Backups Primer

Backup Primer

In today's age of continuously changing technology, backing up your data is more important now than it has ever been. Although keeping your site relevant and up-to-date is extremely important, ensuring that you have backups of this important data is of equal importance. Since your website is one of your business's most valuable assets, (often representing significant amounts of time and money), it is crucial to maintain copies of your website and all other mission-critical data. Here at HostDime, we want to ensure that you always have a duplicate of your valuable data in the event that you experience a loss of your primary copy. This article is an overview of why it is absolutely necessary to maintain multiple, up to date backups of your data, and how you can ensure they will be available in the event they are ever needed for disaster recovery.

What are backups?

Backups are packaged files of your account(s) that contain everything that is in the account. This includes emails, databases, redirects/forwarders, and all the files and content that you have currently within your account. For cPanel packages, "backups" refers specifically to full backups of cPanel accounts created through cPanel, utilizing WHM's "Backup Configuration" system, cPanel's "Backups" or "Backup Wizard" tool, or the "/scripts/packagacct" command-line script. For Plesk packages, "backups" refers specifically to backups created through Plesk's backup utilities. Backups of loose files, directories, or databases are not considered backups for the purposes of this article.

Why are backups necessary?

There are many reasons for needing a backup of your website:

- **Human Error -** This is when someone accidentally deletes, overwrites, or loses something that you needed on your site.

- **Updates gone wrong** - An example of this is when a content management system (such as WordPress), a plugin, or a theme gets updated and causes unexpected problems.

- **Emergency Maintenance** - "Emergency maintenance" can be required for an number of different events, but the most traditional cause is from hardware failure. Unfortunately, all hardware dies eventually and while we make every effort to replace failing hardware before it interferes with normal server operation, hardware can (and does) fail spontaneously at times, often taking crucial data with it.

- **Malicious attacks** - Hackers and crackers are sadly more prolific than ever. No security system is 100% hacker-proof, and an attack often results in corrupted, defaced, or destroyed data. Often, the only option is to restore a backup of the site from before the attack took place.

- **Development** - When making changes or developing a new version of your site, you will want to have backups of the major changes along the way. This way, you have a known working version of the site to fall back on in case you run into any issues during development.

Who is responsible for creating, maintaining, and managing these backups?

It is every client's responsibility to create and manage their own backups. As no backup method is 100% fail-proof, **HostDime does not guarantee any backups**. Please refer to our Service Level Agreement for our full legal policy on this.

How can HostDime help me with creating, managing, and/or restoring my backups?

Due to the nature of hosting, our managed support does not guarantee that we will be able to provide you with valid backups, and the creation, managing, and restoration of backups is the responsibility of the client. Depending on the specific package you have with us however, we do offer certain courtesies:

- **Business/Reseller Hosting Packages** - On shared environments (business hosting/reseller packages), we take daily and weekly backups of all accounts on the server and will make every effort to restore these for you in the event that you need them. As with all backups, we do not guarantee that these backups will be available or contain the specific information you require, and we are not liable for any loss of data. **Please be aware that if you do need us to restore one of these backups that there is a fee to do so**. If you can provide us with a backup that you personally created, we will be happy to restore that backup for no charge. We will also be happy to answer any questions you have on how to manage your backups.

- **VPS and Dedicated Server Packages** - By default, our VPS and Dedicated Server packages are not configured to take backups of any kind, and we encourage clients on these packages to configure their backup system at their earliest convenience or risk being without backups. While we do do not guarantee any backups or backup configurations, we will happily assist you with configuring your backup system upon request. We will also be happy to answer any questions you have on how to take your own backups, along with any questions you may have on configuring your backup system.

- **Un-Managed Servers** - Our support is strictly limited to ensuring that access to the server is possible, and that there are not any hardware issues with your server. We do not provide any assistance with backup system configuration. If you are in immediate need of assistance with backup system configurations, we do offer the ability to upgrade to a managed package, or we can provide support for basic managed clients at our standard per-hour administrative rates.

What are HostDime's recommendations for backup management?

NOTE: The following recommendations are provided as general suggestions and should be carefully considered against you and your organizations particular needs. Different clients have different needs when it comes to backups, and you are the only one who can decide what the best backup system for your needs is. Generally speaking, however, we recommend the "3-2-1" backup strategy as a jumping-off point:

At least **3** copies of backups,
Stored on at least **2** different devices (e.g. your server and your local computer, or a remote storage package and your local computer),
With at least **1** of those locations being off-site (e.g. your local computer).

No backup plan is foolproof of course, but the above strategy has been recommended by many organizations over the years and we believe it is a good starting strategy for our clients.

- **Business Hosting Packages** - We recommend any client on a business hosting package personally backup their data on a regular basis. Per our Acceptable Use Policy, we do not allow the storage of any backups on the server your business hosting package is hosted on. You should always have a copy of your backups stored somewhere off-server, whether on your local machine, one of our remote storage packages, or even a dedicated backup server. This will help ensure that if something happens on the server where the content is hosted, you will always have a recent backup of your own that is unaffected. These types of backups should be taken at *minimum* monthly and *ideally* weekly and daily, retaining at least 1 copy of each so that if any data is lost it is only a few days at most instead of months or more. There are many options to taking your own backups, but the simplest method is to use cPanel's "Backup" module, directions for which can be found in our resource article "How to Create Backups on a Business Hosting Package". If you use this method you will want to ensure that you download the resulting backup from the server to your local computer to avoid any issues with Data Warehousing. If you can not store your backups on your local computer due to space issues, you can always store them on one of our Remote Storage packages.

- **Reseller Hosting Packages** - The same recommendations for our business hosting packages apply to our reseller hosting packages. If you are a reseller, we recommend providing the above information under "business hosting package" to your clients to ensure they are able to keep their own backups. For more detailed information regarding your backup options as a reseller, please consult our resource article "How to Manage Backups for Reseller Packages"

- **VPS Packages** - The same recommendations for our Business/Reseller Hosting Packages apply to our VPS packages, with some minor exceptions. With VPS packages, you get the advantage of WHM's "Backup Configuration" module, which lets you configure cPanel to automatically run backups on a schedule and retain them as you desire (information on configuring backups through WHM can be found in our resource article "How to Configure Backups on a VPS Package"). VPS packages are not subject to our data warehousing/backup storage policies, and you can store backups on the VPS as you see fit. You will still want to keep off-site backups as well, however, for the same reasons mentioned previously. **Please be aware that VPS packages have smaller amounts of disk space by nature, which often limits your backup configuration and can make storing backups on your VPS difficult if not impossible.** For these reasons, we highly recommend the usage of a Remote Storage package, in addition to keeping local backups.

- **Dedicated Servers** - The same recommendations for our Business/Reseller Hosting Packages apply to our Dedicated Server packages as well, with some exceptions. As with VPS packages, you get the advantage of WHM's "Backup Configuration" module, which lets you configure cPanel to automatically run backups on a schedule and retain them as you desire (information on configuring backups through WHM can be found in our resource article "How to Configure Backups on a Dedicated Server"). For easy management of backups, many clients utilize a separate hard drive or even a RAID (Redundant Array of Independent Disks) to store backups on the server for easy access. It is important to note that clients using this setup should absolutely still maintain a copy of backups off-site to avoid putting all of their data on one device.

What happens when I need a backup restored?

In order for us to restore your backup as quickly and efficiently as possible, please ensure you provide any special information regarding the account's configuration if it differs at all from the standard configuration. An example of this would be dedicated IP addresses. By providing this information with the restoration request, we can better prevent downtime and ensure that you are up and running again as quickly as possible.

If you need to have a backup restored, you can always contact us via phone or live chat to get the process started, at which time your request will be logged in a ticket for documentation purposes to ensure we provide you with the best possible support. **Please be aware that to provide you with the highest quality support, we do not process restores over the phone or over live chat.** The actual restore process depends on a number of factors, such as how large the backup is, load, and the server's hardware. For backups under 2 GB this is the process we go through to restore your account:

1. We will confirm which account is being restored and confirm which backup we are restoring the account from.

2. If the backup in question is uncompressed, we will package the backup. This step can take a while if the account backup is large, as it needs to compress all the files into a backup format that we can restore.

3. We will package up the account in it's current state. This is to ensure that, should the contents of the backup you want restored are not what you want, we can restore the account to before we restored the backup. **NOTE** - We cannot guarantee that accounts will be restored to exactly as they were before we attempted restoration, as we cannot guarantee any backups.

4. We will remove the account from the server. This is so that we can restore the account from the backup you are requesting us to restore from.

5. We restore the packaged backup. This is the final step and once this finishes the restore is complete.

If your account is larger than 2 GB, we follow the same process, but instead of packaging and restoring the entire backup at once, we restore only the account data without the home directory, which is synced from the backup to the restored account after we have restored the account data.

What if I have additional questions about backups?

As always, you can contact us at anytime, 24/7/365.

Thank you for reading, and happy backing up!