**ITRI Hypervisor Test Cases for I/O Virtualization**

* FT-IOV-0001 - Transfer a small file (10MB) back and forth between 2 Guest VMs for long times
* FT-IOV-0002 - Transfer a small file (100MB) back and forth between 2 Guest VMs for long times
* FT-IOV-0003 - Transfer a large file (approximate to Guest VM’s storage) back and forth between 2 Guest VMs for long times
* FT-IOV-0004 - Transfer a small file (10MB) back and forth between 2 Guest VMs for long times with another Guest VM in heavy load
* FT-IOV-0005 - Transfer a medium file (100MB) back and forth between 2 Guest VMs for long times with another Guest VM in heavy load
* FT-IOV-0006 - Transfer a large file (approximate to Guest VM’s storage) back and forth between 2 Guest VMs for long times with another Guest VM in heavy load
* FT-IOV-0007 - Transfer a small file (10MB) back and forth between 2 Guest VMs (1 in heavy load) for long times
* FT-IOV-0008 - Transfer a medium file (100MB) back and forth between 2 Guest VMs (1 in heavy load) for long times
* FT-IOV-0009 - Transfer a large file (approximate to Guest VM’s storage) back and forth between 2 Guest VMs (1 in heavy load) for long times
* FT-IOV-0010 - Transfer a small file (10MB) back and forth between 2 Guest VMs (2 in heavy load) for long times
* FT-IOV-0011 - Transfer a medium file (100MB) back and forth between 2 Guest VMs (2 in heavy load) for long times
* FT-IOV-0012 - Transfer a large file (approximate to Guest VM’s storage) back and forth between 2 Guest VMs (2 in heavy load) for long times
* FT-IOV-0013 - Transfer a small file (10MB) back and forth between 2 Guest VMs (1 in heavy load) for long times with another Guest VM in heavy load
* FT-IOV-0014 - Transfer a medium file (100MB) back and forth between 2 Guest VMs (1 in heavy load) for long times with another Guest VM in heavy load
* FT-IOV-0015 - Transfer a large file (approximate to Guest VM’s storage) back and forth between 2 Guest VMs (1 in heavy load) for long times with another Guest VM in heavy load
* FT-IOV-0016 - Transfer a small file (10MB) back and forth between 2 Guest VMs (2 in heavy load) for long times with another Guest VM in heavy load
* FT-IOV-0017 - Transfer a medium file (100MB) back and forth between 2 Guest VMs (2 in heavy load) for long times with another Guest VM in heavy load
* FT-IOV-0018 - Transfer a large file (approximate to Guest VM’s storage) back and forth between 2 Guest VMs (2 in heavy load) for long times with another Guest VM in heavy load

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| **Metadata (Descriptions of the test case)** | |
| **Test case ID** | FT-IOV-0001 – FT-IOV-0003 |
| **Test case name** | Transfer a file (10MB, 100MB, and approximate to Guest VM’s storage) back and forth between 2 Guest VMs for long times |
| **Category** | I/O Virtualization |
| **Designer** | Chia Hung Kao |
| **Reviewer** |  |
| **Modified time** | 04/08/2013 |

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| **Precondition (Conditions that must exist to support the test case)** | |
| **Steps** | 1. Launch Host machine |

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| **Process (Steps to be executed to complete the test)** |
| 1. Login to Host machine 2. Launch Guest VM 1 3. Launch Guest VM 2 4. Create a file by dd on Host machine 5. Generate md5 of the file 6. Copy this file to Guest VM1 7. Generate md5 of the copied file 8. Compare copied file’s md5 with original file 9. Copy this file from Guest VM1 to Guest VM2 10. Generate md5 of the copied file 11. Compare copied file’s md5 with original file 12. Delete file in Guest VM1 13. Copy the file from Guest VM2 to Guest VM1 14. Generate md5 of the copied file 15. Compare copied file’s md5 with original file 16. Delete file in Guest VM2 17. Repeat 9-16 |

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| **Evaluation (Steps to be examined to evaluate the test result)** |
| 1. All the md5 checksums are the same |

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| **Metadata (Descriptions of the test case)** | |
| **Test case ID** | FT-IOV-0004 – FT-IVO-0006 |
| **Test case name** | Transfer a file (10MB, 100MB, and approximate to Guest VM’s storage) back and forth between 2 Guest VMs for long times with another Guest VM in heavy load |
| **Category** | I/O Virtualization |
| **Designer** | Chia Hung Kao |
| **Reviewer** |  |
| **Modified time** | 04/08/2013 |

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| **Precondition (Conditions that must exist to support the test case)** | |
| **Steps** | 1. Launch Host machine 2. Launch Guest VM 3 with heavy load |

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| **Process (Steps to be executed to complete the test)** |
| 1. Login to Host machine 2. Launch Guest VM 1 3. Launch Guest VM 2 4. Create a file by dd on Host machine 5. Generate md5 of the file 6. Copy this file to Guest VM1 7. Generate md5 of the copied file 8. Compare copied file’s md5 with original file 9. Copy this file from Guest VM1 to Guest VM2 10. Generate md5 of the copied file 11. Compare copied file’s md5 with original file 12. Delete file in Guest VM1 13. Copy the file from Guest VM2 to Guest VM1 14. Generate md5 of the copied file 15. Compare copied file’s md5 with original file 16. Delete file in Guest VM2 17. Repeat 9-16 |

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| **Evaluation (Steps to be examined to evaluate the test result)** |
| 1. All the md5 checksums are the same |

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| **Metadata (Descriptions of the test case)** | |
| **Test case ID** | FT-IOV-0007 – FT-IOV-0009 |
| **Test case name** | Transfer a file (10MB, 100MB, and approximate to Guest VM’s storage) back and forth between 2 Guest VMs (1 in heavy load) for long times |
| **Category** | I/O Virtualization |
| **Designer** | Chia Hung Kao |
| **Reviewer** |  |
| **Modified time** | 04/12/2013 |

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| **Precondition (Conditions that must exist to support the test case)** | |
| **Steps** | 1. Launch Host machine |

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| **Process (Steps to be executed to complete the test)** |
| 1. Login to Host machine 2. Launch Guest VM 1 3. Launch Guest VM 2 4. Create a file by dd on Host machine 5. Generate md5 of the file 6. Copy this file to Guest VM1 7. Generate md5 of the copied file 8. Compare copied file’s md5 with original file 9. Deploy heavy load on Guest VM1 10. Copy this file from Guest VM1 to Guest VM2 11. Generate md5 of the copied file 12. Compare copied file’s md5 with original file 13. Delete file in Guest VM1 14. Copy the file from Guest VM2 to Guest VM1 15. Generate md5 of the copied file 16. Compare copied file’s md5 with original file 17. Delete file in Guest VM2 18. Repeat 10-17 |

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| **Evaluation (Steps to be examined to evaluate the test result)** |
| 1. All the md5 checksums are the same |

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| **Metadata (Descriptions of the test case)** | |
| **Test case ID** | FT-IOV-0010 – FT-IOV-0012 |
| **Test case name** | Transfer a file (10MB, 100MB, and approximate to Guest VM’s storage) back and forth between 2 Guest VMs (2 in heavy load) for long times |
| **Category** | I/O Virtualization |
| **Designer** | Chia Hung Kao |
| **Reviewer** |  |
| **Modified time** | 04/12/2013 |

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| **Precondition (Conditions that must exist to support the test case)** | |
| **Steps** | 1. Launch Host machine |

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| **Process (Steps to be executed to complete the test)** |
| 1. Login to Host machine 2. Launch Guest VM 1 3. Launch Guest VM 2 4. Create a file by dd on Host machine 5. Generate md5 of the file 6. Copy this file to Guest VM1 7. Generate md5 of the copied file 8. Compare copied file’s md5 with original file 9. Deploy heavy load on Guest VM1 10. Deploy heavy load on Guest VM2 11. Copy this file from Guest VM1 to Guest VM2 12. Generate md5 of the copied file 13. Compare copied file’s md5 with original file 14. Delete file in Guest VM1 15. Copy the file from Guest VM2 to Guest VM1 16. Generate md5 of the copied file 17. Compare copied file’s md5 with original file 18. Delete file in Guest VM2 19. Repeat 11-18 |

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| **Evaluation (Steps to be examined to evaluate the test result)** |
| 1. All the md5 checksums are the same |

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| **Metadata (Descriptions of the test case)** | |
| **Test case ID** | FT-IOV-0013 – FT-IOV-0015 |
| **Test case name** | Transfer a file (10MB, 100MB, and approximate to Guest VM’s storage) back and forth between 2 Guest VMs (1 in heavy load) for long times with another Guest VM in heavy load |
| **Category** | I/O Virtualization |
| **Designer** | Chia Hung Kao |
| **Reviewer** |  |
| **Modified time** | 04/16/2013 |

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| **Precondition (Conditions that must exist to support the test case)** | |
| **Steps** | 1. Launch Host machine 2. Launch Guest VM 3 with heavy load |

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| **Process (Steps to be executed to complete the test)** |
| 1. Login to Host machine 2. Launch Guest VM 1 3. Launch Guest VM 2 4. Create a file by dd on Host machine 5. Generate md5 of the file 6. Copy this file to Guest VM1 7. Generate md5 of the copied file 8. Compare copied file’s md5 with original file 9. Deploy heavy load on Guest VM1 10. Copy this file from Guest VM1 to Guest VM2 11. Generate md5 of the copied file 12. Compare copied file’s md5 with original file 13. Delete file in Guest VM1 14. Copy the file from Guest VM2 to Guest VM1 15. Generate md5 of the copied file 16. Compare copied file’s md5 with original file 17. Delete file in Guest VM2 18. Repeat 10-17 |

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| **Evaluation (Steps to be examined to evaluate the test result)** |
| 1. All the md5 checksums are the same |

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| **Metadata (Descriptions of the test case)** | |
| **Test case ID** | FT-IOV-0016 – FT-IOV-0018 |
| **Test case name** | Transfer a file (10MB, 100MB, and approximate to Guest VM’s storage) back and forth between 2 Guest VMs (2 in heavy load) for long times with another Guest VM in heavy load |
| **Category** | I/O Virtualization |
| **Designer** | Chia Hung Kao |
| **Reviewer** |  |
| **Modified time** | 04/16/2013 |

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| **Precondition (Conditions that must exist to support the test case)** | |
| **Steps** | 1. Launch Host machine 2. Launch Guest VM 3 with heavy load |

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| **Process (Steps to be executed to complete the test)** |
| 1. Login to Host machine 2. Launch Guest VM 1 3. Launch Guest VM 2 4. Create a file by dd on Host machine 5. Generate md5 of the file 6. Copy this file to Guest VM1 7. Generate md5 of the copied file 8. Compare copied file’s md5 with original file 9. Deploy heavy load on Guest VM1 10. Deploy heavy load on Guest VM2 11. Copy this file from Guest VM1 to Guest VM2 12. Generate md5 of the copied file 13. Compare copied file’s md5 with original file 14. Delete file in Guest VM1 15. Copy the file from Guest VM2 to Guest VM1 16. Generate md5 of the copied file 17. Compare copied file’s md5 with original file 18. Delete file in Guest VM2 19. Repeat 11-18 |

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| **Evaluation (Steps to be examined to evaluate the test result)** |
| 1. All the md5 checksums are the same |