Client Engagement for Successful Resiliency Planning

Recovering from the most impactful events, including those which impact our ability to access data, requires a comprehensive and highly coordinated approach with clients.

For more than 40 years, DTCC has led financial services industry in a host of initiatives to develop the most efficient, security financial markets in the world. We continue that work in cybersecurity and resiliency programs, particularly as our markets become more interconnected. Developing plans to recover from a significant cyber-attack will require close coordination within our industry. We must work together to test programs and to ensure that all firms understand their roles and have established appropriate processes to mitigate the impact of events that could disrupt the markets and critical business services.

Any feedback on DTCC's Resiliency Planning can be sent to **businessresiliency@dtcc.com**.

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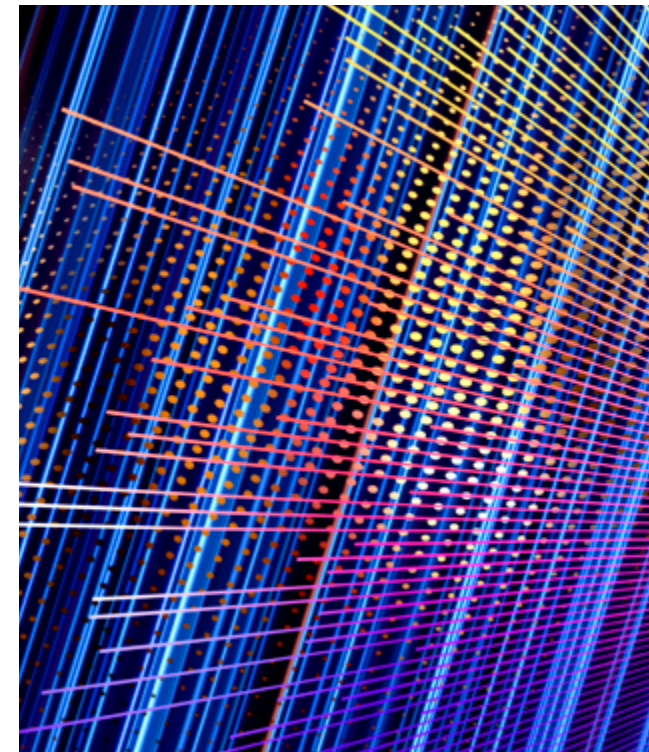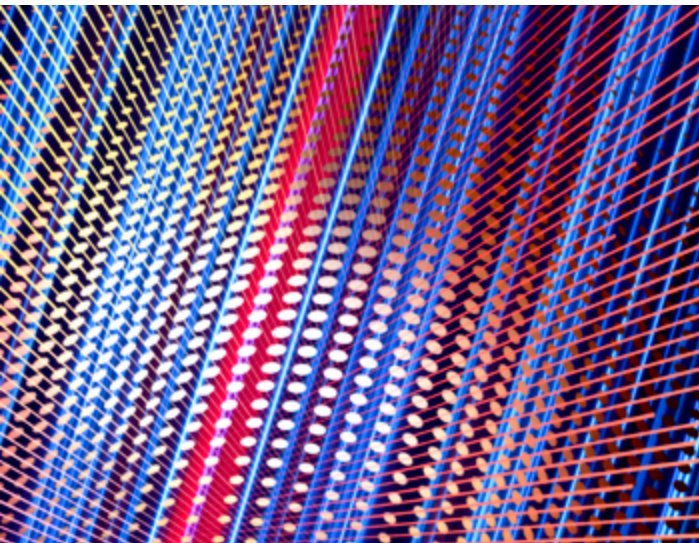
DTCC Resiliency Planning

In today's highly interconnected and global financial marketplace, there's no such thing as an isolated disruptive event. What happens in one part of the world can have widespread and significant impacts on the integrity of the global financial system.

The growing frequency and complexity of cyber threats heightens the focus on service continuity and the need for holistic, forward-looking and collaborative approach to enhance industry-wide resilience.

DTCC will continue to share its vision and proposals for enhancing operational resiliency. This brochure outlines the proposed approach to recover from cyber event scenarios impacting critical DTC settlement services.

DTC Multi-Region Data Impact Scenario

If DTC cannot provide service because data was either corrupted or destroyed across multiple regions, recovery in the out-of-region data center would not remediate the issue. We have developed a recovery process for such a scenario with the following foundational assumptions:

FALL FORWARD TO MAINTAIN SETTLEMENT FINALITY

Once settlement has occurred and the day is complete, the position record for that business day is considered final. In order to allow the industry to continue to operate, DTC is establishing a "fall forward" procedure, where any prior settlement day's activity remains unchanged and errors would be corrected through adjustments in future settlement cycles.

DEFINED RESTORE POINTS

We evaluated client feedback regarding options for data restoration and determined—when primary and backup data copies are impacted—the industry would be best served by reverting to a defined point within the same business day, where the data can be confirmed as accurate. These would typically be:

- **Start of Day**
- **End of the Night Settlement Cycle**
- **Generation of Final Figures**
- **Release of Controls**
- **End of Free Period**

Settlement Alternatives

To address the wide range of potential cyber scenarios, we continue to assess and enhance alternatives for settlement processing, including for scenarios where we may not be not be able to complete current-day settlement within the normal processing schedule:

- **Abbreviated Settlement:** Allows us to complete end-of-day settlement if the Account Transaction Processor application – which processes settlement transactions and maintains our books and records – experiences a late-day outage.

- **Settlement Rollover:** Enables our systems to carry current-day settlement balances to the next business day, while maintaining risk management controls. We will use a set of systemic steps and operational procedures if there is an extreme market disruption that prevents settlement.

Each settlement processing alternative will require close coordination between clients and DTC.

Additional information on these capabilities will be provided as our thoughts progress.

1 DTC detects destruction or corruption of data.

2 DTC identifies the time period of the data impact.

3 DTC restores clean set of books and records by reverting to one of the defined restore points within the same business day, where data is known to be good.

4 DTC completes an internal reconciliation and validation of data.

5 DTC provides information to assist external parties with reconciliation efforts.

6 External parties may utilize information provided by DTC to reconcile and identify data to be replayed.

7 DTC and client books and records are understood, settlement processing is resumed, and necessary data is replayed through normal input channels.

Consult the Disaster Recovery Guide for information on how to access an output file or screen-based monitoring tools.