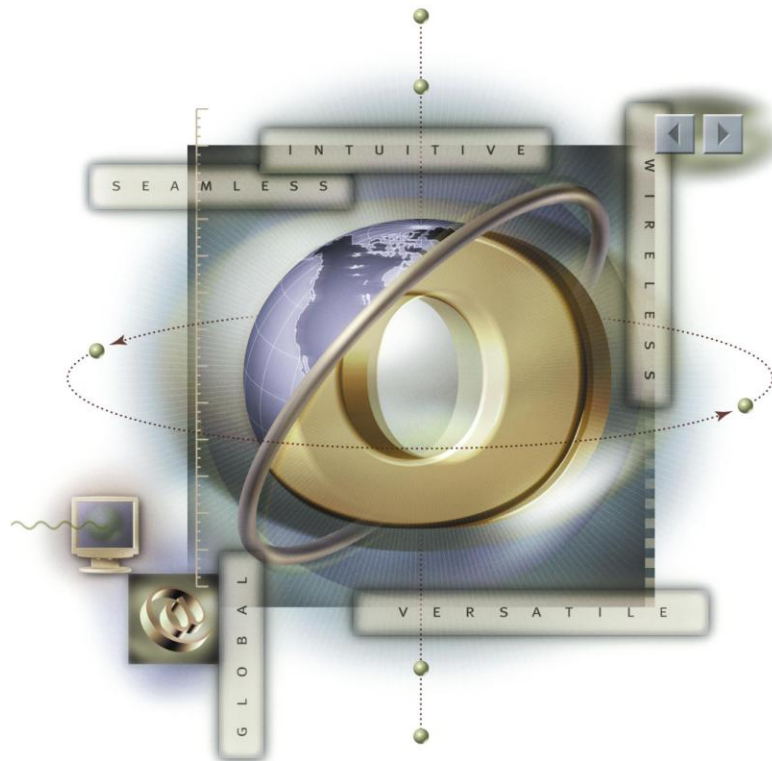


micros® | FIDELIO



# Opera Hotel Edition

*Opera Standard Database Installation  
for Windows*

*Version 5.0.1*



June 17, 2008

## *Copyright*

© 2008 MICROS Systems, Inc. All rights reserved. No part of this publication may be reproduced, photocopied, stored on a retrieval system, or transmitted without the express prior written consent of the publisher. MICROS Systems, Inc. retains the right to update or change the contents of this document without prior notice. MICROS Systems, Inc. assumes no responsibility for the contents of this document.

OPERA is a trademark of MICROS Systems, Inc.

*On Oracle* and the *On Oracle* logo are trademarks of Oracle Corporation.

Information in this document is subject to change without notice.

MICROS Systems, Inc. makes no warranty of any kind with regard to this material, including but not limited to the implied warranties of marketability and fitness for a particular purpose.

MICROS Systems, Inc. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Document Number:

*MICROS Systems, Inc.  
Fidelio Technologies Inc.  
2640 Golden Gate Parkway, Suite 211  
Naples, FL 34105  
Voice. (239) 643-7999 / Fax. (239) 643-7911*

# Table of Contents

**VERSION 5.0.1..... 1**

***COPYRIGHT*..... 2**

**INTRODUCTION..... 4**

**INTENDED AUDIENCE..... 4**

**DISK LAYOUT ..... 4**

**OPERA 5.0.1 DVD LAYOUT ..... 4**

**NEW OPERA 5.0.1 INSTALL..... 5**

**NEW OPERA 5.0.1 INSTALL – POST INSTALLATION STEPS ..... 11**

**Connection to database..... 11**

**Install Logs ..... 11**

**Initopera.ora Changes..... 11**

**Statspack..... 11**

**Archive log Mode ..... 12**

**Backups..... Error! Bookmark not defined.**

**NEW OPERA 5.0.1 INSTALL – INITOPERA.ORA ..... 12**

## Introduction

The purpose of this document is to provide Opera database standards and instructions necessary to perform a standard Oracle on Windows and Opera Installation for production. This version of the document describes the installation of Oracle 10.2.0.3 and Opera 5.0.1 on the Windows platform. Every reference to these two products in the document specifically refers to these versions. This document assumes that the installer has the experience necessary to configure the Windows (2000 or 2003) database server in accordance with these standards. If there is a wish or requirement to deviate from these standards, it becomes a custom installation and requires prior approval.

## Intended Audience

Micros Systems Installers tasked with installing Opera version 5.0.1. While an Oracle Database Administrator (DBA) is not necessarily required to perform a standard installation, a DBA (or equivalent) is required to customize.

## Disk Layout

The following is the required disk layout for an Opera 5.0.1 database installation on Windows.

It is HIGHLY recommended that RAID 1 or RAID 0+1 be used for all drives containing Opera database files.

The Opera 5.0.1 standard installation requires anywhere from one to seven logical drives (C, D, G-K), depending on what is available. The E drive is assumed to be the CD-ROM. There are six installation options based on how the disk drives and drive letters are laid out. The following are the minimum required sizing for installation only, this is not production sizing. The following is the amount of Free space the drives should have before installing Opera.

Installation options:

1. C(4GB), D(4GB), G(4GB), H(4GB), I(4GB), J(4GB), K(4GB)
2. C(4GB), D(4GB), G(4GB), H(8GB), I(8GB)
3. C(4GB), D(8GB), G(8GB), H(8GB)
4. C(4GB), D(12GB), G(12GB)
5. C(4GB), D(24GB)
6. C(28GB)

NOTE: If these minimum sizing requirements are not provided the installation will not proceed.

## Opera 5.0.1 DVD Layout

1. DVD 1 – Application Server and OperaInstallation.exe
2. DVD 2 – Database Media for 64Bit (x64) platform
3. DVD 3 – Database Media for 32Bit (x86) platform

## New Opera 5.0.1 Install

1. Insert the Opera 5.0.1 installation DVD 1 into the drive. Select START / RUN and enter E:\OperaInstallation.exe. The following screen should appear.

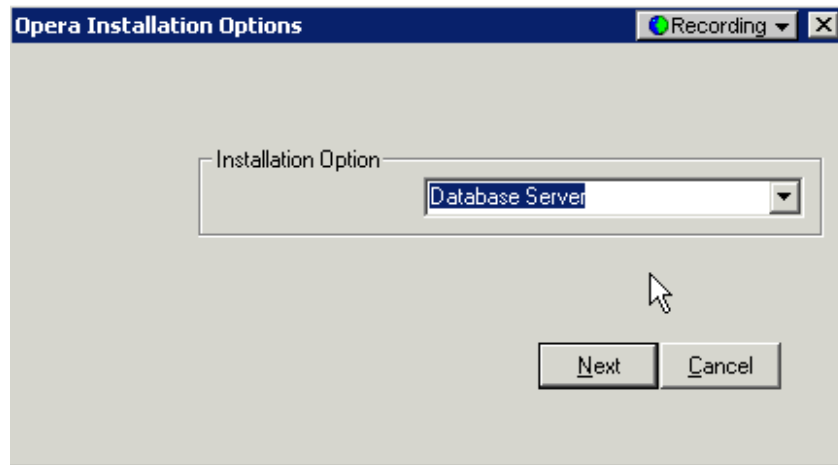


Figure 1 – Opera installation Options

2. Select Database server Click Next. Depending on the Operating system installation media will prompt for the appropriate DVD. For installing on 64Bit (x64) Operating system below screen will be shown (for x32 please use DVD labeled 3).

Click OK after replacing the DVD based on the Label and Click OK.

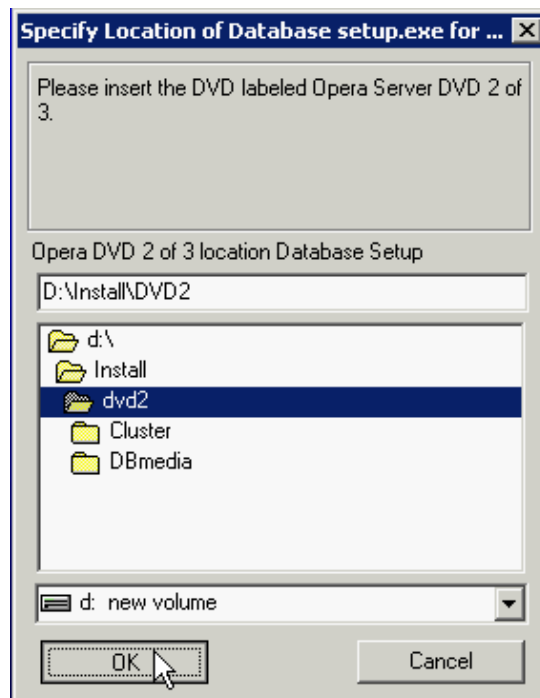


Figure 2 – Prompt for DVD Media

Opera Standard Database Installation for Windows

- Installation media will show below welcome screen. Click Next

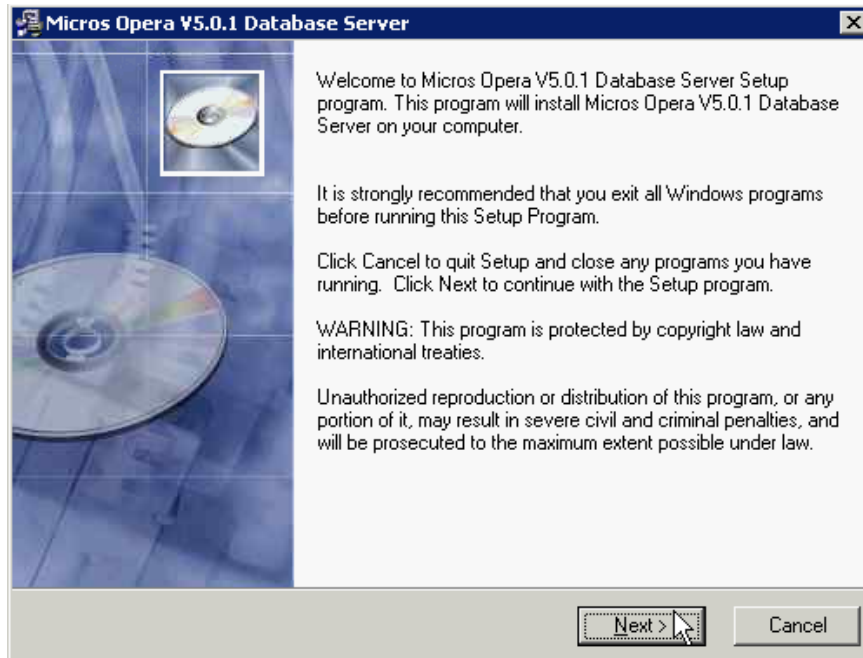


Figure 3 – Welcome screen

- Media will look for D Drive by Default and if D Drive does not have enough disk space then the Media will show below additional screens

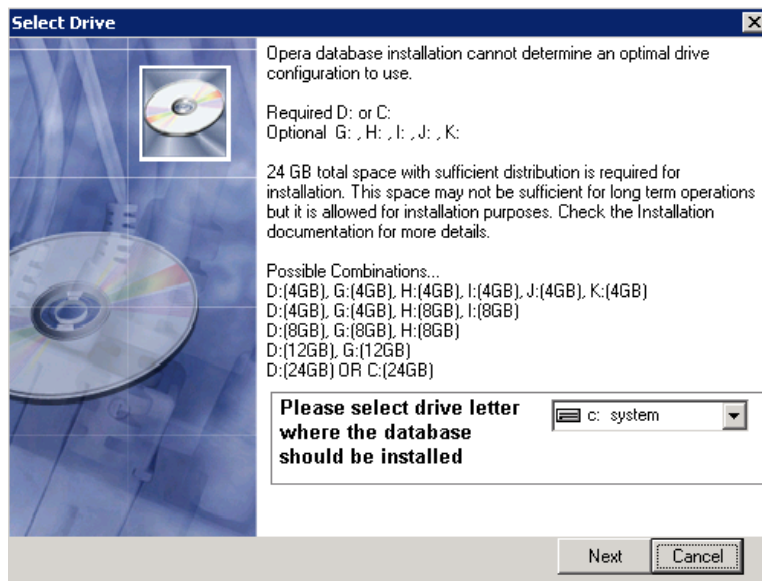
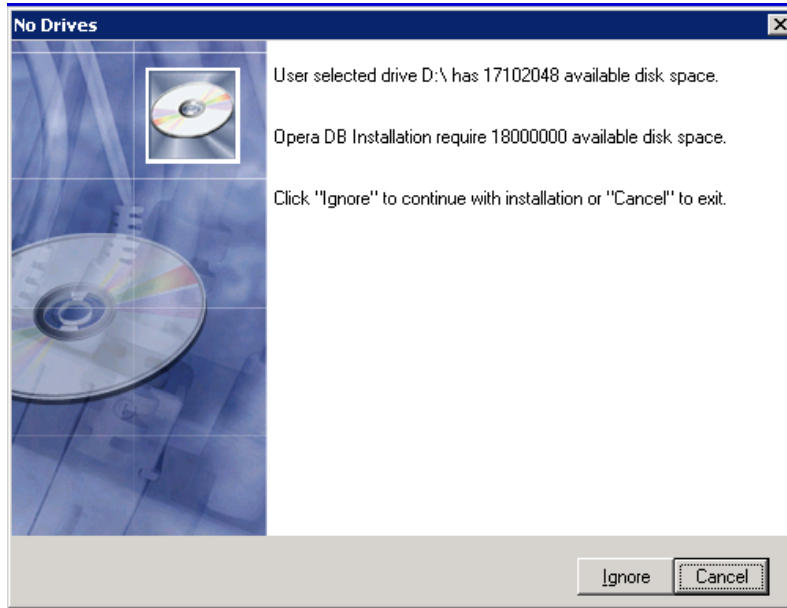


Figure 4 – Disk Configuration

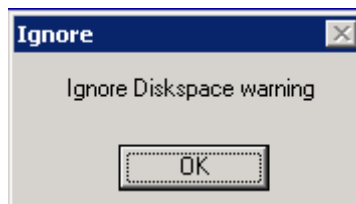
Opera Standard Database Installation for Windows

---

5. If User selected Drive is low on Disk space, installer will prompt with below screen giving the ability for the installer to "Ignore" the disk space. Use caution when selecting Ignore as there is a great possibility that the installer will fail during installation.



6. Install will have the option to cancel the install at this time. Additional screen will popup if user selected Ignore for Disk space warning.



7. Disk drive layout. Carefully review the selected drives for installation and that they are the desired layout for this install. Click Next if correct. Click Cancel if changes to the drive layout are required for install.

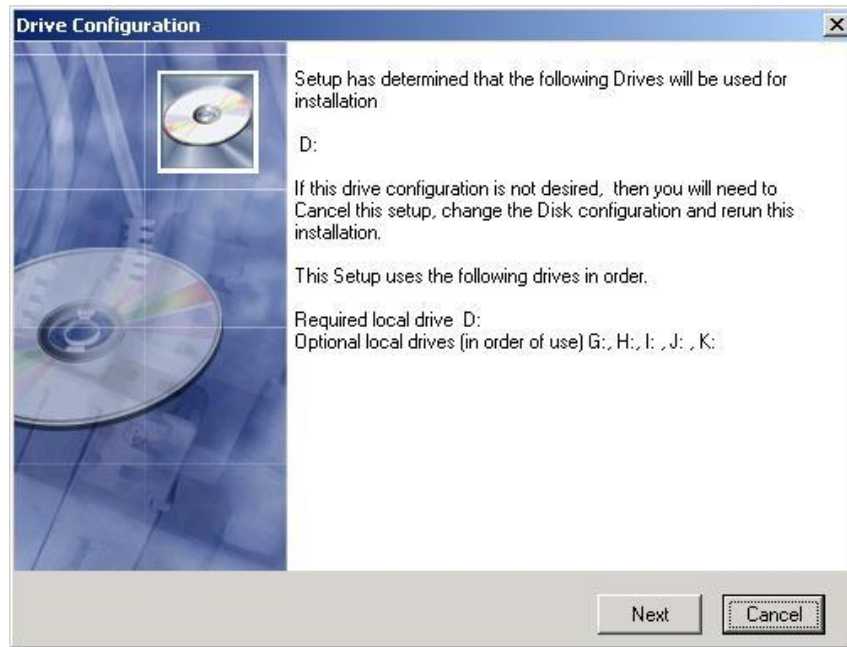


Figure 4.a - Disk Drive Information for installing on D only

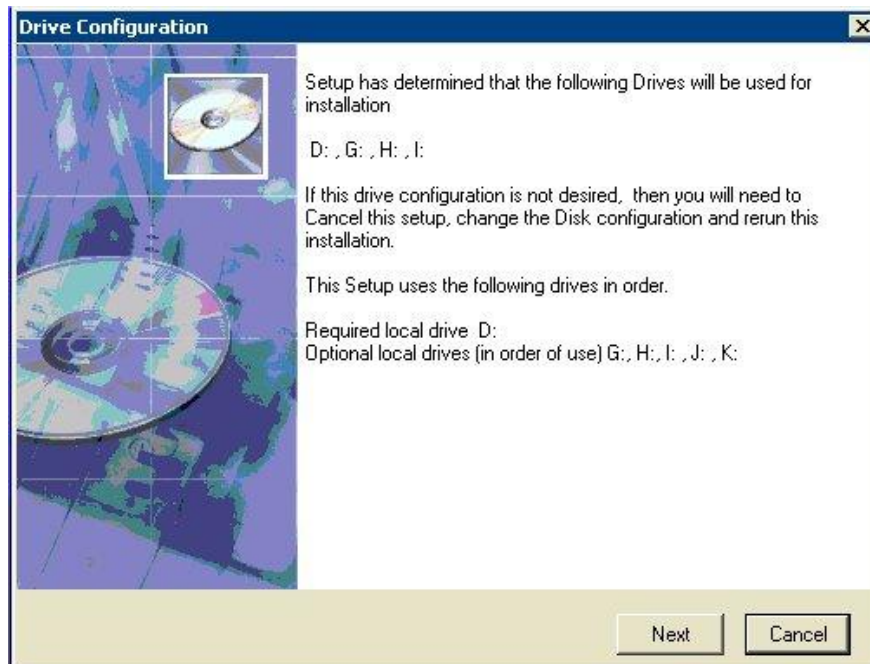


Figure 4.b - Disk Drive Information for installing on D,G,H,I



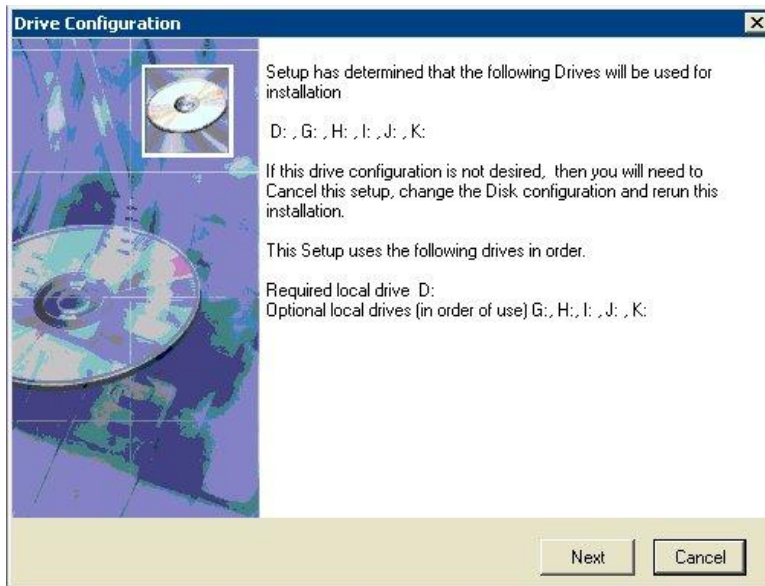


Figure 4.c - Disk Drive Information for installing on D,G,H,I,J,K

8. Install summary. For a fresh install of Oracle and Opera 5.0.1, the following screen appears to display that a fresh install of Oracle 10.2.0.1 will be installed and the Opera 5.0.1 database will be installed. Click Install.



Figure 5 - Oracle 10g Software install and Opera 5.0.1 Database

**NOTE:** There are multiple possible combinations of the Install Database Screen, so read the selections carefully.

9. Oracle Universal Installing screen.

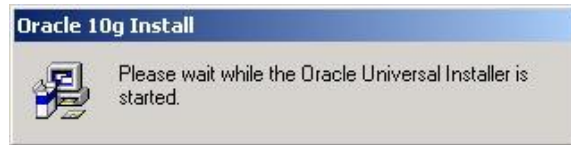


Figure 6. – Oracle Universal Installer starting

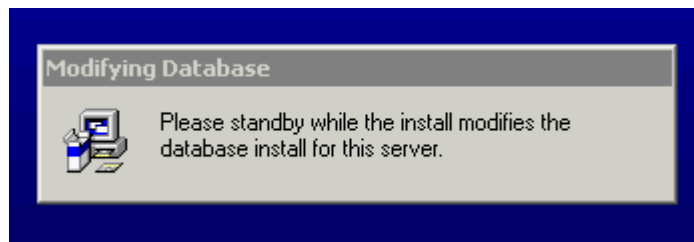


Figure 7. – Modifying Database

10. Click Finish.

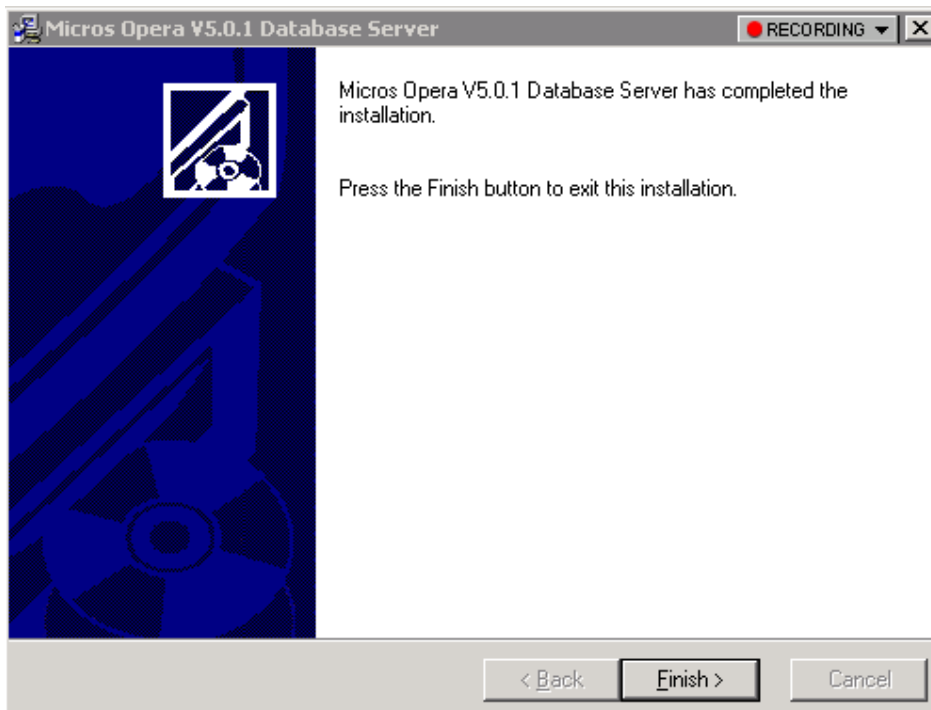


Figure 8 - Installation Finished.

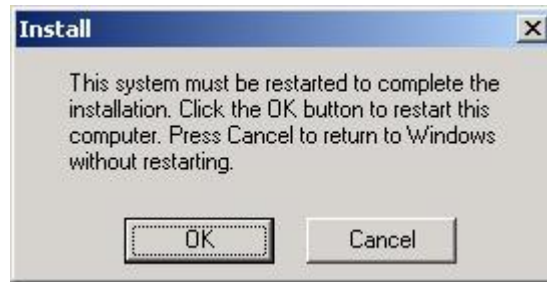


Figure 9 - Click OK to exit and reboot

Click Ok, to reboot the database server now. Click Cancel, to reboot the database server later. The database server must be rebooted to complete the installation.

## New Opera 5.0.1 Install – Post Installation Steps

Review the following notes to customize the database parameters and then reboot the database server.

### **Connection to database**

**Note:** svrmgrl is gone in Oracle 10.2 and higher. Only sqlplus is available. The old connect internal syntax is now connecting as sysdba, use the following syntax:

```
sqlplus "sys as sysdba"
Enter password:
shutdown immediate;
startup;
```

### **Install Logs**

**Note:** Installation logs are located in the system tmp directory, if there is no tmp directory it will write to the temp directory. Right click my computer, properties, advanced tab, environment variables to find the tmp location. Example: c:\temp\opera40\DatabaseInstall.log and CopyDBfiles\_Install.log.

### **Initopera.ora Changes**

Even standard installations require some manual steps to be completed. The installer is responsible for adjusting the size of the SGA as needed (initopera.ora).

To adjust the size of the SGA, edit the d:\oracle\admin\opera\pfile\initopera.ora file. Go to the end of the file. Select SMALL, MEDIUM, or LARGE by uncommenting (i.e remove `#` in front of shared\_pool\_size and db\_cache\_size) the two parameter values associated with the size of installation and commenting out (i.e. insert `#` in front of shared\_pool\_size and db\_cache\_size) the two parameter values associated with 'FOR INSTALLATION ONLY!!! CHANGE\_ON\_INSTALL!!!'. The installer must shutdown and restart the instance i.e. shutdown immediate; startup.

### **Statspack**

**Note:** statspack is not needed in Oracle version 10.2 and higher. AWR repositories can be used instead. This is a feature that is turned on by default and users must run AWRRPT.SQL (AWRRPTI.SQL for RAC) located in d:\oracle\1020\rdbms\admin folder.

### **Archive log Mode**

**Note:** The database is not in ARCHIVELOG MODE.

Enable archive log mode:

1. Shut down the database.
2. Set the LOG\_ARCHIVE\_START parameter to true.
3. Set the LOG\_ARCHIVE\_FORMAT=%%ORACLE\_SID%%T%TS%S.ARC
4. Set the LOG\_ARCHIVE\_DEST\_1 parameter in the parameter file as follows:

```
log_archive_dest_1="location=d:\oracle\admin\opera\archive"
```

6. Mount the database in exclusive mode.

```
Sqlplus "sys as sysdba"
Enter password:
SQL> startup mount exclusive
```

7. Set the database in ARCHIVELOG mode :

```
SQL> ALTER DATABASE ARCHIVELOG;
```

8. Open the database:

```
SQL> ALTER DATABASE OPEN;
```

### **Backups**

The installer is also responsible for informing the site about what files are needed for setting up backups, purging log files, purging archive logs, and other miscellaneous database-related functions.

For a simple cold backup, a list of files to be backed up can be retrieved from the database using the following query.

```
select member from v$logfile
union all
select file_name from dba_data_files
union all
select value from v$parameter where name like '%control_files'
union all
select value from v$parameter where name = 'file';
```

Additional and more detailed backup solutions should be available from regional technical resources.

## New Opera 5.0.1 Install – Initopera.ora

```
#####
# Copyright (c) 1991, 2001, 2002 by Oracle Corporation
#
```

## Opera Standard Database Installation for Windows

---

```
#####  
  
#####  
# Cache and I/O  
#####  
db_block_size=8192  
db_file_multiblock_read_count=16  
  
#####  
# Cursors and Library Cache  
#####  
open_cursors=800  
  
#####  
# Archive  
#####  
#log_archive_dest_1 = "location=D:\oracle\admin\oracle\archive mandatory REOPEN=120"  
#log_archive_format = %%ORACLE_SID%%T_%%TS%S%%R.ARC  
  
#####  
# Database Identification  
#####  
db_domain=""  
db_name=opera  
  
#####  
# Diagnostics and Statistics  
#####  
background_dump_dest=D:\oracle\admin\opera\bdump  
core_dump_dest=D:\oracle\admin\opera\cdump  
max_dump_file_size=4096  
user_dump_dest=D:\oracle\admin\opera\udump  
  
#####  
# File Configuration  
#####  
control_files=("d:\oracle\oradata\opera\control01.ctl", "g:\oracle\oradata\opera\control02.ctl")  
  
#####  
# Job Queues  
#####  
job_queue_processes=16  
  
#####  
# Miscellaneous  
#####  
aq_tm_processes=1  
compatible=10.2.0.1  
remote_dependencies_mode=SIGNATURE  
#####  
# Optimizer  
#####  
optimizer_mode=FIRST_ROWS_10  
optimizer_index_caching=20  
optimizer_index_cost_adj=20  
cursor_sharing=exact  
query_rewrite_enabled=TRUE  
star_transformation_enabled=FALSE  
#####  
# Pools  
#####  
java_pool_size=40960000  
  
#####  
# Processes and Sessions
```

## Opera Standard Database Installation for Windows

---

```
#####
java_max_sessionspace_size=40960000
java_soft_sessionspace_limit=30720000
processes=512

#####
# Redo Log and Recovery
#####
log_buffer=1024000

#####
# SGA Memory
#####
#sga_target=167772160

#####
# Security and Auditing
#####
remote_login_passwordfile=EXCLUSIVE

#####
# Shared Server
#####
dispatchers="(protocol=TCP)"
shared_servers=0

#####
# Sort, Hash Joins, Bitmap Indexes
#####

#####
# System Managed Undo and Rollback Segments
#####
undo_management=AUTO
undo_tablespace=UNDOTBS1

#####
# KGL Heap Size Threshold
#####
_kgl_large_heap_warning_threshold=20480000

#####
# PL/SQL
#####
utl_file_dir = *

#####
# Memory for Opera
#####

#SMALL          (< 2G of Memory)
#Shared_pool_size = 131072000
#db_cache_size = 128m
#pga_aggregate_target=256m

#MEDIUM        (2-3G of Memory)
#Shared_pool_size = 196608000
#db_cache_size = 256m
#pga_aggregate_target=512m

#LARGE / CUSTOM (3GB+ of Memory)
Shared_pool_size = 262144000
db_cache_size = 512m
pga_aggregate_target=512m
```