The necessary packages are as listed below 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>)

** 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.

Goal	Common Menu create Host group Ansible Cobbler Terraform CI/CD for IaC	Settings	Remarks
Unpack ITA Installation files			
Unpack ITA Installation files		deploy the ITA file vx.x.x.tar.gz to the installation file directory. cd / (Install file unpack directory) Is -I vx.x.x.tar.gz Unpack the ITA Installation files tar -zxf vx.x.x.tar.gz Configure ITA Installation directory find it-automation-x.x.x -type f xargs -I[] sed -i -e "s:%%%%ITA_DIRECTORY%%%%:/ (ITA Install directory):g" {}	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.tar.gz
Install yum-utils			
[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			
Install PHP		Install the following Packages php php-bcmath php-cli php-Idap 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
Install PEAR Library		Install the following Pear Package HTML AJAX-beta	For online, use the following command to install. pear install HTML_AJAX-beta
Configure HTML_AJAX-beta settings		In -s /usr/share/pear-data/HTML_AJAX/js /usr/share/pear/HTML/js	
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
Install PhpSpreadsheet		Create the following Directory mkdir -p /usr/share/php/vendor	
		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 phpinstall-dir=/usr/b /usr/bin/composer.phar require "phpoffice/phpspreadsheet":"1.14.1" mv vendor /usr/share/php/
Configure PHP			
[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/	
【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/	
[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			
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.
Create data_relay_storage directory		mkdir / (ITA Installation directory) / data_relay_storage	

	L.	Go	al			
No. Goal	Common	Host group	Cobbler	Terraform CI/CD for IaC	Settings	Remarks
16 Configure common directory			•		Create directory to share the following external storage.	
					Cobbler server common directory External storage common directory	
					/(ITA Installation directory)/data_relay_storage /(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			•		In -s / (ITA Installation directory) /ita-root/confs/backyardconfs/ita_env /etc/sysconfig/ita_env	
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/.	
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 systemctl start ky_cobbler_systemSync_side_Cobbler	
Configure hosts						
25 Configure /etc/hosts					vi /etc/hosts Add the following 127.0.0.1 (Cobbler server host name)	
Install Cobbler						
26 Install Cobbler					Please follow the official Cobbler developer manual and such documents.	