

COSC3380 Linux Server & PostgreSQL Access Guide

IMPORTANT: Change Your Linux Password

Security Notice: Since this guide is shared with all teams, everyone can see the default passwords. You **MUST** change your Linux password immediately after first login.

Changing Your Linux Password

After logging in via SSH:

```
passwd
```

You'll be prompted to enter your current password, then your new password twice.

Important: Make sure your entire team knows the new password you set!

Your Team Account Information

Team Username Format: `dbsh###` where `###` is your 3-digit team number (e.g., `dbsh001`, `dbsh025`, `dbsh042`)

Password Format: `cosc3380###` where `###` is your 3-digit team number

- Your team password is `cosc3380` + your 3-digit team number
- Example: If your team is `dbsh025`, your password is `cosc3380025`

Note: You only need your Linux password for SSH access. PostgreSQL database access does not require a separate password.

Connecting to the Linux Server

SSH Connection

```
ssh dbsh001@54.227.44.99
```

Replace `dbsh001` with your team's assigned username.

Example connections:

- `ssh dbsh001@54.227.44.99`
- `ssh dbsh025@54.227.44.99`
- `ssh dbsh042@54.227.44.99`

Your Team Home Directory

- Location: `/home/COSC3380/dbsh001` (replace with your team username)
- This is your team's shared workspace
- Only your team members have access to this directory

Accessing PostgreSQL Database

Connecting to PostgreSQL

After logging into the Linux server:

```
# Connect to the COSC3380 database
psql -d COSC3380
```

Your PostgreSQL Environment

Database Structure

- **Database Name:** `COSC3380`
- **Your Team Schema:** `dbsh001` (matches your team username)
- **Permissions:** Full access to your team's schema only

Working in Your Team Schema

Once connected to PostgreSQL:

```
-- Set your default schema (recommended)
SET search_path TO dbs001;

-- Create a table in your schema
CREATE TABLE students (
    id SERIAL PRIMARY KEY,
    name VARCHAR(100),
    email VARCHAR(100)
);

-- View your tables
\dt

-- List all schemas (you'll see yours and other teams')
\dn
```

Common Commands

Linux Commands

```
# Check current directory
pwd

# List files
ls -la

# Create directory
mkdir my_project

# Edit files
nano filename.txt

# Exit/logout
exit
```

PostgreSQL Commands

```
-- List databases
\l

-- List tables in current schema
\dt

-- Describe table structure
\d table_name

-- Show current user and database
SELECT current_user, current_database();

-- Quit PostgreSQL
\q
```

File Transfer

Upload files to server (from your local machine)

```
# Using scp
scp local_file.sql db001@54.227.44.99:/home/COSC3380/db001/

### Download files from server
```bash
scp db001@54.227.44.99:/home/COSC3380/db001/file.txt ./
```

## Best Practices

---

### Security

- **Change your default Linux password immediately** - this is critical for security
- Only share your new password with your team members
- Choose a strong, unique password
- Always log out when finished: `exit`

## Troubleshooting

---

### Can't Connect to Server

- Verify you're using the correct server: `54.227.44.99`
- Check your username format (db001, not DB001)
- Ensure you're using the correct password format

### PostgreSQL Connection Issues

```
Test connection
pg_isready -d COSC3380 -h localhost
```

### Permission Denied

- Your team home directory: `/home/COSC3380/db001` (only your team has access)
- Your team PostgreSQL schema: `db001` (only your team has access)

### Forgot Your Password

- Your team password follows the pattern: `cosc3380` + your 3-digit team number
- Example: Team `db045` → password is `cosc3380045`
- Contact your instructor if you're still having issues

## Quick Reference

---

Team Username	Team Password	SSH Command
db001	cosc3380001	<code>ssh db001@54.227.44.99</code>
db025	cosc3380025	<code>ssh db025@54.227.44.99</code>
db042	cosc3380042	<code>ssh db042@54.227.44.99</code>
...	...	...

Remember: Your team username and schema follow the `db####` pattern, and your team password is always `cosc3380###` where `###` matches your team number.