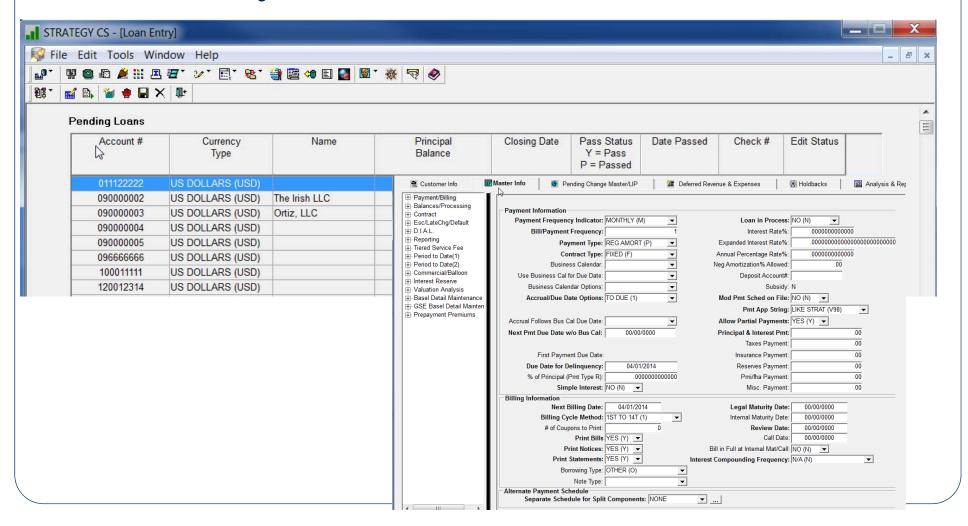
2019 McCracken Customer Conference

New Loan Entry Reinvented



Loan Entry



Why Deliver Another Method to Board Loans?

- Enhanced quality assurance Edit against Product Type
- Ease of understanding loan product entry requirements
 - Freddie K Loan
 - Fannie Mae SARM
- Simplify loan acquisitions
 - Easy to mass populate as a conversion tool
- Efficiency
 - Faster to populate spreadsheet than manual entry
- Incremental collection of loan data
 - Not restricted by loan entry edits while gathering data

Business Use Case

- More than one group is responsible for the loan data required to board a loan
 - They each have to translate their data into a boarding sheet
 - That data gets keyed into Loan Entry

Business Use Case

- Acquiring a portfolio of loans and have the technical expertise to extract and transform the data
 - But its complicated to map the data to the Strategy data model

How Do We Solve These Issues?

- Build a 'Smart Spreadsheet' as part of the product that will:
 - Allow entry of information into a spreadsheet
 - Perform basic data validation numbers, dates, field length, etc.
 - Associate a Loan Product Type to the information entered for advanced validation
 - Allow defaults to be defined for a Loan Product Type



| ₽ Fil | le Edit Tools Wi | ndow Help | | | | | | | | - 4 | # x |
|------------|-------------------------------|------------------|--------------|----------------------|--------------|---------------------------------------|-------------|---------|-------------|-----|-----|
| p - | W @ & # # 8 | B. A. E. B. | | ※ 日 ※ | | | | | | | |
| 8. | 11 12. 12 ♦ 🖨 : | × 10+ | | | | | | | | | |
| | Pending Loans | | | | | | | | | | |
| | Account # | Currency Type | Name | Principal Balance | Closing Date | Pass Status Y = Pass P = Passed | Date Passed | Check # | Edit Status | • | |
| | 88988888 | US DOLLARS (USD) | Mosely | | 00/00/00/00 | | 00/00/0000 | | | | |
| | 060088115 | US DOLLARS (USD) | gnma | 6,235,000.00 | 10/01/2013 | Y | 11/03/2013 | | 1 | - | |
| | 060088113 | US DOLLARS (USD) | gnma | 6,575,375.00 | 10/01/2013 | Y | 11/03/2013 | | | | |
| | 060088120 | US DOLLARS (USD) | gnma | 7,650,125.00 | 10/01/2013 | Y | 11/03/2013 | | | | |
| | 060088114 | US DOLLARS (USD) | gnma | 4.350,500.00 | 10/01/2013 | Y | 11/03/2013 | | | | |
| | 060088116 | US DOLLARS (USD) | gnma | 3,100,000.00 | 10/01/2013 | Y | 11/03/2013 | | | | |
| | 080044210 | US DOLLARS (USD) | arm | 200,000,000.00 | 11/01/2013 | Y | 12/01/2013 | | | | |
| | 880000628 | US DOLLARS (USD) | Waldorf Apts | 2 225 775 00 | 11/01/2013 | Y | 00/00/0000 | | | | |

This is not the Mapping Tool Loan Entry you have Today!

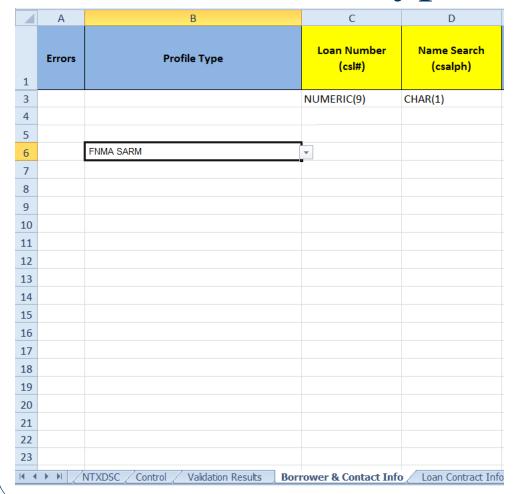


Let's Walk Through How It Works

The 'Smart Spreadsheet'

| 4 | Р | Q | R | S | T | U | V | W |
|----|--------------------------------|--|---|----------------------------|---------------------------|-------------------------------|---------------------------|-------------------------|
| 1 | Accrual Start Date (rqasdt) | Starting Date for Next Accrual (rqmad) | Current Accrual Receivable (rqcard) | Loan in Process (cmlip) | Contract Type (cmcot) | Original Loan Date (cmold) | Maturity Date (cmmatd) | Review Date (cmcrdt) |
| 3 | DECIMAL(8) | DECIMAL(8) | NUMERIC(8) | CHAR(1) YN | CHAR(1) 61 | ZONED(8) | ZONED(8) | ZONED(8) |
| 4 | | 0.7014 | | | | | 11.5 400 | |
| 5 | | | | | Indicates | whether the loan has | | |
| 6 | | | | | 30 St. Comp. 100 Com. 120 | adjustable interest | | |
| 7 | | | | | rate | | | |
| 8 | | | | | F always i | ndicates a Fixed Rate | | |
| 9 | | | | | | other than F is | | |
| 10 | | | | | considere | d Adjustable | | |
| 11 | | | | | - | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | NTXDSC / | Control / Validation F | | Contact Info Loai | Contract Information | on / Payment Informa | | It Int, Split Comp |

Select a Profile Type



Fannie Mae's MBS/SARM product offers an adjustable-rate option that can be used to fund multifamily loans delivered through the DUS® product line of \$25 million or more.

MBS/SARM loans have an adjustable interest rate that is equal to 1-month or 3-month LIBOR plus a mortgage margin.

Fields Default Based on Product Type Selected

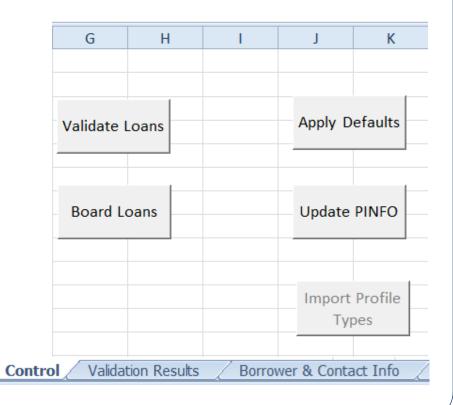
| | AB | AC | AD | AE | AF | AG | AH | Al | AJ | AK |
|----------|----------------------------------|---------------------------|--|--------------------------------------|----------------------------|--------------------------|----------------------------|--|-------------------------------|---|
| 1 | Interest Basis Code (cmib) | Interest Rate (cmrate) | Extended Interest Rate (cmerate) | Annual Percentage Rate (cmapr) | Borrowing Type (cmbtyp) | Subsidy Loan (cmbuyd) | Note Type (cmnott) | Adjustable Loan Description (abatyp) | Index Description (abindx) | Interest Rate Margin (abmarg) |
| 3 | CHAR(3) PI | PACKED(15,13) | PACKED(28,26) | PACKED(15,13) | CHAR(1) BT | CHAR(1) | CHAR(2) N3 | CHAR(2) 10 | CHAR(2) | PACKED(15,13) |
| 4 | | | | | | | | | | |
| | B66 | | | | 0 | N | E1 | | | 4.0000000000000000000000000000000000000 |
| 7 | | | | | | | | L9 30 DAY LIBOR-2 DAY LOC | <u>* </u> | |
| 8 | | | | | | | | 30 DAY LIBOR AMORTIZI 30 DAY LIBOR - 15 DAY L | | |
| 9 | | | | | | | | 30 DAY LIBOR-2 DAY LKB | | |
| 10 | | | | | | | | LIBOR 13TH (L6) 90 DAY LIBOR / 45 DAY L | | |
| 11 | | | | | | | | MONTHLY AVE 6 MO AUC MOODYS (MD) | - | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 23 24 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| | NTXDSC / Control / Validation Re | sults / Borrower & (| Contact Info Loan C | Contract Information | Payment Information | DIAL, Default Int, Split | Comp Reporting Information | YTD Amounts / Con | nmercial Loan Info | Interest 4 |
| T | | | ^ | | | | | | | |

Enter Remaining Data

| | Α | В | С | D | E | F | G | Н | 1 | | К | | M |
|------|--------|-----------------------|--|--|--|----------------------------------|--|--------------------------------------|--------------------------------------|--|----------------------------|---------------------------------------|------------------------------|
| 1 | Errors | Loan Number (cmln) | Original Principal Balance (cmopb) | Current Principal Balance (cmpbal) | Principal Dollars Disbursed to Date (cmpdsp) | Tax Escrow Balance (cme1b) | Insurance Escrow Balance (cme2b) | Reserve Escrow Balance (cme3b) | FHA/MIP Escrow Balance (cme4b) | Escrow 5 Miscellaneous Balance (cme5b) | Late Charge Due (cmlcb) | Suspense Escrow Balance (cme6b) | Active Status Cod (cmasc) |
| 2 er | rors | cmln | cmopb | cmpbal | cmpdsp | cme1b | cme2b | cme3b | cme4b | cme5b | cmlcb | cme6b | cmasc |
| 3 | | ZONED(9) | PACKED(17,2) | PACKED(17,2) | PACKED(17,2) | PACKED(17,2) | PACKED(17,2) | DECIMAL(17,2) | DECIMAL(17,2) | DECIMAL(17,2) | PACKED(15,2) | PACKED(17,2) | CHAR(1) |
| 4 | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | |
| 6 | | 123456789 | \$30,000,000.00 | | \$30,000,000.00 | \$10,000.00 | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |

What If I Have An Acquisition of 100 Loans

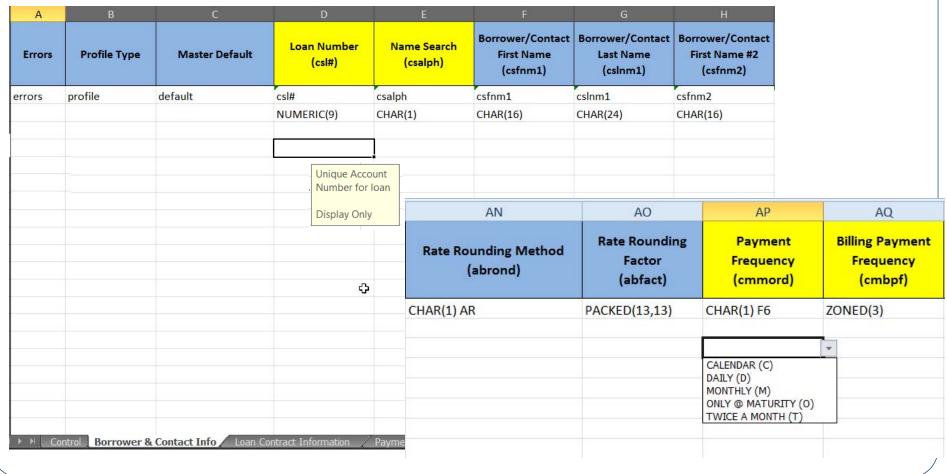
- Load 100 records into the smart spreadsheet
- Apply Defaults
- Validate Loans



Control Tab

| | А | В | С | D | Е | F | G | Н | 1 | J | K |
|--------------------|-------------------------|--|-------------------|-----------|-------------|---------------|----------------------|------|-------------|-------------|-------------|
| 1 | | | | Entered | Errored | Staged | | | | | |
| 2 | Borrower & Contact Info | Borrower & Contact Info | | | | | | | | | |
| 3 | | | | _ | | | V P L | | | Apply D | afaults |
| 4 | Loan Master | Loan Contract Information | | | | | Validate L | oans | | Apply D | Elduits |
| 5 | | Payment Information | | | | | | | | | |
| 6 | | DIAL, Default Int, Split Comp | | | | | | | | | |
| 7 | | Reporting Information | | | | | Board Lo | oans | | Update | PINFO |
| 8 | | YTD Amounts | | | | | | | | | |
| 9 | | Commercial Loan Info | | | | | | | | | |
| 10 | | Interest Reserve | | | | | | | | | |
| 11 | | | | | | | | | | Import | Profile |
| 12 | Property | Property & Collateral Info | | | | | | | | Тур | es |
| 13 | | | | | | | | | | | |
| 16 | Deferred Revenue | Deferred Revenue | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 21 | Tax | Tax Information | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 23 | Insurance | Insurance Information | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 25 | Reserve | Reserve Information | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 27 | ARM | Adjustable Loan Information | | | | | | | | | |
| 28 | | | | | | | | | | | |
| | Investor | Investor Information | | | | | | | | | |
| 32 | | | | | | | | | | | |
| 33 | | | | | | | | | | | |
| 34 4 4 | ▶ ► Control Validatio | n Results / Borrower & Contact Info / Loan C | Contract Informat | ion / Pay | ment Inform | nation / DIAL | , Default Int, Split | Comp | Reporting 1 | Information | YTD Amounts |

McCracken Provided NLB Spreadsheet



Spreadsheet and Many To One Relationships

| | Α | В | С | D | Е |
|---|--------|---|-----------------------|--------------------------------|-------------------------|
| 1 | Errors | Investor Default | Loan Number (imln) | Sequence Number (imseq#) | Investor Name (imi#) |
| 2 | errors | | imln | imseq# | imi# |
| 3 | | | ZONED(9) | ZONED(4) | ZONED(5) |
| 4 | | | | | |
| 5 | | SWEDBANK(00170) COMMERCIAL LOAN SERVICING(D2) 000000001 | 987654321 | 1 | 170 |
| 6 | | GLENDALE (00503) COMMERCIAL LOAN SERVICING(D2) | 987654321 | 2 | |
| 7 | | | | | |

New Loan Smart Spreadsheet

- McCracken provided spreadsheet as part of Strategy
- Multiple tabs to group like data
- Spreadsheet contains all loan level fields needed to enter a loan
- User-friendly field descriptions, required fields clearly marked.
- Hover text will provide info about field
- Data format requirements clearly shown

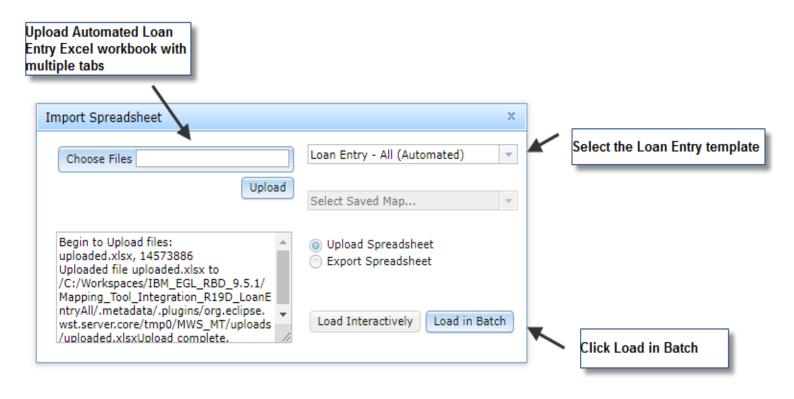
All Data Needed for Loan Entry

- Borrower & Contact Info
- Loan Contract Information
- Payment Information
- DIAL, Default Interest, Split Components
- Reporting Information
- YTD Amounts
- Commercial Loan Information
- Interest Reserve
- Property/Collateral Info
- Prepayment Premiums

- Deferred Revenue
- Pending Changes
- Analysis/Reporting
- Investor Information
- Additional Investor Reporting Info (CREFC)
- Tax Descriptions
- Insurance
- Reserve
- Adjustable Loan Information

Once Spreadsheet Is Complete....

Run the Mapping Tool (MaTi)



MaTi Processes & Displays Data Type Errors

Upload New Spreadsheet

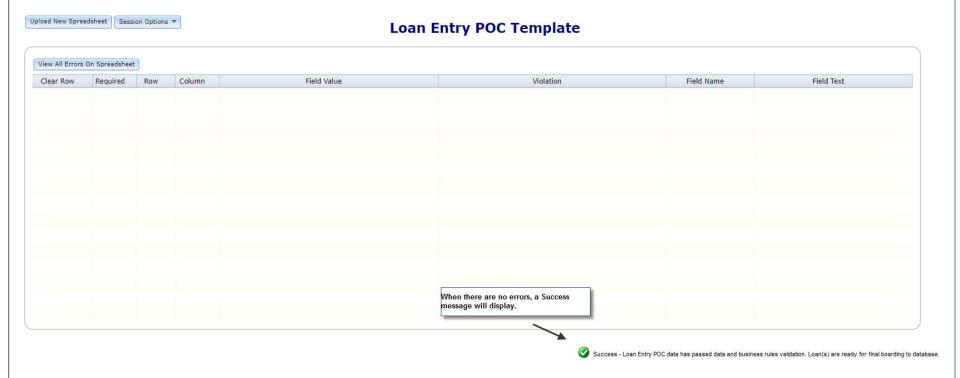
Loan Entry - All (Automated) Template

| Row | Column | Field Value | Violation | Field Name | Field Text |
|-----|--------|-------------|--|--------------|-------------------------|
| 4 | L | | 39814 This field cannot be converted to its expected type (DATE) | NDREV.DRAMDT | AMORT START DATE |
| 4 | E | | ab This field cannot be converted to its expected type (DATE) | NOESC.SOEXDT | POLICY EXP/RSV MAT DATE |
| 5 | С | | This is a required field | NRBL.RBRSV | RESERVE NUMBER |

② Data did not pass validation: data type mismatch

• Data did not pass validation. Correct the spreadsheet and upload again.

No Data Validation Errors



• Upload successful, ready for final boarding to servicing

Upload Successful

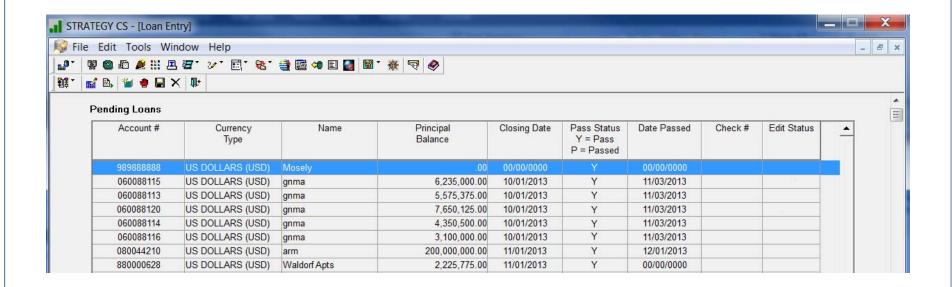
Row Column Field Value Violation Field Name Field Text

Submit to Strategy

Success - Loan Entry - All (Automated) Template

When there are no data validation errors, click Submit to upload to database.

Loans are in Loan Entry to Pass to Servicing



Complete System Level Values Before Upload

- Vendors
 - Banks, Correspondents, GL Company, Insurance Agents, Investors, Lockbox Locations, Taxing Authorities
- Role Types
 - Role Types, and Sub Role Types
- General Ledger Companies
- Note Types
- System Info Values for Customer Defined Tables

Future Direction

- Continued refinement of Product Types to include those items required for the Product Type but optional for Strategy.
- New Loan Boarding upload will allow you to upload data not currently supported in Loan Entry.

Asset Data

- Operating Statements
- Inspections
- Appraisals
- Rent Roll
- Environmental
- Liens

Pre-Authorized Transfers
Modified Payment Schedules
UCC Information

ucc Information

Other Collateral

Credit Instruments

Rate Caps (Hedge)

User-defined Fields

Miscellaneous Information

Loss Tracking

Assumption Information

Additional Investor Info

- GNMA Loan Keys,
 Certificate Records, Pool
 History
- CREFC & Freddie K Deal Info

Feedback?

- Take a closer look. Are data groupings logical?
- What do you think of the new process?
- Potential for incorporating business edits related to product types.

