Adolists: A New Concept for Stata

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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
no sort 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.

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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

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

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.ihp, 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 \texttt{blinderoaxaca}:

\begin{verbatim}
adolist describe blinderoaxaca, from(net/0) <run>
adolist install blinderoaxaca, from(net/0) adolist <run>
\end{verbatim}

Uninstall a list:

\begin{verbatim}
adolist uninstall wagegap <run>
\end{verbatim}

\texttt{adolist} 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 (\texttt{adolist update}; download newest versions, add new packages, remove discontinued packaged).

\begin{verbatim}
blinderoaxaca.hlp

PACKAGES
oaxaca module to compute the Blinder-Oaxaca decomposition
decomp alternate module to compute the Blinder-Oaxaca decomposition

(type -adolist install "D:\Home\jannb\Projekte\Stata\tools\adolist\London07\talk"
 . end of do-file
 . do_example do/5.hlp, nor
 .
adolist install blinderoaxaca, from(net/0)
 checking oaxaca consistency and verifying not already installed...
 all files already exist and are up to date.
 checking decomp consistency and verifying not already installed...
 all files already exist and are up to date.
 .
 .

PACKAGE LISTS installed on your system:
blinderoaxaca Blinder-Oaxaca decomposition packages
wagegap Wage gap decomposition packages

(type -adolist describe pk\texttt{name}- for more information on pk\texttt{name})
\end{verbatim}
Example (continued)

Creating a package list from installed packages.

First check what's around:

```
adolist list
<run>
```

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

```
adolist store using mystuff, help replace
<run>
```

Add other packages, etc.:

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

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

decomp.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
    adoist 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
doaxaca module to compute decompositions of outcome
differentials

Package list source file

    mystuff.pkg

Also see

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

mystuff — A bunch of ados

Packages

- oaxaca module to compute decompositions of outcome differentials
- decomp module to compute decompositions of earnings gaps
- 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
.
\ado\list\ ssc

http://fmwww.bc.edu/repec/bocode/0/
Ado package lists

PACKAGE LISTS you could describe:
  wagegap     wage gap decomposition packages

DIRECTORIES you could \texttt{-net cd-} to:
  ./

(type \texttt{-ado\ list\ ssc\ pkgname} for more information on \texttt{pkgname})
.
end of do-file
.

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SOURCE FILE(S)
  wagegap.pk1
  wagegap.hlp

PACKAGES
  --- Decomposition of wage differentials ---
    oaxaca module to compute Blinder-Oaxaca decomposition
decomp alternate module to compute Blinder-Oaxaca decomposition
decompose antecessor of oaxaca

  --- 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
fairlie module to compute Fairlie decomposition for binary outcomes
jmpierce module to compute decomposition of differences in various s
dff module to compute DiNardo/Fortin/Lemieux counterfactual den

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

(type \texttt{-ado\ list\ 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.

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.