

GLIMPSE Project

**Development machine: Sun Ultra 80 with 2x450MHz, 1GB RAM,
1x36GB Internal Disk and 1x63GB External Disk**

1. Recommended Partitions

Disk 1 (Internal, 36GB):

1. swap	2048MB
2. /	1024MB
3. /var	4096MB
4. /usr	2048MB
5. /project	~ 16298MB
6. /rsch_oracle/home	8192MB
7. /rsch_oracle/mirror1	1024MB

Disk 2 (External, 73GB):

8. swap	2048MB
9. /rsch_oracle/db	~16322MB
10. /rsch_oracle/mirror2	1024MB
11. /opt	4096MB
12. /user	8192MB
13. /usr/local	2048Mbdtree .
14.	

Oracle software should be installed into the /rsch_oracle/home partition, and the database creation scripts should put to this partition too.

2. Kernel Parameters for Oracle

The following lines must be added into **/etc/system** file, and then reboot the machine.

- * The following parameters are being set to recommended value for
- * Oracle 8 Database server:

- * Please reference
- * Oracle8i Installation Guide for Sun Sparc Solaris 2.x.
- * Related Operation System Manual Page.
- *
- * SEMMNS - The number of semaphores in the system.
- * SEMMNI - The number of semaphore set identifiers in the system. SEMMNI
- * determines the number of semaphore sets that can be created at
- * any one time.
- * SEMMSL - The maximum number of semaphores that can be in one semaphore set.
- * Should be same size as maximum number of ORACLE processes.

- * In this case I am going to set the number to 8 as in 8 users.
- * SHMMIN - The minimum size (in bytes) of a single shared memory segment.
- * SHMMAX - The maximum size (in bytes) of a single shared memory segment.
- * SHMMNI - The number of shared memory identifiers.

```
set shmsys:shminfo_shmmax=4294967295
set shmsys:shminfo_shmmin=1
set shmsys:shminfo_shmmni=100
set shmsys:shminfo_shmseg=10
set semsys:seminfo_semmns=200
set semsys:seminfo_semmni=100
set semsys:seminfo_semmsl=400
set semsys:seminfo_semopm=100
set semsys:seminfo_semvmx=32767
```

3. Directory Structure for Oracle

Suppose the Oracle SID is **test**, if you want to use other SID name, you can replace **test** with the name you selected. The Oracle software should be installed into the **product** directory.

```

|-db-----|-lost+found
|          |-test
|
|-home----|-TT_DB
|          |-lost+found
|          |-roracle----|-admin---      |-ad hoc
|                                     |-arch
|                                     |-bdump
|                                     |-cdump
/rsch_oracle--|                                     |-test---|-create
|                                     |-network
|                                     |-pfile
|                                     |-script
|                                     |-udump
|                                     |-product-.....
|
|-mirror1-|-lost+found
|          |-test
|
|-mirror2-|-lost+found
|          |-test
```

4. Oracle Parameter file (inittest.ora)

```
db_name = test
db_domain = ifrc.mcw.edu (change this to fit your site)
instance_name = test

service_names = test.ifrc.mcw.edu (change this to fit your site)

control_files = ("/rsch_oracle/db/test/control00.ctl",
                 "/rsch_oracle/mirror1/test/control01.ctl",
                 "/rsch_oracle/mirror2/test/control02.ctl")

db_block_buffers = 8192
shared_pool_size = 52428800
large_pool_size = 70778880
java_pool_size = 20971520

log_checkpoint_interval = 10000
log_checkpoint_timeout = 1800
processes = 150

log_buffer = 163840

# audit_trail = false # if you want auditing
# timed_statistics = false # if you want timed statistics
# max_dump_file_size = 10000 # limit trace file size to 5M each

log_archive_start = false
log_archive_dest_1 = 'location=/rsch_oracle/home/oracle/admin/test/arch'
log_archive_format = '%t_%s.dbf'

# If using private rollback segments, place lines of the following
# form in each of your instance-specific init.ora files:

rollback_segments = (r01, r02, r03, r04, r05, r06)

# Global Naming -- enforce that a dblink has same name as the db it connects to
# global_names = false

# Uncomment the following line if you wish to enable the Oracle Trace product
# to trace server activity. This enables scheduling of server collections
# from the Oracle Enterprise Manager Console.
# Also, if the oracle_trace_collection_name parameter is non-null,
# every session will write to the named collection, as well as enabling you
# to schedule future collections from the console.
```

```
# oracle_trace_enable = true

# define directories to store trace and alert files
background_dump_dest = /rsch_oracle/home/oracle/admin/test/bdump
core_dump_dest = /rsch_oracle/home/oracle/admin/test/cdump
user_dump_dest = /rsch_oracle/home/oracle/admin/test/udump

db_block_size = 2048

#remote_login_passwordfile = exclusive

os_authent_prefix = ""

# Uncomment the following line when your listener is configured for SSL
# (listener.ora and sqlnet.ora)
mts_dispatchers = "(PROTOCOL=TCPS)(PRE=oracle.aurora.server.SGiopServer)"

mts_servers = 1
compatible = "8.1.0"
```

5. Shell Scripts for Database Creation (*create_test.sh*)

Login as oracle (rdba group group), copy **test.tar** (this file is under the ~glimpse/oracle directory) to **/rsch_oracle/home/oracle/admin directory and de-tar it**, and then go to **/rsch_oracle/home/oracle/admin/create** directory and run the shell script **create_test.sh**. After finished running this script, a up and running database will be created.

```
#!/bin/sh
ORACLE_SID=test
export ORACLE_SID
/rsch_oracle/home/oracle/product/8.1.5/install/test.sh
/rsch_oracle/home/oracle/product/8.1.5/install/test1.sh
/rsch_oracle/home/oracle/product/8.1.5/install/test2.sh
/rsch_oracle/home/oracle/product/8.1.5/install/sqlplus.sh
/rsch_oracle/home/oracle/product/8.1.5/install/sqlplus2.sh
/rsch_oracle/home/oracle/product/8.1.5/install/sqlplus1.sh
/rsch_oracle/home/oracle/product/8.1.5/install/java.sh
```

6. Configure Oracle TNS Listener and more

Follow Oracle installation instruction to configure the TNS listener and other stuff.

7. Create Oracle Tablespace and User

Go to the **/rsch_oracle/home/oracle/admin/script directory** and run the **user.sql** under Oracle DBA account, such as system.