Demo: Yes, You can build DCE Applications

Ron Burback

Lecture 20

Make

```
make
idl -v -keep all -cc_cmd "/usr/local/bin/gcc -c  -g -D_REENTRANT -DSUNOS5" arithm
etic.idl
Running C preprocessor /usr/ccs/lib/cpp  arithmetic.idl -I. -I/usr/include
Importing IDL file /usr/include/dce/nbase.idl
Running C preprocessor /usr/ccs/lib/cpp  /usr/include/dce/nbase.idl -I. -I/usr/in
clude
Operation sum_arrays has no binding handle parameter; [auto_handle] assumed
Creating include file arithmetic.h
Creating stub module arithmetic_cstub.c
Creating stub module arithmetic_sstub.c
Compiling stub module /usr/local/bin/gcc -c  -g -D_REENTRANT -DSUNOS5   -I. -I/us
r/include  arithmetic_cstub.c
Compiling stub module /usr/local/bin/gcc -c  -g -D_REENTRANT -DSUNOS5   -I. -I/us
r/include  arithmetic_sstub.c
/usr/local/bin/gcc   -DLOCAL -o local_client client.c procedure.c
/usr/local/bin/gcc -g -D_REENTRANT -DSUNOS5   -c client.c -o client.o
/usr/local/bin/gcc -g -D_REENTRANT -DSUNOS5 -o client client.o arithmetic_cstub.o
 -ldce -lnsl -lthread -lm -lsocket
/usr/local/bin/gcc -g -D_REENTRANT -DSUNOS5   -c server.c -o server.o
/usr/local/bin/gcc -g -D_REENTRANT -DSUNOS5   -c procedure.c -o procedure.o
/usr/local/bin/gcc -g -D_REENTRANT -DSUNOS5 -o server server.o procedure.o arithm
etic_sstub.o -ldce -lnsl -lthread -lm -lsocket
```

Run the server

```
cat server.sh
# FILE NAME: server.sh
setenv ARITHMETIC_SERVER_ENTRY /.:/arithmetic_serverhost
server
lunaris:> source server.sh
Listening for remote procedure calls...
```

Run the client

```
lunaris:> cat client.sh
# FILE NAME: client.sh
setenv RPC_DEFAULT_ENTRY /.:/arithmetic_serverhost
client
lunaris:> source client.sh
sums:
104
200
347
26
68
72
5
9
6
8
```

Stop the server and try again

```
Listening for remote procedure calls...
^C
lunaris:>
```

```
source client.sh
Exception: status 16c9a0b5 (dce / rpc)
```

To bring an application into DCE

- Create security groups for the application
- Create principal for the application and add it to the group. Add other principals
- Create accounts for the principals if needed
- Create a CDS (object or group or profile) for the application
- Create a keytab file on the application servers

Create a security group

```
dcecp> group create my_application
dcecp>
```

Create application principal

dcecp> principal create my_application_principal

dcecp>

Add the application to the group

dcecp> group add my_application -member
my_application_principal

dcecp>

Create accounts

```
dcecp> org add none -member
my_application_principal

dcecp> account create
my_application_principal -group
my_application -org none -p

assword ifcsmn2% -mypwd ***
```

Create a CDS object

```
dcecp> object create /.:/
my_application

dcecp>
```

Create a keytab

```
dcecp> keytab create /.:/lunaris/
config/keytab/my_application -
storage /krb5/v5sr

vtab -data
{my_application_principal des 1
ifcsmn2%}
```

Add application to the ACL

dcecp> acl modify -entry /.:/my_application -add {my_application_principal rw}