

Guideline

Owner: Operations Division
Statewide Disaster Recovery Services
Business Continuity Section

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MAINFRAME DISASTER RECOVERY SERVICE

PART 1 GENERAL

1.1 SUMMARY

The Office of Technology Services (OTech) provides a Disaster Recovery (DR) service for the Mainframe at both Data Centers. The opposite facility is designated as the DR hot site.

The OTech:

- Recovery Time Objective (RTO) is 24 hours;
- Recovery Point Objective (RPO) is 5 minutes for Direct Access Storage Device (DASD) data, and within 24 hours for virtual tape data.

OTech only provides Mainframe DR for Application Hosting customers.

This document describes information specific to the recovery of mainframe configurations.

This Guideline is not applicable to DR for midrange (Windows, Solaris, AIX, Linux) systems.

1.2 REFERENCES

Items referenced here are identified as support documentation for information in this guideline.

[OTech Service Request Process](#)

[OTech Rates Guide](#)

Mainframe Disaster Recovery Service Description – TBD

Mainframe Disaster Recovery Service Quote Request Submittal Form - TBD

Mainframe Disaster Recovery Exercise Goals and Objectives Submittal Form

OTech [Procedure 3121 - Firewall and Access List Request](#)

OTech [Firewall Access List Form, \(OTech 363\)](#)

DISASTER DECLARATION

A declaration of a disaster to initiate DR Recovery Services to Customers is determined by OTech leaders identified in the OTech Disaster Recovery Plan. Crisis communication protocols, documented in the Plan, will be executed to notify Customers and OTech technical teams in the event of an actual disaster.

1.3 UNIT PRICE

Billing is determined by the mainframe capacity, measured in millions of instructions per second, or MIPS, required during a disaster. Refer to the [OTech Rates Guide](#) for current pricing.

Mainframe DASD rates include replication of the mainframe DASD and the alternate site storage used during DR exercises.

Cloning of the Virtual Tape System (VTS) is included in the mainframe tape rate. Customer requests for quantities of manual tape that exceed the capacity of the auto-loader or tapes that need courier service(s) to other locations, may incur additional tape rate costs.

Offsite tape backup may be requested for an additional cost via the OTech Service Request system.

DR exercises are included in the monthly DR subscription. However, OTech staff hours required for DR exercise coordination, failover script and technical support outside of core business hours are billable.

1.4 REQUESTS FOR WORK

Include the Customer's name and contact information on forms, documents, and requests submitted to OTech.

OTech requires the following method be used for work requests:

Item	Request Method
Quotes & Billable Service	OTech Customer Service System (CSS) Request
Modifications to Existing Systems/ Services	OTech Service Desk or Remedy Service Request
Technical Problems	OTech Service Desk or Remedy Service Request
Security Related Issues/Incidents	OTech Service Desk

Submit separate Service Requests for DR quote(s) and Service activation or termination.

Service Request Criteria

Due to the sensitivity of the information needed, Customers shall provide the completed Mainframe Disaster Recovery Exercise Goals and Objectives Submittal Form directly to their designated OTech DR Coordinator. The accompanying OTech [Firewall Access List Form \(OTech 363\)](#) form shall be submitted via a Service Request.

1.5 EXPECTATIONS

OTech General Expectations

The OTech will schedule the DR exercises, coordinate and communicate with Customer and an OTech staff to achieve the Customer's exercise goals and objectives.

The OTech follows change management practices. Change requests are recorded in the OTech Remedy system, as a Change Request (CRQ). OTech Account Directors can provide updated change procedures.

The OTech Command Center will monitor and manage the DR environment(s) during exercises.

Customer Expectations

Customers should participate in at least one (1) DR exercise each calendar year to verify the integrity of their DR solution.

1.6 SCHEDULING

The OTech's goal is to provide timely and economical technology service. Customers promote this goal by promptly providing information requested, and by keeping the OTech project manager / account manager informed of DR Service status and needs.

The OTech DR Coordinators contact Customers two (2) to three (3) months prior to scheduled DR exercises to participate. DR System Exercise dates are scheduled with Customers on a first-come-first-serve basis until the Customer limit for that exercise has been reached.

Customers must submit completed Mainframe Disaster Recovery Service Exercise Goals and Objectives Submittal Form and the OTech [Firewall Access List Form, \(OTech 363\)](#) forms at least 60 days prior to the scheduled DR exercise.

The table below indicates the availability of DR environments during the week of the DR exercise:

	OTech Recovery	Customer Exercise
Week	Monday	Tuesday - Friday

State holidays and mandated schedule alterations are observed and may impact staff availability.

Change Management Schedule

Technology change proposal / requests that impact the OTech DR Service follow the established OTech Change Management process.

1.7 MAINTENANCE

- Network DR Exercises are conducted during designated OTech maintenance and service windows.
- Mainframe DR Logical Partitions (LPARs), Storage, and Tape System patch levels match those of the production LPARs.

PART 2 PRODUCTS

2.1 PRODUCT

Products available on production LPARs are also available on the DR LPARs.

2.2 OPERATING SYSTEMS

The OTech provides this service for applications running on the mainframe, LPARs on MVS include:

Gold Camp	Vacaville
SY3	S1S1
SY4	S2S2
SY5	
SY8	
SOCP	

PART 3 EXECUTION

DASD data that is replicated to the alternate facility is used to create point-in-time copies of data for DR exercises in the event that the primary facility is no longer available. Tape data is cloned to the alternate facility and is included in the VTS service. The OTech manages contract and licensing for DR software.

The mainframe provides the capacity management tools with the capacity required for DR customers. The tools are utilized annually during an Integration Exercise and provide the storage and CPU capacity required in the event of a disaster.

During Network Exercises the DR systems will failover to the alternate facility using the production IP address. Processing / data adjustments applied to systems during the exercise will NOT be saved. To maintain data integrity, refrain from making adjustments to participating systems during the exercise.

The OTech may provide manual tapes to Customers at the alternate facility for use and then auto-loaded for verification.

3.1 SECURITY

The Customer Information Security Officer must approve the Firewall and Access List Request Form prior to modifications to the OTech firewall for DR exercises.

3.2 SUPPORT AVAILABILITY

The core business hours for DR technical support staff are Monday through Friday 0800 – 1700 during exercises, however, the OTech Service Desk is available to document incidents and Customer requests during DR exercises.

3.3 RESPONSIBILITIES

OTech Responsibilities

- Communicate regularly and frequently with Customers prior to, during and following DR exercises regarding test, incidents, and other request status
- Review, understand and approve DR Service Requests quotes and the Mainframe Disaster Recovery Service Exercise Goals and Objectives Submittal Form
- Review and approve DR storage and CPU capacity needs
- Initialize DR environment(s) in preparation for exercise(s) to verify connectivity and provide environment(s) to the Customer when appropriate
- Coordinate and initiate Network Exercises during designated mainframe maintenance windows
- Remove DR exercise configurations, such as firewall rules, post exercise
- VTS cleanup and exercise decommission
- Restore production system(s)
- Communicate OTech's response and/or resolution of incidents that may have occurred during the exercise and corresponding corrective actions to Customer(s)
- Conduct post-exercise meeting(s) with Customer(s) and OTech technicians to review exercise results and validate capacity

Customer Responsibilities include but are not limited to:

- Communicate regularly with OTech DR Coordinator(s) during scheduling, testing, post-exercise activities
- Submit completed Mainframe Disaster Recovery Service Exercise Goals and Objectives Submittal Form to designated OTech DR Coordinator
- Submit completed and approved OTech [Firewall Access List Form, \(OTech 363\)](#) via an OTech Service Request to participate in Integration and System Exercises
- Perform testing during DR Exercise(s)
- Verify data post Integration and System Exercises
- Verify access during Network Exercises

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END