Adolists: A New Concept for Stata

Ben Jann, ETH Zürich, jann@soz.gess.ethz.ch

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Motivation

I wanted a tool to

1) create a list of installed user ados, switch systems (or upgrade Stata) and easily install the ados on the new system (possibly after editing the list),

2) create topical lists of user ados that can be shared and easily installed and uninstalled.

Such lists could also be used to bring structure into the SSC Archive and other download sites.

Examples:

- 41 User Ados Everyone Should Know
- The Collected Works of Nicholas J. Cox, A–H
- lists on data management, graphics, time-series analysis, income inequality, etc., etc.
New command

- New command called *adolist* to manage (create, install, update, uninstall) lists of ado packages.

- The command uses meta data only (package names, URLs, etc.). The actual contents of the packages is not included in the package lists.

- Heavy use of Mata is made. Therefore, Stata 9 or newer is required.

- Writing this command was not trivial. *adolist* has to go deep into the system and, e.g., parse Stata's user ado track file.

Syntax

Describe a package list

```
adolist describe pk1 [, from(path) ]
```

Install a package list

```
adolist install pk1 [, from(path) replace ... ]
```

Update an installed package list

```
adolist update pk1 [, ... ]
```

Uninstall a package list

```
adolist uninstall pk1 [, ... ]
```

List installed package lists

```
adolist [dir] [, ... ]
```
Syntax (continued)

create a package list

adolist store pk1 [, store_options ]
adolist store [packages] using pk1 [, store_options ]
adolist list [packages] [, store_options ]

store_options description

help produce a help file
title(str) set the title
description(str) include a description
author(str) identify package list author
nosort do not sort the package list
replace overwrite existing files
...
...

Example

Package list containing programs for the decomposition of wage differentials. The list is called wagegap and is located at net/0 (could also be an URL).

Describe the package list:

    adolist describe wagegap, from(net/0) <run>

Install the packages in the list:

    adolist install wagegap, from(net/0) <run>

See what's installed:

    adolist dir <run>
package list wagegap from D:\Home\jannb\Projekte\Stata\tools\adolist\London07\tal

TITLE
Wage gap decomposition packages

DESCRIPTION
This package list comprises ado packages used for the decomposition of wage or income differentials and related problems.

Assembled by: Ben Jann, ETH Zurich, jann@soz.gess.ethz.ch

SOURCE FILE(S)
  wagegap.pk1
  wagegap.hlp

PACKAGES
--- Decomposition of outcome differential ---
oaxaca   module to compute the Blinder-Oaxaca decomposition
decomp   alternate module to compute the Blinder-Oaxaca decomposition

--- Difference-in-difference decomposition ---
jmpierce2 module to compute trend decomposition of outcome differentials
smithwelch alternate module to compute trend decomposition of outcome differentials

(type -adolist install "D:\Home\jannb\Projekte\Stata\tools\adolist\London07\tal"

.

. adolist install wagegap, from(net/0)
  checking oaxaca consistency and verifying not already installed...
  installing into .\ado\plus/...
  installation complete.
  checking decomp consistency and verifying not already installed...
  installing into .\ado\plus/...
  installation complete.
  checking jmpierce2 consistency and verifying not already installed...
  installing into .\ado\plus/...
  installation complete.
  checking smithwelch consistency and verifying not already installed...
  installing into .\ado\plus/...
  installation complete.
.
end of do-file
.
do_example do/3.1hlp, nor
.
  adolist dir

PACKAGE LISTS installed on your system:
wagegap    Wage gap decomposition packages

(type -adolist describe pk?name- for more information on pk?name)
Example (continued)

Add another package list called `blinderoxaca`:

```
ado list describe blinderoxaca, from(net/0) <run>
ado list install blinderoxaca, from(net/0)
ado list <run>
```

Uninstall a list:

```
ado list uninstall wagegap <run>
```

`ado list` is smart and only removes packages that are not part of other installed package lists and that have not been on the system before installing the package list.

Updating is possible too (`ado list update;` download newest versions, add new packages, remove discontinued packaged).
Creating a package list from installed packages.

First check what's around:

```
ado list
```

Store the package list to a file and also produce a help file:

```
ado list using mystuff, help replace
```

Add other packages, etc.:

```
ado store
    oaxaca.decomp "gdecomp SSC <title>" ///
    using mystuff, ///
    help replace nosort ///
    author(Ben Jann) ///
    title(A bunch of ados)
```

Example (continued)
(package uninstalled)

. end of do-file
. do_example do/7.hlp, nor
   adolist list
*! Stata package list 12sep2007

decom pkg "D:\Home\jannb\Projekte\Stata\tools\adolist\London07\talk\net\d" "modi
oaxaca.pkg "D:\Home\jannb\Projekte\Stata\tools\adolist\London07\talk\net\o" "modi

. end of do-file
. do_example do/8.hlp, nor
   adolist store using mystuff, help replace
   (mystuff.pkg created; containing 2 packages)
   (mystuff.hlp created)

. end of do-file


help mystuff  also see: adolist

Title

mystuff — Package list

Packages

decom   module to compute decompositions of earnings gaps
oaxaca   module to compute decompositions of outcome
differentials

Package list source file

   mystuff.pkg

Also see

   Online:  ado, adoupdate, ssc, sj, stb; adolist (if installed)
help mystuff

Title

mystuff — A bunch of ados

Packages

oaxaca module to compute decompositions of outcome differentials
decomp module to compute decompositions of earnings gaps<title>
gdecomp

Package list source file

mystuff.pkl

Assembled by

Ben Jann

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New feature: adolist ssc

adolist interacts with the Statistical Software Components (SSC) archive in Boston.

List available package lists at SSC:

adolist ssc <run>

Describe a package list at SSC:

adolist ssc wagegap <run>

Install a package list from SSC:

adolist ssc wagegap, install <run>
> title(A bunch of ados)
> (mystuff.pkg) created; containing 3 packages
> (mystuff.hlp) created
>
> end of do-file
> do_example do/10.hlp, nor
> . adolist ssc

http://fmwww.bc.edu/repec/bocode/O/
Ado package lists

PACKAGE LISTS you could describe:
 . wagegap      Wage gap decomposition packages

DIRECTORIES you could -net cd- to:
  ../

(type -adolist ssc pkiname- for more information on pkiname)
.
end of do-file
.

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SOURCE FILE(S)
 . wagegap.pkg
 . wagegap.hlp

PACKAGES

--- Decomposition of wage differentials ---
 oaxaca      module to compute Blinder-Oaxaca decomposition
 decompose   module to compute Blinder-Oaxaca decomposition

--- Difference-in-difference decomposition ---
 jmpierce2   module to compute trend decomposition of wage differentials
 smithwelch  alternate module to compute trend decomposition of wage dif

--- Generalizations ---
 gdecomp     module to compute non-linear Blinder-Oaxaca decomposition
 fairlfe     module to compute Fairlfe decomposition for binary outcomes
 jmpierce    module to compute decomposition of differences in various s
 df1         module to compute DiNardo/fortin/Lemieux counterfactual den

--- Related packages ---
 devcon      module to apply the deviation contrast transform
 margeff     module required by gdecomp

(type -adolist ssc wagegap, install- to install)
Summary

- **adolist** makes it easy to handle package lists, I believe.
- My hope is that people will pick it up and create lists and post them on SSC. This would tidy up the archive a bit.
- What are your favorite user ados?

If you want to contribute and compile a package list, send the list to Kit Baum, who will be happy to make it available in the SSC archive. Don’t hesitate to contact me if you need assistance.

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Thank you for listening!

**PS:** I should not have held this talk because providing such functionality would really be Stata Corp’s business.

This stuff is too low in the system to be done by me. My suggestion would be to renew and generalize the existing -net- technology. For example, it would be useful to be able to include references to other packages (dependencies) in package definitions.