

TEST DOCUMENTATION

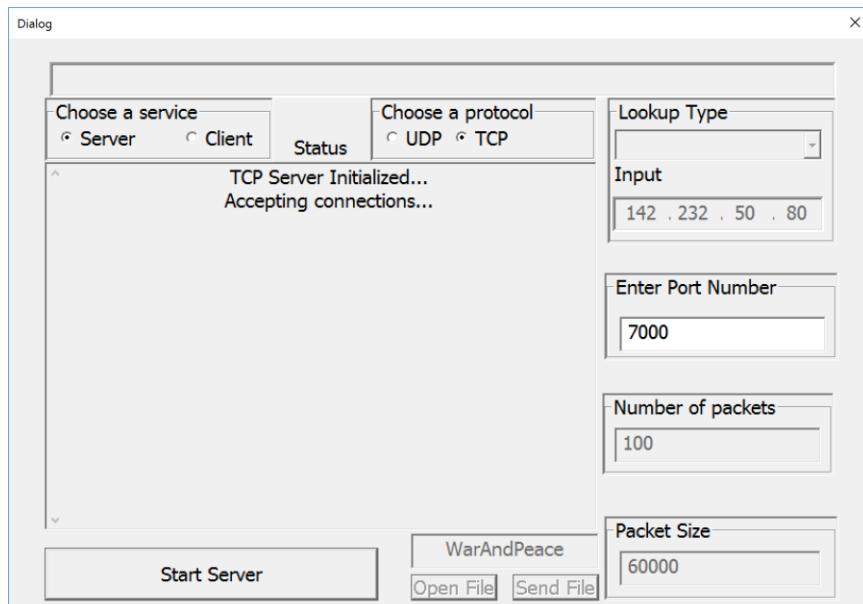
COMP 4985 Protocol Analyzer

[Notes]
Testing Parameters:
 Port Number: 7000
 IP Address: 192.168.1.67
Network Type:
 Local Area Network

Test #	Description	Test Steps	Expected Result	Pass / Fail
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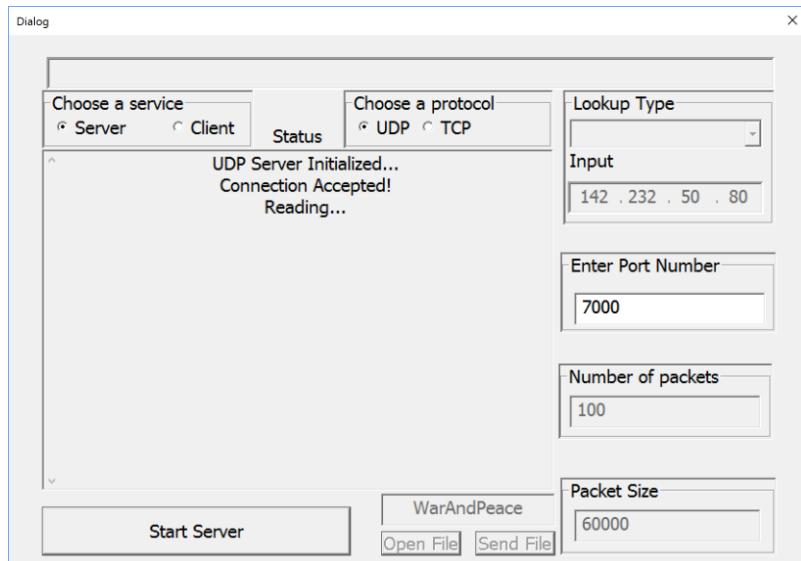
1	Initialize TCP Server	<ol style="list-style-type: none"> 1. Start Program 2. Select Server 3. Select TCP 4. Fill in testing parameters 5. Select Connect 	Display "TCP Server Initialized"	Pass
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Test Case 1 | Screenshot TCP Server



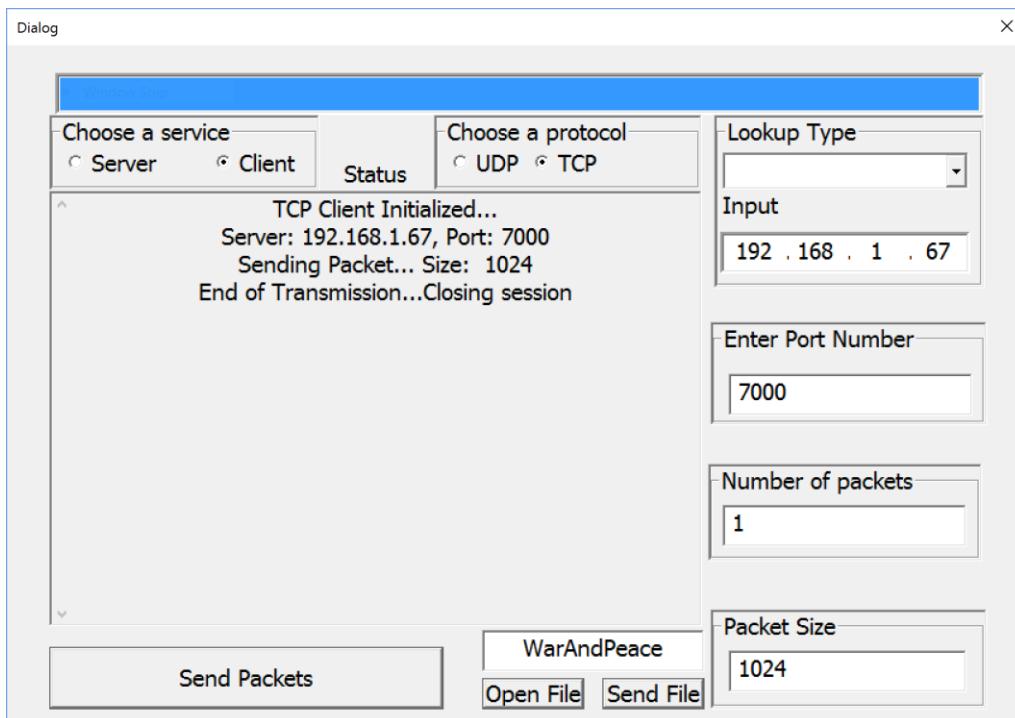
2	Initialize TCP Server	<ol style="list-style-type: none"> 1. Start Program 2. Select Server 3. Select UDP 4. Fill in testing parameters 5. Select Connect 	Display "UDP Server Initialized"	Pass
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Test Case 2 | Screenshot TCP Server

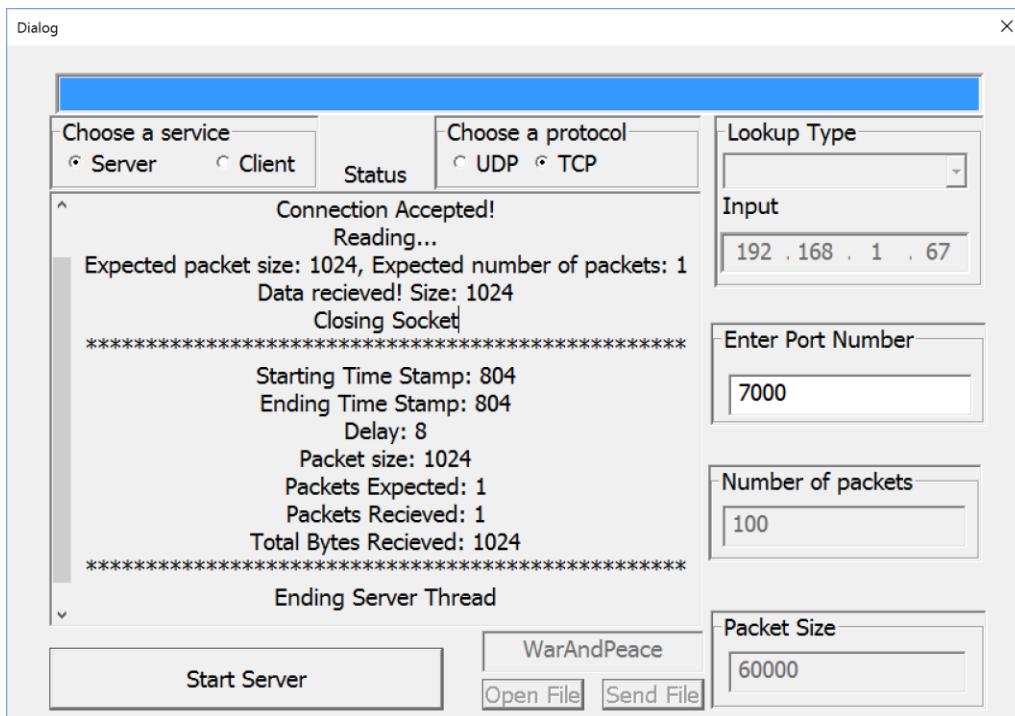


3	Initialize control message successfully sent and received	Client <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select TCP 4. Fill in testing parameters 5. Packet size 1024, send times 1 6. Select Connect Server <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select TCP 10. Fill in testing parameters 11. Select Connect 	Client Display server port number, IP address, and size of packet sent every time Server Display "Expected packet size: 1024, Expected number of packets: 1"	Pass
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Test Case 3 | Screenshot TCP Client

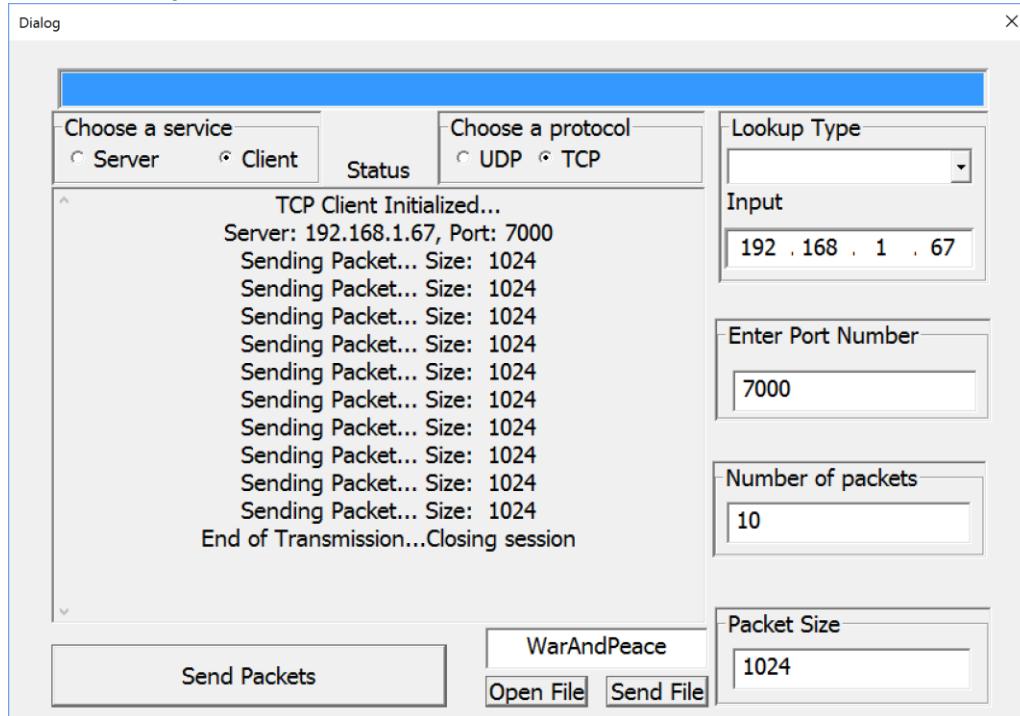


Test Case 3 | Screenshot TCP Server

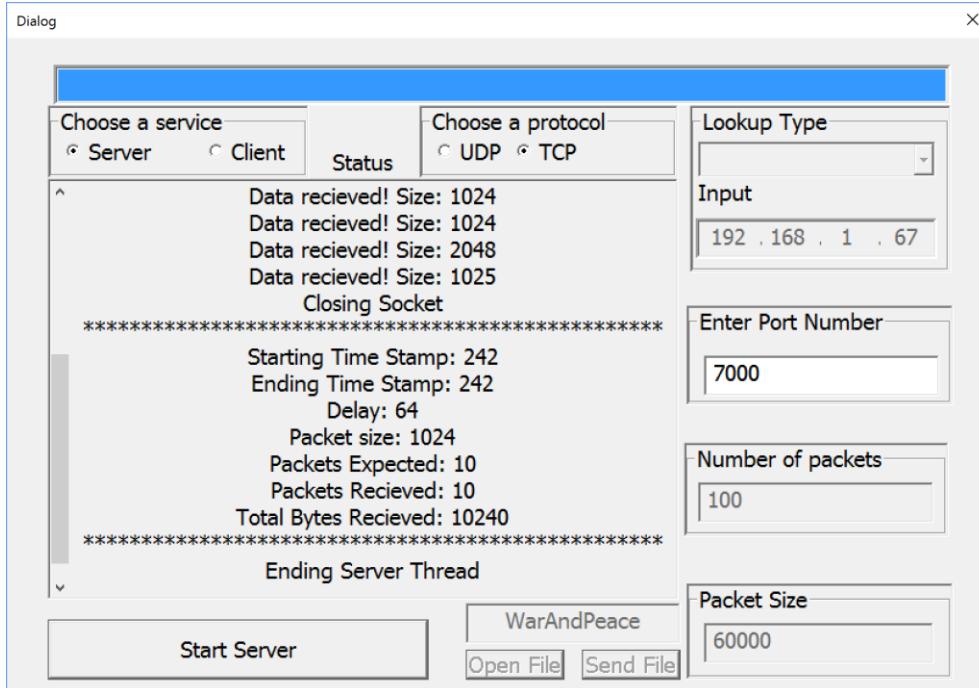


4	Send and receive 1024 size packets 10 times	Client 1. Start Program 2. Select Client 3. Select TCP 4. Fill in testing parameters 5. Packet size 1024, send times 10 6. Select Connect Server 7. Start Program 8. Select Server 9. Select TCP 10. Fill in testing parameters 11. Select Connect"	Client Display server port number, IP address, and size of packet sent every time Server Display "Expected packet size: 1024, Expected number of packets: 10" Display "packets received" every time a packet is read Display transmission information, which receives all the packets	Pass
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Test Case 4 | Screenshot TCP Client

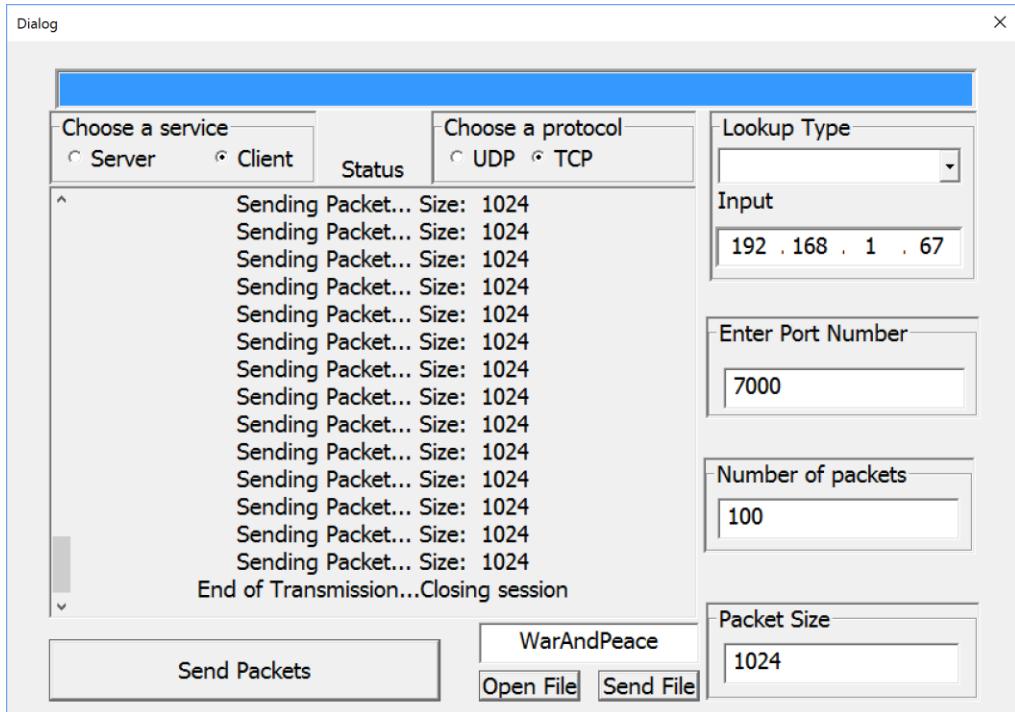


Test Case 4 | Screenshot TCP Server

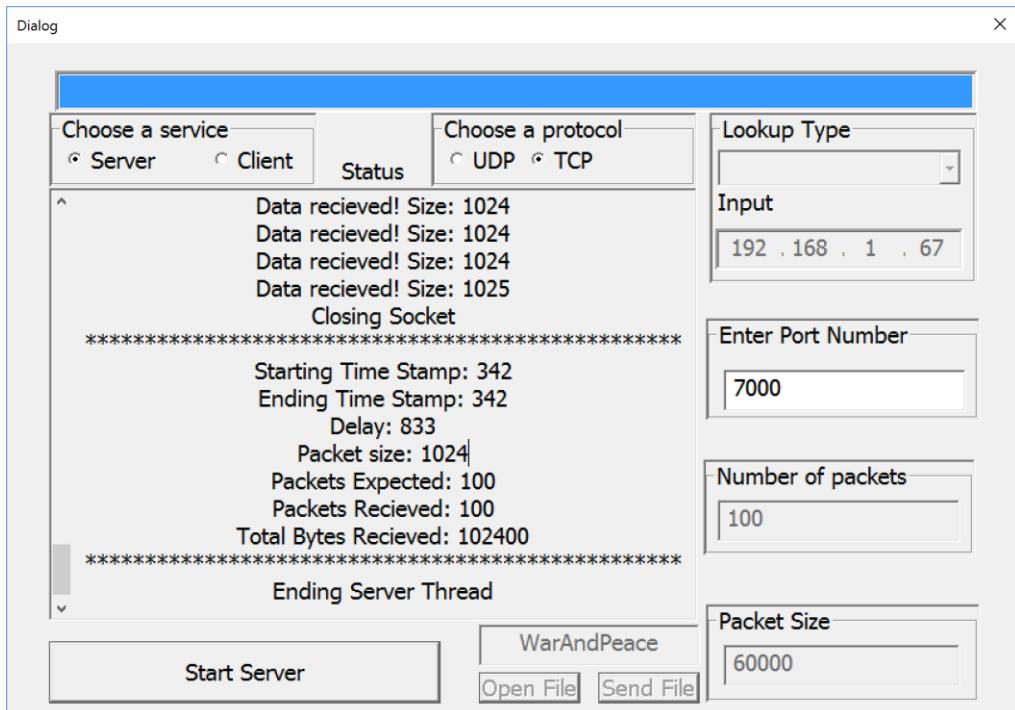


5	Send and receive 1024 size packets 100 times	Client 12. Start Program 13. Select Client 14. Select TCP 15. Fill in testing parameters 16. Packet size 1024, send times 100 17. Select Connect Server 18. Start Program 19. Select Server 20. Select TCP 21. Fill in testing parameters 22. Select Connect"	Client Display server port number, IP address, and size of packet sent every time Server Display "Expected packet size: 1024, Expected number of packets: 100" Display "packets received" every time a packet is read Display transmission information, which receives all the packets	Pass
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Test Case 5 | Screenshot TCP Client

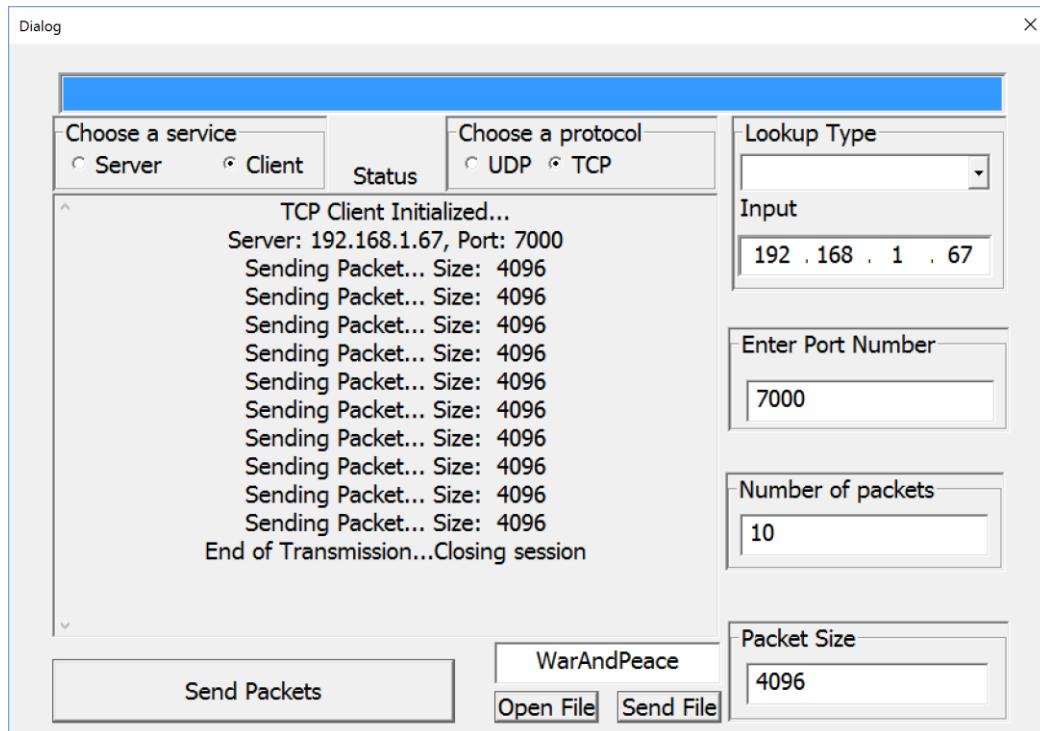


Test Case 5 | Screenshot TCP Server

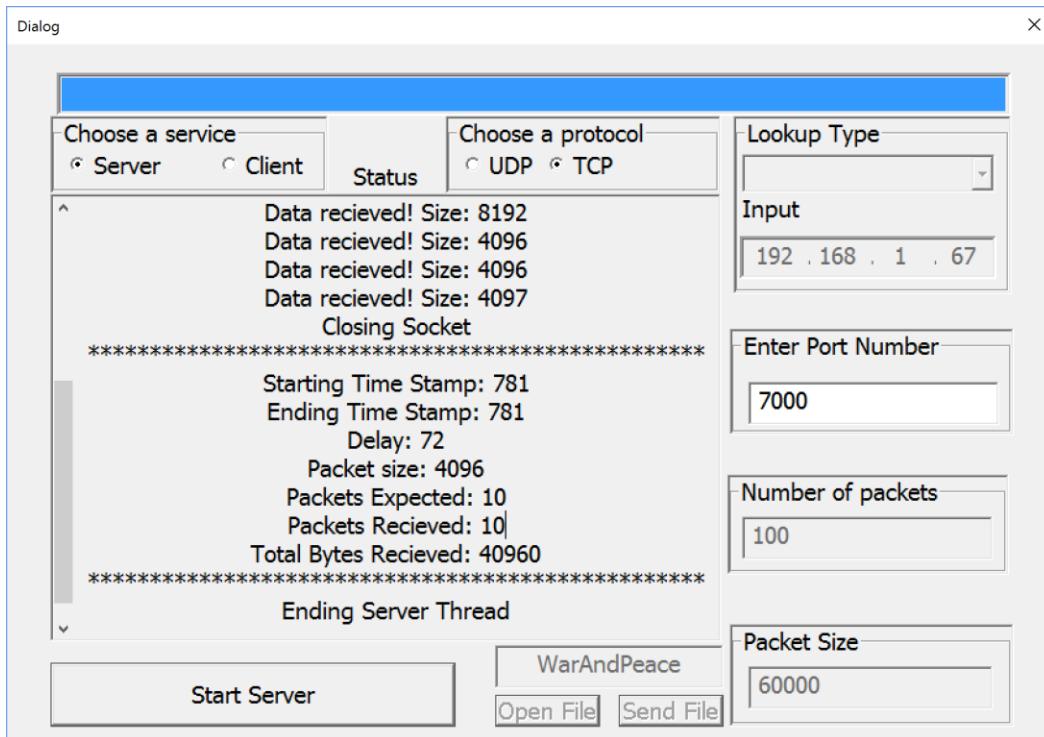


6	<p>Send and receive 4096 size packets 10 times</p> <p>Client</p> <ul style="list-style-type: none"> 23. Start Program 24. Select Client 25. Select TCP 26. Fill in testing parameters 27. Packet size 1024, send times 10 28. Select Connect <p>Server</p> <ul style="list-style-type: none"> 29. Start Program 30. Select Server 31. Select TCP 32. Fill in testing parameters 33. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 4096, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 6 | Screenshot TCP Client

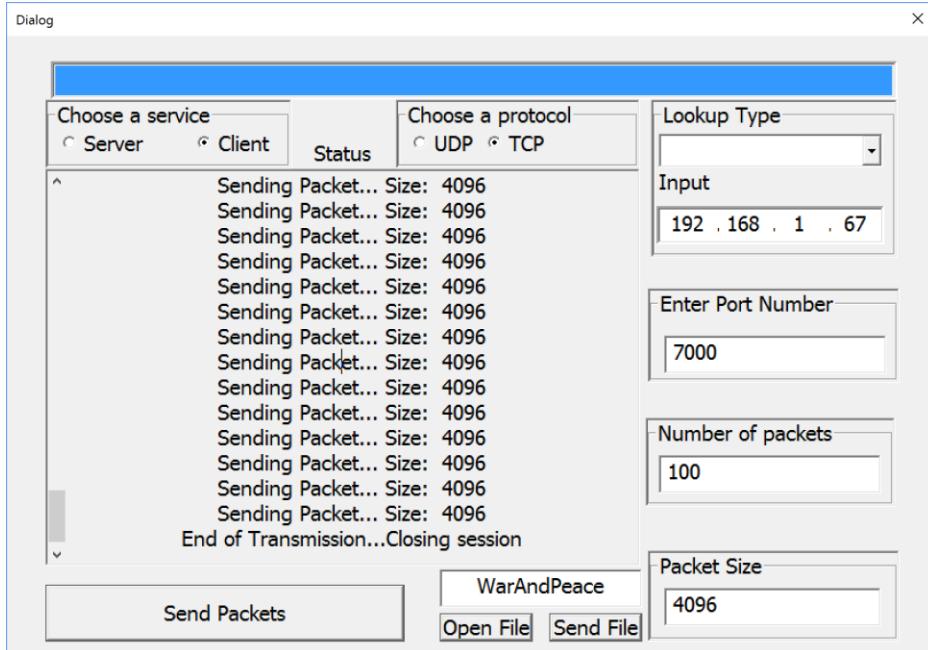


Test Case 6 | Screenshot TCP Server

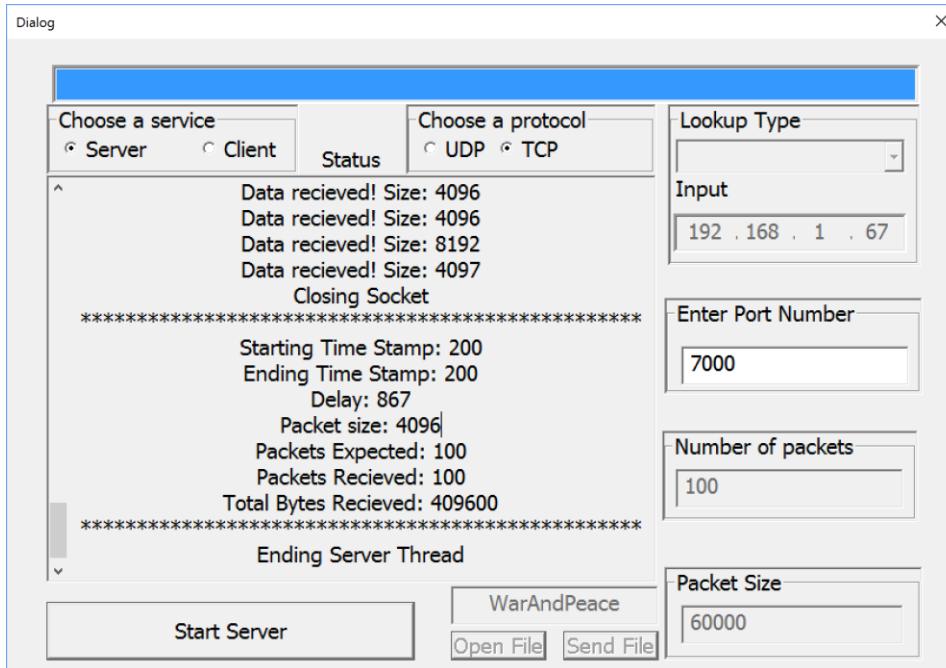


7	Send and receive 4096 size packets 100 times	Client 34. Start Program 35. Select Client 36. Select TCP 37. Fill in testing parameters 38. Packet size 1024, send times 100 39. Select Connect Server 40. Start Program 41. Select Server 42. Select TCP 43. Fill in testing parameters 44. Select Connect"	Client Display server port number, IP address, and size of packet sent every time Server Display "Expected packet size: 4096, Expected number of packets: 100" Display "packets received" every time a packet is read Display transmission information, which receives all the packets	Pass
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Test Case 7 | Screenshot TCP Client

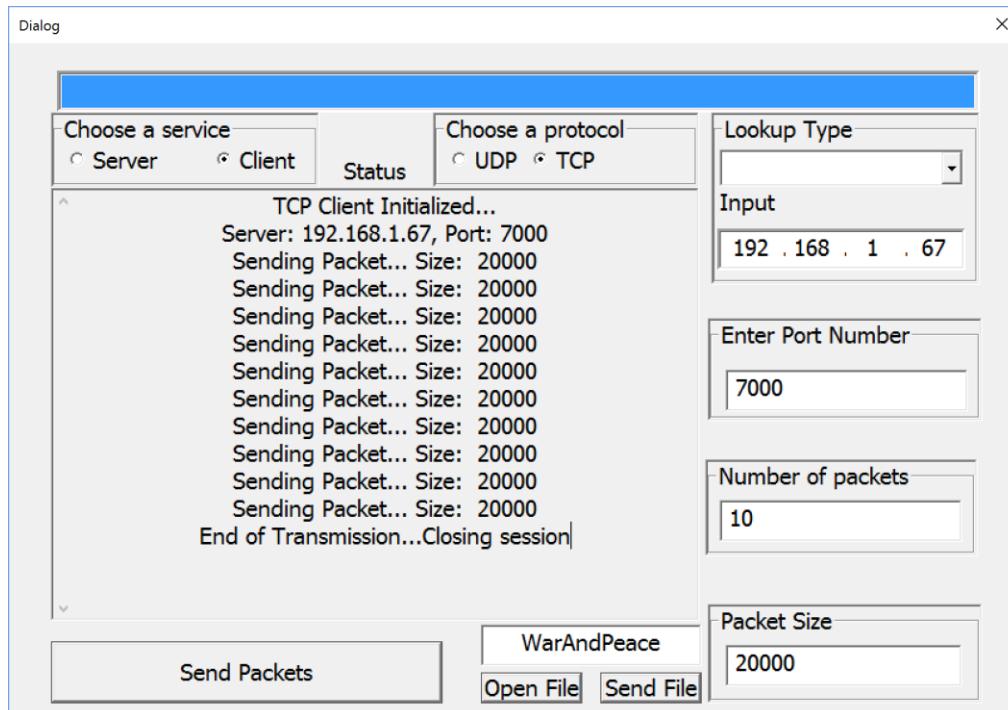


Test Case 7 | Screenshot TCP Server

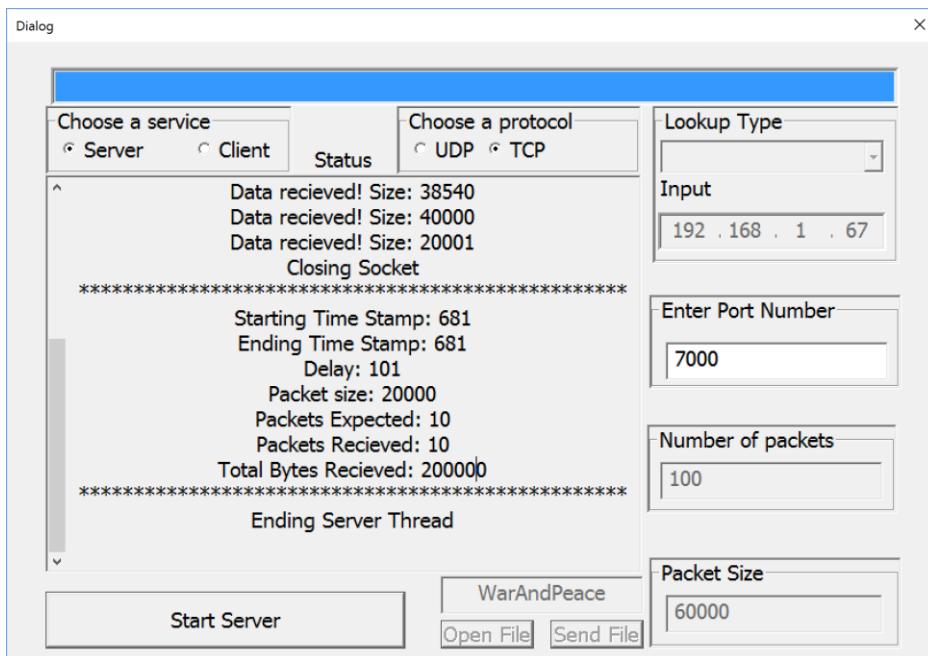


8	Send and receive 20000 size packets 10 times	<p>Client</p> <ul style="list-style-type: none"> 45. Start Program 46. Select Client 47. Select TCP 48. Fill in testing parameters 49. Packet size 20000, send times 10 50. Select Connect <p>Server</p> <ul style="list-style-type: none"> 51. Start Program 52. Select Server 53. Select TCP 54. Fill in testing parameters 55. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 20000, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 8 | Screenshot TCP Client

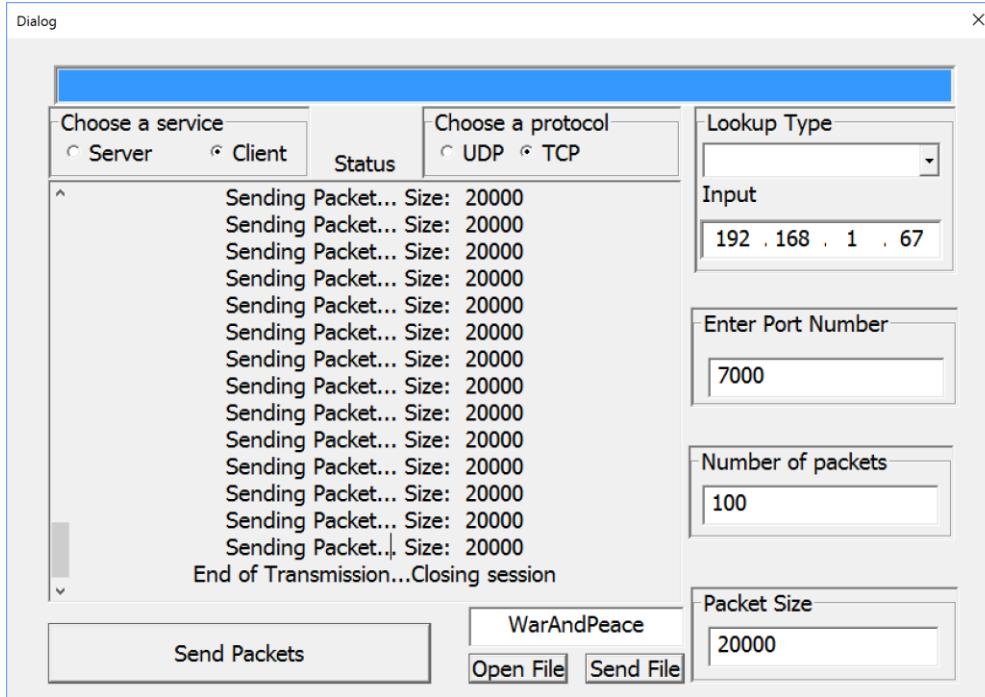


Test Case 8 | Screenshot TCP Server

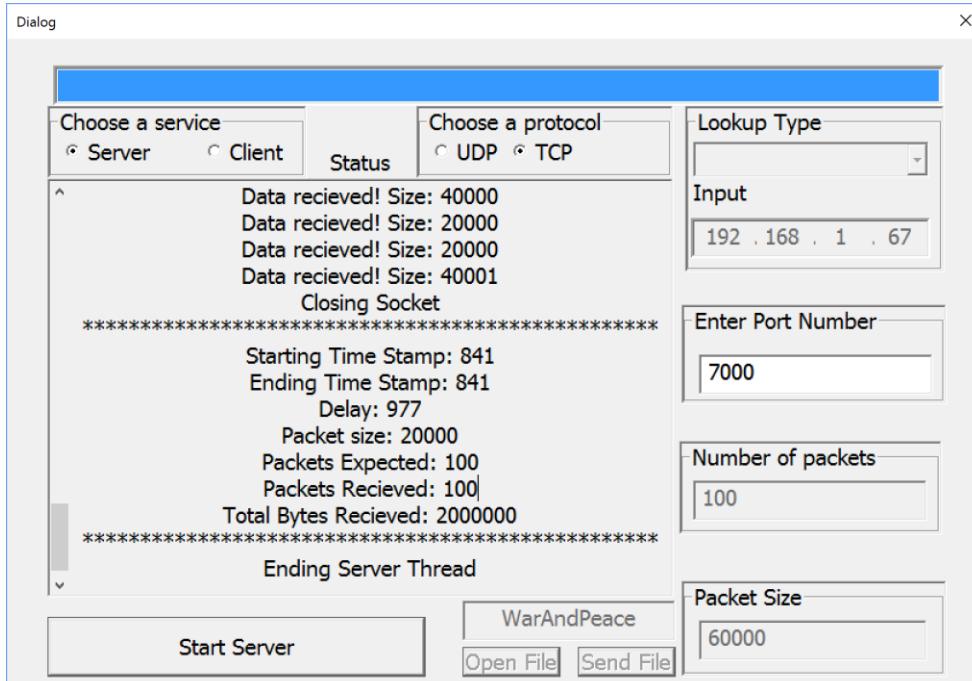


9	<p>Send and receive 20000 size packets 100 times</p>	<p>Client</p> <ol style="list-style-type: none"> Start Program Select Client Select TCP Fill in testing parameters Packet size 20000, send times 100 Select Connect <p>Server</p> <ol style="list-style-type: none"> Start Program Select Server Select TCP Fill in testing parameters Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 20000, Expected number of packets: 100"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 9 | Screenshot TCP Client

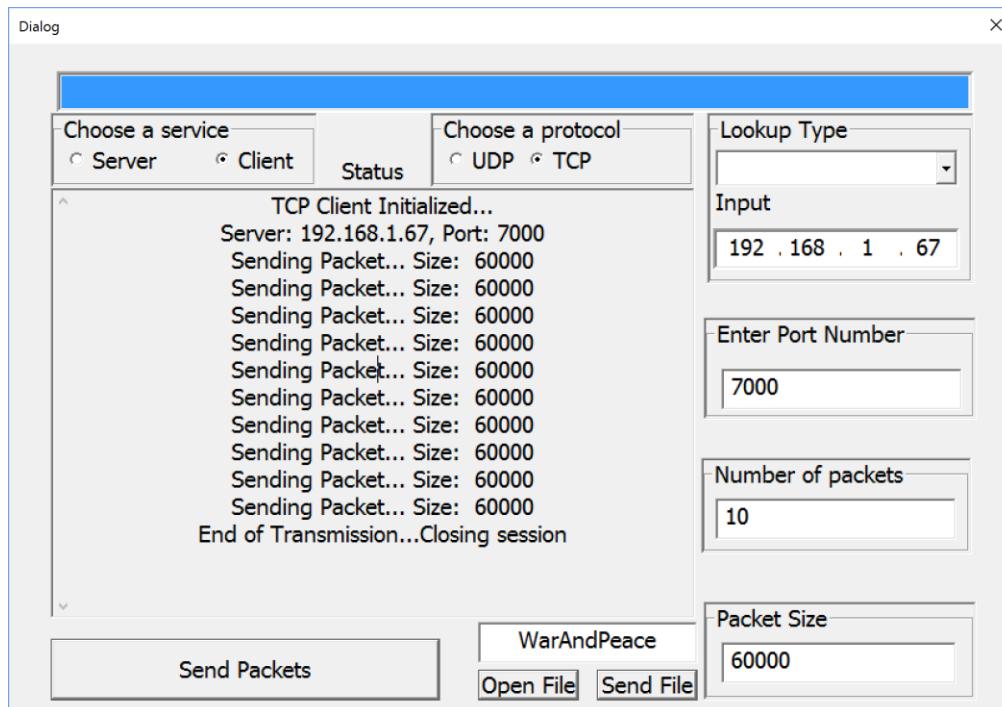


Test Case 9 | Screenshot TCP Server

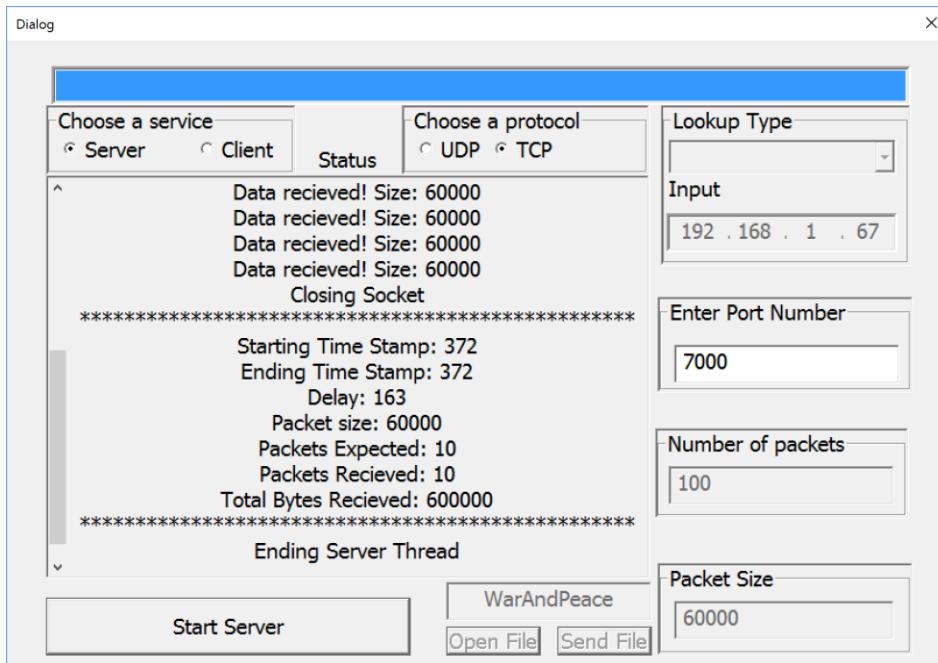


10	Send and receive 60000 size packets 10 times	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select TCP 4. Fill in testing parameters 5. Packet size 60000, send times 10 6. Select Connect <p>Server</p> <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select TCP 10. Fill in testing parameters 11. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 60000, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 10 | Screenshot TCP Client

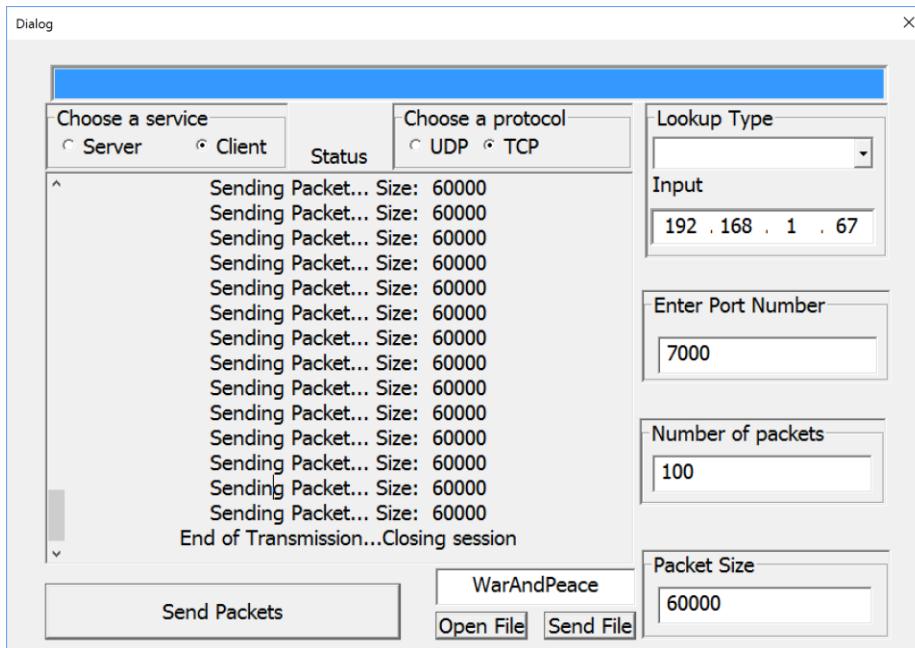


Test Case 10 | Screenshot TCP Server

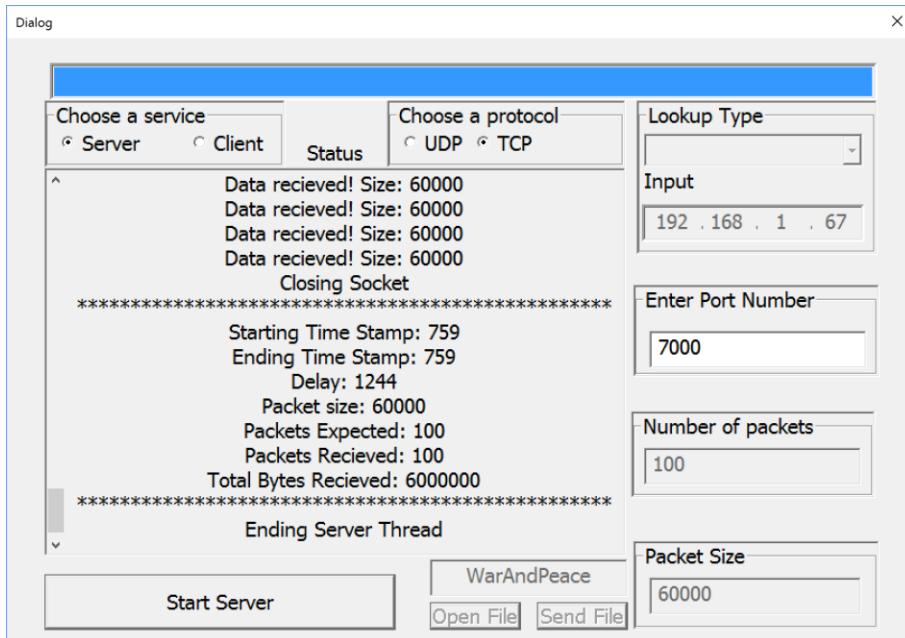


11	Send and receive 60000 size packets 100 times	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select TCP 4. Fill in testing parameters 5. Packet size 60000, send times 100 6. Select Connect <p>Server</p> <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select TCP 10. Fill in testing parameters 11. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 60000, Expected number of packets: 100"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 11 | Screenshot TCP Client

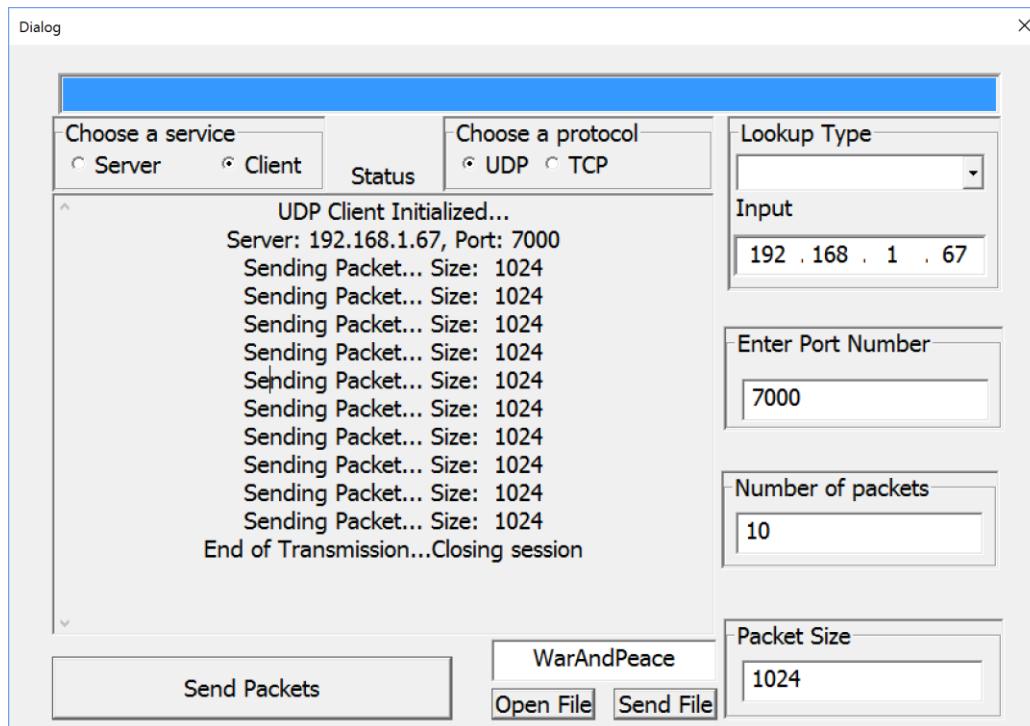


Test Case 11 | Screenshot TCP Server

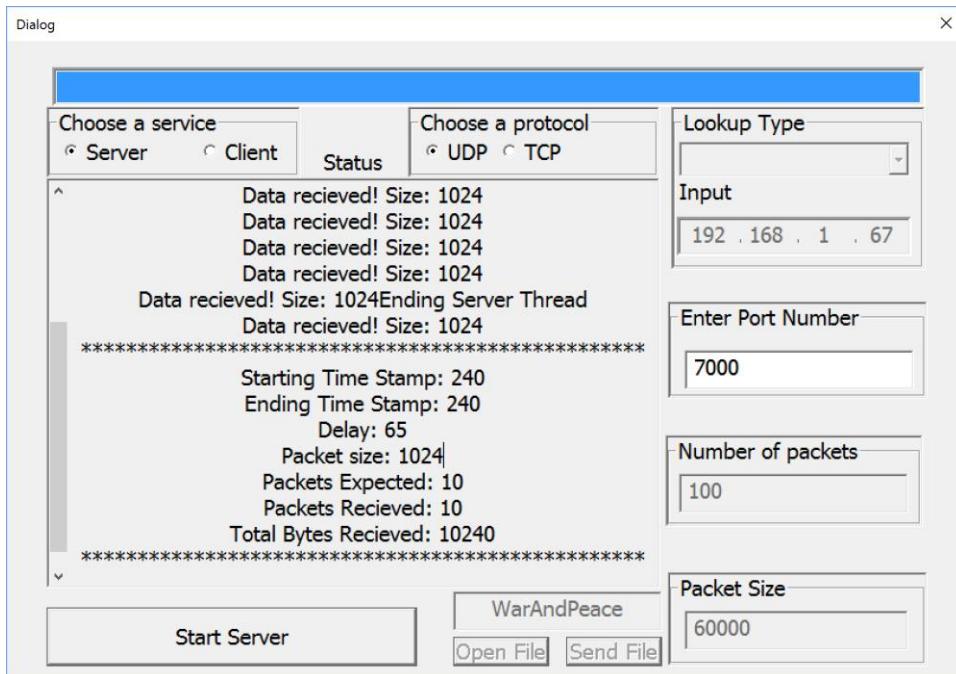


12	Send and receive 1024 size packets 10 times	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select UDP 4. Fill in testing parameters 5. Packet size 1024, send times 10 6. Select Connect <p>Server</p> <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select UDP 10. Fill in testing parameters 11. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 1024, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 12 | Screenshot UDP Client

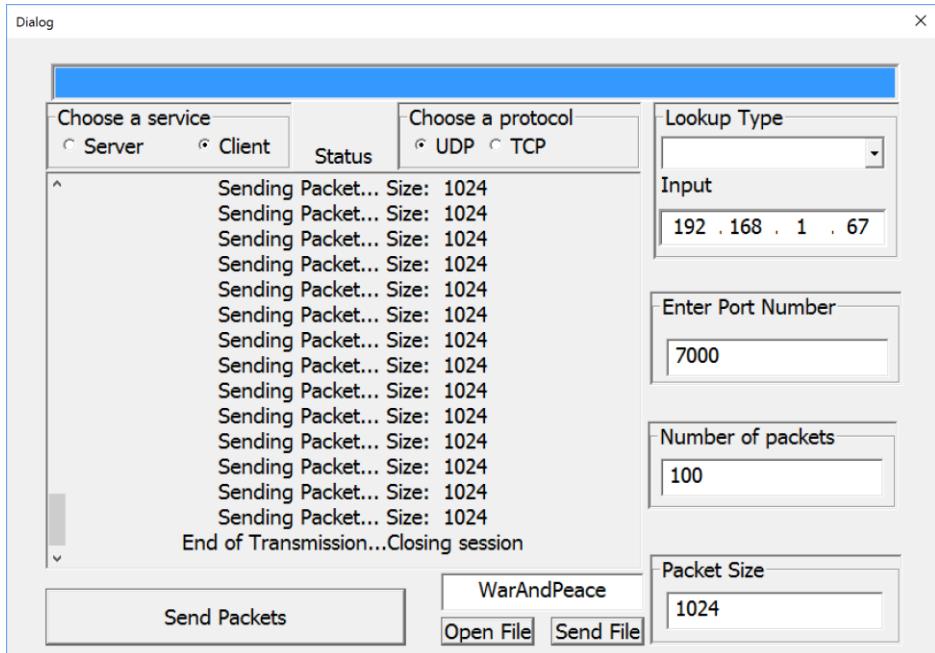


Test Case 12 | Screenshot UDP Server

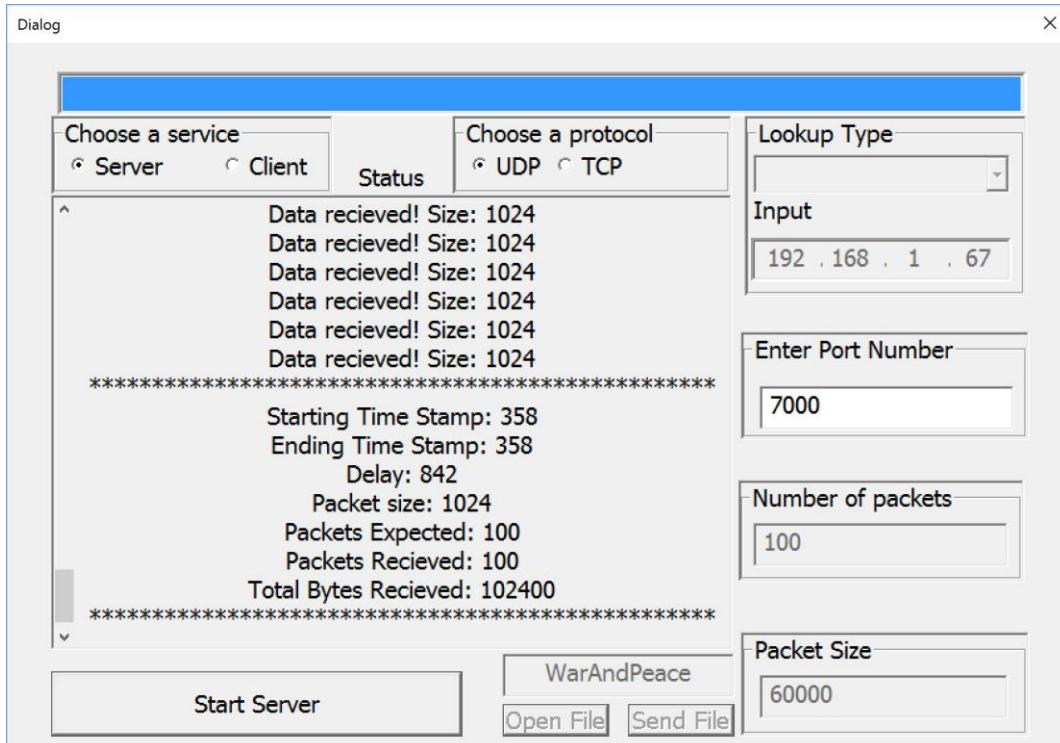


13	Send and receive 1024 size packets 100 times	Client 1. Start Program 2. Select Client 3. Select UDP 4. Fill in testing parameters 5. Packet size 1024, send times 100 6. Select Connect Server 7. Start Program 8. Select Server 9. Select UDP 10. Fill in testing parameters 11. Select Connect"	Client Display server port number, IP address, and size of packet sent every time Server Display "Expected packet size: 1024, Expected number of packets: 100" Display "packets received" every time a packet is read Display transmission information, which receives all the packets	Pass
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Test Case 13 | Screenshot UDP Client

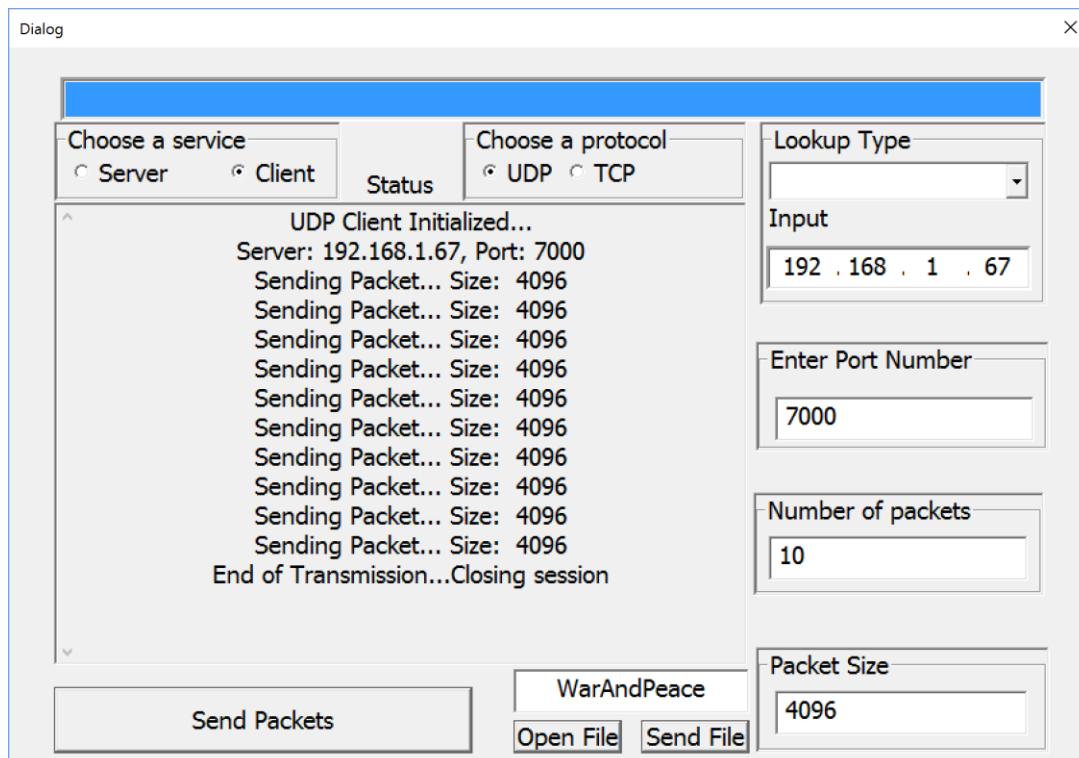


Test Case 13 | Screenshot UDP Server

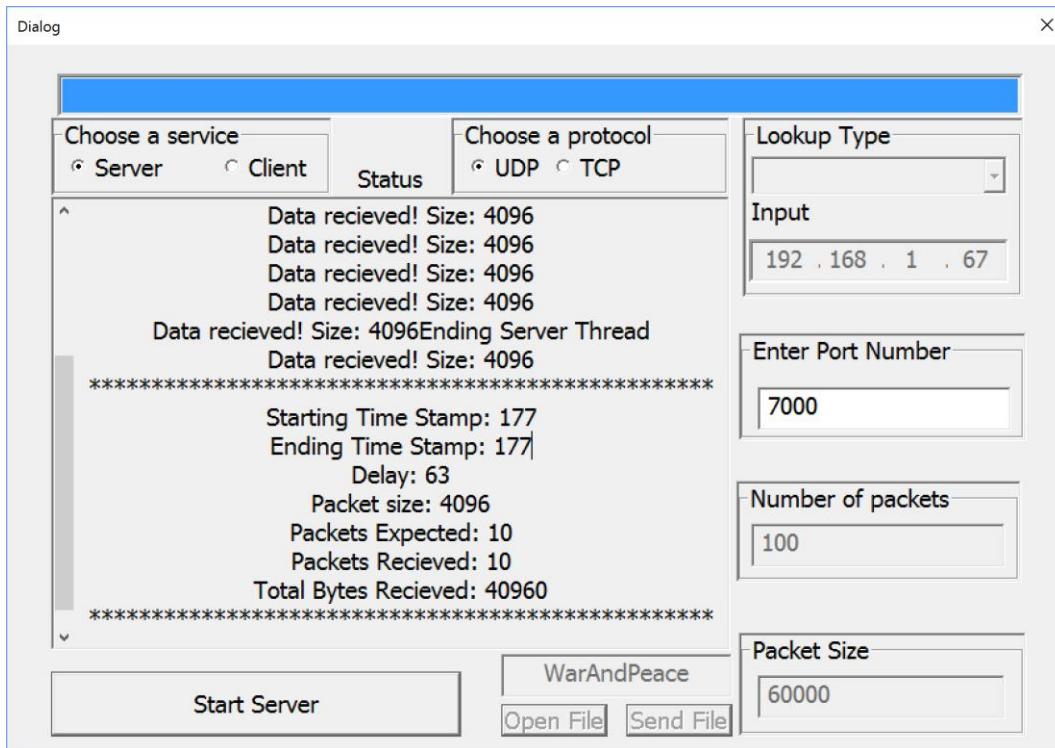


14	Send and receive 4096 size packets 10 times	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select UDP 4. Fill in testing parameters 5. Packet size 1024, send times 10 6. Select Connect <p>Server</p> <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select UDP 10. Fill in testing parameters 11. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 4096, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 14 | Screenshot UDP Client



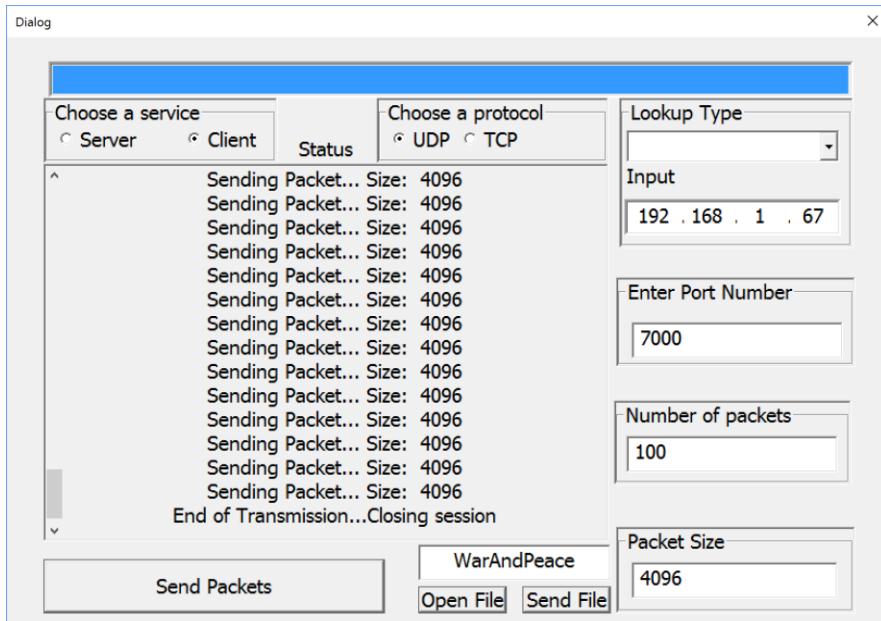
Test Case 14 | Screenshot UDP Server



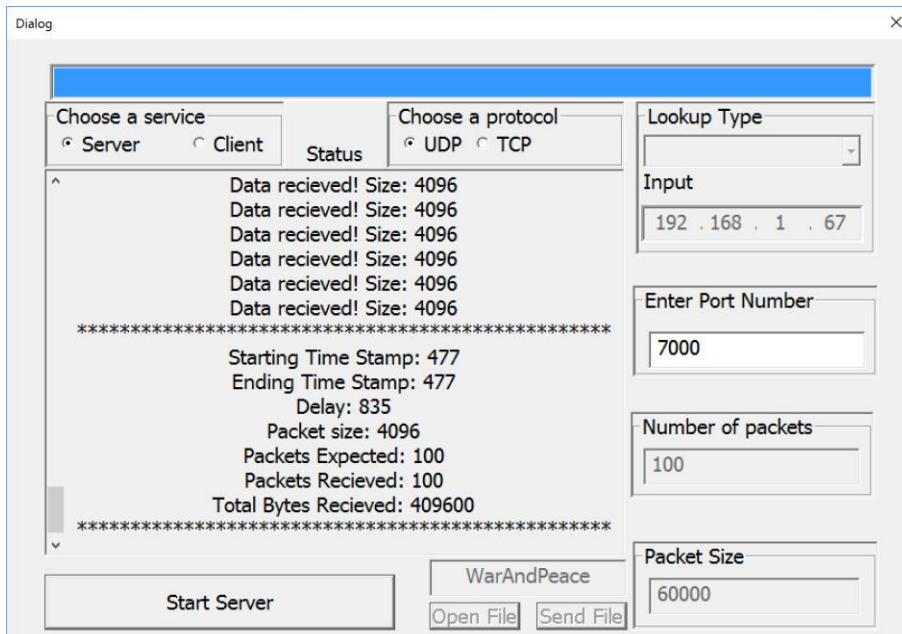
15	<p>Send and receive 4096 size packets 100 times</p> <p>Client</p> <ol style="list-style-type: none"> Start Program Select Client Select UDP Fill in testing parameters Packet size 1024, send times 100 Select Connect <p>Server</p> <ol style="list-style-type: none"> Start Program Select Server Select UDP Fill in testing parameters Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 4096, Expected number of packets: 100"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which</p>	Pass
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			receives all the packets	
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Test Case 15 | Screenshot UDP Client

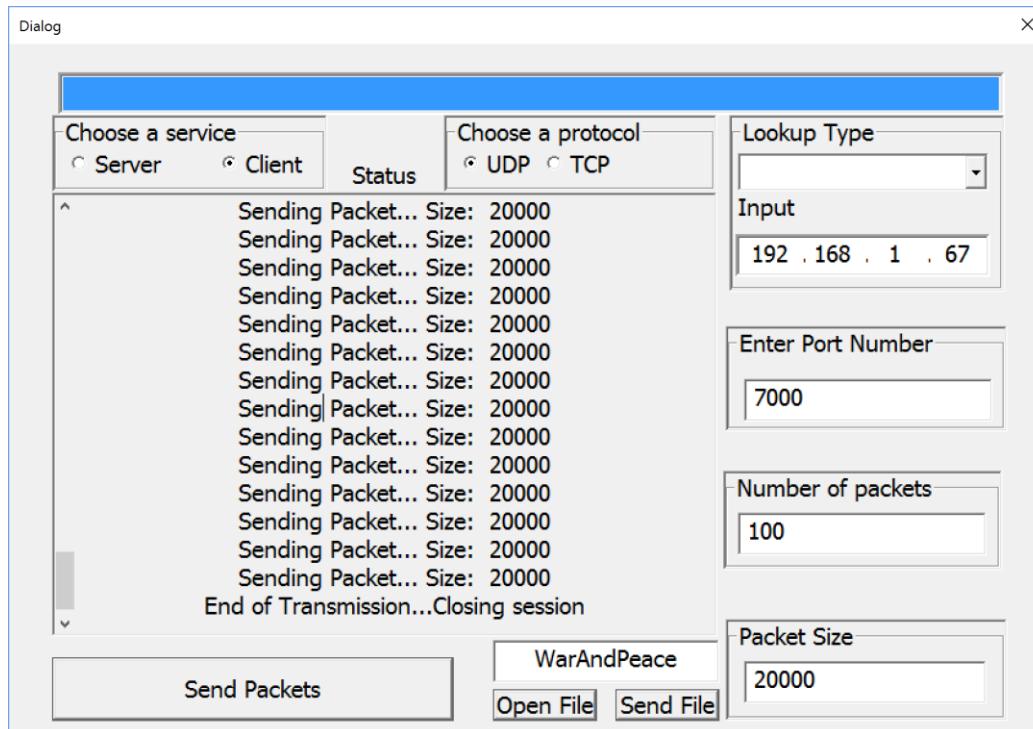


Test Case 15 | Screenshot TCP Server

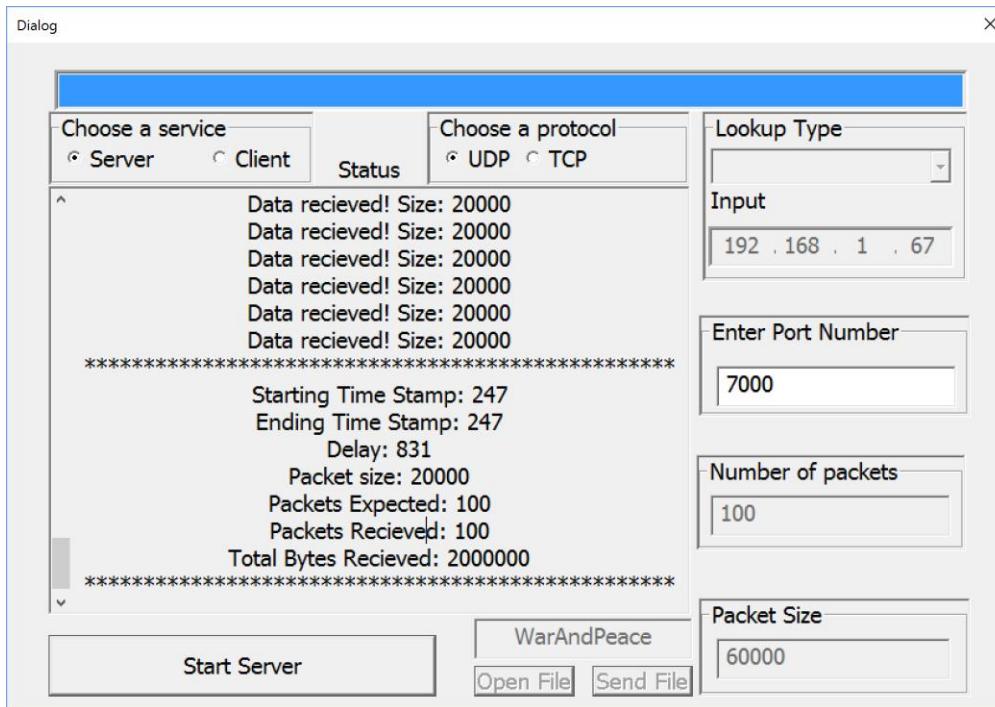


16	Send and receive 20000 size packets 10 times	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select UDP 4. Fill in testing parameters 5. Packet size 20000, send times 10 6. Select Connect <p>Server</p> <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select UDP 10. Fill in testing parameters 11. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 20000, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 16 | Screenshot UDP Client

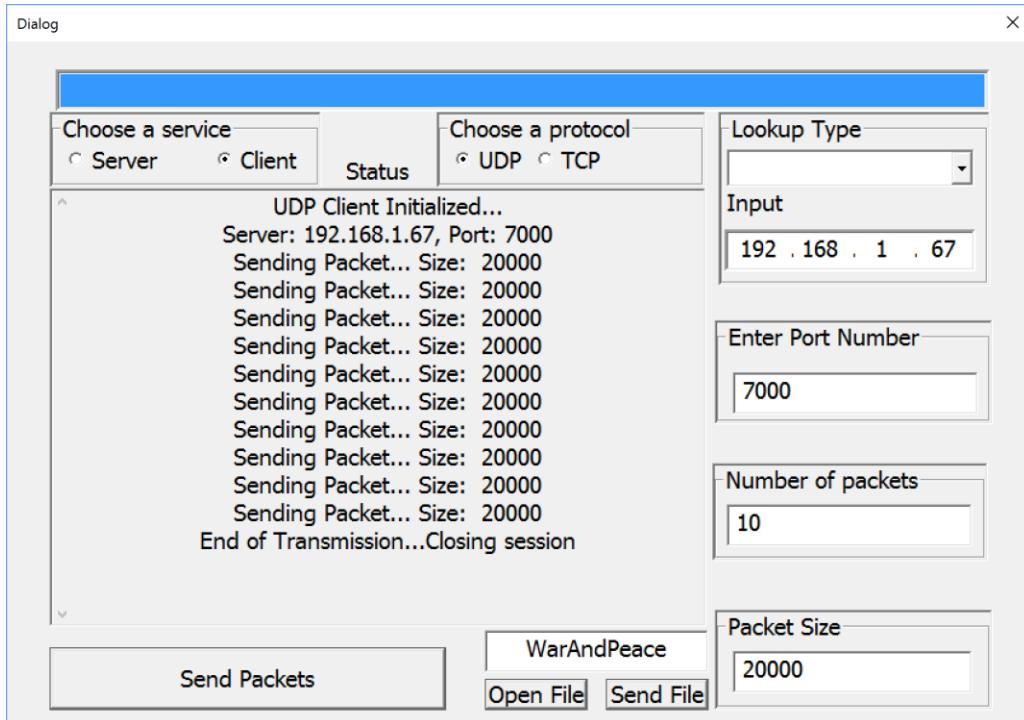


Test Case 16 | Screenshot UDP Server

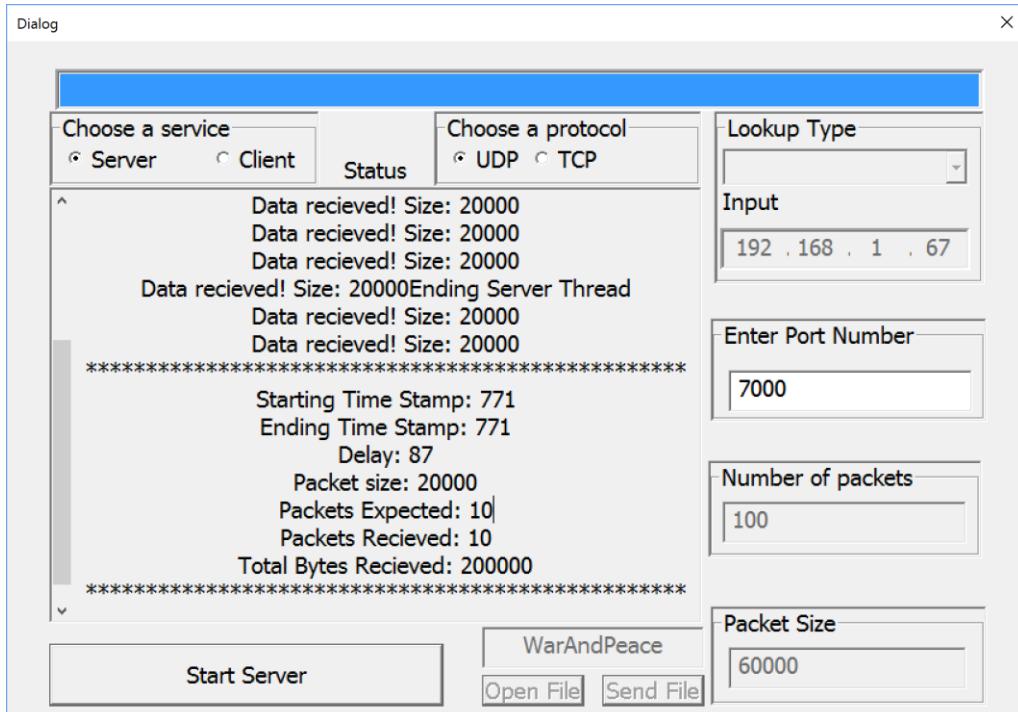


17	<p>Send and receive 20000 size packets 100 times</p>	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 1. Select Client 2. Select UDP 3. Fill in testing parameters 4. Packet size 20000, send times 100 5. Select Connect <p>Server</p> <ol style="list-style-type: none"> 6. Start Program 7. Select Server 8. Select UDP 9. Fill in testing parameters 10. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 20000, Expected number of packets: 100"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 17 | Screenshot UDP Client

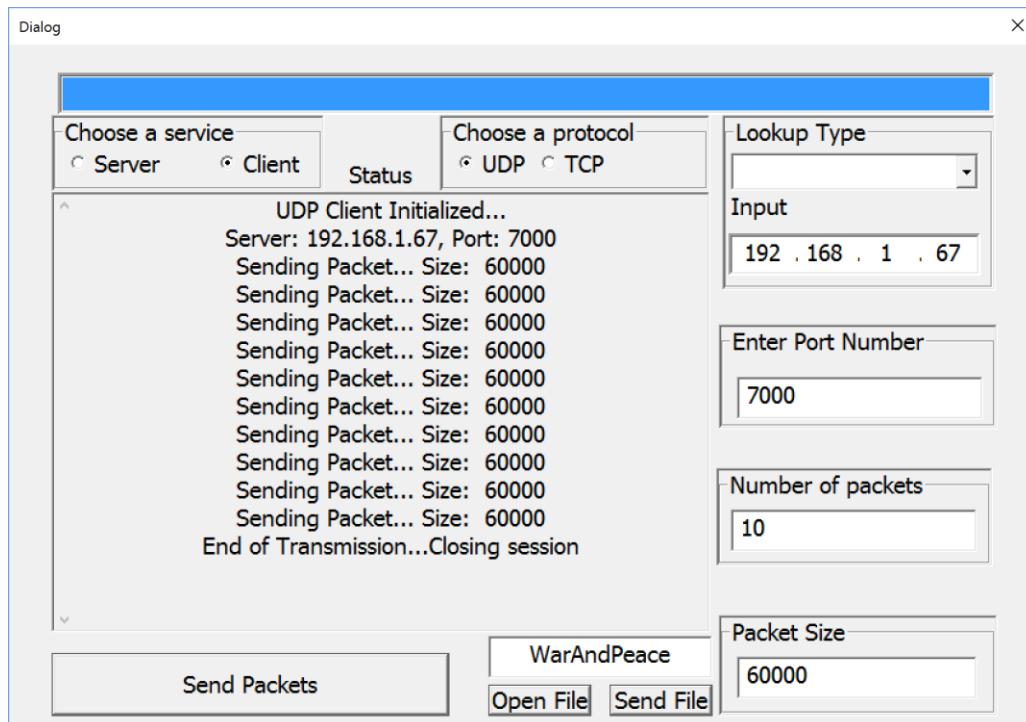


Test Case 17 | Screenshot UDP Server

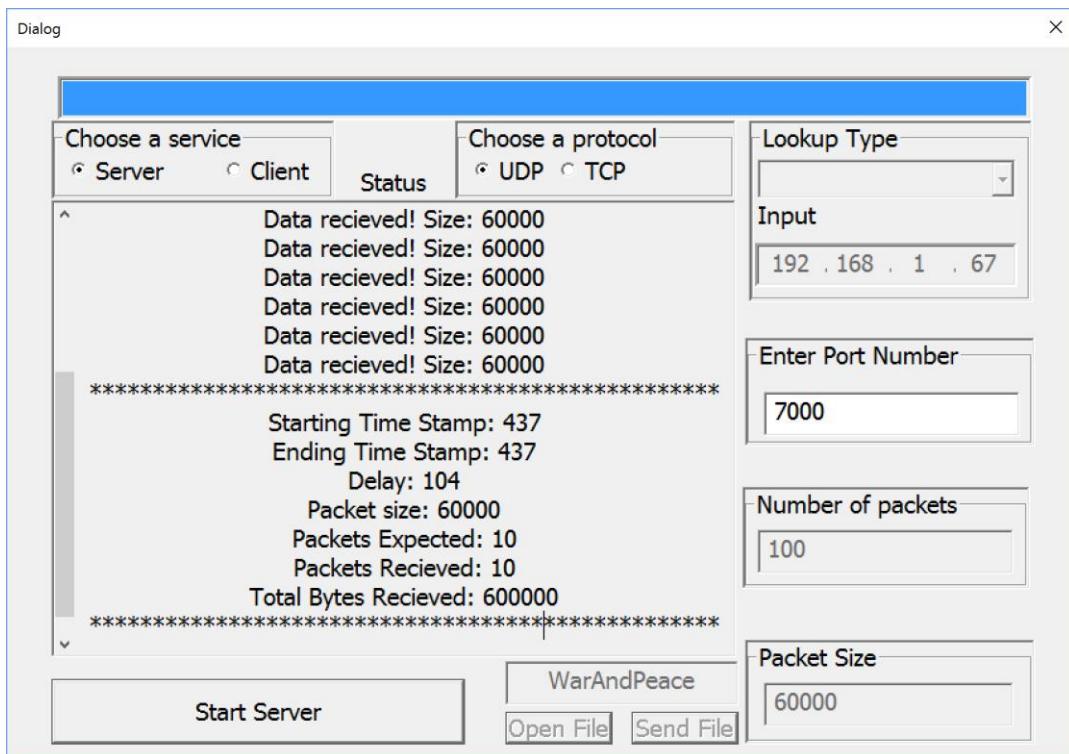


18	Send and receive 60000 size packets 10 times	<p>Client</p> <ol style="list-style-type: none"> 1. Start Program 2. Select Client 3. Select UDP 4. Fill in testing parameters 5. Packet size 60000, send times 10 6. Select Connect <p>Server</p> <ol style="list-style-type: none"> 7. Start Program 8. Select Server 9. Select UDP 10. Fill in testing parameters 11. Select Connect" 	<p>Client</p> <p>Display server port number, IP address, and size of packet sent every time</p> <p>Server</p> <p>Display "Expected packet size: 60000, Expected number of packets: 10"</p> <p>Display "packets received" every time a packet is read</p> <p>Display transmission information, which receives all the packets</p>	Pass
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Test Case 18 | Screenshot UDP Client

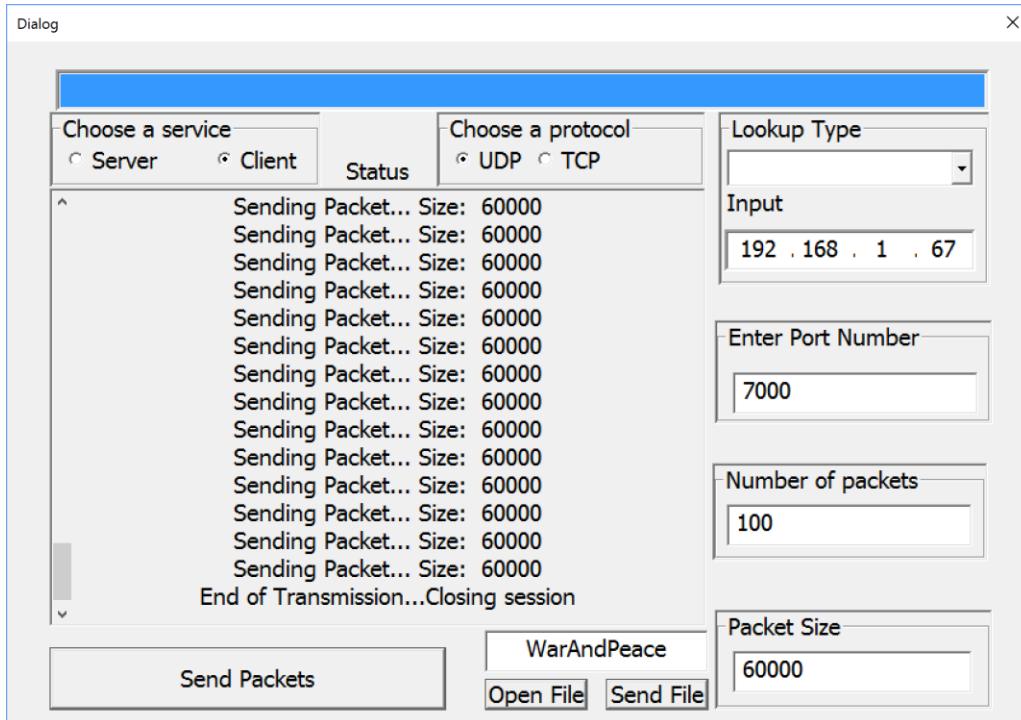


Test Case 18 | Screenshot UDP Server



19	Send and receive 60000 size packets 100 times	Client 2. Start Program 3. Select Client 4. Select UDP 5. Fill in testing parameters 6. Packet size 60000, send times 100 7. Select Connect Server 8. Start Program 9. Select Server 10. Select UDP 11. Fill in testing parameters 12. Select Connect"	Client Display server port number, IP address, and size of packet sent every time Server Display "Expected packet size: 60000, Expected number of packets: 100" Display "packets received" every time a packet is read Display transmission information, which receives all the packets	Pass
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Test Case 19 | Screenshot UDP Client



Test Case 19 | Screenshot TCP Server

