

Goal:

To use Eventus software to get daily volume, for three trading days before through three trading days after the event date, into a SAS data set with all days on the same observation. The CUSIPs and event dates below (in MMDDYYYY format) are in file

c: \myproject\request3. dat:

```
00168810 12291984
00077110 02031988
02312710 08211986
02312710 09251986
02910310 02031988
36955010 01021990
13442910 03141997
68389X10 09111996
90127220 04031989
90127220 04031990
90127220 04031991
90127220 04031992
90127220 04031993
90127220 04031994
90127220 04031995
00791110 03311996
00195710 01041995
98155K10 09301995
```

Solution:

```
filename request 'c: \myproject\request3. dat';
eventus getdata;
  dateconv autodate cusi perm datefmt=mmddy8 outsas=work.request ndays=1;

eventus getdata;
  request insas=work.request datefmt=crsp shift1=-3 ndays=7;
  volume hsas outsas=work.volume3;
```

Notes:

- The **filename request** statement shown is for a Windows system. The exact format will differ on other types of computer systems. Please see SAS documentation for an explanation of **filename** statements.
- Depending on the details of how CRSP data is set up on your computer or network, you may need to include one to three **filename** statements to point to the CRSP database, as explained in the *Eventus User's Guide*.
- The **getdata** option on the **eventus** statement is used because the output of **dateconv** will be used with a data pull operation.
- The **autodate** option on the **dateconv** statement matches any non-trading date to the next trading day.
- The **cusi perm** option on the **dateconv** statement is needed because the request file contains CUSIPs.

- **work.request** is a SAS data set containing CRSP trading day numbers. The name **request** is inspired by the fact that this data set will be used as the request file in the next step, but otherwise the name is arbitrary. You can use any valid SAS name.
- The **ndays=1** option on the **dateconv** statement is needed because the **getdata** option appeared on the **eventus** statement but there is only one event date in the request file.
- The **insas=work.request** option on the **request** statement bypasses the original request file (c: \myproject\request3.dat) and takes the request file information from the data set created by **dateconv**.
- The combination of **shift1=-3** and **ndays=7** specifies seven trading days beginning three trading days before the event date.
- The volume data are not split-adjusted.
- In a batch environment (such as a traditional mainframe), it may be necessary to run the two steps as separate jobs. In that case, it will be necessary to change **work** to the libref of a permanent SAS data library. Also, on all systems, **work.volume3** will be deleted after the user closes the interactive session, or after the batch job terminates, unless the word **work** is changed to the libref of a permanent SAS data library. Please see SAS documentation for more information on librefs and SAS data libraries.

The data set **work.volume3** contains the following variables:

NAME	Fi rm name
CUSIP	CUSIP
PERMNO	CRSP PERMNO
CRSPDAY1	Event day -3 as a CRSP trading day number
CRSPDAY2	Event day +3 as a CRSP trading day number
EVENTDA1	Event day -3 as a SAS date value
EVENTDA2	Event day +3 as a SAS date value
_INT_ID_	Unique event identifier created by Eventus; may be dropped or ignored
VOLU1	Volume for day -3 from CRSP; see CRSP documentation for units
VOLU2	Volume for day -2
VOLU3	Volume for day-1
VOLU4	Volume for day 0 (the date in the original request file, or the next trading day if the original date was non-trading)
VOLU5	Volume for day +1
VOLU6	Volume for day +2
VOLU7	Volume for day +3
NUMDIS	may be ignored
NUMSHR	may be ignored
NUMDEL	may be ignored
NUMNDI	may be ignored

The following code can be used to print the data; the output is shown below the code.

```
proc print data=work.volume3;
  id cusip eventda1 eventda2;
  var vol:;
  title 'Daily Volume';
run;
```

Daily Volume

CUSIP	EVENTDA1	EVENTDA2	VOLU1	VOLU2	VOLU3	VOLU4
68389X10	06SEP1996	16SEP1996	3231398	2456105	2459729	4069563
90127220	29MAR1989	06APR1989	31275	7500	6750	3400
90127220	29MAR1990	06APR1990	5630	24000	13800	27683
90127220	28MAR1991	08APR1991	280310	30070	48950	39687
90127220	31MAR1992	08APR1992	45800	10600	41600	29700
90127220	31MAR1993	08APR1993	118900	12300	45400	8300
90127220	29MAR1994	07APR1994	90500	91300	137600	103100
90127220	29MAR1995	06APR1995	153200	9900	244300	53000
02312710	18AUG1986	26AUG1986	80500	95200	74300	47700
02312710	22SEP1986	30SEP1986	157800	80800	79700	109400
00195710	29DEC1994	09JAN1995	1390900	1526300	1616800	1689300
55268B10	27SEP1995	05OCT1995	2368882	1352507	714768	854877
55268B10	27MAR1996	04APR1996	2529852	2163959	15755395	2173484
36955010	27DEC1989	05JAN1990	209500	109300	81200	159100
00168810	26DEC1984	04JAN1985	37900	41400	38000	50000
13442910	11MAR1997	19MAR1997	753200	342800	376700	343300
00202M10	29JAN1988	08FEB1988	74300	148200	68200	88400
00077110	03FEB1988	03FEB1988	6600	4800	38400	23600

CUSIP	EVENTDA1	EVENTDA2	VOLU5	VOLU6	VOLU7
68389X10	06SEP1996	16SEP1996	8045259	15372408	7353331
90127220	29MAR1989	06APR1989	7800	14500	22504
90127220	29MAR1990	06APR1990	21400	4800	21807
90127220	28MAR1991	08APR1991	72810	11630	72660
90127220	31MAR1992	08APR1992	25400	93200	92900
90127220	31MAR1993	08APR1993	3300	9700	130900
90127220	29MAR1994	07APR1994	46900	378800	126900
90127220	29MAR1995	06APR1995	62500	10000	29100
02312710	18AUG1986	26AUG1986	59600	104000	234000
02312710	22SEP1986	30SEP1986	53300	80800	103400
00195710	29DEC1994	09JAN1995	1354700	5450701	2709300
55268B10	27SEP1995	05OCT1995	1256556	769843	1139002
55268B10	27MAR1996	04APR1996	2716389	1192073	1000161
36955010	27DEC1989	05JAN1990	188300	229900	120300
00168810	26DEC1984	04JAN1985	12000	49200	27900
13442910	11MAR1997	19MAR1997	398500	1099500	991000
00202M10	29JAN1988	08FEB1988	55600	140300	90900
00077110	03FEB1988	03FEB1988	10600	900	800