DTCC *Important Notice* The Depository Trust & Clearing Corporation

Z #:	z0165
Date:	June 19, 2018
То:	All Clients
From:	DTCC Product Management
Attention:	Operations and Technology Management
Subject:	Robotic Processing Applications

As a thought leader in the financial services industry, the Depository Trust and Clearing Corporation is constantly seeking for ways to leverage disruptive technologies to provide Clients with processing efficiencies and risk/cost reduction in a manner that protects the industry's core processes and services. As such, in 2017 DTCC began to review Robotic Processing Automation¹ (RPA) technology, specifically related to Client bots accessing DTCC's user interfaces. The goal of this review was to establish guidelines that enable Clients to realize the benefits of robotics while safeguarding DTCC's systems. The guidelines are detailed in the appendix of this Important Notice and posted online at www.dtcc.com/robotics. They will be updated regularly as the technology continues to mature.

Timeline

Effective immediately, Clients can begin building their bots based on the guidelines in the appendix. By July 1, 2018, DTCC will enhance the language in its Super Access Coordinator forms to include references to bots and other types of digital workers. DTCC expects Clients to register all user IDs being leveraged by bots² in the Customer Registration Service (CRS), ServiceCentral, and/or other relevant registration system under the credentials of the person whom is responsible for the bot's activity.

In Q3 2018, DTCC plans to distribute another Important Notice announcing a CRS enhancement to enable Clients to identify specific user IDs as bots. Once this change is implemented, Access Coordinators are expected to log into CRS and re-identify any user IDs that are being used by bots³ accordingly.

Testing

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DTCC requests that Clients make every effort to test their bots in DTCC's PSE test environments prior to implementing them in DTCC's production environment, in order to ensure that their bots can operate within the aforementioned guidelines. Client should direct any questions about exceptions to the guidelines to their relationship manager or DTCC's Client Support Center.

³ Note that bots and humans should never share IDs as is outlined in the guidelines.

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¹ Robotic Process Automation is a software tool that allows developers to mimic human interaction within a user interface by creating "bots" or programs which perform the everyday tasks performed manually by workers. ² Including any IDs being used in DTC's interfaces prior to the publication of this notice.

APPENDIX

DTCC Robotic Processing Application Guidelines

Registration Requirements

- Digital workers must be <u>registered with DTCC</u> and where technically feasible, have discernable naming conventions that distinguish digital workers from staff workers;
- Each ID must be assigned an accountable person who, in the event of an outage or other abnormal operation, can perform the responsibilities of reporting and responding to events or inquiries;
- Contact information for the accountable person shall be updated and kept current with DTCC;

Access and Re-certification

- Robotics and other digital workers should be recertified in the same manner and timeframe as staff workers;
- IDs used by Robotics and other digital users must conform to the same security policies including
 password complexity and credentials expiration policies and follow/comply with DTCC's acceptable
 use standards;

Operational Requirements

- Robotics or other digital workers should process transactions per second (throughput) not to exceed a) 1.5X (150%) from that of an average staff worker in any 24-hour period, nor b) process 2X (200%) the transactions per second (throughput) from that of an average staff worker in any 5-minute period;
- Robotics or other digital workers processing or transactions should be limited during the times of 1500-1900 (3PM to 7PM ET) not to exceed 1X (100%) of the speed of an average staff worker;
- Robotic processes should be designed and implemented to handle errors or exceptions appropriately to assure the integrity of the processes, including where appropriate manual intervention by responsible staff. In certain cases, robotic processes should be terminated upon error or exception, and on such cases disabled or set aside until the exception can be resolved by the appropriate responsible staff;

Risk Management and Controls

All Robotic processes should be monitored by the firm in accordance with its systems monitoring
policies and practices, and all activities performed by RPA bots logged in a secure facility to support
incident and problem response and the firm's and regulatory audit requirements in the relevant
jurisdictions;

• Robotics and other digital worker processes, where technically feasible, should be quality tested to validate functional correctness and performance tested to verify the controls pertaining to processing speed, transaction load, time of day processing and exception management;

Disaster Recovery, Business Continuity and Access Termination

- Firms should have DR and BCP plans in place and conduct periodic recovery testing specific to RPA operations in accordance with the firms' resiliency policies and regulatory requirements to assure that business operations can be conducted and completed as needed in the event that the RPA systems fail;
- In the event that a digital worker places undue activity or burden on any DTCC system, DTCC may terminate access or connectivity to any user or source address, or any group of users or source addresses, as may be needed to restore or maintain Production operations;
- DTCC may enhance or otherwise modify its user interface applications without consultation with such firms or reference to the use of RPA, and that such changes to the UIs may affect the operation of RPA bots.