| Procedure name | | Please refer to the following file for required package. |
|---|---|---|
| HA configuration(Cobbler) | | https://exastro-suite.github.io/it-automation-docs/asset/Learn/ITA-online-install_en.pdf |
| | | All packages other than <Mariadb, Ansible> in 3.11 Configuration(7/7) |
| | | Cobbler |

※ For the version(x.x.x) in Setting, Notes column, please replace with the ITA version to be installed.
For strings such as "ITA installation target directory name", "IP address of external storage server", "Host name of Cobbler server", please replace them according to the installation environment.

| No. | Target | Target | | | | | | | Setting | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Common | File manage | Create menu | Host group | Ansible | Cobbler | Terraform | | |
| | **Deploy ITA installation file** | | | | | | | | | |
| 1 | Deploy ITA installation file | | | | | | ● | | Please place the ITA file vx.x.x.tar.gz in the installation file deployment directory<br>cd /(installation file deployment directory)<br>ls -l vx.x.x.tar.gz | The deployment directory of the installation file can be any directory.<br>Please acquire the file via the following command when performing online installation<br>wget https://github.com/exastro-suite/it- |
| 2 | | | | | | | | | Please extract ITA installation file<br>tar -zxf vx.x.x.tar.gz | |
| 3 | | | | | | | | | Set the ITA installation directory<br>find it-automation-x.x.x -type f \| xargs -I{} sed -i -e "s:%%%%%ITA_DIRECTORY%%%%%:/(ITA installation target directory):g" {} | |
| | **Install yum-utils** | | | | | | | | | |
| 4 | 【For CentOS7、RHEL7】<br>Install yum-utils | | | | | | ● | | Please install the following package<br>yum-utils | Please install via the following command when performing online installation |
| | **Install PHP** | | | | | | | | | |
| 5 | Install PHP | | | | | | ● | | Please install the following package<br>php php-bcmath php-cli php-ldap php-mbstring php-mysqlnd php-pear php-pecl-zip php-process php-snmp php-xml zip telnet mailx unzip php-json php-gd python3 php-devel libyaml libyaml-devel make sudo crontabs | Please enable the repository via the following command when performing online installation<br>【For CentOS7、RHEL7】<br>yum install -y http://rpms.remirepo.net/enterprise/remi-release-7.rpm<br><br>yum-config-manager --enable remi-php72<br><br>【For CentOS8、RHEL8】<br>No need to add repository.<br><br>Please install via the following command when performing online installation<br>yum install -y php php-bcmath php-cli php-ldap php-mbstring php-mysqlnd php-pear php-pecl-zip php-process php-snmp php-xml zip telnet mailx unzip php-json php-gd python3 php-devel libyaml libyaml- |
| 6 | Install PEAR library | | | | | | ● | | Please install the following PEAR package<br>HTML_AJAX-beta | Please install via the following command when performing online installation<br>pear install HTML_AJAX-beta |
| 7 | Set HTML_AJAX-beta | | | | | | ● | | ln -s /usr/share/pear-data/HTML_AJAX/js /usr/share/pear/HTML/js | |
| 8 | Install php-yaml | | | | | | ● | | Please install the following package<br>php-yaml | Please install via the following command when performing online installation<br>pecl channel-update pecl.php.net<br>echo "" \| pecl install YAML |
| 9 | Install PhpSpreadsheet | | | | | | ● | | Please create the following directory<br>mkdir -p /usr/share/php/vendor | |
| 10 | | | | | | | | | Please install PhpSpreadsheet package in /usr/share/php/vendor directory | Please install via the following command when performing online installation<br>curl -sS https://getcomposer.org/installer \| php -- --install-dir=/usr/bin<br><br>/usr/bin/composer.phar require "phpoffice/phpspreadsheet":"*"<br><br>mv vendor /usr/share/php/ |
| | **Set PHP** | | | | | | | | | |
| 11 | 【For CentOS7、RHEL7】<br>Set php.ini | | | | | | ● | | cp -p /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS7.x/etc/php.ini /etc/ | |
| 12 | 【For CentOS8、RHEL8】<br>Set php.ini | | | | | | ● | | cp -p /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS8.x/etc/php.ini /etc/ | |
| 13 | 【For CentOS8、RHEL8】<br>Set www.conf | | | | | | ● | | cp -p /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS8.x/etc_php-fpm.d/www.conf /etc/php-fpm.d/ | |
| | **Install ITA** | | | | | | | | | |
| 14 | Create installation target directory | | | | | | ● | | mkdir -p /(ITA installation target directory) | ※Please give all parent directories of the ITA installation directory permission to execute "Other Users". |
| 15 | Create data_relay_storage directory | | | | | | ● | | mkdir /(ITA installation target directory)/data_relay_storage | |

| No. | Target | Common | File manage | Create menu | Host group | Ansible | Cobbler | Terraform | Setting | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Set shared directory | | | | | | ● | | Please set the shared directory for external storage as follows. | |

| Shared directory for Cobbler server | Shared directory for external storage |
|---|---|
| /(ITA installation target directory)/data_relay_storage | /(any desired shared directory)/data_relay_storage |

| No. | Target | Common | File manage | Create menu | Host group | Ansible | Cobbler | Terraform | Setting | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Deploy ITA file | | | | | | ● | | cp -rp /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/ITA/ita-contents/ita-root /(ITA installation target directory)/. | |
| 18 | Deploy ITA setting file | | | | | | ● | | cp -rp /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/ITA/ita-confs /(ITA installation target directory)/ita-root/confs | |
| 19 | Create directory used by ITA | | | | | | ● | | Please create one directories for each line of the paths written in /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/install_scripts/list/create_dir_list.txt by adding /(ITA installation target directory) in the front of the paths<br><br>mkdir -p /(ITA installation target directory)(path written in the file) | |
| 20 | Change privilege(755) | | | | | | ● | | Please change privilege for every line of paths written in /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/install_scripts/list/755_list.txt by adding /(ITA installation target directory) in front of the paths<br><br>chmod 755 /(ITA installation target directory)(path written in the file) | |
| 21 | Change privilege(777) | | | | | | ● | | Please change privilege for every line of paths written in /(installation file deployment directory)/it-automation-x.x.x/ita_install_package/install_scripts/list/777_list.txt by /(ITA installation target directory) in front of the paths<br><br>chmod 777 /(ITA installation target directory)(path written in the file) | |
| 22 | Create link to backyard setting file | | | | | | ● | | ln -s /(ITA installation target directory)/ita-root/confs/backyardconfs/ita_env /etc/sysconfig/ita_env | |
| 23 | Copy the service file of backyard operation for cobbler_driver(Cobbler server side) | | | | | | ● | | cp -p /(ITA installation target directory)/ita-root/backyards/cobbler_driver/*.service /usr/lib/systemd/system/. | |
| 24 | Set autostart and start the service of cobbler_driver(Cobbler server side) | | | | | | ● | | systemctl enable ky_cobbler_profileSync_side_Cobbler<br>systemctl enable ky_cobbler_systemSync_side_Cobbler<br>systemctl start ky_cobbler_profileSync_side_Cobbler<br>systemctl start ky_cobbler_systemSync_side_Cobbler | |

## Set hosts

| No. | Target | Common | File manage | Create menu | Host group | Ansible | Cobbler | Terraform | Setting | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Set /etc/hosts | | | | | | ● | | vi /etc/hosts<br><br>Please add the following content.<br>127.0.0.1 (Host name of Cobbler server) | |

## Install Cobbler

| No. | Target | Common | File manage | Create menu | Host group | Ansible | Cobbler | Terraform | Setting | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | Install Cobbler | | | | | | ● | | Please refer to the Cobbler developer's document for installation | |