**MongoDB Sharding**

Step 1

Creating directories

# Config Server

mkdir C:\data\cfg1, C:\data\cfg2, C:\data\cfg3

# Shard Servers (2 shards, 3 nodes each)

mkdir C:\data\shard1\_1, C:\data\shard1\_2, C:\data\shard1\_3

mkdir C:\data\shard2\_1, C:\data\shard2\_2, C:\data\shard2\_3

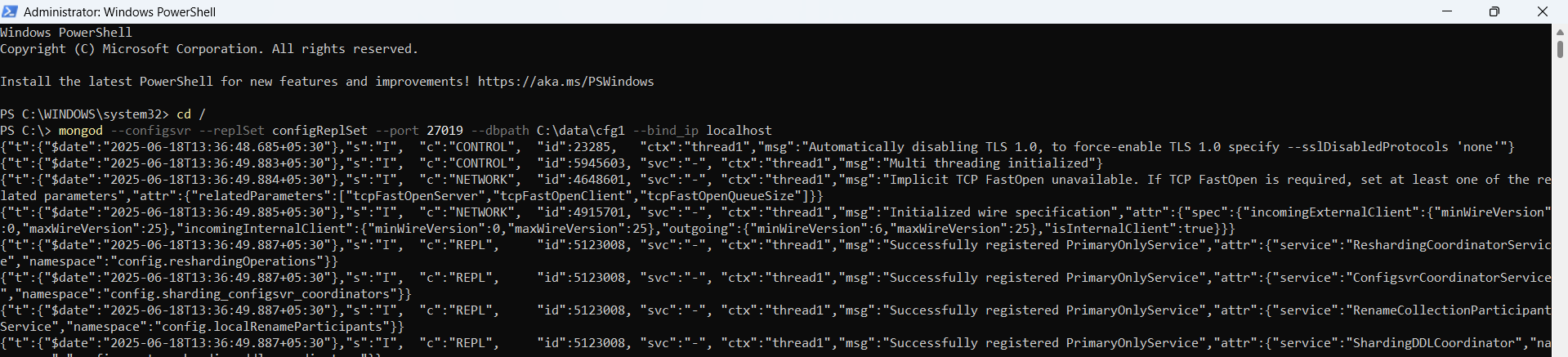
# Mongos router

mkdir C:\data\mongos

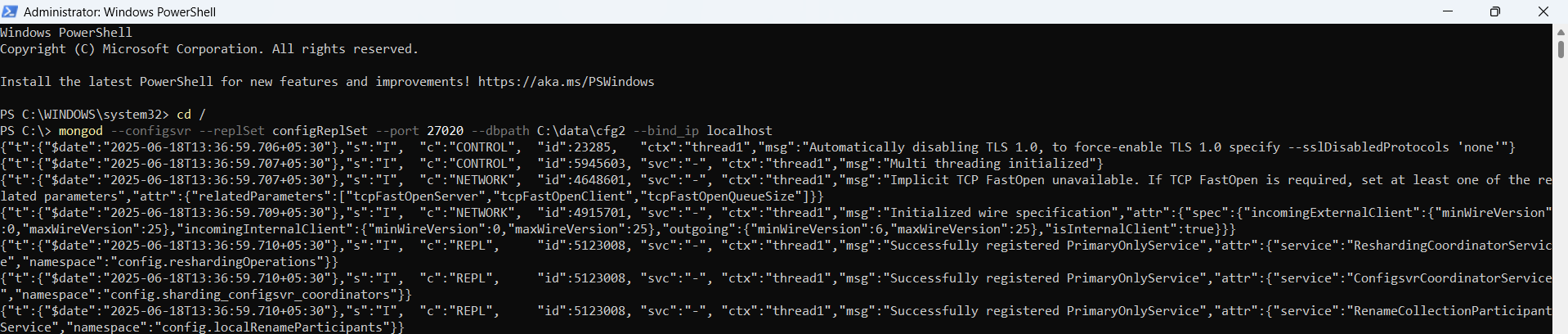
Step 2

Start Config Server Replica Set

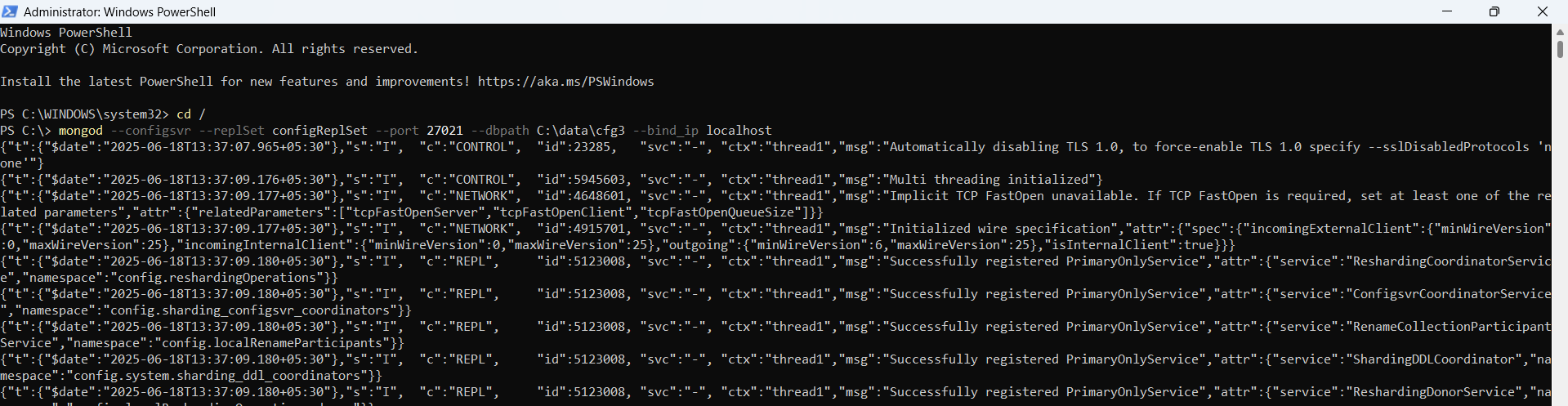
Server 1



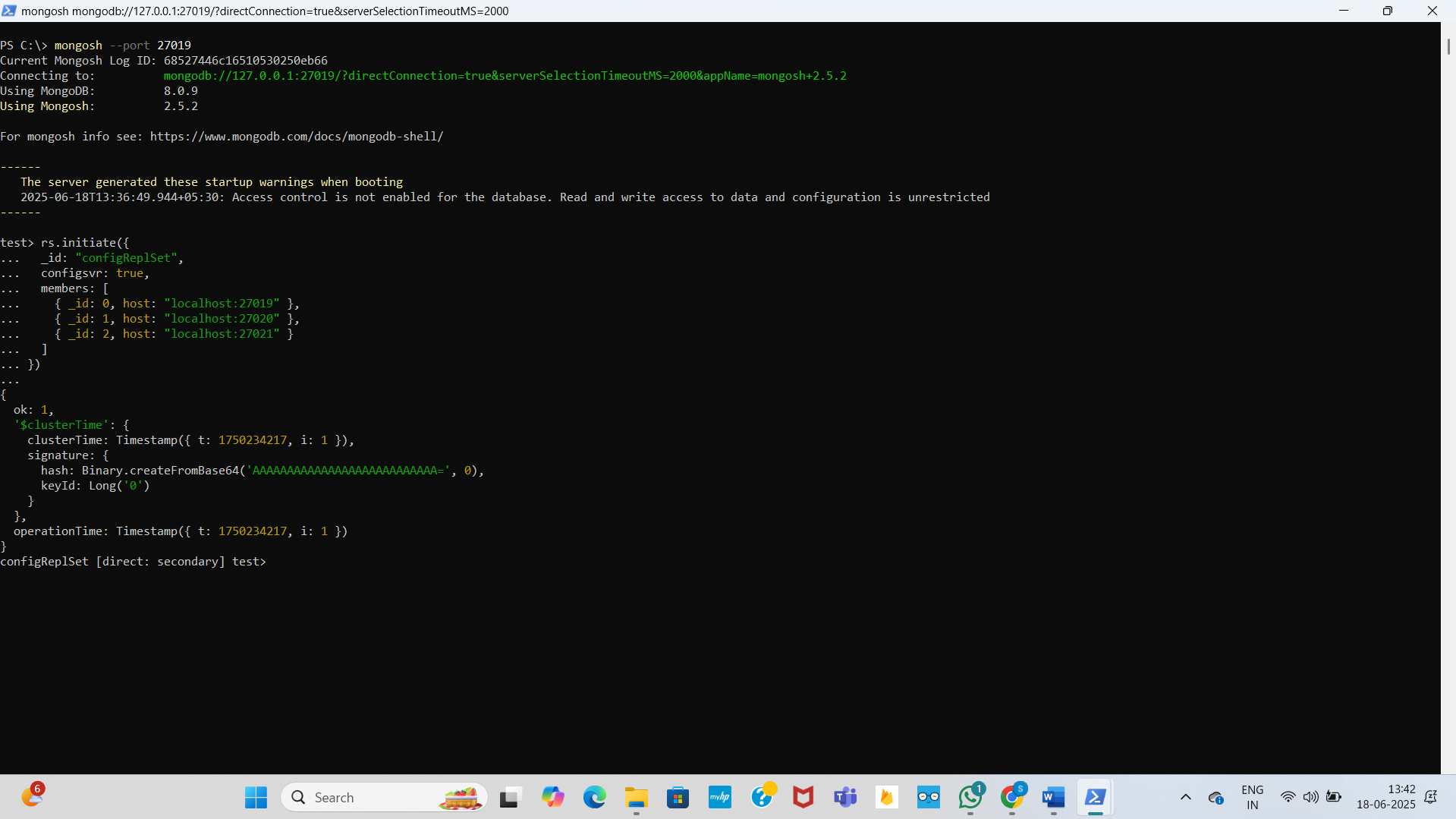
Server 2



Server 3

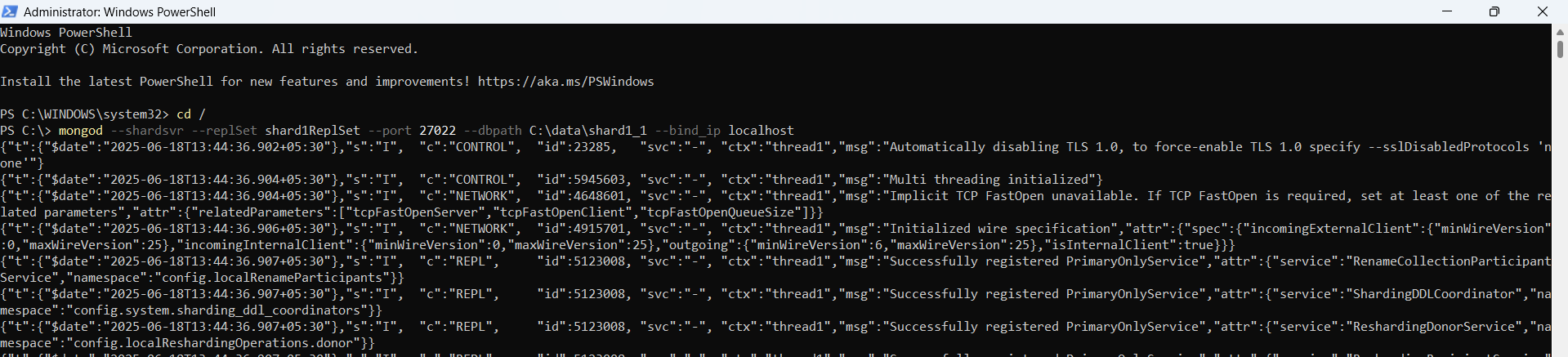


Initialize the config replica set:

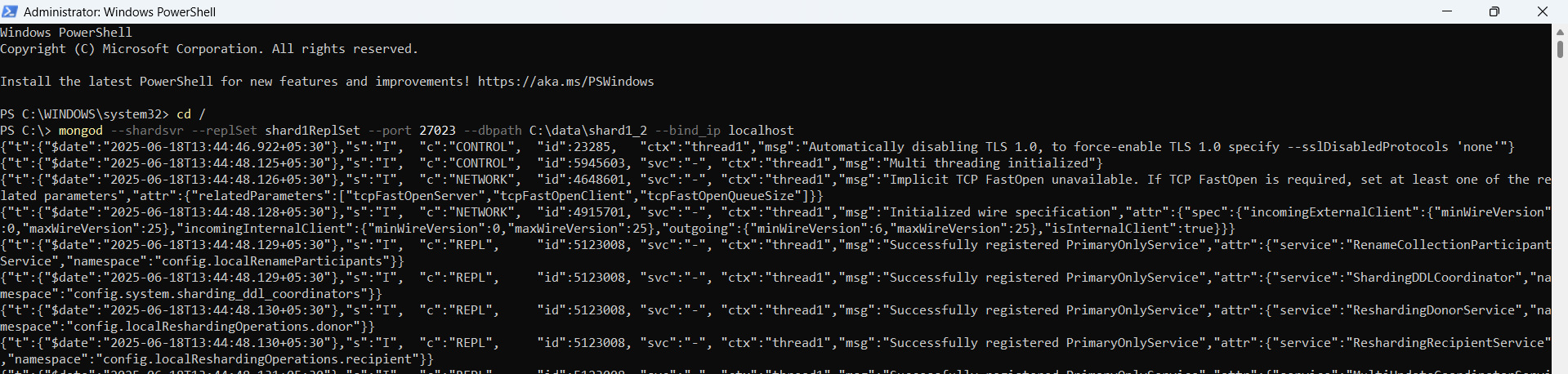


Step 3: Start Shard Replica Sets

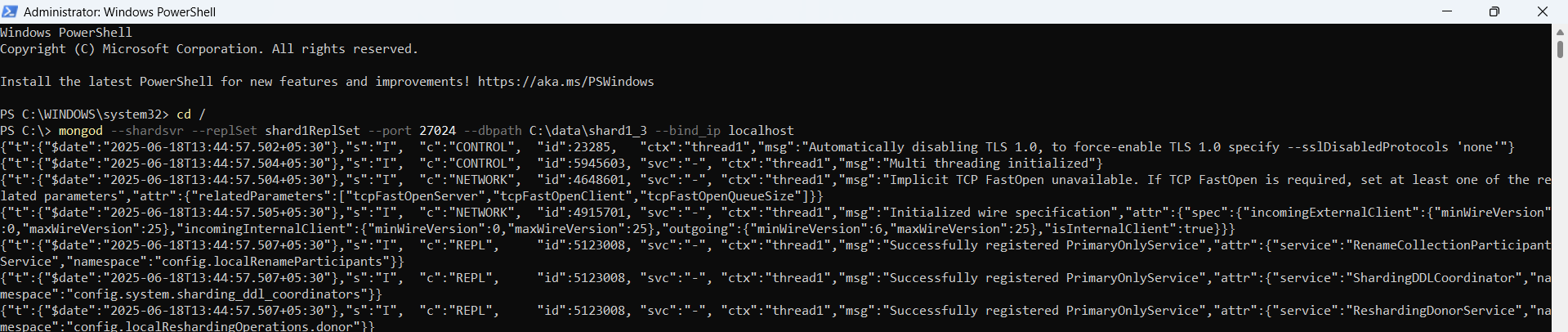
# Shard1 Node1



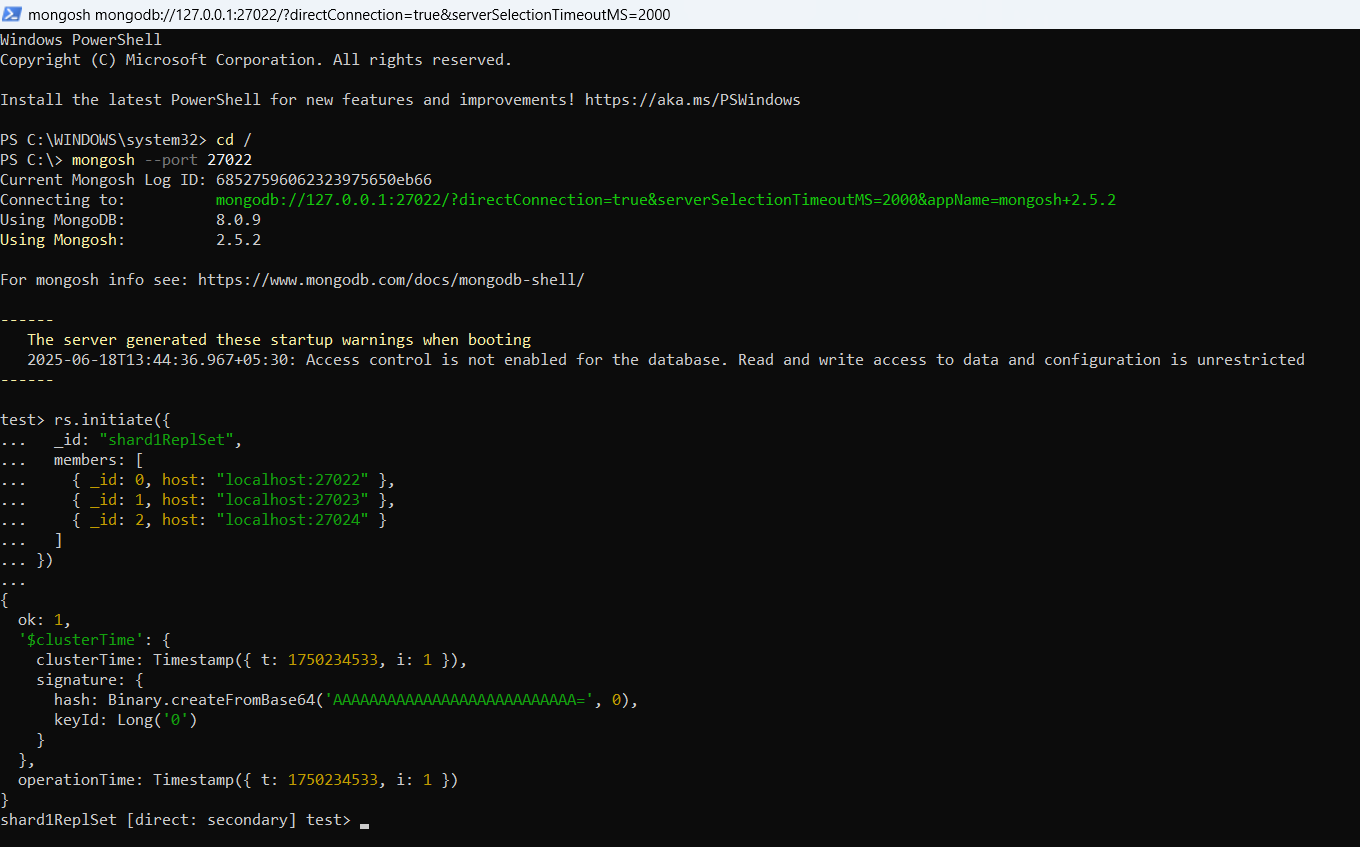
# Shard1 Node2



# Shard1 Node3

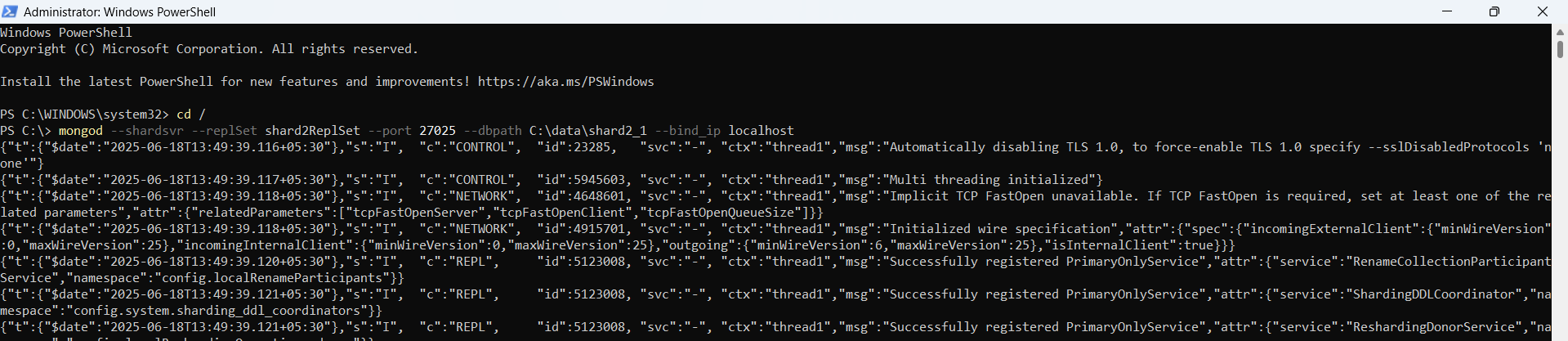


Initialize Shard 1:

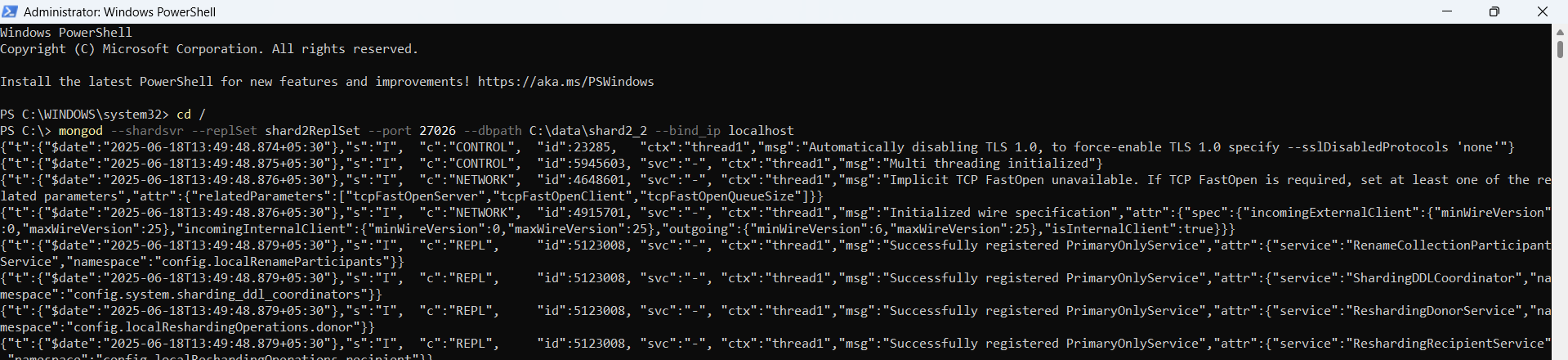


Shard 2

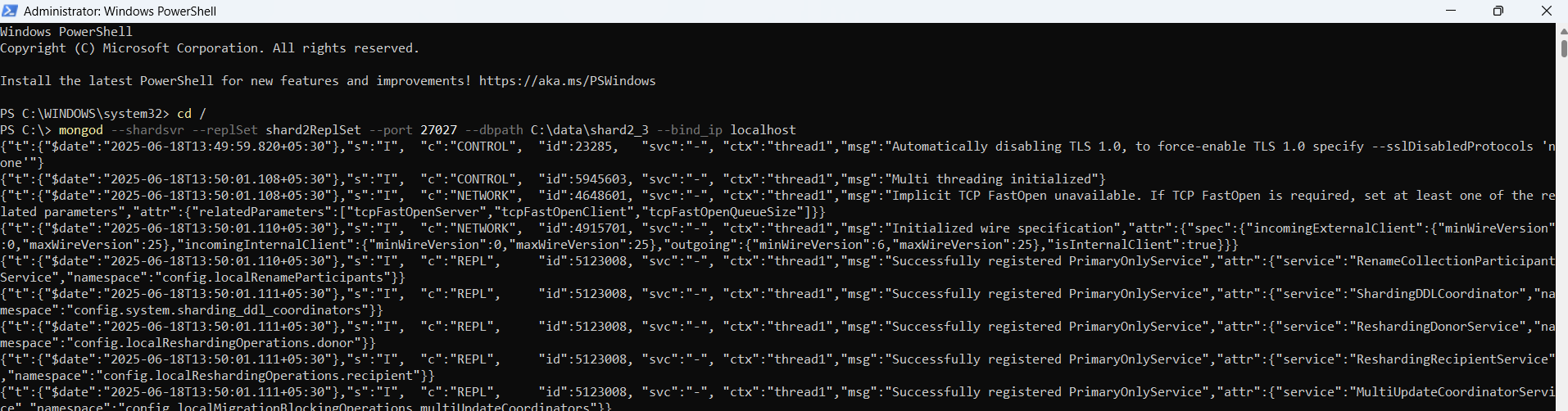
# Shard2 Node1



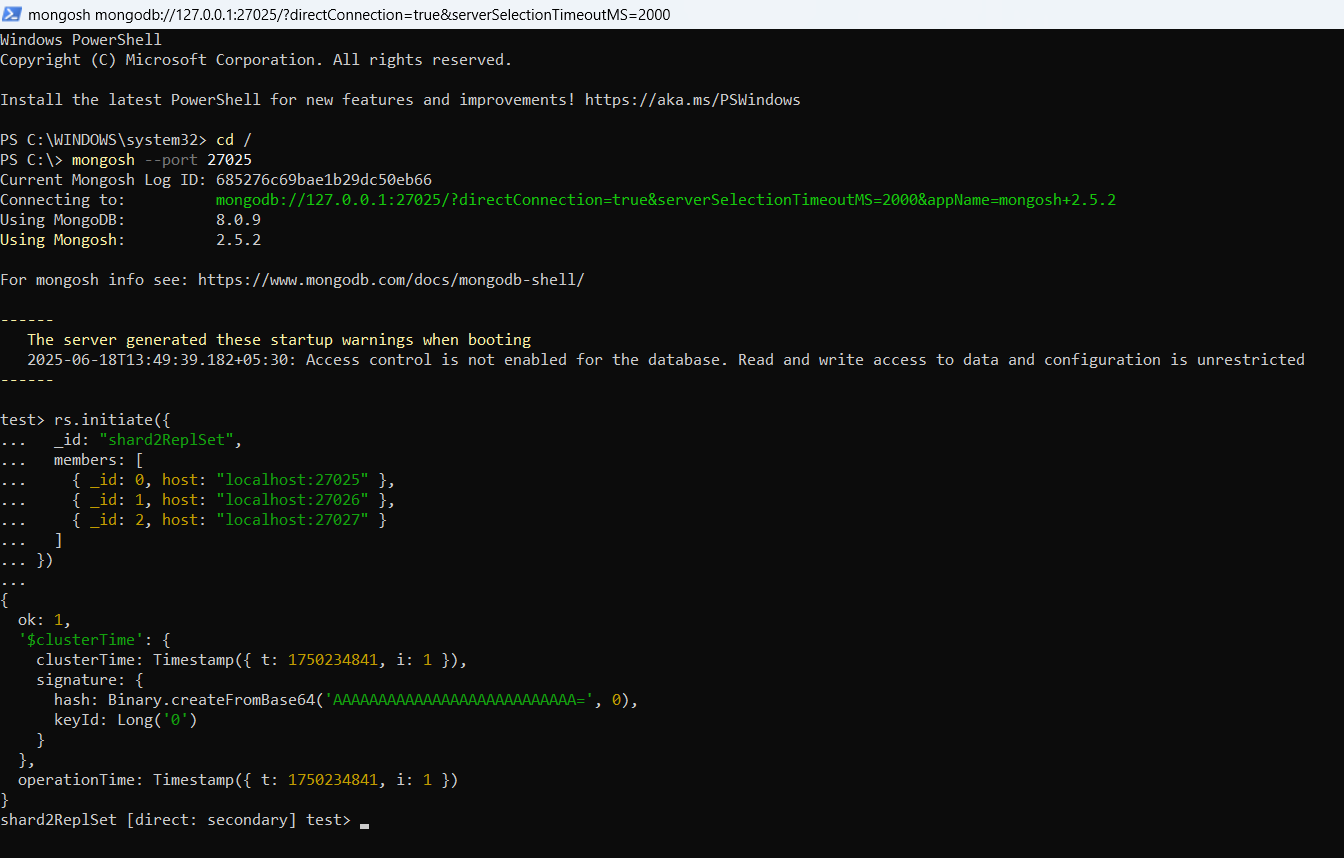
# Shard2 Node2



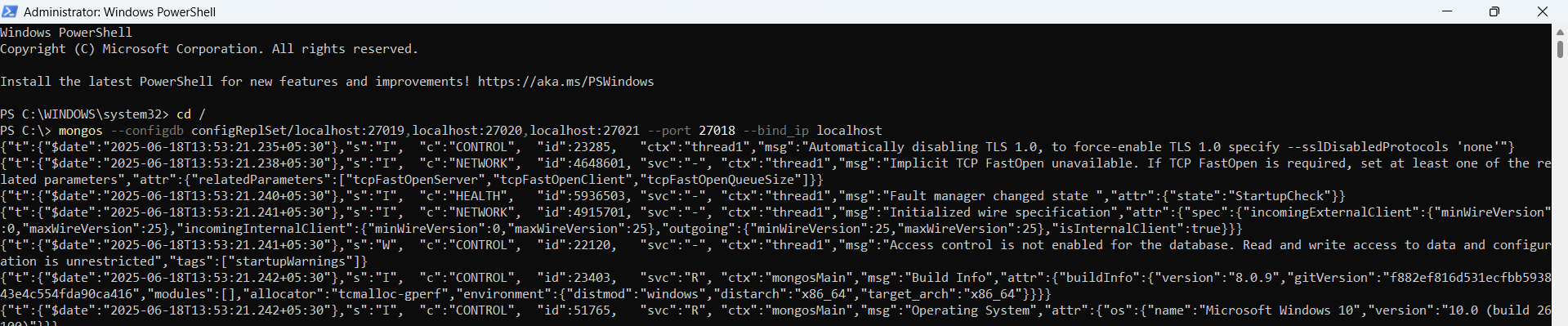
# Shard2 Node3



Initialize Shard 2:

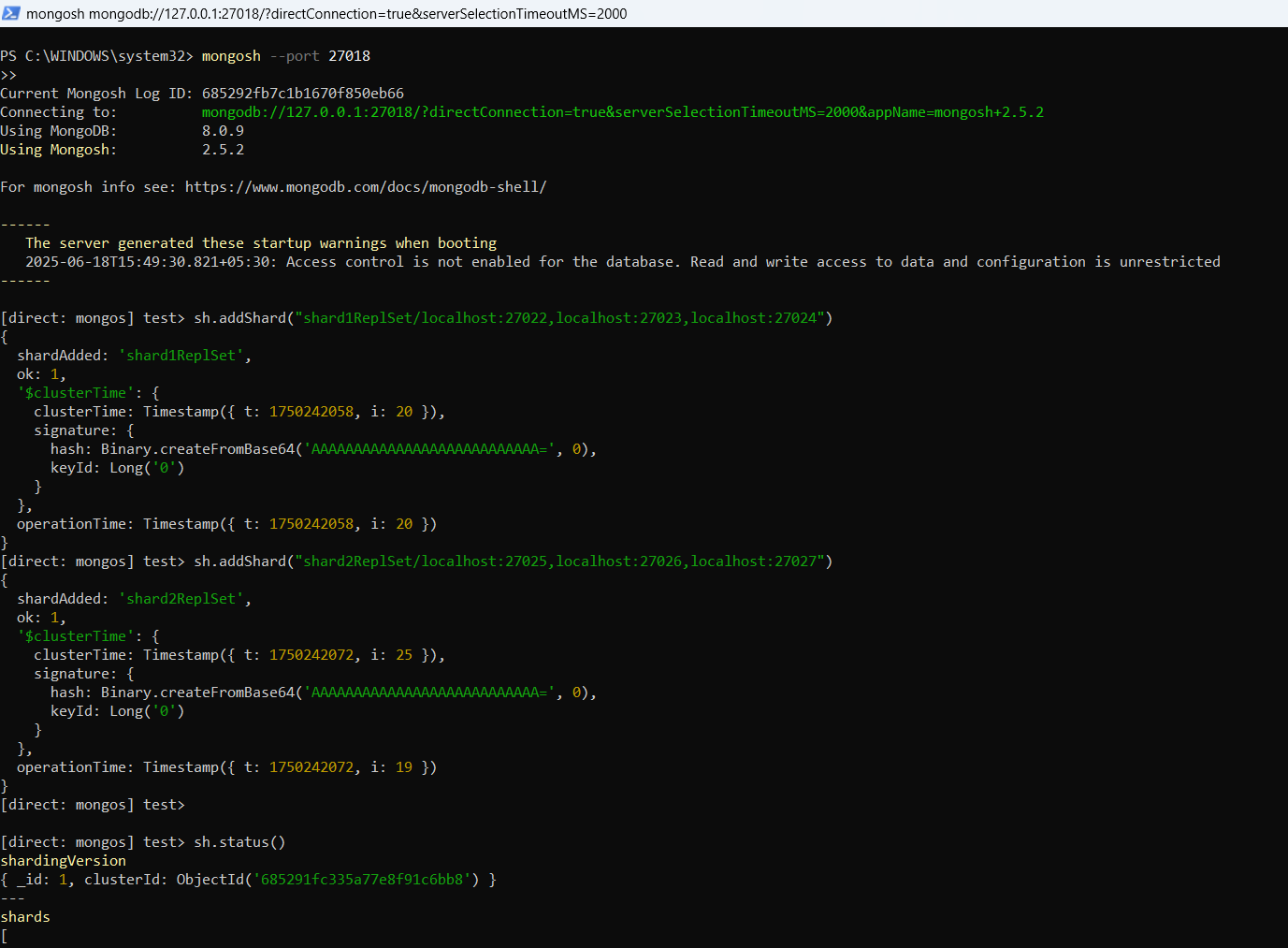


Step 4: Start Mongos Query Router

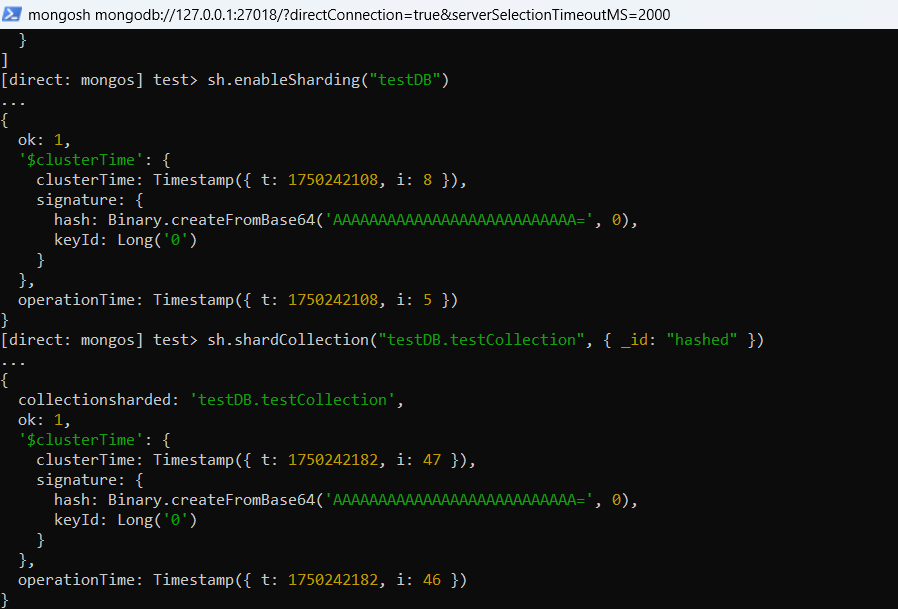


Step 5: Configure Sharding

Connect to mongos:



Step 6: Enable Sharding for a Database and Collection



Step 7: Verify Sharding Status

