
cPanel™ 11.25.0 Release Notes

Copyright © 2009 cPanel, Inc.

Published Dec. 9, 2010

Abstract

Please refer to the cPanel™ 11.25 release notes [<http://docs.cpanel.net/twiki/bin/view/AllDocumentation/ReleaseNotes>] for the most recent version.

Table of Contents

1. Feature Updates	2
1.1. Account Transfers	2
1.2. Account Backup and Restoration	2
1.3. Apache Configuration	2
1.4. APIs	2
1.5. Bandwidth Statistics Generation	5
1.6. Customer Contact	8
1.7. Database Soft Quotas	9
1.8. DNS Clustering	9
1.9. Email Addresses	10
1.10. Email Accounts X3 Interface	10
1.11. Fetch CSV	10
1.12. Integration	10
1.13. Localization	10
1.14. Log Processing	11
1.15. MX Editor	12
1.16. Password Strength Validation	12
1.17. PostgreSQL	13
1.18. Pure-FTPd	13
1.19. Reseller Nameservers	13
1.20. Roundcube	13
1.21. VirtFS and Jailshell	15
2. Added Features	15
2.1. cPanel™ DNS Editors	15
2.2. Custom MIME Types for cpsrvd	16
2.3. File and Directory Access Optimization	17
2.4. JSON API	18
2.5. MySQL Upgrade	18
2.6. Security Improvements	18
2.7. Task Queue	20
2.8. Web Template Editor	21
3. Application Updates	22
A. Issues Resolved in cPanel™ 11.25	22

1. Feature Updates

1.1. Account Transfers

For cPanel™ to cPanel™ transfers, the single and multiple account transfer interfaces in WHM now provide the ability to skip the home directory when packaging an account. This allows you to reduce the amount of time a transfer takes and choose a more efficient method to transfer the user's home directory.

The cPanel™ version of the remote server is auto-detected for cPanel™ -to-cPanel™ account transfers. The *Remote Server Type* menu in the transfer interface is updated to reflect this change.

When transferring a mixture of reseller and non-reseller accounts using the **Multiple Account Transfer** interface, the resellers will transfer first. Prior cPanel™ versions would iterate through the users alphabetically.

Streaming support, introduced in cPanel™ 11.24, received various performance improvements. When the *Express Transfer* method is used with streaming, zone activation is deferred until the end of the account restoration process. This resolves an issue that occurs when transferring accounts among servers within a DNS cluster.

A **Select All** button was added to the **Express Transfer** column in the **Multiple Account Transfer** interface.

The transfer system now detects when the remote or local servers run out of disk space. The errors are captured and the administrator is notified.

1.2. Account Backup and Restoration

Bug #4090: [http://bugzilla.cpanel.net/show_bug.cgi?id=4090] Added the ability for the `/scripts/pkgacct` utility to only **tar** accounts, rather than **tar**ing and compressing, via **gzip**. This option reduces the CPU load and overall time required to generate a full backup, with the trade-off of consuming more disk space.

When restoring backups from read-only media a working directory is created in a suitable, writable location. The location is determined by the same function used during account creation, based upon the **HOMEDIR** and **HOMEMATCH** values in `/etc/wwwacct.conf`. The backup is extracted into the working directory, then the restoration occurs. Afterwards, the working directory is cleared.

The `cpmove` file location is now output at the end of the packaging process. Prior versions displayed it earlier in the process, risking losing the location due to terminal scroll buffer constraints.

1.3. Apache Configuration

Directives used by the *Prefork MPM* are available in the configuration interface found at **WHM >> Service Configuration >> Apache Configuration >> Global Configuration**. These directives include:

- MinSpareServers
- MaxSpareServers
- MaxClients
- MaxRequestsPerChild

1.4. APIs

1.4.1. Custom Event Handlers

cPanel™ 11.25 marks the beginning of transitioning the cPanel™ interface to using API2 for interaction with the product. To accomplish this some of the existing methods for triggering events were converted into API2 calls.

When an existing function is converted into an API2 call the function interface changes. In turn this changes the data passed to Custom Event handlers. Example 1, “Email::addpop comparison between 11.24 and 11.25” illustrates the changes.

Example 1. Email::addpop comparison between 11.24 and 11.25

In cPanel™ 11.24 and older the data passed to the Email::addpop function hook was:

```
<cpanelevent>
  <errors></errors>
  <event>addpop</event>
  <module>email</module>
  <params>
    <param0>username</param0>
    <param1>password</param1>
    <param2>100</param2>
    <param3>domain.com</param3>
  </params>
</cpanelevent>
```

In cPanel™ 11.25 the data passed to the Email::addpop function hook is:

```
<cpanelevent>
  <errors></errors>
  <event>addpop</event>
  <module>email</module>
  <params>
    <domain>domain.com</domain>
    <email>username</email>
    <password>password</password>
    <quota>100</quota>
  </params>
  <result>
    <reason>username+domain.com</reason>
    <result>1</result>
  </result>
</cpanelevent>
```

The following interfaces were changed to use API2 functions:

- Change MX Record
- Cron
- Email Accounts

1.4.2. XML-API

1.4.2.1.

The XML-API no longer prompts for HTTP authentication. Most of the time this is not an issue. Some HTTP libraries may wait for HTTP authentication requests before sending headers. Users of such libraries need to adjust usage to send headers with the initial request.

The following functions were added to the XML-API in cPanel™ 11.25.0:

1.4.2.2. Account Functions

- `domainuserdata` This function displays information about a given domain, including addon and subdomains, whether CGI aliasing is enabled, log locations, and other details.
- `setsiteip` This function allows you to change the IP address associated with a website, or a user's account, hosted on your server.

1.4.2.3. DNS Functions

- `addzonerecord` This API function allows you to add a zone record.
- `editzonerecord` This function allows you to edit an existing zone record.
- `getzonerecord` This function allows you to view DNS zone records associated with a given domain
- `removezonerecord` This function allows you to remove a zone record from the server
- `resetzone` This API function will reset a DNS zone to its default values

1.4.2.4. Reseller Functions

- `setresellerips` This function lets you add IP addresses to a reseller's account.
- `setresellerlimits` This function lets you set limits on the amount of bandwidth and disk space a reseller can use.
- `setresellermainip` This function lets you assign a main, shared IP address to a reseller's account.
- `setresellerpackage-limit` This function allows you to control which packages resellers are able to use. It also lets you define the number of times a package can be used by a reseller.
- `suspendreseller` This function lets you suspend a reseller, thereby preventing the reseller from accessing his or her account.
- `unsuspendreseller` This function lets you unsuspend a reseller, thereby allowing the reseller to access his or her account.
- `acctcounts` This function lists the number of accounts owned by each reseller on the server.
- `setresellernameservers` This function allows you to define a reseller's nameservers.
- `configureservice` This function allows you to enable or disable a service, and enable or disable monitoring of that service, as in the WHM Service Manager

Further information is available in the XML-API Documentation [<http://docs.cpanel.net/twiki/bin/view/AllDocumentation/AutomationIntegration/XmlApi>]

1.5. Bandwidth Statistics Generation

The bandwidth statistics system in cPanel™ uses RRDTool [<http://oss.oetiker.ch/rrdtool/>] to track the data and generate resulting graphs and meters. In cPanel™ 11.24 and prior versions, the way the RRDTool data was interpreted by the system could vary according to which subsystem was examining the data. This often resulted in inconsistent interpretations of the data, as well as missing data.

For cPanel™ 11.25, every aspect of the product that handled RRDTool data was overhauled and consolidated into a single subsystem. The end result is a consistent system that generates reliable and accurate statistics and data.

1.5.1. Changes in RRD Data files

The RRD data files are restructured for cPanel™ 11.25. Prior versions had several files in `/var/cpanel/bandwidth` for each domain and user as shown in Example 2, “cPanel™ 11.24 RRD and Summary Files”. There were files for each protocol (FTP, HTTP, IMAP, POP3, SMTP), an aggregate file (all) and a summary file. The summary file used the username or domain name.

Example 2. cPanel™ 11.24 RRD and Summary Files

A user called *example* whose primary domain is `example.com`, would have the following bandwidth files in cPanel™ 11.24:

```
example
example-all.rrd
example-ftp.rrd
example-http.rrd
example-imap.rrd
example-pop3.rrd
example-smtp.rrd
example.com
example.com-all.rrd
example.com-http.rrd
```

In cPanel™ 11.25 the number of bandwidth data (RRD) files has increased. File names have also changed for clarity. There are now two files for each protocol and for the aggregate. See Table 1, “New RRDTool Files”.



Disk Space Usage

As noted above, the number of RRD files generated by the system increased with cPanel™ 11.25. With this comes an increase in the disk space used by `/var/cpanel/bandwidth`.

To prevent issues related to disk consumption by the RRD files, during the cPanel™ Update `/usr/local/cpanel/bin/chk_bwrrd_space` is used to examine the disk mount that contains `/var/cpanel/bandwidth`. If insufficient disk space is detected then bandwidth generation is disabled.

Table 1. New RRDTool Files

Name	Description
peak	Rates file used for low-precision graphs of timespans of a month or greater.

Name	Description
rate	Rates file with a resolution of 5 minutes, for high precision graphs of timespans of a week or less.

Example 3. cPanel™ 11.25 RRD Files

A user called *example*, whose primary domain is *example.com*, would have the following bandwidth data files in cPanel™ 11.25:

```
example-all-peak.rrd
example-all-rate.rrd
example-ftp-peak.rrd
example-ftp-rate.rrd
example-http-peak.rrd
example-http-rate.rrd
example-imap-peak.rrd
example-imap-rate.rrd
example-pop3-peak.rrd
example-pop3-rate.rrd
example-smtp-peak.rrd
example-smtp-rate.rrd
example.com-all-peak.rrd
example.com-all-rate.rrd
example.com-http-peak.rrd
example.com-http-rate.rrd
```



Bandwidth data for the FTP, IMAP and SMTP protocols are aggregated at the account level.

In addition to the normal data files, there are several summary files. These summary files are maintained long-term, as they are usable for regenerating the RRD files in the case of data corruption. Refer to Table 2, “Bandwidth Summary Files Naming and Formatting in cPanel™ 11.25” for details. For data format details see Table 3, “Format Codes”.

Table 2. Bandwidth Summary Files Naming and Formatting in cPanel™ 11.25

Filename	Example	Data Format	Description
[domain or user]	example.com	{m} . {d} . {yyyy} - {type}={bytes}	Same summary file as in cPanel™ 11.24 and prior versions, maintained for backwards compatibility.
[domain or user].5min	example.com.5min	{yyyy} . {mm} . {dd}T{hh} : {MM} - {type}={bytes}	5-minute summaries of the last month of bandwidth data
[domain or user].hour	example.com.hour	{yyyy} . {mm} . {dd}T{hh} - {type}={bytes}	Hourly summaries of bandwidth data

Table 3. Format Codes

Code	Definition
bytes	Amount of data transferred, in bytes
{d}	1- or 2-digit day number
{dd}	2-digit day number
{hh}	2-digit hour
{MM}	2-digit minute number
{m}	1- or 2-digit month number
{mm}	2-digit month number
{type}	One of the following: <ul style="list-style-type: none"> • all • ftp • http • imap • pop3 • smtp
{yyyy}	4-digit year

Example 4. Summary Bandwidth Files in cPanel™ 11.25

A user called *example*, whose primary domain is *example.com*, has the following bandwidth summary files in cPanel™ 11.25:

```
example
example.5min
example.hour
example.com
example.com.5min
example.com.hour
```

Each domain and user now has a remainder file, i.e. *example.com.remainder* (the domain remainder file) and *example.remainder* (the user remainder file). These files store bandwidth data from the point at which the last summary interval ran, at the precision of 5 minutes for rate data and 1 hour for peak data. This file is necessary due to the way RRD databases work. During the next interval, the remainder data is injected into the processing.

1.5.2. Rebuilding RRD Data Files

RRD files can be regenerated from the various summary files by using the `/usr/local/cpanel/bin/rebuildbwrrd` utility. The utility can regenerate the data for a specific user or all users. This utility accepts the following parameters:

```
--all          Process all users on the system.
```

<code>--dir={path}</code>	Used to specify the location of the RRD summary files and where to create the new RRD files. If not specified, uses <code>/var/cpanel/bandwidth</code> .
<code>--gid={#}</code>	The number specified with this parameter is used to set the GID on any created files. If not specified, the program uses the GID of the existing data files.
<code>prefix</code>	The user or domain to process.

See Example 5, “Using `rebuildbwrrd`” for a `rebuildbwrrd` usage example.



Pre-cPanel™ 11.25 Data

While `/usr/local/cpanel/bin/rebuildbwrrd` is usable on data generated by older versions of cPanel, the resolution of the data is not the same. Prior versions of cPanel™ generated the summary files with a resolution of one day. Files generated by cPanel™ 11.25 have a resolution of one hour. Since older files do not contain the same level of precision, graphs generated by older data will not have the same level of quality as the newer data.



Data Loss Warning

`/usr/local/cpanel/bin/rebuildbwrrd` completely replaces the existing RRD files for the prefix specified (or all files, when using the `--all` parameter). It is recommended to create a backup of the `/var/cpanel/bandwidth` directory (or the directory specified when using the `prefix` parameter) **before** executing `/usr/local/cpanel/bin/rebuildbwrrd`.

Example 5. Using `rebuildbwrrd`

```
root@pxe [~]# /usr/local/cpanel/bin/rebuildbwrrd example
Processing bandwidth for 'example' in directory '/var/cpanel/bandwidth'.
root@pxe [~]# /usr/local/cpanel/bin/rebuildbwrrd example.com
Processing bandwidth for 'example.com' in directory '/var/cpanel/bandwidth'.
root@pxe [~]# /usr/local/cpanel/bin/rebuildbwrrd --all
Processing bandwidth for 'example' in directory '/var/cpanel/bandwidth'.
Processing bandwidth for 'example1' in directory '/var/cpanel/bandwidth'.
Processing bandwidth for 'example2' in directory '/var/cpanel/bandwidth'.
Processing bandwidth for 'example3' in directory '/var/cpanel/bandwidth'.
Processing bandwidth for 'example4' in directory '/var/cpanel/bandwidth'.
Processing bandwidth for 'example5' in directory '/var/cpanel/bandwidth'.
Processing bandwidth for 'example6' in directory '/var/cpanel/bandwidth'.
root@pxe [~]#
```

1.6. Customer Contact

The **Customer Contact** feature replaces the **Support Request** system that exists in prior versions. Resellers may configure this feature to display contact details for support, billing and sales departments.

The feature retains the ability to allow contact submissions via email or external applications. A simplified branding editor in this interface allows the reseller to modify the cPanel™ interfaces used by this feature.

This feature is available to all resellers. Configuration and template data for each reseller is stored in the `cpanelbranding` directory in the reseller's home directory. For the `root` user this is `/var/cpanel/cpanelbranding`. Configuration data is stored in the `contactinfo.yaml` file while branding related changes are stored in one of the following:

Table 4. Customer Contact Branding Files

File Name	Purpose
contactinfo_include.html	Displays contact information in the Contact and Help cPanel™ interfaces.
supportinfo_include.html	Displays a support request form in the Contact and Help cPanel™ interfaces.

1.7. Database Soft Quotas

The file used to cache the number of databases owned by an account moved from `/home/user/.cpanel/datas-tore/mysql-db-count` to `/var/cpanel/datastore/user/mysql-db-count`. Likewise the PostgreSQL cache file is now `/var/cpanel/datastore/user/postgres-db-count`.

To keep the cache file current, a cron job executes the following command periodically: `/scripts/update_db_cache`.

cPanel™ 11.25 provides support for including the disk space consumed by an account's MySQL and PostgreSQL database in the disk usage for the account. To enable this feature toggle the following Tweak Setting:

When displaying disk usage in cPanel/WHM include Postgresql and MySQL® disk usage.

As with the database counts, the disk usage calculation is handled by `/scripts/update_db_cache` which executes every 4 hours. This script is executed upon enabling the Tweak Setting. Administrators may also execute this script to recalculate the figures. The disk usage figures are stored in `/var/cpanel/datastore/mysql-disk-usage` and `/var/cpanel/datastore/postgres-disk-usage`. The file contents are a colon (:) separated list of user names and figures in bytes. See Example 6, “mysql-disk-usage contents”

Example 6. mysql-disk-usage contents

```
root@c5vm [~]# cat /var/cpanel/datastore/mysql-disk-usage
user1: 0
user2: 3190942
user3: 42519945
```

Support for `/scripts/updatemysqlquota` ends as of cPanel™ 11.25.0. Per this change `/scripts/updatemysqlquota` is no longer distributed with the product.

1.8. DNS Clustering

Certain **dnsadmin** operations are now performed in batches. This reduces both the memory needed during large operations, and the amount of time needed to perform the operation.

Each cPanel™ 11.25 cluster member may now configure a peer failure threshold. This option is found in the **Configure Cluster** interface in WHM. The threshold specifies how many **dnsadmin** commands a peer may fail to respond to before that peer is automatically disabled. The threshold is local to the server where it is stipulated.

By default, each cPanel™ 11.25 cluster member will notify the system administrator when peers are disabled due to reaching the failure threshold. The notifications are sent to the *High* priority destinations as set in the **Contact Manager** in WHM.

The amount of time between BIND restarts issued by **dnsadmin** is configurable via a new option in the WHM *Tweak Settings* interface. This option is labeled:

Number of seconds `dnsadmin` will wait before restarting BIND. Additional restart requests during this time period will be silently discarded. On systems that process very frequent DNS updates a setting of 300 or 600 seconds is recommended. On systems with few DNS changes, the default setting of 0 is recommended. Note that DNS changes will not take effect until the restart is complete.

Prior versions would use two separate `dnsadmin` calls to add a zone and reconfigure BIND. In cPanel™ 11.25, this common activity is reduced to a single `dnsadmin` call.

1.9. Email Addresses

cPanel™ 11.25 expands the range of acceptable characters in the local part of email addresses to be closer in line with RFC 5322. Addresses created and managed by cPanel™ have the following limitations:

- Disallowed characters that have special meaning to the shell: `&'^*|/`
- Disallowed characters due to use as data value separators: `@:%`

Prior versions of cPanel™ only accepted the dash (-), underscore (_), and period (.) in the local part of an email address.

Interfaces that accept an email address for contact purposes should accept all RFC 5322 characters in the local part.

When upgrading to cPanel™ 11.25, email accounts with quotas larger than 2 GB will be upgraded to *unlimited*. This is due to limitations with Exim and Courier in handling larger quota values.

1.10. Email Accounts X3 Interface

This interface is replaced with a new JSON-based AJAX interface. A limited Javascript version exists for users who disable or block Javascript. The new JSON interface consumes less memory in the browser and is more responsive.

The pagination and display of this interface now handles thousands of accounts quickly and efficiently.

1.11. Fetch CSV

The Fetch CSV feature within the List Accounts interface received the following improvements in cPanel™ 11.25.0:

- Column headers are now provided.
- The generated file now contains every column that is in the List Accounts interface.

1.12. Integration

The `Digest::MD5` Perl module is no longer bundled with the cPanel and WHM application suite. Existing applications and cPAddons that rely upon this Perl module being provided by cPanel will not function properly after upgrading to cPanel™ 11.25.0.

Developers can address this change in one of two ways:

1. Use the `md5_fallback.pm` functionality provided in the OSCommerce cPAddon.
2. Bundle the `Digest::Perl::MD5` Perl module with their application.

1.13. Localization

cPanel™ 11.25 comes with a new localization system: `Cpanel::Locale`. This new system simplifies the translation and localization of cPanel, WHM, themes and command line applications. `Cpanel::Locale` is backwards-compatible with existing translation methods and language files.

`Cpanel::Locale` uses an XML format for interoperability. Two new interfaces in WHM make provision for importing and exporting a locale using XML.

Languages are now identified in the system by the two-letter ISO 639 [http://en.wikipedia.org/wiki/ISO_639] code. Territory-specific languages are indicated by the two-letter ISO 639 [http://en.wikipedia.org/wiki/ISO_639] code, followed by an underscore, then the two-letter ISO 3166 [http://en.wikipedia.org/wiki/ISO_3166] code. See Example 7, “ISO 639 + 3166 Example”

Example 7. ISO 639 + 3166 Example

The regional language for English as spoken in the United Kingdom is represented in the system as `en_gb`.

Prior cPanel™ 11 versions presented languages in two, or sometimes more, encodings: UTF-8 and Latin1 (ISO 8859-1). This caused unnecessary confusion and made translation more difficult. Languages used by `Cpanel::Locale` use UTF-8 unless there is a very specific reason not to.

`Cpanel::Locale` is more memory-efficient than the prior system, since phrases are only loaded when requested by the user interface.

Complete phrases are available for translation, a format more flexible than the prior method of translating phrase fragments.

The list of phrases in a language, known as a lexicon, is stored locally in YAML [<http://www.yaml.org/>] format and is subsequently compiled into GDBM [<http://www.gnu.org/software/gdbm/>] databases. This introduces a new dependency into the system, the `GDBM_File` [http://search.cpan.org/perldoc?GDBM_File] Perl module.

Although `GDBM_File` is a core Perl module, it will only exist if `libgdbm` was present when compiling Perl, when Perl is installed from source. On systems where Perl is installed via a binary package, this module may still not exist unless `libgdbm` was also installed. For example, on Red Hat Enterprise and CentOS systems, if the Development Tools package group is installed, then the `GDBM_File` [http://search.cpan.org/perldoc?GDBM_File] module will exist.

To account for systems that do not have the `GDBM_File` [http://search.cpan.org/perldoc?GDBM_File] module installed, `/scripts/checkperlmodules` is updated to install `GDBM_File` [http://search.cpan.org/perldoc?GDBM_File]. If necessary, `libgdbm` will be built from source and installed to `/opt`.

If the error message "Can't locate GDBM_File.pm in @INC ..." appears on a system, executing `/scripts/checkperlmodules` will resolve it.



Developer Warning

Application and theme developers should no longer use `Cpanel::Lang::LANG` in their products, as it is no longer supported.

Further information about `Cpanel::Locale` is available at docs.cpanel.net/locale [<http://docs.cpanel.net/locale>].

1.14. Log Processing

The way Apache and Bandwidth logs are processed changed in cPanel™ 11.25.0. The basic pattern for log processing is:

1. Construct a list of all logs that need processed.
2. Move each log in the list to a backup version (denoted by the `bkup` extension).
3. Restart Apache if at least one file was moved to a backup version.
4. Process the backup version of the logs.

- Remove the backup version of the logs.



Note

A backup of the bandwidth bytes logs is always created and processed as above. A backup of the access log(s) is only created if the log processing configuration instructs the log processing to delete rather than preserve the log. In this case, the file is processed in place.

1.15. MX Editor

The cPanel™ and WHM **MX Editor** interfaces and subsystems received an update in cPanel™ 11.25.

The cPanel™ interface is JSON powered, requiring Javascript to function.

The method of configuring how the local server routes mail is improved in cPanel™ 11.25. With cPanel™ 11.24 and prior versions a single check box, labeled *Always accept mail locally even if the primary MX does not point to this server* was the only control exposed in the **MX Entry** interface. This option could still be over-ridden by various circumstances. This changed for cPanel™ 11.25. There are now the following options to configure how mail is to be handled by the local server:

- Automatically Detect MX Configuration
- Local Mail Exchanger
- Backup Mail Exchanger
- Remote Mail Exchanger

These options are presented in the **Email Routing** section of the **MX Entry** cPanel™ interface. A brief description of each option appears in the cPanel™ interface. The description includes how the option will change the way the local system handles email for the domain being modified. This setting may be changed independently from the action of modifying a MX record.

Modifying the Email Routing for domain changes, or adds, an entry to the cPanel™ user file, normally in `/var/cpanel/users`. See Table 5, “Email Routing Configuration Directives”.

Table 5. Email Routing Configuration Directives

Option	Directive
Automatically Detect	Removes MXCHECK
Local MX	MXCHECK-example.com=0
Backup MX	MXCHECK-example.com=secondary
Remote MX	MXCHECK-example.com=remote

Both **MX Editor** interfaces properly support multiple MX entries of the same priority.

1.16. Password Strength Validation

The algorithm used to rate the strength of a password is improved in cPanel™ 11.25. This may cause passwords that had high ratings with the prior algorithm to be rated as less strong.

The password validation used on various forms is now in sync with the server side algorithm. This eliminates inconsistencies that exist in cPanel™ 11.24 and prior versions.

Spaces are no longer accepted in passwords.

1.17. PostgreSQL

Clicking the **PHPPgAdmin** link in cPanel™ now logs the user into **PHPPgAdmin** automatically.

The configuration of PostgreSQL within WHM is also more reliable.

1.18. Pure-FTPd

Version 1.0.22 and higher of this popular FTP daemon allows the administrator to enforce TLS encryption on both the command and data channels of an FTP session. The **FTP Server Configuration** interface in WHM is updated to provide access to this feature.

The **Broken Clients Compatibility** directive is added to the WHM **FTP Server Configuration** interface. When enabled, this directive causes Pure-FTPd to ignore parts of the FTP protocol standards, to improve compatibility with some buggy FTP clients and firewalls.

1.19. Reseller Nameservers

Resellers may modify their nameservers using a new, simplified **Basic cPanel/WHM Setup** interface. This was available only for the root user in the **Edit Privileges/Nameservers** interface in the **Reseller Center** for cPanel™ 11.24.4 and prior versions. This feature is automatically available for all Resellers and is not governed by ACLs.

1.20. Roundcube

cPanel™ 11.25 adds support for using SQLite [http://www.sqlite.org/] as the RoundCube data store. When this option is enabled, each email account receives its own SQLite database file, which resides in `/home/user/etc/example.com/user.rcube.db`. The database file for the cPanel™ account is `/home/user/etc/example.rcube.db`.

This feature also changes the process ID of webmail logins for RoundCube sessions. Rather than being owned by the `cpanelroundcube` user, the process is owned by the cPanel™ system account that owns the email account. See Example 8, “User owned roundcube session”.

Example 8. User owned roundcube session

The RoundCube session for the `<user@example.com>` account, owned by the *example* cPanel™ account appears as:

```
example 27245 0.3 1.8 20764 9340 ? Ss 22:10 0:00 webmaild - serving 10.250.0.10
```

1.20.1. Pre-conversion Considerations

Before performing the conversion, the following matters need considered:

- The upgrade affects the entire server. It is not possible to mix use of the MySQL database and the SQLite database method.
- RoundCube only supports SQLite version 2, which is the default version provided by PHP 5.
- SQLite version 2 databases are incompatible with SQLite version 3 utilities.

- No system utilities are provided for managing the SQLite databases. This means no **sqlite** binary is installed by which a system administrator may view or manage a SQLite version 2 database.
- Conversion is an elective process, with *no* support for returning to using MySQL for the database.
- As with any volatile system change, please ensure current, tested system and account backups exist.
- Each email account has its own SQLite database. This database is stored in the *etc* directory of the cPanel™ account home directory that owns the email account.
- Since the SQLite database is placed in `/home/user`, it is included in the disk usage calculations and file system quota.



Disk Usage Warning

RoundCube stores information about each email message in the database. Tests show that, on average, 1 MB of disk space is consumed by the SQLite database per 10-15,000 messages in an email account.

If an account consumes its remaining disk quota during the conversion process, the remainder of the email addresses for the account are skipped. The conversion process will proceed with the remaining cPanel™ accounts. Once conversion is complete, the account(s) whose quota was consumed by the process will need disk space freed, or the quota increased. Then, conversion for the account may be completed using the `/scripts/convert_roundcube_mysql2sqlite` method described in Section 1.20.3, “SQLite Maintenance and Utilities”.

1.20.2. Converting to SQLite

The conversion to SQLite is accomplished by executing the command:

```
/scripts/convert_roundcube_mysql2sqlite
```

The `convert_roundcube_mysql2sqlite` script will first convert the MySQL RoundCube database to corresponding SQLite databases. Since the MySQL database contains all data for every email account that uses RoundCube, this part of the conversion can be a lengthy process. After database conversion, RoundCube is reconfigured to use SQLite, and the process completes. Any errors encountered are reported on the console. Problems converting individual accounts do not halt the conversion process.

After performing the conversion, the MySQL RoundCube database is no longer needed and may be dropped.

1.20.3. SQLite Maintenance and Utilities

Once the server is converted, individual cPanel™ accounts may be converted using `/scripts/convert_roundcube_mysql2sqlite`. This script accepts a single parameter: *user*.

```
/scripts/convert_roundcube_mysql2sqlite user
```

An SQLite configured RoundCube is updated using `/usr/local/cpanel/bin/update-roundcube-sqlite`. Calling `/usr/local/cpanel/bin/update-roundcube` on an SQLite configured system results in a warning message being displayed and the proper script being **execed**.

SQLite versions prior to 3.1 do not automatically **VACUUM** a database. As documented in the SQLite FAQ [<http://sqlite.org/faq.html#q12>] the **VACUUM** returns unused disk space to the operating system. To work around this a **VAC-**

UUM routine is added to the logout sequence in RoundCube. Users that click the **logout** link in RoundCube will have their database automatically **VACUUMed**.



Disk Usage Warning

The **VACUUM** command will temporarily consume twice the disk space consumed by the database file. As this happens in `/home/user/etc` it is possible for the process to consume the remaining disk quota of the cPanel™ account.

1.21. VirtFS and Jailshell

When terminating an account, the VirtFS mounts for the account are removed.

The VirtFS mounts for an account are cleared when changing the shell of the account. This only happens automatically when using the **Manage Shell Access** interface in WHM.



Session Disruption

If a user has an active jailshell session when the Administrator changes the user's shell, the user's connection is terminated. This is necessary to allow successful removal of the bind mounts used in the jailshell environment.

Administrators may use the following script for clearing VirtFS mounts: `/scripts/clear_orphaned_virtfs_mounts`. This script only removes the mounts for users who no longer use jailshell or no longer exist. This script accepts the following parameters:

- `--help` Outputs brief description of the command and accepted parameters.
- `--erroronly` Limit output to error messages.

Jailshell sessions now include the name of the logged-in account in the process table as demonstrated in Example 9, “Jailshell Login Name”.

Example 9. Jailshell Login Name

```
root@pxe [~]# ps ax | grep jail
20847 pts/2    Ss      0:00 jailshell (case899) [20953]
```

2. Added Features

2.1. cPanel™ DNS Editors

In cPanel™ 11.25, the X3 interface includes both a **Simple DNS Editor** and an **Advanced DNS Editor** feature. The Simple editor is enabled by the default. The Advanced editor is disabled by default. Access to either editor is handled via the **Feature Manager** in WHM.

2.1.1. Simple DNS Editor

The cPanel™ **Simple DNS Editor** permits users to add and remove A and CNAME resource records for existing zones. No editing of records is permitted via this interface. To edit a record, the existing one must first be deleted. Duplicate A records are permitted.

A Record: The user is permitted to supply the name of the record and an IP address. The TTL specified in the WHM **Basic cPanel/WHM Setup** interface is used.

CNAME Record: the user is permitted to supply the name and CNAME of the record. The TTL specified in the WHM **Basic cPanel/WHM Setup** interface is used.

2.1.2. Advanced DNS Editor

The **Advanced DNS Editor** lets users add, edit and delete A, CNAME and TXT resource records. The user may specify the TTL when creating or modifying the record.

Both editors automatically append the name of the domain being modified to new records. To provide a fully-qualified name, terminate the name with a period. Refer to Figure 1, “Using A Fully Qualified Name in the DNS Editor”.

Figure 1. Using A Fully Qualified Name in the DNS Editor

Add a Record

The screenshot shows a form titled "Add a Record" with the following fields and values:

- Name:** name.example.org. (with a green checkmark)
- TTL:** 14400 (with a green checkmark)
- Type:** TXT (dropdown menu)
- TXT Data:** "A Sample Record" (with a green checkmark)

An "Add Record" button is positioned below the form fields.

2.2. Custom MIME Types for cpsrvd

Administrator defined MIME-types may be added to cpsrvd. This is accomplished by adding entries to `/var/cpanel/config/cpsrvd/custom_mime_types`. As shown in Example 10, “Custom MIME Types” the file format is:

- Entries are new-line separated.
- Entry is a **key=value**

The **key** portion of the entry represents the file extension. The **value** represents the MIME type.

Example 10. Custom MIME Types

```
xls=application/vnd.ms-excel
txt=text/plain
```

2.3. File and Directory Access Optimization

A common tactic used to improve file system performance is to use the `noatime mount` option for a mount point. The `ext` family, beginning with `ext2`, supports disabling `atime` for individual files and directories. This can be accomplished with the following command:

```
root@pxe# chattr +A /path/to/file/or/directory
```

cPanel™ 11.25 uses `/usr/local/cpanel/bin/optimizefs` to disable the `atime` attribute for a specific list of files and directories. A cronjob is created to perform this optimization periodically. As of cPanel™ 11.25.0, the list of files and directories modified by this cron job are:

Files and Directories Modified by `optimizefs`

- | | |
|-------------|---|
| Files | <ul style="list-style-type: none">• <code>/etc/relayhosts</code>• <code>/etc/wwwacct.conf</code>• <code>/etc/wwwacct.conf.shadow</code>• <code>/etc/wwwacct.conf.shadow.cache</code>• <code>/etc/wwwacct.conf.cache</code>• <code>/etc/relayhostsusers</code>• <code>/etc/cpbackup.conf</code>• <code>/etc/cpbackup.conf.cache</code>• <code>/etc/exim.pl</code>• <code>/etc/exim.pl.local</code>• <code>/etc/passwd</code>• <code>/etc/shadow</code>• <code>/etc/group</code>• <code>/etc/termcap</code>• <code>/etc/fstab</code>• <code>/etc/localtime</code>• <code>/usr/local/cpanel/cpanel.lisc</code>• <code>/usr/local/cpanel/cpsanitycheck.so</code> |
| Directories | <ul style="list-style-type: none">• <code>/usr/local/cpanel/base/frontend</code>• <code>/etc/valiases</code>• <code>/etc/vfilters</code> |

- /etc/vdomainaliases
- /var/cpanel/adminsessions
- /usr/local/apache/domlogs

2.4. JSON API

cPanel™ 11.25 adds support for JSON output from an API call. As discussed in the JSON [<http://docs.cpanel.net/twiki/bin/view/AllDocumentation/AutomationIntegration/XmlApi>] documentation, developers can activate this by using `/json-api/` in the API call, rather than `/xml-api/`.

Long running JSON initiated processes appear in the process table as (example truncated for display purposes):

```
22410 ?          D          0:03 /usr/local/cpanel/cpanel --json-fast-connect --stdin
```

2.5. MySQL Upgrade

A new interface for managing the process of upgrading MySQL is available as of cPanel™ 11.25.0 build 41902. The new interface is found in the **Software** section in WHM. The MySQL version selection is removed from Tweak Settings.

The new MySQL Upgrade interface walks you through the upgrade process. This process typically includes rebuilding PHP for Apache and sometimes for cPanel. The majority of the process may be accomplished unattended.

The interface only supports upgrading versions, for example from MySQL 4.1 to MySQL 5.1. It does not support down grading. Down grades are not recommended.

As part of the MySQL upgrade, the version of PHPMyAdmin installed may change. This happens when upgrading from MySQL 4.0 or 4.1 to MySQL 5.0 and higher.



PHP Version Incompatibility

PHPMyAdmin 3 is not compatible with PHP 4. cPanel™ provides PHP 5.2.6 for the internal PHP binary. This binary, at `/usr/local/cpanel/3rdparty/bin`, is used to serve the internal PHP applications that ship with the product, such as PHPMyAdmin. If this binary has been modified, or overwritten to be PHP 4, then complications will arise with PHPMyAdmin upon upgrading MySQL 5.0.

2.6. Security Improvements

Cross-site request forgery (CSRF or XSRF) attack prevention is improved with the addition of several options in the WHM *Tweak Settings* interface.

2.6.1. Referrer Checks against Destination URL

Along with the blank referer check that existed in prior versions, server owners may now require the domain and port (or IP address and port) combination in the referer to match the destination URL. To enforce this, enable the following **Tweak Settings** option:

Only permit cpanel/whm/webmail to execute functions when the browser provided referrer (Domain/IP and Port) exactly matches the destination URL. This will help prevent XSRF attacks, but may break integration with other systems, login applications, and billing software. Cookies are required with this option enabled.

2.6.2. Security Tokens

The new security token feature prevents XSRF attacks by injecting a token unique to the session into the URL. Use of this feature is strongly recommended. Enable this feature with the following option in **Tweak Settings**:

Require security tokens for all interfaces. This will greatly improve the security of cPanel™ and WHM against XSRF attacks, but may break integration with other systems, login applications, billing software and third party themes.



Product Incompatibility Warning

The Security Tokens feature will break third party applications, scripts and themes that are not updated to work with Security Tokens. Information regarding the Security Token feature was sent to Third Party developers in advance. Please ensure any third party products integrated with cPanel™ are fully updated before enabling this feature.



Backwards Incompatibility Warning

Active cPanel, Webmail and WHM sessions will generate 404 errors if the security token feature is enabled and the system is subsequently downgraded to cPanel™ 11.24.4. Active sessions will need to log out manually, then re-log in. Manual logouts are accomplished by changing the URL to /logout/

2.6.3. IP Address Validation

To improve security of cookie based logins server owners can opt to record the client IP Address in the server and client side cookies. The IP address is subsequently validated for each request during the session. This option is enabled via the following **Tweak Setting**:

Validate the IP addresses used in all cookie based logins. This will limit the ability of attackers who capture cPanel™ session cookies to use them in an exploit of the cPanel™ or WebHost Manager interfaces. For this setting to have maximum effectiveness, proxydomains should also be disabled.

2.6.4. Other Security Improvements

2.6.4.1. Disabling Root Login to cPanel

Server administrators can prevent root login to the cPanel™ interface. This is a refinement of the existing reseller override feature, wherein both the reseller and root user may access a cPanel™ account by using the account name and the root or reseller password.

To restrict root access, enable the following option in **Tweak Settings**:

Only allow reseller to log in to users' cPanel™ interface with reseller password

2.6.4.2. Require SSL Authentication for Remote Logins

It is now possible to disable all authentication and access on the non-SSL ports used by `cpsrvd`. These ports are:

- 2082
- 2086
- 2095

This is accomplished by setting the following configuration item in **Tweak Settings**:

Require SSL for all remote logins to cPanel, WHM and Webmail. This setting is recommended.

When enabled, accessing the non-SSL ports produces a page containing a link redirecting the user to the SSL port. Logins that originate from localhost are still allowed with this setting enabled.



Incompatibility Warning

Since this **Tweak Settings** option disables access on the non-SSL ports, custom scripts and third-party applications that access the server remotely must use the SSL ports.

Bookmarked URLs that use the non-SSL ports will need to be updated to use the SSL port. When a user clicks a bookmark that uses the non-SSL port, the link is not carried through the manual redirect to the SSL port.

2.6.4.3. Session Handling

Sessions that are inactive for 8 hours or more are now invalidated. Subsequent use of such session will force re-authentication. Invalidated, or inactive, session files are purged from the system every 20 minutes.

In determining which of the new settings to activate cPanel™ recommends the following:

- Require SSL for all remote logins to cPanel, WHM and Webmail.
- Require security tokens for all interfaces.
- Validate the IP addresses used in all cookie based logins.

The referrer settings are only recommended if the security tokens are not enabled.

2.7. Task Queue

Events in cPanel™ often cause one or more services to be restarted. For example, a user adding a subdomain causes a restart of Apache and the nameserver daemon. On busy servers, such restart requests can cause quality of service issues.

To handle these requests, cPanel™ 11.25 comes with a task queuing and processing system. cPanel™ subsystems that are aware of the task queue submit their requests to it, rather than issuing the restart (or other request) directly.

A primary benefit of the task queuing system is that multiple requests for an outstanding request are handled as a single action. At this time, only the Apache restarts issued by the WHM *Tweak Settings* interface are task queue-aware.

There are two aspects of the task queuing system: the queuing mechanism and the queue processor. Queuing of tasks is handled via `/usr/local/cpanel/bin/servers_queue` which has the following usage:

```
/usr/local/cpanel/bin/servers_queue [queue command] [unqueue task id]
```

`queue command` The queue parameter requires a command string as an argument. The command string should be quoted. See Example 11, “Queueing Tasks”. Only commands known to the task queuing system are accepted. Providing an unknown command returns an error. See Example 12, “Queueing an Unknown Task”.

`unqueue id` Requires a task ID number. This is output when queueing a task. It may also be obtained by examining the `/var/cpanel/taskqueue/servers_queue.yaml` file. See Example 13, “Unqueueing A Task”.

Queued tasks are stored in YAML files in `/var/cpanel/taskqueue`.

The task queue is processed periodically by a new daemon `queueprocd`. This daemon resides in `/usr/local/cpanel/libexec` and is started by the cPanel™ start up process. It may be managed using `/scripts/restartsrv_queueprocd`. The daemon is monitored by `chkserverd`.

Example 11. Queueing Tasks

```
root@example [~]# /usr/local/cpanel/bin/servers_queue queue 'apache_restart'  
Id: TQ:TaskQueue:4
```

Example 12. Queueing an Unknown Task

```
root@example [~]# /usr/local/cpanel/bin/servers_queue queue 'buildapacheconf'  
ERROR: No known processor for 'buildapacheconf'. at /usr/local/lib/perl5/site_perl/5.8.8/
```

Example 13. Unqueueing A Task

```
root@pxe [~]# /usr/local/cpanel/bin/servers_queue queue 'apache_restart'  
Id: TQ:TaskQueue:8  
root@pxe [~]# /usr/local/cpanel/bin/servers_queue unqueue TQ:TaskQueue:8  
1 tasks unqueued
```

2.8. Web Template Editor

This new WHM interface presents a unified method of modifying various templates used by Apache. Some of these templates were available for editing in prior versions of cPanel. This interface is automatically available to all resellers.

The templates available are:

- Default Web Page
- Suspended Account Page
- Account Moving Page
- Connection Detection Page

Template Toolkit provides the template processing engine.

The following CGI binaries in `/usr/local/cpanel/cgi-sys` handle displaying of the templates:

- `defaultwebpage.cgi`
- `movingpage.cgi`

- suspendedpage.cgi
- templatepreview.cgi

This initial implementation only supports creation and serving of templates in English. Future versions of this interface will support more languages.

3. Application Updates

The following applications are upgraded as part of cPanel™ 11.25:

- glib to 2.20.0
- Mailman to 2.1.12
- PHPMyAdmin to 2.11.10
- Pure-FTPd to 1.0.22
- RoundCube to 0.2.2
- SquirrelMail to 1.4.19

The following new applications are available as of cPanel 11.25:

- MySQL 5.1
- PHPMyAdmin 3

A. Issues Resolved in cPanel™ 11.25

The following issues are resolved in cPanel™ 11.25.0

Resolved in 42203

- Restore ability to upload legacy language files
- Migrate users of the X and X2 themes to the X branding package of the X3 theme
- Add cron job that will set mailman archive ownership for disk usage calculations
- Add maketext() support to API2 calls
- Remove redundant HUP of cpsrvd when applying Tweak Settings
- Removed /scripts/updatesmysqlquota
- Limit MySQL DB user to 16 characters.
- Updated PHPMyAdmin 2 to 2.11.10

Resolved in 41717

- Contact Email field in List Accounts was not properly decoding & and '

- Replaced legacy language editor with lexicon editor
- Allow logging of missing locale keys to be configurable on a per user basis. Logging is off by default.
- FTP backup fails silently if remote server is unreachable
- Renamed 'Edit a Language' to 'Edit a Lexicon'

Resolved in build 41565

- Added separate API2 functions for email contact information and notification preferences
- Added update notification preferences feature
- Fix improper form variable usage resulting in inability to set Bandmin password
- Add lexicon import/export scripts
- Fix performance problem in byteslog backups.
- Changed the 'Show Reseller Accounts' report to show all resellers regardless of how many accounts they have
- Modify SSL install routines to never create 'www.' virtualhosts while still conserving the certificate domain information provided.
- Exclude wildcard domains from list of domains used for parked domain targets
- Provide better error messages when adding email forwarder fails
- Update improper Tweak Setting name: XSRF Tokens -> Security Tokens
- Inhibit dumping an error message to screen during hotlink protection checking if .htaccess simply doesn't exist.
- Fixed validation of email address used for auto responder to prevent illegal characters
- Provide deletion function for WHM SSL Manager
- Properly report an error when attempting to add a forwarder with an invalid email address
- Fixed CVS Email Import to handle all allowable characters in an email address
- Fixed typo in an API call that prevent Rails applications from being restarted
- Fixed problem that prevented users' with dedicated IP addresses from removing their SSL VHosts
- Fixed issue that prevented Delete button from working Disk Usage interface

Resolved in build 41363

- Cleanup RRD bandwidth databases upon account termination
- Remove wildcard bandwidth files upon account termination
- Resolve issues preventing transfer of accounts with "-" in user names
- Set restored account quota after transferring account to resolve issues restoring user data for accounts over file quotas
- Cleanup unserviceable locale language files

- Resolve spurious errors with Locale system

Resolved in build 41315

- Update Cpanel::TaskQueue to 0.3
- Distribute Locale module with build
- Address issues with WHM navigation breadcrumb URLs
- Add support for setting interval between email response messages when autoresponder is configured
- Renamed WHM Security section to Security Center
- Break out WHM Security Center into Security section
- Update WHM 'Statistics Language Configuration' to 'Application Locale Configuration' for Locale support
- Store user locale settings for transfers and backups
- Added getresellerrips xml-api function
- Various fixes for cPanel™ live language editor mode
- Resolve IP change issues for transfers initiated with DNS changes
- Resolve problems with zone file parsing of DNS labels and sub domain MX records
- Exclude /proc, /dev, /sysfs from disk space calculations
- Added support to /scripts/clear_orphaned_virtfs_mounts for forcing amount of virtfs mounts for all accounts regardless of jailshell state
- Adjust initquotas warning regarding jailshell to call /scripts/clear_orphaned_virtfs_mounts with '--clearall' flag
- Adjust DNS zone reset logic to continue with reset if previous zone file data can not be fetched from the DNS cluster
- Display meaningful error when httpd.conf fails syntax check during SSL cert install
- Add missing security token for WHM remote MySQL setup
- Resolve issue where Addon Domains would not be properly restored

Resolved in build 41121

- Add support in Cpanel::Locale to fallback to a known language when an unknown language is specified for an account
- Resolve problems enabling and disabling shell fork bomb protection under FreeBSD
- Adjust handling of /etc/profile when enabling/disabling shell fork bomb protection
- Adjust issue with command line processing in checkperlmodules that might prevent installation of Locales Perl module

Resolved in build 41106

- Adjust logic to create symlinks to system installed Locales Perl module for cPanel/WHM binaries
- Supply special environment variable needed to make SQL::Statement Perl module

- Update /scripts/checkperlmodules to give a final report of which modules failed to install/update

Resolved in build 41101

- Add support for ipaliases to /scripts/restartsrv
- Add confirmation to deleting IP aliases, including notification of alias restarts on Linux as a result of deleting leader IP aliases
- Resolve issues calculating interval between root login notifications
- Update Cpanel::Cron backend module used for cPanel™ manipulation of cron jobs
- Adjust logic for determining the number of running Ruby Rails applications
- Properly handle missing graphics when bandwidth RRD files for a requested domain do not exist
- Resolve several issues preventing proper function of branding of the x and x2 themes
- Add log-http-requests-postdata cpanel.config setting used for to specify logging of POST data to the requests log
- Fix output formatting in WHM root MySQL password change interface
- Add missing security token support to full backup download link
- Fix bug with command line options preventing specification of dedicated IP when restoring accounts
- Fix fixetchosts to preserve order, remove duplicates, and always ensure hostname and short hostname are set to the main IP of the server
- Turn off PHP processing engine for subsequent requests in keepalive
- Adjust package script matching to avoid spurious 'already installed' matches on FreeBSD
- Add support for showing custom RBLs in the 'Visualize ACLs' display
- Use md5 passwords by default in cPanel™ managed Apache htaccess files
- Allow Exim configuration to save settings that are not part of the default tweak settings (like custom RBLs)
- Resolve issue where Dovecot/Courier SSL Certificate fail to update after Hostname/MailServer changes
- Prevent vps_optimizer from installing Perl if 'allowperlupdates' is turned on
- Add check to /scripts/checkperlmodules to do a full install of modules if Cpanel::Class is not in @INC
- Prevent plugin file Windows line endings from breaking plugin registration
- Add detection of loop mounted filesystems to cpbackup and explicitly delete loop device after unmounting
- Resolve issue with fetching SSL certificate information for "www." domains in SSL installation interfaces
- Add logic to automatically fetch either domain or www.domain SSL files, with preference to user's form selection
- Address issues with homedir streaming during express account transfers
- Correct issues with access log archiving and log processing
- Resolve several issues with handling of wildcard sub domains

- Numerous fixes and updates for Cpanel::Locale language system migration
- Numerous WHM x theme changes (work in progress)

Resolved in build 40716

- Add autofixer to address strict zone checking issue with Bind update
- Added scrollbars to cPAddon moderation pop-up window
- Adjusted message displayed when Apache restarts are disabled by EasyApache
- Backup restoration parent process should die if the child tar process is killed or dies
- Bug 6400: Allow creating forwarder to default address
- Change account suspended redirect to stay within same domain for correct branding
- Correct email validation for contact email and contact pager
- Correct problems with leftover 0-length files in domlogs
- Disable keepalives in proxied connections (e.g. whm.example.com) for Apache bug 48037
- Missing mail directory structure caused spurious error message in Exim logs
- Notify system admin when /var is too small to contain RRD data files
- Queue /scripts/runweblog requests that occur during removal of addon domains
- Re-add support for reseller WHM News
- Reduced Apache restarts triggered by log processing to no more than 3
- Remove unnecessary manipulation of Apache Options setting on account suspension
- Removed incorrect DPNewPass from brazilian-portuguese-utf8
- Resolved issue that resulted in an erroneous error message when changing password in webmail interface
- Resolved issue with PHPPgAdmin displaying all databases when using PostgreSQL 7.4
- Resolved minor sorting issues with List Accounts
- Update automatic repair in restartsrv_named to address strict zone checking issue with Bind update
- Use IP list obtained from ifconfig for setting the main IP for resellers
- Add ability for cPHulk to send notification upon successful root login
- Added ability to define custom MIME types for cpsrvd

Resolved in build 40447

- Allow authenticated mail from localhost to bypass BoxTrapper whitelist check
- Assign Main IPs to Reseller using list obtained from ifconfig rather than /etc/ips

- Fixed Mail.app auto setup on new leopard/newer version of leopard
- Fixed Optimize Website error on page
- Fixed issue in Manage Shell Access interface that prevented re-enabling normal shell access
- Fixed various problems with Copy Account with Account Password
- Leave cpmove file in place after account restoration
- Remove RRD data files untracked domains and for domains without bytes_logs
- Removed bullets that were outside of the validation YUI panel
- Resolved issue that prevented domain restoration during account transfer when a wildcard domain was present
- Resolved issue with creating user's cPAddons moderation directory
- Resolved issue with displaying cPAddon moderation requests in WHM
- Resolved mailing list accounting error that occurred on accounts with wildcard subdomains
- Skip bandwidth processing for domains with no bytes_logs
- Switch to next cPanel™ update mirror when current mirror is locked more than 30 times
- cPHulkd did not de-register authenticated logins resulting in multiple successful logins being counted as a brute-force attack

Resolved in build 40255

- Fixed DEMO mode editor breadcrumbs
- Fixed issue that prevent listaccts XML-API call from being used by resellers

Resolved in build 40223

- Don't send notifications for DNS peers that are not enabled in the cluster
- Moved unmounting of backup disk to after postcpbackup in /scripts/cpbackup
- Output alert during build_locale_databases for language files that are not mappable to ISO locale codes
- Reduce the number of apache restarts caused by cpanellogd
- Removed dependency on /etc/ips for the Change a Site's IP Address function
- Resolve issue with Roundcube configuration errors after a forced update
- Resolve issue with updating .htaccess files that lack a trailing new line
- Resolved display error in Service Status
- Resolved issue with defaultwebpage.cgi being able to read /etc/trueuserowners
- Resolved library linking problems with GDBM_File
- Suppress unnecessary error output from optimizefs

Resolved in build 40108

- Fixed missing header in Change a Site's IP Address interface
- Resolved issue with missing template file in Change a Site's IP Address interface

Resolved in build 40104

- Fixed Javascript error in Change Root Password interface in WHM
- Resolved issue with over-eager onfocus Javascript handling of the Username field in Create a New Account

Resolved in build 40103

- Allow Contactus::isenabled in webmail

Resolved in build 40099

- Default API version to 2 when version is not specified
- Fixed various icon display issues for IE
- Make /scripts/updateuserdomains perform a full rebuild when it is updated
- Resolved error in Tweak Settings output when setting disk_usage_include_sqldbs
- Resolved issue with displaying wrong domain for account in List Accounts
- Restored use of /etc/rrdtooldisable as a way of preventing creation of RRD data files
- Use proper spacing in Exim's daemon_smtp_ports and tls_on_connect_ports options
- Updated WHM Icons

Resolved in build 40052

- Remove keys and values from /etc/wwwacct.conf.shaodw that should not exist
- Resolve 11.25.0 only issue that removed the red highlight from suspended accounts in the suspend/unsuspend WHM interface
- Resolved issue that left the redirect version of .htaccess in place when unsuspending an account

Resolved in build 40018

- Remove user from /etc/nocgiusers and /etc/quota.conf when account is terminated
- Resolved refactoring error that caused /scripts/initquotas to enter an infinite loop when jailshell sessions were active

Resolved in build 39981

- Add security token to Exim configuration interface links
- Exclude unnecessary directories from the RoR import scanner
- Quote suspension reason when passing to /scripts/suspendacct to preserve spaces

- Resolved issue that caused `/var/cpanel/rollback.conf` to be filled with duplicate entries
- Resolved issue with improper values being stored in `wwwacct.conf.shadow`
- Resolved issue with sending email from the command line in jailshell
- Sanitize domain input to remove space characters when creating subdomains
- Strip newlines from shell field when caching `/etc/passwd`
- Updated `cpdvd` init scripts to resolve startup issue
- Optimized API2 sorting of large datasets
- Upgraded Roundcube to 0.3-stable

Resolved in build 39768

- Fixed some typos
- Resolved EDGE only issue with `Cpanel::Reseller::getreselleracldhash`
- Resolved issue with `cPAddons` obtaining the contact email in moderation mode

Resolved in build 39677

- Check OS for FreeBSD prior to calling `Sys::Sysctl::FreeBSD`
- Fixed typo in `bin/userdata_update` that prevented `/scripts/updateuserdomains` from executing
- Update `/scripts` directory before updating CPAN to facilitate downgrades

Resolved in build 39631

- Add support for increasing the maximum number of open files limit on FreeBSD
- Address spurious error messages from `pkgacct` where unreadable files were not properly ignored
- Prevent spurious error messages when updating file quotas on some systems
- Reset quota for `clamav` user to prevent failures updating virus definition data
- Add localization support for JSON API error messages
- Execution of `/usr/local/cpanel/bin/register_hooks` now required when adding new hooks
- Optimized hook API lookups

Resolved in build 39565

- Clear quota cache when `/scripts/fixquotas` and `/scripts/initquotas` are run
- Decode HTML Form variables before sending in support emails
- Fix issue with Rails failing to start applications set to load on boot
- Remove Contact link from X3 when Customer Contact is disabled

- Resolve issue with checkperlmodules attempting to install GDBM_File when the source tarball was not available
- Resolved issue that prevented quotas being displayed in List Accounts in the quota cache was missing
- Resolved issue that prevented quotas being displayed in WHM on Virtuozzo
- Solved a problem with enabling the auto spam delete function in cpanel
- Added support for custom MIME types in cpsrvd
- Bug 6119: Added tweak setting to include database disk space in disk usage calculations
- New Tweak Setting: Maximum time in seconds that the system is permitted to spend fetching diskusage and quota information before it considers the data unavailable

Resolved in build 39459

- Addon domains were not backing up properly when using Incremental backups
- Create init scripts for Ruby on Rails when it is installed
- Fixed typo in Server Info interface
- MySQL user grants were not backing up properly when using Incremental backups
- Resolved authentication issue between Exim and cPHulkd
- Resolved compatibility issue when certain Perl versions that prevented Exim authentication when using Courier
- Resolved compatibility issue with cPHulkd and older versions of MySQL

Resolved in build 39428

- Resolve issue with mail authentication and webmail

Resolved in build 39424

- Resolve compatibility issue with WebDisk and Snow Leopard
- Resolve compatibility issue with WebDisk and Windows Vista

Resolved in build 39399

- `/scripts/restorepkg --force` will now overwrite existing MySQL users and databases
- `/scripts/sysup` created dangling symlink on MySQL 4+ systems
- Account Level Filtering was not propagated to domains/addons created after the filter
- Add default virtualhost when first virtualhost is created on a shared IP address
- Added ability for `/scripts/fixperlscript` to detect and correct more than a single problem in a script
- Added blank indexes to `cgi-sys`, `java-sys` and `img-sys` directories
- Added `cphulk.log` to list of logs to rotate
- Added error handling for zone template fetching

- Added note to EXIM config editor indicating that ** denotes new configuration options
- Allow MySQL to be installed from packages on 64bit FreeBSD
- Allow use of empty SSH pass phrases during account transfer
- Always install Ruby from ports on FreeBSD
- Automatically create 'maildirfolder' file when creating folders under Courier.
- Automatically fix authProg symlink during courierup
- Automatically remove broken installation of Freetype libraries, headers and binaries
- 1971 [http://bugzilla.cpanel.net/show_bug.cgi?id=1971]
- Bug 4850 [http://bugzilla.cpanel.net/show_bug.cgi?id=4850]: Delete all associated bandwidth files upon account termination
- Bug 553 [http://bugzilla.cpanel.net/show_bug.cgi?id=553]: Added header to CSV generated by Fetch CSV in List Accounts
- Bug 5626 [http://bugzilla.cpanel.net/show_bug.cgi?id=5626]: MX Editors handle multiple entries with same priority.
- Bug 7949 [http://bugzilla.cpanel.net/show_bug.cgi?id=7949], 8365 [http://bugzilla.cpanel.net/show_bug.cgi?id=8365]: Preserve Pure-FTPd SSL Certificate while updating
- Bug 8117 [http://bugzilla.cpanel.net/show_bug.cgi?id=8117]: Value for Day was not being provided when requesting Bandwidth report
- Bug 8485 [http://bugzilla.cpanel.net/show_bug.cgi?id=8485]: Single quotes were removed from Rewrite Rule URLs
- Bug 8689 [http://bugzilla.cpanel.net/show_bug.cgi?id=8689]: Use 'all' to display all accounts in List Accounts
- Bug 8705 [http://bugzilla.cpanel.net/show_bug.cgi?id=8705]: Process Trusted Host ACLs before RBL ACLs
- Bug 8761 [http://bugzilla.cpanel.net/show_bug.cgi?id=8761]: Incorrect domain names were used in the Mailman welcome message
- Bug 9037 [http://bugzilla.cpanel.net/show_bug.cgi?id=9037]: Clarify forged HELO note in EXIM config editor
- Bug 9097 [http://bugzilla.cpanel.net/show_bug.cgi?id=9097]: Report that the A record will be used when no MX records exist
- Bug 9173 [http://bugzilla.cpanel.net/show_bug.cgi?id=9173]: Frontpage extensions break after transfers due to the ownership of _vti_pvt being improperly configured
- Bug 9661 [http://bugzilla.cpanel.net/show_bug.cgi?id=9661]: Allow domain owner login override to work properly with Courier
- 900 [http://bugzilla.cpanel.net/show_bug.cgi?id=900]
- CVE 2009-0642: Ruby - Improper return value checking
- Change Compress::Zlib hold back to 2.015
- Change IO::Compress::* hold back to 2.015
- Change dnsuniqid syntax of multi-step dnsadmin commands to work properly with queue system

- Changed /scripts/pkgacct to display location of cpmove file after creating the archive
- Changed /scripts/pythonup to install to /usr/local/cpanel/3rdparty to prevent conflicts with system Python
- Changed bandwidth graph generation to convey accurate date
- Changed bin/roformgr to not fork with account has no Rails applications installed
- Changed how /scripts/ensure_vhost_includes regenerates httpd.conf
- Changed log processing interval to hours, rather than days, in Tweak Settings and Statistics Software Configuration interface
- Changed to print cycle time in hours instead of days on Raw Access Log screen
- Changed transfer process to perform DNS Zone changes after account is fully restored
- Check DNS Cluster during account creation for existence of zone
- Check account ownership before allowing resellers to install SSL Certificates
- Check boxtrapper whitelist before checking for self-addressed email to allow for whitelisting own email address
- Check exit running status of BIND after restart
- Check for broken /bin/pwd during account creation and modify permissions appropriately
- Check for timeouts on all remote dnsadmin commands
- Clean up symlinks associated with a dedicated IP address when terminating an account
- Cleanup /home/virtfs when changing from Jailshell shell in WHM >> Account Functions >> Manage Shell Access
- Cleanup /home/virtfs when terminating an account
- Corrected standard X3 footer comment for mozilla compatability
- Corrected the ownership of counters file counters after a transfer
- Corrected tracking of bandwidth data rates
- Corrected usage info for xferpoint
- Delete bandwidth files upon account termination
- Delete cpmove archive on source server when transfer fails
- Detect and report incorrect SSH key passphrase during Transfer login
- Detect kvm virtual environment properly
- Detect whether PostgreSQL is active before attempting to package user databases
- Disable Dovecot authenticator in EXIM when mail services are disabled
- Disallow IP addresses as MX records
- Disallow spaces in passwords

- Disallow zone transfers by default after rebuilding named.conf
- Discard RRD data older than 10 years
- Display global feature lists when modifying packages
- Display proper message in bin/unregister_cpanelplugin when uninstalling plugin
- Display proper path of Perl installation in the CPAN Module installer
- Don't require session cookie for HTTP AUTH connections when referrer checks are disabled
- Dropped all support for Neomail
- Email filters with multiple rules would fail to update when modifying a rule
- Email quotas exceeding 2 GB will be treated as unlimited due to limitations in Courier and Exim
- Ensure all stored versions of 2 GB email quota have one byte subtracted
- Ensure backup error messages are properly retained when backup is executed via cPanel
- Ensure libXpm-devel is installed
- Ensure no modified 3rdparty/etc/php.ini is published
- Ensure only resellers can download branding packages
- Ensure passwords are not HTML encoded when received from a web form
- Ensure python-devel is installed on Linux systems
- Ensure rndc.key and rndc.conf are owned by user 'named'
- Ensure suspension status is always output when calling resellerstats via XML-API
- Ensure wildcard domains are allowed for SSL Certificate installation
- Explicitly install libX11-devel.x86_64 package on 64bit systems
- Fall back to manual BIND restart when init script restart fails
- Fix timeouts of dnsadmin quickzoneaddressremote commands
- Fixed FTP access to access logs
- Fixed NSD init script incompatibility with chroot configuration
- Fixed Ruby On Rails Redirects to now redirect
- Fixed broken headers on language editor
- Fixed broken links in the WHM Theme Manager Addon themes
- Fixed condition that caused erroneous "Sorry, the given email address is invalid" message when importing email accounts via CSV
- Fixed displaying of hidden files (i.e. '.dot' files) in language listings

- Fixed incorrect argument being passed to /scripts/legacypostkillacct when terminating an account
- Fixed incorrect parameter displayed in rebuild_phpconf's help output
- Fixed issues related to InnoDB, Routines and data safety when modifying the username using Modify an Account
- Fixed listing of user added Apache handlers
- Fixed parsing of API1 tags with 0 arguments
- Fixed problem with Frontpage extensions breaking after transfers due to ownership of _vti_pvt being improperly configured
- Fixed problem with being able to create a routine in MySQL, but not being able to execute it
- Fixed problem with login theme downloads and Tidy
- Fixed problem with wredirect sending requests to /cpanel rather than /webmail
- Fixed regular expression typo in /scripts/installruby that prevented upgrades
- Fixed text field alignment on login form
- Fixed typo in Webmail login message
- Fixed warnings related to Apache restarts
- Frontpage credentials are now updated when account name is modified during transfer
- Frontpage credentials were not updated when account name is modified during transfer
- Have destination server's package limits take precedence over those defined on the source server
- Have fixmailman execute check_perms
- Improved Exim syntax output when building exim.conf
- Improved Handling of zone template errors so they do not encounter an infinite loop when a template variable is not used
- Improved IMAP IDLE for systems using Dovecot
- Improved Signal handling in cPHulk to reduce unpredictable behavior
- Improved ability for rrdinstaller to install on older systems
- Improved accuracy of service checks performed by the RestsrtSrv system
- Improved clarity of error messages in Apache Global Configuration interface
- Improved cpsrvd handling of large file uploads
- Improved detection of slow query log setting when using sqloptimizer
- Improved performance when moving large files with the File Manager
- Improved the Fetch CSV function in List Accounts to include every field listed
- Include Domain Keys files in account backup

- Install correct version of pureauth on FreeBSD in /scripts/ftpup
- Install user gem executable as 'gem' rather than 'gem18' on FreeBSD
- Invalidate the bandwidth cache when changing package values
- Language cache was not updated when .local file changed
- Leave /etc/exim.conf in place during eximup
- Limit Resellers to parking domains on domains they own
- Limit file system usage checks to 5 minute intervals
- Limit redundant bandwidth notification emails
- Log processing will now stop, rather than pause, when blackout hours occur
- MX Editor updates correct zone file when modifying sub-domains that lack a dedicated zone
- Made BoxTrapper always accept mail from trusted transports if the user is not on the ignore or black lists
- Make /scripts/rrdtoolinstall a symlink to /usr/local/cpanel/bin/rrdtoolinstall
- Make /scripts/userdirctl more tolerant of variations in userdir syntax
- Make certain that a timestamp of 0 does not display bandwidth pie chart
- Obtaining a list of MySQL users would cause database privileges be updated
- Package the XML version of bandwidth data as the binary version is platform specific
- Pass on errors reported by usermod/pw in Manage Wheel Group users within WHM
- Patch Freetype to build on systems with older versions of GNU make
- Preserve exim configuration and revert to preserved version when syntax check fails
- Preserve hostname when configuratin cluster relationship to allow for proper display of trust paths
- Prevent email filters from using 'new', 'cur' and 'tmp' as folder destinations
- Prevent local hostname from appearing in accounts that are sub domains of the hostname
- Prevent running of Rails applications when in Demo mode
- Prevent search engines from indexing login pages
- Prevent setting of values to 0 in Pure-FTPd Configuration where 0 is not allowed
- Prevent spurious errors on email validation for multiple accounts
- Prevent the use of user names that could be potentially be required for cPanel™ managed services
- Prevent unnecessary queueing of commands for disabled hosts
- Prevent use of 'tmp', 'cur' and 'new' as Maildir delivery destinations when creating a filter
- Prevent use of spaces in passwords when creating FTP accounts

- Prevent using Modify an Account from changing domain name to a wildcard domain
- Prevent xml-api from stacking two errors resulting in invalid xml
- Provide error message when attempting to extract from an unsupported archive in the File Manager
- Put cursor focus on username field on webmail login form
- Recreate Frontpage configuration files for Sub and Addon domains after transfer
- Refactored update-horde as a Perl script
- Reload Chkservd configuration at the beginning of each check so that changes made via WHM, CLI, etc always work as expected
- Reload chkservd.conf at the beginning of each check
- Remove Zone Load check from named init script
- Remove all appropriate /var/cpanel/bandwidth files upon account termination
- Remove display of 'Hit enter...' message during mailing list creation
- Remove setuid bit from suphp binary when not in use
- Remove the legacy cpop POP3 entry from Service Manager when Maildir is enabled
- Removed /scripts/bandwidth
- Removed /scripts/fixpop
- Removed /scripts/mailman212
- Removed /scripts/pkgacct2
- Removed HTML markup error from displaying on screen
- Removed RC4+RSA from non-email cipher lists
- Removed Tweak Setting "Automatically setup /etc/localsdomains, /etc/remotedomains, /etc/secondarymx based on where the mx entry is pointed." as that system is replaced by the Email Routing system
- Removed call to /scripts/kernelcheck in /scripts/upcp
- Removed call to /scripts/mailscannerupdate from /scripts/eximup
- Removed calls to /scripts/grpck
- Removed compat3x from sysup
- Removed condition that caused a PostgreSQL Role Error during account creation
- Removed installzendopt-freebsd
- Removed misleading warnings from the PostgreSQL restoration output
- Removed scripts relating to install/uninstall of MySQL 4.1 that were replaced by /scripts/mysqlup
- Removed obsolete scripts/fixmysqlbsd

- Removed redundant home directory streaming checks that produced un-necessary errors
- Removed use of the `smtplibbytes_log` as this is now handled by `tailwatch::eximstats`
- Removed unnecessary ` `; which caused off-center check boxes in Tweak Settings
- Removed usage of `/scripts/installcpbsdpkg` from `/scripts/ftpup`
- Removed 'nouserbackupwarn' in TweakSetting
- Report correct protocol when error is encountered during home directory streaming
- Report created certificate as 'saved' rather than 'installed' when creating a SSL Certificate in the SSL/TLS Manager
- Report database creation failure in the X3 interface
- Report skipping portions of backup when feature is disabled
- Resellers will be transferred first, when transferring multiple accounts
- Reset FreeBSD package cache when FTP server is updated
- Resolve EDGE-only issue with Zone records not being updated after transfer
- Resolve conditions causing 'grep: writing output: Broken pipe' on FreeBSD systems
- Resolve issue with "post" responses to CustomEventHandler missing the `dateref`
- Resolve issues with `--force` on `restorepkg`
- Resolve various errors with `/scripts/restorepkg --force`
- Resolved Multi Account Transfer UI problem with Internet Explorer
- Resolved issue with IP Deny Manager updating `.htaccess` when the account's primary domain is a subdomain of the hostname
- Resolved issue with IP Usage not accounting for unallocated IP Addresses
- Resolved issue with PostgreSQL users being granted inadequate permissions on tables
- Resolved issue with express transfer not updating zones for addon and parked domains
- Resolved issue with stopping MySQL on FreeBSD via `/scripts/restartsrv_mysql --stop`
- Resolved issue with subdomain domain documents failing to restore when the document root contains the username
- Resolved issue with the default wildcard redirects causing a loop condition
- Resolved issue with transferring accounts with email addresses with local part consisting solely of 0
- Resolved ownership conflict when restoring accounts with domains that are already owned by other accounts
- Resolved race condition when obtaining MySQL version number
- Restart FTP server when conf file is updated by one-time `fixup`
- Restart `cPHulkd` when settings are changed

- Restoring accounts on FreeBSD would not place the cron tabs in the proper location
- Reuse dnsuniqid with queued dnsadmin requests
- Revert .htaccess of Addon and Sub Domains to non-suspended version during transfer
- Selecting 'Does not match' for email filter action did not set the appropriate Exim rule
- Send priority 3 notification when encountering long-lived zero length lock file
- Services now stopped and checked for running state using restartsrv scripts
- Set "UseDNS no" in sshd_config when cPHulkd is enabled
- Setup pg_hba.conf during PostgreSQL install to allow local logins
- Skip nameserver restart when no changes are made during dnsadmin removezone(s) commands
- Solved problem with being unable to login to mail after suspending and unsuspending accounts
- Store all EXIM configuration settings so that unselected options are not marked as new on future runs of the configuration editor
- Suppress spurious output from PostgreSQL and MySQL when terminating an account
- Suspend chkserve monitoring while switching nameserver
- Update 'Referrer Safety' and 'Referrer Blank Safety' tweaksetting notes to indicate that cookies are required when these options are enabled
- Update Dovecot templates for 1.2
- Update IP addresses in the proxy sub-domain virtualhost during a transfer
- Update MySQL procedure and function definers when changing username during a transfer
- Updated /scripts/generate_maildirsize to obey 2GB-1byte maildir quota size limitation
- Updated /scripts/pkgacct tar error code handling to ignore exit codes generated when archiving an unreadable file
- Updated /scripts/restartsrv_httpd to observe the apache_update_no_restart setting
- Updated /scripts/securemysql to use datadir from /etc/my.cnf if defined
- Updated Cpanel::SimpleSync to resolve bugs and add error reporting and better verification of files in need of syncing.
- Updated clamav scanning, replacing the deprecated --disable-summary flag with --no-summary
- Updated cpanelsync to more safely handle removal of old files
- Updated usage of zone templates during account creation to display errors properly
- Use Reseller's nameservers for transferred accounts if reseller exists on the destination server
- Use UTF-8 for emails sent via WHM
- Use actual disk usage when determining whether to reuse a UID during account creation
- Use calendar_id to retrieve kronolith data during backup

- Use gmake when installing RRD Tool on older FreeBSD systems
- Use proper configuration setting when calculating bandwidth processing interval in Statistics Software Configuration interface
- VPS Optimizer will no longer restart cPanel
- Validity checks are now done for imported forwarders
- When logged in to WHM via SSL, do not show Insecure link redirecting to non-SSL session
- When normalizing email usernames, don't create multiple @ characters
- When prompted to over write files in the file manager, an incorrect time stamp was displayed
- XML-API accountsummary returned OK status on non-existent account
- XML-API passwd function now requires the user name parameter
- cpbackup did not backup the cron tabs during the system-level backup on FreeBSD
- pkgacct neglects to archive custom apache userdata files for add-on domains
- rsyslog and syslog are now mutually exclusive options in Service Manager