

Tax-Aide Appointment System

Installation and Configuration Manual

January 25, 2024

Version 9.08

This appointment system (referred to in this document as TAAS) was developed by AARP Foundation Tax-Aide volunteers from Colorado to replace paper or spreadsheet type systems. It provides a convenient platform for managing appointments for individual sites, coordination of scheduling across multiple sites, or a central scheduling point for many sites. New sites and users can be added by any Appointment Manager and users can be assigned either viewing or scheduling permissions at their own or multiple sites as desired. Sites can optionally allow internet access to taxpayers for scheduling their own appointments or add themselves to a callback list for subsequent scheduling.

TABLE OF CONTENTS

Introduction	2
Overview	2
Prerequisites	2
Windows or Linux Installation	2
Step 1: Create a folder	2
Step 2: Create a database	3
Step 3: Create a database user name and password.	4
Step 4: Setup	5
Appointment reminders:	7
Step 5: Configuration	9
The Site Options Tab:	11
The Tools Menu:	14
MacOS Installation	15
Step 1: Create a folder	15
Troubleshooting tips	16
Reporting problems	16
Check the PHP version and extensions	16
The Trace tool	16
Environment settings	17
Appendix 1 - Prerequisite Components	18
Windows Prerequisites	18
MacOS Prerequisites	18
MySQL	18
Also Recommended	18
Appendix 2 – Database Schema	19
Appendix 3 – Program Module Flow	21
Appendix 4 – Update History	22

Introduction

Overview

The software for the Appointment system is delivered in a zip file containing numerous PHP executable files (.php, .css), image files (.png, .gif, .ico) and supporting documents (.pdf).

This is a web application, not a desktop application. These files must be installed on a web server. The Appointment system has been successfully deployed on Windows, Linux, and MacOS servers.

Access to the Appointment system is via a public-facing web page.

Prerequisites

TAAS requires these components to work

- MySQL database – version 4.6 or later
- PHP – version 7.0 or later
- An HTTP web server, e.g. IIS or Apache.

If you do not have all these already installed on your server, please refer to Appendix 1.

Windows or Linux Installation

Step 1: Create a folder

Create a new folder to hold the Appointment system files. If you are using a website creation system (like Wordpress, Joomla or Drupal), you want the folder to be outside of that environment. It's usually best to add the new directory immediately above your website root folder to keep the access link simple, for example:

`https://mywebsite.net/myappts`

For IIS installations, it's OK to create your folder below the default:

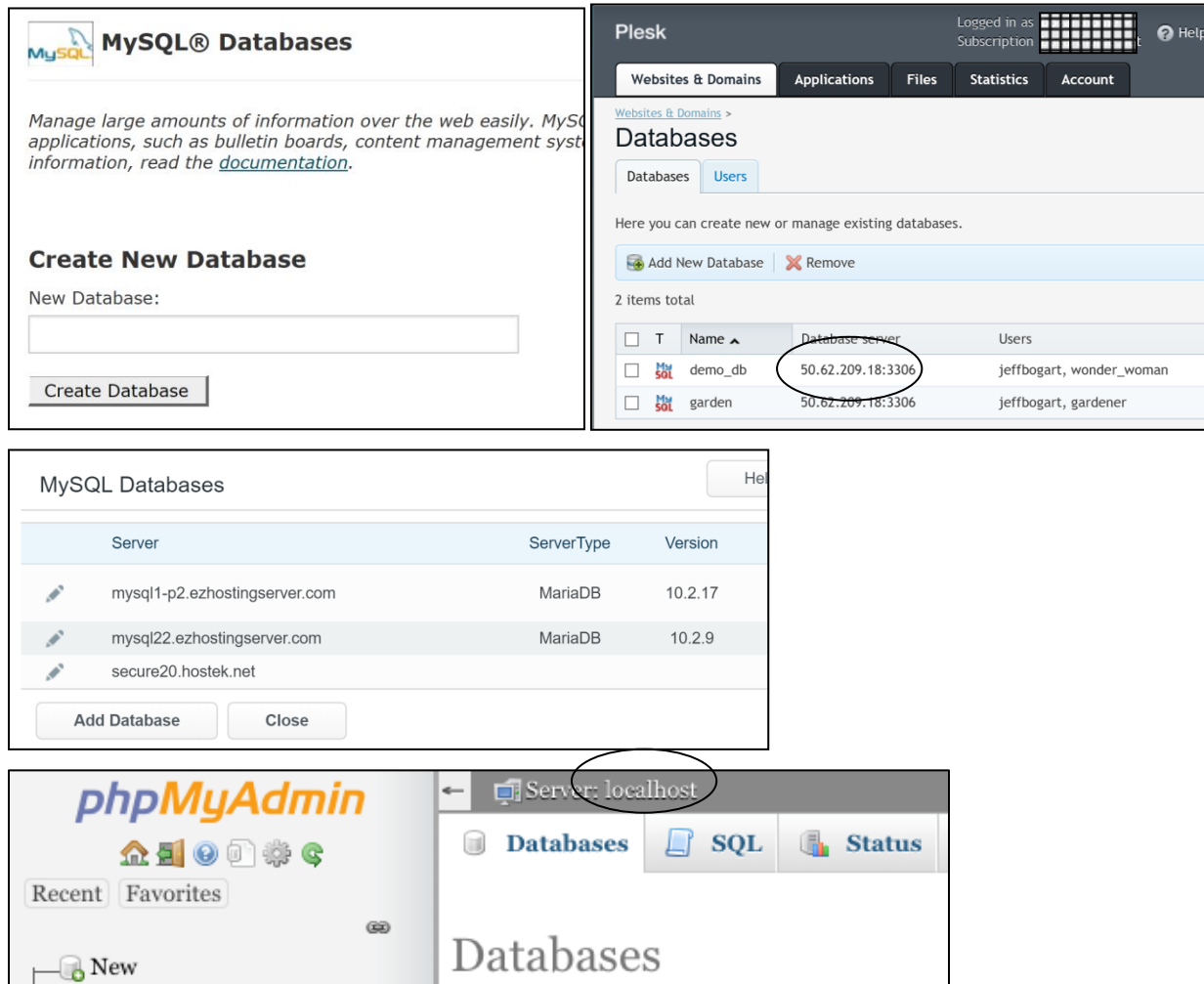
`C:\inetpub\wwwroot`

After you create your folder:

- Enable full permissions to this folder for your web server app and for yourself.
- Unzip and copy the files into the new folder

Step 2: Create a database

The Appointment System uses a MySQL database interface. Creation of the database varies with the host server, but may look like one of the following:



Important - Record the host name of your database (an IP address or "localhost"). You'll need that information later.

Step 3. Create a database user name and password.

MySQL Users

Add New User

Username
gardener

Password
.....

Password (Again)
.....

Strength ⓘ
Very Strong (100/100)

Create User

Add User To Database

User
gardener

Database
garden

Add

Add Database

Server: mysql1-p2.ezhostingserver.com (MariaDB 10.2.17)

Database Name:

User: -- New User --

Username:

Password:

ColdFusion DataSource: ☐

Save Back

Plesk Logged in as: bogarhome - Subscription: bogarhome.net

Websites & Domains Applications Files Statistics Account

Websites & Domains > Databases >

Adding Database User

Database: Any

Type: MySQL

Database server: 50.62.209.18:3306 (default for MySQL)

Database user name: newusername

New password: Strong

Generate Show

Confirm password:

* Required fields

OK Cancel

Be sure your new user has full access privileges to the database, typically the default. If you already have a user name set up for other databases, you could use that same user here of course.

NOTE: Please avoid ampersands and quotes in passwords.

Step 4: Setup

To initialize the system, invoke index.php from your browser:

<http://localhost/apptsys/index.php>

The page below will display. You will need to enter:

- Database host name (recorded from step 2 above).
- The database name, user name and password.
- Your personal information – name, phone, email, home site name.
(your initial password will be "admin").

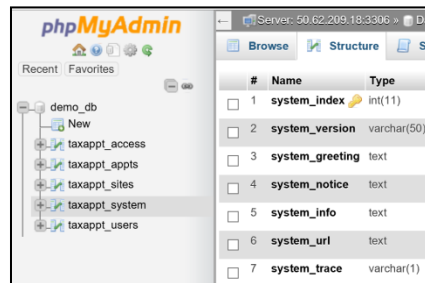
Information about your database:
Host: (Could be an IP address if other than "localhost")
Database Name:
Username:
Password:
Time Zone: ☐ Eastern ☐ Central ☒ Mountain ☐ Mountain no DST
☐ Pacific ☐ Alaska ☐ Hawaii ☐ Hawaii no DST

Information about you:
First Name:
Last Name:
Email:
Phone: (7 or 10 digits with optional leading 1)
Your Home Site Name:
Your public website URL: (Optional)

The setup program will create new subfolders in your appointment folder:

- Images - all .png and .jpg files will be moved to this directory.
- appt_session_dir - where global session variables are stored.
(overrides the PHP system session location setting if it exists)
- appt_error_log – a text file where error messages may appear. It also contains information about actions taken by the appointment system users. Viewing using the Trace capability can help troubleshoot problems a user is experiencing.
- crontab.bat – a file that is executed as a scheduled task to send email reminders.
- crontab.txt – (for future use)

The setup program will also create the database tables and their fields:



The screenshot shows the phpMyAdmin interface. On the left, a tree view shows the database 'demo_db' with several tables: 'taxappt_access', 'taxappt_appts', 'taxappt_sites', 'taxappt_system', and 'taxappt_users'. The 'taxappt_system' table is selected, and its structure is displayed on the right. The table has 7 fields:

#	Name	Type
1	system_index	int(11)
2	system_version	varchar(50)
3	system_greeting	text
4	system_notice	text
5	system_info	text
6	system_url	text
7	system_trace	varchar(1)

In addition to entries in the `taxappt_system` table, there should be one entry in the `taxappt_users` table (you) and two entries in the `taxappt_sites` table (your site and an “Unassigned” site).

The setup program will also create a new PHP file, `opendb.php`. This file uses the information you entered to provide the needed code statements to connect the database to the Appointment system.

If you need to run setup again for some reason, simply delete the `opendb.php` file and it will be re-created. Re-running setup will not change the contents of the database other than to add new tables or table fields during an update process. But it may set your password back to “admin”.

Appointment reminders:

One final step is to set up a scheduled task to run which will send email reminders to those who have upcoming appointments.

On Linux systems, that means setting up a cron job. Look for the cron icon:



Click the Cron Jobs icon and you will be presented with a form to fill in:

The image shows two screenshots of a web-based form titled 'Add New Cron Job'. The left screenshot shows the full form, which includes PHP command examples (General and Domain-specific), Common Settings (a dropdown menu), and fields for Minute, Hour, Day, Month, and Weekday, each with a text input and a dropdown menu. The Command field contains the path '/home/c0admin/public_html/appt/crontab.bat'. The right screenshot is a zoomed-in view of the 'Add Cron Job' form, showing the Name field (Appt), the URL field (http://mytestsite.org/aarp/crontab.bat), and the Expert field (20 2 ***). Below the Expert field are five columns of dropdown menus for Minute, Hours, Day, Month, and Day Of Week, each with a list of options. The 'Save' button is green and the 'Back' button is grey.

These examples are set to run at 2:20 am every day.



Note that the time set is the server time, not necessarily your local time if the server is not in your time zone.

The command entry is the full path from your home directory to the crontab.bat file that was created during the installation process.

An example Plesk screen for scheduling on a windows system:

To see all scheduled tasks created for a subscription, go to **Websites & Domains > Scheduled Tasks**.

The screenshot shows the Plesk interface for managing scheduled tasks. On the left is a sidebar with navigation links: Websites & Domains (selected), Mail, Applications, Files, Databases, and Statistics. The main content area is titled 'Scheduled Tasks' and includes buttons for 'Add Task', 'Refresh', 'Remove', and 'Settings'. Below these buttons, it shows '1 items total' and a table of tasks. The table has columns for 'Command', 'Schedule', and 'Run Now'. A single task is listed: 'touch /tmp/test.txt' with a 'Daily (00:00)' schedule. A 'Run Now' button is visible next to the task. At the bottom right, there is a pagination control showing 'Entries per page: 10 25 100 All'.

For every task in the list you can change the settings of the task (by clicking on the task's name), activate it by clicking the , deactivate it by clicking the , or run the task immediately.

To create a scheduled task, go to **Websites & Domains > Scheduled Tasks > Add Task**.

The screenshot shows the 'Schedule a Task' form in Plesk. The sidebar is the same as in the previous screenshot. The main content area is titled 'Schedule a Task' and includes a 'Active' checkbox which is checked. The 'Task type' section has three radio buttons: 'Run a command' (selected), 'Fetch a URL', and 'Run a PHP script'. The 'Command' field contains 'touch /tmp/test.txt' with a 'with arguments' button. The 'Run' section has a dropdown menu with 'Daily' selected, and a time field set to '00 : 00'. Below the dropdown, it says 'for running the task is (UTC +07:00) Novosibirsk'. The 'Description' and 'Notify' fields are empty. At the bottom, there is a note: 'Notifications contain the command output and are sent only if the exit code is non-zero.' and another note: 'Every time Notifications contain the command output and are sent regardless of the command exit code.' At the bottom right, there are three buttons: 'Run Now', 'OK', and 'Cancel'. A legend at the bottom left indicates '* Required fields'.


Step 5: Configuration

If setup runs properly, you will then be presented with the login page:

Tax-Aide Appointments

We are not accepting reservations at this time.

Appointments at other sites are by phone – see the [AARP Locator web site](#).



Sign In

Email:


Password:


☐ Remember me on this PC.


FORGOT YOUR PASSWORD?

Click here


Don't have an ID yet?





**Make or Change appointments**


**Manage options and permissions**

Change your information:

**Password**

**Email**

**Phone**



Sign in with your email and initial password (“admin”). You should change that password as soon as possible.

Then, choose “Manage options and permissions”. It will take you to your home site configuration tab.

Site and User Administration

You are signed in as Johnny Appleseed

[Manage appointments](#) [Search](#) [Tools](#) [Sign out](#)

Site being managed: Apple Valley Senior Center ▼

System Options

Site Options

Schedulers

Taxpayers

Add a new site

Current site name:

Address:

City:

Contact:

Appointment phone:

Website:

Email messages:

Site options:

Internet access:

Other site access:

Apple Valley Senior Center

1000 Apple Parkway

Apple Valley

State: CO

Zip: 80999

303-555-1234

Email: avsc@applevalleycommunity.test

http://cotaxaide.org/

☐ Send confirmation email if taxpayer has an email.

☐ Allow scheduling of reserved slots in Summary View (empty slots are always chosen first)

☐ Require 10-digit phone numbers with optional toll prefix (recommended)

☐ Allow internet taxpayers to make their own appointment.

☐ Allow other sites to view or schedule your taxpayers.

Save changes

Cancel

Delete this site

Complete filling out the information and options for your home site. More details about the options are in the *Appointment help.pdf* document, included as one of the TAAS files.

The System Options Tab:

As the System Administrator, you have a tab for System Options that others do not. Here, you can customize the Login Greeting, the Login Notice, the default site Confirmation message and attachment links available to the sites in their messages.

The State Website should point to a web page that is accessible to the public such as lists of what to bring. The [STATESITE] shortcode in appointment confirmation messages will be replaced by what you enter in that field.

New in version 9.02 is a function that periodically queries the database to check the contents of the fields in the Daily View. It runs in the background with a repetition rate specified in milliseconds. This has not been stress tested but a setting of 10000 ms (10 seconds) seems to work well. This will reduce the opportunity for two (or more) schedulers to inadvertently choose the same seemingly empty time slot while in the Daily View. Other views are more complex and may be handled in a future release.

Site and User Administration													
You are signed in as Jeff Bogart													
Manage appointments	Search Tools Sign out												
System options being managed													
System Options	Site Options												
<table border="1"><thead><tr><th>OPTION</th><th>VALUE or STATUS</th></tr></thead><tbody><tr><td>System Version:</td><td>9.02</td></tr><tr><td>State Web Site [STATESITE]:</td><td><input type="text" value="https://cotaxaide.org"/> <input type="button" value="Go there"/></td></tr><tr><td>Default Email:</td><td><input type="text" value="do-not-reply@tax-aide-reservations.no-reply.email"/></td></tr><tr><td>Daily View update interval:</td><td><input type="text" value="15000"/> milliseconds. (0 = off) or no less than 5000 (5 seconds))</td></tr><tr><td>Periodic email reminder:</td><td>Last ran on 01/09/23 at 11:22 am.</td></tr></tbody></table>		OPTION	VALUE or STATUS	System Version:	9.02	State Web Site [STATESITE]:	<input type="text" value="https://cotaxaide.org"/> <input type="button" value="Go there"/>	Default Email:	<input type="text" value="do-not-reply@tax-aide-reservations.no-reply.email"/>	Daily View update interval:	<input type="text" value="15000"/> milliseconds. (0 = off) or no less than 5000 (5 seconds))	Periodic email reminder:	Last ran on 01/09/23 at 11:22 am.
OPTION	VALUE or STATUS												
System Version:	9.02												
State Web Site [STATESITE]:	<input type="text" value="https://cotaxaide.org"/> <input type="button" value="Go there"/>												
Default Email:	<input type="text" value="do-not-reply@tax-aide-reservations.no-reply.email"/>												
Daily View update interval:	<input type="text" value="15000"/> milliseconds. (0 = off) or no less than 5000 (5 seconds))												
Periodic email reminder:	Last ran on 01/09/23 at 11:22 am.												

Below the options is the Login Greeting and Login Notice setup:

The Login Greeting and Login Notices use HTML coding for the messages. They will initially be blank. The default Login Page greeting will appear after you *Save changes* the first time. To restore the default Login Greeting, simply delete the entire greeting and select *Save changes* (buttons will appear at the bottom of the screen). To remove the Login Notice, delete the notice and it will not appear on the login screen. The notice will have no effect on the ability to use the system but acts only as a deterrent to warn internet clients that the system is not active for their use or to indicate service limitations (for example, during the COVID epidemic period).

Login Page Greeting	
<p>AARP Foundation Tax-Aide, an AARP Foundation program, helps low- to moderate-income taxpayers have more discretionary income for everyday essentials, such as food and housing, by assisting with tax services and ensuring they receive applicable tax credits and deductions.</p> <p>AARP Foundation Tax-Aide is available free to taxpayers with low and moderate income, with special attention to those 60 and older. Through a cadre of trained and IRS accredited volunteers, AARP Foundation Tax-Aide has helped low- to moderate-income individuals for more than 40 years in every state and the District of Columbia.</p> <p>AARP Foundation Tax-Aide is offered in cooperation with the IRS.</p> <p><div id="disclaimer">Please note: There are some tax issues that are beyond the scope of our volunteer training. Most things that a retired or low-income person has will be OK.</div></p>	<p>The "greeting" field to the left and the "notice" field below appear on the sign-in page. Both fields can contain HTML coding to display text, for example:</p> <ul style="list-style-type: none">• Use some text to make some text bold.• Use <i>some text</i> to make <i>some text</i> italic.• Use <u>some text</u> to make <u>some text</u> underlined.• Nest them: <u><i>some text</i></u> to make <u><i>some text</i></u> do combinations. <p>To restore the default greeting, simply clear the box to the left and click the save button at the bottom of the window.</p>

Login Page Notice:	
<div></div>	<p>The system notice is generally blank during the normal season but can be used to indicate that the season is over or that some special conditions need to be brought to the attention of users (e.g. during the COVID-19 epidemic, system is temporarily off-line, etc.)</p>

Scrolling down the tab gives access to the default Confirmation/Reminder message that is available to each site. Each site can create their own but if they delete their message, this will be the replacement.

Default confirmation email:	
<p>Welcome, [TPNAME]:</p> <p>This is to confirm your appointment with AARP Tax-Aide to assist in preparing your tax return.</p> <p>You are scheduled for [TIME] on [DATE] at the [SITENAME] [ADDRESS] [CITY], [STATE] [ZIP]</p> <p>You can find additional information and a handy checklist at our web site at [STATESITE]</p> <p>If you find that you no longer need this appointment, please contact us at [PHONE] so that we can use this time for another person who does need our service.</p> <p>We look forward to seeing you on [DATE]</p> <p>Your AARP Tax-Aide friends at the [SITENAME].</p>	<p>The default confirmation email should contain only ascii text, no HTML coding. It can contain the following shortcodes which will be replaced with text when emailed:</p> <p>[STATESITE] (state web site as defined above) [SITENAME] (site's name) [ADDRESS] (site's street address) [CITY], [STATE], [ZIP] (site's address) [CONTACT] (site's contact name) [PHONE] (site's contact phone) [EMAIL] (site's email) [DATE], [TIME] (date and time of appointment) [ATTACHMENTS] (defined below)</p> <p>To restore the sample confirmation message, clear the box to the left and click the save button at the bottom of the window.</p>

And down a little more is the definition of attachments that are available to the sites for selection using the [ATTACHMENTS] shortcode:

Attachments list:		
Attachment title	Attachment URL	
<input type="text" value="Intake documents"/>	<input type="text" value="https://cotaxaide.org/docs/i-all.pdf"/>	<input type="button" value="Verify"/>
<input type="text" value="Intake booklet"/>	<input type="text" value="https://cotaxaide.org/docs/i-booklet.pdf"/>	<input type="button" value="Verify"/>
<input type="text" value="Deductions"/>	<input type="text" value="https://cotaxaide.org/docs/i-deductions.pdf"/>	<input type="button" value="Verify"/>
<input type="text" value="Self-employment worksheet"/>	<input type="text" value="https://cotaxaide.org/docs/i-selfemployed.pdf"/>	<input type="button" value="Verify"/>
<input type="text" value="Education worksheet"/>	<input type="text" value="https://cotaxaide.org/docs/i-education.pdf"/>	<input type="button" value="Verify"/>
<input type="text"/>	<input type="text"/>	

The attachment list provides links to documents and/or web sites. These attachments can be selected by site and applied to email confirmation and reminder messages.
For the URL, include the http:// or https:// prefix.
To remove an entry, clear either the title or URL field and save.

There is no limit to the number of attachments that can be defined – as you add an attachment, a new blank line will be added to the end of the list.

At the bottom of the page, save and cancel buttons will appear if changes have been made on this tab.

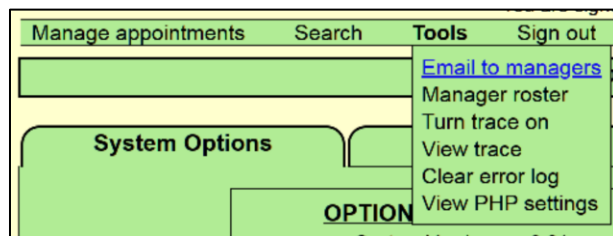
Also, as System Administrator, you have full access to all sites and all users and can change all permissions including adding additional Administrators (it's a good idea to have a backup). This can be helpful when the Appointment Managers at sites need assistance in configuring their setups.

You also have access to a site called "Unassigned". The purpose of this site is to list users (in the Taxpayer tab) who have login accounts but are not associated with any site. Perhaps a person created a login ID but never made an appointment. You may wish to purge names on this list if they haven't been used for a long time.

That's it! You are now ready to add additional sites and their Appointment Managers, Schedulers and appointment slots for each site. For those tasks, see the *Appointment help.pdf* file included in the TAAS distribution files.

The Tools Menu:

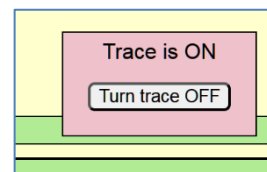
The tools menu is only available to Administrators.



Email to managers opens your email application on your PC and pre-loads the send-to list with all Administrators and Appointment Managers.

Manager roster produces a new window listing all Administrators and Appointment Managers in the system with their email address, phone number and home site name. This can be copied and pasted into an excel spreadsheet.

Turn trace on/off provides messages in the `appt_error_log` as an aid to troubleshooting. When the trace is active, a red indicator box at the top right of the window indicates this status. Turn the trace off by clicking the button in the red box or the Tools menu choice.



View trace provides a view of the information in the `appt_error_log` by grouping transactions by the user that was logged on. It can give a way to figure out who did what and when if a problem is reported.

Clear error log deletes the information in the `appt_error_log`. The log can get quite large as the season progresses and if all is well, there is no need to save that information. If you do wish to save the information, use the View trace menu and then use the view source function in the browser to save it to your PC before clearing the error log.

View PHP settings provides a new window showing all settings for PHP and its extensions as an aid to troubleshooting. This invokes the `show_phpinfo.php` file, which can also be run directly as a URL, for example:

https://mywebsite.net/myappts/show_phpinfo.php

MacOS Installation

Step 1: Create a folder

Create a new folder to hold the Appointment system files. It's fine to use the default MacOS Apache folder:

```
/Users/<username>/Sites
```

After you create your folder:

- Enable full permissions to this folder for your web server app and for yourself.
- Unzip and copy the files into the new folder

Then follow Steps 2 through 5 in the Windows Installation section.

Troubleshooting tips

Reporting problems

To ask questions or to report problems, please send an email to: tools@cotaxaide.org.

Check the PHP version and extensions

On your server dashboard there will be a place to select the version of PHP that is being used. The icon may be something like:



The application has been tested on several PHP versions and it's best to use the latest (8.1 as of this writing) since the later versions have significant performance improvements. The current version of TAAS requires PHP version 7.0 or later.

If, during setup, the database doesn't get created, verify that *mysqli* is included in the extensions.

Current PHP version: **7.2**

PHP Version: 7.2 Set as current Switch To PHP Options

<input type="checkbox"/> apcu	<input type="checkbox"/> igbinary	<input type="checkbox"/> nd_pdo_mysql	<input type="checkbox"/> posix	<input checked="" type="checkbox"/> uploadprogress
<input checked="" type="checkbox"/> bcmath	<input checked="" type="checkbox"/> imagick	<input type="checkbox"/> oauth	<input type="checkbox"/> propro	<input type="checkbox"/> uuid
<input type="checkbox"/> brotli	<input type="checkbox"/> imap	<input checked="" type="checkbox"/> oci8	<input type="checkbox"/> pspell	<input type="checkbox"/> vips
<input type="checkbox"/> dba	<input type="checkbox"/> inotify	<input type="checkbox"/> odbc	<input type="checkbox"/> raphf	<input type="checkbox"/> wddx
<input type="checkbox"/> dbase	<input type="checkbox"/> interbase	<input type="checkbox"/> opcache	<input type="checkbox"/> redis	<input type="checkbox"/> xdebug
<input type="checkbox"/> disval	<input type="checkbox"/> intl	<input checked="" type="checkbox"/> pdo	<input checked="" type="checkbox"/> snmp	<input type="checkbox"/> xmlreader
<input type="checkbox"/> dom	<input checked="" type="checkbox"/> ioncube_loader	<input type="checkbox"/> pdo_dblib	<input type="checkbox"/> soap	<input checked="" type="checkbox"/> xmlrpc
<input type="checkbox"/> eio	<input type="checkbox"/> json	<input type="checkbox"/> pdo_firebird	<input type="checkbox"/> sockets	<input type="checkbox"/> xmlwriter
<input type="checkbox"/> enchant	<input type="checkbox"/> ldap	<input type="checkbox"/> pdo_mysql	<input checked="" type="checkbox"/> sqlsrv	<input type="checkbox"/> xsl
<input type="checkbox"/> ffmpeg	<input type="checkbox"/> lz4	<input type="checkbox"/> pdo_oci	<input type="checkbox"/> ssh2	<input type="checkbox"/> yaf
<input type="checkbox"/> fileinfo	<input checked="" type="checkbox"/> mailparse	<input type="checkbox"/> pdo_odbc	<input type="checkbox"/> stats	<input type="checkbox"/> yaml
<input type="checkbox"/> gd	<input checked="" type="checkbox"/> mbstring	<input type="checkbox"/> pdo_pgsql	<input type="checkbox"/> sysvmsg	<input type="checkbox"/> zip
<input type="checkbox"/> gender	<input type="checkbox"/> memcached	<input type="checkbox"/> pdo_sqlite	<input checked="" type="checkbox"/> sysvsem	<input type="checkbox"/> zmq
<input type="checkbox"/> geoip	<input type="checkbox"/> mongodb	<input type="checkbox"/> pdo_sqlsrv	<input type="checkbox"/> sysvshm	
<input type="checkbox"/> gmagick	<input checked="" type="checkbox"/> mysqli	<input type="checkbox"/> pgsql	<input type="checkbox"/> tidy	
<input type="checkbox"/> gnupg	<input type="checkbox"/> mysqlnd	<input checked="" type="checkbox"/> phalcon3	<input type="checkbox"/> timezonedb	
<input type="checkbox"/> http	<input type="checkbox"/> nd_mysqli	<input type="checkbox"/> phar	<input checked="" type="checkbox"/> trader	

Save Use Defaults

The Trace/Error log tool

From the Tools menu option, you can turn trace on or off.

This produces messages in the *appt_error_log* file whenever an action is taken and is helpful when the action does not do what was expected – especially if a real error is logged because of that action. If such occurs, please report it so that it can be investigated and repaired. Send the *appt_error_log* file along plus any other information that you think might be helpful.

With trace on, the *appt_error_log* can get rather large as time goes on. After using this tool for troubleshooting, it's a good idea to erase the *appt_error_log*. It will be recreated when needed.

Environment settings

The *environment.php* module is designed to set the required PHP options and create the necessary subfolders.

You may gain some insight by running the *show_phpinfo.php* module as a URL:

https://mywebsite.net/myappts/show_phpinfo.php

If you have difficulty with the installation or operation and find a setting that is causing problems, please report it. The default settings on servers vary. We'll be glad to help you get set up if you run into trouble.

Database problems

Issues with the database are often related to the query construction. If you can determine which query is causing a problem (usually an error message in the *appt_error_log* file), add an `"error_log($query)"` message, copy the query and paste it into the SQL section of the MySQL database interface. It will give a clue that may help repair the query.

Appendix 1 - Prerequisite Components

Windows Prerequisites

Assuming you want to use IIS as your web server, we highly recommend that you use Microsoft Web Platform Installer. It provides a robust system to install and configure many well-known web components. It works well for installing MySQL and PHP.

<https://www.microsoft.com/web/downloads/platform.aspx>

MacOS Prerequisites

Apache and PHP come pre-installed on MacOS. There are numerous articles available to assist you with configuring these components.

<https://coolestguidesontheplanet.com/install-apache-mysql-php-on-macos-mojave-10-14/>

<https://www.iodocs.com/installing-apache-php-mysql-mac-os-x-macos-sierra/>

MySQL

If you're not already using MySQL, we recommend the Community Server edition.

<https://dev.mysql.com/downloads/>

If you install version 8.0 or greater of MySQL, we recommend you choose the Legacy Encryption option to ensure compatibility with third party tools.

Also Recommended

One of the best free database management tools for MySQL is phpMyAdmin. It is well supported and very powerful for a wide range of DBA tasks.

<https://www.phpmyadmin.net/>

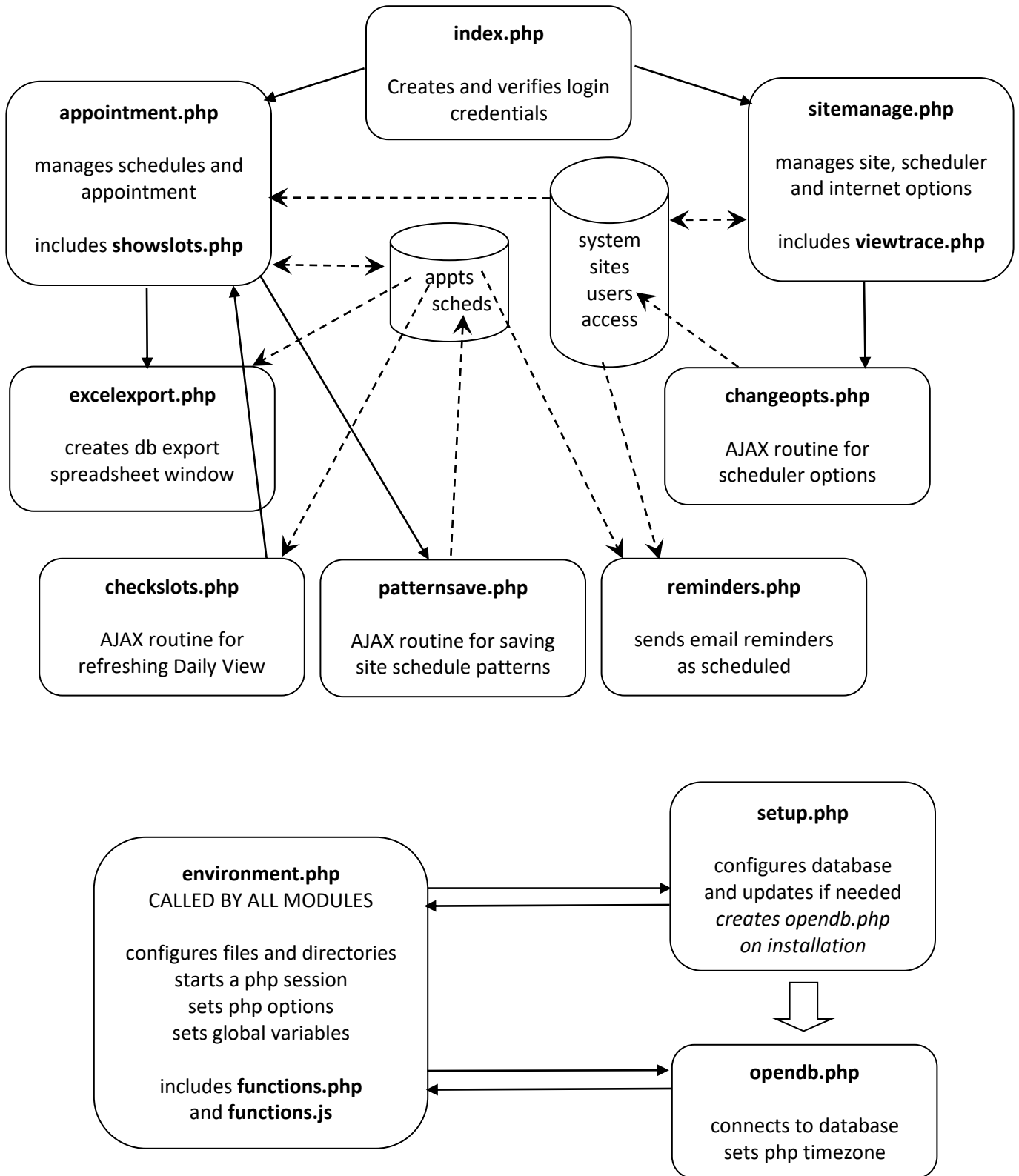
Appendix 2 – Database Schema

Table	Field	Option	Description
taxappt_system	system_index	1	Only one record in this table
	system_heartbeat	(number]	Update interval in milliseconds
	system_version	(number)	Version number from the setup.php file
	system_greeting	(text)	Login page greeting message
	system_notice	(text)	Login page notice (doesn't print if blank)
	system_info		Reserved for future use
	system_url		URL to state web site
	system_trace	T	"T" if trace is active
	system_email		Default email address for emails
	system_reminders	(date)	The date and time when the last scheduled crontab.bat ran
	system_confirm	(text)	Default confirmation message
	system_attach	(text)	List of attachments available for use with the [ATTACHMENTS] shortcode. " " delimits each attachment
taxappt_sites	site_index	(number)	Index of the record for the site (1 = Unassigned)
	site_name	(text)	Site name "^" as a first character hides the site to all but admin
	site_address	(text)	Address, phone, contact with " " as a delimiter
	site_inet	S:n R:n C:n N:n	Internet scheduling allowed Restrict scheduling to CB list if CB list > avail slots Restrict scheduling to CB list Allow scheduling but cannot add to the CB list n = Number of appointments allowed by this site
	site_contact	(text)	Contact person
	site_message	(text)	Email message to be sent when appt is made or changed. Not sent if first 4 characters are "NONE".
	Site_instructions	(text)	Additional instructions for the taxpayer when making their own appointment
	site_addedby	(index)	Index of site that created this site
	site_open	(date)	Date site is open for internet scheduling
	site_closed	(date)	Last date site is open for internet scheduling
	site_schedule		Reserved for future use
	site_help	(URL)	
	site_sumres	"checked"	Allow selection of RESERVED slot from Summary View
	site_reminder	(number)	Number of days prior to appointment to send reminder
	site_lastrem	(number)	Number of days since last email to not send a reminder
	site_10dig	"checked"	10-digit phone numbers are required
	site_attach	(text)	Names of attachments to be listed using the [ATTACHMENTS] shortcode. Separated by " ".
taxappt_users	user_index	(number)	Index of the record for this user
	user_name	(text)	Abbreviated name for status history messages
	user_email	(email)	User's email address
	user_phone	(phone)	User's phone number
	user_last	(text)	User's last name
	user_first	(text)	User's first name
	user_home	(index)	Index of user's home site (Appt Mgrs, Schedulers only)
	user_appt_site	(index)	Index of user's last appointment site (Inet scheds only)
	user_options	A M 1-63	Administrator Appointment Manager Bit map value of Scheduler permissions:

Table	Field	Option	Description
			1 = view Callback list 2 = add/change Callback list 4 = view Appointment availability (Summary View) 8 = add/change Appointments 16 = (reserved for future use) 32 = allowed to use RESERVED slots
	user_lastlogin	(timestamp)	Date and time of last login
	user_pass		User password. Initial dagger indicated a temporary password sent to the user. Now formatted as: oldPW † 6-dig code † date
	user_sitelist	(indexes)	Indexes of sites to which the user has permissions delimited with “ ”
	user_excel_export		Ordered list of fields to export to excel. Preceding * in field name indicates skip box was checked.
taxappt_access	acc_index	(index)	Index of the permission entry in the table
	acc_owner	(index)	Index of the site who has given this permission
	acc_location†	(index)	Index of site to whom the owner wishes to give permissions (i.e. who is listed on the Scheduler tab)
	acc_user†	(index)	Index of the user to whom the owner gave permissions
	acc_option	M, 1-63	The permission option (see above table)
taxappt_appts	appt_no	(index)	Index of the appointment slot
	appt_date	(date)	Slot date (1900-01-01 is unused, Callback or Deleted)
	appt_time	(time)	Slot time
	appt_name	(text)	Client’s name
	appt_location	(index)	Index of the site for which the appointment is made
	appt_phone	(phone)	Client’s phone number
	appt_need	(text)	Client’s need information
	appt_status	(text)	Status history – each event separated by “%0A”
	appt_wait	(number)	A number, used for Callback list sorting
	appt_change	(timestamp)	When the appointment was last added or changed
	appt_by	(text)	Full name of the person who made the appointment
	appt_type	D A	D = Deleted record, A = Archived record
	appt_tracking		Reserved for future use
	appt_emailsent	(date)	Date when the last email was sent
	appt_tags	(text)	Tags content
	appt_info	(text)	Info content
taxappt_scheds	Sched_index	(index)	Index of the schedule pattern
	Sched_location	(index)	Index of the site to which the pattern belongs
	Sched_name	(text)	The name of the pattern
	Sched_pattern		The pattern: d1, d2 , dow1, dow2, ... , n1, n2, n3, n1, ... d1 = starting date as yyyy-mm-dd d2 = ending date as yyyy-mm-dd dow1 – dow7 = Mon, Tue, Wed, etc n1 = number of slots n2 = time as hh:mm in 24 hr format n3 = number of slots reserved n1 – n3 is repeated up to 8 times as needed

†Only one of acc_user or acc_location is populated to give permissions for the user or site respectively.

Appendix 3 – Program Module Flow



Appendix 4 – Update History

New in version 5.00:

- Management window:
 - New option to require entry of 10-digit phone numbers.
 - New option by Scheduler to allow or deny using reserved slots for an appointment.
 - Search by name, phone or email of internet registered persons.
 - Sites are prevented from removal if any appointment slots are present – to remove a site, go to the appointment screen and “Start over” to remove all.
 - Sites are prevented from removal if any Schedulers are assigned – move them to another site or delete them.
 - New option to delete all members of the “Taxpayers” tab who have not logged in since a given date.
 - Site Appointment Managers now have access to the “Unassigned” site – a list of internet users who have created a login but have not completed a registration at any site.
 - Addition of a default system email “From” address to be used if email is sent without a site email address.
 - Ability to schedule reminder emails on a site basis (if set up for the system).
 - Administrable limit on the number of appointments an internet user can make.
- Appointment window:
 - The calendar now scrolls from the earliest appointment date to one month past the last appointment date.
 - The current date is highlighted in the calendar.
 - Schedulers can now go to an earlier than current date by clicking on the calendar day.
 - Daily view appointments now sorted by: assigned, available, RESERVED.
 - Separate the Notes field into 3 depending on desired use:
 - Tags field displays with the name on the Daily view but does not print on the check-in sheet or the ERO report.
 - Notes field continue to be footnotes on the check-in sheet,
 - Info field is miscellaneous information for Schedulers,
 - Added search by Tags option.
 - An additional column in Daily, Callback and Deleted views to indicate that the Info field has information – hover the mouse over the icon to see the information.
 - Search shows any match to phone or email at any site in the system, not just your own.
 - Allow ampersand (&) in name and email fields.
 - The status log for an appointment now shows when an email was sent.
 - The “cancel” button on the appointment entry form is now labeled “close”.
 - Deleting “Reserved for #...” entries in the Callback list no longer are added to the Deleted list.
 - Ability to save and recall a schedule pattern and use patterns saved at other sites to which you have access.
 - Ability to delete the “Deleted list”.
- Internet window:
 - The calendar was removed because it was hiding sites that could be selected and provided no additional information not already available in the list of available appointments.

New in version 6.00

- Management window:
 - A new field for each site to give additional information to the taxpayer when making their appointment.
- Internet window:
 - Display of the additional information for the site

New in version 7.00

- Management window:
 - Minor reformatting to keep table headers visible and scrolling changes
 - Minor reformatting to keep page-bottom buttons visible
 - Changed view of site messages to display in a new browser window (vs alert window)
- Appointment window:
 - Flexibility for excel export to re-order and omit selected fields
 - Added ability to copy an appointment
 - Added ability to send an email message to a taxpayer
 - Added ability to move all Callback list to Deleted list
 - Added shortcode support for site information field on user appointment window
 - Changed blue indications for internet-registered appointments
 - Minor reformatting to keep table headers visible and scrolling changes
 - Moved some routines to new functions.php, functions.js and showslots.php to reduce module size and duplication

New in version 8.00

- opendb.php problem fix
 - The line containing “mysqli_connct_error()” has a parameter \$dbcon prior to version 8. The parameter is not permitted using PHP version 8.0. This is corrected by fixdbv8.php, which is run from setup.php.
- Management window:
 - Added ability to delete the appt_error_log to prevent it getting too large or if no longer needed.
 - Added ability to tailor the default confirmation/reminder message for the system.
 - Added ability to add document or web page links as attachments to confirmation, reminder or user instruction messages via an [ATTACHMENTS] shortcode.
- Appointment window:
 - Changed export to create a download file, courtesy of Mark Doernhoefer.
 - Changed the null date (for callback and deleted record detection) from 0000-00-00 to 1900-01-01 so that database strict options work properly.
 - Added ability to select among available attachments to apply to confirmation, reminder or user instruction messages via the [ATTACHMENTS] shortcode to create a list. Individual attachments can be included in-line by placing the attachment name within brackets, e.g: [Intake booklet]
 - Added 2 new status buttons for “Sent documents” and “Responded by email”.
- PHP 8 fixes in version 8.02
 - htmlspecialchars_decode does not accept undefined as an input so changed to always produce null if found. This change occurred in most code modules.
 - Operator === changed to == in functions.php module.

- Changes in 8.03
 - Excel export order and options for a user was saved as a cookie, now saved in the user's database.
 - When a change is made to a taxpayer appointment, the display now returns to the taxpayer's line rather than the top of the appointment list.
 - If only one entry is found in a search, the resulting search list is skipped and the display goes directly to the found entry.

New in version 9.01

- Major internal restructuring
 - In prior releases, most User database values were available in SESSION globals such as `$_SESSION["UserName"]`. To ease maintenance and make all values available, these are all stored in a single session array holding the user's entire record, now accessed as `$_SESSION["User"]["user_name"]`. This affected most code modules.
 - Other changes throughout were made to use new capabilities of PHP and JavaScript where they can be used to simplify coding such as the `??` null-coalescing operator.
 - In prior releases of appointment.php, only the site information to which the user has permissions was saved as global variables and many individual tables were created as needed for a particular capability. Now, all site data is retained in a site array and additional information is added as new array keys in the site array.
- Login window
 - In prior releases, when requesting a new password, an 8-character string was emailed to the requester. This has now been changed to a 6-digit number like two-factor authorization uses, a more familiar process. The number is only valid on the date requested and either the number or the old password can be used for access.
- Management window
 - Passwords in user's administration window are now hidden but can still be changed.
 - A new site option to allow internet users to make an appointment but not add themselves to a callback list. Appointment Managers should use the additional instructions message to instruct internet users what to do if this option is chosen.
- Appointment window
 - Added an "Archived" flag to the appointment record, for use when an appointment is removed in the schedule configuration process by mistake. To be implemented in a later release to aid in recovery of the record.
 - In Export to Excel, added the field that specifies who made the appointment. Also added the ability to only export a single day's appointments.
 - Visual indication in user entry form if a phone number or email address is not in the proper format.
 - Corrected some issues related to permissions when a user has access to multiple sites with mixed levels of permissions.
 - Searches now only show matches in the current year so prior year data does not appear. Also, an option to show or hide matches from the deleted list. Searches on tags only match on sites the user is allowed to access to prevent confusion with other sites using similar tags. The same search function is now used when adding an appointment with icons to indicate how a match occurred (name, phone or email).
 - When moving an appointment, a new option to mark the old appointment slot as RESERVED to prevent it being used inadvertently.
 - A new report showing current site statistics information for the current year.
 - Clearing appointments by day of week is now allowed.

- Changes in 9.02
 - Correct the Daily View check-in report so the slots match the display.
 - Added a periodic background update to the slots in the Daily View to reduce conflicts when more than one scheduler is assigning appointment slots.
 - Site administration: Fixed inability to delete Unassigned users by date.
- Changes in 9.03
 - Fixed problem in setup where fields defined before the table definition.
 - Fixed system crashes related to configuring slots and moving appointments.
 - Fixed an empty slot behavior during periodic background update.
- Changes in 9.04
 - A PHP error message was thrown in the log when a known user entered an incorrect email address. This was corrected and an event notice was added to the log to record the attempt.
 - When moving a record from the Callback or Deleted list to an appointment, the old record would not be removed from that list.
 - When adding a record to the Callback list, email would be sent showing an appointment for 00:00 am on 01/01.
 - Corrected open appointment count when the site is selected for display.
- Changes in 9.05
 - Email not sending when appointment added or changed.
- Changes in 9.06
 - Name not retained in deleted list record when an internet user deletes an appointment or callback.
 - Deleted callback records continue to be displayed to internet users
 - Attachments show doc title but does not display link to the document
 - Individual attachment shortcodes not working
 - Can't select site if the current date is the opening date for internet reservations
- Changes in 9.07
 - Moving callback or deleted records leaves a copy behind again (v 9.04 fix was omitted)
 - Entries on callback list not in proper order.
 - Site statistics showing prior year if not removed, now limited to current year.
- Changes in 9.08
 - A scheduler without permission to use reserved slots can do so in Summary View
 - Allow scheduler with permission to schedule reserved slots without going to the Daily View to do so.
 - Selection of a person after a search doesn't highlight and focus on the person after opening the view in which they were found.
 - In the Site Management window, changing a scheduler's information changed their password to "*****".
 - In the User View (taxpayer's window), the first site was hidden by buttons if opened by a scheduler with permissions set to only view Callback records.
 - In the Summary View, time slot buttons with more than 9 open slots wrapped to a second line. The buttons were increased slightly to prevent that.

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