Florida State University
Disaster Recovery & Business Continuity Planning
IT Professionals Meeting
June 1, 2017
Key Readiness Questions

• Has your department identified the assets that are most critical to your operations?
  – Assets may include systems, data, information, samples, facilities.

• What departmental assets, if any, need to be available or recovered during a disaster?

• Does your department have a documented plan to ensure that its critical assets are appropriately managed during a disaster?
  – Do you practice your plan?
What is an (IT) Disaster?

- The unplanned and significant interruption of normal business processes resulting from the failure or disruption of the IT infrastructure or IT facilities such processes rely on.

- Common Types of Disasters

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Power outages</td>
<td>28%</td>
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<tr>
<td>Storm Damage</td>
<td>12%</td>
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<tr>
<td>Floods</td>
<td>10%</td>
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<tr>
<td>Hardware Error</td>
<td>8%</td>
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<tr>
<td>Physical Attack</td>
<td>7%</td>
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<tr>
<td>Hurricanes</td>
<td>6%</td>
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<tr>
<td>Fires</td>
<td>6%</td>
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<tr>
<td>Software Error</td>
<td>5%</td>
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<tr>
<td>Power surge/spike</td>
<td>5%</td>
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<tr>
<td>Earthquake</td>
<td>5%</td>
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Source: Healthcare Information and Management Systems (himss.org)
A Few Definitions

• **Business Continuity (BC):** Addresses the academic, research and business activities of the University. This includes departmental plans, functional areas and critical business processes.
  
  – Business continuity planning often addresses a larger set of issues than DR planning.
  
  – **Recovery Point Objectives (RPO).** RPO are defined as the maximum time/period in which data is at risk of being lost due to a major incident.

• **Disaster Recovery (DR):** IT activities to enable recovery to an acceptable level of performance after a disaster occurs.
  
  – DR ‘needs’ guidance from BC to establish priorities and define scope.
  
  – **Recovery Time Objectives (RTO).** RTO are defined as the duration of time within which a system/business process must be restored to an acceptable level of service to avoid unacceptable consequences after a disruption in business continuity has occurred.
DR-BC Cost Benefit Analysis

Chart adapted from CANHEIT 2012 Presentation
Develop an IT DR Plan

• Form a planning team made up of business/academic and IT personnel.

• Identify and prioritize the critical (essential) business processes and assets that need to be recovered or managed during a disaster.
  – Understand the impact of system downtime on essential business functions.

• Determine system/asset Recovery Point & Recovery Time Objectives.

• Understand who is responsible for recovery.
  – Responsibilities include coordination, implementation, and communication.

• Document the IT DR plan and include it as a component of the department’s overall business continuity plan.
FSU Disaster Recovery Coordination

• Enterprise Systems managed by ITS are addressed in the ITS Continuity of Operations Plan (COOP).
  – The COOP is currently being reviewed and updated.
  – Departments are responsible for Non-Enterprise Systems.

• University-wide DR-BC activities are coordinated under the direction of the FSU Emergency Management center. (FSU PD)
  – The University maintains a Comprehensive Emergency Management Plan (CEMP) which serves as the official emergency operations plan of the University. For additional information, refer to:
    – [https://emergency.fsu.edu/cemp/tableofcontents](https://emergency.fsu.edu/cemp/tableofcontents)
    – [https://emergency.fsu.edu/cemp/hazardspecificannexes](https://emergency.fsu.edu/cemp/hazardspecificannexes)
  – Emergency Management can assist on-campus units with scheduling short duration tabletop exercises or drills.
How to Get Started

• Identify single points of failure that could affect department systems/assets during a disaster.
• Plan for and perform preventive maintenance on backup generators, UPS, cooling systems, etc.
  – Identify secure parking locations for department vehicles.
  – Create a checklist to ensure maintenance is completed.
• Understand disaster related risks to departmental IT facilities
  – Shutdown non-essential systems in the face of an approaching disaster, such as a hurricane.
  – Ensure fuel tanks have been filled.
• Develop a communications call tree for department personnel required to participate in disaster response or recovery activities.
• Ensure that system backups are current and available.
FEMA Online Training

FEMA provides comprehensive disaster recovery training materials, many of which are available at no cost. *A few of the core courses are listed here.*

We recommend that Florida State University department IT DR personnel complete the following online training courses as time allows:


  [https://training.fema.gov/is/courseoverview.aspx?code=IS-100.b](https://training.fema.gov/is/courseoverview.aspx?code=IS-100.b)

- FEMA – Continuity of Operations Awareness; Introduction to Continuity of Operations
  [https://emilms.fema.gov/IS546.a/index.htm](https://emilms.fema.gov/IS546.a/index.htm)
  [https://emilms.fema.gov/IS547A/index.htm](https://emilms.fema.gov/IS547A/index.htm)
Other Useful DR Resources

- Florida Division of Emergency Management
  - [http://www.floridadisaster.org](http://www.floridadisaster.org)

- NIST Computer Security Resource Center
  - [http://csrc.nist.gov/publications/PubsSPs.html](http://csrc.nist.gov/publications/PubsSPs.html)

- NIST SP 800-34 Rev. 1: Contingency Planning Guide for Federal Information Systems

- NIST SP 800-84: Guide to Test, Training, and Exercise Programs for IT Plans and Capabilities
Hurricane Season June 1 – Nov 30th

Next Steps

• Understand who is responsible for coordinating and implementing your department’s disaster response.

• Develop an IT DR plan addressing departmental assets that need to be recovered or managed.
  – Practice Your Plan!

• Understand the FSU CEMP and key university contacts responsible for disaster response.

• Complete the online FEMA training.
Joseph Brigham, Disaster Recovery Program Coordinator

joseph.brigham@fsu.edu

(850)645-3601