Murano Developers Guide

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v0.1

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Abstract

This document is intended for individuals who wish to use our product or intend to contribute.

Table of Contents

Chapter 1. How can I use Murano Service?

Murano is intended to get opportunity for non-experienced users to deploy reliable Windows-based environments with 1-Click. This document describes steps for creation Windows Environment with different services. You'll see how it's easy with Murano.

Document change history

The following table describes the most recent changes:

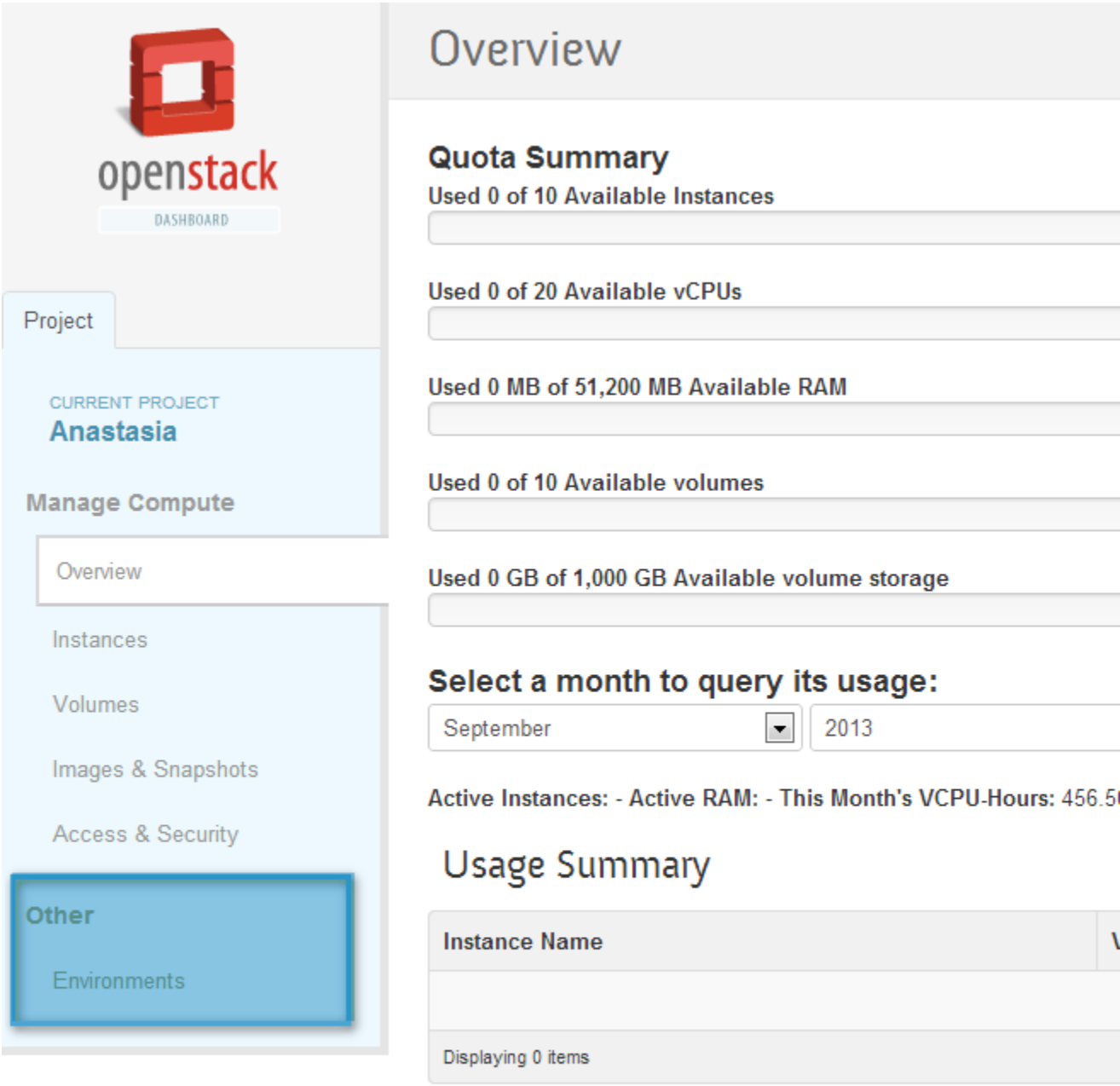
Revision Date	Summary of Changes
September. 4, 2013	• Initial document creation.

Chapter 2. Murano dashboard plugin

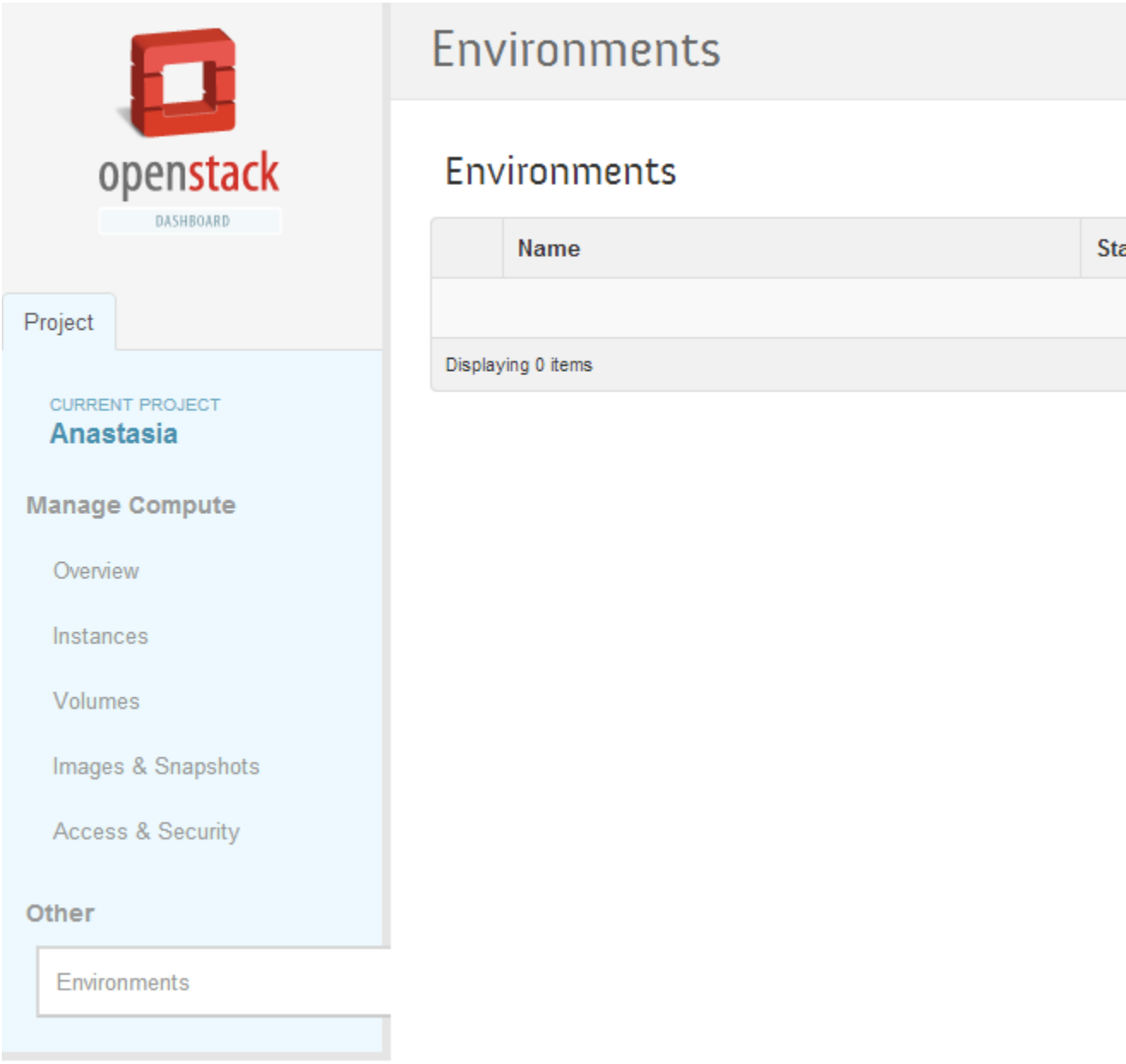
For a Murano usage you should be familiar with Openstack. Murano Dashboard is just a plugin to Openstack dashboard - Horizon. Please visit horizon user guide [http://docs.openstack.org/user-guide/content/] first to see how dashboard is organized and how login to it.

Creating environment

Once you installed all Murano components and login to horizon dashboard successfully you will see Environments panel:

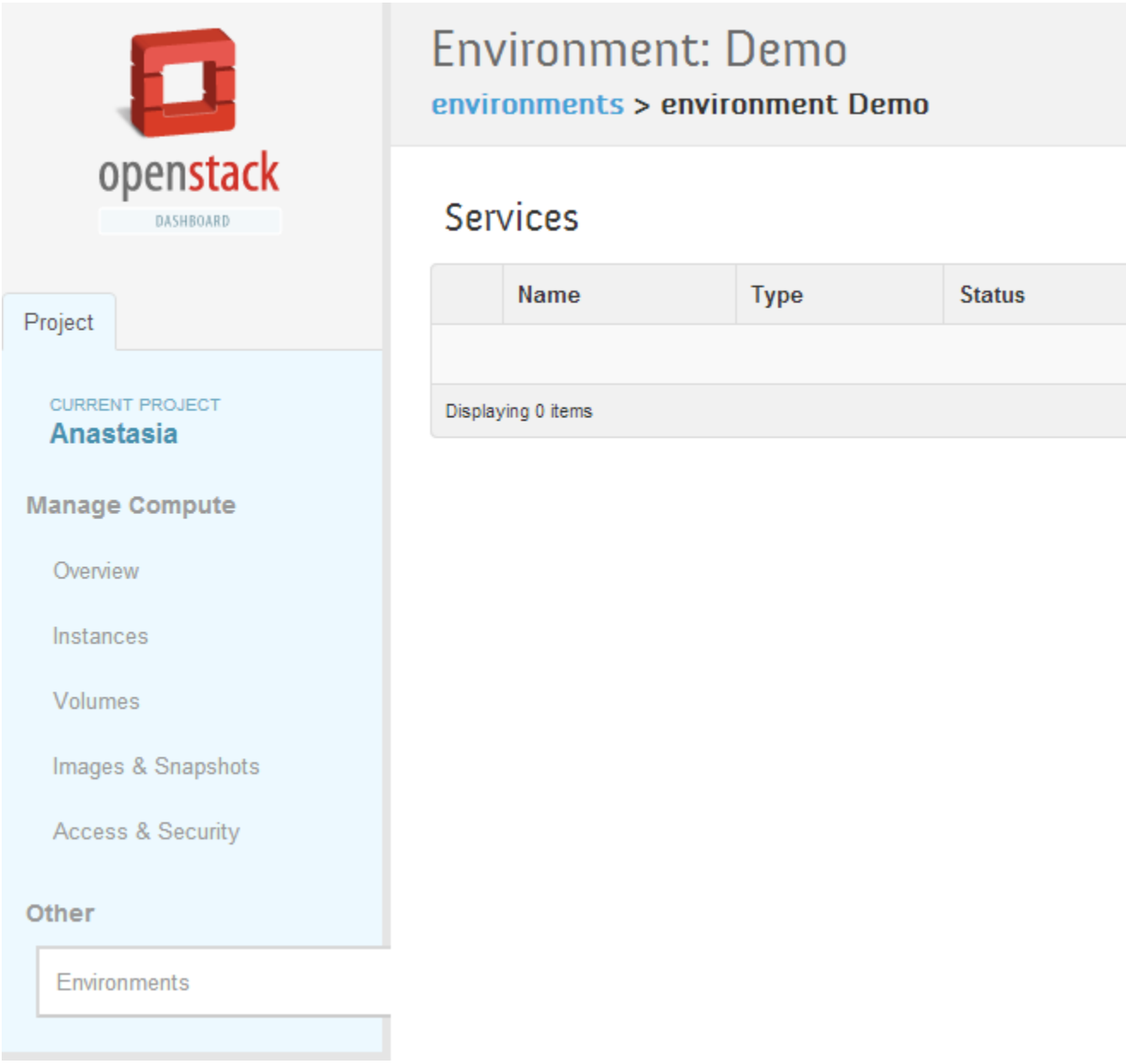


First you need to do is to create an environment - virtual Windows Data Center which will contain different Windows services. Navigate to "Environments" page and click "Create Environment". After setting name to your virtual environment it will be created. Just created environment has status *Ready to configure*.

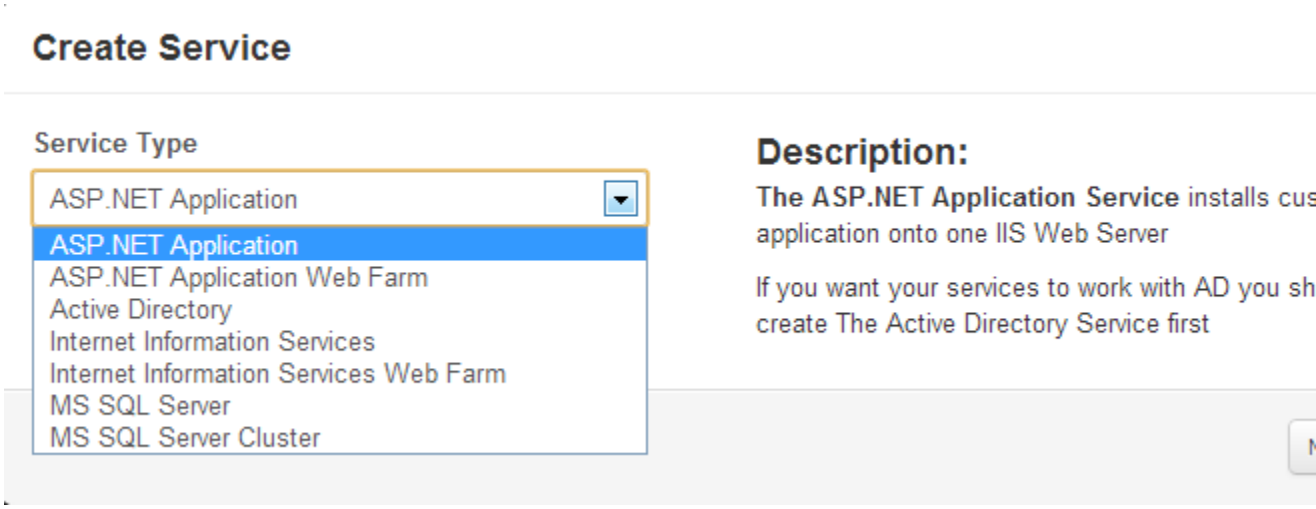


Creating service prototype

All services should be created within the framework of Environment - virtual Windows Data Center. First you need to create one or more service's prototypes and then send Environment to deploy process. After that one or more instances with your service be spawned on Openstack. To create service prototype navigate to environment services by clicking on environment name (or on "Services" button) and press on "Create Service" button.



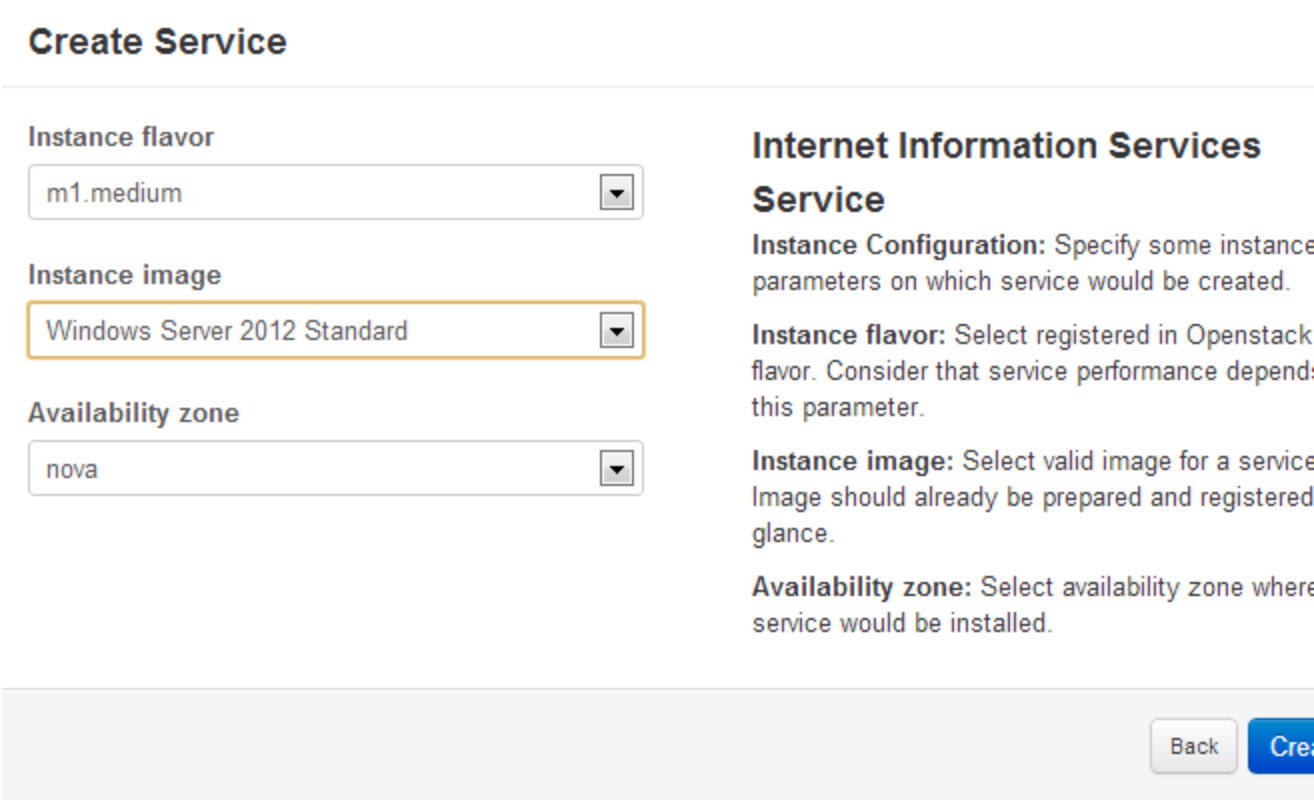
You have opportunity to create one of the following services:



Once you choose service that you want to create click "Next" and fill the form. Forms for each service are specific. To see more information about filling the form for a specified service follow one of the link below:

- **Active Directory:** Active Directory is a directory service implemented by Microsoft for Windows domain networks. In one installation in addition to primary Domain Controller you can add optional count of secondary Domain Controllers. Any other services you are intending to create can be joined to that domain.
- **Internet Information Service:** IIS is a web server and a set of feature extension modules.
- **Internet Information Web Farm Service:** Murano installs the Web Farm Framework on the controller server, configures the primary server and prepares the secondary servers. In addition load balancer is installed to monitor service statuses.
- **ASP.NET Service:** is a server-side Web application framework designed for Web development to produce dynamic Web pages. Service is able to install custom application onto one IIS Web Server. Murano installs all needed components and make proper configuration.
- **ASP.NET Farm Service:** ASP.NET Farm Service installs a custom application on a load-balanced array of IIS servers
- **MS SQL Service:** Microsoft SQL Service is a relational database management system.
- **SQL Server Failover Cluster:** Murano installs all needed components and configures your SQL Server Cluster the way you want.

On the last step of creating service prototype you have opportunity to set the hardware flavor of the instance which will be created - and the image with the operating system, which will be installed on the instance. Also you may select availability zone, if there are more then one in your environment.


Create Service
Instance flavor
m1.medium
Instance image
Windows Server 2012 Standard
Availability zone
nova
Internet Information Services
Service
Instance Configuration: Specify some instance
parameters on which service would be created.
Instance flavor: Select registered in Openstack
flavor. Consider that service performance depend
this parameter.
Instance image: Select valid image for a service
Image should already be prepared and registered
glance.
Availability zone: Select availability zone where
service would be installed.
Back
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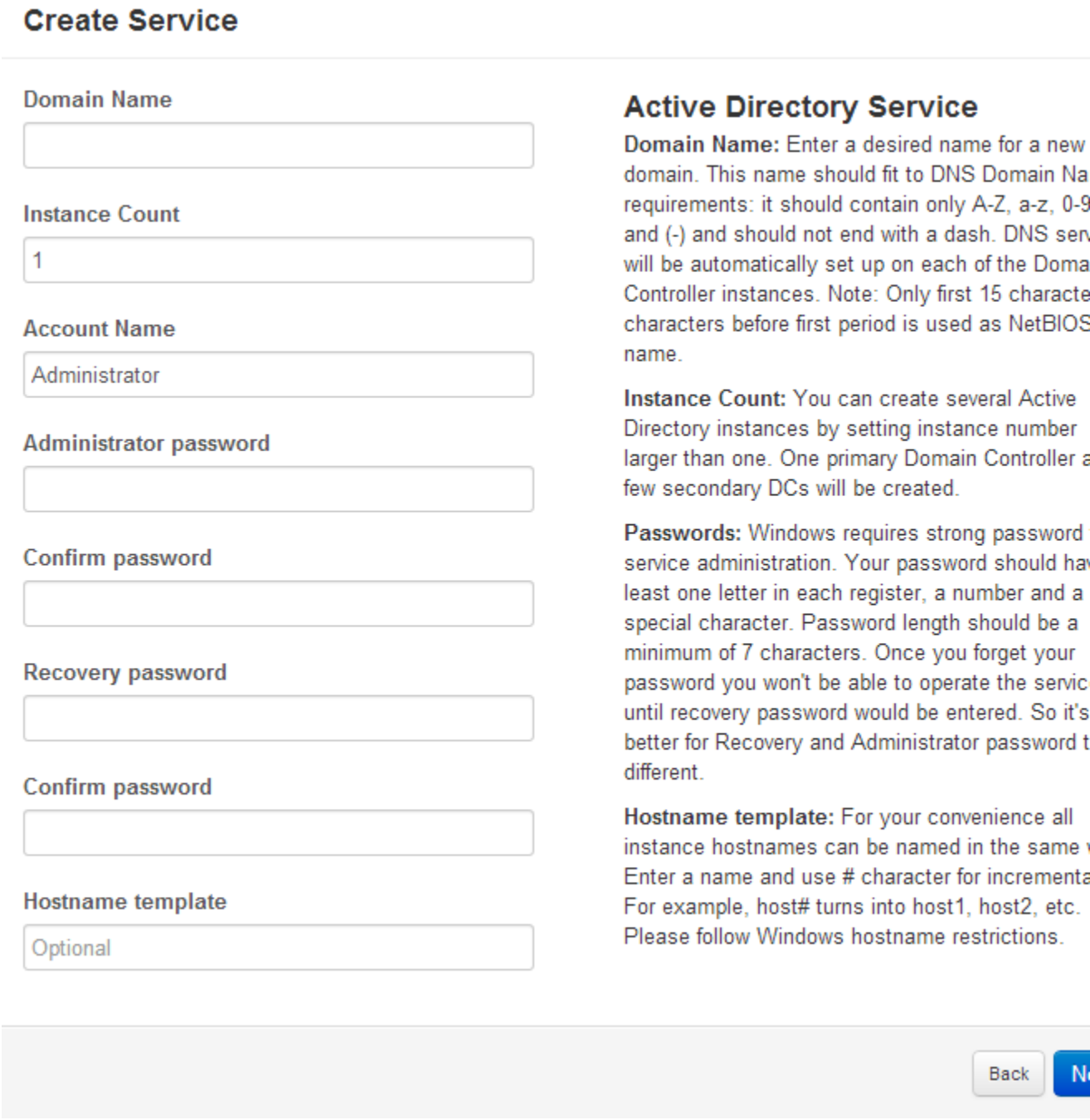
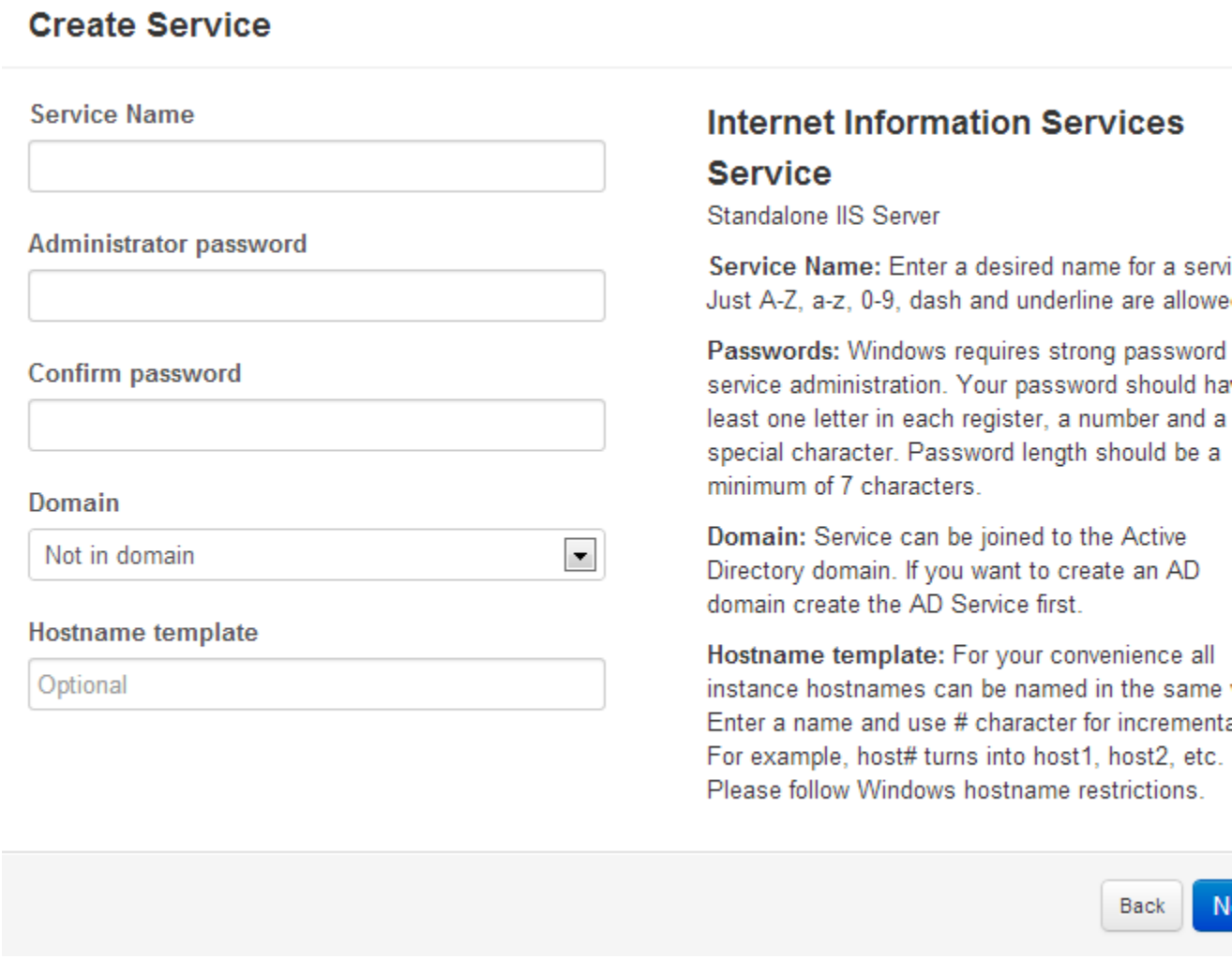
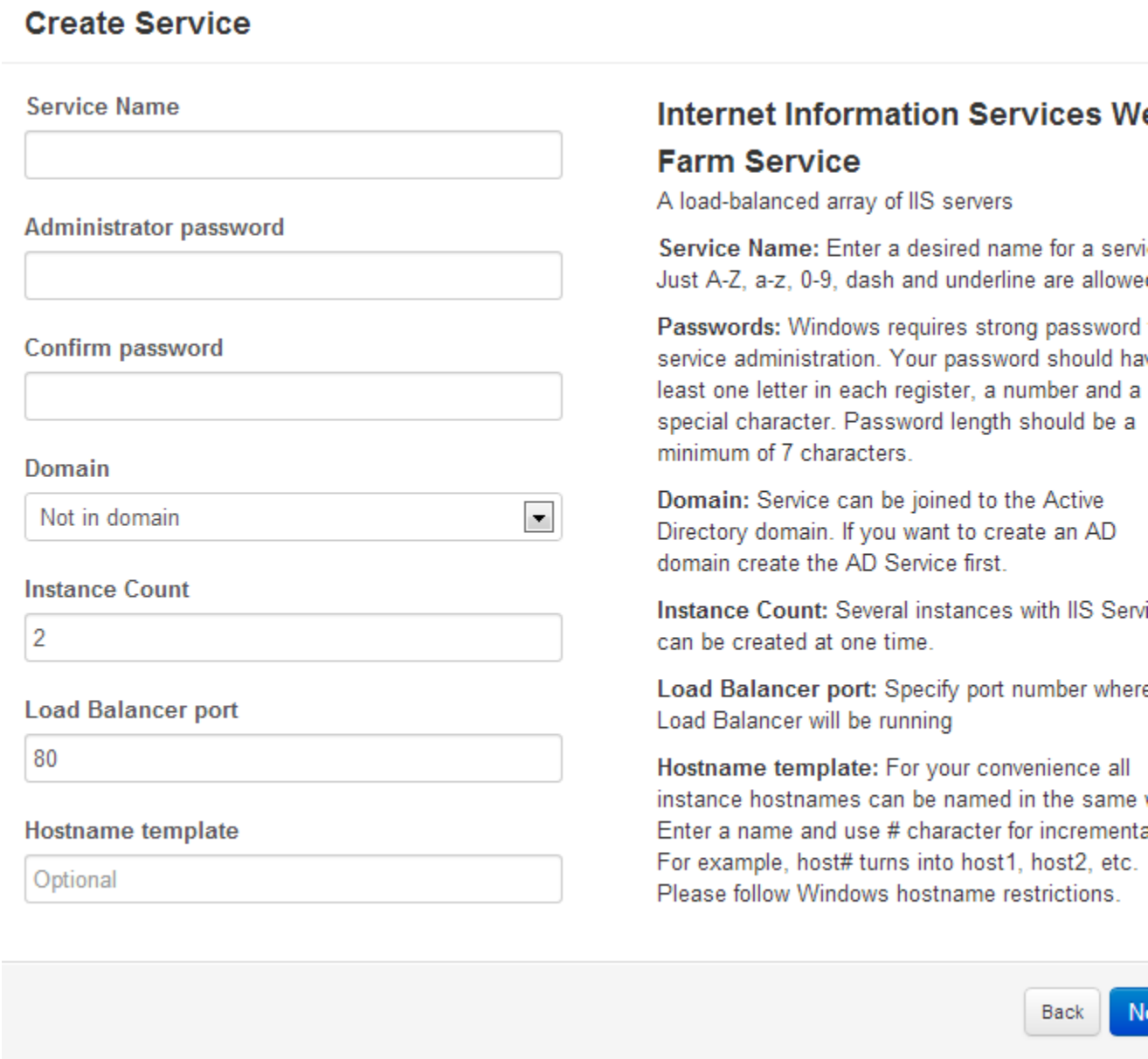
Active Directory



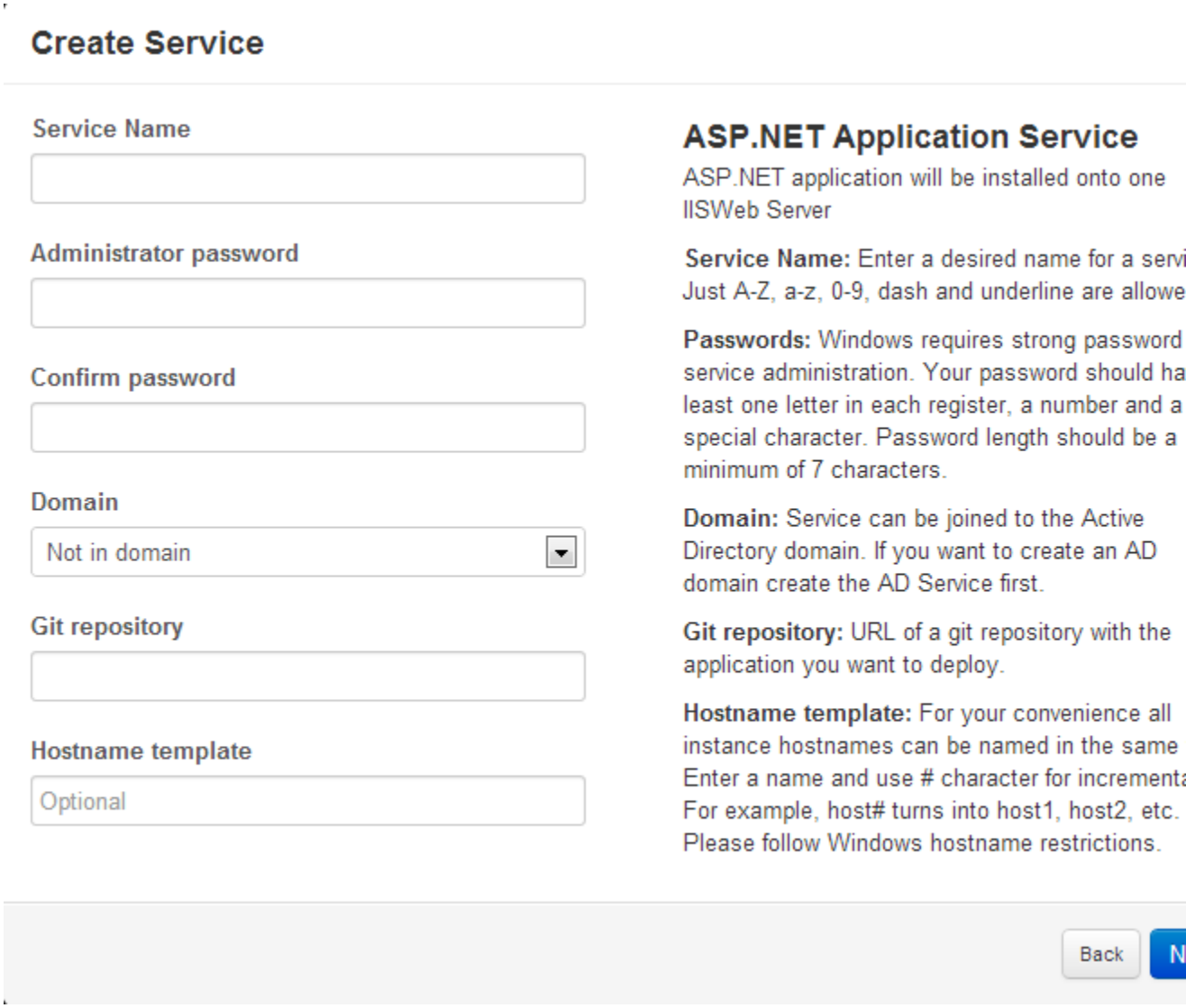
Internet Information Service



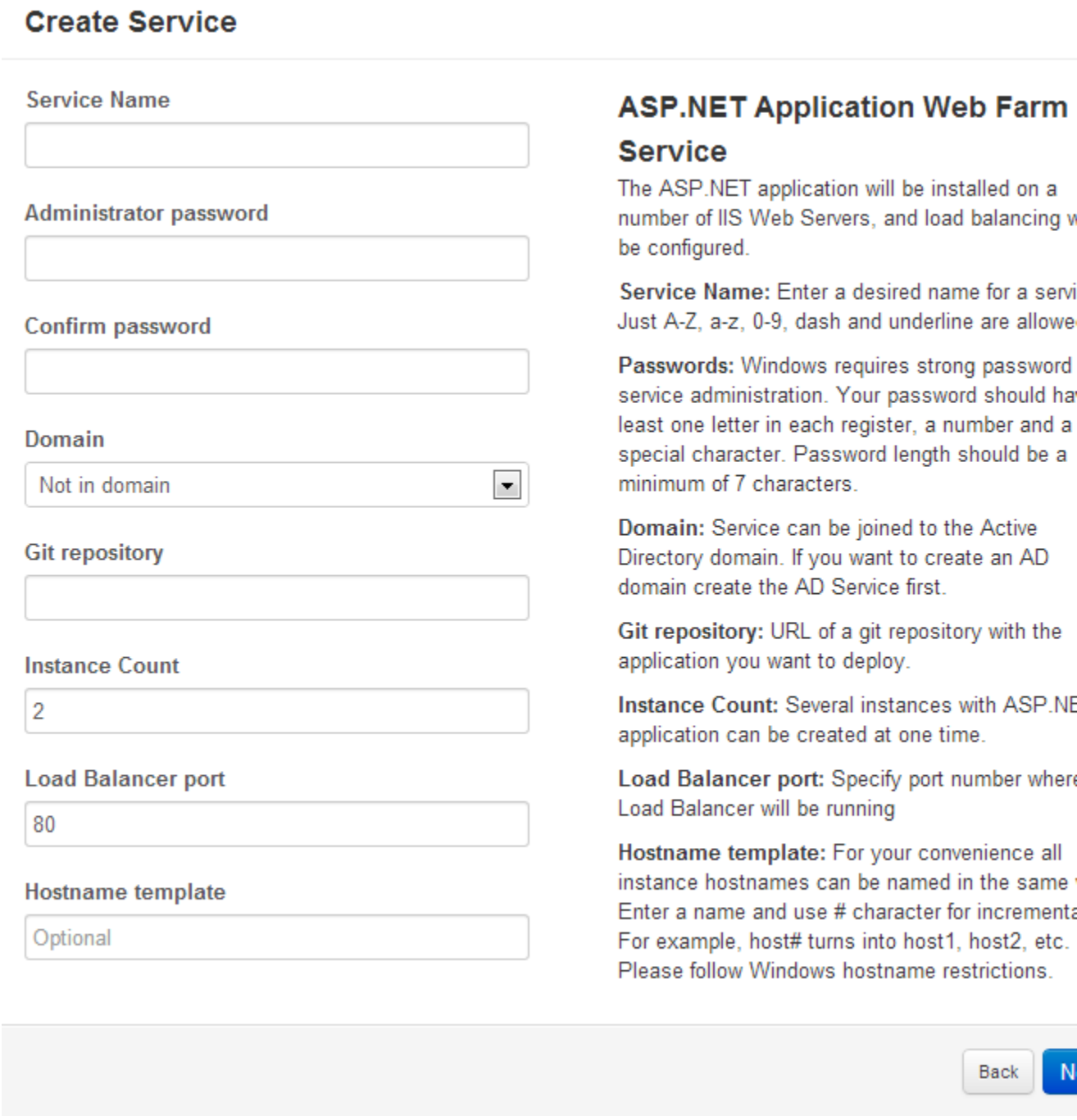
Internet Information Web Farm Service



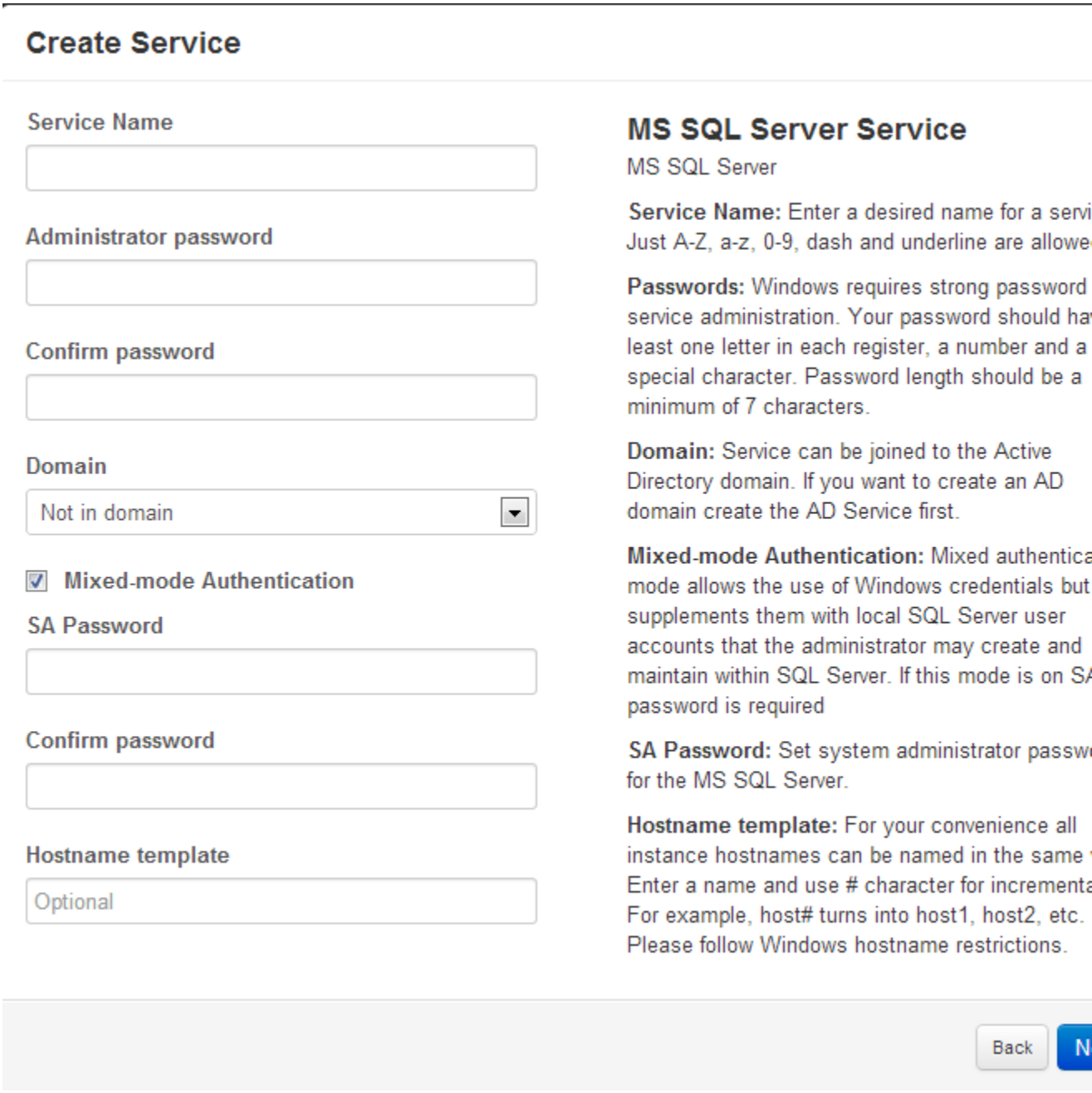
ASP.NET Service



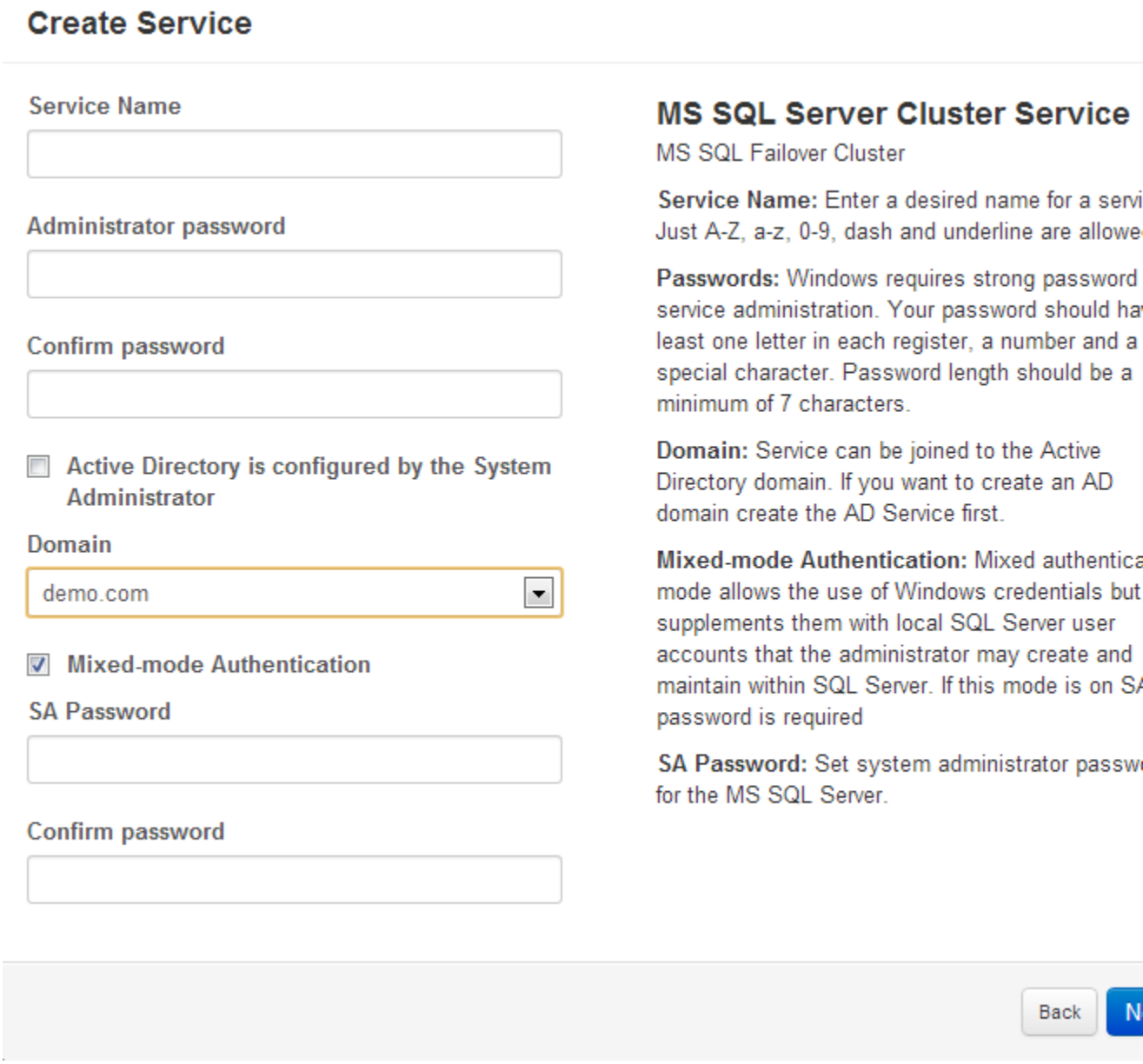
ASP.NET Farm Service

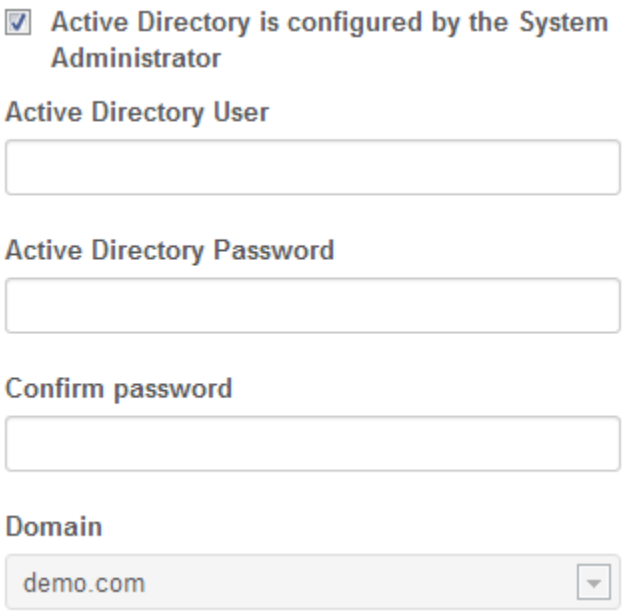


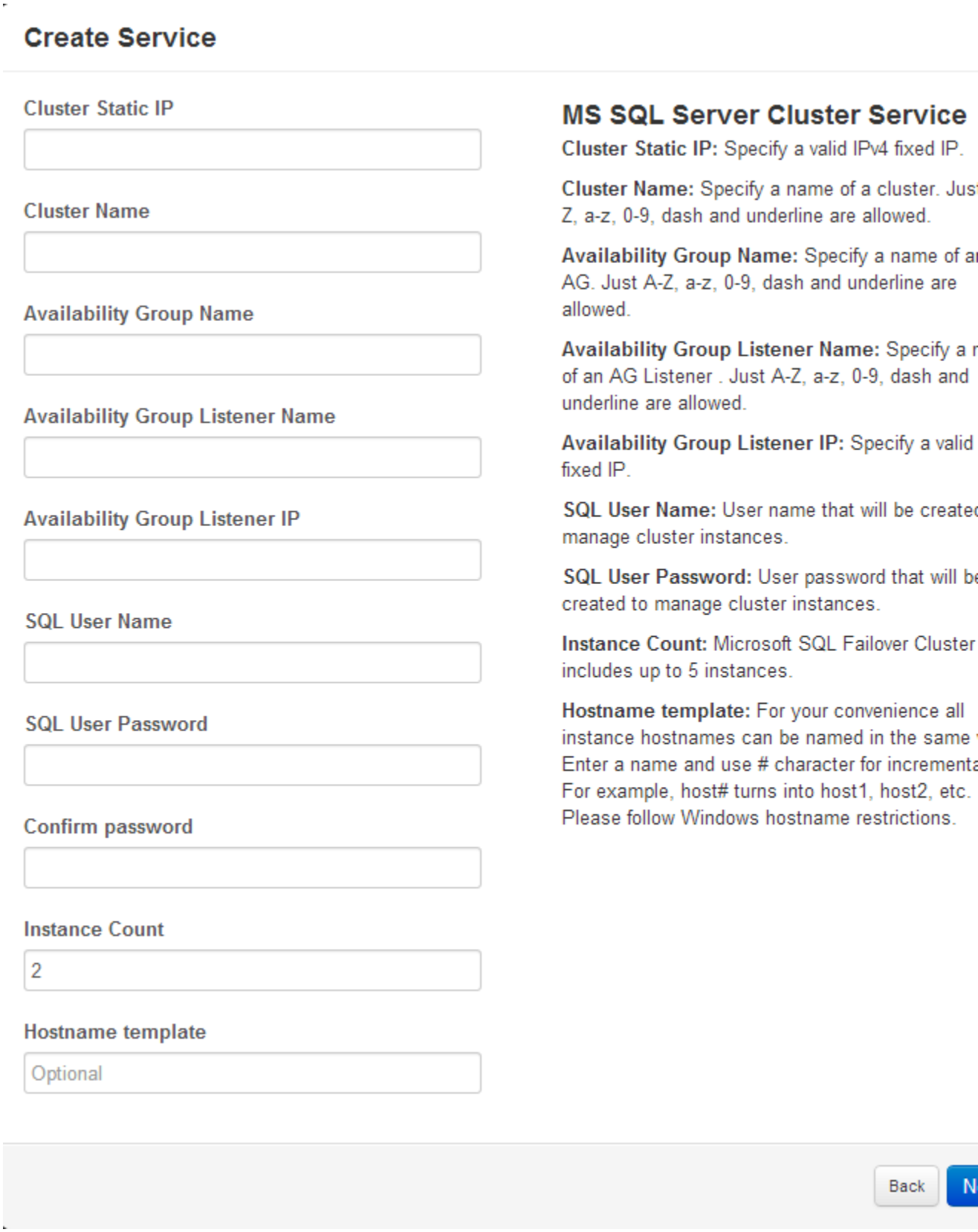
MS SQL Service



SQL Server Failover Cluster




Active Directory is configured by the System Administrator
Active Directory User
Active Directory Password
Confirm password
Domain
demo.com


Create Service
Cluster Static IP
Cluster Name
Availability Group Name
Availability Group Listener Name
Availability Group Listener IP
SQL User Name
SQL User Password
Confirm password
Instance Count
2
Hostname template
Optional
MS SQL Server Cluster Service
Cluster Static IP: Specify a valid IPv4 fixed IP.
Cluster Name: Specify a name of a cluster. Just
Z, a-z, 0-9, dash and underline are allowed.
Availability Group Name: Specify a name of a
AG. Just A-Z, a-z, 0-9, dash and underline are
allowed.
Availability Group Listener Name: Specify a
of an AG Listener . Just A-Z, a-z, 0-9, dash and
underline are allowed.
Availability Group Listener IP: Specify a valid
fixed IP.
SQL User Name: User name that will be created
manage cluster instances.
SQL User Password: User password that will be
created to manage cluster instances.
Instance Count: Microsoft SQL Failover Cluster
includes up to 5 instances.
Hostname template: For your convenience all
instance hostnames can be named in the same
Enter a name and use # character for incrementa
For example, host# turns into host1, host2, etc.
Please follow Windows hostname restrictions.
Back
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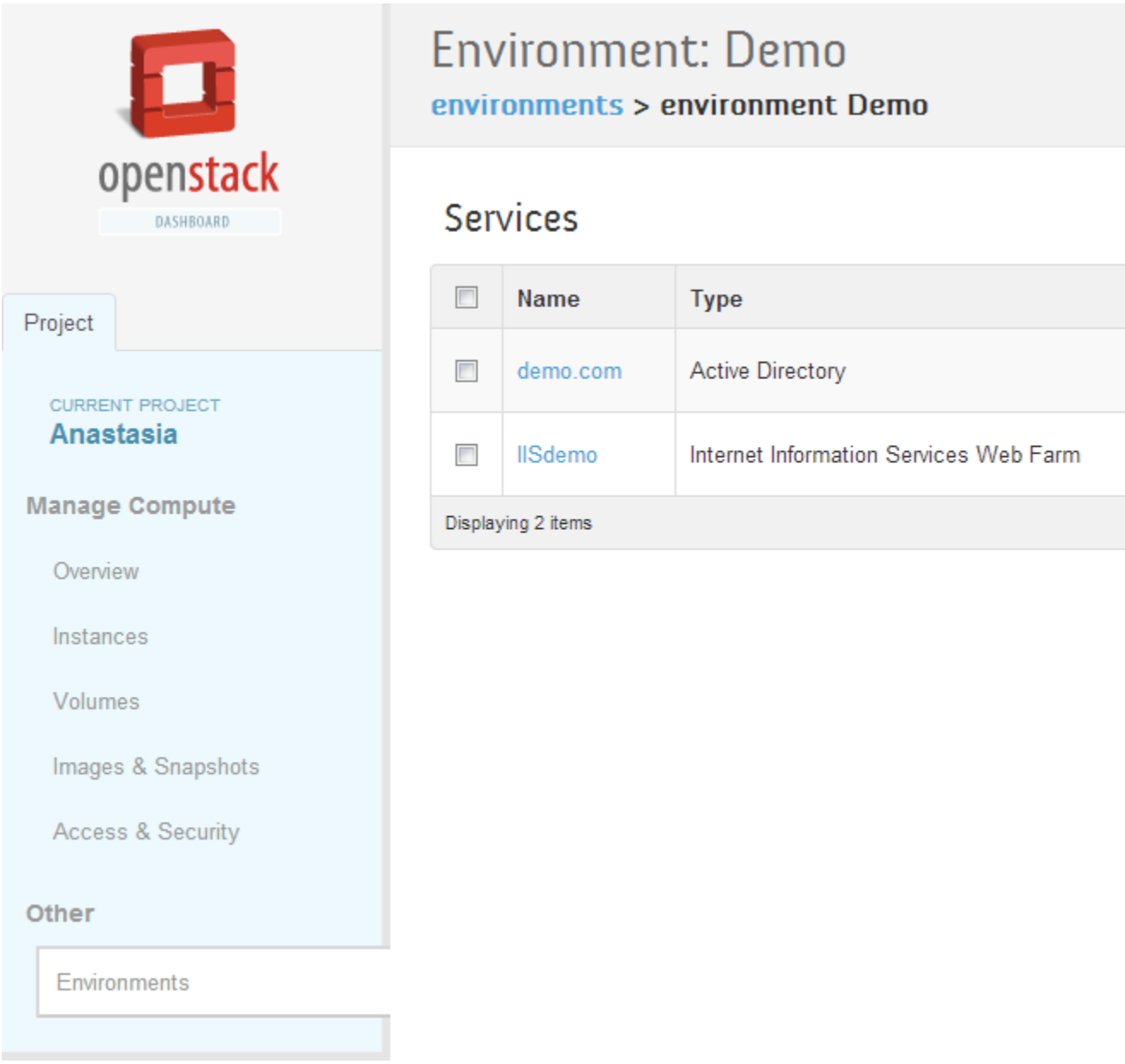
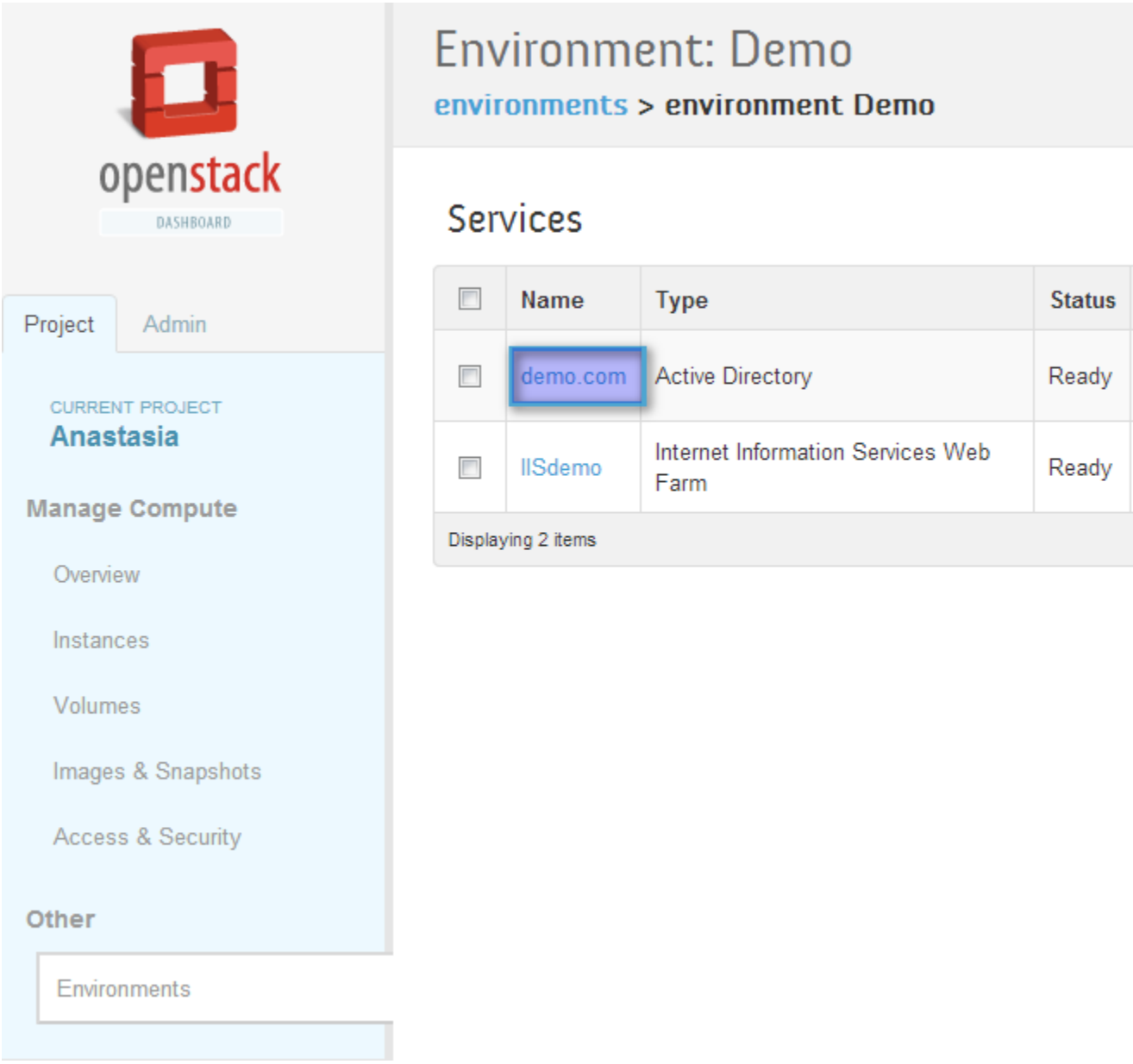
Deploying environment

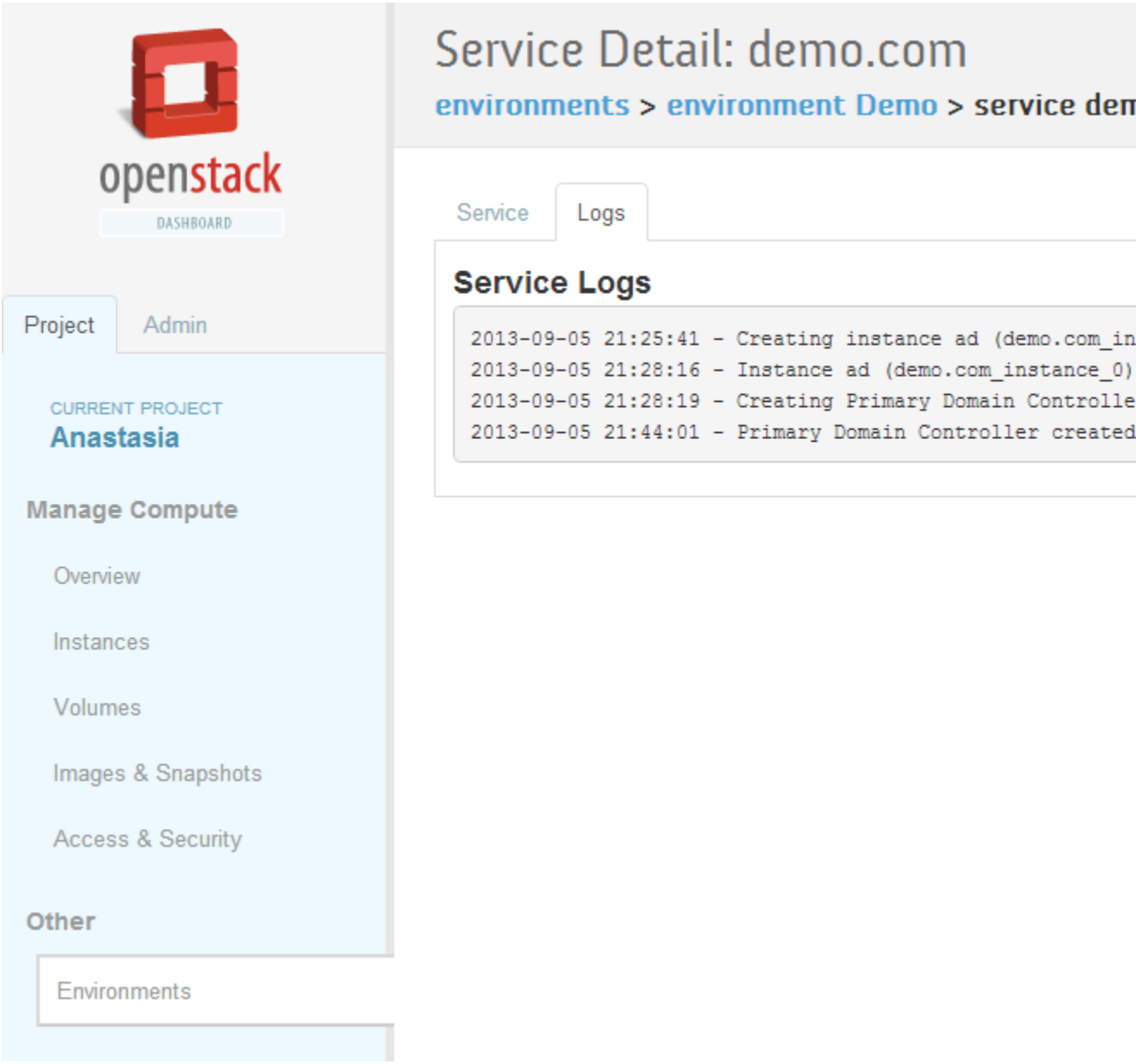
Once all services are prepared you can send environment to deploy and wait while Murano installing and configuring your services. Just press the "Deploy Environment" button.



You can monitor deploying process. Just go to the Log tab on service detailed page where you can get by clicking on the service name.



And now you can see installation progress.



Until installation finished environment are in deployng state.

Detailed information