**Test Plan - Ticket Machine Application**

**Test Suite:**

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[2 Station Entry Gate Test 3](#_Toc60790018)

[3 Station Exit Gate Test 4](#_Toc60790019)

[4 Create Ticket Machine Test 5](#_Toc60790020)

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[13 Change Ticket Machine Configuration Test 14](#_Toc60790029)

**Test Pre-requisites:**

Ensure the following pre-requisites have been met before commencing testing. These pre-requisites allow for tests to be conducted in any order.

* Ensure the client and controller web applications are running.
* Ensure a ticket machine has been created for testing.
* Ensure the client application is configured for a valid ticket machine.
* Ensure an off-peak price per zone value has been set.

# Create Ticket Test

**Associated Use Case**

Use Case 1

**Description**

This test verifies that the client application can generate a ticket via the ticket machine. Machine with correct user input. Invalid user input is attempted and denied as expected.

**Pre-conditions**

None.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the client web application, select ‘Ticket Machine’. | Ticket Machine JSP is displayed. |
|  | Enter a valid ‘Destination Station’ and ‘Departure Time’ and select ‘Confirm Ticket Details’. | Ticket information is calculated and populated for zones, rate and cost. |
|  | Select ‘Proceed to Payment’. | Generated ticket xml is displayed. Values are correctly populated according to the parameters specified. |
|  | Copy the ticket xml to the clipboard. | Ticket xml copied to the clipboard. |
|  | Select ‘Ticket Machine Home’. | Client Ticket Machine Home page is displayed. |

# Station Entry Gate Test

**Associated Use Case**

Use Case 2

**Description**

This test verifies that the client application can open or close a station entry ticket gate based on the ticket presented.

**Pre-conditions**

A valid ticket is saved to the clipboard.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the client web application, select ‘Entry Ticket Gate’. | Ticket Machine JSP is displayed. |
|  | Enter a valid ‘Departure Station’ and ‘Current Time’. |  |
|  | Insert the ticket xml from the clipboard into the text field. |  |
|  | Select ‘Verify Ticket’. | Gate status displays ‘GATE OPEN’. |
|  | Select ‘Ticket Machine Home’. | Client Ticket Machine Home page is displayed. |

# Station Exit Gate Test

**Associated Use Case**

Use Case 3

**Description**

This test verifies that the client application can open or close a station exit ticket gate based on the ticket presented.

**Pre-conditions**

A valid ticket is saved to the clipboard.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the client web application, select ‘Exit Ticket Gate’. | Ticket Machine JSP is displayed. |
|  | Enter a valid ‘Destination Station’ and ‘Current Time’. |  |
|  | Insert the ticket xml from the clipboard into the text field. |  |
|  | Select ‘Verify Ticket’. | Gate status displays ‘GATE OPEN’. |
|  | Select ‘Ticket Machine Home’. | Client Ticket Machine Home page is displayed. |

# Create Ticket Machine Test

**Associated Use Case**

Use Case 4

**Description**

This test verifies that the controller application can create a ticket machine for a station.

**Pre-conditions**

A station is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | stationList JSP is displayed. |
|  | From the table of stations, identify a station and select ‘Modify Station’. | Station JSP is displayed titled for the selected station. |
|  | Select ‘Add Ticket Machine’. | A ticket machine is added to the Station Ticket Machines list. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Update Ticket Machine Test

**Associated Use Case**

Use Case 5

**Description**

This test verifies that the controller application can update a ticket machine UUID and assigned station.

**Pre-conditions**

A ticket machine is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | stationList JSP is displayed. |
|  | Identify a station with a ticket machine available and select ‘Modify Station’. | Station JSP is displayed titled for the selected station. |
|  | Identify a ticket machine in the Station Ticket Machine list and select ‘Modify Ticket Machine’. | Ticket machine manager JSP is displayed. |
|  | Enter a new UUID in the text field and select ‘Update Ticket Machine UUID’. | The ticket machine UUID change message is displayed in green. |
|  | Enter a new, valid station in the text field and select ‘Update Ticket Machine Station’. | The ticket machine station change message is displayed in green. |
|  | Select ‘Return to Station List’. | stationList JSP is displayed. |
|  | Identify the station the ticket machine was moved to and select ‘Modify Station’. | Station JSP is displayed titled for the selected station. The ticket machine with the new UUID set in step 4 is present. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Delete Ticket Machine Test

**Associated Use Case**

Use Case 6

**Description**

This test verifies that the controller application can delete a ticket machine from a station.

**Pre-conditions**

A ticket machine is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | stationList JSP is displayed. |
|  | Identify a station with a ticket machine available and select ‘Modify Station’. | Station JSP is displayed titled for the selected station. |
|  | Identify a ticket machine in the Station Ticket Machine list and select ‘Delete Ticket Machine’. | The ticket machine is no longer present in the list of ticket machines for that station. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Create Station Test

**Associated Use Case**

Use Case 7

**Description**

This test verifies that the controller application can create a station.

**Pre-conditions**

None.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | stationList JSP is displayed. |
|  | Select ‘Create New Station’. | The Station page with a new station name is presented. Make note of the station name. |
|  | Select ‘Return to Station List’. | stationList JSP is displayed. |
|  | Select Zone 0 to filter the station list to those in zone 0.  Note: newly created stations are assigned to zone 0 by default. | Verify the newly created station is present in the station list. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Update Station Test

**Associated Use Case**

Use Case 8

**Description**

This test verifies that the controller application can update a station name and zone.

**Pre-conditions**

A station is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | stationList JSP is displayed. |
|  | Identify a station from the station list and select ‘Modify Station’. | Station JSP is displayed titled for the selected station. |
|  | Enter a name in the ‘Station Name’ text field and select ‘Update Station Name’. | The station name change message is present at the top of the page in green. |
|  | Enter a zone in the ‘Zone’ text field and select ‘Update Station Zone’. | The station zone change message is present at the top of the page in green. |
|  | Select ‘Return to Station List’. | stationList JSP is displayed. |
|  | Use the zone filter selection to filter the station list to displays stations in the zone set at step 4. | Verify the station with the station name previously entered is present in the filtered list of stations. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Delete Station Test

**Associated Use Case**

Use Case 9

**Description**

This test verifies that the controller application can delete a station.

**Pre-conditions**

A station is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | stationList JSP is displayed. |
|  | Identify a station from the station list and select ‘Delete Station’. | Verify the station deleted message is present at the top of the page in green and that the station deleted is no longer available in the list. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Update Price Per Zone Test

**Associated Use Case**

Use Case 10

**Description**

This test verifies that the controller application can update the peak price per zone and the off-peak price per zone via a JSP.

**Pre-conditions**

None.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Pricing Schedule Manager’. | pricingScheduleManager JSP is displayed. |
|  | Enter a valid Peak Price Per Zone in the text field and select ‘Update’. | The price set message is displayed in green. |
|  | Enter a valid Off-Peak Price Per Zone in the text field and select ‘Update’. | The price set message is displayed in green. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Create Price Band Test

**Associated Use Case**

Use Case 11

**Description**

This test verifies that the controller application set a price band by specifying the start time and rate (peak or off-peak) and add the price band to the current pricing schedule via a JSP.

**Pre-conditions**

None.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Pricing Schedule Manager. | pricingScheduleManager JSP is displayed. |
|  | Enter a valid start hour, start minute, and rate and select ‘Create New Price Band’. | The price band created message is displayed in green. The new price band has been correctly added to the Current Pricing Schedule table. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Delete Price Band Test

**Associated Use Case**

Use Case 12

**Description**

This test verifies that the controller application can delete a price band from the current pricing schedule via a JSP.

**Pre-conditions**

A price band is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Pricing Schedule Manager. | pricingScheduleManager JSP is displayed. |
|  | Identify a price band in the current pricing schedule list and select ‘Delete’. | The selected price band has been removed from the Current Pricing Schedule table. |
|  | Select ‘Station Controller Home’. | Station Controller Home page is displayed. |

# Change Ticket Machine Configuration Test

**Associated Use Case**

Use Case 13

**Description**

This test verifies that the client application can reconfigure the application to a different ticket machine.

**Pre-conditions**

A ticket machine is available.

**Test Steps**

|  |  |  |
| --- | --- | --- |
| **No.** | **Test Step** | **Expected Response** |
|  | At the controller web application, select ‘Station Manager’. | Station list JSP is displayed. |
|  | From the table of stations, identify a station that contains a ticket machine and select ‘Modify Station’. | Station JSP is displayed titled for the selected station. |
|  | Identify a ticket machine and copy the UUID to the clipboard. | Ticket machine UUID has been copied to the clipboard. |
|  | At the client web application, select ‘Change Ticket Machine Configuration’. | changeConfiguration JSP is displayed. |
|  | Insert the copied ticket machine UUID into the text field and select ‘Change Ticket Machine Uuid’. | The station name and station zone update to the correct values for the ticket machine selected after the next configuration poll. |
|  | Select ‘Ticket Machine Home’. | Client Ticket Machine Home page is displayed. |