

# Readme

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# Deploying

## Software requirements

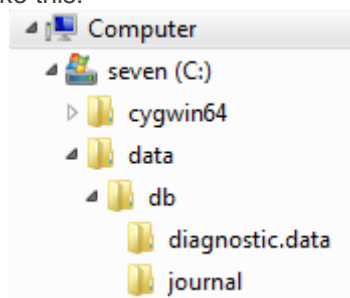
- JDK 8u112: <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>
- Maven 3.3.9: <https://maven.apache.org/download.cgi>
- MongoDB community 3.41: <https://www.mongodb.com/download-center#community>

Please download and install them.

## Setup steps

### 1. Database

- Download "data.zip" from "ftp://ftp2.tma.com.vn/nnmchau/Database/"
- Extract it in to home dir (C:\) like this:



### 2. Network

- To change/enable/disable proxy option, modify values of *resourcebundle.proxy.ip*, *resourcebundle.proxy.port* in "src/main/resources/internal\_conf.properties" file.  
Note\*: Comment out one of them to disable proxy.
- By default, application work on port: 1373. To change it, modify "src/main/java/conf/application.conf".

## Starting server

1. Run "mongod.exe" from "C:\Program Files\MongoDB\Server\3.2\bin\".
2. At the root dir of project, run cmd with command "mvn package ninja:run"

```

web\framework
http://www.ninjaframework.org
@ninjaframework
5.8.0

2017-01-05 16:52:16.518 INFO [NinjaJetty] n.l.LifecycleServiceImpl [LifecycleServiceImpl.java:53] Starting Ninja application...
2017-01-05 16:52:16.522 INFO [NinjaJetty] n.l.LifecycleServiceImpl [LifecycleServiceImpl.java:86] Ninja application started in 4ms
2017-01-05 16:52:16.525 INFO [NinjaJetty] o.e.j.s.h.ContextHandler [ContextHandler.java:744] Started o.e.j.s.ServletContextHandler@b1712f30
2017-01-05 16:52:16.610 INFO [NinjaJetty] o.e.j.s.ServerConnector [AbstractConnector.java:266] Started ServerConnector@49ad826d(HTTP/1.1)<6
2017-01-05 16:52:16.610 INFO [NinjaJetty] o.e.j.s.Server [Server.java:379] Started @1231ms
2017-01-05 16:52:16.610 INFO [NinjaJetty] n.s.NinjaJetty [NinjaJetty.java:168] Started jetty v9.2.10.v20150310 on <all>:1373
2017-01-05 16:52:16.610 INFO [NinjaJetty] n.s.NinjaJetty [AbstractStandalone.java:513]
2017-01-05 16:52:16.610 INFO [NinjaJetty] n.s.NinjaJetty [AbstractStandalone.java:514] Ninja application running at
2017-01-05 16:52:16.611 INFO [NinjaJetty] n.s.NinjaJetty [AbstractStandalone.java:518] => http://localhost:1373
2017-01-05 16:52:16.611 INFO [NinjaJetty] n.s.NinjaJetty [AbstractStandalone.java:521]

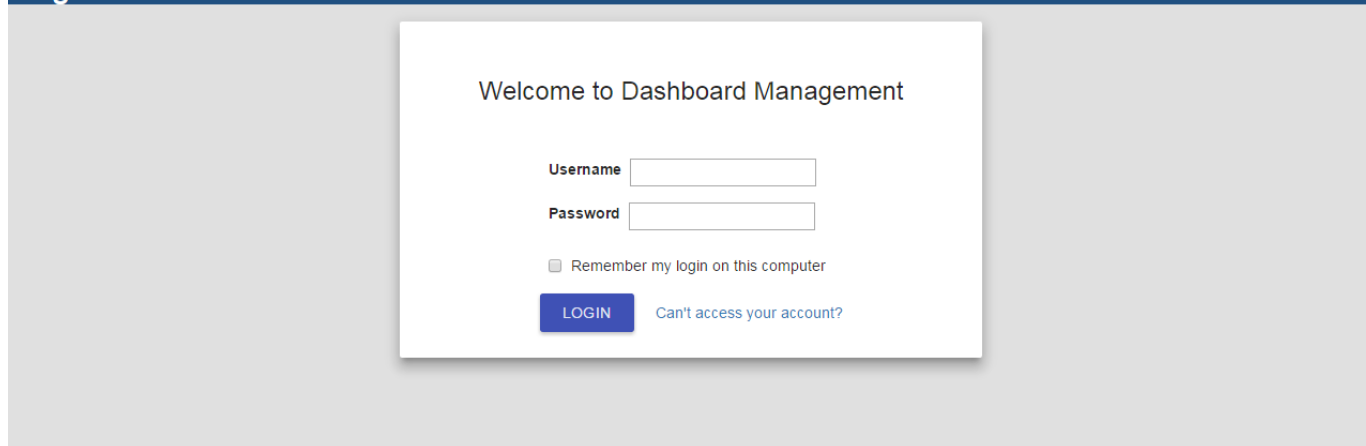
```

## Instruction

### Application

- We strongly recommend using Google Chrome browser.
- Login UI

#### Login



Welcome to Dashboard Management

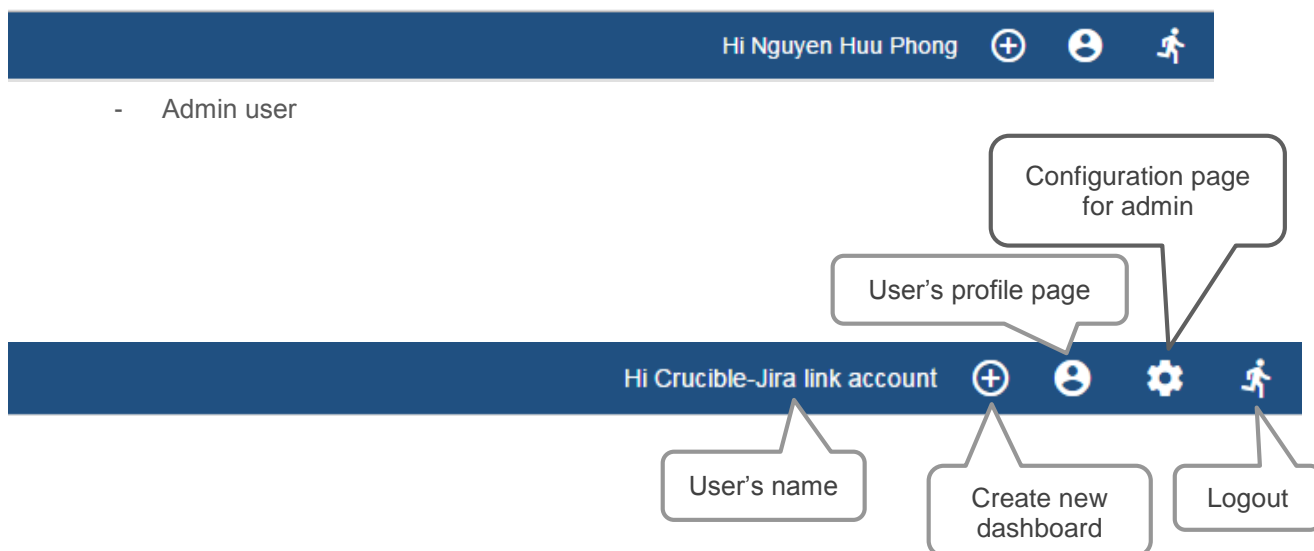
Username

Password

☐ Remember my login on this computer

[LOGIN](#) [Can't access your account?](#)

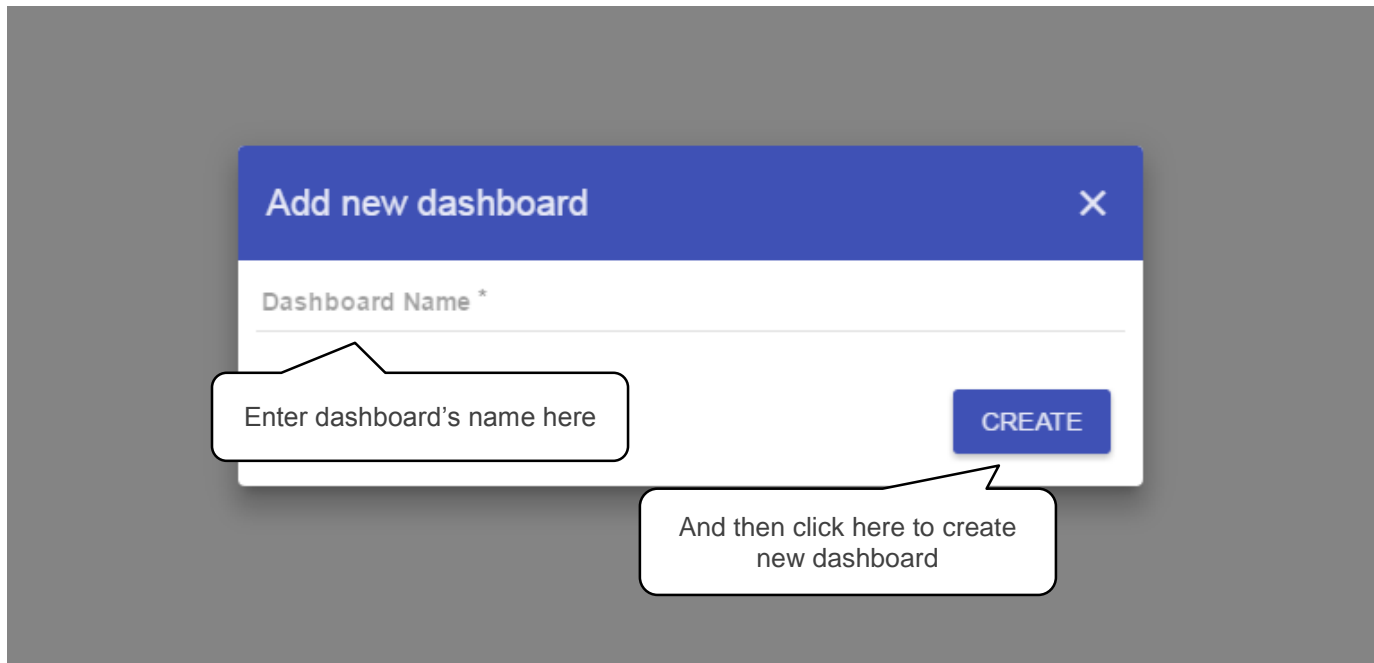
- Toolbar
  - Regular user
  - Admin user



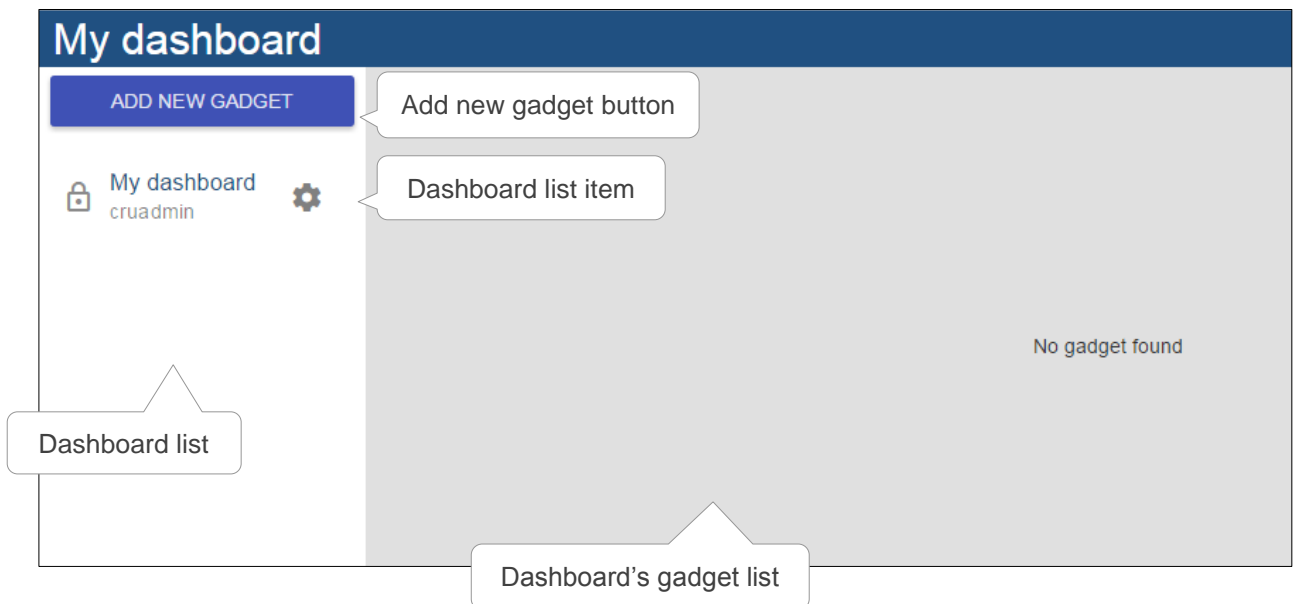
## Dashboard

- Create Dashboard

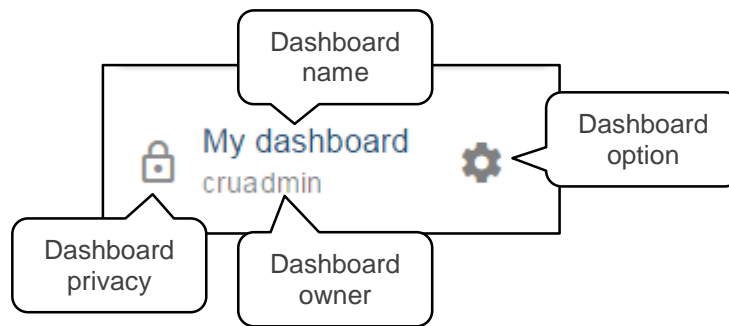
Click create new dashboard on tool bar.






- Dashboard main UI

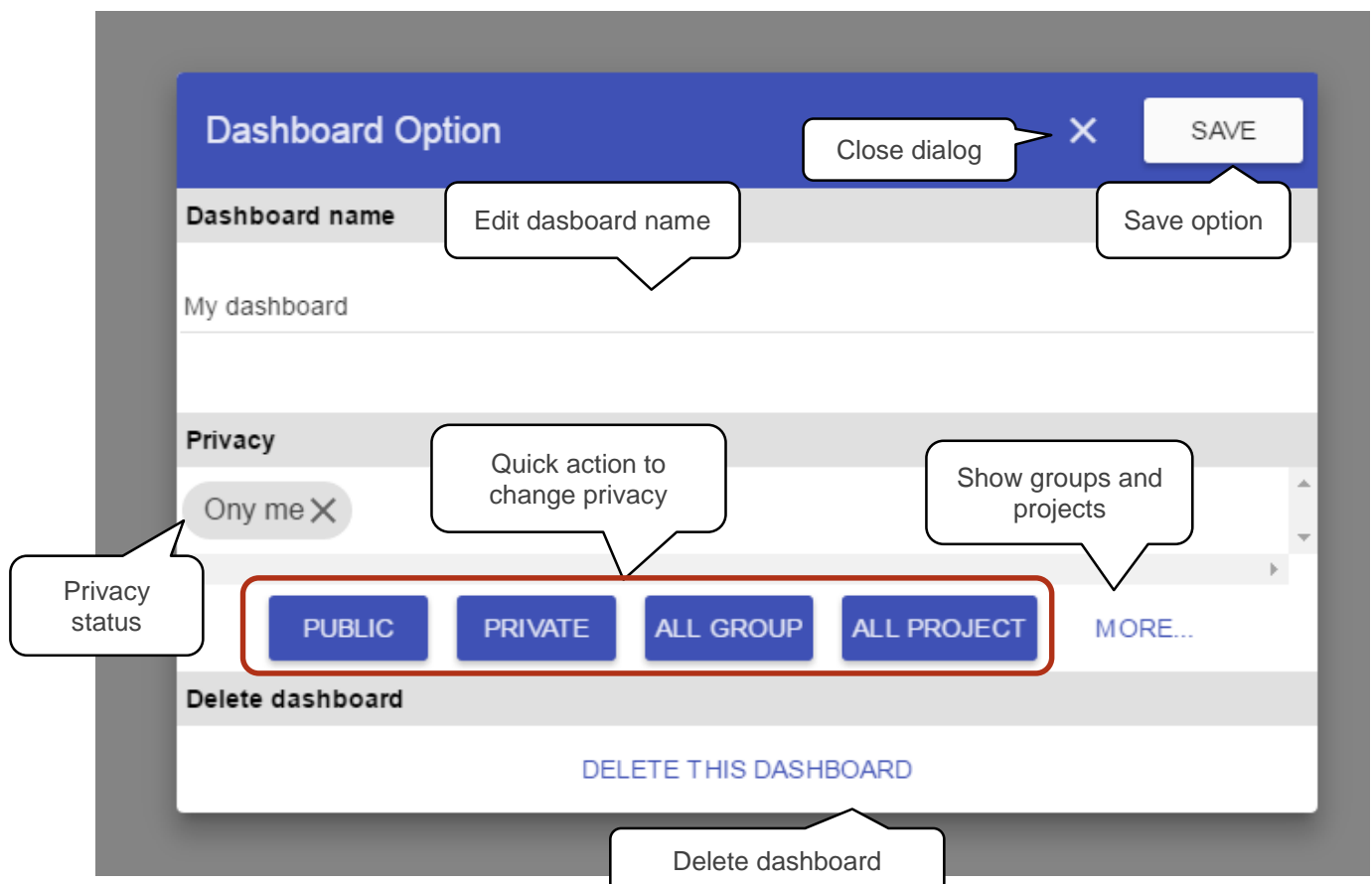


- Dashboard list item



Icon	Privacy status
	private
	public
	Share to specific group or project

- Dashboard option UI



**Gadget:****New Epic Gadget Instance**

The 'Epic Settings' dialog box contains the following fields and options:

- Project:** A dropdown menu currently showing '-Select Project-'.
- Release:** A dropdown menu currently showing '-Select Version-'.
- Product:** A dropdown menu currently showing '-Select Product-' with an 'Add Product' button to its right.
- Epic Link:** A checkbox labeled 'Select All' which is currently checked.
- Metrics:** A list box containing the following items: SUMMARY, PRIORITY, UNEXECUTED, and FAILED.

A green bar at the bottom of the dialog contains a 'Save' button.

- After filling in project, release, and product field, if epic link is not “Select All”. Database will query for a list of epic issue keys.

The 'Epic Settings' dialog box now displays the following values:

- Project:** FNMS 557x
- Release:** R1.2.0
- Product:** PCC
- Epic Link:** A list box showing the following issue keys: FNMS-57, FNMS-47, FNMS-58, and FNMS-39. The 'Select All' checkbox is now unchecked.
- Metrics:** SUMMARY, PRIORITY, UNEXECUTED, and FAILED.

The green bar at the bottom still contains the 'Save' button.

- Select epic link and all the remaining options you want for your table then save gadget.

### New User Story Gadget instance:

**User Story Settings**

Project	FNMS 557x
Release	
Product	<input type="text"/> Add Product
Epic Link	<input checked="" type="checkbox"/> Select All
User Story	<input checked="" type="checkbox"/> Select All
Metrics	SUMMARY PRIORITY UNEXECUTED FAILED

Update

- After filling in project, release, product field. If epic link field is not "Select All". Database will query for a list of epic issue keys. By default epic links and user story are selected all.

**User Story Settings**

Project	FNMS 557x
Release	R1.2.0
Product	PCC Add Product
Epic Link	<p><b>Available</b></p> <p>FNMS-115 FNMS-134 FNMS-16 FNMS-17</p> <p><b>To be fetched</b></p> <p>FNMS-12 FNMS-13</p> <p>Select All</p>
User Story	<p>FNMS-1009 FNMS-1057 FNMS-1058 FNMS-1059</p> <p>Select All</p>
Metrics	SUMMARY PRIORITY UNEXECUTED FAILED

Update

- After obtaining available epic links list, select available epic keys you want to fetch story issues.
- Select user story issue keys you want for the table then update.



### New Assignee and Cycle Gadget instance:

- Assignee and Test Cycle gadget have the same dialog interface with the only difference is table details once it's drawn. In Assignee Gadget, all assignees belong to a Test Cycle will be shown.

Assignee Settings

Project: -Select Project-

Release: -Select Version-

Product: -Select Product- Add Product

Test Cycle: ☒ Select All

Metrics: UNEXECUTED, FAILED, WIP, BLOCKED

Update

- If Select All Test Cycle is selected, input other fields normally and update gadget.
- If Select All Test Cycle is not selected, project-release-product field will be hidden and a list of Test Cycle commissioned by Jira Administrator will be loaded and shown.

Assignee Settings

Test Cycle: PCC Sprint Iteration 6, PCC Sprint Iteration 5, PCC Sprint Iteration 8, PCC Sprint Iteration 9

Metrics: UNEXECUTED, FAILED, WIP, BLOCKED

Select All

Update

### Authorize Product-Test Cycle:

- As a Jira administrator, you can commission new Product and Test Cycle for user to choose from.

The screenshot shows the Greenhopper interface with two main sections: 'Existing Product' and 'Existing Test Cycle'.

**Existing Product:**

Product Name	Action
PCC	Delete

Below the table is an 'Add product' input field with a '+' button.

**Existing Test Cycle:**

Cycle Name	Action
PCC Sprint Iteration 6	Delete
PCC Sprint Iteration 5	Delete
PCC Sprint Iteration 8	Delete
PCC Sprint Iteration 9	Delete

Below the table are three dropdown menus: 'Project' (FNMS 557x), 'Release' (R1.2.0), and 'Product' (PCC). There is a search icon (magnifying glass) next to the Product dropdown.

Below the dropdowns is an 'Add Cycle' input field with a '+' button.

At the bottom, there is a 'Clear Cache' button with a lightning bolt icon and a 'Clear' button.

- To add Product, type in Product name and click the button at the end of input field
- To add Test Cycle, type in Test Cycle name and click the button at the end of input field.

The screenshot shows the 'Existing Test Cycle' section. The table is empty with the message 'No data available in table'.

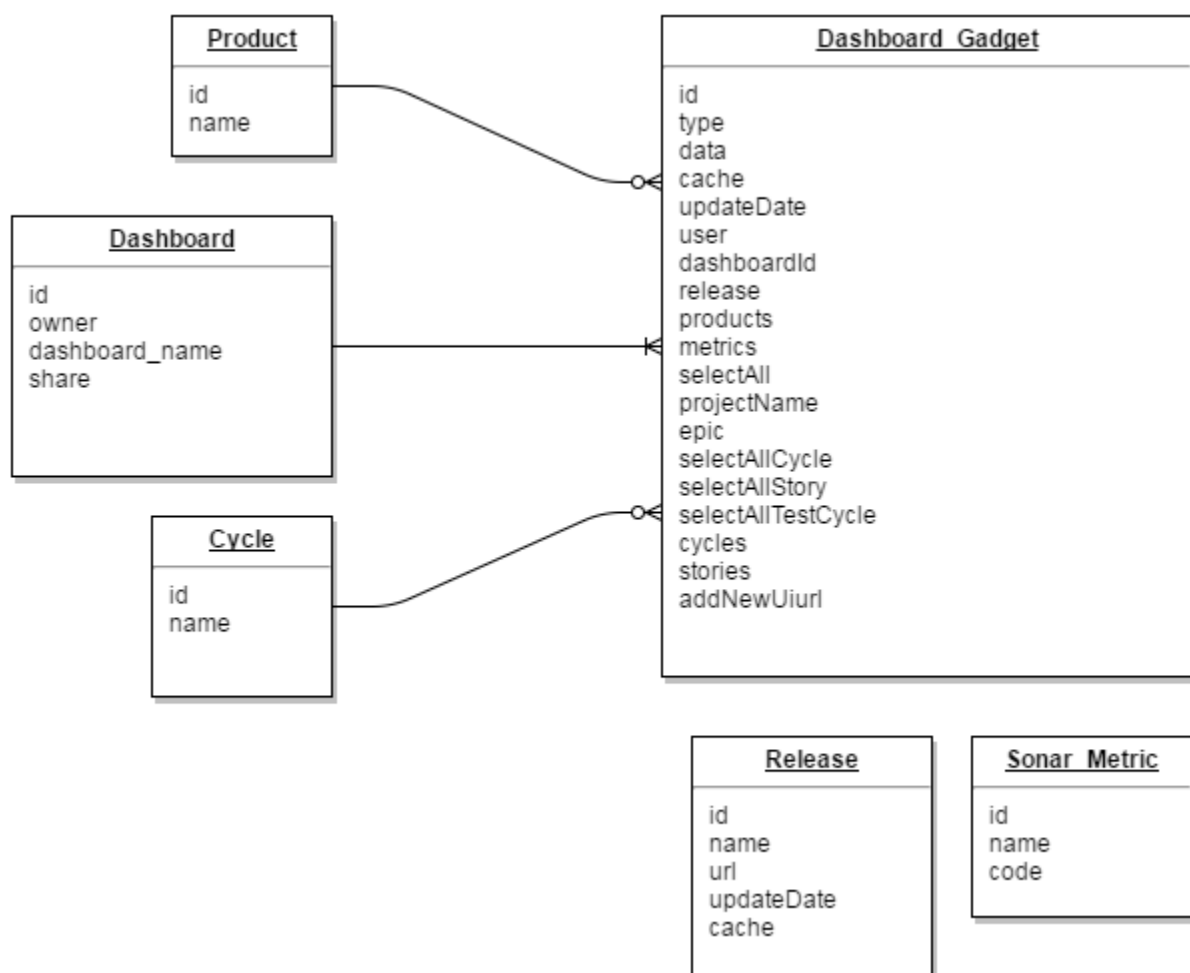
Below the table are three dropdown menus: 'Project' (FNMS 557x), 'Release' (R1.2.0), and 'Product' (PCC). There is a search icon (magnifying glass) next to the Product dropdown.

Below the dropdowns is an 'Add Cycle' input field. A search dropdown is open, showing a list of test cycles:

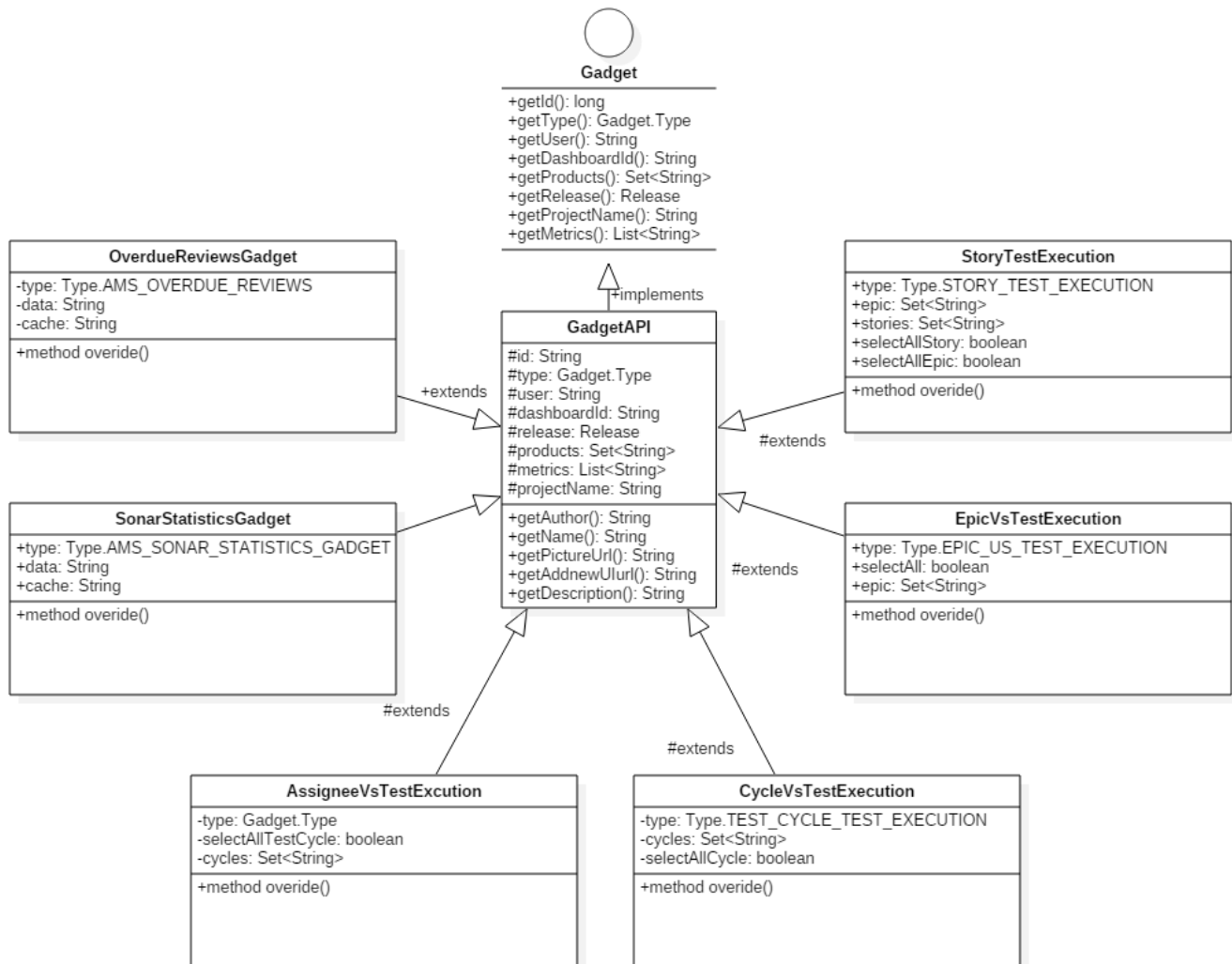
- PCC Sprint Iteration 6
- PCC Sprint Iteration 5
- PCC Sprint Iteration 8
- PCC Sprint Iteration 9
- PCC 1.2.01 Sprint Iteration 7
- PCC CP/P7 Sanity

- Alternatively you can to search for test cycle list, click on the magnifier icon to search for product. Once loading icon disappeared or select field is enabled again, double-click on Add Cycle input field, it should show the search result in the form of drop-down list. Select and add the one you want.

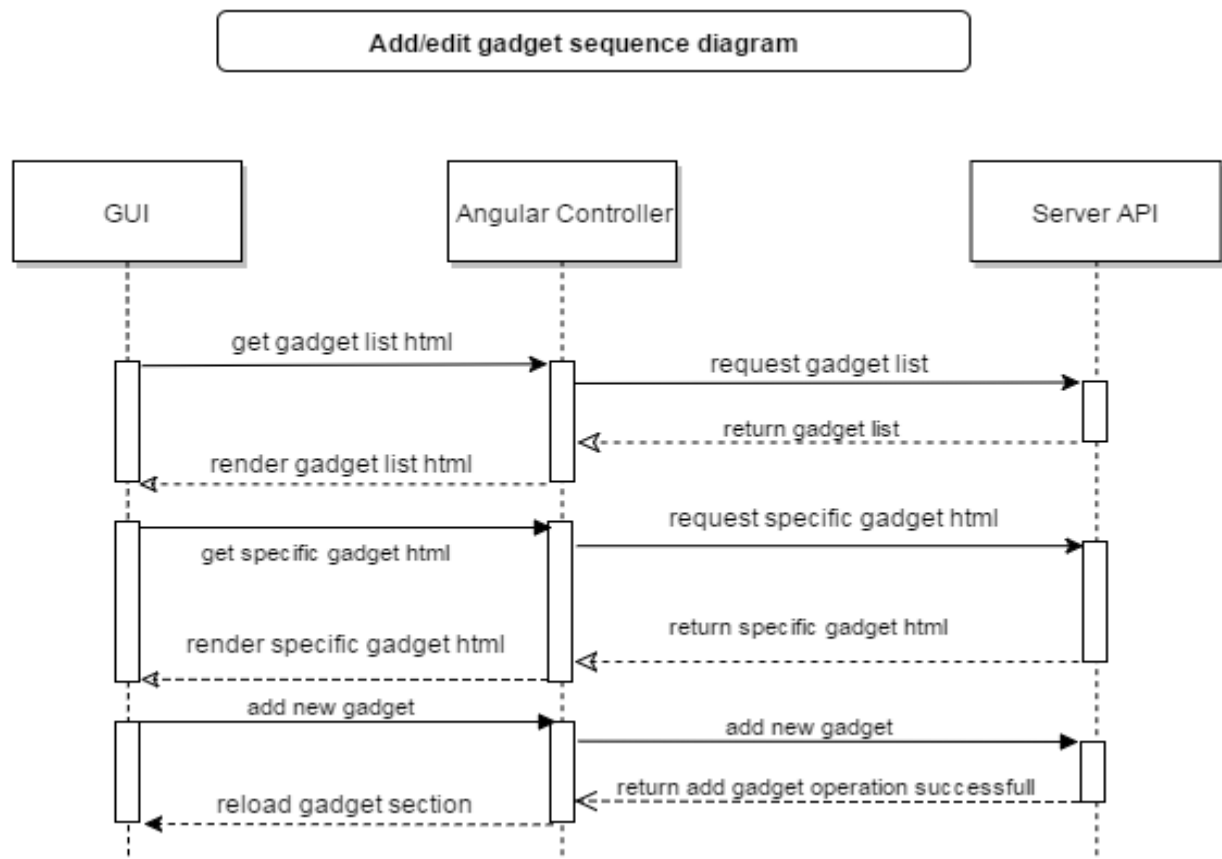
## Database diagram



## Back-end diagram



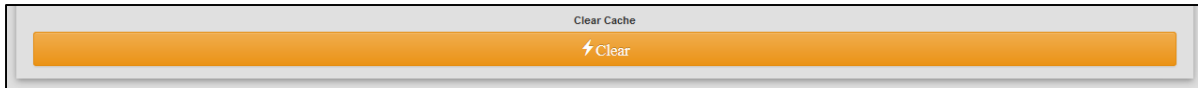
## Front-end diagram



## Caching

### Greenhopper gadget caching:

- Data caching duration, login timeout and maximum concurrent threads allowed to fetch data from greenhopper is defined in *internal.conf.properties*.
- In Jira Administrator configuration page, admin can clear the greenhopper cache manually (Equal to `internal.conf.clearcache.time`)



- Overview:

```
#Greenhopper connection timeout. No timeout if value is 0
resourcebundle.project.timeout=60000
#Maximum records return by greenhopper json.
resourcebundle.search.maxrecords=10000
#Maximum number of concurrent threads
internal.conf.concurrent_thread=20
#Interval(hour) to clear the entire cache including greenhopper data (project list, epic
links, test cycle list, assignee list) and gadget data.
internal.conf.clearcache.time=24
#Interval(minute) to clear cache (Greenhopper data not including gadget)
internal.conf.cleardatacache.time=1
#Time to live(minute).The time to live for each cached greenhopper gadget.
internal.conf.gadgetdata.timetolive=10
```

## Test Execution Report Querying Rules:

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- For Epic issue, fetch Test issue for the first children. If the original epic issue has multiple epic child issues, user story issues, test issues and each of these issues has multiple child then fetch only Test issues belong to the original epic and its user story.
- Only fetch Test issue with “is a test by” issue link for Story issue
- On the other hand, fetch all Test issues inside Epic issue, including Test with “is a test by” link
- Only fetch the newest test execution in Test issue.
- “PLANNED” test metric is gotten from customfield\_14809 in return json query.
- “UNPLANNED” test metric is the sum of “PASSED” + “FAILED” + “UNEXECUTED” + “BLOCKED” + “WIP”.

## Possible Improvements

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- Sonar Metric is hardcoded in database, append option to add new sonar metric in Jira Administrator configuration page.
- Greenhopper Test metric and Release are hardcoded in html, append option to add new test metric and Release in Jira Administrator configuration page.