

Methods of *Machine* class

- `Machine.new(String or ClibIPAddr: machine address)`
 - IP address and FQDN(ex: aaa.bbb.jp) can be used as machine address
- `Machine#set_auth_info(String: user name, String: password)`
 - sets user name and password to access a machine via SSH
- `Machine#set_auth_info(String: user name, String: passphrase of private key , String: file path of private key)`
 - sets user name, passphrase of private key and file path of private key (ex: ~/.ssh/id_rsa) to access a machine via SSH
- `Machine#establish_session()`
 - establishes a transport for command execution via SSH
 - before calling this function, authentication information should be set appropriately by `Machine#set_auth_info`
 - methods described on following slides can be used after calling of this function

Methods of *Machine* class

- `Machine#exec!(String: command string to execute on remote shell)`
 - executes passed command string on remote machine via SSH
 - calling without exclamation mark (!) executes commands asynchronously (no blocking on call)
 - returns standard output of executed command (currently, asynchronous call doesn't return stdout)
- `Machine#exec_script_on(String: local file path of shell script to execute, String: arguments of shell script, String: current path which is used at shell script execution)`
 - executes passed shell script on remote. you had better pass "." if you don't have any request.
 - returns standard output of executed command as *String*.
- `Machine#install_package(String: package name to install)`
 - Install specified package with package system; yum, apt and so on.
 - package system used by varies platform specified by user. default is yum.
 - returns standard output of package system control command as *String*.

Methods of *Machine* class (File I/O)

- `Machine#push_a_file(String: local file path, String: remote file path)`
 - send (copy) a specified local file to remote path
- `Machine#pull_a_file(String: remote path, String: local path)`
 - send (copy) a specified remote file to local path
- `Machine#push_files(String : local directory path, String : remote directory path)`
 - send (copy) all files on specified local directory to remote directory
 - subdirectories on the local path are ignored
- `Machine#pull_files(String: remote directory path , String : local directory path)`
 - send (copy) all files on specified local directory to remote directory
 - subdirectories on the local path are ignored
- `Machine#push_dir(String : local directory path, String : remote directory path)`
 - Send (copy) specified local directory to remote path
 - subdirectories are also sent
- `Machine#pull_dir(String : remote directory path, String : local directory path)`
 - Send (copy) specified remote directory to local path
 - subdirectories are also sent

Methods of *Machine* class (config file editing)

- `Machine#get_config_file(String: file path of configuration path located on remote)`
 - return *ConfigFile* class instance which represents specified remote config file
- user can edit remote config file through methods of *ConfigFile* class instance
- editing will reflected to real config file after calling *ConfigFile#save* method
- Methods of *ConfigFile* class
 - `ConfigFile#remove_col_by_str(String: string contained by columns you want to remove)`
 - remove all columns which contains specified string
 - `ConfigFile#replace_col(String: string contained by columns you want to replace, String: string placed at replaced part)`
 - remove all columns which contains specified string
 - `ConfigFile#append_str(String: string to append)`
 - append specified string to end of file
 - multi column (contains new-line character)
 - `ConfigFile#save()`
 - reflect editing to the *ConfigFile* class instance to remote config file
 - this method has only to be called once after all editing