

# 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 to access a machine via SSH
  - You may use this method when you can login with no password
- `Machine#set_auth_info(String: user name, String: password)`
  - sets user name and password to access a machine via SSH
- `Machine#set_auth_info_pki(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