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## Demonstrate Using Templates Lab

Scenario

In the scenario for this demonstration lab, a developer wants to use templates to deploy containers to the project.

Overview

This lab covers the following topics:

* Deploying a template
* Verifying that all components are deployed
* Observing that environment variables are used
* Using the pod terminal to explore a running container

## 1. Demonstrate Authentication to OpenShift Master

1. Action: Log in to the OPENTLC shared OpenShift web console using either of these methods:
   * Method 1: Go to [https://master.na1.openshift.opentlc.com](https://master.na1.openshift.opentlc.com/)
   * Method 2: Use the command line from any host with the OpenShift client utility (oc) installed:

LocalMachine$ oc login https://master.na1.openshift.opentlc.com --username shacharb-redhat.com

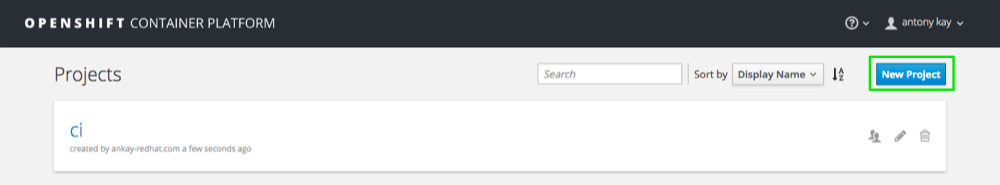
Username: shacharb-redhat.com

Password: \*\*\*\*\*\*\*\*\*\*

Logged into "https://master.na1.openshift.opentlc.com" as "shacharb-redhat.com" using existing credentials.

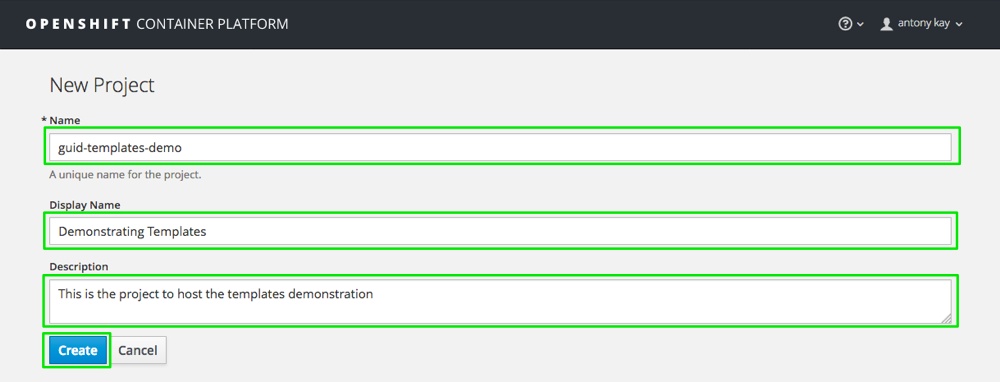
## 2. Demonstrate Creating a Project

1. Action: Click New Project to create a project for your demonstration:



* + Explain what projects are and how different projects can have different user permissions and quotas attached to them.

1. Action: Fill in the Name, Display Name, and Description fields:

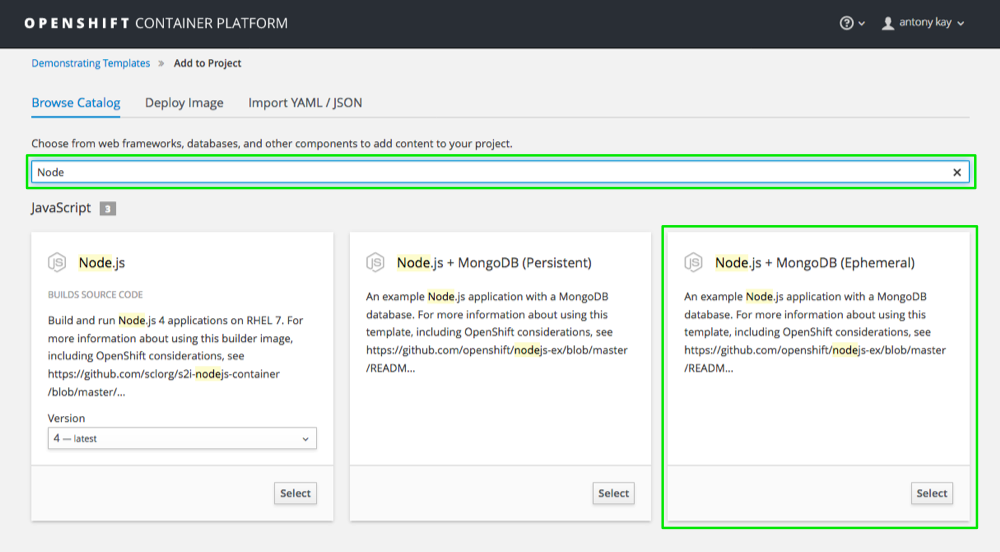


|  |  |
| --- | --- |
|  | Two other options for completing this task:   * Use the command line from any host with the OpenShift client utility (oc) installed:   [sborenst@ip-192-168-20-158 ~]$ oc new-project guid-templates-demo --description="This is the project to host the templates demonstration" --display-name="Demonstrating Templates"  Now using project "guid-templates-demo" on server "https://master.na1.openshift.opentlc.com".   * Run the oc new-project guid-templates-demo command without the description and display name information. |

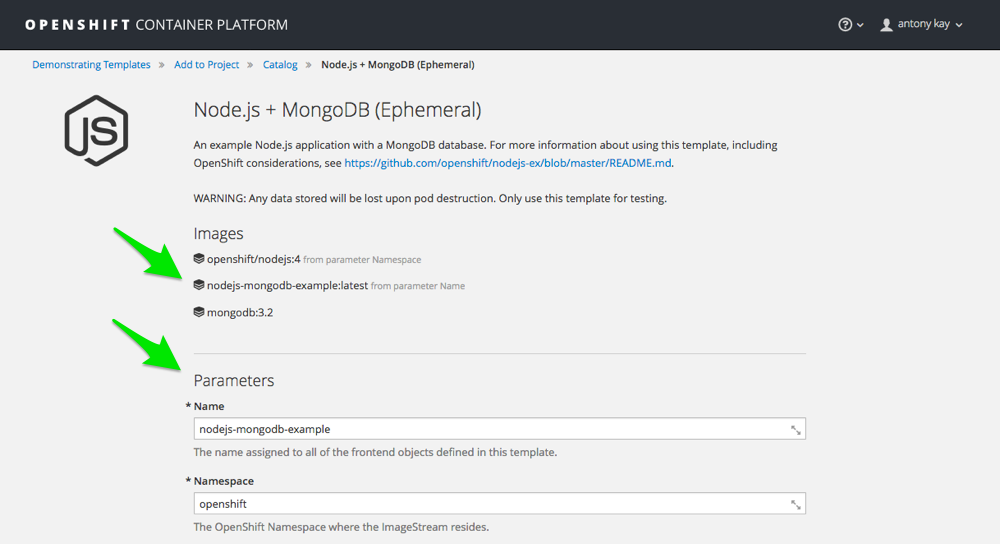
## 3. Demonstrate Deploying an Application Based on a Template

|  |  |
| --- | --- |
|  | Skip this section if you already executed the steps in previous demonstrations. |

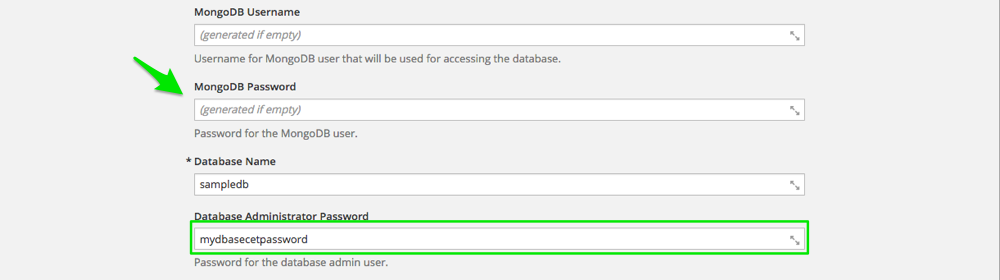
1. Action: After creating your project or after clicking Add to project, enter node in the catalog filter and select Node.js + MongoDB (Ephemeral).



* + Explain the following aspects of the Application Creation page:
    - You can see the Images that are used to deploy this template.
    - You can designate Parameters to be used to customize the template environment variables:



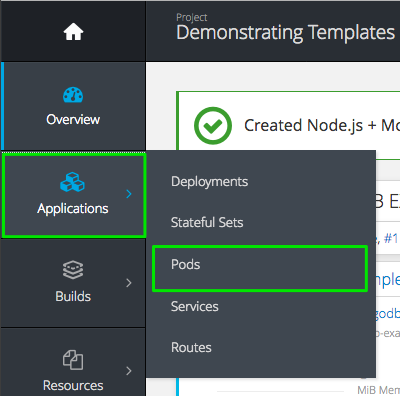
1. Action: Under Parameters, enter a password of your choice in the Database Administrator Password field.
   * Explain the following:
     + There are more settings that you can define as you scroll down the page.
     + Passwords and other environment variables can be set as parameters; how these work in the deployed template is shown later in this demonstration.



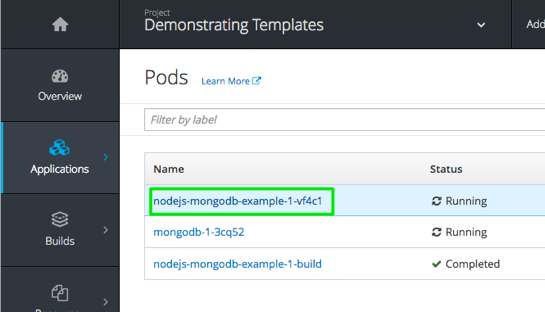
1. Action: When you are done, click Create.

## 4. Demonstrate Template Parameters & Deployment Environment Variables

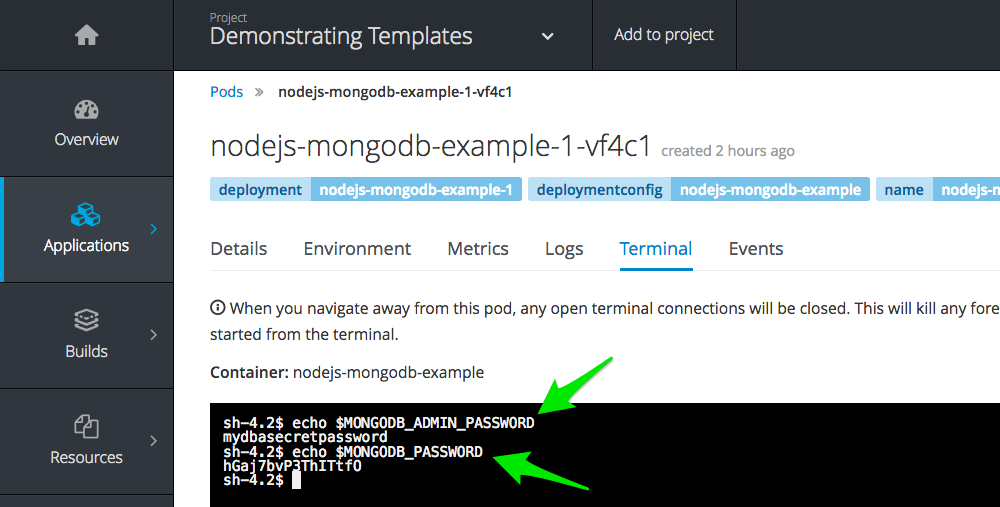
1. Action: Navigate to Applications → Pods:



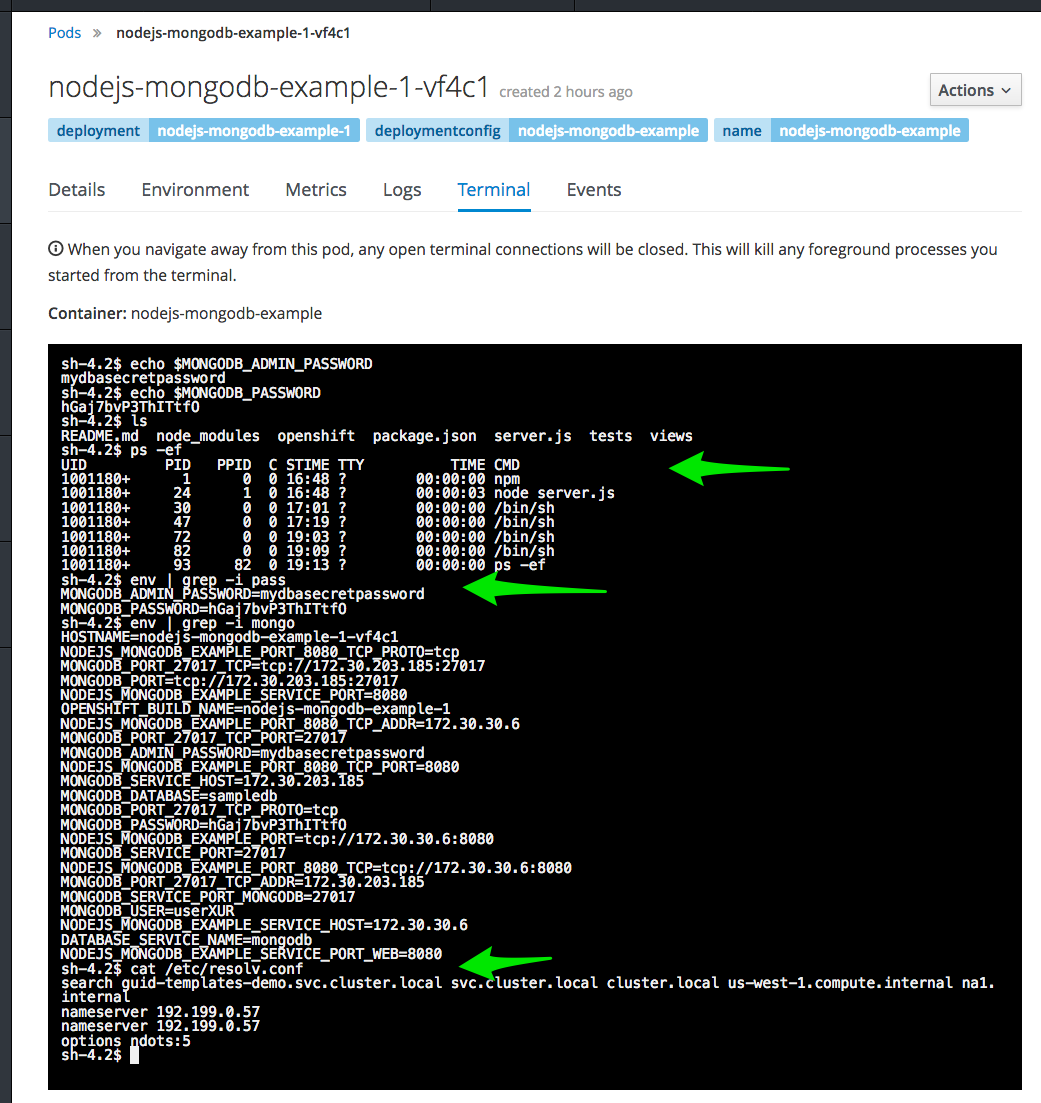
1. Action: Select the nodejs-mongodb-example-\* deployment:



1. Action: Select the Terminal tab to gain shell access. Action: In the terminal window type echo $MONGODB\_ADMIN\_PASSWORD to see the deployment’s environment variable holding that.
   * Explain that you can see that the MONGODB\_ADMIN\_PASSWORD has been set to the password you chose during the template creation process.
2. Action: In the terminal window type echo $MONGODB\_PASSWORD to see the deployment’s environment variable holding that.
   * Explain that the MONGODB\_PASSWORD was generated by OpenShift and is set to the same value in the other deployment.



1. Action: Still in the Terminal tab enter the following commands:
   * ls
     + Explain that, depending on your present working directory, you can see files in the container and manipulate them.
   * ps -ef
     + Explain that this allows you to see the processes running inside your container.
   * env |grep -i mongo
     + Explain that this allows you to see the environment variables, and that you can see the password shown here is the same as the one you set earlier in the demonstration.
   * cat /etc/resolv.conf



## 5. Cleanup

If you are not going do do any additional demonstrations go back to the OpenShift Homepage and delete your project.