

# FL Simulation Results

File: test1.1\_Trojan\_Backdoor

## Federated Learning Configuration

Total Clients (N): 2  
Malicious Clients (M): 1  
Neural Network: Test1.1\_  
Training Rounds: 2  
Poisoned Rounds (R): 1  
Distribution Strategy: first

## Data Poisoning Attack Parameters

Poisoning Operation: backdoor\_badnets  
Attack Intensity: 15.0% (0.15)  
Poisoned Data Percentage: 30.0% (0.30)

*Attack Summary: Using backdoor\_badnets with 15.0% (0.15) intensity on 30.0% (0.30) of data for 1 rounds with 1 malicious clients.*

## Simulation Results

Init Accuracy: 0.9445  
Clean Accuracy: 0.9423  
Poisoned Accuracy: 0.9473  
Poisoned + DP Protection Accuracy: 0.0000  
Drop (Clean - Poisoned): -0.0050  
Drop (Clean - Init): -0.0022  
Drop (Poisoned - Init): 0.0028  
Drop (Poisoned DP - Init): -0.9445  
DP Protection Method: trimmed\_mean  
GPU Used: GPU 2

### Confusion Matrix Metrics (Weighted Avg):

Clean Precision: 0.9425  
Clean Recall: 0.9423  
Clean F1 Score: 0.9424  
  
Poisoned Precision: 0.9460  
Poisoned Recall: 0.9459  
Poisoned F1 Score: 0.9458  
  
DP Protection Precision: 0.0000  
DP Protection Recall: 0.0000  
DP Protection F1 Score: 0.0000

## Summary

FL Simulation Complete  
Task: 3a0fa3eb-b57a-4702-b32f-61aef0122f9b  
GPU: GPU 2  
Init Accuracy: 0.9445  
Clean Accuracy: 0.9423  
Poisoned Accuracy: 0.9473  
Data Poison Protection Accuracy: 0.0000  
Drop (Clean - Poisoned): -0.0050  
Drop (Clean - Init): -0.0022  
Drop (Poisoned - Init): 0.0028  
Drop (Poisoned\_DP - Init): -0.9445  
Data Poison Protection Method: trimmed\_mean  
--- Confusion Matrix Metrics (Weighted Avg) ---  
Clean Precision: 0.9425  
Clean Recall: 0.9423  
Clean F1 Score: 0.9424  
Poisoned Precision: 0.9460  
Poisoned Recall: 0.9459  
Poisoned F1 Score: 0.9458  
DP Protection Precision: 0.0000  
DP Protection Recall: 0.0000  
DP Protection F1 Score: 0.0000