Personas:



Background: Henry, an Institution Account Administrator (Federal), is responsible for his institution's federal registration activities, which means ensuring his institution and individual registrants maintain registration on the federal registry. As the institution is newly established, they have not used NMLS to file for registration in the past. Henry searches for how to register with the federal registry, and is directed to the NMLS website to find the instructions on how to request a new account. After creating an account, Henry will be able to begin all of the necessary registration activities, such as creating the institution record, and submitting a filing for federal registration for his institution.

Journey Map System activity Option to perform action in bulk Human activity **Account Creation Account Setup** Registration Preceding Journey(s) Subsequent Journey(s) N/A #13 - Federal Renewal (Institution)

Henry searches for how to register with the federal registry, and is directed to the NMLS website to find a clearly defined set of 'quick links' which includes setting up a new account.

Henry is asked a series of questions to guide him to the right account type to register for, in this case Institution Account Administrator, and is asked if this is for a new institution in NMLS. Henry is prompted to input basic information about himself and his institution (e.g. SSN and EIN) for validation. He is also prompted to add an additional Account Administrator. Henry acquires a credential directly from NMLS's approved multi-factor authentication vendor.

The system validates Henry and the institution's basic identifying information against external data sources and against rules to prevent duplication (e.g. duplicate email addresses). If there are no issues, then Henry's account and the new institution (if applicable) record are created. If there are any issues or red flags, the request goes to SRR for manual review.

Henry receives a login and password in his email and logs into NMLS for the first time with his two-factor authentication credential. He changes his password, sets security questions for selfservice password reset, and includes a personal email address for account recovery. Henry also completes his own personal profile information such as address, phone number, etc.

After completing the account set up, Henry is presented with options regarding what he would like to do next, and selects the option to file for federal registration. A guided process begins to walk him through next steps.

Henry is guided through all of the core data entry that is required for the institution record, such as identifying information and contact employee information. This data will be automatically populated into the registration filing.

Henry reviews the information to ensure accuracy, attests, pays the federal registration fee, and submits to the federal registry. He receives a notification that the filing was submitted, and the notification contains reminders for next steps (e.g. annual renewal). The institution is assigned an NMLS ID at the time of submission.

User Experiences:



I am able to quickly and easily navigate throughout the different sections of the filing and the on-screen status bar keeps track of my progress.



When filing for federal registration, the system automatically populates the filing from the institution record.



I receive a notification that my filing was successfully submitted.



The system performs a completeness check and notifies me of any missing information before allowing me to submit.



I am provided with a clearly defined set of 'quick links' which includes setting up a new account.

Henry



A complete list of all the information I need to create an account is included right on the screen.



Henry

The single login gives me the ability to establish and manage all related institution and individual records.



The user interface for entering data is very intuitive and well organized.



The easy-to-follow guided process walks me through all of the steps required to complete my institution filing.



If I have a question while I am completing the record, I can access specific help resources right on the screen I am working on.



The system automatically validates the information that I enter for myself and institution. such as SSN and EIN.

#52 - Federal Institution End-to-End Journey

NMLS 1.0 Pain Points:

- The filing workflow is complex, not intuitive, and does not provide transparency on where the applicant is in the process.
- The account request process is currently done outside of the system through the call center.
- Registrants are often unsure of where to start in the registration process.
- Users do not receive confirmation that their filing has been successfully submitted.
- Unable to communicate with other users in the system.
- Difficulty locating help resources on the Resource Center.
- The system doesn't validate if a user already has an account, leading to the creation of duplicate accounts.
- Profile information is not validated against third party data sources.
- Email addresses are not validated and sometimes users will enter an incorrect email address.
- Users have to maintain multiple logins and passwords to manage the various entities they are affiliated to.
- Users spend too much time logging in and out of the system to manage various entities.
- The system is not validating legal entities, but simply checking if the EIN exists or not.
- There is no ability to auto-fill filings which leads to entering data that is already in the system.

NMLS 2.0 Capabilities:

- Ability for users to assign roles and permissions.
- Ability to initiate tasks based on user actions, another user's actions (who created a task for you), or system generated activities.
- Ability to assign tasks to individuals/groups.
- Ability for companies to control what steps individuals have access to.
- Ability to have role-based security access.
- Ability to assist users with a step in the process based on the stage of the process and also directly on the page (i.e., contextual help resources).
- Ability to communicate with other users within the system.
- Mobile capability for core licensing workflow functionality (smartphone, tablet).
- Ability to leave and come back to a filing and resume in the same location (i.e., save and continue).
- Ability to have a single login/profile, with access and association to multiple entities.
- Ability to combine logical workflow components to facilitate the user experience and reduce confusion / duplication (e.g., streamlined, intuitive user interface).
- Ability to see progress while completing the filing (e.g., visually represent with a status bar where the user is in the overall filing workflow).
- Ability to reset password without calling the Contact Service Center.
- Ability to upload and tag documents with metadata in the document upload section based on workflow and context.
- Users are able to withdraw a filing at any time in the process.
- Ability to send multiple notifications to different parties when actions are taken (e.g. registration is submitted).
- Ability to provide e-signature capability for any forms / documents requiring a signature.
- Ability to make multiple payments in one invoice similar to a shopping cart concept.
- Ability to integrate with third party data sources during data entry/upload to validate data (SSN, addresses, etc.).
- Ability to provide access to FAQs, quick reference guides, job aids, training videos and tutorials.
- Ability to populate form data from existing data in NMLS or based on business rules based on the action being taken or the form being completed.
- Ability to easily toggle between one entity and another for which the user has an admin or organization role.

#53 - Federal Individual End-to-End Journey (Institution-Driven)

Version 2, Delivered 4/10/17





Henry Institution Account Administrator (Federal)



Matt **Individual Registrant**

Background: Henry, an Institution Account Administrator (Federal), is responsible for his institution's federal registration activities, which means ensuring his institution and individual registrants maintain registration on the federal registry. Henry has submitted his institution's registration, and now wants to create accounts for his individual registrants, including Matt, which he does in bulk. After the accounts are created, Henry pays a single invoice for all of his registrants and schedules fingerprinting appointments. Matt's activities within the system are very limited as his institution manages the registration process for him. He completes his fingerprinting, logs into his account for the first time, and reviews and confirms the information that Henry entered, completing any remaining information. Once he attests, his filing is submitted to the federal registry.

Journey Map

Human activity

System activity

API Gateway

Registration

BULK Option to perform action in bulk

Account Creation

Fingerprint/Scheduling Payment

Account Setup

Preceding Journey(s)

#52 - Federal Institution End-to-End Journey

Individuals who are registered, or have an intent to become registered, will be assigned an NMLS ID at account creation.

Subsequent Journey(s) #14 - Federal Renewal (Individual)



After completing his institution's registration, Henry is presented with options for next steps, and selects the option to create accounts for other users, including Matt. With a large number of registrants, Henry can create accounts in bulk using either a bulk upload template, or an API which interfaces with his institution's internal systems.

Since Henry's institution uses the API gateway, this is leveraged to expose his employee list and allow him to pick which registrants to upload information for. The registrants' basic identifying information is uploaded into the system to kick off account creation.

The registrants' information is validated against external data sources and against rules to prevent

duplication (e.g. duplicate email addresses). Henry also assigns users to roles (e.g. individual registrant) and permissions. Henry confirms that the institution is the employer for the individuals

BULK API

Henry clicks on the criminal background check (CBC) section of the professional standards page to schedule fingerprinting for his registrants via the NMLS approved vendor. Matt also has the option to use existing fingerprints, if still valid (i.e., less than 3 years). Henry then adds all of the registration and CBC fees into his shopping cart, and pays a single invoice. The payments will be processed once registrations are submitted. Henry is configured as the default payer for all of his registrants' activities in NMLS.

Note: Fingerprint scheduling is not required to be done by the company.



Matt gets fingerprinted, if necessary. The system will submit the full CBC request at the time of filing submission. The CBC will then be stored as part of Matt's NMLS record.

Matt received a login and password in his email after account creation and now logs into NMLS for the first time. He changes his password, sets security questions for self-service password reset, and includes a personal email address for account recovery. He is required to confirm his personal email address.



Matt reviews, confirms, and attests to the information entered by Henry before being allowed to continue, and completes any remaining core data that will be prepopulated into his filing (e.g. identifying information, employment history, disclosure questions). If he answers "Yes" to any questions, he uploads supporting documentation. He also approves the employer assigned by Henry. His full CBC request is also submitted at this time.

If there are no issues and the CBC is clear, the filing is submitted to the federal registry and the payment (initiated in step #4) is processed. Henry reviews the registration request if any data was changed, if a flag was identified during the CBC, or if Matt answered "Yes" to a disclosure question. After his review, he then decides whether or not to submit to

the federal registry.

User Experiences



I am able to quickly and easily navigate throughout the different sections of the filing and the on-screen status bar keeps track of my progress.



Federal institutions have the ability to upload individual filings in bulk utilizing a bulk upload template or an API which interfaces with my Henry internal system.



Matt

When filing for federal registration, the system automatically populates the filing from my personal record.





I receive a notification that my filing was successfully submitted.



The system performs a completeness check and notifies me of any missing information before allowing me to submit.



I can pay for my registrants' filings in bulk and can select which filings to include in an invoice.



Matt

I can change my password without having to call the contact center.



The user interface for entering data is very intuitive and well organized.



The easy-to-follow guided process walks me through all of the steps required to complete my filing.



If I have a question while I am completing the filing, I can access specific help resources right on the screen I am working on.



I am automatically notified when my account is created in NMLS.



Matt

I am able to review, confirm, and attest to information via my mobile device.

#53 - Federal Individual End-to-End Journey (Institution-Driven)

NMLS 1.0 Pain Points:

- The filing workflow is complex, not intuitive, and does not provide transparency on where the applicant is in the process.
- Registrants are often unsure of where to start in the registration process.
- Users do not receive confirmation that their filing has been successfully submitted.
- Unable to communicate with other users in the system.
- Difficulty locating help resources on the Resource Center.
- The system doesn't validate if a user already has an account, leading to the creation of duplicate accounts.
- Profile information is not validated against third party data sources.
- Email addresses are not validated and sometimes users will enter an incorrect email address.
- Criminal Background Check process does not include fingerprint scheduling.
- There is no ability to auto-fill filings which leads to entering data that is already in the system.
- Federal institutions currently have to pay for individual registrants one at a time.
- There is an insufficient level of granularity when it comes to existing permissions.
- Users often don't know what exactly they are granting access to when providing access to another user.
- Users are able to complete certain actions that their company may not want them to complete

NMLS 2.0 Capabilities:

- Ability for users to assign roles and permissions.
- Ability to initiate tasks based on user actions, another user's actions (who created a task for you), or system generated activities.
- Ability to assign tasks to individuals/groups.
- Ability to bulk upload data (file upload) or bulk complete actions (multi-record select) in order to complete actions on multiple records at once (e.g., file for multiple registrants).
- Ability to request account access from an individual.
- Ability for companies to control what steps individuals have access to.
- Ability to have role-based security access.
- Ability to assist users with a step in the process based on the stage of the process and also directly on the page (i.e., contextual help resources).
- Ability to communicate with other users within the system.
- Mobile capability for core licensing workflow functionality (smartphone, tablet).
- Ability to leave and come back to a filing and resume in the same location (i.e., save and continue).
- Ability to have a single login/profile, with access and association to multiple entities.
- Ability to combine logical workflow components to facilitate the user experience and reduce confusion / duplication
 (e.g., streamlined, intuitive user interface).
- Ability to see progress while completing the filing (e.g., visually represent with a status bar where the user is in the overall filing workflow).
- Ability to reset password without calling the Contact Service Center.
- Ability to upload and tag documents with metadata in the document upload section based on workflow and context.
- Users are able to withdraw a filing at any time in the process.
- Ability to send multiple notifications to different parties when actions are taken (e.g. registration is submitted).
- Ability to provide e-signature capability for any forms / documents requiring a signature.
- Ability to make multiple payments in one invoice similar to a shopping cart concept.
- Ability to integrate with third party data sources during data entry/upload to validate data (SSN, addresses, etc.).
- Ability to provide access to FAQs, quick reference guides, job aids, training videos and tutorials.
- Ability to populate form data from existing data in NMLS or based on business rules based on the action being taken or the form being completed.
- Ability to easily toggle between one entity and another for which the user has an admin or organization role.

#54 - Federal Individual End-to-End Journey (Individual-Driven)

Version 2, Delivered 4/10/17





Henry Institution Account Administrator (Federal)



Matt **Individual Registrant**

Background: Matt, an Individual Registrant, was recently hired by a federally-registered institution. The institution requires their individuals to manage the registration process on their own, with the institution doing a final review and paying on behalf of the individual. Henry, an Institution Account Administrator (Federal), has instructed Matt to visit the NMLS website to create an account to begin his registration activities. Matt then sets up his account, completes the core data entry, and gets fingerprinted. After attesting, a task is created for Henry to approve the employment relationship, review his filing, and pay the registration/CBC fees, which submits the filing to the federal registry.

Journey Map

Human activity

System activity

API Gateway

Option to perform action in bulk

Account Creation

Account Setup

Fingerprinting

Submission

Preceding Journey(s)

#52 - Federal Institution End-to-End Journey

Individuals who are registered, or have an intent to become registered, will be assigned an NMLS ID at account creation.

Subsequent Journey(s) #14 - Federal Renewal (Individual)



Henry instructs Matt to visit the NMLS website to create an account, where he finds a clearly defined

set of 'quick links' which

includes setting up a new

account.

Matt is asked a series of questions to guide him to the right account type he wants to register for, in this case individual registrant. Matt is prompted to input basic information about himself (e.g. SSN) for validation.



basic identifying information against external data sources and against rules to prevent duplication (e.g. duplicate email addresses). If there are no issues, then Matt's account is created. If there are any issues or red flags, Matt cannot continue and is presented with the reason why. If he feels there is an error (e.g. someone used his email address without his knowledge), he can submit a request for review.



Matt receives a login and password in his email and logs into NMLS for the first time. He changes his password, sets security questions for selfservice password reset, and includes a personal email address for account recovery. He is required to confirm his personal email address.



Matt enters the core data that will be prepopulated into his filing (e.g. identifying information. employment history, disclosure questions). If he answers "Yes" to any questions, he uploads supporting documentation. He also enters his employer, which will trigger a task for Henry to approve once Matt attests.



Matt clicks on the CBC section of the professional standards page to schedule fingerprinting via the NMLS approved vendor. Matt also has the option to use existing fingerprints, if still valid (i.e., less than 3 years). The CBC will be paid for by Henry, who is configured as the default payer for all of Matt's activities in NMLS.



Matt gets fingerprinted, if necessary. The system will submit the full CBC request at the time of filing submission. The CBC will then be stored as part of Matt's NMLS record.

Matt attests to all data, and a task is created for Henry to approve the employment relationship, review his filing, and pay the registration/CBC fees. Once Henry pays, the full CBC request is submitted. If the CBC is clear, the filing is submitted to the federal registry. If there are issues, Henry reviews the filing then decides whether or not to submit to the federal registry.

User Experiences



I am able to quickly and easily navigate throughout the different sections of the filing and the on-screen status bar Matt keeps track of my progress.



Matt

When filing for federal registration, the system automatically populates the filing from my personal record.





I receive a notification that my filing was successfully submitted.



The system performs a completeness check and notifies me of any missing information before allowing me to submit.



I can configure the system to be the default payer for my reaistrants' activities in NMLS.



I can change my password without having to call the contact center.

I am provided with a clearly defined set of 'quick links' which includes setting up a new account. Matt



A complete list of all the information I need to create an account is included right on the



Henry

The user interface for entering data is very intuitive and well organized.



The easy-to-follow guided process walks me through all of the steps required to complete my filing.



If I have a question while I am completing the filing, I can access specific help resources right on the screen I am working on.



#54 - Federal Individual End-to-End Journey (Institution-Driven)

NMLS 1.0 Pain Points:

- The filing workflow is complex, not intuitive, and does not provide transparency on where the applicant is in the process.
- Registrants are often unsure of where to start in the registration process.
- Users do not receive confirmation that their filing has been successfully submitted.
- Unable to communicate with other users in the system.
- Difficulty locating help resources on the Resource Center.
- The system doesn't validate if a user already has an account, leading to the creation of duplicate accounts.
- Profile information is not validated against third party data sources.
- Email addresses are not validated and sometimes users will enter an incorrect email address.
- Criminal Background Check process does not include fingerprint scheduling.
- There is no ability to auto-fill filings which leads to entering data that is already in the system.
- Federal institutions currently have to pay for individual registrants one at a time.
- There is an insufficient level of granularity when it comes to existing permissions.
- Users often don't know what exactly they are granting access to when providing access to another user.
- Users are able to complete certain actions that their company may not want them to complete.

NMLS 2.0 Capabilities:

- Ability for users to assign roles and permissions.
- Ability to initiate tasks based on user actions, another user's actions (who created a task for you), or system generated activities.
- Ability to assign tasks to individuals/groups.
- Ability to bulk upload data (file upload) or bulk complete actions (multi-record select) in order to complete actions on multiple records at once (e.g., file for multiple registrants).
- Ability to request account access from an individual.
- Ability for companies to control what steps individuals have access to.
- Ability to have role-based security access.
- Ability to assist users with a step in the process based on the stage of the process and also directly on the page (i.e., contextual help resources).
- Ability to communicate with other users within the system.
- Mobile capability for core licensing workflow functionality (smartphone, tablet).
- Ability to leave and come back to a filing and resume in the same location (i.e., save and continue).
- Ability to have a single login/profile, with access and association to multiple entities.
- Ability to combine logical workflow components to facilitate the user experience and reduce confusion / duplication
 (e.g., streamlined, intuitive user interface).
- Ability to see progress while completing the filing (e.g., visually represent with a status bar where the user is in the overall filing workflow).
- Ability to reset password without calling the Contact Service Center.
- Ability to upload and tag documents with metadata in the document upload section based on workflow and context.
- Users are able to withdraw a filing at any time in the process.
- Ability to send multiple notifications to different parties when actions are taken (e.g. registration is submitted).
- Ability to provide e-signature capability for any forms / documents requiring a signature.
- Ability to make multiple payments in one invoice similar to a shopping cart concept.
- Ability to integrate with third party data sources during data entry/upload to validate data (SSN, addresses, etc.).
- Ability to provide access to FAQs, quick reference guides, job aids, training videos and tutorials.
- Ability to populate form data from existing data in NMLS or based on business rules based on the action being taken or the form being completed.
- Ability to easily toggle between one entity and another for which the user has an admin or organization role..