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HEALTH CHECK REPORT FOR ORACLE DATABASE

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HEALTH CHECK REPORT FOR DANUBE ORACLE DATABASE

The database health check report displays data collected by the 3i-DBA Team. The aim of this report is to enable a DBA to identify bottlenecks in the database system, provide the DBA with enough information to trace down the critical objects. The different sections display tables and charts that visualize the current situation and the trend over time for the database. There are sections for space usage analysis, memory analysis, growth analysis, configuration and parameter analysis, activity pattern analysis, error logs etc. As a DBA this report gives you the tool you need to perform long term configuration and maintenance to secure that your database system runs at an optimal level.

1. STATUS OVERVIEW

1.1 STATUS ON CHECK INFORMATION

The following table lists the mandatory checks with the collected information as a part of health check

Check	Status	Date
Alert log check		
Archive status Check		
File status check		
Flash Recovery Area Usage		
Segment size status		
Table space free space check		
Daily backup status		

1.2. LAST 10 WARNINGS/ALARMS

The following table lists the 10 last occurred warnings and alarms.

Check	Status	Occured(Date)
RMAN backup status		
Alert log check		

2 DATABASE OVERVIEW

The sections shows overall information concerning the database.

2.1 DATABASE INFORMATION

The table below lists the identification information for the database

Instance Name	Database Name	Hostname	Database Version	Version	Status
xe	XE	WT-HDBVVS1	Oracle Database 11g Express Edition	11.2.0.2.0	Production

2.2 DATABASE VERSIONS

The table below shows the Oracle version information.

Database Version Details
Oracle Database 11g Express Edition Release 11.2.0.2.0 - Production
PL/SQL Release 11.2.0.2.0 - Production
CORE 11.2.0.2.0 Production
TNS for 32-bit Windows: Version 11.2.0.2.0 - Production
NLSRTL Version 11.2.0.2.0 - Production

2.3 MODE OF DATABASE

To identify that report taken with stand-alone database or Real application cluster database with instance details.

Database_Mode
RAC database? : No Current instance: xe

2.4 DATABASE COMPONENT

The table below shows information from DBA_REGISTRY dictionary view which displays information about the components loaded

into the database.

Component ID	Version	Status	Component Name
APEX	4.0.2.00.09	VALID	Oracle Application Express
XDB	11.2.0.2.0	VALID	Oracle XML Database
CONTEXT	11.2.0.2.0	VALID	Oracle Text
CATALOG	11.2.0.2.0	VALID	Oracle Database Catalog Views
CATPROC	11.2.0.2.0	VALID	Oracle Database Packages and Types

2.5 DBMS UPTIME PERIODS

The table below shows the periods of time when the database was started/stopped etc. It gives a good indication of the restart frequency of the database.

Instance Name	Startup Date	Database uptime
xe	23-JUL-2019 11:09:21	15 DAYS(S) 22 HOUR(S) 55 MINUTE(S) 51 SECONDS

3 SPACE USAGE STATISTIC

All database data are organized in units called segments Segments are grouped by object types such as tables indexes clusters etc Each segment consists of blocks the smallest storage unit in Oracle The blocks are connected to the file system blocks A database usually consists of thousands of segments so each cannot be monitored individually We therefore retrieve detailed information about the segments that need to be monitored more closelysuch as the largest segments in the database This section displays information on all segment types and more detailed information on the largest segments.

3.1 SCHEMAS DETAILS

The following table provides an overview of the object count and size in the monitored database environment

Schema	Segment count (#)	Segment size (GB)
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	51	0
REPDB	51	0
REPDB	51	0
REPDB	62	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	88	.01

REPDB	94	.01
REPDB	94	.01
REPDB	94	.01
REPDB	94	.01
REPDB	94	.01
REPDB	29	0
REPDB	94	.01
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	50	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	64	0
REPDB	94	.01
REPDB	29	0

REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	29	0
REPDB	41	0
REPDB	43	0
REPDB	43	0
REPDB	46	0
REPDB	46	0
REPDB	46	0

REPDB	46	0
REPDB	46	0
REPDB	47	0
REPDB	47	0
REPDB	47	0
REPDB	47	0
REPDB	48	0
REPDB	50	0
REPDB	50	0
REPDB	51	0
REPDB	51	0

4 MEMORY USAGE STATISTIC

This chapter shows memory statistics.

4.1 INITIALIZATION FILE

The following table indicates whether a spfile is used or not

Parameter Details	Path
spfile	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DBS\SPFILEXE.ORA

4.2 MEMORY INITIALIZATION PARAMETERS

The following table shows relevant parameters and their values. Please note that pga_aggregate_target (> 9i) and sga_target (> 10g) settings will cause Oracle to dynamically allocate memory resources. Dynamically allocated memory values are not visible to users and will be shown as zero values in the table below.

Parameter Details	Values in MB
sga_max_size	1024
shared_pool_size	0
large_pool_size	0
java_pool_size	0
sga_target	0
memory_target	1024
memory_max_target	1024
db_cache_size	0
log_buffer	4.21
sort_area_size	.06
pga_aggregate_target	0

5 FILE TO STATISTICS

Oracle maintains the information regarding the different types of files data files temporary files etc each of these statistics requires its own interpretation to understand the use of the disk resources on the host machine This chapter shows information concerning data files The data files are physically located in the file system of the Oracle server and they contain all data stored in the database including metadata The data files are grouped in the logical storage unit table space Looking at the table space growth directly gives a more correct insight into how much disk resources particular applications which typically have their own table spaces consume

5.1 FILE STATISTICS

The table below lists all data files in the database The column Auto refer to AUTOEXTENSIBLE column in DBA_DATA_FILES dictionary view while Max refer to MAXBYTES column

Tablespace	File Name	Used (GB)	Max (GB)	Auto Status
DATA	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\USERS.DBF	.01	.2	YES
DATA1	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\DATA1.DBF	.01	.2	YES
DR	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\DR.DBF	.01	.2	YES
ORION11JTBS	D:\ORACLEXE\APP\ORACLE\ORADATA\XE\ORION11JTBS.DBF	.1	0	NO
ORION11JTBS1	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\USERS1.DBF	.01	.2	YES
SAM	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\SAM.DBF	.01	.02	YES
SAMPLE	D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\SAMPLE.DBF	.01	.2	YES
SYSAUX	D:\ORACLEXE\APP\ORACLE\ORADATA\XE\UNDOTBS1.DBF	.72	32	YES
SYSTEM	D:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSTEM.DBF	.36	.59	YES
UNDOTBS1	D:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSAUX.DBF	.06	32	YES
USERS	D:\ORACLEXE\APP\ORACLE\ORADATA\XE\USERS.DBF	.1	11	YES

5.2 STATISTICS FOR DATA FILES WITH THE HIGHEST AVERAGE PHYSICAL READS

The table below shows data files with the highest average physical reads, i.e. how many times the database has had to read from that particular file in order to satisfy a request. Disk reads can be alleviated by buffering tables in memory or by reducing transaction loads. If some particular data file needs to be read often it may be beneficial to store this file on its own disk.

File Name	No Block Read	No Block Write
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\SAMPLE.DBF	10	132
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\USERS1.DBF	10	140
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\SAM.DBF	18	138
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\USERS.DBF	20	16
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\USERS.DBF	20	16
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\DR.DBF	289	221
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\DATA1.DBF	341	198
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSAUX.DBF	47	25546
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\UNDOTBS1.DBF	7332	42922
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\ORION11JTBS.DBF	817	217
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSTEM.DBF	8245	10249

5.3 STATISTICS FOR DATA FILES WITH THE HIGHEST AVERAGE PHYSICAL WRITES

The chart below shows data files with the highest average physical writes for each data file. Write operations are caused by transactions that update tables in the database. Depending on the type of database you will see a lot of write activity or very little. If both read and write activity is high and you experience lag your safest bet is either to reduce the load on the database (by optimizing SQL statements or rescheduling regular tasks) or moving the data file to another disk.

File Name	No Block Read	No Block Write
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSTEM.DBF	8245	10249
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\SAMPLE.DBF	10	132

D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\SAM.DBF	18	138
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\USERS1.DBF	10	140
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\USERS.DBF	20	16
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\USERS.DBF	20	16
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\DATA1.DBF	341	198
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\ORION11JTBS.DBF	817	217
D:\ORACLEXE\APP\ORACLE\PRODUCT\11.2.0\SERVER\DATABASE\DR.DBF	289	221
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\SYSAUX.DBF	47	25546
D:\ORACLEXE\APP\ORACLE\ORADATA\XE\UNDOTBS1.DBF	7332	42922

6 TABLESPACE STATISTICS

The following table presents general statistics for the largest table spaces. The Free extents column may indicate de-fragmentation of the table space

6.0 TABLESPACE DETAILS

Table space Name	Total Space	Used Space	Free Space	Used %
SYSTEM	.361328125	.35	.01	97.79
SYSAUX	.72265625	.68	.04	94.43
UNDOTBS1	.05859375	.02	.03	42.19
USERS	.09765625	0	.1	2.56
ORION11JTBS	.09765625	0	.1	2.44
DATA1	.009765625	0	.01	17.5
DR	.009765625	0	.01	13.75
ORION11JTBS1	.009765625	0	.01	12.5
SAM	.009765625	0	.01	11.25
SAMPLE	.009765625	0	.01	10
DATA	.009765625	0	.01	10

7 SORTING TEMPORARY SPACE

Temporary tablespaces are used to manage space for database sort and joining operations and for storing global temporary tables.

7.1 TEMPORARY DATA FILES

The following table presents storage configuration for temporary files.

Tablespace Name	File Name	Size In GB	Auto Status	Max size In GB
TEMP	D:\ORACLEXE\APP\ORACLE\ORADATA\XE\TEMP.DBF	.02	YES	32

8 NEWLY CEATED OBJECTS

The table below lists the newly created tables in the database for the last days

8.0 OBJECTS DETAILS

NIL DATA

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