

Managing the Chaos

- ▶ Setting up your Disaster Recovery Plan

It's a fact: cyber attacks continue to rise.

- ▶ 122 records are stolen every **second**.
- ▶ Less than **5%** of those records will be encrypted.
- ▶ A company is hit with ransomware every **60** seconds.
- ▶ For a site outages, **67%** of companies estimate a loss of over **\$20k+** for every day of downtime.



We need to do more than defend.

We need to be prepared.

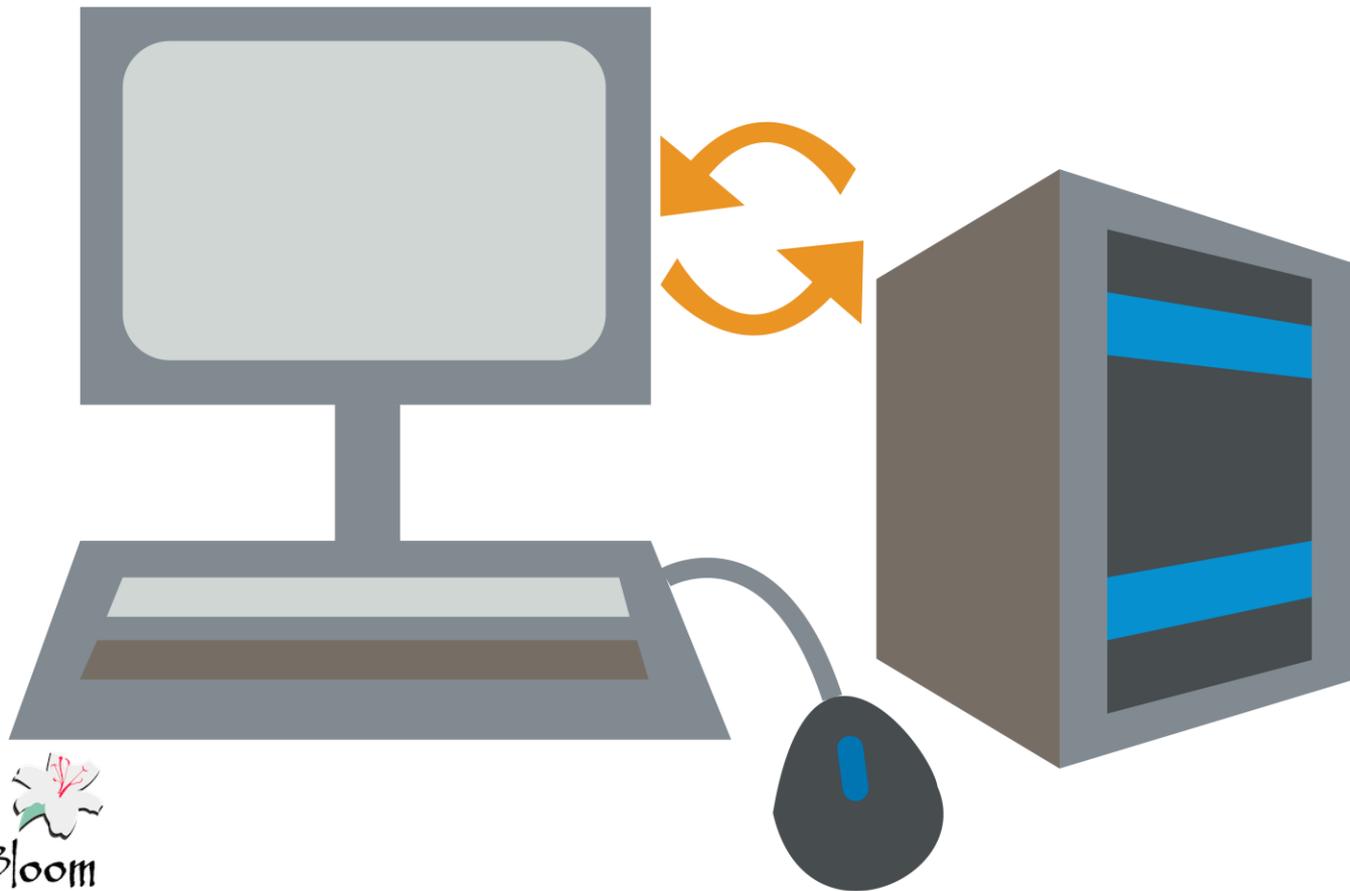




Enter the Disaster Recovery Plan



What We Often Think of as Disaster Recovery



What is a Disaster Recovery Plan (DRP)?

- ▶ **Documented process** for protection and recovery.
- ▶ **Prepare** how to put out the fires.
- ▶ **Minimize** damage when you get hit.
- ▶ Get back up and running **faster**.



Elements of A Disaster Recovery Plan





Gather Intelligence

What do we have, what are our safeguards
and where's that Bat-signal?



Information Auditing and Data Mapping

- ▶ Learn the ‘what, where, how, who and why’ of your data.
- ▶ Involve stakeholders from all affected units.
- ▶ You can’t protect what you don’t know exists.
- ▶ Visualize the data’s pathways, partnerships, and processes.



Identify Existing Safeguards

- ▶ What do we have to protect ourselves?

Do we have:

- ▶ Administrative safeguards?
- ▶ Technical safeguards?
- ▶ Physical safeguards?



Important Contacts

- ▶ Who is in charge of responding to the crisis?
- ▶ Who needs to be contacted in the event of an attack or disaster?
- ▶ Who can do repairs, or supply needed materials?
- ▶ Who will speak for the company to victims, clients, employees or the press?
- ▶ Who can you call for help?





Determine Threat Levels



How Do We Find Our Organizational Threat Level?

Tools of the trade:

- ▶ Risk Assessment.
- ▶ Business Impact Analysis.
- ▶ Privacy Impact Assessment (if collecting personal information).



Risk Assessment vs. Business Impact Analysis

Risk Assessment

- ▶ Threats & vulnerabilities.
- ▶ The likelihood and impact of an attack.
- ▶ What do we **value** most and how do we **reduce risk**?

Business Impact Analysis

- ▶ The effect of interruptions.
- ▶ The operational and financial impacts from major disruptions?
- ▶ How **fast** do you need to recover, and what can you **afford**?



Problem Classification

Establish an internal code for identifying the threat level.

Problem	Signs/Symptoms	Risk Level	Time Objective	Class
Ransomware Bad Bunny	Message on screen, data locked	High. Infectious to rest of network.	1 hour	Class A
Database C Downtime	Staff unable to log in.	Low. Rarely used resource.	1/2 day	Class C





Identify Strategies

Pulling it all together



Problem Solving: Tactical Response and Recovery

- ▶ What response options have been identified?
- ▶ Ways you can speed up recovery?
- ▶ Map it out:



Communications and Public Relations

- ▶ A crisis communication strategy is a must!

Should include:

- ▷ Holding statements & social media response.
 - ▷ Is there a time requirement for reporting?
 - ▷ Who does the talking? Who *doesn't*?
-
- ▶ Consider strategies for a social media PR crisis in your disaster recovery plan.



Plan: The Codified, Selected Strategy

- ▶ **Make the call:** which strategies and tactics will be used in an emergency.
- ▶ Document design: consider checklists, summaries, or spreadsheets.
- ▶ How does the information get found **fast**?



The Importance of Triage on the Cyber Attack Battlefield

- ▶ **Triage**: the ability to sort problems and allocate limited resources based on need or benefit.
- ▶ Determining the **order** of problem response.
- ▶ Komand Blog Method:



Drills and Updates

- ▶ Update your Disaster Recovery Plan on a regular basis.
- ▶ Rule of I.T: don't forget to test!
- ▶ Training: does everyone understand their role?



Need More Help?

Existing Standards and Options

- ▶ *U.S. National Institute:*
NIST SP 800-34
- ▶ *International Organization for Standardization:*
ISO/IEC 24762
- ▶ *British Standard Institute:* BS 25777
- ▶ Disaster Recovery Services are available commercially.
- ▶ Be aware: does the DRS cover disaster relief, or data recovery?
- ▶ Consider a needs analysis before you outsource.



Contact



bloom@victoriamcintosh



@vmcintosh



www.victoriamcintosh.com

