

USER STORY 3 - MONGODB ATLAS CONNECTION

Complete Step-by-Step Guide

STEP 1: CREATE MONGODB ATLAS ACCOUNT

1. Go to <https://www.mongodb.com/atlas>
2. Click "Try Free" or "Start Free"
3. Sign up with email and password
4. Verify your email address

STEP 2: CREATE PROJECT AND CLUSTER

1. Click "New Project"
2. Name: "BookVerse Project"
3. Click "Create Project"
4. Click "Build a Database"
5. Choose "M0 FREE" tier
6. Cloud Provider: Choose any (AWS/Google Cloud/Azure)
7. Region: Choose closest to your location
8. Cluster Name: "Cluster0" (auto-filled)
9. Click "Create Cluster"
10. Wait 5-10 minutes for cluster creation

STEP 3: SETUP SECURITY

1. After cluster creation, click "Connect" on your cluster
2. SECURITY SETUP:
 - a. IP ACCESS:
 - Click "Add Your Current IP Address"
 - OR Click "Allow Access from Anywhere" (for testing)
 - b. DATABASE USER:
 - Username: "bookverse_user"
 - Password: Create strong password (remember it!)
 - Click "Create Database User"
3. Click "Choose a connection method"

STEP 4: GET CONNECTION STRING

1. Choose "MongoDB Compass"
2. Copy the connection string (looks like):
`mongodb+srv://<username>:<password>@cluster0.xxx.mongodb.net/`
3. Modify the connection string:
 - Replace <username> with "bookverse_user"
 - Replace <password> with your actual password
 - Add "/BookVerseCloudDB" at the end
 - Final string:
`mongodb+srv://bookverse_user:YourPassword@cluster0.xxx.mongodb.net/BookVerseCloudDB`

STEP 5: CONNECT COMPASS TO ATLAS

1. Open MongoDB Compass
2. Click "New Connection"
3. Paste your modified connection string
4. If SSL error occurs, add "?ssl=false" at the end
5. Click "Connect"

STEP 6: EXPORT DATA FROM LOCAL DATABASE

1. In Compass, connect to your LOCAL database (`mongodb://localhost:27017`)
2. Export each collection:
 - a. Go to "Books" collection → Click "Export Collection" → Save as "books.json"
 - b. Go to "Authors" collection → Click "Export Collection" → Save as "authors.json"
 - c. Go to "Users" collection → Click "Export Collection" → Save as "users.json"

STEP 7: IMPORT DATA TO ATLAS

1. In Compass, connected to ATLAS

2. Go to "BookVerseCloudDB" database
3. Import each file:
 - a. Click "Add Data" → "Import JSON or CSV File"
 - b. Select "books.json" → Click "Import"
 - c. Repeat for "authors.json" and "users.json"

STEP 8: VERIFY AND TEST

1. Check all 3 collections show imported data
2. Run test query in Books collection:
 - Filter: {"genre": "Fantasy"}
 - Verify results show correctly

STEP 9: TAKE REQUIRED SCREENSHOTS

1. Atlas cluster dashboard showing active cluster
2. Security setup (database user & IP access)
3. Compass successfully connected to Atlas
4. Collections with imported data in Atlas
5. Query working in Atlas

TROUBLESHOOTING TIPS:

- If connection fails, try adding "?ssl=false" to connection string
- If still failing, use "Advanced Connection Options" in Compass
- Reset database user password if credentials don't work
- Ensure network access includes your IP address

COMPLETION CHECKLIST:

Atlas account created
Free cluster deployed
Database user created
Network access configured
Compass connected to Atlas
Data exported from local database
Data imported to Atlas
Test query successful
All screenshots taken

Your MongoDB Atlas cloud database is now ready!