

Functional Specifications

Fund Expansion
EV15, SmartApp and SmartApp for MRPS

Modification Number: MLI-182
Empire Time Codes:
INDV-01217A (EV15/ SmartApp)
INDV-02095 SRA (SmartApp for MRPS)

MetLife®
[April 2005]
[Design Phase]

IBIT

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Last Updated: 04.07.2005
Version: 4.0

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1 Revision History

VERSION/ RELEASE	DATE ISSUED	DESCRIPTION OF REVISIONS	AUTHOR
1.0	03.04.2005	Initial Draft	Lisa Colvin
1.1	03.08.2005	SmartApp specifications added	Lisa Colvin
1.2	03.08.2005	Updates in the Business Requirements implemented (asset allocation models, fund family name for MLF Fund of Funds, removal of MLI fund of funds for EDJ.)	Lisa Colvin
1.3	03.09.2005	Clarified SmartApp display names, fund effective date, state approval, fund closure, model changes required, attached reference spreadsheets, and updated Suitability.	Lisa Colvin
1.4	03.10.2005	Added plan code specific data for 049 and 186, added LS41R3 to MLI -L share, added 137 as a new fund for MLI/USA, updated Fund Family name for MLF Fund of Funds, noted potential table changes for IVR, noted changes for MRPS, added AGE models, added specifications for NEF and MLFS fund order display, updated message text for suitability, added new version of EFA/EAS diagram, updated Open/Closed Issues.	Lisa Colvin
1.5	03.11.2005	Added MLI/USA to BR Money Market Name Change, updated version of MRPS changes, updated QA cycle map, updated queries per QA request, added EV15 dataset names.	Lisa Colvin
1.6	03.14.2005	Corrected statutory company code reference for MRPS, corrected year for first cycle date, updated suitability messages, added specification for SmartApp update for suitability grid, SmartApp edit and screen changes for AGE model change, updated SmartApp name of funds 99 and 100, updated MRPS spreadsheet.	Lisa Colvin
1.7	03.15.2005	Updated names for ETF fund placeholders, provided dummy Fund of Funds asset class percentages for suitability, inserted updated version of fund risk order spreadsheet, added fund order specifications for NEF (New Biz and Post-Issue) and MLFS PPS (New Biz only at this time).	Lisa Colvin
2.0	03.21.2005	Suitability change for 100% allocation to a Fund of Funds, updates to suitability range/grid, changes for validation of investment objective vs. risk tolerance (Change Control approved), changes for MLFS (PPS) Post-Issue fund order, PCA/RJA note for SmartApp conversion, draft 9.0 MRPS spreadsheet.	Lisa Colvin
2.1	03.22.2005	ETF fund names inserted, different fund orders for NEF/MLFS-PPS vs MRPS – new spreadsheets attached, added Suitability Fund of Funds underlying asset class percentages.	Lisa Colvin
2.2	03.23.2005	ETF fund family name inserted, separated Suitability Review System specifications, added issue blotter and registered principal review screen changes (Change Control approved), updated EFA Translation Table and Unit Value files, updated Open and Closed Issues.	Lisa Colvin
3.0	03.31.2005	ETF fund family name corrected, spelling of MetLife Advisers LLC fund family should remain with an 'e', updated ET codes, deleted Non-Financial Transactions query, added two new EV15 confirms queries, updated ETF fund availability, and updated Appendix and Open/ Closed Issues.	Lisa Colvin
4.0	04.07.2005	Updated queries, removed fund 125 which is not substituting, removed fund 193 which is no longer being added, updated EFA Translation table and unit value file, added DST FanMail file, updated Appendix and Open/Closed Issues. Changes in AQUA. Updated Suitability rule (for 1 Fund of Funds selection for New Biz) for pending Change Control. Changes in YELLOW until approved.	Lisa Colvin

2 Goals of the Project

- 2.1 The goal of this project is to implement the system changes necessary to support the Enterprise Fund Expansion (effective May 2, 2005) administered through EV15, SmartApp and SmartApp for MRPS.

3 Assumptions

- 3.1 All requirements have been identified by the Business.
- 3.2 All changes required by system interfaces and downstream systems have been identified and will be implemented. Please see *Section 5 – System Interface/ Downstream System Impact*.
- 3.3 There will be no impact to fixed products administered through EV15, SmartApp and SmartApp for MRPS.
- 3.4 All fund mergers and substitutions will be approved by the SEC and Proxy vote.
- 3.5 All application and sales literature will be updated by Sales and Marketing.
- 3.6 All necessary post-issue forms will be updated by the appropriate department (Patty Wagner/ Ann Marie Surber), but there will be no impact to FastForms on SmartApp.
- 3.7 There will be no impact to the SmartApp to MRPS feed for the MFFS, EPPA, FFA, PPA, MAB, SFG, and Vestmet products.
- 3.8 There will be no impact to the Decomposed Transall (Mainframe and Client Server) Des Moines Accounting Files.
- 3.9 There will be no impact to the OSJ or ARD logic in Smart App.

4 Functional Details, System Messages and Screen Layout Changes

4.1 Overview

- 4.1.1 Multiple types of changes are occurring as part of the Fund Expansion 2005 project which can be categorized as follows:

- 4.1.1.1 Portfolio Mergers and Substitutions
- 4.1.1.2 Fund Closures
- 4.1.1.3 Addition of New Funds and Existing Funds to Products
- 4.1.1.4 Changes to Existing and Creation of New Asset Allocation Models
- 4.1.1.5 SmartApp Screen Changes
- 4.1.1.6 Suitability Changes
- 4.1.1.7 EV15 and SmartApp Table Updates
- 4.1.1.8 Fund Chart Updates

4.1.2 Affected Franchises

- 4.1.2.1 Franchises for EV15 and SmartApp affected by the Fund Expansion 2005 project are as follows:
- (a) MLI of MO (Statutory Company Code 003)
 - (b) MLI of CA (Statutory Company Code 004)
 - (c) MLI of NY (Statutory Company Code 005)
 - (d) MLI USA (Statutory Company Code 006)
 - (e) MLF (Statutory Company Code 020)
 - (f) NEF (Statutory Company Code 002)
- 4.1.2.2 Franchise for SmartApp for MRPS affected by the Fund Expansion 2005 project is as follows:
- (a) MLF - RPS (Statutory Company Codes 111, 222, 333)

4.1.3 Internal Modification Number

- 4.1.3.1 The internal Modification Number for the Fund Expansion 2005 project is MLI-182.

4.1.4 Empire Time Code

- 4.1.4.1 The Empire Time Codes for the Fund Expansion 2005 project are INDV-01217A (EV15/ SmartApp) and INDV-02095 SRA (SmartApp for MRPS).

4.1.5 EV15 Transaction Effective and Process Dates

- 4.1.5.1 The Transaction Effective Date for all EV15 auto-generated transactions will be 04/29/2005.
- 4.1.5.2 EV15 auto-generated transactions will process in the 04/29/2005 cycle.

4.1.6 EV15 Originator ID

- 4.1.6.1 All EV15 transactions must be assigned a unique Originator ID which will allow these transactions to be identified in the Confirm Extract and by the user in the future in Transaction History.
- 4.1.6.2 The Originator ID for Fund Expansion 2005 project is FNDEXP05.

4.1.7 EV15 Memo Code

4.1.7.1 No EV15 Memo Code is required.

4.1.8 Quality Assurance

4.1.8.1 Code must be delivered to the MLIM QA region by 3/16/2005 as the first cycle will take place on 3/16/2005.
(a) The purpose of the 3/16/05 Model Office Cycle is to mimic the 4/29/05 Production Cycle as closely as possible.

4.1.8.2 The cycle date will be 3/16/2005.

4.1.8.3 Cycle Map



Apr2005 Release
Cycle Map_03_09_20

4.2 EV15 Required Queries

Note: Please see similar queries produced for the May and November 2004 Fund Expansions.

4.2.1 Pre Cycle – Allocated Value

4.2.1.1 The EV15 code will need to query the database to determine which policies with Active, Death Claim Pending or Waiting for Money statuses [POLICY_STATUS IN ('A', 'E', 'W')] have allocated value to Funds 072, 073, 102, 111, 009, 017, 083, 079, 151, 005, and 139 within Plan Code Specified in *Section 4.7 - Portfolio Mergers, Substitutions and Closures*.

4.2.1.2 A report should be produced on 04/17/05, 04/26/05 and 4/29/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Plan Code, Policy Status, and Impacted Fund Number.

4.2.1.3 OE and LE transactions will then need to be performed

4.2.2 Pre Cycle – No Allocated Value

4.2.2.1 The EV15 code will need to query the database to determine which policies with Active, Death Claim Pending or Waiting for Money statuses [POLICY_STATUS IN ('A', 'E', 'W')] have the following funds on the policy but have no allocated value: 072, 073, 102, 111, 009, 017, 083, 079, 151, 005, and 139 within Plan Code Specified in *Section 4.7 - Portfolio Mergers, Substitutions and Closures*.

4.2.2.2 A report should be produced on 04/17/05, 04/26/05 and 4/29/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Plan Code, Policy Status, and Impacted Fund Number.

4.2.2.3 OE and LE transactions will then need to be performed

4.2.3 Pre Cycle – Special Programs

4.2.3.1 The EV15 code will subsequently need to query the database to determine which of the above with Active, Death Claim Pending or Waiting for Money status policies (referenced in 4.2.1) have active rebalance, dollar cost averaging, enhanced dollar cost averaging and systematic withdrawal programs where the indicated fund is on the segment itself.

4.2.3.2 A report should be produced on 04/17/05, 04/26/05 and 4/29/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Plan Code, Policy Status, Special Program, Cost Averaging Type (if Applicable – CA, ED, EG) and Impacted Fund Number.

4.2.3.3 LRBI, LGCI and LPOI transactions will then need to be performed.

4.2.3.4 If the segment has been terminated (i.e. next date is = 999), no changes are necessary.

4.2.4 Pre Cycle – Terminated Special Programs

4.2.4.1 The EV15 code will subsequently need to query the database to determine which of the above with Active, Death Claim Pending or Waiting for Money status policies (referenced in 4.2.1) have terminated rebalancing, dollar cost averaging, enhanced dollar cost averaging and systematic withdrawal programs where the indicated fund is on the segment itself.

4.2.4.2 A report should be produced on 04/17/05, 04/26/05 and 4/29/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Plan Code, Policy Status, Special Program, Cost Averaging Type (if Applicable – CA, ED, EG) and Impacted Fund Number.

4.2.5 Pre Cycle – Policies to be Affected

4.2.5.1 The EV15 code will need to query the database to determine how many policies will be affected by the Fund Merger/ Substitution. This would include all policies within Plan Code Specified in *Section 4.7 - Portfolio Mergers, Substitutions and Closures* which have allocated value to Funds 072, 073, 102, 111, 009, 017, 083, 079, 151, 005, and 139.

4.2.5.2 A report should be produced on 04/17/05 and 04/26/05 indicating the number of policies affected for each franchise. (MLI, USA, MLF, NEF)

4.2.6 Pre Cycle – VIT Substitution Policies to be Affected (Confirms Request)

4.2.6.1 The EV15 code will need to query the database to determine how many policies will be affected by the VIT Substitution. This would include all policies within Plan Code Specified in *Section 4.7 - Portfolio Mergers, Substitutions and Closures* which have allocated value to Funds 111, 009, 017, 083, 079, 151, 005, and 139.

4.2.6.2 A report should be produced on 04/05/05 indicating the number of policies affected for each franchise. (MLI, USA, MLF, NEF)

4.2.7 Pre Cycle – FAV/ FVF Transactions (Confirms Request)

4.2.7.1 The EV15 code will need to query the database to determine which policies within Plan Code Specified in *Section 4.7 - Portfolio Mergers, Substitutions and Closures* which have allocated value to Funds 072, 073 and 102 have had an FAV or FVF transaction performed in the past.

4.2.7.2 A report should be produced on 04/05/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Transaction Code and Transaction Effective Date.

4.2.8 Post Cycle – Valid Trades

4.2.8.1 The EV15 code will need to query the database immediately after the 4/29/05 cycle to identify all valid transactions (processor generated) vs. system generated transactions on that day for buy/sell reasons.

4.2.8.2 A report should be produced immediately after the 4/29/05 cycle with the following field information: Company Code, Statutory Company Code, Policy Number, Amount Moved with "from" Fund Number, Amount Moved with "to" Fund Number, Units Moved with "from" Fund Number, Units Moved with "to" Fund Number, Transaction Type, and Originator Code.

4.2.8.3 The report should show all OE, OES and OEI transactions with Originator Codes other than FNDEXP05.

4.3 SmartApp Required Queries

Note: Please see similar queries produced for the May and November 2004 Fund Expansions.

4.3.1 Pre Cycle – Restricted Policies

4.3.1.1 SmartApp will need to query the database to identify all "Restricted" policies on 4/26/05 so that they can be corrected by the Business prior to 4/29/05. (If the policies are not corrected, the automated transactions will reject.)

4.3.1.2 The system must also identify whether the policy is enrolled in an allocation model, and which model.

4.3.1.3 A report should be produced on 4/26/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Plan Code, Policy Status, Restrict Code, and Model Name (if applicable).

4.3.2 Pre Cycle – Suspended Policies

4.3.2.1 SmartApp will need to query the database to identify all "Suspended" policies on 4/26/05 so that they can be corrected by the Business prior to 4/29/05. (If the policies are not corrected, the automated transactions will reject.)

4.3.2.2 Criteria should include using the `plcysuspend` field in `tblPolicy` where the field is not blank or = NULL.

4.3.2.3 The system must also identify whether the policy is enrolled in an allocation model, and which model.

4.3.2.4 A report should be produced on 4/26/05 with the following field information: Company Code, Statutory Company Code, Policy Number, Plan Code, Policy Status, Suspend Code, and Model Name (if applicable).

4.3.3 Post Cycle – Restricted Policies Causing Rejection of Automated Transactions

4.3.3.1 SmartApp will need to query the database immediately after the 4/29/05 cycle to identify all policies which did not have their "Restrictions" corrected by the business and thus, the automated transactions rejected.

4.3.3.2 The system must also identify whether the policy is enrolled in an allocation model, and which model.

4.3.3.3 A report should be produced immediately after the 4/29/05 cycle with the following field information: Company Code, Statutory Company Code, Policy Number, Policy Status, Restrict Code, and Model Name (if applicable).

4.3.4 Post Cycle – Suspended Policies Causing Rejection of Automated Transactions

4.3.4.1 SmartApp will need to query the database immediately after the 4/29/05 cycle to identify all policies which did not have their "Suspensions" corrected by the business and thus, the automated transactions rejected.

- 4.3.4.2 Criteria should include using the plcysuspend field in tblPolicy where the field is not blank or = NULL.
- 4.3.4.3 The system must also identify whether the policy is enrolled in an allocation model, and which model.
- 4.3.4.4 A report should be produced immediately after the 4/29/05 cycle with the following field information: Company Code, Statutory Company Code, Policy Number, Policy Status, Suspend Code, and Model Name (if applicable).

4.3.5 Post Fund Expansion – Closed Funds (Business Request)

- 4.3.5.1 SmartApp will need to query the database each day for the week of 5/02/05 and once a week thereafter (to include once on the last business day of the month) to identify for all franchises any contracts that are invested in closed funds.
- 4.3.5.2 A report should be produced with the following field information: Company Code, Policy Number, Policy Status, and Impacted Fund Number.
- 4.3.5.3 Any contracts found will need to be manually updated to transfer the funds out of the old funds and into the new funds.
- 4.3.5.4 This query is currently being produced by SmartApp on a daily basis and should be updated to include funds closed as of 4/29/05.
- 4.3.5.5 The Business will provide direction as to when the query no longer needs to be run.

4.4 Plan Code Legend

The following plan codes indicate the affected products.

MLI Class AA	MLI Class A	MLI Class B	MLI Class VA	MLI Class XC	MLI Class L	MLI Class C	USA Series VA	USA Series XC	USA Series L	USA Series C
ST1NAV ST1NAB ST1NA3 ST1AGX ST1AGB ST1AG3 ST1AGR ST1AR3 ST1NA4 ST1AG4 ST1AR4	FL3EDJ FL3EDB FL3ED3 FL3EDR FL3ER3 FL3ED4 FL3ER4	ST1EDJ ST1EDX ST1EDB ST1EXB ST1EDR ST1ED3 ST1EX3 ST1ER3 ST1ED4 ST1EX4 ST1ER4	ST1101 ST110X ST110R ST11ML ST11MR ST1103 ST11X3 ST11R3 ST11M3 ST13R3	BN2101 BN21ML BN2103 BN21M3	LS4101 LS410R LS41ML LS41MR LS4103 LS41M3 LS41R3 LS43R3 LS4104 LS41R4	CS5101 CS510R CS51ML CS51MR CS5103 CS51R3 CS51M3 CS53R3	ST1201 ST120X ST120R ST12ML ST12MR ST1203 ST12X3 ST12R3 ST12M3 ST13MR	BN2201 BN22ML BN2203 BN22M3	LS4201 LS420R LS42ML LS42MR LS4203 LS42R3 LS42M3 LS4204 LS42R4	CS5201 CS520R CS52ML CS52MR CS5203 CS52R3 CS52M3 CS53MR
MLF B Share (7-yr)	MLF Bonus	MLF L Share	MLF C Share	NEF B Share (7-yr)	NEF Bonus	NEF L Share	NEF C Share	NEF V Share (P Share)		
225010 225011 2250B0 2250B1 2250A0 2250A1	225050 225080 225090	225030 225031 2250L0 2250L1 2250E0 2250E1	225020 225021 2250C0 2250C1 2250D0 2250D1	125010 125110 125011 1250B0 1251B0 1250B1 1250A0 1251A0 1250A1	125050 125150 125080 125180 125090 125190	125030 125031 1250L0 1250L1 1250E0 1250E1	125020 125021 1250C0 1250C1 1250D0 1250D1	125040 125140 125041 1250P0 1251P0 1250P1 1250F0 1251F0 1250F1		

4.5 Portfolio Name Changes

4.5.1 Impacted Funds

The following funds are being renamed for the Plan Codes indicated below.

4.5.1.1 Update the Fund Chart to reflect the changes indicated below.

Row #	Plan Codes	Fund Family 1. SmartApp Display 2. NEF/MLFS Mailings	Fund Number/ Class	Old Name	New SmartApp Name	New EV15 Short Name	New EV15 Abbreviated Name
1	MLF All NEF All	1. Neuberger and Berman (fundID = 32) 2. MSF (fundID = 48)	094 (B) and 095 (E)	Neuberger Berman Partners Mid Cap Value	Neuberger Berman Mid Cap Value	NEUB BER MIDCAP VAL	NB MCAPV
2	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	127 (E) and 158 (B)	State Street Research Aggressive Growth	BlackRock Aggressive Growth	BROCK AGGRESSIVE	BR AGG
3	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	128 (E) and 167 (B)	State Street Research Aurora	BlackRock Strategic Value	BROCK STRAT VALUE	BR STVAL
4	MLI Class AA	1. BlackRock Advisors, Inc. (New)	167 (B)	State Street Research Aurora	BlackRock Strategic Value	BROCK STRAT VALUE	BR STVAL
5	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	129 (B) and 130 (E)	State Street Research Bond Income	BlackRock Bond Income	BROCK BOND INCOME	BR BOND
6	MLI Class AA	1. BlackRock Advisors, Inc. (New)	129 (B)	State Street Research Bond Income	BlackRock Bond Income	BROCK BOND INCOME	BR BOND
7	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	131 (E) and 157 (B)	State Street Research Diversified	BlackRock Diversified	BROCK DIVERSIFIED	BR DIVER
8	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	133 (B) and 134 (E)	State Street Research Investment Trust	BlackRock Investment Trust	BROCK INVEST TRUST	BR INVST
9	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	159 (B) and 007 (E)	State Street Research Large Cap Growth	BlackRock Legacy Large Cap Growth	BROCK LG CAP GROWTH	BR LCAPG
10	MLF All NEF All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	135 (E) and 168 (B)	State Street Research Large Cap Value	BlackRock Large Cap Value	BROCK LG CAP VALUE	BR LCAPV
11	MLF All NEF All MLI All USA All	1. BlackRock Advisors, Inc. (New) 2. MSF (fundID = 48)	137 (B) and 138 (E)	State Street Research Money Market	BlackRock Money Market	BROCK MONEY MARKET	BR MONEY
12	MLF All NEF All	1. Oppenheimer Funds, Inc. (fundID = 10) 2. MSF (fundID = 48)	124 (E) and 166 (B)	Scudder Global Equity	Oppenheimer Global Equity	OPPENHEIMER GLOB EQTY	OPP GLENO
13	MLF All NEF All	1. RCM Global Advisor (New) 2. MIST (fundID = 47)	099 (B) and 100 (E)	PIMCO PEA Innovations	RCM Global Technology Portfolio	RCM GLOBAL TECH	RCM GLOB
14	MLI Class VA MLI Class XC MLI Class L MLI Class C USA All	1. RCM Capital Management, LLC (New)	099 (B)	PIMCO PEA Innovations	RCM Global Technology Portfolio	RCM GLOBAL TECH	RCM GLOB
15	MLI All USA All	1. Third Avenue Management LLC (fundID = 53)	148 (B)	Third Ave Small Cap	Third Avenue Small Cap (Class B)	THIRD AVE SMALL B	THRD SCB

4.5.2 EV15 Table Changes

4.5.2.1 Entries must be made in the A09 Fund Name table (E0015S.MLIM.N.TBLT009.R040705) as indicated above in *Section 4.5.1 – Impacted Funds*.

4.5.2.2 New portfolio names shall be added effective 4/29/05.

4.5.3 SmartApp Table Changes

4.5.3.1 Create new fund families.

(a) Create a record in tblFundFamily for each new fund family name.

4.5.3.2 Rename the funds.

(a) Update the fund name as specified in tblFund.

(b) If the old name indicates the share class, then the new name must also indicate the same share class.

4.5.3.3 Associate the funds to the appropriate fund families.

(a) For SmartApp screen display, identify the fund family per fund in tblFund.

(b) For NEF and MLFS mailings, update tblFundFamilyAnnualReport to associate the applicable funds to the appropriate fund families.

- 4.5.3.4 Rename the funds if necessary for MLFS PPS.
 - (a) SmartApp tables that may be affected:
 1. tblVRUFund
 2. tblVRUFundXRef

4.5.4 SmartApp Screen Changes

- 4.5.4.1 The New Business screens will display the new fund names after close of business on 4/29/2005.
- 4.5.4.2 The Post-Issue screens will display the new fund names after close of business on 4/29/2005.

4.5.5 SmartApp for MRPS Table Changes

- 4.5.5.1 Please refer to the attached document in Appendix 7.1 for specific changes.
- 4.5.5.2 Summary of functional changes required:
 - (a) Update fund names for the applicable products. Name changes will affect identified products for:
 1. MLI SFG (compID = 8)
 2. MFFS (compID = 7)
 3. EPPA, PPA, FFA versions 1, 2, & 3, VESTMET, Variable 1, 2, 3 (compID = 9)
 4. MAB and Prospectus C (compID = 9)
 5. MDC (EPPA MDC & FFA MDC) (compID = 9)
 - (b) No updates required to the 2-letter MRPS code for the renamed funds.
 - (c) SmartApp tables that may be affected:
 1. tblFund

4.6 New and Existing Fund Additions by Product

4.6.1 Impacted Funds

The following funds are being added for the Plan Codes indicated below.

- 4.6.1.1 Update the Fund Chart to reflect the changes indicated below.

Row #	Plan Codes	Fund Family 1. SmartApp Display 2. NEF/MLFS Mailings	New Fund Number/ Class	New SmartApp Name	New EV15 Short Name	New EV15 Abbreviated Name
1	MLI All USA All	1. Morgan Stanley Investment Management Inc. (funfID = 31)	(New Fund) 187 (B)	Van Kampen Comstock Portfolio	VAN KAMPEN COMSTOCK	VK COMSTOCK
2	MLF All NEF All	1. Asset Allocation Portfolios (New) 2. MSF (funfID = 48)	(New Fund) 188 (B)	MetLife Conservative Allocation Portfolio	METLIFE CONSERVATIVE	MET CONS
3	MLF All NEF All	1. Asset Allocation Portfolios (New) 2. MSF (funfID = 48)	(New Fund) 189 (B)	MetLife Conservative to Moderate Allocation	CONSERVE MODERATE	MET CMOD
4	MLF All NEF All	1. Asset Allocation Portfolios (New) 2. MSF (funfID = 48)	(New Fund) 190 (B)	MetLife Moderate Allocation Portfolio	METLIFE MODERATE	MET MODE
5	MLF All NEF All	1. Asset Allocation Portfolios (New) 2. MSF (funfID = 48)	(New Fund) 191 (B)	MetLife Moderate to Aggressive Allocation	MODERATE AGGRESSIVE	MET MAGG
6	MLF All NEF All	1. Asset Allocation Portfolios (New) 2. MSF (funfID = 48)	(New Fund) 192 (B)	MetLife Aggressive Allocation Portfolio	METLIFE AGGRESSIVE	MET AGGR
7	MLI Class AA	1. A G Edwards & Sons, Inc (New)	(New Fund) 195 (B)	Cyclical Growth ETF Portfolio	CYCLICAL GROWTH ETF	CYC GRTH
8	MLI Class AA	1. A G Edwards & Sons, Inc (New)	(New Fund) 196 (B)	Cyclical Growth & Income ETF Portfolio	CYCLICAL GTHINC	CYC GI
9	MLI Class AA	1. Salomon Brothers Group (funfID = 24)	(New Fund) 192 (A)	Salomon Brothers US Gov't Portfolio	SALOMON BRO US GOVT	USGOVT
10	MLI Class VA MLI Class XC MLI Class L MLI Class C USA All	1. Salomon Brothers Group (funfID = 34)	(Existing Fund) 165 (B)	Salomon Brothers US Gov't Portfolio	SALOMON BRO US GOVT	USGOVT
11	MLI Class AA	1. Third Avenue Management LLC (funfID = 53)	(New Fund) 194 (A)	Third Ave Small Cap (Class A)	THIRD AVE SMALL A	THRD SCA

Row #	Plan Codes	Fund Family 1. SmartApp Display 2. NEF/MLFS Mailings	New Fund Number/ Class	New SmartApp Name	New EV15 Short Name	New EV15 Abbreviated Name
12	MLF All NEF All MLI Class A MLI Class B	1. Oppenheimer Funds, Inc. (funfID = 10) 2. MIST (funfID = 47)	(Existing Fund) 096 (B)	Oppenheimer Capital Appreciation	OPPENHEIMER CAP APP	OPP CAPA
13	MLF *See Plan Codes Below NEF * See Plan Codes Below MLI Class A MLI Class B	1. Jennison Associates LLC (funfID = 54) 2. MSF (funfID = 48)	(Existing Fund) 049 (B)	Jennison Growth Portfolio	JENNISON GROWTH	JENN GRW
14	MLF *See Plan Codes Below NEF * See Plan Codes Below	1. Jennison Associates LLC (funfID = 54) 2. MSF (funfID = 48)	(New Fund) 186 (E)	Jennison Growth Portfolio	JENNISON GROWTH	JENN GRW
15	MLI Class A MLI Class B	1. Oppenheimer Funds, Inc. (funfID = 10)	(Existing Fund) 166 (B)	Oppenheimer Global Equity	OPPENHEIMER GLO EQTY	OPP GLEQ
16	MLI Class A MLI Class B	1. BlackRock Advisors, Inc. (New)	(Existing Fund) 129 (B)	BlackRock Bond Income	BROCK BOND INCOME	BR BOND
17	MLI Class AA	1. Neuberger and Berman (funfID = 32)	(Existing Fund) 156 (B)	(Existing) Neub Berman Real Estate Portfolio	NEUB BER REAL ESTATE	NB REALE
18	MLI Class AA	1. MetLife Advisers, LLC (funfID = 6)	(Existing Fund) 076 (B)	(Existing) MetLife Stock Index Portfolio	METLIFE STOCK INDEX	MET STKI
19	MLI Class AA	1. AIM Capital Management, Inc. (funfID = 3)	(Existing Fund) 064 (B)	(Existing) Met/AIM Small Cap Growth Portfolio	METAIM SMALL CAP GR	AIM SCAP
20	MLI All USA All	1. BlackRock Advisors, Inc. (New)	(Existing Fund) 137 (B)	BlackRock Money Market	BROCK MONEY MARKET	BR MONEY

***Note: For Funds 195 and 196, the effective date must be 08/1/05.**

- Funds must be added to the tables as appropriate, so that they can be adequately tested.
- Funds must then be removed/ made unavailable until 08/01/2005.
- Scripts should be written and tested so that the implementation/ availability of these funds may be requested by the Business via a SmartApp Remedy.

***Note: For Funds 049 (B) and 186 (E), funds added are plan code specific.**

MLF B Share (7-yr) (049)	MLF Bonus (049)	MLF L Share (049)	MLF C Share (049)	NEF B Share (7-yr) (049)	NEF Bonus (049)	NEF L Share (049)	NEF C Share (049)	NEF V Share (P Share) (049)
2250A0 2250A1	225090	2250E0 2250E1	2250D0 2250D1	1250A0 1251A0 1250A1	125090 125190	1250E0 1250E1	1250D0 1250D1	1250F0 1251F0 1250F1

MLF B Share (7-yr) (186)	MLF Bonus (186)	MLF L Share (186)	MLF C Share (186)	NEF B Share (7-yr) (186)	NEF Bonus (186)	NEF L Share (186)	NEF C Share (186)	NEF V Share (P Share) (186)
225010 225011 2250B0 2250B1	225050 225080	225030 225031 2250L0 2250L1	225020 225021 2250C0 2250C1	125010 125110 125011 1250B0 1251B0 1250B1	125050 125150 125080 125180	125030 125031 1250L0 1250L1	125020 125021 1250C0 1250C1	125040 125140 125041 1250P0 1251P0 1250P1

4.6.2 EV15 Table Changes

- 4.6.2.1 Entries must be made in the A09 Fund Name table (E0015S.MLIM.N.TBLT009.R040705) as indicated above in *Section 4.6.1 – Impacted Funds*.
- 4.6.2.2 Entries must be made in the A10 Fund Availability table (E0015S.MLIM.N.TBLTA10.FNDEXP05.R040705) as indicated above in *Section 4.6.1 – Impacted Funds*.
- 4.6.2.3 Entries must be made in the T113 FAV Code Availability table (E0015T.MLILM.FAVRU.UNLOAD.A - updated via spreadsheet [T113 FE2005 V5 4 6 05.xls]) as indicated above in *Section 4.6.1 – Impacted Funds*.
- 4.6.2.4 New funds shall be added effective 4/29/05.

4.6.3 SmartApp Table Changes

- 4.6.3.1 Create new fund families.
 - (a) Create a record in tblFundFamily for each new fund family name.
- 4.6.3.2 Create new funds.
 - (a) Create a record in tblFund for each applicable franchise (complD) that will offer the new fund.
 - (b) Associate the fund to death options in tblFundDeathOption.
 - (c) Specify the effective date (04/29/2005) for the new funds in tblFundDeathOptionStateApproval. All states should be approved.
- 4.6.3.3 Associate the funds to the appropriate fund families.
 - (a) For SmartApp screen display, identify the fund family per fund in tblFund.
 - (b) For NEF and MLFS mailings, update tblFundFamilyAnnualReport to associate the applicable funds to the appropriate fund families.
- 4.6.3.4 Associate the funds to plans.
 - (a) Associate the funds to the applicable planID in tblPlanFundDeathOption.
- 4.6.3.5 Assign and associate the appropriate IVR fund number to the new funds for MLFS PPS.
 - (b) SmartApp tables that may be affected:
 1. tblVRUFund
 2. tblVRUFundXRef

4.6.4 SmartApp Screen Changes

- 4.6.4.1 The New Business screens will display the new fund options after close of business on 4/29/2005.
- 4.6.4.2 The Post-Issue screens will display the new fund options after close of business on 4/29/2005.

4.6.5 SmartApp for MRPS Table Changes

- 4.6.5.1 Please refer to the attached document in Appendix 7.1 for specific changes.
- 4.6.5.2 Summary of functional changes required:
 - (a) New and existing fund additions will affect identified products for.
 1. MFFS (complD = 7)
 2. EPPA, PPA, FFA versions 1, 2, & 3, VESTMET, Variable 1, 2, 3 (complD = 9)
 3. MAB and Prospectus C (complD = 9)
 4. MDC (EPPA MDC & FFA MDC) (complD = 9)
 - (b) New fund options will be available after close of business on 04/29/2005.
 - (c) Specify the 2-letter MRPS code as appropriate for the new fund options.
 - (d) Specify the surrogate keys as applicable, using the appropriate version when applicable.
 - (e) No special requirements specified for states (tblSurrogateKeyState).
 - (f) No special requirements specified for forms (tblSurrogateKeyForm).
 - (g) SmartApp tables that may be affected:
 1. tblFund
 2. tblFundDeathOption
 3. tblFundDeathOptionStateApproval
 4. tblSurrogateKey

4.7 Portfolio Mergers, Substitutions and Closures

4.7.1 Impacted Funds

The following funds will be affected by the fund mergers and substitutions. Plan Codes are indicated by the Class/ Series referenced in *Section 4.4 - Plan Code Legend*.

4.7.1.1 Update the Fund Chart to reflect the changes indicated below.

Row #	Class/ Series/ Share	Current Fund Number *Closing	Current SmartApp Name	Current EV15 Short Name	Current EV15 Abbreviated Name	New Fund Number *Closing	New SmartApp Name	New EV15 Short Name	New EV15 Abbreviated Name	New Associated Fund Family 1. SmartApp Display 2. NEF/MLFS Mailings
1	MLF All NEF All	072 (B)*	Met/Putnam Voyager	MET PUTNAM VOYAGER	PUT VOYG	049 (B)	Jennison Growth	JENNISON GROWTH	JENN GRW	1. Jennison Associates LLC (fundID = 54) 2. MSF (fundID = 48)
2	MLI Class A MLI Class B	072 (B)*	Met/Putnam Voyager	MET PUTNAM VOYAGER	PUT VOYG	049 (B)*	Jennison Growth	JENNISON GROWTH	JENN GRW	1. Jennison Associates LLC (fundID = 54)
3	MLF All NEF All	073 (E)*	Met/Putnam Voyager	MET PUTNAM VOYAGER	PUT VOYG	186 (E)	Jennison Growth	JENNISON GROWTH	JENN GRW	1. Jennison Associates LLC (fundID = 54) 2. MSF (fundID = 48)
4	MLI ALL USA ALL	102 (B)*	Money Market Portfolio	MONEY MARKET	MONEY MK	137 (B)	BlackRock Money Market	BROCK MONEY MARKET	BR MONEY	1. BlackRock Advisors, Inc. (New)
5	MLI Class AA	111 (B)*	Putnam VT International Equity	PUTNAM INTL GROWTH	PUT INGR	085 (B)	MFS Research International	MFS RESEARCH INTL	MFS INTL	1. MFS Investment Management (fundID = 13)
6	MLI Class AA	009 (B)*	Alliance Bernstein Real Estate	AB REAL ESTATE INV	AB REAL	156 (B)	Neub/Ber Real Estate	NEUB BER REAL ESTATE	NB REALE	1. Neuberger and Berman (fundID = 32)
7	MLI Class AA	017 (B)*	Dreyfus Stock Index	DREYFUS STOCK INDEX	DREY STK	076 (B)	MetLife Stock Index	METLIFE STOCK INDEX	MET STKI	1. MetLife Advisors, LLC (fundID = 6)
8	MLI Class AA	083 (B)*	MFS New Discovery	MFS NEW DISCOVERY	MFS NEW DISC	064 (B)	Met/AIM Small Cap Growth	MET AIM SMALL CAP GR	AIM SCAP	1. AIM Capital Management, Inc. (fundID = 3)
9	MLI Class AA	079 (B)*	MFS High Income	MFS HIGH INCOME	MFS HYLD	056 (B)	Lord Abbett Bond Deb	LORD ABBETT BOND DEB	LA BOND	1. Lord, Abbett & Co. (fundID = 2)
10	MLI Class AA	151 (B)*	VIP High Income	VIP HIGH INCOME	VIP INC	056 (B)	Lord Abbett Bond Deb	LORD ABBETT BOND DEB	LA BOND	1. Lord, Abbett & Co. (fundID = 2)
11	MLI Class AA (Only ST1NAV & ST1AGX)	005 (A)*	AIM V.I. Premier Equity	AIM PREMIER EQUITY	AIM EQUIT	172 (A)*	Lord Abbett Gr & Inc	LORD ABBETT GR INC	LA GRINC	1. Lord, Abbett & Co. (fundID = 2)
12	MLI Class AA	125 (A)*	Scudder Government Securities	SCUDDER GOVT SEC	SCUD GOV	193 (A)*	Salomon Bro US Govt (Class A)	SALOMON BRO US GOVT	USGOVT	1. Salomon Brothers Group (fundID = 24)
13	MLI Class AA	139 (A)*	SVS Dreman Small Cap	SVS DREMAN SMALL CAP	SVS SCAP	194 (A)*	Third Ave Small Cap (Class A)	THIRD AVE SMALL A	THRD SCA	1. Third Avenue Management LLC (fundID = 53)

4.7.2 EV15 Manual Data Collect Transactions

Note 1: Funds 072, 073, 102, 111, 009, 017, 083, 079, 151, 005 (see plan codes) and 139 will no longer be available for New Sales, Fund Transfers, Additional Premiums, Rebalancing, Dollar Cost Averaging or Enhanced Dollar Cost Averaging.

Note 2: For MLI Classes A and B, fund 049 will be closed to new money by SmartApp once the merger has occurred. For MLF and NEF policies, fund 049 shall remain open to new money.

Note 3: For MLI Class AA, funds 172 (see plan codes) and 194 will be closed to new money by SmartApp once the merger has occurred.

- 4.7.2.1 **OE:** All policies (within franchise and plan code indicated) with money in any of the above "current fund numbers" will need to have OE transactions performed to move the money into the "new fund numbers."
- 4.7.2.2 **LE:** Policies (within franchise and plan code indicated) with allocations to any of the above "current fund numbers" will need to have LE transactions performed to change fund number allocations to the "new fund numbers."
- 4.7.2.3 **LRBI:** Policies (within franchise and plan code indicated) with rebalancing will need to have LRBI transactions performed to update those segments.
- 4.7.2.4 **LGCI:** Policies (within franchise and plan code indicated) with dollar cost averaging or enhanced dollar cost averaging will need to have LGCI transactions performed to update those segments.
- 4.7.2.5 **LPOI:** Policies (within franchise and plan code indicated) with systematic withdrawal will need to have LPOI transactions performed to update those segments.
- 4.7.2.6 **Notes:**
 - (a) No transfer fees will be assessed.
 - (b) There is no maximum number of transfers.
 - (c) All transactions manually processed on 04/29 will process before the EV15 automated transactions and will potentially cause the EV15 automated transactions to error out.
 - (d) EV15 code will indicate that the "latest time" of a transaction should apply.
 - (e) SmartApp will receive the old fund numbers as entered and change them before the extracts are received by EV15.

4.7.3 EV15 Table Changes

- 4.7.3.1 No EV15 table changes are required for Portfolio Mergers, Substitutions and Closures.

4.7.4 SmartApp Table Changes

- 4.7.4.1 Close funds to all new business and post-issue transactions after close of business 04/29/2005.
 - Note 1:** Funds 072, 073, 102, 111, 009, 017, 083, 079, 151, 005 (see plan codes) and 139 will no longer be available for New Sales, Fund Transfers, Additional Premiums, Rebalancing, Dollar Cost Averaging or Enhanced Dollar Cost Averaging.
 - (a) Update tblFundDeathOptionStateApproval to set the fund effective date to NULL. Specify the transactions for which the fund will be closed.
 - (b) Exception processing: The closed funds may be made available in SmartApp for contracts issued with an effective date prior to 04/30/2005 and post-issue transactions processed with an effective date prior to 04/30/2005. Process will be initiated by a Remedy ticket and resolved by appropriate updates to tblFundDeathOptionStateApproval.
- 4.7.4.2 Close funds to new business, added payments, and fund transfers after close of business 04/29/2005.
 - Note 2:** For MLI Classes A and B, fund 049 will be closed to new money by SmartApp once the merger has occurred. For MLF and NEF policies, fund 049 shall remain open to new money.
 - Note 3:** For MLI Class AA, funds 172 (see plan codes), 193 and 194 will be closed to new money by SmartApp once the merger has occurred.
 - (a) Update tblFundDeathOptionStateApproval to set the fund effective date to NULL. Specify the transactions for which the fund will be closed.
 - (b) Exception processing: The closed funds may be made available in SmartApp for contracts issued with an effective date prior to 04/30/2005 and post-issue transactions processed with an effective date prior to 04/30/2005. Process will be initiated by a Remedy ticket and resolved by appropriate updates to tblFundDeathOptionStateApproval.
- 4.7.4.3 Convert all non-extracted transactions prior to their extraction to EV15.
 - (a) All automated transactions will be performed by EV15, but SmartApp must convert all queued and pending transactions (as of 4/29/2005) with the fund changes specified in this document.

- (b) Impacted transactions include: (1) all new business and post-issue transactions to be extracted in the 04/29/2005 cycle; (2) any pending new business and post-issue (i.e. Added Payment) transactions that will be extracted in a future cycle.
- (c) Note: This should also include California Senior Suitability. Any pending transaction that specifies an allocation to the Money Market (PIMCO) of MIST will need to be updated to reflect the new fund BlackRock Money Market Portfolio of MSF. These transactions will need to be updated before they are extracted to EV15.
- (d) Note: This should also include files that we receive from PCA, RJA, etc. These files are usually received by SmartApp after SmartApp has sent the day's extracts to EV15 – the transactions are usually processed in the following day's cycle. The files that we receive on 4/29/2005 will reflect the 'old' funds, and so will need to be converted. The files that we receive starting on 5/02/2005 will reflect the 'new' funds.
- (e) The appropriate entries must be made in tblFundExpansionMap.
- (f) The following stored procedures must be updated and run:
 - sp_Massfndold
 - sp_MassfndoldNewBizDCA
 - sp_MassfndoldNewBizFund
 - sp_MassfndoldNewBizFundRebalancing
 - sp_MassfndoldNewBizWithdrawal
 - sp_MassfndoldTrxAddedPaymentFund
 - sp_MassfndoldTrxAllocationChangeFund
 - sp_MassfndoldTrxDCAFund
 - sp_MassfndoldTrxRebalancing
 - sp_MassfndoldTrxTransTo

4.7.4.4 If necessary, remove the closed funds from the IVR fund table for MLFS PPS.

- (a) SmartApp tables that may be affected:
 1. tblVRUFund
 2. tblVRUFundXRef

4.7.5 SmartApp Screen Changes

- 4.7.5.1 The New Business screens will no longer display closed funds after close of business on 4/29/2005.
- 4.7.5.2 The Post-Issue screens will no longer display closed funds after close of business on 4/29/2005.

4.7.6 SmartApp for MRPS Table Changes

- 4.7.6.1 Please refer to the attached document in Appendix 7.1 for specific changes.
- 4.7.6.2 Summary of functional changes required:
 - (a) Mergers will affect identified products for.
 1. MFFS (compID = 7)
 2. EPPA, PPA, FFA versions 1, 2, & 3, VESTMET, Variable 1, 2, 3 (compID = 9)
 3. MAB and Prospectus C (compID = 9)
 4. MDC (EPPA MDC & FFA MDC) (compID = 9)
 - (b) Close funds after close of business on 4/29/2005.
 - (c) SmartApp tables that may be affected:
 1. tblFund
 2. tblFundDeathOption
 3. tblFundDeathOptionStateApproval
 4. tblSurrogateKey

4.8 Allocation Model Updates

4.8.1 Edward Jones Allocation Model Updates

- 4.8.1.1 Existing Edward Jones Allocation Models must be updated due to the fund mergers (as referred to above in *Section 4.7 – Portfolio Mergers, Substitutions and Closures*).
- 4.8.1.2 New Edward Jones Allocation Models must be created for new issue policies and for policies whose owners later request a manual change to a new model.
- 4.8.1.3 Edward Jones Allocation Models



EDJ Asset Allocation
Models

4.8.1.4 EV15 Required Transactions

- (a) No transactions are required by EV15 specific to the EDJ models, as no changes are required to percentages in the Model.
- (b) There will be no one-time rebalancing and no changes to future allocations for policies in existing models.
- (c) All EV15 transactions required are delineated in *Section 4.7.2 - EV15 Manual Data Collect Transactions*.

4.8.1.5 SmartApp Table Changes

- (a) Update tblinvestmentmodelfund with the appropriate allocations for each model.
- (b) All models will be updated with effective date of 04/30/2005: invmID in (16, 17, 18) and compID = 1.

4.8.2 A.G. Edwards Allocation Model Updates

- 4.8.2.1 Existing A.G. Edwards Allocation Models must be updated due to the fund mergers (as referred to above in *Section 4.7 – Portfolio Mergers, Substitutions and Closures*).
- 4.8.2.2 New A.G. Edwards Allocation Models must be created for new issue policies and for policies whose owners later request a manual change to a new model.
 - (a) The "Income" Model is being eliminated going forward. Thus there will only be five model choices, instead of six.
 - (b) Note: "Income" models will remain for existing models.
- 4.8.2.3 A.G. Edwards Allocation Models: Class AA/Navigator



AGE Asset Allocation
Models

4.8.2.4 EV15 Required Transactions

- (a) No transactions are required by EV15 specific to the AGE models, as no changes are required to percentages in the Model.
- (b) There will be no one-time rebalancing and no changes to future allocations for policies in existing models.
- (c) All EV15 transactions required are delineated in *Section 4.7.2 - EV15 Manual Data Collect Transactions*.

4.8.2.5 SmartApp Table Changes

- (a) Update tblinvestmentmodelfund with the appropriate allocations for each model.
- (b) All models will be updated with effective date of 04/30/2005: invmID in (19, 20, 21, 22, 23, 24, 30, 31, 32, 33, 34, 35) and complID = 1.
- (c) The Income model will be eliminated effective 04/30/2005.
 - 1. Contracts issued with an effective date prior to 04/30/2005 will have all 6 investment models available.
 - 2. Contracts issued with an effective date on or after 04/30/2005 will have only the 5 remaining investment models available.
 - 3. Post issue transactions with an effective date prior to 04/30/2005 will have all 6 investment models available.
 - 4. Post issue transactions with an effective date on or after 04/30/2005 will have only the 5 remaining investment models available (even if the contract has an effective date prior to 04/30/2005).
- (d) SmartApp will need a new edit to alert the user of an unavailable investment model selection.
 - 1. Create a new medium red edit (50, 50) in tblRule.
 - 2. Message: **The <insert model name> investment model is not available on or after <insert effective end date>. Please select a different investment model or other fund allocations.**

4.8.2.6 SmartApp Screen Changes

- (a) On the New Business Purchase Payment Allocation screen, SmartApp will display only the available investment models, comparing the policy effective date with the model effective date. If the policy effective date has not yet been entered, then all investment models should display as available options.
- (b) SmartApp will use the red edit (4.8.2.5) to prevent the user from issuing a policy with an unavailable investment model. Note: This situation will arise if the user selects the model first, and then specifies/modifies the policy effective date to a date after which the model is no longer available.

4.8.3 Index Selector Allocation Model Updates

4.8.3.1 Index Selector Allocation Models must be updated due to a fund name change (as referred to above in *Section 4.5, Row 11 – Portfolio Name Changes*).

4.8.3.2 Index Selector Allocation Models



Index Selector Basic
Models

4.8.3.3 EV15 Required Transactions

- (a) No transactions are required by EV15 specific to the Index Selector models, as no changes are required to percentages in the Model.
- (b) There will be no one-time rebalancing and no changes to future allocations for policies in existing models.
- (c) All EV15 transactions required are delineated in *Section 4.7.2 - EV15 Manual Data Collect Transactions*.

4.8.3.4 SmartApp Table Changes

- (a) No update to tblinvestmentmodelfund is required. Since the only change is a fund rename, that change will take effect as soon as the portfolio name change is completed (Section 4.5).

4.9 SmartApp Fund Order

4.9.1 SmartApp Table Changes

4.9.1.1 Specify the fund family sequence.

- (a) Assign sequence numbers (funffSequence) to the new records in tblFundFamily to preserve alphabetical order across all records.
- (b) Assign fund of funds sequence numbers (funfSeqFundOfFunds) to the new records in tblFundFamily.

4.9.1.2 Specify the fund sequence.

(a) For MLI and USA funds:

Money Market funds and Fund of Funds strategy portfolios will be assigned specific numbers.
All other funds will be assigned fundSeq = 999

(b) For NEF and MLFS (PPS) funds:

Order the funds according to existing practice (i.e. risk tolerance).



NEF MLFS Risk
Order_BRv10.7.xls

(c) For MLFS (MRPS) funds:

Order the funds according to existing practice (i.e. risk tolerance).



MRPS_SA RISK
ORDER v1.1 031705.

(d) Assign sequence numbers (fundSeq) to the new records in tblFund.

4.9.1.3 Additional table updates may be required as determined by AD.

4.9.2 SmartApp Screen Changes

4.9.2.1 Post issue transactions for USA must be updated to display funds as follows:

(a) Funds must be grouped under the appropriate fund family header.

(b) Fund families must be ordered as follows:

- Fixed Account (if applicable)
- Enhanced DCA (if applicable)
- MetLife Asset Allocation Program
- Remaining fund families (in alphabetical order)

(c) Within the MetLife Asset Allocation Program fund family, funds must be ordered by ascending risk tolerance (i.e. Defensive, Moderate, Balanced, Growth, Aggressive).

(d) Within the remaining fund families, funds must be ordered alphabetically (i.e. A – Z).

(e) Screens/sections affected:

Allocation Change: 1. Enter New Investment Allocations Percentages

<u>Investment Choice</u>	<u>Current Destination Percentages</u>	<u>Destination Percentages</u>
1. Enter New Investment Allocations Percentages:		
Fixed Account		
General Account		<input type="text"/> %
Enhanced DCA		
3-Month Market Entry		<input type="text"/> %
6-Month EDCA		<input type="text"/> %
12-Month EDCA	100%	<input type="text"/> %
MetLife Asset Allocation Program		
Metlife Defensive Strategy Portfolio		<input type="text"/> %
Metlife Moderate Strategy Portfolio		<input type="text"/> %
Metlife Balanced Strategy Portfolio		<input type="text"/> %
Metlife Growth Strategy Portfolio		<input type="text"/> %
Metlife Aggressive Strategy Portfolio		<input type="text"/> %
AIM Capital Management, Inc.		
Met/AIM MidCap Core Equity Portfolio		<input type="text"/> %

Rebalancing: 1. Select Rebalancing Allocations

Step One: Define Rebalancing Program
1. Select Rebalancing Allocations

Initiate Rebalancing using the following allocations:

<u>Investment Choice</u>	<u>Destination Percentages</u>
Fixed Account	
General Account	<input type="text"/> %
Enhanced DCA	
3-Month Market Entry	<input type="text"/> %
6-Month EDCA	<input type="text"/> %
12-Month EDCA	<input type="text"/> %
MetLife Asset Allocation Program	
Metlife Defensive Strategy Portfolio	<input type="text"/> %
Metlife Moderate Strategy Portfolio	<input type="text"/> %
Metlife Balanced Strategy Portfolio	<input type="text"/> %
Metlife Growth Strategy Portfolio	<input type="text"/> %
Metlife Aggressive Strategy Portfolio	<input type="text"/> %
AIM Capital Management, Inc.	
Met/AIM MidCap Core Equity Portfolio	<input type="text"/> %

Transfer: Step Two – 1. Select Destination Investment Choice(s) and % Amount(s)

2. Select Transfer Source(s)

<u>Investment Choice</u>	<u>As of Date</u>	<u>Approximate # of Units</u>	<u>Approximate Transfer Value</u>	<u>Percent</u>
Metlife Defensive Strategy Portfolio	2/22/2005	10147.1948	101,471.95	<input type="text"/>

Step Two: Select Destinations
1. Select Destination Investment Choice(s) and % Amount(s)

Note: Each percentage amount entered must be whole numbers or with 1 decimal place such as 33.3 or 50. Unused investment choice fields may remain empty; zeros ("0") in empty fields are not necessary:

<u>Investment Choice</u>	<u>Percent</u>
Fixed Account	
General Account	<input type="text"/>
Enhanced DCA	
3-Month Market Entry	<input type="text"/>
6-Month EDCA	<input type="text"/>
12-Month EDCA	<input type="text"/>
MetLife Asset Allocation Program	
Metlife Defensive Strategy Portfolio	<input type="text"/>
Metlife Moderate Strategy Portfolio	<input type="text"/>
Metlife Balanced Strategy Portfolio	<input type="text"/>
Metlife Growth Strategy Portfolio	<input type="text"/>
Metlife Aggressive Strategy Portfolio	<input type="text"/>
AIM Capital Management, Inc.	
Met/AIM MidCap Core Equity Portfolio	<input type="text"/>

- (f) Screens not affected:
 - Added Payment
 - Dollar Cost Averaging
 - Enhanced Dollar Cost Averaging
 - All Post-Issue Recap screens
 - Contract Features Details
 - Pie Chart screen

4.9.2.2 New business app for NEF must be updated to display funds as follows:

- (a) Funds must be ordered as follows:
 - Enhanced DCA (if applicable)
 - Fund of Funds
 - Fixed Account (if applicable)
 - Remaining variable funds
- (b) Funds should NOT be displayed by fund families.

1. The Rebalancing section on the Recap screen will be updated to remove fund family display.
 2. All other screens do not currently display funds by fund family.
- (c) The Fund of Funds must be ordered by ascending risk order (i.e. Conservative to Aggressive).
- (d) All other variable funds should be ordered according to current functionality (this may be by risk order, alphabetical, or other).
- 4.9.2.3 Post issue transactions for NEF must be updated to display funds as follows:
- (a) Funds must be ordered as follows:
 - Fixed Account (if applicable)
 - Enhanced DCA (if applicable)
 - Fund of Funds
 - Remaining variable funds
 - (b) The Fund of Funds must be ordered by ascending risk order (i.e. Conservative to Aggressive).
 - (c) All other variable funds should be ordered according to current functionality (this may be by risk order, alphabetical, or other).
 - (d) Funds should be grouped by fund families only in accordance with current functionality. If a screen does not group funds by fund family currently, then all funds will remain ungrouped.
 - (e) Exception: Pie Chart screen
 1. Funds will be ordered as follows: (this follows current MLI/USA order for this screen)
 - Fund of Funds
 - Remaining variable funds
 - Fixed Account (if applicable)
 - Enhanced DCA (if applicable)
- 4.9.2.4 New business app for MLFS (PPS) must be updated to display funds as follows:
- (a) Funds must be ordered as follows:
 - Enhanced DCA (if applicable)
 - Fund of Funds
 - Fixed Account (if applicable)
 - Remaining variable funds
 - (b) Funds should NOT be displayed by fund families.
 1. All screens do not currently display funds by fund family, so this should not require any additional change.
 - (c) The Fund of Funds must be ordered by ascending risk order (i.e. Conservative to Aggressive).
 - (d) All other variable funds should be ordered according to current functionality (this may be by risk order, alphabetical, or other).
- 4.9.2.5 Post issue transactions for MLFS (PPS) must be updated to display funds as follows:
- (a) Funds must be ordered as follows:
 - Fixed Account (if applicable)
 - Enhanced DCA (if applicable)
 - Fund of Funds
 - Remaining variable funds
 - (b) The Fund of Funds must be ordered by ascending risk order (i.e. Conservative to Aggressive).
 - (c) All other variable funds should be ordered according to current functionality (this may be by risk order, alphabetical, or other).
 - (d) Funds should be grouped by fund families only in accordance with current functionality. If a screen does not group funds by fund family currently, then all funds will remain ungrouped.
 - (e) Exception: Pie Chart screen
 1. Funds will be ordered as follows: (this follows current MLI/USA order for this screen)
 - Fund of Funds
 - Remaining variable funds
 - Fixed Account (if applicable)
 - Enhanced DCA (if applicable)
- 4.9.2.6 New business app for MLFS (MRPS) must be updated to display funds as follows:
- (a) The new Fund of Funds must be grouped under their fund family header at the top of all other funding options.

- (b) Within the Fund of Funds group, funds must be ordered by ascending risk order (i.e. Conservative to Aggressive).
- (c) Screens/sections affected:

Purchase Payment Allocation

All columns (if utilized) must total 100%.

COLUMN 2	COLUMN 1	COLUMN 3
Asset Allocation Portfolios	Allocation	Allocator
MetLife Conservative Allocation Portfolio	100 %	<input type="text"/> %
MetLife Conservative to Moderate Allocation	<input type="text"/> %	<input type="text"/> %
MetLife Moderate Allocation Portfolio	<input type="text"/> %	<input type="text"/> %
MetLife Moderate to Aggressive Allocation	<input type="text"/> %	<input type="text"/> %
MetLife Aggressive Allocation Portfolio	<input type="text"/> %	<input type="text"/> %
Fund Choices	Allocation	Allocator
MetLife Fixed Interest Account	100 %	<input type="text"/> %
Salomon Brothers US Government	<input type="text"/> %	<input type="text"/> %
PIMCO Total Return	<input type="text"/> %	<input type="text"/> %
State Street Research Bond Income	<input type="text"/> %	<input type="text"/> %
Lehman Brothers Aggregate Bond Index	<input type="text"/> %	<input type="text"/> %
Salomon Brothers Strategic Bond Opportunities	<input type="text"/> %	<input type="text"/> %
Lord Abbett Bond Debenture	<input type="text"/> %	<input type="text"/> %
Calvert Social Balanced	<input type="text"/> %	<input type="text"/> %
MFS Total Return	<input type="text"/> %	<input type="text"/> %

Policy Number: 211304224 Purchase Payment Allocation Go

Exit Reset Recap Review Errors Previous Next

Recap – Purchase Payment Allocation

Purchase Payment Allocation Click button to edit Section >> Go To [top](#) [bottom](#)

COLUMN 2	COLUMN 1	COLUMN 3
Payment Allocation Fund Selection(s):	Allocation	Allocator
Asset Allocation Portfolios		
MetLife Conservative Allocation Portfolio	10%	
Fund Choices	Allocation	Allocator
MetLife Fixed Interest Account	50%	
Salomon Brothers US Government	10%	
State Street Research Bond Income	10%	
Salomon Brothers Strategic Bond Opportunities	10%	
MFS Total Return	10%	

4.10 SmartApp Suitability

4.10.1 SmartApp Table Changes

4.10.1.1 SmartApp must maintain asset class percentages for each of the new Fund of Funds for NEF and MLFS. This information will be used to calculate the appropriate percentages to send to the Suitability Engine, in the case that weighted percentages must be calculated.

- (a) This information must be managed based on an effective date, as the percentages may change annually.

(b) MetLife Conservative Allocation

Cash	0%
Short term/Aggregate bonds	73%
High Yield Bonds	6%
REIT	0%
Large Cap	11%
Mid Cap	3%
Small Cap	3%
International	4%

(c) MetLife Conservative to Moderate Allocation

Cash	0%
Short term/Aggregate bonds	52%
High Yield Bonds	6%
REIT	1%
Large Cap	22%
Mid Cap	6%
Small Cap	5%
International	8%

(d) MetLife Moderate Allocation

Cash	0%
Short term/Aggregate bonds	33%
High Yield Bonds	4%
REIT	1%
Large Cap	32%
Mid Cap	10%
Small Cap	7%
International	13%

(e) MetLife Moderate to Aggressive Allocation

Cash	0%
Short term/Aggregate bonds	14%
High Yield Bonds	2%
REIT	2%
Large Cap	42%
Mid Cap	14%
Small Cap	9%
International	17%

(f) MetLife Aggressive Allocation

Cash	0%
Short term/Aggregate bonds	0%
High Yield Bonds	0%
REIT	2%
Large Cap	50%
Mid Cap	17%
Small Cap	11%
International	20%

4.10.1.2 SmartApp will need a new edit to manage multiple Fund of Funds selection.

(a) Create a new medium red edit (50, 50) in tblRule.

- (b) Message: **Allocations to multiple asset allocation portfolios is not permitted. Please review and adjust allocations.**

4.10.2 SmartApp Screen Changes

- 4.10.2.1 NEF: Only one Fund of Funds may be selected within the New Business app. This rule applies across the purchase payment allocations and any DCA strategies selected for the policy.
- (a) Purchase Payment Allocation screen – User may not select more than one Fund of Funds:
1. Among the Purchase Payment allocations
 2. Among the DCA/EDCA destinations
 3. Between the Purchase Payment allocations and DCA/EDCA destinations (even if it is the same fund).
 4. In other words, only one entry field may be selected for one Fund of Funds on the screen (regardless of which column it is in).
- (b) If the user has selected more than one Fund of Funds, then SmartApp will display the new edit message (Ref. 4.10.1.2) on the Purchase Payment Allocation screen.
- 4.10.2.2 MLFS-PPS: Only one Fund of Funds may be selected within the New Business app. This rule applies across the purchase payment allocations and any rebalancing/DCA strategies selected for the policy.
- (a) Purchase Payment Allocation screen – User may not select more than one Fund of Funds:
1. Among the Column 1 allocations
 2. Among the Column 3 allocations
 3. Between the Column 1 and Column 3 allocations (even if it is the same fund).
 4. In other words, only one entry field may be selected for one Fund of Funds on the screen (regardless of which column it is in).
- (b) If the user has selected more than one Fund of Funds, then SmartApp will display the new edit message (Ref. 4.10.1.2) on the Purchase Payment Allocation screen.
- 4.10.2.3 MRPS: Only one Fund of Funds may be selected within the New Business app. This rule applies across the purchase payment allocations and any rebalancing/DCA strategies selected for the policy.
- (a) Purchase Payment Allocation screen – User may not select more than one Fund of Funds:
1. Among the Column 1 allocations
 2. Among the Column 3 allocations
 3. Across the Column 1 and Column 3 allocations (even if it is the same fund).
 4. In other words, only one entry field may be selected for one Fund of Funds on the screen (regardless of which column it is in).
- (b) If the user has selected more than one Fund of Funds, then SmartApp will display the new edit message (Ref. 4.10.1.2) on the Purchase Payment Allocation screen.
- 4.10.2.4 NEF and MLFS: SmartApp will not restrict multiple Fund of Funds selection for any of the Post-Issue transactions. This includes Automatic Rebalancing on the NEF New Business app.
- 4.10.2.5 If allocation to a Fund of Funds is 100% (determined by SmartApp as specified in 4.10.3.1), then SmartApp will compare the selected Fund of Funds with the selected Risk Tolerance.
- (a) SmartApp will verify based on an exact match as follows:
1. Conservative MetLife Asset Allocation Portfolio = Risk Tolerance Conservative
 2. Conservative to Moderate Asset Allocation Portfolio = Risk Tolerance Conservative to Moderate
 3. Moderate Asset Allocation Portfolio = Risk Tolerance Moderate
 4. Moderate to Aggressive Asset Allocation Portfolio = Risk Tolerance Moderate to Aggressive
 5. Aggressive Asset Allocation Portfolio = Risk Tolerance Aggressive
- (b) If there is a match, then SmartApp will consider the validation is passed.
1. SmartApp will NOT send asset class percentages to Suitability to validate.
 2. Suitability will perform its usual validation of all applicable rules; in the absence of asset class percentages, Suitability will not run the validation rule on allocation/risk tolerance.
- (c) If there is not a match, then SmartApp will consider this validation as failed.
1. SmartApp will NOT send asset class percentages to Suitability to validate.
 2. Suitability will perform its usual validation of all applicable rules; in the absence of asset class percentages, Suitability will not run the validation rule on allocation/risk tolerance.
 3. SmartApp will insert a violation with the following message:

The selected Asset Allocation Portfolio, <insert fund name>, may not be suitable for risk tolerance <insert risk tolerance name>. Please explain.

4. Note: SmartApp will insert the violation as appropriate to mimic current functionality when violations are returned from Suitability. Suitability will not be passing this violation message to SmartApp.
- 4.10.2.6 If allocation to a Fund of Funds is less than 100% (determined by SmartApp as specified in 4.10.3.1), then SmartApp will calculate the appropriate asset class percentages to send to Suitability for validation.
- (a) Suitability will perform its usual validation of all applicable rules, including the validation rule on allocation/risk tolerance. Suitability will return the existing violation message to SmartApp if applicable.
 - (b) In displaying the violation message, SmartApp will need to check if the allocation includes a Fund of Funds.
 1. If yes, then SmartApp will display the existing violation message with an appended note:
Allocation falls outside of approved range for Risk Tolerance. Please explain.
Please note: An asset allocation portfolio was elected in this allocation. The underlying funding options of the fund of funds are used in calculating the percentages that fall into each of the asset classes.
 2. If no, then SmartApp will display the existing violation message according to current functionality:
Allocation falls outside of approved range for Risk Tolerance. Please explain.
- 4.10.2.7 All suitability violation messages (described in 4.10.2.4, 4.10.2.5) will display according to current functionality.
- (a) SmartApp will display the appropriate violation message in blue text on the following screens:
 1. Financial Disclosures
 2. Recap – Financial Disclosures section
 - (b) SmartApp will need to reflect any changes to the grid of defined suitability ranges when displaying the chart with the violation message. Refer to table in Section 4.10.4.3.

4.10.3 SmartApp Calculations

- 4.10.3.1 SmartApp must identify which allocations to take into account for suitability purposes. When appropriate, SmartApp will need to calculate weighted values. SmartApp may follow current functionality (described below) to determine the asset class percentages to send to the Suitability Engine.
- (a) If no special programs (i.e. rebalancing, DCA, EDCA) have been elected, then SmartApp will use the Purchase Payment allocation.
 - (b) For MLFS Rebalancing options:
 1. If Rebalancer is selected, then SmartApp will use the Purchase Payment allocation.
 2. If Index Selector is selected, then SmartApp will use the selected Model (there will be no Purchase Payment allocation).
 - (c) For MLFS Dollar Cost Averaging options:
 1. If Equity Generator is selected, then SmartApp will use the Purchase Payment allocation.
 2. If Allocator is selected, then SmartApp will use the Purchase Payment allocation (excluding the Fixed Account) and the Allocator destination allocation (weighted by the Fixed Account percentage in the Purchase Payment allocation).
 3. If EDCA is selected, then SmartApp will use the Purchase Payment allocation (excluding the EDCA) and the EDCA destination allocation (weighted by the EDCA percentage in the Purchase Payment allocation).
 - (d) For NEF Rebalancing:
 1. If Rebalancing is selected, then SmartApp will use the Purchase Payment allocation.
 - (e) For NEF DCA/EDCA:
 1. If DCA or EDCA is selected, then SmartApp will use the Purchase Payment allocation (excluding the Fixed Account or EDCA, as applicable) and the DCA/EDCA destination allocation (weighted by the Fixed Account/EDCA percentage in the Purchase Payment allocation).

4.10.3.2 If SmartApp must calculate percentages for an allocation set that includes a Fund of Funds, then SmartApp will use the model-specific asset class percentages (4.10.1.1) to derive the correct percentages to send to the Suitability Engine..

4.10.4 Suitability Engine Changes

4.10.4.1 No change is required to perform the allocation vs. risk tolerance validation (existing validation) against the Fund of Funds. SmartApp will continue to send asset class percentages when that validation rule needs to be performed.

4.10.4.2 No new suitability flags are required. Suitability will continue to provide SmartApp with the existing violation message when applicable: Allocation falls outside of approved range for Risk Tolerance. Please explain.

4.10.4.3 Update the grid of defined suitability ranges. Changes are in red text below:

Risk Tolerance	Cash	Short-Term Bonds/ Aggregate Bonds	High Yield Bonds	Large Cap Growth/ Large Cap Value	Mid Cap Growth/ Mid Cap Value	Small Cap Growth/ Small Cap Value	International Stocks	REITs
			Not to exceed 30%					
Conservative	20-100%	0-80%	0-15%	0-25%	0-10%	0-5%	0-5%	0-5%
			Not to exceed 50%					
Conservative to Moderate	0-50%	0-70%	0-15%	0-40%	0-15%	0-10%	0-10%	0-10%
			Not to exceed 75%					
Moderate	0-30%	0-40%	0-20%	30-60%	0-25%	0-20%	0-20%	0-15%
	Not to exceed 25%							
Moderate to Aggressive	0-25%	0-25%	0-25%	40-90%	0-35%	0-25%	0-25%	0-20%
	Not to exceed 10%							
Aggressive	0-10%	0-10%	0-50%	0-100%	0-50%	0-50%	0-50%	0-50%

- 4.10.4.4 Update the logic for the investment objective vs. risk tolerance validation (existing validation).
- (a) The following Risk Tolerances are acceptable when Investment Objective = Growth & Income:
 1. Conservative to Moderate (new)
 2. Moderate (current)
 3. Moderate to Aggressive (current)
 - (b) The following Risk Tolerances are acceptable when Investment Objective = Growth:
 1. Moderate (new)
 2. Moderate to Aggressive (current)
 3. Aggressive (current)
 - (c) The same Suitability Flag should be returned to SmartApp if the validation fails:
 1. Investment Objective = Growth & Income AND Risk Tolerance ≠ Conservative/Moderate OR Moderate OR Moderate/Aggressive
 2. Investment Objective = Growth AND Risk Tolerance ≠ Moderate OR Moderate/Aggressive OR Aggressive
 3. MESSAGE - The Applicant's Investment Objective, <<provide investment objective>>, may not be suitable based on the Applicant's Risk Tolerance, <<Provide risk tolerance>>. Please explain.
 - (d) Changes are in red text below:

Investment Objective	Risk Tolerance				
Preservation of Capital	Conservative	Conservative to Moderate			
Income	Conservative	Conservative to Moderate	Moderate		
Growth & Income		Conservative to Moderate	Moderate	Moderate to Aggressive	
Growth			Moderate	Moderate to Aggressive	Aggressive
Aggressive Growth				Moderate to Aggressive	Aggressive

4.10.5 Suitability Review System Changes

- 4.10.5.1 If allocation to a Fund of Funds is 100%, and the selected Fund of Funds does not align with the selected Risk Tolerance, then the Suitability Review System will need to display the violation message inserted by SmartApp.
- (a) SmartApp will insert a violation with the following message:

The selected Asset Allocation Portfolio, <insert fund name>, may not be suitable for risk tolerance <insert risk tolerance name>. Please explain.
 - (b) Note: SmartApp will insert the violation as appropriate to mimic current functionality when violations are returned from Suitability. Suitability will not be passing this violation message to SmartApp.
- 4.10.5.2 If allocation to a Fund of Funds is less than 100%, and the asset class percentages representing the allocation does not align with the selected Risk Tolerance, then the Suitability Review System will need to display the same violation message as SmartApp.
- (a) SmartApp will display the existing violation message with an appended note:

Allocation falls outside of approved range for Risk Tolerance. Please explain.
Please note: An asset allocation portfolio was elected in this allocation. The underlying funding options of the fund of funds are used in calculating the percentages that fall into each of the asset classes.
- 4.10.5.3 All suitability violation messages (described in 4.10.5.1, 4.10.5.2) will display according to current functionality.
- (a) Suitability Review System will display the violation message in blue text for the Principal to review (once the policy has been submitted to Home Office).
 - (b) Suitability Review System will need to reflect any changes to the grid of defined suitability ranges when displaying the chart with the violation message. Refer to table in Section 4.10.4.3.
- 4.10.5.4 Registered Principal Review screen
- (a) When displaying the Sub-Account Investment Allocation percentages, the system will need to break down any allocation to a Fund of Funds (0 – 100%) into its underlying asset class percentages.
 - (b) When displaying the EDCA/DCA Investment Allocation percentages, the system will need to break down any allocation to a Fund of Funds (0 – 100%) into its underlying asset class percentages.
 - (c) Note on SmartApp functionality: When allocation to a Fund of Funds is 100%, SmartApp will not send asset class percentages to the Suitability Engine. When allocation to a Fund of Funds is less than 100%, SmartApp will calculate and send asset class percentages to the Suitability Engine. However, SmartApp takes into account DCA/EDCA destinations when calculating the asset class percentages – that is, the source allocation to the Fixed or EDCA account is translated into the asset class percentages using the weighted destination allocation.
 1. The Suitability Review System will require modified logic to calculate the asset class percentages when allocation to a Fund of Funds is 100%.
 2. The Suitability Review System will require modified logic to account for EDCA/DCA treatment. Current functionality of the Registered Principal Review screen considers allocations to Fixed and EDCA accounts as belonging to the Cash asset class; this should not change. The destination allocations are calculated and displayed separately.
 3. SmartApp will maintain the underlying asset class percentages for each Fund of Funds in a table, which is accessible to the Suitability Review System. (See Section 4.10.1.1)

4.10.6 Issue Blotter Changes

- 4.10.6.1 Back Office
- (d) When displaying the Sub-Account Investment Allocation percentages, the system will need to break down any allocation to a Fund of Funds (0 – 100%) into its underlying asset class percentages.
 - (e) When displaying the EDCA/DCA Investment Allocation percentages, the system will need to break down any allocation to a Fund of Funds (0 – 100%) into its underlying asset class percentages.
 - (f) Note on SmartApp functionality: When allocation to a Fund of Funds is 100%, SmartApp will not send asset class percentages to the Suitability Engine. When allocation to a Fund of Funds is less than 100%, SmartApp will calculate and send asset class percentages to the Suitability Engine. However, SmartApp takes into account DCA/EDCA destinations when calculating the asset class percentages – that is, the source allocation to the Fixed or EDCA account is translated into the asset class percentages using the weighted destination allocation.

1. The Issue Blotter will require modified logic to calculate the asset class percentages when allocation to a Fund of Funds is 100%.
 2. The Issue Blotter will require modified logic to account for EDCA/DCA treatment. Current functionality of the Registered Principal Review screen considers allocations to Fixed and EDCA accounts as belonging to the Cash asset class; this should not change. The destination allocations are calculated and displayed separately.
 3. SmartApp will maintain the underlying asset class percentages for each Fund of Funds in a table, which is accessible to the Issue Blotter. (See Section 4.10.1.1)
- 4.10.6.2 Field OSJ Blotter Report
- (g) When displaying the Sub-Account Investment Allocation percentages, the system will need to break down any allocation to a Fund of Funds (0 – 100%) into its underlying asset class percentages.
 - (h) When displaying the EDCA/DCA Investment Allocation percentages, the system will need to break down any allocation to a Fund of Funds (0 – 100%) into its underlying asset class percentages.
 - (i) Note on SmartApp functionality: When allocation to a Fund of Funds is 100%, SmartApp will not send asset class percentages to the Suitability Engine. When allocation to a Fund of Funds is less than 100%, SmartApp will calculate and send asset class percentages to the Suitability Engine. However, SmartApp takes into account DCA/EDCA destinations when calculating the asset class percentages – that is, the source allocation to the Fixed or EDCA account is translated into the asset class percentages using the weighted destination allocation.
 1. The Issue Blotter will require modified logic to calculate the asset class percentages when allocation to a Fund of Funds is 100%.
 2. The Issue Blotter will require modified logic to account for EDCA/DCA treatment. Current functionality of the Registered Principal Review screen considers allocations to Fixed and EDCA accounts as belonging to the Cash asset class; this should not change. The destination allocations are calculated and displayed separately.
 3. SmartApp will maintain the underlying asset class percentages for each Fund of Funds in a table, which is accessible to the Issue Blotter. (See Section 4.10.1.1)

5 System Interface / Downstream System Impact

5.1 EFA – Enterprise Funds Administration

5.1.1 No changes are required by EV15, SmartApp or SmartApp for MRPS for EFA.

5.1.2 Add EV15 Fund Numbers and FAV Codes to the EFA Translation Table

5.1.2.1 Updates are required to the spreadsheet provided by EFA for all new funds.

5.1.2.2 Updates are required to E0015P.MLIP.INTFV.PR.EFA2V1.TABLE (EFA fund translation table for E00152RP [formerly MLIPIF06] and E0015AKP [formerly MLIPTRDE]).

5.1.2.3



EV15 EFA New Fund
Translation Table V10

5.1.3 EFA must provide an updated unit value file which will contain all unit values for all new funds as well as static unit values for all closed funds.

5.1.3.1



UV EV15 20050406

5.1.4 EFA/ EAS Interface Diagram



EFA - EAS Interface
Diagram V0307

5.1.5 EFA Translation Table Data



EFA Translation
Table Information

5.2 DST Fanmail

5.2.1 No changes are required by EV15, SmartApp or SmartApp for MRPS for DST Fanmail.

5.2.2 Add DST Fund Numbers to the CUSIP Translation Table.

5.2.2.1 Updates are required to E0015P.MLIP.INTFS.PR.FUND.CUSIP (Nick Cockrum / Laura Anderson: translation for AAP and FPR files).



DST Fanmail File

5.2.3 Additional Technical Detail

5.2.3.1 Job: E00159JP

5.2.3.2 Program: MSTCMN.MLIP.BATCH.SOURCE.NMODANN(IPDPRICE)

5.2.3.3 Input: E0015P.MLIP.INTFS.PR.FUND.CUSIP

(a) Copy: MSTCMN.MLIP.USERCOPY.NMODANN(CFNDQSIP)

5.2.3.4 AAP: E0015P.MLIP.SEQ.DATA.AAP

(a) Copy: MSTCMN.MLIP.USERCOPY.NMODANN(CJMXXFND)

5.2.3.5 FPR: E0015P.MLIP.SEQ.DATA.DSTFPRP

(a) Copy: MSTCMN.MLIP.USERCOPY.NMODANN(CJMAMFP1)

5.3 eService

5.3.1 No changes are required by EV15, SmartApp or SmartApp for MRPS for eService.

5.4 Confirms

5.4.1 No changes are required by EV15, SmartApp or SmartApp for MRPS for Confirms.

5.4.2 All EV15 transactions will be assigned a unique Originator ID (FNDEXP05), which will allow these transactions to be identified in the Confirm Extract. Please see *Section 4.1.6 – EV15 Originator ID*.

5.5 IVR

5.5.1 Table changes are required by SmartApp for the MLFS PPS product and have been referenced in this document.

5.5.2 SmartApp must provide support to the IVR AD team in addition to a table dump and a list of all new funds.

6 Issues

6.1 Open Issues

Issue and Description	Responsible	Date Due
None at this time.		

6.2 Closed Issues

Issue and Description	Resolved By / Date	Resolution
New CUSIP file (DST Fanmail update) and Unit Values are now required as fund 125 is no longer substituting into 193 and fund 193 is no longer being added for MLI Class AA.	Diane Beckwith Nick Cockrum 04/07/2005	Updated files have been received.
No DST Fanmail updates have been received. (See Section 5.2.2)	Laura Anderson Nick Cockrum 04/04/2005	DST Fanmail file has been received.
Confirmation has not yet been received for the Non-Financial Transactions Query content. (See Section 4.2.4)	Marylou Hutton 03/31/2005	Non-Financial Transactions Query no longer needed. Two new queries requested instead.
No Translation Table has been received from EFA. (See Section 5.1.2)	Diane Beckwith 03/16/2005	Translation Table has been received.
No Unit Value file has been received from EFA. (See Section 5.1.3)	Diane Beckwith 03/16/2005	Unit Value File for 3/16 was received.
No information has yet been received for New "ETF" Funds 195 and 196. (See Section 4.6.1, Rows 7 & 8). Update 3/15: No data yet available, using dummy data. Update 3/22: Received fund names; pending fund family name.	Kim Snyder 03/23/2005	All ETF Fund information has been received.
Changes to the AGE models have not yet been received.	Kim Snyder 03/10/2005	AGE Models have been received.
The new Fund Family has not been confirmed for the new MLF Fund of Funds Portfolios.	Kim Snyder La Donna Simmons Bjorn Bergmann 03/10/2005	New Fund Family Name has been received.
Changes to the SmartApp New Business Application have not yet been received.	Kim Snyder 03/11/2005	Changes to the New Business Application have been received.
Fund order for NEF and MLFS (PPS) is open issue. Update 3/15: NEF New Biz, NEF Post-Issue, and MLFS New Biz have been confirmed. Pending MLFS Post-Issue.	Bjorn Bergmann 03/21/2005	All changes received.
Suitability: Adjustments to the suitability ranges have not been confirmed.	Bryan Trainum 3/21/2005	Changes received.
Suitability: Asset class percentages for the new Fund of Funds have not been defined. Update 3/15: No data yet available, using dummy data.	Bunita Drew 3/22/2005	Data published in Suitability Bus Req v1.5.
Final Suitability requirements have not yet been received. (See Section 4.10)	Bunita Drew 3/24/2005	Final version published.

7 Additional Appendices

7.1 MRPS Changes



FE 2005 - MRPS
Changes _ Version 1C

7.2 EV15 Fund Chart

Note: This version is not yet final.



Fund Number Chart
May 05 V8