Changes

- **PHP 5.6** minimum requirement
- **PHP 7** ready
- migrations directories added to all components and plugins with initial install migrations

- Automatic API endpoints for ORM models - If a component has ORM models, the system will automatically make available API endpoints for the basic CRUD actions. Models must be named as a singular entity and endpoints are reached via the plural of those entity names. For example, if the Blog component has a model named Entry, then the API endpoint would be https://yourhub.org/api/blog/entries.

  Automatic API endpoints will only be available if a component has not already implemented an API interface (i.e., if a component does not have an /api sub-directory).

- Support for un-prefixed component and module directories. This allows for the removal of the redundant com_ and mod_ prefixes on directories.

  old:
  app/components/com_example/
  app/modules/mod_example/

  new:
  app/components/example/
  app/modules/example/

  **Note:** Prefixed directories will be deprecated in the next version.

- Autoloading of PHP files for un-prefixed components. No include or require statements needed. Class namespace directly maps to case insensitive path.

  // Path:
  app/components/example/models/foo.php

  // Directly maps to a class of
  ComponentsExampleModelsFoo

  // Calling the class the first time autolodes it, so no include statement is needed:
  class Examples extends SiteController
```php
{
    public function displayTask()
    {
        $model = new ComponentsExampleModelsFoo();
    }
}
```

- HubzeroDatabaseManager class added. Class is used to manage database connections.
  - HubzeroDatabaseRelational:::connection property changed from object (HubzeroDatabaseDriver) to (string) name of the connection to be resolved by the manager.
  - HubzeroDatabaseDriverPdo is generic PDO driver class.
  - HubzeroDatabaseDriverMysql added, extends DriverPdo
  - HubzeroDatabaseDriverSqlite added, extends DriverPdo
  - HubzeroDatabaseDriverPsql added, extends DriverPdo
- Projects now use global activity log.
- core/libraries/simplepie changed to a Composer package
- HubzeroDatabaseTable added as temporary replacement for Joomla's JTable

- Joomla constants replacement:

<table>
<thead>
<tr>
<th>Joomla</th>
<th>HUBzero</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPATH_COMPONENT</td>
<td>PATH_COMPONENT</td>
</tr>
<tr>
<td>JPATH_COMPONENT_SITE</td>
<td>N/A</td>
</tr>
<tr>
<td>JPATH_COMPONENT_ADMINISTRATOR</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- End of life for Joomla-based code
- Base install migrations added to every component
- Suggestions for alternate search terms if a term returns no results

**Removed**

- com_admin removed from core
- com_store removed from core
- plg_quickicon_extensionupdate removed from core
- plg_quickicon_joomlaupdate removed from core
- plg_xmessage_im removed from core
- plg_xmessage_rss removed from core
- plg_xmessage_smstxt removed from core
- tpl_hubbasic2012 removed from core
- tpl_hubbasic2013 removed from core
- tpl_baselayar removed from core
2.2.1

Added

- com_activity added - Admin interface and API endpoint for browsing/inspecting site activity

Changed

- com_citations rewritten to use the ORM
- com_config rewritten from Joomla-based code
- com_plugins rewritten to use the ORM
- com_resources rewritten to use the ORM
- com_support rewritten to use the ORM
- com_wishlist rewritten to use the ORM