

# CRSP/COMPUSTAT RELEASE NOTES

JULY 2018 ANNUAL UPDATE

## ABOUT THE JULY 2018 CRSP/COMPUSTAT MERGED DATABASE

The cut date for these release notes is 20180714. This shipment includes the following version of the CRSP/Compustat Merged Database:

- CMZ20180713– the CCM format database using Compustat’s Xpressfeed delivery.

## DATABASE CHARACTERISTICS

The following table summarizes general characteristics of the CCM database.

ATTRIBUTE	CCM FORMAT DATABASE
<b>Source</b>	<b>Compustat Xpressfeed</b>
Volume Label	CMZyyyyymm
Size	10.93 GB
Delivery	<a href="#">MOVEit Cloud</a>
CRSPAccess version	3.22 and higher – ts_print ccm_print
CRSPSift Version (Windows only)	Yes – all currently supported versions.
SASEXCCM Engine	Version 9.3 (Early Adopters)
C	Yes – CA3.22 and higher
Number of Data Items	Over 4,000 quarterly & annual data items

## PROGRAMMERS

C-programming is supported with all CRSPAccess versions. C sample programs are included for use with the Xpressfeed data.

FORTRAN-95 continues to be supported in CRSPAccess. Information about usage are available in the CRSPAccess Utilities and Program Libraries Release Notes and the Programming Guide, which can be accessed online at: <http://www.crsp.ChicagoBooth.edu/documentation>.

A SAS Engine that supports the CCM data was released to early adopters in SAS Version 9.3. Since their first maintenance release of SAS version 9.40, the SASEXCCM engine is in full production. The most current ETS release in the field, ETS 13.1 is needed to use the engine. Note that the original SASECRSP engine is still in the field but does not have support for the CCM database.

## PARAMETERS

CMZ ANNUAL	
Total Compustat Records	48,387
Total GVKEY Companies	46,189
Total GVKEYX Indexes	2,198
Total GVKEY/IID Securities	59,363
Total CRSP Securities Linked	29,066
Total GVKEYs in Link	46,146
Total Link Records	102,653
Total Link Records with a Link to CRSP	33,751
Database Size	10.93GB

## CALENDARS

The CCM database utilizes the CRSP stock calendars to align properly with CRSP data. Data in the CRSP daily Stock (and Indexes) file use daily and annual calendars. Data in the monthly files use monthly, quarterly and annual calendars.

CALENDAR	DATE RANGE	DATE INDEX RANGE
Daily trading calendar	19251231-20180713	1-24424
Monthly trading calendar	19251231-20221231	1-1165
Annual trading calendar	19251231-20191231	1-95
Quarterly trading calendar	19251231-20191231	1-377
Semi-Annual trading calendar	19251231-20191231	1-189
Weekly trading calendar	19260102-20180713	1-4828

## JULY 2018 NEW DATA ITEMS

Listed in the table below are new data items and new keysets for existing data items that have been added this month.

ITEM MNEMONIC	ITEM NAME	KEYSET	KEYSET_TAG	DESCRIPTION
HFSUPY_FN	Supplies as % of Rev Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation

## JULY 2018 GROUP EDITS

BEGDT_GRP	ENDDT_GRP	DESC_GRP
2012	2018	Added 241 links for BATS securities that were added to the CRSP Stock database in the 201806 release.

## JULY 2018 LINK EDITS

### GVKEY 14864 JRJR33 INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120101	20120927	0	0	00X	NR	C
20120928	20141204	0	0	01	NR	P
20141205	99999999	15099	55131	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120101	20120927	0	0	00X	NR	C
20120928	20141204	0	0	01	NR	P
20141205	20180402	15099	55131	01	LC	P
20180403	99999999	0	0	01	NR	P

### GVKEY 63907 EDUCATION MANAGEMENT CORP

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950701	19961030	0	0	00X	NR	C
19961031	20060601	84075	15098	01	LC	P
20091002	99999999	93080	53248	02	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950701	19961030	0	0	00X	NR	C
19961031	20060601	84075	15098	01	LC	P
20091002	20141112	93080	53248	02	LC	P
20141113	99999999	0	0	02	NR	P

### GVKEY 66281 RAIT FINANCIAL TRUST

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19970101	19980108	0	0	00X	NU	C
19980109	99999999	85772	34638	01	LU	P
20040331	20051230	0	0	02	NU	J

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19970101	19980108	0	0	00X	NR	C
19980109	20180511	85772	34638	01	LC	P
20180512	99999999	0	0	01	NR	P
20040331	20051230	0	0	02	NR	J

**GVKEY 143710 GLOBAL POWER EQUIPMENT GROUP****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20010517	0	0	00X	NR	C
20010518	20060928	88987	41577	01	LC	P
20060929	20080131	0	0	01	NR	P
20080201	20140714	0	0	01	NR	P
20140715	99999999	88987	41577	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20010517	0	0	00X	NR	C
20010518	20060928	88987	41577	01	LC	P
20060929	20080131	0	0	01	NR	P
20080201	20140714	0	0	01	NR	P
20140715	20160330	88987	41577	01	LC	P
20160331	99999999	0	0	01	NR	P

**GVKEY 184473 SPDR S&P RUSSIA ETF****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20100310	0	0	00X	NR	C
20100311	99999999	93294	43629	01	LS	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20100310	0	0	00X	NR	C
20100311	20170724	93294	43629	01	LS	P
20170725	99999999	0	0	01	NR	P

**GVKEY 237820 GRANA Y MONTERO SA****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20020731	20130430	0	0	90	NR	P
20130724	99999999	14019	54461	91	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20020731	20130430	0	0	90	NR	P
20130724	20180517	14019	54461	91	LC	P
20180518	99999999	0	0	91	NR	P

## JUNE 2018 LINK EDITS

### GVKEY 126122 ONCOLYTICS BIOTECH INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19980101	19991129	0	0	00X	NU	C
20011005	99999999	89175	42270	01	LC	P
19991130	20011004	0	0	01C	NU	C
20011005	99999999	89175	42270	01C	LX	N

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19980101	19991129	0	0	00X	NR	C
20011005	20151104	89175	42270	01	LC	P
20151105	99999999	0	0	01	NR	P
19991130	20011004	0	0	01C	NR	C
20011005	20151104	89175	42270	01C	LX	N
20151105	99999999	0	0	01C	NR	N

## MAY 2018 NEW DATA ITEMS

Listed in the table below are new data items and new keysets for existing data items that have been added this month.

ITEM MNEMONIC	ITEM NAME	KEYSET	KEYSET_TAG	DESCRIPTION
OGTPROIL_DC	Total Proved Reserves-Oil Data Code	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
HFOQ_FN	Other % of Revenue Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
HFMCDQ_FN	Medicaid % of Revenue Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
OGPDROIL_DC	Proved Developed Reserves-Oil Data Code	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
RECTRQ_FN1	Receivables - Trade Footnote	7	SFAS	Industrial Format, Pre-FASB Reporting, Standardized Presentation
PPSCY_FN	Pension Plans - Service Cost Footnote	7	SFAS	Industrial Format, Pre-FASB Reporting, Standardized Presentation
RSTCHEQ	Restricted Cash and Investments - Current	7	SFAS	Industrial Format, Pre-FASB Reporting, Standardized Presentation
PPSCQ_FN	Pension Plans - Service Cost - QuarterlyFootnote	7	SFAS	Industrial Format, Pre-FASB Reporting, Standardized Presentation
ACCTCHGQ	Adoption of Accounting Changes	2105	BSTD4	Bank Format, Consolidated Information, Standardized Presentation, Rank 4
ACCTCHGQ	Adoption of Accounting Changes	2125	BASTD4	Bank Format, Consolidated Information, Average Standardized Presentation, Rank 4

## MAY 2018 LINK EDITS

### GVKEY 165943 DEXTERA SURGICAL INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20000701	20060202	0	0	00X	NR	C
20060203	99999999	91088	50292	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20000701	20060202	0	0	00X	NR	C
20060203	20171212	91088	50292	01	LC	P
20171213	99999999	0	0	01	NR	P

**APRIL 2018 NEW DATA ITEMS**

Listed in the table below are new data items and new keysets for existing data items that have been added this month.

ITEM MNEMONIC	ITEM NAME	KEYSET	KEYSET_TAG	DESCRIPTION
ACCTCHG	Adoption of Accounting Changes	22	FS3	Financial Services Format, Consolidated Information, Standardized Presentation, Rank 3
AMDC_DC	Amortization of Deferred Charges Data Code	4	FS	Financial Services Format, Consolidated Information, Standardized Presentation
CPDOI_DC	Claims Paid - Other Data Code	4	FS	Financial Services Format, Consolidated Information, Standardized Presentation
HFBDQ_FN	Bad debt as % of Rev Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
HFB DY_FN	Bad debt as % of Rev Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
HFB D_FN	Bad debt as % of Rev Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
HFSUPQ_FN	Supplies as % of Rev Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
PNLI_DC	Premiums Written - Non-Life Data Code	4	FS	Financial Services Format, Consolidated Information, Standardized Presentation
PPENTQ_FN1	Property Plant and Equipment - Total (Net) Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
PPENTQ_FN1	Property Plant and Equipment - Total (Net) Footnote	2100	BSTD	Bank Format, Consolidated Information, Standardized Presentation
PPENT_FN	Property, Plant and Equipment - Total (Net) Footnote	2100	BSTD	Bank Format, Consolidated Information, Standardized Presentation
PPSC_FN	Pension Plans / Service Cost Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
RECTRQ_FN1	Receivables - Trade Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
RECTR_FN	Receivables - Trade Footnote	1	STD	Industrial Format, Consolidated Information, Standardized Presentation
XSTF_FN	Staff Expense (Income Account) Footnote	4	FS	Financial Services Format, Consolidated Information, Standardized Presentation

## APRIL 2018 LINK EDITS

### GVKEY 20693 NORTHSTAR ASSET MGMT GRP INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20090101	20140630	0	0	00X	NR	C
20140701	20170131	14686	54879	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20090101	20140630	0	0	00X	NR	C
20140701	20170110	14686	54879	01	LC	P

### GVKEY 183144 ENERJEX RESOURCES INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20061229	20140616	0	0	01	NR	P
20140617	99999999	14720	54913	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20061229	20140616	0	0	01	NR	P
20140617	20180326	14720	54913	01	LC	P

### GVKEY 30428 ALTA MESA RESOURCES INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20160101	20170330	0	0	00X	NR	C
20170331	20170331	0	0	01	NR	P
20170401	20170427	0	0	01	NR	C
20170428	20180228	0	0	01	NR	N
20170428	20180211	16677	55895	03	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20160101	20170330	0	0	00X	NR	C
20170331	20170331	0	0	01	NR	P
20170401	20170427	0	0	01	NR	C
20170428	20180228	0	0	01	NR	N
20170428	99999999	16677	55895	03	LC	P

**GVKEY 33096 ALTA MESA RESOURCES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20180212	99999999	16677	55895	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20180212	99999999	0	0	01	NR	P

**GVKEY 264713 INFOSONICS CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20040616	0	0	00X	NR	C
20040617	99999999	90207	45281	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20040616	0	0	00X	NR	C
20040617	20180308	90207	45281	01	LC	P

**GVKEY 32912 DUNXIN FINANCIAL HOLDINGS**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20171229	20171231	0	0	90	NR	C
20180101	99999999	0	0	90	NR	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20171229	20171231	12367	53551	90	LC	C
20180101	99999999	12367	53551	90	LC	P

**GVKEY 25923 STANLEY FURNITURE CO INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19850101	19860929	0	0	00X	NU	C
19860930	19921109	0	0	01	NU	C
19921110	99999999	78068	8586	01	LU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19850101	19860929	0	0	00X	NR	C
19860930	19921109	0	0	01	NR	C
19921110	20180314	78068	8586	01	LC	C
20180315	99999999	0	0	01	NR	C

**GVKEY 183603 COLONY NORTHSTAR INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20090101	20090923	0	0	00X	NR	C
20090924	20170110	93018	53208	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20090101	20090923	0	0	00X	NR	C
20090924	20170110	93018	53208	01	LC	P
20170111	99999999	14686	54879	01	LC	P

**MARCH 2018 LINK EDITS****GVKEY 12665 APPLIED CONTROL SYSTEMS INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19840901	19861016	0	0	00X	NU	C
19861017	19871030	10764	8660	01	LU	P
19871031	19880531	0	0	99X	NU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19840901	19861015	0	0	00X	NR	C
19861016	19871030	10764	8660	01	LC	P
19871031	19880531	0	0	99X	NR	C

**GVKEY 21206 SINO MERCURY ACQUISITION CP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20140101	20140828	0	0	00X	NR	C
20140829	20140930	0	0	01	NR	P
20141001	20141019	0	0	01	NR	C
20141020	20151027	0	0	01	NR	N
20141020	20151027	15017	54997	02	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20140101	20140828	0	0	00X	NR	C
20140829	20140930	0	0	01	NR	P
20141001	20141028	0	0	01	NR	C
20141029	20151027	0	0	01	NR	N
20141029	20151027	15017	54997	02	LC	P



**GVKEY 11462 HANDY & HARMAN LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19610101	19620130	19238	21915	00X	LC	C
19620131	20050307	19238	21915	01	LC	P
20050308	20050729	0	0	01	NR	P
20050831	20081204	0	0	04	NR	P
20081205	20171031	92872	21915	04	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19610101	19620130	19238	21915	00X	LC	C
19620131	19940726	19238	21915	01	LC	P
19940727	20050729	0	0	01	NR	P
20050831	20081204	0	0	04	NR	P
20081205	20171031	92872	56283	04	LC	P

**GVKEY 4472 EVERGREEN RESOURCE-OLD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19810401	19811227	0	0	00X	NR	C
19811228	19880128	33647	5238	01	LC	P
19880129	19890331	33647	5238	01	LD	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19810401	19811220	0	0	00X	NR	C
19811221	19880128	33647	5238	01	LC	P
19880129	19890331	33647	5238	01	LD	P

**GVKEY 4822 FLYING TIGER LINE INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19790101	19840312	0	0	00X	NR	C
19840313	19850731	37130	6915	01	LU	P
19850801	19900228	0	0	99X	NU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19790101	19840312	0	0	00X	NR	C
19840313	19840430	0	0	01	NR	P
19840501	19850731	37130	6915	01	LC	P
19850801	19900228	0	0	99X	NR	C

**GVKEY 10571 TIGER INTERNATIONAL**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19560101	19660130	0	0	00X	NU	C
19660131	19890228	37364	6915	01	LU	P
19890301	19890331	0	0	99X	NU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19560101	19660130	0	0	00X	NR	C
19660131	19700629	37364	6915	01	LC	P
19700701	19890228	0	0	01	NR	P
19890301	19890331	0	0	99X	NR	C

**GVKEY 2828 CELERON CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19510101	19620130	0	0	00X	NR	C
19620131	19680814	0	0	01	NR	P
19680815	19830617	46623	5140	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19510101	19620130	0	0	00X	NR	C
19620131	19680814	0	0	01	NR	P
19680815	19780802	46623	5140	01	LC	P
19780803	19830630	0	0	01	NR	P

**GVKEY 64912 FOUNDATION HEALTHCARE LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950701	19970618	0	0	00X	NU	C
19970619	19990331	85007	15537	90	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950701	19970616	0	0	00X	NR	C
19970617	19990331	85007	15537	90	LC	P

**GVKEY 65423 MTG-MODERN TIMES GROUP AB**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19970918	0	0	00X	NU	C
19970919	20031231	85384	15694	90	LU	P
20040101	20040227	0	0	90	NU	P
20040228	20050331	0	0	99X	NU	C

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19970917	0	0	00X	NR	C
19970918	20031231	85384	15694	90	LC	P
20040101	20040227	0	0	90	NR	P
20040228	20050331	0	0	99X	NR	C

**GVKEY 106847 HOME STAKE OIL & GAS CO**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19980226	0	0	00X	NU	C
19980227	19980511	0	0	01	NU	P
19980512	20001229	86069	16098	01	LU	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19980226	0	0	00X	NR	C
19980227	19980510	0	0	01	NR	P
19980511	20001229	86069	16098	01	LC	P

**GVKEY 110679 BLUE RHINO CORP**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19930801	19980519	0	0	00X	NU	C
19980520	20040430	86088	16112	01	LU	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19930801	19980518	0	0	00X	NR	C
19980519	20040430	86088	16112	01	LC	P

**GVKEY 31592 HENNESSY CAP ACQ CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20170101	20170629	0	0	00X	NR	C
20170630	99999999	0	0	01	NR	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20170101	20170629	0	0	00X	NR	C
20170630	20170731	0	0	01	NR	P
20170801	99999999	0	0	01	NR	J
20170801	99999999	16864	55970	03	LC	P

**FEBRUARY 2018 LINK EDITS****GVKEY 7745 AVATEX CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19620130	19019	21257	00X	LU	C
19620131	19990129	19019	21257	01	LU	C
19990130	99999999	0	0	01	NU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19620130	19019	21257	00X	LC	C
19620131	19830912	19019	21257	01	LC	C
19830913	19990129	17278	56247	01	LC	C

**GVKEY 13121 FLAGSTAR CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19621231	19617	22934	00X	LN	C
19630101	19640130	19617	22934	00X	LC	C
19640131	19861230	19617	22934	01	LC	P
19861231	19870104	0	0	01	NR	P
19870105	19891206	72792	25880	01	LC	P
19891207	19980331	0	0	99X	NR	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19621231	19617	22934	00X	LN	C
19630101	19640130	19617	22934	00X	LC	C
19640131	19781229	19617	22934	01	LC	P
19781230	19870104	0	0	01	NR	P
19870105	19891206	72792	25880	01	LC	P
19891207	19980331	0	0	99X	NR	C

**GVKEY 10699 TRANSWORLD LIQUIDATING TRUST**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19640130	0	0	00X	NR	C
19640131	19861230	19617	22934	01	LD	P
19861231	19870331	19617	22934	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19640130	0	0	00X	NR	C
19640131	19781229	19617	22934	01	LD	P
19790102	19870331	17277	56246	01	LC	P

**GVKEY 147175 LORILLARD INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20020131	0	0	00X	NR	C
20020201	20150611	89303	21111	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20020131	0	0	00X	NR	C
20020201	20080609	89303	21111	01	LC	P
20080610	20150630	17279	56249	01	LC	P

**GVKEY 24724 LIBERTY LATIN AMERICA LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150630	20150701	0	0	00X	NR	C
20150702	99999999	15403	45301	01	LC	P
20150702	99999999	15402	45301	02	LC	J
20150731	99999999	0	0	03	NR	J

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150630	20150701	0	0	00X	NR	C
20150702	20171229	15403	45301	01	LC	P
20171230	20171231	17131	56166	01	LC	P
20180101	99999999	17131	56166	01	LC	J
20150702	20171229	15402	45301	02	LC	J
20171230	20171231	17130	56166	02	LC	J
20180101	99999999	17130	56166	02	LC	P
20150731	99999999	0	0	03	NR	J

**GVKEY 7422 EXCO RESOURCES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19810306	19871002	54280	2978	01	LC	C
19871003	19980915	0	0	01	NR	C
19980916	20030729	86357	16277	01	LC	C
20060209	99999999	91109	16277	04	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19810306	19871002	54280	2978	01	LC	C
19871003	19980915	0	0	01	NR	C
19980916	20030729	86357	16277	01	LC	C
20060209	20171222	91109	16277	04	LC	P
20171223	99999999	0	0	04	NR	P

**GVKEY 22515 PATRIOT NATIONAL INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120101	20150115	0	0	00X	NR	C
20150116	99999999	15164	55161	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120101	20150115	0	0	00X	NR	C
20150116	20171122	15164	55161	01	LC	P
20171123	99999999	0	0	01	NR	P

**GVKEY 22729 WINLAND HOLDINGS CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19930101	19950525	0	0	00X	NU	C
19950526	99999999	81651	13747	01	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19930101	19950525	0	0	00X	NR	C
19950526	20130320	81651	13747	01	LC	P
20130321	99999999	0	0	01	NR	P

**GVKEY 24483 BON-TON STORES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19900201	19910923	0	0	00X	NU	C
19910924	99999999	76847	11123	01	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19900201	19910923	0	0	00X	NR	C
19910924	20171108	76847	11123	01	LC	P
20171109	99999999	0	0	01	NR	P

**GVKEY 31252 TPG PACE ENERGY HLDGS CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20170101	20170530	0	0	00X	NR	C
20170531	99999999	0	0	01	NR	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20170101	20170530	0	0	00X	NR	C
20170531	20171231	0	0	01	NR	P
20180101	99999999	0	0	01	NR	J
20170626	20171231	16771	55962	02	LC	J
20180101	99999999	16771	55962	02	LC	P

**JANUARY 2018 LINK EDITS**

**GVKEY 16719 BIOSTAGE INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20131030	0	0	00X	NR	C
20131031	20131103	0	0	01	NR	P
20131104	99999999	14253	54611	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20131030	0	0	00X	NR	C
20131031	20131103	0	0	01	NR	P
20131104	20171005	14253	54611	01	LC	P
20171006	99999999	0	0	01	NR	P

**GVKEY 20856 SPDR MSCI AUS STRATEGICFACTR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20140401	20140611	0	0	00X	NR	C
20140612	99999999	14743	43629	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20140401	20140611	0	0	00X	NR	C
20140612	20170724	14743	43629	01	LS	P
20170725	99999999	0	0	01	NR	P

**GVKEY 20863 SPDR MSCI SPAIN STRATEGICFAC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20140401	20140611	0	0	00X	NR	C
20140612	99999999	14739	43629	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20140401	20140611	0	0	00X	NR	C
20140612	20170724	14739	43629	01	LS	P
20170725	99999999	0	0	01	NR	P

**GVKEY 23898 RENTECH INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19900101	19910421	0	0	00X	NU	C
19910422	99999999	76978	10894	01	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19900101	19910421	0	0	00X	NR	C
19910422	20171013	76978	10894	01	LC	P
20171014	99999999	0	0	01	NR	P

**GVKEY 26177 SPDR S&P INTL DIV CURRNCY HG**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150701	20150914	0	0	00X	NR	C
20150915	99999999	15700	43629	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150701	20150914	0	0	00X	NR	C
20150915	20170724	15700	43629	01	LS	P
20170725	99999999	0	0	01	NR	P



**GVKEY 61140 WINDTREE THERAPEUTICS INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940101	19950807	0	0	00X	NR	C
19950808	99999999	82156	13915	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940101	19950807	0	0	00X	NR	C
19950808	20170504	82156	13915	01	LC	P
20170505	99999999	0	0	01	NR	P

**GVKEY 63383 HYPERDYNAMICS CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960830	20050504	0	0	01	NR	P
20050505	99999999	90687	46675	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960830	20050504	0	0	01	NR	P
20050505	20150310	90687	46675	01	LC	P
20150311	99999999	0	0	01	NR	P

**GVKEY 166746 J.G. WENTWORTH CO**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060331	20131107	0	0	00X	NR	C
20131108	99999999	14288	54633	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060331	20131107	0	0	00X	NR	C
20131108	20160617	14288	54633	01	LC	P
20160618	99999999	0	0	01	NR	P

**GVKEY 176726 SHINER INTERNATIONAL INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20070329	0	0	00X	NR	C
20070330	20080213	0	0	01	NR	P
20080214	99999999	92553	52946	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20070329	0	0	00X	NR	C
20070330	20080213	0	0	01	NR	P
20080214	20120905	92553	52946	01	LC	P
20120906	99999999	0	0	01	NR	P

**GVKEY 177003 SPDR S&P EMERGING EUROPE ETF**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20070322	0	0	00X	NU	C
20070323	99999999	91882	43629	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20070322	0	0	00X	NR	C
20070323	20170724	91882	43629	01	LS	P
20170725	99999999	0	0	01	NR	P

**GVKEY 177006 SPDR S&P EMERGING LATIN AMER**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20070322	0	0	00X	NU	C
20070323	99999999	91881	43629	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20070322	0	0	00X	NR	C
20070323	20170724	91881	43629	01	LS	P
20170725	99999999	0	0	01	NR	P

**GVKEY 15367 INVESCO MUNICIPAL INCOME OPP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19880601	19880918	0	0	00X	NR	C
19880919	19981218	75324	20056	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	99999999	86469	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19880601	19880918	0	0	00X	NR	C
19880919	19981218	75324	20056	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86469	34961	01	LC	P
20100529	99999999	17205	56198	01	LC	P

**GVKEY 15368 INVESCO MUNICIPAL PREM INCM**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19890201	19981218	75453	22014	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20121031	86465	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19890201	19981218	75453	22014	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86465	34961	01	LC	P
20100529	20121012	17202	56195	01	LC	P

**GVKEY 21425 INVESCO MUNI INCOME OPP III**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19900401	19900419	0	0	00X	NR	C
19900420	19981218	76143	26053	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20120831	86467	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19900401	19900419	0	0	00X	NR	C
19900420	19981218	76143	26053	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86467	34961	01	LC	P
20100529	20120824	17203	56196	01	LC	P

**GVKEY 23666 INVESCO VALUE MUNI BD TR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19901101	19910220	0	0	00X	NR	C
19910221	19981218	76569	28986	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20121031	86481	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19901101	19910220	0	0	00X	NR	C
19910221	19981218	76569	28986	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86481	34961	01	LC	P
20100529	20121012	17215	56206	01	LC	P

**GVKEY 24494 INVESCO QUALITY MUNI INVSTMT**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19901101	19910919	0	0	00X	NR	C
19910920	19981218	76819	29079	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20121031	86478	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19901101	19910919	0	0	00X	NR	C
19910920	19981218	76819	29079	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100531	86478	34961	01	LC	P
20100601	20121012	17212	56203	01	LC	P

**GVKEY 24950 INVESCO VALUE MUNICIPAL TR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19911101	19920227	0	0	00X	NR	C
19920228	19981218	77314	29437	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20121031	86485	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19911101	19920227	0	0	00X	NR	C
19920228	19981218	77314	29437	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86485	34961	01	LC	P
20100529	20121012	17220	56209	01	LC	P

**GVKEY 26116 INVESCO QUALITY MUNI INCOME**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19911101	19920921	0	0	00X	NR	C
19920922	19981218	77923	29568	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	99999999	86479	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19911101	19920921	0	0	00X	NR	C
19920922	19981218	77923	29568	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86479	34961	01	LC	P
20100529	99999999	17213	56204	01	LC	P

**GVKEY 27852 INVESCO CALIF MUNI INCM TR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930218	0	0	00X	NR	C
19930219	19981218	78939	29755	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20120831	86473	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930218	0	0	00X	NR	C
19930219	19981218	78939	29755	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20120831	86473	34961	01	LC	P

**GVKEY 27853 INVESCO VALUE MUNI INCM TR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930218	0	0	00X	NR	C
19930219	19981218	78940	29756	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	99999999	86480	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930218	0	0	00X	NR	C
19930219	19981218	78940	29756	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86480	34961	01	LC	P
20100529	99999999	17214	56205	01	LC	P

**GVKEY 28890 INVESCO CALIF QUALITY MUNI**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930921	0	0	00X	NR	C
19930922	19981218	79656	29966	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20120831	86477	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930921	0	0	00X	NR	C
19930922	19981218	79656	29966	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86477	34961	01	LC	P
20100529	20120824	17211	56202	01	LC	P

**GVKEY 28891 INVESCO NY QUALITY MUNI SECS**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930921	0	0	00X	NR	C
19930922	19981218	79657	29967	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20120831	86475	34961	01	LC	P
20031031	20101029	0	0	04	NR	J

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930921	0	0	00X	NR	C
19930922	19981218	79657	29967	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86475	34961	01	LC	P
20100529	20120824	17207	56200	01	LC	P
20031031	20101029	0	0	04	NR	J

**GVKEY 28892 INVESCO QUALITY MUNI SECS**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930921	0	0	00X	NR	C
19930922	19981218	79658	29968	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20121031	86476	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19921101	19930921	0	0	00X	NR	C
19930922	19981218	79658	29968	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86476	34961	01	LC	P
20100529	20121012	17210	56201	01	LC	P

**GVKEY 29742 INVESCO VALUE MUNI SECS**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940218	19981218	80202	30257	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20121031	86484	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940218	19981218	80202	30257	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86484	34961	01	LC	P
20100529	20121012	17219	56208	01	LC	P

**GVKEY 29743 INVESCO CALIF MUNI SECS**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940218	19981218	80203	30258	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20120831	86483	34961	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940218	19981218	80203	30258	01	LC	P
19981219	19981220	0	0	01	NR	P
19981221	20100528	86483	34961	01	LC	P
20100529	20120824	17218	56207	01	LC	P

**DECEMBER 2017 LINK EDITS****GVKEY 22637 YULONG ECO-MATERIALS LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120701	20150625	0	0	00X	NR	C
20150626	20170710	15441	55322	01	LC	P
20170711	99999999	0	0	01	NR	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120701	20150625	0	0	00X	NR	C
20150626	20170710	15441	55322	01	LC	P
20170711	20171001	0	0	01	NR	P
20171002	99999999	15441	55322	01	LC	P

**GVKEY 170307 FC GLOBAL REALTY INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20111229	0	0	00X	NR	C
20111230	20170706	88258	5761	01	LC	P
20170707	99999999	0	0	01	NR	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20111229	0	0	00X	NR	C
20111230	20170706	88258	5761	01	LC	P
20170707	20171001	0	0	01	NR	P
20171002	99999999	88258	5761	01	LC	P

**GVKEY 64844 MIDWAY GOLD CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20080103	20150619	92540	52932	01	LC	P
19970530	20080102	0	0	01C	NR	C
20080103	99999999	92540	52932	01C	LX	N
20150620	99999999	0	0	99X	NR	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20080103	20150619	92540	52932	01	LC	P
20150620	20171130	0	0	01	NR	P
19970530	20080102	0	0	01C	NR	C
20080103	20150619	92540	52932	01C	LX	N
20150620	20150731	0	0	01C	NR	N

**NOVEMBER 2017 LINK EDITS****GVKEY 26148 NABRIVA THERAPEUTICS PLC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20130101	20150917	0	0	00X	NR	C
20150918	99999999	15656	55408	90	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20130101	20150917	0	0	00X	NR	C
20170626	99999999	15656	55408	01	LC	P
20150918	20170531	15656	55408	90	LC	P
20170601	20170625	15656	55408	90	LC	C

**GVKEY 25814 XTRACKERS GERMANY EQUITY ETF**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150819	99999999	15601	53807	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150101	20150818	0	0	00X	NR	C
20150819	20170105	15601	53807	01	LS	P
20170106	99999999	0	0	01	NR	P



**GVKEY 25816 XTRACKERS EUROZNE EQUITY ETF**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150819	99999999	15602	53807	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150101	20150818	0	0	00X	NR	C
20150819	20170105	15602	53807	01	LS	P
20170106	99999999	0	0	01	NR	P

**GVKEY 27722 DIREXION DLY GOLD MNR BEAR1X**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20160727	20170929	16151	53101	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20160727	20170925	16151	53101	01	LS	P
20170926	20170929	0	0	01	NR	P

**GVKEY 140023 DELCATH SYSTEMS INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20011021	0	0	00X	NR	C
20011022	99999999	89169	40199	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20011021	0	0	00X	NR	C
20011022	20170914	89169	40199	01	LC	P
20170915	99999999	0	0	01	NR	P

**GVKEY 178377 SPI ENERGY CO LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20070927	0	0	00X	NR	C
20070928	20151231	0	0	01	NR	P
20170929	99999999	15913	55511	02	LC	P
20160119	20170831	15913	55511	90	LC	P
20170901	20170928	15913	55511	90	LC	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20070927	0	0	00X	NR	C
20070928	20151231	0	0	01	NR	P
20170919	99999999	15913	55511	02	LC	P
20160119	20170831	15913	55511	90	LC	P
20170901	20170918	15913	55511	90	LC	C
20170919	99999999	0	0	90	NR	N

**GVKEY 185190 G-ESTATE LIQUIDATION STORES**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100805	99999999	12080	53491	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100805	20170321	12080	53491	01	LC	P
20170322	99999999	0	0	01	NR	P

**OCTOBER 2017 LINK EDITS****GVKEY 12616 WACOAL HOLDINGS CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19760901	19770110	0	0	00X	NU	C
19980731	99999999	0	0	01	NU	N
19770111	99999999	81331	4846	90	LU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19760901	19770110	0	0	00X	NU	C
19980731	20140630	0	0	01	NR	N
19770111	20130412	81331	4846	90	LC	C
20130413	99999999	0	0	90	NR	C

**GVKEY 22637 YULONG ECO-MATERIALS LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120701	20150625	0	0	00X	NR	C
20150626	99999999	15441	55322	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120701	20150625	0	0	00X	NR	C
20150626	20170710	15441	55322	01	LC	P
20170711	99999999	0	0	01	NR	P

**GVKEY 26948 CAMBRIA SOVRN HI YLD BD ETF**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20160223	99999999	15922	54386	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20160223	20161228	15922	54386	01	LS	P
20161229	99999999	0	0	01	NR	P

**GVKEY 170307 PHOTOMEDEX INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20111229	0	0	00X	NR	C
20111230	99999999	88258	5761	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100101	20111229	0	0	00X	NR	C
20111230	20170706	88258	5761	01	LC	P
20170707	99999999	0	0	01	NR	P

**GVKEY 175509 TOWERSTREAM CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20070130	0	0	00X	NR	C
20070131	20070530	0	0	01	NR	P
20070531	99999999	92054	52305	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20070130	0	0	00X	NR	C
20070131	20070530	0	0	01	NR	P
20070531	20161130	92054	52305	01	LC	P
20161201	99999999	0	0	01	NR	P

**GVKEY 177949 COPSINC INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070831	20151112	0	0	01	NR	P
20151113	99999999	15834	55478	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070831	20151112	0	0	01	NR	P
20151113	20170405	15834	55478	01	LC	P
20170406	99999999	0	0	01	NR	P

**GVKEY 178089 POINT.360**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20070814	0	0	00X	NR	C
20070815	99999999	92223	52672	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20070814	0	0	00X	NR	C
20070815	20141202	92223	52672	01	LC	P
20141203	99999999	0	0	01	NR	P

## SEPTEMBER 2017 LINK EDITS

### GVKEY 30098 GARDNER DENVER HOLDINGS INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940101	19940424	0	0	00X	NR	C
19940425	20130731	80446	13008	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940101	19940424	0	0	00X	NR	C
19940425	20130731	80446	13008	01	LC	P
20170512	20170531	16692	55928	02	LC	C
20170601	99999999	16692	55928	02	LC	P

### GVKEY 186198 PROSHARES VIX ST-TERM FUTRS

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20110104	20160812	12531	53104	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20110104	99999999	12531	53104	01	LS	P

### GVKEY 2811 CASTLE (A M) & CO

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19620130	0	0	00X	NU	C
19620131	19620701	0	0	01	NU	P
19620702	99999999	30402	20404	01	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19620130	0	0	00X	NU	C
19620131	19620701	0	0	01	NU	P
19620702	20161206	30402	20404	01	LC	P
20161207	99999999	0	0	01	NR	P

### GVKEY 174300 MILLENNIUM INVT & ACQ CO INC

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20060730	0	0	00X	NR	C
20060731	20060831	0	0	01	NU	P
20060901	20060920	0	0	01	NU	C
20060921	20100806	0	0	01	NU	N
20060921	99999999	91454	50958	02	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20060730	0	0	00X	NR	C
20060731	20060831	0	0	01	NU	P
20060901	20060920	0	0	01	NU	C
20060921	20100806	0	0	01	NU	N
20060921	20121003	91454	50958	02	LC	P
20121004	99999999	0	0	02	NR	P

**GVKEY 178082 PARAGON SHIPPING INC****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20070809	0	0	00X	NR	C
20070810	99999999	92224	52673	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20070809	0	0	00X	NR	C
20070810	20160603	92224	52673	01	LC	P
20160604	99999999	0	0	01	NR	P

**GVKEY 186748 INTERCLOUD SYSTEMS INC****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100129	20131030	0	0	00X	NR	C
20131031	99999999	14254	54612	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100129	20131030	0	0	00X	NR	C
20131031	20160830	14254	54612	01	LC	P
20160831	99999999	0	0	01	NR	P

**GVKEY 4246 ELAN PHARMACEUTICAL RES CORP****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19820119	19840131	31801	5272	01	LU	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19820119	19840202	31801	56024	01	LC	P

**GVKEY 146714 SAXON CAPITAL INC****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20020115	0	0	00X	NU	C
20020116	20040920	89288	42650	01	LC	P
20040921	20061201	90365	42650	01	LC	P
20061202	20070131	0	0	99X	NU	C

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20020115	0	0	00X	NU	C
20020116	20040920	89288	56001	01	LC	P
20040921	20061201	90365	42650	01	LC	P
20061202	20070131	0	0	99X	NU	C

**GVKEY 6512 KYOCERA CORP****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120928	99999999	0	0	02	NR	N
19760210	20121130	61778	2591	90	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120928	20141231	0	0	02	NR	N
19760210	99999999	61778	2591	90	LC	P

**GVKEY 9818 SONY CORP****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19611101	19620130	0	0	00X	NU	C
19620131	19700916	0	0	90	NU	P
19700917	99999999	51131	21633	90	LU	P
19980331	20140630	51131	21633	90C	LX	N

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19611101	19620130	0	0	00X	NU	C
19620131	19700916	0	0	90	NU	P
19700917	99999999	51131	21633	90	LC	P
19980331	99999999	51131	21633	90C	LX	N

**GVKEY 10357 TECH OPS INC****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19591001	19660130	0	0	00X	NR	C
19660131	19871230	37217	21714	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19591001	19660130	0	0	00X	NR	C
19660131	19880131	37217	21714	01	LC	P
19880201	19880229	0	0	01	NR	P

**GVKEY 14169 LANDAUER INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19861001	19871230	0	0	00X	NR	C
19871231	99999999	37217	21714	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19861001	19880131	0	0	00X	NR	C
19880201	99999999	37217	21714	01	LC	P

**GVKEY 11796 LCI INDUSTRIES**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19840901	19850522	0	0	00X	NR	C
19850523	20170113	87426	7557	02	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19840901	19850522	0	0	00X	NR	C
19850523	99999999	87426	7557	02	LC	P

**GVKEY 12096 DGSE COMPANIES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19850101	19860204	0	0	00X	NU	C
19860205	20120608	10028	7978	01	LU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19850101	19860204	0	0	00X	NR	C
19860205	99999999	10028	7978	01	LC	C

**GVKEY 21593 CIVISTA BANCSHARES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19961129	20010401	0	0	01	NR	P
20010402	20150508	88965	41460	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19961129	20010401	0	0	01	NR	P
20010402	99999999	88965	41460	01	LC	P

**GVKEY 22834 ABERDEEN SINGAPORE FUND INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19891101	19900724	0	0	00X	NR	C
19900725	20131031	76246	26095	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19891101	19900724	0	0	00X	NR	C
19900725	99999999	76246	26095	01	LC	P

**GVKEY 30401 NETSHOES CAYMAN LTD****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150101	20170411	0	0	00X	NR	C
20170412	20170428	16669	55913	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150101	20170411	0	0	00X	NR	C
20170412	99999999	16669	55913	01	LC	P

**GVKEY 63005 AVADEL PHARMACEUTICALS -ADR****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19960606	0	0	00X	NR	C
19960607	20170113	83656	14701	90	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19960606	0	0	00X	NR	C
19960607	99999999	83656	14701	90	LC	P

**GVKEY 64515 CTI BIOPHARMA CORP****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19970320	0	0	00X	NR	C
19970321	20170113	84604	15401	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19970320	0	0	00X	NR	C
19970321	99999999	84604	15401	01	LC	P

**GVKEY 110685 L3 TECHNOLOGIES INC****OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19980518	0	0	00X	NR	C
19980519	20170113	86021	34746	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19980518	0	0	00X	NR	C
19980519	99999999	86021	34746	01	LC	P



**GVKEY 149721 TRAVELZOO**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20000101	20020829	0	0	00X	NR	C
20020830	20031229	0	0	01	NR	P
20031230	20131031	89941	44695	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20000101	20020829	0	0	00X	NR	C
20020830	20031229	0	0	01	NR	P
20031230	99999999	89941	44695	01	LC	P

**GVKEY 175342 CHINA INFORMATION TECHNOLOGY**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20061030	0	0	00X	NR	C
20061031	20080522	0	0	01	NR	P
20080523	20121109	92682	53023	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20061030	0	0	00X	NR	C
20061031	20080522	0	0	01	NR	P
20080523	99999999	92682	53023	01	LC	P

**GVKEY 177053 VOYA ASIA PAC HI DIV EQ INCM**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070301	20070327	0	0	00X	NR	C
20070328	20140430	91872	51971	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070301	20070327	0	0	00X	NR	C
20070328	99999999	91872	51971	01	LC	P

**GVKEY 180423 LENDINGTREE INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20080820	0	0	00X	NR	C
20080821	20150109	92775	53077	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20080820	0	0	00X	NR	C
20080821	99999999	92775	53077	01	LC	P

**GVKEY 182309 ARCA BIOPHARMA INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20090127	0	0	00X	NR	C
20090128	20150911	85293	15638	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20090127	0	0	00X	NR	C
20090128	99999999	85293	15638	01	LC	P

**GVKEY 184680 KINGTONE WIRELESSINFO -ADR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20041201	20100513	0	0	00X	NR	C
20100514	20121109	93396	53422	90	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20041201	20100513	0	0	00X	NR	C
20100514	99999999	93396	53422	90	LC	P

**AUGUST 2017 LINK EDITS****GVKEY 30098 GARDNER DENVER HOLDINGS INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940101	19940424	0	0	00X	NR	C
19940425	20130731	80446	13008	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19940101	19940424	0	0	00X	NR	C
19940425	20130731	80446	13008	01	LC	P
20170512	20170531	16692	55928	02	LC	C
20170601	99999999	16692	55928	02	LC	P

**GVKEY 186198 PROSHARES VIX ST-TERM FUTRS**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20110104	20160812	12531	53104	01	LS	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20110104	99999999	12531	53104	01	LS	P

**GVKEY 2811 CASTLE (A M) & CO**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19620130	0	0	00X	NU	C
19620131	19620701	0	0	01	NU	P
19620702	99999999	30402	20404	01	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19500101	19620130	0	0	00X	NU	C
19620131	19620701	0	0	01	NU	P
19620702	20161206	30402	20404	01	LC	P
20161207	99999999	0	0	01	NR	P

**GVKEY 174300 MILLENNIUM INVT & ACQ CO INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20060730	0	0	00X	NR	C
20060731	20060831	0	0	01	NU	P
20060901	20060920	0	0	01	NU	C
20060921	20100806	0	0	01	NU	N
20060921	99999999	91454	50958	02	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20060730	0	0	00X	NR	C
20060731	20060831	0	0	01	NU	P
20060901	20060920	0	0	01	NU	C
20060921	20100806	0	0	01	NU	N
20060921	20121003	91454	50958	02	LC	P
20121004	99999999	0	0	02	NR	P

**GVKEY 178082 PARAGON SHIPPING INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20070809	0	0	00X	NR	C
20070810	99999999	92224	52673	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20070809	0	0	00X	NR	C
20070810	20160603	92224	52673	01	LC	P
20160604	99999999	0	0	01	NR	P

**GVKEY 186748 INTERCLOUD SYSTEMS INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100129	20131030	0	0	00X	NR	C
20131031	99999999	14254	54612	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20100129	20131030	0	0	00X	NR	C
20131031	20160830	14254	54612	01	LC	P
20160831	99999999	0	0	01	NR	P

**GVKEY 4246 ELAN PHARMACEUTICAL RES CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19820119	19840131	31801	5272	01	LU	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19820119	19840202	31801	56024	01	LC	P

**GVKEY 146714 SAXON CAPITAL INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20020115	0	0	00X	NU	C
20020116	20040920	89288	42650	01	LC	P
20040921	20061201	90365	42650	01	LC	P
20061202	20070131	0	0	99X	NU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19990101	20020115	0	0	00X	NU	C
20020116	20040920	89288	56001	01	LC	P
20040921	20061201	90365	42650	01	LC	P
20061202	20070131	0	0	99X	NU	C

**GVKEY 6512 KYOCERA CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120928	99999999	0	0	02	NR	N
19760210	20121130	61778	2591	90	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20120928	20141231	0	0	02	NR	N
19760210	99999999	61778	2591	90	LC	P

**GVKEY 9818 SONY CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19611101	19620130	0	0	00X	NU	C
19620131	19700916	0	0	90	NU	P
19700917	99999999	51131	21633	90	LU	P
19980331	20140630	51131	21633	90C	LX	N

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19611101	19620130	0	0	00X	NU	C
19620131	19700916	0	0	90	NU	P
19700917	99999999	51131	21633	90	LC	P
19980331	99999999	51131	21633	90C	LX	N

**GVKEY 10357 TECH OPS INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19591001	19660130	0	0	00X	NR	C
19660131	19871230	37217	21714	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19591001	19660130	0	0	00X	NR	C
19660131	19880131	37217	21714	01	LC	P
19880201	19880229	0	0	01	NR	P

**GVKEY 14169 LANDAUER INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19861001	19871230	0	0	00X	NR	C
19871231	99999999	37217	21714	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19861001	19880131	0	0	00X	NR	C
19880201	99999999	37217	21714	01	LC	P

**GVKEY 11796 LCI INDUSTRIES**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19840901	19850522	0	0	00X	NR	C
19850523	20170113	87426	7557	02	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19840901	19850522	0	0	00X	NR	C
19850523	99999999	87426	7557	02	LC	P

**GVKEY 12096 DGSE COMPANIES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19850101	19860204	0	0	00X	NU	C
19860205	20120608	10028	7978	01	LU	C

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19850101	19860204	0	0	00X	NR	C
19860205	99999999	10028	7978	01	LC	C

**GVKEY 21593 CIVISTA BANCSHARES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19961129	20010401	0	0	01	NR	P
20010402	20150508	88965	41460	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19961129	20010401	0	0	01	NR	P
20010402	99999999	88965	41460	01	LC	P

**GVKEY 22834 ABERDEEN SINGAPORE FUND INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19891101	19900724	0	0	00X	NR	C
19900725	20131031	76246	26095	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19891101	19900724	0	0	00X	NR	C
19900725	99999999	76246	26095	01	LC	P

**GVKEY 30401 NETSHOES CAYMAN LTD**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150101	20170411	0	0	00X	NR	C
20170412	20170428	16669	55913	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20150101	20170411	0	0	00X	NR	C
20170412	99999999	16669	55913	01	LC	P

**GVKEY 63005 AVADEL PHARMACEUTICALS -ADR**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19960606	0	0	00X	NR	C
19960607	20170113	83656	14701	90	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19960606	0	0	00X	NR	C
19960607	99999999	83656	14701	90	LC	P

**GVKEY 64515 CTI BIOPHARMA CORP**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19970320	0	0	00X	NR	C
19970321	20170113	84604	15401	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19950101	19970320	0	0	00X	NR	C
19970321	99999999	84604	15401	01	LC	P

**GVKEY 110685 L3 TECHNOLOGIES INC**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19980518	0	0	00X	NR	C
19980519	20170113	86021	34746	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
19960101	19980518	0	0	00X	NR	C
19980519	99999999	86021	34746	01	LC	P

**GVKEY 149721 TRAVELZOO**

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20000101	20020829	0	0	00X	NR	C
20020830	20031229	0	0	01	NR	P
20031230	20131031	89941	44695	01	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20000101	20020829	0	0	00X	NR	C
20020830	20031229	0	0	01	NR	P
20031230	99999999	89941	44695	01	LC	P

**GVKEY 175342 CHINA INFORMATION TECHNOLOGY**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20061030	0	0	00X	NR	C
20061031	20080522	0	0	01	NR	P
20080523	20121109	92682	53023	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20050101	20061030	0	0	00X	NR	C
20061031	20080522	0	0	01	NR	P
20080523	99999999	92682	53023	01	LC	P

**GVKEY 177053 VOYA ASIA PAC HI DIV EQ INCM**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070301	20070327	0	0	00X	NR	C
20070328	20140430	91872	51971	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070301	20070327	0	0	00X	NR	C
20070328	99999999	91872	51971	01	LC	P

**GVKEY 180423 LENDINGTREE INC**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20080820	0	0	00X	NR	C
20080821	20150109	92775	53077	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20060101	20080820	0	0	00X	NR	C
20080821	99999999	92775	53077	01	LC	P

**GVKEY 182309 ARCA BIOPHARMA INC**

**OLD:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20090127	0	0	00X	NR	C
20090128	20150911	85293	15638	01	LC	P

**NEW:**

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20070101	20090127	0	0	00X	NR	C
20090128	99999999	85293	15638	01	LC	P



## GVKEY 184680 KINGTONE WIRELESSINFO -ADR

OLD:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20041201	20100513	0	0	00X	NR	C
20100514	20121109	93396	53422	90	LC	P

NEW:

LINKDT	LINKENDDT	LPERMNO	LPERMCO	LIID	LINKTYPE	LINKPRIM
20041201	20100513	0	0	00X	NR	C
20100514	99999999	93396	53422	90	LC	P

### STEPS TO INSTALL:

- From the directory containing your downloaded zip file, right click (in Windows) or run File Roller (in Red Hat)
- Set the extract destination to the current higher level directory where data is normally stored and unzip will add the rest of the path (default is C:\ in Windows or /home in Red Hat)
- For example, in Windows, extracting to C:\ will install the data under C:\crspdata

Contact CRSP Client Services for assistance at: [support@crsp.chicagobooth.edu](mailto:support@crsp.chicagobooth.edu) or call 312-263-6400, Option 2.

### SETTING ENVIRONMENT VARIABLES

The zip process will not automatically set environment variables for use with command line tools. The following steps will do so.

NOTE: CRSPSift does not use and therefore does not require environment variables.

### LINUX

NOTE: The new zip installs are now saving to directories with lower case letters – for example, ~/crspdata/diz201308

Check the current state of the environment variables by entering this command: `env | grep crsp`

- If you have admin privileges on your machine, open the .profile file, and make updates to the following lines to update the paths for the new data installed:
  - `CRSP_CCM=<full path name>/<compustat directory>` (example: `CRSP_CCM=~ /crspdata/cmz201309` )
- If you are using the bash shell (or any Bourne-style shell), enter the same commands above and export each one. This will make changes for your current session only and does not save to the .profile file.
- A shell script is available to make changes that can be reused for each update done. Note that this will only make changes to your current session and does not save to the .profile file.
  - Navigate to where the CUPL tools are loaded and then enter: `cd accbin`
  - Start the script by entering: `./crsp_setup.sh`
  - The script will prompt for the following:
    - File name (*will be appended with .kshrc*)
    - Top level directory (this should be where CUPL tools are located (example: `~/crsp` )
    - Scratch directory for error messages – name can be anything
    - Enter path for daily stock directory (example: `~/crspdata/diz201308`)
    - Enter path for monthly stock directory (example: `~/crspdata/miz201308`)
    - Enter path for index directory (example: `~/crspdata/ifz201308`)
    - Enter path for CCM directory – enter to leave blank (example: `CRSP_CCM=~ /crspdata/cmz201309` )

- Enter path for CST directory – enter to leave blank
- Execute script by running: `./<file name created above>.kshrc` (*note there is a space between the two dots*)

**WINDOWS:**

The CRSP Client Environment utility provides users a way to check the location of the software and to set environment variables. The utility can be started by locating it under installed programs CRSPAccess/CRSP Client Environment, or by navigating to the /accbin folder where the CUPL tools are installed and running: `Client_Environment.exe` . After making any changes, be sure to log off and back into Windows for the settings to be saved.