

MongoDB Enterprise Edition offers data encryption features, but the free MongoDB Community Server lacks built-in encryption at rest. However, the CIS benchmarks might still offer recommendations for securing data on Ubuntu using alternative approaches. Here's what you can consider:

### 1. File System Encryption:

- **Encrypt Data Directory:** Consider using full disk encryption tools like dm-crypt or LUKS to encrypt the entire disk where the MongoDB data directory (/var/lib/mongodb by default) resides. This encrypts data at rest, adding an extra layer of security in case of physical server access.

### 2. Client-Side Encryption (Optional):

- **MongoDB Drivers:** Explore libraries provided by MongoDB drivers for some programming languages that support client-side encryption. This encrypts data before sending it to the server, ensuring it remains encrypted throughout its lifecycle. However, this requires development effort and compatibility considerations.

### 3. Alternatives for Sensitive Data:

- **Separate Database:** If you have highly sensitive data, consider storing it in a separate database system that offers native encryption capabilities. This might involve additional costs and management overhead.

### 4. Strong Authentication and Authorization:

- **Focus on Access Controls:** The CIS benchmarks likely emphasize robust authentication and authorization practices. This ensures only authorized users can access the database, even if the data itself isn't encrypted at rest.

### 5. Regular Backups and Security Practices:

- **Encrypted Backups:** Regularly back up your MongoDB data. Even without data encryption at rest, encrypting backups adds an extra layer of security. Tools like mongodump can be used for backups.
- **Security Updates:** Maintain your system and MongoDB packages updated with the latest security patches to address vulnerabilities.

### Additional Resources:

- CIS MongoDB Security Benchmarks (reference security guides that mention them): While not available directly online, you can find references and explanations in security guides that reference CIS benchmarks. Search for "CIS MongoDB Security Benchmarks Ubuntu".
- Ubuntu Documentation on Disk Encryption: <https://ubuntu.com/ceph/docs/encryption-at-rest>
- MongoDB Documentation on Client-Side Encryption (For Reference): [mongodb.com] (search for "client-side encryption" and your programming language driver)

**Remember:**

- These are alternative approaches since MongoDB Community Server doesn't offer built-in data encryption.
- Evaluate the trade-offs between security requirements, complexity, and available resources when choosing a method.
- Regularly review security practices and consider migrating to MongoDB Enterprise if data encryption at rest becomes critical.