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Deploy Web Apps with Render

Render Web Services

Web services can be deployed in Render by connecting the GitLab or GitHub code repository.

Render Web Service Configurations

When deploying a web service with Render, the name, region, branch, root directory, runtime, build command, start command, and instance type settings must be configured.

Render Build and Start

The build and start commands set in the web service configuration are used by Render to build and start the deployed application.

Render Live Status

Render will show a green, "Live" status to indicate that the web service is deployed and running successfully.

Render Database Regions

In order for two or more Render services to communicate with each other, they must belong to the same configured region.



Render PostgreSQL Configurations

When creating a PostgreSQL database with Render, the name, database, user, region, PostgreSQL version, datadog API key, and instance type settings must be configured.

Render PostgreSQL Connections

The "Connections" view on the PostgreSQL database dashboard will provide credential and connection information in order to connect to and access the PostgreSQL database.

Render Free PostgreSQL

A free tier subscription level in Render can only have one active PostgreSQL database at a time.

Render Events

Deployment events include first deployments, started deployments, canceled deployments, and failed deployments.

Render Metrics

In Render, the "Metrics" tab can show total service usage and bandwidth.



Render Deploy Configurations

Render allows for setting additional deployed service configurations like adding custom domains, setting automatic deployments, health alerts, and suspending or deleting services.

Render Logs

In Render, the "Logs" tab can be used to read through the deployed application's logs to help with troubleshooting and bug finding.

Render Environment Variables

Environment variables can be added and modified during or after deployment in Render in order to change values quickly to suit developer needs.

Deployed Environment Variables

When environment variables are added or modified, the deployed web service will automatically redeploy for the changes to take affect.

Deployment Process

Deployment is the process in which software or updates are released to the end-user.



Software Development Life Cycle (SDLC)

The Software Development Life Cycle (SDLC) provides steps/guidance to create high-quality software. Generally, the steps include: planning, defining/analysis, design, development, testing, deployment, and maintenance.

SDLC Planning

The SDLC planning phase defines the problem and gathers the requirements needed to solve it.

SDLC Defining

The SDLC defining phase determines the necessary resources to build a prototype of the solution.

SDLC Design

The SDLC design phase involves deciding on the technical aspects of the solution.

SDLC Development

The SDLC development phase is where the software is built and written.



SDLC Testing

The SDLC testing phase involves testing the solution software.

SDLC Maintenance

The SDLC maintenance phase is where additional bugs are found after deployment occurs and are fixed through software updates.

SDLC Environments

Different environments are used throughout the SDLC for building and developing the code, testing the code, and deploying the code.

Deployment Tools

Deployment tools can help automate and speed up the deployment process.

SDLC Deployment

The SDLC deployment phase moves the software solution to the production environment for end-users to use.

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PaaS Deployment

Platform as a Service (PaaS) describes tools that use cloud-based deployment to automatically builds, deploys, and manages applications.

Render as a PaaS

Render is a type of PaaS that can deploy code applications.

Render PostgreSQL Database

Render provides the ability to create a PostgreSQL database that is accessible from applications.

Render Domain

Render provides a free, publically available .onrender.com domain when a web service is deployed.

Render Subscription Tiers

Render offers both free and paid subscription tiers to meet project needs.



