The DCE Control Program

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Lecture 21

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A family of control programs

- dcecp : major control program
- dce_config : used to build initial systems; note: some venders integrated into dcesetup
- sec_create_db, sec_salvage_db : used to manage registries.
- sec_admin : old registry monitor
- passwd_import and passwd_export
- acl_edit, auditcp, cdscp, dtscp, gdscp, rpccp, rgy_edit : old utilities

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/opt/dcelocal files

- /bin - binaries
- /etc - system dependent files
- /var/adm/dce-component-name - log and cache files
- /var/dce-component-name - data files

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Standard Unix files and DCE

- /etc/zoneinfo : time templates
- /krb5 : configuration files, including tickets
- /usr/include/dce : include headers
- /opt/dcelocal/shared - directory of libraries

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General features

- tcl program
- can run on any client, by any principal
- what you can do is based on ACLs
- full tcl functionality, loops, variables
- interactive or command line (dcecp -c “...”)
- history of commands with emacs editor

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Command Format

- <object> <verb> [arguments] [options]
- The objects are
  - account, acl, attrlist, aud, audevents, audfilter, audtrail, cdsalias, cdscache, cell, cellalias, clearinghouse, clock, directory, dts, endpoint, group, host, hostdata, keytab, link, log, name, object, organization, principal, registry, rpcentry, rpcgroup, rpcprofile, secval, server, user, utc, uuid, and xattrschema

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dcecp help commands

- dcecp> help -verbose
  - list all objects
- dcecp> <*object*> help [-verbose]
  - list all verbs for this object
- dcecp> <*object*> help <*verb*>
  - list all options for this verb under this object
- dcecp> man <*object*>
  - manual pages

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Customizing dcecp

- init.tcl
  - tcl init per host
- init.dcecp
  - dcecp init per host
- $home/.dcecprc
  - dcecp init per user
- /dcelocal/dcecp
  - tcl scripts for all dcecp commands

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dcecp defined variables

- “_u” user name
- “_c” cell name
- “_h” host name
- “_n” most recent operation argument
- “_o” last object name
- “_p” parent directory in cds
- “_r” last return value

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more dcecp defined variables

- “_s(sec)” next security service name
- “_s(cds)” next directory service name
- “_s(dts)” next time service name
- “_s(aud)” next audit service name
- “_b(sec)” last security service name

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Example: who am I?

```
proc whoami {} {
        global _c _u
        return “You are ‘$_u’ logged into ‘$_c’.”
}
```

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Example: show_clocks

```
proc show_clocks {} {
  set x [directory list /.:/hosts]
  foreach n $x {
    if {[catch {object show $n/dts-entry}] == 0} {
      set index [string last "/" $n]
      set y [string range $n [incr index] end]
      if {[catch {clock show $n/dts-entity} msg] == 0} {
        set i [expr 20 - [string length $y]]
        puts [format "Time on $y is %${i}s %s" " " [clock show $n/dts-entity]]
      } else {
        puts [format "Server not responding" ]
      }
    }
  }
}
```

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