Orange for ORACLE V4.0



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١.	•••				
1.1	•••				
				, SQL	PL/SQL
			, DBA(Datab	ase Administrator)	
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SQL Shared pool SQL SQL / Lock/Latch , Blocking , Waiting Kill **ERP** Oracle E-Business Suite DB Script Oracle 가 > DBA Edition 가 & 가 9 Update, Insert, Delete 1.3 Online Upgrade 가 가 가 가 Patch 가 $] \rightarrow [$...] []



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✓	Windows NT				
✓	Windows Me				
✓	Windows 2000				
✓	Windows XP				
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2.2.1					
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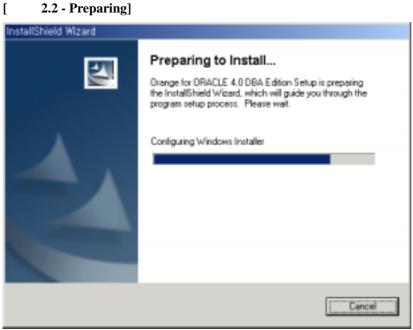
[**2.1 - Setup.exe**]



가 2.2 - Preparing] Γ

2.2 - Preparing]

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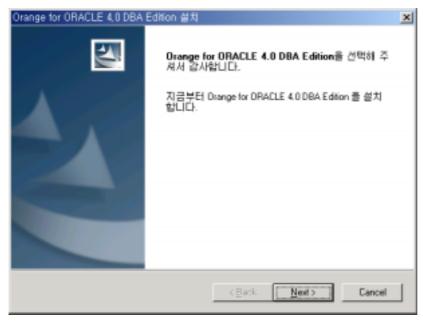


, [2.3 – Welcome] 가 [Next]



2.3 – Welcome]

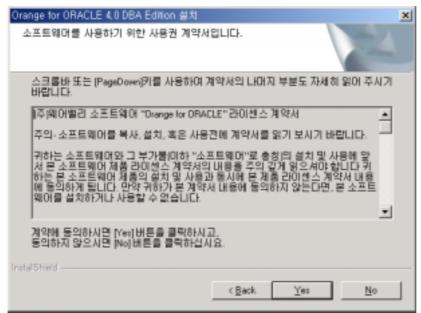
[



[2.4 –]

[Yes] .

[2.4 –]





가 [2.5 -] [Browse] [Next] 2.5 – [] Orange for ORACLE 4,0 DBA Edition 설치 × 소프트웨어를 설치할 폴더를 선택합니다. 아래 선택된 졸더에 Orange for ORACLE 4.0 DBA Edition 을 설치합니다. 다른 폴더에 설치하시려면 (Browse) 버튼을 클릭하며 설치할 폴더를 선택하십시 요. 선택을 마치신 후 [Next] 버튼을 클릭하십시요. Destination Folder Browse... C:\...\WareValley\Drange for DRACLE 4.0 DBA\ InstallShield -< Back Next > Cancel 2.6 -] [[Existing Folders] [Next] [2.6 -] Orange for ORACLE 4,0 DBA Edition 설치 × 프로그램 아이콘들을 복사할 [프로그램 폴더] 를 설정합니다. 프로그램 아이콘들을 아래의 프로그램 폴더에 설치합니다. 다른 폴더에 설치하시려면 입력난에 폴더의 이름을 입력하시거나 아래의 폴더 목록에 서 기존의 폴더 이름을 클릭하십시요. 선택을 마치신 후 (Newl) 버튼을 클릭하십시요. Program Folders: Orange for DRACLE 4.0 DBA 보조프로그램 시작프로그램 HTML Help Workshop STLPort 4.5.3



Next >

Cancel

< Back

Instal/Shield -

[2.7 – 가 Component [Custom] 2.7 – [] Orange for ORACLE 4.0 DBA Edition 설치 설치 유현을 선택합니다. 원하는 설치 유현을 선택하십시요 선택을 마치신 후 (Next) 버튼을 클릭하십시요. 프로그램을 사용하기 위해 필요한 일반적인 요소들을 설치합니 다. 일반적인 사용자들에게 추천되는 유형됩니다. 표준설치(I) 프로그램을 사용하기 위해 필요한 최소한의 요소들만을 설치합 니다. C 최소설치(C) 필요한 요소들을 사용자가 직접 선택하여 설치합니다. 고급 사 용자들에게 추천되는 유형이며, 초보자인 경우에는 [표준설치] 를 권장합니다. ○ 사용자설치(L)) < <u>B</u>ack. Next > Cancel 2.8 -[] [Custom] Component [Next] 2.8 – 1 Orange for ORACLE 4,0 DBA Edition 설치 × 설치할 구성요소를 선택합니다. 설치하려는 구성요소의 체크베른들 선택하시고, 설치를 원하지 않는 구성요소는 체크 베른들 선택하시 마십시요. 선택을 마치신 후 (Next)베른들 클릭하십시요. Description-Executable Files & DLLs

Online Help

Space Required on C:

Space Available on C

Instal/Shield -

■ Required DLL: Documentation (PDF)



[Typical]

[Next]

28072 K

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Executable Files_DLLs

Next >

Cancel

[2.9 -]

[2.9 -]

Orange for ORACLE 4.0 DBA Edition 針为

Setup Status

Orange for ORACLE 4.0 DBA Edition Setup is performing the requested operations.

C.\...\Ware\/alley\/Orange for ORACLE 4.0 DBA\/Orange_ka.pdl

18%

Instal/Shield -



Cancel

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2.10 -
[
                                      (Online Upgrade)]
                      가
                                                                   [Tools] → [Global Options...]
                3.2.1 Global Options
                                           (Ask before upgrade) -
                                                (Always upgrade without asking) –
                                  (Never upgrade without asking) -
                                  [ ](Upgrade check interval[Days]) -
                                                                                       10
                                            Online upgrade check
                                                1.3 Online Upgrade
                                                                                        )
                           . (
              2.10 -
                                             (Online Upgrade)]
         range for ORACLE 4,0 DBA Edition 台:
          온라인 업그레이드 서비스.
           온라인 자동 업그레이드 서비스 정책
          Orange for ORACLE은 인터넷을 통해 자동으로 업그레이드 됩니다. 원하는 업그레이드 정
책을 선택하십시요
선택을 마치신 후 (Next) 버튼을 클릭하십시요.
          온라인 업그레이드 서비스는 귀하의 컴퓨터에 관한 어떠한 정보도 수집하지 않으며, 귀
하의 컴퓨터에서 어떠한 정보도 외부로 전송하지 않습니다.
온라인 업그레이드 서비스는 온라인 업그레이드 서비로부터 업그레이드에 필요한 정보
를 전송받기만 합니다.
           ⓒ 업그레이드 실행 건 물어보기
                                                   자동 업그레이드 검사 주기(일)
           C 물어보지 않고 언제나 업그레이드
           ○ 자동 업그레이드 않음
                                                              \underline{N}ext >
                                                                            Cancel
```



(Catalog)

. 7 | . [Next]

. Orange Configuration Admin [2.11 – Orange Configuration Admin] [Orange Configuration Admin]

Configuration Admin) . (Orange Configuration Admin 2.3 Orange Configuration Admin)

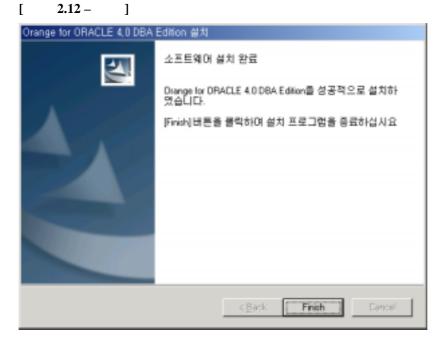
[2.11 – Orange Configuration Admin]





 $[\qquad 2.12 - \qquad] \qquad \qquad . \text{ [Finish]}$

•



2.2.2 (Online Upgrade)

V2.1 가 가 가 . [2.13 -]

, 가 가 가 가 .

[2.13 –]



2.3 Orange Configuration Admin

Orange Configuration Admin

가 Orange Configuration Admin .

Orange Configuration Admin 7, PL/SQL

가 가



DBA Edition SYS

, Standard Edition DBA 가 .

V2.2 Orange Configuration Admin (SQL, PL/SQL, Plan,

Table Editor, Trace, Schema Browser, Description, Database Information)

Orange

Configuration Admin

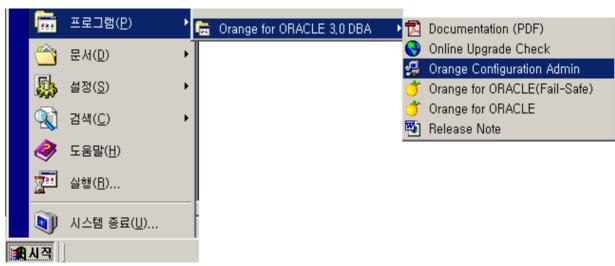
DBA

2.3.1 Orange Configuration Admin

Orange Configuration Admin [2.14 - Orange Configuration Admin]

→ [] → [Orange for ORACLE] → [Orange Configuration Admin]

[2.14 - Orange Configuration Admin]





2.3.2

Orange Configuration Admin [2.15 - Orange Configuration Admin]

[] .

2.15 - Orange Configuration Admin

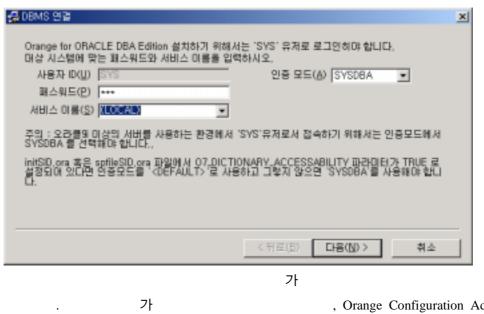


2.3.3 **DBMS**

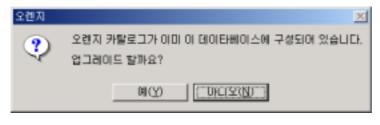
2.16 - Connect to DBMS] Orange Configuration Admin DBA SYS, SYSTEM SYS, SYSTEM DBA 가 DBA 가 Orange Configuration Admin "AS" <DEFAULT>가 9i SYS SYSDBA **SYSOPER** 9i SYS **SYSDBA** init Parameter O7_DICTIONARY_ACCESSIBILITY=TRUE 가 SYSDBA <DEFAULT> 가 []



2.16 - Connect to DBMS]



. 가 , Orange Configuration Admin [2.17 - Upgrade] 가 . [**2.17 - Upgrade**]



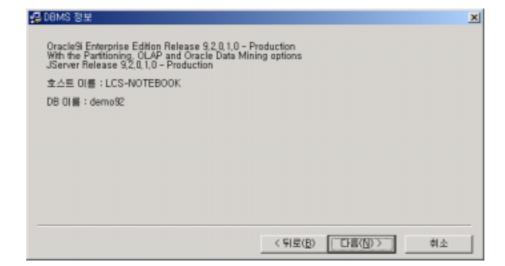
[] .



[

]

2.3.4 DBMS



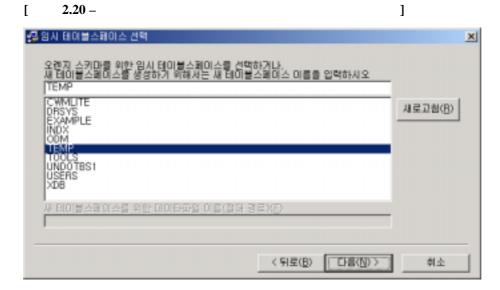
2.3.5

[2.19 -] 가 가 **TOOLS** [] 2.19 -] 🚜 기본 테이블스테이스 선택 × 요렌지 스키마를 위한 기본 테이블스페이스를 선택하거나. 새 테이블스페이스를 생성하기 위해서는 새 테이블스페이스 이름을 입력하시오. [TOOLS CWMLITE DRSYS EXAMPLE INDX ODM 새로고침(B) W 테이블스페이스를 위한 데이타파일 이름(절대 경로)(E D:WORACLEWORADATAWDEMOS2WTOOLS01.DBR

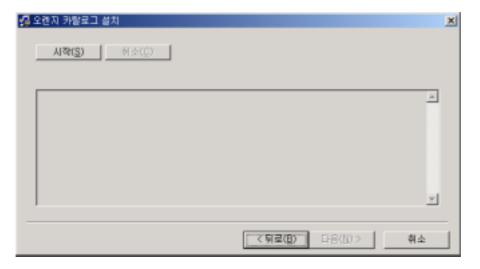


< 뒤로(B) 다음(N)>

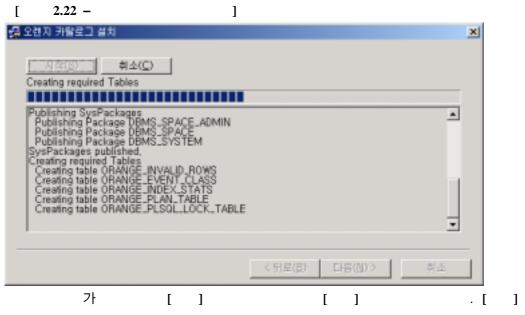
```
2.3.6 DB
```



2.3.7





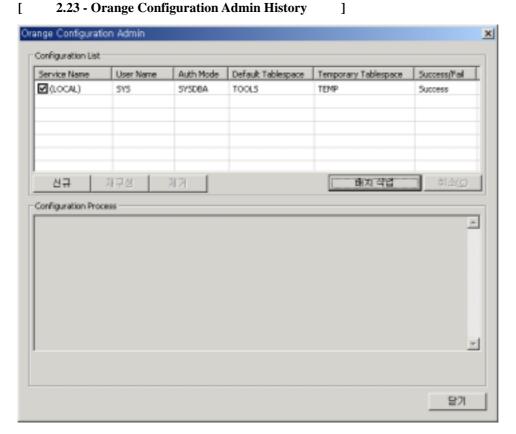


Orange Configuration Admin



가 2.23 - Orange Configuration Admin History Configuration Admin History Configuration Admin 가 Configuration Admin Configuration Admin [2.16 - Connect to DBMS]] 가 **DBMS** [2.23 -가 [] Orange Configuration Admin History] []

2.23 - Orange Configuration Admin History]





2.4 Registration Key







2.5

2.5.1

가/ 2.26 -[2.26 -새 오피스 파일 오피스 파일 열기 Windows Update 프로그램(P) 문서(D) ☑ 제어관(C) 설정(<u>S</u>) 🚵 네트워크 및 전화 접속 연결(<u>N</u>) 검색(<u>C</u>) 프린터(P) 🌁 작업 포시출 및 시작 메뉴(T)... 도움말(번) 살행(B)... 시스템 종료(山)... 2.27 -] 🖷 프로그램 추가/제거 정렬(S): 미름 현재 설치된 프로그램: Orange for ORACLE 4,0 DBA Edition 지원 정보를 확인하려면 여기를 누르십시오. 사용 빈도: 났욢 컴퓨터에서 이 프로그램을 변경하거나 제거하 검면 [변경/제거]를 누르십시오. 변경/제거(C) STLPort V4.5,3別分 🧝 Symantec pcAnywhere 크기: 12,5MB Tera Term Pro 🗽 Trend Micro OfficeScan 클라이언트 371; 60,3MB 🚮 Windows 2000 핫찍스 - KB329115 👩 Windows 2000 핫픽스 - KB822831 👩 Windows 2000 핫픽스 - KB823182 👩 Windows 2000 한찍스 - KB823559

[2.27 –] Orange for ORACLE 4.0

Windows 2000 한력스 - KB824105
 Windows 2000 한력스 - KB825119
 Windows 2000 한력스 - KB82522
 Windows 2000 한력스 - KB828035
 Windows 2000 한력스 - KB828035
 Windows 2000 한력스 - KB828741



2.5.2 DBMS

 $(ORANGE) \qquad 7 \\ . \ [2.28 - DBMS \quad DB \text{ user orange} \qquad] \qquad DBA \qquad 7 \\ ? \ SQL*Plus \qquad \text{"drop user"} \qquad . \\ SQL> DROP \text{ USER orange CASCADE }; \qquad . \\ \end{cases}$

| DB user orange | DB



3.							
3.1							
J. 1							
3.1.1	TNS						
	SO	QL*Net		. SQL*Net			
		"tnsnar	nes.ora"				
		Oracle Net8 E	Easy Configuration	1			
		DBA					
		TNS			. (17	Network	Configuration
Tool)						
3.1.2	tnsnames.ora						
					가		. "File'
	フ	ŀ			tnsnam	es.ora	
2			tnsn	ames.ora			
		tnsnames.c					
		(📜)					
•		- tnsnames.ora	TNS				TNS
			()	TNS	S Name		TNS
•		– "Oracle8i	8	,,	SID	S	SID
			44	,,		. "	,,



IP

. HOST

Ping

Dedicated

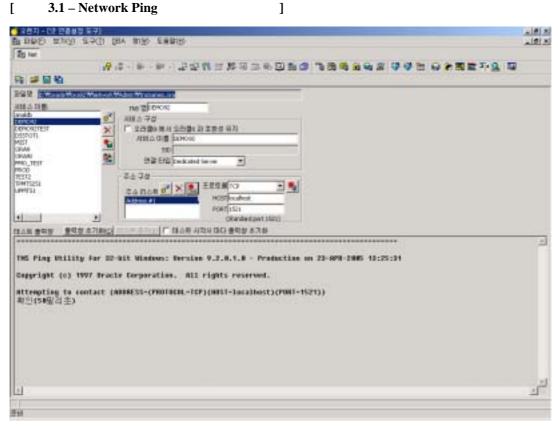
. Network Ping

DB server

TCP

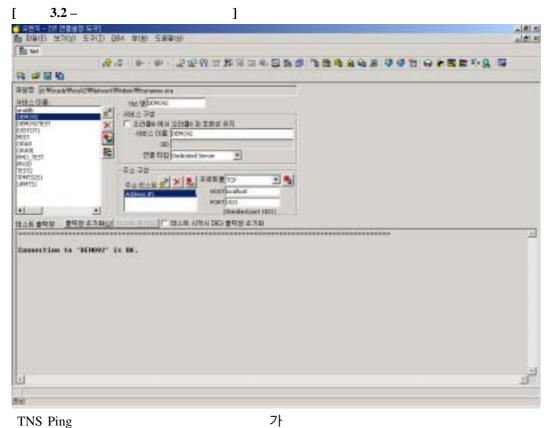
MTS

3.1 – Network Ping



3.1 – Network Ping Network Ping 가] TNS Ping (TNS) 가 . TNS ping scott 가 scott [3.2 -



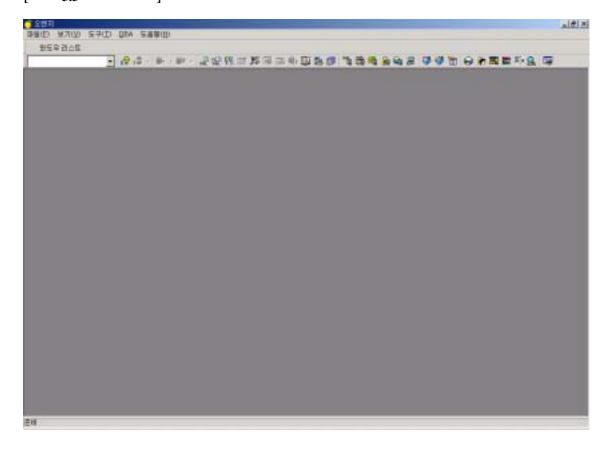


(tnsnames.ora)



3.2

 $[\qquad 3.3 - \qquad] \qquad \qquad . \qquad \text{Orange for ORACLE V4.0 DBA Edition}$ $. \qquad \qquad . \qquad \qquad .$ $[\qquad \textbf{3.3} - \qquad]$

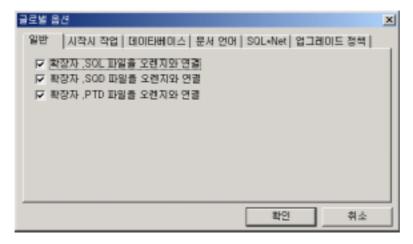


3.2.1 Global Options

[] → [...] [3.4 –] 가



[3.4 -]



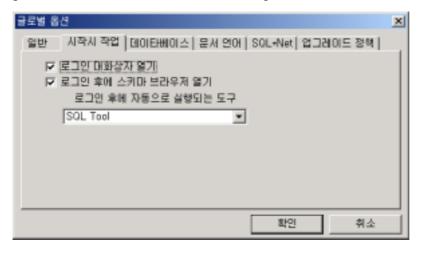
*.SQL/SQD/PTD

.SQL, .SQD, .PTD

.SQL SCIPT .SQD Workspace (SQL) , .PTD Plan Tool

Explain Plan Trace Schema

[3.5 –]



Logon

 \triangleright



가 , > 가 , .

, statement 가

.

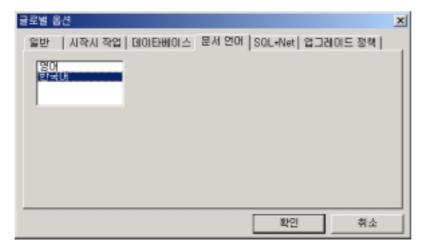
SQL Tool, Table Editor statement Commit

" "가

"" " Commit .""
Commit "" Rollback



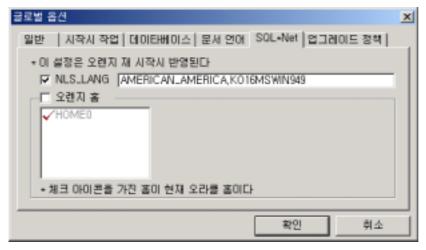
[3.7 –



& Guide Line

■ SQL*Net

3.8 SQL*Net]



SQL*Net Parameter . SQL*Net

"Orange for ORACLE"

. "Orange for ORACLE(Fail-Safe)"

NLS_LANG

NLS_LANG

Home

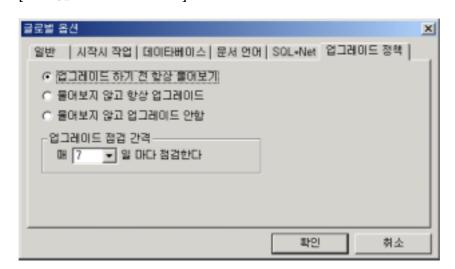


"Home Selector" Home . 2 Home

Default Home Home

.

[3.9]



>

가 Patch 가 , . .

가 Patch 가 , .

[Online Upgrade Check]

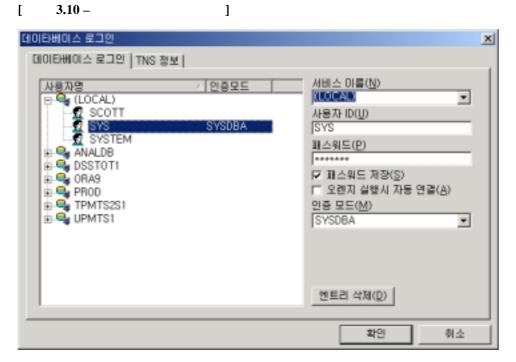
" " " " "가

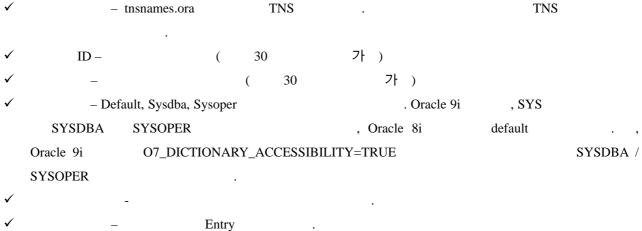
가 Patch 가 . 3~10 가 .



3.3 Logon

```
[ ] → [ ...] [ 3.10 - ] 가 ...
[ ] DBMS
```







가

```
3.4
```

```
3.11 - DBMS
[
                                                                                                                                                 ]
                                                                                    가
                                                                                                                                                                          가
                                                  3.11 - DBMS
                       [
                                                                                                                                                                        ]
                                                                                                                                                                                                                                                                                                                                                                                                                                             JO X
                          마일(E) 환경(E) 역년(A) 옵션(Q)
                                                                                                                                                                                                                                                                                                                                                                                                                                             _ISIX
                      HE SOL BUT PLISON
                                                                                 · 19 18 - B
                                                                                                                                                金属電子品
                      1- IVSLOCAL
                     SYS(MLOCAL)
                                                                                                                                             Bial 9011
                   Procedure | Function | Package | Trigger | Java
                         Object Table | Type | Synonym
Sequence | DB Link | Tablespace
Table | View | Index | Constraint | M-View
                      Table View Index Constraint

SYS

H ACCESSS
H APPLYLCONF_HOURCOLUMNS
H APPLYLDEST_OBJ_CMAP
H APPLYLDEST_OBJ_CMAP
H APPLYLEBROR
H APPLYLEBROR
H APPLYLEBROR
H APPLYLEBROR
H APPLYLSOURCE_SCHEMA
H APPLYLDEST_CONTROL
H APPLYL
                                                                                                                                                              마지막 살병은 sou
                                                                                                                                                                  워크 결과 | cees output | 텍스트 현식 | 실명 계획 | 통계정보 |
                     User Into
                            Hem
                               Usamame
                       2 User Id
                                                                                                          OPEN
                         3 Account Status
                       4 Lack Date
                       5 Evolvy Date
                       6 Dutault Tablespace
3 Temporary Tablespace
                                                                                                           SYSTEM
                                                                                                           TEMP
                                                                                                          2002/05/12 16:
EVE BROHD
                      8 Created
                                                                                                                                                                                                                                                                                                                                          La T. Col T.
                  존바
```



3.5

ナ ✓		,	· (2 •		·	
•	· (♣ ▼) . , , , , , , , , , , , , , , , , , ,	, ,	,	,	가 . ,	,
	_		,	,	(❤️)	가
■	- SQL , ERP , , & ,	, ,	, , ,	,	,	,



4. (Schema Browser)

(Table, Object Table, Index, Trigger, Constraint, View, Type, Synonym, DB Link, Sequence, M-View, Procedure, Function, Package, Java) 가 SQL가 가 가 (Create) (Alter) , Invalid 가 가 4.1 가 (Multi-Node) (Object) (Window)

- ✓ Table/Cluster/Index/Synonym/DB link/Sequence (CREATE)
- ✓ Table/Index (ALTER)
- ✓ Source/Invalid Object
- ✓ Object (DROP)
- ✓ Table/Index/Column Analyze
- ✓ Drag & Drop SQL Editor, Description Tool, Table Editor



4.2

85 Change Session () Refresh Invalid (Batch) Object Description ■ Object Column list (SQL*Plus describe) W a View PL/SQL Tool Source 1 Table 1 Table ďĩ Cluster 20 Table View SQL Tool H Index **•**₫ Index Synonym DB Link Sequence PL/SQL View Object × Analyze 44 Object Disable Object Enable Unusable 鄶 Rebuild

4.3

4.3.1

,

가

Ware Valley 4.3.2

(II)

77

71

71

71

71

71

4.3.3 Table

Column, Index, Partition, Trigger, Snapshot Log, Constraint

フト

「TABLE]

TABLE

フト

Column, Index, Partition, Trigger, Snapshot Log, Constraint

Column, Index, Trigger, Partition, Snapshot





Column : Column , Nullable, Data Type, Comment

➤ General : Tablespace, Pct Free(%), Pct Used(%), ...

Storage : storage (Initial, Next, Min Extents, ...)

➤ Stats : (Last Analyze, Rows, Blocks, ...)

> Other : Parallel Degree, Partition , ...

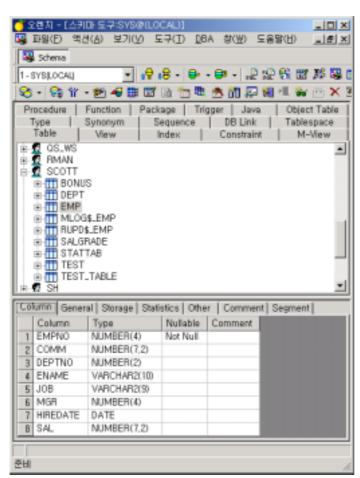
Comment:

➤ Segment : , , Extents, ...

■ Column

Column List: Column, Nullable, Data Type, Comment

[4.1 -]

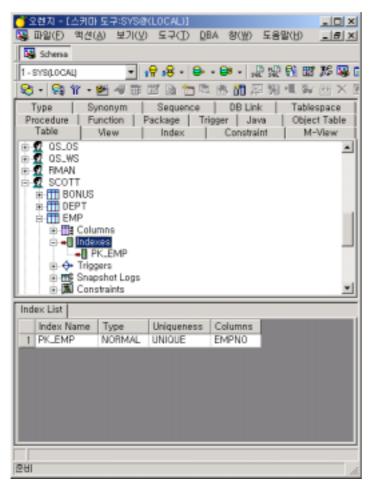




■ Index

➤ Index List : , , , ,

[4.2 -





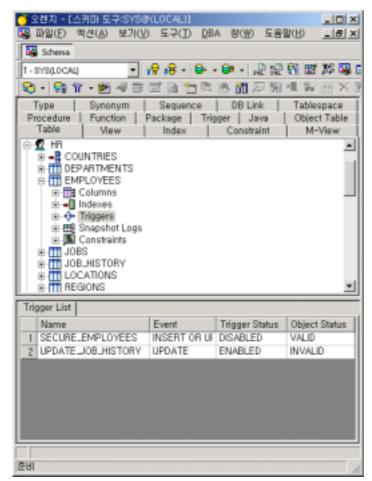
Trigger

가 .

 \triangleright

◆ Trigger List : Name, Event, Trigger Status

[4.3 -





준비

◆ General : Name, Event, Trigger Status

◆ Body

[4.4 -] ○ 오렌지 - [스키마 도구·SYS@(LOCAL)] _ I I X 👺 파일(E) 액션(A) 보기(<u>V</u>) 도구(<u>T</u>) <u>D</u>BA _ 8 × Scheme 5 1 - SYSILOCAL) Synonym Sequence DB Link Tablespace Object Table Procedure | Function | Package | Trigger | Java | Table M-View Index Constraint 😑 💆 HR ٠ ⊕ → COUNTRIES DEPARTMENTS
EMPLOYEES ⊕ Columns ⊞ → Indexes ⊟ → Triggers ◆ SECURE EMPLOYEES

★ UPDATE JOB_HISTORY ⊕ IIII JOBS General Body Item Value Owner SECURE_EMPLOYEES 2 Trigger Name BEFORE STATEMENT 3 Trigger Type 4 Triggering Event INSERT OR UPDATE OR DELETE 5 Table Owner TABLE 6 Base Object Type **EMPLOYEES** 7 Table Name 8 Column Name

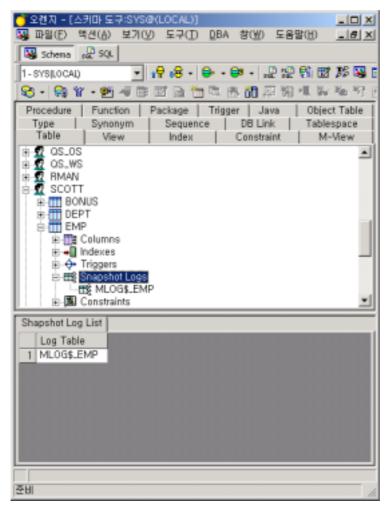


Snapshot Log

 \triangleright

◆ Snapshot Log List:

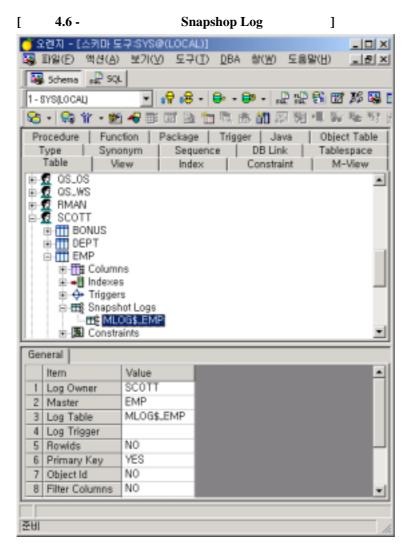
[4.5 - Snapshot Log]





가 .

♦ General : ,



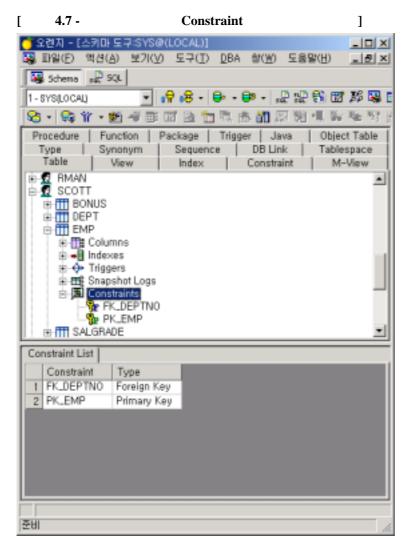


Constraint

Primary Key, Foreign Key, Unique Key, Check(NULL), Check(

)

- Constraint
 - ◆ Constraint List : Constraint , Type





Partition

Partition, Subpartition

Partitions

Partition List : Partition , TablespacePartition Key : Partition Key Column

Partition / Subpartition

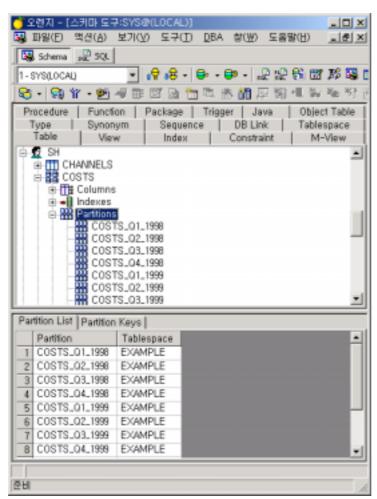
◆ Storage List : Partition Storage

◆ Partition List : Partition◆ Stats List : Analyze

◆ Other List

◆ Segment : Partition/Subpartition , , Extents, ...

[4.8 - Partition]





4.3.4 Object Table

[OBJECT TABLE]

Object Table OBJECT TABLE 가 .

Column : Column , Nullable, Data Type, Comment

Figure 3: Tablespace, Pct Free(%), Pct Used(%)

Storage : (Initial, Next, Min Extents)

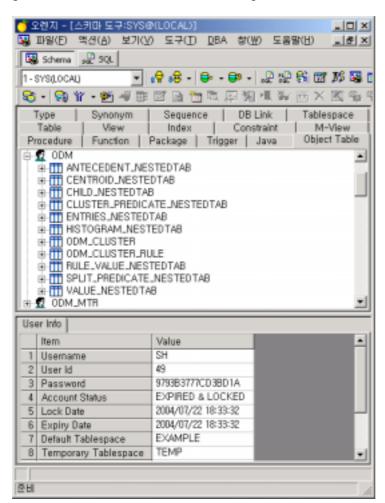
> Stats : (Last Analyze, Rows, Blocks)

> Other : Parallel Degree, Partition

Comment:

> Segment : , , Extents

[4.9 -]





4.3.5 Index

B*tree Level . [INDEX]

INDEX

가 .

> Column : Column , Length, Sort

Figure 3: Tablespace, Unique

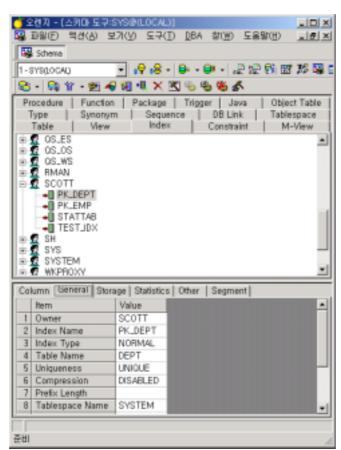
> Storage : (Initial, Next, Min Extents)

> Stats : (B*Tree Level, Leaf Blocks, Distinct Keys, Rows)

> Other : Parallel Degree, Partition

➤ Segment : 7} , Extents

[4.10 -]





4.3.6 Trigger

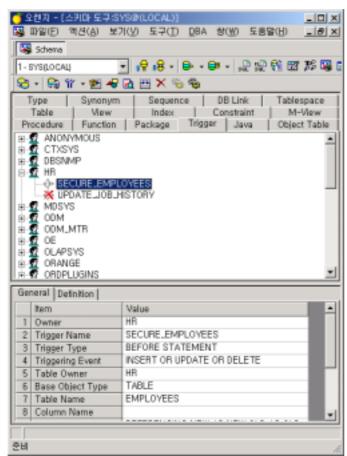
[TRIGGER]

TRIGGER 가 .

➤ General : Type(Before..), Event(Insert..), Action Type

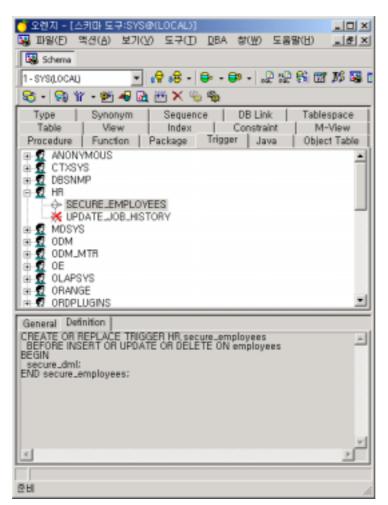
Definition

[4.11 - General]





[4.12 - Definition]





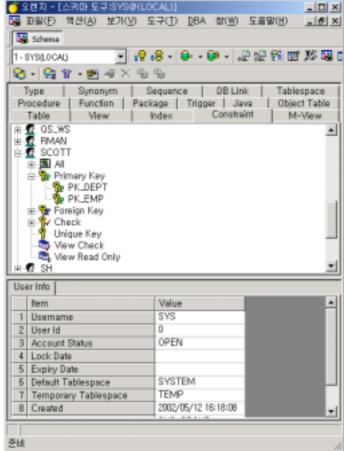
4.3.7 Constraint

Constraint Primary Key, Unique Key, Foreign Key, Check(Null),

Check(Column Value) Constraint

[CONSTRAINT] Constraint

Constraint Constraint 가 .





■ Primary Key Constraint

> General : Type, Status, deferrable, Deferred, Last Change

Constraint Columns: Primary Key

► Index Segment : 7 Tablespace, , , Default

Storage, Extents

4.14 - Primary Key Constraint (General)

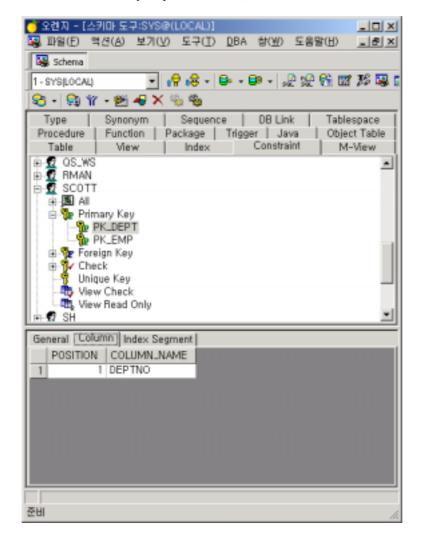
🍏 오렌지 - [스키마 도구:SYS@(LOCAL)] - 0 x 🛂 파일(E) 액션(A) 보기(Y) 도구(I) DBA 창(W) 도움말(H) _ 8 X Schema . 1 - SYS(LOCAL) 83 - 83 Y - 24 A X % % Type Synonym Sequence DB Link Tablespace Function | Package | Trigger | Java | Object Table Procedure Table Index M-View ⊕ Ø GS_WS ⊕ Ø RMAN ⊕ Ø SCOTT e 50 All B % Primary Key Foreign Key
Check
Unique Key View Check View Read Only ini-67 SH General | Column | Index Segment | SCOTT Owner Constraint Name PK_DEPT Primary Key Constraint Type Table Name Search Condition Ret Owner Ret. Constraint Ret, Table 준비



4.15 - Primary Key Constraint (Constraint Columns)

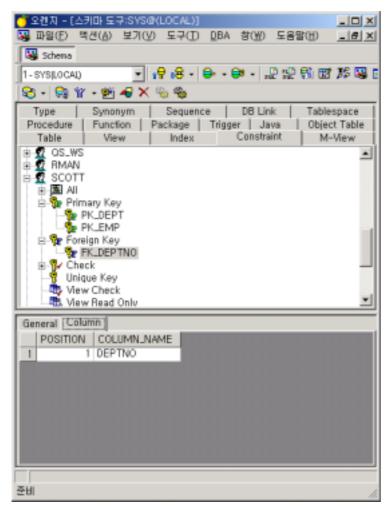
]

[





- Foreign Key Constraint
 - > General : (, Constraint,), Delete Rule, Status, Deferrable, Deferred, Last Change
 - Constraint Columns: Foreign Key
 - [4.16 Foreign Key Constraint (Constraint Columns)]



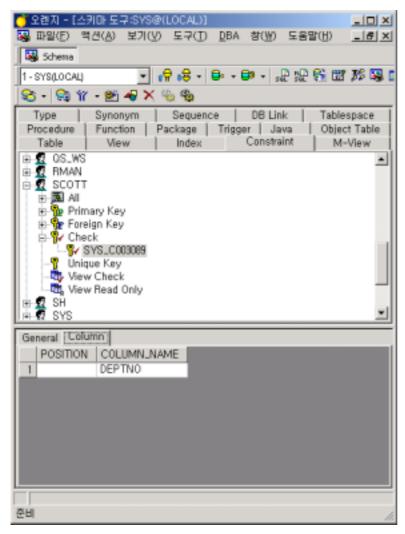


■ Check Constraint

> General : Table Name, Search Condition

Constraint Column : Check

[4.17 - Check Constraint (Constraint Columns)]





■ Unique Key Constraint

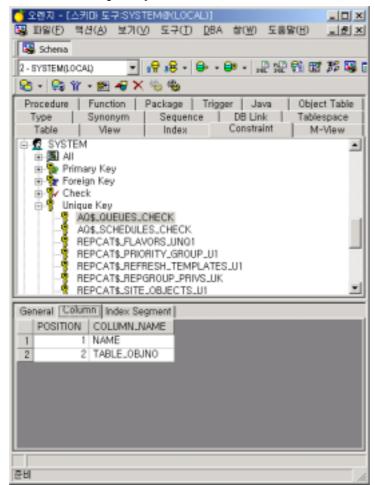
> General : Type, Status, deferrable, Deferred, Last Change

Constraint Columns: Unique Key

➤ Index Segment : 가 Tablespace, , , Default

Storage, Extents

4.18 - Unique Key Constraint (Constraint Columns)





4.3.8 View

, ,

가 가 .

[VIEW]

VIEW 가 .

■ View

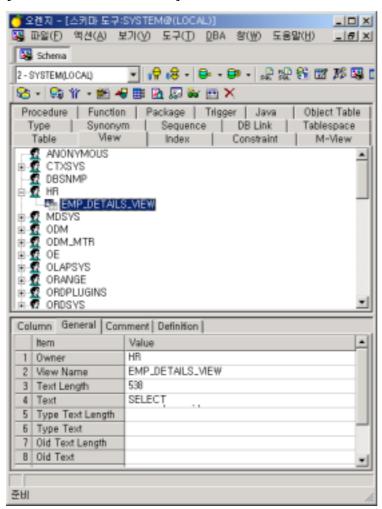
Column : 가 , Nullable, Data Type, Comment

> General : 가

Comment:

Definition

[4.19 - View]





4.3.9 Type

Type , , 7 .

[TYPE] Type

TYPE 가 .

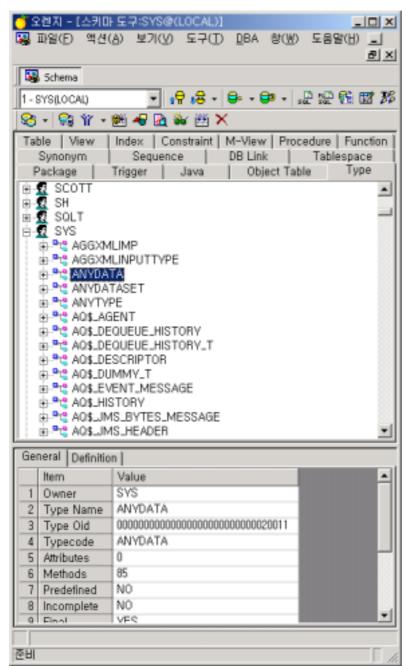
■ Type

➤ General : Type Name, Type Object ID

> Definition : Type



[4.20 - Type]





4.3.10 Synonym

Synonym

가 DB link 가 .

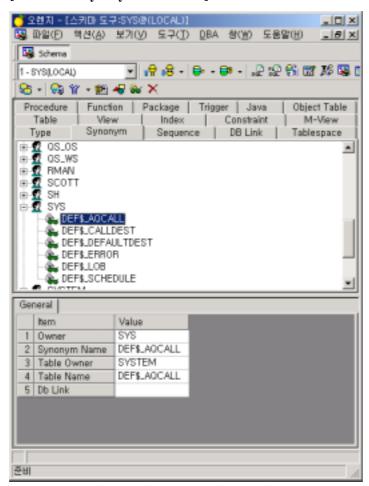
[SYNONYM]

Synonym SYNONYM 가 .

■ Synonym

➤ General : Synonym , DB Link

[4.21 - Synonym]





4.3.11 DB link

DB Link

가 .

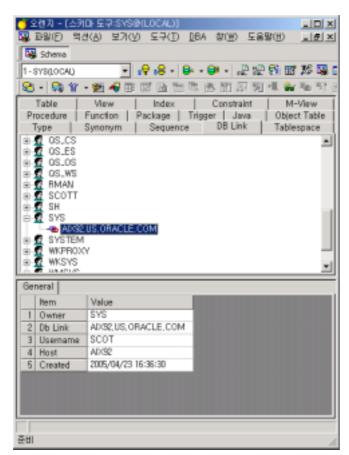
[DB LINK]

DB Link DB LINK 가 .

■ DB Link

➤ General : DB Link 가 , DB Link

[4.22 - DB Link]





4.3.12 Sequence

가

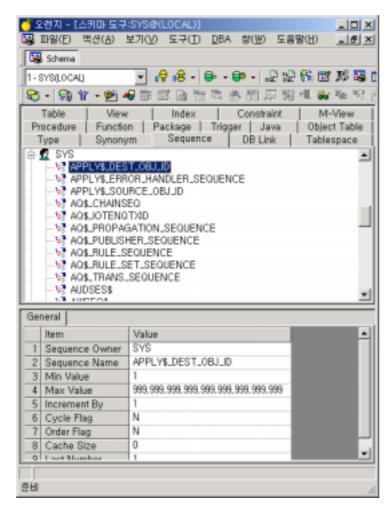
, 가 , . . .

[SEQUENCE]

SEQUENCE 가

> General : MIN, MAX, 가

[4.23 - Sequence]





4.3.13 Materialized View

Materialized View M-View [M-View]

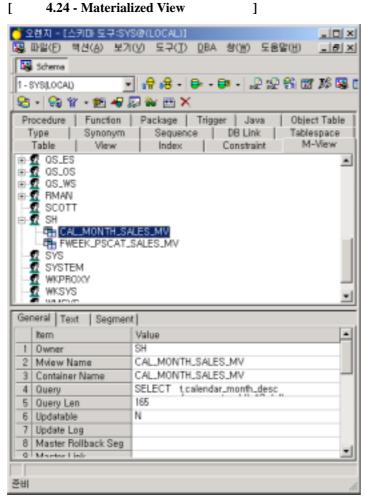
가 Materialized View

Materialized View

General : Owner, Updatable, Query Rewrite

Text : Materialized View Segment : Segment Parameter

4.24 - Materialized View





4.3.14 Procedure

PL/SQL

ID , Status 가 .

[PROCEDURE]

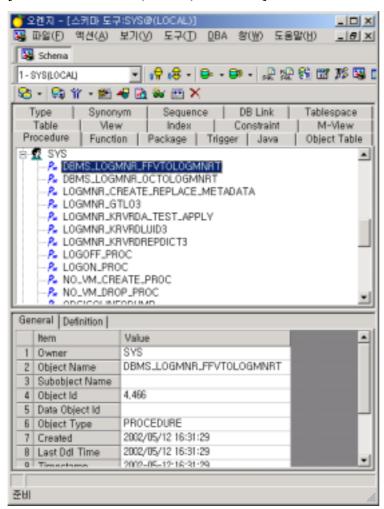
PROCEDURE 가 .

■ PROCEDURE

> General : ID , Status

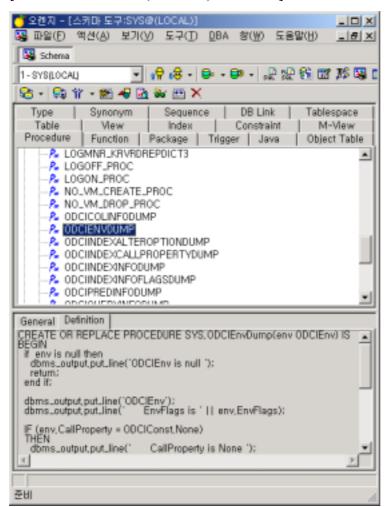
Definition

[4.25 - Procedure(General)





4.26 - Procedure (Definition)





4.3.15 Function

PL/SQL Function

ID , Status 가 .

[FUNCTION]

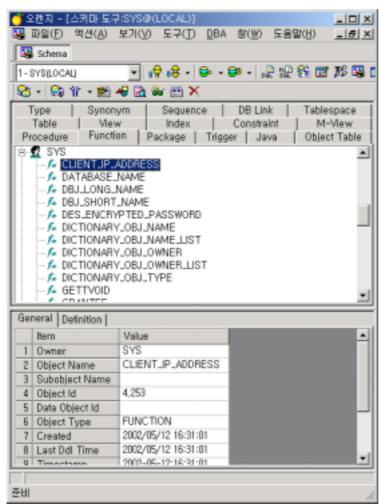
Function FUNCTION 7 .

■ Function

➤ General : ID , Status

Definition

[4.27 - Function (General)]

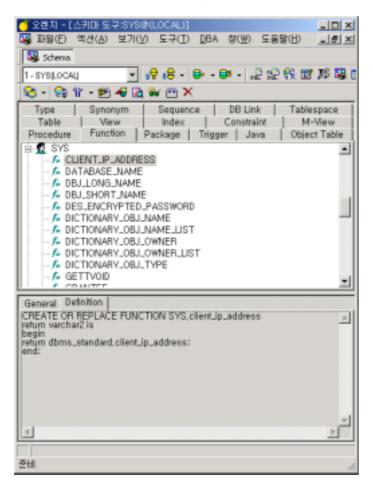




4.28 - Function (Definition)

[

1





4.3.16 Package

PL/SQL

PL/SQL 가
. ID , Status 가
. [PACKAGE]

PACKAGE, PACKAGE BODY 가

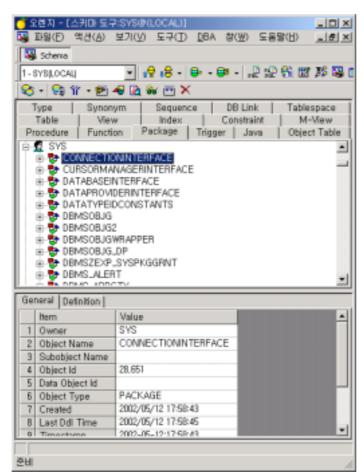
.

■ PACKAGE, PACKAGE BODY

➤ General : ID , Status

Definition

[4.29 - Package (General)





4.30 - Package (Definition)

[

○ 오렌지 - [스키마 도구:SYS@(LOCAL)] _ O X 🚜 파일(E) 핵션(A) 보기(Y) 도구(I) DBA 창(W) 도움말(H) _ 8 X Schema 3 - | 🔐 😂 - | 😂 - 😂 - | 🚜 😭 🖼 🗯 🖼 🎉 🖼 1 - SYS(LOCAL) 会・ 員 〒・營 46 図 ※ 円 × Type Synonym Sequence DB Link Tablespace Index Constraint Table View M-View Function Package Trigger Java Procedure Object Table ⊨ 💆 SYS ٠ CONNECTIONINTERFACE
CURSORMANAGERINTERFACE DATABASEINTERFACE

DATAPROVIDERINTERFACE ⊕ B DATATYPEIDCONSTANTS ⊕ 👺 DBMS0BJG DBMSOBJG2
DBMSOBJGWRAPPER DBMSOBJG_DP
DBMSZEXP_SYSPKGGRNT
DBMS_ALERT PERMIT ARROWS General Definition 준비



4.3.17 Java

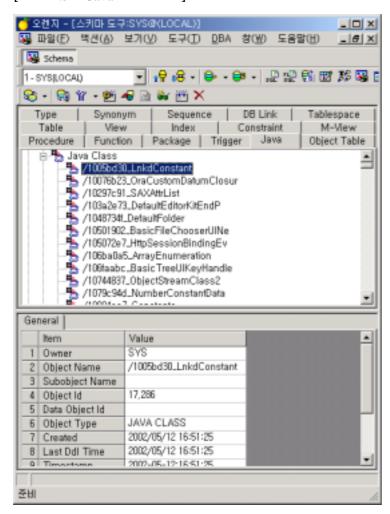
[JAVA]

JAVA Class/Source/Resource JAVA 가 .

■ JAVA

> General : ID , Status

[4.31 - Java]





4.3.18 Tablespace

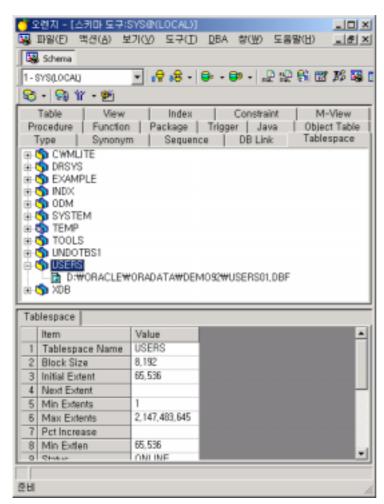
[TABLESPACE]

가

■ Tablespace

Tablespace: Initial, Next, Status, Type(Permanent or Temporary),

[4.32 - Tablespace]

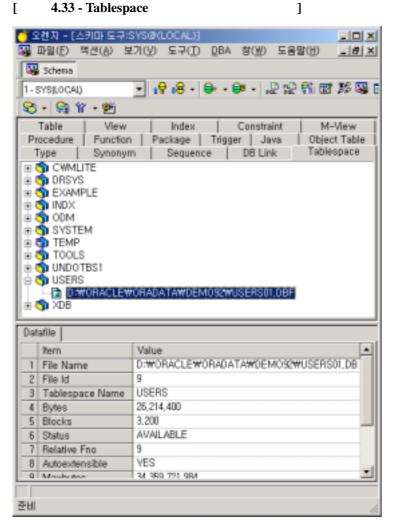




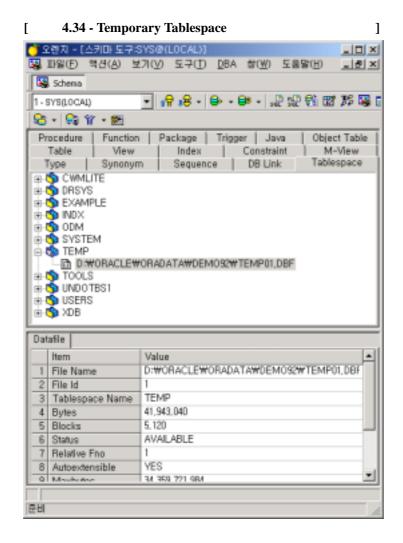
■ Tablespace

Data File : , Tablespace Name, Bytes, Blocks, Status

4.33 - Tablespace



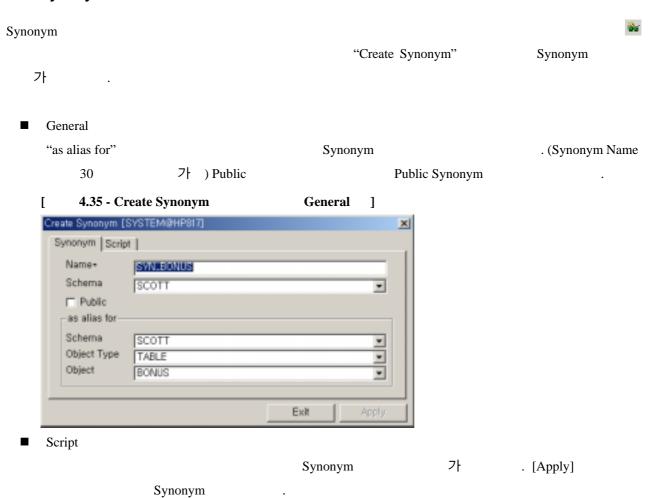




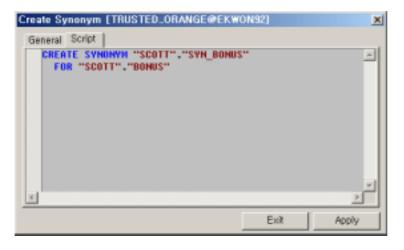


4.4 (CREATE)

4.4.1 Synonym



[4.36 - Create Synonym Script]

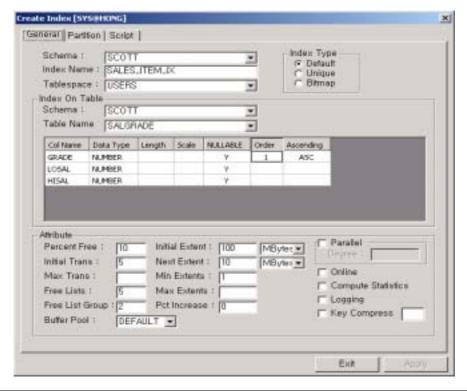




4.4.2 Index

[Table]	Index		[Index]					
			1				"Create		
Index"		Index	가						
	General								
	>								
		"Order"							
				Unique	Bitmap				
	>		"Attribute"						
	Percent Free, Initial, Next, PctIncrease, Minextents, Maxextents								
		Pool"	Oracle V8						
	>	가							
		♦	: 30						
		◆ Percent Free	: 0 ~ 99 (%)						
		◆ Initial Trans/Ma	ax Trans : 1 ~ 255						
		•			O/S	가			
		가							
	[4.37 – Create Inde	x General]						

4.37 – Create Index General]

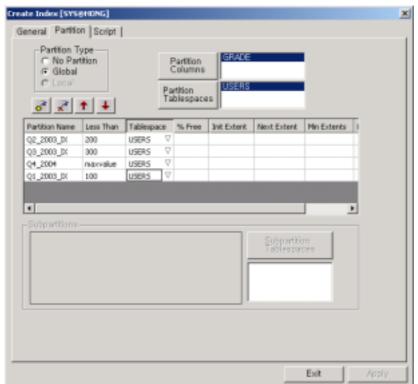




■ Index Partition

"No Partition", "Global", "Local" 7 ↑ 7 ↑ , "Local"
Local"
[Partition Columns]
Range
Th

4.38 – Create Index Partition





■ Script

가 . [Apply]

가 .

[4.39 – Create Index Script]

```
General Partition Script

CREATE INDEX SCOTT.SALES_ITEM_IX
ON SCOTT.SALEADE

(
GRADE ASC
)
GLOBAL
PARTITION BY RANGE
(
GRADE
)
(
PARTITION Q2_2003_IX VALUES LESS THAN
(
200
)
TABLESPACE USERS,
PARTITION Q3_2003_IX VALUES LESS THAN
(
300
)
TABLESPACE USERS,
PARTITION Q4_2004 VALUES LESS THAN
(
naxvalue
)
TABLESPACE USERS,
PARTITION Q4_2004 VALUES LESS THAN
(
naxvalue
)
TABLESPACE USERS,
PARTITION Q4_2004 VALUES LESS THAN
(
naxvalue
)
TABLESPACE USERS,
PARTITION Q4_2003_IX VALUES LESS THAN
(
naxvalue
)
TABLESPACE USERS,
PARTITION Q4_2003_IX VALUES LESS THAN
(
Ext Apply
```



4.4.3 Table

[Table] "Create Table" 가

General

> . . .

Attribute . Percent Free, Percent
 Used, Initial Trans, Max Trans, Free Lists, Free List Group, Initial Extent, .

▶ 기

♦ : 30

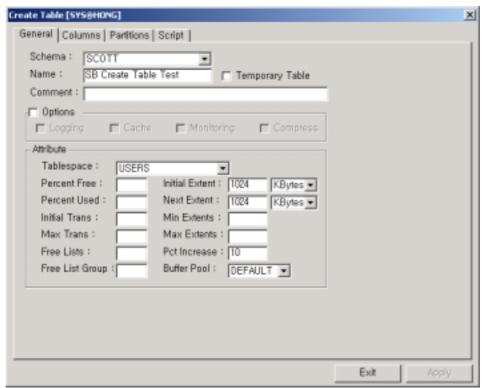
◆ Comment : 4000
 ◆ Percent Free : 0 ~ 99 (%)

◆ Percent Free : 0 ~ 99 (%)◆ Percent Used : 0 ~ 99 (%)

♦ Initial Trans/Max Trans : 1 ~ 255

◆ O/S 가 가

4.40 – Create Table General]





■ Columns

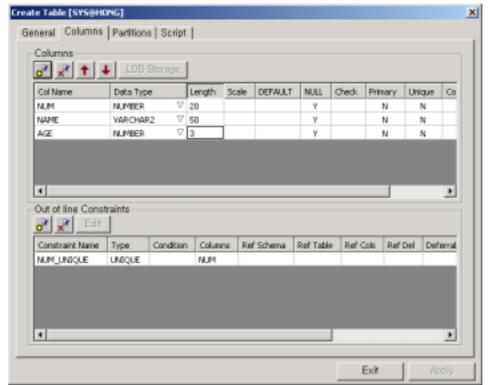
Not Null , Check

> LOB [LOB Storage] LOB

➤ Inline Constraints "Out of line constraint"

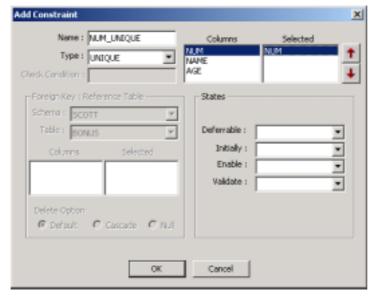
가/ / 가

4.41 – Create Table Columns]





[4.42 – Create Table Columns (Out of line Constraints)]





■ Table Partition

Range Partition

.

Subpartition "Sub-Partition Count"

1 .

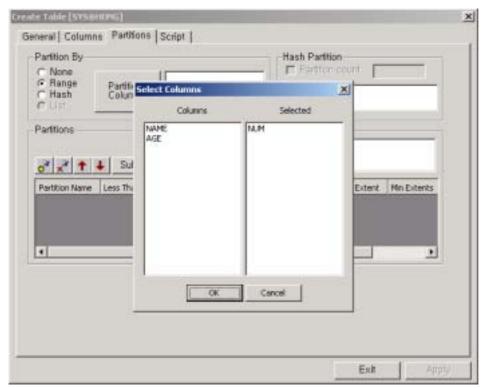
> Subpartition

"Subpartition Count" . Sub-Partition List

. SYS

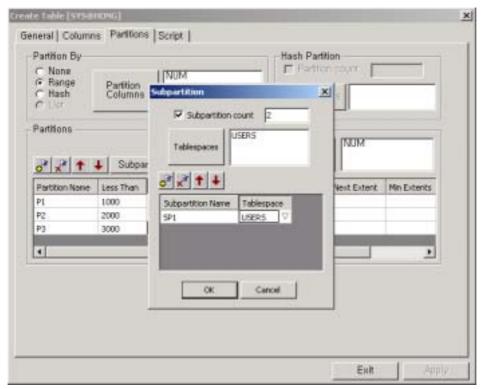
DBMS 가

[4.43 – Create Table Partitions (Partition Column)]





[4.44 – Create Table Partitions (Range Subpartition)]





■ Script

 가
 . [Apply]

.

[4.45 – Create Table Script]

```
General Columns Partitions Script |

CREATE TABLE SCOTT.SB
Create Table Test
(
    NUN NUMBER (20) ,
    NAME VARCHAR2 (50) ,
    AGE NUMBER (3) ,
    CONSTRAINT NUM_UNIQUE UNIQUE
(
    NUM
)

STORAGE
(
INITIAL 1024K NEXT 1024K PCTINCREASE 10
)
TABLESPACE USERS
PARTITION BY RANGE
(
    NUM
)
SUBPARTITION BY HASH
(
    NUM
)

SUBPARTITION BY HASH
(
    NUM
)
```



4.4.4 Sequence

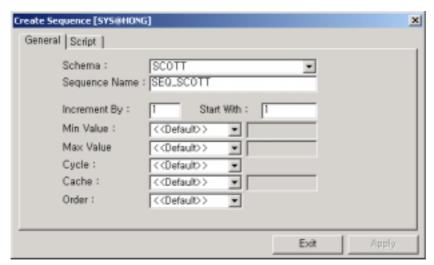
[Sequence]

%₹

"Create Sequence"

가 .

- General
 - Increment By, Start With, Min/Max Value
 - [4.46 Create Sequence General]

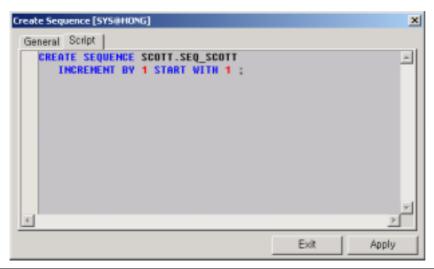


■ Script

가 . [Apply]

가 .

[4.47 – Create Sequence Script]





4.4.5 Cluster

[Table]

"Create Cluster"

Cluster 7 .

Cluster

Cluster

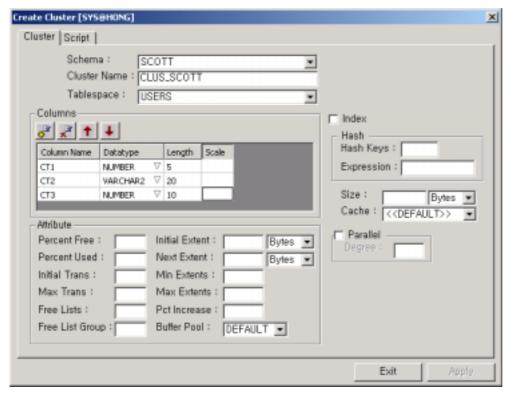
Cluster

Cluster

Hash, Size, Cache, Parallel

The state of the content of the con

[4.48 – Create Cluster Cluster]





■ Script

Cluster 7 . [Apply]

Cluster 가 .

[4.49 – Create Cluster Script]



4.4.6 DB-Link

[DB Link] DB Link "Create DB Link"
DB Link プト .

General

DB Link , (Shared/Public/Current User), ID

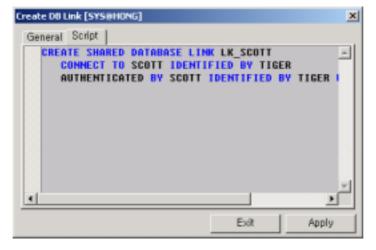
[4.50 – Create DB Link General]



■ Script

DB Link 가 . [Apply]
DB Link 가 .

[4.51 – Create DB Link Script]





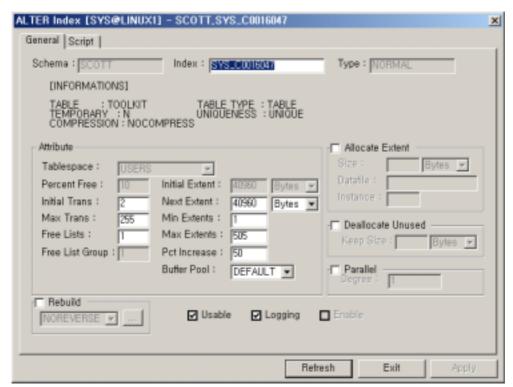
4.5 (ALTER)

4.5.1 Index

[Index]	[Table	J	Index					
	• □				"Alter Index"			
	가							
= (General							
)	INDEX	:						
,	Attribute	:	Storage					
)	Allocate Ex	xtent :	Extent					Extent
					. Datafile		가	
		Datafile					. Instance	OPS
	RAC	Freelis	t Group	Instance num	ber			
,	Deallocate	Unused	: HWM(High	Water Mark)		Free Exter	nt	
	Kee	p Size		Free Exter	nt			
)	Parallel	: Parallel	Thread					
	Parallel Deg	gree						
)	Rebuild	: Index						
)	Usable :		/		가			
,	Logging : L	ogging	Redo Log F	ïle				



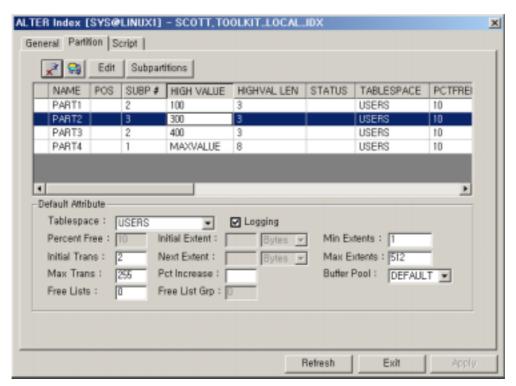
[4.52 – Alter Index General]



- Partition
 - Partition /

Subpartition . General .

[4.53 – Alter Index Partition]





■ Script

> 가 . [Apply]

가

[4.54 – Alter Index Script]



4.5.2 Table

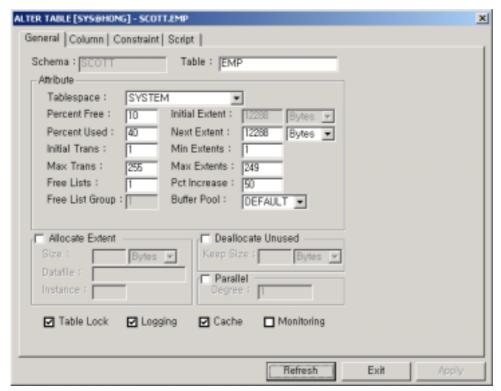
"Monitoring"

가

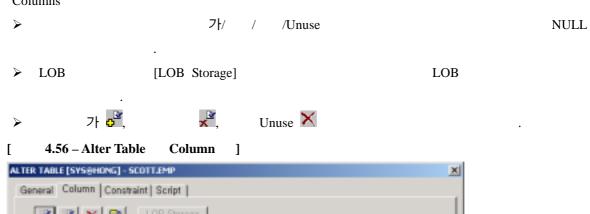
[Table] **m** "Alter Table" 가 General ALTER TABLE Storage "Extent Allocation", "De-allocate Unused Keep" . General . "Table" "Attribute" Storage "Allocate Extent Group" . "Size" Extent . Datafile Segment 가 Datafile . Instance **OPS RAC** Freelist Group Instance number "Deallocate Unused" HWM Free Extent Keep Size Free Extent "Parallel" Table Altering Parallel Query Parallel DML Parallel Thread Parallel Degree "Table Lock" **DML** TM Lock Table DDL . Default Table Lock "Logging" Redo Log File "Cache"

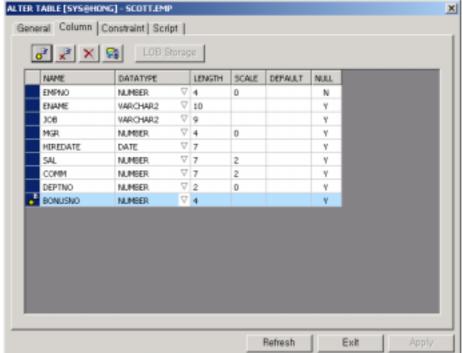


[4.55 – Alter Table General]



■ Columns

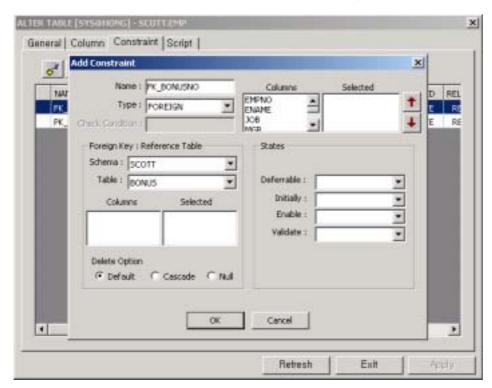






■ Constraint

- **Out of line Constraint** フト/ / .
- Constraint 7 Constraint
- [4.57 Alter Table Constraint (Constraint 7)]





■ Script

 가
 . [Apply]

4.58 – Alter Table Script]

```
ALTER TABLE [SYSBHONG] - SCOTT.EMP

General | Column | Constraint | Script |

ALTER TABLE SCOTT.EMP

ADD

(
BONUSNO NUMBER (A) NULL
);

Refresh Exit Apply
```

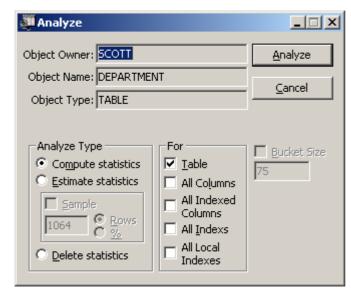


4.6 Analyze/Compile

4.6.1 Analyze

■ Analyze 7 Histogram Bucket Size

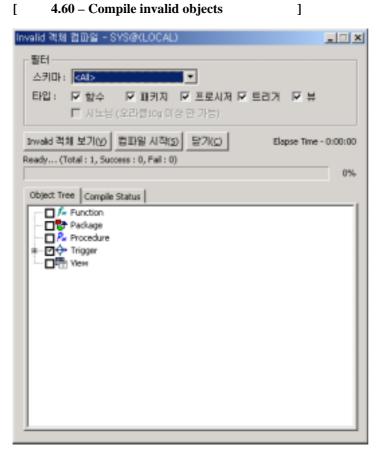
4.59 – **Analyze**]





4.6.2 Compile

```
[Function], [Package]
                              Compile
                                                    (PL/SQL
                                                              )
"Compile"
                   Compile
DBA
               Invalid Object
                                          Compile
                                                                          [DBA] → [Invalid
     ]
                                                                     [
                                                                          4.60 - Compile invalid
                           가
objects
               ]
```



- - Ware Valley

5. (QUERY Builder)

Table Tree

GUI , Syntax SQL Join SQLSQLTool, Plan Tool, PL/SQL Tool SQL Return SQL Where, Group By, Order By, Having . Plan Tool 가) (SQL 5.1 Drag & Drop 가 GUI SQL Add-ON Tool Editor SQL SQL Formatting Load Syntax 5.2 SQL Paste SQL $\, SQL \,$ Paste

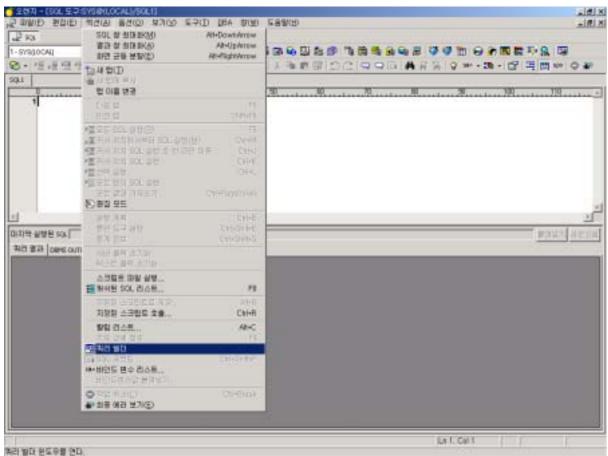


5.3

5.3.1

SQL Tool, Plan Tool, PL/SQL Tool [] → [電] 가 , 가 가 .

[5.1 - SQL Tool]





5.3.2 SQL

Tables, Views 가

가 .

SQL FROM

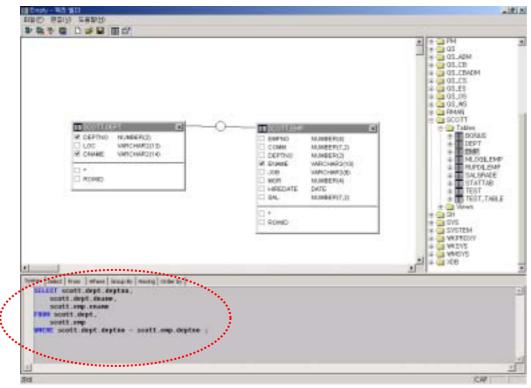
WHERE .

SELECT 가

Select From Check Column

Uncheck .

5.2 - SQL]





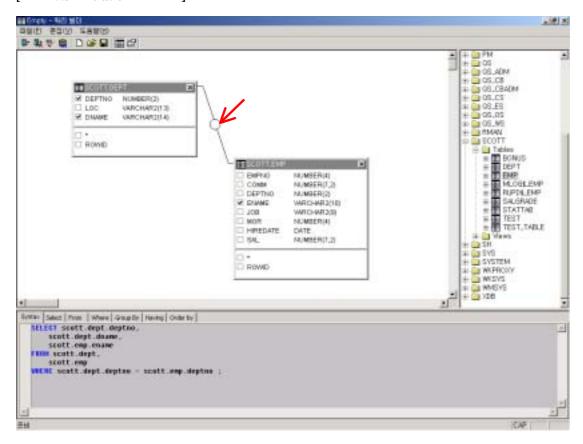
5.3.3 Relation

Tables, Views Relation 가 가 [5.3 - Relation 1 가

"="**,** "!=" , ">" , "<" , ">=" , "<=" , "BETWEEN" 가

[5.3 - Relation]

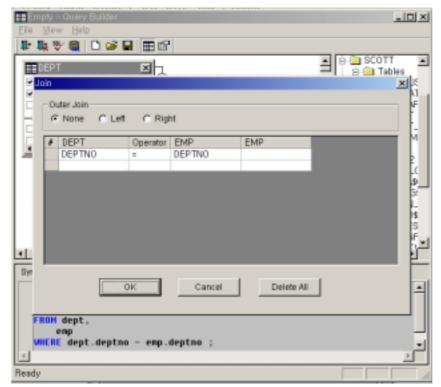
Outer Join





5.4 - Relation]

[



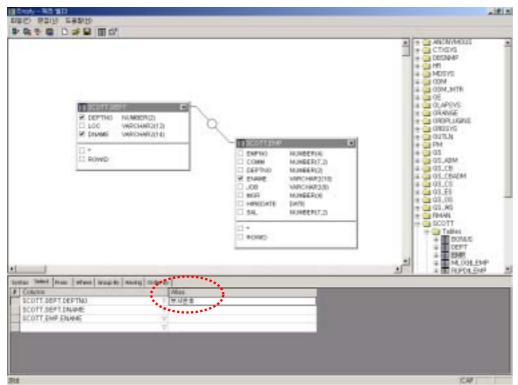


5.3.4 Alias (Select)

"SQL " [SELECT]
Alias 7 Alias "F2"

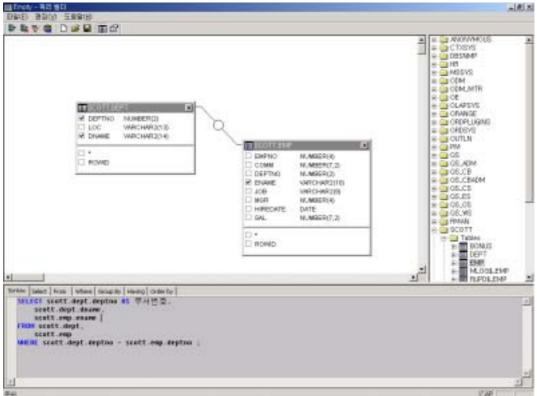
Syntax 가 .

[5.5 - Alias]





5.6 -Alias [**Syntax**] DATE BROW ENGL





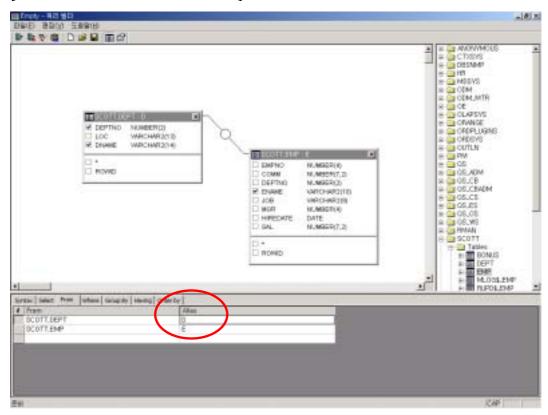
5.3.5 Alias

"SQL" [FROM]

From Alias 가 Alias "F2"

Syntax 가 .

[5.7 - Alias]





5.3.6 Where 가

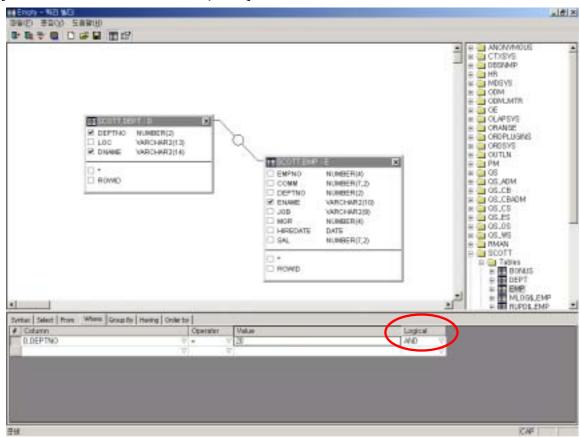
가 "SQL " [WHERE] ,

, , 가

Syntax 가 . BETWEEN

Value AND .) "A() AND B()"

[5.8- 가]

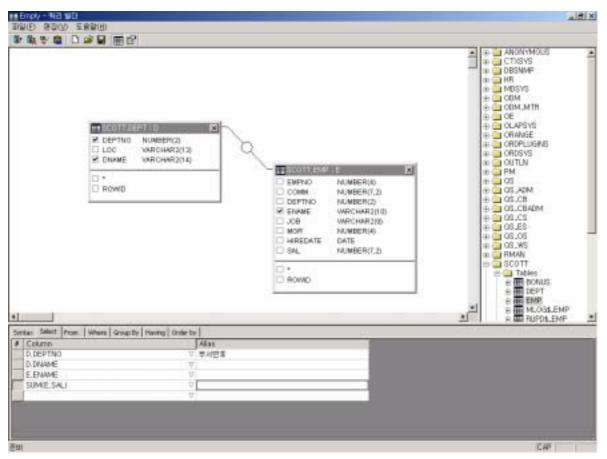




5.3.7 Group By

Group By "SQL" [SELECT]
sum() . Query Builder "SQL" [GROUP BY]

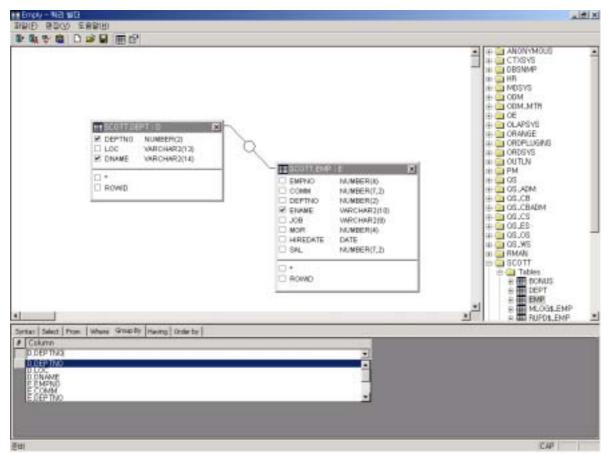
[5.9 -]





[5.10 - Group By

]



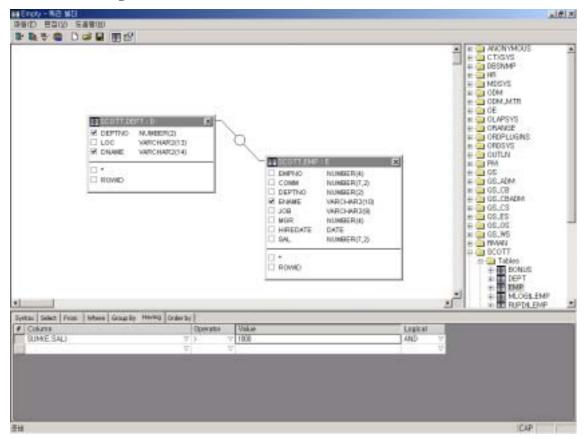


5.3.8 Having 가

Group By Having 7 "SQL" [HAVING]

Column, Operator, Value, Logical 7

[5.11 - Having 가]





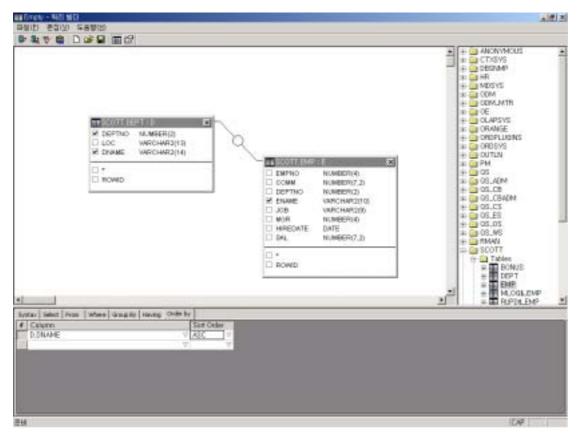
5.3.9 Order By 가

"SQL

[ORDER BY]

Column, Sort Order 가

[5.12 - Order By 가]



5.3.10

(OQB)

SQL

5.3.11 Return

SQL Tool, PL/SQL Tool, Plan Tool)



6. Plan Tool

```
지 SQL (RBO,CBO), RDBMS Version, HINT , Index , DBA SQL DBA 가 LOCAL DB, REMOTE DB LEVEL ( , , ) 가 . Workspace
```

6.1 Plan Tool

```
SQL(Query, DML)
✓ DB Link
   Pro*C Source Code Analysis
                                 (Cursor)
   SQL
   SQL Trace
                              (TKPROF
                                             + Client Time, Bind Value, Wait Events)
   SQL(Query)
                         GRID
               (Bind variable)
           SQL
                      ( SQL Formatter)
              SQL
                      PLAN
                                               MULTI-TAB
   Syntax Highlight
           Edit
                   (Block Comment/Uncomment, Find & Replace, Goto Line, Matching, Bookmark, ...)
   SQL
                            Project
                                       (.ptd
✓ SQL
           Visual Basic, PowerBuilder, C/C++, Delphi, Java, Perl
```



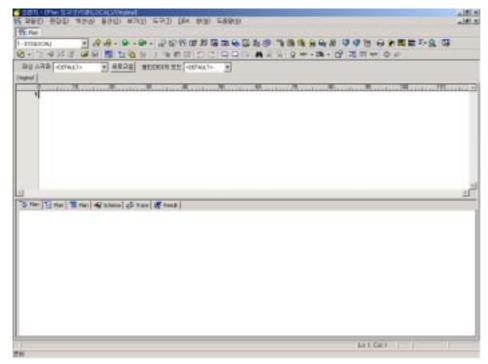
6.2 Plan Tool



6.3 Plan Tool

[

6.1 - Plan Tool]

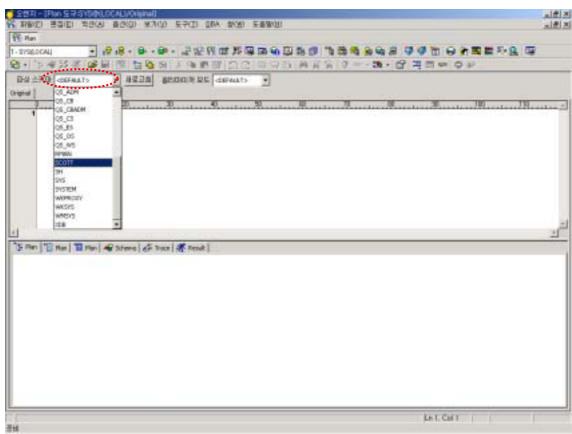




6.4

6.4.1 Parsing Schema

[6.2 –]





6.4.2 Optimizer Mode

6.3 -

```
Init.ora
   "
  Plan Tool
                                            "<Default>"
                                                            가
                        Optimizer Mode
                                                      "<Default>"가
                               . Optimizer Mode
"<Default>"
  Optimizer Mode
                                                                 SQL Tool
                                                                                Plan Tool
                                                        SQL Tool
                                                                       Plan Tool
Plan Tool
              Optimizer Mode 가 "<Default>"
                                                                                   Default Optimizer Mode
                                                    Optimizer Mode
                                                                                    Optimizer Mode
Database Information
                         [System Parameter]
                                               [Session Parameter]
                                                                          optimizer_mode parameter
          . Optimizer Mode
                              Workspace
```



6.4.3 SQL

SQL Plan Tool [Show Plan] [Plan] . [Show Plan] (Hot Key : F5) SQL (**11**), 3 가 Plan 가 6.4 -Full] 가 Scan, Full Scan, Cartesian Product SQL DB Link Access "object@DBLink" object [6.4 –] _(# X N 中部(E) 時音(E) 司(B) 音(B) 音(C) サスパカ モカ(エ) DBA 特(A) 正義部(B) _ (# X Plan Plan 2.100ML00ML 1.40ml 1.10ml 1.1 DU AND COVALTS - MEZE SERVIN SE FALE 15 tolect ename
2 from one e, dept d
2 observe e.deptmo - d.deptmo
Name d.dmane - 'SALES'; 5 Plan 1 Plan 1 Plan 4 Schema of Trace 4 Result SELECT STATEMENT Optimizer=FLUE

SINESTED LOOPS

TABLE ACCESS (FULL) OF "EMP"

TABLE ACCESS (BY INDEX ROWD) OF "DEPT"

MINDEX (UNIQUE SCAN) OF "PK_DEPT" (LINIQUE) 11,27 mer. Ln 4, Col 23



, 가

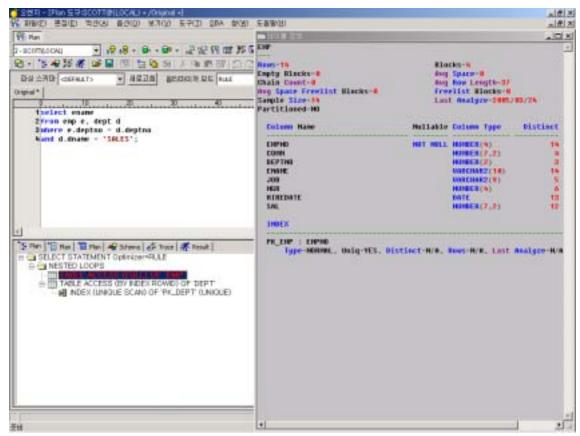
. 가 . .

, , ,

. DB Link DB Link SID

가 .

[6.5 –]





6.4.4 SQL

SQL SQL [Show Related Schema] (***) [Schema] フト .

6.6 -] [東京(E) 神政(E) 神(E) 国(E) はり(D) 東京(E) (BA (E) (国際)(E) Pi Ruc · 1948、4·4·4·4·20公司的国际中国的国际中国的国际中国。 2-SCOTTLOCAL · 바로고향 출인이이게 모드 PLAS 5. 3. 4. 40. 50. 50. 50. 50. 40. 40. 500. 519. -2 from emp o, dept d Subere e.deptno - d.deptno hand d.dname - "SMLES"; "5 rior The Ten Ten 4 Schenz of toxy A Realt Nove-4 Septy Blocks=0 Jusin (Sept-0) Nog Sback Freeligt Blocks=0 Semole Size-4 Partitioned=00 Nuttable Orlan Type NOT HILL NUMBER(2) VARCHAR2(14) VARCHAR2(14) DESTAC LOC DILINE PK_DEPT : (METHO)
Type=MCRMAL, Unit="MES, Distinct=MUA, Ross=MUA, Last Analyze=MUA Blocks=0 Caset=0 race freelist Blocks=0 | Size=14 Ln 4, Col 23 0.38 sec.

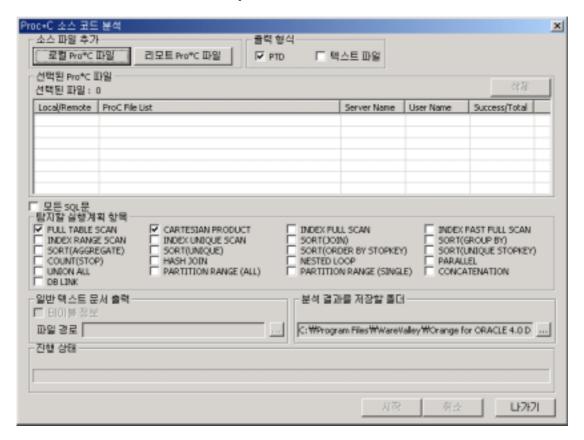
6.4.5 Pro*C Source Code Analysis



	Add Source Files –	".pc"			".pc'	' 가
	. ".pc"	ocal Pro*C Files]		,		
I	[Remote Pro*C Files]		".pc" .		FTP	
	".pc"	가	가			
	Output Format –					Plan Too
	-			T(E.1.		11411 100
	Workspace PTD Selected Pro*C File – "Add Source Files"			Text File		•
				.pc		
	. Remot	te Pro*C	Server Name	User Name		. [Delete]
		.pc				
■]	Execution Plan Item to De	etect – ".pc"	SQL		가	
		Full Table Scan Cartesian Product 가		duct 가		가
					"ALl	L SQLs"
=]	Plain Text Document Output – Output Format		Text File		. Table Information	
		가	,			
		1. 500	•			
	Folder to Save Analysis R	esult – PTD			•	
– ,	start – .pc Success/Totalpc		SQL		"Selected Pro*C File" SQL	
	.pc	((Open Success File, Open Error F		File)	
	. SO	QL Plan Tool,	SQL			



[6.7 – Pro*C Source Code Analysis]





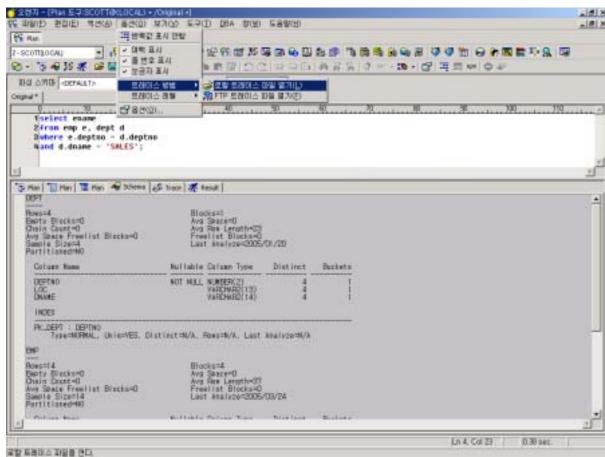
6.5

6.5.1

 $[] \rightarrow []$ FTP

•

[6.8 – Trace Method]





6.5.2 Local File

■ 7 (Windows)

■ 가 Windows udump 가

가

■ udump 가 NFS 가

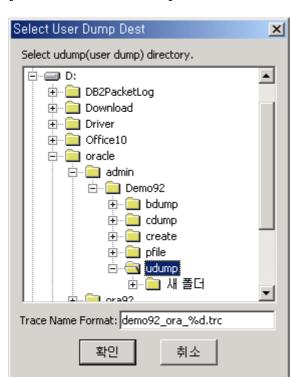
File 가 .

udump , "Trace Name Format" . NT

, Trace Name Format $\mbox{ORA}\%05\mbox{d.TRC}(\mbox{ : ORA00123.TRAC})$, UNIX

OK

[**6.9** – Local File]





6.5.3 FTP

```
FTP
                     가 FTP
                                             , FTP
         가
                    6.10 – FTP ]
                                            , OS User Password
FTP
              ſ
                                                                      udump
                              가
                                      . Server Name
                                                      udump dir
                                                                       가
                          , User, Password
                                               256
                                                              가
                                                                      Port
                                                                           1~65000
       가
                    , Trace Name
                                       Unix
           udump
                                                                                     udump
                             ora10344_ora817.trc, ora_2114_ora817.trc
                                                                               6.10 - FTP
             . Trace Name
                               256
]
```

[6.10 - FTP]

FTP 로그인 정보

서버명

사용자명

패스워드

포트 번호 21 □ 패시브 모드

udump dir D:\#oracle\#admin\#Demo92\#udump\#

Trace Name | demo92_ora_\%d.trc |
* use %[[0]n]d format(printf format) for PID. ex) ora_\%d.trc



6.5.4 Trace Level

4 Level .

 $[Option] \rightarrow [Trace\ Level] \qquad \qquad 4 \qquad \qquad Level \qquad \qquad .\ Trace\ Level$

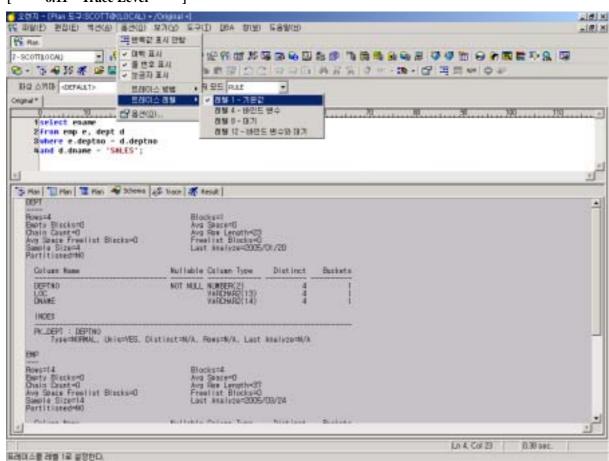
Level 1 .

■ Level 1:

■ Level 4 : Level 1 + Bind ■ Level 8 : Level 1 + Waits

■ Level 12 : Level 1 + Bind + Waits

6.11 – Trace Level

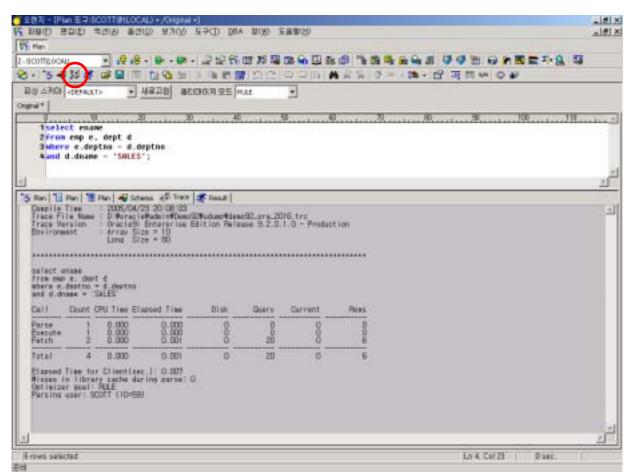




6.5.5

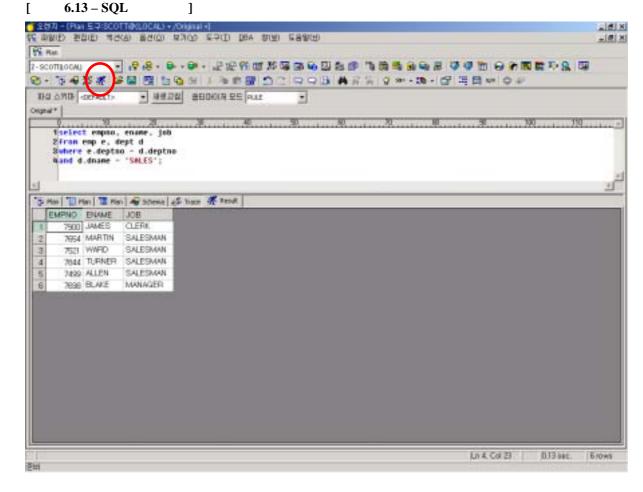
[Show Trace] SQL [Trace] Parse, Execute, Fetch SQL , Wait ,

[6.12 – Trace]





6.6 Plan Tool SQL





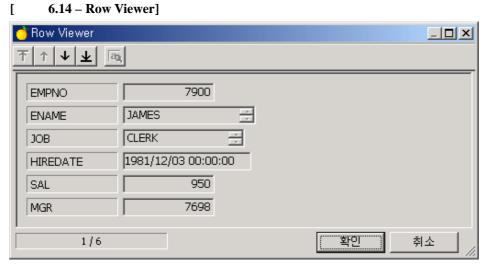
6.6.1 Row Viewer

가 가 Grid

[Row Viewer]

Row Viewer . (Appendix B)

6.14 – **Row Viewer**]



6.6.2 SQL

SQL Editor SQL

> SQL Paste

가 Copy

- Visual Basic
- PowerBuilder
- C/C++
- Delphi
- Java
- Perl

[Edit] → [Copy as Programming Language Code] SQL

가

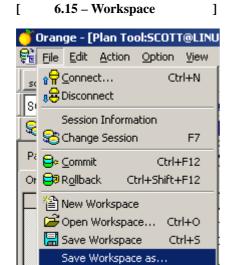
- Copy as Visual Basic Code
- Copy as C/C++ Code
- Copy as PowerBuilder Code
- Copy as Delphi



Copy as Perl [Edit] → [Paste from Programming Language Code] 가 SQL Paste from Visual Basic Code Paste from C/C++ Code Paste from PowerBuilder Code Paste from Delphi Code Paste from Java Code Paste from Perl Code 6.7 Workspace Workspace Plan tool SQL, . Workspace SQL Editor 가 SQL 가 . Workspace , SQL Plan, 6.7.1 (1 Plan Tool "Original" 가 가 Plan **SQL SQL** (**1** Plan **SQL (** Plan Plan 6.7.2 Plan Tool 가 Workspace SQL, SQL (), SQL Workspace . .ptd SQL SQL DBA

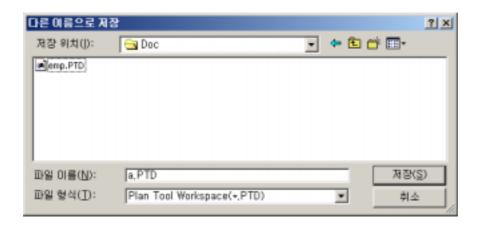
Copy as Java





Merge Workspace

CERT CONTROL File



6.7.3 Workspace

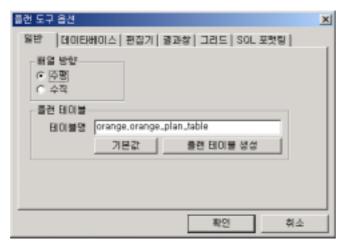
[] \rightarrow [] 2 Workspace Workspace



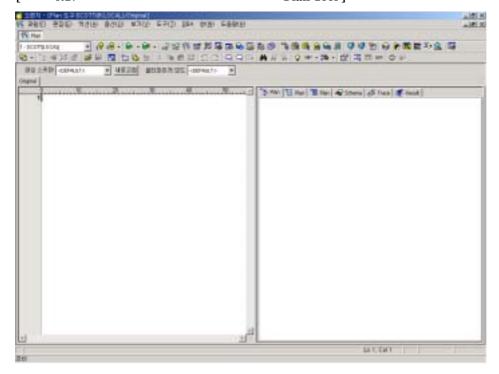
6.8 Plan Tool

6.8.1 General

[6.16 – Plan Tool General]



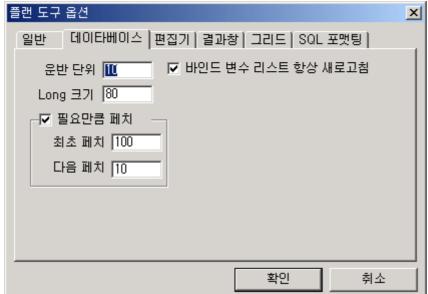
[6.17 – Plan Tool]





6.8.2 Database

```
가
                                  Fetch
                                            . "Long "
 Long type
   Initial Next
                                   1000
                                             가
                                                                  100
                                                           Initial
          Next 가 10
                           100
                                   " Bind Variable List
10
                                  . " ", "Long " 1
                                                                   가
                                           가 .
   "Initial/Next Fetch" 1
                       429496729
                                                                   Row
               Retrieve
                                                                    [
   가 ]
                             Retrieve .
     [ 6.18 – Plan Tool
                                    ]
     플랜 도구 옵션
```





6.8.3 Editor

[6.19 – Plan Tool]



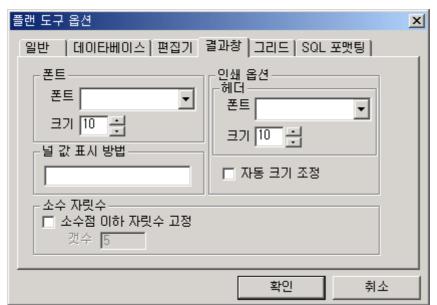


6.8.4 Result

Plan Tool . "Fixedsys" True Type 가 가 SQL

" Null Null 가 Insert Space . " "

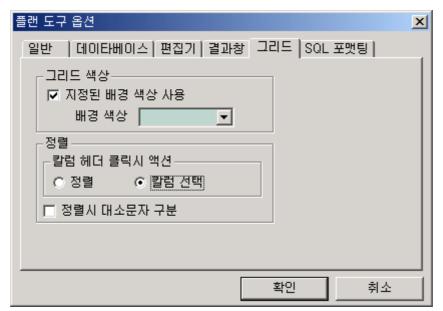
[6.20 – Plan Tool]





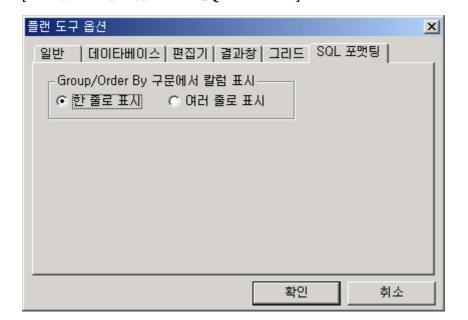
6.8.5 Grid

[6.21 – Plan Tool]





6.8.6 SQL Formatter





7. SQL Tool

```
SQL Tool
              SQL
                      PL/SQL
SQL
                                           가
            DML
                     DDL
      (DDL, DML)
                                                     Description
          SQL
                                                           . SQL
         SQL
7.1 SQL Tool
            SQL(DDL, Query, DML)
                                                                                 SQL
                                                                                                    tab
        Workspace
        \, SQL \,
        SQL
                      GRID , Text
        SQL
                      Save as EXCEL
               SQL
                            ( SQL Formatter)
                   (Bind variable)
        Retrieve As Need
        Syntax Highlight
               Edit
                        (Block Comment/Uncomment, Find & Replace, Goto Line,
                                                                                Matching, Bookmark, ...)
        SQL
               Visual Basic, PowerBuilder, C/C++, Java Delphi, Perl
       Last SQL
                   Display
                                  Refresh
    ✓ Large Objects(LOBs/FILE), LONG, RAWs
                                                Data type Selection
                                                                    Save
```



(Edit Mode)

7.2 SQL Tool

<u>F5</u> $\, SQL \,$ 가 Ctrl+M SQL Ctrl+J 가 가 Ctrl+K Ctrl +L SQL TEXT K SQL 8 -> $\, SQL \,$ 2 SQL 램 Query Builder Ξþ SQL Formatter 가 **†** 1 Ÿ :a= Bind , Po SQL Template

7.3 SQL Tool

7.3.1 **SQL Tool**



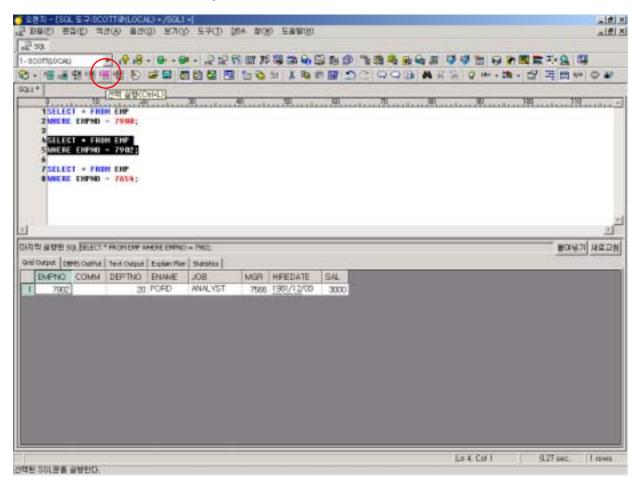
7.3.2 SQL

多田

```
SQL Tool
                  SQL(DDL, Query, DML)
                                                                         SQL
                     가
                           SQL
                                                                 SQL
                                                                       가
       가
                                              가
     SQL
                          가
                                                                         "(唱)
                                               "( )
SQL
            SQL
                                                                         SQL
                       SQL
                                                      7.2 -
                                                 [
     ]
     [
          7.1 –
                              ]
     구 마하다 현리티 역상의 옵션의 보기와 토구(D LBA 항영) 토용방법
                                                                               JO X
                                                                              교회 제
      2 VIEW ENTHO - 7988;
         STREET - FROM EMP
SWIERE EMPHO - 7982;
         PERSON - TRULE CHE
         BUNERE EHPHO - 7654;
      DITITY WITH SOLET FROM DRY WHERE DRIVE - 1900)
                                                                         분명되기 사로고설
       Gid Output | DePE OutPut | Text Output | Explain Plan | Science |
       EMPNO COMM DEPTNO ENAME JOB
                                 MOR HREDATE SAL
                    30 JAMES CLERK
                                  7696 1981/12/03 950
                                                             Ls I. Cel 18 (0.27 sec. | I rows
```



[7.2 - SQL]





7.3.3 LOBs, LONG, RAWs

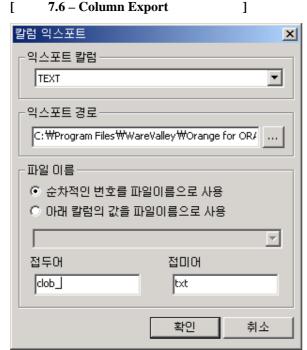
```
(CLOB, LONG)
                                                                 SQL Tool
        (character)
                                                                   Hexa Code
                                                                                          , BFILE
    BFILE
Table Editor
                                                      Import, Export 가 가
                                                                                                  15
                                                                                . (
    Table Editor
         7.3 - SQL Tool
                           CLOB, LONG Datatype
                                                            ]
     Last Execute SQL: select * from char_type;
     Query Result | Server Output | Text Output |
         CLOB
                                  LONG
      1 I am CLOB DataType I am LONG DataType
                           BLOB, BFILE Datatype
         7.4 - SQL Tool
                                                            ]
     Last Execute SQL: select * from bin_type;
     Query Result | Server Output | Text Output |
                                                                          RAW
         BLOB
                           BFILE
                                                         LONGRAW
        49616D424C4... <BFILE DIR>: lamBFILE
                                                         49616D4C4... 49616D524157...
                 Lob/Long
                                                        Grid
    7.5 – Export LOBs, LONG, RAWs
                                                       [Export LOBs, LONG, RAWs]가
                                              1
                           7.6 – Column Export
                                                          1
                                                                   Column Export
                                                                                             가
         7.5 – Export LOBs, LONG, RAWs
                                                    ]
      Find...
    Select All
    Copy
    Copy/Save with Header
      Copy/Save with Line Number
      Print Setup...
      Print Grid ...
      Save/Show grid as a excel file...
      Save Grid,...
      Fix Column
      Row Viewer
      Export LOBs,LONG,RAWs
```



Column Export Lob/Long (: COL4)

(: COL1) . " "

[7.6 – Column Export





7.3.4

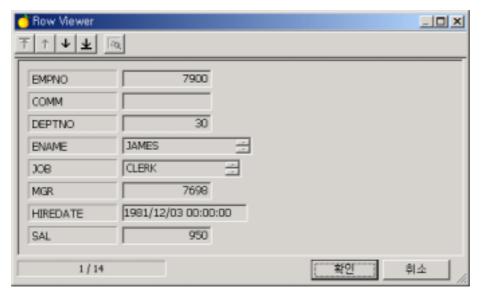
Grid (\bigcirc) Text (\bigcirc) SQL 가 DBMS_OUTPUT.PUT_LINE [Server Output] . Grid [7.7 - SQL Tool (Text Output)] Text ■ Text Output $[] \rightarrow [$ Server Output $[Action] \rightarrow [$] [7.7 - SQL Tool (Text Output)] 2 DEN PERCHASION BOOM NAVO EFID DEN SUR ESEMBLE - 原 X tselect - from emp; II(기약 상병원 SQL Select * from error. 불어떻게 재료고점 Get Output | Server Output | Text Output | Explain Man. | Statistics | SOL> salect + from east DEP ENINE MGR HIREDATE 500 0 14 rows selected Ltr 1. Cal 19 | 1.85 sec. | 14 rows



7.3.5 Row Viewer

Grid 가 가 , [Row Viewer]
Row Viewer . (Appendix B)

[7.8 - Row Viewer]





7.3.6 Description

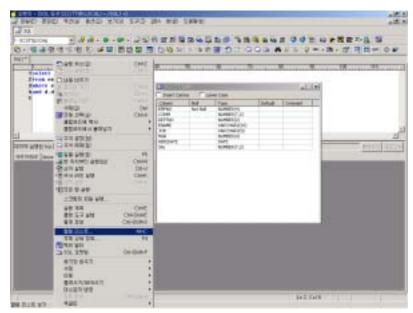
SQL , NULL ,

•

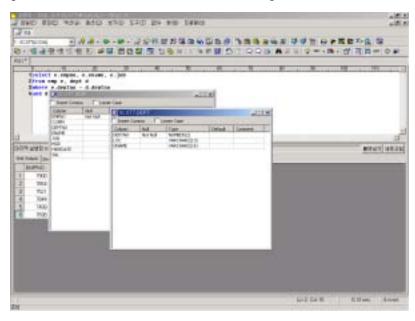
[7.9 -] 7h

. "Alt+C" .

[7.9 -]



[7.10 -]





7.3.7 Full Description

7.11 -

[

Full Description (Indexes, Constraints, Storage, Partitions, Triggers, Snapshot Logs, Columns, Table Info, Object Info, Segment, Statistics, Sample Data, Script, Grants, References, Referenced By) . (Full Description 14. Description Tool)

[7.11 -]

[] Description Tool . F4 .

]

. (8) × 当さ(8) 音さ(0) 並ぶ(y) 左子(I) [BA 解(b) 左参配(I) 日告(日) 製造(日) Life N P 30. • 传传 • • • • · 少少有世界可以及自由的 " * * 50LL+ 公司 Chi+2 환경자문의 숙선 및 급한 등성(편) 대한(D) Del Cal+A 중합보드에서 불어되기 () 주의 설명(H) 마지막실병은 아니 海田田 田田田 Gld Output | Server OutPut | T 조현 위치부터 살병(M) CHHM 연호가 살병 기존 거시 라면 살병 DIN CHIE ·블로든 현 공명 **点型指型 彩版 前型** 保証 別報 CNIHE 용면 도구 상병 CHI-ShinE 参考を見 Chi-Shin-S 말신동 열생 **■ 801** 王贺樹 CH+SNIR+F 型河路由平河 规 创整 無のセスバオロゼカ 대스문자변경 Lt 2 Cal 15 एकार विवास विकेश श्रेष्ट्र



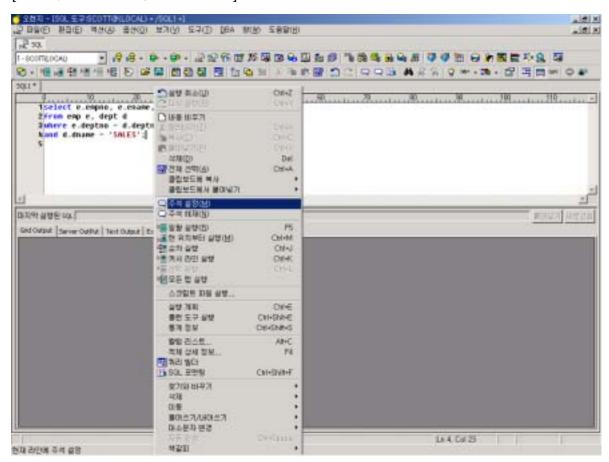
7.3.8 Comment, Uncomment

Line " "

<u>"</u>"

가 SQL .

[7.12 - Line]





7.3.9 Named Script

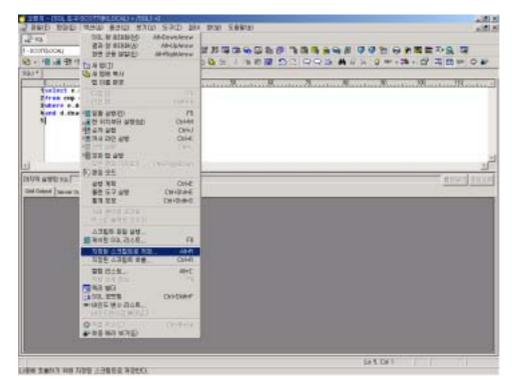
가 SQL .

SQL SQL [] [...]

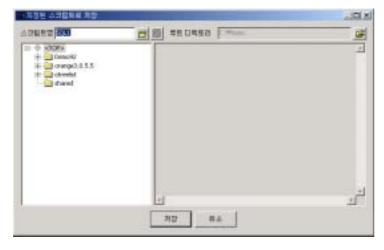
"Script Name" [OK] "

.

[7.13 –]

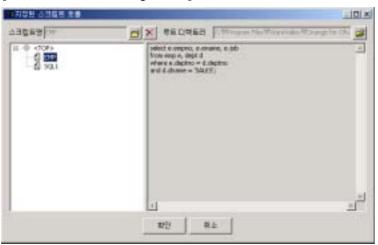


[7.14 –]





SQL []→ [...] SQL "Scripts" , F2 rename, Script 7.15 – [] THE STREET THE BOTH AND STREET BY AND COME. SO POD TONY BOAD WANTED TO THE PROPERTY OF THE Andrews Andre Dates with Article and Sept. を 計画 本が まかむ DECEL ANN ARRESTS. SQL [] SQL SQL 7.16 – SQL]

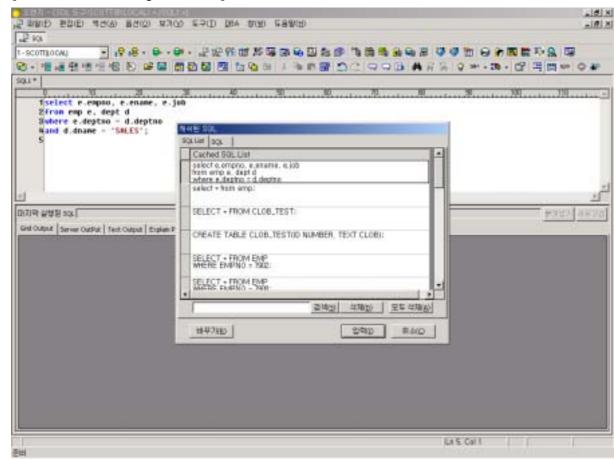




7.3.10 Cached SQL

SQL .[]→[SQL ...] (F8) ■ [SQL List] 가 SQL [SQL List] SQL [SQL] 가 가 SQL [] SQL List ,[] SQL SQL 256] SQL SQL Cached SQL SQL SQL []] Shift Ctrl

7.17 – Cached SQL





7.3.11 SQL Formatter

 SQL Formatter
 [7.18 - Formatter SQL]

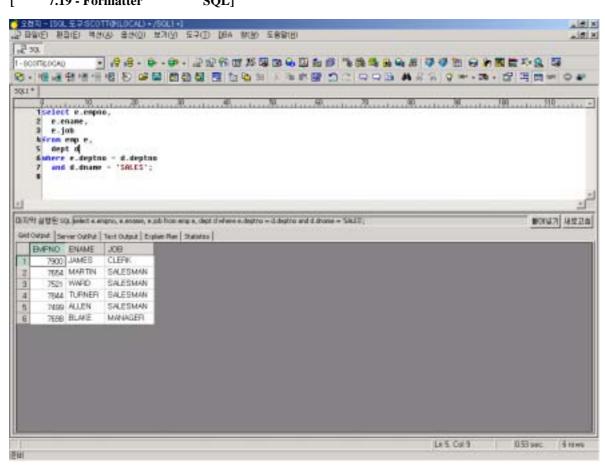
 SQL [7.19 - Formatter SQL]
 7\tau_.

 [7.18 - Formatter SQL]

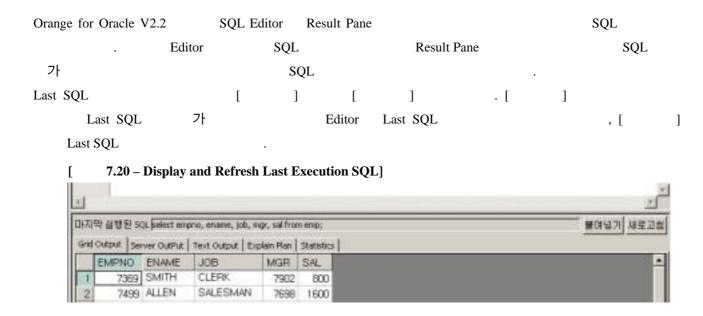
- | 計 | 3 · (音) × SOL WHO BOWN AND CONTACTOR
WITH THE PROPERTY AND THE PROP 100 SQL 11日 元年 年秋日 AIHRIGHTANION fariret v. dept d where e.deptnu - d.deptnu and d.dname - 'SALES'; 내용한 취치부터 설탕(Ed) 현 교가 설탕 1한 커서 라인 설탕 CHIM CHILI CHI 祖兄臣をおせ DAR 645 30 PM S 52 oldeption = 6 deptins and dishares = SALES; 第四名 日本日日 CHIE GHI OURDE Server O. 용면 도구 설명 CHI-SEN-E EMPNO ENA 7900 JAME 보기 전보 Os-Sus-S 7654 MAR 7521 WWR 白田田県 取製 春秋 7844 TURI 3 NOTE SOL CLAR. 171 7600 ALF 기업원 소급원론 제2 7600 BLA 기업원 소급원들 호텔 Chi-B 할밤 라스트, Ab-C 10 EOL 王が保 中間日 単中さられ ● 計画 (H2) 単元(E) Ln Z Call | ItS sec | Groves 50, 925



7.19 - Formatter SQL]



7.3.12 Refresh Last Execution Result



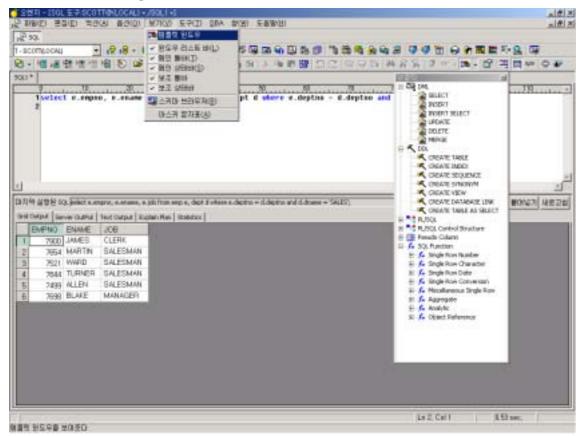


7.3.13 SQL Template

[]→[] SQL(DML, DDL) 7+
DML, DDL SQL
. 7+ SOL

- DML (Select, Insert, Insert Select, Update, Delete)
- DDL (Create Table, Create Table As Select, Create Index, Create View, Create Sequence, Create Synonym, Create Database Link)
- PL/SQL (Create Function, Create Procedure, Create Trigger, Create Package, Create Package Body, Create Java, Create Type, Create Type Body)
- PL/SQL Control Structure (IF-THEN, IF-THEN-ELSE, IF-THEN-ELSEIF, LOOP, WHILE-LOOP, FOR-LOOP, CURSOR-FOR-LOOP)
- Pseudo Column (CURRVAL, LEVEL, NEXTVAL, ROWID, ROWNUM)
- SQL Function (Single Row Number, Single Row Character, Single Row Date, Single Row Conversion, Miscellaneous Single Row, Aggregate, Analytic, Object Reference)
 - > Oracle

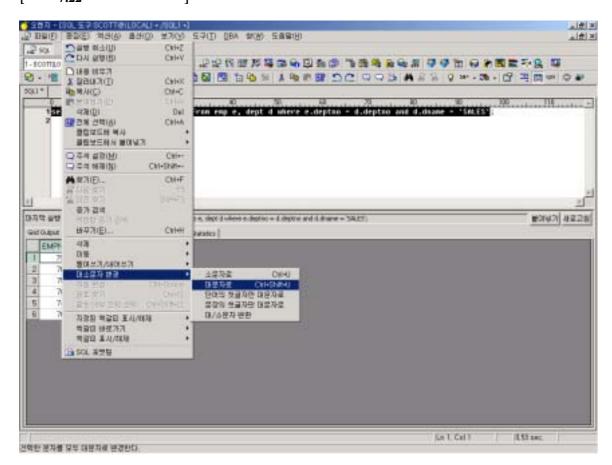
7.21 – SQL Template]





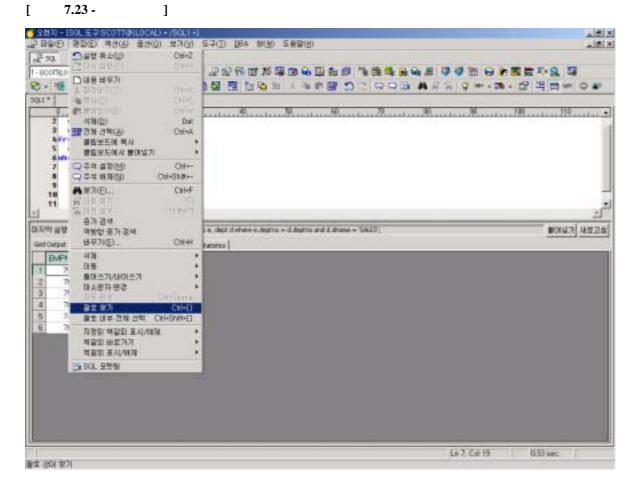
7.3.14

[7.22 -]





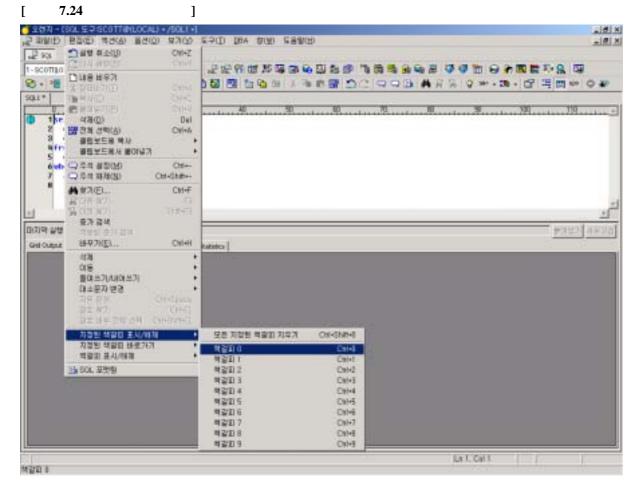
7.3.15 SQL





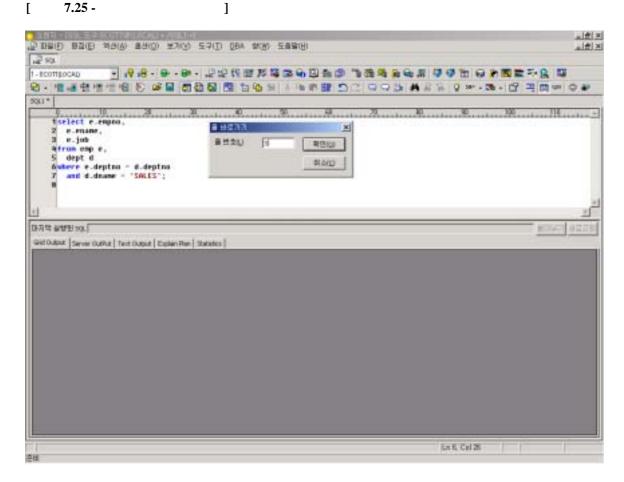
7.3.16 Bookmark

```
SQL
                                                    SQL
                  ]→[
                                            ]→[
                                                    0~9]
                                                                     [ALT+0~9]
                                                                                  [
                   가 ]→[
]<del>→</del>[
                              0~9]
                            [
                               ]→[
                                                      ]→[
                                                                                  ]
                 ]→[ ] 4가
                  /
                      (Ctrl+F2):
                  (F2):
                   (Shift+F2):
                          (Ctrl+Shift+F2):
```





```
7.3.17
```



7.3.18



7.3.19 Find

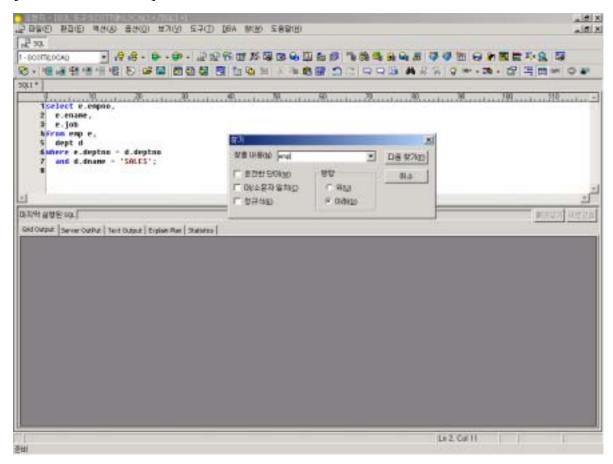
SQL "Ctrl+F" Find Up, Down

.

(F3)

■ (Shift+F3)

[7.26 -]





7.3.20 Replace

SQL "Ctrl+H" (
) () .

[7.27 - Replace]

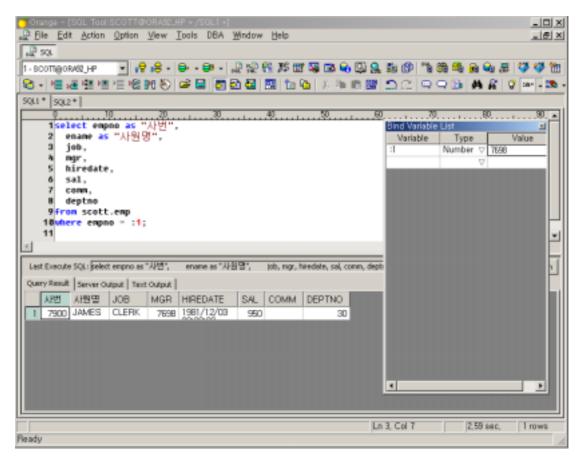
₽ Ble Edit Action Option Yiew Iools DBA Window Help _ 8 × 왕 - 1 悟 通 哲 전 면 영 해 진 (孝 급) 취 집 집 [집] 15 집 [사 15 6 점 [15 조] 그 그 그 그 다 나 사 후 [각 2 * * * 25 * * SQLI * SQL2 * 1 select empno as "八十十" 2 ename as "小兒兒" ficolace job, Figd what: ename Find Next ngr, hiredate, Replace with: ENAME Replace sal, Match whole word only Replace in 7 conn, Replace All deptno Metch gase C Selection 9 from scott.enp, (se Cancel 18 where empno - 7988; Regular Expression ₩hgle file Last Execute SQL: Select empno as "사원점", ename as "사원점", tob, mgr, hiredate, sal, comm, deptno from scott.emp where e.... Pasta Rafrash Query Result | Server Output | Text Output | 사번 사원명 JOB MGR HIREDATE SAL COMM DEPTINO 1 7900 JAMES CLERK 7898 1981/12/03 950 Ln 10. Col 20 | 2.59 sec. | 1 rows Ready



7.3.21 Bind Variable

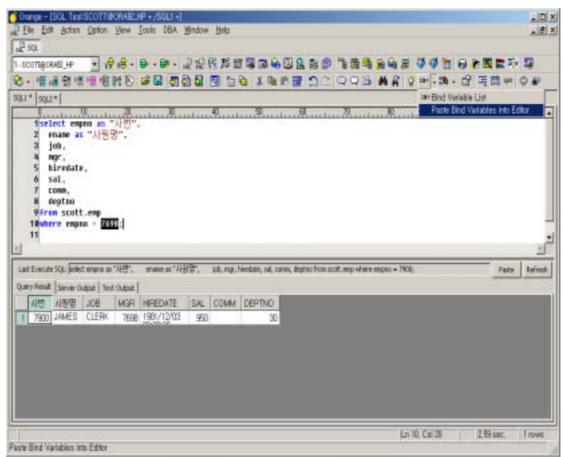
SQL*Plus Bind Variable List . SQL Bind Variable Bind Variable List (String(Varchar2), Number, Date, Fixed Char Value Bind List(**a=) Bind Variable List **SQL** [Paste Bind Variables Into Editor] **SQL** Bind Variable Bind Variable List

[7.28 – Bind Variable List]





7.29 – Bind Variable Editor





7.3.22 SQL HINT

Hint (ਊ) SQL HINT 가

HINT Group (Optimization Goal, Access Method, Join Order, Join Operation, Parallel Execution, Other) SQL .

.

■ Optimization Goal : (CHOOSE, ALL_ROWS)

■ Access Method : (FULL, INDEX SCAN)

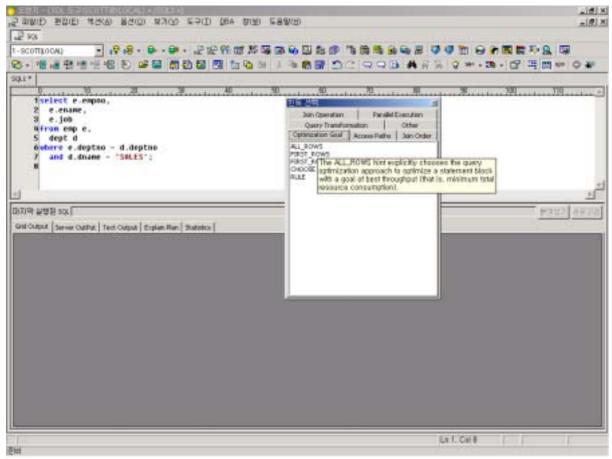
■ Join Order : (ORDERED, STAR)

■ Join Operation : (USE_NL, USE_MERGE)

Parallel Execution: (PARALLEL, NOPARALLEL)

■ Other: (CACHE, NOCACHE)

[7.30 - HINT]





7.3.23

SQL Tool

[] " " " " " " " ...

[7.31 -]

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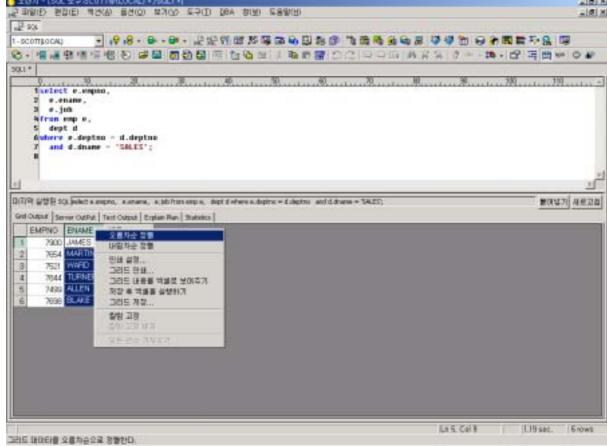
[3.31 -]

[3.31 -]

[3.31 -]

[3.31 -]

[3.31 -



7.3.24 Commit, Rollback

SQL Tool DML
Commit , Rollback . DML " "(🕞) " "(🗐)



7.3.25 Work Space

SQL Tool Workspace File Mode Workspace Mode 2 가 File Mode - SQL Tool Workspace Workspace Workspace Mode -Workspace Workspace (*.SQD)] → [] $] \rightarrow [$ File Mode [...] Workspace (1 Workspace SQL "SQL1" SQL SQL 가 (: "SQL1*") , File Mode , Workspace Mode Workspace . Workspace

7.3.26 SQL

SQL Editor SQL , SQL .

가 .

.

- Visual Basic
- PowerBuilder
- > C/C++
- Delphi
- Java
- Perl
- SQL
 - Copy as Visual Basic Code
 - ➤ Copy as C/C++ Code
 - > Copy as PowerBuilder Code
 - Copy as Delphi Code
 - Copy as Java Code
 - Copy as Perl Code



■ SQL

> Paste from Visual Basic Code

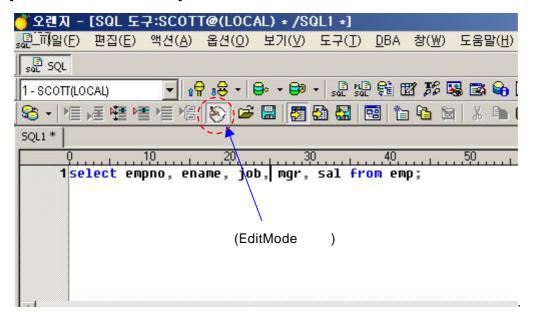
- ➤ Paste from C/C++ Code
- > Paste from PowerBuilder Code
- > Paste from Delphi Code
- Paste from Java Code
- > Paste from Perl Code



7.3.27 (Edit Mode)

```
SQL Tool
                                Editing
                                                       [ 7.32 – Grid Edit Mode]
               (<del>\)</del>
                                               Grid
 Edit Mode
                               SQL
                                              Select
                                                        Primary Key Unique Key + Not Null
                                                       Edit Mode
                                                                                           Select
                ROWID 가
                                                                                  가
                                                   가
From
                        SQL
                                              가
                                                                               SQL
                          가
                  가
```

7.32 – Grid Edit Mode]





Edit Mode 가 가 . (Update) . (Update AutoAccept(무) 가 Commit DB Rollback AutoAccept SQL SELECT a.rowid, a.empno, a.ename, a.job, a.mgr, a.hiredate, a.sal, a.comm, a.deptno, b.dname, b.loc FROM scott.emp a, scott.dept b WHERE a.deptno = b.deptno; From scott.emp Select list Primary Key Unique key + Not Null 가 scott.emp ROWID From



[7.33 -] Editing From scott.emp DNAME, LOC . Scott.dept . [Auto Accept() 가 7.33 -1 (**''**) (**⋘**), Commit(\(\beta\) 7.33 -[] [문 22] - 188년 - 1901년 - 보유(주) - 8대(전) - 보기(전) - 12년(전) - 188년(전) - 180년(전) 4 8 X wiff H 1 - SCOTTE DCAD 13ELECT a.rould, a.empno, a.empno, a.empr, a.biredate, a.ual, a.comm, a.deptno, b.dmane, b.loc 27RDM scott.emp a, scott.dept b 20MMINE a.deptno - b.deptno; DERFOR AND METERS SIGNATION AND ASSESSED AS A SECTION OF Quarry Result for Editions (SCOTT(BLOCAL) | Server OutPut | Taxt Output | Explain Run | Statistics | H 4 ▶ N + - V V 0 = = 7 80 SCOTT.BMP EMPNO ENAME JOB MGR HEEDATE SAL COMM DEPTINO DINAME LOC 7698 1981/12/03 7588 1981/12/03 7900 JAMES CLEFIX 950 30 SALES 7902 PORD MAALYST 20 RESEARCH SEATTLE 3000 7698 1981/09/28 2664 MARTIN SALESMAN 30 SALES CHICAGO 1250 1400 7782 CLARK 7809 | 961/06/09 IQ ACCOUNTING NEW YORK MANAGER 4 2450 1901/11/17 7762 1960/01/23 10 ACCOUNTING NEW YORK 2830 KING PRESIDENT 5000 10 ACCOUNTING NEW YORK 2994 MILLER CLEFK 300 1300 30 BALES 7521 WWFD BALEBAUN CHICAGO 7686 1981/02/22 1250 500 8 7566 JONES MANAGER 7809 1905/04/02 250% 20 RESEARCH SEATTLE 20 RESEARCH 7788 SCOTT 9 ANALYST 7566 1987/04/19 3000 SEATTLE 30 BALES 7844 TURNER BALESMAN 7688 1981/09/0B 1500 0 CHICAGO 10 20 RESEARCH 11 7369 SMITH CLERK 7902 1900/12/17 SEATTLE 800 12 7499 ALLEN SALESMAN 7698 1981/02/20 1600 300 90 SALES CHICAGO 7696 BLAIE MANAGER 7809 1981/05/01 30 SALES CHICAGO 2950 13 7876 ADWIS CLERK 7768 1987/05/20 20 RESEMPICH SEATTLE 14 1100

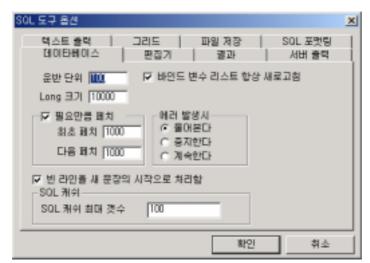


(0.62 sec. 14 rows

LPS CW2

7.3.28 SQL Tool

```
가
                                          Fetch
                                                                    . "Long
            Long type
                              Initial
                                          Next
                            가
         , 1000
                                               Initial
                                                        100
                                                                                 Next 가 10
                                                가 가
       100
                                                                                   (:a=)
    10
                  SQL Editor
                                          Bind Variable
                                          SQL Editor
                                                                     Bind Variable
                                                                               가
                     SQL Editor
                                                        SQL
                              (Ask)
                                           (Stop)
                                                           (Continue)
                                              "
                                                                                \, SQL \,
                                                                     SQL
                                           Error
                                                       (Scroll Bar)
           Row
                                          Retrieve
           가
                                                                            가
                   ]
                                                                    Row
7.34 - SQL Tool
```



■ -6.8



Plan Tool .



```
"가
                         DBMS_OUTPUT.PUT_LINE
SQL
      [
          ]
         . Never
                               Output
                                                       2000 ~ 1000000
           가
[ 7.35 – SQL Tool
                             ]
   텍스트 출력 그리드 파일 저장 SOL 포맷팅
  데이타베이스 편집기 결과 서버 출력
  ▼ 서버 플릭 활성화
  -버퍼 크기--
  ② 기본값
   C 사용자 정의 20000
   출력참 초기화~
   ○ 초기화 하지 않음
ⓒ 실행 시 한 변만
   이 매 문장 살행시 마다
                           확인
                                    취소
             10 ~ 100000
                                       가
                                                              9 ~ 38
             가
                      Text Output
       가
       "
```



가 Fetch

SQL

■ Grid – **6.8**



Plan Tool Grid

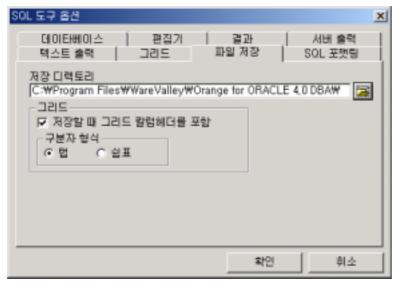
File Save

SQL

Tab Comma

Excel

7.37 – SQL Tool]



SQL Formatter - 6.8



Plan Tool SQL formatter .



■ Result

SQL Font Size

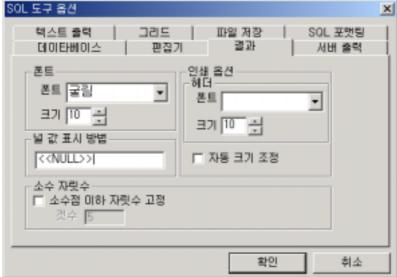
Default NULL Text Null Null 기

Insert NULL Space

. "Decimal Digit" Count

.





```
7.39 - SQL Tool
                                         - Default NULL Text]
                               Result
          create table null_tb
   26
          (Space_C varchar2(10), Hull_C varchar2(10));
   27
   28
   29
          insert into null_tb
   38
          values (' ', null );
   31
          connit;
   32
          select * from null_tb;
   33
Last Execute SQL: select * from null_tb;
Query Result | Server Output | Text Output |
   SPACE_C NULL_C
             <<NULL>>
```



8. PL/SQL Tool

8.1 PL/SQL Tool

- ✓ PL/SQL, Stored Procedure, Function, Package, Type, Trigger
- ✓ PL/SQL Block
- ✓ Stored Procedure (Lock)
- ✓ Stored Procedure
- ✓ DBMS_Output
- ✓ 가 Syntax
- ✓ Syntax Highlighting,
- ✓ Edit (Block Comment/Uncomment, Find & Replace, Goto Line, Matching, Bookmark, ...)
- ✓ SQL Visual Basic, PowerBuilder, C/C++

8.2 PL/SQL Tool

PL/SQL Compile

PL/SQL Check Out

Check Out Check Out List

PL/SQL debugger Debug-Compile

▶ PL/SQL debugger

■ Debugger

Debug

Break Point Debug

Call Stack

Break Point

Break Point

Break Point



- Comment
- Uncomment

8.3 PL/SQL Tool

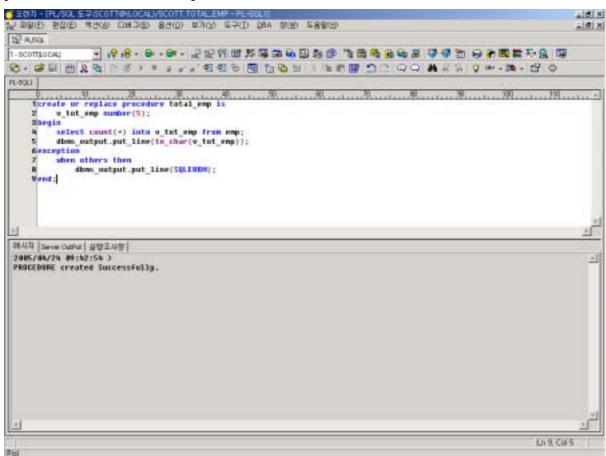
8.3.1 PL/SQL Tool

Tools PL/SQL Tool PL/SQL (...)

8.3.2

PL/SQL (E) F5 PL/SQL

[8.1 –]

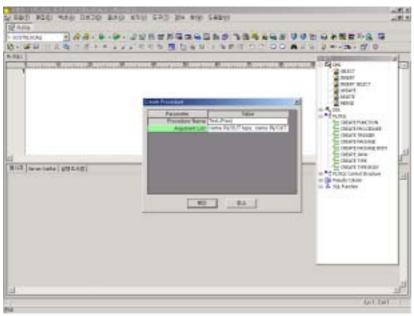




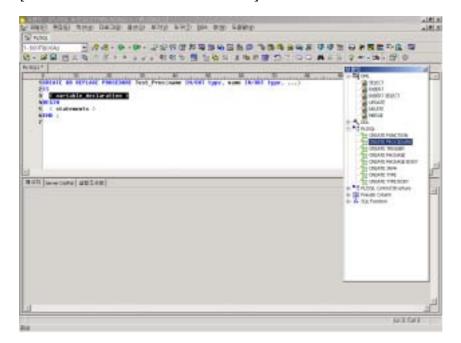
PL/SQL (E)

, Function Create Function Create Function
. Function Name Argument List, Return Type [OK] Function

[8.2 –]



[8.3 –]





8.3.3

execute . Procedure SQL Tool exec . Procedure SQL Tool exec . Trigger DML Event 7^{\dagger} . Trigger



8.3.4

.

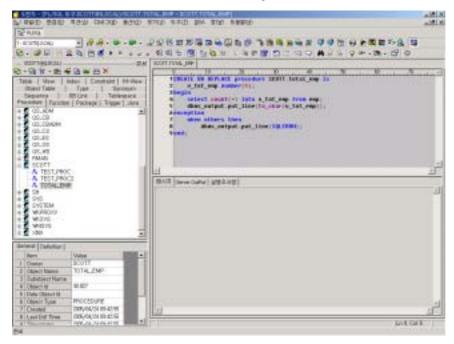
[8.5 - Check Out]

```
### (PACK_ESPECITION ALVECTITION ALBERT DOUTTON ALBERT DESCRIPTION A
```



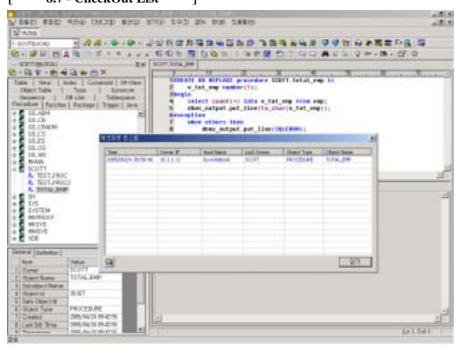
Schema Browser PL/SQL 7 . []

[8.6 – Schema Browser PL/SQL]



Check Out List

8.7 - CheckOut List]





8.3.5 **Editor**

PL/SQL Bookmark, Goto Line, Change Case, Find, Replace SQL Tool

8.3.6 SQL

SQL Editor SQL

SQL Paste .

Copy

.

Visual Basic

PowerBuilder

> C/C++

Delphi

Java

Perl

■ SQL

- Copy as Visual Basic Code
- ➤ Copy as C/C++ Code
- > Copy as PowerBuilder Code
- Copy as Java
- Copy as Delphi
- Copy as Perl

■ SQL Paste

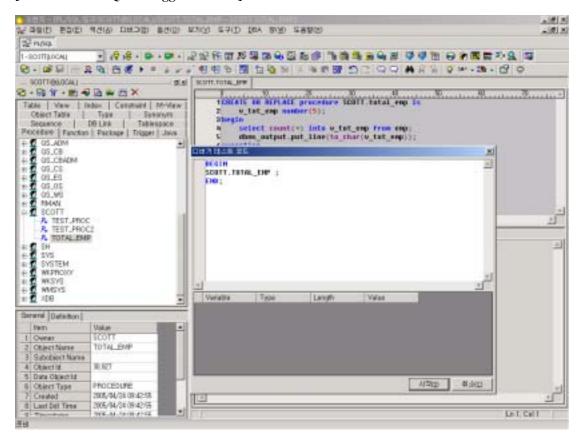
- > Paste from Visual Basic Code
- ➤ Paste from C/C++ Code
- > Paste from PowerBuilder Code
- Paste from Java
- > Paste from Delphi
- Paste from Perl



8.3.7 PL/SQL Debugger

Function, Procedure, Trigger PL/SQL PL/SQL Debugger Check out Check in (Read Only Mode: 가 가) (🏙) []] **()**] . [가 **Debug Execution**] [

[8.8 - PL/SQL Debugger]





```
] ( )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   가
[
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Break Point
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             [
                                                                                  ( 🕝 )
]
                                                                          [ 8.9 – Break Point Step over]
                                                                                      (B) - 1943 - 1943 - 1944 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 1945 - 19
                                                                                         BAS Investors 89550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . [
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 가
                                                                                                                                                  Call Stack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ] ( )
                                                                                                                                   8.10 –
                                                                          [
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ]
                                                                            PANA SEE SON DANK BOOK BOOK BOOK BOOK BOOK BOOK
                                                                              - Entropy - Pan - Pan
```



REUK DRIGHT

8.3.8 PL/SQL Tool Options

PL/SQL Editor				,	,		
Server o	output						
•	Editor – 6.8 Plan	Tool	[]			
•	Message –	[]			. Time Ou	tput
	"	,,		SQL		"	,
가 Fetch							
	Server Output – 7.3.28 SQL Tool			[]		
•	■ File Save – 7.3.28 SQL Tool			[]		



9. SQL Monitor

 I/O
 . SQL Monitor
 SGA

 SQL
 I/O
 71

 SQL
 . SQL
 Plan Tool

 , Session Info
 ,

 , Event
 , Wait

9.1 SQL Monitor

 ✓
 SQL

 ✓
 (, , , , , Event, Wait)

 ✓
 Plan Tool

 ✓
 SQL
 Object Information
 Report

9.2 SQL Monitor

SQL Monitor List Refresh

SQL

SQL

SQL

SQL

SQL List Execution Plan, Statement Statistics, Related Session Statistics, Table Information

7 SQL text

SQL Monitor Option

Pane Control List copy Column Header

9.3 SQL Monitor

9.3.1 SQL Monitor

 SQL Monitor
 SQL Monitor
 . [] []]

 [] " ", "

 " "SQL Monitor"
 SQL Monitor
 .

 SQL Monitor
 Session
 Connection

 manager 7 | .
 .



9.3.2 SQL Monitor

SQL Monitor Criteria Group, SQL Filter Group, Sort Group

. Criteria Group 0

.

■ Criteria Group

> Buffer Gets:

➤ Buffer Gets/Exec :

> Executions : SQL

Disk Reads: I/O

➤ Include SYS User's SQL : SYS SQL

➤ Include SYSTEM User's SQL : SYSTEM SQL

■ SQL Filter Group

> Include: SQL

Start With:End With:SQL

Sort Group

> Buffer Gets:

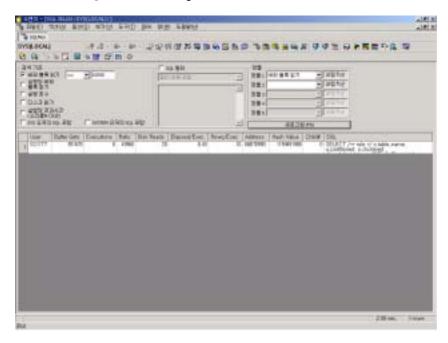
➤ Buffer Gets/Exec :

> Executions:

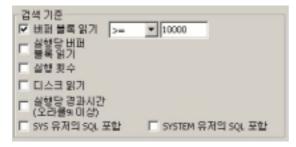
➤ Disk Reads : I/O



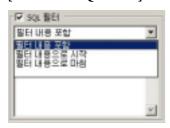
[9.1 - SQL Monitor Sample]



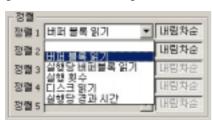
[9.2 - Criteria]



[9.3 – SQL Filter]



[9.4 - Sort]





9.3.3 SQL Monitor

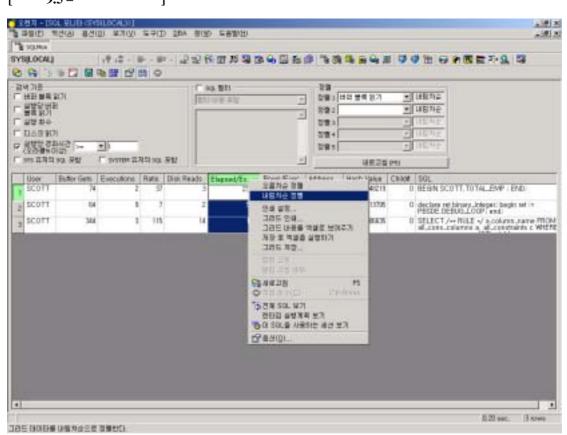
SQL Monitor

" " " "

- User
- Buffer Gets
- Executions
- ➤ Ratio (Buffer Gets / Executions)
- Disk Reads
- Rows Processed

SQL Monitor

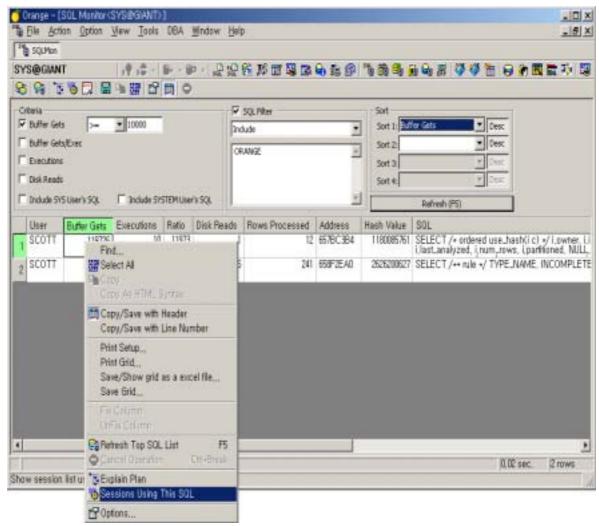
[9.5 –]





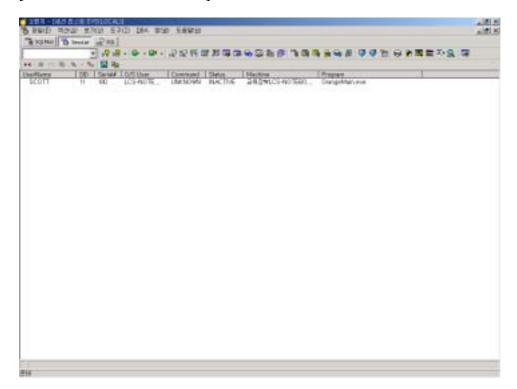
9.3.4 SQL

[9.6 - SQL "Session Using this SQL"]

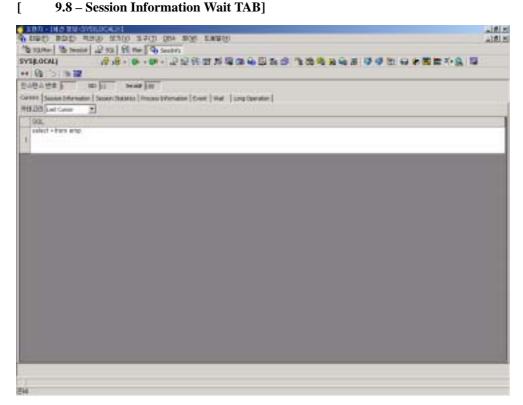




[9.7 – Session List Window]



9.8 – Session Information Wait TAB]





9.3.5 Report

■ Report Generation Option

Range Group Report .

➤ All – SQL Report .

➤ Selection – SQL SQL Report .

Range – SQL Record SQL

Report . 1 All

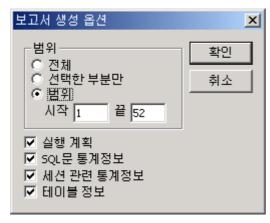
■ - SQL .

■ SQL – SQL .

■ -SQL .

■ - SQL Table

9.9 – Report Generation Option]





9.3.6 SQL

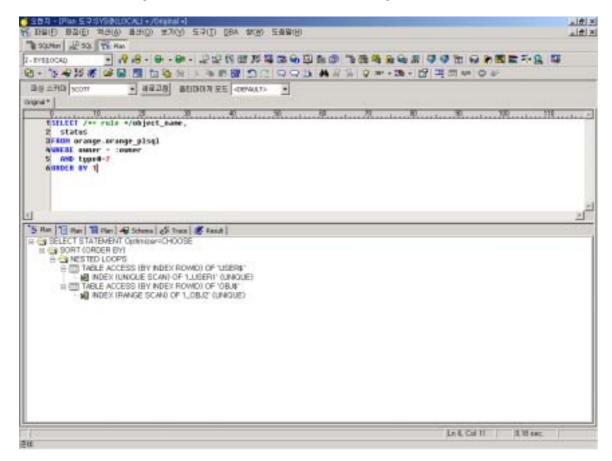
Row **SQL SQL** Plan Tool SQL **SQL** "가 가 SQL SQL PL/SQL PL/SQL Tool PL/SQL 9.10 -**SQL Plan Tool**

[] TORE THE BOY MANY SAID TO THE BUT SERVED 4 (B) x A ISLA SYSTLOCAL の日で記録を開口がである 검색기존 50x BD1 IBB和会 智慧に出出事業会内 **胡拉西希腊**为 는 설립합니다 등록 위기 문학 회수 ▼ UB차순 188 명 하기... 함 전체선적 명 복사 당 제사로 참석으로 복사 트 다스크웨기 T 실병당 경과시간 (설명 호텔전오) 厂 585 高阳岛 504 至数 厂 SISTEM 采用引 50x 王世 二 一門 製造 味口者 早年の内 年八/万ツ 를 변호를 포함하여 복사/제항 Buffer Guts Enecutions Rolls Disk Reads Elepsed/Exec Rows/Exec Add 254 14 18 5 0.007 1 666-User 현병 설팅... 40 SCOTT srange.orange_tr_get_trans FRC 그라도 연쇄. 41 SCOTT 5 n 지수하면 유럽한 활용한 교육도 사용이 ñ sunti-0 from orange, erange, plag stowner = rowner and ick, ebjects 42 SCOTT 취장·숙 역별를 실험하기 9 1 0 0.01 1 6685 bring_debog.ping: end: 그런도 저장... 43 SCOTT 56 12 0.01 19 6684 from vitals_parameters D (000) 0 SCOTT 63 1 . PROM SYS, DOA, TABLES 158 41 FE 6 SCOTT 243 13 0.02 /++ first_rows +/ TEXT FROM s rowner AND NAME + proc_nam I COM DESIGNATION I as SCOTT 15 2 tiect.type from sys.all.objects wane = marrie 0 0.02 1 HC 등이 SOLE 사용하는 세년 보기 CRANGE 2 13 1 D D instance,name FROM views 47 45 SCOTT 3 664 18 BOILD WHERE owner - owner AND 1994-1 OF BEGIN DEMS, DEBUG, DEBUG, ON, END Ü 15 1 18 Ü 4 SCOTT ä 1 66879314 2 0 0.01 889135898 50 SCOTT 24 4 0 B 66600F64 117802772 E SELECT - FROM ORANGE ORANGE PLI SELECT trut.id. sid. serial# copid. cran crange, crange_in_instance_name. SCOTT 1245 13 96 129 0.33 1 66CF8234 917752597 51 b SELECT sets(used_usec) from vibrance (select sets) ORANGE 99 14 2 0.02 1 66844364 3366552962 整 0.29 sec 52 tows 출판 도구에서 전혀 SOL를 본다.



9.11 - SQL Plan Tool SQL format]

[



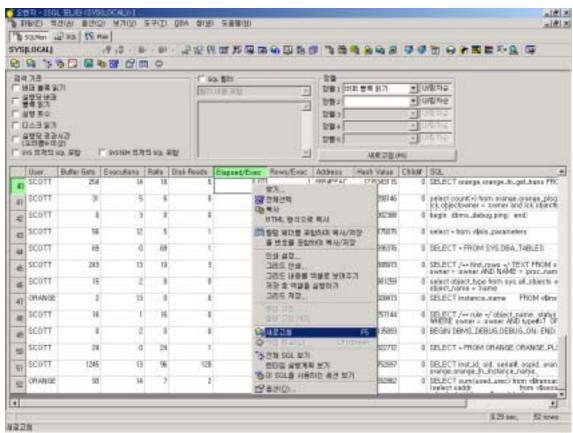


9.3.7 SQL Monitor

SQL Monitor " " (🗐)

. "F5" .

9.12 - SQL Monitor





9.3.8 SQL Monitor Option

[]

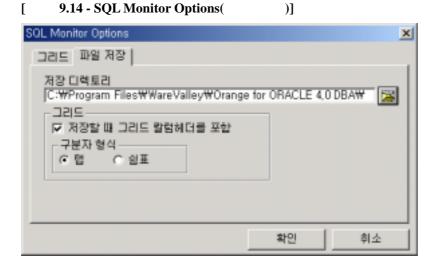
[9.13 - SQL Monitor ()

SOL Monitor Options

□리드 | 파일 저장 |
□리드 색상
□ [시정된 배경 역상 사용 |
배경 색상 |
□ 캠럼 헤더 클릭시 액션
□ 정렬 | C 칼럼 선택
□ 정렬시 대소문자 구분

확인 회소

,





10. Session Monitor

(User, Redo, Enqueue, Cache, Session Monitor OS, Parallel Server, SQL, Debug) 가 Kill SQL Trace Plan Tool **SQL** Dynamic SQL

10.1 Session Monitor

가 , Event, Wait) Plan Tool Kill Level 1, 4, 8, 12 **SQL** Trace

10.2 Session Monitor

9 Refresh **SQL** Kill SQL SQL Option Refresh Δ₿ 가 (Delta)

10.3 Session Monitor

10.3.1 Session Monitor

Session Monitor []] "Session Monitor" Session Monitor

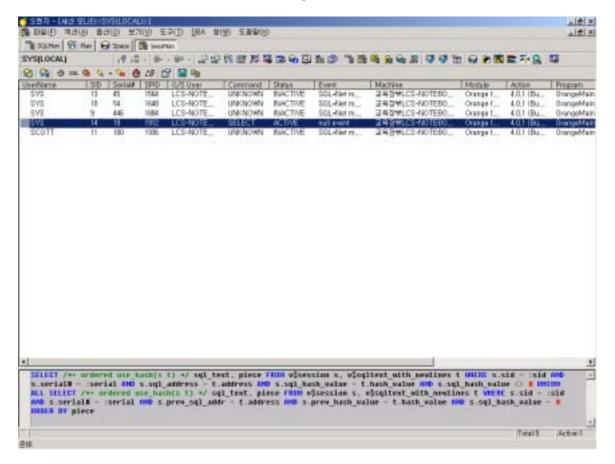
SQL Current SQL

가 "Module" Property

Tool . [10.2 – Orange

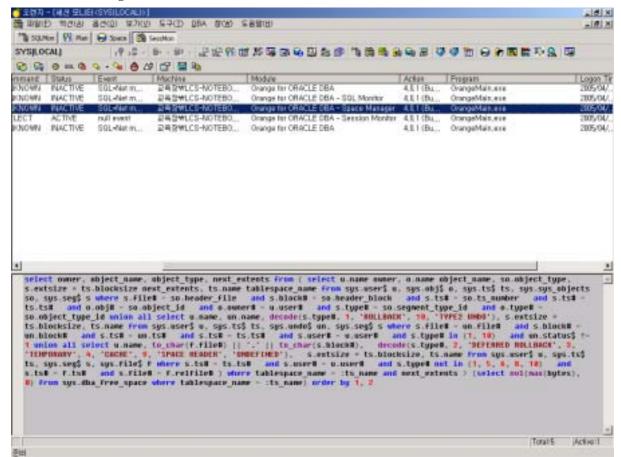
Module] Space Manager, Instance Monitor, Session Monitor

[10.1 - Current SQL]





10.2 – Orange Module]





10.3.2 Session Monitor Option

[],[],[] .

I []

User, Redo, Enqueue, Cache, Parallel Server, SQL, Debug

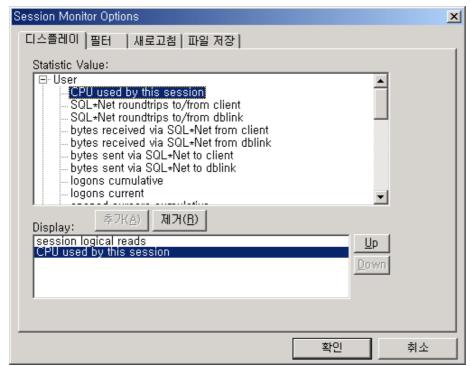
CPU User

"CPU used by this session" Display "Add" Session Monitor

CPU . , 7 5

.

[10.3 –]





```
[ ]
                    , 가
 Value
                        가
            가
          . Background Session
                                         ORACLE
                                                     Background Process 가
                                                                                 , Orange
 Session
                    Orange
                                                  Session
                             Module Filter (DBMS_APPLICATION_INFO.SET_MODULE (Module,
                     ) Program Filter (
 Action)
                  )
                             . Module Filter
                                             Program Filter
                                                                      Exclude
                                           Session Monitor
           Module
                      Program
                                                           Display
     10.4 –
                    ]
 Session Monitor Option:
                                                              X
  디스플레이 필터
                새로고침 | 파일 저장 |
    디스플레이 값
                               사용자 필터
    실제 강
                 ○ 증감 값
                               UserName
    디스플레이 세션
    오 모두 표시
                   개표시
    C 상위 10
    디스플레이 칼럼 정보

    Event

    ₩ SID

✓ Machine

✓ Module

▼ SPID

    Action

∇ 0/S User

    □ Program

    Command

    ✓ Logon Time

✓ Status

   백그라운드 세션 보여주기
                                모듈 필터
                                                     ☑ 제외
   □ 오렌지 세션 감추기
                             프로그램 필터
                                                     ☑ 제외
```

확인

취소



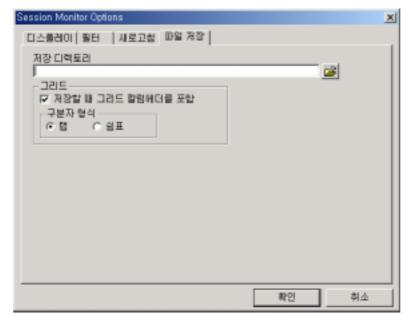
• []



• []

,

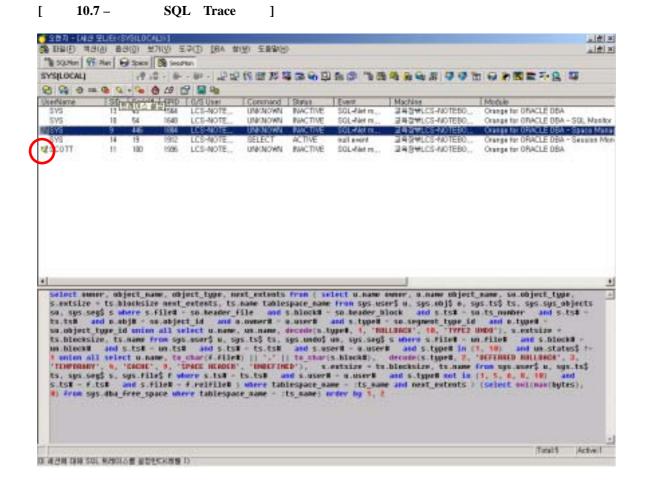
[10.6 –]





10.3.3 Session Monitor SQL Trace

SQL Trace Trace On() SQL Trace Trace On() Trace Level Drop Down Trace On(\simeq) SQL Trace 가 **SQL** Trace 가 SQL Trace **DBMS** SQL Trace Trace Tool Trace Off(🍑) SQL Trace SQL Trace

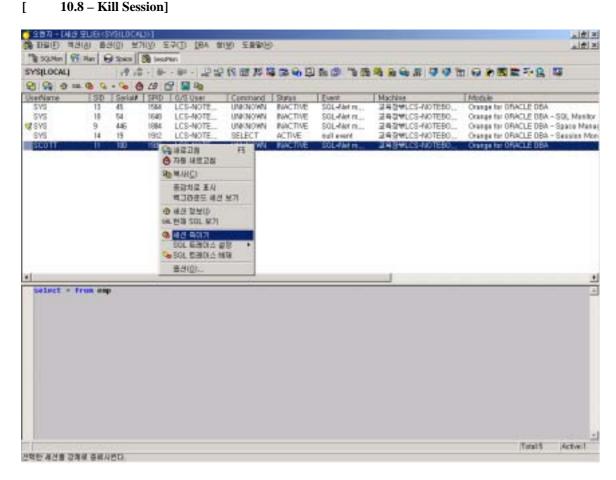




10.3.4 Session Kill

Kill . Kill DML Rollback

10.8 - Kill Session]

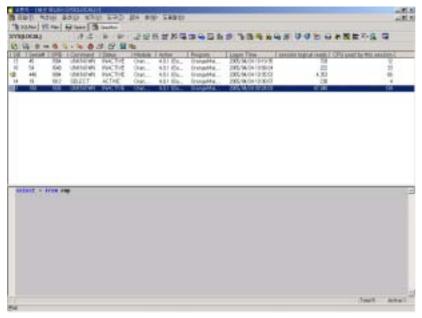




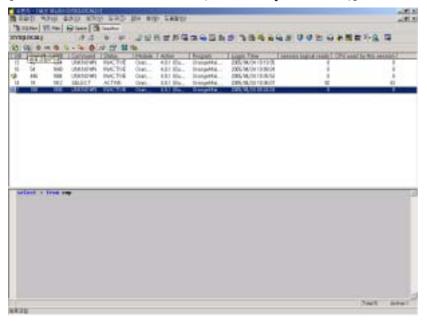
10.3.5 가

CPU

[10.9 – (CPU used by this session)]



[10.10 – 가 (CPU used by this session)]





가

10.3.6

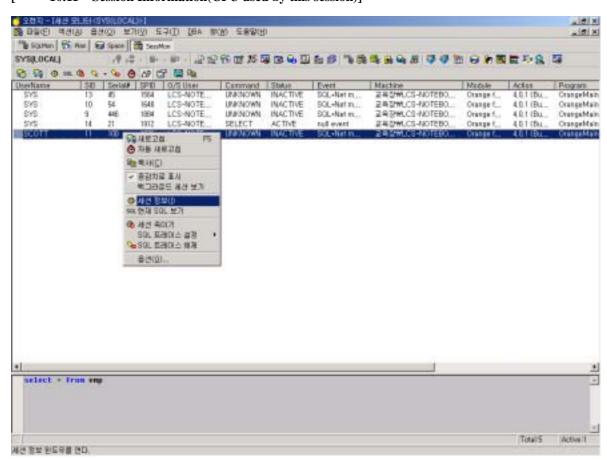
Session Monitor

.

■ Session Info:

Session Info Session Info Session Info 27 . (Session Info Session Info) PL/SQL Tool: SQL PL/SQL Session Info [] Current SQL PL/SQL Plan Plan Tool: SQL] Session Info [

10.11 - Session Information(CPU used by this session)]





11. Lock/Latch Monitor

Lock 가

Lock . Lock Monitor Lock Holding Waiting

Lock

Locking Latch

Latch Waiting Tree Latch

. Session Info Plan Tool Lock Latch

11.1 Lock Monitor

- ✓ (Lock)
- ✓ (Latch)
- ✓ Lock Holding/Waiting
- ✓ Latch Holding/Waiting
- ✓
- ✓
- ✓ Plan Tool PL/SQL Tool
- **√**
- \checkmark (, , , , Event, Wait)
- ✓ Kill
- ✓ Level 1, 4, 8, 12 SQL Trace

11.2 Lock Monitor

- Refresh
- **③**
- SQL SQL
- **ଊ** Kill
- **SQL** SQL
- **SQL**
- Option Refresh



11.3 Lock Monitor

11.3.1 Lock Monitor

.

11.3.2 Lock Latch

Lock Monitor [Lock List], [Lock Holder/Waiter Tree], [Latch List], [Latch Holder/Waiter Tree]

"Lock List" Lock "Lock

Holder/Waiter Tree" Lock Holder Waiter Lock Waiting . "Latch

List" Latch 가 Latch Holder/Waiter Tree"

Latch Holder Waiter .

■ [Latch List] Latch

. [Latch List] Latch Vaiting

.

■ [Latch Holder/Waiter Tree] Latch Latch

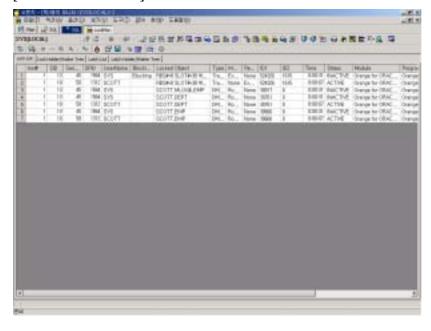
. Latch Waiting Lock Waiting Latch

. Latch

Latch Latch

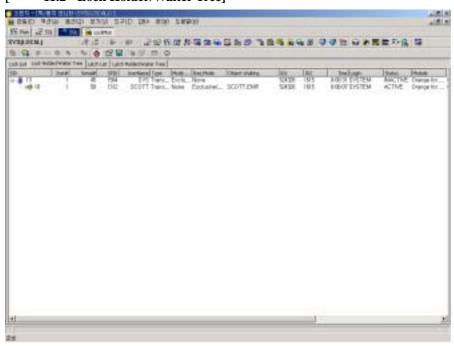
가 .

11.1 - Lock List]

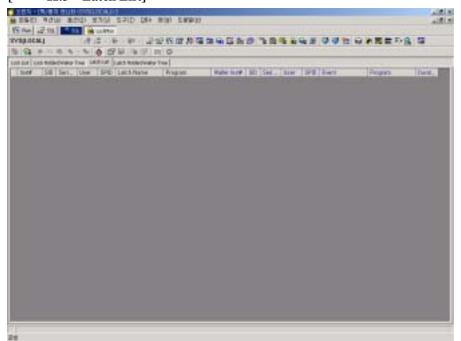




[11.2 - Lock Holder/Waiter Tree]

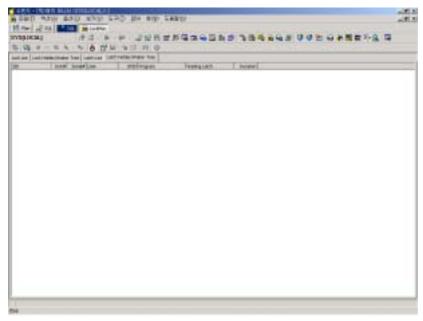


11.3 – Latch List]





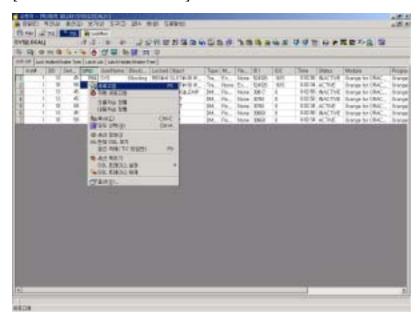
11.4 - Latch Holder/Waiter Tree]



11.3.3 Lock List

Lock List """ "

[11.5 –]

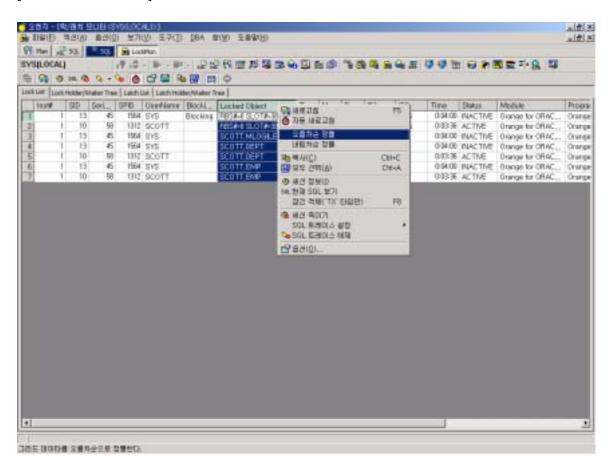




11.3.4 Lock List Sort

Lock List """

[11.6 - Sort]





11.3.5 Lock Holding/Waiting

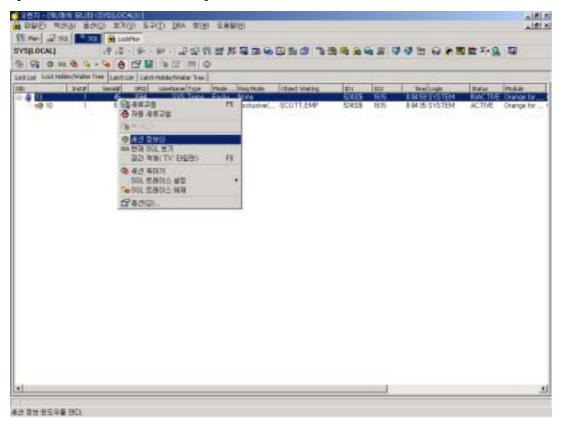
[11.7 - Session Information] Lock Holding(SID 13) Lock Waiting(SID 10)

. SID 13 Row ,

"Session Information" (Cursors, , , ,

Waits)

[11.7 - Session Information]





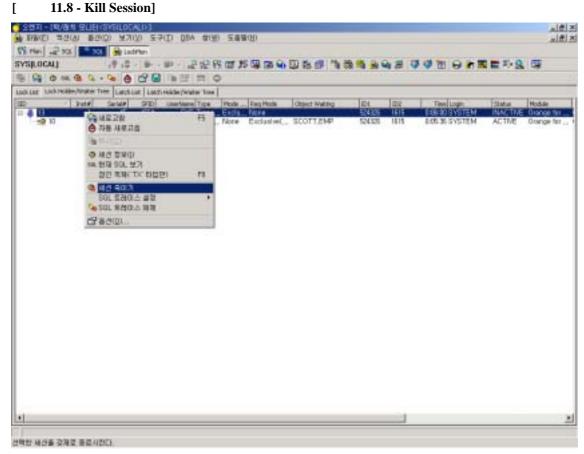
11.3.6 Lock Holding/Waiting Kill

11.8 - Kill Session] Lock Holding(SID 13) Lock Waiting(SID 10)

> "Kill Kill Row

Session"

11.8 - Kill Session]





11.3.7 Lock SQL Trace

[11.9 - Trace] Lock Holding(SID13) Lock Waiting(SID 10)

Row "SQL"

SQL Level Trace .

7 .

11.3.8

Lock Monitor Session Monitor 7 Session Info, Plan Tool, PL/SQL Tool Lock

Lock Latch SQL Tool

PL/SQL . (10.3.6)



11.3.9 Lock Monitor Option

Lock Monitor [GENERAL],[GRID],[FILE SAVE],[REFRESH] 가 **[**] "Source View" Single Instance 가 . OPS "Automatic" 가 OPS Lock 가 "Translate Lock Mode"가 Type Mode 11.10 - Lock Monitor Option] Lock Monitor Options X 일반 | 그리드 | 파일 저장 | 새로고침 | -Source View-C Use V\$ View C Use GV\$ View(OPS) Automatic ▼ Translate Lock Mode 확인 취소] 가 **Background Color** Sort]

. (10.3.2



Session Monitor Option [File Save])
■ []
Refresh . (10.3.2



Session Monitor Option [Refresh])



12. Trace Tool

Trace Tool

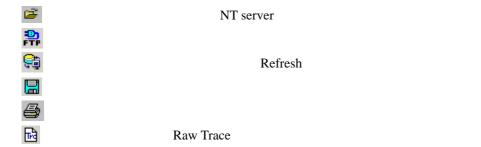
Disk I/O

SQL

SQL

12.1 Trace

12.2 Trace



12.3 Trace

12.3.1 Trace

Trace Tool (Trace Tool . [
] [] Trace Tool

Trace Tool .

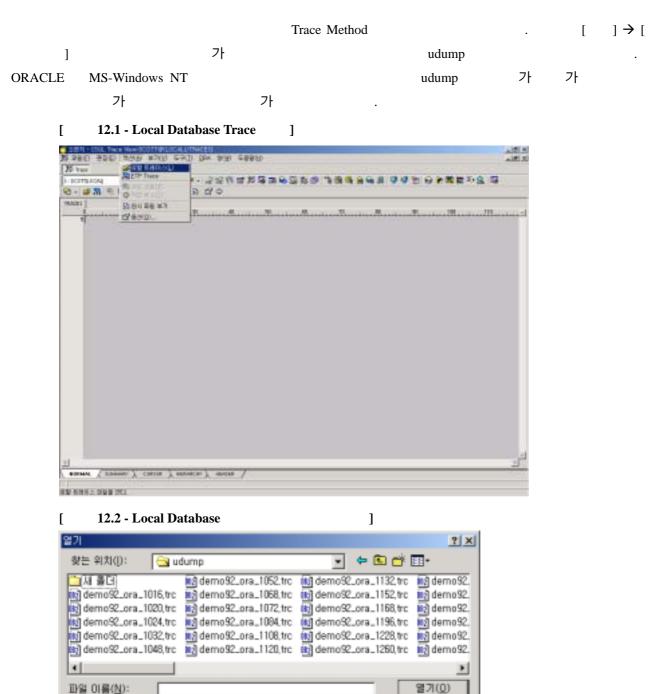


12.3.2 Local Database / NT Server Database Trace File

파일 형식(工):

Trace Files (*,trc)

□ 읽기 전용으로 열기(B)





•

취소

12.3.3 Remote Database Trace File

Trace Method FTP . [Action] \rightarrow

[FTP] "Server Name", "O/S User Name", "Password", "Port#"

. Server Name/User Name/Password 64 Port # 1 ~ 65000 7

[12.3 - FTP Login]

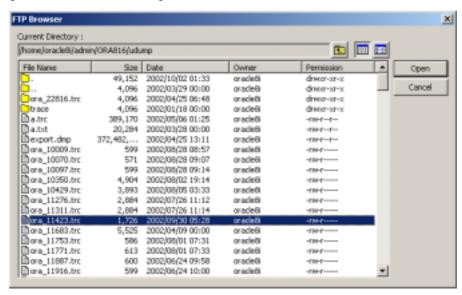


가 Orange Configuration Admin

[Server Name] tnsnames.ora . [OK]

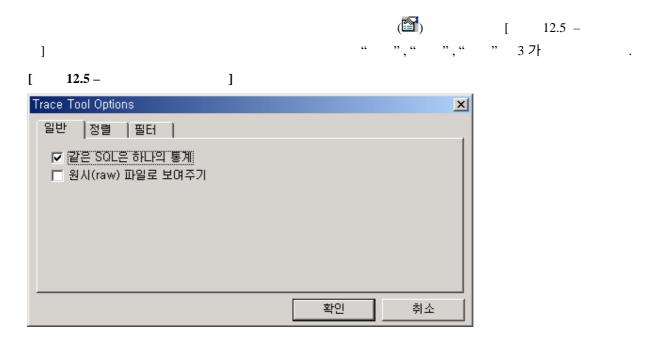
FTP Browser 가 . [Open]

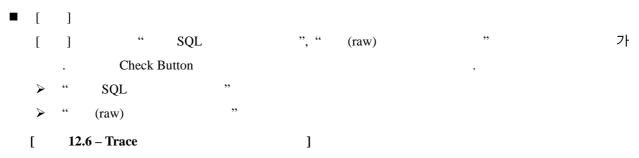
[12.4 - FTP Browser]

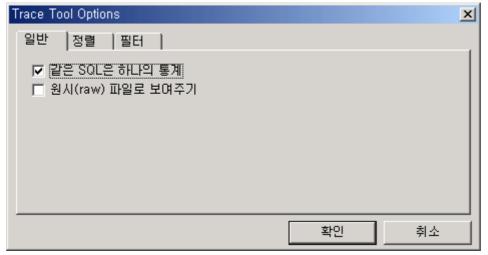




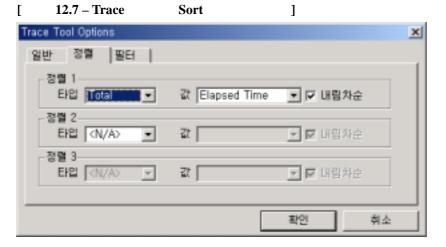
12.3.4 Trace









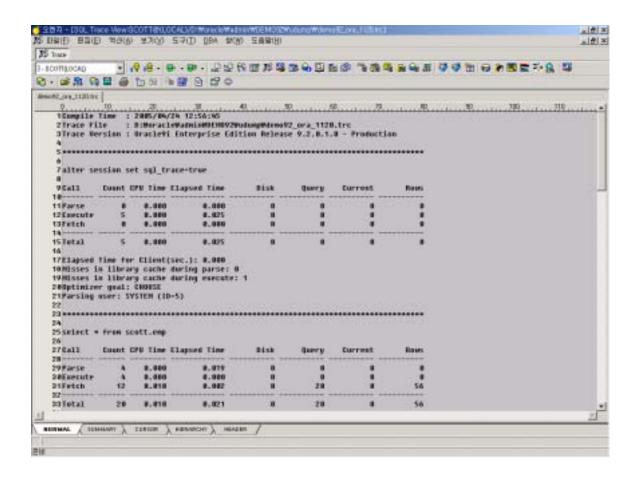




```
■ [ ]
 [ ] Trace SQL
                       " SQL
                                             ", "
       ", "SYS SQL "가 .
 SQL
  > " SQL
  > " SQL " SQL
                                 Recursive SQL
  ➤ "SYS SQL " SYS user
                                 SQL
 [ 12.8 – Trace Filter
 Trace Tool Options
  일반 정렬 필터
  □ 海部 🔟 글 개의 SQL 문장만 보며주기
   ☐ Recursive SQL 보여주기
   ▼ SYS 사용자의 SOL 보며주기
                        확인
                              취소
```



12.3.5

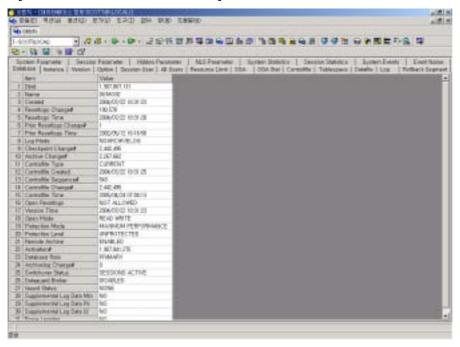




13. Database Information

가 (SGA, Parameter, Control File, Redo Log, Tablespace, Rollback Segment), (Archive Mode), 가 .

[13.1 - Database Information]



13.1 Database Information

. Database Information Database, Instance,

Version, Option, Session User, All Users, Resource Limit, SGA, SGA stat, Control file, Tablespace, Data file, Log, Rollback Segment, System Parameter, Session Parameter, Hidden Parameter, NLS Parameter, System Statistics, Session Statistics, Events, Event Name 22 .

13.2 Database Information



Save

e Copy

Select All



13.3 Database Information

가	Database Information	. System Parameter	Events
Filter		Filter	50
가 .			
13.4 Database Information	Tab		
Database Information	22 .		
✓ [Database]	, ,		
✓ [Instance] ,	,		
✓ [Version]	•		
✓ [Option]			
✓ [Session User]			
✓ [All Users]			
✓ [Resource Limit]			
✓ [SGA] SGA			
✓ [SGA stat] SGA			
✓ [Controlfile]			
✓ [Tablespace]			

[] Database Information

✓ [Datafile]

.

✓ [Log]

•

✓ [Rollback Segment] , Wait, Xacts

.

✓ [System Parameter]

init.ora 가 , ALTER SYSTEM

. Filter

✓ [Session Parameter]

[System Parameter] 가 , ALTER SESSION

. Filter



<pre></pre>		•					
 ✓ [System Statistics] ✓ [System Events] ✓ [Event Name] []] ⇒ [] 	\checkmark	[Hidden Parameter]	Hidden Parameter				
 ✓ [Session Statistics] ✓ [Event Name] 3.5 [] → [] 	✓	[NLS parameter]	NLS				
 ✓ [System Events] ✓ [Event Name] [] → [] 	\checkmark	[System Statistics]					
<pre> ✓ [Event Name] 3.5 [] → []</pre>	✓	[Session Statistics]		•			
<pre> ✓ [Event Name] [] → [] [] → []</pre>	✓	[System Events]					.]
[] → []							
3.5 [] → [] [] → []	✓	[Event Name]					
$[] \rightarrow []$							
$[] \rightarrow []$							
[] → []	13.5						
[] → []					ſ] → [1
$[] \rightarrow []$,
	ſ		1				
	·	, .					



14. Description Tool

14.1 Description Tool Access Type Object Description Description "Exact Match", "Start With", "Include String" Object Type Filter Object Script Analyze , Grant Object Reference Object, Object Reference Object ✓ Description Tool Object , Schema Browser Object 가 Description 14.2 Description Tool 2 14.3 Description Tool 14.3.1 Description Tool [] Tab Description Tool] [**Description Tool Description Tool** 가 "F4" Tool(SQL Tool, PL/SQL Tool, Plan Tool)

Description



14.3.2 Object

14.1 – Description Tool

[SCHEMA].[OBJECT_NAME]

]

Object

SENTE BUYON YAYO SPID DEA WAY SEETH - | 計 | 3 - 伊区 The Dear 8 · 18 관예타인·영화의 방기 🗾 F 모든 스케이에서 검색 **利特型品电子** 무료하다라 海维 全界界 SCOTT **动物切痕 (50**) AND THE 전한 | 대체가 함조하는 제체 | 대체가를 환조하는 제체 스크트로 함께 HO를 받는 오늘자를 받는 레그트로 | 스토리지 | 통해받는 바라스 | 제작조건 | 다리스 | 코리지 | 스탠스트그 | 대통대하는 - Out Tuript For Track Scott Sept. Orange For Object. - Greenwised on 2005/85/25 14:25:52 by 100110 CHEATE THILE SCRITTLESP CHPMO MIRECE (N) HOT MULL,
COMM MEMBER (7 ,2),
DEPTHO MIRECE (2),
EMME EMOCHARY (N),
JOS UNICHERY (N),
MINEDATE DOTE,
SML MIRECE (D),
CONSTRAINT FK_BEPTHO FOREIGN NEV (DEPTHO) REFERENCES SCOTT.BEPT (DEPTHO) EHETTAL 65526 MINEXTENTS 1 MINESTENTS BINJULTED Done EMPI

Object Schema Browser
. , Description Tool , Schema Browser Object
Object 가 Description Tool .

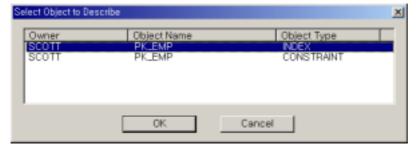


14.3.3 가 Object가

가 Object 가 가 .

Object

[14.2 – 가 Object]



14.4 Object

Description Tool Object 23 7 . Object

Object

14.4.1 Cluster

- Cluster Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.2 Constraint

- Constraint Info
- Column
- Object Info
- Grants
- Reference
- Reference by



14.4.3 Context

- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.4 DB Link

- DB Link Info
- Script
- Grants
- Reference
- Reference by

14.4.5 Dimension

- Dimension Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.6 Directory

- Directory Info
- Object Info
- Script
- Grants
- Reference
- Reference by



14.4.7 Function

- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.8 Index

- Index Columns
- Index Info
- Statistics
- Object Info
- Storage
- Segment
- Partition
- Script
- Reference
- Reference by

14.4.9 Index Type

- IndexType Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.10 Java

- Java Class Script
- Java Class Object Info
- Java Source Script
- Java Source Object Info
- Java Resource Script
- Java Resource Object Info



- Grants
- Reference
- Reference by

14.4.11 Library

- Library Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.12 Operator

- Operator Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.13 Package

- Package Script
- Package Object Info
- Package Body Script
- Package Body Object Info
- Grants
- Reference
- Reference by



14.4.14 Procedure

- Script
- Object Info
- Grants
- Reference
- Reference by

14.4.15 Profile

- Profile Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.16 Role

- Role Info
- Granted Roles
- Granted System Privileges
- Script
- Grants
- Reference
- Reference by

14.4.17 Sequence

- Sequence Info
- Object Info
- Script
- Grants
- Reference
- Reference by



14.4.18 Synonym

- Synonym Info
- Object Info
- Script
- Grants
- Reference
- Reference by

14.4.19 Table

- Column List
- Table Info
- Object Info
- Segment
- Storage
- Statistics
- Indexes
- Constraints
- Partitions
- Triggers
- Snapshot Logs
- Sample Data
- Script
- Grants
- Reference
- Reference by

14.4.20 Trigger

- Script
- Trigger Info
- Object Info
- Grants
- Reference
- Reference by



14.4.21 Type

- Type Info
- Type Object Info
- Type Script
- Type Body Object Info
- Type Body Script
- Grants
- Reference
- Reference by

14.4.22 View

- Column List
- Script
- View Info
- Triggers
- Sample Data
- Grants
- Reference
- Reference by

14.4.23 Snapshot Log(Mview Log)

- Snapshot Log Info
- Grants
- Reference
- Reference by



14.4.24 Description

SQL , NULL ,

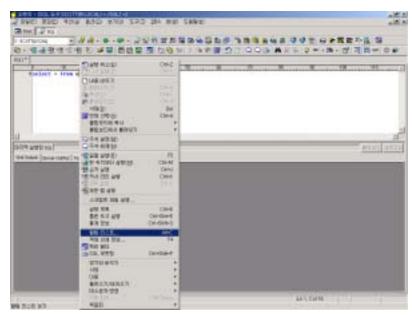
.

[14.3 -

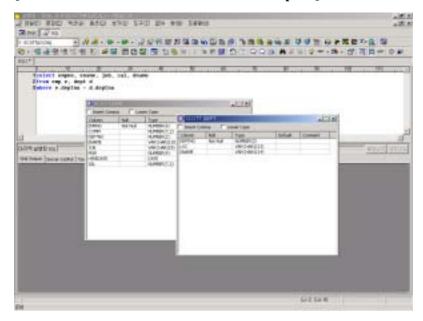
] 가

. "Alt+C" .

[14.3 -]



[14.4 - Column Description]



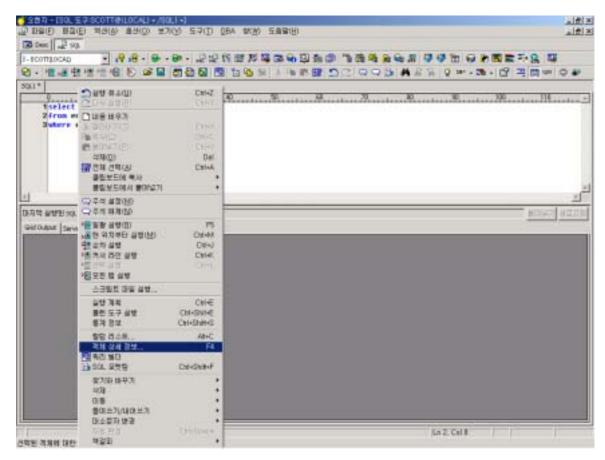


14.4.25 Full Description

Full Description (Indexes, Constraints, Storage, Partitions, Triggers, Snapshot Logs, Columns, Table Info, Object Info, Segment, Statistics, Sample Data, Script, Grants, Reference, Reference by)

[14.5] Description Tool
. "F4" .

[14.5 -]

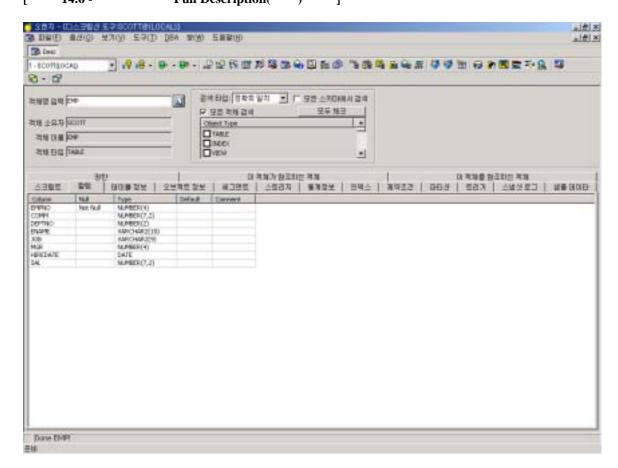




 Description Tool
 [14.6 - Full Description()]

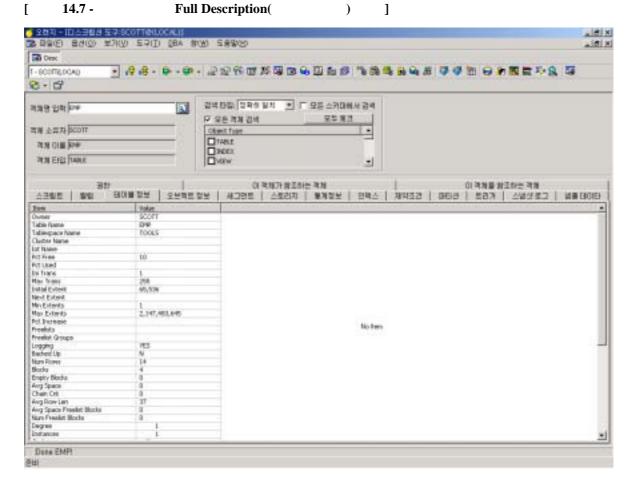
 プト
 , NULL , プト .

 [14.6 - Full Description()]





Description Tool [Table Info] ,
(Rows, Row , Empty , , Last Analyzed..) .

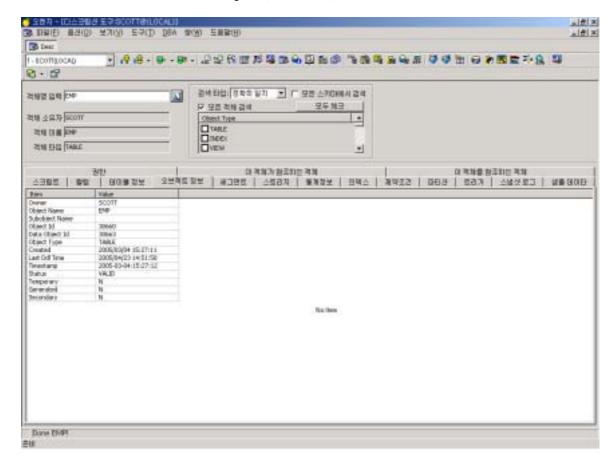




Description Tool [Object Info] ID , , ,

.

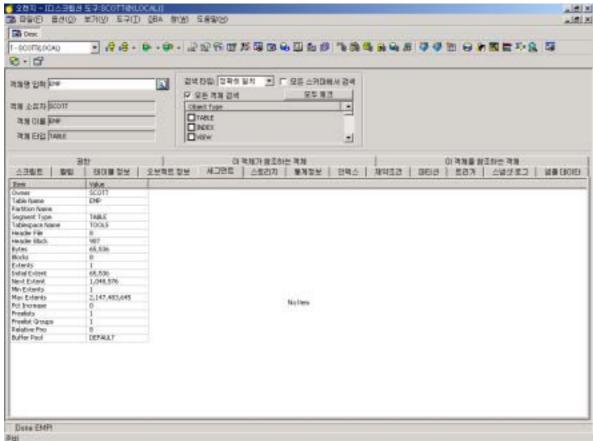
[14.8 - Full Description()]





Description Tool [Segment] (TABLE..), Header File, Header Block,
Bytes, Blocks (Initial, Next..) .

[14.9 - Full Description()]





Description Tool [] Last Analyzed, Avg Space, , Blocks, Empty Blocks,

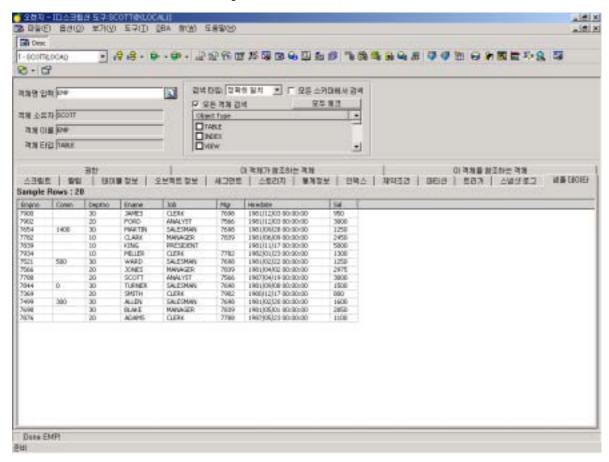
Dune EMPI

[14.10 -**Full Description**()] ○ 28回 - ID 43=IR 23=800 II 8/1000 (BA 和) 5 8 8/20
 ○ 28回 - ID 43=IR 23=800 II 8/1000 (BB 和) AIR N The Orac 1-SCOTTEDCAD · 产度· 中· 中· 卫尔尔西斯英国西西西西斯 "我是是我们 医中枢 日的现在分词 草 8.0 김박한학 김학생 일시 🏓 🗀 모든 스카마에서 경역 নমন্ত প্ৰকৃতিক P 오는 경제 검색 Otent from 海南 全界자 SCOTT 24.8 日田 日本 THE PER THREE 정한 이 작업가 함조하는 작성 이 이 작업가 함조하는 작성 이 이 기계를 함조하는 작성 소프센트 | 중앙 | 대대를 정보 | 소프센트 | 조건지 보게 조보 | 전략은 이 대대를 정보 | 소프센트 | 보급 II 이 대대를 전보 | 사고 기계를 대대를 다 되었다. 2-30 m Sell Took
Leaf Analyzed Sample Sam
Mary Rooms
Model English Sample Sampl No fami



Description Tool [Sample Data] 20 Sample Data

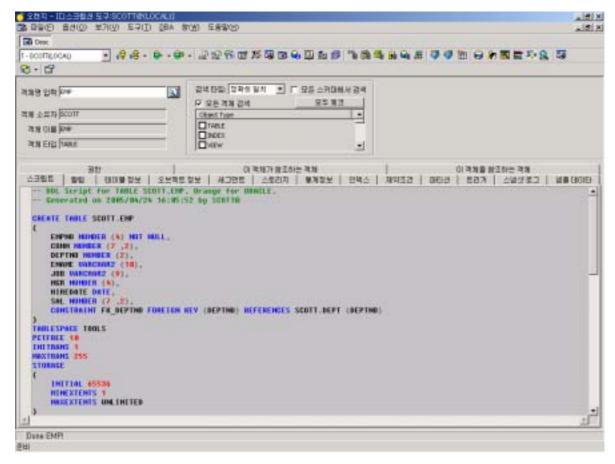
[14.11 - Full Description()]





Description Tool [Script] 가 DDL

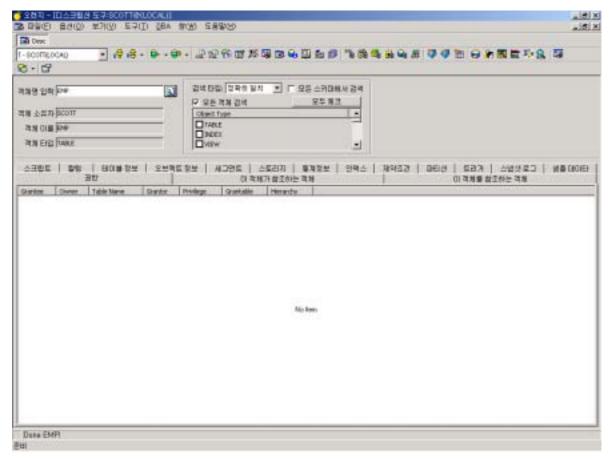
[14.12 - Full Description()]





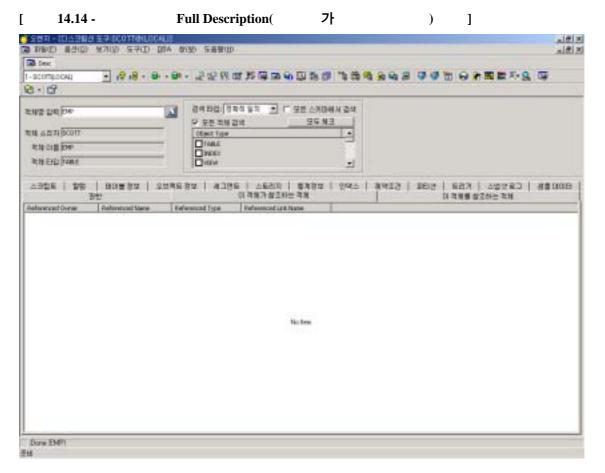
Description Tool [Grants] 가

[14.13 - Full Description()]





Description Tool [Reference] 7

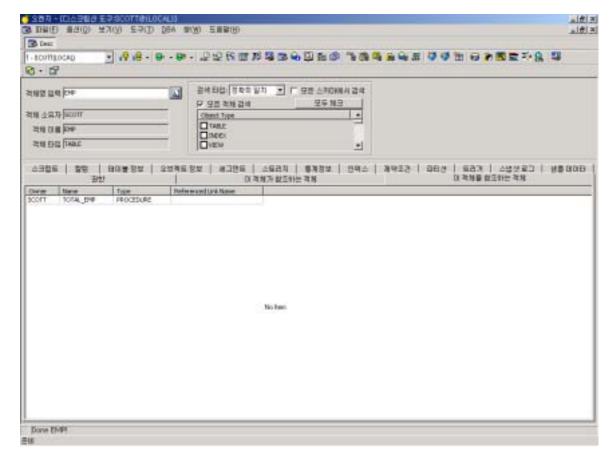




Description Tool [Reference by] 가

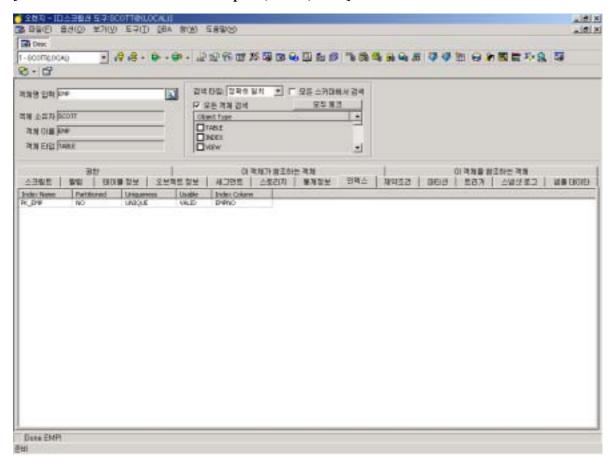
[reserved by]

[14.15 - Full Description()]





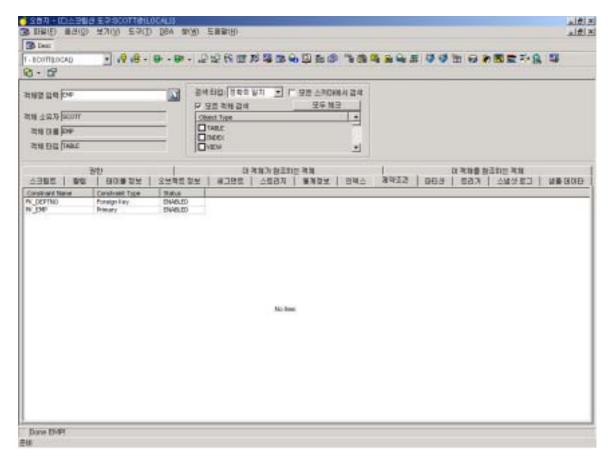
[14.16 - Full Description()]





Description Tool [Constraint] , , .

[14.17 - Full Description()]

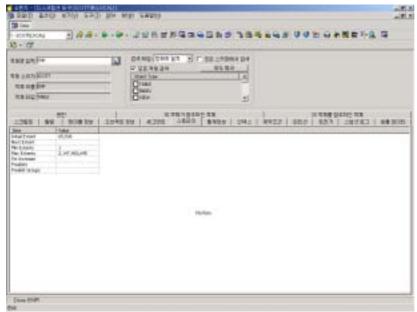




Description Tool [Storage] Next Size, , ,

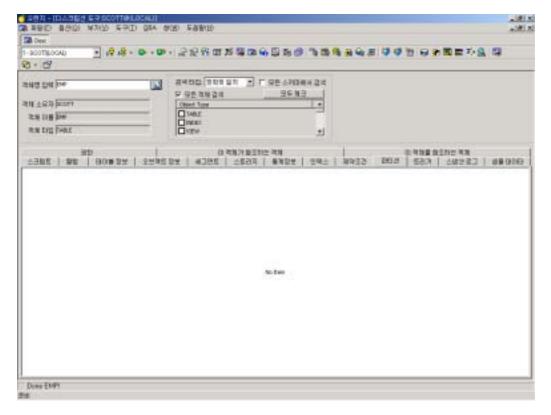
가 , .

[14.18 - Full Description(Storage)



Description Tool [Partitions] 가

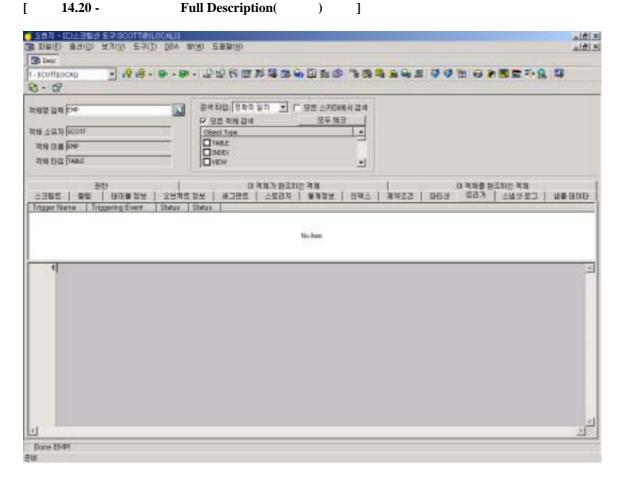
[14.19 - Full Description()]





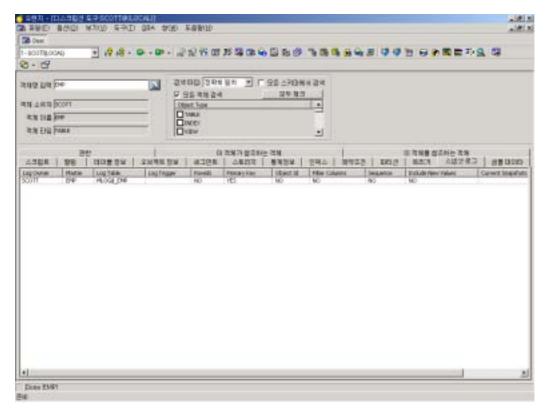
가 Description Tool [Triggers]

14.20 -Full Description()]





[14.21 - Full Description(Snapshot Logs)]



14.4.26 Description Option

Option Submenu Options Description

.

[14.22 – Description Tool Option ()]





15. Table Editor

가	(Delete, Insert, Update)	(Select)
		Commit
Rollback .		
15.1 Table Editor		
✓ GRID		
✓	/ /	
✓	Row Editor	

Import Export

15.2 Table Editor

✓ LOBs, BFILE, RAWs

Apply Modification

Delete

Undelete

Append New Record

Undo

Redo

15.3 Table Editor

15.3.1 Table Editor



15.3.2

15.1 -

[

Table Editor Table Drop down List

The Drop d

]

國 마음(E) 역사(P) 등학(E) 보기(E) 도구(E) [BA 新/R) 도움함(E) - 오라지-[HO] (MDHSCOTTM (LOCALITY) THE THE TIME 1-800FTGOCAD 田田田田中 ■ 期間無利用五件 224 8845 EMPNO COMM DEPTNO ENAME JOB 1900 30 JAMES CLEFA MOR HEREDATE SAL 7696 1981/12/03 7506 1981/12/03 7902 28 FORD ANALYST 3000 MITHAM IE SALESMAN 1250 7654 II CLANK MANAGER 261 H-KNG PRESIDENT 5800 III MILLER CLERK. 7554 130E 7521 580 30 WARD SALESMAN 1258 28 JONES MWWAGER 2975 25 SCOTT ANALYST. 3000 TURNER SALESMAN 7644 7990 150E 25 SMITH CLERK 7902 7360 900 300 30 ALLEN SALESMAN 1900 36 BLACE 26 ADAMS MANAGERI CLERK 7939 2958 1108 7076 14 10 100



15.3.3

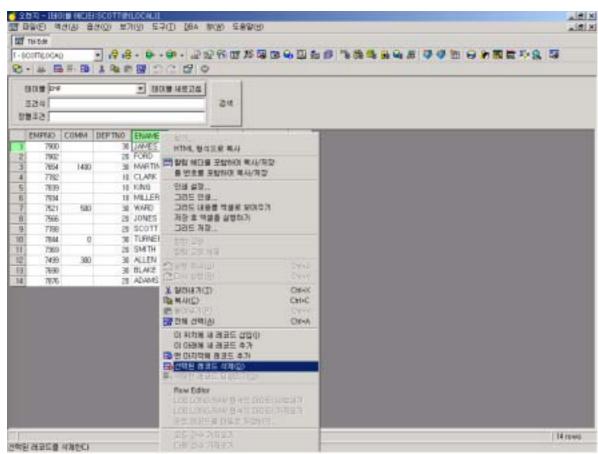
7 Row

"Delete Selected Rows" [Delete] (■) Table Editor

"Deleted Text Color" Row .

.

[15.2 -]





15.3.4 Undelete

선학인 레코드를 이게한다.

Delete Row Undelete (==5) "Undeleted rows" [Undelete] 15.3 -]

Raw Editor

LOG LOGICAN BAS GOT DESIGN LOG LOGICAN BAS GOT DESIGN LOG LOGICAN BAS GOT DESIGN REGISTED DESIGNADA.

. (8) X -ist N ■ 200 年 200 日 1-SCOTTGOCAD 8-4 B = B | 1 B = B | D C B | 0 · 自以時外自立由 田田田田中 224 급석 世界五四 EMPNO COMM BEPTNO CHAME S AWARS HTML BUSINESS SAV SO FORD SI MARTIN SI SEL MITE SELMON SAVINGS 7902 1400 7654 를 변호를 포함하여 복사/개당 II CLAPK II KNG 7192 인물 설립... 7839 그러도 안녕... 그러도 내용한 역설로 보여주기 저장 호 역설을 설립하기 II MILLER 31 WARD 21 JONES 500 7521 7566 25 SCOTT 그런도 경장... 7198 TURNE! 21 SMTH
31 ALLEN
31 BLAZ
21 ADAMS 7369 380 7499 7698 Na MANCO Re MANCO 0666 ChHC. MED NO W DE-A 이 위치에 왜 전로도 설립이 이 이용에 왜 전로도 추가 ID 안 미워하게 제로 크고



14 raws

15.3.5

가 가

. "Insert new record here,

Append new record here" "Append new record at the end" Row

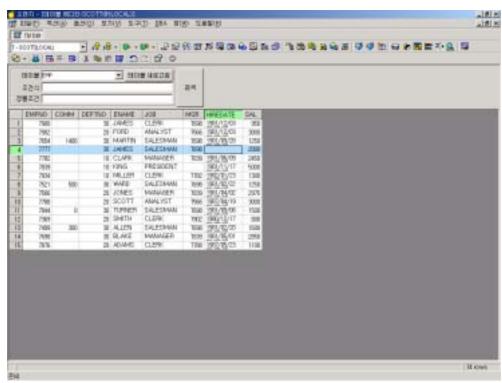
가 . "Insert new record here" Row

"Append new record here" Row . DBMS

row 가 . 가

.

[15.4 -]



15.3.6 Row Editor

Row Editor 가 가 [Row Editor] Row Editor 가 . (Appendix B)



15.3.7 BLOB, RAW, LONG RAW Import

BLOB, RAW, LONG RAW

"Import LOBs, LONG, Raws" Import 7

. BLOB, RAW, LONG RAW "Import Column"

Import . "Select Import File" Import [OK]

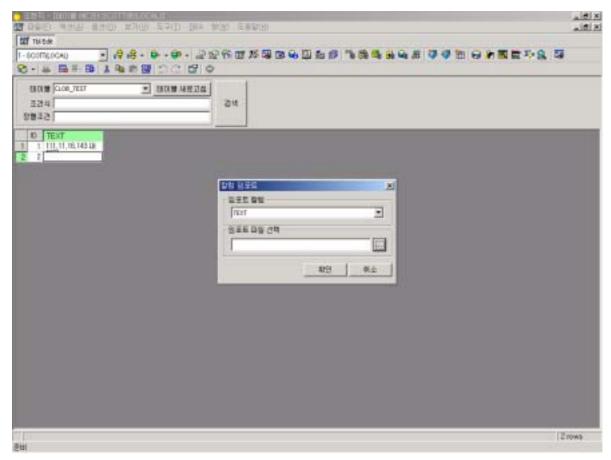
Import .

BLOB, RAW, LONG RAW Import

BLOB, RAW, LONG RAW [Query]

BLOB, RAW, LONG RAW Import .

[15.5 – BLOB, RAW, LONG RAW Import]





15.3.8 DML

DML [Apply Modification] () . [Apply

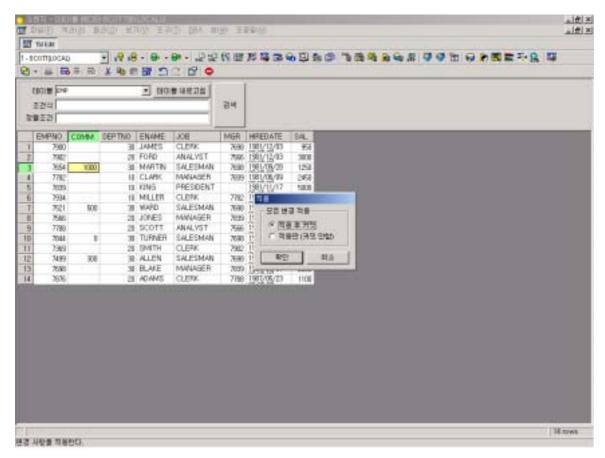
Modification] DML DBMS

Commit Commit

Commit . Table Editor Apply

Modification undo(), redo()

[15.6 – Apply Modification DML]





15.3.9 Table Editor Options

15.7 – Table Editor

■ []

DML Rows Color "Color" . "Color" Updated Cell
Color, Inserted Row Color, Deleted Text Color 가



**Array Size" Fetch 7\text{. "Long Size"}

Long type . "Fetch as Need"

Initial Next . 1000
Initial 100 Next 가 10 100

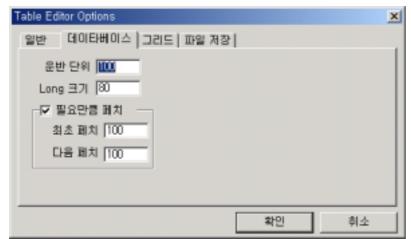
10 .

Fetch as Need Row

Retrieve ,

"Fetch All rows" .

15.8 – Table Editor





가

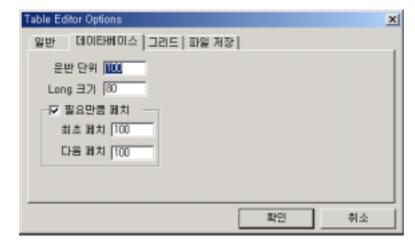
■ []

"Grid Color" "Sort" . "Grid Color"

. "Sort" Header

.

[15.9 – Table Editor]



= []

,



16. ERP Monitor

Oracle ERP(Oracle E-Business Suite)

ERP Monitoring

16.1 ERP Monitor

Oracle Application

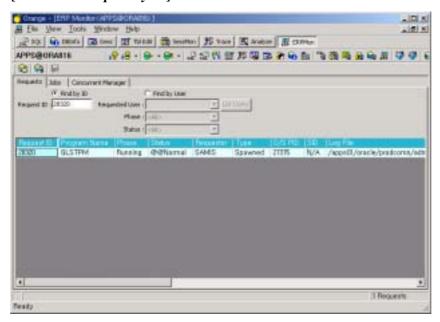
- ✓ Request Monitoring
 - Find by Request ID
 - Find by User
- ✓ Job Monitoring
- ✓ Concurrent Monitoring

16.2 ERP Monitor

16.2.1 Request ID Request

- ERP Monitor([Request]
- ID (Find by ID) (Find by User)
- Radio [Find by ID] [Request ID]Request id Refresh ID

16.1 - Request by ID]





16.2.2 User Request

■ ERP Monitor [Request]

■ ID (Find by ID) (Find by User)

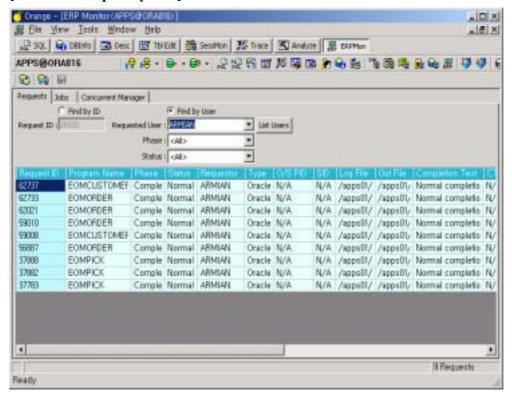
■ Radio [Find by User] [Request User], [Phase], [Status] [List User]

■ [Requested User] , , , [List Users]

■ [Requested User], [Phase], [Status] Refresh

가

[16.2 - Request by User]



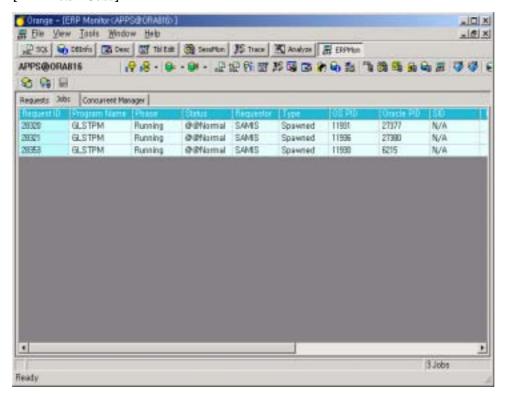


16.2.3 Job

■ ERP Monitor [Jobs]

■ [Refresh] Job .

[16.3 – Jobs]





16.2.4 Concurrent Manager

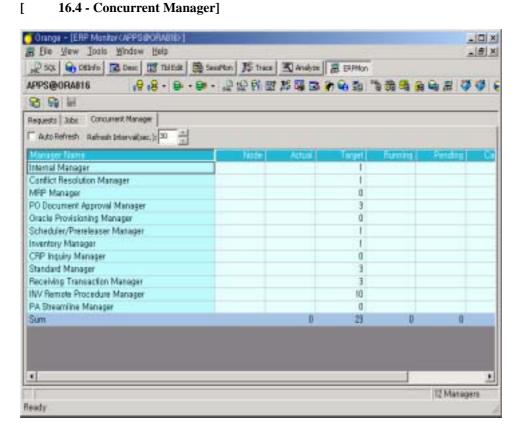
ERP Monitor [Concurrent Manager]

[Refresh] Concurrent Manager

[Auto Refresh] [Refresh Interval]

가

16.4 - Concurrent Manager]





17. Network Configuration Tool

Oracle SQL*Net . Network

Configuration Tool SQL*Net , Ping , TNS Ping

17.1 Network Configuration Tool

✓ Tnsnames.ora

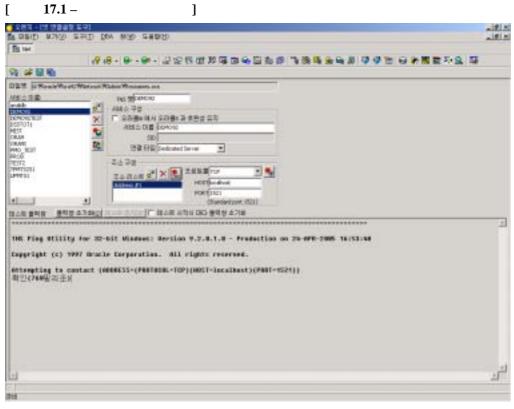
✓ Host Ping Test✓ Listener TNS Ping T

,

TNS Ping Test

17.2 Network Configuration Tool

17.2.1 Network Configuration Tool



Network Configuration Tool



가 File tnsnames.ora "Service Names" tnsnames.ora $(\mathbf{X}),$ "scott/tiger"] , [(🙀) 가 30 , "Service Configuration" "Compatible with Oracle8i release 8.0" Net8 Oracle 7.X . Service Name **SID** Service Name SID , "Connection Type" **Dedicated Server** Shared Server 가 (X), TNS Ping "Address Configuration" (TNS) 가 . Protocol TCP/TCPS/SPX/NMP/IPC **TCPS** , Host **PING** . TCP 32 가 . Host 1 가 , Port 1 ~ 65000 , TNS Ping Test Output , Ping

17.2.2 Tnsnames.ora Load

Network Configuration Tool Home tnsnames.ora

Network Configuration Tool File tnsnames.ora



17.2.3 Service Name 가

, TNS Names Service Names

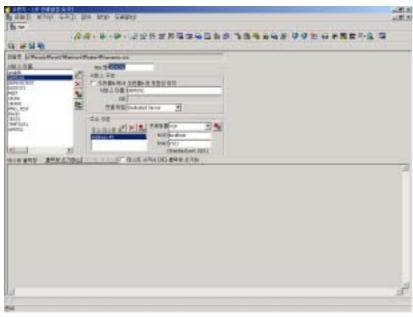
■ "Compatible with oracle8i release 8.0" SID

, "Service Name"

" Shared Server, Dedicated Server, Database Default Value フト フト Database Default Value . フト Dedicated Server

.

[17.2 –]



. ""

. address 가 IP Host Name .

■ 가 가

. TCP .

■ TCP TCPS , IP

Host Name . .

1521 .

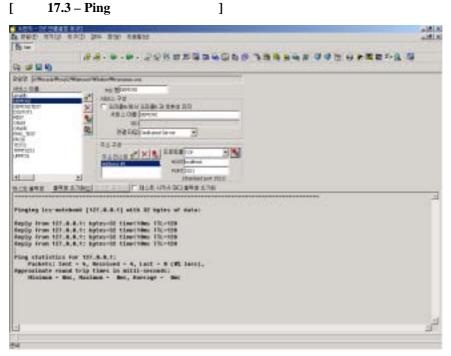


17.2.4

가 [Ping Test]

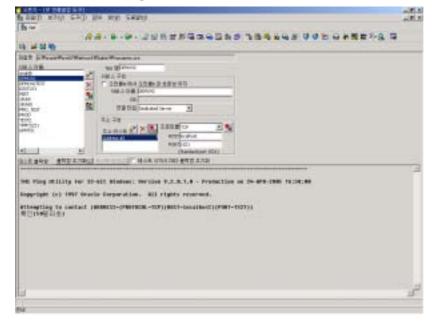


17.3 – Ping]



Ping 가 Net8 (TNS) [TNS Ping Test]

17.4 – TNS Ping





TNS Ping 가

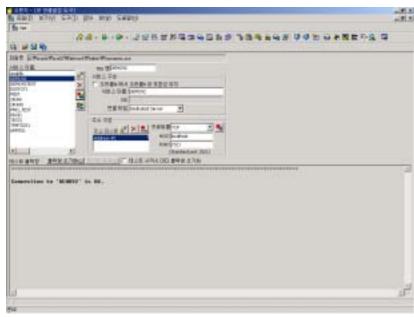
> . [Database Connection Test] "SCOTT"



[Change User for Connection Test]



17.5 –



Ping / TNS Ping / Connection

Test Output Clear output on each test Clear



Stop Test

[]

"tnsnames.ora"

[Save As]



Network Configuration Tool Oracle Home Windows

> 가 Oracle DLL Home

Windows 가 Application DLL **PATH** Windows



Space Manager 18.

Space Manager Used Space / Free Space / Unused Space 가 가 가 18.1 Space Manager Object) 가 가 Object () Object Color Map Schema Object Table/Index/Cluster/Partition Object Usage, Create Tablespace Coalesce Add/Resizing Modification Rollback Segment /Online/Offline/Shrink Redo Log Groups /Log Switch/



Check Point

18.2 Space Manager



18.3 Space Manager

18.3.1 Space Manager

[] [] Space Manager

[] Space Manager

Space Manager

Space Manager

DBA

DBA

Space Manager

7t

.

18.3.2 Space Manager

Space Manager [Tablespaces] [Schema], [Rollback Segments], [Redo Log Groups]

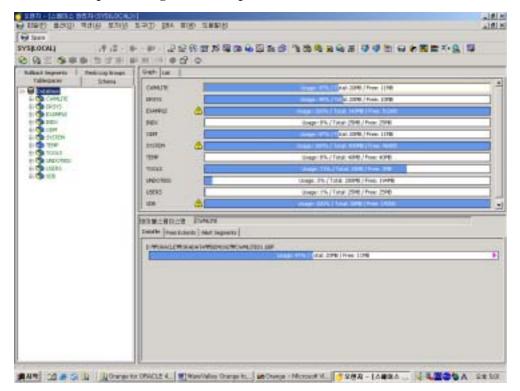
[Tablespaces]
, [Schema]
. [Rollback Segments] , [Redo Log Groups]



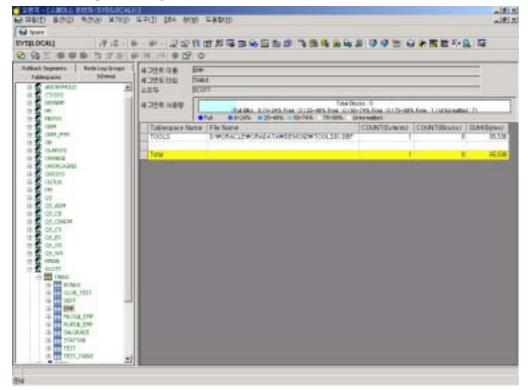
18.1 – Space Manager Tablespace]

[

[



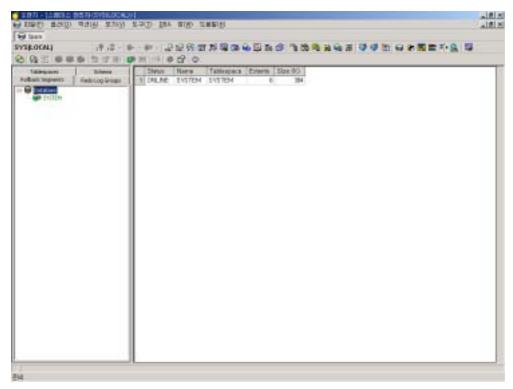
18.2 – Space Manager Schema]



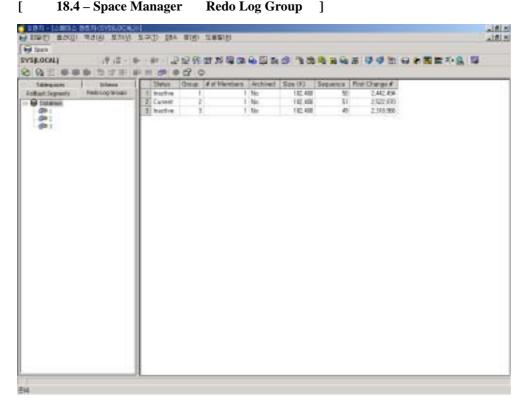


18.3 – Space Manager Rollback Segment]

[



18.4 – Space Manager Redo Log Group]

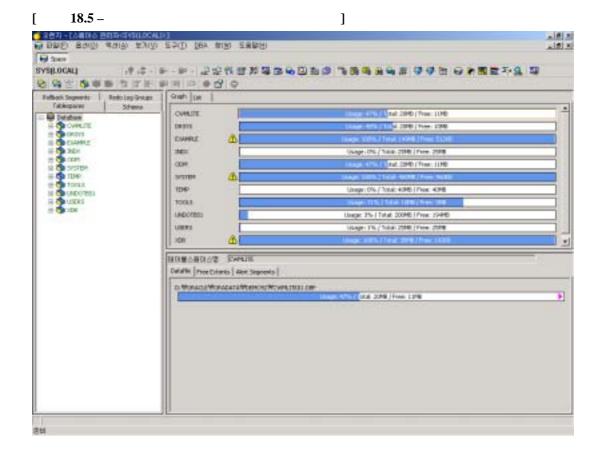




18.3.3

Space Manager [Tablespace] 가 Database , [Graph] [List] Grid (Default: 95%) [Graph] [Graph] 가 가 Next Extent Free 가 Extent 가 가 Next 가 [Datafile]

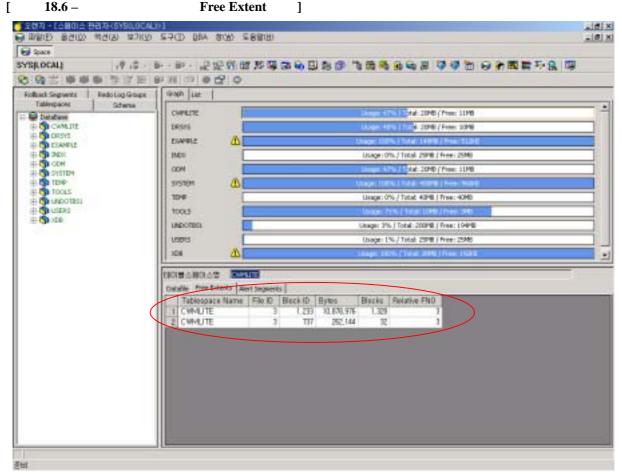
Free Extent





, [Free Extents]

18.6 – Free Extent]





[Tablespace] Space Manager

, Free Extents

, [Graph] [List]

Grid [Free Extents] . Free Extents

[Tablespace Info]

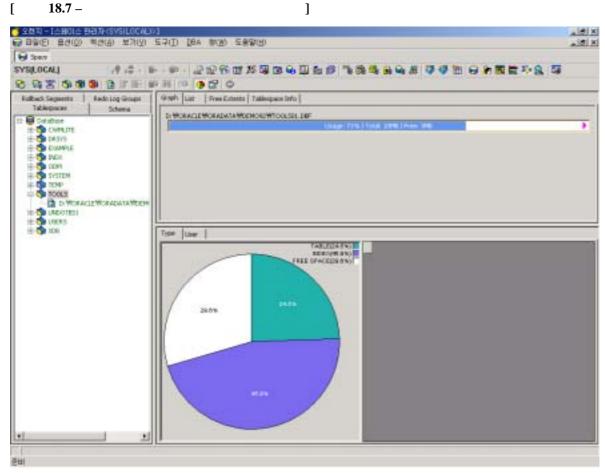
[Graph]

가 [Type]

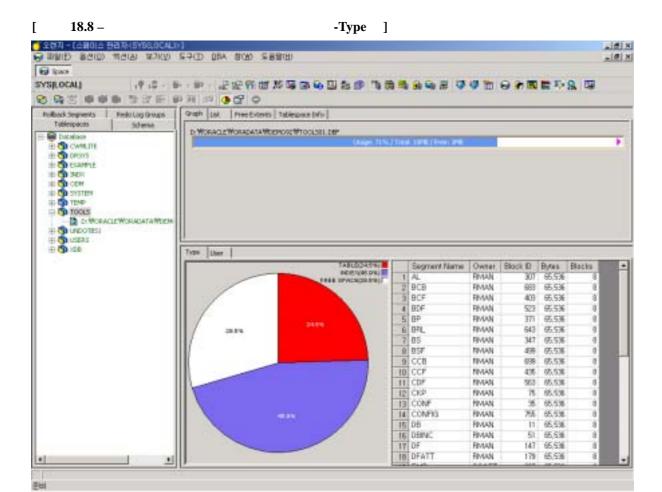
, Free Space

. [User]

18.7 –]





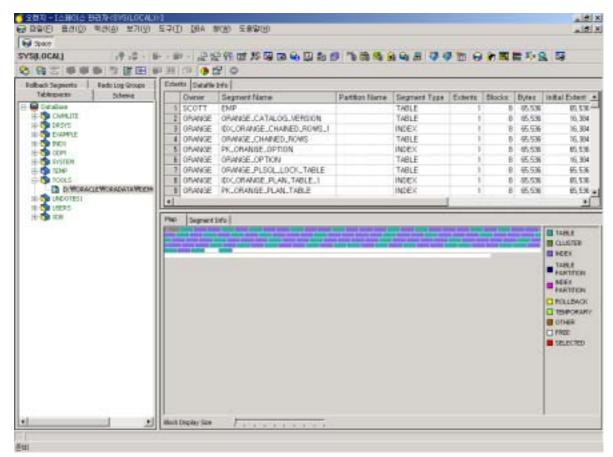




	[Tablespace]				
	[Extents]				가
	, [Datafile Info]	Datafile	, Autoextensible	Datafile Status	
	[Map]	, [Segment Info]	Segme	nt 가
	Block	High Water Mark	, Unused Block		
	•				
_	가		, [Segme	nt Info]	
		. ,			
	가	가			
				[Segme	ent Info]
	,	,	Used/Free/Unused	l	
	Used	Free	Fre	ee List	, HWM
	Free Block	, Unused			

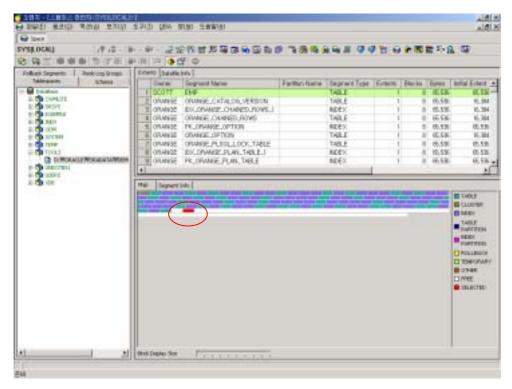


[18.9 –]

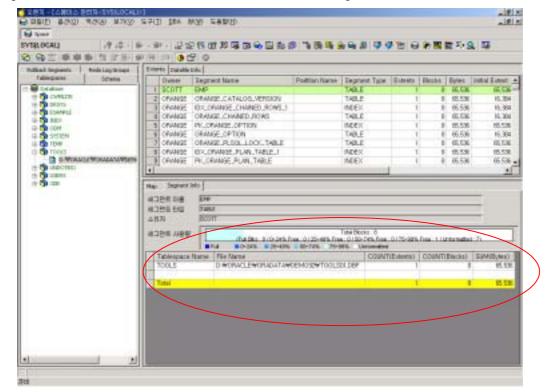




[18.10 -]



[18.11 –]





■ Space Manager [Schema]

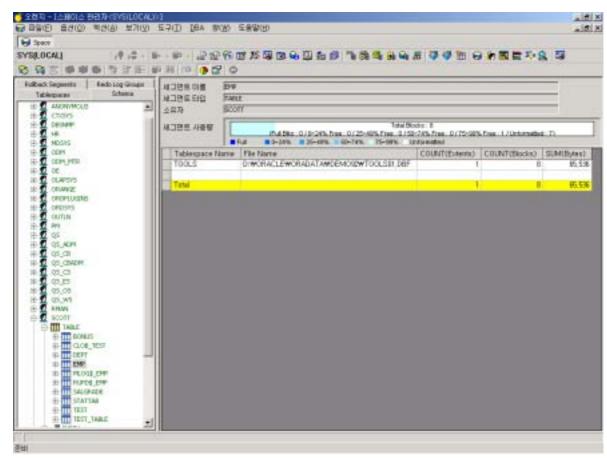
, 가

[18.3.5]

.

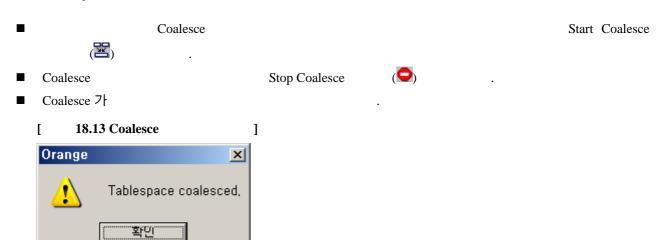
,

[18.12 –]





18.3.7 Tablespace Coalesce



18.3.8 Tablespace

가

The Add Datafile (한) .

■ Reuse Auto extent Next increment







Resize ().

■ Size [OK] .

[18.15 -]



18.3.10 Tablespace

Tablespace	[Action] – [Cre	ate Tablespace]	Create
Tablespace ())			. Tablespace Name
		Add I	Datafile (🛅)	
가			Rei	use Auto extend
		[OK]		
30	,		5	
	2		A	Add Datafile
	. Initial/Next/Min S	Size 0	5	가 ,
Min/Max Num	10	가	. Increment by six	ze 0 ~ 999
가				
			Status Po	ermanency .
Extent Management	Local Dictionary 7	Locall	y Management O	racle Database 8i
가				
Locally Management	- Locally Management	Extent	가	Automatic Allocate
Uniform Size	. Default	Automatic	Oracle	Extent
. Uniform	m 가	Extent		Extent 가
. Segment Management	 Locally Management 3 	Fablespace	Segment Mana	gement
9i	기 : : : : : : : : : : : : : : : : : : :	. Default	Manual	Auto
-	ΓS, FREELIST GROUP	Oracle		
	nt Tablespace – Dictionar		7	' Storage Parameter
,	TIAL, NEXT, PCTINCR			8
. Storage P		Oracle	Default	·



■ Enable Logging – LOGGING NOLOGGING . NOLOGGING Redo log

18.16 - Create Tablespace] Create Tablespace × Tablespace name | NEW_TABLESPACE Datafile 1 D:\U00c8ORACLE\U00c8ORADATA\U00c8EKWON92\U00c8NEW_TABLESPACE , × 4 Status © Online C Offline Permanency Permanent C Temporary Extent Management @ Local C Distionary Automatic Allocation C Uniform Allocation Segment Management C Auto @ Manual

Enable Logging

· Generate redo logs, Recoverable

C Don't generate redo logs, Not recoverable, Faster update



OK

Cancel

18.3.11 Tablespace Parameter

■ Tablespace Parameter [Action] → [Edit Tablespace] Edit

Tablespace . Permanency

Extent Management

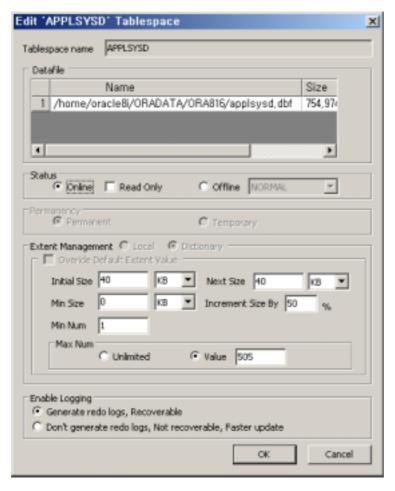
■ Extent Management 7 Local Dictionary

■ Enable Logging – LOGGING NOLOGGING

DLOGGING . NOLOGGING

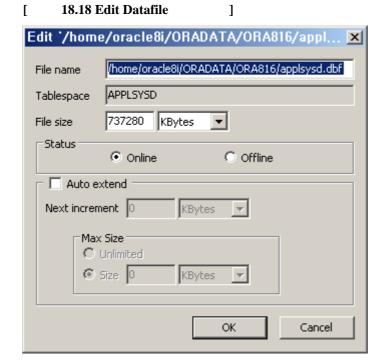
Redo log

18.17 Edit Tablespace





18.3.12 Datafile Parameter





18.3.13 Rollback Segment

Space Manager [Rollback Segment] 7 "Database"

Rollback Segment

■ Status: , , , Rollback Segment

]

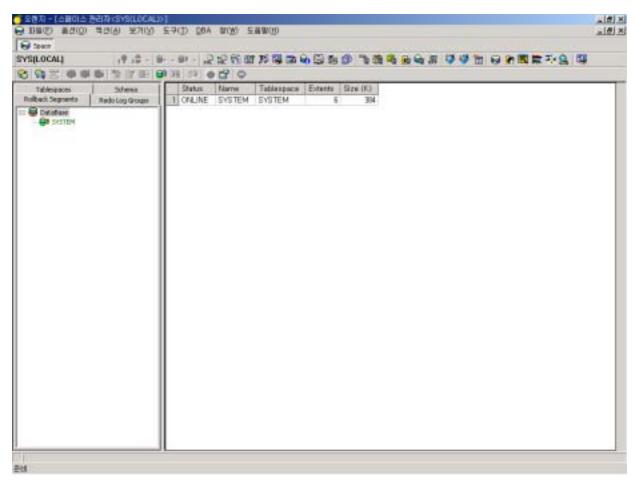
■ Name : Rollback Segment .

■ Tablespace : Rollback Segment .

■ Extents : Rollback Segment . .

■ Size : Rollback Segment .

[18.19 Rollback Segments

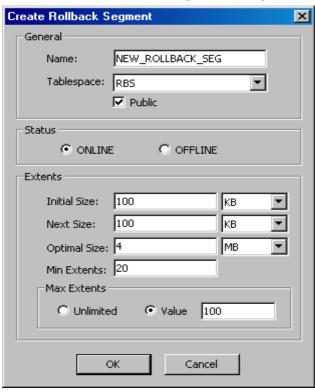




18.3.14 Rollback Segment

Rollback Segment [Action] → [Create Rollback Segment] Create Rollback Segment Rollback Segment Rollback Segment "General" "Name" Rollback Segment Rollback Segment . Rollback Segment 30 가 . "Tablespace" Rollback Segment . Public Rollback Segment Rollback Segment Rollback Segment 가 ONLINE/OFFLINE "Status" "Extents" . "Initial Size" Rollback Segment "Next Size" Rollback Segment "Optimal Size" Rollback Segment . "Min Extents" Rollback Segment . "Max Extents" Rollback Segment 'Unlimited' Rollback Segment [OK]

18.20 Create Rollback Segments Dialog]





18.3.15 Rollback Segment Parameter 1

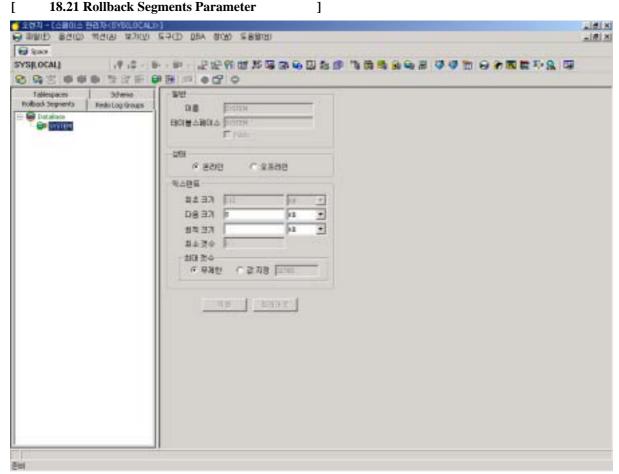
Rollback Segment Parameter . [Rollback Segment] Rollback Segment

. Next Extents Size, Optimal Extents Size

Online/Offline 'Unlimited' Max Extents

[Apply]

18.21 Rollback Segments Parameter]





18.3.16 Rollback Segment

18.22 Rollback Segment Rollback Segment [Rollback Segment 가 "Offline Rollback Segment" Rollback Segment []

18.22 Rollback Segment





Rollback Segment

18.23 Rollback Segment

Rollback Segment

"Online Rollback Segment"

]

[18.23 Rollback Segment

]



18.3.17 Rollback Segment (Shrink)

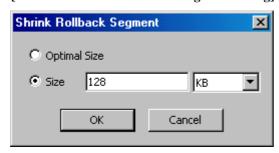
Rollback Segment [Rollback Segment] Rollback Segment

[Action] → [Shrink Rollback Segment] Shrink Rollback Segment (♥)

Rollback Segment . Rollback Segment 'Optimal Size'

Size . Rollback Segment .

18.24 Shrink Rollback Segment Dialog]





18.3.18 Rollback Segment

Rollback Segment

First Change #:

	[D	rop Rollback	Segment]		: Rollback
Segment					
18.3.19 Redo Lo	og Groups				
Space Manager	[Redo Log Groups]		가	"Database"	
■ Status :		,	,		
■ Group:					
■ # of Mem	bers:				
■ Archived	:				. ARCHIVE
	가				
■ Size:		KB			
■ Sequence	:				

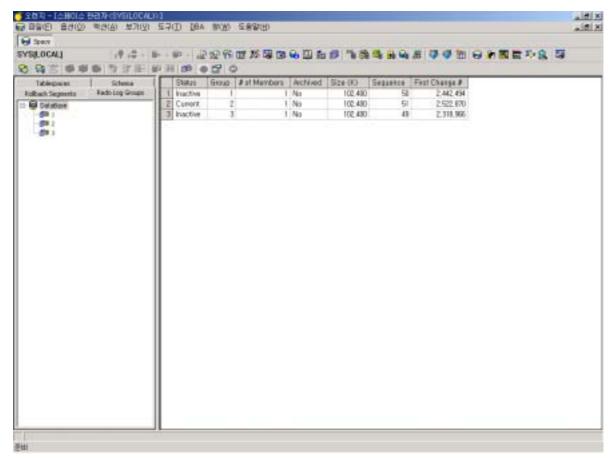
SCN(System Change Number)

[Rollback Segment]

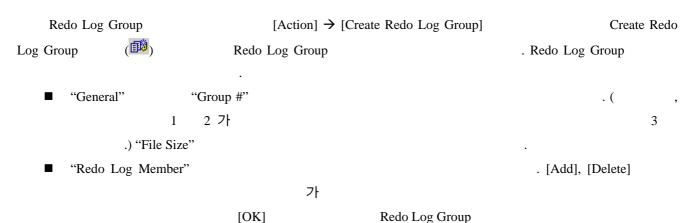
Rollback Segment

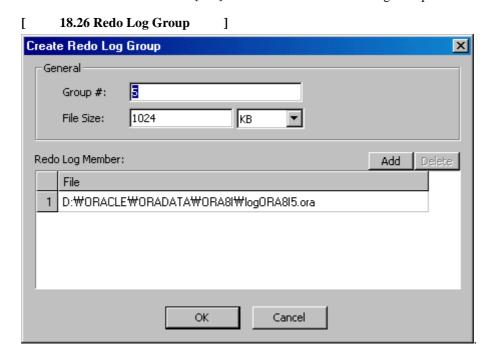


[18.25 Redo Log



18.3.20 Redo Log Group





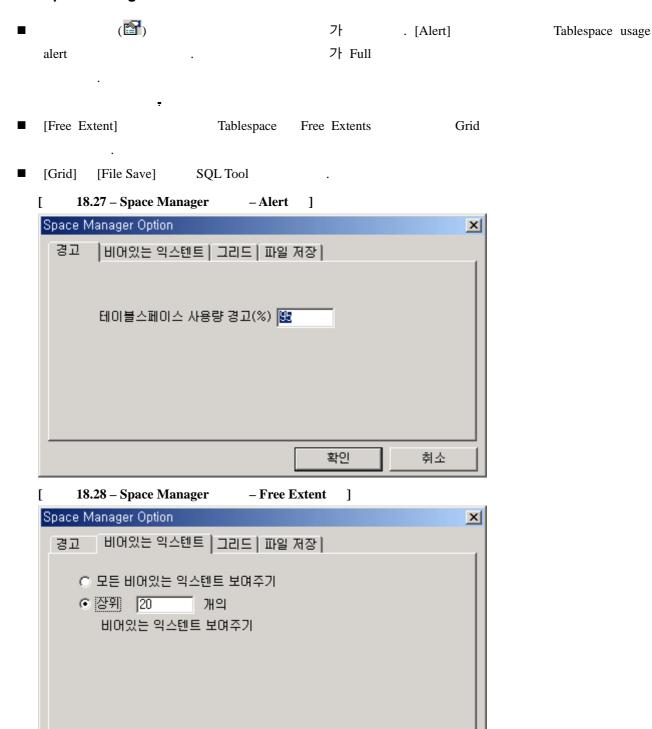
18.3.21 Log Switch

기 (Redo Log Group)
[Switch Logfile]

18.3.22 Redo Log Group
Redo Log Group
[Drop Redo Log Group]
[Drop Redo Log Group]
.



18.3.23 Space Manager





확인

취소

19. Security Manager

Secur	ity Manag	er	,	, ,	,	•						
				~		_				•		
		, ,				er Group			,			
		,	, (Consi	ımer (Group						,
				•								
40.4.0)	Manag										
19.1 8	Security	Manag	ger									
✓												
✓												
✓		/										
✓												
✓	/					(Consume	r Group)					
19.2 \$	Security	Manag	ger									
ę	Refres	h										
2	_											
2												
Ē												
2												
₫												
2												
_	•											
19.3 5	Security	Manag	ger									
19.3.1	Security	/ Mana	ger									
			[1	[]		[]	Security	Manager	
[]		-	-	-	•		-	,	curity Mar		
	-	Security	Mana	ager		(67)			Security N			
Security	Manager				OBA		,		Ž	curity Mar		



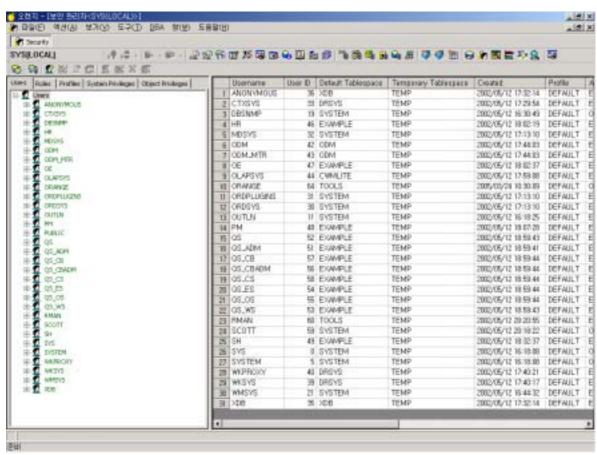
Schema .

19.3.2

Security Manager [Users] Users

가 .

[19.1 –]





■ Security Manager [Users]

가 6 .

[19.2 - -]

🦪 오랜지 - 1보안 원리자(SV) . (8) X (日本報告) はな(日) 本当(内) 在当(日) 日日本 株(本) 日日教部(日) A ISLA Toposto SYSECOLALI BREEDING #8 User D Detaum Tableopace Temperary Tableopace Created USBS Rober | Profiler | System Privileges | Object Privileges | PUBLIC COLACH CO 2002/01/12 17:32 14 35 XDB 38 DREVE ANONYMOUS TEMP 2002/05/12 12:29:58 CTXSVS DEFAULT 19 SYSTEM 2002/05/12 16:30:49 DESNMP TEMP DEFAULT TEMP QS_CR QS_CHADM HR 46 EXAMPLE 2002/05/12 19:82:19 DEFAULT MDSVS 30 SYSTEM TEMP 2002/05/12 17:13:10 DEFWILT 2000/05/12 17:46:83 COM 42 ODM TEMP DEFAULT RTMLM00 43 ODM TEMP 2002/05/12 17:44:83 DEFAULT Œ 47 EXAMPLE TEMP 2002/05/12 18:02:37 DEFAULT **OLAPSYS** 44 CWMLITE TEMP 2002/05/12 17:59:08 DEFMILT CRANCE M TOOLS TEMP 2005/03/24 10:30:89 DEFAULT 2002/05/12 17:13:10 ORDPLUSINS 31 SYSTEM TEMP DEFAULT COMMECT PRESCURICE SILLECT_CATHLOULFICKE ORDEYS. SYSTEM TEMP 2002/05/12 17:13:10 DEFAULT 13 OUTLY II SYSTEM TEMP 2002/05/12 16:18:25 DEFAULT 14 FM 40 EXAMPLE TEMP 2902/05/12 19:07:29 2002/05/12 19:59:43 DEFAULT Typiteni Printeger Granted
G QUERY REWESTS
- DRICE ANY TABLE 15 OS 62 EXAMPLE TEM DEFAULT MI COLADM 51 EXAMPLE 2002/05/12 18 59 41 DEFAULT TEMP 17 QS.CB 57 EXAMPLE TEMP 2002/05/12 18:59:44 DEFAULT ALTER ANY TABLE 2002/05/12 18:59:44 2002/05/12 18:59:44 19 QS_CBADM SE EXAMPLE TEMP DEFAULT THE CHEATE ANY TABLE 19 OS.CS SE EXAMPLE DEFAULT TEMP SELECT ANY TABLE.

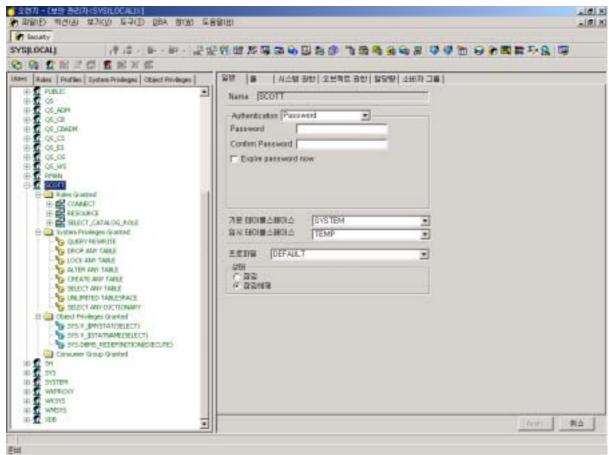
UNLIMITED TABLESPACE. 20 OS.ES 2002/05/12 18 59:44 54 EXAMPLE TEMP DEFAULT 80,80 % 55 EXAMPLE TEMP 2002/05/12 18:59:44 DEFAULT Service of the property of the 22 GS.WS 23 RMAN 24 SCOTT to EXAMPLE TEMP 2002/05/12 10:59:43 DEFAULT 2802/08/12 20:20:95 63 TOOLS TEMP DEFAULT 59 SYSTEM TEMP 2802/05/12 20:10:22 DEFAULT ES SH 49 EXAMPLE TEMP 2002/05/12 18:32:37 DEFAULT SHOURS REDEFINITION DISCUSS. 25 SYSTEM Consumer Group Granted 0. SYSTEM TEMP 2002/05/12 16:10:00 DEFAULT SICIOCICICA SE 2002/05/12 15:18:88 5 SYSTEM TEMP DEFAULT 28 WEPROOF 40 DRSYS TEMP 2802/05/12 17:40:21 DEFAULT SYSTEM 25 WKSYS 39 DREYS TEMP 2002/05/12 17:40:17 DEFAULT 30 WMSYS 21 SYSTEM TEMP 2002/05/12 16:44:12 DEFWILT NUMBER 30 000 35,306 2000/05/12 12:32:36 | DEFAULT TEMP



■ [General] , Default Tablespace, Temporary Tablespace, Profile

[Apply] , [Cancel]

[19.3 – – General]





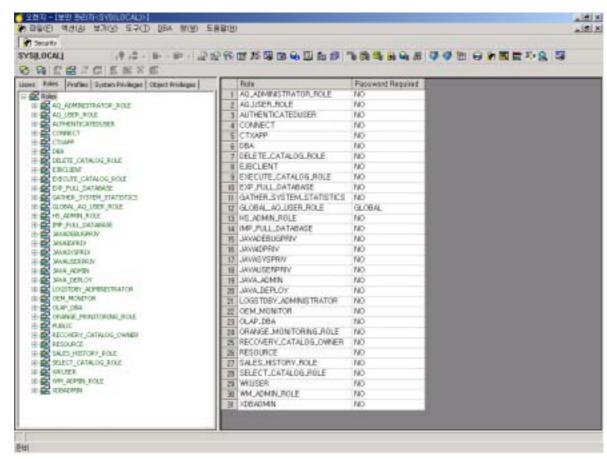
■ [Role] 가

가 . Admin Option Default YES NO 가

[Apply]

[Cancel]

[19.4 - - Role]





■ [System Privileges] 가

,

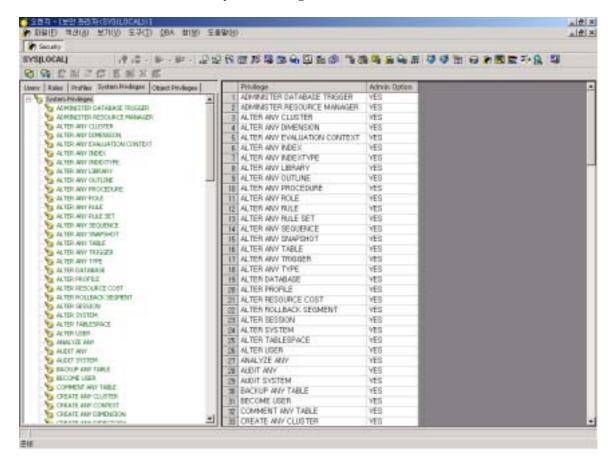
. Admin Option YES

가

NO 가 .

[Apply] , [Cancel]

[19.5 – System Privileges]





■ [Object Privileges]

,

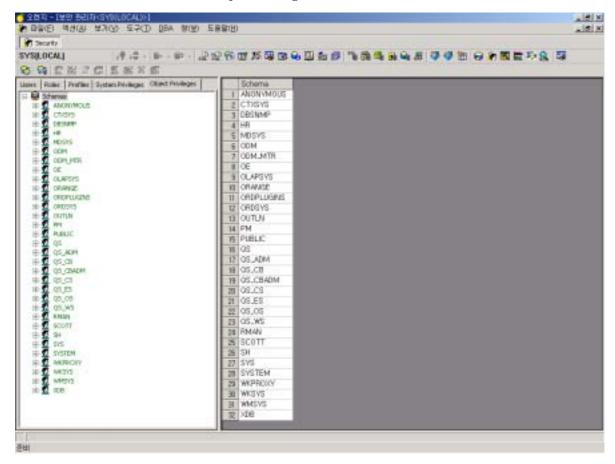
가

. Grantable

YES NO 가

[Apply] , [Cancel]

[19.6 – Object Privileges]





■ [Quota] Quota 가 .

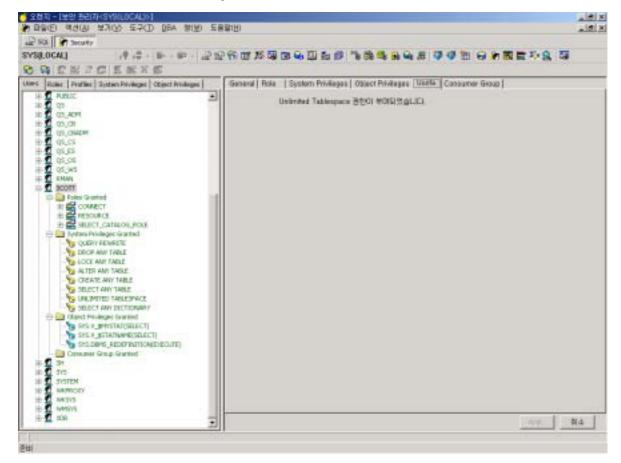
Quota None, Unlimited, Value 7

, Value Value .

[Apply] , [Cancel]

.

[19.7 – Quota]





■ [Consumer Group]

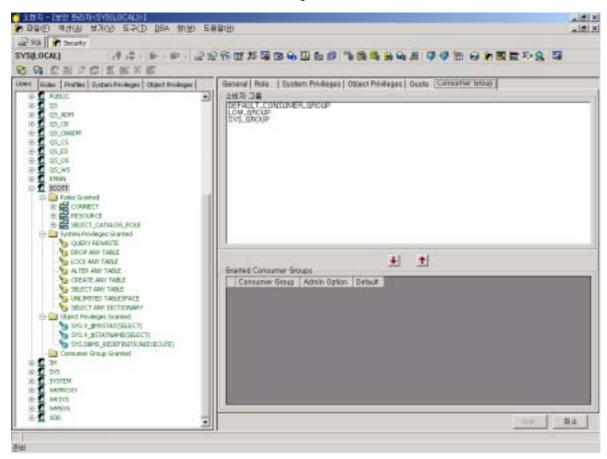
가

. Admin Option Default

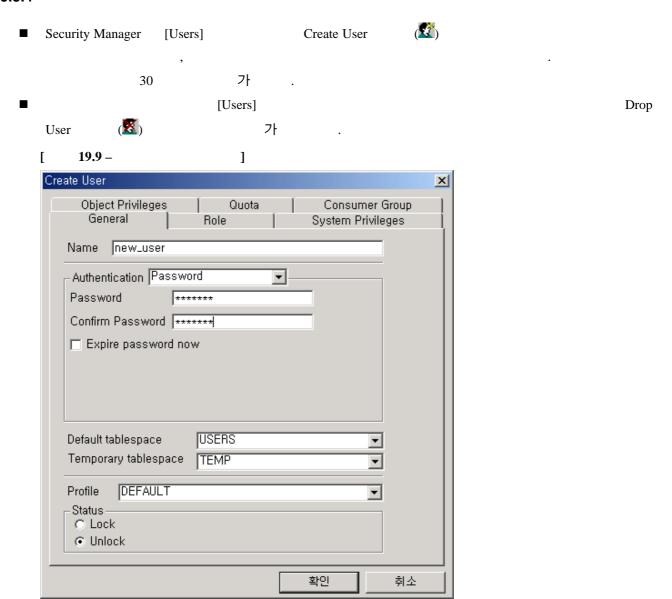
YES NO 가

[Apply] , [Cancel]

[19.8 – — Consumer Group]





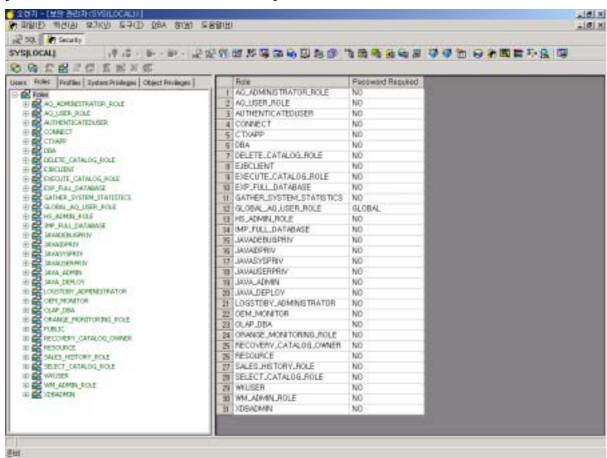




Security Manager [Roles] Roles

가 .

[19.10 -]

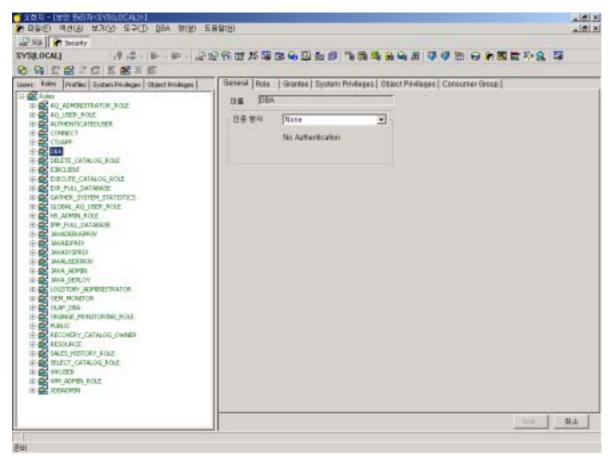




,

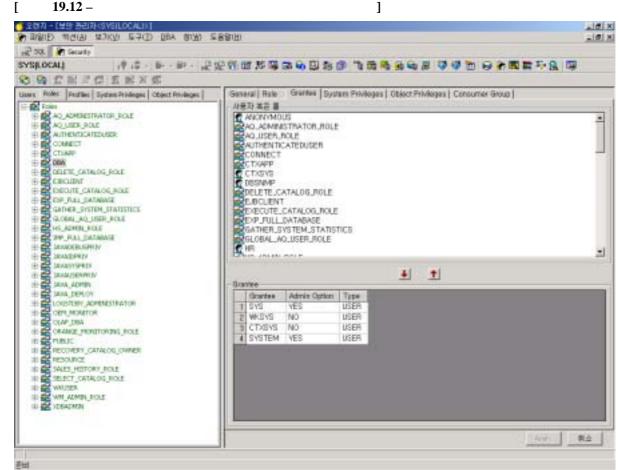
.

[19.11 –]

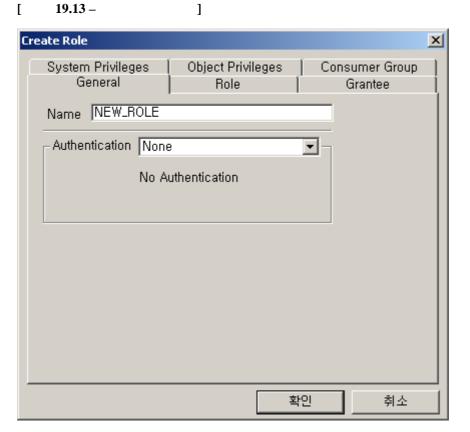




19.12 -]



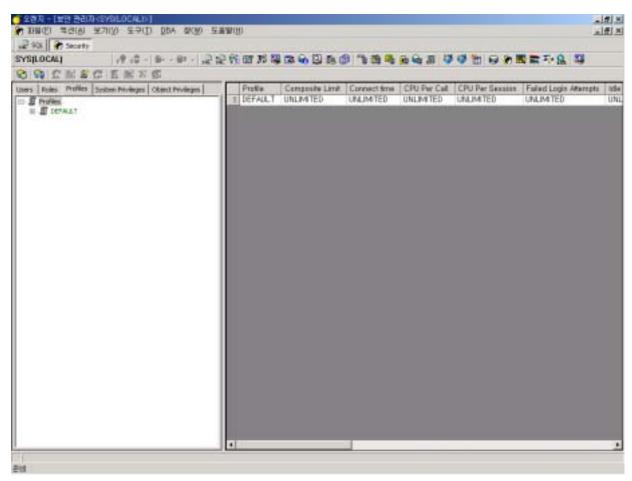






Security Manager [Profiles] Profiles 가 .

[19.14 –]





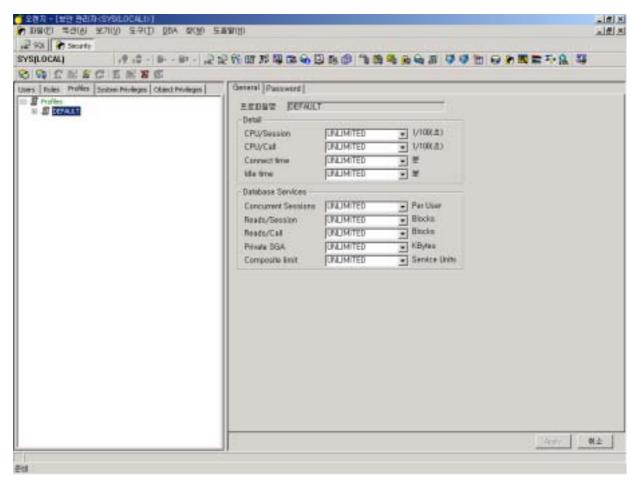
Security Manager [Profiles]

가 2 . [General]

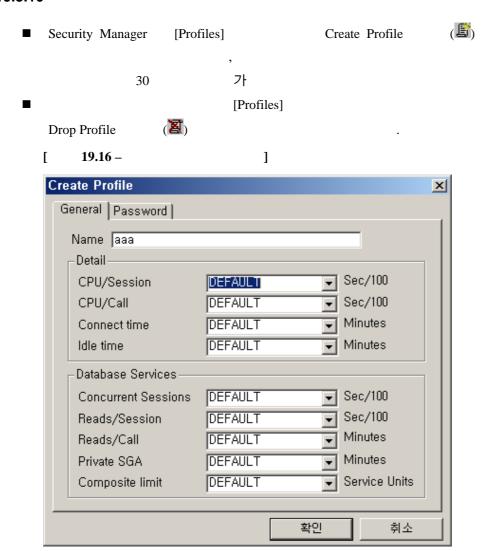
[Password] . [Profiles]

.

[19.15 –]









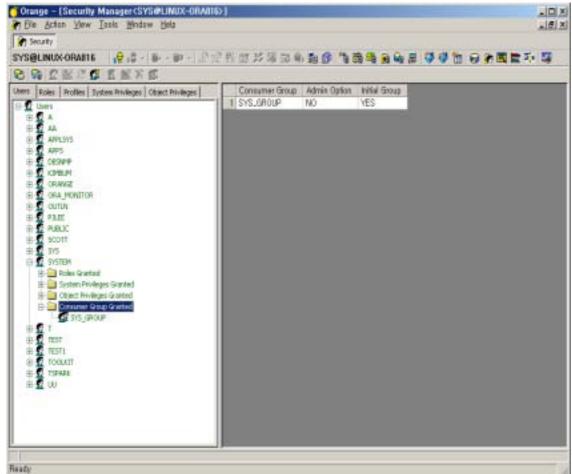
19.3.11 /

Security Manager

[Users] [Roles] ()

Consumer Group Granted () Consumer Group

[19.17 – /]





■ [Users] [Roles]

가 3 . 3

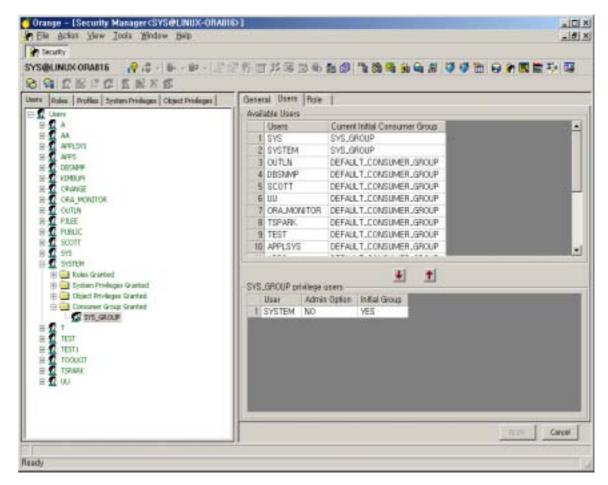
[General], [User], [Role]

■ [User] フト

가

. [Role] [User]

[19.18 –]



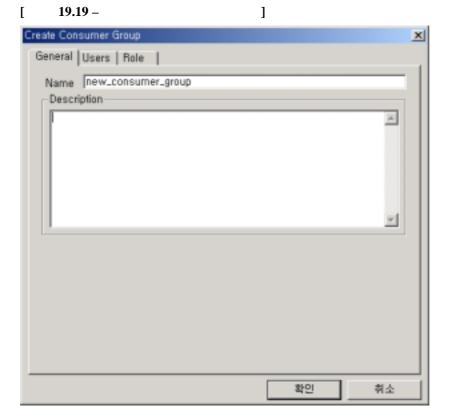


Security Manager [Users] [Roles] Consumer Group Granted
, 7

Create Consumer Group
. 30
7

■ [Users]/[Roles]

Drop Consumer Group (...)

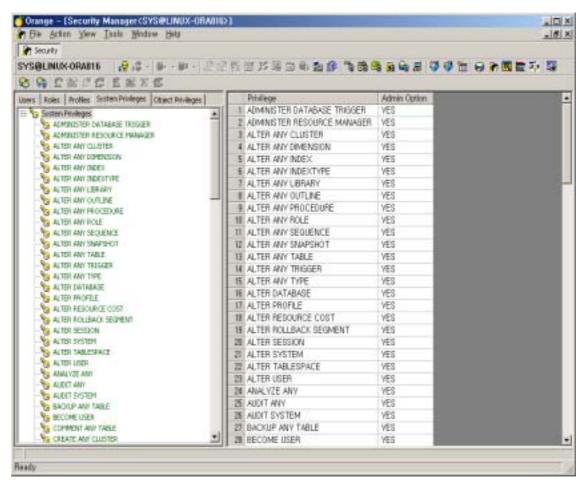




[System Privileges]

System Privileges

[19.20 –]





[System Privileges] System Privileges

[Users] [Roles]

19.21 -[] ● 加斯氏 山谷(甲) 本2(木) でも(工) でBy 年(本) 世界専用
 ● 古地町 山谷(甲) 本2(水) でも(工) でBy 年(本) 世界専用 A B X 크린 N of 50. In Security SYSILOCAL S O CHICERXS Lions | Rules | Featlier Sosters Privileges | Object Privileges | Users | Role | THE WAS A STATE OF THE STATE OF CREATE ANY RILLE SET CREATE ANY SEQUENCE. -CREATE ANY SMOORING CREATE ANY TABLE CREATE MY TRIGGER OE OLAPSYS ORANGE ORIOPLUGINIS OMDSYS OUTLN PM CREATE WAY KEEN CREATE CLUSTER GREATE DATABASE LINE ORGATE DIMENSION GRATE EMERICAL
GREATE EMERICAL
GREATE EMERTHY
GREATE GREATE OFFILIAN
GREATE OFFI
G SS ASM SS CS ADM SS CS ADM SS CS ASM -1 GRATE ROCKET
GORATE RULL COLDANA LINE
GORATE ROLL
GORATE ROLL
GORATE ROLL
GORATE ROLL
GORATE RULL
GORA 4 + 1 COM 2 SVS 3 MDSV Admin Option NO GREATE SEQUENCE GREATE SESSION MDSYS VES. WKSYS GREATE SYNORIFE CDSYS NO TO CHEATE TABLE ORANGE NO OTEATE TABLESPACE RTM_MGD NO B OLAPSYS CHEATE THE GREATE HEW DEBUG COMMECT SESSION DELETE AWY TABLE 供业

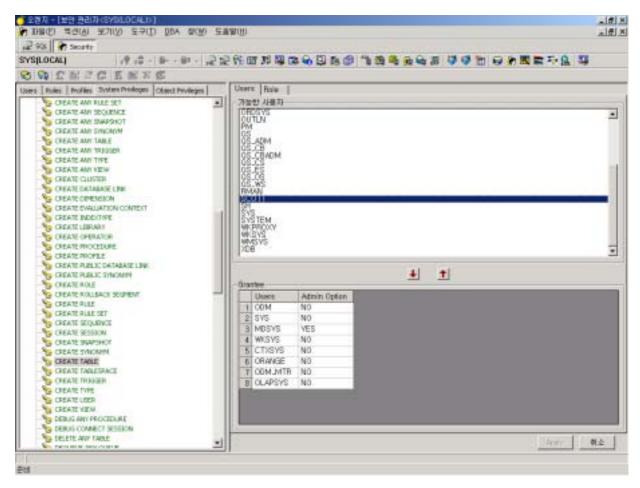


()

. [Apply]

[Cancel]

[19.22 –]





[Object Privileges]

19.23 -[] ② 全位的 - (生命 表記的 (E2)(2) (E2(I) (DBA (B1M) (E8)(H) (E A B X 크린 N page 503. P Security SCOTTROCAL S G CHICERXS Users | Role | AND THE PROPERTY OF THE PROPER + 对世世 从典功 ARTH MARK INTOTIVIDUS CTOSYS DESIMP HI MISYS ODM ODMLMTH OE OLAPSYS OLAPSYS ORANGE ORDANS ORDSYS OUTLN PM OS OS 4 + User Privilege Object Crest Option E STANDARD

E STANDARD

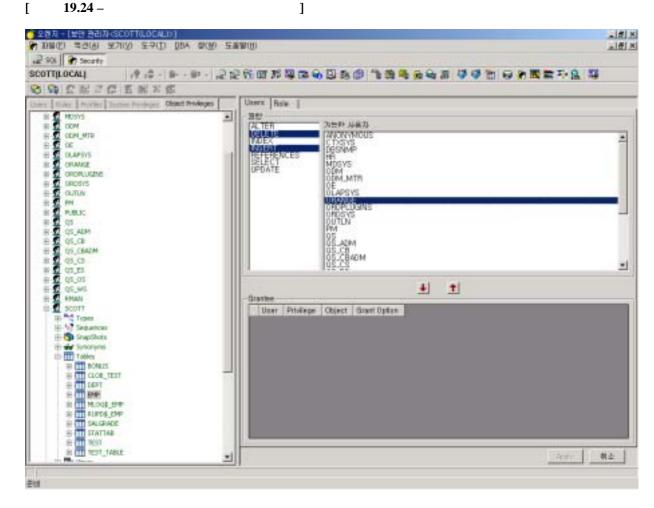
TORRES

D TO



- 株立

() () () . ()





20. Transaction Monitor

"All or Nothing"

, 가

Transaction Monitor

가

20.1 Transaction Monitor

 \checkmark

✓ Current SQL

√

✓

✓ Refresh

✓

20.2 Transaction Monitor

Transaction Monitor List Refresh



QL Current SQL

20.3 Transaction Monitor

20.3.1 Transaction Monitor

Transaction Monitor Transaction Monitor Sub Tool

bar , Current SQL

Ware Valley ➤ User Name : Oracle

> SID : Session ID

➤ Serial# : Session Serial Number

➤ SPID : Oracle Server Process OS Process ID

Machine: Machine

Status :

> Recursive : Recursive Call

> RBS:

Duration: ()

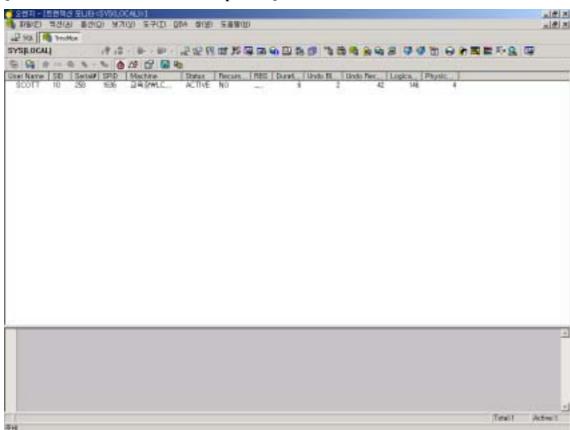
> Undo blocks: No.

Undo Records: No.

➤ Logical IO : Logical IO Block

Physical IO : Phygical IO Block

20.1 - Transaction Monitor Sample





20.3.2 Transaction Monitor

[] [] Transaction Monitor
[] Transaction Monitor

. Transaction Monitor

Transaction Monitor

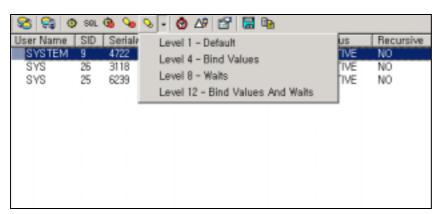
Session

Transaction Monitor フト .

Connection manager 가 . .

20.3.3 Transaction Monitor

[20.2 –]



■ ,

. [20.2 –] Level 1, 4, 8, 12 . Trace On ()

, Session Info ()

■ Current SQL (SQL) Context SQL Tool
PL/SQL Tool .

■ Save (🗒) [File Save]

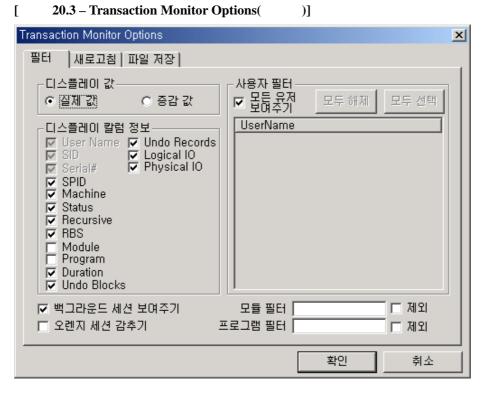
, Copy (♣) .

■ Auto Refresh (Delta Mode Display (Refresh Refresh Time () .



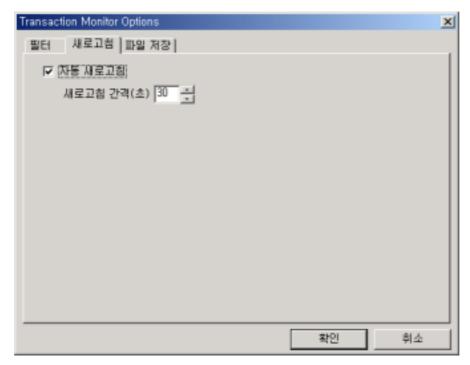
20.3.4 Transaction Monitor Options

가 [20.3 - Transaction Monitor Options()] . [Filter] , [Refresh] "Display Background Session" . [Filter] 'Display Orange Session" Oracle Background Process Orange . [File Save] File [Filter] Display Value Group Real Value Delta Value 가 Real Value Oracle Database 가 , Delta Value Refresh interval Refresh Module Filter Program Filter Application Exclude Application filter 256 가

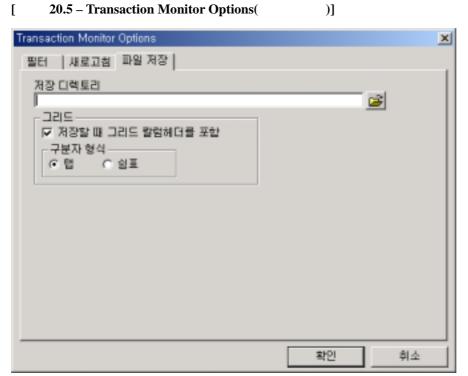




[**20.4 – Transaction Monitor Options**()]



20.5 – Transaction Monitor Options(





21. Instance Monitor

9 . 9 Instance Monitor 가 Refresh

21.1 Instance Monitor

- Instance Display (Refresh Interval) Time Range
- Auto Refresh
- **Instance Monitor**

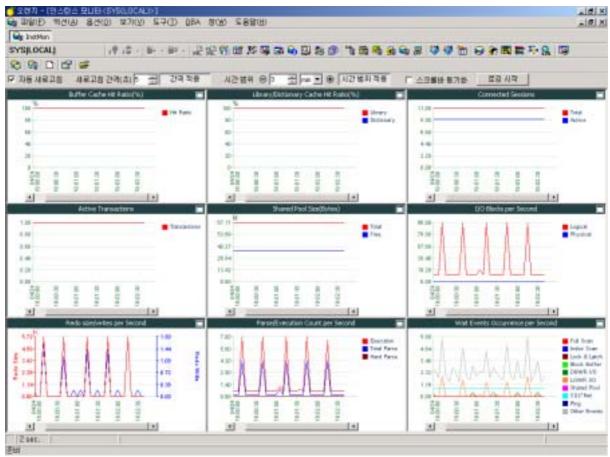
21.2 Instance Monitor

21.2.1 Instance Monitor

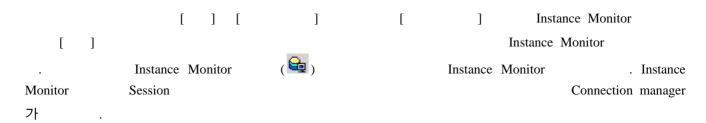
Instance Monitor 가 Instance Monitor Refresh (Bar) 9 9 Buffer Cache Hit Ratio Library/Dictionary Cache Hit Ratio Shared Pool Size (Total, Free GB/MB/KB/Bytes) Session Count **Transaction Count** Parsing Count (Total, Free/) Wait Events (/) I/O (/) Redo Count (Size, Write /)



21.1 - Instance Monitor Sample



21.2.2 Instance Monitor





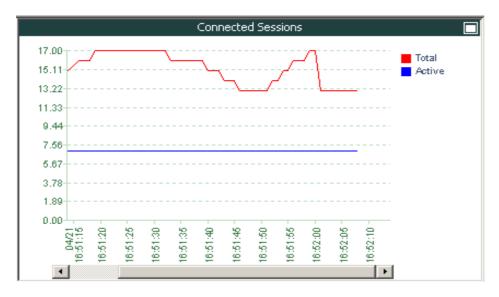
21.2.3 Instance Monitor Refresh

[21.2 – Refresh Apply Interval Time Range : 🕣 1 Start Logging ■ Instance Monitor 21.2 - RefreshRefresh] (Bar) "Refresh Interval(sec)" Refresh , [Apply Interval] "Auto 가 Refresh" Refresh 1~999 가 . Interval Instance Monitor Time Range 가 Range 1~1440(24) "Scrollbar Sync" 9 가 [Start Logging] Instance Monitor Instance Monitor [Log] 가 Net Service 가

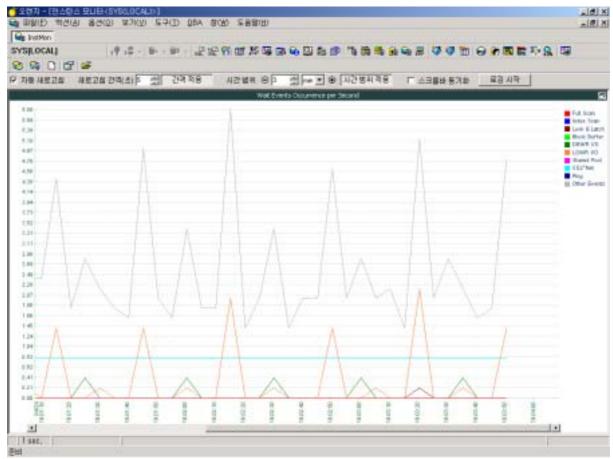
21.2.4 Instance Monitor



[21.3 –]



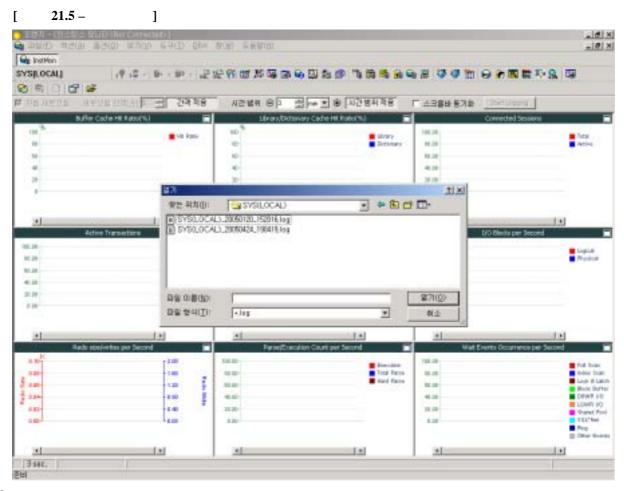
[21.4 –]





21.2.5 Instance Monitor

Load Log (🔁)



21.2.6

가 , [Action] → [Clear

Content] Instance Monitor .



21.2.7 Instance Monitor

[

■ (🖹) 7 . [Display] 9
Display . "Graph Name" ,

••

21.6 – Instance Monitor – Display]



■ [Wait Events] "Wait Events Occurrence per Second" Event

Event "Wait Events Occurrence per Second"

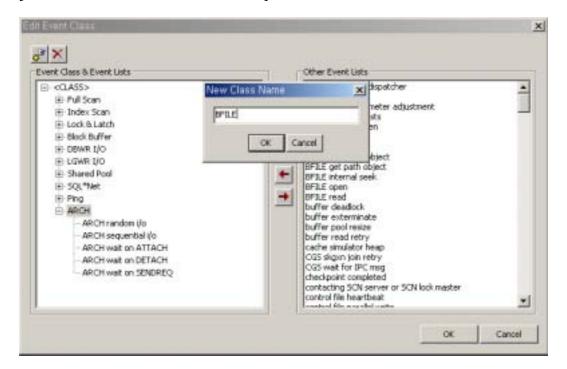
21.7 – Instance Monitor – Wait Events





가 [Edit] ■ [Wait Events] **Event Class** . "Event Class & Event Lists" "Wait Events Occurrence per Second" 가 Event Event Class Wait Event List 가/ Event Class Event Class Wait Event List **Event Class** "Other Event Lists" Wait Event 가 가 가 가 . Event Class

[21.8 – Edit Event Class]





■ [Log] "Log Folder" .

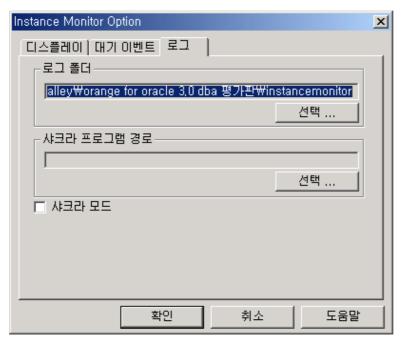
Net Service . DBA

.

. Chakra Mode

. ,

[21.9 – Instance Monitor – Log]





22. Graph & Report

가 가 (User, Redo, Enqueue, Cache, O/S, Parallel Server, SQL, Debug) Fixed Table X\$KSUSGSTA(Kernel Service User Management Global Statistics)

(bstat/estat,...)

Graph & Report Tool 가 Pre-Defined Group 가 User-Defined Group

22.1 Graph & Report

✓ Document

✓

✓ 7 SQL User-Defined Group 7
✓ Item

22.2 Graph & Report

User Item or Group
User Item or Group
User Item

22.3 Graph & Report

22.3.1 Graph & Report

[] [] " [] " [] " () "

22.3.2 Predefined-Group Item

Graph & Report "Defined SQL Scripts" Top-Down Pre-Defined User-Defined フト Item Item



가

"Graph Components"

X , Y

- Pre-Defined Group Item
 - ➤ MEMORY-SGA

SGA(System Global Area)

가

Shared pool DB Block buffer, Log buffer

4 가 Item

SGA

가 SGA

- ◆ Library Cache Hit Ratio
 - ♦
 - ♦ LIBRARY CACHE HIT RATIO :
- ◆ Dictionary Cache Hit Ratio
 - \diamond
 - ♦ DICTIONARY CACHE HIT RATIO :
- ◆ Buffer Cache Hit Ratio

 \diamond

- ♦ BUFFER CACHE HIT RATIO :
- ♦ LOGICAL READS : Logical Read
- ♦ PHYSICAL READS : Physical Read
- ◆ Shared Pool Free Memory
 - ♦ Free
 - ♦ KBYTES : Free Memory Size
- MEMORY-SQL

SQL Access 가

Item

- ◆ Execution Count
 - ♦ SQL

 - \Leftrightarrow EXEC_COUNT:
- ◆ Cache Term
 - ♦ Cache SQL
 - ♦ MIN_CACHE : Cache
 - ♦ COUNT : SQL
 - ♦ AVG_EXEC :



Cursor Open per Transaction \diamondsuit OCC: ♦ UC: **COMMITS** AVG_CURSORS: Recursive to User Call Ratio RECURSIVE CALL CALL \diamondsuit RC: Recursive Call ♦ UC: User Call ♦ RATIO: RC/UC Parse Count per User Call Ratio ♦ Parse Count PC: Parse Count ♦ UC: User Call ♦ RATIO: PC/UC Hard Parse Ratio ♦ SQL PCH: ♦ PCT : ♦ RATIO: PCH/PCT Cluster Key Ratio ♦ Cluster Key Block Chaining ♦ CKSBG : cluster key scan block gets (A) ♦ CKS : cluster key scans (B) ♦ BLOCKS: A/B Index Scan Ratio (Instance) \diamondsuit ♦ TFBR : table fetch by rowed (A) ♦ TSRG: table scan rows gotten (B) \Rightarrow RATIO : A / (A+B) Index Scan Ratio (Session) \diamond

> Ware Valley

(A)

(B)

♦ TFBR : table fetch by rowed

 \Leftrightarrow RATIO: A / (A+B)

Chained Row Ratio

♦ TSRG: table scan rows gotten

```
♦ TFCR : table fetch continued row (A)
    ♦ TFBR : table fetch by rowed
       TSRG: table scan rows gotten
                                         (C)
    \Rightarrow RATIO : A/ (A+B+C)
PROCESS-USER
    Concurrent Process Count
    Concurrent Session Count
    Transaction count
PROCESS-LATCH
          SGA
                                                                                    가
          Lock
                                                                    SGA
                                    Database Buffer, Shared Pool, Log Buffer
    Buffer Cache Latch Contention
    \diamond
    \diamondsuit
       NAME:
    ♦ MG : misses/gets
    ♦ IMG : immediate misses / immediate gets
    Library Cache Latch Contention
    \diamondsuit
       NAME:
    ♦ MG : misses/gets
    ♦ IMG : immediate misses / immediate gets
    Redo Latch Contention
    ♦ Redo Latch
        NAME:
       MG: misses/gets
       IMG: immediate misses / immediate gets
```

Row Chaining / Migration

 \diamondsuit



<i>∠</i>	PR C	CES	S-ENOUEUE					
	•	OCESS-ENQUEUE Enqueue Resource						
	•	taq ♦	ucuc Resource					
		·	NAME:					
			VALUE:					
_	DD.C		SS-CHECKPOINT					
_	PRC							
	•		ting for Checkpoint					
			LGWR					
			EVENT:					
			TOTAL_WAIT:					
			TIME_WAITED:					
			AVERAGE_WAIT:					
	DIS	K-TA	ABLESPACE					
	♦	Tablespace Information						
			가					
			TABLESPACE NAME :					
			TOTAL:					
			USED:					
		\$	FREE: 가					
			MAX : 가					
>	DIS	K-D	ATAFILE					
	•	File I/O						
								
			DATAFILE:					
			TABLESPACE:					
			PHYRDS:					
			PHYWRTS:					
>	DIS	K-SC	ORT					
	•	Disk	Sort Ratio					

 \diamondsuit

 \Leftrightarrow MEM:

 \Rightarrow DISK:

♦ MISS RATIO :

> DISK-ROLLBACK SEGMENT

◆ Rollback Segment Contention

 \diamondsuit



(hundredths of a second)

(hundredths of a second)

- ♦ COUNT:
- ♦ TIME VALUE :
- ◆ Rollback Segment Miss Ratio
 - \diamond
 - ♦ SEGMENT :
 - ♦ RATIO:

DISK-REDOLOG

- ◆ Redo log Buffer Space Contention
 - \diamond
 - ♦ REDO LOG SPACE REQUESTS :
- ◆ Redo log Space Waiting
 - ♦ Wait Event
 - ♦ SID:
 - ♦ EVENT:
 - ♦ SECONDS_IN_WAIT:
 - ♦ STATE: (0:waiting, -2:Unknown Time, -1:Short time,>0:Known Time)
- ◆ Redo log File I/O Contention
 - \diamondsuit
 - ♦ EVENT:
 - ♦ TOTAL_WAIT:
 - ♦ TIME_WAITED: (hundredths of a second)
 - ♦ AVERAGE_WAIT : (hundredths of a second)

➤ DISK-OBJECT

- ◆ Invalid Objects Count
 - ♦ OWNER : Invalid Object Schema
 - ♦ COUNT: Schema Invalid Object
- ◆ Invalid Objects List
 - ♦ OWNER : Invalid Object Schema
 - ♦ OBJECT TYPE : Schema Invalid Object
 - ♦ OBJECT NAME : Schema Invalid Object
 - ♦ LAST DDL TIME : DDL
- ◆ Large Extents
 - ♦ Extent 가
 - ♦ OWNER:
 - ♦ SEGMENT NAME :
 - ♦ SEGMENT TYPE :



- ♦ EXTENTS: Extent
- ♦ ALLOWED EXTENTS : Extent
- ◆ TABLESPACE NAME : 기 Table Space
- ♦ INITIAL(MB) : Initial Extents
- ♦ NEXT(MB) : Next Extents
- ♦ TOTAL(MB) : Total Extents
- ♦ FREELISTS : Free List
- ♦ FREELIST GROUPS : Free Group
- ♦ MAX Next Extent
 - ♦ MAX Free Space
 - ♦ OWNER:
 - ♦ OBJECT NAME :
 - ♦ TYPE:
 - ♦ TABLESPACE NAME : Table Space
 - ♦ MAX FREE SIZE : Free Size
 - ♦ NEXT EXTENT : Next Extents
 - ♦ PCTINCREASE : PCTINCREASE
- ◆ User Objects count
 - \diamond
 - ♦ OWNER:
 - ♦ TAB:
 - \Rightarrow IDX:
 - ♦ VEW : View
 - ♦ SYN: Synonym
 - ♦ SEQ : Sequence
 - ♦ TRG : Trigger
 - ♦ PRO : Procedure
 - ♦ DBL: DB Link
 - ♦ FUN: Function
 - ♦ CLU : Cluster
 - ♦ PKG : Package
 - ♦ PKB : Package Body
 - ♦ PK# : Primary Key
 - ♦ FK# : Foreign Key
- ◆ Free list Contention Ratio
 - ♦ Free list



- ♦ FREELISTS CONTENTION RATIO: Free List
- ♦ FREELISTS : Free list
- ♦ CONSISTENT GETS : Consistent Get
- ♦ PHYSICAL READS : Physical Read
- ◆ Free list Contention per Segment
 - ♦ Free List
 - ♦ SEGMENT NAME :
 - **♦** SEGMENT TYPE :
 - ♦ FREELISTS : Free List
 - ♦ WAIT TIME :
 - ♦ STATE:
- ➤ SQL*NET-GENERAL
 - ◆ SQL*NET Roundtrips
 - \diamond SQL*Net
 - ♦ NAME:
 - ♦ TOTAL_WAIT:
 - ◆ SQL*NET Traffic
 - ♦ SQL*Net
 - ♦ NAME:
 - \diamond TOTAL_WAIT:
- > OPS-SESSION
 - ♦ Waiting Session
 - ♦ OPS
 - \diamond INST_ID: ID
 - ♦ SID : Session ID
 - ♦ EVENT: event
 - ♦ SECONDS : Event
 - \diamond WAIT_TIME :
 - ♦ P1,P2,P3: Event Parameter
- > OPS-LOCK
 - ◆ PCM Lock Blockers
 - ♦ OPS PCM lock (blockers)
 - ♦ INST_ID : ID
 - ♦ SID : Session ID
 - ♦ LOCKP: Lock
 - ♦ GRANT LEVEL :



- ♦ REQUEST LEVEL :
- ♦ OWNING_NODE :
- ♦ LOCK_TYPE : Lock
- ♦ LOCK STATE : Lock
- ♦ SEC:

◆ PCM Lock Waiters

- ♦ OPS PCM lock (waiters)
- \diamond INST_ID: ID
- ♦ SID : Session ID
- ♦ LOCKP: Lock
- ♦ SPID: ID
- ♦ GRANT LEVEL :
- ♦ REQUEST LEVEL :
- \diamond OWNING_NODE:
- ♦ LOCK_TYPE : Lock
- ♦ LOCK STATE : Lock
- ♦ SEC:

♦ Non-PCM Lock Blockers

- ♦ OPS Non-PCM lock (blockers)
- \diamond INST_ID: ID
- ♦ SID : Session ID
- ♦ ADDR:
- ♦ TYPE:
- ♦ USERNAME :
- ♦ OS_USER : OS level

Non-PCM Lock Waiters

- ♦ OPS Non-PCM lock (waiters)
- ♦ INST_ID: ID
- ♦ SID : Session ID
- ♦ ADDR:
- ♦ TYPE:
- ♦ USERNAME :

> OPS-LATCH

◆ Latch Holders

- ♦ OPS Latch (blockers) .
- ♦ INST_ID: ID



	♦ SID : Session ID							
	♦ TYPE:							
	♦ USERNAME :							
•	Latch Waiters							
	♦ OPS Latch (waiters) .							
	♦ INST_ID: ID							
	♦ SID : Session ID							
	♦ ADDR:							
	♦ USERNAME :							
	♦ SECONDS_IN_WAIT:							
> OF	PS-DLM							
•	DLM Resource Usage							
	♦ OPS .							
	♦ INST_ID: ID							
	♦ RESOURCE_NAME : resource							
	♦ CURRENT_UTILIZATION :							
	♦ CURRENT_PCT:							
	♦ MAX_UTILIZATION :							
	♦ MAX_PCT:							
	♦ INITIAL_ALLOCATION :							
•	DLM Traffic Information							
	♦ DLM .							
•	Lock Hit Ratio							
	♦ Lock Hit Ratio							
	♦ INST_ID: ID							
	♦ LOCK_HIT_RATIO : Lock hit							
•	◆ Average Consistent Read Roundtrip Time							
	♦ INST_ID : ID							
	♦ AVG_CR_ROUND_TRIP_TIME :							
•	Average Global Lock Conversion Time							
	♦ Global Lock Conversion .							
	♦ INST_ID: ID							
	♦ AVG_GL_LOCK_CONV_TIME :							
•	Top 10 Pinging Objects							



10

가

♦ Pinging

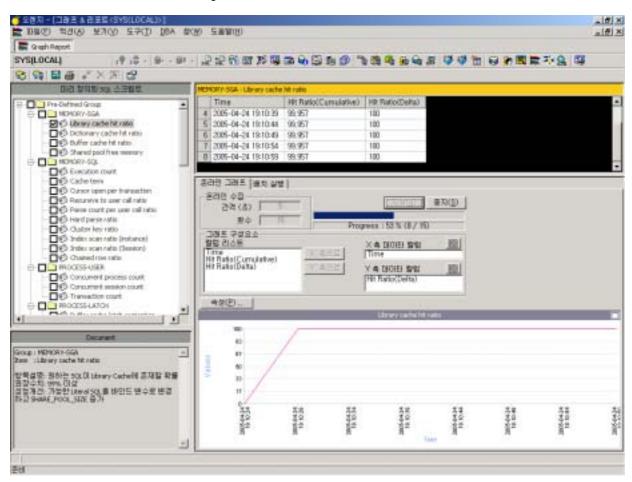
	\diamond	INST_ID:	ID		
		NAME:			
		KIND:			
		FILE#:			
		STATUS:			
		BLOCKS : Block			
		READ_PINGS : Read	l		Ping
		WRITE_PINGS : Wri	te		Ping
•	Top	10 Read Pinging Object	ets		
		Read Pinging 가		10	
		INST_ID:	ID		
		NAME:			
		KIND:			
	\$	FILE#:			
	\$	STATUS:			
	\$	BLOCKS : Block			
	\$	READ_PINGS : Read	l		Ping
		WRITE_PINGS : Wri	te		Ping
•	Top	10 False Pinging Object	ets		
		False Pinging 가		10	
		INST_ID:	ID		
		NAME:			
		KIND:			
		FILE#:			
		STATUS:			
		BLOCKS : Block			
		READ_PINGS : Read	l		Ping
		WRITE_PINGS : Wri	te		Ping
•	Top	10 Wait Event on Syste	em		
		Wait 가		10	
		INST_ID:	ID		
		EVENT:			
	\$	TIME_WAITED:			
	\$	TOTAL_WAITS:			
	\$	TOTAL_TIMEOUTS	:		



Cache Fusion

- ♦ Cache Fusion
- ♦ CR_REQUESTS: "Consistent-Read"
- ♦ CURRENT_REQUESTS:
- ♦ DATA_REQUESTS : "C-R"
- ♦ UNDO_REQUESTS : UNDO "C-R"
- ♦ TX_REQUESTS : UNDO "C-R"
- ♦ Ping Ratio
 - ♦ OPS ping
 - ♦ DBWR CROSS INSTANCE WRITES: "DBWR cross instance writes "
 - ♦ PING RATIO : Ping

22.1 – Execution Count Sample



22.3.3 Pre-Defined Group Item Snapshot

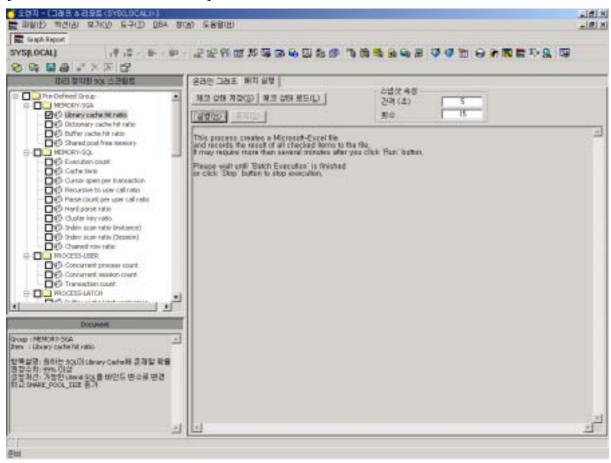
[Batch Execution]



		Item Snapsnot					
>	>		d Group				
>	>	10	100			"Snap shot Properities"	Counts
		100, Intervals (Sec	s)	10			
>	>				[Run]		"AllSnapShot"
>	>			[]		
		Item Snapshot					
>	>					[Stop]	
•		Item Snapshot				·	
>	>	10	100			"Snap shot Properities"	Counts
		100, Intervals (Sec	s)	10			
>	>					Item	[Run]
		"Save Check List"				"checklist"	
>	>		I	[]		checklist.chk
>	>	Check List				"Load Check List"	
		[]					
>	>	[Run]			Snapsh	ot .	
•		Item Snapshot			-		
>	>	-			[Sto	p]	
					•		



22.2 – Batch Execution]



22.3.4 User-Defined Group Add

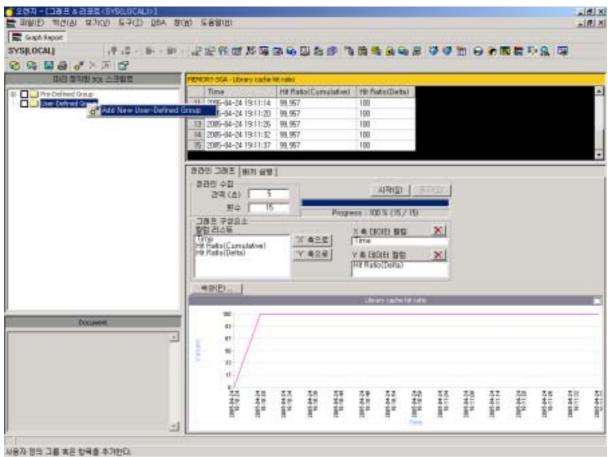
■ User-Defined Group Add

User-Defined Group "Add new User-Defined Group" 7 .

▶ [OK] User-Defined Group



22.3 – User-Defined Group Add



]



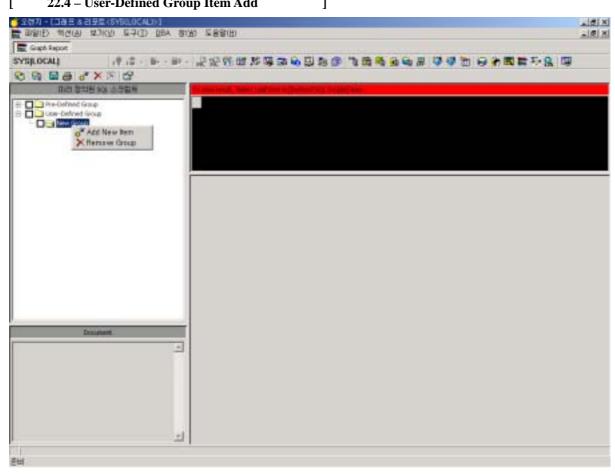
22.3.5 User-Defined Group Item Add

User-Defined Group Item Add

[

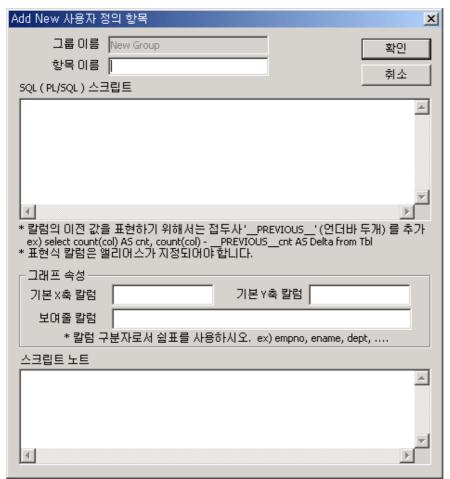
"Add new User-Defined Group User-Defined Group" 가 SQL Script, Script Note Item Item Item SQL Script SQL Source Script Note SQL [OK]

22.4 - User-Defined Group Item Add]





[22.5 – User-Defined Group Item Add Detail]



22.3.6 User-Defined Group Item

User-Defined Group Item Item "Remove Item" .

22.3.7 User-Defined Group Item

User-Defined Group Item

"Modify Item"

"SQL Script" "Script Note"

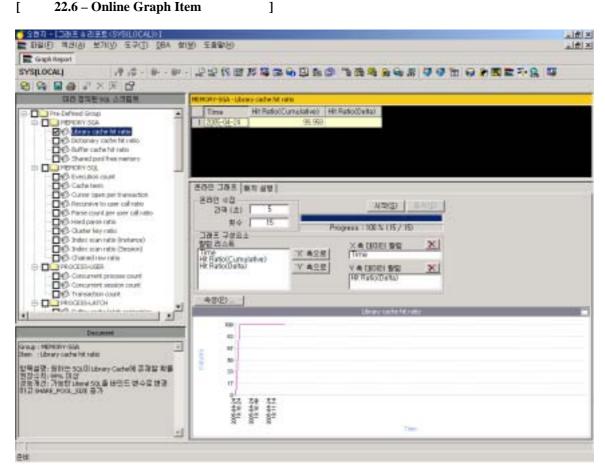


22.3.8 Item **Online Graph Item**

Pre-Defined Group User-Defined Group Item

Pre-Defined Group User-Defined Group Online Graph

22.6 – Online Graph Item]



22.3.9 Item **Online Graph**

[Online Graph]

"Online Collect" Box "Period (Seconds)"

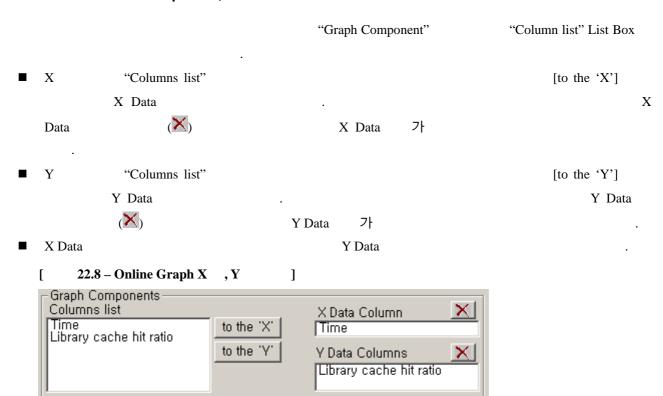
"Counts" 가 1 . Batch . Interval Count

Interval, Count Execution



[22.7 - Online Graph ,] Online Collect Interval (secs) 15 Counts 10

22.3.10 Item Online Graph X , Y



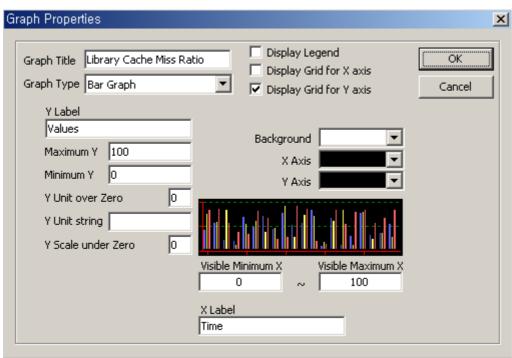


22.3.11 Item Online Graph

[

[Properties]

22.9 – Online Graph



22.3.12 Item Online Graph

"Graph Title" . Item . 256

22.3.13 Item Online Graph Type

"Graph Type" Type (Line, Bar) 가

22.3.14 Item Online Graph X , Y

X "X Label" Y "Y Label" . 20

22.3.15 Item Online Graph Color(Background, X, Y,) Color Box Background(), X , Y 22.10 - Online Graph Color] Background X Axis Y Axis 22.3.16 Item Online Graph X . X "Visible Minimum X" "Visible Maximum X" . 0 X "Visible Maximum X" "Visible Minimum X" . 0 22.11 - Online Graph X] Visible Maximum X **Online Graph Y** 22.3.17 Item . Y "Minimum Y" "Maximum Y" . 0 Y "Minimum Y" "Maximum Y"

]



22.12 - Online Graph Y

Maximum Y 100

22.3.18 Item Online Graph Y

Y Unit string

Y Scale under Zero

	Y 1000 가	1	"Y Unit	t over Zero"	3	. 0~10
•	Y		"Y Unit string"	K	. 256	
	가 .					
			"Y Scale under Zero"	1		0.1
	. 0~3		가 .			
	[22.13 – Online Graph	Y	1			
	Y Unit over Zero					

22.3.19 Item	Online Graph	X, Y	Grid

	"Displ	ay Legend"	Check Button		
X		"Display Grid fo	or X axis"	Check Button	
Y		"Display Grid fo	or Y axis"	Check Button	
[22.14 – Online Graph	X,Y	Grid]	
	Display Legend Display Grid for X axis	ОК			
	Display Grid for Y axis	Cancel			

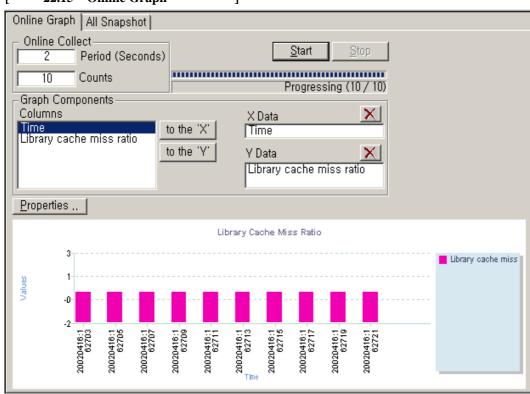


22.3.20 Item Online Graph

Graph & Report [Start]

가 . .

22.15 – Online Graph



22.3.21 Item Online Graph

[Stop] 가

•



22.3.22 Item Online Graph Copy

"Copy" "Word, Excel, PPT"

.

[22.16 – Online Graph Copy to Word]

20020416:1 63402
20020416:1 63404
20020416:1 63404
20020416:1 63409
20020416:1 63409
20020416:1 63413
20020416:1 63413
20020416:1 63413
20020416:1 63413
20020416:1 63413



23. Health Check

Health Check Tool 가 가 (General, SGA, Wait Event, I/O, Space, Access Type, MTS, OPS) HTML . Health Check Tool 가

23.1 Health Check

✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 ✓
 HTML
 ✓

23.2 Health Check







23.3 Health Check

23.3.1 Health Check

[] [...] [] Health Check
[] Health Check .

Health Check 7 .



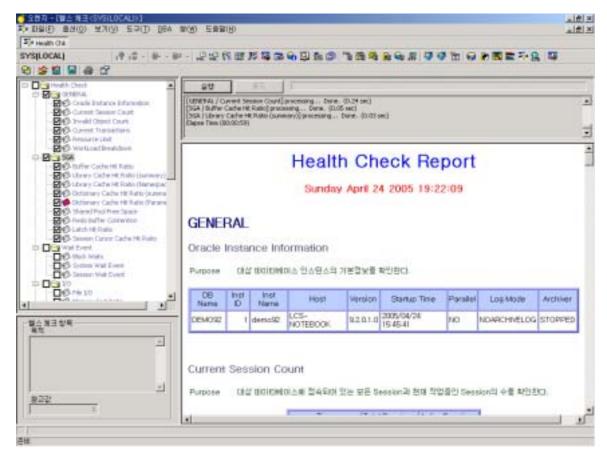
23.3.2 Item

■ Health Check 4

■ Health Check [Check Box]

[Check Box]

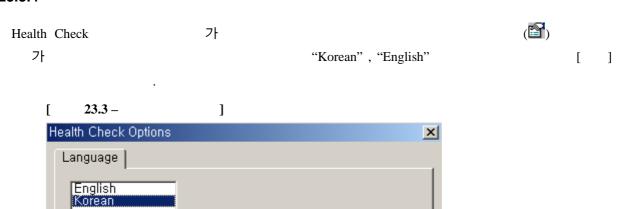
[23.1 –]





23.3.3 Item

23.3.4



확인

취소

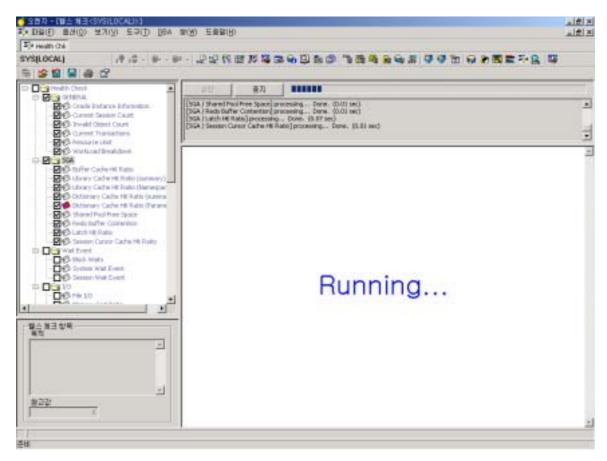


23.3.5 Health Check

가 [Run]

가

[23.4 –]



23.3.6 Health Check

Health Check [Stop]



23.3.7 Health Check

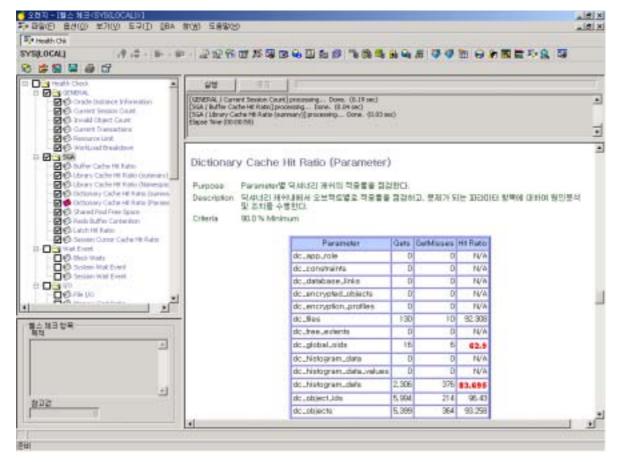
가 가

. DBMS 가

SGA Dictionary Hit Ratio

parameter 가 .

[23.5 – (Dictionary Cache Hit Ratio)]





[] HTML"HealthCheck.html" [23.6 -] Save Result HTML Document ? × (속) 내 문서 저장 위치([): 🗅 받은 파일 🗀 Visual Studio Projects 🛅 download ilelib 🚞 🛅 My eBooks My Pictures 🛅 My Webs 저장(<u>S</u>) 파일 이름(<u>N</u>): HealthCheck 파일 형식(<u>T</u>): Save Files (*,html) 취소



24. Export

가 Export Export Import 가 Export Tool Export .

24.1 Export

- ✓ Export
- ✓ Export
- ✓ Export
- ✓ Export Incremental Type Export
- ✓ Export Scope(Full, Owner, Table) 7
- Export Grants, Indexes, Rows, Constraints 가

24.2 Export



Command Help

Dump, Log, Index File

24.3 Export

24.3.1 Export

Export (**) Export Tool 가 .

24.3.2 Export

- Export Export File Export .
- "Advance Options"

" Buffer Size "

10000000 7 . "Statistics"

" Estimate()" "Compute()"

"Incremental type" "Incremental(7)", "Cumulative()", "Complete()"

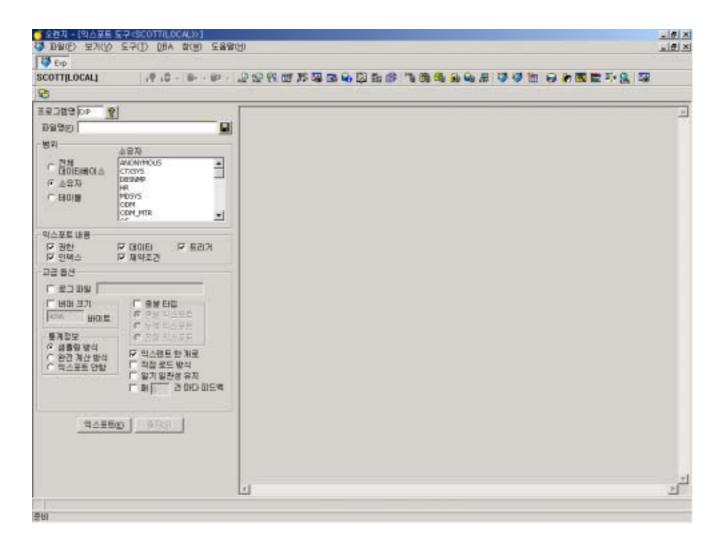
■ "Scope" "Full Database", "Owner", "Table"

0

```
■ "Export Contents" "Grants( )", "Indexes( )", "Rows( )", "Constraints( )", "Triggers( )", "Compress( )", "Direct( )", "Consistent( )", "Feedback( )" .

[Export Now] Export 7 Export Message
```

[24.1 – Export Tool]



24.3.3 Export

■ Export Export File Export

■ "Scope" Full Database [OK]



24.3.4 User Export

■ Export Export File Export . .

■ "Scope" Owner "Select user to Export" List Box Export

Table .

■ "Select user to Export" List Box [OK]

•

■ [Export Now] User Export Export

Message .

24.3.5 Table Export

■ Export Export File Export .

■ "Scope" Table "Select Table to Export" List Box

Export Table .

■ "Select Table to Export" List Box Table [OK]

.

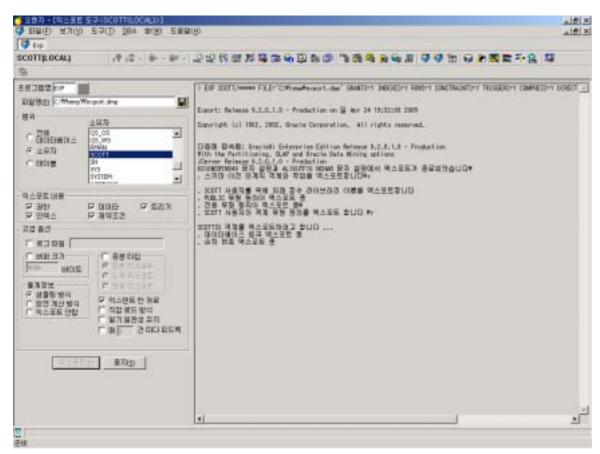
■ [Export Now] Table Export Export

Message .



24.2 – Export Sample]

[



24.3.6 Export

■ [Stop] Export 가



25. Import

가 Export Export Import 7 Import Tool Import

25.1 Import

- ✓ Import
- ✓ Import Size
- ✓ Import analyze
- ✓ Import
- ✓ Import Grants, Indexes, Rows, Constraints 기

25.2 Export & Import

Import Tool Open

Export File

? Command Help

Dump, Log, Index File

25.3 Import

25.3.1 Import

Import (^(*)) Import Tool 가

25.3.2 Import Options

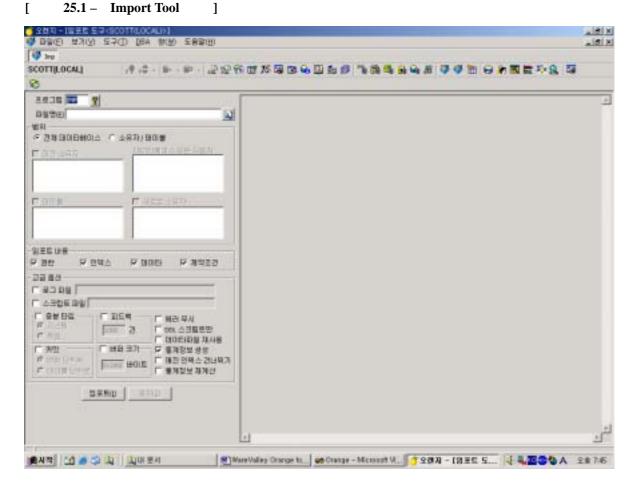
- Log File
- Index File
- "Incremental" Import "System(Incremental)", "Restore(Complete)"
- "Commit" "After each buffer()", "After each

table()" .

■ Size "Buffer Size" Import .

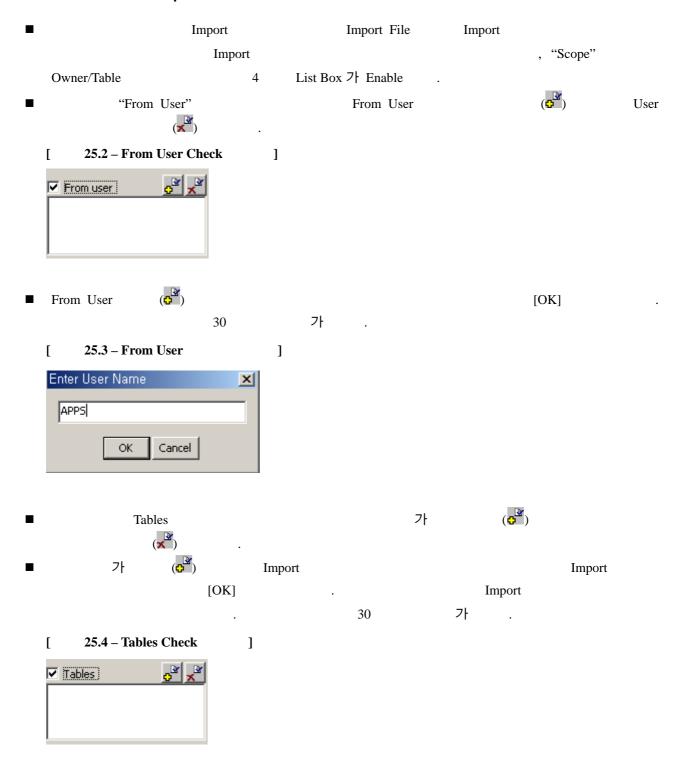


```
가
     0 ~ 10000000
                                                     "Full Database", "Owner/Table"
"Scope"
                  Import
                                                         0 ~ 10000
                                                                                        가
Feedback
                   Row
"Import Contents"
                             Import
                                        "Grants(
                                                        )", "Indexes(
                                                                                )", "Rows(
                                                                                                 )",
                                               )", "Just Show File(Only Export
"Constraints(
                        )", "Ignore Errors(
                               )", "Analyze(Analyze
                                                       )", "Skip unusable Indexes(UNUSABLE
"Overwrite(
    )","Recalculate Statistics(
```





25.3.3 User/Table Import





To User Import (**X**) 가 [25.5 – To User Check] ▼ To user "All user List in Database" Import User 가 "To User" **25.6 – Import User List**] All user List in Database DBSNMP ORANGE OUTLN SCOTT [Import Now] Import 가 Import Message 25.3.4 Full Database Import Import Import File Import "Scope" Box Full Database [Import Now] Import 가 Import Message



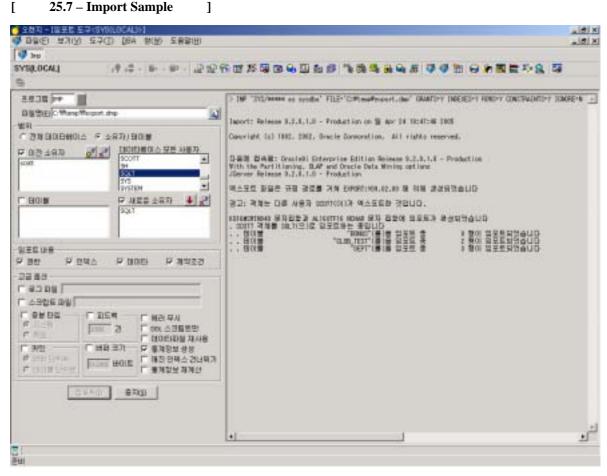
25.3.5 Import

Import File Import Import

Import

Import 가 [Import Now] Import Message

25.7 – Import Sample]



25.3.6 Import

Import 가 [Stop]



26. Analyze Manager

Analyze Manager , , ,

. Analyze Analyze .

Bucket Size , Parallel Analyze 가 .

Analyze Script , Analyze

가 .

26.1 Analyze Manager

- ✓ Analyze Scope
- ✓ Analyze
- ✓ Histogram
- ✓ Parallel Degree
- ✓ Analyze Script
- ✓ Analyze .
- ✓ All statistics Information

26.2 Analyze Manager



Checked Item



Checked Item



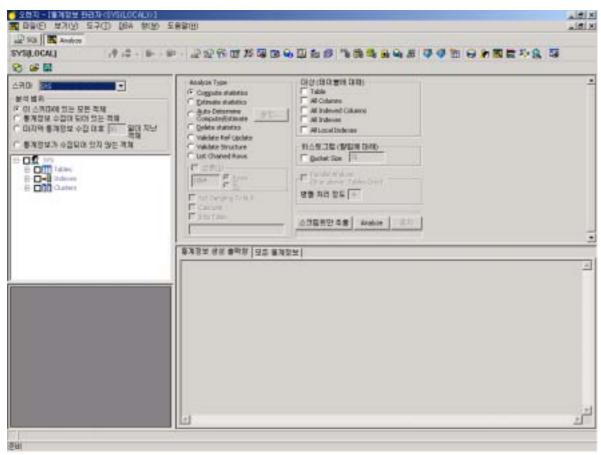
26.3 Analyze Manager

26.3.1 Analyze Manager

[

Analyze Manager Analyze Manager Sub Tool bar
Analyze , Analyze Analyze

26.1 - Analyze Manager Sample



26.3.2 Analyze Manager

	[]]	[]	Analyze Man	ager
[]				Anal	yze Manager	
	Analyze Manager	()	1	Analyze Manager	가	. Analyze
Manager					Connection n	nanager 가



26.3.3 Analyze

Analyze 26.2 - Analyze Analyze Manager Analyze 4 가 Analyze Scope Analyze Scope . 4 가 Analyze Scope All Objects in this schema: Analyze Objects which have been analyzed: Analyze Object analyzed [] days ago or more since last analysis : Analyze (days) Objects which are not analyzed yet: Analyze (**]** Analyze .anl [26.2 - Analyze] Schema SCOTT Analyzing Scope All objects in this schema C Objects which have been analyzed days ago or more since Objects Analyzed 30 last analysis Objects which are not analyzed yet Ė... □ III Tables Ĥ--☑ III AAA ⊞-- BONUS ⊕.... CREATE\$JAVA\$LOB\$TABLE É-- □ DEPARTMENT ⊕... □ III DEPT

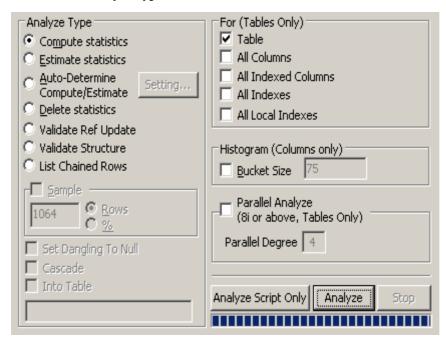


Ė--□ 🗓 🗓 DEPT_C

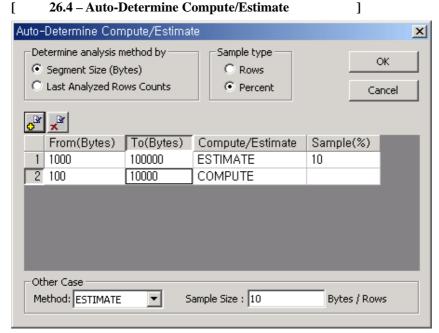
An	aalyze Type					
>	Compute Statistics :					
>	Estimate Statistics :					Compute
	Statistics .				0	_
	가 .					
>	Auto Determine Compute/Estimate :	[26.4 –	Auto-Determin	ne Compute/Est	timate
] "Segment	t Size" "I	Last Ana	lyzed Rows C	ount"	
	Analyze	가				
	가 Analyze					
	"Segment Size"		가	()		
	가 가 .	"From(Bytes)"	100		"To(Bytes)"	10000
	"Compute/Estimate"	Estimate		"Sample"	10	
	가	100 Bytes	10000	Bytes		Estimate
	Analyze . "Sample"	10% 10	Rows		"Samp	ole"
	"Percent" "Rows"			Record	가 ,	
		가		가	가	•
	(×					
			Anal	yze		
	"Other Cases" "Sample Size"		٠			
>	Delete Statistics :					
>	Validate Ref Update :	Ref(object ref	ference)			. REF
	ROWID			. "Set Dar	ngling To Null	,,
	Invalid	가	REF	NULI	_	
>	Validate Structure :	, , Re	f			
	"cascade"					. "Into
	Table" partitioned table					
>	List chained Rows:	Chain	ned	Migrated Rov	V	
	Row ROWID "Into Table"					



[26.3 - Analyze Type]



26.4 – Auto-Determine Compute/Estimate





FOI	R -	For		•			
>	Table :						
>	All Columns / All Index	xed Columns :		Inde	x 가		
>	All Indexes / All Local In	ndexes :			Parti	tion	
[26.5 – For]			•			
	r (Tables Only) Table All Columns All Indexed Columns All Indexes All Local Indexes togram, Parallel All Columns All In	ndexed Columns m		"Analyzing S	cope'' Histogram		
	Bucket Size	1	254	가 .			
>	Parallel Analyze Table	e "Comp	oute Statistics"				;
	. Parallel Degree	1	가	. DBMS	_STATS	가	
[26.6 – Histogram	Parallel Option	onl				
	Bucket Size 100 Parallel Analyze (8i or above, Tables Only)						



26.4 Analyze

[Analyze Script Only] Analyze 가 Analyze 가 가 가 **SQL** Tool SQL*Plus Copy & Paste 26.7 – analyze script output] . [Analyze 가 . Analyze 가 [Analyze] DBA / ALL / USER_[TABLES | INDEXES | CLUSTERS] "All Statistics Informations" Table, Index, Cluster . [26.8 – All Statistics Infomation]

26.7 – analyze script output]

```
Analyze Output | All Statistics Informations |

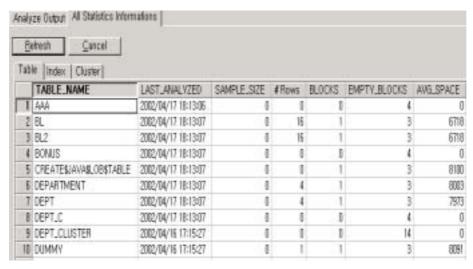
ANALYZE TABLE SCOTT.BONUS COMPUTE STATISTICS FOR TABLE;

ANALYZE TABLE SCOTT.CREATE$JAVA$LOB$TABLE COMPUTE STATISTICS FOR TABLE;

ANALYZE TABLE SCOTT.DEPARTMENT COMPUTE STATISTICS FOR TABLE;

ANALYZE TABLE SCOTT.DEPT COMPUTE STATISTICS FOR TABLE;
```

26.8 – All Statistics Infomatioin]





27. Session Information

Session Information , Event , Wait Lock monitor, Session Monitor, Transaction Monitor, SQL Monitor Session Information 27.1 Session Information

, Event, Wait SQL Plan Tool

27.2 Session Info

Session Information Refresh PLAN Tool Session Information

27.3 Session Information

27.3.1 Session Information

Session Information

Session Information Session Information . Lock Monitor, Session monitor, Transaction Monitor, SQL Monitor Session Information Tool



27.3.2 Session Information

Session Information "Cursors", "Session Information", "Session Statistics", "Process Information", "Event", "Wait" Filtering

Filter 256 7 ...

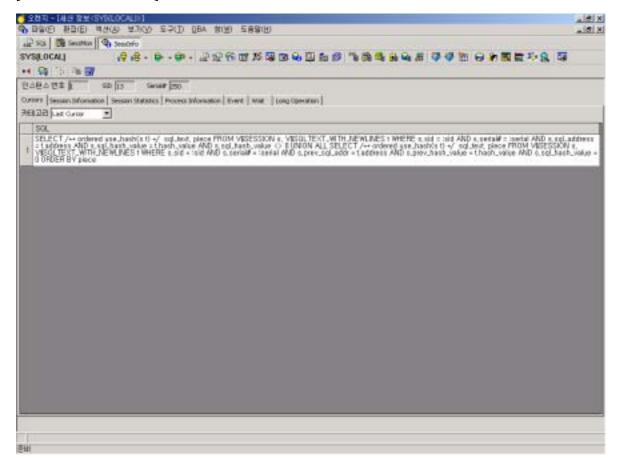
■ Cursors

7} "Category" Last Cursor, All Open Cursors

. Last Cursor All

Open Cursors .

27.1 -Cursors]

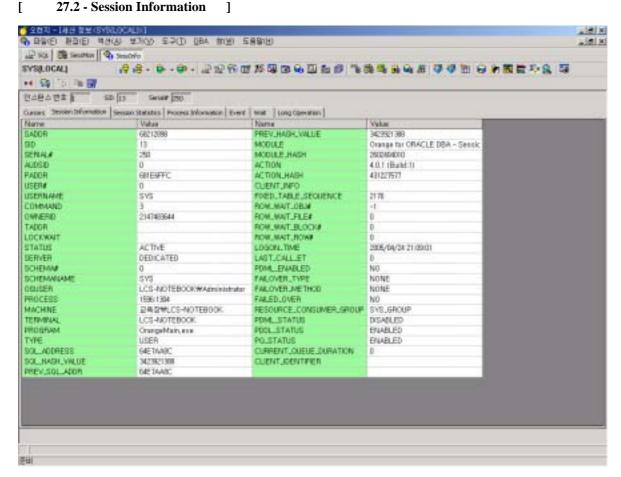




Session Information

, SQL (Sid, Serial#,)

27.2 - Session Information





Session Statistics

Commits & Rollback

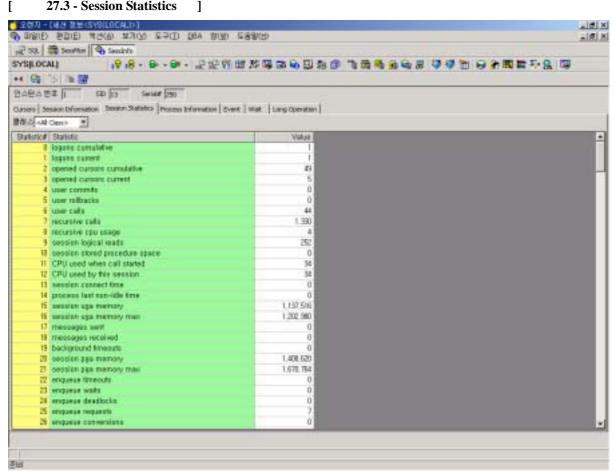
CPU

 \triangleright

UGA

DBWR

27.3 - Session Statistics



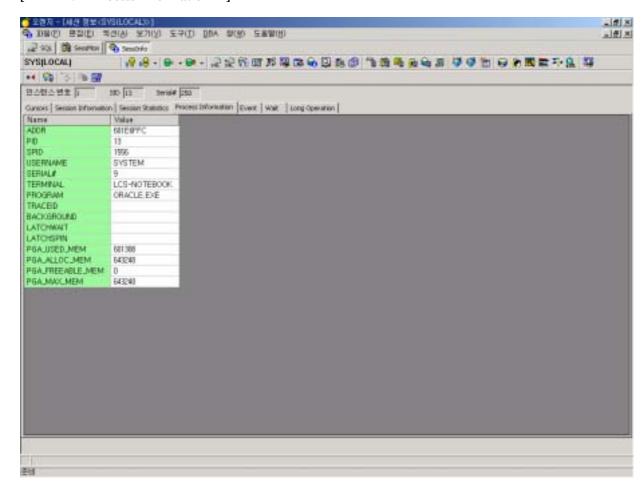


■ Process Information

.

A A A

27.4 - Process Information

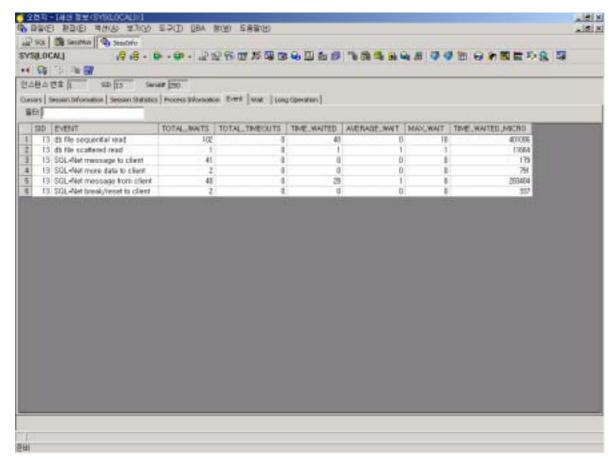




■ Event

➤ Wait

[27.5 - Event]





■ Wait

Wait .

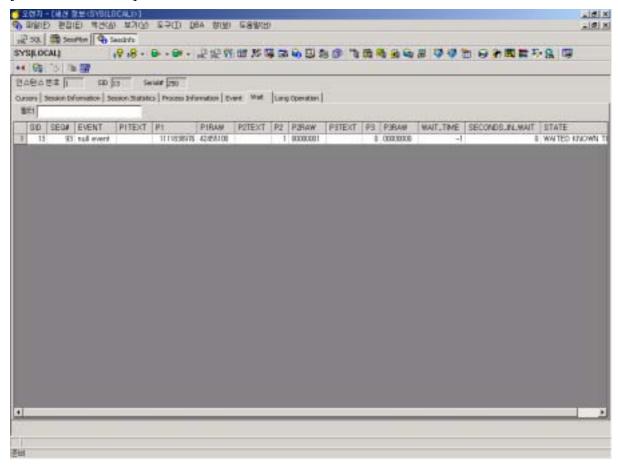
Wait

"db file scattered read"P1 : FILE#"db file scattered read"P2 : BLOCK#

"db file scattered read" P3 : BLOCKS

P1, P2, P3 가

[27.6 – Wait]





28. File Editor

SQL

28.1 File Editor

Highlighting

- ✓ Text File, SQL File
- ✓ Multi-Tab
- ✓ Line Number, Ruler

28.2 File Editor

The state of the s

ab Ab













H

Ăř

File Editor

28.3 File Editor

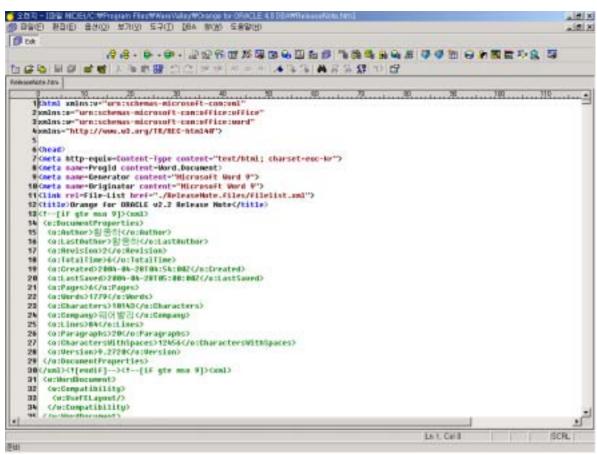
28.3.1 File Editor

File Editor $[Tool] \rightarrow [File Editor]$, [File Editor]

28.3.2 Workspace

- File Editor Multi-Tab
 - Workspace .
- Workspace OS
 - .
- "Add New Tab"
- '*' 가

[**28.1** – File Editor]



28.3.3 Syntax Highlighting

■ File Editor SQL PL/SQL Syntax Highlighting

■ Syntax Highlighting . SQL PL/SQL Syntax Highlighting 7† "SQL" .

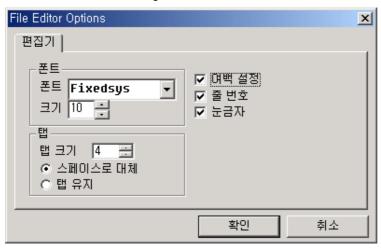
, Syntax Highlighting



28.3.4 File Editor

File Editor ,

[28.2 - File Editor Option]



Font

Size Point

Selection Margin , 가

Line Number . Selection Margin

가 .

Ruler

Tab Size Tab .

Insert Space/Keep Tab Tab Space Tab

28.3.5

Word wrapping

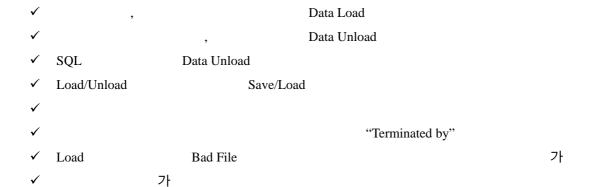
.



29. Loader

Loader	,	C	Load	
		Unload	. Load/Unload	
,				

29.1 Loader



29.2 Loader



29.3 Loader

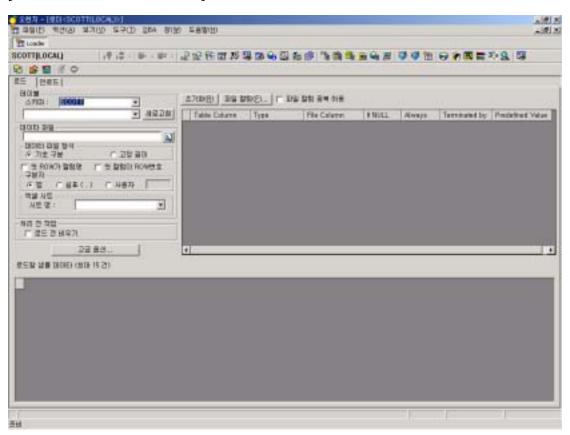
29.3.1 Loader





29.3.2 Loader - Load

[29.1 – Load]



■ "Table" Load . [Refresh]

■ "Data File"

[Load File] ().

"Data File Format" . フト

"Data File Format" "Symbol Separated"

"Fixed Width" . "Symbol Separated" "Separator" "Tab"

"Comma" "User"

. [29.1 – Load] "Sample data to Load"

15 Row 가 .

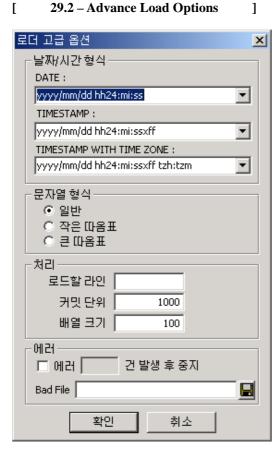
"1st row is col

name" , " 1^{st} col is row #" .



"Pre-Process" "Truncate before loading"

29.2 - Advance Load Options]



가 [Advance Option] "Advance Load Option" . "Date/Time Formats"

"String Format" Normal(string),

Quotation('string'), Double Quotation("string")

"Lines to Load" . "Lines to

Load" . "Commit Rows" 1

> , Array Size Array Processing

"Array Size" "Commit Rows"

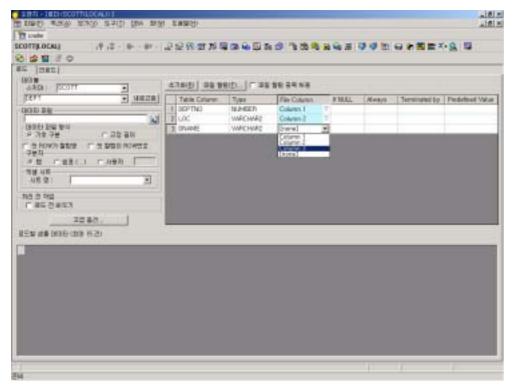
가 "Error" "Stop after _ errors"

Bad File

[Bad File] "Bad File"



[29.3 – Load File Column]

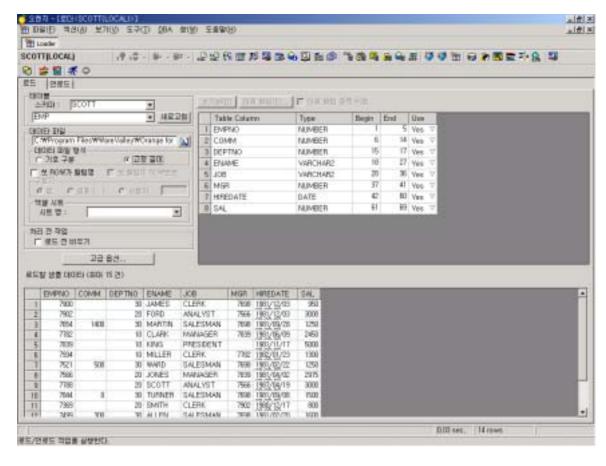


29.3 – Load File Column] 가 . "File Load Column" [File Columns] "File Column" "File Column" [Reset] . "Enable File Column Duplication" "File Column" "Table Column" "Type" . "File Column" Load [none] . "If NULL" (Null) "If NULL" 가 (Null) , "Always" 가 "Always" . "If NULL" "Always" 가 . "Terminated by" . "Predefined Value" SYSDATE (Pseudo column: CURRVAL, NEXTVAL) . "Predefined Value" "File Column", "If NULL",



"Always"

[29.4 – Load Fixed Width]



■ [29.4 – Load Fixed Width] "Fixed Width" 7 . "Use"

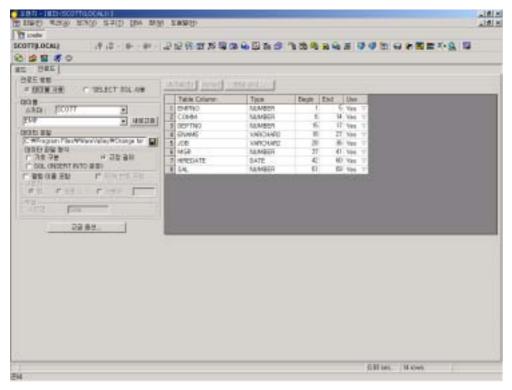
. No

(Null) .



29.3.3 Loader - Unload

[29.5 – Unload (Using Table)]



■ "Unload Method"

'SELECT' SQL

. "Using 'SELECT' SQL"

SQL

가 [29.5 – Unload

(Using Table)]

■ "Table" . [Refresh]

■ "Data File"

. [Unload File] (



"Data File Format"

. "Data File Format"

"Symbol Separated"

"Fixed Width" . "Symbol Separated"

"Separator" "Tab" "Comma"

"User"

가 'INSERT' SQL

"Data File Format" 'SQL'

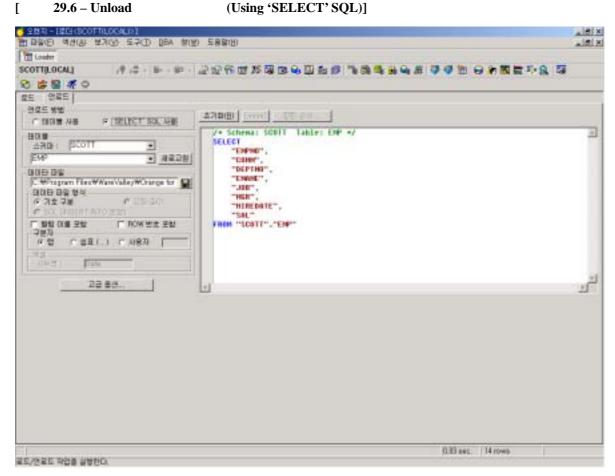
"Include col

name", "Include row #"



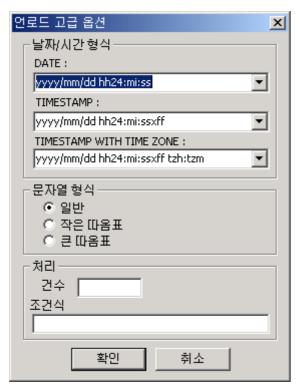
가 "Excel"

29.6 – Unload (Using 'SELECT' SQL)]





[29.7 – Advance Unload Options]



- [Advance Option] "Advance Unload Option" 7 . "Date/Time Formats" .
- "String Format"

 Normal(string), Quotation('string'), Double Quotation("string") .
- "Process" .

 "Rows" , "Where" .



■ [29.8 – Unload Column Order] . [Reset] "Column Order" .

■ [none] "Column Order" [none] . フト

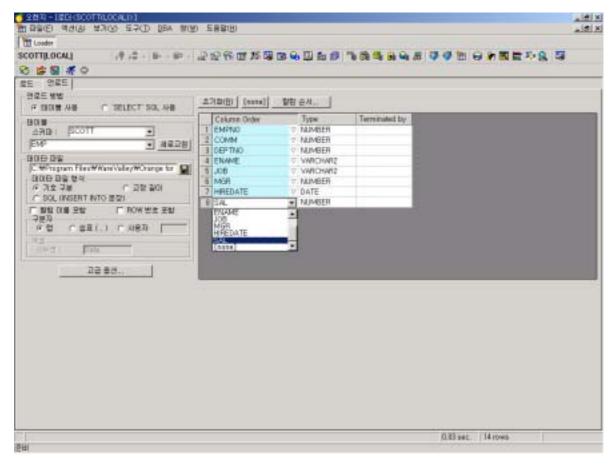
"Column Order"

■ [Columns Order] "File Column"

■ "Type" . "Column Order" [none]

■ "Terminated by"

29.8 – Unload Column Order



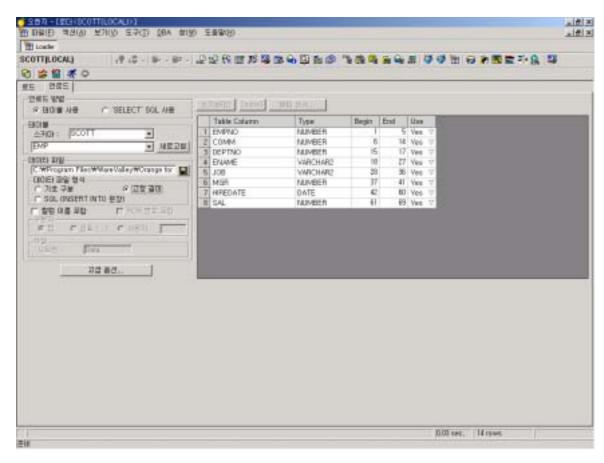


■ Fixed Width

가 . [29.9 – Unload Fixed Width] "Use"

. No

[29.9 – Unload Fixed Width]



29.4

Loader Load/Unload ODBC . ODBC 가 가 . 가 Load/Unload Load/Unload

Load/Unload .



30. Describe DB Objects

Describe DB Objects (Cluster, DB Link, Dimension, Directory, Function, Index, Index Type, Java, Library, MView, Operator, Package, Procedure, Profile, Role, Sequence, Synonym, Table, Trigger, View)

Script
.

30.1 Describe DB Objects

- ✓ Object Script
- ✓
- ✓ Schema, Tablespace
- ✓ Object Filter
- ✓ Object

30.2 Describe DB Objects

30.2.1 Describe DB Objects

 $[DBA] \rightarrow [DB$ Describe DB Objects

30.2.2 Describe DB Objects

[] Script

■ [] Script

. . .

■ Script [DDL Filename] .

-

"

■ User User . "
", " "기



"

1 [], []

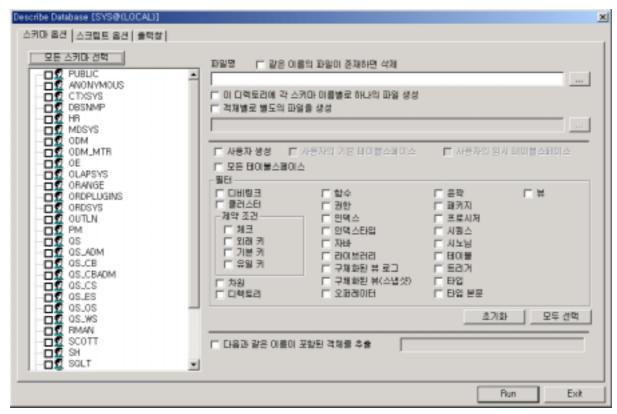
■ "

. "ABC" "ABC%" , "ABC"

"%ABC" . "ABC"

"%ABC%"

[30.1 –]





I [

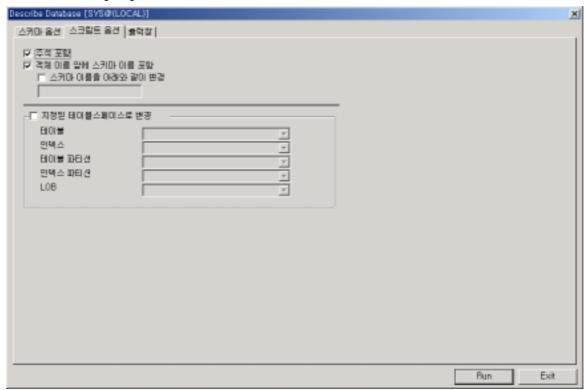
- "

"

"

• ,

[30.2 – Script Options]

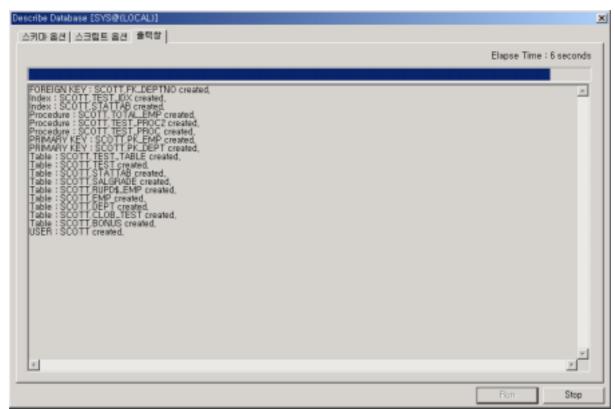




■ [] .

 \blacksquare [Run] .

[30.3 –]





31. Log Miner Tool

Oracle Database

Oracle . Oracle Log Miner

. Log Miner Tool Log Miner

Log Miner Tool Log Miner SQL Tool Data

Dictionary Tool Log Miner (v\$logmnr_contents, v\$logmnr_logs)

Log Miner Tool Oracle 8i , DBMS_LOGMNR, DBMS_LOGMNR_D

. Oracle 8i init.ora UTL_FILE_DIR

. Log Miner v\$logmnr_contents,

v\$logmnr_logs

31.1 Log Miner Tool

- ✓ DBMS_LOGMNR_D
 - Dictionary Build
- ✓ DBMS_LOGMNR
 - Log Mining Log 가/
 - Log Mining /

✓ SQL(Redo, Undo SQL)

31.2 Log Miner Tool



Log Mining



Log Mining







31.3 Log Miner Tool

[

 $[DBA] \rightarrow [$

31.1 - Log Miner Tool]

오전지 - [제목없다]	(古(Q) 보기(Y) 5.7(I) 18A WYB) 5.88(B)	LIST X
S Logher		
SASIFOCNTI	· · · · · · · · · · · · · · · · · · ·	
○・尺尺の は 日本日本日		
# 235 BREIS	HER SKI SKI SKI EL	
C 경투 학교에 있는 9		
C 個性 斯福特 范芒木	(세:10 사용	
11.01.01 11.01.01 11.01.01 11.01		
F II CHEMINI		
E.M.SESTH & S		
i la		- 0
pillin .		



31.4 Log Miner

31.4.1 [Dictionary]

```
가 .
                    [
                          ]
                   (가
                          ):
                                             가
                                                            . Oracle 9i
                                         [
                                                  ]
                                                  init.ora UTL_FILE_DIR
DBMS_LOGMNR_D.BUILD
                DDL
[ 31.2 –
🎳오렌지 - [제목없음]
\mathbb{Q} 파일(F) 액션(\underline{A}) 옵션(\underline{O}) 보기(\underline{V}) 도구(\underline{T}) \underline{D}BA 창(\underline{W}) 도움말(\underline{H})
R LogMnr
                    SYS(LOCAL)
 응 - 일 일 👄 🖀 窗
 딕셔너리 | 로그 리스트 | 조건 | 조회 항목 선택 |
   온라인 데이타 딕셔너리 사용 (가장 빠름)
   ○ 리두 로그에 있는 딕셔너리 사용
   ○ 일반 파일에 있는 딕셔너리 사용
      딕셔너리 파일
       경로
    ┌ 새 딕셔너리 생성
```



31.4.2 [Log Lists]

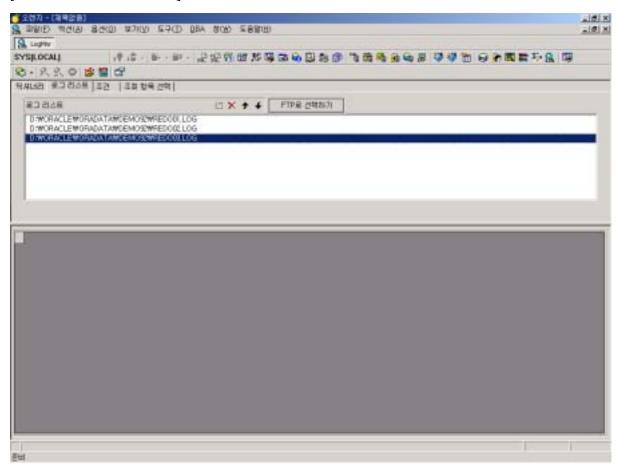
Log Mining .

. Log Mining . Log

Mining [FTP]

•

[31.3 –]



■ 가 : [New]

■ 가:[FTP]

FTP .



31.4.3 [Condition]

Log Mining **SCN** SCN [] . [SCN . V\$logmnr_contents SQL_REDO, SQL_UNDO Log Miner SQL SQL_UNDO SQL_REDO SQL Commit SQL_UNDO [31.4 –] (문) 학년(A) 옵션(Q) 보기(V) 도구(I) DBA 창(W) 도움말(H) S LogMnr SYS(LOCAL) 왕 - | 凡 있 🗢 🍅 🛍 🖆 딕셔너리 | 로그 리스트 조건 조회 항목 선택 파라미터 281474976710655 SCN 11304179 2005/04/24 15:43:05 2005/04/23 20:23:29 □ SQL 종료문자(:) 를 표시 안함 □ 커밋된 데이타만 표시 ■ DDL 딕셔너리 추적 ■ SELECTAI 목서너리 RESET 만한 Parameters Mining SQL (;) : v\$logmnr_contents SQL_REDO, SQL_UNDO : Commit Commit DDL Build DDL SQL_REDO, SQL_UNDO (가) 가 Select : v\$logmnr_contents DDL No ROWID in Reconstructed SQL Statement : SQL_REDO, SQL_UNDO **ROWID** SQL_REDO, SQL_UNDO Oracle 10g 가 Print Pretty SQL: SQL_REDO, SQL_UNDO SQL



Oracle 10g 7 .

■ Continue Mining : Log Mining Log Miner 7

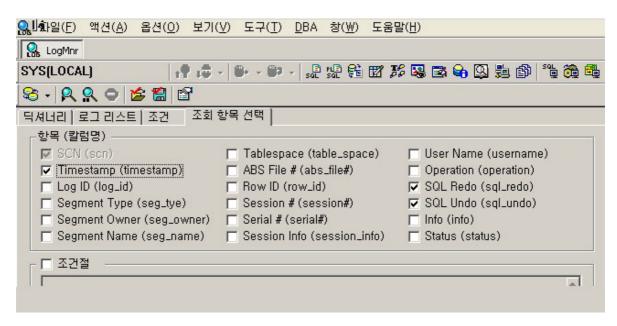
가

가 .

31.4.4 [Columns]

 $v\$logmnr_contents$

[31.5 –]



SCN, Timestamp, SQL Redo, SQL Undo

 \blacksquare : (where)



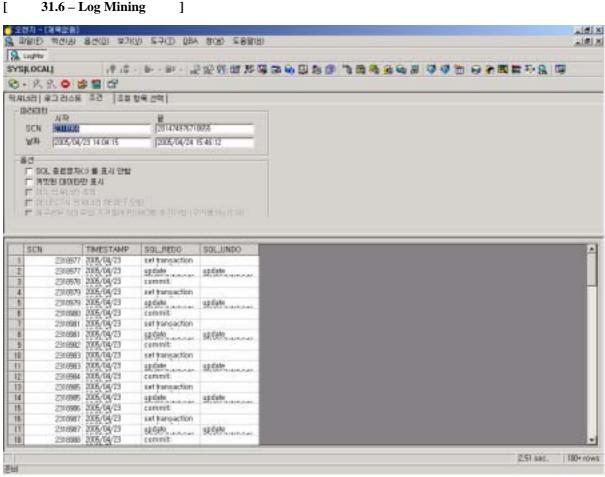
Oracle 10g

31.5 Log Mining Session

31.5.1 Log Mining Session

Log Miner [31.4 Log Miner] Start LogMnr Session Log Mining [. Log Miner 가 31.6 – Log Mining 1

31.6 - Log Mining [

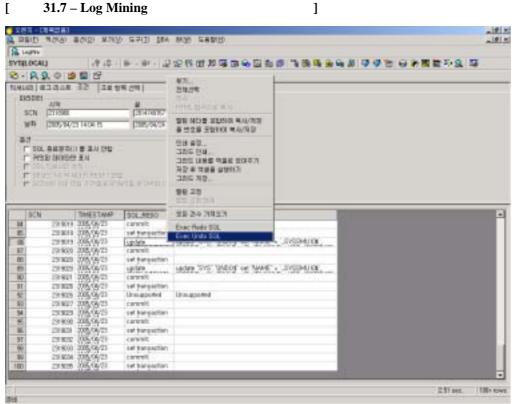




31.5.2

Log Miner	SQL_REDO	SQL_UNDO	SQL
		"Exec Redo	SQL" SQL_REDO
SQL	"Exec Undo SQL"	SQL_UNDO	SQL
			SQL
"Exec Undo SQL",	"Exec Redo SQL"		
	"Exec Undo SQL"	()	, "Exec Redo SQL"
() .		가

[31.7 – Log Mining



31.5.3 Log Mining Session

	Log Mining	가	End LogMnr Session	(<u> </u>	Log
Mining		. Log Mining	SQL Tool	Data Dictionary Tool	
		. Log Mining	Log Miner	가	



31.6 Log Miner

. " "

" " ,1000 가 가 100 가 10 , 100 가가 10 .

[31.8 – Log Miner]





32. Data Dictionary Tool

Dictionary Tool

Data Dictionary Tool				
가				
가		가	. , SQL	
32.1 Data Dictionary Tool				
✓ V\$				
✓ DBA_*				
✓				
✓	Comment, Describe			
32.2 Data Dictionary Tool				
•				
32.3 Data Dictionary Tool				
32.3.1 Data Dictionary Tool				
] [] []	Data Dictionary Tool	
[]			Data Dictionary Tool	
. Data Dictionary Tool	DBA	,	Da	į



가

32.3.2

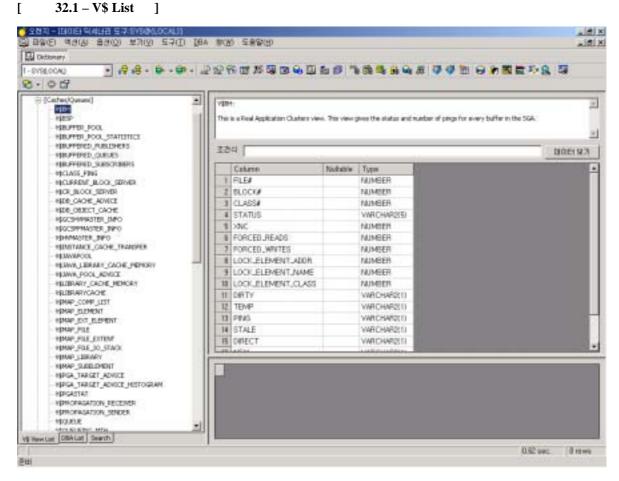
Data Dictionary Tool

[V\$ View List]

[DBA List]

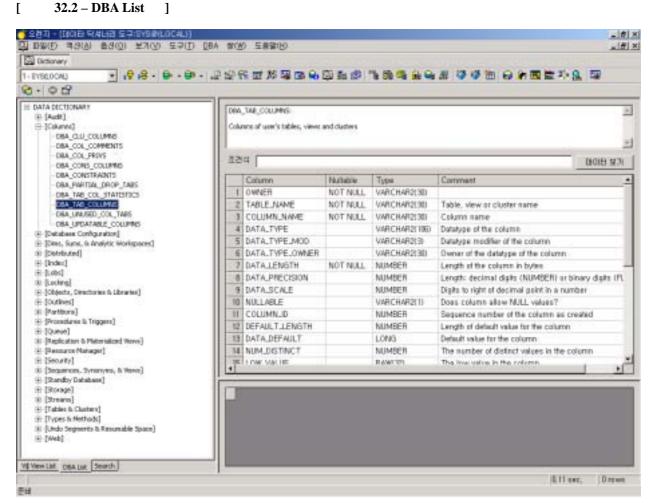
Comment

32.1 – V\$ List





32.2 – DBA List





32.1 – V\$ List], [32.2 – DBA List] [Get Data]

2

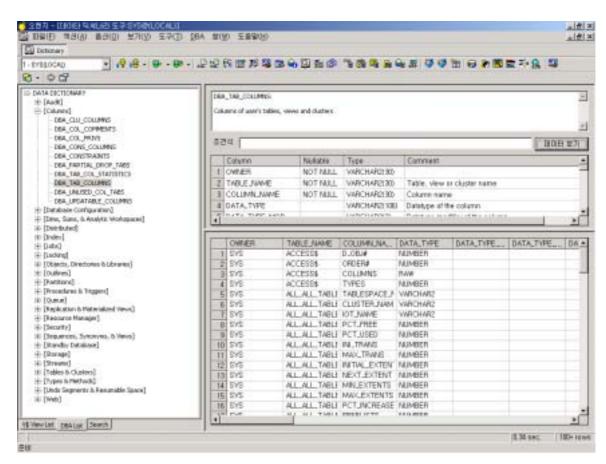
Ctrl + Down Arrow Comment/Columns

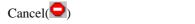
Ctrl + Up Arrow

[

Ctrl + Left Arrow Comment/Columns

[32.3 –]







32.3.3 Search

Data Dictionary Tool [V\$ View List], [DBA List]

. 가

[V\$ View List], [DBA List] [Search]

가 . [Search]

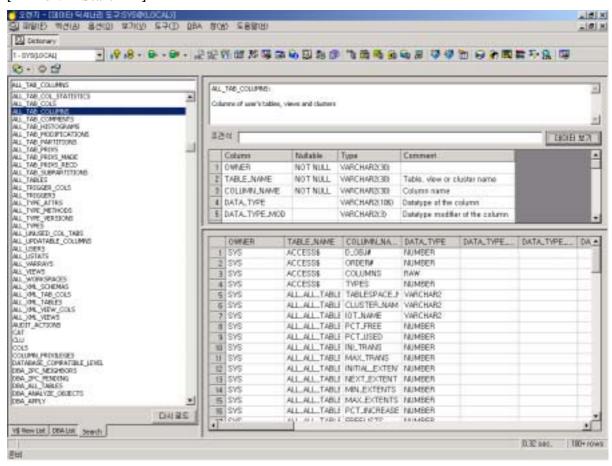
가 . [Search] Edit Box (3)

.

Comment

Describe . [Get Data] 가가 .

[32.4 – Search]



32.3.4 Options

Log Miner



A. (Editor)

SQL Tool, PL/SQL Tool, Plan Tool SQL 가 .

A.1 Editor

✓ Undo/Redo

✓ Visual Basic, C/C++, Power Builder Programming Language Code

√ Find/Replace

✓ Block Shifting Block

✓ Auto Complete

✓ Book Mark

A.2 Editor

A.2.1 Undo / Redo

Undo . [Edit] \rightarrow [Undo]

Ctrl+Z .

Redo Undo . [Edit] \rightarrow

[Redo] Ctrl+Y .

A.2.2 Copy & Paste

Clear Content . $[Edit] \rightarrow [Clear Content]$

Cut Clip Board . $[Edit] \rightarrow [Cut]$

Ctrl+X .

Copy Clip Board . $[Edit] \rightarrow [Copy]$ Ctrl+C

Paste Clip Board . [Edit] → [Paste]

Ctrl+V .

Select All . [Edit] \rightarrow [Select All]

Ctrl+A .



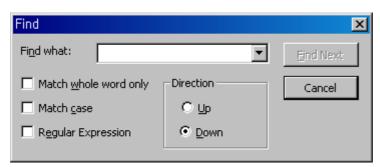
SQL Visual Basic, C/C++, Power Builder Copy Copy **Programming** Code Paste [Edit] → [Copy as Programming Language Code] → Language Code **SQL SQL** (Each Language) Programming Language Code Copy Programming Language Code Copy **Programming Tool** Ctrl+VPaste Paste from Visual Basic, C/C++, Power Builder Programming Tool **SQL Programming** Copy Paste Programming Tool Language Code Ctrl+C [Edit] \rightarrow [Paste from Copy Programming Language Code] → (Each Language) Paste

A.2.3 Find / Replace

Find . $[Edit] \rightarrow [Find]$

Ctrl+F

[A.1 - Find]



- Find what : . .
- Match whole world only: 기
- Match case : . .
- Regular Expression : . .
- Up: cursor 가 .
- Down: cursor 가 .

Find Next 가 가 가 .

 $[Edit] \rightarrow [Find Next]$ F3 .

Find Previous 가 가

 $[Edit] \rightarrow [Find Previous]$ Shift+F3.

Find

Incremental . $[Edit] \rightarrow [Find Incremental Next]$



 Next
 力
 力
 .

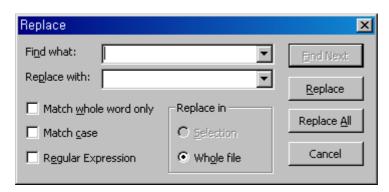
 Find
 Incremental
 . [Edit] → [Find Incremental Previous]

 Previous
 力
 力
 .

 Replace
 .
 [Edit] →

[Replace] Ctrl+H .

[A.2 - Replace]



- Find what : . .
- Replace with:
- Match whole word only: 7
- Match case : . .
- Regular Expression : . .
- Selection:
- _ Selection .
- Find next: Find what field .
- Replace : *Replace with* field .
- Replace all: Find what field Replace with field
- Cancel: Replace .

A.2.4 Delete

Whole file:



Backward . [Edit]

Delete Word \rightarrow [Delete] \rightarrow [Backward Delete Word] Ctrl+Backspace .

A.2.5 Move

Go to line $[Edit] \rightarrow [Move] \rightarrow [Go to line]$

Ctrl+G . Go to line Line Number

[OK] 가 .

[A.3 - Go to line]



Go to last .

change $[Edit] \rightarrow [Move] \rightarrow [Go to last change]$ Ctrl+Shift+G.

 $\text{Line Down} \qquad \qquad \text{.} \qquad \text{[Edit]} \rightarrow \text{[Move]} \rightarrow \text{[Line Down]} \qquad \text{Down}$

.

Scroll Down Editor . $[Edit] \rightarrow [Move] \rightarrow [Scroll Down]$

Ctrl+Down

.

Scroll Up Editor . $[Edit] \rightarrow [Move] \rightarrow [Scroll Up]$

Ctrl+Up .

Left. $[Edit] \rightarrow [Move] \rightarrow [Left]$ Left

.

Word Left . [Edit] \rightarrow [Move] \rightarrow [Word Left]

Ctrl+Left .

Right . $[Edit] \rightarrow [Move] \rightarrow [Right]$ Right

•

Word Right . $[Edit] \rightarrow [Move] \rightarrow [Word Right]$

Ctrl+Right .

Page Up . $[Edit] \rightarrow [Move] \rightarrow [Page Up]$ Page

Up .



Page Down $[Edit] \rightarrow [Move] \rightarrow [Page Down]$ Page Down Line Head $[Edit] \rightarrow [Move] \rightarrow [Line]$ Head] Home **Editor Head** Editor $[Edit] \rightarrow [Move] \rightarrow [Editor]$ Head] Ctrl+Home **Line End** $[Edit] \rightarrow [Move] \rightarrow [Line]$ End] End **Editor End** $[Edit] \rightarrow [Move] \rightarrow [Editor]$ End] Ctrl+End A.2.6 Shift **Increase Indent** [Edit] \rightarrow [Shift] -> [Indent] Tab $[Edit] \rightarrow [Shift]$ **Decrease Indent** → [Decrease Indent] Shift+Tab A.2.7 Change Case **Lower Case** [Edit] \rightarrow [Change Case] \rightarrow [Lower Case] Ctrl+U**Upper Case** [Edit] \rightarrow [Change Case] \rightarrow [Upper Case] Ctrl+Shift+UCapitalize $[Edit] \rightarrow [Change Case] \rightarrow [Capitalize]$ Sentencize $[Edit] \rightarrow [Change Case] \rightarrow [Sentencize]$ **Invert Case** $[Edit] \rightarrow [Change Case] \rightarrow [Invert Case]$ A.2.8 Auto Complete 가 **Auto Complete** [Edit] \rightarrow [Auto Complete]



Ctrl+Space

A.2.9 Match Bracket

가 가 **Match Bracket** [Edit] → [Match Bracket] Ctrl+[Ctrl+] 가 가 가 Match Select [Edit] → [Match Select Bracket] **Bracket** Ctrl+Shift+[Ctrl+Shift+] 가

A.2.10 Book Mark

Book Marks Book Mark [Edit] → [Book Book Mark 가 Marks] \rightarrow [Book Mark 0~9] $Ctrl+0\sim9$ $[Edit] \rightarrow [Book Marks] \rightarrow [Clear All]$. Book Mark Bookmarks] Goto Bookmark Book Mark [Edit] → [Goto Bookmark] Alt+0 \sim 9 Toggle Book Mark Bookmark $[Edit] \rightarrow [More Bookmarks] \rightarrow [Toggle Bookmark]$ Ctrl+F2 **Next Bookmark** Book Mark $[Edit] \rightarrow$ [More Bookmarks] → [Next Bookmark] 가 F2 Book Mark **Previous** Book Mark [Edit] \rightarrow Bookmark [More Bookmarks] → [Previous Bookmark] Shift+F2 가 Book Mark Book Mark Clear All $[Edit] \rightarrow [More]$ **Bookmarks** Bookmarks] → [Clear All Bookmarks] Ctrl+Shift+F2 Book Mark $[Edit] \rightarrow [Book Marks] \rightarrow$ [Clear All Bookmarks]



B. Row Viewer/Editor

Row Viewer SQL Tool Plan Tool 7

가 . Row

Editor Table Editor . Row Editor

Row Viewer

B.1 Row Viewer/Editor

- ✓ SQL Tool, Plan Tool
- ✓ Table Editor
- ✓ ASCII, Binary, Octal, Decimal, Hexadecimal 7

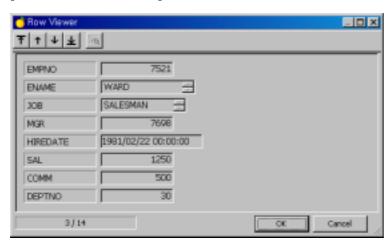
B.2 Row Viewer/Editor

✓ SQL Tool Plan Tool Grid

[Row Viewer] Row Viewer

B.1 - Row Viewer]

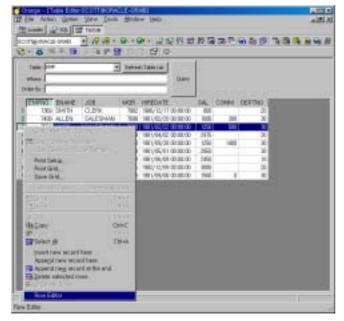
Row Editor



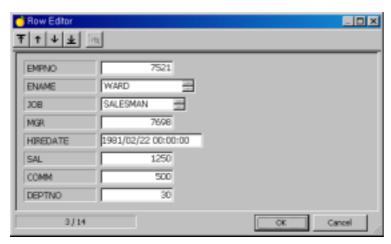
✓ Table Editor [Row Editor]

Ware Valley

B.2 – Row Editor



B.3 – Row Editor]



 ✓ Row Editor
 [OK]
 Table Editor

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 Table Editor
 Undo

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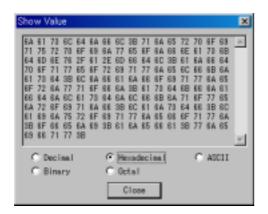
 ✓ ↑ , ↓
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[Show value]

ASCII, Binary, Octal, Decimal, Hexadecimal

[B.4 - Hexadecimal]



C. ASCII Table

ASCII Table ASCII

C.1 ASCII Table

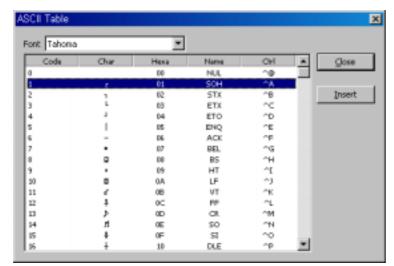
✓ ASCII

✓

C.2 ASCII Table

✓ [View] ASCII Table ASCII Table

[C.1 - ASCII Table]



✓ ASCII "Insert"

가

✓ "Font"

