Procedure		The necessary packages are as listed below
HA Construction (Cobbler)		https://github.com/exastro-suite/it-automation-docs/blob/master/asset/Documents/ITA-online-install_en.pdf 3.11 Construction（7/7）Library overview (Other than what is included in ＜Mariadb、Ansible＞) Cobbler

※ 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. cd /(Install file unpack directory) ls –l vx.x.x.tar.gz	The install files can be unpacked in any directory. For online, uesr the following command to gather them. wget https://github.com/exastro-suite/it-automation/archive/vx.x.x.tar.gz
2									Unpack the ITA Installation files tar –zxf vx.x.x.tar.gz	
3									Configure ITA Installation directory 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, RHEL7】 Install yum-utils					●			Install the following Package yum-utils	For online, use the following command to install. yum install –y yum-utils
	Install PHP									
5	Install PHP					●			Install the following Packages 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	For Online, use the following command to activate Repositories 【For CentOS7, RHEL7】 yum install –y http://rpms.remirepo.net/enterprise/remi-release-7.rpm yum-config-manager --enable remi-php72 【For CentOS8, RHEL8】 Repositories will not be added For Online, use the following command to install. 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-devel make sudo crontabs
6	Install PEAR Library					●			Install the following Pear Package HTML_AJAX-beta	For online, use the following command to install. pear install HTML_AJAX-beta
7	Configure HTML_AJAX-beta settings					●			ln –s /usr/share/pear-data/HTML_AJAX/js /usr/share/pear/HTML/js	
8	Install php-yaml				●				Install the following Package php-yaml	For online, use the following command to install. pecl channel-update pecl.php.net echo "" | pecl install YAML
9	Install PhpSpreadsheet					●			Create the following Directory mkdir –p /usr/share/php/vendor	
10									Install the PhpSpreadsheet package to the /usr/share/php/vendor directory.	For online, use the following command to install. curl –sS https://getcomposer.org/installer | php -- --install-dir=/usr/bin /usr/bin/composer.phar require "phpoffice/phpspreadsheet":"1.14.1" mv vendor /usr/share/php/
	Configure PHP									
11	【For CentOS7, RHEL7】 Configure php.ini					●			cp –p /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS7.x/etc/php.ini /etc/	
12	【For CentOS8, RHEL8】 Configure php.ini					●			cp –p /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/ext_files_for_CentOS8.x/etc/php.ini /etc/	
13	【For CentOS8, RHEL8】 Configure www.conf					●			cp –p /(Installation file unpack location)/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 directory					●			mkdir –p /(ITA Installation directory)	※Make sure that "other users" also have permission to run all the parent directories of the ITA Install directory.
15	Create data_relay_storage directory					●			mkdir /(ITA Installation directory)/data_relay_storage	

No.	Goal	Common	Menu create	Host group	Ansible	Cobbler	Terraform	CI/CD for IaC	Settings	Remarks
16	Configure common directory					●			Create directory to share the following external storage. **Cobbler server common directory:** /(ITA Installation directory)/data_relay_storage **External storage common directory:** /(Free Directory)/data_relay_storage	
17	Deploy ITA Files					●			cp –rp /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/ITA/ita-contents/ita-root /(ITA Install directory)/.	
18	Deploy ITA Settings files					●			cp –rp /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/ITA/ita-confs /(ITA Install directory)/ita-root/confs	
19	Create ITA Directory					●			For paths written in the /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/install_scripts/list/create_dir_list.txt file, create directories one line at a time with /(ITA Install directory) at the beginning. mkdir –p /(ITA Install directory)(File path written in the document)	
20	Change Permission(755)					●			For paths written in the /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/install_scripts/list/755_list.txt, Change the permissions one line at a time with /(ITA Install directory) at the beginning. chmod 755 /(ITA Install directory) (File path written in the document)	
21	Change Permission(777)					●			For paths written in the /(Installation file unpack location)/it-automation-x.x.x/ita_install_package/install_scripts/list/777_list.txt, Change the permissions one line at a time with /(ITA Install directory) at the beginning. chmod 777 /(ITA Install directory) (File path written in the document)	
22	Create Backyard settings file link					●			ln –s /(ITA Installation directory)/ita-root/confs/backyardconfs/ita_env /etc/sysconfig/ita_env	
23	Copy the cobbler_driver (Cobbler server side) backyard process service file					●			cp –p /(ITA Installation directory)/ita-root/backyards/cobbler_driver/*.service /usr/lib/systemd/system/.	
24	Configure resident settings and start the cobbler_driver (Cobbler server side) service.					●			systemctl enable ky_cobbler_profileSync_side_Cobbler systemctl enable ky_cobbler_systemSync_side_Cobbler systemctl start ky_cobbler_profileSync_side_Cobbler systemctl start ky_cobbler_systemSync_side_Cobbler	

Configure hosts

No.	Goal	Common	Menu create	Host group	Ansible	Cobbler	Terraform	CI/CD for IaC	Settings	Remarks
25	Configure /etc/hosts					●			vi /etc/hosts Add the following 127.0.0.1 (Cobbler server host name)	

Install Cobbler

No.	Goal	Common	Menu create	Host group	Ansible	Cobbler	Terraform	CI/CD for IaC	Settings	Remarks
26	Install Cobbler					●			Please follow the official Cobbler developer manual and such documents.	