#### NAME

compascl - COMPAS Enterprise Document Management System Command Line

#### **SYNOPSIS**

compascl -uLOGIN -WPASSWD -SSERVER -gGET [-VVERSION] [-x] [-1] [-dPRINTER] [-sSNUM] ID [ID ...]

compascl -uLOGIN -WPASSWD -SSERVER -tTABLE [-wWORDS] [-qQUERY]

**compascl** -**u**LOGIN -**W**PASSWD -**S**SERVER -**a**ADD [-**f**descfile] [-**e**resolfile] [-**i**ID] [-**s**SNUM] ["FIELD VALUES" ...]

**compascl** -**u**LOGIN -**W**PASSWD -**S**SERVER -**m**MODIFY [-**f**descfile] [-**e**resolfile] -**i**ID [-**s**SNUM] ["FIELD\_VALUES" ...]

compascl -uLOGIN -WPASSWD -SSERVER -pPUT -iID [-Pps/pdf] [-sSNUM] [-fputfile] [-C]

compascl -uLOGIN -WPASSWD -SSERVER -rREPORT [-AARG] [-cCONVERT] [-x] [-1] [-dPRINTER] -qQUERY

compascl -uLOGIN -WPASSWD -SSERVER -RREMOVE [-iID] [-sSNUM] [-VVERSIONS]

compascl -uLOGIN -WPASSWD -SSERVER -l{addme, delme} ID [ID ...]

compascl -uLOGIN -WPASSWD -SSERVER -Ulogin

compascl -uLOGIN -WPASSWD -SSERVER -quiet ...

#### **Change History**

July 10, 2002

Add document supplement feature. User can add, replace, retrieve, delete supplement using command-line.

May 20, 2002

Rewrote command line using perl. Now it could run on both Windows and Unix/Linux.

Oct 22, 1999

Added inspection summary report option. See flag **-g** *inspsummary*.

- Oct 5, 1999 Added support for the Change Control Draft (Control Draft) feature. See flags **-g** ... **-V** draft, **-p** ... **-V** draft, **-p** draft, **-p** draft.
- Oct 1, 1999 Removed 'online' from and added 'draft format type' to the fields displayed when doing '-t entries' command.
- Oct 1, 1999 Added this 'Change History' section to the man page.

### DESCRIPTION

**COMPAS** is a development-process support system that provides quick access to documents and document-related information produced at discrete times throughout the development cycle. The system is designed to aid the development of documentation products; aid the planning, scheduling, and tracking of project progress; support activities that verify and validate development products as they are produced; and provide metrics about the document-development process for controlling the current project and data for planning future projects. This man page documents the latest release 1.0 of COMPAS Enterprise command line.

For window's user, you need to put perl in front of compascl, like "perl compascl .....".

Page 1 July 11, 2002

-ulogin, -Wpassword -Sserver are required, we didn't put them in the examples repeatedly in this document.

Most features of **COMPAS**, such as entering data and generating reports, can be accessed using command line flags without going through the interactive version. These features and associated command line flags are listed below:

### **Getting documents**

**-g** *GET* Use this option to get documents and other things from COMPAS. The argument *GET* decides what to get and valid values for getting documents are:

**document** Get the source document stored in the COMPAS database.

**pdf** Get the document in Portable Document Format (PDF) format.

**ascii** Get the document in ASCII format.

**postscript** Get the document in postscript format.

diff Get the difference between two old versions of the document. Use the -Vv1,v2

flag to specify the two versions.

If there is no conversion format of the document stored, then COMPAS tries to generate it. The text is sent to stdout unless redirected to the printer with the **-x** flag. Use the **-d***PRINTER* option to specify a printer. Use the **-V**<**VERSION**> flag, followed by a version number, to get an old version of a document, rather than the current version. **VERSION** can also be set to *draft* to get the Change Control Draft (Control Draft) version of the document when used with the **-g** flag. Place the one or more ID's (separated by white space) of the documents that are wanted, at the end of all other command line arguments.

### Example

```
compascl -dmyprinter -x -gdocument 1000 1001 1002
```

Prints the three documents on printer 'myprinter'.

```
compascl -gpdf 1000
```

Sends to stdout a pdf version of the document.

```
compascl -gascii -V3 1000
```

Sends to stdout the third version of the document after converting it to ascii.

### **Getting other things**

-g ITEM

All the items are sent to stdout. Use the **-i** flag to select from which COMPAS ID the item is returned. Any of the *ITEM* arguments may be abbreviated. Valid values for *ITEM* are:

### supplement

Returns the document supplement file. Use the -sSUPNUM option to specify which supplement file to return. The file is send to stdout unless redirected to the printer with the -x flag. Use the -dPRINTER option to specify a printer. Use -cCONVERT option to convert the supplement from original format to either ascii or pdf.

**history** Returns the document history file.

**review** Returns the review notice belonging to the document.

#### notification

You can give -i flag to get notification list of the document or give -l *User* to get all document ids that the User is in.

#### versiondates

Returns a list of all the document versions and their corresponding creation dates.

**projects** Returns one or more records corresponding to the projects for the given COMPAS ID. The format of each record is 'field^field^f...', where the fields are (in order) compas ID, desig (primary or secondary), system, release, subsys, index.

**clinks** (Child links) Returns a list of all the COMPAS ID's that are linked to the given COMPAS ID.

**plinks** (Parent links) Returns a list of all the COMPAS ID's that the given COMPAS ID are linked to.

### description

Returns an MR description file. The **-i** flag is not needed, but if provided, saves time. Use the **-s**MRNUM option to specify which MR's description file to return.

**mrhistory** Returns an MR history file. The **-i** flag is not needed, but if provided, saves time. Use the **-s**MRNUM option to specify which MR's history file to return.

**resolution** Returns an MR resolution file. The **-i** flag is not needed, but if provided, saves time. Use the **-s**MRNUM option to specify which MR's resolution file to return.

**revnotice** Returns a review notice. Use the **-s**RNUM option to specify which review notice to return. The notice is sent to stdout unless redirected to the printer with the **-x** flag. Use the **-d**PRINTER option to specify a printer. Use the **-c**CONVERT option to convert the notice from the original roff format to either ascii, pdf, or postscript.

#### revattendants

Returns a review 'required to attend' list. Use the **-s**RNUM option to specify which review to return. The list is sent to stdout. The list is formatted like the person required to attend, then '@', then the person they represent.

**revcopyto** Returns a review Copy-to list. Use the **-s**RNUM option to specify which review to return. The list is sent to stdout. The list has one name per line.

inspnotice Returns an inspection notice. Use the -sINUM option to specify which inspection notice to return. The notice is sent to stdout unless redirected to the printer with the -x flag. Use the -dPRINTER flag to specify a printer. Use the -cCONVERT flag to convert the notice from the original roff format to either ascii, pdf, or postscript.

#### inspsummary

Returns an inspection summary report. Use the -sINUM option to specify which inspection summary to return. The summary is sent to stdout unless redirected to the printer with the -x flag. Use the -dPRINTER flag to specify a printer. Use the -cCONVERT flag to convert the summary from the original roff format to either ascii, pdf, or postscript.

**faults** Returns the inspection fault list. Use the **-s***INUM* option to specify which inspection's faults to return. The list of faults are sent to stdout.

Page 3 July 11, 2002

### Example

```
compascl -c ascii -g inspnotice -i 1000 -s 1
```

Sends to stdout an ascii version of the inspection notice

#### Retrieve table attributes

**-t** *TABLE* Retrieve attributes to stdout from the table given by *TABLE*. Valid values for *TABLE* are **{entries, supplement, mr, review, inspdata, inspmeet}**. Select the attributes to retrieve with the where clause given by the **-q** or **-w** flags (see below). The format of the output is "field^field^field^...". In the descriptions below 'NOOP' means a field that is no longer used, or is unimportant to describe. The fields, in order, for the different tables are as follows:

entries

1 ID, 2 title, 3 author, 4 area, 5 type, 6 subtype, 7 owner, 8 creation date, 9 status, 10 status date, 11 size, 12 modified date, 13 issue, 14 version, 15 format type, 16 open MR count, 17 links (yes/no), 18 stored versions (yes/no), 19 document control (yes/no), 20 draft format type, 21 system, 22 release, 23 subsystem.

### supplement

1 ID, 2 supplement number, 3 title, 4 format, 5 suffix, 6 create-date, 7 update-date

mr

1 ID, 2 MR number, 3 NOOP, 4 comment, 5 Person assigned, 6 MR type, 7 category, 8 MR status, 9 severity, 10 originator, 11 origination date, 12 due date, 13 date status changed, 14 abstract, 15 version fixed.

review

1 ID, 2 Review number, 3 review size, 4 review faults, 5 number attended, 6 review leader, 7 presenter, 8 scribe, 9 review duration, 10 preparation time, 11 disposition, 12 review status, 13 number of meetings, 14 time1 (of first meeting), 15 date1, 16 place1, 17 time2 (of second meeting), 18 date2, 19 place2, 20 time3 (of third meeting), 21 date3, 22 place3, 23 teleconference number.

inspdata

1 ID, 2 inspection number, 3 NOOP, 4 comment, 5 size inspected, 6 number of participants, 7 number of meetings, 8 preparation time, 9 special preparation time, 10 inspection duration, 11 rework time, 12 last meeting date, 13 first meeting date, 14 inspection type, 15 inspection status, 16 High Severity Faults per Normalized Size, 17 preparation rate, 18 inspection rate, 19 pre-test, 20 disposition.

inspmeet

1 ID, 2 inspection number, 3 moderator, 4 reader, 5 recorder, 6-18 inspectors 1 through 13, 5 meetings (date, place, time).

#### Example

```
compascl -tentries -q'prodid="58700"' | cut -f2,3 -d^
```

Sends to stdout the values of title and author for COMPAS ID 58700

### Adding new entries

-a *ADD* Add the given type of information to **COMPAS**. Data to be added must come at the end of all the flags and is of the form **"field=value"** (e.g. "author=M. R. Hudson", detail below). Add faults by supplying the name of a file that contains the faults using the **-f** flag (see below). Allowable values for *ADD* are:

entry

Do not give an **ID** on the command line when adding a new entry, because it is generated by **COMPAS** and printed on stdout. The required **field** names when adding an **entry** are *title*, *author*, *type*, *system*, *release*, and *subsys*. Optional fields when adding an **entry** are *isize*, *area*, *vercntl*, *control*, *cdate*, *issue*, *subtype*, and *status*. If no value is given for 'vercntl' or 'control', the default value is 'no'. The default value for 'status' is 'draft'.

## supplement

When adding an Supplement, give an ID with the -i flag and the number of the supplement is generated and printed on stdout. Submit file with the -f flag. The required **field** name when adding a **Supplement** is *title* 

mr

When adding an MR, give an ID with the -i flag and the MR number is generated and printed on stdout. A description file may optionally be provided with the -f flag. A resolution file may optionally be provided with the -e flag. The only required **field** name when adding an MR is abs (abstract). Other optional **field** names that may be added to an **MR** are *mrtype* (default 'mod'), *category* (default 'other'), severity (default '3'), mrcmnt (comment), pa (default is doc owner), and orig (originator, you are the default).

review

When adding an **Review**, give an **ID** with the -i flag and the number of the review is generated and printed on stdout. A file with 'required to attend' participants must be provided with the -f flag. A file with Copy-to list may optionally be provided with the -e flag. The required field names when adding a Review are rleader (review leader), rpresenter (presenter), rscribe (scribe), rtime1, rdate1, rplace I (first meeting info). Other optional **field** names that may be added to a **Review** are rsize, rfaults, rnattnd (number attending review), rhrs (review time), rprephrs (preparation time), and rdisp (disposition), and rstatus, and rnmeet (number of meetings), rteleconf (teleconference number), rtime2, rdate2, rplace2 (second meeting info), and rtime3, rdate3, rplace3 (third meeting info).

inspection When adding an inspection, give an ID with the -i flag and the number of the inspection is generated and printed on stdout. The required field names when adding an inspection are neslinsp, nparticip, moderator, reader, recorder, inspector1, inspector2. Other optional field names that may be added are cmnt, nmeetings, preptime, spclprep, iduration, reworktime, pretest, disp, firstmdate, lastmdate, insptype, inspstatus, inspectorX (where X is 3 - 13), and dateY, placeY, timeY (where Y is 1 - 5).

faults

When adding **faults**, give an **ID** with the **-i** flag, give an inspection number with the -s flag, and the file containing the faults with the -f flag. The format of the file used to enter faults is as follows:

One fault per line in the file of the form: fault type@dim1 type@dim2 type@dim3 type

Where valid types are defined in the tailorable fault file.

link

When adding a link, give an ID with the -i flag. New links are added using the following syntax: "linkid=ID1", where ID1 is the COMPAS ID of the document to be linked to the given ID.

project

When adding a project as secondary, give an **ID** with the -i flag. New project is added using the following syntax: "system=SYSTEM release=RELEASE subsys=SUBSYS", where system, release, subsys are the project attributes to be linked to the given **ID**.

### Example

```
compascl -a entry "title=This is the Title" "author=I. M.
Author" "area=none" ...
```

Adds a new entry to COMPAS and prints the ID on stdout.

Page 5 July 11, 2002

## **Modifying entries**

mr

#### -m MODIFY

Modify the given type of information in **COMPAS**. Allowable values for *MODIFY* are **{entry, mr, review, inspection}**. The data to be modified must come at the end of all the flags and is of the form **"field=value"** (detail below).

**entry** When modifying an entry, an **ID** must be given on the command line with the **-i** flag. The **field** names that can be modified are *title*, *author*, *area*, *isize*, *type*, *subtype*, *owner*, *issue*, *vercntl*, *control*, *system*, *release*, *subsys*.

When modifying an MR, an MR number must be given with the -s flag. The -i flag is not needed, but if provided, saves time. The **field** names that can be modified are *mrstatus*, *mrtype*, *category*, *severity*, *orig*, *ddate*, *vernum*, *abs* (*abstract*), *mrcmnt* (*comment*), *and pa*. Optionally use the -e flag to replace the resolution file.

**review** When modifying a review, give an **ID** with the **-i** flag and a review number with the **-s** flag. All **field** names are allowed to be modified.

**inspection** When modifying an inspection, give an **ID** with the **-i** flag and an inspection number with the **-s** flag. The same **field** names are allowed to be modified as when adding an inspection.

#### Example

```
compascl -minspection -i58700 -s1 "reworktime=2.5" "preptime=2.0"
```

Modifies reworktime and preptime values of inspection number 1 COMPAS ID 58700

### Putting a document in to COMPAS

#### -p document

Put the given document into **COMPAS**. The argument *document* may be the name of the file the document is in, if it is in the current directory, or may be a full or relative path to the file. An ID of an existing entry must be provided (-i flag). Use the -P flag to give the pathname of a file that contains a postscript or PDF version of the document that will override the file **COMPAS** automatically generates. Use the -P flag to both put new documents and replace existing documents in **COMPAS**. Use the -C flag to suppress sending the automatic email notification of the new document.

If a document is controlled, it can only be replaced if it is in the status of 'draft' or 'rework'. If the controlled document is in status 'chg\_ctl', then use the -A flag to send the list of MR's that the updated text fixes. The MR list should have the format of MR numbers separated by commas.

If a document is controlled and in status  $chg\_ctl$ , then use the **-V** draft flag to put a Change Control Draft (Control Draft) version of the document into **COMPAS**. To make a Control Draft version of a document into the released version, use the **-p** draft below.

### **Putting other things**

**-p** *ITEM* Put the given item into **COMPAS**. Use the **-i** flag to provide the ID of an existing entry, and use the **-f** flag to provide the name of a file that contains data to be put into **COMPAS**. Valid values for *ITEM* are:

### supplement

Replaces the existing Supplement file with the given file. Use the -s flag to specify the supplement number. Use the -P flag to give the pathname of a file that

contains a postscript or PDF version of the file that will override the file **COM-PAS** automatically generates. Use the **-C** flag to suppress sending the automatic email notification of the new document.

### description

Replaces the existing MR description file with the given file. Use the **-s** flag to specify the MR number.

**resolution** Replaces the existing MR resolution file with the given file. Use the **-s** flag to specify the MR number.

**annotation** Adds the annotation given in the file to the existing MR description. Use the **-s** flag to specify the MR number.

**attendants** Replaces the existing review 'required to attend' list with the given file. Use the **-s** flag to specify the review number.

**copyto** Replaces the existing review Copy-to list with the given file. Use the **-s** flag to specify the review number.

**revinfo** Replaces the existing review info file with the given file. Use the **-s** flag to specify the review number.

#### notification

Replaces the existing document notification list with the one in the given file.

draft
Makes the existing Control Draft version into the current release version. Use the
-A flag to send the list of MR's that the updated text fixes. The MR list should have the format of MR numbers separated by commas.

### Example

```
compascl -p/home/mydoc -P/home/mydoc.ps -i1000
```

Puts new document source and postscript for COMPAS ID 1000

```
compascl -p/home/mydoc -Vdraft -i1000
```

Puts new document in as Control Draft version of ID 1000

```
compascl -pdraft -A"1001,1002" -i1000
```

Puts Control Draft version as the released version of ID 1000 and associates MR numbers 1001, 1002 with the new version.

```
compascl -pnotification -fnotiflist -i58700
```

Puts a new notification list for COMPAS ID 58700

### **COMPAS** reports

#### -r REPORT

Make the kind of report given by the argument *REPORT*. Available *REPORT*s are {dstatus, istatus, mrstatus, mrdetail, rstatus, summary, detail, comparison, tailored}. All output for the reports is sent to stdout, unless directed to the printer with the -x flag. Select data for the reports with the where clause given by the -q flag.

The **dstatus** (document), **rstatus** (review), **mrstatus** (MR) and **istatus** (inspection) status reports are preformatted ascii that can be printed without further processing.

Page 7 July 11, 2002

The **mrdetail**, **summary** and **detail** reports are roff format reports that contain grap, tbl, and troff macros. Use the **-c** flag to the convert the report to a different format. Valid conversion formats are *none*, *postscript*, *pdf*, and *ascii*.

There are two ways to generate comparison reports. Use the '-r comparison' option to make a comparison report with only one row of data. To generate a comparison report with multiple rows of data first use the '-r comparison\_header' option, then one or more calls with the '-r comparison\_row' option, and finally a call with the '-r comparison\_end' option. See the example below. Use the -A flag to provide the name of the row of data.

The **tailored** statistical report is similar to the **summary** and **detail** reports because it is roff format containing grap, tbl, and troff macros. The plots and axis values are specified using the '-A REPORT\_SPEC' option: where REPORT\_SPEC is

If PLOT\_TYPE is 'table' or 'faultdist', then XAXIS and YAXIS are not used. If PLOT\_TYPE is 'histogram', then only XAXIS is used. If PLOT\_TYPE is 'scatter' or 'lowess', then XAXIS and YAXIS are both used. When more than one plot is specified, the plots are arranged four-plots-per-page and from left to right and top to bottom.

#### Example

```
compascl -rcomparison_header -Aone -q'system="thisSys" ...' > report
compascl -rcomparison_row -Atwo -q'system="thatSys" ...' >> report
compascl -rcomparison_row -Athree -q'system="otherSys" ...' >> report
compascl -rcomparison_end >> report
```

Generates an inspection comparison statistical report with several rows of data and put it in the file 'report'.

```
compascl -rtailored -q'system="thisSys" ...'
    -A'table; histogram ncslinsp; scatter insprate HSF/knscl'
```

Generates a tailored inspection statistical report with three different plots.

#### Removing items

**-R** Use the '**-R** *REMOVE*' option to remove things from **COMPAS**. Valid values for *REMOVE* are:

**entry** Remove the COMPAS ID given by the **-i** flag and all associated files, MR's, reviews, or inspections.

### supplement

Remove the supplement number N, given with the '-s N' option, from the ID given with the -i flag.

**version** Remove the N version, given with the '- $\mathbf{V}$  N' option, of the document given with

the **-i** flag.

inspection Remove the inspection number N and associated faults, given with the '-s N'

option, from the ID given with the -i flag.

**review** Remove the review number N and associated files, given with the '-s N' option,

from the ID given with the -i flag.

**MR** Remove the MR number N and associated files, given with the '-s N' option. The

-i flag is not needed, but if provided, saves time.

**project** Remove the secondary project number N, given with the '-s N' option, from the ID

given with the -i flag. Use the '-s \*' option to remove all secondary projects.

link Remove the link between the document ID given with the -i flag and the other ID

OID given in the argument "linkid=OID".

draft Remove the Change Control Draft (Control Draft) version of the document ID

given with the -i flag.

### Example

```
compascl -R link -i1000 "linkid=1001"
```

Removes the link between ID 1000 and 1001.

#### Adding to notification list

## -l {addme, delme}

To either add or delete yourself to/from the notification list of one of more documents, list the COMPAS ID's of the documents after the **-l** option.

## Example

```
compascl -1 addme 1000 1001
```

Adds my login id to the notification lists of documents 1000 and 1001.

### User information

**-U** *login* Use this option to see the information **COMPAS** has about a particular login. Zero or more records containing information about the given login are returned in the following format:

login^handle^email address^name^phone number

Because login ids are not always unique, there are cases where a login id returns multiple records.

## Quiet

-quiet ... Use this flag with any other option to suppress printing of status messages to stdout.

### Querying

#### -q WHERECLAUSE

*COMPAS* has a limited-capability where clause with SQL-like syntax and a subset of the features of an SQL where clause. The syntax is:

whereclause:expression

Page 9 July 11, 2002

```
[(] expression "or" expr_prim [)]
        expr_prim: fieldname OPERATOR value
        value:
                     STRING
                      DATE
                      NUMBER
        fieldname: a valid compas FIELDNAME
                     "=" | "!=" | ">" | ">=" | "<" | "<="
        OPERATOR:
                     any series of characters surrounded by double quotes
        STRING:
        DATE:
                     a date of the form
                     dd-mmm-yyyy (15-jan-1998)
                     | "today"
        NUMBER:
                     a valid integer or real
               number (exponential notation excluded)
                     prodid|system|release|subsys|title|author|area|type|subtype
        FIELDNAME:
                      |owner|cdate|status|sdate|isize|modified|issue|vercntl
                      links|control|mrcount|mr|mrcmnt|pa|orig|vernum
                      category|mrstatus|severity|odate|ddate|chdate
                      abs cmnt nparticip ncslinsp nmeetings preptime
                      spclprep|iduration|reworktime|lastmdate|firstmdate
                      insptype|flts_kncsl|preprate|insprate|pretest|disp
                      |moderator|reader|recorder|inspector1|inspector2
Example
                                                    status="complete"
    compascl
                     -q'system="tools"
                                             and
                                                                          and
              . . .
    preprate>=150 and preprate<=200'
    A query where system is "tools", status is "complete" and preparation rate is in the range of 150 to
    200
-w WORDS Use this option to do a full text search of any word or words in the stored documents. The syn-
        tax is:
        words:
```

### Word search

```
expression
                  [(] expr_prim [)]
expression:
                  [(] expression "and" expr_prim [)]
                  [(] expression "or" expr_prim [)]
                  proximity_expr | word
expr_prim:
proximity_expr:
                  word ( words_apart ) word
words apart:
                  integer followed by "w"
                  (e.g. 0w, meaning zero words apart)
word:
                  any word found in a document
```

Page 10 July 11, 2002

# Example

```
compascl ... -w'(system (0w) test) and integration or (code (0w) inspection)'
```

A search on documents containing either the phrase "system test" and the word "integration", or the phrase "code inspection".

## **Printing**

## -x -dPRINTER -1

Send output to the printer, instead of stdout. Two-sided output is the default, but can be overridden with the **-1** flag. Use the **-d** *PRINTER* option to tell which printer the output will go.

#### **DIAGNOSTICS:**

**COMPAS** returns a 0 to the shell if everything worked correctly and returns a 1 if an error occurred.

**BUGS:** 

Page 11 July 11, 2002