

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 3.14 Construction(9/10) 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 exastro-it-automation-x.x.x.tar.gz to the installation file directory. cd / (Install file unpack directory) ls -l exastro-it-automation-x.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/releases/download/vx.x.x/exastro-it-automation-x.x.x.tar.gz ※Use the following command for v1.10.1 and later versions. curl -OL https://github.com/exastro-suite/it-automation/releases/download/vx.x.x_tag/exastro-it-automation-x.x.x.tar.gz”				
2								Unpack the ITA Installation files tar xzf exastro-it-automation-x.x.x.tar.gz					
3								Configure ITA Installation directory find it-automation-x.x.x -type f xargs -l{} 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”:”1.18.0” 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/					

No.	Goal	Goal							Settings	Remarks		
		Common	Menu create	Host group	Ansible	Cobbler	Terraform	CI/OD for IaC				
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			
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					●			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												
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.			