| Procedure | The necessary packages are as listed below |
|---|---|
| HA Construction(DBMS) | MariaDB、MariaDB-server、expect |

※ Please change the the version number (x.x.x) written under "Settings" or "Remarks" to match the version of ITA being installed.
　Please also change text such as "ITA Installation directory name", Backyard Server host name" to fit your environment.

| No. | Goal | Goal | | | | | | | Settings | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Common | Menu create | Host group | Ansible | Cobbler | Terraform | CI/CD for IaC | | |
| | **Unpack ITA Installation files** | | | | | | | | | |
| 1 | Unpack ITA Installation files | ● | | | | | | | deploy the ITA file vx.x.x.tar.gz to the installation file directory.<br>cd /(Install file unpack directory)<br>ls -l vx.x.x.tar.gz | The install files can be unpacked in any directory.<br>For online, uesr the following command to gather them.<br>wget https://github.com/exastro-suite/it-automation/archive/vx.x.x.tar.gz |
| 2 | | | | | | | | | Unpack the ITA Installation files<br>tar -zxf vx.x.x.tar.gz | |
| 3 | | | | | | | | | Configure ITA Installation directory<br>find it-automation-x.x.x -type f \| xargs -I{} sed -i -e "s:%%%%%ITA_DIRECTORY%%%%:/(ITA Install directory):g" {} | |
| | **Install yum-utils** | | | | | | | | | |
| 4 | 【For CentOS7 and RHEL7】<br>Install yum-utils | ● | | | | | | | Install the following package(s)<br>yum-utils | For online environments, please install using the following command.<br>yum install -y yum-utils |
| | **Configure common directory (DB file storage location)** | | | | | | | | | |
| 5 | Create a directory where the Maria DB Database files will be saved.<br>Only if you are going to move DB Files to an external storage. | ● | | | | | | | mkdir -p /(DB File storage directory) | Example:<br>mkdir -p /data/mysql |
| 6 | Configure Common directory.<br>※Only if you are going to move DB Files to an external storage. | ● | | | | | | | Configure the external storage common directory settings to be as bellow.<br><br>| DBMS server common directory | External storage common directory |<br>|---|---|<br>| /(DB file storage directory) | /(DB File storage directory) | | |
| | **Configure MariaDB** | | | | | | | | | |
| 7 | Install MariaDB | ● | | | | | | | Install the following packages<br>【For CentOS7, RHEL7】<br>MariaDB MariaDB-server expect<br><br>【For CentOS8, RHEL8】<br>mariadb mariadb-server expect | For online environments, use the following command to activate respositories<br>【For CentOS7, RHEL7】<br>curl -sS https://downloads.mariadb.com/MariaDB/mariadb_repo_setup \| bash<br>【For CentOS8, RHEL8】<br>No repository will be added<br><br>For online, use the following commands to install.<br>【For CentOS7, RHEL7】<br>yum install -y MariaDB MariaDB-server expect<br>【For CentOS8, RHEL8】 |
| 8 | Move MariaDB database files to external storage<br>※Only if you are going to move DB files to an external storage. | ● | | | | | | | cp -pr /var/lib/mysql/* /(DB File storage directory) | Example：<br>cp -pr /var/lib/mysql/* /data/mysql |
| 9 | | ● | | | | | | | rm -rf /var/lib/mysql | |
| 10 | | ● | | | | | | | ln -s /(DB File storage directory) /var/lib/mysql | Example：<br>ln -s /data/mysql /var/lib/mysql |
| 11 | Configure Maria DB automatic startup settings and run Maria DB | ● | | | | | | | systemctl enable mariadb<br>systemctl start mariadb | |
| 12 | Configure Maria DB root password | ● | | | | | | | mysql_secure_installation<br>The rest is set up interactively. | ※The password can only contain half-width characters and symbols |
| 13 | Deploy MariaDB Settings files. | ● | | | | | | | 【For CentOS7, RHEL7】<br>cp -p /(Install file unzip location)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS7.x/etc_my.cnf.d/server.cnf /etc/my.cnf.d/server.cnf<br><br>【For CentOS8, RHEL8】<br>cp -p /(Install file unzip location)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS8.x/etc_my.cnf.d/server.cnf /etc/my.cnf.d/server.cnf | |
| 14 | Restart MariaDB | ● | | | | | | | systemctl restart mariadb | |

## Create DB for ITA

| No. | Goal | Common | Menu create | Host group | Ansible | Cobbler | Terraform | CI/CD for IaC | Settings | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | Connect to MariaDB | ● | | | | | | | mysql -uroot -p(MariaDB root password) | |
| 16 | Create MariaDB User | ● | | | | | | | CREATE USER '(user name)' IDENTIFIED BY '(password)';<br>CREATE USER '(user name)'@'localhost' IDENTIFIED BY '(password)'; | ※The password can only contain half-width characters and symbols |
| 17 | Create Database for ITA | ● | | | | | | | CREATE DATABASE (TA Database name) CHARACTER SET utf8; | |
| 18 | Configure User permission | ● | | | | | | | GRANT ALL ON (ITA Database name).* TO '(User name)'@'%' WITH GRANT OPTION;<br>GRANT ALL ON (ITA Database name).* TO '(User name)'@'localhost' WITH GRANT OPTION; | |
| 19 | Exit MariaDB | ● | | | | | | | exit | |
| 20 | Create ita_base table | ● | | | | | | | mysql -u (User name) -p(Password) (ITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-a.sql | |
| 21 | Create createparam table | | ● | | | | | | mysql -u (User name) -p(Password) (IITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-m.sql | |
| 22 | Create hostgroup table | | | ● | | | | | mysql -u (User name) -p(Password) (ITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-n.sql | |
| 23 | Create ansible_driver table | | | | ● | | | | mysql -u (User name) -p(Password) (ITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-c.sql | |
| 24 | Create ansible_driver table (collect function)<br>※Only if you are installing createparam and Ansible_driver. | | ● | | ● | | | | mysql -u (User name) -p(Password) (ITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-m2.sql | |
| 25 | Create cobbler_driver table | | | | | ● | | | mysql -u (User name) -p(Password) (ITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-d.sql | |
| 26 | Create terraform_driver table | | | | | | ● | | mysql -u (User name) -p(Password) (ITA Database name) < /tmp/it-automation-x.x.x/ita_install_package/ITA/ita-sqlscripts/en_US_mysql_ita_model-o.sql | |