Script to perform CLI `commit` against a list of saved config

Task requirement

While performing POC tests, we usually need to switch PA config with fixed traffic pattern. This script issues multiple `commit` with constant delay.

Here we have the list of saved config in the file config.txt. Those saved config should exist on PA or commit will just do nothing.

config-???? on PA is the original config saved by the script. You may go back to the initial stage by loading it.

```
$ cat config.txt
POC9627_5250_68_v11
POC9627_5250_68_v12
POC9627_5250_68_v13
POC9627_5250_68_v14
POC9627_5250_68_v15
POC9627_5250_68_v16
POC9627_5250_68_v17
POC9627_5250_68_v18
POC9627_5250_68_v19
admin@PA5250-APAC-68> show config saved [TAB]
 POC9627_5250_68_v11
                          2019/11/30 16:23:02 39450.2K
 POC9627 5250 68 v12
                           2019/11/30 16:30:02 42741.9K
 POC9627_5250_68_v13
                          2019/11/30 16:37:50 46033.6K
 POC9627_5250_68_v14
                           2019/11/30 16:41:56 49325.3K
 POC9627_5250_68_v15
                          2019/11/30 16:56:01
                                              52617.0K
 POC9627_5250_68_v16
                           2019/11/30 17:00:00 55908.8K
 POC9627_5250_68_v17
                          2019/11/30 17:05:20
                                             59200.4K
 POC9627_5250_68_v18
                           2019/11/30 17:10:18
                                              62492.1K
 POC9627 5250 68 v19
                                              65780.9K
                           2019/11/30 17:16:27
 autosave-8.1-20191113.xml 2019/11/13 13:19:24
                                               13.9K
 candidate-config
                     candidate-config
 config-6688
                    2019/12/09 14:20:28
                                        3172.1K
 config-6794
                   2019/12/09 14:48:11
                                        3172.1K
```

```
running-config.xml 2019/12/09 15:43:54 3172.1K </br>
<value> Saved configuration
admin@PA5250-APAC-68> show config saved
```

It also captures the job list at the end, and log the whole session in a file commit-*.log.

The script

The script content is as follows. You may want to customize it before use, including change of the following variables.

uname - the login name "admin"
pass - the login password "password"
host - skipped, the host taken from the command line input
prompt - skipped, CLI command prompt
config_prompt - skipped, CLI command prompt (configuration mode)
config_file - name of the config list file
time_delay - initial delay in seconds, before any command set to be issued

time_interval - additional delay in seconds after each commit. Set it large enough for designed tests with the running config.

timeout_commit - in seconds, timeout of a commit command. Normally the script will move on immediately after the prompt returns. Increase this one if commit takes longer than expected.

```
$ cat pancommit.exp
#!/usr/bin/expect -f

#set uname [lindex $argv 0]
#set pass [lindex $argv 1]
#set host [lindex $argv 2]

set uname "admin"
set pass "admin"
```

```
set host [lindex $argv 0]
set prompt "> $"
set config_prompt "# $"
set config_list "config.txt"
set time_delay 0
set time_interval 5
set timeout_commit 300
log_user 1
set mypid [pid]
log_file -noappend "commit-$mypid.log"
spawn /usr/bin/ssh -I $uname $host
expect {
 "Password: " {
  sleep 1
  send "$pass\r"
 } timeout {send_user "error"}
set timeout 1
expect -re $prompt
send "set cli pager off\r"
expect -re $prompt
send "show system info\r"
```

```
expect -re $prompt
send "configure\r"
expect -re $config_prompt
send "save config to config-$mypid\r"
sleep $time_delay
set timeout $timeout_commit
set f [open "$config_list"]
set config_files [split [read $f] "\n"]
close $f
foreach config $config_files {
     expect -re $config_prompt
     send "run show clock\r"
     expect -re $config_prompt
     send "load config from $config\r"
     expect -re $config_prompt
     send "commit\r"
     expect -re $config_prompt
     send "run show clock\r"
     sleep $time_interval
expect -re $config_prompt
send "exit\r"
expect -re $prompt
send "show jobs all\r"
expect -re $prompt
send "exit\r"
```

```
#
#
puts "Initial config saved as config-$mypid"
puts "CLI session captured and saved in commit-$mypid.log"

exit
# End
$
```

Script environment

This is an Expect script, which runs on Linux. All you need is a CentOS box with Expect installed.

Use this command to install Expect.

\$ yum install expect

Run the script with this syntax.

\$./pancommit.exp 10.10.1.123

where 10.10.1.123 is the PA management IP.

Reference

- Script to execute CLI commands at short regular intervals
- · Script to perform CLI `commit` against a list of saved config
- Script to generate PA XML config for objects, policy rules and routes
- · Scripts to collect browser content or Panachrome repeatedly over time
- · Terence's list of my tech docs

