

CASE STUDY - Security Master - Cleansing & Maintenance

About the Client - Leading provider of asset management, asset servicing, wealth management and banking solutions

The Business Challenges

- Transitioning to a new EDM platform – want to ensure only high quality data is ported over
- Lack of a proper mechanism to assess data quality
- Quality issues are being identified by downstream users. Lack of systematic approach to track and rectify data quality issues before it reaches downstream systems
- Cleanse a sub-section of their existing security master database (100,000 assets)

Results

- A comprehensive review of the existing data to identify gaps and quality issues, including an exercise to define what is considered an appropriate level of quality
- Development of a “Heatmap” – a RAG-coded graphic which depicts various quality issues
- Repair issues identified, both as a one-time clean-up effort as well as process fixes needed to prevent repeat issues into the future. Dedicated team of resources and various customized tools were utilized to cleanse the database
- Multi-vendor comparison approach was followed and scorecard was created for each vendor

Benefits

- Timely delivery of the cleansed “Golden copy” file in an agreed pre-determined format
- Generated “Heatmap” based on quality parameters such as Completeness, Coverage, Conformity, Consistency, Timeliness, and Accuracy, with region-wise report
- Developed sustainable method to report on data quality

Sample Input – Security Master Cleansing

Region	Int_ID	CUSIP	ISIN	COUNTRY OF QUOTATION	COUPON RATE	COUPON START DATE	COUPON END DATE	FIRST PAYDATE	ISSUE DATE	ISSUE RATE TEXT	ISSUE TYPE	LAST PAYDATE	MATURITY DATE
NA	100916	46628VAC0	US46628VAC00	US	5.870000000	6/1/2008 12	6/9/2008 2:3	7/25/2006	6/1/2006	FLOATING	CMOBOND	[NULL]	8/25/2036
NA	100917	46626LFL9	US46626LFL99	US	0.384000000	5/25/2011 1	5/25/2011 2	2/27/2006	1/27/2006	FLOATING	ASSTBCKD	5/25/2011	5/25/2035
NA	100930	38373MEP1	[NULL]	US	6.110000000	7/1/2002 12	11/1/2007 1	8/16/2002	7/1/2002	FIXED	CMBSBOND	6/16/2011	7/16/2028
NA	100933	46625YKZ5	US46625YKZ50	US	0.468000000	5/15/2011 1	5/16/2011 2	7/15/2005	6/15/2005	FLOATING	CMBSBOND	[NULL]	2/15/2019
NA	100936	31331GCF4	US31331GCF46	US	3.125000000	9/23/2008 1	10/2/2008 5	3/23/2009	9/23/2008	FIXED	FFCB	3/23/2011	9/23/2011
NA	100937	38374HW22	US38374HW228	US	5.500000000	9/20/2004 1	10/10/2006	10/20/2004	9/1/2004	FIXED	GNMAREMI	9/1/2004	1/20/2031
NA	100944	46629KAD1	US46629KAD19	US	0.304000000	5/25/2011 1	5/25/2011 2	9/25/2006	9/14/2006	FLOATING	ASSTBCKD	5/25/2011	8/25/2036
NA	100949	32051GQL2	US32051GQL22	US	2.908226000	5/1/2011 12	5/26/2011 2	7/25/2005	6/1/2005	FLOATING	CMOBOND	6/25/2011	8/25/2035
NA	100953	59022HHJ4	US59022HHJ41	US	4.747000000	6/1/2005 12	11/11/2006	7/12/2005	6/1/2005	FLOATING	CMBSBOND	6/12/2011	6/12/2043
NA	100979	589929DF2	[NULL]	US	7.849999904	3/15/1992 1	6/21/2003 6	4/15/1992	3/1/1992	FIXED	ASSTBCKD	[NULL]	4/15/2012
NA	100987	38374LVL2	US38374LVL25	US	5.000000000	7/20/2005 1	5/2/2007 5:3	8/20/2005	7/1/2005	FIXED	GNMAREMI	[NULL]	12/20/2033
NA	100989	38373V4B3	US38373V4B31	US	3.900000000	11/1/2002 1	12/7/2007 1	12/16/2002	11/1/2002	FIXED	GNMAREMI	6/16/2011	11/16/2032
NA	100993	38376C5B1	US38376C5B17	US	4.500000000	10/1/2009 1	2/19/2010 5	11/20/2009	10/1/2009	FIXED	GNMAREMI	[NULL]	9/20/2039
NA	101005	23246LAE9	US23246LAE92	US	0.444000000	5/25/2011 1	5/25/2011 2	7/25/2007	6/29/2007	FLOATING	ASSTBCKD	5/25/2011	11/25/2047
NA	101006	46629QAV8	US46629QAV86	US	0.334000000	5/25/2011 1	5/25/2011 2	12/26/2006	12/14/2006	FLOATING	ASSTBCKD	[NULL]	7/25/2036
NA	101015	31331GQH5	US31331GQH55	US	3.070000000	3/25/2009 1	3/31/2009 1	9/25/2009	3/25/2009	FIXED	FFCB	3/25/2011	3/25/2013
NA	101016	22541SJJ8	US22541SJJ87	US	2.721115000	4/1/2011 12	4/25/2011 4	6/25/2004	5/1/2004	VARIABLE	CMOBOND	6/25/2011	6/25/2034
NA	101022	126673XQ0	US126673XQ02	US	0.472500000	4/26/2010 1	4/26/2010 4	4/25/2005	3/29/2005	FLOATING	ASSTBCKD	5/25/2011	10/25/2034
NA	101026	93935HAS6	US93935HAS67	US	2.389380000	2/25/2009 1	6/25/2009 7	9/25/2006	8/30/2006	FLOATING	CMOBOND	5/25/2011	9/25/2036
NA	101034	32028PAR6	[NULL]	US	5.206880000	10/27/2008	11/26/2008	9/25/2006	9/6/2006	FLOATING	ASSTBCKD	5/25/2011	8/25/2036
NA	101036	22541SAA6	US22541SAA69	US	2.254000000	3/15/2004 1	8/1/2006 11	4/15/2004	3/1/2004	FIXED	CMBSBOND	3/1/2004	1/15/2037
NA	101050	38374CAK7	[NULL]	US	5.500000000	9/20/2003 1	10/7/2003 5	10/20/2003	9/1/2003	FIXED	GNMAREMI	9/1/2003	6/20/2020
NA	101062	466247PW7	US466247PW76	US	5.183375000	5/1/2011 12	5/25/2011 2	6/25/2005	5/1/2005	FLOATING	CMOBOND	6/25/2011	6/25/2035
NA	101064	22540VHE5	US22540VHE56	US	1.856250000	9/27/2010 1	9/27/2010 3	12/26/2001	11/27/2001	FLOATING	ASSTBCKD	5/25/2011	1/1/2031
NA	101065	31331JWW9	US31331JWW97	US	3.300000000	7/27/2010 1	7/22/2010 7	1/27/2011	7/27/2010	FIXED	FFCB	7/27/2010	7/27/2020
NA	101066	31846LBH8	[NULL]	US	1.320000000	1/20/2004 1	1/21/2004 2	1/20/1997	12/20/1996	FLOATING	ASSTBCKD	[NULL]	12/20/2026
NA	101067	38373QBS9	[NULL]	US	3.500000000	4/20/2003 1	6/8/2004 11	5/20/2003	4/1/2003	FIXED	GNMAREMI	[NULL]	12/20/2026
NA	101070	38374F7D0	US38374F7D03	US	5.000000000	4/1/2004 12	5/21/2008 8	5/20/2004	4/1/2004	FIXED	GNMAREMI	5/20/2008	12/20/2026

Sample Output – Security Master Cleansing

Region	Int_ID	CUSIP	ISIN	COUNTRY OF QUOTATION	COUPON RATE	COUPON START DATE	COUPON END DATE	FIRST PAYDATE	ISSUE DATE	ISSUE RATE TEXT	ISSUE TYPE	LAST PAYDATE	MATURITY DATE
NA	100916	46628VAC0	US46628VAC00	US	5.870000000000	6/1/2008	6/9/2008	7/25/2006	6/29/2006	Fixed	Home Equity Loans	5/25/2011	8/25/2036
NA	100917	46626LFL9	US46626LFL99	US	0.402600000000	5/25/2011	5/25/2011	2/25/2006	1/20/2006	Floater	Home Equity Loans	5/25/2011	5/25/2035
NA	100930	38373MEP1	US38373MEP14	US	6.110000000000	7/1/2002	11/1/2007	7/16/2002	7/19/2002	Fixed	Commercial Mortga	5/16/2011	7/16/2028
NA	100933	46625YKZ5	US46625YKZ50	US	0.457050000000	5/15/2011	5/16/2011	7/15/2005	5/27/2005	Floater	Commercial Mortga	5/15/2011	2/15/2019
NA	100936	31331GCF4	US31331GCF46	US	3.125000000000	9/23/2008	10/2/2008	3/23/2009	9/23/2008	Fixed:Pla	Fixed Income/Fixed	3/23/2011	9/23/2011
NA	100937	38374HW22	US38374HW228	US	5.500000000000	9/20/2004	10/10/2004	9/20/2004	9/23/2004	Fixed	CMO Tranches	5/20/2011	1/20/2031
NA	100944	46629KAD1	US46629KAD19	US	0.304000000000	5/25/2011	5/25/2011	9/25/2006	8/22/2006	Floater	Home Equity Loans	5/25/2011	8/25/2035
NA	100949	32051GQL2	US32051GQL22	US	2.908226300000	5/1/2011	5/26/2011	7/25/2005	6/24/2005	Variable	CMO Whole Loan	5/25/2011	8/25/2035
NA	100953	59022HHJ4	US59022HHJ41	US	4.747000000000	6/1/2005	11/11/2004	7/12/2005	6/21/2005	Fixed	Commercial Mortga	6/12/2011	6/12/2043
NA	100979	589929DF2	US589929DF26	US	7.850000000000	3/15/1992	6/21/2003	3/15/1992	3/1/1992	Fixed	CMO Whole Loan	5/15/2000	4/15/2012
NA	100987	38374LVL2	US38374LVL25	US	5.000000000000	7/20/2005	5/2/2007	7/20/2005	7/15/2005	Fixed	CMO Tranches	5/20/2011	12/20/2033
NA	100989	38373V4B3	US38373V4B31	US	3.900000000000	11/1/2002	12/7/2007	11/16/2002	11/21/2002	Fixed	CMO Tranches	5/16/2011	11/16/2032
NA	100993	38376C5B1	US38376C5B17	US	4.500000000000	10/1/2009	2/19/2010	10/20/2009	10/23/2009	Fixed	CMO Tranches	5/20/2011	9/20/2039
NA	101005	23246LAE9	US23246LAE92	US	0.444000000000	5/25/2011	5/25/2011	7/25/2007	6/28/2007	Floater	Home Equity Loans	5/25/2011	11/25/2037
NA	101006	46629QAV8	US46629QAV86	US	0.334000000000	5/25/2011	5/25/2011	12/25/2006	11/21/2006	Floater	Home Equity Loans	5/25/2011	7/25/2036
NA	101015	31331GQH5	US31331GQH55	US	3.070000000000	3/25/2009	3/31/2009	9/25/2009	3/25/2009	Fixed:Pla	Fixed Income/Fixed	3/25/2011	3/25/2013
NA	101016	22541SJJ8	US22541SJJ87	US	2.671421000000	4/1/2011	4/25/2011	6/25/2004	3/26/2004	Variable	CMO Whole Loan	5/25/2011	6/25/2034
NA	101022	126673XQ0	US126673XQ02	US	0.404000000000	4/26/2010	4/26/2010	4/25/2005	3/14/2005	Floater	Home Equity Loans	5/25/2011	10/25/2034
NA	101026	93935HAS6	US93935HAS67	US	2.473750000000	2/25/2009	6/25/2009	9/25/2006	8/28/2006	Floater	Home Equity Loans	5/25/2011	9/25/2036
NA	101034	32028PAR6	US32028PAR64	US	5.258750000000	1/1/2008	1/1/2008	7/25/2006	7/25/2006	Floater	Home Equity Loans	5/25/2011	8/25/2036
NA	101036	22541SAA6	US22541SAA69	US	2.254000000000	3/25/2009	3/31/2009	9/25/2009	3/25/2009	Fixed:Pla	Commercial Mortga	5/15/2011	1/15/2037
NA	101050	38374CAK7	US38374CAK71	US	5.500000000000	9/20/2004	10/10/2004	9/20/2004	9/23/2004	Fixed	CMO Tranches	5/20/2011	6/20/2020
NA	101062	466247PW7	US466247PW76	US	5.183375000000	9/20/2004	10/10/2004	9/20/2004	9/23/2004	Fixed	CMO Whole Loan	5/25/2011	6/25/2035
NA	101064	22540VHE5	US22540VHE56	US	1.794000000000	9/20/2004	10/10/2004	9/20/2004	9/23/2004	Floater	Home Equity Loans	5/25/2011	1/1/2031
NA	101065	31331JWW9	US31331JWW97	US	3.300000000000	7/1/2002	11/1/2007	7/16/2002	7/19/2002	Fixed	Fixed Income/Fixed	1/27/2011	7/27/2020
NA	101066	31846LBH8	US31846LBH87	US	0.787500000000	1/20/2007	2/23/2007	2/20/2007	2/20/2007	Floater	Home Equity Loans	6/20/2010	12/20/2026
NA	101067	38373QBS9	US38373QBS93	US	3.500000000000	4/20/2003	6/8/2004	4/20/2003	4/23/2003	Fixed	CMO Tranches	5/20/2011	12/20/2026
NA	101070	38374F7D0	US38374F7D03	US	5.000000000000	4/1/2004	5/21/2008	4/20/2004	4/22/2004	Fixed	CMO Tranches	5/20/2011	12/20/2026

Mobius filled values + Matching with Input values

Mobius filled values + Changed from Input values

Mobius Heatmap – Data Accuracy

ACCURACY										
Region	CUSIP	ISIN	COUNTRY OF QUOTATION	COUPON RATE	COUPON START DATE	COUPON END DATE	FIRST PAYDATE	ISSUE DATE	ISSUE DATED DATE	MATURITY DATE
North America	100.00%	99.28%	99.61%	69.37%	88.89%		50.10%	14.92%	100.00%	96.71%
Europe	92.86%	99.40%	70.36%	22.49%	16.23%	0.00%	70.12%	56.89%	94.27%	92.42%
ASIA, Australia, New Zealand & South Africa	100.00%	100.00%	88.89%	42.86%	41.18%	0.00%	63.89%	36.11%	93.55%	96.97%
Latin America & South America	100.00%	100.00%	27.27%	30.00%	0.00%	0.00%	81.82%	90.91%	72.73%	100.00%

Less than or equal to 90%	
Above 90% and less than or equal to 95%	
Above 95%	