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| ID | Traced Requirements | Object Heading and Object Text | Input Parameters |
| VGIL\_LLTC-41 | VGIL\_LLR-29,  VGIL\_LLR-30,  VGIL\_LLR-31,  VGIL\_LLR-32 | DispatchAcquireLock Test Case 1  Verify DispatchAcquireLock delays a thread, increases the time the thread waits to acquire a lock, and returns false if the calling thread fails to acquire a lock in the allotted period of time. | N/A |
| VGIL\_LLTC-42 | VGIL\_LLR-30,  VGIL\_LLR-31,  VGIL\_LLR-32 | DispatchAcquireLock Test Case 2  Verify DispatchAcquireLock return true if the calling thread successfully acquires a lock in the allotted period of time | N/A |
| VGIL\_LLTC-43 | VGIL\_LLR-33,  VGIL\_LLR-34 | DispatchReleaseLock Test Case 1  Verify DispatchReleaseLock releases a thread that is wiating on the init/uninit lock | N/A |

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| ID | Object Heading and Object text |
| VGIL\_LLR-29 | DispatchAcquireLock  The COMMON UTILS module shall expose the function bool DispatchAcquireLock(void). |
| VGIL\_LLR-30 | DispatchAcquireLock  The function DispatchAcquireLock shall delay the thread and increase the time waited so far if it is unable to accquire the init/uninit lock in this thread. |
| VGIL\_LLR-31 | DispatchAcquireLock  The function DispatchAcquireLock shall return false if it is unable to acquire the init/uninit lock in this thread and a timeout occurred. |
| VGIL\_LLR-32 | DispatchAcquireLock  The function DispatchAcquireLock shall return true if lock successfully acquired. |
| VGIL\_LLR-33 | DispatchReleaseLock  The COMMON UTILS module shall expose the function void DispatchReleaseLock(void). |
| VGIL\_LLR-34 | DispatchReleaseLock  The function DispatchReleaseLock shall release any threads waiting on the init/uninit lock. |

The following test cases, VGIL\_LLTC-41, VGIL\_LLTC-42, and VGIL\_LLTC-43, are under review. Please answer the following questions using the tables above. Answer using Yes, No, or N/A, along with any comments to justify your answer.

1. Does each test case that is the target of this review specify the objective of the test case?

1. If the test case that is the target of the review traces to requirements that specify external input, does the test case adequately test for robustness with respect to external input?
2. Would the successful execution of the test cases that are the target of this review verify the requirements to which the test cases trace?

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| ID | Object Text | Test Condition |
| VGIL\_LLTC-41 | DispatchAcquireLock Test Case 1  Verify DispatchAcquireLock delays a thread, increases the time the thread waits to acquire a lock, and returns false if the calling thread fails to acquire a lock in the allotted period of time. | Set the global unsigned, 32-bit integer named s\_timeElapsed to 0  Initialize an unsigned, atomic integer named lockStatus to 0  Stub  UtilTestAndSet32 50000 times to return 1 and set the pVal parameter to the address of lockStatus  Call FUT  Override the call to the OsBusyWait function to continuously add the delay in time before a timeout is set |
| VGIL\_LLTC-42 | DispatchAcquireLock Test Case 2  Verify DispatchAcquireLock return true if the calling thread successfully acquires a lock in the allotted period of time | Set the global unsigned, 32-bit integer named s\_timeElapsed to 0  Initialize an unsigned, atomic integer named lockStatus to 1  Stub UtilTestAndSet32 once to return 0 and set the pVal parameter to the address of lockStatus  Call FUT |
| VGIL\_LLTC-43 | DispatchReleaseLock Test Case 1  Verify DispatchReleaseLock releases a thread that is wiating on the init/uninit lock | Set the global unsigned, 32-bit integer named s\_timeElapsed to 0  Initialize an unsigned, atomic integer named lockStatus to 1  Stub UtilTestAndSet32 once to return 0 and set the pVal parameter to the address of lockStatus  Call DispatchAcquireLock  IF DispatchAcquireLock returned true  Call FUT  Override the call to the UtilAtomicSet function to set the value of the integer pointed at by the p parameter to the value specified by the val parmeter  ELSE  Output a message that details the thread unsuccessfully acquiring the init/uninit lock |

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| ID | Expected Result | Filename path | Expected Result File name path |
| VGIL\_LLTC-41 | DispatchAcquireLock returns the false Boolean value and the thread is delayed for 500000 microseconds before timing out. | vgil\_unit\_tests  \UTC\_common\_utils\_1  \UTC\_common\_utils\_1.c | vgil\_unit\_tests  \UTC\_common\_utils\_1  \expectedresults\  UTC\_common\_utils.log |
| VGIL\_LLTC-42 | DispatchAcquireLock returns the true Boolean value. | vgil\_unit\_tests  UTC\_common\_utils  \UTC\_common\_utils\_1.c | vgil\_unit\_tests  \UTC\_common\_utils\_1\expectedresults  \UTC\_common\_utils\_1.log |
| VGIL\_LLTC-43 | DispatchReleaseLock releases the init/uninit spinlock that was initially acquired after the call to DispatchAcquireLock and updates the status of the lock being owned by a thread from true to false. DispatchReleaseLock releases the init/uninit spinlock that was initially acquired after the call to DispatchAcquireLock and updates the status of the lock being owned by a thread from true to false. | vgil\_unit\_tests  \UTC\_common\_utils\_1\UTC\_common\_utils\_1.c | vgil\_unit\_tests  \UTC\_common\_utils\_1  \expectedresults  \UTC\_common\_utils\_1.log |

1. Does each test case that is the target of this review specify its inputs and test conditions?
2. Please note any typos or other errors found during this review.
3. Based on your answers, would you pass this review?