

# ITDB's Installation Manual

This guideline will provide instructions on installation of the final version of the ITDB prototype.

## 1. Database Configuration

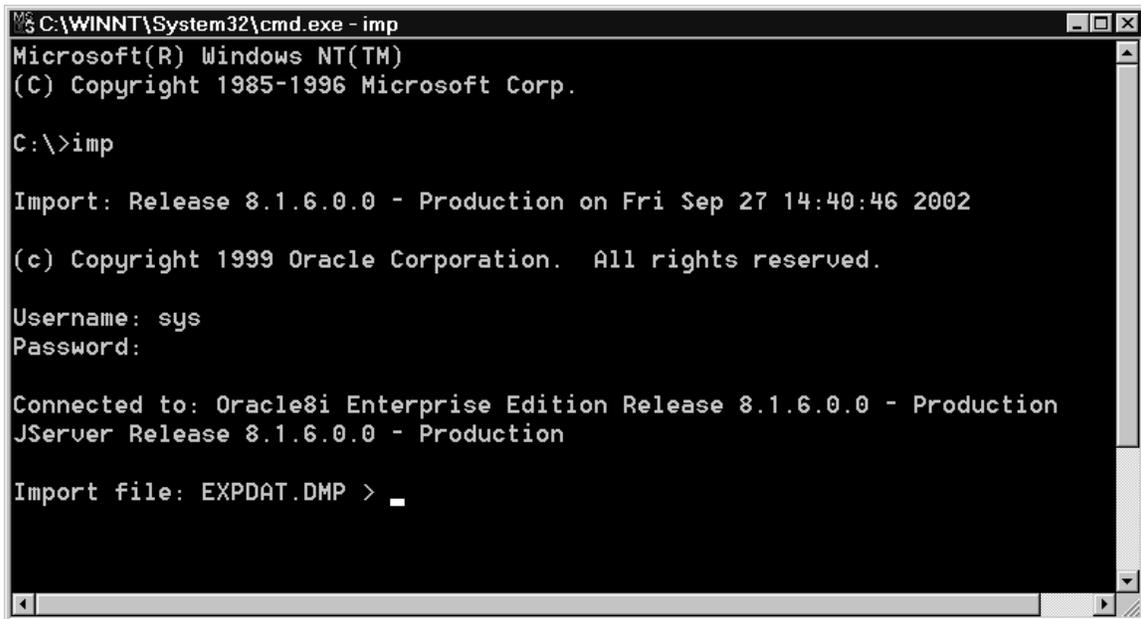
### 1.1 Install the database

The ITDB current version requires Windows NT 4.0 and can be run Oracle 8.1.6 or higher. During the database installation process, it is recommended to specify the properties as follow:

Global database name: orcinew  
Database system identifier (SID): orcinew

### 1.2 Import data and objects

The ITDB final version was backup into the export file -- EntireDB\_Final.dmp. The backup includes all data and objects belong to database users include -- sys, system, mediate, rpmgr and itsys. By using the imp utility, those data and objects can be restored to the database.



```
C:\WINNT\System32\cmd.exe - imp
Microsoft(R) Windows NT(TM)
(C) Copyright 1985-1996 Microsoft Corp.

C:\>imp

Import: Release 8.1.6.0.0 - Production on Fri Sep 27 14:40:46 2002

(c) Copyright 1999 Oracle Corporation. All rights reserved.

Username: sys
Password:

Connected to: Oracle8i Enterprise Edition Release 8.1.6.0.0 - Production
JServer Release 8.1.6.0.0 - Production

Import file: EXPDAT.DMP > _
```

*The Oracle's Imp utility*

### 1.3 Modify the init.ora

Message queue is used for performing communications between several components in ITDB. The components include the mediator, the repair manager, the Intrusion Detector, and the Confinement Manager. The message queuing functionality can be enabled by using the Advanced Queuing Option. It is not necessary to reconfigure the option after

importing all ITDB data and objects. However, we have to specify the number of AQ Time Managers to start for ITDB.

To do the task, use any text editors to open the init.ora file. Then, add the line below to somewhere in the file.

```
AQ_TM_PROCESSES = 1
```

Also, modify the following properties in the 'init.ora' To specify the maximum number of cursors per session.

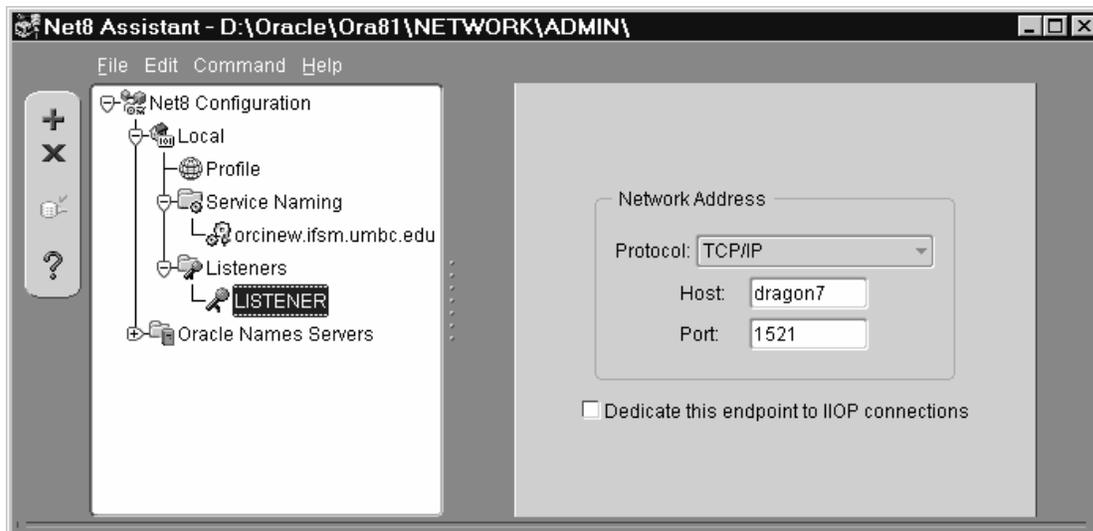
```
open_cursors = 500
```

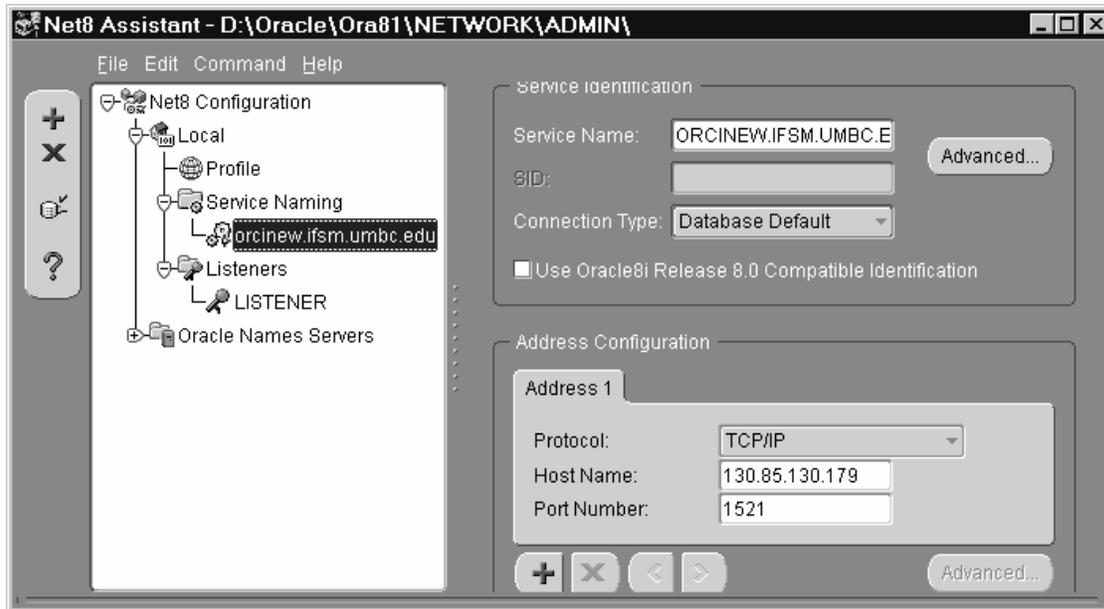
Increase the value of the PROCESSES initialization parameter by change to number of processes parameter.

```
processes = 200
```

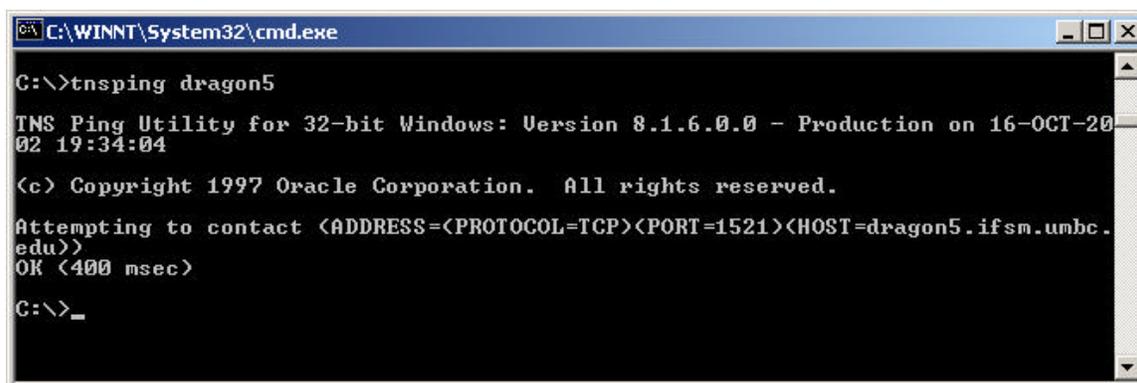
#### 1.4 SqlNet Configuration

Perform the Listener and TnsName configuration by using the Net8 Assistant utility program. It is recommended to specify the service name as 'orcinew'.





Test the connection by 'tnsping' utility as shown below:



### 1.5 Run SQL scripts

Login as 'sys' user and run the following sql scripts in Sqlplus:

1. Itdbms\_capture.sql
2. cuz\_sys\_user.sql
3. cuz\_itsys\_user.sql
4. cuz\_test\_user.sql
5. cuz\_rpmgr\_user.sql

**Note:**

- Before running the scripts above, please check users' password and connection string as the following:

1. User: sys  
Psswd: manager
1. User: system  
Psswd: manager
2. User: mediate  
Psswd: mediate

3. User: itsys  
Psswd: itmanager
  4. User: rpmgr  
Psswd: rpmgr
- Test the connection via the SQL\*Net as shown below.

```

Oracle SQL*Plus
File Edit Search Options Help
SQL> CONN SYS/MANAGER@ORCINEW AS SYSDBA
Connected.
SQL> CONN SYSTEM/MANAGER@ORCINEW
Connected.
SQL> CONN MEDIATE/MEDIATE@ORCINEW
Connected.
SQL> CONN ITSYS/ITMANAGER@ORCINEW
Connected.
SQL> CONN RPMGR/RPMGR@ORCINEW
Connected.
SQL> |

```

### 1.6 Start all message queues

To start all message queues, login as 'mediate' user and run the following command in Sqlplus.

```

EXEC DBMS_AQADM.START_QUEUE (queue_name=>'mqueue_trnsid');
EXEC DBMS_AQADM.START_QUEUE (queue_name=>'mqueue_repaired_trnsid');
EXEC DBMS_AQADM.START_QUEUE (queue_name=>'AITDB_params_queue');
EXEC DBMS_AQADM.START_QUEUE (queue_name=>'ID_msg_queue');
EXEC DBMS_AQADM.START_QUEUE (queue_name=>'MQUEUE_TRNSID_YW');

```

```

Oracle SQL*Plus
File Edit Search Options Help
SQL> conn mediate/mediate
Connected.
SQL> EXEC DBMS_AQADM.START_QUEUE (queue_name=>'mqueue_trnsid');
PL/SQL procedure successfully completed.
SQL> EXEC DBMS_AQADM.START_QUEUE (queue_name=>'mqueue_repaired_trnsid');
PL/SQL procedure successfully completed.
SQL> EXEC DBMS_AQADM.START_QUEUE (queue_name=>'AITDB_params_queue');
PL/SQL procedure successfully completed.
SQL> EXEC DBMS_AQADM.START_QUEUE (queue_name=>'ID_msg_queue');
PL/SQL procedure successfully completed.
SQL> EXEC DBMS_AQADM.START_QUEUE (queue_name=>'MQUEUE_TRNSID_YW');
PL/SQL procedure successfully completed.
SQL> |

```

## 2. Windows Configuration

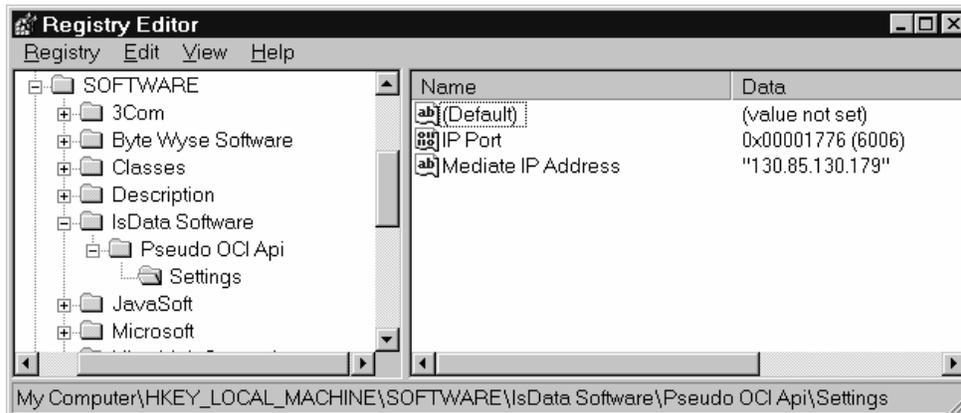
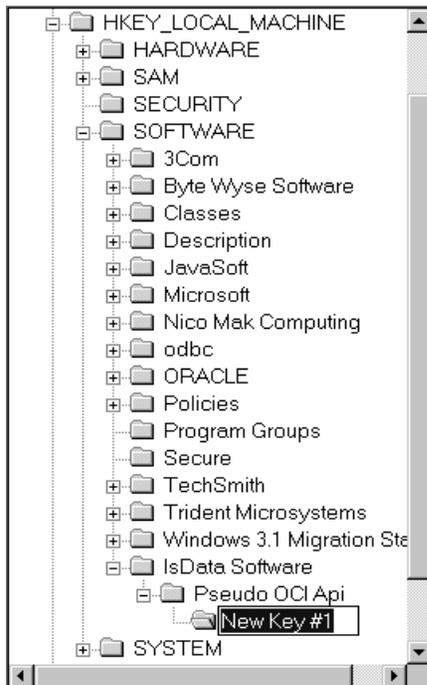
### 2.1 Modify Windows Registry

2.1.1 Use regedit to add the following keys into the registry:

- IsData Software
  - Pseudo OCI Api
  - Settings

2.1.2 Add the following string and Dword values into the keys:

- IP Port : 6006
- Mediate IP Address : Specify the IP Address of the machine that used to be installed and run the Mediator program.



### 3. ITDB Components Configuration

3.1 All components can be stored in either in the same machine, same folder or on a different machine, different folder. But for the components that communicate with the Mediator via CORBA (for example -- the Intrusion Detector and the Repair Manager), you have to

1. Start the Mediator
2. Copy the MediateCorba.ref file to any other folders that stored other component.
3. Start the components.

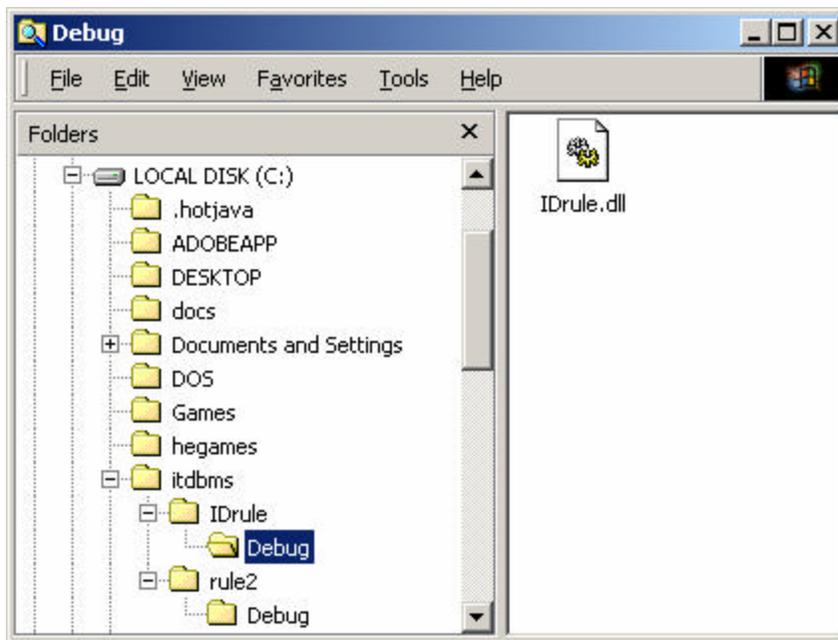
#### 3.2 The Mediate (Mediate.exe)

Create folder named 'sql' under the Mediator folder. This folder is used to keep the SQL scripts used by the Mediator.

#### 3.3 The Intrusion Detector (ID.exe)

Install Intrusion Detector Rules as the following:

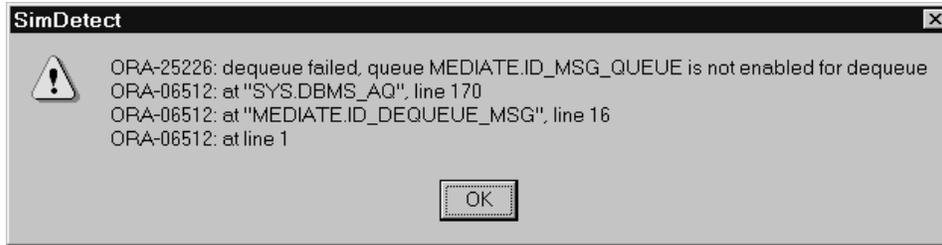
1. Create the 'itdbms' folder in drive C:
2. Copy DLL files that are used to keep ID rules into the folder.



3.3

### 4. Troubleshooting

1. Encounter an error message shown below when start the Mediator and Intrusion Detector program.
  - Start all Message Queue (1.6)



2. The Transaction Simulators or Application Program (POCI.exe) cannot connect to the Mediator (hang when login).

- Recheck the network
- Check regedit (2.1)

3. Encounter an error message shown below when start the Transaction Simulator program.

- Run the Create\_User\_test.sql script in Sqlplus.

