JLL
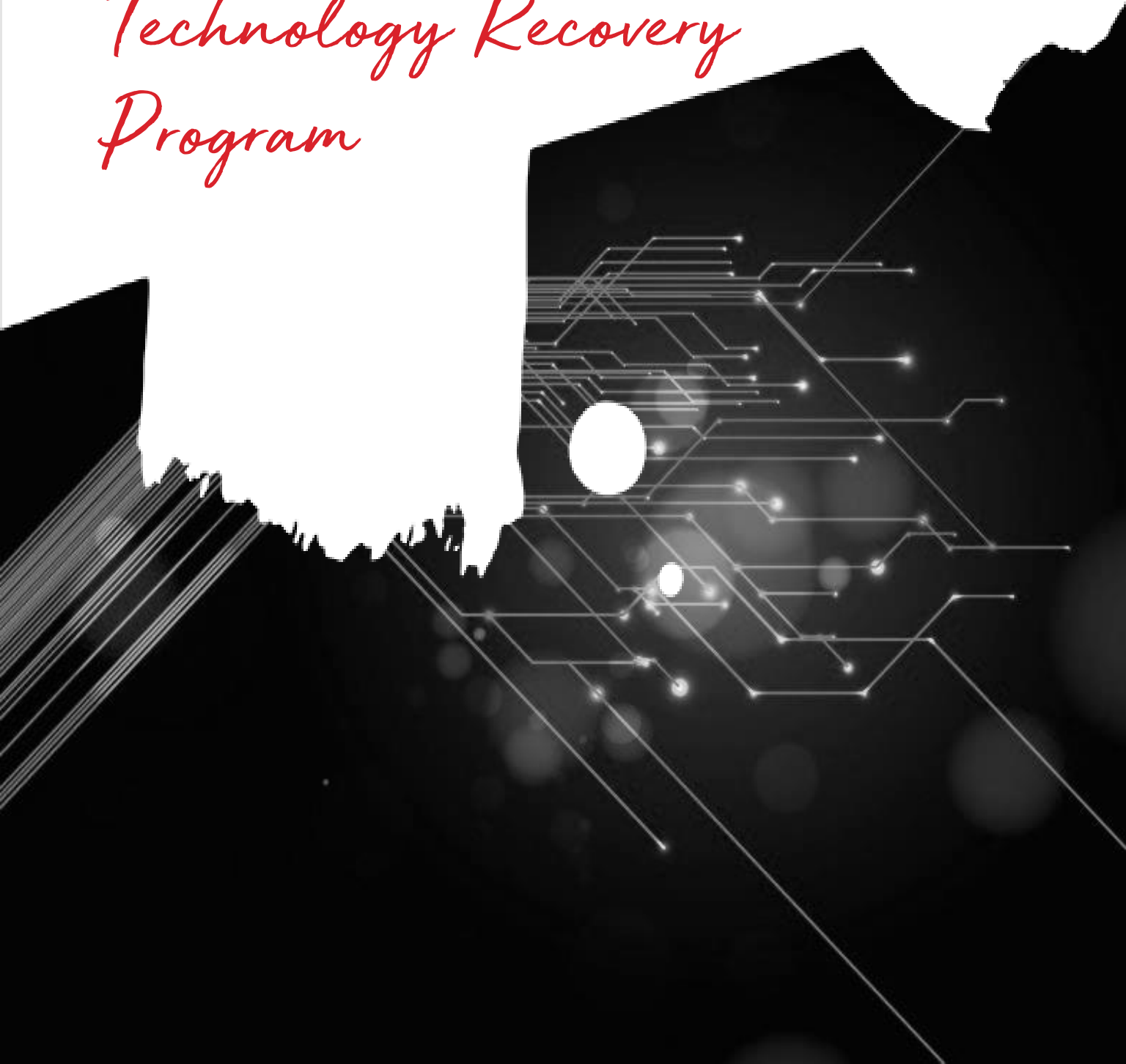
Global Information Security Technology
Recovery Program within JLL

Technology Recovery Program

Introduction

The JLL Technology Recovery Program is managed by the Global Technology Recovery Program Manager, reporting to the SVP, Global Risk, Compliance, and Recovery. Plans are in effect for continuity of the Regional and Global Technology Teams and the services they deliver to the firm's clients and employees, as well as system recovery plans for all mission-critical technology systems.

The Technology Groups are responsible for recovery of the firm's computing environment in the event of a significant incident affecting critical systems hosted at a regional primary data center used by JLL; or an incident that disrupts a corporate office or multiple local offices across a geographic region and displaces employees at a location. Manual workarounds for critical business processes during the technology restoration period are the responsibility

Regional IT Group Business Continuity Plans

Plan Description

The Technology Groups' Crisis Management Plans are detailed guides to crisis response and the rebuilding of the firm's technology infrastructure systems and business applications. The contents of the plans include steps the responsible regional Technology Group would take to recover the list below of critical technology business processes. The regional Technology Crisis Management Plans' recovery time objectives are the same day of a major manmade business-interrupting event or natural disaster, while critical business systems recovery Time Objective (RTO) is within 72 hours of a disaster declaration which requires all business-critical production systems to be made available at an identified regional recovery data center (see "Systems Recovery Program").

- Crisis Communications & Event Management (including liaison with client points of contact)
- Technology Operations (all infrastructure services necessary to support the firm's technology delivery)
- Vendor Management (third-party vendors supplying network connectivity, hardware replacement, managed operations services, telecommunications, data restoration, telephony)
- Procurement (all business controls, including hardware purchasing)
- End-User Support (including replacement PCs and remote connectivity to ensure JLL staff ability to function at a recovery location)

- Telecommunications (including network connectivity, telephone access, and voicemail continuity)
- Security Management (secure external and internal access to the firm's network and data)
- Troubleshooting / Application Management (restoration of systems and data for business – critical applications)
- Restoration of business–critical technology systems and data at an alternate data center location if necessary

System Recovery Program

Assessing Systems Recovery Priorities and Requirements

For the determination of technology disaster recovery requirements, the Information Technology Group conducts business impact analysis (BIA) sessions with senior-level representatives from all business units. During these sessions critical business processes are documented, as well as the impact of disruption to these processes, and the tools used to support them. Business processes and systems are evaluated in terms of criticality, recovery tolerance, and financial impact to the firm. This information is compiled and evaluated, and the technology systems grouped into two categories: Tier 1 and Tier 2. Detailed System Recovery Plans are then developed for each Tier 1 application.

On an annual or as-needed basis, the listing of Tier 1 systems in each region is reviewed to ensure alignment with the criteria for remaining on the critical systems list. During the implementation of new systems, a business impact analysis of the system's criticality is performed for consideration of it being added to the Tier 1 suite of applications.

The recovery classifications for systems are outlined below.

Tier 1	Tier 2
Systems will be operational within 72 hours of an outage with no more than 24 hours of data loss.	Systems will be operational within two weeks of an outage with no more than 24 hours of data loss.
Systems critical to the service of our clients and employees because there is little or no manual process available to duplicate the tasks performed by these systems. The loss of these applications would cause significant financial or non-financial impact to the firm's employees and clients.	Systems important to the service of our clients and employees, but the tasks performed by these systems can be manually performed during an interim period.

Based on the above assessment process, this is a representative list of Tier 1 critical business applications that are client-facing across multiple service regions around the globe.

Tier 1 Systems				
Analytics	Budget	Extranet	Foundational Report	Maintain
Portfolio	Project	Property Hub	Space	Spend

Program Maintenance and Testing

System recovery plans are reviewed and updated on an annual basis; with out-of-cycle reviews occurring as new systems are bought, developed, or acquired. Program testing documentation includes test objectives and formal verification scripts, as well as a recovery test results report which is issued as part of the testing procedure.

Testing occurs throughout the calendar year, with at least one annual exercise for Technology crisis management and business resumption, and all Tier 1 applications are subject to live recovery testing on a minimum three-year testing cycle to validate technology recovery resumption and timeline (some applications are tested more frequently based on business criticality or client agreement). A combination of written plan updates, tabletop crisis response scenario exercises, and live system recovery tests is used to verify and maintain plan currency. Gaps noted during tests and exercises are worked to conclusion through a mitigation project.

For more information

For additional information on the JLL Global Technology Recovery Program, please contact the Technology Recovery Team at TechnologyRecovery@am.jll.com