



PROJECT REPORT

Cloud Computing  
  
Automation of MongoDB database backup

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# **PROJECT DETAILS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Name** | Automation of MongoDB database backup | | |
| **Project Sponsor** | Harshada Topale | | |
| **Project Manager** | Harshada Topale | | |
| **Start Date** | 12-10-2023 | **Completion Date** | 20-11-2023 |

# **SUMMARY**

This project aims to automate the database backup of mongodb ,It will also store the backup in the storage service.The main goal is to do backup in less time as the other time will be utilize for other work.AWS services like EC2,S3,IAM(Role) and the cronjob will be used.

# **INTRODUCTION**

## Background

A company name cloud counselage has an employee(Mr.John Doe) working in IT department,he has hosted a website on EC2 that website is having database of mongodb so he do the backup manually but its very time consuming therefore he wants a solution that the backup will be done automatically in which less time will be used and then he can utilize the remaining time in other work.

## Stakeholders

Stakeholders in Automation of MongoDB database project are company(cloud counselage) and the employee(Mr.John Doe).

## Objectives

The project objective is to automate the process of mongodb database backup,Reduce the time compared to the manual backup.

# **METHODOLOGY**

These conventions are all about the positions of line breaks, how many characters should go on a line, and everything in between.

## Considerations & Assumption

Data sensitivity can be the consideration as we can assume that the mongodb data contains sensitive information so for security measures while doing backup.

## Approach

Analyzed the problem,identified the requirements,selected or developed the sript with exisiting tool to automate mongodb database backup.

## Activities

1.Firstly understand the problem statement ,according to that gathered the requirement means researched about what resources will be used.

2.Onced it get to know that the aws services (EC2,S3,IAM Role) will be used then did the step of each.

3. Created s3 bucket&folder,created iam role,launched ec2 instance.

3.1 Installed MongoDB setup,created database in mongo terminal.

3.2 Created backup script(.sh),assigned folder name,database name and s3 path,then executed it.

3.3.Scheduled that backup script using cronjob after scheduling it reexecuted that script.

# **TARGETTED V/S ACHIEVED OUTPUT**

The targeted output aimed for automation of mongodb database backup stored in S3 with the use of EC2.The achieved output successfully executed the script and the database are stored in S3.

# **CONCLUSION**

In conclusion,we can conclude that the backup is automatically done and stored in s3 by scheduling with the help of cronjob.

# **APPENDICES**

## Appendix A – Title

|  |  |  |
| --- | --- | --- |
| Component | Type | Description |
| EC2 Instance | Computng Resource | Hosting purpose,Interact with aws services,Execute backup script |
| Backup Script | Bash Script | Automate Mongodb backup and store in s3. |
| S3 | Storage Resource | Stores the backup files |
| IAM Role | Access Managment | Provide permission for EC2 to acsess S3 |