**CrypToolStoreDatabase – “general ideas” - whitepaper**

Nils Kopal, 2018-08-20

The **CrypToolStoreDatabase** is the “ground truth” of the CrypToolStore. It stores “everything”:

* User data
* CrypToolStorePlugins source code
* CrypToolStorePlugin assemblies
* Resources (i.e. huge language statistics)

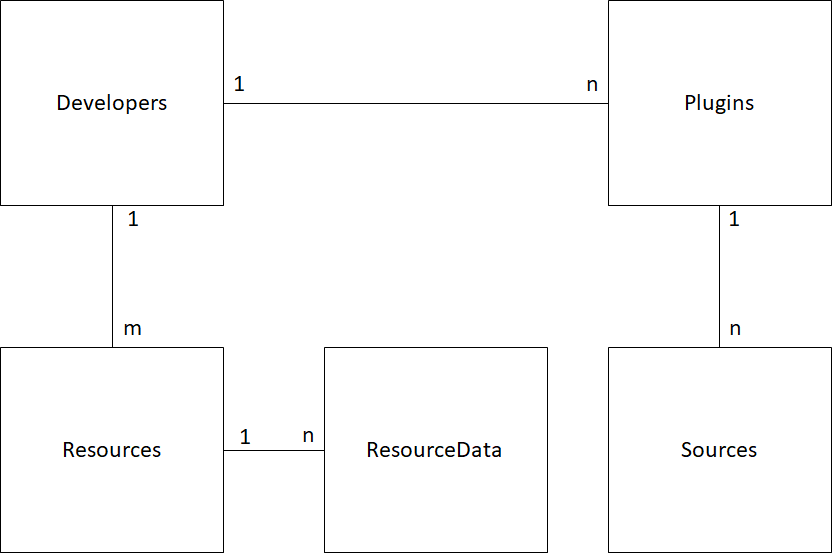
Description of “the world”:

* We have different **developers**.
* A user can upload and manage different **plugins**.
* A user can upload and manage different **resources**.
* A **plugin** has different versions of **source code**.
* A **resource** has different versions of **resource data**.
* Each **source** generates a single assembly.

Tables we need:

* **Developers**
* **Plugins**
* **Source**
* **Resources**
* **ResourceData**

Here, are the relations between the tables.



## Table: developers

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Type** | **Null** | **Default** | **Links to** | **Comments** | **MIME** |
| username *(Primary)* | varchar(100) | No |  |  |  |  |
| firstname | varchar(100) | No |  |  |  |  |
| lastname | varchar(100) | No |  |  |  |  |
| password | varchar(50) | No |  |  |  |  |
| passwordsalt | varchar(50) | No |  |  |  |  |
| email | varchar(100) | No |  |  |  |  |
| isadmin | tinyint(1) | No |  |  |  |  |

**Indexes**

| **Keyname** | **Type** | **Unique** | **Packed** | **Column** | **Cardinality** | **Collation** | **Null** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PRIMARY | BTREE | Yes | No | username | 0 | A | No |  |

**Table: plugins**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Type** | **Null** | **Default** | **Links to** | **Comments** | **MIME** |
| id *(Primary)* | int(11) | No |  |  |  |  |
| username | varchar(100) | No |  | developers -> username |  |  |
| name | varchar(100) | No |  |  |  |  |
| shortdescription | text | No |  |  |  |  |
| longdescription | text | No |  |  |  |  |
| authornames | text | No |  |  |  |  |
| authoremails | text | No |  |  |  |  |
| authorinstitutes | text | No |  |  |  |  |
| icon | blob | Yes | *NULL* |  |  |  |
| activeversion | int(11) | No |  |  |  |  |
| publish | tinyint(1) | No |  |  |  |  |

**Indexes**

| **Keyname** | **Type** | **Unique** | **Packed** | **Column** | **Cardinality** | **Collation** | **Null** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PRIMARY | BTREE | Yes | No | id | 0 | A | No |  |
| username | BTREE | No | No | username | 0 | A | No |  |

**Table: resources**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Type** | **Null** | **Default** | **Links to** | **Comments** | **MIME** |
| id *(Primary)* | int(11) | No |  |  |  |  |
| username | varchar(100) | No |  | developers -> username |  |  |
| name | varchar(100) | No |  |  |  |  |
| description | text | No |  |  |  |  |
| activeversion | int(11) | No |  |  |  |  |
| publish | tinyint(1) | No |  |  |  |  |

**Indexes**

| **Keyname** | **Type** | **Unique** | **Packed** | **Column** | **Cardinality** | **Collation** | **Null** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PRIMARY | BTREE | Yes | No | id | 0 | A | No |  |
| username | BTREE | No | No | username | 0 | A | No |  |

**Table: resourcesdata**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Type** | **Null** | **Default** | **Links to** | **Comments** | **MIME** |
| resourceid *(Primary)* | int(11) | No |  | resources -> id |  |  |
| version *(Primary)* | int(11) | No |  |  |  |  |
| data | blob | Yes | *NULL* |  |  |  |
| uploadtime | datetime | No |  |  |  |  |

**Indexes**

| **Keyname** | **Type** | **Unique** | **Packed** | **Column** | **Cardinality** | **Collation** | **Null** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PRIMARY | BTREE | Yes | No | resourceid | 0 | A | No |  |
| version | 0 | A | No |

**Table: sources**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Type** | **Null** | **Default** | **Links to** | **Comments** | **MIME** |
| pluginid *(Primary)* | int(11) | No |  | plugins -> id |  |  |
| pluginversion *(Primary)* | int(11) | No |  |  |  |  |
| buildversion | int(11) | No |  |  |  |  |
| zipfile | blob | Yes | *NULL* |  |  |  |
| buildstate | varchar(100) | No |  |  |  |  |
| buildlog | text | No |  |  |  |  |
| assembly | blob | Yes | *NULL* |  |  |  |
| uploaddate | datetime | No |  |  |  |  |
| builddate | datetime | No |  |  |  |  |

**Indexes**

| **Keyname** | **Type** | **Unique** | **Packed** | **Column** | **Cardinality** | **Collation** | **Null** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PRIMARY | BTREE | Yes | No | pluginid | 1 | A | No |  |
| pluginversion | 1 | A | No |
| pluginversion | BTREE | No | No | pluginversion | 1 | A | No |  |

[Open new phpMyAdmin window](http://192.168.0.122/phpmyadmin/db_datadict.php?db=CrypToolStore&table=sources&server=1&target=&token=d384554085f127ef25e5f94e1367ee36)

