

Informix : New Setup and Basic Administration Commands

FYI: Installation and configuration had already been done for new setup, kindly use this info for your understanding.

Basic Difference between Oracle & Informix:

ORACLE	INFORMIX
unix user (oracle)	informix
sqlplus	dbaccess
DATABASE	INSTANCE(ratactp6)
SCHEMA/USER	DATABASE
SYS	sysadmin@ratactp6
SYSTEM	sysmaster@ratactp6
	sysuser@ratactp6
	sysutils@ratactp6
	monitoring@ratactp6 (Application user created by DBA)
ORACLE_HOME	INFORMIXDIR
ORACLE_SID	INFORMIXSERVER
init file	\$INFORMIXDIR/etc/onconf.if_<SID> (Ex. for instance ratactp6 : \$INFORMIXDIR/etc/onconf.if_ratactp6)
redo log file	logical logs
alert log	online log (\$INFORMIXDIR/tmp/online.log.ratactp6)
file system	row devices
temporary tbs	tempdbspace
tablespace	dbspace
system tbs	rootdbs
	onstat - (On-Line)
	onstat -g dis (list all instances running on server)
READ WRITE	onstat -u (list all sessions information)
ps -ef grep pmon	
select * from v\$session;	

Please use links for more information :

https://www.ibm.com/support/knowledgecenter/SSGU8G_14.1.0/com.ibm.adref.doc/ids_adr_0504.htm : onstat-d info doc

<http://adevas3s:8005/> -- tramomonitor

<http://adevas3s:8001/> --status monitor

Old Environment :

Environment	IP	Server Name
Prod1	10.133.22.129	adetrmas

Prod2	10.133.22.65	adetrmb
Development	ratakt9	adettm1s

Current Setup:

Environment	IP	Server Name
Development 1	195.233.84.38	adedtdev1.dc-rating.de
Development 2	195.233.84.39	adedtdev2.dc-rating.de
new PROD1	10.133.20.196	adetrmdb1
new PROD2	10.133.20.197	adetrmdb2
POC		de0078ls
new ACC		adettmacc1

App Server: advas6s

To connect to any instance :

Please use 'ss' or 'aa' alise like below.

```
adbm@de0922yr:~ $
adbm@de0922yr:~ $ ssh informix@adetrmdb1
Enter passphrase for key '/home/adbm/.ssh/id_rsa':
Password:
successful authentication. The latest at Thu Feb 17 11:02
Last login: Thu Feb 17 11:24:14 2022 from 10.133.20.195
Oracle Corporation SunOS 5.11 11.4 March 2021 informix@adetrmdb1:/opt/informix>
informix@adetrmdb1:/opt/informix> ss
ratakt1
informix@adetrmdb1:/opt/informix>
informix@adetrmdb1:/opt/informix>
informix@adetrmdb1:/opt/informix> aa
. ./switch_ratakt1.sh == ratakt1 PROD INSTANCE
. ./switch_ratakt2.sh == ratakt2 PROD INSTANCE
. ./switch_ratakt4.sh == ratakt4 PROD INSTANCE
. ./switch_ratcalp2.sh == ratcalp2 PROD INSTANCE
. ./switch_ratakt6.sh == ratakt6 TEST

informix@adetrmdb1:/opt/informix>
informix@adetrmdb1:/opt/informix> ./switch_ratakt1.sh
informix@adetrmdb1:/opt/informix>
```

How to use DBACCESS utility:

1) informix@adetrmdb1:/opt/informix> dbaccess

```
DBACCESS: [ ] Query-language Connection Database Table Session Exit
Use SQL query language.

----- Press CTRL-W for Help -----
```

How to check the DB:

click on Query-language then select the required database from the dropdown list

```

SELECT DATABASE >>
Select a database with the Arrow Keys, or enter a name, then press Return.

----- Press CTRL-W for Help -----

sysadmin@rataktpl

sysmaster@rataktpl

sysuser@rataktpl

sysutils@rataktpl

```

Basic Informix Commands :

```

onstat -l : to check the log files

onstat - : to check the current server status

onstat -d : command to check the dbspaces

onstat -u : check user sessions

onstat -m : To check the alert log

```

Informix backup details :

Please check the crontab -l output on our prod instance:

```

informix@adetrddb1:~$ crontab -l
#
#0 4 * * * /opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_ratakt2.sh >/opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_akt2_cron.log
2>&1
#15 4 * * * /opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_ratakt1.sh >/opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_akt1_cron.log
2>&1
#30 4 * * * /opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_ratakt4.sh >/opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_akt4_cron.log
2>&1
#45 4 * * * /opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_ratcalp2.sh >/opt/informix/IDS/ids.12.10.FC10WE/scripts/level0_calp2_cron.log
2>&1
#0 3 * * * /opt/informix/IDS/ids.12.10.FC10WE/scripts/clear_xbsa.messages.sh >/opt/informix/IDS/ids.12.10.FC10WE/scripts/clear_xbsam.log
2>&1
#
#
##### Scripts scheduled by ADBA for Informix monitoring
#####44 3 * * * /opt/informix/ifxmonitor/scripts/db_backup.sh >> /opt/informix/ifxmonitor/scripts/db_backup.log 2>&1
#####44 3 * * * /opt/informix/ifxmonitor/scripts/db_logs2.sh >> /opt/informix/ifxmonitor/scripts/db_logs2.log 2>&1
#####44 3 * * * /opt/informix/ifxmonitor/scripts/db_oninits.sh >> /opt/informix/ifxmonitor/scripts/db_oninits.log 2>&1
#####44 3 * * * /opt/informix/ifxmonitor/scripts/db_logs_info.sh >> /opt/informix/ifxmonitor/scripts/db_logs_info.log 2>&1

```

To take the full backup please use below commands :

```

onbar -b -L 0 =====> do this ratakt1.
onbar -b -L 0 =====> do this ratakt2.
onbar -b -L 0 =====> do this ratakt4.
onbar -b -L 0 =====> do this ratcalp2.

```

We need to raise P2 INC for backup team if backups are not happening:

We can find the meaning of any informix error by finderr utility like below:

```
informix@adetrmas:/opt/informix> ./switch_ratakt1.sh
informix@adetrmas:/opt/informix>
informix@adetrmas:/opt/informix>
informix@adetrmas:/opt/informix> env | grep INFORMIXSERVER
INFORMIXSERVER=ratakt1
informix@adetrmas:/opt/informix>
informix@adetrmas:/opt/informix>
informix@adetrmas:/opt/informix> finderr 201
-201 A syntax error has occurred.
```

This general error message indicates mistakes in the form of an SQL statement. Look for missing or extra punctuation (such as missing or extra commas, omission of parentheses around a subquery, and so on), keywords misspelled (such as VALEUS for VALUES), keywords misused (such as SET in an INSERT statement or INTO in a subquery), keywords out of sequence (such as a condition of "value IS NOT" instead of "NOT value IS"), or a reserved word used as an identifier.

Database servers that provide full NIST compliance do not reserve any words; queries that work with these database servers might fail and return error -201 when they are used with earlier versions of IBM Informix database servers.

The cause of this error might be an attempt to use round-robin syntax with CREATE INDEX or ALTER FRAGMENT INIT on an index. You cannot use round-robin indexes.

The error may also occur if an SQL statement uses double quotation marks around input strings and the environment variable DELIMIDENT is set. If DELIMIDENT is set, strings that are surrounded by double quotation marks are regarded as SQL identifiers rather than string literals. For more information on the usage of DELIMIDENT, see the IBM Informix Guide to SQL: Reference.

For Informix Installation :

- 1) Please copy the ifx_12_10_FC10WE_SOL_SPARC_64.tar file from adba1 server to target server.

```
adbm@de0922yr:/opt/SP/dumps/sagar/informix_install $ ls -lrt
total 414012
-rw-r----- 1 adbm adbm 423942656 Jan 19 15:35 ifx_12_10_FC10WE_SOL_SPARC_64.tar
drwxr-xr-x 3 adbm adbm 4096 Jan 19 15:41 CSDK.4.10.UC
adbm@de0922yr:/opt/SP/dumps/sagar/informix_install $
adbm@de0922yr:/opt/SP/dumps/sagar/informix_install $
```

- 2) Login with root user and untar the zip file

```
informix@adetrmdb1:/opt/informix/IDS>
informix@adetrmdb1:/opt/informix/IDS> chmod 755 ifx_12_10_FC10WE_SOL_SPARC_64.tar
informix@adetrmdb1:/opt/informix/IDS> su - root
Password:
Last login: Thu Jan 27 08:58:13 2022 on pts/1
Oracle Corporation SunOS 5.11 11.4 March 2021
root@adetrmdb1:~#
root@adetrmdb1:~# cd /opt/informix/IDS
root@adetrmdb1:/opt/informix/IDS#
root@adetrmdb1:/opt/informix/IDS#
root@adetrmdb1:/opt/informix/IDS# ls -lrt
total 828018
drwxr-xr-x 28 informix informix 1024 Jun 24 2018 ids.12.10.FC10WE
-rwxr-xr-x 1 informix informix 423942656 Jan 27 10:20 ifx_12_10_FC10WE_SOL_SPARC_64.tar
root@adetrmdb1:/opt/informix/IDS#
root@adetrmdb1:/opt/informix/IDS# tar xvf ifx_12_10_FC10WE_SOL_SPARC_64.tar
```

- 3) Run the ./ids_install and follow the below steps.

```
root@adetrmdb1:/opt/informix/IDS# ./ids_install
Preparing to install...
Extracting the JRE from the installer archive...
Unpacking the JRE...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...
```

Launching installer...

```
=====
(created with InstallAnywhere)
=====
```

Preparing CONSOLE Mode Installation...

```
=====
Getting Started
=====
```

This application will guide you through the installation of IBM Informix Software Bundle.

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1. Release Notes

The Release Notes can be found in

/opt/informix/IDS/SERVER/doc/ids_unix_relnotes_12.10.html

2. Installation Guide

Please view the Installation / Quick Beginnings Guide at

/opt/informix/IDS/SERVER/doc/ids_unix_installg_12.10.pdf

3. Join the Informix Community at:

<http://www.informixcommunity.com>

4. Launch Information Center

Access the IBM Informix 12.10 Information Center at

<http://pic.dhe.ibm.com/infocenter/informix/v121/index.jsp>

To Begin Installation,

Respond to each prompt to proceed to the next step in the installation.

If you want to change something on a previous step, type 'back'.

You may cancel this installation at any time by typing 'quit'.

PRESS <ENTER> TO CONTINUE:

```
=====
International Program License Agreement
```

Part 1 - General Terms

BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, CLICKING ON AN "ACCEPT" BUTTON, OR OTHERWISE USING THE PROGRAM, LICENSEE AGREES TO THE TERMS OF THIS AGREEMENT. IF YOU ARE ACCEPTING THESE TERMS ON BEHALF OF LICENSEE, YOU REPRESENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND LICENSEE TO THESE TERMS. IF YOU DO NOT AGREE TO THESE TERMS,

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Press Enter to continue viewing the license agreement, or enter "1" to accept the agreement, "2" to decline it, "3" to print it, or "99" to go back to the previous screen.: 1

=====

Installation Location

Choose location for software installation

Default Install Folder: /opt/IBM/Informix_Software_Bundle

ENTER AN ABSOLUTE PATH, OR PRESS <ENTER> TO ACCEPT THE DEFAULT
: /opt/informix/IDS/12.10

INSTALL FOLDER IS: /opt/informix/IDS/12.10
IS THIS CORRECT? (Y/N): Y

=====

Installation or Distribution

Select the installation type.

Typical: Install the database server with all features and a database server that is configured with default values. Includes:
** Client Software Development Kit (CSDK)

Custom: Install the database server with specific features and software that you need.
Optionally install a configured database server instance.
Minimum disk space required: 75 MB (without a server instance)

->1- Typical installation
2- Custom installation
3- Extract the product files (-DLEGACY option)

ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO ACCEPT THE DEFAULT::

=====

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Press Enter to continue viewing the license agreement, or enter "1" to accept the agreement, "2" to decline it, "3" to print it, or "99" to go back to the previous screen.: 1

=====

Server Instance

Type 'back' to go to the previous step or 'quit' to cancel the installation.

Create a database server instance?

->1- Yes - create a server instance

2- No - do not create a server instance

ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO ACCEPT THE DEFAULT:: 2

=====

Installation Summary

Please review the following before continuing:

Product Name:

IBM Informix Software Bundle

Install Folder:

/opt/informix/IDS/12.10

Product Features:

IBM Informix database server,
Base Server,
Extensions and tools,
J/Foundation,
Database extensions,
Conversion and reversion support,
XML publishing,
Demonstration database scripts,
Enterprise Replication,
Data loading utilities,
onunload and onload utilities,
dbload utility,
High-Performance Loader,
Backup and Restore,
archecker utility,
ON-Bar utility,
Interface to Tivoli Storage Manager,
Administrative utilities,
Performance monitoring utilities,
Miscellaneous monitoring utilities,
Auditing utilities,
Database import and export utilities,
JSON Client Support,
IBM Informix Client SDK,
IBM Informix Object Interface for C++,
IBM Informix Object Interface for C++ Demos,
IBM Informix ESQL/C,
IBM Informix ESQL/C demos,
7.2 application compatibility module,
IBM Informix LIBDMI for client applications,
IBM Informix ODBC Driver,
IBM Informix ODBC Driver demos,
Global Language Support (GLS),
West European and Americas,
East European and Slavic,
Japanese,
Korean,
Chinese,
Thai,
IBM Informix JDBC

Disk Space Information (for Installation Target):
Required: 912,093,046 Bytes
Available: 2,100,649,984 Bytes

PRESS <ENTER> TO CONTINUE:

=====

Ready To Install

=====

InstallAnywhere is now ready to install IBM Informix Software Bundle onto your system at the following location:

/opt/informix/IDS/12.10

PRESS <ENTER> TO INSTALL:

=====

Installing...

=====

[=====|=====|=====|=====]
[-----|-----|-----|-----]

=====

Installation Complete

=====

Congratulations! IBM Informix Software Bundle installation is complete.

Product install status:
Informix Dynamic Server: Successful
Informix Client-SDK: Successful

For creation of instance :

Please prepare below files for creation of Informix instance :

- 1) Startup Files ==> informix@adetrmdb1:/opt/informix/IDS~\$ cat start_ratactp2.sh.12.10
- 2) Switch Files ==> informix@adetrmdb1:/opt/informix/IDS~\$ cat switch_ratactp6-12.10.sh
- 3) on-config Files ==>
- 4) /etc/services entries ==> informix@adetrmdb1:/opt/informix~\$ cat /etc/services
- 5) Setup a profile ==> informix@adetrmdb1:/opt/informix~\$ cat .profile