

Database Migration Workflow Fix Summary

Issues Identified and Fixed

1. FIXED: Bash Syntax Error in Migration Step

Problem: The migration step had a bash quoting error that caused this failure:

```
[ : -c: line 1: unexpected EOF while looking for matching `''  
[ : -c: line 2: syntax error: unexpected end of file
```

Root Cause: Improper quote escaping in the curl command that sends the migration script to Azure. The nested single quotes inside the bash -c command were not properly escaped when wrapped in the JSON payload.

Solution: Changed the quote escaping from:






```
-d "{\"command\":\"bash -c 'if [ -f  
/home/site/wwwroot/scripts/migrate.py ]; then ...; fi'\", ...}"
```

To properly escaped quotes:

```
-d "{\"command\":\"bash -c \\\"if [ -f  
/home/site/wwwroot/scripts/migrate.py ]; then ...; fi\\\"\", ...}"
```

2. VERIFIED: Required Files and Directories Present

All required files and directories exist in the repository:

-  **app/** directory - Contains application code
-  **migrations/** directory - Contains Alembic migration files
-  **scripts/migrate.py** - Migration script (794 bytes)
-  **alembic.ini** - Alembic configuration
-  **requirements.txt** - Python dependencies
-  **startup.sh** - Azure startup script

3. ACTION REQUIRED: GitHub Secrets Configuration

The workflow includes comprehensive secret validation that checks for required secrets at the start of each deployment. You need to ensure all required secrets are set in your GitHub repository.

Required GitHub Secrets

Navigate to your repository: **Settings → Secrets and variables → Actions**

Set the following secrets:

Essential Secrets

1. AZURE_RESOURCE_GROUP

- Your Azure resource group name
- Example: `ai-event-planner-rg`

2. AZURE_LOCATION

- Your Azure region
- Example: `eastus, westus2, centralus`

3. AZURE_CREDENTIALS

- Azure service principal credentials in JSON format
- Get this by running:

```
az ad sp create-for-rbac \  
  --name "ai-event-planner-deploy" \  
  --role contributor \  
  --scopes /subscriptions/{subscription-  
id}/resourceGroups/{resource-group} \  
  --sdk-auth
```

- The output JSON should be pasted as-is into the secret

4. DATABASE_URL

- PostgreSQL connection string for your Azure Database
- Format:
`postgresql://username:password@server.postgres.database.azure.com/database?sslmode=require`
- Example:
`postgresql://adminuser:P@ssw0rd@myserver.postgres.database.azure.com/eventplanner?sslmode=require`

5. SECRET_KEY

- Application secret key for JWT tokens and encryption
- Generate a secure random string:

```
python -c "import secrets; print(secrets.token_urlsafe(32))"
```

6. OPENAI_API_KEY

- Your OpenAI API key
- Format: Starts with **sk-**
- Get from: <https://platform.openai.com/api-keys>

Optional Secrets (for enhanced functionality)

7. **GOOGLE_API_KEY**

- Google API key for additional services
- Leave empty if not using Google services

8. **TAVILY_API_KEY**

- Tavily search API key
- Leave empty if not using Tavily

9. **STORAGE_CONNECTION_STRING**

- Azure Storage connection string
- Only needed if using Azure Blob Storage

Workflow Improvements

The updated workflow now includes:

1. **Early Secret Validation**

- Checks all required secrets before deployment
- Provides clear error messages with setup instructions
- Prevents wasted deployment time if secrets are missing

2. **Fixed Migration Command**

- Proper quote escaping in bash commands
- Robust path checking for migrate.py
- Fallback migration approach if primary method fails

3. **Enhanced File Verification**

- Verifies deployed files via Kudu API
- Checks for critical directories and scripts
- Provides detailed deployment package contents

4. **Improved Python Detection**

- Tests multiple Python paths on Azure
- Ensures Python 3.10 is properly configured
- Provides troubleshooting steps if Python not found

Testing the Fix

After setting up your secrets, trigger a deployment by either:









1. **Push to main branch** (if your changes affect watched paths):

```
git add .github/workflows/azure-deploy-saas.yml
git commit -m "Fix DB migration bash syntax error"
git push origin main
```

2. **Manual workflow dispatch** (from GitHub Actions tab):

- Go to Actions → Deploy AI Event Planner SaaS to Azure
- Click "Run workflow"
- Select branch: main
- Click "Run workflow"

Expected Behavior After Fix


1.  Workflow validates all required secrets are present
2.  Sets up Azure Web App with Python 3.10 runtime
3.  Creates deployment package with all necessary files
4.  Deploys to Azure Web App
5.  Verifies deployed files exist on Azure
6.  Detects Python 3.10 executable
7.  Runs database migrations successfully (with fixed bash syntax)
8.  Starts the Web App

Monitoring Deployment

Watch the deployment progress in GitHub Actions:

- Navigate to: Actions → Deploy AI Event Planner SaaS to Azure
- Click on the running/latest workflow
- Expand each step to see detailed logs

Key steps to monitor:

1. **Verify required secrets are available** - Should show  for all secrets
2. **Create deployment package** - Should show migrate.py in zip contents
3. **Verify deployed files on Kudu** - Should confirm scripts/migrate.py exists
4. **Run database migrations** - Should complete without bash syntax errors

Troubleshooting

If deployment still fails:

1. **Check Secret Values**
 - Ensure DATABASE_URL has correct format and credentials

- Verify AZURE_CREDENTIALS JSON is valid
- Test OPENAI_API_KEY works by making a test API call

2. Verify Azure Resources

- Ensure resource group exists
- Check App Service plan is created
- Verify Web App is accessible

3. Review Migration Logs

- Look for Python import errors
- Check database connection issues
- Verify migration script execution






4. Manual Migration Test (if needed):

- Access Azure Kudu console: <https://ai-event-planner-saas-py.scm.azurewebsites.net>
- Navigate to wwwroot directory
- Run: `python3 scripts/migrate.py`

Additional Resources

- [AZURE_DEPLOYMENT_SETUP_GUIDE.md](#) - Comprehensive Azure setup guide
- [GITHUB_SECRETS_SETUP_COMPLETE.md](#) - Detailed secrets configuration
- Azure CLI Documentation: <https://docs.microsoft.com/en-us/cli/azure/>

Next Steps

1.  Bash syntax error - FIXED
2.  Configure GitHub secrets (see Required GitHub Secrets section above)
3.  Test deployment by pushing to main or running workflow manually
4.  Verify application is accessible after deployment
5.  Monitor logs for any runtime issues

Status: Ready for deployment after GitHub secrets are configured

Date Fixed: October 22, 2025

Files Modified:

- [.github/workflows/azure-deploy-saas.yml](#) - Fixed bash quote escaping in migration step