1. 安装Oracle的OCI套件(确定系统是否安装gcc和libaio1)

下载地址：https://www.oracle.com/technetwork/database/database-technologies/instant-client/overview/index.html

1. 下载版本实例

instantclient-basic-linux.x64-11.2.0.4.0.zip

instantclient-sdk-linux.x64-11.2.0.4.0.zip

instantclient-sqlplus-linux.x64-11.2.0.4.0.zip

instantclient-basic-linux.x64-12.2.0.1.0.zip

instantclient-sdk-linux.x64-12.2.0.1.0.zip

instantclient-sqlplus-linux.x64-12.2.0.1.0.zip

1. 按顺序解压到同一目录

11g: instantclient\_11\_2

12c: instantclient\_12\_2

1. root权限移动文件夹到目录 /usr/lib 下
2. root权限执行以下命令

11g:

ln /usr/lib/instantclient\_11\_2/libclntsh.so.11.1 /usr/lib/libclntsh.so

ln /usr/lib/instantclient\_11\_2/libocci.so.11.1 /usr/lib/libocci.so

ln /usr/lib/instantclient\_11\_2/libociei.so /usr/lib/libociei.so

ln /usr/lib/instantclient\_11\_2/libnnz11.so /usr/lib/libnnz12.so

以下两条是为了运行sqlplus

ln /usr/lib/instantclient\_11\_2/libsqlplusic.so /usr/lib/libsqlplusic.so

ln /usr/lib/instantclient\_11\_2/libsqlplus.so /usr/lib/libsqlplus.so

12c:

ln /usr/lib/instantclient\_12\_2/libclntsh.so.12.1 /usr/lib/libclntsh.so

ln /usr/lib/instantclient\_12\_2/libocci.so.12.1 /usr/lib/libocci.so

ln /usr/lib/instantclient\_12\_2/libociei.so /usr/lib/libociei.so

ln /usr/lib/instantclient\_12\_2/libnnz12.so /usr/lib/libnnz12.so

以下两条是为了运行sqlplus

ln /usr/lib/instantclient\_12\_2/libsqlplusic.so /usr/lib/libsqlplusic.so

ln /usr/lib/instantclient\_12\_2/libsqlplus.so /usr/lib/libsqlplus.so

1. 把 OCI路径加入系统加载动态库的路径中，并重新加载一次

11g:

echo /usr/lib/instantclient\_11\_2 >> /etc/ld.so.conf

​ldconfig

12c

echo /usr/lib/instantclient\_12\_2 >> /etc/ld.so.conf

ldconfig

1. 安装pkg-config
2. 在/usr/lib 目录下创建pkgconfig 目录
3. 在/usr/lib/pkgconfig 目录下创建文件oci8.pc,内容如下

11g:

prefix= /usr/lib/instantclient\_11\_2  
libdir=${prefix}  
includedir=${prefix}/sdk/include/  
  
Name: OCI  
Description: Oracle database engine  
Version: 11.2   
Libs: -L${libdir} -lclntsh  
Libs.private:  
Cflags: -I${includedir}

12c:

prefix= /usr/lib/instantclient\_12\_2  
libdir=${prefix}  
includedir=${prefix}/sdk/include/  
  
Name: OCI  
Description: Oracle database engine  
Version: 12.2    
Libs: -L${libdir} -lclntsh  
Libs.private:  
Cflags: -I${includedir}

1. 在 .bashrc 文件中添加环境变量

11g:

# OCI安装目录​  
export ORACLE\_HOME=/usr/lib/instantclient\_11\_2

12c:

export ORACLE\_HOME=/usr/lib/instantclient\_12\_2

# ​tnsnames.ora 文件地址​需要创建network和admin目录（此步骤也可以省略）  
​export TNS\_ADMIN=$ORACLE\_HOME/network/admin  
# OCI安装目录加入动态库加载路径​  
​export LD\_LIBRARY\_PATH=$ORACLE\_HOME  
# oci8.pc文件所在路径  
export PKG\_CONFIG\_PATH=/usr/lib/pkgconfig

1. tnsnames.ora 文件的内容（如果export TNS\_ADMIN=$ORACLE\_HOME/network/admin 没有设置则不需操作此步骤）内容如下：

awsdb=  
(DESCRIPTION =  
(ADDRESS\_LIST =  
(ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.0.126)(PORT = 1521))  
)  
(CONNECT\_DATA =  
(SERVICE\_NAME = awsdb)  
)  
)  
  
  
EXTPROC\_CONNECTION\_DATA =  
(DESCRIPTION =  
(ADDRESS\_LIST =  
(ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1))  
)  
(CONNECT\_DATA =  
(SID = PLSExtProc)  
(PRESENTATION = RO)  
)  
)

1. 安装go-oci8 （准备条件为：安装了git和go语言运行环境）

可连接网络：

go get github.com/mattn/go-oci8​

不可连接网络：

1. 在Gopath 下创建sql.go 测试连接文件

Sql.go

package main

import (

"database/sql"

"fmt"

"log"

"os"

\_ "github.com/mattn/go-oci8"

)

func main() {

if len(os.Args) != 2 {

log.Fatalln(os.Args[0] + " user/password@host:port/sid")

}

db, err := sql.Open("oci8", os.Args[1])

if err != nil {

log.Fatalln(err)

}

defer db.Close()

rows, err := db.Query("select user from dual")

if err != nil {

log.Fatalln(err)

}

defer rows.Close()

for rows.Next() {

var data string

rows.Scan(&data)

fmt.Println(data)

}

if err = rows.Err(); err != nil {

log.Fatalln(err)

} }

1. 编译并运行测试文件

编译：go build –o sql sql.go

运行：./sql system/oracle@192.168.0.150:1521/testpdb