  |
| CVIM/Insight workspace conflict check     | PASS   | None  |
| Check registry connectivity               | PASS   | None  |
| Check Email server for Insight            | PASS   | None  |
+-------------------------------------------+--------+-------+

Downloading Updated VIM Insight Artifacts, will take time!!!
Cisco VIM Insight update Info!
   +---------------------------------------+--------+-----------------------------+
   | Description                           | Status | Details                     |
   +---------------------------------------+--------+-----------------------------+
   | VIM Insight Container: insight_<new_tag> | PASS | Updated from insight_<old_tag>|
   | VIM Mariadb Container: mariadb_<new_tag> | PASS | Updated from mariadb_<old_tag>|
   +---------------------------------------+--------+-----------------------------+
 Done with VIM Insight update!
 VIM Insight update logs are at: "/var/log/insight/bootstrap_insight/"
```

Step 3   Verify the Insight Update.

```
# ./bootstrap_insight.py –a update-status
Cisco VIM Insight Update Status!
+---------------------------------------+--------+-------------------------------+
| Description                           | Status | Details                       |
+---------------------------------------+--------+-------------------------------+
| VIM Insight Container: insight_<new_tag> | PASS  | Updated from insight_<old_tag> |
| VIM Mariadb Container: insight_<new_tag> | PASS  | Updated from mariadb_<old_tag> |
+---------------------------------------+--------+-------------------------------+
```

VIM Insight without Internet Access

Step 1   Copy the new installer tar ball to the Insight Management Node.

Extract the tar ball to get the new Insight workspace by running the following command:

```
# tar –xvzf mercury-installer.tar.gz
```

Step 2   To download the new Insight artifacts follow the steps given in Cisco_NFVI_Install_Guide_2_2 under Preparing to Install Cisco NFVI on Management Nodes Without Internet Access, page 41.

Step 3   Run Import Artifacts:

```
# cd /root/installer_<tag_id>/tools
# ./import_artifacts.sh
This verifies that /var/cisco/artifcats on the management node has the following Insight artifacts,
 along with the other components 'insight-K9.tar' and  'mariadb-app-K9.tar'.'
```

Step 4   Update the Insight by running the following command:

```
# cd ../insight/
 # ./bootstrap_insight.py –a update

VIM Insight update logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
Management node validations!
+-------------------------------+--------+-------+
| Rule                          | Status | Error |
+-------------------------------+--------+-------+
| Check Kernel Version          | PASS   | None  |
| Check Ansible Version         | PASS   | None  |
| Check Docker Version          | PASS   | None  |
| Check Management Node Tag      | PASS   | None  |
| Check Bond Intf. Settings     | PASS   | None  |
| Root Password Check           | PASS   | None  |
| Check Boot Partition Settings | PASS   | None  |
| Check LV Swap Settings        | PASS   | None  |
| Check Docker Pool Settings    | PASS   | None  |
| Check Home Dir Partition      | PASS   | None  |
| Check Root Dir Partition      | PASS   | None  |
| Check /var Partition          | PASS   | None  |
| Check LVM partition           | PASS   | None  |
| Check RHEL Pkgs Install State | PASS   | None  |
+-------------------------------+--------+-------+

Insight standalone input validation
+---------------------------------------+--------+-------+
| Rule                                  | Status | Error |
```

```
+-------------------------------------+--------+-------+
| Insight standalone schema validation | PASS  | None  |
| Valid key check in Insight setup data | PASS | None  |
| Duplicate key check In Insight setup data | PASS | None |
| CVIM/Insight workspace conflict check | PASS  | None  |
| Check registry connectivity         | PASS  | None  |
| Check Email server for Insight      | PASS  | None  |
+-------------------------------------+--------+-------+

Updating VIM Insight, Kindly wait!!!
Cisco VIM Insight update Info!
   +-------------------------------------+--------+-----------------------------+
   | Description                         | Status | Details                     |
   +-------------------------------------+--------+-----------------------------+
   | VIM Insight UI URL                  | PASS   | https://<br_api:9000>       |
   | VIM Insight Container: insight_<new_tag> | PASS | Updated from insight_<old_tag>|
   | VIM Mariadb Container: mariadb_<new_tag> | PASS | Updated from mariadb_<old_tag>|
   | VIM Insight Workspace               | PASS   | /root/<new_insight_ws>      |
   +-------------------------------------+--------+-----------------------------+
 Done with VIM Insight update!
 VIM Insight update logs are at: "/var/log/insight/bootstrap_insight/"
```

Step 5   Verify Insight Update by running the following command:

```
# ./bootstrap_insight.py –a update-status
Cisco VIM Insight Update Status!
+-------------------------------------+--------+-------------------------------+
| Description                         | Status | Details                       |
+-------------------------------------+--------+-------------------------------+
| VIM Insight Container: insight_<new_tag> | PASS | Updated from insight_<old_tag> |
| VIM Mariadb Container: insight_<new_tag> | PASS | Updated from mariadb_<old_tag> |
+-------------------------------------+--------+-------------------------------+
```

Rollback VIM Unified Management

VIM Unified Management Rollback provides feature to revert to the old UM release which is used before the update.

Following are some of the key points:

- The rollback action removes the new docker containers of insight and mariadb which is created after an update and bring up old ones with the old tag.

- The new workspace is used to update the operation later or the VIM may be running from it.

- After rollback, your Insight workspace is the old workspace which you were using before the update.

Following are the steps to perform Insight rollback:

Step 1   Run the following command to rollback VIM Insight:

```
# cd /root/<new_insight_ws>
# ./bootstrap_insight.py –a rollback

VIM Insight rollback logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log
```

```
Management node validation!
+-----------------------------+--------+-------+
| Rule                        | Status | Error |
+-----------------------------+--------+-------+
| Check Kernel Version        | PASS   | None  |
| Check Ansible Version       | PASS   | None  |
| Check Docker Version        | PASS   | None  |
| Check Management Node Tag   | PASS   | None  |
| Check Bond Intf. Settings   | PASS   | None  |
| Root Password Check         | PASS   | None  |
| Check Boot Partition Settings | PASS | None  |
| Check LV Swap Settings      | PASS   | None  |
| Check Docker Pool Settings  | PASS   | None  |
| Check Home Dir Partition    | PASS   | None  |
| Check Root Dir Partition    | PASS   | None  |
| Check /var Partition        | PASS   | None  |
| Check LVM partition         | PASS   | None  |
| Check RHEL Pkgs Install State | PASS | None  |
+-----------------------------+--------+-------+


Insight standalone input validation
+-------------------------------------------+--------+-------+
| Rule                                      | Status | Error |
+-------------------------------------------+--------+-------+
| Insight standalone schema validation      | PASS   | None  |
| Valid key check in Insight setup data     | PASS   | None  |
| Duplicate key check In Insight setup data | PASS   | None  |
| CVIM/Insight workspace conflict check     | PASS   | None  |
| Check registry connectivity               | PASS   | None  |
| Check Email server for Insight            | PASS   | None  |
+-------------------------------------------+--------+-------+

 VIM Insight rollback in progress, Kindly wait!!!
 Cisco VIM Insight rollback Info!
   +-----------------------------------------+--------+------------------------------+
   | Description                             | Status | Details                      |
   +-----------------------------------------+--------+------------------------------+
   | VIM Insight UI URL                      | PASS   | https://<br_api:9000>        |
   | VIM Insight Container: insight_<old_tag>| PASS   | Rollback from insight_<new_tag>|
   | VIM Mariadb Container: mariadb_<old_tag>| PASS   | Rollback from mariadb_<new_tag>|
   | VIM Insight Workspace                   | PASS   | /root/<old_insight_ws>       |
   +-----------------------------------------+--------+------------------------------+
 Done with VIM Insight rollback!
 VIM Insight rollback logs are at: "/var/log/insight/bootstrap_insight/"
```

Step 2   Verify the rollback status by running the following command:

```
 # ./bootstrap_insight.py –a install-status
Cisco VIM Insight Install Status!
+----------------------+--------+--------------------------------+
| Description          | Status | Details                        |
+----------------------+--------+--------------------------------+
| VIM Insight Version  | PASS   | <release_tag>                  |
| VIM Insight UI URL   | PASS   | https://<br_api:9000>          |
| VIM Insight Container| PASS   | insight_<tag_id>               |
| VIM Mariadb Container| PASS   | mariadb_<tag_id>               |
| VIM Insight Workspace| PASS   | /root/<insight_ws>             |
```

```
+---------------------+-------+------------------------------+
```

Commit VIM Unified Management

The key points of VIM Unified Management (UM) Commit are:

- VIM Insight Commit supports for new Insight release after an update.

- The old workspace is left as it is and can be deleted.

- After commit operation, UM workspace which has been used for the update is the new workspace

1. Run following command to commit VIM Insight:

```
# cd /root/<new_insight_ws>
# ./bootstrap_insight.py -a commit
VIM Insight commit logs are at: /var/log/insight/<bootstrap_insight_<date>_<time>.log

Management node validation
+-----------------------------+--------+-------+
| Rule                        | Status | Error |
+-----------------------------+--------+-------+
| Check Kernel Version        |  PASS  | None  |
| Check Ansible Version       |  PASS  | None  |
| Check Docker Version        |  PASS  | None  |
| Check Management Node Tag    |  PASS  | None  |
| Check Bond Intf. Settings    |  PASS  | None  |
| Root Password Check          |  PASS  | None  |
| Check Boot Partition Settings |  PASS  | None  |
| Check LV Swap Settings       |  PASS  | None  |
| Check Docker Pool Settings   |  PASS  | None  |
| Check Home Dir Partition     |  PASS  | None  |
| Check Root Dir Partition     |  PASS  | None  |
| Check /var Partition         |  PASS  | None  |
| Check LVM partition          |  PASS  | None  |
| Check RHEL Pkgs Install State |  PASS  | None  |
+-----------------------------+------- -+-------+

Insight standalone input validation
+-------------------------------------------+--------+-------+
| Rule                                      | Status | Error |
+-------------------------------------------+--------+-------+
| Insight standalone schema validation      | PASS   | None  |
| Valid key check in Insight setup data     | PASS   | None  |
| Duplicate key check In Insight setup data | PASS   | None  |
| CVIM/Insight workspace conflict check     | PASS   | None  |
| Check registry connectivity               | PASS   | None  |
| Check Email server for Insight            | PASS   | None  |
+-------------------------------------------+--------+-------+
 VIM Insight commit is in progress, Kindly wait!!!
 Cisco VIM Insight commit Info!
   +-----------------------------------------+--------+-----------------------------+

   | Description                              | Status | Details
 |
   +-----------------------------------------+--------+-----------------------------+
```

```
   | VIM Insight UI URL                        | PASS   | https://<br_api:9000>
|
   | VIM Insight Container: insight_<old_tag> | PASS   | Rollback from insight_<new_tag>|

   | VIM Mariadb Container: mariadb_<old_tag> | PASS   | Rollback from mariadb_<new_tag>|

   | VIM Insight Workspace                     | PASS   | /root/<old_insight_ws>
|
   +-----------------------------------------+--------+-------------------------------+

 Done with VIM Insight commit!
 VIM Insight commit logs are at: "/var/log/insight/bootstrap_insight/"
```

2. Verify the commit status by running the following command:

```
 # ./bootstrap_insight.py –a install-status
Cisco VIM Insight Install Status!
+---------------------+--------+---------------------------------+
| Description         | Status | Details                         |
+---------------------+--------+---------------------------------+
| VIM Insight Version | PASS   | <release_tag>                   |
| VIM Insight UI URL  | PASS   | https://<br_api:9000>           |
| VIM Insight Container | PASS | insight_<tag_id>                |
| VIM Mariadb Container | PASS | mariadb_<tag_id>                |
| VIM Insight Workspace | PASS | /root/<insight_ws>              |
+---------------------+--------+---------------------------------+
```