

# FINRA CAT Industry Member Onboarding Guide

08/17/2020

Version 1.14

**Change Log..... 3**

**Introduction ..... 5**

**Onboarding Overview ..... 6**

**Companion Documents..... 7**

**1. Register for CAT ..... 8**

**2. Submit the CAT Reporter Agreement..... 9**

**3. Designate Account Administrators ..... 10**

**4. Create / Entitle CAT User Accounts for the CAT Reporter Portal ..... 12**

**5. Request Secure File Transfer Accounts ..... 19**

**6. Manage Connectivity..... 21**

**7. Manage Multi-Factor Authentication (MFA)..... 22**

**8. Establish CAT Reporting Relationships in the Test Environment ..... 33**

**9. Establish ATS Order Types in the Test Environment..... 34**

**10. Conduct Testing for Production Readiness ..... 35**

**11. Certification of Testing Completion ..... 38**

## Change Log

Version	Date Published	Description of Change(s)
1.0	7/31/2019	Guide initially published on the CAT NMS web site.
1.1	8/7/2019	<ul style="list-style-type: none"> <li>• §4 has been updated to reflect that SAAs and AAs can grant entitlements to the Reporter Portal beginning on September 9, 2019, rather than the previously indicated August 30, 2019.</li> <li>• A change Log has been added to the document.</li> </ul>
1.2	8/16/2019	<ul style="list-style-type: none"> <li>• A link to the FINRA CAT Connectivity Supplement for Industry Members has been added to Companion Documents</li> <li>• §6 has been updated to reflect publication of the FINRA CAT Connectivity Supplement for Industry Members</li> </ul>
1.3	11/04/2019	<ul style="list-style-type: none"> <li>• Multi-factor authentication information has been added as §7</li> <li>• Added links to CAT Reporter Agreement location in §2</li> <li>• Updated the link in the Companion Documents to point to latest CAT Connectivity Supplement</li> </ul>
1.4	12/6/2019	<ul style="list-style-type: none"> <li>• Additional requirements regarding the expiration of temporary passwords for new accounts has been added to §4.</li> <li>• Added link for CAT Reporter Portal User Guide</li> </ul>
1.5	12/17/2019	<ul style="list-style-type: none"> <li>• Changes to Overview, §2 and §10 to describe the option of the Industry Member Limited Testing Acknowledgement Form.</li> </ul>
1.6	1/14/2020	<ul style="list-style-type: none"> <li>• Added security token information and links to test environments in §7</li> <li>• Updated the link in the Companion Documents to point to the latest publication of the FINRA CAT Connectivity Supplement for Industry Members</li> </ul>
1.7	3/12/2020	<ul style="list-style-type: none"> <li>• Added Duo country prohibition in §7.</li> </ul>
1.8	3/31/2020	<ul style="list-style-type: none"> <li>• Updated Section 11 with new Production Readiness Certification Requirements for CRAs.</li> </ul>
1.9	4/15/2020	<ul style="list-style-type: none"> <li>• Provided instructions for adding a device for the Duo MFA service.</li> <li>• Made trivial modifications to §7 for consistency.</li> </ul>
1.10	5/18/2020	<ul style="list-style-type: none"> <li>• Updated §7 Duo MFA instructions to: <ul style="list-style-type: none"> <li>○ Indicate that CAT will no longer allow the use of passcode entry from the Duo app.</li> <li>○ Refer to new “last login” info presented during login.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ Provide instructions for reactivating a replaced device and managing device settings.</li> <li>○ Streamline duplicative content.</li> <li>● Updated Companion Documents to provide additional details and links to redesigned CAT NMS website.</li> <li>● Updated Reporting Relationships and ATS Order types sections to refer to the Industry Member CAT Reporter Portal User Guide.</li> <li>● Updated guide throughout to remove references to “future dates” that have now passed.</li> <li>● Updated Industry Member Compliance Dates in §11 to match new timeline.</li> <li>● Removed references to the Limited Testing Acknowledgement Form to align with requirement to submit the CAT Reporting Agreement in order to access the Industry Test environment.</li> </ul>
1.11	5/28/2020	<ul style="list-style-type: none"> <li>● Added §10.4 to provide Production Readiness steps for IMs that do not have production data prior to the certification deadline.</li> </ul>
1.12	6/3/2020	<ul style="list-style-type: none"> <li>● Updated §7.2 to reflect removal of double sign-in for users accessing the Reporter Portal via SRG.</li> </ul>
1.13	06/30/2020	<ul style="list-style-type: none"> <li>● Updated §4 and §5 to reflect the splitting of Industry Test and Production entitlements and access.</li> <li>● Updated §4.3 to change required timeframe to complete user account onboarding steps from 5 days to 10 days.</li> </ul>
1.14	08/17/2020	<ul style="list-style-type: none"> <li>● Updated Onboarding Overview and Companion Documents to reflect the introduction of the Customer and Account Information System (CAIS).</li> <li>● Updated §4 to remove information about the transition to the splitting of TEST and PROD entitlement access that occurred in July.</li> <li>● Update §5 to clarify TEST and PROD entitlement access for SFTP accounts.</li> </ul>

## Introduction

Rule 613 of the Securities Exchange Act of 1934 requires national securities exchanges and national securities associations (“SROs”) to submit a national market system plan to the Securities and Exchange Commission (“Commission” or “SEC”) to create, implement, and maintain a consolidated audit trail (the “CAT”) that would allow regulators to more efficiently and accurately track all activity in U.S. equity and listed options markets. Pursuant to Rule 613, the SROs filed with the Commission the National Market System Plan Governing the Consolidated Audit Trail (“CAT NMS Plan”), which was approved by the Commission on November 15, 2016.

Under Rule 613(g)(2), each member of a national securities exchange or national securities association is required to comply with all the provisions of the CAT NMS Plan. Relatedly, as mandated under Rule 613, the CAT NMS Plan requires each SRO to adopt rules requiring its members to comply with Rule 613 and the CAT NMS Plan, and to agree to enforce compliance by its members in that regard. Accordingly, each SRO has adopted rules requiring its members to comply with Rule 613 and the CAT NMS Plan. For example, see FINRA Rule 6800 Series.

The SROs jointly own Consolidated Audit Trail, LLC, which was formed by the SROs to arrange for and oversee the creation, implementation, and maintenance of the CAT as required under Rule 613. Thus, the CAT is a facility of each SRO.

For more information, refer to SEC Rule 613 at <https://www.sec.gov/rules/final/2012/34-67457.pdf> and the CAT NMS Plan at <https://www.catnmsplan.com/wp-content/uploads/2018/02/34-79318-exhibit-a.pdf>.

## Onboarding Overview

The FINRA CAT Onboarding Guide provides information for CAT Reporters on how to gain access to the CAT Test and Production Environments for the first time. Industry Members and CAT Reporting Agents that report to CAT on behalf of Industry Members must complete the following steps to gain access to CAT, including:

1. Register for CAT
2. Submit the CAT Reporter Agreement
3. Designate Account Administrators
4. Create / Entitle CAT User Accounts for the CAT Reporter Portal
5. Request CAT Secure File Transfer Accounts
6. Manage Connectivity
7. Enroll in Multi-Factor Authentication
8. Establish CAT Reporting Relationships in the Test Environment
9. Establish ATS Order Types in the Test Environment (if applicable)
10. Conduct Testing for Production Readiness
11. Certify Testing Completion

This document provides instructions for completing each of these steps, as well as additional resources and information. Upon completion of these steps, access to the CAT Production Environment will be authorized.

**A separate onboarding guide that provides the steps for gaining access the CAT Customer and Account Information System (CAIS) is available on the CAT NMS website. See the *Industry Member CAIS Onboarding Guide* available at <https://www.catnmsplan.com/registration>. It is assumed that CAIS onboarding will be done in conjunction with or following CAT onboarding described in this document.**

### Questions

Questions related to this document may be directed to the FINRA CAT Help Desk at 888-696-3348 or at [help@finracat.com](mailto:help@finracat.com).

## Companion Documents

- CAT Industry Member Reporting Scenarios: <https://www.catnmsplan.com/specifications/imreportingscenarios>
- CAT Reporting Technical Specifications for Industry Members: <https://www.catnmsplan.com/specifications/im>
- Entitlement Reference Guide for Super Account Administrators: <http://www.finra.org/sites/default/files/finra-entitlement-program-saa-reference-guide.pdf>
- FINRA CAT Connectivity Supplement for Industry Members: <https://www.catnmsplan.com/registration/>
- Frequently Asked Questions: <https://www.catnmsplan.com/faq/index.html>
- Industry Member CAT CAIS Onboarding Guide: *coming soon to* <https://www.catnmsplan.com/>
- Industry Member JSON Schemas: <https://www.catnmsplan.com/specifications/im>
- Reporter Portal User Guide: <https://www.catnmsplan.com/registration/>

## 1. Register for CAT

Any member of a national securities exchange or national securities association that handles orders or quotes in NMS equity securities, OTC equity securities, or listed options and any CAT Reporting Agent that is or will be authorized to submit data to CAT on behalf of an Industry Member must register in order to report to the CAT system.

The CAT NMS Plan Registration Form must be submitted online at <https://www.catnmsplan.com/registration>.

The information collected on the registration form includes:

- Company Name, Address, Type of Organization, CRD number<sup>1</sup>
- Primary and Secondary Contact Name, Phone, Email
- Registered Principal Name, Phone, Email (Not Applicable to Service Bureaus)
- Primary and Secondary Source of CAT Reporting (Self-Reporting or Vendor)
- Preferred Connectivity (SFTP and/or CAT Reporter Portal)
- Type of Securities Traded (Equities and/or Options)
- Whether the firm qualifies as a Small Broker Dealer (Not Applicable to Service Bureaus)
- Whether the firm reports to OATS
- Default CAT Reporting IMID (Not Applicable to Service Bureaus)

Industry Members may use any SRO-assigned identifier (e.g., a Market Participant Identifier) that is valid on the CAT Trading Day as the CAT Reporter IMID to report events for that day. However, each CAT Reporter must provide a Default CAT Reporting IMID during registration. If an Industry Member does not have an identifier assigned to them, they should request an identifier from their Designated Examining Authority (“DEA”).

A list of default CAT Reporting IMIDs will be published for use by other reporters to resolve unlinked records. See [CAT Alert 2018-003](#) for more information.

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<sup>1</sup> CAT Reporting Agents that do not have a CRD number must leave the CRD number blank when entering Company Information. An ID will be assigned once a CAT Agreement is submitted and an account is created for an Account Administrator. The ID will be provided by the FINRA Entitlement Team in the notification email alerting that Account Administrator access has been granted.



## **2. Submit the CAT Reporter Agreement**

In order to gain access to the Industry Test and Production environments, all organizations are required to submit the appropriate CAT Reporter Agreement.

### **2.1. Industry Members**

Industry Members must sign a *CAT Reporter Agreement* to access the Industry Test and Production environments. The CAT Reporter Agreement is available for electronic signature on the CAT NMS Web Site at <https://catnmsplan.com/registration/>.

### **2.2. CAT Reporting Agents**

Organizations that are not members of any Plan Participant but report to CAT on behalf of Industry Members (“CAT Reporting Agents”) must sign a *CAT Reporting Agent Agreement* to access the Industry Test and Production environments. The CAT Reporting Agent Agreement is available for electronic signature on the CAT NMS Web Site at <https://catnmsplan.com/registration/>.

### 3. Designate Account Administrators

Access to CAT leverages the FINRA Entitlement Program that includes the Super Account Administrator (SAA) role for Industry Members and an Account Administrator role for CAT Reporting Agents (Service Providers). Refer to <http://www.finra.org/industry/entitlement-program> for additional information on the FINRA Entitlement Program.

#### 3.1. Request a Super Account Administrator (applicable to Industry Members only)

Industry Members must have a Super Account Administrator (“SAA”) to serve as the primary entitlement contact. Industry Members that have an SAA established with the FINRA Entitlement Program will use that SAA for CAT access; no further action is required. Upon submission and verification of the prerequisites, the SAA will be granted with the capability to provide CAT access to users and create Account Administrators to assist in maintaining user access to CAT.

Firms that do not have a FINRA SAA must complete the [New Organization SAA Entitlement Form](#) to designate an SAA and to authorize set up of this type of account. Once the new SAA form is verified and processed, the SAA will receive an email with log on credentials and have the capability to grant access to CAT and other FINRA systems.

To replace the SAA, contact the FINRA CAT Help Desk at 888-696-3348 or at [help@finracat.com](mailto:help@finracat.com) to request an *Update/Replace SAA Form*. The form will be emailed to the Authorized Signatory who signed the form authorizing the former SAA.

An [SAA Reference Guide](#) that includes setting up Account Administrators and users and fulfilling other responsibilities of the role is available on FINRA.org.

#### 3.2. Designate CAT Account Administrators (applicable to Reporting Agents that are not a member of a Plan Participant)

CAT Reporting Agents that are not members of any Plan Participant but report to CAT on behalf of Industry Members must use a CAT Account Administrator (“CAT AA”) role to manage access to CAT. To designate a CAT AA, the organization must submit a [CAT Account Administrator Entitlement Form](#)<sup>2</sup> (“CAT AAEF”). An organization may designate more than one CAT AA by completing a form for each individual who will perform this role.

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<sup>2</sup> CAT Reporting Agents that are not members of any Plan Participant must complete a CAT AAEF to designate a CAT AA.



To replace a CAT AA, use the CAT Account Administrator Entitlement Form and complete the applicable section. CAT AAs cannot create or edit their own accounts or the accounts of other CAT AAs. For help with their accounts, CAT AAs will need to contact the FINRA CAT Help Desk at 888-696-3348 or [help@finracat.com](mailto:help@finracat.com).

## **4. Create / Entitle CAT User Accounts for the CAT Reporter Portal**

Once an organization meets the prerequisites for access including: registering for CAT, submitting a CAT Reporter Agreement, and designating an Account Administrator, the FINRA Entitlement Team will grant access to the Super Account Administrators (“SAA”) or CAT Account Administrators (“CAT AA”) to the CAT Test Environment.

SAs and CAT AAs for organizations that have met the prerequisites defined above have the ability to create user accounts and grant entitlement to the CAT Reporter Portal.

### **4.1. CAT System Environments**

Two environments are available for CAT Reporters to access: a non-production test environment, often referred to as “Industry Test”, and a production environment. Each user account entitled to access any CAT application must explicitly be assigned access to the test environment, production environment, or both. A user’s CAT access setting will determine whether the user can access CAT applications in the test or production environment, or both. For example, a user with CAT Reporter Portal entitlement and test access will be able to access the CAT Reporter Portal in the test environment but not in production.

#### **CAT Super Account Administrators (SAAs)**

The FINRA Entitlement Team will manage environment access for all SAAs. An SAA will be able to manage access to the test environments upon completion of the requirements outlined in §1 and §2. When a firm has completed all testing certification and is granted production access, per §11, the SAA will be given the ability to manage access to the production environment for their users.

#### **CAT Account Administrators (AAs) (as Access Managers)**

When creating or modifying an account for an **Account Administrator**, the SAA must indicate if the AA is able to grant and manage access to the test and/or production environments, as shown in the screen shot below.

### Application Privileges

User: The ability to use the functionality as defined by the privilege.  
 Privilege Viewer: The ability to view the privilege assigned to your organization's users from the EWS Account Management Application.  
 Administrator: The ability to assign the privilege to other users and view the privilege assigned to other users.

All Account Privileges		Unselect ALL	Select Administrator	Select Privilege Viewer
<b>Account Management:</b>			<input type="checkbox"/> User	
Select All   Unselect All				
Edit Account Data:			<input type="checkbox"/> User	
Manage Accounts:			<input type="checkbox"/> User	
Change Password:			<input type="checkbox"/> User	
Manage Identity Provider User id:				
<i>TRACE MPIDs</i>				
View:			<input type="checkbox"/> User	
Update:			<input type="checkbox"/> User	
<i>Equity MPIDs</i>				
View:			<input type="checkbox"/> User	
Update:			<input type="checkbox"/> User	
<i>MSRB Numbers</i>				
View:			<input type="checkbox"/> User	
Update:			<input type="checkbox"/> User	
<i>OSO</i>				
View:			<input type="checkbox"/> User	
CAT Production Access Management:			<input type="checkbox"/> User	
CAT Test Access Management:			<input type="checkbox"/> User	

### All Other Users (including AAs)

When creating or modifying an account for an **Account Administrator** or **User**, the SAA or AA must indicate if the user is able to access CAT applications in the test and/or production environments, as shown in the screen shot below. The user will be able to access the applications in the selected environment(s) only.

#### FINRA Information

Organization Class (\*): SRO  
 Organization ID (\*): 1  
 Legacy User ID:   
 Identity Provider User ID:   
 OATS Legacy User ID (PD):   
 OATS Legacy User ID (CT):   
 CAT Access:  TEST  PROD

## 4.2. CAT Reporter Portal User Types

The following user roles may be assigned to grant users privileges to access and use the Industry Member CAT Reporter Portal.

### 4.2.1. CAT Account Administrator

CAT AAs have the highest level of access in CAT. In the CAT Reporter Portal, CAT AAs can:

- Create, view, and transmit reportable events
- Upload data files
- View and repair errors
- Create, view, and edit Reporting Relationships
- Create, view, and edit ATS Order Types
- View and export feedback, including announcements, reporting summaries, and all error records
- View monthly report cards
- Create and edit user preferences

In the FINRA Entitlement system, CAT AAs can:

- Create, edit, disable, and delete CAT User and CAT Read-Only accounts
- Unlock and reset passwords for CAT Users and CAT Read-Only accounts
- CAT AAs cannot create, edit, disable, or delete their own accounts, or the accounts of other CAT AAs, nor can they unlock or reset other AA's passwords. Only the SAA can maintain CAT AA accounts.

### 4.2.2. CAT User

CAT Users can do the following in the Reporter Portal:

- Create, view, and transmit reportable events
- Upload data files

- View and repair errors
- Create, view, and edit Reporting Relationships
- Create, view, and edit ATS Order Types
- View and export feedback, including announcements, reporting summaries, and all error records
- View monthly report cards
- Create and edit user preferences

#### 4.2.3. CAT Read-Only User

Read-Only users can do the following in the CAT Reporter Portal:

- View Reporting Relationships
- View ATS Order Types
- View and export feedback, including announcements, reporting summaries, and all error records
- View monthly report cards

### 4.3. Create, Modify, and Delete CAT Accounts

SAs and CAT AAs may create, edit, and delete CAT User and CAT Read Only accounts per the following instructions:

1. Log into the [FINRA Firm Gateway](#) and select the User Administration tab.

The screenshot shows the FINRA Firm Gateway interface. At the top right, it says "FINRA.org | My Account" with a bell icon and a user profile icon. Below this is a navigation bar with "Home", "Compliance Calendar", "Forms & Filings", and "User Administration" (which is highlighted). On the left, there is a "User Administration" sidebar menu with options: "Account Management", "Create New Account", "Start New Search", and "Help". The main content area is titled "Account Management: Start New Search". It contains the following text: "To perform a new search, fill in query criteria, then click 'Search'." Below this is a yellow tip box: "You can use asterisks as wildcards. For example, 'J\*o\*n\*' matches 'Jason', 'John', and 'Julio'." The form fields are: "User ID:" (text input), "Last Name:" (text input), "First Name:" (text input), "Middle Name:" (text input), "Email:" (text input), and "Department:" (text input). A "Search" button is located at the bottom of the form.

2. Select **Create New Account** to create a new user account (skip to step 8 below for instructions on modifying and deleting accounts).
3. Complete the following sections of the new user's account. All required fields are marked with an asterisk.
  - Provide the user's name and contact information. Click the link to generate a User ID automatically or create a User ID for the new user.
  - In Account Profile, provide a temporary password for the user. The user will be prompted to change the password upon first logging into the system.

4. In the FINRA Information section, select the environment(s) to which the user needs access. For additional information on environments, see §4.1.

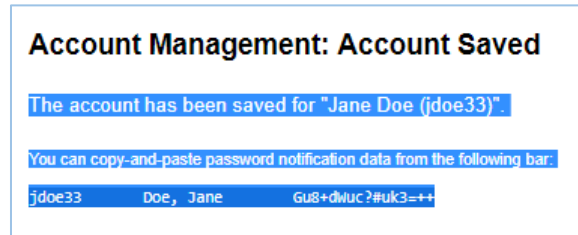
5. In the Application Privileges section, select the entitlement(s) for the CAT Reporter Portal based on the user's intended role in the system:
  - CAT Reporter Portal – General application access.
 

*Note: At least one of the privileges below must also be granted for the user to access the application.*

    - CAT Admin – CAT Account Administrator access, as defined in 4.2.1.
    - CAT User – CAT User access, as defined in 4.2.2.
    - CAT Read Only – CAT Read-Only access, as defined in 4.2.3.
6. Click Save.



7. Highlight the account information that appears at the top of the screen, copy the credentials, and provide them to the user.



### IMPORTANT NOTE REGARDING THE ONBOARDING PROCESS

It is recommended that you provide the credentials to the user immediately. **The user must complete all steps of the onboarding process within 240 hours (10 days) of account creation.** Onboarding steps include (1) logging in to the account, (2) resetting the temporary password, (3) providing security challenge questions and answers, and (4) enrolling in multi-factor authentication<sup>3</sup>.

Failure to complete all onboarding steps within the required timeframe will result in the immediate expiration of the temporary password and automated revocation of CAT entitlements for the user account. When this occurs, the SAA or CAT Account Administrator must grant the necessary CAT entitlements again and set a new temporary password if the user requires CAT system access.<sup>4</sup>

8. When modifying or deleting an account, select the User ID from the search results to open the user's account.
9. Select Edit Account to modify a user's account or Delete Account to delete the user's account.  
**Deleted accounts cannot be reactivated.**
10. Modify the user's account and click Save or click Delete to remove the user.

*Note: SAAs and CAT AAs can also change a user's password or unlock an account in Password Lockout status in the User Administration tab.*

Tips for managing user and administrator accounts are available in the following guides:

[Quick Reference Guide for Super Account Administrators](#)

<sup>3</sup> See [§7 Manage Multi-Factor Authentication \(MFA\)](#) for information on enrolling.

<sup>4</sup> Additional resources for managing user accounts can be found at the end of this section.



## 5. Request Secure File Transfer Accounts

### 5.1. SFTP Environments

Two environments are available for CAT Reporters to access: a non-production test environment, often referred to as “Industry Test”, and a production environment. When requesting a new SFTP account, the SAA must designate the access level on the CAT SFTP Entitlement Form, that is, if the account is for test, production, or both. If no access level is marked on the CAT SFTP Entitlement Form, the SFTP account will be given access to both test and production environments. An SAA may submit another CAT SFTP Entitlement Form to update the access level if required.

SFTP accounts for the CAT Reporter may be given access to production only after testing certification has been completed. When the CAT Reporter completes testing certification and is granted access to the production environment, any SFTP account for which production access was designated will be granted production access.

The SAA (for a CAT Reporter) or the Account Administrator (for a CAT Reporting Agent) must submit a CAT SFTP form to request the access be changed for an SFTP account if access should be given to or removed from an existing SFTP account. **When removing SFTP environment access, ensure that the CAT Reporter has at least one remaining SFTP account for the environment.** For example, if the CAT Reporter has only one SFTP account with production access that access should not be removed since it would leave the CAT Reporter without the ability to submit data to the production environment.

### 5.2. CAT Secure File Transfer Accounts

CAT Secure File Transfer Protocol (“SFTP”) Accounts enable Industry Members and CAT Reporting Agents to create a machine-to-machine connection to securely transmit data to CAT and receive related feedback. To create an SFTP account, the organization must first have an SAA or CAT AA established and then submit a CAT SFTP Entitlement Form, available on the CAT NMS Web Site at <https://catnmsplan.com/registration/>. Once the request is verified and processed, the FINRA Entitlement team will send the account credentials to the contact identified on the form. Prior to first use of the SFTP account to submit data, the initial password must be reset by logging into <https://accountmgmt.finra.org/myews/>. Once the password is reset, it will not expire.

CAT SFTP accounts can be used solely for the machine-to-machine transmission of data to/from CAT and cannot be used to access any other CAT system. Additionally, existing FINRA FTP accounts cannot be used to submit data to or receive data from CAT.



## 6. Manage Connectivity

Connectivity to CAT will be via private line or the CAT Reporter Portal. Private line connectivity will be provided via a managed private network. Private line solutions will provide access to both the SFTP (Secure File Transfer Protocol) service for machine-to-machine connectivity, as well as to the CAT Reporter Portal for interactive reporting through web-based forms or manual file upload.

The CAT Reporter Portal will also be accessible via the web using a secure, authenticated internet connection. This method of connectivity requires the use of modern browsers supporting HTML5 and TLS (Transport Layer Security). No client software installation is required.

Connectivity details are provided in the [FINRA CAT Connectivity Supplement for Industry Members](#).

## 7. Manage Multi-Factor Authentication (MFA)

The Reporter Portal requires multi-factor authentication, or MFA, to provide an additional layer of security beyond the User ID and password required for login. Multi-factor authentication is required for users accessing the Reporter Portal via private line connection, AWS Private Link, or the Secure Reporting Gateway over the internet. The second-level authentication is provided by Duo, and end users must enroll a smart phone, tablet, or U2F security key (e.g., a Yubikey or Feitian key) in the Duo service to initiate the authentication process and to use this service going forward.

Attempts to access CAT in the Test or Production environment by a user physically located in any of the following countries is prohibited:

Afghanistan	Mali
Bolivia	North Korea (Democratic People’s Republic of Korea)
Burkina Faso	Russia (Russian Federation)
Central African Republic	Somalia
China	South Sudan
Iran (Islamic Republic of Iran)	Syria (Syrian Arab Republic)
Iraq	Venezuela
Libya (Libyan Arab Jamahiriya)	Yemen

### MFA Requirements

If using a **smart phone or tablet**:

- The device must have a screen lock enabled.
- The device must be on an operating system that is not identified as “end-of-life”. While the system will encourage users to download the most current version of their operating system, it will not prevent entry by lower versions, as long as they are not identified as end-of-life versions. Consult your OS provider for more information about which operating systems are considered end-of-life.

- End-of-life operating systems are supported for a short grace period after their end-of-life date. If a user attempts to use a device with an end-of-life operating system during that time, they will be able to authenticate, but will be notified that they need to update their operating system. After the grace period, they will no longer be able to access CAT systems without updating their operating system.
- The user must access the CAT system from a different device than the device used for multifactor authentication.
- Beginning June 1, 2020, the device must have internet connectivity via a wireless or cellular connection in order to accept push notifications from Duo. The entry of a password from the Duo application will not be permitted.

If using a **security key**:

- The computer used to access CAT must have a USB port, and no USB block enabled that would restrict use of that USB port.
- The user must access CAT via a supported browser (Chrome 70 or later, Firefox 60 or later, or Opera 40, or later) for authentication.
- The user must have a supported security key. Duo MFA supports WebAuthn/FIDO2 security keys such as those offered by Yubico and Feitian. U2F-Only security keys such as Yubikey NEO-n are not supported with Firefox.

*FINRA CAT does not endorse any specific security key vendor or model and recommends that organizations perform adequate testing to ensure that the device they intend to use is compatible with Duo MFA for FINRA CAT. More information on Duo-compatible security keys is available on Duo's [website](#).*

### **Supported Operating Systems for Authentication Devices**

Operating System	Access Policy
iOS	End-of-life versions are blocked
Android	End-of-life versions are blocked
Windows Phone	No versions blocked
Mac OS X	End-of-life versions are blocked
Windows	No versions blocked

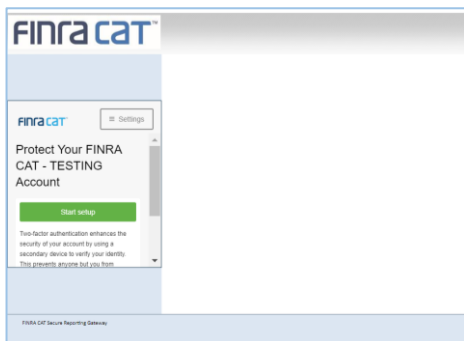
Linux	No versions blocked
Chrome OS	No versions blocked
Other Operating Systems	All versions blocked

## 7.1. Enroll in Duo MFA service

All users must enroll in the Duo MFA service to be able to access the Reporter Portal. The following enrollment steps only need to be completed once per CAT user account. New users will be prompted to complete these steps before they can access the Reporter Portal.

1. Navigate to the Reporter Portal based on your connectivity method. See the Industry Member [CAT Reporter Portal User Guide](#) for access information.
2. Click **Start setup** to begin the enrollment process. *The appearance of the setup screens will differ for users logging in via the Secure Reporting Gateway (first screen shot below) versus Private Line/Private Link users who will not enter via the Gateway (second screen shot). The process to enroll is the same, however.*

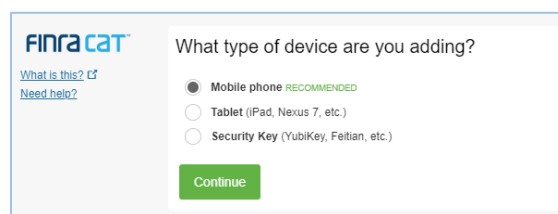
Secure Reporting Gateway



Private Line/Private Link



3. Select the type of device you will use for authentication (mobile phone, tablet, or security key) and click **Continue**.





To enroll a phone or tablet, continue to Step 4. To enroll a security key, skip to Step 5.

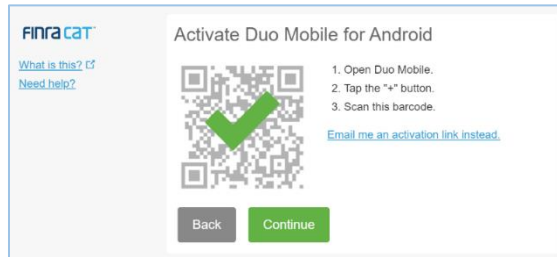
4. Complete the following steps to enroll a **phone or tablet** in Duo MFA:
  - a. If enrolling a phone, enter the phone number of the device and check the box to confirm the phone number. **The user must have access to the device associated with this phone number to log into the Reporter Portal.** If enrolling a tablet, no phone number is required.
  - b. Click **Continue**.

If the phone number entered is in use for authentication by another user account, the system will return an error stating that the number cannot be added. Please contact the CAT Help Desk ([help@finracat.com](mailto:help@finracat.com)) to request that the number be enabled for use with a second account.

- c. Select the type of phone or tablet being enrolled and click **Continue**.

- d. If the Duo Mobile application is not already installed on the device, follow the instructions to complete installation.

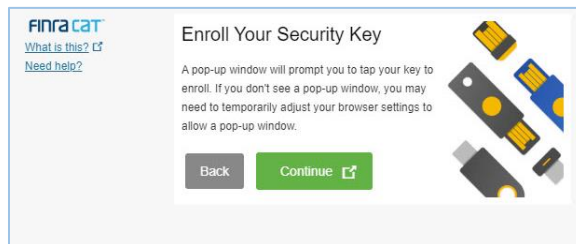
- e. Click **I have Duo Mobile installed**. A QR code will appear on your computer screen.
- f. Using the Duo mobile application, click **+** to scan the code<sup>5</sup> and link the Duo Mobile application to your CAT user account. **You must authorize Duo Mobile to access your device camera in order to scan the code.**



- g. Click **Continue** to complete enrollment.
- h. Once enrolled, review the user settings. See [§7.5 Manage Device Settings](#) for details. The user may select a default authentication method or may select how to authenticate at each log in. **It is recommended that all users set the default authentication method to “Automatically send this device a Duo Push”.**<sup>6</sup>
- i. Click **Save** when finished.

5. Complete the following steps to enroll a **security key** in Duo MFA:

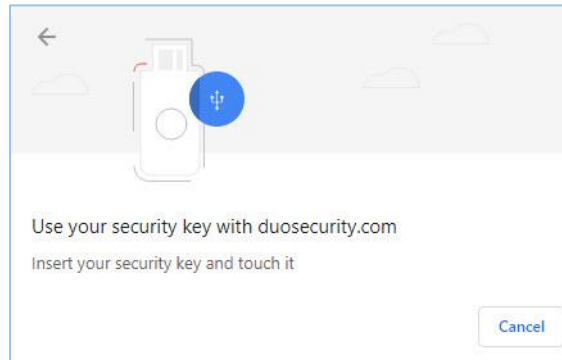
- a. Click **Continue** to begin enrolling your security key.



<sup>5</sup> If unable to scan the code, click the option to have an activation link sent to you via email.

<sup>6</sup> CAT requires all Duo authentication via a phone or tablet to be performed using the push method. Setting Duo to automatically push a notification to a designated device by default does not preclude the user from requesting an additional push, selecting an alternate device, or providing a bypass code during login if needed.

- b. Insert your security key into the USB port on your computer and, if needed for the model used, tap the key or press the button.

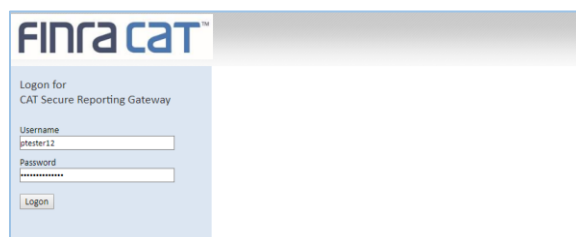


- c. A message will appear confirming that your enrollment was successful.

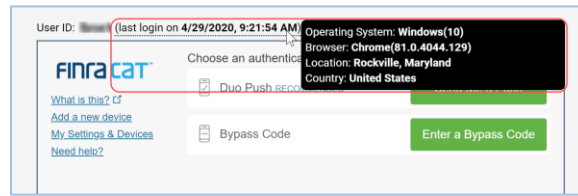
## 7.2. Log In Using Duo MFA Service

The User ID, Password, and Duo MFA authentication must be provided each time the user accesses the Reporter Portal.

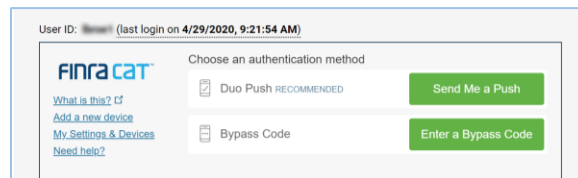
1. Navigate to the Reporter Portal based on your connectivity method. See the Industry Member [CAT Reporter Portal User Guide](#) for access information.
2. Enter the User ID and Password.



Information is displayed for the most recent login to a CAT application for the account. Hover over the last login date and time to view additional details. **If these details do not reflect the last known login for the account, FINRA CAT recommends that you immediately change your account password and contact the FINRA CAT Help Desk at 888-696-3348.**



3. To authenticate using a **security key**, insert the security key and, if required, tap the key or push the button.
4. To authenticate using a **phone or tablet**,
  - If the account is not set to automatically send a push notification, click **Send Me a Push**.
  - Access the Duo Mobile application on the associated device.
  - Approve the request.



**To authenticate using a bypass code provided by the CAT Help Desk:**

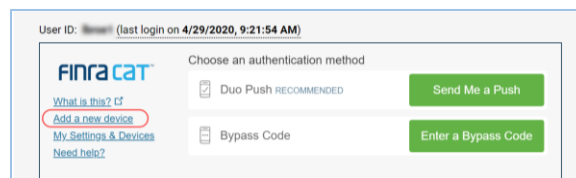
If the authentication device cannot be accessed, the user may contact the FINRA CAT Help Desk for assistance. Once the Help Desk confirms the user’s identity, they can provide a bypass code that can be used for one-time authentication. **Users without an authentication device enrolled cannot be provided with a bypass code.**

- Click **Enter a Bypass Code**.
  - Enter the code provided by the CAT Help Desk and click **Log In**.
5. If accessing the Reporter Portal via the web, select the Reporter Portal application from the Secure Reporting Gateway. Through June 29, 2020, the user must log in with the User ID and Password again to access the Reporter Portal in Production. After June 29, the additional login will no longer be required.

### 7.3. Enroll an Additional Device in Duo MFA Service

Users may find it necessary to add an alternate device to their account. **To enroll an additional device, the user must have access to a currently enrolled device. If the currently enrolled device is no longer available, contact the FINRA CAT Help Desk at 888-696-3348 or at [help@finracat.com](mailto:help@finracat.com) for assistance.**

1. Navigate to the Reporter Portal based on your connectivity method. See the Industry Member [CAT Reporter Portal User Guide](#) for access information.
2. Click **Add a new device**.

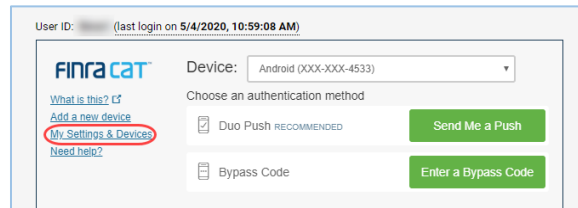


3. Complete authentication using a currently enrolled device or using the bypass code provided by the FINRA CAT Help Desk if an existing device is not available. (See [§7.2 Log In Using Duo MFA Service](#).)
4. Enroll the additional device using the instructions provided in [§7.1 Enroll in Duo MFA Service](#), beginning with Step 3.
5. If needed, to change the default device, change the default login method, or remove a device, refer to [§7.5 Manage Device Settings](#).

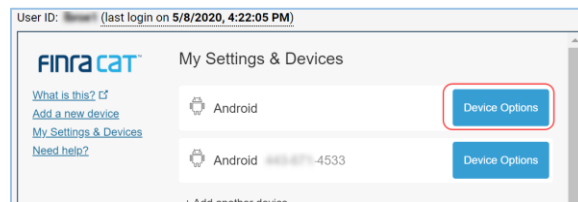
### 7.4. Replace a Device

Users may find it necessary to replace a device on their account, for example when a cell phone has been replaced or upgraded. **To replace a device, the user must have access to another currently enrolled device. If another currently enrolled device is not available, contact the FINRA CAT Help Desk at 888-696-3348 or at [help@finracat.com](mailto:help@finracat.com) for assistance.**

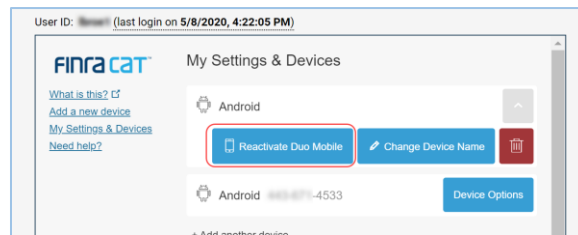
1. Navigate to the Reporter Portal based on your connectivity method. See the Industry Member [CAT Reporter Portal User Guide](#) for access information.
2. Click **My Settings & Devices**.



3. Complete authentication using a currently enrolled device or using the bypass code provided by the FINRA CAT Help Desk if an existing device is not available. (See [§7.2 Log In Using Duo MFA Service](#).)
4. Click **Device Options** for the device to be replaced.



5. Click **Reactivate Duo Mobile**.

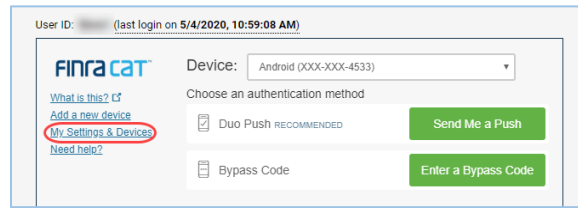


6. Enroll the replacement device using the instructions provided in [§7.1 Enroll in Duo MFA Service](#), beginning with Step 4c.

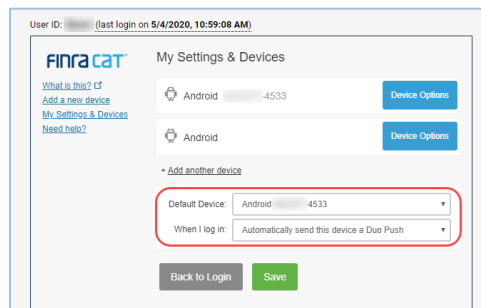
## 7.5. Manage Device Settings

Users can change their preferences including selecting the default device, selecting the default authentication method, and removing enrolled devices by following the steps below.

1. Navigate to the Reporter Portal based on your connectivity method. See the Industry Member [CAT Reporter Portal User Guide](#) for access information.
2. Click **My Settings & Devices**.



3. Complete authentication using a currently enrolled device. (See [§7.2 Log In Using Duo MFA Service.](#))
4. To **change the default device or default method** used for authentication:
  - a. Select the desired device from the “Default Device” dropdown. This designates the device used for authentication by default; the user may select to use an alternate enrolled device during any login.
  - b. Select the desired method from the “When I log in” dropdown. The user may select to be asked for the method or to have the system automatically push a notification upon each login. **It is recommended that the default authentication method be set to “Automatically send this device a Duo Push”.**<sup>7</sup>

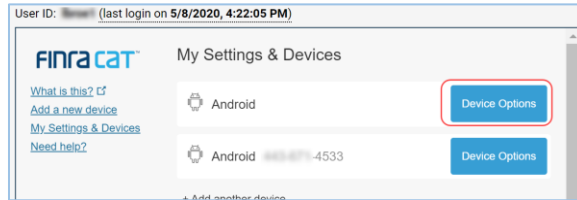


- c. Click **Save**.
- d. Click **Back to Login** to continue logging in to CAT. (See [§7.2 Log In Using Duo MFA Service.](#))

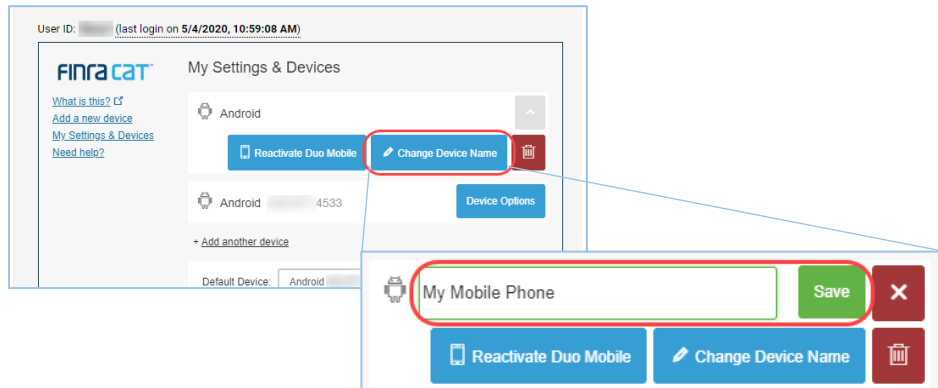
<sup>7</sup> CAT requires all Duo authentication via a phone or table to be performed using the push method. Setting Duo to automatically push a notification to a designated device by default does not preclude the user from requesting an additional push, selecting an alternate device, or providing a bypass code during login if needed.

5. To **manage a specific device**, including setting a customized device name or deleting an enrolled device:

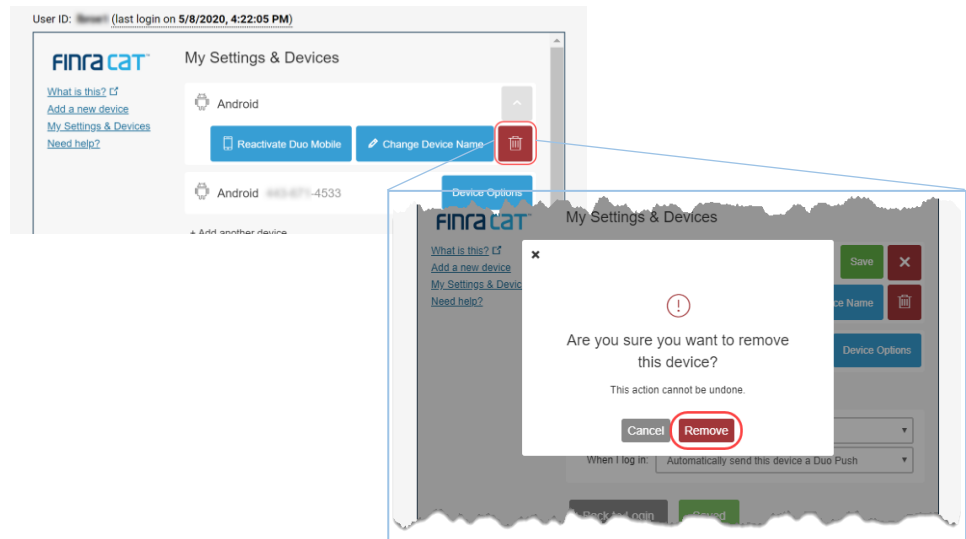
a. Click **Device Options** for the device.



b. To change the device name, click **Change Device Name**, edit the device name, and click **Save**.



c. To **delete the device**, click  and **Remove**.





## 8. Establish CAT Reporting Relationships in the Test Environment

CAT Reporting Relationships are required to authorize a Reporting Agent to report on behalf of a CAT Reporter and to authorize a Third-Party Reporting Agent to view data submitted on behalf of a CAT Reporter by another Submitter. Firms that will not use a Reporting Agent or Third-Party Reporting Agent are not required to add Reporting Relationships.

During onboarding, CAT Reporting Relationships must be entered using the CAT Reporter Portal in the Test Environment. There are two types of Reporting Relationships:

**Reporting Agent (Submitter)** – Authorizes an organization to transmit data to CAT on behalf of a CAT Reporter IMID.

- For SFTP submissions, Reporting Agents will receive a copy of the error feedback in their SFTP feedback folder for data submitted on behalf of the CAT Reporter.
- Using the CAT Reporter Portal, Reporting Agents can view and take action on Reporting Feedback and Errors for the submissions made by the Reporting Agent on behalf of the CAT Reporter.
- Relationship record requires the IMID of the CAT Reporter and CRD# / Org ID of the Reporting Agent (Submitter ID).

**Third-Party Reporting Agent** – Authorizes an organization to view data submitted on behalf of a CAT Reporting IMID by another Submitter.

- In addition to the Reporting Relationship, Third-Party authorization requires the inclusion of the Third-Party Reporting Agent's identifier in the Metadata File submission by the Submitter.
- For the data files transmitted by the Submitter for which the Third-Party Reporting Agent is designated, all associated Reporting Feedback and Errors can be viewed by the Third-Party Reporting Agent using the CAT Reporter Portal.
- Third-Party Agents must have a Reporting Agent relationship to submit repairs to CAT.
- Relationship record requires the IMID of the CAT Reporter, CRD# / Org ID of the Reporting Agent (Submitter ID), and CRD# / Org ID of the Third-Party Reporting Agent.

*Note: Existing OATS Reporting Relationships cannot be leveraged.*

**For additional information on establishing and maintaining CAT Reporting Relationships, see the Industry Member [CAT Reporter Portal User Guide](#).**

## 9. Establish ATS Order Types in the Test Environment

Industry Member ATSS are required to register ATS Order Types with CAT at least 20 days prior to the Order Type becoming effective. During onboarding, ATS Order Types must be entered using the CAT Reporter Portal in the Test Environment.

The following information must be provided for each Order Type used by an ATS:

- ATS MPID
- Order Type Identifier assigned by the ATS
- Description of how the Order Type operates within the ATS
- Effective date of the Order Type
- Expiration Date of the Order Type

Industry Members may not reuse Order Type Identifiers for the same ATS MPID. See [CAT Alert 2019-01](#) for more information.

*Note: ATSS must re-register all Order Types. Order Types established in OATS cannot be leveraged.*

**For additional information on establishing and maintaining ATS Order Types, see the Industry Member [CAT Reporter Portal User Guide](#).**

## 10. Conduct Testing for Production Readiness

By June 8, 2020, Industry Members and CAT Reporting Agents are required to perform testing to demonstrate their ability to successfully submit data to CAT. Production readiness testing is limited to the validations in effect when an Industry Member is required to begin reporting data to CAT. More specifically, for all Industry Members that are required to begin reporting equity data to CAT on June 22, 2020, production readiness testing will be limited to entitlements, file submissions, and data integrity validations. See Table 1 below.

Testing is performed in the CAT Test Environment, which is production-equivalent. CAT Reporters have no volume limitation and may submit full production-equivalent loads to the Test Environment. Additionally, validations and feedback processes mirror those of the Production Environment. Test symbols will be accepted in the Test Environment, which is available 24x6.

### 10.1. CAT Production Readiness Testing Requirements for Self-Reporting Firms

Firms that will report to CAT on their own behalf must perform the following:

**Step 1:** Successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment.

**Step 2:** Successfully submit at least one data file and one metadata file to the Test Environment for each of its CAT Reporter IMIDs without error.

**Step 3:** Successfully submit a single day of production data to the Test Environment with an error rate<sup>8</sup> of less than 10%.

**Step 4:** Record the CAT Processing Date on which the single day of production data was submitted to the Test Environment.

### 10.2. Production Readiness Testing Requirements for CAT Reporting Agents (“CRA”)

CAT Reporters and CAT Reporting Agents (“CRA”) that will report to CAT on behalf of a firm must perform the following:

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<sup>8</sup> The error rate will be based on validations in effect at the date of required production reporting. For the initial Phase 2a reporting on June 22, 2020, the error rate calculation is equal to the Total Number of Syntax and Semantic Errors divided by Total Submissions. See Table 1.

**Step 1:** Successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment.

**Step 2:** Ensure the CRA is identified in a CAT Reporting Relationship in the Test Environment by CAT Reporter(s) for which the CRA will transmit data to CAT. The CRA must provide a complete list of IMIDs for which it plans to report. FINRA CAT will validate that the relationships for each IMID have been created in the CAT Reporter Portal.

**Step 3:** Successfully submit data files and metadata files to the Test Environment that contain all the event types that the CRA will support.

**Step 4:** Successfully complete a capacity test by submitting a single day of full production volume to the Test Environment. The capacity test should include data for each of the CAT Reporter IMIDs for which the CRA is reporting. If a CRA plans to submit data for an IMID that is not yet prepared to submit data to CAT, the CRA should estimate the number of events to be processed and expected utilization of the IMID for the purpose of the capacity test.

If a CRA is also an Industry Member that plans to self-report its own data along with data submitted on behalf of other firms, the CRA must certify its own IMIDs under the requirements outlined in Section 11.1. If the data submitted on behalf of other firms will exceed 50% of the anticipated daily volume submitted by the CRA across all entities, the CRA must conduct a load test as described above.

**Step 5:** Record the CAT Processing Date on which the single day of production data was submitted to the Test Environment.

### **10.3. Production Readiness Testing Requirements for Industry Members Submitting via CAT Reporting Agents**

CAT Reporters that will exclusively report to CAT using a Reporting Agent must perform the following:

**Step 1:** Firm and CRA successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment.

**Step 2:** CAT Reporter has defined one or more CAT Reporting Agent Relationships in the Test Environment.

**Step 3:** Record the CAT Processing Date(s) on which each CRA has successfully submitted a single day of production to the Test Environment on the Industry Member's behalf.

**Table 1: Production Readiness Error Rates**

Production Reporting Phase	Production Readiness Error Rate Based On
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Phase 2a Data Integrity Go-live June 22, 2020	Equity Data Integrity Only (Syntax/Semantics)
Phase 2b Data Integrity Go-live July 20, 2020	Options Data Integrity Only (Syntax/Semantics) <i>IMs passing the 2a Production Readiness that are already entitled to the Production Environment do NOT have to re-test for options.</i>
IM Begins Reporting to CAT for the First Time Post Initial Go-live	Validations in effect in the Production Environment when the IM begins reporting to CAT for the first time. <i>Once a CAT Reporter has certified for 2a or 2b, they do not have to recertify for subsequent phases.</i>

**10.4. Production Readiness Testing Requirements for Industry Members that Do Not Have Production Data Prior to the Certification Deadline and for Industry Members That Start Trading After the Go-live Date**

CAT Reporters that will not have production data volume prior to the certification deadline and/or go-live date must perform the following:

**Step 1:** Firm and CRA (if applicable) successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment.

**Step 2:** CAT Reporter has defined one or more CAT Reporting Agent Relationships in the Test Environment (if applicable).

**Step 3:** Record the CAT Processing Date(s) on which the firm and each CRA (if applicable) has successfully submitted test order and/or trade events to the Test Environment to demonstrate that relationships and entitlements are effective.

## 11. Certification of Testing Completion

Once CAT Reporters have completed all onboarding steps, including the successful completion of production readiness testing, each IM and CRA must contact the FINRA CAT Help Desk at 888-696-3348 or [help@finracat.com](mailto:help@finracat.com). The FINRA CAT Help Desk will require the Processing Date(s) on which the testing occurred.

Upon verification of the Onboarding Steps by FINRA CAT, CAT Reporters will be granted access to the CAT Production Environment and a notification confirming access will be sent.