

# The backups\_create\_metadata Script

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## Overview

The `/usr/local/cpanel/scripts/backups_create_metadata` script allows a user to create [metadata files](#) manually for all account backup types.

### Note:

The script will generate metadata for all directories under the `/home/username` directory, except for the `/mail` and `/.cpanel` directories.

## The backups\_create\_metadata script

To use the `/usr/local/cpanel/scripts/backups_create_metadata` script, run the following command as the `root` user:

```
/usr/local/cpanel/scripts/backups_create_metadata [arguments] [inputs]
```

## Arguments and inputs

### Note:

You **must** provide at least one option to execute this script.

Use the following arguments for the `/usr/local/cpanel/scripts/backups_create_metadata` script:

Arguments	Description	Input values	Example
<code>--all</code>	<p>Creates metadata files for all backups.</p> <div data-bbox="472 1530 786 1669"><p><b>Note:</b> You <b>cannot</b> combine the <code>--all</code> argument with other arguments.</p></div>	None.	<code>/scripts/backups_create_metadata --all</code>
<code>--backup=[backup filename]</code>	<p>Creates metadata files for the specified backup file.</p> <p>Use this argument with the <code>--user</code> argument to create metadata for the specified user.</p>	The backup file's name.	<code>/scripts/backups_create_metadata --backup=monthly/YYYY-DD-MM</code>
<code>--user=[user]</code>	Creates metadata files for the specified user.	The cPanel account's username.	<code>/scripts/backups_create_metadata --user=abc1</code>

<code>--vacuum</code>	Defragments the metadata SQL database and frees unused space.  <b>Notes:</b> <ul style="list-style-type: none"> <li>The <code>--vacuum</code> argument will only free space if the database has unused space. If you have already used the <code>--vacuum</code> argument to free database space, you cannot use it again to clear additional space.</li> <li>You <b>cannot</b> combine the <code>--vacuum</code> argument with other arguments.</li> </ul>	None.	<code>/scripts/backups_create_metadata --vacuum</code>
<code>--schedule_rebuild</code>	Same as the <code>--all</code> argument, but runs the script in the background.	None.	<code>/scripts/backups_create_metadata --schedule_rebuild</code>

## Metadata for backups version 3.1

Every time that cPanel & WHM creates a backup, it creates metadata for that backup. The system stores that metadata as entries in a `username.db` database (where `username` represents the cPanel account's username). Then, the system saves the database to the `.meta` directory under your configured backup directory. The metadata databases store the indexed information of their related backups. These smaller database entries provide a faster information-retrieval method than their source backup.

### Metadata database tables

The following tables describe the fields of these smaller databases, the `backup_paths` table, the `backups` table, the `file_changes` table, the `metadata` table, and the `seen_files` table.

#### The `backup_paths` table

The `backup_paths` table lists the backup files' paths.

Field	Type	Description	Possible values	Example
<code>backup_path</code>	<i>string</i>	The backup files's filepath, relative to the configured backup directory.	A string value.	<code>/backup/2018-04-12/accounts</code>
<code>backup_id</code>	<i>integer</i>	The backup file's identification number.	A positive integer.  This value references the <code>backup_id</code> value in the <code>backups</code> table.	1

#### The `backups` table

The `backups` table lists the backup files on the disk.

Field	Type	Description	Possible values	Example
<code>backup_id</code>	<i>integer</i>	The backup file's identification number.	An automatically-incrementing positive integer.	1
<code>timestamp</code>	<i>timestamp</i>	The backup files's creation date in <a href="#">Universal Time Coordinated (UTC)</a> format.	An integer.	1523642274

does_exist	<i>Boolean</i>	Whether the backup file exists.	<ul style="list-style-type: none"> <li>• 1 — Exists.</li> <li>• 0 — Does <b>not</b> exist.</li> </ul>	1
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## The file\_changes table

The file\_changes table lists backup file changes when any of the following actions occur:

- The first time the system backs up the file.
- The user modifies the file.
- The user removes the file.

Field	Type	Description	Possible values	Example
seen_files_id	<i>integer</i>	The filepath's identification number.	A positive integer.  This value references the file_id value in the seen_files table.	1
backup_id	<i>integer</i>	The backup file's identification number.	A positive integer.  This value references the backup_id value in the backups table.	1
size	<i>integer</i>	The backup file's size, in bytes.	<ul style="list-style-type: none"> <li>• A file size value displays the file's size.</li> <li>• A directory or a symlink displays a 0 file size.</li> </ul>	660
mtime	<i>integer</i>	The date when the user last modified the file, in UTC format.	An integer.	1523642274
operation	<i>integer</i>	The change type.	<ul style="list-style-type: none"> <li>• 0 — The user created the backup file.</li> <li>• 1 — The user changed the file.</li> <li>• 2 — The user removed the file.</li> </ul>	0
type	<i>integer</i>	The backup file's type.	<ul style="list-style-type: none"> <li>• 0 — A file.</li> <li>• 1 — A directory.</li> <li>• 2 — A symlink.</li> </ul>	0

## The metadata table

This table stores metadata keys and values.

Field	Type	Description	Possible values	Example
key	<i>string</i>	The metadata code type.	schema_version — The metadata schema's version.	schema_version
value	<i>string</i>	The metadata code's version number.	A string value.	3.1

## The seen\_files table

This table stores filenames.

Field	Type	Description	Possible values	Example
file_id	<i>integer</i>	The file's identification number.	An automatically-incrementing positive integer.	1
path	<i>string</i>	The file's filepath, relative to the /home/username directory.	A string value.	/public_html/

## The `.master.meta` file

The `.master.meta` file stores relevant data about cPanel user backups that is **not** stored in the metadata database tables. This information, unlike the information in the tables, doesn't change.

Every `accounts` directory inside the daily, weekly, and monthly backup directories contains a `.master.meta` file.

## Additional documentation

Suggested documentation For cPanel users For WHM users For developers

- [The restorepkg Script](#)
- [The backups\\_create\\_metadata Script](#)
- [Backup Tarball Contents](#)
- [System Backups](#)
- [The backups\\_list\\_user\\_files Script](#)
  
- [File Restoration for cPanel](#)
- [Backup for cPanel](#)
- [Backup Wizard](#)
  
- [The restorepkg Script](#)
- [The backups\\_create\\_metadata Script](#)
- [Backup Tarball Contents](#)
- [System Backups](#)
- [The backups\\_list\\_user\\_files Script](#)
  
- [WHM API 1 Functions - backup\\_destination\\_add](#)
- [WHM API 1 Functions - backup\\_destination\\_get](#)
- [WHM API 1 Functions - backup\\_destination\\_list](#)
- [WHM API 1 Functions - backup\\_destination\\_set](#)
- [WHM API 1 Functions - backup\\_set\\_list\\_combined](#)