Great Project Beginnings: The Postgres DB Install [NG]

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**Framework Category:** Operate and Maintain  
**Specialty Area:** Data Administration  
**Work Role:** Database Administrator  
**Task Description:** Install and configure database management systems and software. (T0490)  
**Scenario**

Dynamic Arbitrary Solutions (DAS Webs Inc.) will soon start work on a major project involving a Postgres database. DAS Webs Inc does not currently have the Postgres database management system software installed. As the new junior systems administrator you have been tasked by the senior systems administrator Gary Thatcher to install and configure a Postgres database with a single instance on the Windows 2012 Database server ahead of the coming project.

**Additional Information**

More details and objectives about this challenge will be introduced during the challenge meeting, which will start once you begin deploying the challenge.  
  
You will be able to check your progress during this challenge using the check panel within the workspace once the challenge is deployed. The checks within the check panel report on the state of some or all of the required tasks within the challenge.  
  
Once you have completed the requested tasks, you will need to document the methodology you used with as much detail and professionalism as necessary. This should be done on the documentation tab within the workspace once the challenge is deployed. Below the main documentation section be sure to include a tagged list of applications you used to complete the challenge.  
  
Your username/password to access all virtual machines and services within the workspace will be the following...  
Username: playerone  
Password: password123  
  
The username/password used to access the Firewall's web interface within the workspace will be the following...  
Username: admin  
Password: password123  
  
This challenge is completed on the Dev-Web virtual machine and the player must be logged in as user "playerone" for the checks to work correctly.

**Gilly Bates** @gbates | *Windows Developer*

Alright, looks like Ol' Gary Thatcher tasked @playerone with installing the Postgres DBMS.

**Richard LeGrand** @rlegrand | *CEO*

BRING IN THE DBMS! THE DOUBLE BARREL MISSILE SYSTEM.

**Gilly Bates** @gbates | *Windows Developer*

Ahem... @playerone, Richard means the Database Management System (DBMS) for short. I've already downloaded the version we will be using (it is a little old, legacy applications.......) which you can find on the Database server in the file path C:\postgres.

**Gilly Bates** @gbates | *Windows Developer*

Also, looks like we are going to need them to change the port the server listens on to 1801.

**Gary Thatcher** @gthatcher | *Sr. Systems Admin*

Mhmm, yup. Some more notes about the install based on the required setup. Install options can be left default, except for setting the port to 1801 and setting the database superuser (postgres) password to 'password123'.

**Gilly Bates** @gbates | *Windows Developer*

@playerone, get the DBMS up and simply running. After that you'll need to do a little configuring for the application we are using the database for. First, you'll want to allow remote connections from 172.31.2.0/24 in the DBMS configuration, and you'll need to allow port 1801 through the Database host firewall. We'll also need you to add a user named DASWEBADMIN, and then create a new database called DASWEBDATA.

**Gary Thatcher** @gthatcher | *Sr. Systems Admin*

Sounds about right @gbates! Get 'er done @playerone, thanks! We'll take over further configuration at a later time. This is just to help us get started.

Solution:

Postgres Listening on Port 1801

netsh advfirewall firewall add rule name="Allow Port 1801" dir=in action=allow protocol=TCP localport=1801

Create DASWEBDATA database

Create database DASWEBSDATA;

Add DASWEBADMIN user

Create user DASWEBADMIN;

List All Users

Once inside the psql command line interface, list all users by executing the \du command:

\du

To allow remote connections from 172.31.2.0/24 in the DBMS configuration:

Edit postgresql.conf:

Find the line that starts with #listen\_addresses and change it to listen on all interfaces or the specific IP of the server. For allowing all interfaces, you can set it to \*:

listen\_addresses = '\*'

Modify pg\_hba.conf:

Add a New Line for Your IP Range:

Add the following line to allow connections from the 172.31.2.0/24 network:

host all all 172.31.2.0/24 md5

This line means:

host: The connection type is host, indicating it's a remote connection.

all: Applies to all databases.

all: Applies to all users.

172.31.2.0/24: The allowed IP range.

md5: Use md5 authentication for the connection