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| Track Controller Test Plan | 2012 | |
| This is the PAAC Track Controller Test Plan. | | Calvin Souders |

**Test Case #1: Switch track segment safely**

***Inputs:***

* ‘Switch’ button on Track Controller UI

***Outputs:***

* ‘Status’ output
* ‘Occupied’ output

***Expected Result:***  Request for switch is sent from the track controller, and if deemed safe, track will perform switch.

***Actual Result:*** Not fully implemented, Track Controller not getting track connections correctly

***Tester:*** Calvin Souders

***Date:*** 12/13/2012

***Notes:*** Defect Filed in Github Issues

**Test Case #2: Ensure crossing activation happens safely**

***Inputs:***

* ‘Activate’ button on Track Controller UI

***Outputs:***

* ‘Status’ output
* ‘Occupied’ output
* ‘Crossing Active’ output
* ‘Crossbar Position’ output
* ‘Warning Signals’ output

***Expected Result:*** Upon selecting the “Activate Crossing” Button in the Track Controller GUI, the controller will, if safe, enable a crossing and all of its appropriate signals. If the enable was successful, the enable button will be disabled and the deactivate will be enabled.

***Actual Result:*** Does not operate, Track Controller does not get the appropriate signals to signify the place of a crossing to activate.

***Tester:*** Calvin Souders

***Date:*** 12/13/2012

***Notes:*** Defect Filed in Github Issues

**Test Case #3: Ensure crossing deactivation happens safely**

***Inputs:***

* ‘Deactivate’ button on Track Controller UI

***Outputs:***

* ‘Status’ output
* ‘Occupied’ output
* ‘Crossing Active’ output
* ‘Crossbar Position’ output
* ‘Warning Signals’ output

***Expected Result:*** Similar to Test Case #2, Upon selecting the “Deactivate Crossing” button in the Track Controller GUI, the controller will, if safe, disable a crossing and all of its appropriate signals. If the disable was successful, the disable button will be disabled and the activate will be enabled.

***Actual Result:*** Does not operate, Track Controller does not get the appropriate signals to signify the place of a crossing to deactivate.

***Tester:*** Calvin Souders

***Date:*** 12/13/2012

***Notes:*** Defect Filed in Github Issues

**Test Case #4: Importing a PLC file**

***Inputs:***

* ‘Import PLC’ option from File Menu

***Outputs:***

* Error Dialog (or not)

***Expected Result:*** Upon activating a PLC import, the Track Controller will load a user defined PLC File that will get parsed and will set the system appropriately.

***Actual Result:*** Not implemented

***Tester:*** Shane Lester

***Date:*** 12/13/2012

***Notes:*** Defect filed in Github Issues

**Test Case #5: Receive Maintenance Suggestion from CTC office**

***Inputs:***

* No physical inputs

***Outputs:***

* Error Dialog (or not)

***Expected Result:*** The Track Controller, upon receiving a Track Suggestion, will parse the given info and use it appropriately. If the suggestion is to start maintenance, the Track Controller will set the block to maintenance mode.

***Actual Result:*** Working correctly

***Tester:*** Ben Long

***Date:*** 12/12/2012

***Notes:*** None

**Test Case #6: Receive Track Speed Suggestion from CTC office**

***Inputs:***

* No physical inputs

***Outputs:***

* Error Dialog (or not)

***Expected Result:*** The Track Controller, upon receiving a Track Suggestion, will parse the given info and use it appropriately. If the suggestion is to change the track speed limit, the track controller will change, if safe, the block speed limit to the suggested value.

***Actual Result:*** Working properly

***Tester:*** Ben Long

***Date:*** 12/12/2012

***Notes:*** None

**Test Case #7: Receive Train Suggestion from CTC office**

***Inputs:***

* No physical inputs

***Outputs:***

* Error Dialog (or not)

***Expected Result:*** The Track Controller, upon receiving a Train Suggestion, will parse the given info and pass it on to the Train Controller which will use it appropriately.

***Actual Result:*** Passes the train suggestion appropriately

***Tester:*** Calvin Souders

***Date:*** 12/13/2012

***Notes:*** None