

# Transfer Tool

(WHM >> Home >> Transfers >> Transfer Tool)

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## Overview

This interface copies multiple accounts from a remote server to your cPanel & WHM server. To transfer accounts, you **must** obtain the following:

- SSH access to the remote server.
- root-level privileges with the `su` or `sudo` commands.

### Warnings:

- Do **not** shut down or restart any processes on either server during the transfer and restoration process.
- Do **not** start a transfer during a system update (`upcp`) or start a system update during a transfer. The system update will fail.
- Transfers **to** a server configured in the same DNS cluster **overwrite** that domain's existing zone files. The system replaces these files with the transferred server's zone files when:
  - The destination server resides in the same cluster.
  - The DNS role is set to the *Synchronized Changes* option.
- For more information about DNS clusters, read our [DNS Cluster](#) documentation.
- The *Transfer Tool* feature does **not** transfer the Domain Name System (DNS) zone templates. If custom DNS zone templates exist on the remote server, the system ignores these zone templates when it recreates the account on the destination server. For more information, read the [transfer process](#) section below.
- Account transfers process AAAA records differently than A records.
  - The target server will **not** alter AAAA records that point to servers other than the source server or servers related to the source.
  - target server without IPv6 enabled will strip locally-managed AAAA records that pointed to the source server.
  - A target server with IPv6 enabled will point any source-related AAAA record to the account's shared IPv6 address in the domain's locally-managed zone file.
- In cPanel & WHM version 70 and later, the server disregards the *Restrict document roots to public\_html* Tweak Setting option during server transfers. The transfer tool retains any pre-transfer `public_html/` directory structures, even those that place addon and subdomains document roots outside of the primary website's document root. However, after the transfer, addon and subdomains that the restored user creates will adhere to this setting.
- **Do not** use the `skip-name-resolve` option in your server's MySQL configuration. This option can cause problems on **any** server. It will create **more** problems on remote MySQL servers during account transfers.

### Notes:

- The *Transfer Tool* feature requires MySQL® or a MySQL-compatible database (for example, MariaDB) on the remote server to function properly.
- If you experience problems with session timeouts, increase the number of seconds in the *Number of seconds an SSH connection related to an account transfer may be inactive before timing out* setting in the *System* section of WHM's [Tweak Settings](#) interface (WHM >> Home >> Server Configuration >> Tweak Settings).
- If one of the accounts that you wish to transfer uses Microsoft® FrontPage® on the remote server, we **strongly** recommend that you disable FrontPage for that account **before** you attempt to transfer the account. cPanel & WHM versions 11.46 and later do **not** support FrontPage, and the restoration process does **not** restore FrontPage-specific files and directories.

- To transfer IP addresses from one server to another, use WHM's [IP Migration Wizard](#) interface (*WHM >> Home >> IP Function >> IP Migration Wizard*).

## Important notes about account transfers from Plesk

The system will **not** transfer any email addresses from Plesk to cPanel & WHM that contain a plus sign (+) in the email username.

To transfer accounts from Plesk, first change any forwarded domains to physical hosting accounts. To do this, run the following command as the root user:

```
/usr/local/psa/bin/domain --update example.com -hst_type phys -login "example" -hosting true -ip 127.0.0.1 -passwd "12345luggage"
```

- `example.com` represents the forwarding domain.
- `example` represents the new account's username.
- `127.0.0.1` represents the new account's IP address.
- `12345luggage` represents the new account's password.

If you need to convert several forwarding domains into hosting accounts, [open a support ticket](#) and our migration team will contact you.

## How to transfer and restore multiple accounts

### Remote server information

This section of the *Transfer Tool* interface allows you to specify information about the remote server (the server from which to transfer accounts).

1. In the *Remote Server Address* text box, enter an IP address or a Fully Qualified Domain Name (FQDN).
  - **IP address example** — `127.0.0.1`
  - **FQDN example** — `host.example.com`

**Note:**

In this case, the FQDN does **not** require the trailing dot.

2. In the *Remote SSH port* text box, specify the port to use.

**Note:**

The default value for SSH is port 22.

### Authentication

In this section of the *Transfer Tool* interface, specify the authentication method with which to log in to the remote server.

To specify an authentication method, perform the following steps:

1. Select whether to log in as the `root` user or with a specific username.

**Note:**

If the `PermitRootLogin` value is `no` in the `sshd_config` file on the remote server, you **must** log in as a user other than the `root` user and then escalate to the `root` user.

2. If you selected *User for Login*, perform the following actions:
  - Enter the remote account's username in the *Username* text box.
  - Enter the remote account's password in the *Password* text box.
3. Use the *Authentication Method* menu to specify whether to use a password or an SSH public key to authenticate to the remote server.
  - If you select *Password*, enter the password for the account in the *Password* text box.
  - If you select *SSH Public Key*, select the key to use during authentication. Make certain that you installed the appropriate key in WHM's [Manage root's SSH Keys](#) interface (*WHM >> Home >> Security >> Manage root's SSH Keys*).

**Note:**

If you encrypted your account's SSH public key, enter the *SSH Key Passphrase*.

- If you select *User* under *Login*, select a root escalation method under the *Root Escalation Method* heading.
  - If you select *su* for the *Root Escalation Method*, enter the `root` password in the *Root Password* text box.

## Security

In this section of the *Transfer Tool* interface, select whether to use the *Restricted Restore* feature or copy reseller privileges.

**Notes:**

The *Restricted Restore* feature performs additional security checks on the backup file in order to mitigate the risk of transfers from unfamiliar sources. An issue may exist with a component of the backup file (for example, a compromised MySQL grant table or a symbolic link attack). If such an issue exists, the system will not restore that portion of the backup and will add a warning to the log file.

- The *Restricted Restore* feature is **Experimental**. Do **not** consider it an effective security control at this time. The behavior of this feature may change in a future release of cPanel & WHM. Exercise **extreme caution** when you use this feature.
- If you do not trust the source of the account backup with `root` access to your server, use the *Restricted Restore* feature to protect your server.
- If you wish to use the *Restricted Restore* feature to restore an account that owns PostgreSQL® databases, the target server **must** use PostgreSQL version 8.4 or newer .
- The *Restricted Restore* feature only allows restored accounts to use `noshell` or `jailshell`. If the restored account uses another shell, the system sets the account to use `noshell`. For more information, read our [VirtFS \(Jailed Shell\)](#) documentation .

## Advanced

This section of the *Transfer Tool* interface provides advanced options for the transfer. Click *Show* to display the list of options.

To select the advanced options, perform the following steps:

- From the *Remote Server Type* menu, select the web control panel that the remote server runs. Choose from the following options:
  - Auto Detect*
  - cPanel & WHM*
  - DirectAdmin*
  - Ensim (Parallels Pro)*
  - Plesk*
- Select *Unencrypted* to use an unencrypted session to transfer the files.
- Select *Compressed Transfers* to compress the files during the rsync process when the remote server transfers the files between the remote and destination servers.

**Note:**

This option does not affect the package account function, which creates a gzip archive of the user's account on the remote server.

- Select *Low Priority* to use less CPU and input/output (I/O) on the remote server.

**Note:**

This option reduces the impact on performance on the remote server, but increases the duration of the transfer session.

- Select *Use Incremental Backups speed-up* to decrease the amount of time that the system uses to package the account on the remote server. If a daily incremental backup exists, WHM uses that backup as a starting point. The system then updates the package before transfer.
- Select *Use custom account packaging modules from /var/cpanel/lib/Whostmgr/Pkgacct* to use packaging scripts in that directory.

**Important:**

The system does **not** create the `/var/cpanel/lib/Whostmgr/Pkgacct` directory by default. You **must** create the `/var/cpanel/lib/Whostmgr/Pkgacct` directory **before** you select this option, if the directory does not already exist.

**Note:**

cPanel & WHM always prioritizes custom restore modules in the `/var/cpanel/perl/Whostmgr/Transfers/Systems dir`

ectory over the cPanel-provided modules in the `/usr/local/cpanel/Whostmgr/Transfers/Systems` directory.

- The `/var/cpanel/perl/Whostmgr/Transfers/Systems` directory stores any custom modules that you create.
- The `/usr/local/cpanel/Whostmgr/Transfers/Systems` directory stores the modules that ship with cPanel & WHM.

7. Specify the number of CPU processes (threads) for the transfer session in the *Number of Transfer Threads* text box.

**Note:**

The system allows you to specify a **maximum** of five transfer threads.

8. Specify the number of CPU processes (threads) for the restore session in the *Number of Restore Threads* text box.

**Note:**

The system allows you to specify a **maximum** of five transfer threads.

9. Enter the number of seconds that the transfer session remains open before it times out in the *Transfer Session Timeout* text box.

**Important:**

If you change the default in the *Transfer Session Timeout* text box, it will only apply to the current session. You **must** enter a new value each time that you run a transfer. You can permanently change the value in WHM's *Tweak Settings* interface (*WHM >> Home >> Server Configuration >> Tweak Settings*).

## Fetch account list

After you make your selections, click *Fetch Account List*. A new interface will appear.

## The *Account List* interface

The top of the *Account List* interface displays the hosting software and version of the remote server. If any of this information appears incorrect, click *Reanalyze Remote Server*.

Below the remote server information, the interface displays if any available IP addresses exist.

**Warning:**

If no available IP addresses exist on the target server, accounts on the remote server that use a dedicated IP address will **not** transfer.

## Service Configurations

In this section of the *Account List* interface, select the configurations on the remote server that you wish to copy over to a destination server.

- You can transfer configurations for the following configurations:
  - Backups
  - cPanel & WHM (whmconf)
  - EasyApache
  - Exim
  - MySQL and PostgreSQL databases

**Note:**

When you transfer remote MySQL databases, the *Transfer Tool* feature includes any comments associated with the remote MySQL server. For more information about remote MySQL comments, read our [Remote MySQL](#) documentation.

- User Interface Themes

**Note:**

When you transfer an account that runs EasyApache 3 (EA3), the migration script converts the account's EA3 profile to an EasyApache 4 (EA4) profile on the destination cPanel & WHM server.

- For more information about the files that the system transfers for each configuration, read our [The cpconftool Script](#) documentation.

To select your desired configurations, perform the following steps:

1. Click *Show* next to *Service Configurations* to reveal all of the available configurations on your server. The *Configuration Name* and *Analysis* columns display the available configurations and versions.
2. Select the configurations that you wish to transfer to your local server.

**Notes:**

- The system displays warning messages in yellow and blocker messages in red text.
- If you receive a blocker message, the system disables the *EasyApache* option.

3. Click *Copy*. The system will display the progress interface.

**Notes:**

- You cannot click *Copy* until you select a configuration to transfer.
- The *Transfer* column displays the status of all configurations from the remote server.
- The *Restore* column displays the status of all configurations to the destination server.
- The system displays any error messages in yellow and warning messages in red text.

The summary bar displays the transferred or restored configurations.

## Restore the PHP-FPM `.yaml` configuration file

A MultiPHP user's PHP-FPM setting does **not** transfer. The system transfers the PHP-FPM `.yaml` configurations, but will **not** place it in position due to the undetermined status of PHP and FPM services. Instead, the system copies the PHP-FPM `.yaml` configuration file to the `filename.php-fpm.transferred` file.

To restore the PHP-FPM `.yaml` configuration file manually, perform the following steps:

1. Rename the file to the `filename.php-fpm.yaml` file.
2. Run the following command:

```
/scripts/php_fpm_config --rebuild
```

The system restores your account's PHP-FPM `.yaml` configuration file.

## CentOS, Red Hat®, and CloudLinux 5 Migrations

**Important:**

On March 31, 2017, Red Hat® deprecated **all** CentOS 5 systems. cPanel, Inc. **no longer** provides maintenance and security updates for CentOS 5 systems. The *Transfer Tool* interface can assist you in your migration from CentOS 5 systems to a higher version of CentOS. We **strongly** recommend that you migrate to a CentOS 7 server.

To migrate your CentOS 5 server to a CentOS 7 server, perform the following steps:

1. Contact your hosting provider and acquire a CentOS 7 server to which to migrate.
2. Log in to WHM as the `root` user and navigate to the *Transfer Tool* interface.
3. Perform the steps in the Configuration section above.

**Note:**

We **strongly** recommend that you migrate your accounts and configurations separately. Migrate your configurations first.

4. Verify that your server operates as expected. For more information about one method to do this, read our [Service Manager](#) documentation.
5. Use the *Transfer Tool* interface to migrate the desired accounts.

## Packages

In this section of the *Account List* interface, select the packages on the remote server to copy to your local server.

## How to copy packages

**Note:**

The *Transfer Tool* feature transfers features lists for the packages that you select.

To copy a package, perform the following steps:

1. Select the packages to copy in the table under the *Packages* heading.
  - Select the checkbox in the table header to select all of the packages from the remote server.
  - Use the *Search* text box to filter the list of packages.
  - Use the navigation controls to page through the list of packages.
  - Click a column header to sort the packages by that column.
2. Click *Copy*.

**Warning:**

- The restore system attempts to extract the package information from the `cpmove` file. If the package does not already exist on the target system, the system creates the package and assigns it to the account. If the system cannot create the package, the system assigns the default package to the account.
- If the feature list for the account exists on the target system, the system assigns it to the account. If the feature list does not exist, the system assigns the default feature list to the account.
- You can transfer a new package and feature list with the same name as a package that already exists on the target server. This package will override the previous package's settings.

## Accounts

In this section of the *Account List* interface, search for and select accounts to transfer to your local server.

## How to copy accounts

**Note:**

To toggle an option for all accounts, select the checkbox at the top of the appropriate column in the table header.

To copy accounts, perform the following steps:

1. Select the accounts to copy in the table under the *Accounts* heading.
  - To copy all of the accounts on the remote server, select the checkbox at the top of the column in the table header.
  - Use the *Search* text box to filter the list of accounts.
  - Use the navigation controls to page through the list of packages.
  - Click a column header to sort the accounts by that column.
2. Specify the copied account's new username and enter the new username in the *User* text box.

**Note:**

The *User* text boxes use the following colors as warning indicators:

- **Red** indicates that the username exists on this server, and the account will fail to copy if you do not change the username or select *Overwrite*.
- **Yellow** indicates that the account has a dedicated IP address on the remote server.
- **Green** indicates that the account does not already exist.

3. Select the accounts to which the system will assign dedicated IP addresses under the *Dedicated IP Address* heading.

**Warning:**

The interface does **not** allow you to assign more dedicated IP addresses than the number of available IP addresses on your server. If you select an account with a dedicated IP address on the remote server but an available IP address does not exist on your server, the transfer fails.

4. Select the accounts that will transfer their home directories under the *Copy Home Directory* heading.
  - Use the *Filter* text box to filter the list of accounts by the *Domain*, *User*, or *Reseller* columns.

**Note:**

Accounts will retain their mailbox format settings from the remote server. For example, if an account uses maildir format on the remote server, it will use maildir format on the target server.

**Important:**

Some system administrators use alternative methods to transfer home directories, such as the `rsync` command. If you do **not** select the *Copy Home Directory* option, the system will **not** add the necessary SNI information to Dovecot's configuration files.

To manually configure SNI information in Dovecot's configuration files after an alternative transfer of home directories, run the following command:

```
/scripts/build_mail_sni --rebuild_dovecot_sni_conf
--restartsrvs
```

5. Select the accounts that will retain their reseller privileges under the *Copy Reseller Privileges* heading.

**Note:**

This option does **not** appear if you selected the *Restricted Restore* feature in the *Security* section of the previous interface.

6. Select the accounts that will transfer their account databases under the *Copy Databases* heading.
7. Select the accounts that will transfer their bandwidth data under the *Copy Bandwidth Data* heading.

**Warning:**

If you transfer an account from cPanel & WHM version 11.50 to an earlier version, the account loses its bandwidth data.

8. Select accounts for express transfer under the *Express transfer* heading.

**Note:**

For more information, read the [Express transfer](#) section of this document.

9. If an account exists on the server, the *Overwrite Account* column displays a checkbox that allows you to transfer the account and overwrite all the data in the account.
10. Click *Copy*.

After you click *Copy*, the *Account Transfer* interface will appear.

## The transfer process

**Notes:**

- In the following steps, `domain` represents the name of a domain that you transferred.
- The system considers any two records with the same resource name and type to be duplicates.
- MultiPHP user's PHP-FPM settings do **not** transfer. The system transfers the PHP-FPM `.yaml` configurations, but will **not** place it in position due to the undetermined status of PHP and FPM services. Instead, the system copies the PHP-FPM `.yaml` configuration file to the `filename.php-fpm.transferred` file. To restore this file manually, read the [Restore the PHP-FPM .yaml configuration file](#) section above.

When you use the *Transfer Tool* interface to transfer accounts, the system performs the following actions:

1. The system creates the account.
2. The system compares the DNS zone file from the account's backup file with the template-generated zone file that the system generated during account creation.

**Important:**

The *Transfer Tool* feature does **not** transfer DNS zone templates. If custom DNS zone templates exist on the remote server, the system ignores these zone templates when it recreates the account on the destination server.

3. The system updates the SOA record to match the target server's zone templates and comments out the existing SOA record from the

remote server.

4. The system updates domain NS records to match the target server's zone templates and comments out any duplicate domain NS records from the remote server.
5. The system updates ftp.domain A, AAAA, and CNAME records to match the target server's DNS templates and comments out any identical ftp.domain records from the remote server.

**Note:**

cPanel & WHM uses the IP address in the destination server's virtual-ftp zone template (usually, the server's main IP address) for virtual FTP when the account exists on a shared IP address.

6. The system checks whether the template-generated zone file uses an MX preference of 0, and then performs the following actions:
  - If the zone file's MX preference is 0 and the zone file is \$PRIMARY\_DOMAIN or mail.\$PRIMARY\_DOMAIN, the system does **not** merge in the generated templates and does **not** update the MX preference from the remote server.
  - If the zone file's MX preference is 0 and the zone file is **not** \$PRIMARY\_DOMAIN or mail.\$PRIMARY\_DOMAIN (a non-standard mail configuration), the system merges the generated templates and comments out templates from the remote server.
  - For example, when the zone template's MX record defines an external mail service, the system prefers that entry over the record in the backup.
7. The system comments out duplicate records.
8. The system comments out CNAME records that conflict with any other records. If two or more CNAME records conflict, the system comments out all but the first CNAME record.
9. The system increments the SOA serial number for the domain.
10. The system updates records that reference the old IP address to use the account's new IP address.
11. The system removes comments that are older than 30 days.
12. The system updates CalDAV and CardDAV records to match the target server's DNS template.
13. If the zone file contains an \$ORIGIN directive for an additional domain, the system will **not** update that additional domain's records.

## Express transfers

**Warnings:**

- You can **only** use the *Express transfers* feature to transfer accounts between cPanel & WHM servers.
- **Only** use the *Express transfers* feature if the remote server controls the authoritative name servers for the domain. If the remote server does not control the authoritative nameservers for the domain and you use this feature, DNS will **not** resolve. This will cause your sites to experience downtime.

**Note:**

If you do not use the *Express transfers* feature when you transfer your accounts, you can use [The swapip Script](#) to update the transferred accounts' nameserver records.

An express transfer performs the following actions on the remote server:

1. Updates the account's A record to point to the destination server.
2. Changes the domain's nameserver entry to point to the destination server.
3. Updates the email routing configuration, so that mail arrives at the destination server.
4. Adds a redirect for the *Account Moved* page (cgi-sys/movingpage.cgi) for the following file extensions:

```
.dynamiccontent
.pl
.plx
.perl
.cgi
.php
.php4
.php5
.php6
.php3
.shtml
```

5. Suspends the transferred accounts on the remote server. For more information, read our [What Happens When You Suspend an Account](#)



documentation.

The system performs changes on the remote server in the `/usr/local/cpanel/scripts/xferpoint` directory.

## Additional documentation

Suggested documentation [For cPanel users](#) [For WHM users](#) [For developers](#)

- [Transfer Tool](#)
- [The pkgacct Script](#)
- [The view\\_transfer Script](#)
- [How Do I... FAQ](#)
- [Copy an Account from Another Server with Account Password](#)
  
- [How Do I... FAQ](#)
  
- [Transfer Tool](#)
- [How to Manually Transfer an Account Between Servers](#)
- [How to Move All cPanel Accounts from One Server to Another](#)
- [The pkgacct Script](#)
- [The view\\_transfer Script](#)
  
- [WHM API 1 Functions - get\\_transfer\\_session\\_state](#)
- [WHM API 1 Functions - create\\_remote\\_root\\_transfer\\_session](#)
- [WHM API 1 Functions - enqueue\\_transfer\\_item](#)
- [WHM API 1 Functions - available\\_transfer\\_modules](#)
- [WHM API 1 Functions - retrieve\\_transfer\\_session\\_remote\\_analysis](#)