

Efficient DBA

Gain Time by Reducing
Command-Line Keystrokes



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MORE CONTROL. LESS RISK.

Seth Miller
smiller05@sjm.com
<http://sethmiller.org>

About Me



- Saint Paul, Minnesota
- Saint Jude Medical
- Linux Administrator
- Oracle Developer
- Oracle Database Administrator
- **Efficient DBA**



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Agenda

Workstation Backup

Putty Login

Shared Key Authentication

Login Profiles

Custom Scripts

Rlwrap

Miscellaneous



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How Much Time?

- Do you back up your important files?
- How long does it take to log into a server?
- How many times do you log into a server each day?
- How long and complicated is your password?
- Do you use the same password for each server?
- Do you need to put in a password when you switch users on a server?
- How do you change environment settings for different databases?
- How do you change environment settings for different oracle homes?
- Does your shell prompt offer enough information?
- Does your sqlplus prompt offer enough information?
- How often do you check for running instances on the server?
- How often do you check Clusterware resources?
- How efficient are you?



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Workstation Backup

`xcopy source [destination] [/Y] [/w] [/D:date] [/C] [/S] [/E] [/V] ...`

<code>source</code>	Specifies the file to copy.
<code>destination</code>	Specifies the location and the name of new files.
<code>/C</code>	Continues copying even if errors occur.
<code>/H</code>	Copies hidden and system files also.
<code>/D:date</code>	Copies files changed on or after the specified date.
<code>/S</code>	Copies directories and subdirectories except empty ones.
<code>/Y</code>	Suppresses prompting to confirm you want to overwrite an existing destination file.
<code>/E</code>	Copies any subfolder, even if it is empty.
<code>/V</code>	Verifies each new file.
<code>/W</code>	Prompts you to press a key before copying.



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Workstation Backup

```
xcopy source [destination] [/Y] [/w] [/D:date] [/C] [/S] [/E] [/V] ...
```

```
net use w: \\share\smiller /persistent:no
```

```
xcopy "%USERPROFILE%\Documents\*" "w:\Documents\" /C /H /E /D /Y
xcopy "%USERPROFILE%\Shortcuts\*" "w:\Shortcuts\" /C /H /E /D /Y
xcopy "%USERPROFILE%\Pictures\*" "w:\Pictures\" /C /H /E /D /Y
xcopy "%USERPROFILE%\Scripts\*" "w:\Scripts\" /C /H /E /D /Y
xcopy "%USERPROFILE%\Putty\*" "w:\Putty\" /C /H /E /D /Y
xcopy "%USERPROFILE%\Putty Sessions\*" "w:\Putty Sessions\" /C /H /E /D /Y
xcopy "%ProgramFiles(x86)%\vim\*" "w:\vim\" /C /H /E /D /Y
xcopy "%APPDATA%\Microsoft\Templates\*" "w:\Outlook Templates\" /C /H /E /D /Y
xcopy "%LOCALAPPDATA%\Microsoft\Outlook\archive.pst" "w:\PSTs\" /C /H /E /D /Y
xcopy "%APPDATA%\Microsoft\windows\Libraries\*" "w:\Libraries\" /C /H /E /D /Y
xcopy "%APPDATA%\Microsoft\UProof\*" "w:\UProof\" /C /H /E /D /Y
```

```
net use w: /delete /y
```



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CMD Window

```
C:\windows\System32\cmd.exe /k %USERPROFILE%\profile.cmd
```

```
set ORACLE_HOME=C:\oracle\app\smiller\product\11.2.0\dbhome_1
```

```
set ORACLE_SID=ORCL
```

```
set TNS_ADMIN=%USERPROFILE%\TNS_ADMIN
```

```
doskey oh=cd %ORACLE_HOME%
```

```
doskey sss=sqlplus
```

```
doskey ls=dir
```

```
doskey pwd=cd
```

doskey = "alias" command in Linux



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Putty Login

```
PROMPT> path
```

```
PATH=C:\windows\system32;C:\windows;C:\Users\smiller\Shortcuts
```

```
PROMPT> type s1.bat
```

```
wscript %USERPROFILE%\Shortcuts\invis.vbs %USERPROFILE%\Shortcuts\openputty.bat server1
```

```
PROMPT> type openputty.bat
```

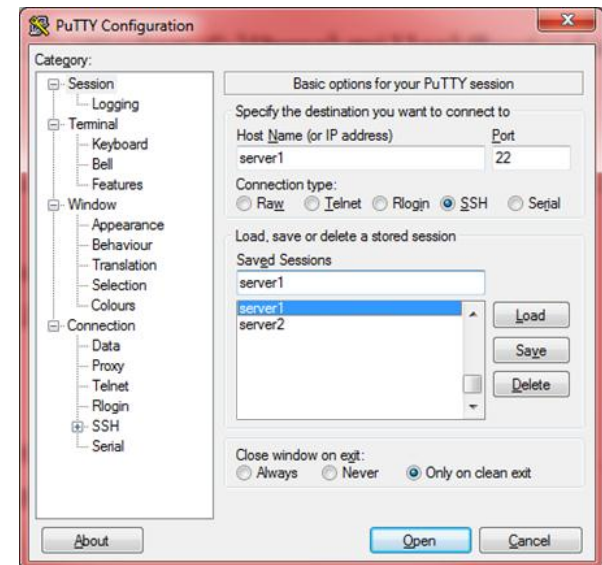
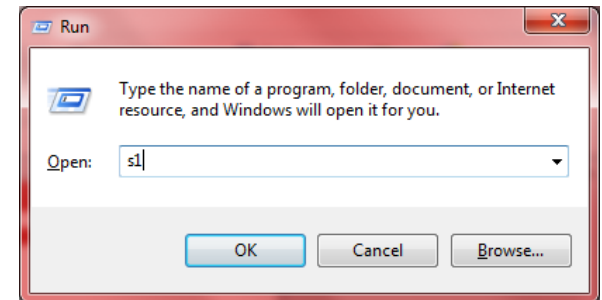
```
C:\Users\smiller\Putty\Putty.exe -load %1
```

```
PROMPT> type invis.vbs
```

```
CreateObject("wscript.shell").Run "*****" & WScript.Arguments(0) _  
& "*****" & WScript.Arguments(1) & "*****", 0, False
```

```
PROMPT> type s2.bat
```

```
wscript %USERPROFILE%\Shortcuts\invis.vbs %USERPROFILE%\Shortcuts\openputty.bat server2
```



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Putty Login

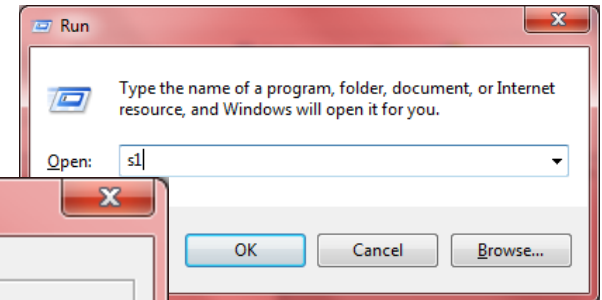
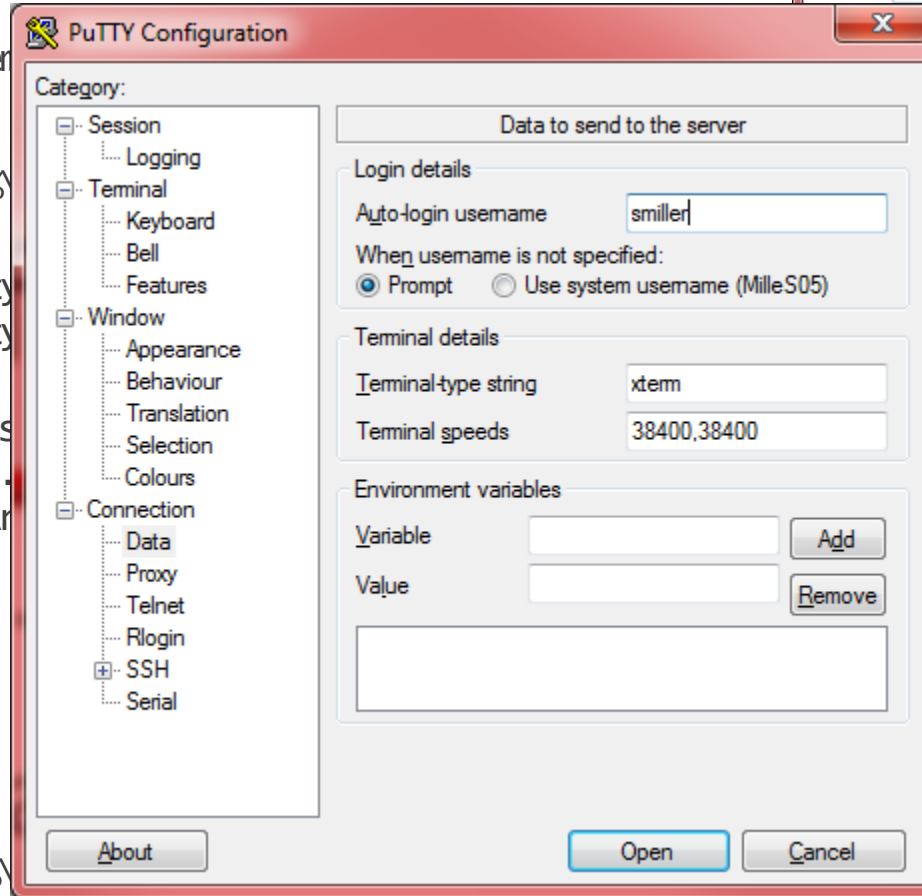
```
PROMPT> path  
PATH=C:\windows\system
```

```
PROMPT> type s1.bat  
wscript %USERPROFILE%
```

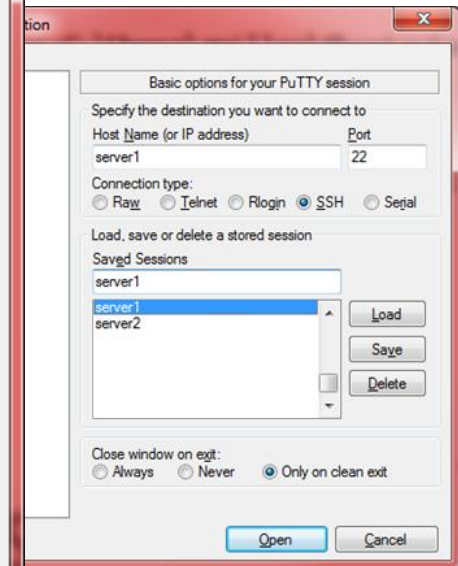
```
PROMPT> type openputty  
C:\Users\smiller\Putty
```

```
PROMPT> type invis.vbs  
CreateObject("wscript.  
& "'''''' & wScript.Ar
```

```
PROMPT> type s2.bat  
wscript %USERPROFILE%
```



pty.bat server1



pty.bat server2



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Shared Key Authentication

- Makes password authentication not necessary
- Usually precedes password authentication
- Used by RAC for communication between nodes

```
[oracle@server1 ~]$ ssh -v server2
OpenSSH_4.3p2, OpenSSL 0.9.8e-fips-rhel5 01 Jul 2008
...
debug1: Authentications that can continue: publickey,password
debug1: Next authentication method: publickey
debug1: Trying private key: /home/oracle/.ssh/identity
debug1: Offering public key: /home/oracle/.ssh/id_rsa
debug1: Authentication succeeded (publickey).
...
[oracle@server2 ~]$
```

- Enabled in SSHD by default

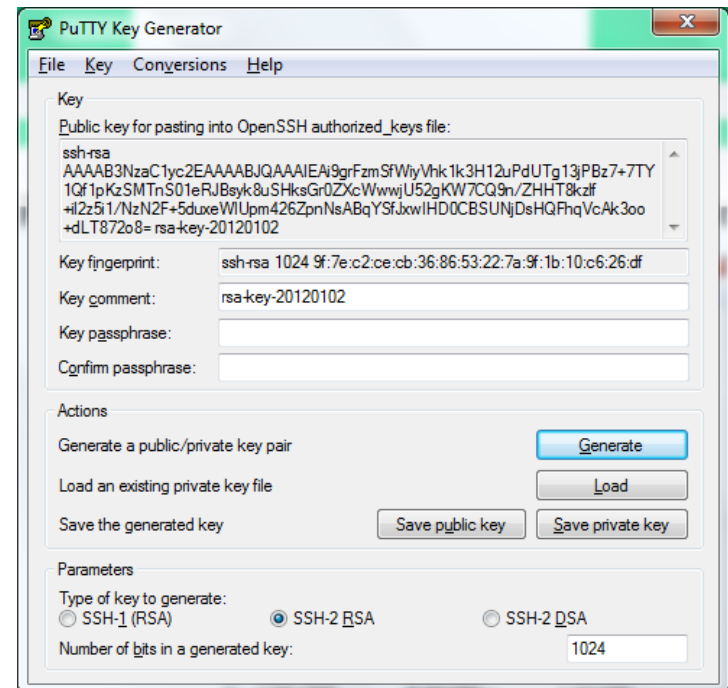
```
[root@server1 ~]# cat /etc/ssh/sshd_config | grep Pubkey
#PubkeyAuthentication yes
```



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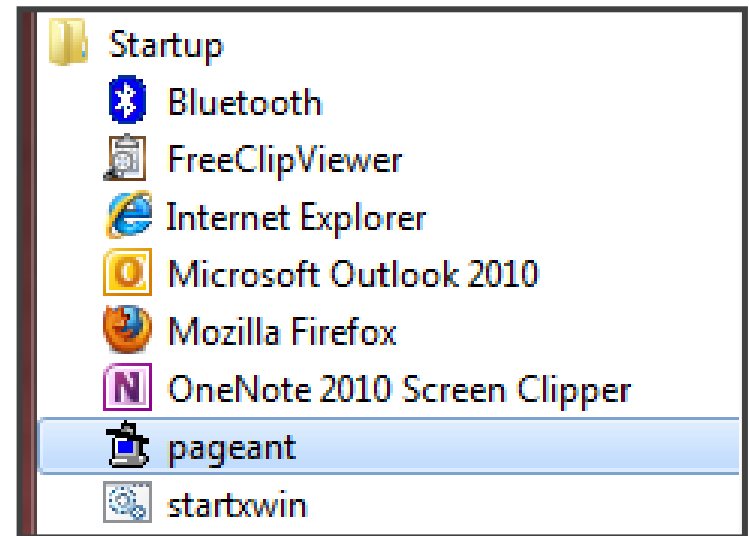
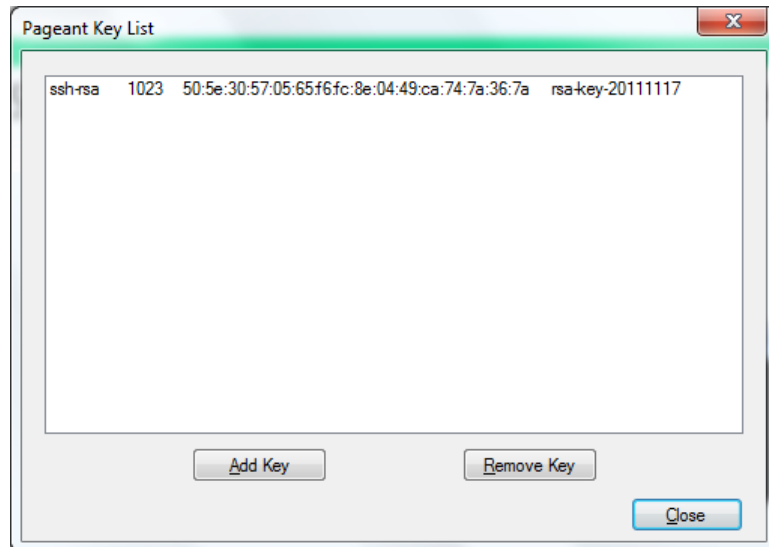
Shared Key Authentication

- Create keys on Windows with Putty Key Generator
- Can optionally use a passphrase
 - The use of a passphrase is for additional security
 - Counterproductive to eliminating keystrokes
- Can use different algorithms
- Public key is displayed for copy/paste
- Private key needs to be secure



Shared Key Authentication

- Host keys on Windows with Pageant
- Run in the background
- Start with Windows startup
- Load private key into Pageant



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Shared Key Authentication

- Authorized_keys file on server

```
[root@server1 ~]# cat /etc/ssh/sshd_config | grep #AuthorizedKeysFile
#AuthorizedKeysFile      .ssh/authorized_keys
```

- Permissions need to be set properly

```
[smiller@server1 ~]$ chmod 700 ~/.ssh
[smiller@server1 ~]$ ls -ld ~/.ssh
drwx----- smiller smiller /home/smiller/.ssh
[smiller@server1 ~]$ chmod 600 ~/.ssh/authorized_keys
[smiller@server1 ~]$ ls -ld ~/.ssh/authorized_keys
-rw----- smiller smiller /home/smiller/.ssh/authorized_keys
```

- Append the public key to the authorized_keys file

```
[smiller@server1 ~]$ cat /home/smiller/.ssh/authorized_keys
ssh-rsa
AAAAB3NzaC1yc2EAAAABJQAAAIG2QRU8oQ0Rp7LuMre9Vaxjt7mL50xsADMUAXuBP0lxxjeJVPbjYO+0EjUo116gXWmc74Qa
9iA108+3EoQ0gjtsYjVMgYmposqltdBz3LG7EDqKfiV+73CABgrayZxo2WaBIZF3c5448gtQp6JC6HElEZFnX9xCuL43y9t
ovUiCW==
```



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Shared Key Authentication

- Generate a public/private key pair

```
[smiller@server1 ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/smiller/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in (/home/smiller/.ssh/id_rsa.
Your public key has been saved in (/home/smiller/.ssh/id_rsa.pub.
The key fingerprint is:
f5:2e:c1:bf:ed:75:27:6f:50:a2:6a:17:a7:94:e5:e7 smiller@server1
```

```
[smiller@server1 ~]$ cp /home/smiller/.ssh/id_rsa.pub /tmp
```

```
[smiller@server1 ~]$ su - oracle
Password:
```

```
[oracle@server1 ~]$ cat /tmp/id_rsa.pub >> ~/.ssh/authorized_keys
```

```
[oracle@server1 ~]$ exit
```

```
[smiller@server1 ~]$ alias suo='ssh oracle@localhost'
```

```
[smiller@server1 ~]$ suo
```

```
[oracle@server1 ~]$
```



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Linux Shells

- Bourne Again Shell (Bash)

```
/etc/profile  
~/.bash_profile  
~/.bash_login  
~/.profile
```

- C Shell (csh)

```
~/.login  
~/.cshrc
```

- Korn Shell (ksh)

```
~/.profile  
~/.kshrc
```

- Password File

```
[smiller@server1 ~]$ cat /etc/passwd | grep smiller  
smiller:x:15525:15003:Seth Miller - Oracle  
DBA:/home/smiller:/bin/bash
```

- LDAP

```
[smiller@server1 ~]$ ldapsearch -x -h  
ldap.example.com -b "dc=us,dc=example,dc=com"  
cn="smiller"  
  
# smiller, people, us.example.com  
dn: uid=smiller,ou=people,dc=us,dc=example,dc=com  
loginShell: /bin/bash  
cn: smiller  
gecos: Seth Miller - Oracle DBA  
homeDirectory: /home/smiller
```



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My User's Profile Script

```
function ora
{
echo 1 > ~/fromsmiller
chmod go+rw ~/fromsmiller
sudo /bin/su - oracle
}
```



(From oracle's .bash_profile script)

```
if [ $( cat /home/smiller/fromsmiller ) -eq 1 ];
then
. /home/smiller/oracleprofile
echo 0 > /home/smiller/fromsmiller
fi
```

```
if [ $(hostname -s) = "usa-server1" -o $(hostname -s) = "usa-server2" ]; then
    ora
fi
```

```
ENVFILE=~/${hostname -s}.env
[ ! -f $ENVFILE ] && touch $ENVFILE && chmod 764 $ENVFILE
```



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Shared Oracle User

- `sudo su - oracle`
 - Environment settings are not transferred with `sudo` by default
- Source a file as the Oracle user
`source <file>`
OR
`. <file>`
- Automate the sourcing of the file by modifying Oracle's `.bash_profile`

```
if [ $( cat /home/smiller/fromsmiller ) -eq 1 ]; then  
    source /home/smiller/oracleprofile  
    echo 0 > /home/smiller/fromsmiller  
fi
```



Server Environment File

ORACLE_BASE=
CRS_GRID_HOME=
ASM_HOME=
AGENT_HOME=
DEFAULT_ORACLE_HOME=
RAC_NODE=
DEFPATH=



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Server Environment File (RAC)

You have not set a default ORACLE_HOME. would you like to do so now?
y

- 1) /u01/app/crs
- 2) /u01/app/oracle/product/asm/11.1
- 3) /u01/app/oracle/product/db/11.1
- 4) /u01/app/oracle/product/agent12c
- 5) /u01/app/oracle/product/agent12c/core/12.1.0.1.0
- 6) /u01/app/oracle/product/agent12c/sbin
- 7) /u01/app/oracle/product/db/10.2
- 8) NA
- 9) Manual Input

Please select the ORACLE_HOME you would like to use as your default
ORACLE_HOME: 3



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Server Environment File (RAC)

You have not set a default CRS/GRID_HOME. Would you like to do so now?

- y
- 1) /u01/app/crs
 - 2) /u01/app/oracle/product/asm/11.1
 - 3) /u01/app/oracle/product/db/11.1
 - 4) /u01/app/oracle/product/agent12c
 - 5) /u01/app/oracle/product/agent12c/core/12.1.0.1.0
 - 6) /u01/app/oracle/product/agent12c/sbin
 - 7) /u01/app/oracle/product/db/10.2
 - 8) NA
 - 9) Manual Input

Please select the CRS/GRID_HOME: 1



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Server Environment File (RAC)

You have not set a default ASM_HOME. would you like to do so now?

- y
- 1) /u01/app/crs
 - 2) /u01/app/oracle/product/asm/11.1
 - 3) /u01/app/oracle/product/db/11.1
 - 4) /u01/app/oracle/product/agent12c
 - 5) /u01/app/oracle/product/agent12c/core/12.1.0.1.0
 - 6) /u01/app/oracle/product/agent12c/sbin
 - 7) /u01/app/oracle/product/db/10.2
 - 8) NA
 - 9) Manual Input

Please select the ASM_HOME: 2



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Server Environment File (RAC)

You have not set a default AGENT_HOME. Would you like to do so now?

- y
- 1) /u01/app/crs
 - 2) /u01/app/oracle/product/asm/11.1
 - 3) /u01/app/oracle/product/db/11.1
 - 4) /u01/app/oracle/product/agent12c
 - 5) /u01/app/oracle/product/agent12c/core/12.1.0.1.0
 - 6) /u01/app/oracle/product/agent12c/sbin
 - 7) /u01/app/oracle/product/db/10.2
 - 8) NA
 - 9) Manual Input

Please select the AGENT_HOME: 4



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Server Environment File (RAC)

You have not set a default RAC_NODE. would you like to do so now?
y

Please enter the RAC_NODE (NA for none):
1

You have not set a default ORACLE_BASE. would you like to do so now?
y

Please enter the ORACLE_BASE (NA for none):
/u01/app/oracle



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Server Environment File (RAC)

```
ORACLE_BASE=/u01/app/oracle
CRS_GRID_HOME=/u01/app/crs
ASM_HOME=/u01/app/oracle/product/asm/11.1
AGENT_HOME=/u01/app/oracle/product/agent12c
DEFAULT_ORACLE_HOME=/u01/app/oracle/product/db/11.1
RAC_NODE=1
DEFPATH=/usr/infra/bin:/usr/kerberos/bin:/usr/bin:/bin:
/usr/local/bin::/home/oracle/bin:/etc/oracle/scripts
```



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Server Environment File (Non-RAC)

You have not set a default ORACLE_HOME. would you like to do so now?

y

- 1) /opt/app/oracle/product/10.2.0.4/db_1
- 2) /opt/app/oracle/product/agent10g
- 3) /opt/app/oracle/product/10.2.0/db_1
- 4) NA
- 5) Manual Input

Please select the ORACLE_HOME you would like to use as your default ORACLE_HOME: 3



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Server Environment File (Non-RAC)

You have not set a default CRS/GRID_HOME. would you like to do so now?

y

- 1) /opt/app/oracle/product/10.2.0.4/db_1
- 2) /opt/app/oracle/product/agent10g
- 3) /opt/app/oracle/product/10.2.0/db_1
- 4) NA
- 5) Manual Input

Please select the CRS/GRID_HOME: NA



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Server Environment File (Non-RAC)

You have not set a default ASM_HOME. would you like to do so now?

y

- 1) /opt/app/oracle/product/10.2.0.4/db_1
- 2) /opt/app/oracle/product/agent10g
- 3) /opt/app/oracle/product/10.2.0/db_1
- 4) NA
- 5) Manual Input

Please select the ASM_HOME: NA



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Server Environment File (Non-RAC)

You have not set a default AGENT_HOME. Would you like to do so now?

y

- 1) /opt/app/oracle/product/10.2.0.4/db_1
- 2) /opt/app/oracle/product/agent10g
- 3) /opt/app/oracle/product/10.2.0/db_1
- 4) NA
- 5) Manual Input

Please select the AGENT_HOME: 2



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Server Environment File (Non-RAC)

You have not set a default RAC_NODE. would you like to do so now?

y

Please enter the RAC_NODE (NA for none):

NA

You have not set a default ORACLE_BASE. would you like to do so now?

y

Please enter the ORACLE_BASE (NA for none):

/opt/app/oracle



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Server Environment File (Non-RAC)

```
DEFAULT_ORACLE_HOME=/opt/app/oracle/product/10.2.0/db_1
CRS_GRID_HOME=NA
ASM_HOME=NA
AGENT_HOME=/opt/app/oracle/product/agent10g
RAC_NODE=NA
ORACLE_BASE=/opt/app/oracle
DEFPATH=/usr/kerberos/bin:/usr/bin:/bin:/usr/local/bin:
:/usr/X11R6/bin:/home/oracle/bin
```



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OracleProfile Script

```
export SCRIPTHOME=/home/smiller
```

```
$SCRIPTHOME/setenvs.sh
```

```
for I in $( cat $SCRIPTHOME/$(hostname -s).env 2> /dev/null );do
    if [ "$( echo $I | cut -d '=' -f 2 )" = "NA" ]; then
        export $( echo $I | cut -d '=' -f 1 )=""
    else
        export $I
    fi
done
```

```
export ORACLE_HOME=$DEFAULT_ORACLE_HOME
export SQLPATH=$SCRIPTS
export PATH=$SCRIPTS:$CRSHOME/bin:$ASM_HOME/bin:$ORACLE_HOME/bin:$DEFPATH
export LD_LIBRARY_PATH=$ORACLE_HOME/lib
export NLS_DATE_FORMAT='DD-MON-YY HH24:MI:SS'
export NLS_LANG='american'
```



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Prompt (ps1)

PS1 through PS4 are reserved environment variables for the prompt

```
function ps1
{
export PS1="\n\[\033[35m\]\$(echo ORACLE_HOME=$1)\n
$(echo ORACLE_SID=$2)\n
\[\033[32m\]\w\n
\[\033[1;31m\]\u@h:
\[\033[1;34m\]\$(/usr/bin/tty | /bin/sed -e 's:/dev/::'):
\[\033[1;36m\]\$(/bin/ls -l | /usr/bin/wc -l | /bin/sed 's: ::g') files
\[\033[1;33m\]\$(/bin/ls -lah | /bin/grep -m 1 total | /bin/sed 's/total //' )b\[\033[0m\] ->
\[\033[0m\]"
}
```

```
ps1 /u01/app/oracle/product/db/11.1 ORCL
```

```
ORACLE_HOME=/u01/app/oracle/product/db/11.1
ORACLE_SID=ORCL
/home/oracle
oracle@usa-server1: pts/1: 10 files 240Kb ->
```



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Running Instances

```
ps -ef | grep pmon
```

oracle	10872	1	0	Aug28	?	00:00:00	asm_pmon_+ASM1
oracle	11332	1	0	Aug28	?	00:00:10	ora_pmon_ORCLH1
oracle	12199	1	0	Aug28	?	00:00:10	ora_pmon_ORCLK1
oracle	13603	1	0	Aug28	?	00:00:10	ora_pmon_ORCLC1
oracle	14467	1	0	Aug28	?	00:00:02	ora_pmon_ORCLD1
oracle	15190	1	0	Aug28	?	00:00:10	ora_pmon_ORCLG1
oracle	16100	1	0	Aug28	?	00:00:02	ora_pmon_ORCLF1
oracle	17052	1	0	Aug28	?	00:00:02	ora_pmon_ORCLE1
oracle	17896	1	0	Aug28	?	00:00:10	ora_pmon_ORCLA1
oracle	18838	1	0	Aug28	?	00:00:02	ora_pmon_ORCLI1
oracle	22729	1	0	Aug28	?	00:00:02	ora_pmon_ORCLJ1
oracle	25044	1	0	Aug28	?	00:00:02	ora_pmon_ORCLB1
oracle	25610	25330	0	03:42	pts/1	00:00:00	grep pmon



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Running Instances

```
ps -e o command | grep pmon
```

```
asm_pmon_+ASM1  
grep pmon  
ora_pmon_ORCLH1  
ora_pmon_ORCLK1  
ora_pmon_ORCLC1  
ora_pmon_ORCLD1  
ora_pmon_ORCLG1  
ora_pmon_ORCLF1  
ora_pmon_ORCLE1  
ora_pmon_ORCLA1  
ora_pmon_ORCLI1  
ora_pmon_ORCLJ1  
ora_pmon_ORCLB1
```



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Running Instances

```
ps -e o command | grep pmon | grep -v grep | cut -d '_' -f 3 | sort
```

```
+ASM1  
ORCLA1  
ORCLB1  
ORCLC1  
ORCLD1  
ORCLE1  
ORCLF1  
ORCLG1  
ORCLH1  
ORCLI1  
ORCLJ1  
ORCLK1
```



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Running Instances (pl)

Database Instances

Oracle Home

+ASM1	/u01/app/oracle/product/asm/11.1
ORCLA1	/u01/app/oracle/product/db/11.1
ORCLC1	/u01/app/oracle/product/db/11.1
ORCLD1	/u01/app/oracle/product/db/11.1
ORCLE1	/u01/app/oracle/product/db/11.1
ORCLF1	/u01/app/oracle/product/db/11.1
ORCLG1	/u01/app/oracle/product/db/11.1
ORCLH1	/u01/app/oracle/product/db/11.1
ORCLI1	/u01/app/oracle/product/db/11.1
ORCLJ1	/u01/app/oracle/product/db/11.1
ORCLK1	/u01/app/oracle/product/db/11.1
ORCLC1	/u01/app/oracle/product/db/11.1

Listeners Running

Oracle Home

LISTENER_USA-SERVER1	/u01/app/oracle/product/asm/11.1/bin/tnslsnr
----------------------	--



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Running Instances (pl)

```
function pl {
local L
echo
echo "Database Instances          Oracle Home"
echo "===== "
for L in $(ps -e o command | grep pmon | grep -v grep | cut -d '_' -f 3 | sort); do
    local VAR=$(grep ^${L%$RAC_NODE}: /etc/oratab | cut -d ':' -f 2)
    [ "${L:0:4}" = "+ASM" ] && VAR=$(grep ^${L}: /etc/oratab | cut -d ':' -f 2)
    VAR=${VAR:-"NA"}
    echo "$L $VAR" | awk '{printf "%-30s%s\n", $1,$2}'
done
echo
echo "Listeners Running          Oracle Home"
echo "===== "
ps -e o command | grep tns | grep -v grep | awk '{printf "%-30s%s\n", $2,$1}'
echo
```

Database Instances

```
+ASM1
ORCL A1
ORCL C1
ORCL D1
ORCL E1
ORCL F1
ORCL G1
ORCL H1
ORCL I1
ORCL J1
ORCL K1
ORCL L1
```

Oracle Home

```
/u01/app/oracle/product/asm/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
/u01/app/oracle/product/db/11.1
```

Listeners Running

```
LISTENER_USA-SERVER1
```

Oracle Home

```
/u01/app/oracle/product/asm/11.1/bin/tnslsnr
```



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Instance Chooser (db)

- | | | | | |
|----------|-----------|-----------|-----------|------------------|
| 1) ORCLA | 6) ORCLF | 11) ORCLK | 16) ORCLP | 21) ORCLU |
| 2) ORCLB | 7) ORCLG | 12) ORCLL | 17) ORCLQ | 22) ORCLV |
| 3) ORCLC | 8) ORCLH | 13) ORCLM | 18) ORCLR | 23) ORCLW |
| 4) ORCLD | 9) ORCLI | 14) ORCLN | 19) ORCLS | 24) ORCLX |
| 5) ORCLE | 10) ORCLJ | 15) ORCLO | 20) ORCLT | 25) Manual Input |

What would you like to set your ORACLE_SID parameter to?

```
ORACLE_HOME=/u01/app/oracle/product/db/11.1
```

```
ORACLE_SID=ORCL
```

```
~
```

```
oracle@usa-server1: pts/1: 10 files 240kb ->
```



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Other Environments

asm

```
ORACLE_HOME=/u01/app/oracle/product/asm/11.1
ORACLE_SID=+ASM1
~
oracle@usa-server1: pts/1: 10 files 240Kb ->
```

crs

```
ORACLE_HOME=/u01/app/crs
ORACLE_SID=crs/grid
~
oracle@usa-server1: pts/1: 10 files 240Kb ->
```

agt

```
ORACLE_HOME=/u01/app/oracle/product/agent12c
ORACLE_SID=agent
~
oracle@usa-server1: pts/1: 10 files 240Kb ->
```



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Crs_stat

NAME=ora.usa-server1.ASM1.asm
TYPE=application
TARGET=ONLINE
STATE=ONLINE on usa-server1

NAME=ora.usa-server1.LISTENER_USA-SERVER1.1snr
TYPE=application
TARGET=ONLINE
STATE=ONLINE on usa-server1

NAME=ora.usa-server1.vip
TYPE=application
TARGET=ONLINE
STATE=ONLINE on usa-server1



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Crsstat

ora.ORCL.ORCL1.inst	OFFLINE	OFFLINE
ora.ORCL.ORCL2.inst	OFFLINE	OFFLINE
ora.ORCL.db	OFFLINE	OFFLINE
ora.usa-server1.ASM1.asm	ONLINE	ONLINE on usa-server1
ora.usa-server1.LISTENER_USA-SERVER1.lsnr	ONLINE	ONLINE on usa-server1
ora.usa-server1.gsd	ONLINE	ONLINE on usa-server1
ora.usa-server1.ons	ONLINE	ONLINE on usa-server1
ora.usa-server1.vip	ONLINE	ONLINE on usa-server1
ora.usa-server2.ASM2.asm	ONLINE	ONLINE on usa-server2
ora.usa-server2.LISTENER_USA-SERVER2.lsnr	ONLINE	ONLINE on usa-server2
ora.usa-server2.gsd	ONLINE	ONLINE on usa-server2
ora.usa-server2.ons	ONLINE	ONLINE on usa-server2
ora.usa-server2.vip	ONLINE	ONLINE on usa-server2



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Watch

watch crsstat

Every 2.0s: crsstat ORCL

Sun Sep 9 02:37:00 2012

HA Resource

ora.ORCL.ORCL1.inst

ora.ORCL.ORCL2.inst

ora.ORCL.db

Target

OFFLINE

OFFLINE

OFFLINE

State

OFFLINE

OFFLINE

OFFLINE



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Multi-line crs_stat (crsm)

Target HA Resource	State/Location -----	Target HA Resource	State/Location -----	Target HA Resource	State/Location -----
ORCLA.ORCLA1.inst	XX usa-server1	ORCLG.db	--	ORCLV.ORCLV1.inst	--
ORCLA.ORCLA1.inst	--	ORCLH.ORCLH1.inst	--	ORCLV.db	XX usa-server1
ORCLA.orclaha.sjm.com.ORCLA1.s	XX usa-server1	ORCLH.ORCLH1.inst	--	ORCLW.ORCLW1.inst	XX usa-server1
ORCLA.orclaha.sjm.com.cs	XX usa-server1	ORCLH.db	--	ORCLW.ORCLW1.inst	--
ORCLA.db	XX usa-server1	ORCLI.ORCLI1.inst	--	ORCLW.db	XX usa-server1
ORCLB.ORCLB1.inst	XX usa-server1	ORCLI.ORCLI1.inst	--	ORCLW.orclwha.sjm.com.ORCLW1.s	XX usa-server1
ORCLB.ORCLB1.inst	--	ORCLI.db	--	ORCLW.orclwha.sjm.com.cs	XX usa-server1
ORCLB.orclbha.sjm.com.ORCLB1.s	XX usa-server1	ORCLJ.ORCLJ1.inst	--	ORCLX.ORCLX1.inst	XX usa-server1
ORCLB.orclbha.sjm.com.cs	XX usa-server1	ORCLJ.ORCLJ1.inst	--	ORCLX.ORCLX1.inst	--
ORCLB.db	XX usa-server1	ORCLJ.db	--	ORCLX.db	XX usa-server1
ORCLC.ORCLC1.inst	XX usa-server1	ORCLK.ORCLK1.inst	--	ORCLY.ORCLY1.inst	XX usa-server1
ORCLC.ORCLC1.inst	--	ORCLK.ORCLK1.inst	--	ORCLY.ORCLY1.inst	--
ORCLC.orclcha.sjm.com.ORCLC1.s	XX usa-server1	ORCLK.db	--	ORCLY.db	XX usa-server1
ORCLC.orclcha.sjm.com.cs	XX usa-server1	ORCLL.ORCLL1.inst	--	ORCLY.orclyha.sjm.com.ORCLY1.s	XX usa-server1
ORCLC.db	XX usa-server1	ORCLL.ORCLL1.inst	--	ORCLY.orclyha.sjm.com.cs	XX usa-server1
ORCLD.ORCLD1.inst	--	ORCLL.db	--	ORCLZ.ORCLZ1.inst	XX usa-server1
ORCLD.ORCLD1.inst	--	ORCLM.ORCLM1.inst	--	ORCLZ.ORCLZ1.inst	--
ORCLD.orcldha.sjm.com.ORCLD1.s	--	ORCLM.ORCLM1.inst	--	ORCLZ.db	XX usa-server1
ORCLD.orcldha.sjm.com.cs	--	ORCLM.db	--	ORCLZZ.ORCLZZ1.inst	--
ORCLD.db	--	ORCLN.ORCLN1.inst	--	ORCLZZ.ORCLZZ1.inst	--
ORCLE.ORCLE1.inst	XX usa-server1	ORCLN.ORCLN1.inst	--	ORCLZZ.db	--
ORCLE.ORCLE1.inst	--	ORCLN.db	--	usa-server1.ASM1.asm	XX usa-server1
ORCLE.orcleha.sjm.com.ORCLE1.s	XX usa-server1	ORCLO.ORCLO1.inst	--	usa-server1.LISTENER_USA-SERVER	XX usa-server1
ORCLE.orcleha.sjm.com.cs	XX usa-server1	ORCLO.ORCLO1.inst	--	usa-server1.gsd	XX usa-server1
ORCLE.db	XX usa-server1	ORCLO.db	--	usa-server1.ons	XX usa-server1
ORCLF.ORCLF1.inst	XX usa-server1	ORCLP.ORCLP1.inst	--	usa-server1.vip	XX usa-server1
ORCLF.ORCLF1.inst	--	ORCLP.ORCLP1.inst	--	usa-server2.ASM2.asm	--
ORCLF.orclfha.sjm.com.ORCLF1.s	XX usa-server1	ORCLP.db	--	usa-server2.LISTENER_USA-SERVER	X-
ORCLF.orclfha.sjm.com.cs	XX usa-server1	ORCLQ.ORCLQ1.inst	XX usa-server1	usa-server2.gsd	X-
ORCLF.db	XX usa-server1	ORCLQ.ORCLQ1.inst	--	usa-server2.ons	X-
ORCLG.ORCLG1.inst	--	ORCLQ.db	XX usa-server1	usa-server2.vip	XX usa-server1
ORCLG.ORCLG1.inst	--	ORCLV.ORCLV1.inst	XX usa-server1		



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Rlwrap

- Gives capability to re-execute commands in sqlplus, asmcmd and rman
- Command history program similar to bash's history package
- Installable as RPM or compile from source
- Gives similar behavior to sqlplus in Windows
- Will run in Cygwin
- Very robust, but simple arrow up gives last command executed
- <http://sysdba.wordpress.com/2006/10/08/how-to-use-rlwrap-to-get-a-command-history-in-sqlplus/>
 - <http://goo.gl/EfGOI>
- <http://utopia.knoware.nl/~hlub/rlwrap/#rlwrap>
 - <http://goo.gl/YdJN5>



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Login.sql

```
SET SQLPROMPT "_USER'@'_CONNECT_IDENTIFIER > "  
set linesize 140  
set pagesize 100  
DEFINE _EDITOR=vi
```

```
SQLPATH=/home/smiller/scripts
```

```
SYS@ORCL1 >
```



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Upload Script

```
@echo off
```

```
set FILESPATH=C:\Users\smiller\Putty
set TRANSFERSSCRIPTS=%FILESPATH%\transferscripts
set TRANSFERPATH=%FILESPATH%\transfer
set PSCP_USER=smiller
set TARGET=%1
```

```
IF (%1)==() set usa-server1 usa-server2 usa-server3 usa-server4
```

```
for %%I in ( %TARGET% ) do (
echo.
echo Transferring files to %%I
echo.
```

```
%FILESPATH%\plink.exe %PSCP_USER%%I "mkdir -p ~/scripts"
```

```
%FILESPATH%\pscp.exe %TRANSFERPATH%\* %PSCP_USER%%I:
```

```
%FILESPATH%\pscp.exe %TRANSFERSSCRIPTS%\* %PSCP_USER%%I:scripts/
```

```
%FILESPATH%\plink.exe %PSCP_USER%%I "dos2unix ~/oracleprofile; dos2unix ~/sharedcode; dos2unix  
~/setoraclebash; dos2unix ~/scripts/*; chmod 755 ~/scripts/*; chmod 775 ~/setenvs.sh;"
echo. )
```

```
cpk.bat "usa-server1 usa-server2"
OR
cpk.bat
```



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Summary

Workstation Backup

Putty Login

Shared Key Authentication

Login Profiles

Custom Scripts

Rlwrap

Miscellaneous



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Thank You



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Seth Miller

smiller05@sjm.com

<http://sethmiller.org>