
State of California

California Department of Technology

Office of Information Security

**Technology Recovery Plan
Instructions**

SIMM 5325-A

June 2018

REVISION HISTORY

REVISION	DATE OF RELEASE	OWNER	SUMMARY OF CHANGES
Initial Release	November 2009	Office of Information Security and Privacy Protection	
Minor Update	September 2013	California Information Security Office (CISO)	SIMM number change, change “agency” to “state entity”, change “disaster recovery” to “technology recovery”, and change references to other related SIMM documents.
Minor Update	November 2017	Office of Information Security (OIS)	Office name change
Minor Update	January 2018	Office of Information Security (OIS)	Office name change; removal of biennial submission option.
Minor Update	June 2018	Office of Information Security (OIS)	<u>Incorporate AB1841</u> : Inclusion of critical infrastructure controls and critical infrastructure information.

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INTRODUCTION AND APPLICABILITY

The requirements included in this document are applicable to all state entities that operate, manage, or use information technology to support business functions in the State of California. This document identifies sections that describe the minimum requirements that a state entity must include as components of its Technology Recovery Plan (TRP). The TRP is just one portion of contingency planning and business continuity. A complete business continuity plan includes emergency/disaster management, business resumption, and technology recovery plans.

As required in [State Administrative Manual \(SAM\) Section 5325 \(Business Continuity with Technology Recovery\)](#), each state entity is required to participate in business continuity and technology recovery planning processes to reduce the risks associated with unanticipated outages for their critical applications, systems and critical infrastructure (as the defined in SIMM 5300.4, Definitions). [SAM Section 5325.1 \(Technology Recovery Plan\)](#) requires each state entity to maintain an up-to-date and tested TRP. Additionally, as required in [SAM Section 5330.2](#), each year the state entity head shall submit a copy of its TRP, along with the SIMM 5325-B to the Office of Information Security (OIS) by the last business day of the state entity's scheduled reporting month, as outlined in the Security Compliance Reporting Schedule (SIMM 5330-C). If the state entity employs the services of a data center, it must also provide the data center with a copy of its TRP or subset of the relevant recovery information from the state entity's TRP. Finally, agencies must designate and provide contact information for their Technology Recovery Coordinator by completing the Designation Letter (SIMM 5330-A) and must be submitted to OIS by the last business day of the state entity's scheduled reporting month, as outlined in SIMM 5330-C, or as designee changes occur.

INSTRUCTIONS

These sections generally describe the minimum requirements for TRP development. If the state entity's TRP does not follow this format, then include a cover sheet to indicate where information on each component can be located.

SECTION 1: MINIMUM TRP REQUIREMENTS

1.0 STATE ENTITY ADMINISTRATIVE INFORMATION

- 1.1** An executive summary that serves as a guide to the structure of the plan, the procedures for updating (plan maintenance) and distributing the plan, and a description of the state entity's test and awareness programs.
- 1.2** A description of the state entity's mission, including the organizational, managerial and technical environments. This section should include organization charts, business functions, and a description of the state entity's information technology environment.
- 1.3** A list of state entities that are included in your recovery plan or entities supported by the organization (e.g., if your state entity is responsible for recovering any technology services for another state entity or provides information technology infrastructure or services to another organization, this information should be included in your entity's TRP).
- 1.4** A communication strategy noting information flow, decision making, and interrelationship among state entity core resources for response, recovery, and resumption.
- 1.5** A list of state agencies that provide services required in your recovery plan (i.e., State Controller's Office, Department of General Services, etc.)

2.0 CRITICAL BUSINESS FUNCTIONS/APPLICATIONS

- 2.1** A chart that lists and provides a description of critical business functions and their supporting applications, a designation of maximum acceptable outage timeframes for each application, and the recovery priorities.
- 2.2** Include information on the approach used to determine the recovery priorities (e.g., a business impact assessment or planning committee meeting).

3.0. CRITICAL INFRASTRUCTURE

- 3.1** A chart that lists and provides a description of critical infrastructure and their supporting information technology systems, controls and information, along with the designation of maximum acceptable outage timeframes for each critical infrastructure facility, system and information, and the recovery priorities as defined in SIMM 5300.4, definitions.
- 3.2** Describe the approach used to determine the recovery priorities (e.g., a business impact assessment or planning committee meeting).

4.0 RECOVERY STRATEGY

- 4.1** A description of the portions of the plan that will be implemented based on various levels of incident severity, for example, minor interruption of service, total service failure or loss of facility. Recovery strategies should be built to accommodate a worst case scenario, loss of service and facility. Plans for catastrophic or regional disasters must be addressed in the COOP/COG Plan.
- 4.2** A description of the recovery strategy that supports the state entity's critical business application, and critical infrastructure facilities, systems, controls and information priorities, including identification and evaluation of alternative recovery strategies. Will the state entity sustain critical business functions manually until the applications are recovered? Does the state entity contract with an outside source for recovery services? Will the state entity's information technology infrastructure be rebuilt at another location? Will a hot or cold site be used?
- 4.3** A description of how the incident response plan and strategy interplays with TRP and strategy to include when an incident is declared a disaster and the TRP procedures are initiated, and identification of individual(s) responsible for making the TRP activation decision.
- 4.4** Alternate recovery sites should be detailed within the plan that includes location, contact numbers and the type of facilities/equipment that will be available.

5.0 BACKUP AND OFFSITE STORAGE PROCEDURES

- 5.1** Backup and retention schedules and procedures that are critical to the recovery of a state entity's critical business applications and data, and critical infrastructure facilities, systems, controls and information.
- 5.2** The detailed procedures should include hardware, software (including version), data file back-up and retention schedules, off-site storage details, and appropriate contact and authority designation for personnel to retrieve media.

6.0 TECHNOLOGY RECOVERY PROCEDURES

- 6.1** This section systematically details the operational procedures that will allow recovery of the critical business applications and data, and critical infrastructure facilities, systems, controls and information to be achieved in a timely and orderly way.
- 6.2** Detailed recovery procedures (including manual processes) that support the state entity's recovery strategy and provide for the recovery of critical business applications within the established maximum acceptable outage time frames. Included would be the process for recovering the critical data-processing activities, application and data recovery, and the process for suspending non-critical activities and any relocation to an interim (back-up) processing site.
- 6.3** Detailed recovery procedures should be developed for the recovery of critical infrastructure systems, information and controls within the established maximum acceptable outage time frames.
- 6.4** The procedures should be detailed enough so that another trained information technology professional would be able to recover the state entity's infrastructure should those with primary responsibility be unavailable during the recovery process. Include a high-level network diagram that includes all critical applications.

7.0 DATA CENTER SERVICES

- 7.1** For agencies using the services of a data center including third party cloud services, a description of data center or cloud services that will be provided during recovery must be documented.
- 7.2** Include information on any interagency agreements, memorandums of understanding, or contracts.
- 7.3** If specific coordination of efforts with the data center is critical to the state entity's recovery, those procedures should be included within Section 5 above.

8.0 RESOURCE REQUIREMENTS

- 8.1** A comprehensive list of the equipment, space, telecommunication needs, data, software, hard-copy references (forms and procedures), and personnel necessary for recovery is essential.
- 8.2** Identification of resources that will be available at an alternate site should also be documented.

9.0 ASSIGNMENT OF RESPONSIBILITY

- 9.1** Distinct management and personnel assignment of responsibilities must be clearly designated within the technology recovery plan. Within procedures, job titles (rather than the names of individuals) should be used to assign responsibility as it lessens maintenance on procedures as personnel changes.

10.0 CONTACT INFORMATION

- 10.1** Separate contact lists should include the names of individuals, job title and contact information. If home phone numbers are included, the contact lists should be designated as confidential sections of the technology recovery plan.
- 10.2** Contact lists for vendors, other government entities, and outside resources critical to the state entity's recovery process.

11.0 TESTING

- 11.1** A description of the annual technology recovery test(s) performed, including how the test(s) were conducted, high level timeframes for each test, and the level of testing appropriate to the complexity of the system(s), program(s), process(es), or organization(s) being recovered. Examples of testing may include tabletop exercises, data recovery testing, forced testing (actual recovery due to an unplanned outage or failure), and/or full plan testing

SECTION 2: SUPPLEMENTAL TRP REQUIREMENTS

Agencies must also include the following three supplemental components from their continuity plan in their TRP.

1.0 DAMAGE RECOGNITION AND ASSESSMENT

- 1.1** This section details the emergency response actions necessary immediately following the disaster including: protecting the health and safety of all personnel; gaining immediate emergency assistance from state entity security, fire, police, hospitals, etc.; notifying state entity personnel that are members of an coordinating the response/recovery program, disseminating information and assembling personnel.
- 1.2** Damage assessment includes the procedures and personnel necessary to assess the damage and determine the level of severity of the incident, including the decision support mechanism required to declare a disaster versus a less severe interruption in processing capability.

2.0 MOBILIZATION OF PERSONNEL

- 2.1** This section details personnel and management responsibilities for putting the remainder of the plan into effect. Included may be team or individual assignments of responsibility by area of expertise such as:
 - 2.1.1** Technical personnel in the areas of systems software, telecommunications, and computer operations.
 - 2.1.2** User personnel and management to assist in resolution of programmatic issues.

- 2.1.3 Business services to support such tasks as arranging for office space, supplies, equipment, and processing of emergency contracts.
- 2.1.4 Personnel and communications staff to disseminate information regarding special work assignments, conditions, or locations.

3.0 PRIMARY SITE RESTORATION AND RELOCATION

- 3.1 This section includes detailed procedures to be followed after the interim processing situation has stabilized. The intent is to provide a framework for restoring full processing capability at a permanent location. Many of the same procedures will be used as were included during the moving of applications and systems to an interim site as described in the Recovery Plan Implementation procedures.

SECTION 3: APPENDICES

A variety of appendices may be attached to the TRP. Many of the plan sections described above will contain static procedures, while others may contain operational information that requires continual maintenance.

Some examples of appendix topics may include:

- Emergency action notification information containing the names and phone numbers of the various management, personnel and specialty team members;
- Damage assessment or disaster classification forms intended to function as a guide to supplement/support the management decision process;
- Profiles of critical applications;
- State entity hardware and system software inventory; and
- Any data communications network routing information necessary for providing interim processing capability and restoring full processing capacity.