

**import** — Overview of importing data into Stata[Description](#)[Remarks and examples](#)[Reference](#)[Also see](#)

## Description

This entry provides a quick reference for determining which method to use for reading non-Stata data into memory. See [\[U\] 21 Entering and importing data](#) for more details.

## Remarks and examples

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Remarks are presented under the following headings:

*Summary of the different methods**import excel**import delimited**odbc**infile (free format)—infile without a dictionary**infile (fixed format)**infile (fixed format)—infile with a dictionary**import sasxport**import fred**import haver (Windows only)**import dbase**spsshape2dta**Examples**Video example*

## Summary of the different methods

### **import excel**

- `import excel` reads worksheets from Microsoft Excel (.xls and .xlsx) files.
- Entire worksheets can be read, or custom cell ranges can be read.
- See [\[D\] import excel](#).

### **import delimited**

- `import delimited` reads text-delimited files.
- The data can be tab-separated or comma-separated. A custom delimiter may also be specified.
- An observation must be on only one line.
- The first line in the file can optionally contain the names of the variables.
- See [\[D\] import delimited](#).

### **odbc**

- ODBC, an acronym for Open DataBase Connectivity, is a standard for exchanging data between programs. Stata supports the ODBC standard for importing data via the `odbc` command and can read from any ODBC data source on your computer.
- See [\[D\] odbc](#).

### **infile (free format)—infile without a dictionary**

- The data can be space-separated, tab-separated, or comma-separated.
- Strings with embedded spaces or commas must be enclosed in quotes (even if tab- or comma-separated).
- An observation can be on more than one line, or there can even be multiple observations per line.
- See [\[D\] infile \(free format\)](#).

### **infix (fixed format)**

- The data must be in fixed-column format.
- An observation can be on more than one line.
- `infix` has simpler syntax than `infile` (fixed format).
- See [\[D\] infix \(fixed format\)](#).

### **infile (fixed format)—infile with a dictionary**

- The data may be in fixed-column format.
- An observation can be on more than one line.
- ASCII or EBCDIC data can be read.
- `infile` (fixed format) has the most capabilities for reading data.
- See [\[D\] infile \(fixed format\)](#).

### **import sasxport**

- `import sasxport` reads SAS XPORT Transport format files.
- `import sasxport` will also read value label information from a `formats.xpf` XPORT file, if available.
- See [\[D\] import sasxport](#).

### **import fred**

- `import fred` reads Federal Reserve Economic Data.
- To use `import fred`, you must have a valid API key obtained from the St. Louis Federal Reserve.
- See [\[D\] import fred](#).

**import haver (Windows only)**

- `import haver` reads Haver Analytics (<http://www.haver.com/>) database files.
- See [D] [import haver](#).

**import dbase**

- `import dbase` reads a version III or version IV dBase (.dbf) file.
- See [D] [import dbase](#).

**spshape2dta**

- `spshape2dta` translates the .dbf and .shp files of a shapefile into two Stata datasets.
- See [SP] [spshape2dta](#).

**Examples**

## ▷ Example 1: Tab-separated data

```

----- begin example1.raw -----
1      0      1      John Smith      m
0      0      1      Paul Lin        m
0      1      0      Jan Doe f
0      0      .      Julie McDonald f
----- end example1.raw -----

```

contains tab-separated data. The `type` command with the `showtabs` option shows the tabs:

```

. type example1.raw, showtabs
1<T>0<T>1<T>John Smith<T>m
0<T>0<T>1<T>Paul Lin<T>m
0<T>1<T>0<T>Jan Doe<T>f
0<T>0<T>.<T>Julie McDonald<T>f

```

It could be read in by

```
. import delimited a b c name gender using example1
```



## ▷ Example 2: Comma-separated data

```

----- begin example2.raw -----
a,b,c,name,gender
1,0,1,John Smith,m
0,0,1,Paul Lin,m
0,1,0,Jan Doe,f
0,0,,Julie McDonald,f
----- end example2.raw -----

```

could be read in by

```
. import delimited using example2
```



### ▷ Example 3: Tab-separated data with double-quoted strings

```
-----begin example3.raw-----
1      0      1      "John Smith"    m
0      0      1      "Paul Lin"      m
0      1      0      "Jan Doe"      f
0      0      .      "Julie McDonald"  f
-----end example3.raw-----
```

contains tab-separated data with strings in double quotes.

```
. type example3.raw, showtabs
1<T>0<T>1<T>"John Smith"<T>m
0<T>0<T>1<T>"Paul Lin"<T>m
0<T>1<T>0<T>"Jan Doe"<T>f
0<T>0<T>.<T>"Julie McDonald"<T>f
```

It could be read in by

```
. infile byte (a b c) str15 name str1 gender using example3
```

or

```
. import delimited a b c name gender using example3
```

or

```
. infile using dict3
```

where the dictionary dict3.dct contains

```
-----begin dict3.dct-----
infile dictionary using example3 {
    byte    a
    byte    b
    byte    c
    str15   name
    str1    gender
}
-----end dict3.dct-----
```

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### ▷ Example 4: Space-separated data with double-quoted strings

```
-----begin example4.raw-----
1 0 1 "John Smith" m
0 0 1 "Paul Lin" m
0 1 0 "Jan Doe" f
0 0 . "Julie McDonald" f
-----end example4.raw-----
```

could be read in by

```
. infile byte (a b c) str15 name str1 gender using example4
```

or

```
. infile using dict4
```

where the dictionary dict4.dct contains

```

-----begin dict4.dct-----
infile dictionary using example4 {
    byte    a
    byte    b
    byte    c
    str15   name
    str1    gender
}
-----end dict4.dct-----

```

◀

### ► Example 5: Fixed-column format

```

-----begin example5.raw-----
101mJohn Smith
001mPaul Lin
010fJan Doe
00 fJulie McDonald
-----end example5.raw-----

```

could be read in by

```
. infix a 1 b 2 c 3 str gender 4 str name 5-19 using example5
```

or

```
. infix using dict5a
```

where dict5a.dct contains

```

-----begin dict5a.dct-----
infix dictionary using example5 {
    a      1
    b      2
    c      3
    str    gender  4
    str    name    5-19
}
-----end dict5a.dct-----

```

or

```
. infile using dict5b
```

where dict5b.dct contains

```

-----begin dict5b.dct-----
infile dictionary using example5 {
    byte    a      %1f
    byte    b      %1f
    byte    c      %1f
    str1    gender %1s
    str15   name   %15s
}
-----end dict5b.dct-----

```

◀

## ▷ Example 6: Fixed-column format with headings

```

-----begin example6.raw-----
line 1 : a heading
There are a total of 4 lines of heading.
The next line contains a useful heading:
-----+-----1-----+-----2-----+-----3-----+-----4-----+-----
1      0      1      m      John Smith
0      0      1      m      Paul Lin
0      1      0      f      Jan Doe
0      0      0      f      Julie McDonald
-----end example6.raw-----

```

could be read in by

```
. infile using dict6a
```

where dict6a.dct contains

```

-----begin dict6a.dct-----
infile dictionary using example6 {
  _firstline(5)
      byte a
      byte b
  _column(17) byte c      %1f
      str1 gender
  _column(33) str15 name   %15s
}
-----end dict6a.dct-----

```

or could be read in by

```
. infix 5 first a 1 b 9 c 17 str gender 25 str name 33-46 using example6
```

or could be read in by

```
. infix using dict6b
```

where dict6b.dct contains

```

-----begin dict6b.dct-----
infix dictionary using example6 {
5 first
      a      1
      b      9
      c      17
  str gender 25
  str name   33-46
}
-----end dict6b.dct-----

```

## ▷ Example 7: Fixed-column format with observations spanning multiple lines

---

```

a b c gender name
1 0 1
m
John Smith
0 0 1
m
Paul Lin
0 1 0
f
Jan Doe
0 0
f
Julie McDonald

```

---

begin example7.raw

---

end example7.raw

---

could be read in by

```
. infile using dict7a
```

where dict7a.dct contains

---

```

infile dictionary using example7 {
  _firstline(2)
      byte  a
      byte  b
      byte  c
  _line(2)
      str1  gender
  _line(3)
      str15 name  %15s
}

```

---

begin dict7a.dct

---

end dict7a.dct

---

or, if we wanted to include variable labels,

```
. infile using dict7b
```

where dict7b.dct contains

---

```

infile dictionary using example7 {
  _firstline(2)
      byte  a          "Question 1"
      byte  b          "Question 2"
      byte  c          "Question 3"
  _line(2)
      str1  gender     "Gender of subject"
  _line(3)
      str15 name      %15s
}

```

---

begin dict7b.dct

---

end dict7b.dct

---

infix could also read these data,

```
. infix 2 first 3 lines a 1 b 3 c 5 str gender 2:1 str name 3:1-15 using example7
```

or the data could be read in by

```
. infix using dict7c
```

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where dict7c.dct contains

```
-----begin dict7c.dct-----
infix dictionary using example7 {
2 first
      a      1
      b      3
      c      5
str   gender 2:1
str   name   3:1-15
}
-----end dict7c.dct-----
```

or the data could be read in by

```
. infix using dict7d
```

where dict7d.dct contains

```
-----begin dict7d.dct-----
infix dictionary using example7 {
2 first
      a      1
      b      3
      c      5
/
str   gender 1
/
str   name   1-15
}
-----end dict7d.dct-----
```

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## Video example

[Copy/paste data from Excel into Stata](#)

## Reference

Dicle, M. F., and J. Leventis. 2011. [Importing financial data](#). *Stata Journal* 11: 620–626.



## Also see

- [D] [edit](#) — Browse or edit data with Data Editor
- [D] [import dbase](#) — Import and export dBase files
- [D] [import delimited](#) — Import and export delimited text data
- [D] [import excel](#) — Import and export Excel files
- [D] [import fred](#) — Import data from Federal Reserve Economic Data
- [D] [import haver](#) — Import data from Haver Analytics databases
- [D] [import sasxport](#) — Import and export datasets in SAS XPORT format
- [D] [infile \(fixed format\)](#) — Read text data in fixed format with a dictionary
- [D] [infile \(free format\)](#) — Read unformatted text data
- [D] [infix \(fixed format\)](#) — Read text data in fixed format
- [D] [input](#) — Enter data from keyboard
- [D] [odbc](#) — Load, write, or view data from ODBC sources
- [D] [export](#) — Overview of exporting data from Stata
- [SP] [spshape2dta](#) — Translate shapefile to Stata format
- [U] [21 Entering and importing data](#)