

The graph displays the accuracy of three federated learning algorithms over 100 epochs. The y-axis represents accuracy, ranging from 0.4 to 0.9. The x-axis represents the number of epochs, ranging from 0 to 100. FedSim - G - 9 (solid blue line) consistently achieves the highest accuracy, starting around 0.45 and reaching approximately 0.85 by epoch 100. FedProx (solid green line) follows, starting around 0.45 and reaching approximately 0.75. FedAvg (dotted orange line) shows the lowest accuracy, starting around 0.45 and reaching approximately 0.65. All algorithms exhibit significant fluctuations in accuracy throughout the training process.

Epoch	FedSim - G - 9	FedAvg	FedProx
0	0.45	0.45	0.45
20	0.65	0.55	0.60
40	0.75	0.60	0.70
60	0.80	0.65	0.75
80	0.82	0.68	0.78
100	0.85	0.65	0.75

Legend:

- FedSim - G - 9
- FedAvg
- FedProx

The plot displays the performance of FedSim and Fed Avg across 10 groups. FedSim (blue line) shows high performance, while Fed Avg (red line) shows lower performance. Groups 0-8 are clustered at the bottom.

Series	Color	Approximate Performance Range
FedSim - G - 9	Blue	0.85 - 0.95
Fed Avg	Red	0.65 - 0.95
Group - 0	Light Blue	0.05 - 0.15
Group - 1	Orange	0.05 - 0.15
Group - 2	Green	0.05 - 0.15
Group - 3	Pink	0.05 - 0.15
Group - 4	Purple	0.05 - 0.15
Group - 5	Brown	0.05 - 0.15
Group - 6	Pink	0.05 - 0.15
Group - 7	Grey	0.05 - 0.15
Group - 8	Yellow	0.05 - 0.15

Method	Group	Initial Value (Epoch 0)	Final Value (Epoch 100)
FedSim	9	9	9
Fed Avg	9	9	9
Group	0	0	0
Group	1	1	1
Group	2	2	2
Group	3	3	3
Group	4	4	4
Group	5	5	5
Group	6	6	6
Group	7	7	7
Group	8	8	8