



speed things up with
transients



@cliffseal



**LogosCreative.co/
wcpbx14**



LOL WUT

is the Transients API?

The Transients API

“offers a **simple** and standardized way of **storing cached data** in the database **temporarily** by giving it a custom name and a timeframe after which it will **expire** and be deleted.”

The Transients API

- ✓ like Options API, but with expiration
- ✓ uses fast memory (if configured)
- ✓ uses database otherwise

	Native	Object Cache Plugin
Option	Persistent (database)	N/A
Transient	Persistent (database)	Persistent (varies)
Cache	Non-persistent (memory)	Persistent (varies)

thetransientsAPI



Tweets



Friends



Scrobbles

Options API: Username, URL, ID

externalAPIs

thetransientsAPI



Tag Cloud



Ratings



Custom Queries

expensive queries

3

mainfunctions

mainfunctions

```
set_transient(  
    $transient,  
    $value,  
    $expiration  
);
```

set_transient

\$transient

- ✓ **(string)** a unique identifier for your cached data
- ✓ **45 characters or less in length**
- ✓ For site transients, **40 characters or less in length**

set_transientargs

\$value

- ✓ **(array|object)** Data to save, either a regular variable or an array/object
- ✓ Handles serialization of complex data for you

set_transientargs

\$expiration

- ✓ **(integer)** number of seconds to keep the data before refreshing
- ✓ Example: **60*60*24** or **86400** (24 hours)

set_transientargs

mainfunctions

MINUTE_IN_SECONDS = 60 (seconds)
HOUR_IN_SECONDS = 60 * MINUTE_IN_SECONDS
DAY_IN_SECONDS = 24 * HOUR_IN_SECONDS
WEEK_IN_SECONDS = 7 * DAY_IN_SECONDS
YEAR_IN_SECONDS = 365 * DAY_IN_SECONDS

timeconstants

mainfunctions

```
get_transient($transient);
```

- ✓ If the transient does not exist, or has expired, returns **false**
- ✓ An integer value of zero/empty could be the stored data
- ✓ Should not be used to hold plain boolean values; array or integers instead

get_transient

mainfunctions

```
delete_transient($transient);
```

delete_transient

mainfunctions

```
set_site_transient();  
get_site_transient();  
delete_site_transient();
```

These work 'network wide'.

wpmultisite

The background of the entire image consists of numerous thin, teal-colored lines radiating outwards from the center, creating a starburst or sunburst effect against a dark, almost black, background.

3

example use cases



cachetagcloud

```
function get_tag_cloud() {  
    if ( false === ( $tag_cloud = get_transient( 'my_tag_cloud' ) ) ) {  
        $tag_cloud = wp_tag_cloud( 'echo=0' );  
        set_transient( 'my_tag_cloud', $tag_cloud, 60*60*24 );  
    } else {  
        $tag_cloud = get_transient( 'my_tag_cloud' );  
    }  
  
    return $tag_cloud;  
}
```

EXPERT



MODE

cachetagcloud

```
function edit_term_delete_tag_cloud() {  
    delete_transient( 'my_tag_cloud' );  
}  
  
add_action( 'edit_post', 'edit_term_delete_tag_cloud' );
```




cachemyissues

cachemyissues

```
function we_have_issues() {
    if ( false === ( $issues = get_transient( 'we_have_issues' ) ) ) {
        $response = wp_remote_get('https://api.github.com/repos/twbs/bootstrap/
issues?assignee');
        if ( is_wp_error( $response ) ) {
            $error_message = $response->get_error_message();
            echo "This borked: " . $error_message;
        } else {
            $issues = wp_remote_retrieve_body($response);
            set_transient( 'we_have_issues', $issues, 60*60*24 );
        }
    } else {
        $issues = get_transient( 'we_have_issues' );
    }
    $issues = json_decode($issues, true);
    $issuereturn = '';
    for ( $i = 0; $i < 5; $i++ ) {
        $issuereturn .= "<h3><a href='" . $issues[$i]["html_url"] . "'>".
$issues[$i]["title"] . "</a></h3>";
    }
    return $issuereturn;
}
```

EXPERT



MODE

cachemyissues

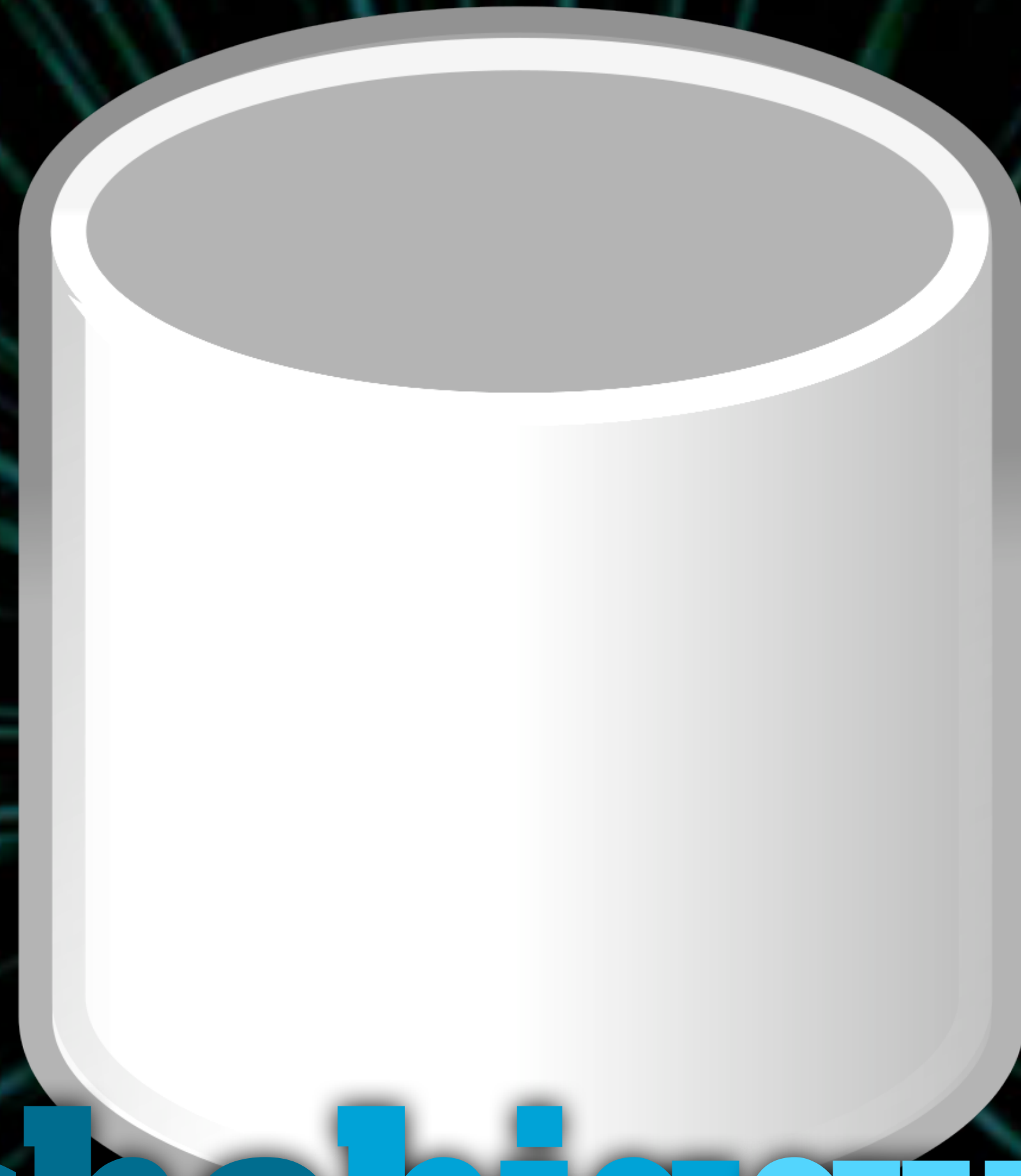
```
function refresh_my_issues() {
    if ( current_user_can('edit_plugins') && isset($_GET['forcedel']) &&
$_GET['forcedel'] === 'yes' ) {
        delete_transient( 'we_have_issues' );
    }
}
```

```
function refresh_via_admin_bar() {

    global $wp_admin_bar;
    $wp_admin_bar->add_menu( array(
        'title' => __('Refresh'),
        'href' => '?forcedel=yes',
        'id' => 'refresh-issues',
        'parent' => false
    ) );

}
```

```
add_action( 'wp_before_admin_bar_render', 'refresh_via_admin_bar' );
```



cachebigquery

cachebigquery

```
function query_for_commenters() {
    if ( false == ( $commenters = get_transient( 'top_commenters_cached' ) ) ) {
        global $wpdb;
        $commenters = $wpdb->get_results("
            select count(comment_author) as comments_count, comment_author, comment_type
            from $wpdb->comments
            where comment_type != 'pingback'
            and comment_author != ''
            and comment_approved = '1'
            group by comment_author
            order by comment_author desc
            LIMIT 10
        ");
        set_transient( 'top_commenters_cached', $commenters, 60*60*24 );
    } else {
        $commenters = get_transient( 'top_commenters_cached' );
    }
    $comment_list = '<ol>';
    foreach($commenters as $commenter) {
        $comment_list .= '<li>';
        $comment_list .= $commenter->comment_author;
        $comment_list .= ' (' . $commenter->comments_count . ')';
        $comment_list .= '</li>';
    }
    $comment_list .= '</ol>';
    return $comment_list;
}
```

cachebigquery

```
function delete_query_for_commenters() {  
    delete_transient( 'top_commenters_cached' );  
}  
  
add_action( 'comment_post', 'delete_query_for_commenters' );
```


cachebigquery

```
function popular_posts( $num=10 ) {
    if ( false === ( $popular = get_transient( 'popular_posts' . $num ) ) )
    {
        $query = new WP_Query( array(
            'orderby' => 'comment_count',
            'posts_per_page' => $num
        ) );
        set_transient( 'popular_posts' . $num, $query, 60*60*24 );
    } else {
        $query = get_transient( 'popular_posts' . $num );
    }

    return $query;
}
```

cachebigquery

```
$newquery = popular_posts(3);  
if ( $newquery->have_posts() ) {  
    while ( $newquery->have_posts() ) {  
        $newquery->the_post(); ?>  
        <h4><?php the_title(); ?></h4>  
        <?php the_excerpt(); ?>  
        <?php  
    }  
    wp_reset_postdata();  
}
```


cachebigquery

```
function clear_popular_posts() {  
    for ( $i = 0; $i < 50; $i++ ) {  
        delete_transient( 'popular_posts' . $i );  
    }  
}  
  
add_action( 'edit_post', 'clear_popular_posts' );
```

EXPERT



MODE

cachebigquery

Once a transient expires, it remains so until the new result is saved.
Heavy traffic can mean too many concurrent MySQL connections.

```
function popular_posts_panic( $num=10 ) {  
    if ( false === ( $popular =  
get_transient( 'popular_posts' . $num ) ) ) {  
        return '';  
    } else {  
        $query = get_transient( 'popular_posts' . $num );  
    }  
  
    return $query;  
}
```

cachebigquery

```
$newquery = popular_posts_panic(3);
if ( $newquery !== '' ) {
    if ( $newquery->have_posts() ) {
        while ( $newquery->have_posts() ) {
            $newquery->the_post(); ?>
            <h4><?php the_title(); ?></h4>
            <?php the_excerpt(); ?>
            <?php
            }
            wp_reset_postdata();
        }
    }
}
```


cachebigquery

```
function renew_popular_posts() {
    for ( $i = 0; $i < 50; $i++ ) {
        $query = new WP_Query( array(
            'orderby' => 'comment_count',
            'posts_per_page' => $i
        ) );
        set_transient( 'popular_posts' . $i, $query, 60*60*24*365 );
    }
}

add_action( 'hourly_renew_popular_posts', 'renew_popular_posts' );

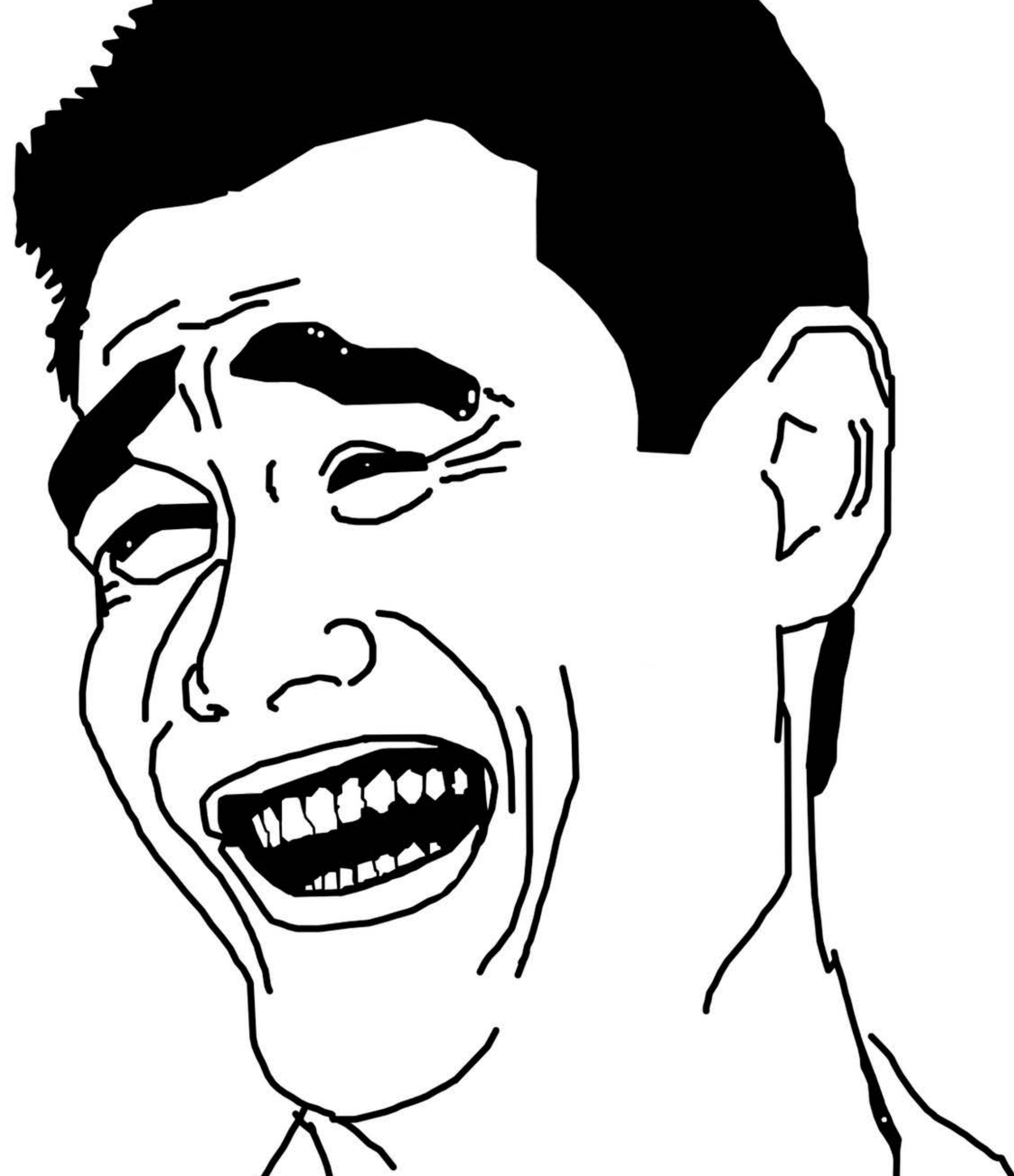
if ( !wp_next_scheduled( 'hourly_renew_popular_posts' ) ) {
    wp_schedule_event( time(), 'hourly', 'hourly_renew_popular_posts' );
}
```

TOP OF HACKER NEWS

CONQUERED

The background of the entire image consists of numerous thin, teal-colored lines radiating outwards from the center, creating a starburst or sunburst effect against a dark, almost black background.

4. **warnings**



expiry&garbagecollection

- ✓ everything works **on request**
- ✓ expired != deleted, unless requested
- ✓ unrequested, undeleted transients stay until you remove them explicitly

scalar values


- ✓ accepts **scalar values** (integer, float, string or boolean) & **non-scalar serializable values** (arrays, some objects)
- ✓ **SimpleXMLElement will FREAK OUT.**, so convert it to a string or array of objects (i.e. `simplexml_load_string`)

infinitetransients

- ✓ transients set without an expiration time are **autoloaded**
- ✓ if you don't need it on every page, **set an expiration** (even if it's a year)
- ✓ consider the **Options API** for non-transient data

cachinggotchas

- ✓ in some shared hosting environments, object caching can be **slower** than using the database; check your host's recommended settings
- ✓ always use the Transients API to access transients; **don't assume they're in the database** (or vice versa)



3
usefultools



TLC Transients

Supports soft-
expiration,
background updating



Debug Bar Transients

Adds panel to Debug
Bar with transient info



Artiss Transient Cleaner

Deletes expired
transients and optimizes
table





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