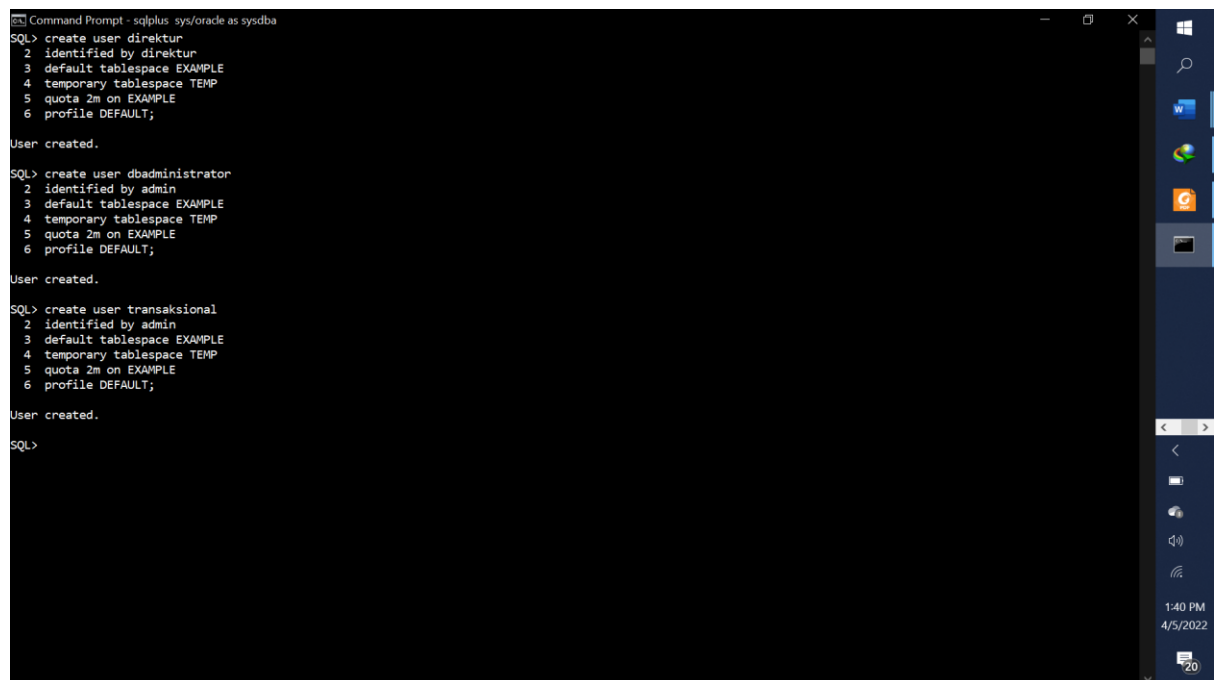


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NPM : 20082010148

Kelas : D

1. Database yang sesuai untuk pt xyz adalah oracle yang berbasis cloud dikarenakan biaya yang lebih hemat, kecepatan load yang tinggi, adanya fitur back up, kapasitas yang tanpa batas dan implementasi yang cepat. Selain itu sistem operasi yang digunakan yaitu windows
2. 6 dba administrator diantaranya :
 - a. Dba_scientis : mempunyai akses untuk read dimana nantinya bertanggung jawab untuk memproses data dan menyajikannya dalam produk data
 - b. Dba_administrator : mengelola database untuk sehari-hari semisal CRUD
 - c. Dba_analis : mempunyai akses untuk read, dimana nantinya menganalisis hasil data dari scientis
 - d. Dba_manager : mengordinasi dan memimpin tim database
 - e. Dba_architect : merancang dan mengembangkan dan mengelola database
 - f. Dba_engineering : merancang dan membangun database dengan dba architect selain itu bertugas untuk memelihara database yang dirancang
3. Membuat user :



```
Command Prompt - sqlplus sys/oracle as sysdba
SQL> create user direktur
2 identified by direktur
3 default tablespace EXAMPLE
4 temporary tablespace TEMP
5 quota 2m on EXAMPLE
6 profile DEFAULT;
User created.

SQL> create user dbadministrator
2 identified by admin
3 default tablespace EXAMPLE
4 temporary tablespace TEMP
5 quota 2m on EXAMPLE
6 profile DEFAULT;
User created.

SQL> create user transaksional
2 identified by admin
3 default tablespace EXAMPLE
4 temporary tablespace TEMP
5 quota 2m on EXAMPLE
6 profile DEFAULT;
User created.

SQL>
```

Membuat role :

```
Command Prompt - sqlplus sys/oracle as sysdba
SQL> create role R_DBA
2 ;

Role created.

SQL> create role R_MAN;

Role created.

SQL> create role R_TRX;

Role created.

SQL> _
```

Membuat object previllage R_dba :

```
Command Prompt - sqlplus sys/oracle as sysdba
SQL> GRANT update, delete on hr.employees to R_dba;

Grant succeeded.

SQL> _
```

Membuat object previllage R_man :

```
Command Prompt - sqlplus sys/oracle as sysdba
Grant succeeded.

SQL> GRANT select on hr.employees to R_man;

Grant succeeded.

SQL> _
```

Membuat system previllage untuk r_trx

```
Command Prompt - sqlplus sys/oracle as sysdba
SQL> grant create session to r_trx;

Grant succeeded.

SQL>
```

```
Command Prompt - sqlplus sys/oracle as sysdba

SQL> GRANT create table to R_trx;

Grant succeeded.

SQL>
```

Pemberian role ke user :

```
Command Prompt - sqlplus sys/oracle as sysdba

SQL> GRANT R_dba to dbadministrator;

Grant succeeded.

SQL> GRANT R_man to direktur;

Grant succeeded.

SQL> GRANT R_TRX to transaksional;

Grant succeeded.

SQL>
```

Pemberian role ke role :

```
Command Prompt - sqlplus sys/oracle as sysdba
SQL> GRANT R_TRX to R_man;
Grant succeeded.
SQL> GRANT R_man to R_DBA;
Grant succeeded.
SQL>
```

Screenshoot em :

Oracle Enterprise Manager (SYS) - L X

Berikut 6 Jenis Admin di Beber...

Selection Mode | Single

desktop-156lnf9 1158/em/console/database/databaseObjectsSearch?target=orcl&type=oracle_database&otype=USER

Create Edit View Delete Actions Create Like

Previous 1-25 of 35 Next 10

Select	UserName	Account Status	Expiration Date	Default Tablespace	Temporary Tablespace	Profile	Created
<input checked="" type="radio"/>	AISYAH	OPEN		EXAMPLE	TEMP	DEFAULT	Apr 5, 2022 1:37:14 PM ICT
<input type="radio"/>	ANONYMOUS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:13:32 AM ICT
<input type="radio"/>	BI	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	USERS	TEMP	DEFAULT	Feb 22, 2022 2:33:57 PM ICT
<input type="radio"/>	CTXSYS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:12:17 AM ICT
<input type="radio"/>	DBADMINISTRATOR	OPEN		EXAMPLE	TEMP	DEFAULT	Apr 5, 2022 1:39:16 PM ICT
<input type="radio"/>	DBSNMP	OPEN		SYSAUX	TEMP	MONITORING_PROFILE	Apr 17, 2007 3:57:07 AM ICT
<input type="radio"/>	DIP	EXPIRED & LOCKED		USERS	TEMP	DEFAULT	Apr 17, 2007 3:42:54 AM ICT
<input type="radio"/>	DIREKTUR	OPEN		EXAMPLE	TEMP	DEFAULT	Apr 5, 2022 1:38:05 PM ICT
<input type="radio"/>	DMSYS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:11:19 AM ICT
<input type="radio"/>	EXFSYS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:10:32 AM ICT
<input type="radio"/>	GIRARD	OPEN		USERS	TEMP	DEFAULT	Mar 22, 2022 11:34:59 AM ICT
<input type="radio"/>	HR	OPEN		USERS	TEMP	DEFAULT	Feb 22, 2022 2:33:57 PM ICT
<input type="radio"/>	IX	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	USERS	TEMP	DEFAULT	Feb 22, 2022 2:33:57 PM ICT
<input type="radio"/>	MDDATA	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	USERS	TEMP	DEFAULT	Apr 17, 2007 4:37:20 AM ICT
<input type="radio"/>	MDSYS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:17:07 AM ICT
<input type="radio"/>	MGMT_VIEW	OPEN		SYSTEM	TEMP	DEFAULT	Apr 17, 2007 4:49:12 AM ICT
<input type="radio"/>	NEENA	OPEN		EXAMPLE	TEMP	DEFAULT	Mar 22, 2022 10:57:29 AM ICT
<input type="radio"/>	OE	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	USERS	TEMP	DEFAULT	Feb 22, 2022 2:33:57 PM ICT
<input type="radio"/>	OLAPSYS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:34:54 AM ICT
<input type="radio"/>	ORDPLUGINS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:17:06 AM ICT
<input type="radio"/>	ORDSYS	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSAUX	TEMP	DEFAULT	Apr 17, 2007 4:17:06 AM ICT
<input type="radio"/>	OUTLN	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	SYSTEM	TEMP	DEFAULT	Apr 17, 2007 3:34:56 AM ICT
<input type="radio"/>	PM	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	USERS	TEMP	DEFAULT	Feb 22, 2022 2:33:57 PM ICT
<input type="radio"/>	PUBLIC	OPEN					
<input type="radio"/>	SCOTT	EXPIRED & LOCKED	Feb 22, 2022 2:35:02 PM ICT	USERS	TEMP	DEFAULT	Apr 17, 2007 4:52:03 AM ICT

desktop-156lnf9:1158/em/console/database/security/user?oname=DBADMINISTRATOR&event=view&cancelURL...rcld&type=oracle_database&objectType=USER&otype=USER&otype=USER&target=orcl&type=oracle_database

Oracle Enterprise Manager - View User | Berikut 6 Jenis Admin di Beber...

desktop-1561nf9:1158/em/console/database/security/user?oname=DBADMINISTRATOR&event=view&cancelURL=/em/

ORACLE Enterprise Manager 10g Database Control

Database Instance: orcl > Users > View User: DBADMINISTRATOR

View User: DBADMINISTRATOR

Actions: Create Like Go Edit Return

General

Name **DBADMINISTRATOR**
Profile **DEFAULT**
Authentication **Password**
Default Tablespace **EXAMPLE**
Temporary Tablespace **TEMP**
Status **UNLOCK**
Default Consumer Group **None**

Roles

Role	Admin Option	Default
R_DBAN	Y	

System Privileges

System Privilege Admin Option
No items found

Object Privileges

Object Privilege Schema Object Grant Option
No items found

Quotas

Oracle Enterprise Manager - View User | Berikut 6 Jenis Admin di Beber...

desktop-1561nf9:1158/em/console/database/security/user?oname=DIREKTUR&event=view&cancelURL=/em/console/

ORACLE Enterprise Manager 10g Database Control

Database Instance: orcl > Users > View User: DIREKTUR

View User: DIREKTUR

Actions: Create Like Go Edit Return

General

Name **DIREKTUR**
Profile **DEFAULT**
Authentication **Password**
Default Tablespace **EXAMPLE**
Temporary Tablespace **TEMP**
Status **UNLOCK**
Default Consumer Group **None**

Roles

Role	Admin Option	Default
R_MAN N	Y	

System Privileges

System Privilege Admin Option
No items found

Object Privileges

Object Privilege Schema Object Grant Option
No items found

Quotas

Oracle Enterprise Manager - View U x

Berikut 6 Jenis Admin di Beber x

desktop-l56lnf9.1158/em/console/database/security/user?oname=TRANSAKSIONAL&event=view&cancelURL=/em/...

ORACLE Enterprise Manager 10g Database Control

Setup Preferences Help Logout Database

Database Instance: orcl > Users > View User: TRANSAKSIONAL

Logged in As SYS

View User: TRANSAKSIONAL

Actions Create Like Go Edit Return

General

Name

TRANSAKSIONAL

Profile

DEFAULT

Authentication

Password

Default Tablespace

EXAMPLE

Temporary Tablespace

TEMP

Status

UNLOCK

Default Consumer Group

None

Roles

Role	Admin Option	Default
R_TRXN	Y	

System Privileges

System Privilege	Admin Option
No items found	

Object Privileges

Object Privilege	Schema	Object	Grant Option
No items found			

Quotas

Oracle Enterprise Manager (SYS) - x

Berikut 6 Jenis Admin di Beber x

desktop-l56lnf9.1158/em/console/database/databaseObjectsSearch?target=orcl&type=oracle_database&otype=ROLE

Search

Select an object type and optionally enter an object name to filter the data that is displayed in your results set.

Object Name

Go

By default, the search returns all uppercase matches beginning with the string you entered. To run an exact or case-sensitive match, double quote the search string. You can use the wildcard symbol (%) in a double quoted string.

Selection Mode Single

Create

Edit View Delete Actions Create Like Go

Select	Role	Authentication
<input checked="" type="radio"/>	OEM_ADVISOR	NO
<input type="radio"/>	OEM_MONITOR	NO
<input type="radio"/>	OLAP_DBA	NO
<input type="radio"/>	OLAP_USER	NO
<input type="radio"/>	RECOVERY_CATALOG_OWNER	NO
<input type="radio"/>	RESOURCE	NO
<input type="radio"/>	R_DBA	NO
<input type="radio"/>	R_MAN	NO
<input type="radio"/>	R_TRX	NO
<input type="radio"/>	SCHEDULER_ADMIN	NO
<input type="radio"/>	SELECT_CATALOG_ROLE	NO
<input type="radio"/>	WM_ADMIN_ROLE	NO
<input type="radio"/>	XDBADMIN	NO
<input type="radio"/>	XDBWEBSERVICES	NO

Previous 25 26-39 of 39 Next

Edit View Delete Actions Create Like Go

Database | Setup | Preferences | Help | Logout

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About Oracle Enterprise Manager 10g Database Control

Windows Taskbar

1:59 PM 4/5/2022

20

Oracle Enterprise Manager - View R...Berikut 6 Jenis Admin di Beber...

desktop-1561nf9.11158/em/console/database/security/role?oname=R_DBA&event=view&cancelURL=/em/console/dat...

Setup Preferences Help LogoutDatabase

Database Instance: orcl > Roles > View Role: R_DBA

View Role: R_DBA

Actions Create Like Go Edit Return

General

Name R_DBA

Authentication None

Roles

Role Admin Option

R_MAN N

System Privileges

System Privilege Admin Option

No items found

Object Privileges

Object Privilege Schema Object

DELETE HR EMPLOYEES

UPDATE HR EMPLOYEES

Consumer Groups Switching Privileges

Consumer Group

No items found

Oracle Enterprise Manager - View R...Berikut 6 Jenis Admin di Beber...

desktop-1561nf9.11158/em/console/database/security/role?oname=R_TRX&event=view&cancelURL=/em/console/dat...

Setup Preferences Help LogoutDatabase

Database Instance: orcl > Roles > View Role: R_TRX

View Role: R_TRX

Actions Create Like Go Edit Return

General

Name R_TRX

Authentication None

Roles

Role Admin Option

No items found

System Privileges

System Privilege Admin Option

CREATE SESSION N

CREATE TABLE N

Object Privileges

Object Privilege Schema Object

No items found

Consumer Groups Switching Privileges

Consumer Group

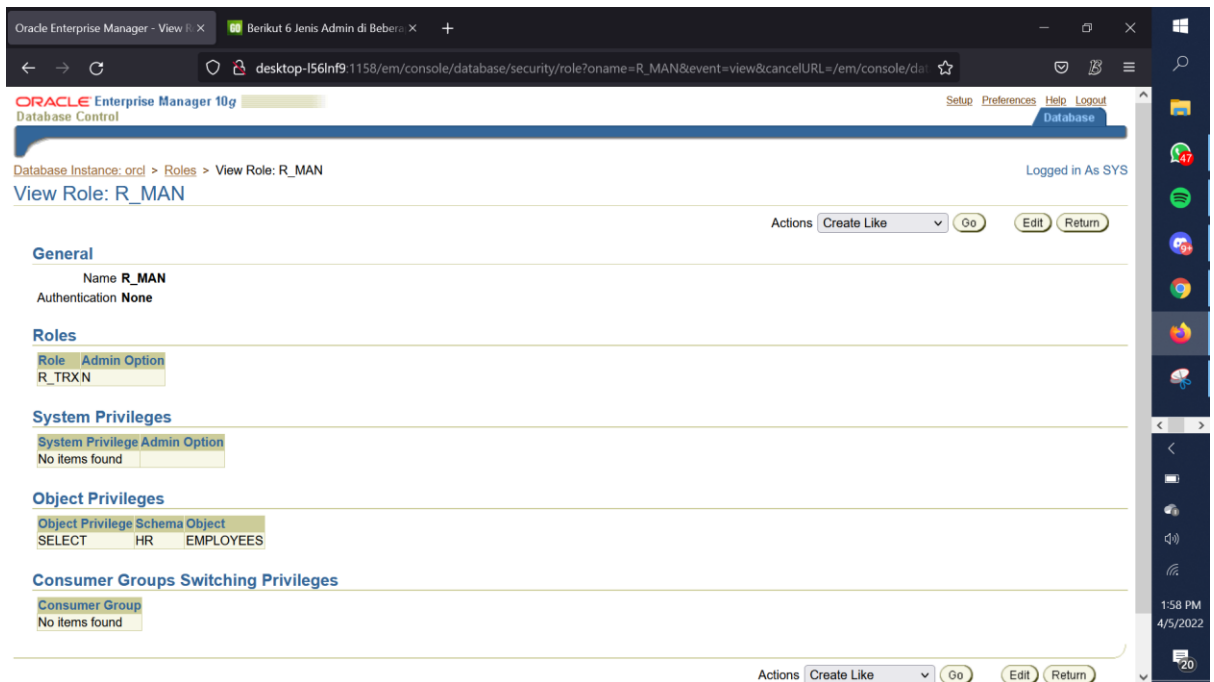
No items found

Database | Setup | Preferences | Help | Logout

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About Oracle Enterprise Manager 10g Database Control

Windows Taskbar

1:57 PM 4/5/2022



4. Terdapat 2 system privilege pada gambar diatas. Dimana System privilege pada gambar diatas yaitu terkoneksi ke database dan membuat tabel dimana system privilege tersebut dimiliki oleh role R_trx. Selanjutnya role R_trx diberikan kepada user transaksional. Selain itu role R_trx di berikan kepada role lainya diantaranya R_man yang dimiliki oleh user direktur dan R_dba yang dimiliki oleh dba_administrator jadi untuk system privilege untuk gambar diatas dimiliki oleh transaksional, direktur dan administrator
5. Error tersebut dikarenakan tidak adanya table employees pada user. Untuk mengatasi error tersebut dapat dilakukan dengan beberapa cara diantaranya :
 - a. Membuat table employees
 - b. Memberikan object previllage (GRANT select on hr.employees to role user). Jadi nantinya user memamngill table dari hr dengan kode berikut

```
Select * from hr.employees where employee_id = 100
```