

HOWTO: POWER On using expect

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Using expect to automate mundane tasks

I have a Power5 system I use for testing, no HMC and I cannot always depend on being at a location where I can use the web-based ASMI interface. Plus, I have to wait for the web-interface to load. I prefer to use the serial line connection from tty1 to the serial port of the Power5. But typing in the commands got boring too. Enter expect, a program that can be told what to expect and then send an automated reply.

My program to automatically start a Power5 system

```
#!/usr/bin/expect -f
```

```
send_user "$argv0 performs 'cu -l tty[|range $argv 0 0]'\n"
```

```
spawn cu -l tty[|range $argv 0 0]
```

```
expect {
```

```
" DEVICE LOCKED" { puts "*****locked\n"; close; exit }
```

```
"onnected" {
```

```
    puts "login to Hypervisor\n";
```

```
    send \n;
```

```
}
```

```
"ogin: " {
```

```
    puts "**** already active\n exiting\n"; close; exit;
```

```
}
```

```
}
```

```
expect "User ID: " { send admin\n }
```

```
expect "assword: " { send PASSWORD\n }
```

```
expect " 80]: " { send \n }
```

```
expect {
```

```
    " 24]: " { send \n }
```

```
    " 25]: " { send \n }
```

```
}
```

```
expect "S1> " { send 1\n; sleep 1 }
```

```
expect "S1> " { send 1\n; sleep 1 }
```

```
expect "S1> " { send 8\n; sleep 1 }
```

```
expect "PRESS ENTER TO CONTINUE:" { send \n }  
expect "S1> " { send 99\n; sleep 1 }  
expect "out." { send "~." }  
expect "~." { send "\n" }  
puts "\n\nPower On Successful\n"
```

ote: you will need to change the PASSWORD to your system admin password.

Below is an example of the output. - And I expect this would work with Power6 and Power7, although the prompts and command option numbers may be a bit different.

```
michael@x054:[/home/michael]pwrOn 1  
/opt/bin/pwrOn performs 'cu -l tty1  
spawn cu -l tty1  
Connected  
login to Hypervisor
```

Welcome

Machine type-model: 9110-51A

Serial number: 0639B8D

Date: 2013-12-12

Time: 8:09:24

Service Processor: Primary

User ID: admin

Password: *****

Number of columns [80-255, Currently: 80]:

Number of lines [24-255, Currently: 24]:

System name: X100-p51A-054321D

Version: SF240_418

User: admin

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1. Power/Restart Control
2. System Service Aids
3. System Information
4. System Configuration
5. Network Services
6. Performance Setup
7. On Demand Utilities
8. Concurrent Maintenance
9. Login Profile
99. Log out

S1> 1

Power/Restart Control

1. Power On/Off System
2. Auto Power Restart
3. Immediate Power Off
4. System Reboot
5. Wake On LAN
98. Return to previous menu
99. Log out

S1> 1

Power On/Off System

Current system power state: Off

Current firmware boot side: Temporary

Current system server firmware state: Not running

1. System boot speed

Currently: Fast

2. Firmware boot side for the next boot

Currently: Temporary

3. System operating mode

Currently: Normal

4. AIX/Linux partition mode boot

Currently: Continue to operating system

5. Boot to system server firmware

Currently: Running

6. System power off policy

Currently: Power off

7. i5/OS partition mode boot

Currently: A

- 8. Power on
- 98. Return to previous menu
- 99. Log out

S1> 8

The system is powering on.

PRESS ENTER TO CONTINUE:

Power On/Off System

Current system power state: Off

Current firmware boot side: Temporary

Current system server firmware state: Unknown

- 1. System boot speed
 - Currently: Fast
- 2. Firmware boot side for the next boot
 - Currently: Temporary
- 3. System operating mode
 - Currently: Normal
- 4. AIX/Linux partition mode boot
 - Currently: Continue to operating system
- 5. Boot to system server firmware
 - Currently: Running
- 6. System power off policy
 - Currently: Power off
- 7. i5/OS partition mode boot
 - Currently: A
- 8. Power on
- 98. Return to previous menu
- 99. Log out

S1> 99

You have logged out.

[x054]~.

Power On Successful

michael@x054:[/home/michael]

Script command is complete on Thu Dec 12 08:14:07 CUT 2013.