

Change request log for CR-2

1. Concept Location

Step #	Description	Rationale
1	First, we ran the system	
2	We interacted with the system and verified if the CR given is right.	To check the change request.
3	We logged in to the system as admin and observed the notification feature was unmuted by default on the homepage navigation bar.	We confirmed that the change request was necessary.
4	Installed the cscope and ctags for browsing the source code.	We used this tool before for code browsing and navigation.
5	Created the tags file for all the java files in the main mango source directory.	This will help us to trace keywords or function calls in the code.
6	Used the feature "Find this egrep pattern:" and searched for the keyword "notification sound".	Since the change request was related to the notification sound that plays.
7	Didn't find any useful results with the keyword "notification sound" so we searched for a new keyword "mute" and found multiple files.	Since the change request said the notification sound feature should be set to mute by default.
8	Opened a file "User.java" to check if the required changes are to be made in this file.	
9	Found a boolean variable name "muted" which was set to "false".	
10	The notification sound feature was muted by default on the homepage navigation bar and hence we found the exact concept location of the change request.	We can observe that whenever an instance of User object is created the muted member of object is always set to be false.

Time spent (in minutes): 20

Classes and methods inspected:

- "src/com/serotonin/mango/rt/EventManager.java"
- "src/com/serotonin/mango/rt/dataSource/bacnet/BACnetIPDataSourceRT.java"
- "src/com/serotonin/mango/rt/event/handlers/EmailHandlerRT.java"
- "src/com/serotonin/mango/MangoContextListener.java"
- "src/com/serotonin/mango/vo/User.java"

2. Impact Analysis

Step #	Description	Rationale
1	Checked where the data member User.muted was being used.	To track the classes that could be impacted by the change.
2	Found method setMuted which was being called by toggleUserMuted() in MiscDwr.java.	
3	Found the function isMuted which was being called by same toggleUserMuted() in MiscDwr.java.	There were no issues found for setting the muted true by default in the User class. Discarded - MiscDwr.java .
4	Checked if muted data member was being used anywhere else in User.java class.	There were no other places muted value was being used in the User.java class. Discarded - User.java

Time spent (in minutes): 10

Classes and methods Inspected:

- src/com/serotonin/mango/vo/User.java
 - public void setMuted(boolean muted)
 - public boolean isMuted()
- src/com/serotonin/mango/web/dwr/MiscDwr.java
 - public boolean toggleUserMuted()

3. Prefactoring (optional)

There was no prefactoring done for this change.

Time spent (in minutes): 0

4. Actualization

Step #	Description	Rationale
1	We created a new github branch from master.	To add changes on a new branch.
2	In the class User.java we changed the default value of variable muted to true.	This is because every time a new user is created, we would want the muted option to be true by default unless the user toggles it.
3	We committed the changes to github.	Just in case if we need to revert the change.

Time spent (in minutes): 7

Classes and methods Inspected:

- src/com/serotonin/mango/vo/User.java

5. Postfactoring (optional)

There was no postfactoring done for this change.

Time spent (in minutes): 0

6. Validation

Step #	Description	Rationale
1	Functional Test Logged in using admin user and checked if the by default the notification sound was muted	The notifications were muted by default. Test Passed.
2	Functional Test Logged out from user with notifications set to unmute and then tried to login again.	Logged in again to find the notification to be set muted by default. Test Passed.
3	Functional Test Muted and unmuted the notifications and navigated to all the possible pages separately.	The option remained as whatever was selected/toggled by user and did not change to

		mute after changing the page. Test Passed.
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Time spent (in minutes): 5

7. Summary of the change request

Phase	Time (minutes)	No. of classes inspected	No. of classes changed	No. of methods inspected	No. of methods changes
Concept location	20	5	0	0	0
Impact Analysis	10	2	0	3	0
Prefactoring	0	0	0	0	0
Actualization	7	1	1	0	0
Postfactoring	0	0	0	0	0
Verification	5	0	0	0	0
Total	42	6	1	3	0

8. Conclusions

It was quite easy to find the concept location for this change and using the cscope and ctags tools helped a lot. The impact, actualization and testing part also did not take much time.