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

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

Install a package list

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

Update an installed package list

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

Uninstall a package list

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

List installed package lists

```stata
 adolist [dir] [, ... ]
```
create a package list

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

<table>
<thead>
<tr>
<th>store_options</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>help</td>
<td>produce a help file</td>
</tr>
<tr>
<td>title(str)</td>
<td>set the title</td>
</tr>
<tr>
<td>description(str)</td>
<td>include a description</td>
</tr>
<tr>
<td>author(str)</td>
<td>identify package list author</td>
</tr>
<tr>
<td>nosort</td>
<td>do not sort the package list</td>
</tr>
<tr>
<td>replace</td>
<td>overwrite existing files</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

---

**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 differenti
smithwelch alternate module to compute trend decomposition of outcome

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

D:\more\jannb\research\lit\Stata\add\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.hlp, nor
.
adolist dir

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

(type -adolist describe pk7name- for more information on pk7name)
Example (continued)

Add another package list called `blinderoxaxac`:

```bash
adolist describe blinderoxaxa, from(net/0)
<run>
adolist install blinderoxaxa, from(net/0)
adolist
<run>
```

Uninstall a list:

```bash
adolist uninstall wagegap
<run>
```

`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 (`adolist update`; download newest versions, add new packages, remove discontinued packaged).

```
blinderoxaxa.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 blinderoxaxa, 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.
adolist

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

(type -adolist describe pk?name- for more information on pk?name)```
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 uninstalled)

end of do-file

.do_example do/7.hlp, nor

adolist 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

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

decomp 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  also see: adolist

Title

mystuff — A bunch of ados

Packages

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

Package list source file

mystuff.pkl

Assembled by

Ben Jann

glog sc

---

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/0/
Ado package lists

PACKAGE LISTS you could describe:
  wagegap       wage gap decomposition packages

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

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

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

SOURCE FILE(S)
  wagegap.pkg
  wagegap.hlp

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

  --- Difference-in-difference decomposition ---
    jimpierce2   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
    jimpierce    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.

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.