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North Shore Systems

“Industry-Leading Software and Support”



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North Shore Systems

North Shore™

*Commercial Lending & Investment
Platform*



North Shore Systems, LLC

- **In business for 20 years**
- **80+ years of combined experience in CRE systems**
- **25 enterprise implementations since '02**
- **Proven financial longevity/business model**
- **Located in Orange County, CA**



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CUSTOMERS – past & present

Freddie Mac – multifamily GSE, underwriting, securitization
CBRE – Fannie/Freddie/FHA origination, closing
Waterfall/Ready Capital – Freddie, Bridge, Perm originations, asset mgmt.
Pacific Life – Portfolio origination, debt & equity, asset management, servicing
Thrivent Financial – Commercial portfolio originations, asset mgmt.
Luther Burbank Savings Bank – CRE origination, asset management
Annaly Capital Management – Debt & equity investment & portfolio mgmt
DIME Bank – Portfolio origination, asset management
Santander/Sovereign Bank – portfolio, conduit, multifamily/Fannie Mae
Lima One Capital – Residential investment property lending
PNC Real Estate – Agency Multifamily originations
Union Bank of California – commercial/multifamily portfolio
M&T Bank – Fannie, Freddie FHA
Cantor Fitzgerald (prev. Berkeley Point) – Fannie, Freddie, FHA
Ares Capital – CRE, portfolio
Oak Grove Capital – Agency Servicing and Asset Management
Johnson Capital – MB, perm, construction, mezz, bridge, structured
Legg Mason – credit tenant lease
EverBank Commercial – multifamily/commercial portfolio
FINOVA Realty Capital – MB, CMBS, Portfolio, Broker
BayView Financial – Subprime, hard money, MBS
American Property Finance – Fannie, Freddie, FHA
AMI Capital – Fannie, Freddie, FHA, Structured
ABN AMRO/LaSalle Bank – portfolio, multifamily, conduit
Lutheran Church Extension Fund – Construction/Perm, Portfolio
Imperial Capital Bank – portfolio, all types
Jackson Federal Bank – portfolio, all types



North Shore Value Proposition

NSS is the *COMPANY* that will serve you the best: most experienced, responsive, future direction

North Shore is the most *MATURE SYSTEM* on the market: most implementations; feature rich; continually enhanced & supported

***ARCHITECTURE* accommodates all your business goals and operational needs:** Straight-thru, end-to-end dataflow; rules-based processing; implement incrementally



NS Competitive Advantages

- **Technology-partner** approach
- **Maturity and robustness** of application
- **Ability to function as a data hub**
- **Ease of tailoring** system to workflow processes, business lines
- **Flexibility** for underwriting/excel integration
- **Technology and technical expertise**
- **Integration experience with Servicing Systems**
- **Seamless integration with the GSE's and other agencies**
- **Turn-key** installation and on-going system support
- **New releases and on-going** enhancements



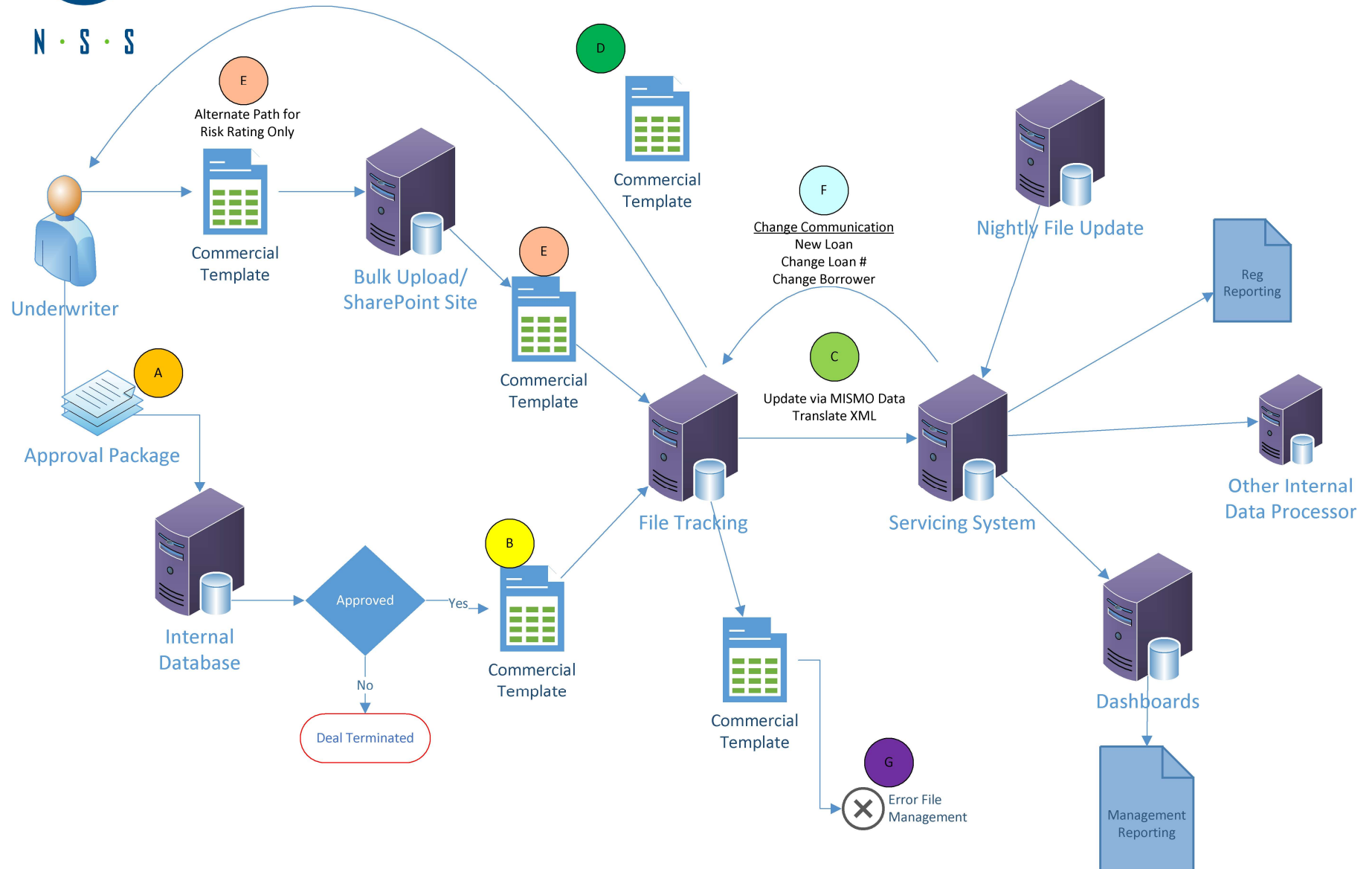
Key Benefits

- ✓ **Platform for end-to-end digital transformation**
- ✓ **Central access to system-of-record information**
- ✓ **Consolidate systems/tools used**
- ✓ **Lessen dependency on excel**
- ✓ **Ability to adapt products to market**
- ✓ **Ability to readily comply**
- ✓ **Cost savings and efficiencies**



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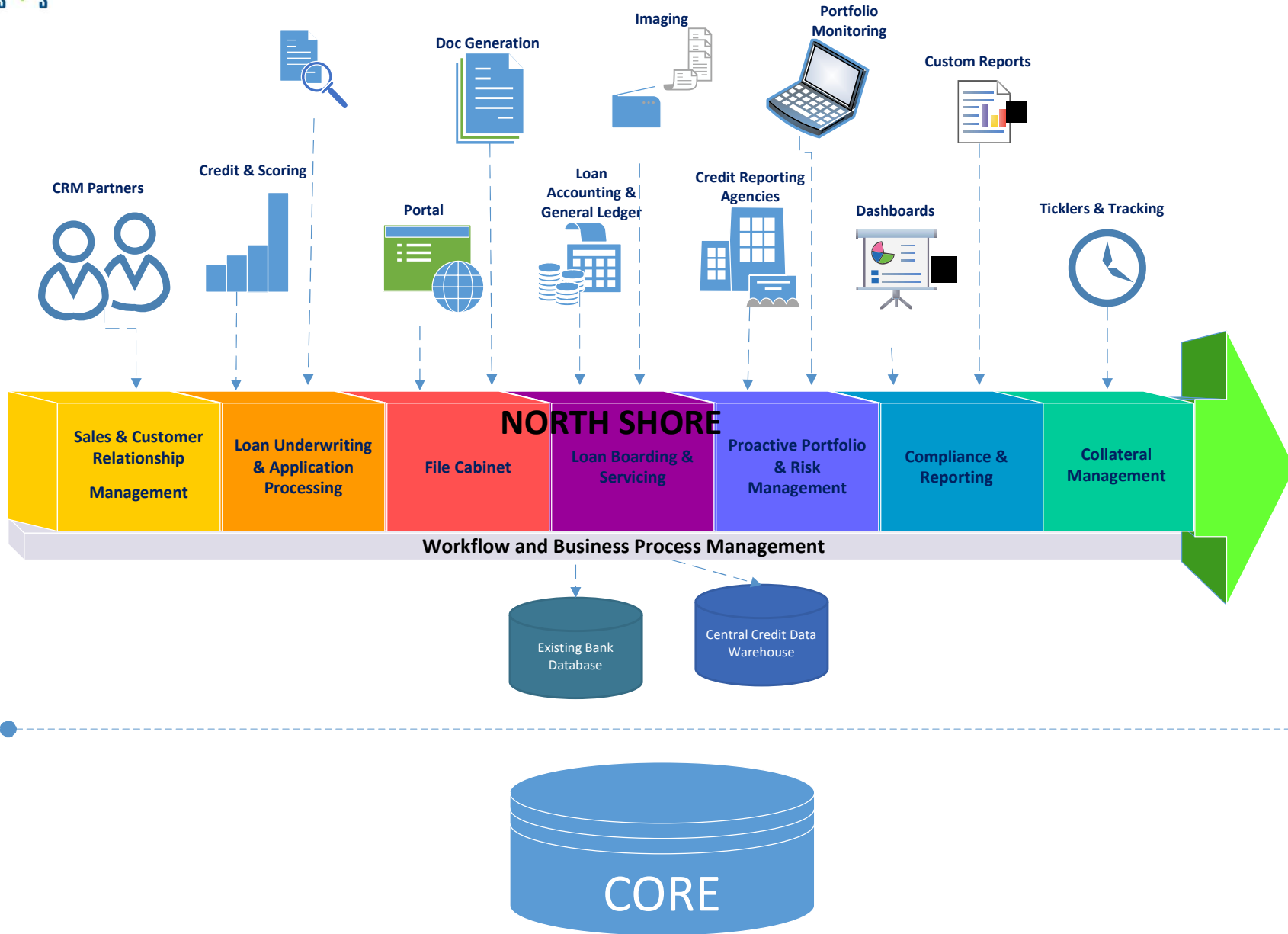
Commercial Loan Systems - BEFORE





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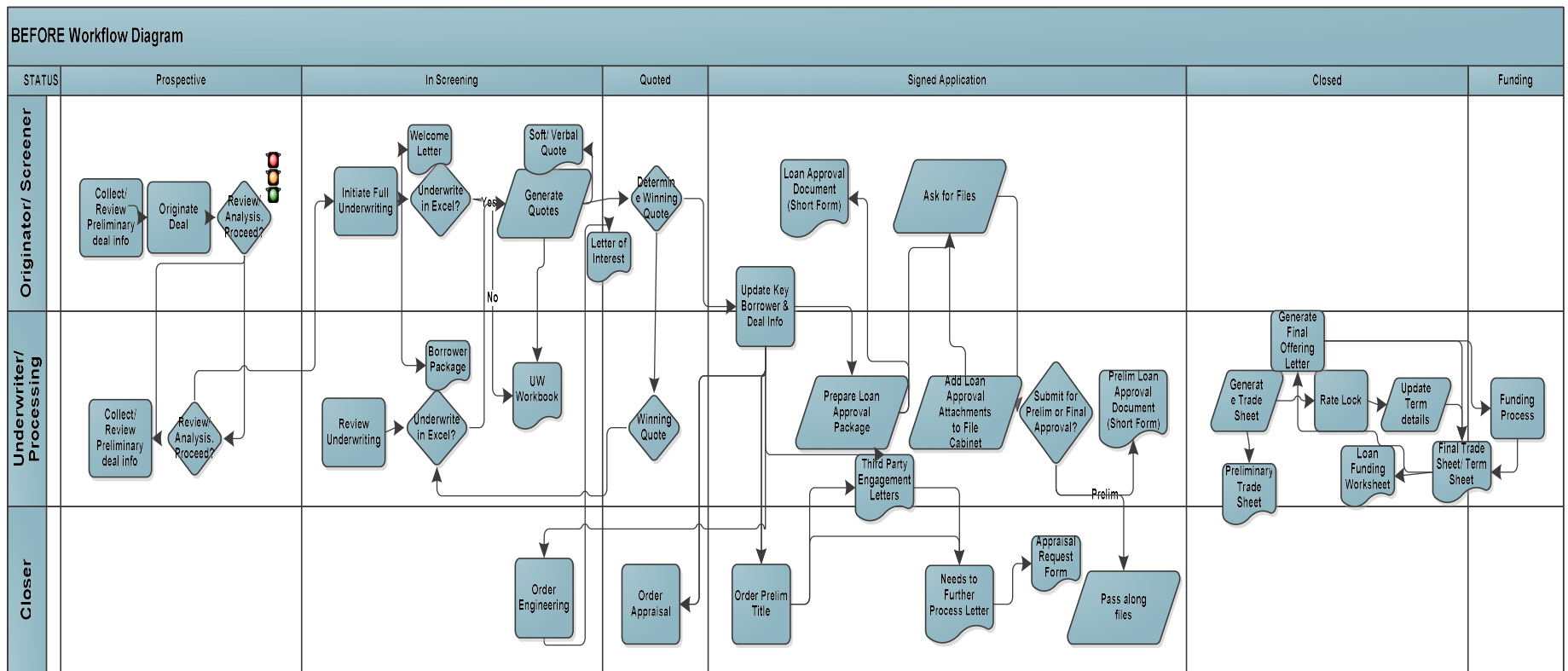
Systems Environment - AFTER





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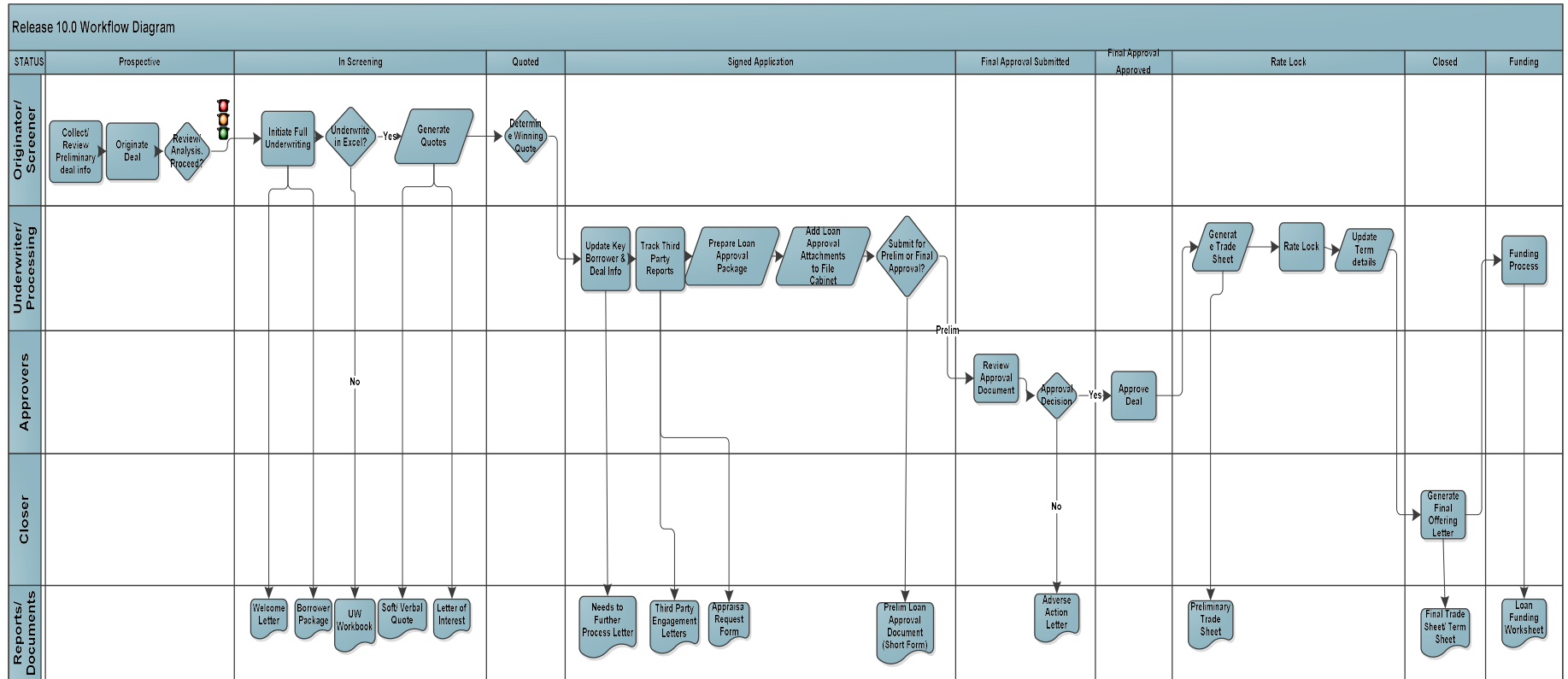
Commercial Lending Workflow - Before





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Commercial Lending Workflow - After

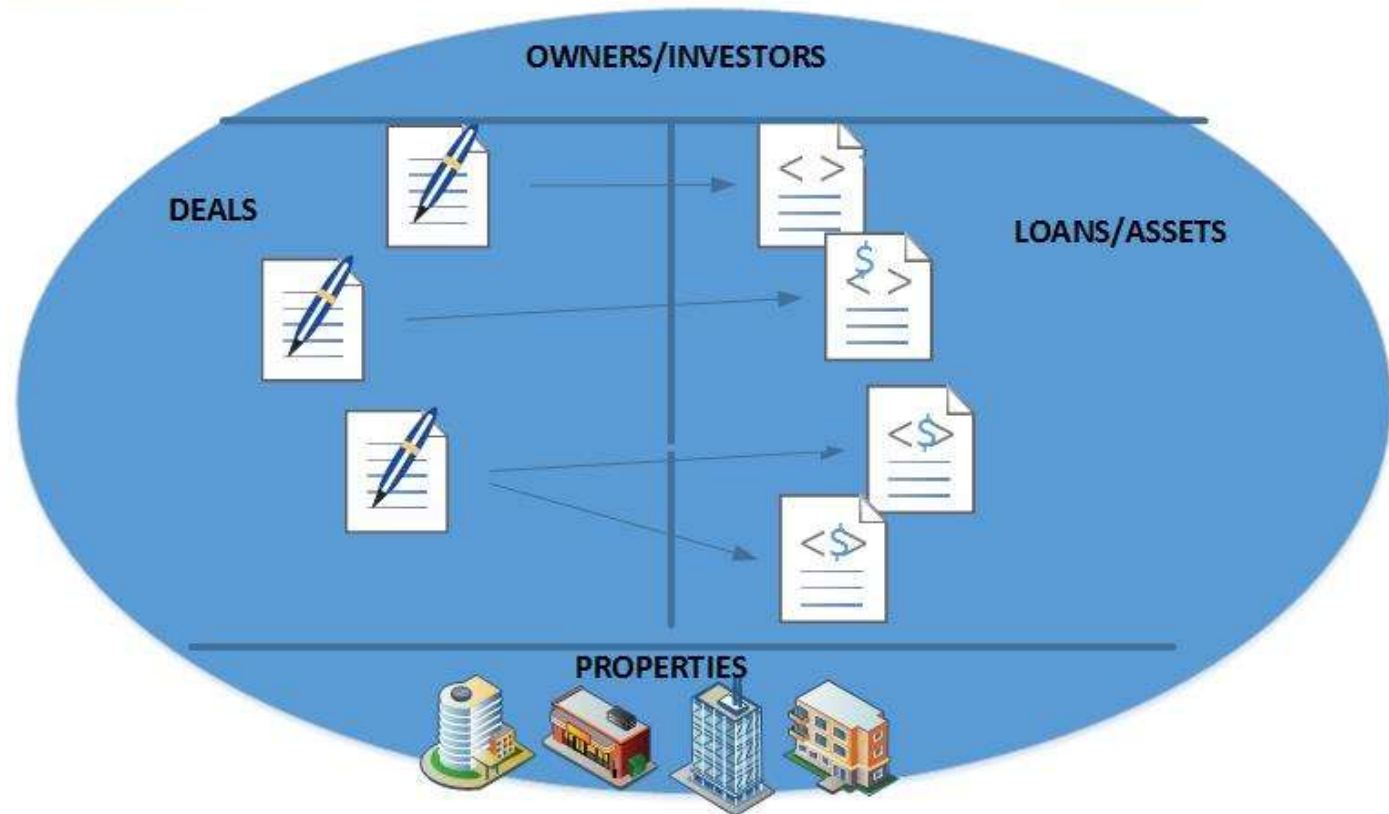




Integrated Front-End/Back-End Database

LOAN ORIGATION/
TRANSACTION

ASSET MANAGEMENT/
SERVICING





NS Features To Note

- ✓ **Web-based, hosted model (.NET technology)**
- ✓ **Easy to use, configure, modify**
- ✓ **Works for all commercial loan and investor types**
- ✓ **Integrates with your internal systems**
- ✓ **Data Import/Export capabilities**
- ✓ **Reporting Engine and Ad Hoc Query**
- ✓ **Rules Engine (workflow, underwriting, compliance, exceptions)**
- ✓ **MISMO, CREFC, Fannie/Freddie/HUD compliant**
- ✓ **Externally facing Portal for borrower/third party access**
- ✓ **Supports multiple lending operations from ONE system!**



Solution for All Commercial Lenders

- ✓ **Banks/Portfolio Lenders**
- ✓ **Agency Lenders/CMB's**
- ✓ **Life/Insurance Co's**
- ✓ **CMBS/Conduit Lenders**
- ✓ **Fintechs**
- ✓ **REITS/Equity Investors**
- ✓ **Single Family Rental**
- ✓ **Construction Lenders**
- ✓ **Corporate Real Estate**
- ✓ **State Housing Authorities**
- ✓ **Servicers/Asset Managers**
- ✓ **C&I Lenders**



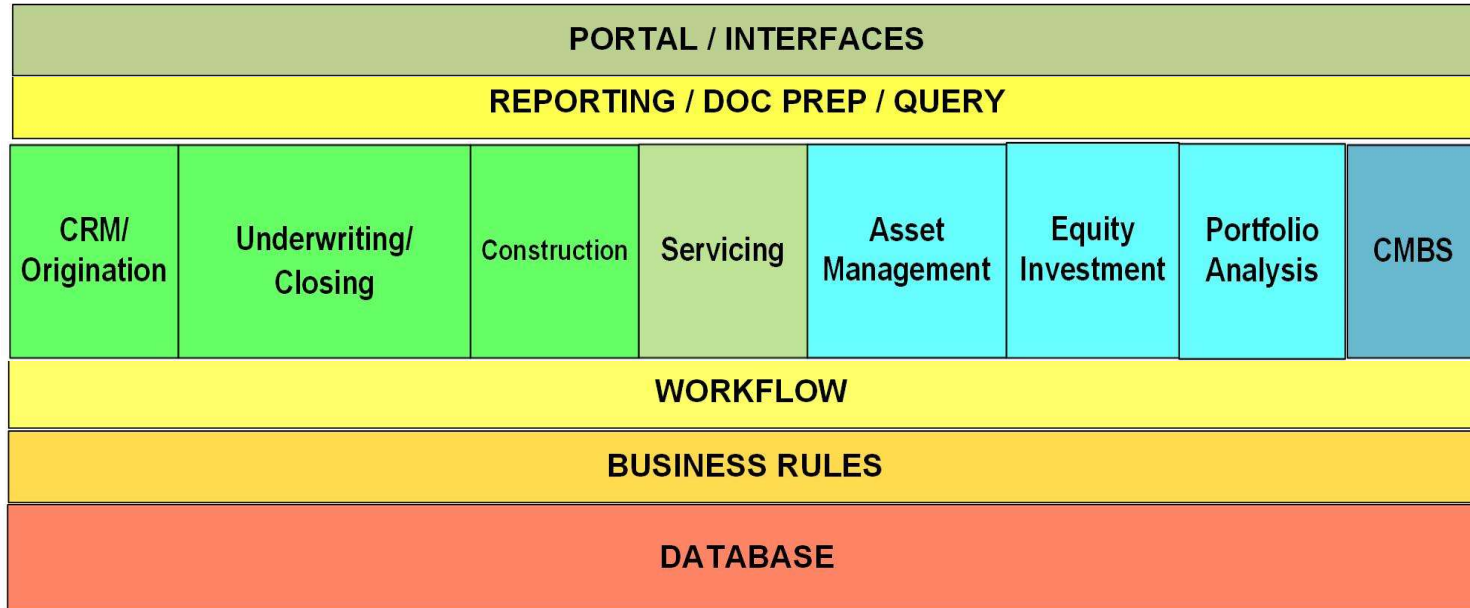
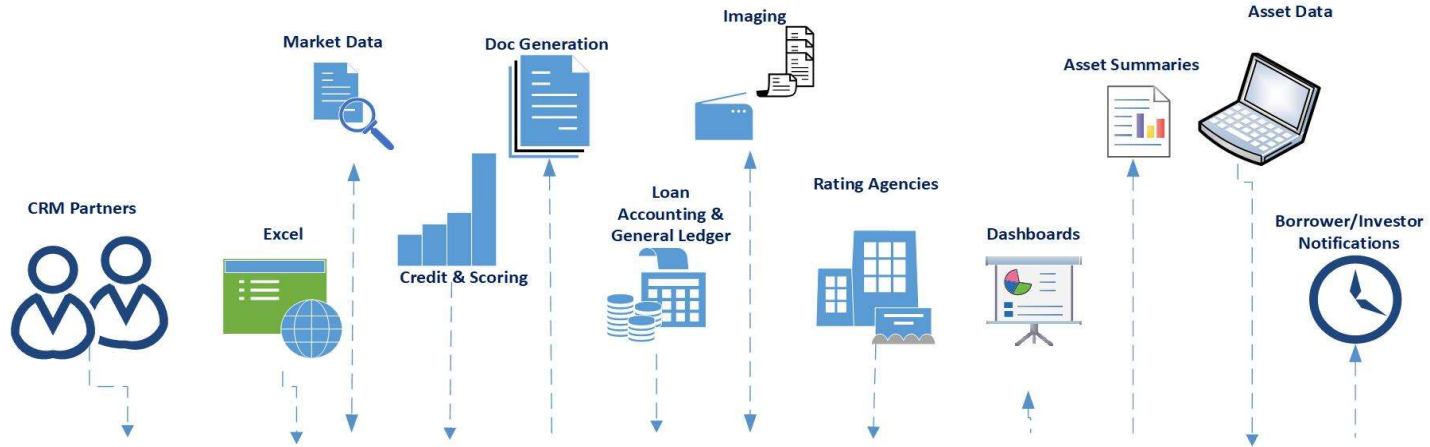
Future Developments

- ✓ **Browser-agnostic HTML5 version**
- ✓ **Mobile device access**
- ✓ **Industry-leading DATA HUB capabilities**
 - ✓ **Talks to all other systems w/ web services and API's**
 - ✓ **Mismo and CREFC compliant**
- ✓ **Facilitating Agency Digitization**
- ✓ **Helping Enterprises with Digital Transformation**
- ✓ **Portfolio Management & Analysis**
- ✓ **Portal and Fintech Capabilities**
- ✓ **Servicing Module**
- ✓ **Externally facing Portal for borrower/third party access**
- ✓ **Supports multiple lending operations from ONE system!**



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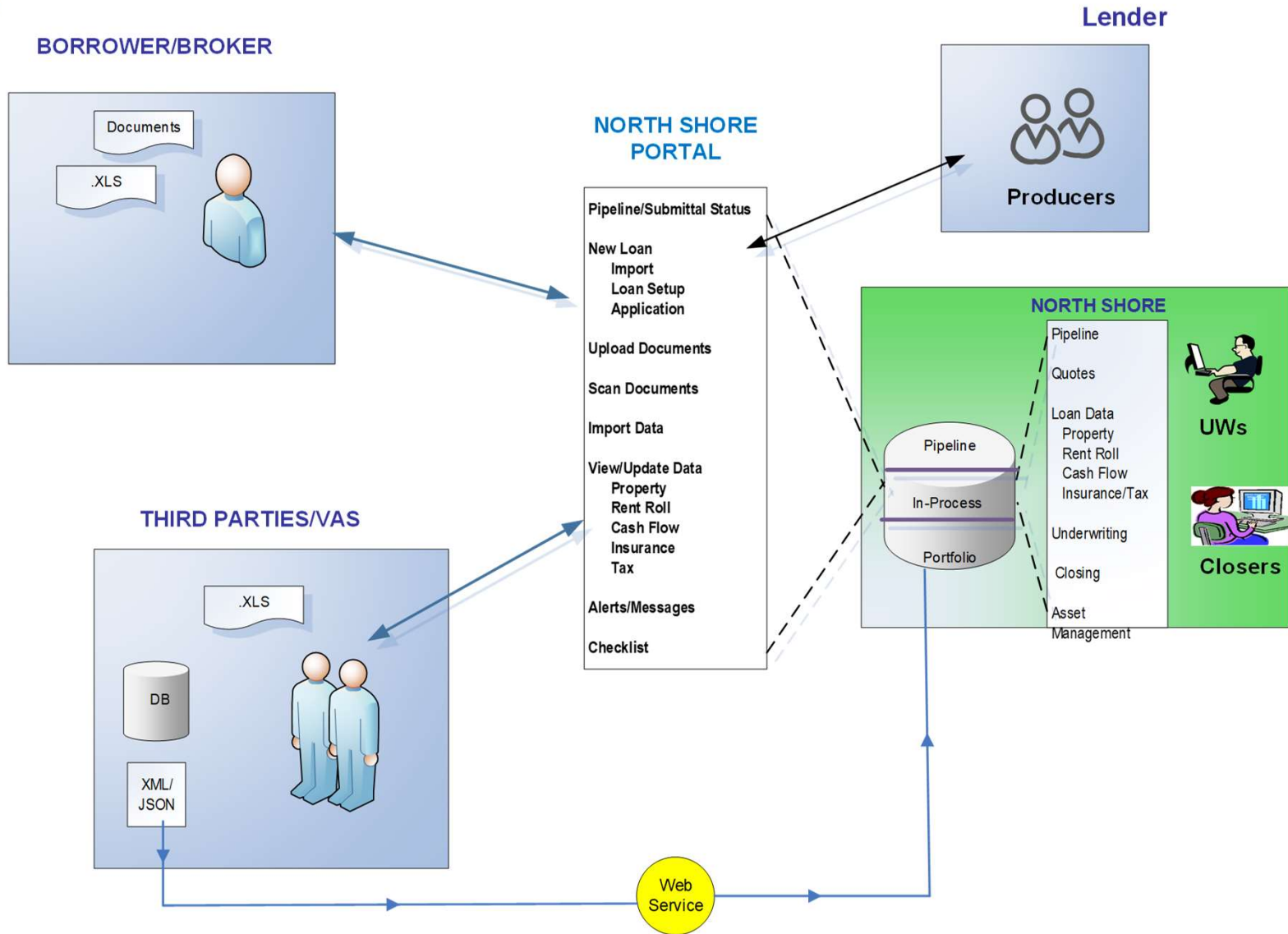
Single Platform of Integrated Modules





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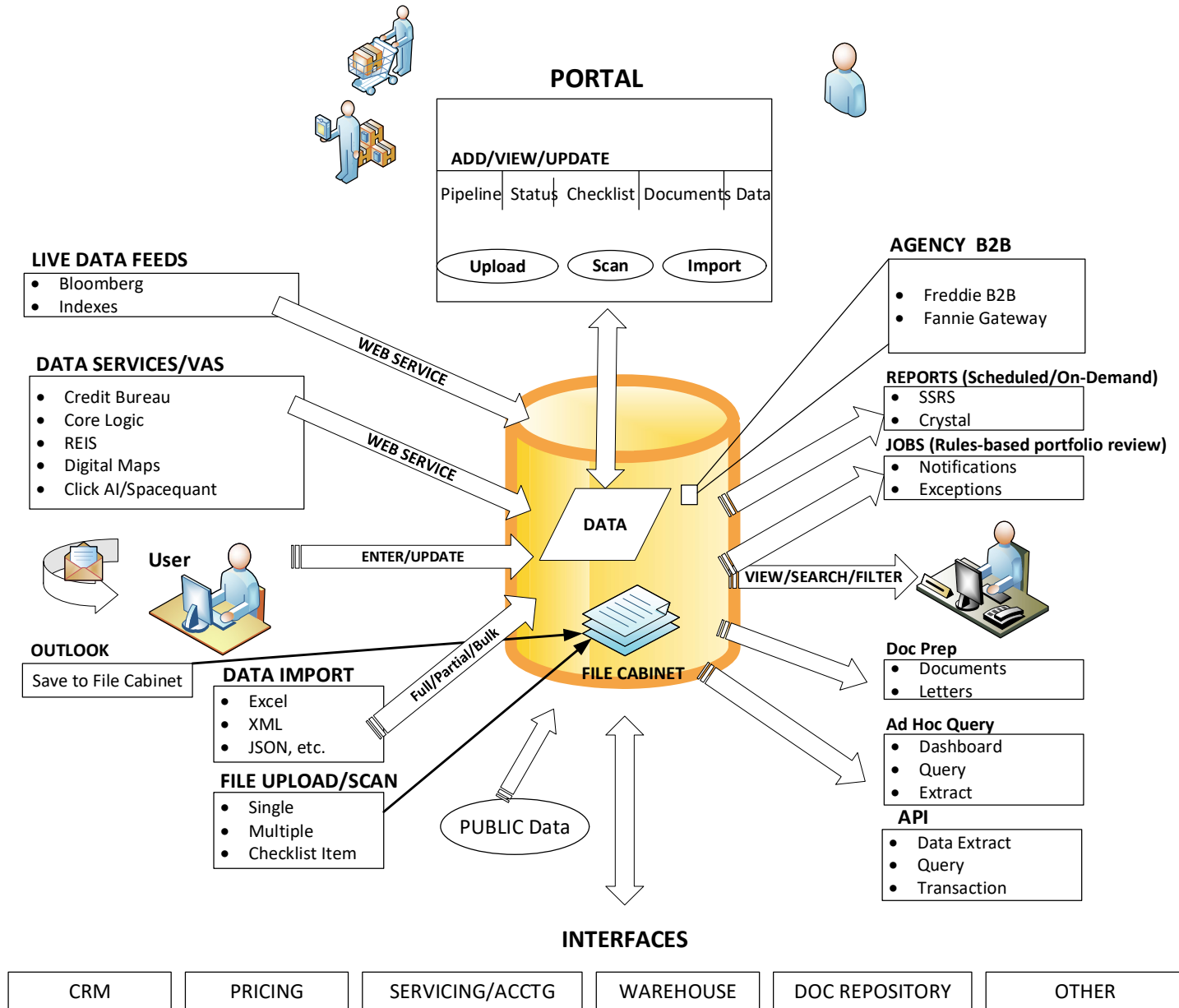
North Shore Connect (Portal)





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North Shore as DATA HUB – In's and Out's



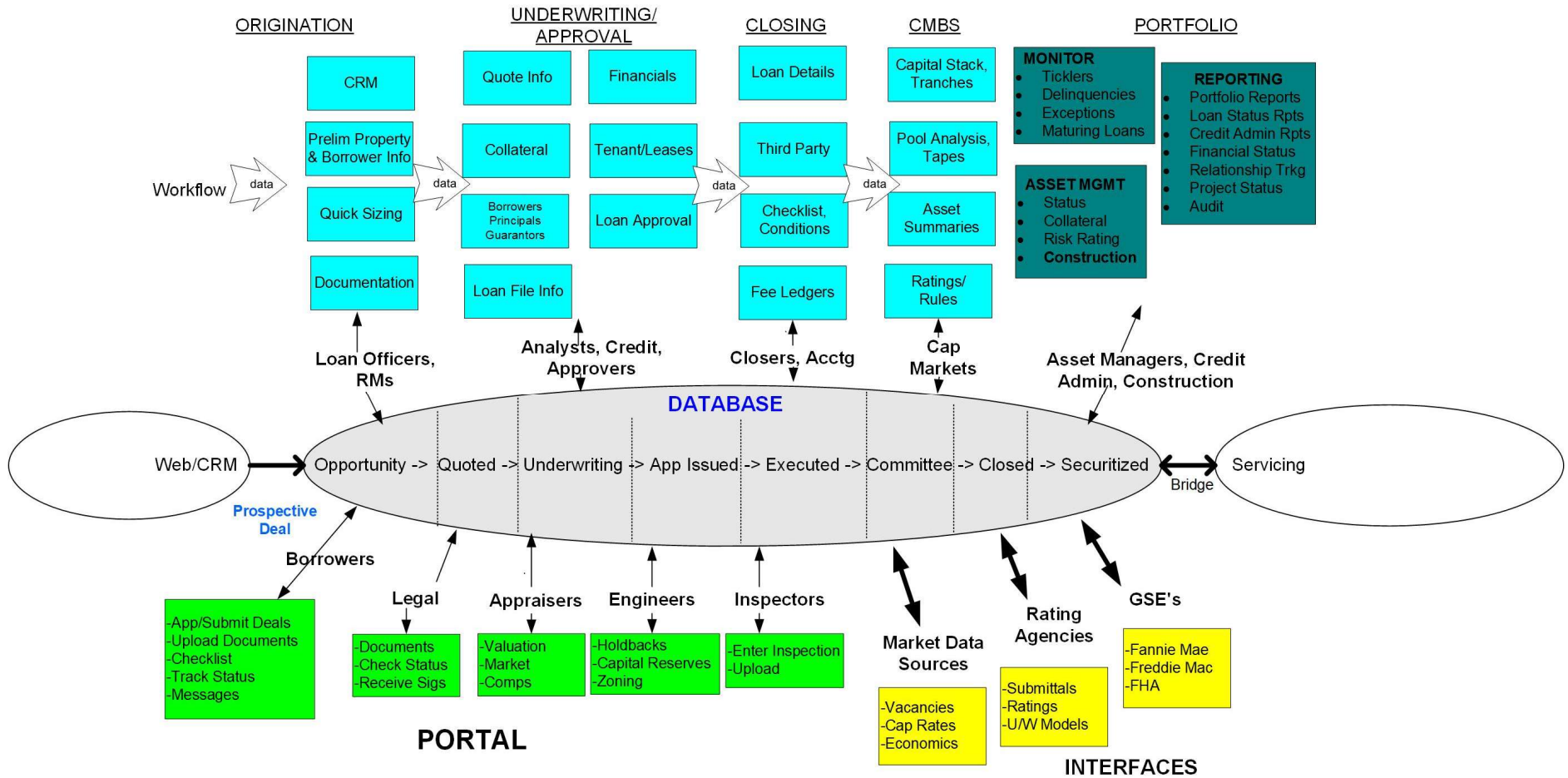


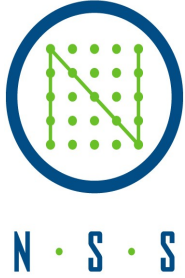
North Shore Modules

- **Origination**
- **Portfolio & Asset Management**
- **CMBS**
- **Construction Loan Administration**
- **NS CONNECT (Customer/Third Party Portal)**
- **Servicing (Accounting) (2019)**
- **Construction Project Analysis (2020)**



END-TO-END PLATFORM





Origination

- **Workflow Automation & Pipeline Tracking**
- **Excel integration and/or Integrated Underwriting**
- **Document Generation**
- **Management Reporting**
- **Quote Tracking**
- **Contact Log**
- **Procedure & Document Checklists**
- **Committee Presentation**
- **Complete Closing & Accounting Functions**
- **Underwriting & Credit Policy Business Rules**



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Asset Management

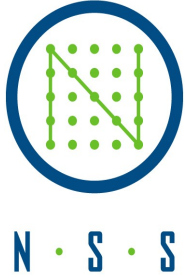
- **Rules-based portfolio surveillance & asset management**
- **Automatic Property Financials requests**
- **Property Inspection scheduling and capture**
- **Initial & Continuing Valuations**
- **Disposition & Business Plan Write-up & Approval**
- **Appraisal Tracking**
- **Document Tracking and repository**
- **Risk Analysis & Loss Protection**
- **Portfolio & Regulatory Reporting**
- **Budgeting & Cash Management**
- **Over 2,500 Data Elements**



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Project/Portfolio Performance

- **Portfolio mix and concentration reports**
- **Risk Based Capital**
- **Borrower Exposure**
- **Dynamic trend analysis**
- **Exception reports**
- **Economic impact analysis**
- **Comparable reporting**
- **Market data**
- **Production and performance reports**



NS Connect Customer Portal

- **Integrated with client web-site, private label**
- **Initial loan inquiry and loan application**
- **Customer/broker Pipeline**
- **Deal Dashboard w Status and Messages**
- **Data and File submission**
- **Excel integration and/or Integrated Underwriting**
- **Document Checklist and File Upload**
- **Document/Notification Generation**
- **Construction Draw Requests**
- **Third-Party Collaboration/Data upload**



Online Underwriting

- **One ‘enterprise spreadsheet’** – *based on lender’s underwriting templates – eliminates version-tracking or distribution issues*
- **All underwriting data integrated with other parts of the origination process** – *excel is an 20+ yr old technology that has no database interface and major data integrity issues*
- **Increased underwriter productivity** – *‘best’ underwriting practices and business rules put in system for all to refer to*
- **Increased functionality** – *access to database during the underwriting process saves time and provides more accurate analysis.*
- **Underwriters integrated into automated workflow processes** – *for better collaboration and coordination*
- **Higher-quality deal information** – *for management and investors*



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CMBS

- **Excel Integration**
- **Rule-Based Underwriting and Pooling**
- **Build Pools and Perform What-If Scenarios**
- **Track Bond Details and Participants**
- **Closing and Securitization Checklists**
- **CREFC Investor Reporting Package**
- **Loan or Pool Import/Export**
- **Asset Summaries**
- **Rating Agency Tape Creation**
- **On-Going Asset Administration**
- **Pool Analysis/Statistics & Reporting**



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Commercial/Multifamily Lending

- **Workflow Automation**
- **Pipeline Tracking**
- **Broker Interface**
- **Sizing/Loan Options**
- **Quote/Application Tracking**
- **Business Rules/Exceptions**
- **Integrated Underwriting**
- **Cash Collections**
- **Borrower Relationship**
- **Credit Bureau Download**
- **Fee & Expense Tracking**
- **Property/Unit Mix**
- **Tenancy Details**
- **Site Issues/Improvements**
- **Site Inspection/Appraisal**
- **Sales Comps**
- **Management Firm**
- **Environmental**
- **Engineering**
- **Future Commitments**
- **Loan Approval**
- **Closing Checklist**
- **Management Reports**
- **Doc/Letter Generation**
- **Servicing System Interface**



GSE-Lending Features

- **GSE-specific data fields**
- **GSE-specific configuration of process flow and screens**
- **GSE-specific data tags for use in doc prep**
- **GSE-specific XML and adhoc query access**
- **Tiered Loan Sizing Screen**
- **Fail Safe Tracking Screen**
- **LIHTC and Credit Enhancements screens**
- **Future Commitment screen**
- **Bi-directional UW excel template**
- **Business Rules by Program (configurable)**
- **Electronic M-code submission**
- **GSE specific reports**
- **Property/Unit Mix & Tenancy screens & analysis**
- **Site Issues/Improvements to support UW Narrative**
- **Robodocs interface**



Fannie Mae Report/Document List

- **GSE UW Narrative**
- **Fee Reconciliation Report**
- **Fail Safe Tracking Report**
- **Loan Options Report**
- **Cash Collections Report**
- **Income Report**
- **Loan Sizing Report**
- **Rent Analysis Report**
- **Waivers and Conditions Rpt**
- **Exit Strategy Report**
- **Property/Unit Mix Repot**
- **Tenancy Report**
- **Final Loan Summary Doc**
- **M-code Reconciliation Report**

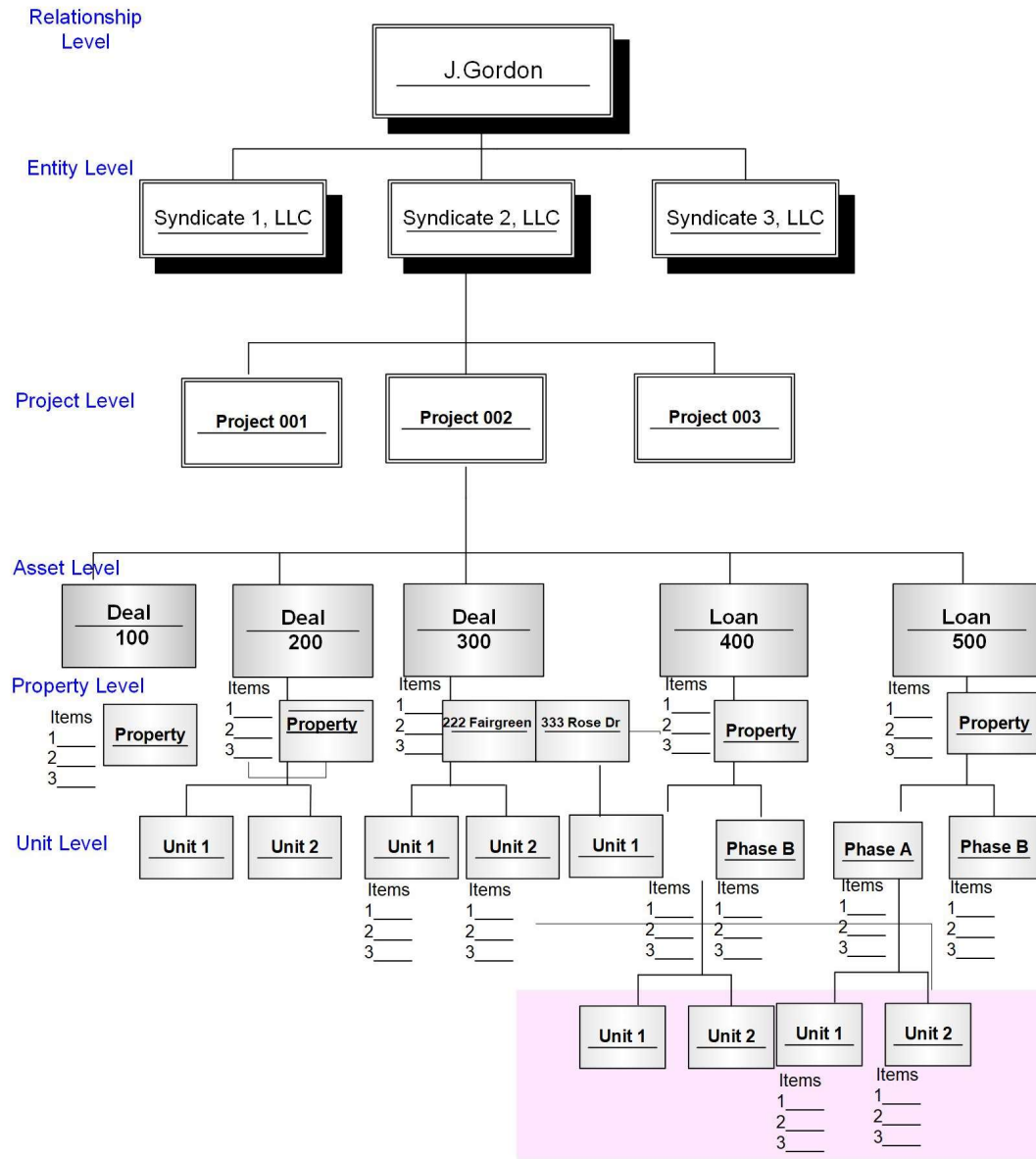


Construction Loan Administration

- **Borrower/Project/Loan Reporting & Control Hierarchy**
- **Hard Cost/Soft Cost Chart of Accounts Templates**
- **Line Item-level Percent Complete, Retainage, Locks**
- **Stage Draw, Percent Complete, Builder Line Controls**
- **Borrower Equity Tracking**
- **Disbursement Schedule & Revolving Lines**
- **Multi-unit Development & Lot Release Tracking**
- **Web-Based Inspection Module, Borrower Module**
- **Seamless Integration with Existing Systems**



Control Hierarchy





DEAL D



exible Deal
structure

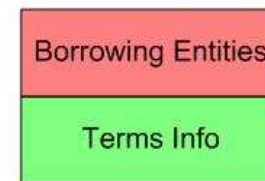
Note 001



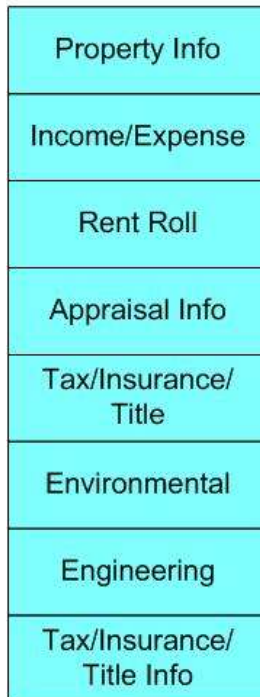
Note 002



Note 003



Property 1



Property 2



Property 3





Deal CF-FM001

- Credit Facility Amount
- status/comments
- ticklers
- file cabinet
- approval info
- Dashboard

Credit Facility

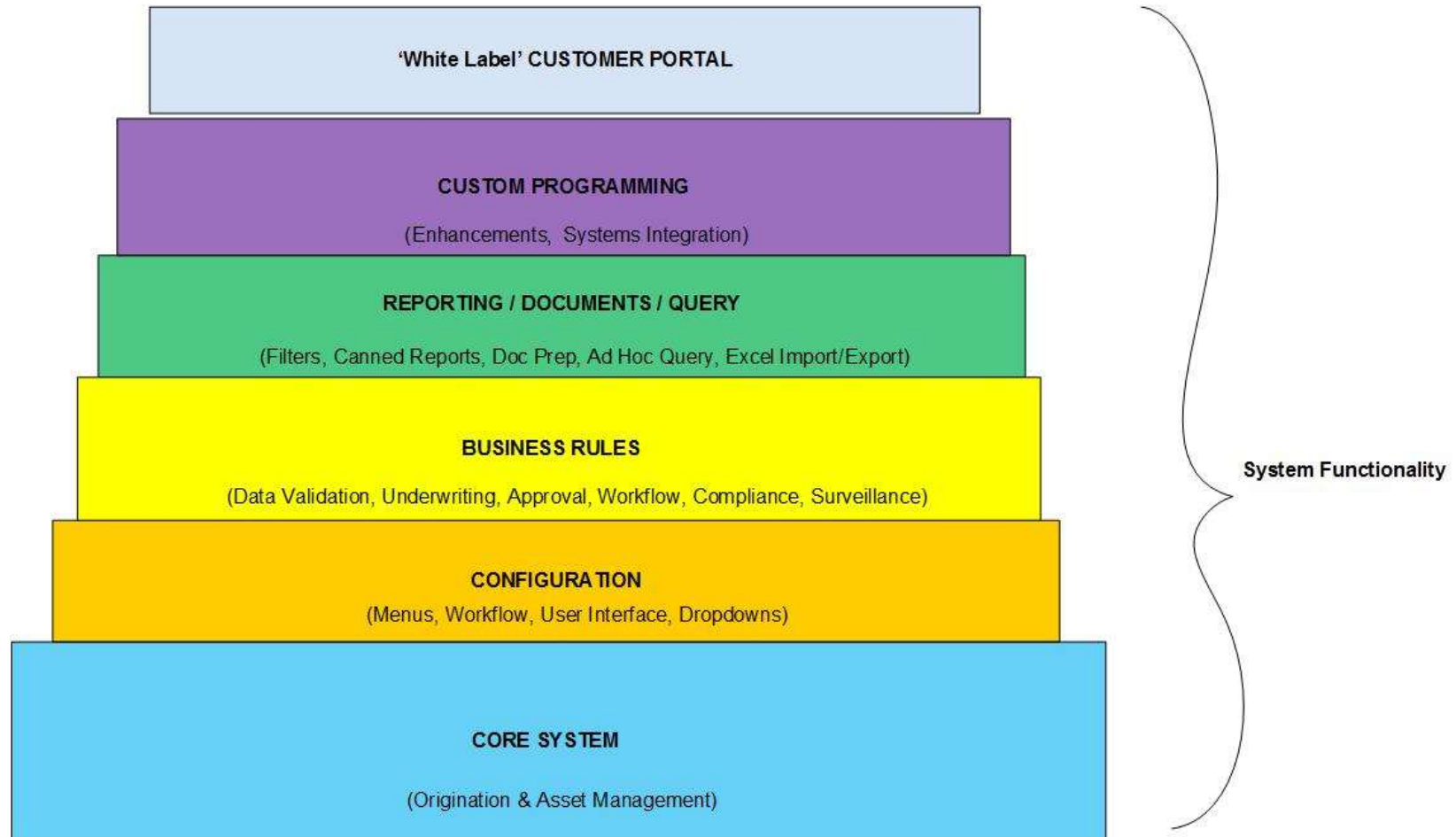
Note 001

- Common Terms
- Sizing Rollup

<u>Property 1</u>	<u>Property 2</u>	<u>Property 3</u>		<u>Property nnn</u>
Property Info	Property Info	Property Info		Property Info
Income/Expense	Income/Expense	Income/Expense		Income/Expense
Sizing	Sizing	Sizing		Sizing
Appraisal Info	Appraisal Info	Appraisal Info	Appraisal Info
Tax/Insurance/ Title	Tax/Insurance/ Title	Tax/Insurance/ Title		Tax/Insurance/ Title
Environmental	Environmental	Environmental		Environmental
Engineering	Engineering	Engineering		Engineering



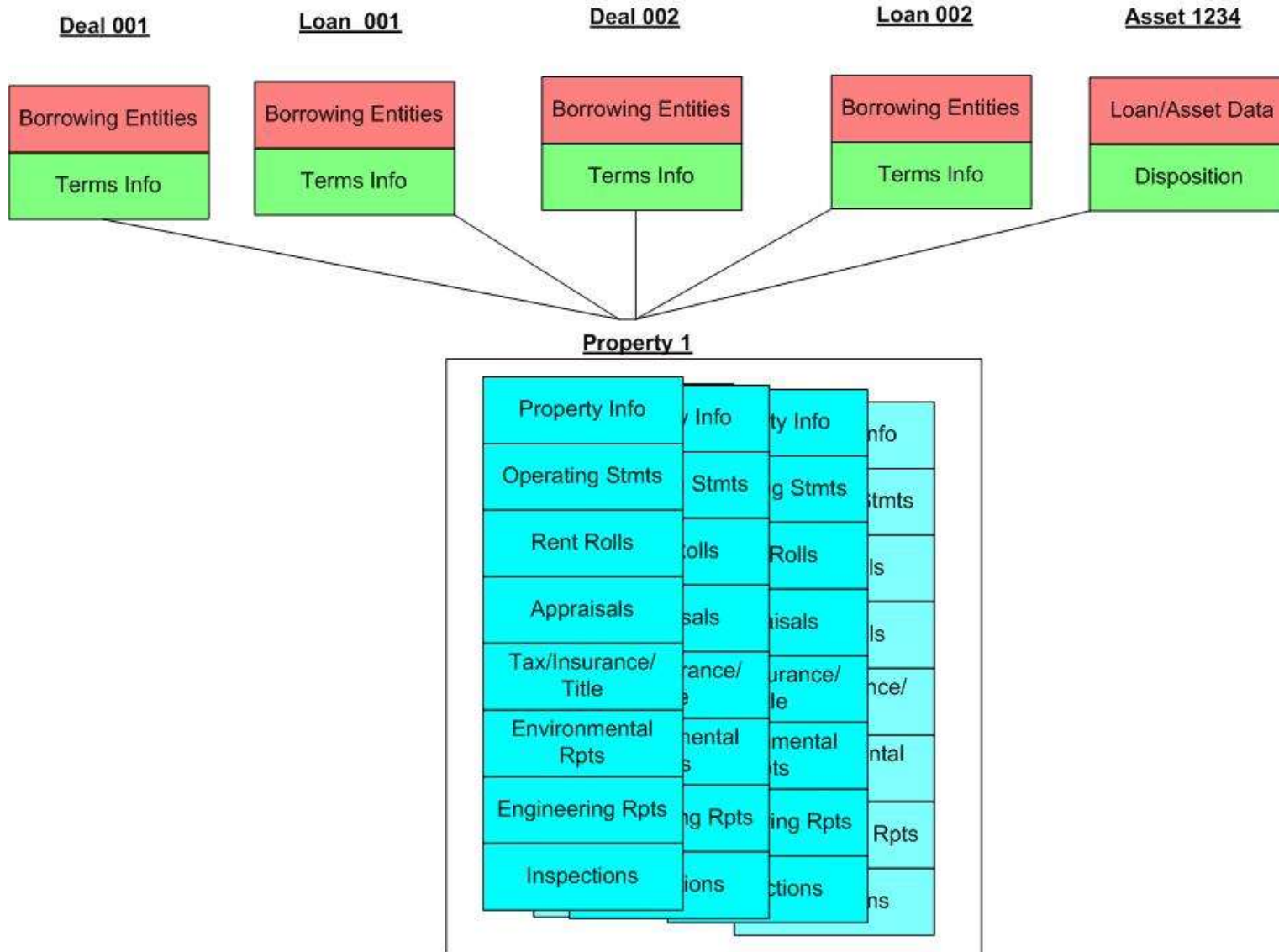
North Shore – Functionality Layers





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Single Property Record (Delivery thru Final Disposition)

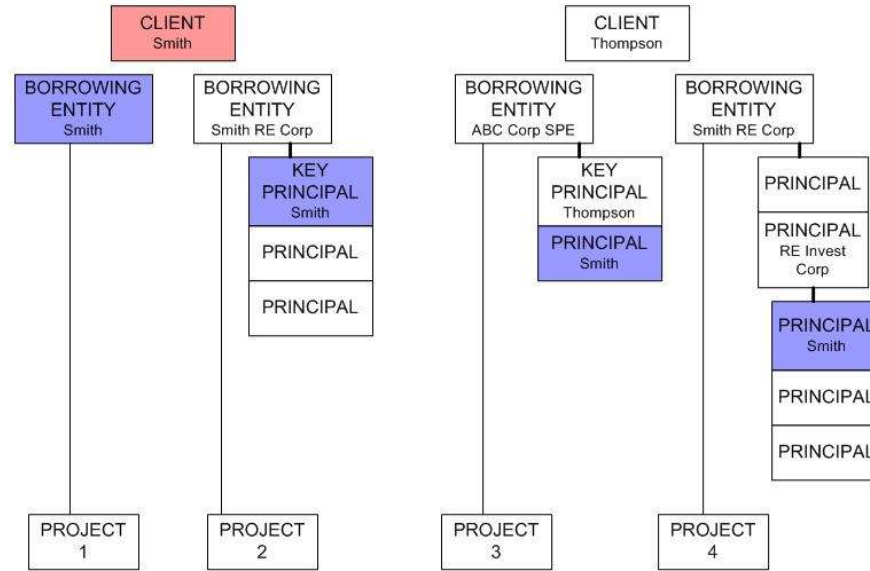




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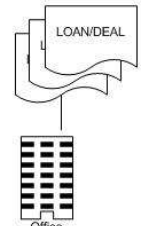
Relationship Tracking

Example: 'Smith' Relationship



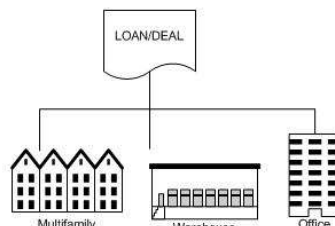
Project Structures

Example A



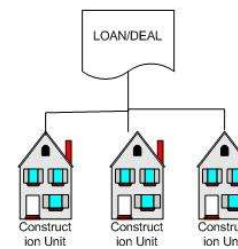
1 Property/
Multiple Loans

Example B



1 Loan/
Multiple Properties

Example C

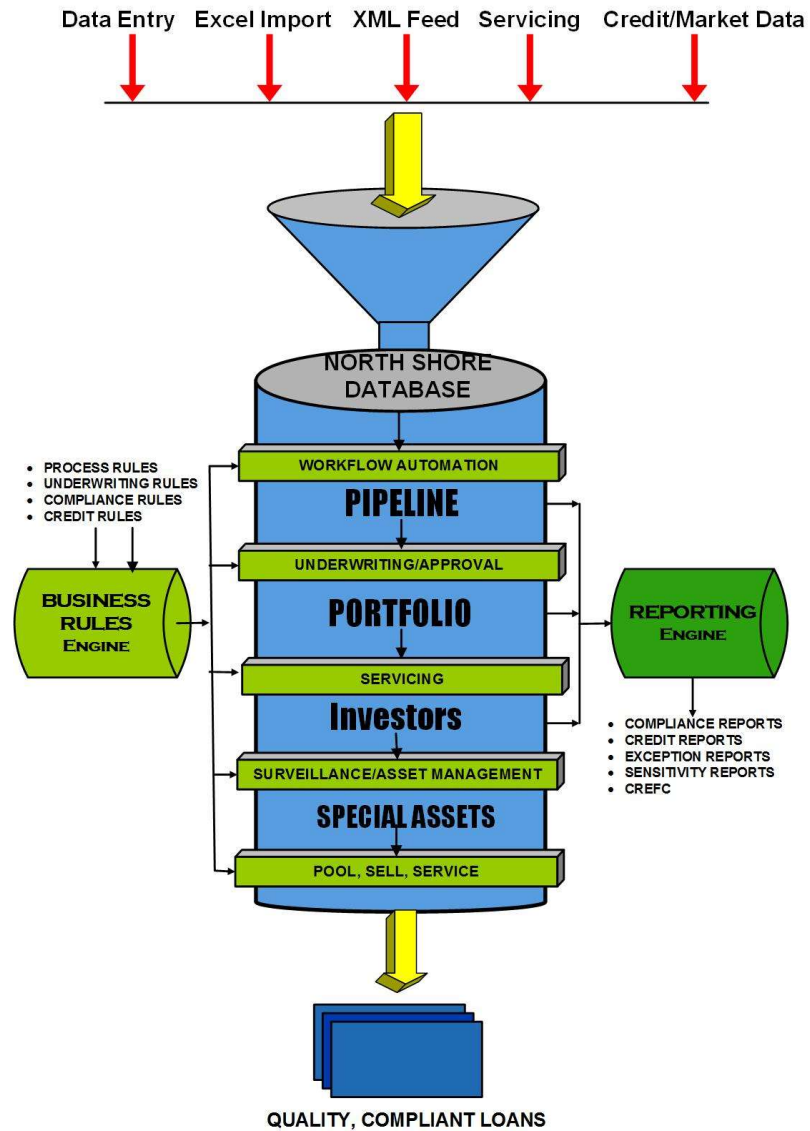


Construction Loan



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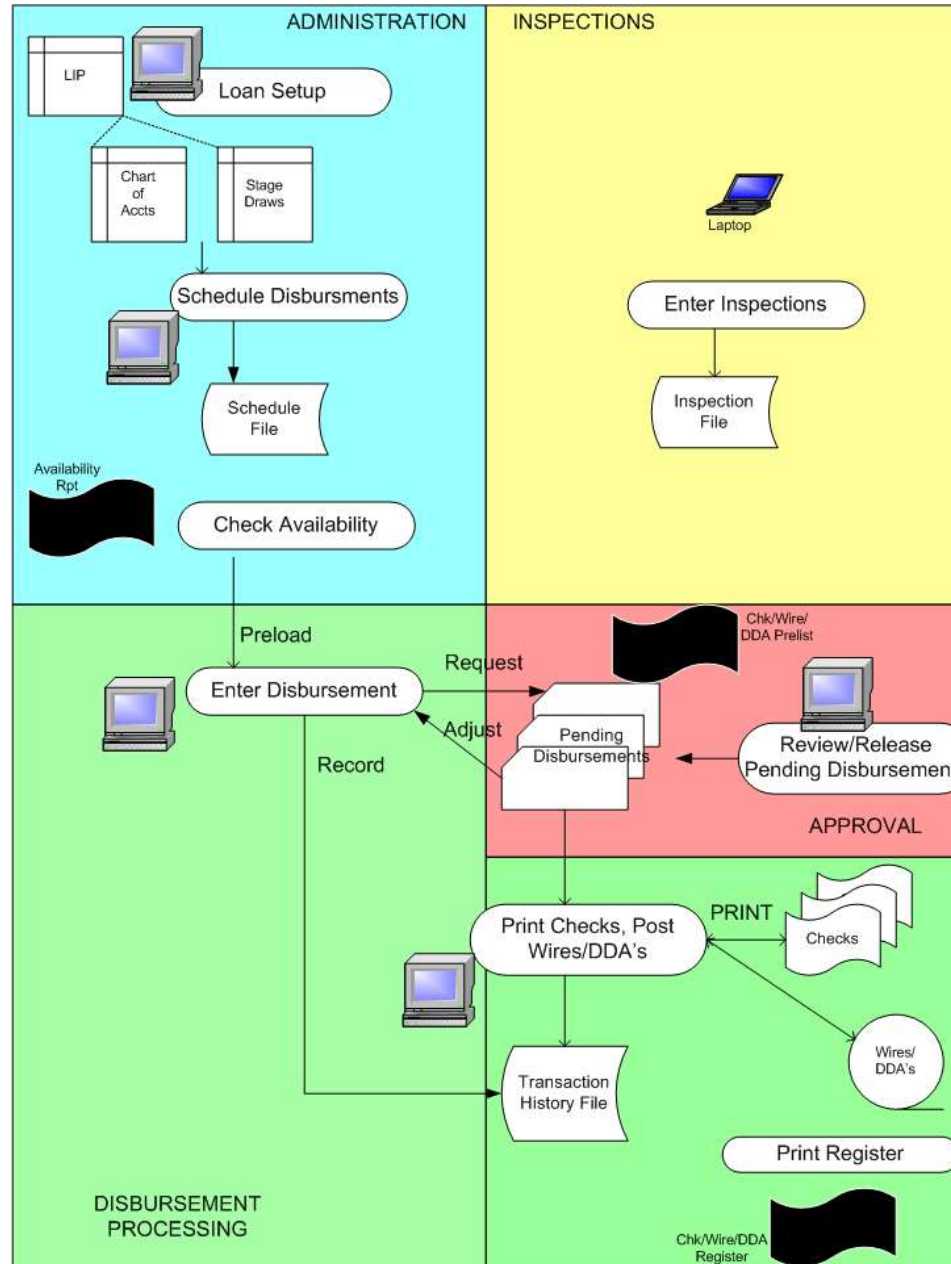
RULES-BASED PROCESSING & REPORTING





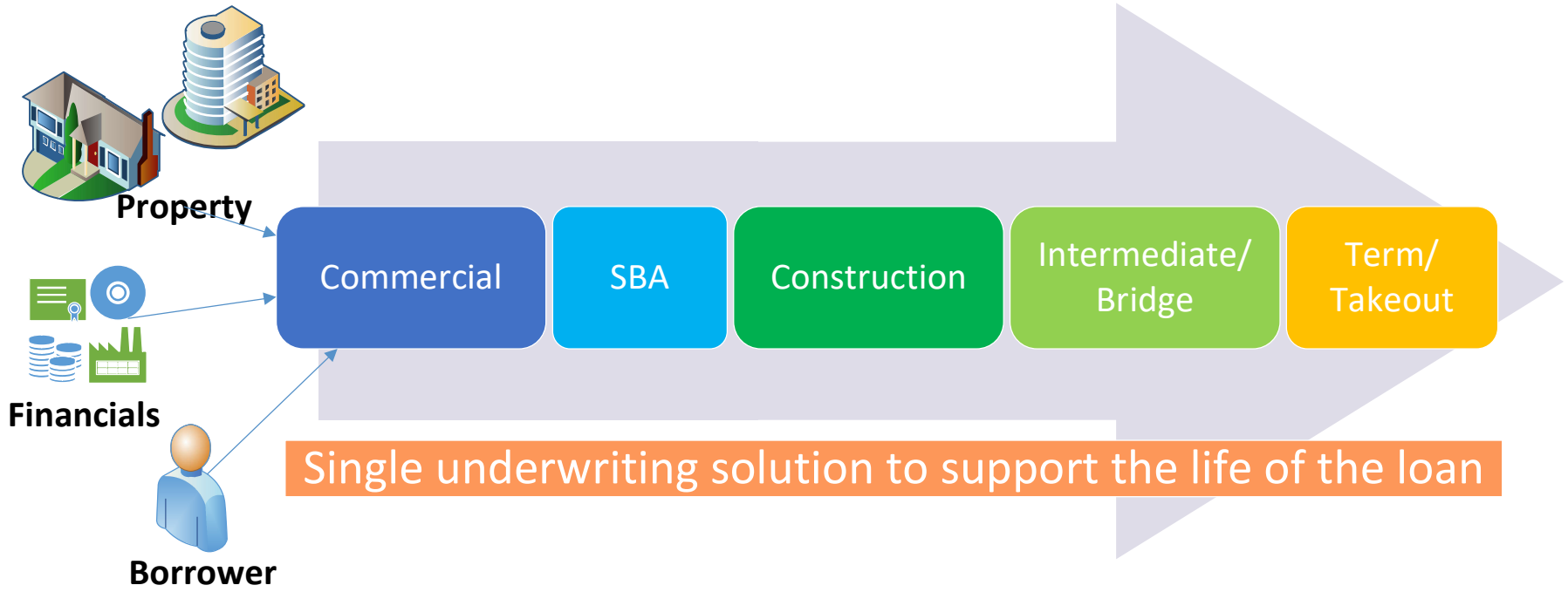
Disbursement Process

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Underwriting Solution



Property Types:

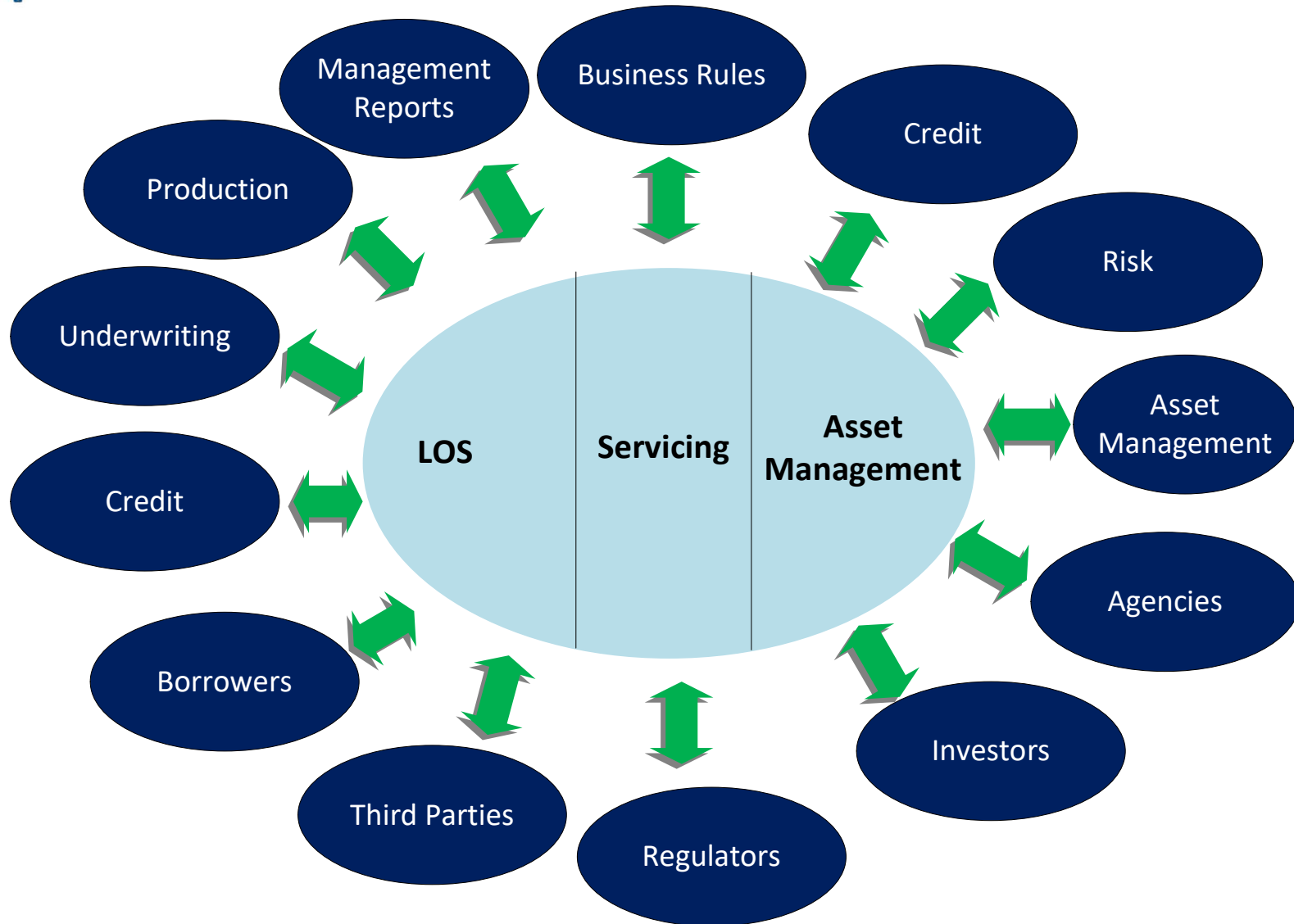
Office
Retail
Multifamily
Hotel/Lodging

Warehouse/Industrial
Self Storage
Senior Housing
Student Housing

Mixed Use
Multi-Collateral



Secure Electronic Platform Linking all Key Parties





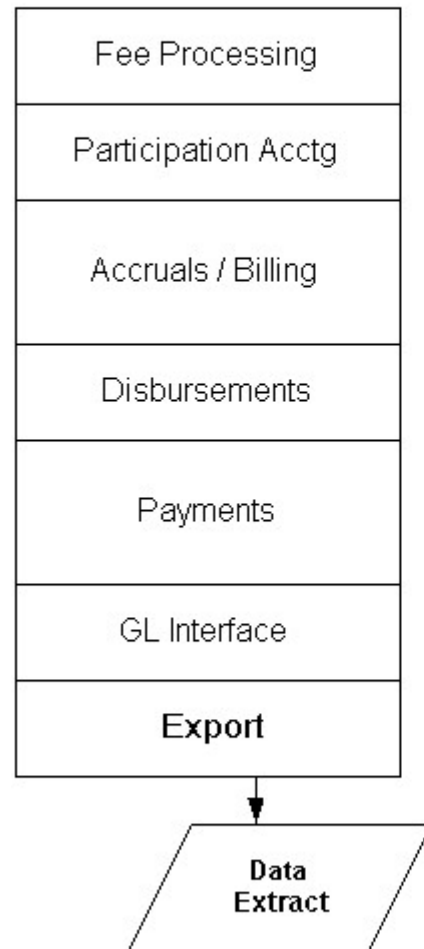
North Shore as a Front-End System

- **Monetary and non-monetary transactions applicable to a construction loan are posted on North Shore.**
- **These transactions are passed in the appropriate format to accounting system**
- **A download also takes place to overlay North Shore with the balances “owned” by the accounting system, which performs all loan accounting functions including interest accruals, customer billing, and participation accounting.**
- **Accounting system continues to interface with the General Ledger, CIF, and other corporate systems.**
- **North Shore is used to perform all construction loan control and reporting.**

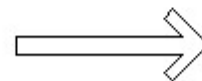
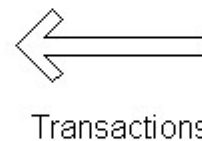
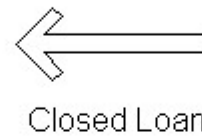
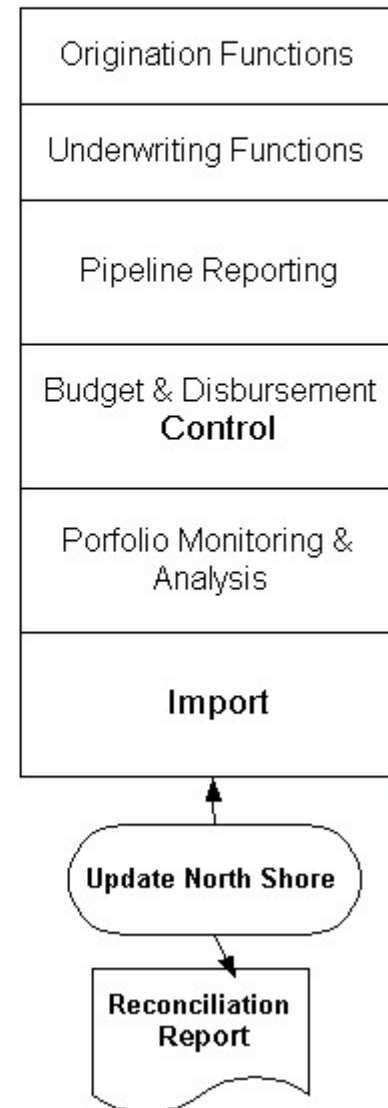


North Shore as a Front-End System

Commercial Loan System



North Shore





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Advantages to Front-End Approach

- **Leveraging current systems**
- **Disbursement Controls ensure that budgets are adhered to. Online history is maintained for original budget amounts, change orders, transfers, retentions, holds, disbursements, and amounts available for disbursement.**
- **Construction progress information from inspections is maintained at the line item level for disbursement control.**
- **A single, integrated real estate database is used to consolidate portfolio data, and serve as a single point of access for construction servicing personnel.**
- **All interest accruals and customer billing is controlled by your accounting system.**



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North Shore Front-End Functions

- ✓ **Borrower/Project/Loan/Property Setup**
- ✓ **Budget Setup & Maintenance**
- ✓ **Disbursement Control**
- ✓ **Retainage & Budget Locks**
- ✓ **Interest Reserve**
- ✓ **Inspection Tracking**
- ✓ **Subdivision Inventory Control**
- ✓ **Builder line Tracking**
- ✓ **Ticklers**



Current Interfaces

- ✓ **CRM**
- ✓ **Servicing Systems**
- ✓ **Credit Bureau**
- ✓ **Appraisal**
- ✓ **Market Data**
- ✓ **Inspection**
- ✓ **Scoring/Pricing**
- ✓ **Agency Portals**
- ✓ **Borrower/third party Portal**
- ✓ **CMBS**
- ✓ **Data Feeds:**
 - ✓ **Argus**



Imports/Exports

- **Web Services Output**
 - **MISMO XML data export NSS API**
 - **SMTP Mail service**
 - **SMTP Mail service File Uploads From Outlook**
 - **Excel Exports – User Designed**
 - **CRAWiz**
 - **Argus**
 - **Freddie Mac B2B**
 - **Fannie Mae Gateway**



Imports/Exports

- **Web Services Output (Continued)**
 - **Document Management System**
 - **OpenText**
 - **OnBase**
 - **Other Generic DMS**
 - **Izenda Series 6 & 7**
 - **Ivue (Cognos Reporting)**



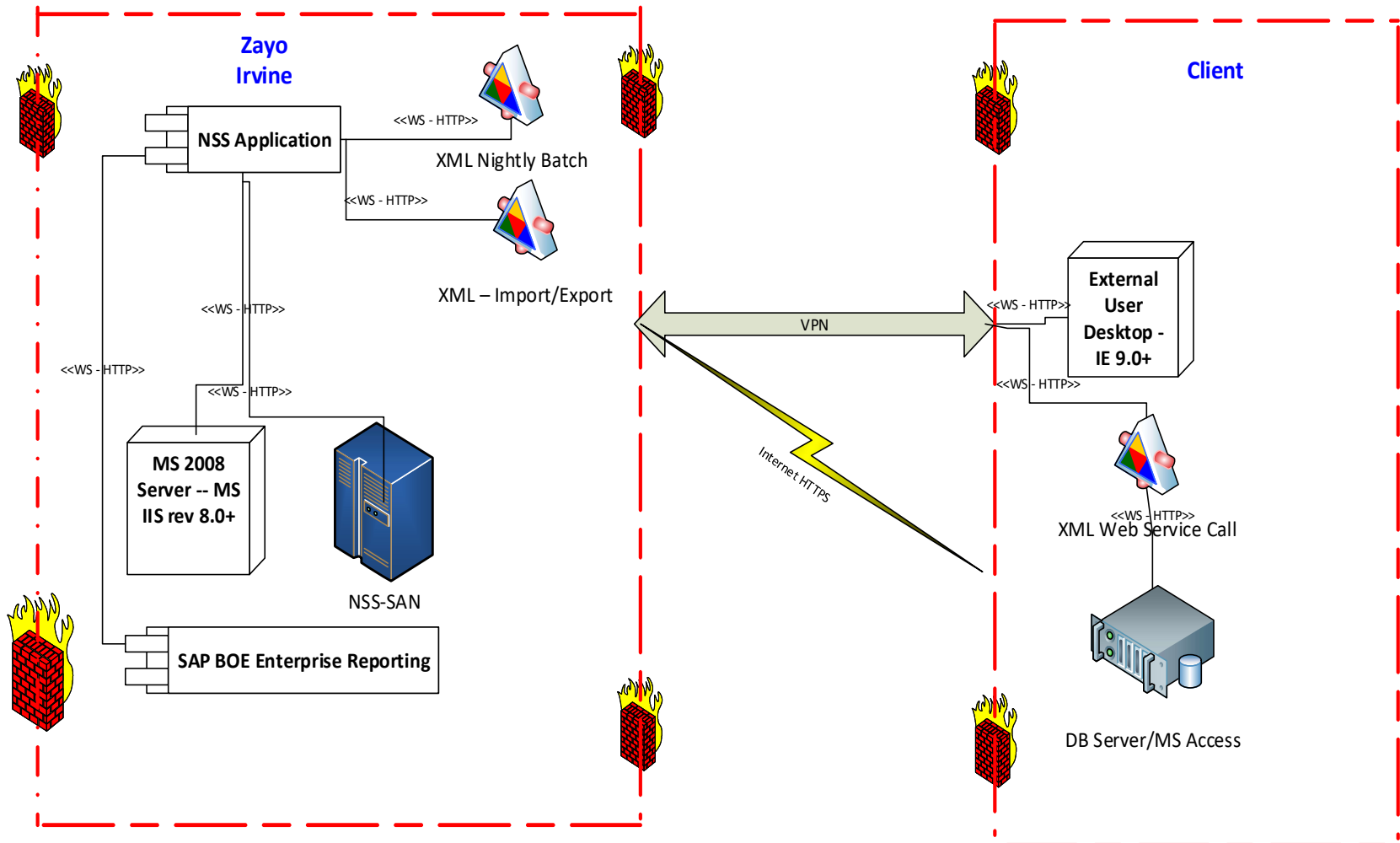
Imports/Exports

- **Web Services Input**
 - **Excel Imports (MISMO Definitions)**
 - **MISMO XML Data Import (Batch/Real-Time)**
 - **Informative Research**
 - **Credco**
 - **REIS**
 - **DigitalMaps**
 - **Google Maps**
 - **CoreLogic**
 - **HappyCo**
 - **FTNI (Construction Draw Payments)**



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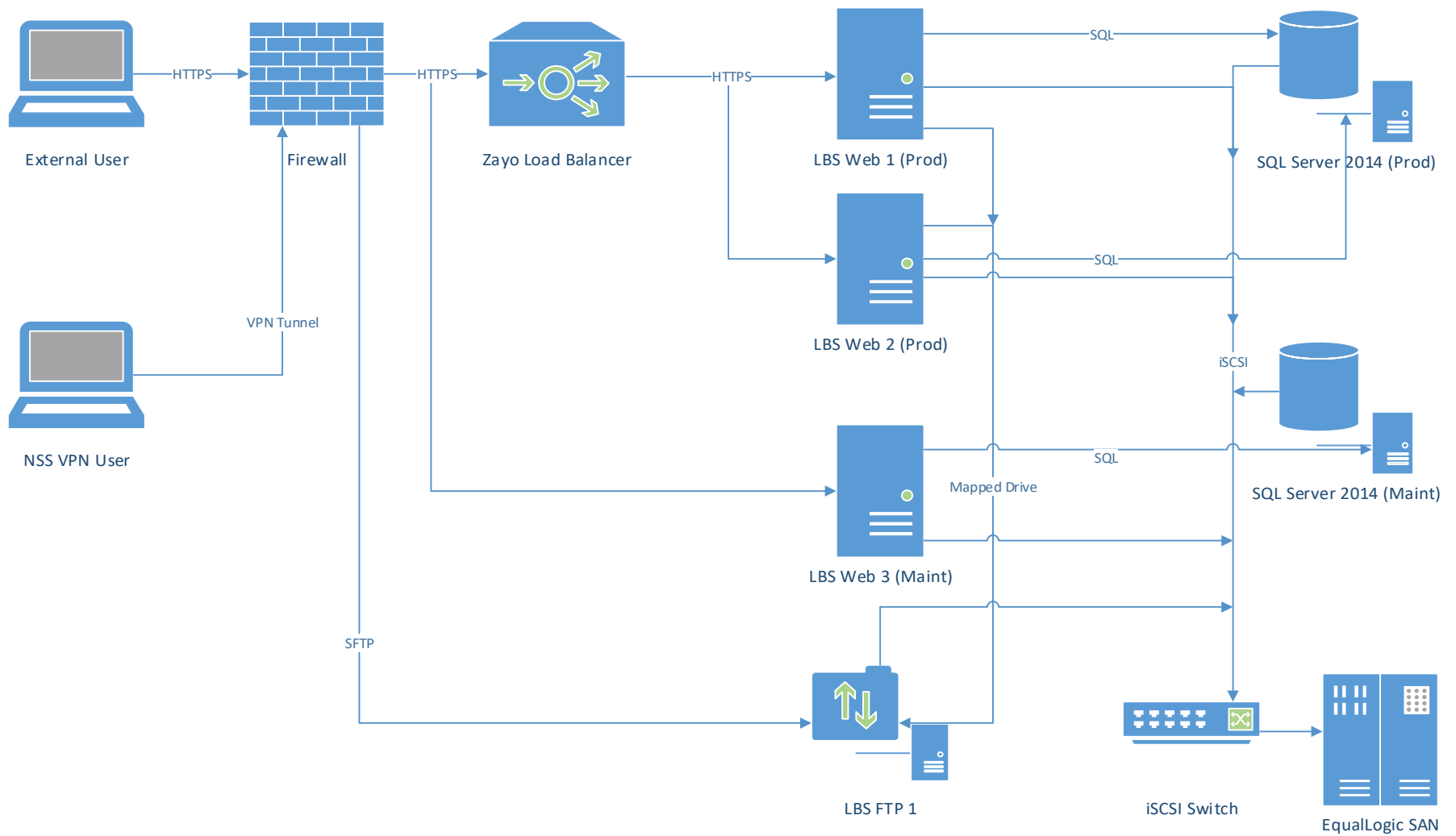
North Shore Systems Server





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Prod Environment Schematic



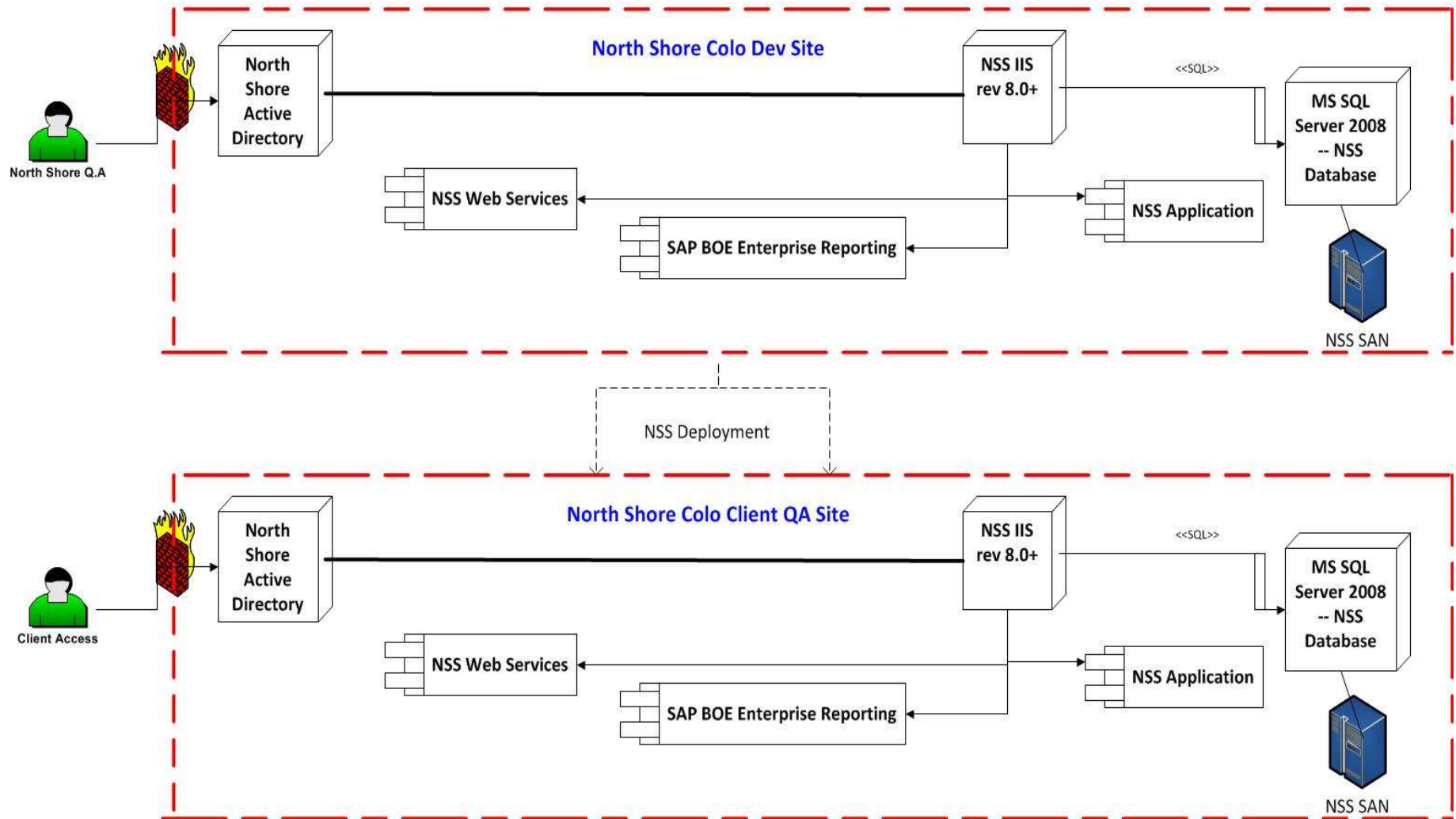
Zayo Cabinet A Network Layout



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Test Environment Schematic

North Shore Development





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System Monitoring

- **Zayo 24/7 monitoring of internet speed, network up-time**
- **Third party server monitoring**
- **NSS internal monitoring for system response times**



Development Road Map

- **SQL Server 2019**
- **Expand on our User Administration Functionality**
- **Expand on our Web Service Calls**
- **Upgrade our Web Version of TxtControl**
- **OCR inputs market data**



Governance

Every three to four months, North Shore publishes next release announcements and for our clients to input into test track enhancement requests.

North Shore Senior management teams will review the requests along with client input, plot out the next release and timeframes.

North shore then publishes the release to our clients. We work closely with them for upgrade procedures and each clients project management team to schedule each install.



North Shore Hosting

- ✓ **Zayo**
 - ✓ **SOC 2 Type II and SOC 3 audited controls**
 - ✓ **4 data centers. (Irvine, Chicago, Ashburn, Denver)**
 - ✓ **In business for 15 years**
 - ✓ **Located in a building designed to meet rigorous federal and state building code standards.**
 - ✓ **Extensive fire detection and suppression capabilities**
 - ✓ **Conditioned, clean power and redundancy and disaster recovery configurations.**
 - ✓ **Full-time monitoring and management of all aspects of the data center, operated from their 24x7 Network Operations Center.**
 - ✓ **3 internet service providers that will continually provide the reliability and bandwidth you demand.**



North Shore Hosting

- ✓ **Zayo Hosting - continued**
 - ✓ **North Shore uses the Irvine, site as our primary hosting site**
 - ✓ **Zayo Chicago is our hot backup site**
 - ✓ **North Shore owns all the servers and software at both sites.**
 - ✓ **Our hosting site acts as an extension to the clients IT data centers**
 - ✓ **All clients have their own database and environments using VMware**
 - ✓ **Dedicated locations for your servers is available.**
 - ✓ **Freddie Mac currently uses our co-location for all pre-SIT testing.**
 - ✓ **VPN connection between our clients and hosting sites is available for secured connections.**
 - ✓ **The hosted site configuration and functionality is transparent to the user.**



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North Shore Hosting

- ✓ **Hosting Benefits**
 - ✓ **NSS onsite application and server support**
 - ✓ **Shorter project life cycle enabling new enhancements and products installed faster into production which will reduce cost.**
 - ✓ **NSS will have better access for support and quicker response time resolution.**
 - ✓ **Dedicated operations support team from both Latisys and NSS.**
 - ✓ **Better installation support propagating releases from environment to environment. NSS verifies all installs and preliminary smoke tests.**
 - ✓ **All North Shore environments will be using the same technology throughout the life cycle of the project cutting down on environment problems during on-site installs.**
 - ✓ **Hot fixes can be applied more quickly.**
 - ✓ **North Shore hosting site is in a better position for archiving data.**

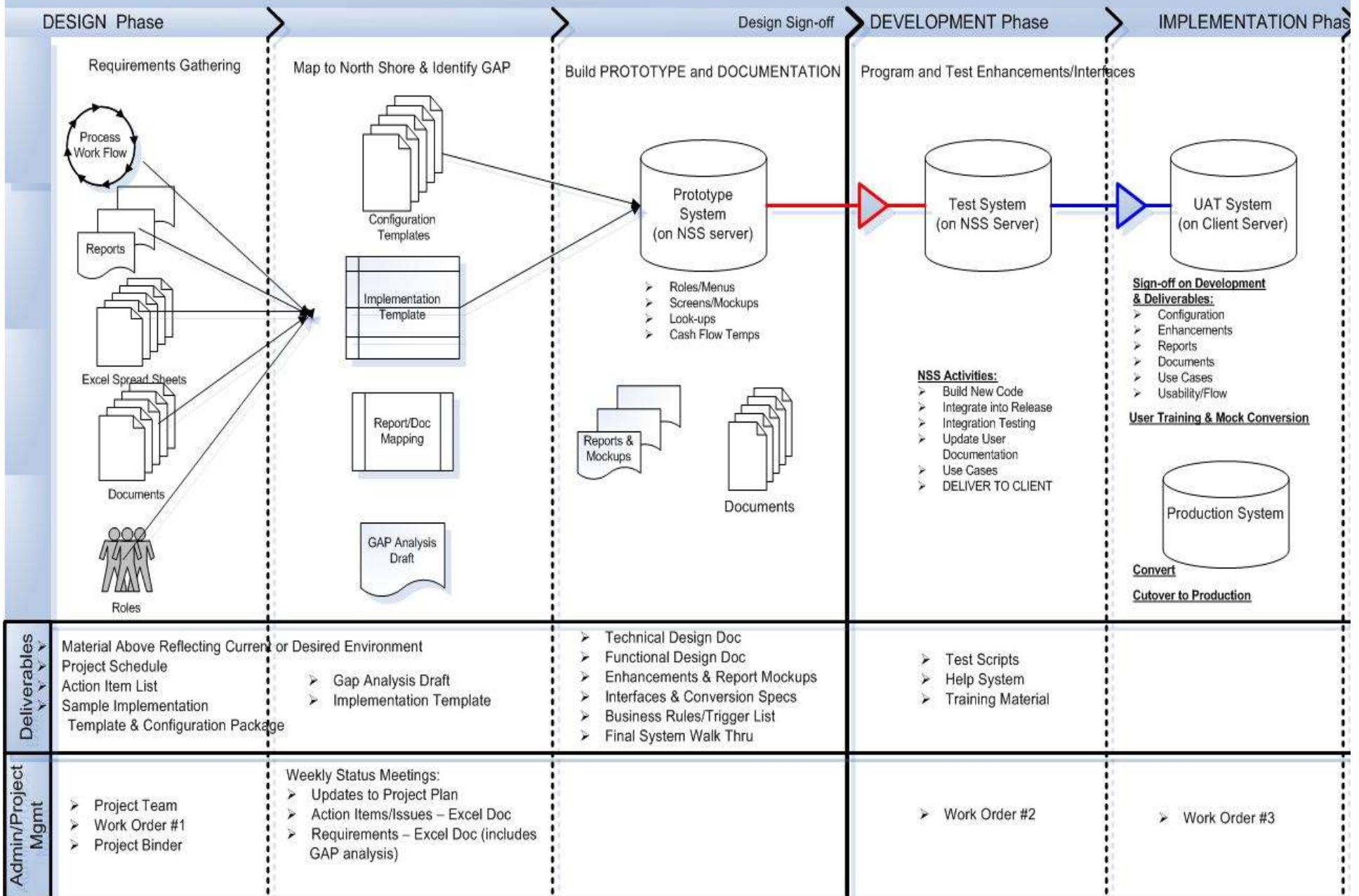


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North Shore Hosting

- ✓ **Hosting Benefits (continued)**
 - ✓ **North Shore can expand server capacity quickly.**
 - ✓ **On-site vendor support during testing cycles SIT and UAT which will shorten overall testing times.**
 - ✓ **Estimating 15-20 servers which GEMSA would not have to support internally**
 - ✓ **North Shore is responsible for all backups and storage requirements.**
 - ✓ **North Shore supplies all the reporting enterprises services**
 - ✓ **Our hosted site automatically increases internet capacity that guarantees the same response times without any variations.**

NORTH SHORE PROJECT METHODOLOGY





Implementation Issues

- ✓ **In-house or ASP (hosted system)**
- ✓ **Implementation methodology**
- ✓ **Customization process**
- ✓ **Timeframes and dependencies**
- ✓ **Resources required**
- ✓ **Integration w/ Servicing**



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Testimonials

➤ **Tim White, PNC/ARCS:**

“We are on a mission to improve our processing times and eliminate double entry of data throughout our organization. The North Shore system is a critical component of our strategy. We believe the North Shore system will allow us to integrate our processes in ways not possible just a few years ago, and we expect that timeliness and efficiency will be significantly improved once the system is fully operating within our organization.”