

CLI Procedures

This page documents procedure-type commands in the command line interface (CLI). Procedure-type commands are ones that begin with the command name and then have arguments. For example:

->dsp campnet

If you are looking for documentation for the more numerous function-type commands, go here:

- [CLI function documentation](#)

CD Change folder	Description. Change default folder (and/or drive). Determines where UCINET will look for data and where data will be saved. Syntax: cd <drive:\folder> Usage ->cd \ucinet\data ->cd a:
Clip	Description. Copies the contents of a dataset to the Windows clipboard. If the dataset contains multiple matrices, all of the matrices are included. Syntax: clip <dataset> Usage: ->clip "centrality scores" //quotes needed if filename contains a space Note that the Clip command automatically recodes spaces in row and column labels to underscores. For example, if one of your columns had been "EI Index", it would be changed to "EI_Index". If you don't like this behavior, use the menu system's File Clip command instead.
Decimals	Description. A setting that determines how many decimal places will be displayed when displaying matrices. If you set decimals to a negative number (recommended), UCINET will display matrices containing integer values without decimal places, but display matrices containing real values with the specified number of decimal places.

	Syntax ->dec <integer> Usage ->dec 3 ->dsp campnet // 1s and 0s will appear as 1.000 and 0.000 ->dec -3 ->dsp campnet //1s and 0s will appear as 1 and 0
Delete	Description. Deletes files given in list. Syntax: delete <file1>,<file2>,... Usage ->delete zache, zachc
Display	Description. Displays all cells of <dataset> to the screen. Optionally, you can control the number of decimal places, width of columns and the scale of numbers. Syntax: dsp <mat> [decimals:<int>] [width:<int>] [scale:<real>] [na:<string>] [zeros:<string>] Usage ->dsp padgnet //displays padgnet dataset with 1s and 0s ->dsp padgnet z: //displays padgnet with 0s shown as blanks ->dsp ginv(transp(davis)) ->c = corr(centrality(campnet)) ->dsp c d:0 s:100 //multiplies all correlations by 100 and displays w/out decimals
Draw	Description. Launches UCINET's built-in Draw facility and loads the specified file(s). Optionally, you can include an attribute file Syntax: draw <network> [<attributes>] Usage ->draw campnet campattr Note: if you wanted to run NetDraw instead of UCINET's built-in draw capability, type this instead: ->netdraw campnet campattr

Edit	Description. Launches the spreadsheet editor and loads <file>. Syntax: edit<file> Usage ->edit campnet
Eigen	Description. Compute eigenvectors and eigenvalues of a square matrix. Matrix need not be symmetric and left or right eigenvectors can be chosen for symmetric data but both are computed for non-symmetric matrices. The default is to normalize to sum of squares = 1, but the user has a choice. The euc option (the default) forces the euclidean norm of each eigenvector to 1. The eigen option forces the euclidean norm to equal the absolute value of the corresponding eigenvalue, and the max option divides all scores by the largest. The num option (the default) causes the majority of scores to be positive. The corr option causes the biggest scores to be positive. For symmetric matrices Syntax: eigen(<matrix> [norm:euc eigen max] [pos:num corr]) Usage Eigen padgm ->dsp padgm-eig //display eigenvalues ->dsp padgm-vec //display eigenvectors For non-symmetric matrices Syntax: eigen(<matrix> [norm:euc eigen max] [pos:num corr]) Usage ->Eigen campnet ->dsp campnet-eig //display eigenvalues real and imaginary parts with a third column indicating a complex value with 1 for complex and 0 for real ->dsp campnet-rvec //display real part of right eigenvectors ->dsp campnet-rveci //display imaginary part of right eigenvectors ->dsp campnet-cvec //display real part of left eigenvectors ->dsp campnet-cveci //display imaginary part of left eigenvectors
Excel	Description. Opens a UCINET dataset in Excel (assumes you have Excel installed on your computer).

	Usage ->excel campnet
Font	Description. Set the font for all CLI output. Usage ->font courier ->font consolas Note: you probably do not want to set the font to a proportional-spacing type of font such as calibri, because the columns of matrices won't line up.
Fontsize	Description. Choose the font size. Syntax: fontsize = <integer> Usage ->fontsize = 14
ForFiles	Description. Run the same analysis on multiple files. ■ Lets you repeat a command for a series of files that are similarly named, as in "samplk1", "samplk2", "samplk3" ■ Syntax is ->forfiles <filemask> <command with "\$\$" used to stand in for file name> ■ For example, if you have unpacked the 'sampson' dataset so that you have a bunch of files on disk with names like "samplk1", "samplk2", and "samplk3" and want to compute and store the average value of each row for each matrix, you could type: ->forfiles samp* \$\$-avg = wavg(\$\$ row) this will create a series of new files named "samplk1-avg", "samplk2-avg", "samplk3-avg", etc. ■ Use * as a wildcard for one or more letters. Use ? for a single letter. For example, if you have files called samplk1, samplk2 and samplkcombined, using samplk* will find samplk1 and samplk2, but also samplkcombined. In contrast using samplk? will only find samplk1 and samplk2 ■ If you are using UCINET 6.578 or later, you can combine forfiles with the Run command to execute a script for each file. For example, we could create a text file called doit.txt containing these commands:

	<pre>->h = holes(\$\$) ->c = centrality(\$\$) ->dsp corr(h c)</pre> and then execute the script for all files that begin with "samplk": <pre>->forfiles samplk* doit.txt \$\$</pre> and it will execute doit.txt for samplk1, samplk2 and samplk3
NetDraw	Description. Launches NetDraw and loads the specified file(s). Optionally, you can include an attribute file Syntax: netdraw <network> [<attributes>] Usage <pre>->netdraw campnet campattr</pre>
Notepad	Description. Starts notepad and loads a text file. Syntax: notepad <text file> Usage <pre>->np mycommands.txt</pre>
Pajek	Description. Exports a UCINET to Pajek format. Syntax: Pajek <network> [<coordinates>]. Usage. <pre>->pajek campnet // creates a text file called campnet.net</pre>
RecordCLI	Description. Turns on a log that records all of your CLI commands so that you can retrace your steps later Syntax: recordcli = <true false> Usage

	->recordcli = true
Run	Description. Executes CLI commands stored in a text file Syntax: run <filename> Usage ->run myscript.txt Notes: You can use a single parameter, as in ->run myscript.txt campnet This assumes that the myscript.txt file contains && where you want 'campnet' to be.
QAP	Description. Runs QAP on all possible pairs of matrices entered using 10,000 permutations. Syntax: QAP <mat1> <mat2> [Parallel] [nperm:<integer>] Usage ->QAP RDGAM RDPOS RDNEG RDCON ->psqr = prod(pv960 pv960) >qap pv960 psqr nperm:1000 //smaller # of permutations for speed All matrices must be square and the same size. The correlations are output to the window only, no dataset is created. See also RQAP
Quit	Description. Close the CLI window. Syntax: quit or exit or close Usage ->exit
RecordCLI	Description. A boolean setting. When True, all commands typed in the CLI (and any textual outputs) are saved in the Ucinet Data subdirectory of the user's Documents folder Usage

	->recordcli = true
RectQAP	Description. Performs a QAP correlation on rectangular matrices with a default of 10,000 permutations. Note this can run as a procedure or a function. syntax rectqap <dataset1> <dataset2> [perm:<integer>] Usage ->rectqap davis davis2 davis3 davis4 perm:20000
REIGEN	Description. Calculates right eigenvectors and associated eigenvalues for symmetric and non-symmetric matrices. Note: fails if matrix has repeated eigenvalues or if eigenvalues are complex (i.e., contain imaginary parts). Outputs eigenvector as dataset V. Outputs eigenvalue to output log. (For square matrices only.) Syntax: reigen <mat1> Usage ->reigen campnet
REIGENQR	Description. Calculates eigenvalues of symmetric and non-symmetric matrices, including those requiring imaginary numbers. Outputs eigenvectors into dataset V and eigenvalues into dataset E. (For square matrices only.) Syntax: reigenqr <mat1> Usage ->reigenrq UnicornLineage
Regress	Description. Runs OLS regression on a set of column variables. If the keyword “yperm” is specified, it additionally runs a permutation test to obtain p-values. Syntax: Regress <yvar> <xvar1> [<xvar2>] ... [yperm] [1-tail 2-tail] Usage ->regress overallperformance degree(feeling), yperm
Rename	Description. Renames files.

	Syntax: rename <oldname> <newname> Usage ->Rename campnet campweek3
RQAP	Description. Runs QAP correlation between two matrices, but restricts permutations within groups. Syntax: RQAP <matrix1> <matrix2> <groupvector> Usage: ->rqap week2 week3 gender //runs permutations only within gender
Savetext	Description. Export to tab-delimited text files with no labels. Syntax: savetext <filename> Usage ->savetext campnet
SaveToCSV	Description. Export a ucinet dataset to a text file in CSV format. Datasets without row/column labels are automatically provided with labels (e.g., 'A1'). Also, spaces within labels are replaced with underscores. Syntax: SaveToCSV <ucinet dataset> [<filename.csv>]. If no output file name is provided, the program uses the dataset name together with a .csv extension. Usage: ->savetocsv campnet //creates file campnet.csv
Singular value decomposition	Description. Performs an SVD. The program requires $m \geq n$. Syntax: svd <amat> <umat> <dmat> <vtmat>, where <amat> is an m-by-n data matrix of rank r, <umat> will be an m-by-r output matrix, <dmat> will be a diagonal r-by-r output matrix, and <vtmat> will be an n-by-r output matrix. Usage The <umat> and <vtmat> matrices are often referred to as "row scores" and "column

	scores" respectively. The <dmatrix> matrix contains singular values down the main diagonal and zeros elsewhere. svd inmat [umat [dmatrix [vmatrix]]] Parameters in the brackets may be excluded. If you do not specify the names for the output matrices, they will default to u, d, and v, respectively. For example: svd davis RScores will create a matrix named RScores to store the row scores, another named V to store the column scores, and another named D to store the singular values along the diagonal. The singular value decomposition of a square, symmetric matrix gives row and column scores equal to the eigenvectors of the matrix, and the singular values are their eigenvalues. The SVD of any matrix X gives row scores equal to the eigenvectors of XX' and column scores equal to the eigenvectors of $X'X$. The singular values of X are the square of the eigenvalues of both XX' and $X'X$.
Subgraph	Description. Construct multiple subgraphs from all classes of a partition. Syntax: subgraph <network> <partition> Where network is a 1-mode matrix and partition is a column vector Usage: <pre>->gender = col(campattr 1) ->subgraph campnet gender</pre> The above command creates campnet-1 and campnet-2, where campnet-1 is the network of ties among women (gender=1) and campnet-2 is the network of ties among men (gender=2)
Tab	Description. Crosstabulate two datasets. Could be two matrices, or two vectors. Syntax. Tab <rowdataset> <coldataset> Usage: <pre>->tab padgm padgb</pre>
Unpack	Description. Extra each matrix in a multi-matrix dataset and make each one a separate file. You can specify a common prefix for all of the output files. Syntax. Unpack <dataset> [prefix:<string>]

	Usage: ->unpack krack-high-tec //creates datasets 'advice', 'friendship' and 'reports_to' ->unpack krack-high-tec pre:k- //creates k-advice, k-friendship, and k-reports_to
Width	Description. An integer setting that determines the width of columns when displaying matrices. Setting Width to 0 causes the program to automatically determine the width based on the size of numbers to be displayed Usage ->width = 0