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| General Information | |
| Use Case Name\Number : 003  Subject Area : System Startup  Description : User starts system | Responsible Analyst : Sanchez |

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| Requirements/Feature Trace | |
| **REQ#** | Requirements Name and / or Short Description |
| 1 | The system checks and initializes all wireless networking components |
| 3 | The system begins the wireless video stream and synchronizes the client/server connection |
| 4 | The system initializes the sensor system |
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| Revision History | | |
| Author | **Date** | **Comments** |
| Sanchez | 10/28/14 | Initial use case draft |
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| **Insertion Points in other Use Cases** | | |
| Use Case Name | **Use Case Number** | **Step Inserted After** |
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| **Actors** | | |
| **Actor Name** | **Person/System** | **Brief Description** |
| Driver | Person | The sole actor of the system |
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| **Pre-Conditions** | |
| # | Description |
| 1 | The system is not already running |

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| **Start Stimulus** |
| User wants to begin using the system |

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| **Use Case Main Course Steps** | | | |
| **Number** | **Description** | **Adds/Alt Name/Number** | **Bus Rule#** |
| 1 | User starts client system application |  |  |
| 2 | System prompts user to start server system |  |  |
| 3 | User starts server system |  |  |
| 4 | System prompts user to check all RC connections |  |  |
| 5 | User verifies connections and accepts the dialog |  |  |
| 6 | System initializes network systems |  |  |
| 7 | System initializes video systems |  |  |
| 8 | System initializes sensor systems |  |  |
| 9 | System initializes controller systems |  |  |
| 10 | System displays ready screen |  |  |

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| **Exception Conditions** | | |
| **Exception Situations** | **Action(s) on Exception** | **Adds\Alt UC #** |
| Initialization Exception | System shall alert user if any initializing step returns a failure, system presents component failure prompt |  |

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| Post-Conditions | |
| **#** | **Description** |
| 1 | System has started |
| 2 | System has initialized |
| 3 | System is waiting on user interaction |

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| **Candidate Objects** | | |
| **Class/Object Name** | **Descriptions** | **Possible**  **attributes** |
| ApplicationManager | Maintains lifecycle of entire application | OculusManager, ConnectionManager, RCCar, ControllerManager |
| ConnectionManager | Provides the interface for the ApplicationManager to handle all network communications | ClientSocket, VideoStream, ControlStream |
| OculusManager | Controls, manipulates, and displays the video feed to the Rift | LeftEyeStream, RightEyeStream |
| RCCar | Client interface to the control of the RC car | Speed, steering angle |
| InertialSensor | Accelerometer sensor interface | Value, Offset, Pin |

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| **Assumptions** | | | | | |
| **#** | **Assumption** | **Date**  **Raised** | **Raised**  **By** | **Date**  **Verified** | **Verified By** |
| 1 | System is assembled | 10/28/14 | Sanchez | 10/28/14 | Sanchez |
| 2 | System is offline | 10/28/14 | Sanchez | 10/28/14 | Sanchez |
| 3 | User wants to use the system | 10/28/14 | Sanchez | 10/28/14 | Sanchez |

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| **Issues** | | | | | |
| **#** | **Issue** | **Date**  **Raised** | **Raised**  **By** | **Date**  **Verified** | **Verified By** |
| 1 | Starting this system requires a fair amount of technical skill | 10/28/14 | Sanchez |  |  |
| 2 | Starting the system requires the proper, specific configuration | 10/28/14 | Sanchez |  |  |

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| **Other Comments** | | |
| **Author** | **Comment** | **Date** |
| Sanchez | The system should be synchronized on startup | 10/28/14 |
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| Frequency of Execution |
| **Frequency:**  2 Minimum: 1 Maximum: 3 Average: 2 (OR)Fixed:  **Per:** Hour:Day:  Week:  Month:  Other: |

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| **Timing Information** | | | | | | | |
| **#** | **At/**  **Between** | **Step(s)** | **Timing**  **Unit** | **Minimum** | **Average** | **Maximum** | **Comments** |
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| **Volume Information** | | | | | | |
| **#** | **Step #** | **Unit of**  **Measure** | **Minimum** | **Average** | **Maximum** | **Comments** |
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| **Alternate Course General Information** |
| Alternate Course Name:  Alternate Course Number:  Parent Use Case Name:  Parent Use Case Number:  Description:  Reason for Execution: Non Exception:  Exception:  Exception #: |

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| Insertion Point |
| Step Inserted After |
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| Pre-Conditions | |
| 1. |  |
| 2. |  |

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| Alternate Course Steps | | | |
| **#** | **Step Description** | **Adds Use Case #** | **Business Rule(s)#** |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |

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| Post-Conditions | |
| 1. |  |
| 2. |  |