Best Practices for Storing the ArcGIS® Data Reviewer Workspace in an Enterprise Geodatabase for Oracle®



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Best Practices for Storing the ArcGIS Data Reviewer Workspace in an Enterprise Geodatabase for Oracle

An Esri White Paper

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Best Practices for Storing the ArcGIS Data Reviewer Workspace in an Enterprise Geodatabase for Oracle

Introduction

ArcGIS® Data Reviewer, a data quality control management application, requires that you have a workspace defined when using a review session to store the anomalies found during your data review process. It creates a new feature dataset and tables in the geodatabase that you have identified as your Reviewer workspace. The feature dataset includes point, line, and polygon feature classes, which contain error geometries for the features that have been written to the Reviewer table. The Reviewer workspace can be stored in any existing geodatabase, including the production geodatabase, or a separate file or personal geodatabase created specifically for the data review process. When stored in an enterprise geodatabase, the Reviewer workspace supports versioning. This white paper is intended for database administrators to help them establish the ArcGIS Data Reviewer workspace in an enterprise geodatabase for Oracle®. The enterprise geodatabase uses ArcSDE® technology as the gateway between geographic information system (GIS) clients and Oracle.

SDE DBTUNE

DBTUNE storage parameters let you control how ArcSDE technology creates objects within an Oracle database. They allow you to determine things such as how to allocate space to a table or index and which tablespace a table or index is to be created in, as well as other Oracle-specific storage attributes. They also let you specify one of the available storage formats for the geometry of a spatial column.

The DBTUNE storage parameters are stored in the DBTUNE table. The DBTUNE table, along with all other metadata tables, is created during the setup phase that follows the installation of ArcSDE. ArcSDE installation creates a dbtune file under the etc directory from which the DBTUNE table is populated. If no dbtune file is present during setup, the DBTUNE table will be populated with default values.

If a large number of database connections are accessing the same files in the same location on disk, database performance will be slower because the connections are competing with one another for the same resources. To reduce this competition, you can store database files in different locations on disk.

Thus, DBTUNE can be modified to store the Reviewer feature dataset and tables into separate data files across different locations on disk. This will lead to reduced disk contention and improved database input/output (I/O).

Standard GIS storage recommendations favor keeping index and log files separate from vector and tabular business tables. For performance reasons, it is better to position the business, feature, and spatial index tables separately and to position tablespace data files based on their usage pattern. For a multiversioned, highly active editing geodatabase, database files of VERSIONS tablespace may be separated and dispersed across available disks to avoid I/O contention.

Disk Configuration

Large-production enterprise geodatabase systems should employ a hardware striping solution. The best strategies for disk and data organization involve spreading your data across multiple disks. With data spread across multiple disks, more spindles actively search for it. This can increase disk read time and decrease disk contention. However, too many disks can slow down a query. There are two main ways of achieving striping: tablespaces and redundant array of independent disks (RAID). You can also combine the two—create tablespaces within disk arrays. You can employ data segregation strategies; keeping tables from indexes or certain types of tables from other tables will improve performance and alleviate administrative burdens.

Suggested Oracle optimal configuration is as follows:

- DISK 0—Oracle/App Software DISK 0
- DISK 1—SYSTEM, Control File 1
- DISK 2—RBS, TEMP, Control File 2
- DISK 3—REDO 1,2,3, Export Files
- DISK 4—Feature Data Tables
- DISK 5—Spatial Index Data Tables
- DISK 6—Attribute Data/Business Tables
- DISK 7—Oracle Indexes

Reduce Disk I/O Contention

As a rule, you should create database files as large as possible, based on the maximum amount of data you estimate the database will contain, to accommodate future growth. By creating large files, you can avoid file fragmentation and get better database performance. In many cases, you can let data files grow automatically; just be sure to limit autoextend by specifying a maximum growth size that leaves some hard disk space available. By putting different tablespaces on different disks, you can also help eliminate physical fragmentation of your files as they grow.

Below is a suggested design to reduce disk I/O contention:

File Type	Database Activity	Move File to Disk With
Redo log	Frequent edits	Relatively low I/O
Redo log	Few or no edits	Moderate I/O
Undo log files	Frequent edits	Low I/O but separate from redo log files
System data	Frequent edits	Moderate I/O
Temporary tablespace	Few edits	High I/O

Step 1: Data Files Create new tablespaces to store the Reviewer feature dataset and tables.

```
TABLESPACE
                                  SDE PARAMETER
                                  Business table
REV BINDEX
                                  Business table index
REV_FDATA
                                  Feature table
REV_FINDEX
                                  Feature table index
REV SDATA
                                  Spatial Index table
REV_SINDEX
                                  Spatial Index table index
REV ADATA
                                  Adds table (versioned)
REV_AINDEX
                                  Adds table index
REW DDATA
                                  Deletes table (versioned)
                                  Deletes table index
REV_DINDEX
CREATE SMALLFILE TABLESPACE "REV_BDATA"
DATA FILE 'D:\oracle\ORADATA\REV\rev_Bdata01.dbf'SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_BINDEX"

DATA FILE 'D:\oracle\ORADATA\REV\rev_Bindex01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_FDATA"
DATA FILE 'D:\oracle\ORADATA\REV\rev_FDATA01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_FINDEX"
DATA FILE 'D:\oracle\ORADATA\REV\rev_FINDEX01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV SDATA"
DATA FILE 'D:\oracle\ORADATA\REV\rev_Sdata01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_SINDEX"

DATA FILE 'D:\oracle\ORADATA\REV\rev_Sindex01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_ADATA"
DATA FILE 'D:\oracle\ORADATA\REV\rev_Adata01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV AINDEX"
                 'D:\oracle\ORADATA\REV\rev_Aindex01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_DDATA"
DATAFILE 'D:\oracle\ORADATA\REV\rev_Ddata01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 400M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K SEGMENT SPACE MANAGEMENT AUTO;
CREATE SMALLFILE TABLESPACE "REV_DINDEX"
DATAFILE 'D:\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\oracle\ora
```

Step 2: REV User

Create a new database user to store the Reviewer feature dataset and tables and grant the appropriate permissions.

```
CREATE USER REV PROFILE DEFAULT IDENTIFIED BY rev

DEFAULT TABLESPACE "REV_BDATA"

TEMPORARY TABLESPACE "TEMP"

QUOTA UNLIMITED ON "REV_BDATA"

QUOTA UNLIMITED ON "REV_BINDEX"

QUOTA UNLIMITED ON "REV_FINDEX"

QUOTA UNLIMITED ON "REV_FINDEX"

QUOTA UNLIMITED ON "REV_SDATA"

QUOTA UNLIMITED ON "REV_SDATA"

QUOTA UNLIMITED ON "REV_SINDEX"

QUOTA UNLIMITED ON "REV_ADATA"

QUOTA UNLIMITED ON "REV_AINDEX"

QUOTA UNLIMITED ON "REV_AINDEX"

QUOTA UNLIMITED ON "REV_AINDEX"

QUOTA UNLIMITED ON "REV_DDATA"

QUOTA UNLIMITED ON "REV_DDATA"

QUOTA UNLIMITED ON "REV_DDATA"

QUOTA UNLIMITED ON "REV_DDATA"

GRANT CREATE SESSION TO REV;

GRANT CREATE TRIGGER TO REV;

GRANT CREATE TRIGGER TO REV;

GRANT CREATE TRIGGER TO REV;

GRANT CREATE VIEW TO REV;
```

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Step 3: Modify DBTUNE

Export the dbtune file before making any modification.

```
sdedbtune -o export -f dbtune_exp.sde -u sde -p sde -i 5151
```

Copy dbtune_exp.sde to dbtune_rev.sde.

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Create a new DBTUNE keyword following the steps below:

Copy the ##DEFAULTS keyword and paste it at the end of the file named dbtune_rev.sde.

Rename it ##REVIEWER and change the tablespace name for the appropriate parameters.

```
dbtune_rev.sde
##REVIEWER
A_INDEX_RASTER
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_AINDEX NOLOGGING
A_INDEX_XML "PCTFREE 0 INITRANS 4 TABLESPACE REV_AINDEX NOLOGGING"

D_INDEX_STATE ROWID "PCTFREE 0 INITRANS 4 TABLESPACE REV_DINDEX STORAGE (INITIAL 409600) NOLOGGING"

D_INDEX_DELETED_AT "PCTFREE 0 INITRANS 4 TABLESPACE REV_DINDEX STORAGE (INITIAL 409600) NOLOGGING"

B_STORAGE "PCTFREE 0 INITRANS 4 TABLESPACE REV_BDATA STORAGE (INITIAL 409600) "
B_INDEX_XML
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_BINDEX NOLOGGING"
B INDEX USER
                            "PCTFREE 0 INITRANS 4 TABLESPACE REV BINDEX STORAGE (INITIAL 409600) NOLOGGING"
B_INDEX_TO_DATE
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_BINDEX NOLOGGING
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_BINDEX NOLOGGING"
"PCTFREE 0 INITRANS 4 TABLESPACE REV_BINDEX STORAGE (INITIAL 409600) NOLOGGING"
B INDEX SHAPE
B_INDEX_ROWID
B_INDEX_RASTER
                           "PCTFREE 0 INITRANS 4 TABLE PACE REV_BINDEX NOLOGGING"
GEOMETRY_STORAGE
                            "ST GEOMETRY"
F_STORAGE
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_FDATA
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_FINDEX NOLOGGING"
"PCTFREE 0 INITRANS 4 TABLESPACE REV_FINDEX NOLOGGING"
F_INDEX_LEN
F INDEX FID
                                                          TABLESPACE REV_FINDEX NOLOGGING
F_INDEX_AREA
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_FINDEX NOLOGGING"
"PCTFREE 0 INITRANS 4 TABLESPACE REV_DDATA STORAGE (INITIAL 409600)
D STORAGE
ST_GEOM_LOB_STORAGE "STORE AS (TABLESPACE REV_FDATA ENABLE STORAGE IN ROW CHUNK 8K RETENTION CACHE
                           INDEX (TABLESPACE REV FINDEX) )
                             PCTFREE 0 INITRANS 4 TABLESPACE REV_SDATA STORAGE (INITIAL 409600)
S_INDEX_SP_FID
S_INDEX_ALL
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_SINDEX NOLOGGING"
"PCTFREE 0 INITRANS 4 TABLESPACE REV_SINDEX STORAGE (INITIAL 409600) NOLOGGING"
A_STORAGE
A_INDEX_USER
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_ADATA STORAGE (INITIAL 409600) "
"PCTFREE 0 INITRANS 4 TABLESPACE REV_AINDEX STORAGE (INITIAL 409600) NOLOGGING"
A_INDEX_ROWID
                           "PCTFREE 0 INITRANS 4
                                                          TABLESPACE REV_AINDEX STORAGE
                                                                                                   (INITIAL 409600)
                                                                                                                          NOLOGGING"
A INDEX SHAPE
                            "PCTFREE 0 INITRANS 4 TABLESPACE REV AINDEX STORAGE
                                                                                                   (INITIAL 409600) NOLOGGING'
A_INDEX_STATEID
                           "PCTFREE 0 INITRANS 4 TABLESPACE REV_AINDEX STORAGE (INITIAL 409600) NOLOGGING
```

Import the modified *dbtune_rev.sde* file.

```
sdedbtune -o import -f dbtune_rev.sde -u sde -p sde -i 5151
```

Step 4: Reviewer Workspace

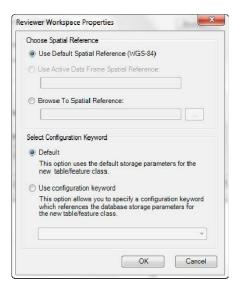
Create a database connection in $ArcCatalog^{TM}$ with the REV user; this will be the Reviewer workspace location.

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In ArcMap[™], click the Reviewer Session Manager button on the Data Reviewer toolbar.

- Browse to the Reviewer workspace location.
- Navigate to the database connection created in ArcCatalog.
- Click New to start a new Reviewer session.

The Reviewer Workspace Properties dialog box appears.



Reviewer Workspace Properties

Choose the custom spatial reference.

When you click Browse To Spatial Reference, the New Spatial Reference wizard appears and allows you to choose the spatial reference you want to use with the Reviewer feature dataset.

■ Choose the configuration keyword.

You can use the default configuration keyword or select the ##REVIEWER configuration keyword created in step 3.

Click OK.

This automatically creates the Reviewer feature dataset and tables.

- The ID and Name fields are automatically populated in the Session area.
- If necessary, type a custom name for the current Reviewer session in the Name text box.

By default, the name matches the ID.

- If you are working with an enterprise database, click the Reviewer Dataset Version drop-down arrow and choose the version to be used.
- Click Start Session.

The button appears to be selected, and its name changes to End Session.

Click Close.

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Step 5: Set the Feature Dataset and Tables as Versioned

After the new session is created, the REV user must register the following as versioned in ArcCatalog:

- RevDataset (feature dataset)
- RevBatchJobSummary table
- RevTableConfig table
- RevTableLocation table
- RevTableMain table
- RevCheckRunTable

Step 6: Verify Storage

Run the SQL queries below to verify that the Reviewer workspace was created under the correct tablespaces:

```
sqlplus rev/rev@rev

--TABLES--
SELECT TABLE_NAME, TABLESPACE_NAME, STATUS FROM USER_TABLES ORDER BY 1;
--INDEXES--
SELECT INDEX_NAME, TABLE_NAME, TABLESPACE_NAME, STATUS FROM USER_INDEXES ORDER BY 2,1;
--LOBS--
SELECT * FROM USER_LOBS WHERE SEGMENT_NAME LIKE 'SYS_LOB%' ORDER BY TABLE_NAME;
```

If any tables or indexes are stored in the wrong tablespace, then ALTER TABLE and ALTER INDEX can be used to change the tablespace. See the SQL syntax.

```
ALTER TABLE <table_name> MOVE TABLESPACE <tablespace_name>;
ALTER INDEX <index_name> REBUILD TABLESPACE <tablespace_name>;
```

If moving large objects (LOB), please read Oracle MetaLink Doc ID: 130814.1, "How to move LOB Data to Another Tablespace."

Step 7: Permissions and Roles

Grant permissions to the REV tables through Oracle roles using the script below:

```
SET SERVEROUTPUT ON;

spool Roles_rev.sq1;
DROP ROLE "REVEDITOR";
CREATE ROLE "REVEDITOR" NOT IDENTIFIED;
DROP ROLE "REVVIEWER";
CREATE ROLE "REVVIEWER";
CREATE ROLE "REVVIEWER" NOT IDENTIFIED;
select 'grant select on ' ||owner|| '.' || table_name || ' to REVVIEWER;'
from sys.dba_tables where lower(owner) = 'rev' order by table_name;
select 'grant select,insert,update,delete on ' ||owner|| '.' || table_name || ' to REVEDITOR;'
from sys.dba_tables where lower(owner) = 'rev' order by table_name;
spool off;
SET SERVEROUTPUT ON;
//
@Roles_rev.sq1;
//
```

Then, simply grant the REVEDITOR role to ArcSDE editor users and the REVVIEWER role to ArcSDE viewer users.

Tips for Granting Permissions

Grant a user only select, update, insert, and delete privileges to the RevAdminCustomFields and RevAdminDescriptions tables if the user has privileges to modify the database schema and add customized error descriptions.

Step 8: Log File Tables

Enterprise geodatabases use log file tables to maintain lists of selected records. Records are written to log file tables for later use by the application whenever a selection of a specific size is made, a reconciliation or post on a versioned database is performed, or a disconnected editing checkout is done in a client application. The log file tables store the ObjectIDs of the selected features so they can be redisplayed. This allows faster analysis and processing of information.

In ArcGIS, by default, log file tables are used if the selection set contains 100 or more records. This selection threshold of 100 features is set in the registry. It can be changed; however, Esri does not recommend doing so. There is no proven performance reason for changing it, and doing so could even cause performance problems. Thus, log file tables store feature selections in ArcMap that are greater than 100 for each connected ArcSDE editor/viewer user. Hence, it is recommended to store the log file tables in a separate tablespace; this can be achieved with the DBTUNE table.

Log file options are set using specific parameters in the SERVER_CONFIG and DBTUNE tables. Parameters in these tables are altered using the sdeconfig and sdedbtune commands, respectively.

Create Log File Tablespaces

```
CREATE SMALLFILE TABLESPACE SDELOGFILE

DATA FILE 'D:\oracle\ORADATA\REV\SDE\sdelogfile01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE 800M
LOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 512K SEGMENT SPACE MANAGEMENT AUTO;

CREATE SMALLFILE TABLESPACE SDELOGFILEIDX

DATA FILE 'D:\oracle\ORADATA\REV\SDE\sdelogfileidx01.dbf' SIZE 10M AUTOEXTEND ON NEXT 1M MAXSIZE
400MLOGGING EXTENT MANAGEMENT LOCAL UNIFORM SIZE 512K SEGMENT SPACE MANAGEMENT AUTO;
```

Change DBTUNE Log File Parameters

■ Export the DBTUNE table.

```
sdedbtune -o export -f dbtune_logfile.sde -u sde -p sde -i 5151
```

■ Modify the dbtune_logfile.sde ##LOGFILE_DEFAULTS configuration keyword.

■ Import the modified dbtune_logfile.sde.

```
sdedbtune -o export -f dbtune_logfile.sde -u sde -p sde -i 5151
```

Create Log File Tables

 Grant QUOTA on SDELOGFILE and SDELOGFILEIDX permissions to the ArcSDE editor/viewer user.

```
ALTER USER <user_name> QUOTA UNLIMITED ON "SDELOGFILE";
ALTER USER <user_name> QUOTA UNLIMITED ON "SDELOGFILEIDX";
```

- Grant CREATE TABLE permission for the ArcSDE editor/viewer user.
- In ArcMap, select more than 100 features; this automatically creates the log file tables.

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■ Remove CREATE TABLE permissions as appropriate.

Learn more about ArcSDE log file tables at help /index.html#/What_are_ArcSDE_log_file_tables/002n00000013000000/.

Step 9: ArcSDE User

The example below shows how to create an editor and viewer ArcSDE user:

Editor User

```
CREATE USER GIS_EDITOR PROFILE "DEFAULT"

IDENTIFIED BY editor

DEFAULT TABLESPACE "USERS"

TEMPORARY TABLESPACE "TEMP" ACCOUNT UNLOCK;

GRANT "CONNECT" TO "GIS_EDITOR";

GRANT CREATE TABLE TO "GIS_EDITOR";

GRANT GREATE TABLE TO "GIS_EDITOR";

GRANT "GISEDITOR" TO "GIS_EDITOR";

/*-- GISEDITOR role has SELECT, INSERT, UPDATE and DELETE permission on the GIS data

(featureclasses, tables, etc.)

GRANT "REVEDITOR" TO "GIS_EDITOR";

ALTER USER GIS_EDITOR QUOTA UNLIMITED ON "SDELOGFILE";

ALTER USER GIS_EDITOR QUOTA UNLIMITED ON "SDELOGFILET);
```

Viewer User

```
CREATE USER GIS_VIEWER PROFILE "DEFAULT"

IDENTIFIED BY viewer

DEFAULT TABLESPACE "USERS"

TEMPORARY TABLESPACE "TEMP" ACCOUNT UNLOCK;

GRANT "CONNECT" TO "GIS_VIEWER";

GRANT CREATE TABLE TO "GIS_VIEWER";

(FRANT "GISVIEWER " TO "GIS_VIEWER";

/*-- GISVIEWER " TO "GIS_VIEWER";

GRANT "REVVIEWER" TO "GIS_VIEWER";

ALTER USER GIS_VIEWER QUOTA UNLIMITED ON "SDELOGFILE";

ALTER USER GIS_VIEWER QUOTA UNLIMITED ON "SDELOGFILETUR";
```

Conclusion

You can reduce disk contention and improve database I/O by storing the ArcGIS Data Reviewer workspace in different locations on disk. However, this practice alone does not guarantee optimal database performance, and additional tuning tasks may be needed.

Learn more about the recommended tuning tasks at help/index.html#/Minimize_disk_I_O_contention_in_Oracle/002n00000025000000/.

For more information on ArcGIS Data Reviewer, visit esri.com/datareviewer or e-mail datareviewer@esri.com. Access blogs, forums, downloads, and more from the ArcGIS Data Reviewer Resource Center at resources.arcgis.com/content/data-reviewer/10.0/about. You can access other resources at ArcGIS Desktop 10 Help (help.arcgis.com/en/arcgisdesktop/10.0/help/index.html) and Esri Support (esri.com/support).



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