

Piper Technology Hurricane Preparation Guidelines and Policies

Objective

Our objective is to ensure our clients are appropriately prepared in case a hurricane affects the area. Damage to computer equipment can be caused by rain, wind or debris with a major cause of damage being power spikes, extended power outages or power outages in rapid succession. Taking the appropriate precautions can reduce or eliminate damage to computer hardware and software.

Preparation

Piper Technology recommends the following steps to prepare equipment and software in case of a hurricane threat:

Hurricane Watch (36 - 24 hours prior to landfall)

During the Hurricane Watch period, preparations should begin on non-core equipment and infrastructure including all PCs, printers and monitors. All loose software manuals and CDs should be stored in a closet away from windows, preferably stored in a sealed, weatherproof container. It is recommended a final backup of data be run before servers are shut down. Backups can take many hours to run and therefore, preparations for final backups should start at this point.

Hurricane Warning (24 hours prior to landfall and beyond)

When the hurricane warning is issued, indicating that a hurricane strike is imminent, preparations to core equipment including servers, routers, switches, phone systems and firewalls should take place. The final or latest backup should be stored in a safe, sent for offsite storage or taken offsite by an employee. It is also recommended that multiple tapes be taken offsite, preferably by multiple persons.

Protection of Computer and Electronic Equipment

The following guidelines should be followed in order to protect computer equipment.

- Equipment close to windows should be moved to a safer location, usually a closet or an inside corner of a room.
- All computer equipment including PCs, servers, monitors, printers, routers, switches, phones and phone systems should be shut down and unplugged. Uninterruptible power supplies (UPS) should be unplugged and turned off. All equipment should be double bagged and sealed to protect from water damage in case a window breaks or the roof leaks.

After the Storm

Even after the storm passes, damage to equipment can still occur. This damage is usually caused by post storm power surges or outages while the power company begins to restore power to the affected areas. The following guidelines should be followed in restoring computer and other systems to normal operations after the storm.

- Physical recovery can begin once the damage to property has been assessed. This will include removal of bags on computer equipment and moving of equipment back to its original location. During this phase, any equipment that may have been exposed to water or damaged will have to be more closely inspected to determine whether it needs to be replaced.
- Equipment should remain powered off and unplugged from the electrical outlet until the electrical power in the area has stabilized. **Failure to follow these procedures can cause extensive**

damage to equipment from power surges and repeated or rapid succession power outages.

- Once the all clear is received from the power company. The core systems and infrastructure should be restored first. These include routers, firewalls, switches, servers and telephone systems.
- Once the core systems have be restored and tested, the recovery can begin on the non-core systems including PCs, printers and telephone sets.

Piper's Role in Helping you Prepare for a Hurricane

As your technology provider, Piper Technology can help you prepare for a hurricane. We can offer you the above mentioned services. It is Piper's recommendation that you permit us to handle preparation of your core systems. This will prevent unnecessary down time once the storm passes and/or reduce damage to expensive core equipment.

Even though we offer services to protect non-core systems including PCs, monitors, printers and telephone sets, the client may choose to handle that preparation themselves to reduce costs. Should the client decide to handle preparations on their own, it is recommended the above guidelines are followed.

If you decide to use our services to help you weather the storm, please note the following policies:

1. Please advise Piper as soon as possible of your intent to use our services to prepare for a hurricane.
2. It is Piper's policy not to perform any work past the **first 6 hours** after a Hurricane Warning is issued in order to protect our field personnel and allow them enough time to undertake their personal preparations. Thus, it is important that you advise us early of your intent to use our services for any part of the preparation.

In any case, **Piper will discontinue operations 6 hours** after a Hurricane Warning is issued for the area. Our technical support line 305-665-6051 option 1 will remain operational as long as possible under the conditions, but calls received after the above deadline may not be answered until the storm passes. Once the storm passes and the all clear is given, support to our clients will resume as soon as possible given the conditions of the area after the storm.