

# PostgresRdb

## PostgreSQL server system service module

### Table of contents

1 Overview.....	2
2 Design.....	2
3 Constraints.....	2
3.1 Allowed Child Dependencies.....	2
3.2 Allowed Parent Dependencies.....	2
4 Attributes.....	3
4.1 Defaults for Imported Attributes.....	3
5 Commands.....	3
5.1 Deploy.....	3
5.2 assertServiceIsUp.....	4
5.3 Configure.....	4
5.4 InitDb.....	4
5.5 Docs-Generate.....	4
6 Related Types.....	5
6.1 PostgresRdbSetting.....	5
6.2 PostgresRdbPgEngine.....	5
6.3 PostgresRdbPgData.....	6

## 1. Overview

**PostgresRdb:** *PostgreSQL server system service module*

## 2. Design

### Super Type

[Rdb](#)

Role	<b>Concrete.</b> (Objects can be created.)
Instance Names	<b>Unique</b>
Notification	<b>false</b>
Template Directory	
Data View	Children, proximity: <b>1</b>
Logger Name	PostgresRdb

## 3. Constraints

### 3.1. Allowed Child Dependencies

- [PostgresRdbPgData](#) 1
- [PostgresRdbPgEngine](#) 1
- [PostgresRdbSchema](#)
- RdbConnection1
- RdbDriver1
- RdbInstanceName1
- RdbPassword1
- RdbPort1
- RdbType1
- RdbUserName1
- SystemServiceScript1
- SystemServiceUseSudo1

1: These types have a *Singleton* constraint. Only one instance may be added as a resource.

### 3.2. Allowed Parent Dependencies

- Node
- Service

- Site

## 4. Attributes

### 4.1. Defaults for Imported Attributes

Name	Default
pgData	/var/lib/pgsql/data
pgEngine	/usr/bin
rdbConnection	localhost
rdbDriver	org.postgresql.Driver
rdbInstanceName	postgres
rdbPassword	postgres
rdbPort	5432
rdbType	postgresql
rdbUserName	postgres
systemServiceScript	postgresql

## 5. Commands

### Note:

Commandline options displayed in square brackets "[]" are optional. If an option expects arguments, then angle brackets are shown after the option "<>". Any default value is shown within the brackets.

### 5.1. Deploy

*Run the service deployment cycle, stopping installing package dependencies, configuring and the starting it.*

#### Usage

Deploy

#### 5.1.1. Workflow

1. Stop
2. Packages-Install

3. [Configure](#)
4. Start

## 5.2. assertServiceIsUp

*Check whether the specified system service is up*

### Usage

```
assertServiceIsUp [-script <>] [-usesudo <>]
```

### Options

Option	Description
script	System service script
usesudo	Whether or not to use sudo

## 5.3. Configure

*Run the configuration cycle for the deployment.*

### Usage

```
Configure
```

### 5.3.1. Workflow

1. [InitDb](#)
2. [Docs-Generate](#)

## 5.4. InitDb

*Invoke the PostgreSQL server database initialization program (initdb)*

### Usage

```
InitDb [-buildstamp <>] [-pgdata <>] [-pgengine <>]
```

### Options

Option	Description
buildstamp	build identifier. currently ignored
pgdata	PGDATA directory
pgengine	PGENGINE directory

## 5.5. Docs-Generate

Generate the PostgreSQL server configuration files

### Usage

```
Docs-Generate [-archivedir <${entity.instance.dir}/var>]
[-buildstamp <>] [-pgdata <>]
```

### Options

Option	Description
archivedir	dir to store current output docs
buildstamp	build identifier. currently ignored
pgdata	PGDATA directory

## 6. Related Types

The following types are defined for use with PostgresRdb.

### 6.1. PostgresRdbSetting

#### 6.1.1. Overview

**PostgresRdbSetting**: PostgreSQL server configuration setting

#### 6.1.2. Design

##### Super Type Setting

Role	<b>Abstract.</b> (Objects cannot be created.)
Instance Names	<b>Unique</b>

### 6.2. PostgresRdbPgEngine

#### 6.2.1. Overview

**PostgresRdbPgEngine**: PostgreSQL program installation directory

#### 6.2.2. Design

##### Super Type [PostgresRdbSetting](#)

Role	<b>Concrete.</b> (Objects can be created.)
Instance Names	<b>Unique</b>

### 6.2.3. Constraints

#### 6.2.3.1. Allowed Parent Dependencies

- [PostgresRdb](#)

### 6.2.4. Attributes

#### 6.2.4.1. Exported Attributes

Name	Property
pgEngine	settingValue

## 6.3. PostgresRdbPgData

### 6.3.1. Overview

**PostgresRdbPgData:** *PostgreSQL server data directory*

### 6.3.2. Design

#### Super Type

[PostgresRdbSetting](#)

Role	<b>Concrete.</b> (Objects can be created.)
Instance Names	<b>Unique</b>

### 6.3.3. Constraints

#### 6.3.3.1. Allowed Parent Dependencies

- [PostgresRdb](#)

### 6.3.4. Attributes

#### 6.3.4.1. Exported Attributes

Name	Property
------	----------

*PostgresRdb*

pgData	settingValue
--------	--------------