VISUALISE ALL THE THINGS

BUILDING DASHBOARD WIDGETS FOR MISP

CIRCL / TEAM MISP PROJECT

HTTP://WWW.MISP-PROJECT.ORG/

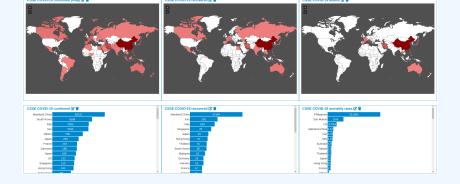
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MISP PROJECT



DASHBOARD IN MISP

- User configurable simple dashboard interface
- Visualise, aggregate and track data important to you
- Brand new feature, still undergoing reworks



THE INTERNALS OF AWIDGET

- **Backend** for the widget, full access to all MISP internals
- Load, convert, format to be represented via view widgets
- Widget metadata size, name, description, behaviours
- Only main function required to be implemented: handler()
- Optional: checkPermissions() for ACL
- Accepts user configuration for which a template can be provided
- Located in /var/www/MISP/app/Lib/Dashboard/
- Custom widgets can be placed in /var/www/MISP/app/Lib/Dashboard/Custom/

THE VIEW LAYER OF A WIDGET

- View files are included by default and reusable
- Currently we have a small but growing list of views
 - ▶ BarChart
 - ▶ SimpleList
 - ► WorldMap
- Converts the data passed by the Widget logic to HTML
- Located in /var/www/MISP/view/Elements/dashboard/Widgets/

WIDGET BEHAVIOURS

- Widgets can additionally be tied to certain **behaviours**:
 - Caching
 - Executions of the widget logic are cached
 - Separate caches for each organisation in addition to site admins
 - Cache duration is controlled by the widget logic
 - Refresh
 - Widgets can be set to refresh after x seconds
 - ► Both of these should be used with special care in regards to the use of **system resources**

EXERCISE MODULE: SIMPLE WHOAMI

- Let's start with a skeleton
- Create /var/www/MISP/app/Lib/Dashboard/Custom/WhoamiWidget.php
- MISP will parse anything ending with Widget.php in this directory

EXERCISE MODULE: SIMPLE WHOAMI

```
<?php
   class MispWhoamiWidget
     public $title = 'Whoami';
     public $render = 'SimpleList';
     public $width = 2;
     public $height = 2;
     public $params = array();
     public $description = 'Shows information about the
9
         currently logged in user.';
     public $cacheLifetime = false;
10
     public $autoRefreshDelay = 3;
11
12
     public function handler($user, $options = array())
13
14
       $data = array();
15
       return $data;
17
18
```

META INFORMATION

- **\$title**: The name of the widget
- \$description: A description of the widget
- \$render: The view element to use in rendering the widget
- \$width & \$height: Default relative dimensions
- **\$params**: Configuration array with explanations for each key
- \$cacheLifetime: The lifetime of the caches in seconds (false disables it)
- \$autoRefreshDelay: The time in seconds between each refresh (false disables it)

THE HANDLER

```
1 public function handler($user, $options = array())
 2 {
 3
     $this->Log = ClassRegistry::init('Log'):
     $entries = $this->Log->find('all', array(
        'recursive' => -1,
       'conditions' => array(
 6
          'action' => 'login', 'user id' => $user['id']
 8
9
       'order' => 'id desc',
       'limit' => 5,
        'fields' => arrav('created', 'ip')
12
     foreach ($entries as &$entry) {
13
       $entry = $entry['Log']['created'] . ' --- ' .
14
15
         empty($entry['Log']['ip']) ?
16
         'IP not logged' :
          $entry['Log']['ip']
19
20
     return arrav(
21
       array('title' => 'Email', 'value' => $user['email']),
       array(
          'title' => 'Role', 'value' => $user['Role']['name']
24
26
       array(
         'title' => 'Organisation',
28
         'value' => $user['Organisation']['name']
29
30
       array(
          'title' => 'IP', 'value' => $ SERVER['REMOTE ADDR']
32
       array('title' => 'Last logins', 'value' => $entries)
34
35
```

RESULT

Whoami 📝 📋

Email: admin@admin.test

Role: admin

Organisation: ORGNAME

IP: ::1

Last logins:

2020-03-05 06:50:46 --- ::1

2020-03-04 21:35:15 --- IP not logged

2020-03-04 09:34:44 --- IP not logged

2020-03-03 16:58:35 --- IP not logged

2020-03-03 06:49:10 --- IP not logged