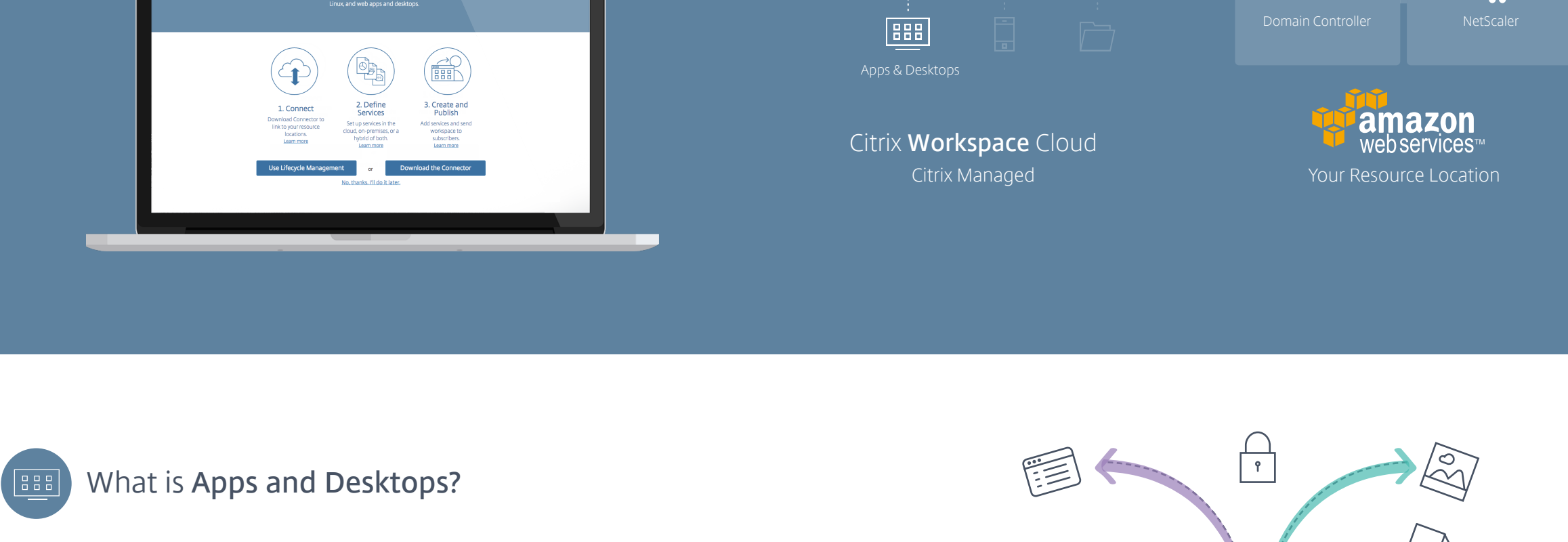


Setting up a Resource Location for Apps and Desktops with Citrix Lifecycle Management

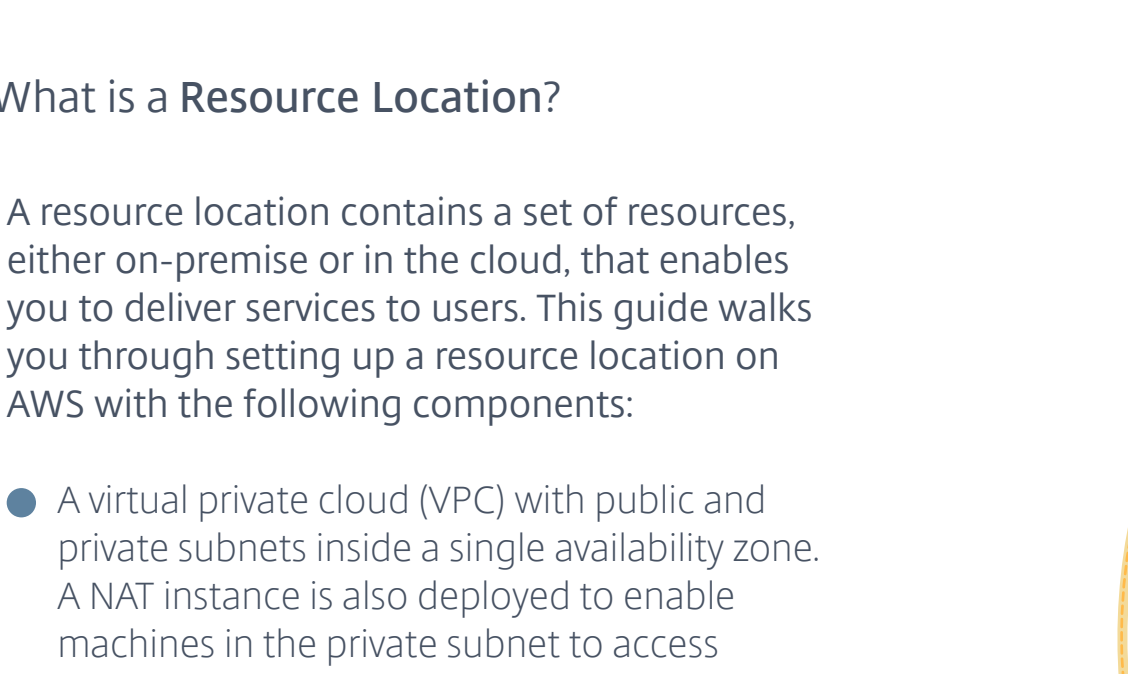
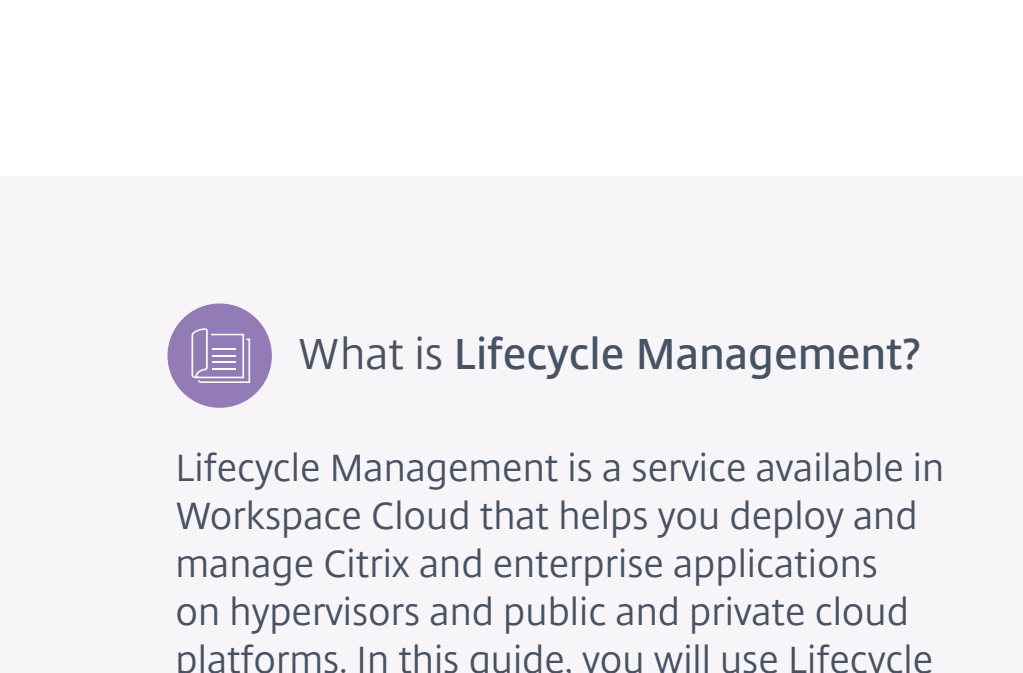
This guide helps you quickly set up resources on Amazon Web Services (AWS) that you can use with the Apps and Desktops service to deliver applications and desktops to your users.



What is Apps and Desktops?

Apps and Desktops is a service of Citrix Workspace Cloud that enables you to provide secure access to virtual Windows, Linux, and web applications and desktops.

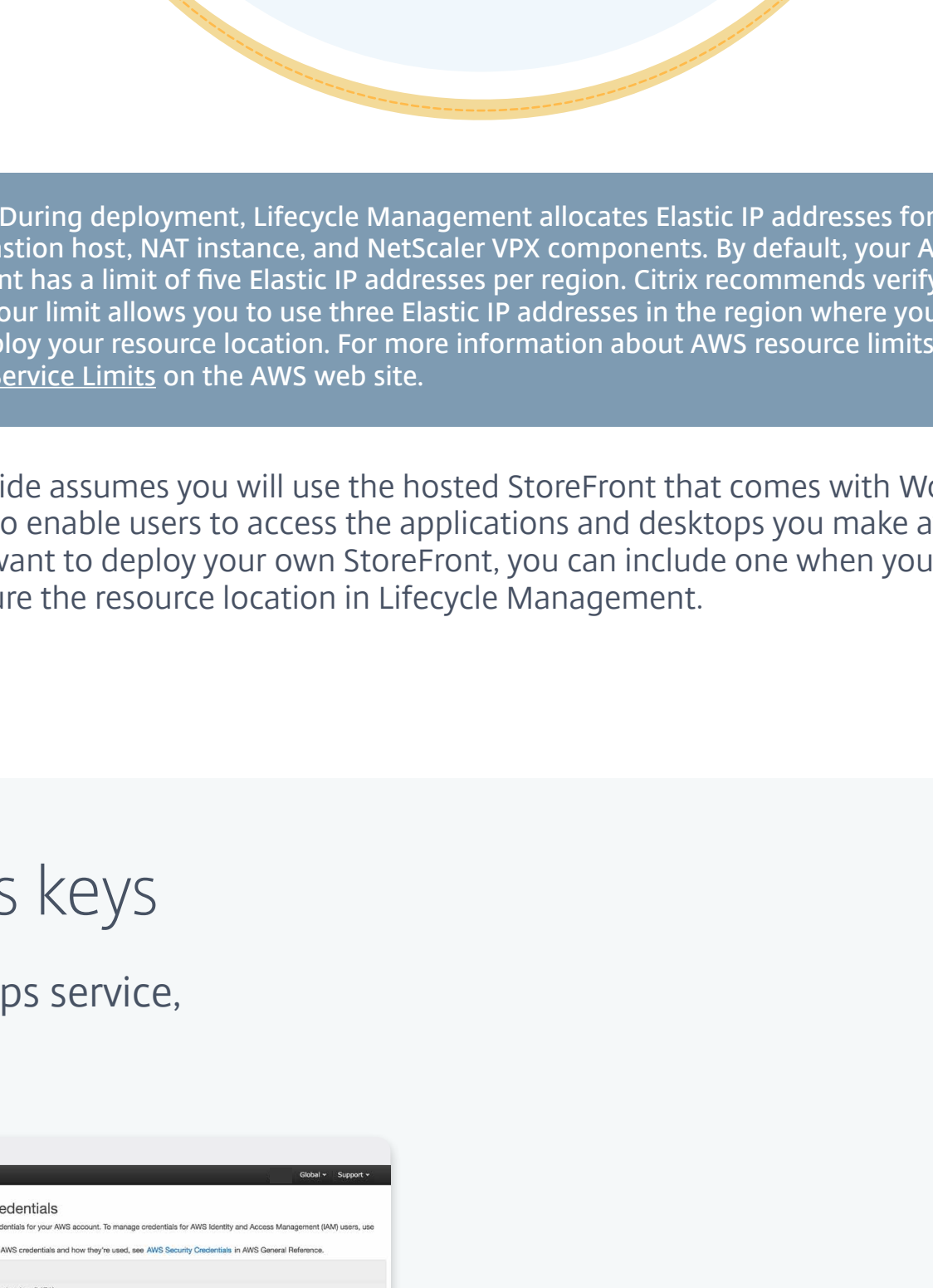
In this guide, you will deploy resources you can use with Apps and Desktops to provide applications and desktops to your users.



What is a Resource Location?

A resource location contains a set of resources, either on-premise or in the cloud, that enables you to deliver services to users. This guide walks you through setting up a resource location on AWS with the following components:

- A virtual private cloud (VPC) with public and private subnets inside a single availability zone. A NAT instance is also deployed to enable machines in the private subnet to access the Internet.
- An Active Directory domain controller, deployed to the private subnet of the VPC.
- Two servers with the Citrix Workspace Cloud Connector installed, deployed to the private subnet of the VPC and joined to the domain. These servers enable Workspace Cloud to communicate with your resource location.
- Two XenDesktop Server VDAs, deployed to the private subnet of the VPC and joined to the domain. These machines will host the applications and desktops you want to make available to users.
- A NetScaler VPX for securing access to the applications and desktops you deliver to users (AWS Marketplace subscription required).
- A bastion host, deployed to the public subnet of the VPC, for administering the machines in the private subnet using RDP.

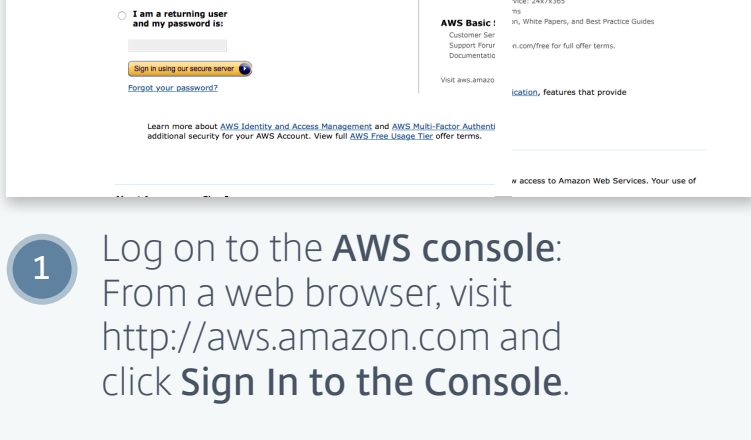


Note: During deployment, Lifecycle Management allocates Elastic IP addresses for the bastion host, NAT instance, and NetScaler VPX components. By default, your AWS account has a limit of five Elastic IP addresses per region. Citrix recommends verifying that your limit allows you to use three Elastic IP addresses in the region where you intend to deploy your resource location. For more information about AWS resource limits, see [AWS service limits](#) on the AWS web site.

This guide assumes you will use the hosted StoreFront that comes with Workspace Cloud to enable users to access the applications and desktops you make available. If you want to deploy your own StoreFront, you can include one when you configure the resource location in Lifecycle Management.

Prep Task 1 : Create AWS access keys

Before you can use AWS with the Apps and Desktops service, you need the following items:



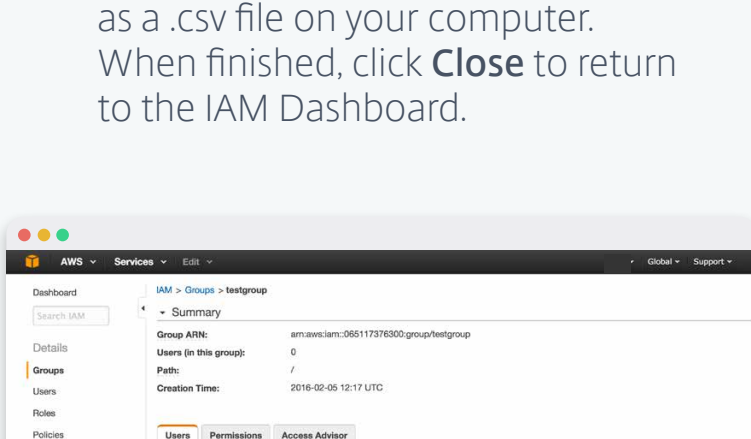
An Amazon.com account.

If you already have an Amazon.com account, you can use your credentials to log on to the AWS web site and complete this task. If you need a new account, you can sign up at <http://aws.amazon.com>.

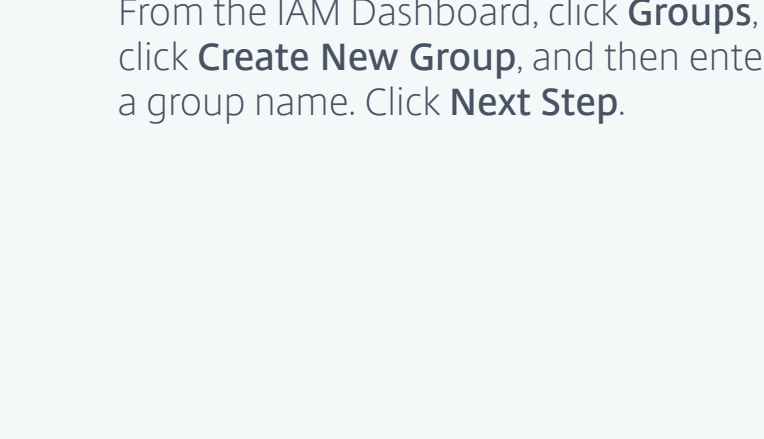


Access keys for your AWS account.

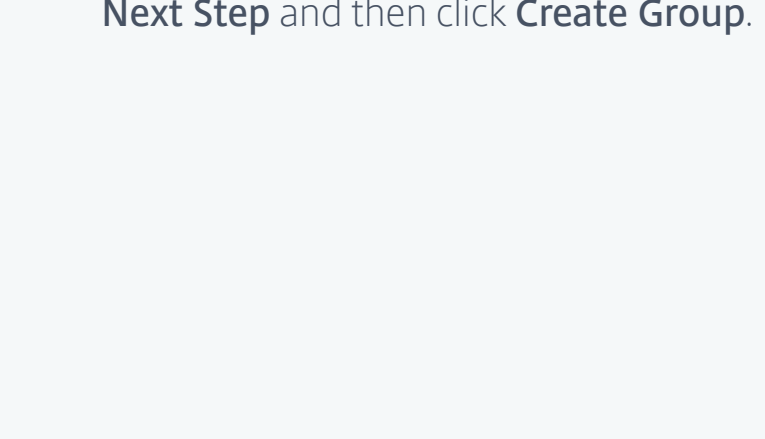
These keys allow Lifecycle Management to deploy VMs to AWS on your behalf. Afterward, you also use these keys to set up the Apps and Desktops service. As a security best practice, Citrix recommends using the access keys of a specific IAM user with Full Access permissions to Amazon EC2 and VPC functions.



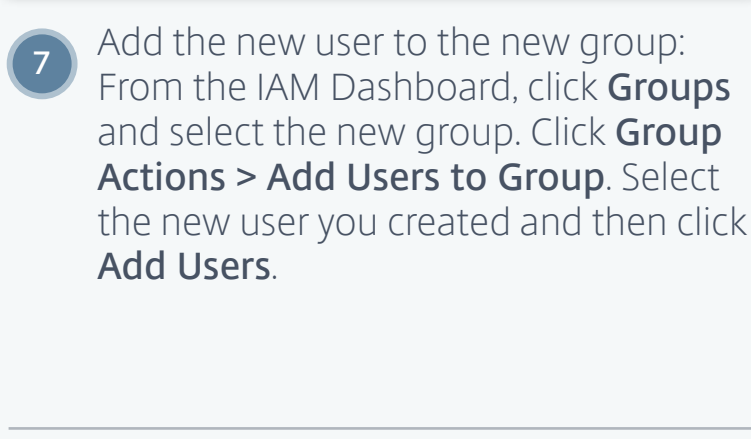
1 Log on to the AWS console. From a web browser, visit <http://aws.amazon.com> and click **Sign In to the Console**.



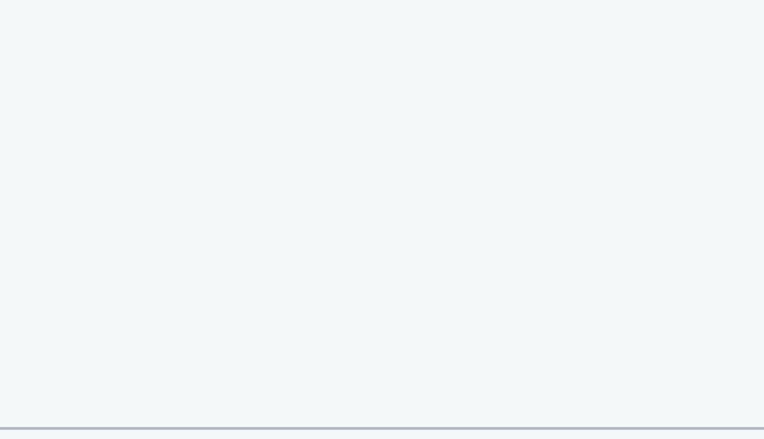
2 Under **Security & Identity**, click **Identity & Access Management**.



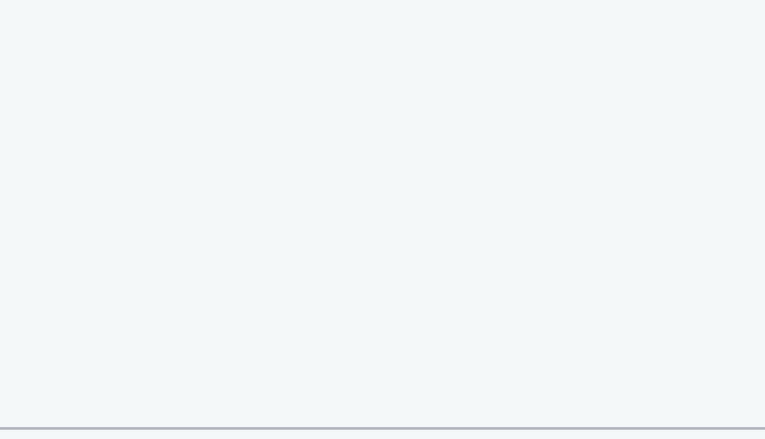
3 Create a new user. From the IAM dashboard, click **Users**, click **Create New Users**, and then enter a user name. Click **Create**.



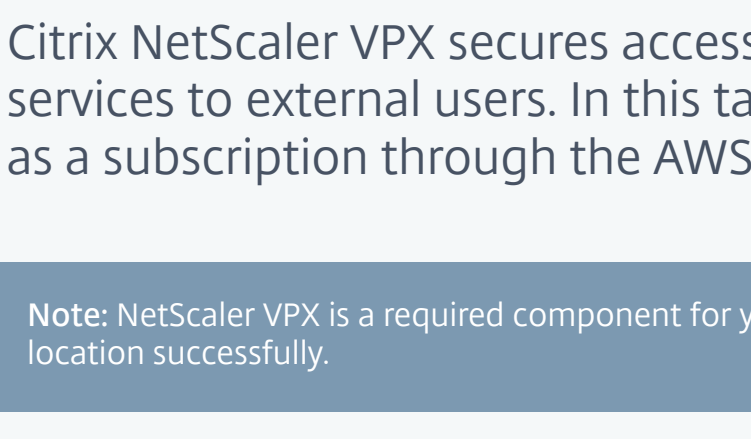
4 Click **Download Credentials** to save the access key for the IAM user you created as a .csv file on your computer. When finished, click **Close** to return to the IAM Dashboard.



5 Visit the **Citrix NetScaler VPX Platinum Edition – 10 Mbps** page on the AWS Marketplace web site.



6 Select the **AmazonEC2FullAccess** and **AmazonVPCFullAccess** policies. Click **Next Step** and then click **Create Group**.

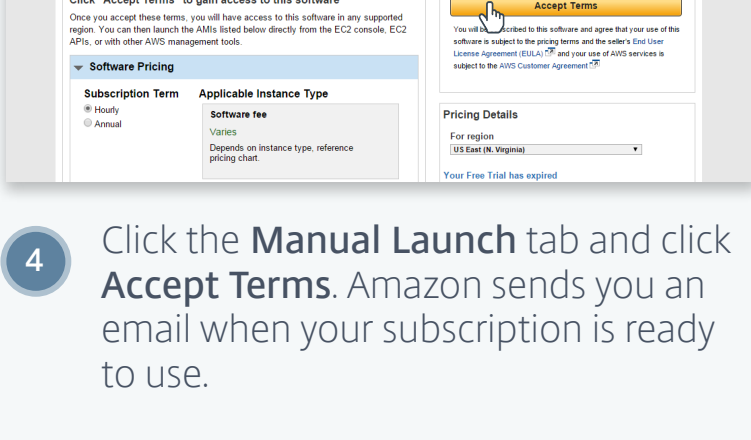


7 Add the new user to the new group. From the IAM Dashboard, click **Groups** and select the new group. Click **Group Actions > Add Users to Group**. Select the new user you created and then click **Add Users**.

Prep Task 2 : Subscribe to NetScaler VPX

Citrix NetScaler VPX secures access to your resource location so you can deliver services to external users. In this task, you will add NetScaler VPX to your AWS account as a subscription through the AWS Marketplace.

Note: NetScaler VPX is a required component for your resource location. If you do not perform this task, Lifecycle Management cannot deploy your resource location successfully.



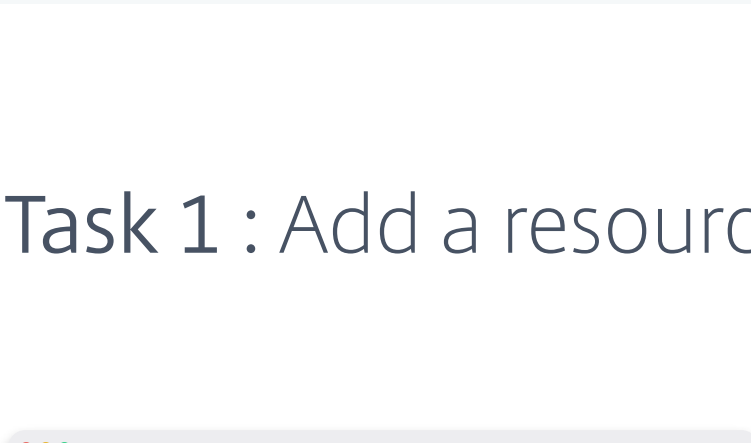
1 Log on to the AWS management console and visit <http://aws.amazon.com/marketplace>.



2 Visit the **Citrix NetScaler VPX Platinum Edition – 10 Mbps** page on the AWS Marketplace web site.

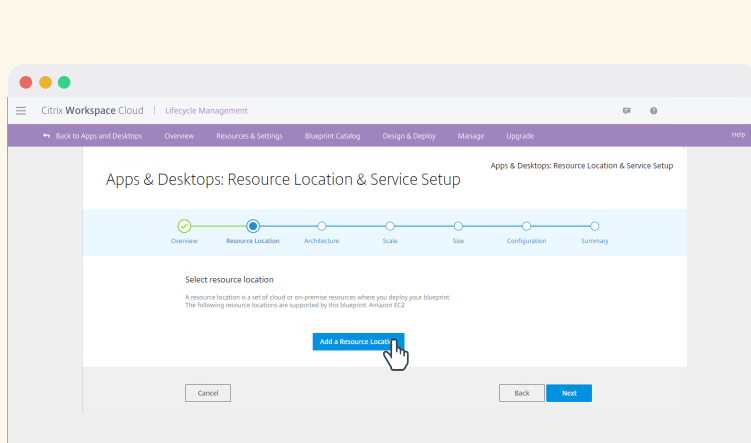


3 On the NetScaler VPX details page, click **Continue**. The Launch on EC2 page appears.

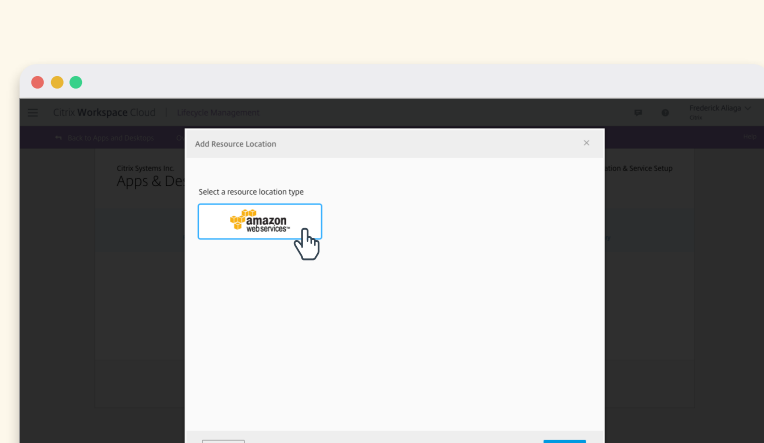


4 Click the **Manual Launch** tab and click **Accept Terms**. Amazon sends you an email when your subscription is ready to use.

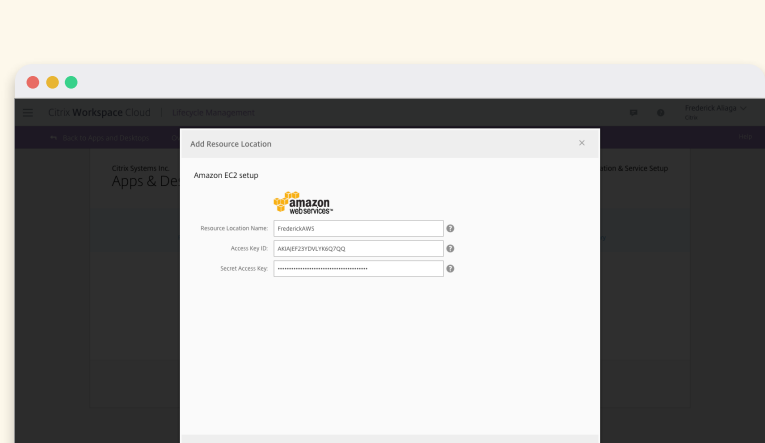
Task 1 : Add a resource location



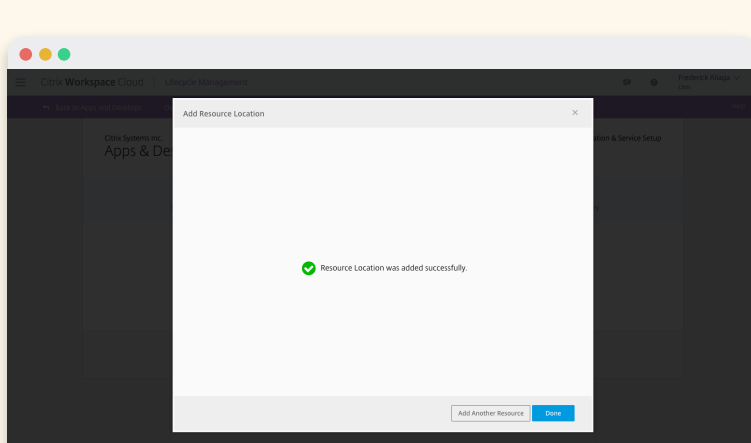
1 Log on to the Citrix Workspace Cloud web site and then, from the **Control Center**, click **Get Started** for the Apps and Desktops service.



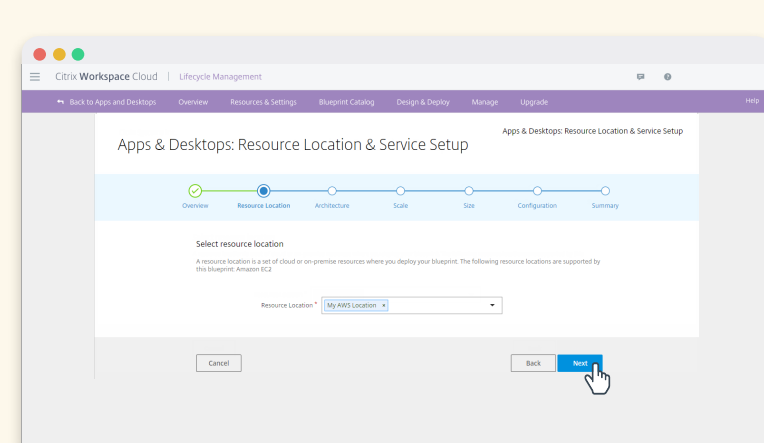
2 From the Apps and Desktops home page, click **Use Lifecycle Management**. Apps and Desktops directs you to Lifecycle Management so you can configure your resource location. This might take a few minutes to complete.



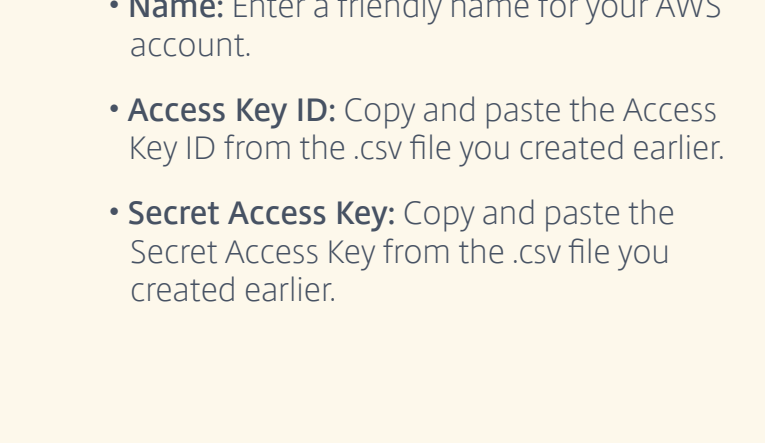
3 On the **Overview** page, enter a deployment name and then click **Next**. The default name is **Apps and Desktops: Resource Location Setup**.



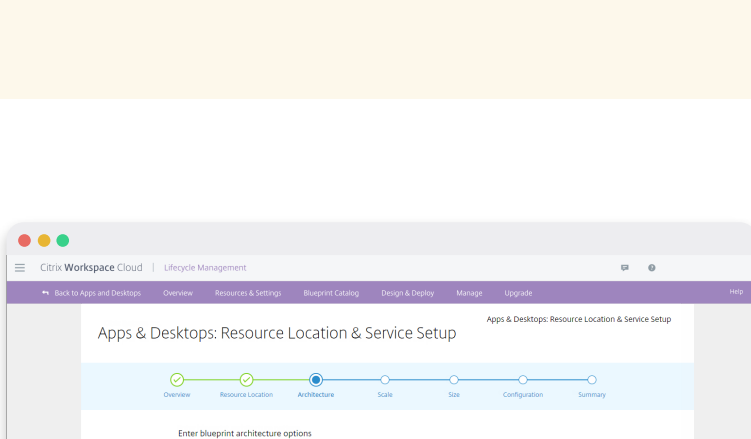
4 On the **Resource Location** page, specify your AWS account details.



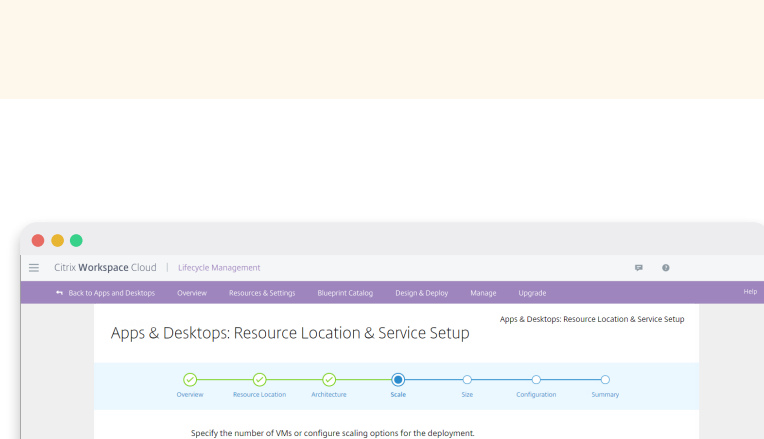
5 Select **Amazon Web Services** and then click **Next**.



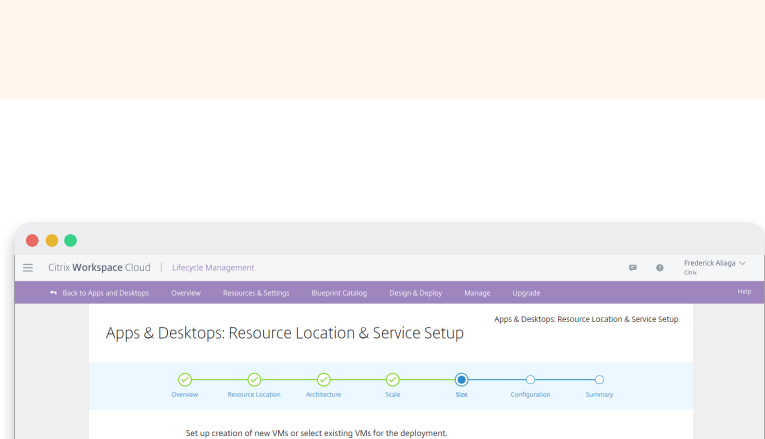
6 On the **Amazon EC2 setup** page, enter the following details:



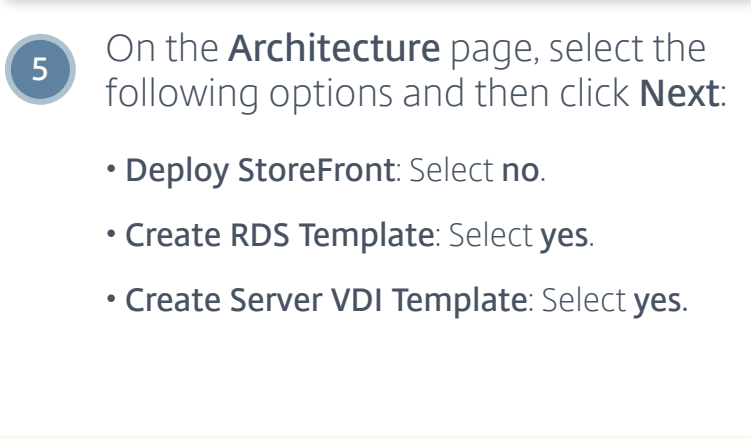
7 Click **Add**. Lifecycle Management verifies the details you provided.



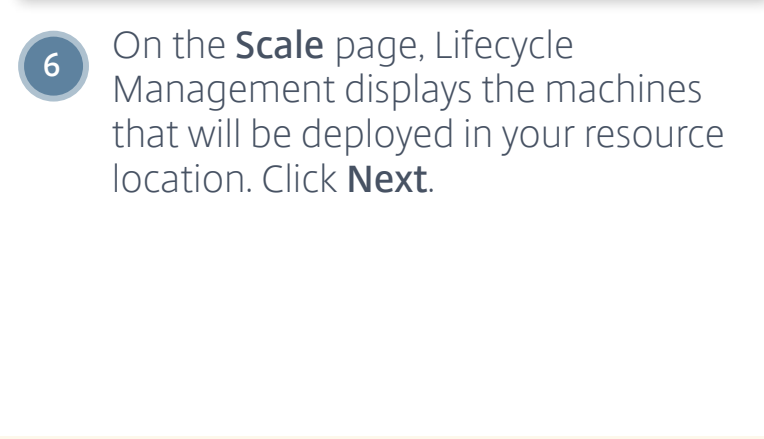
8 Click **Done**. Lifecycle Management returns you to the deployment configuration. Click **Next** to continue.



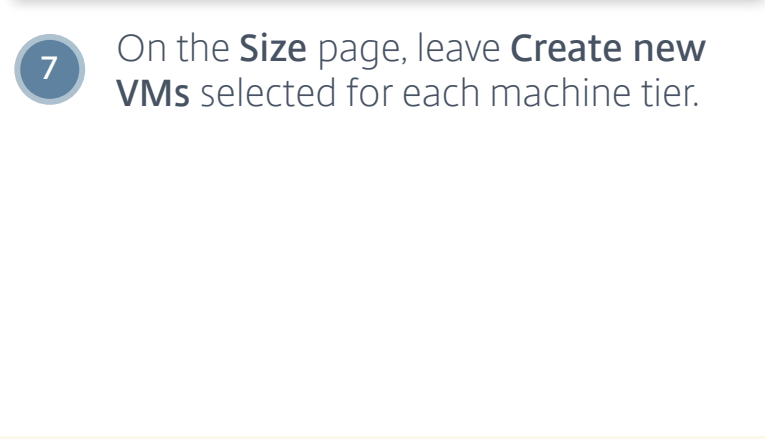
9 On the **Amazon EC2 setup** page, enter the following details:



10 On the **Architecture** page, then click **Next**.

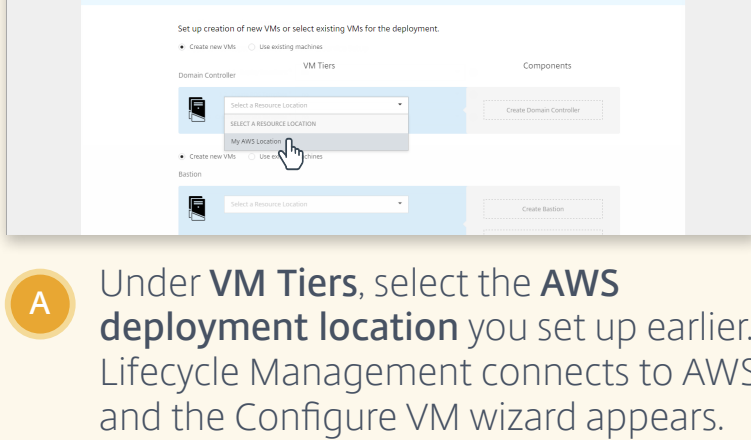


11 On the **Scale** page, Lifecycle Management displays the machines that will be deployed in your resource location. Click **Next**.

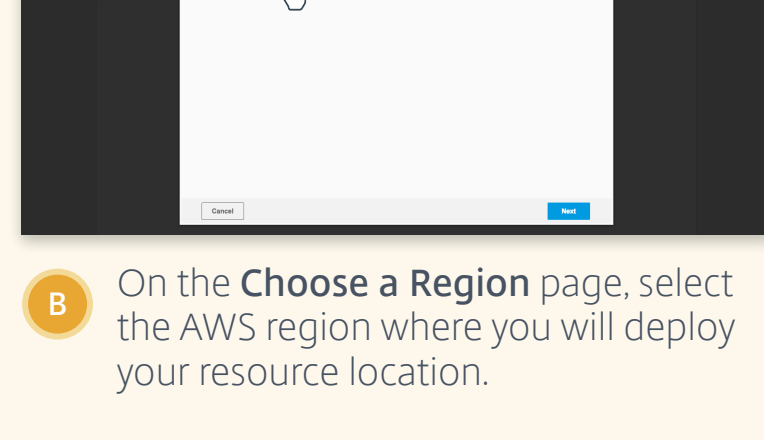


12 On the **Size** page, leave **Create new VMs** selected for each machine tier.

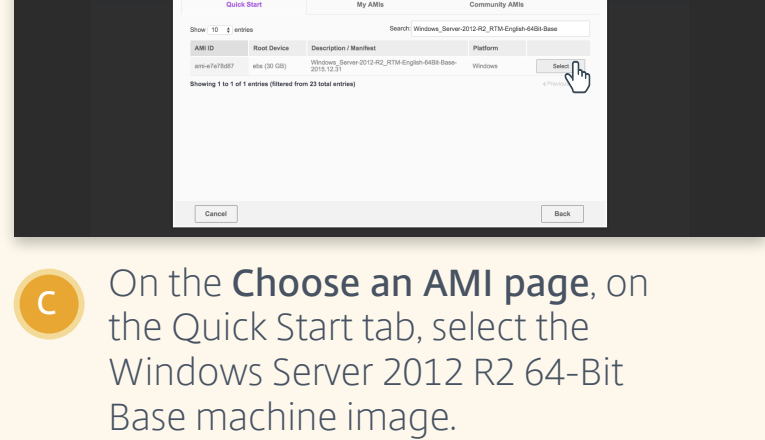
13 For the **Domain Controller** machine tier, perform the following actions:



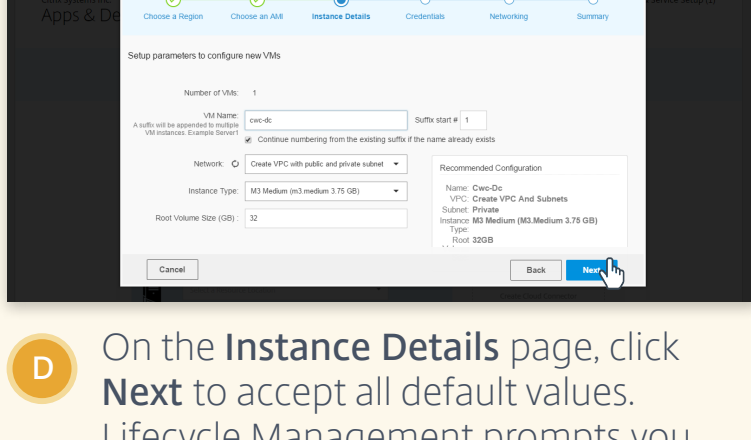
14 Under **VM Tiers**, select the **AWS deployment location** you set up earlier. Lifecycle Management connects to AWS and the Configure VM wizard appears.



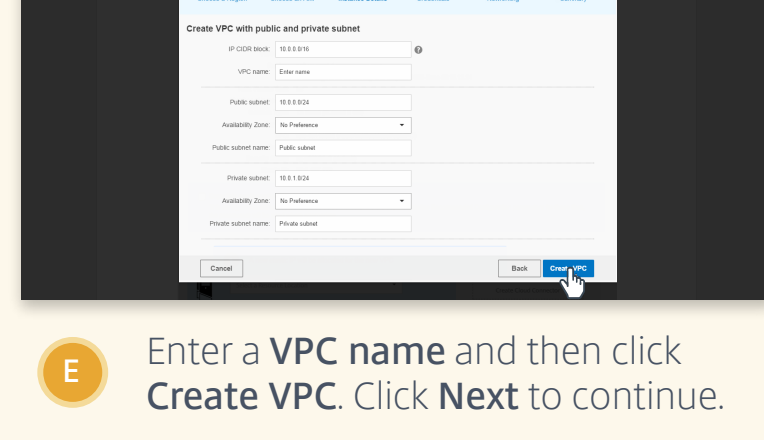
15 On the **Choose a Region** page, select the AWS region where you will deploy your resource location.



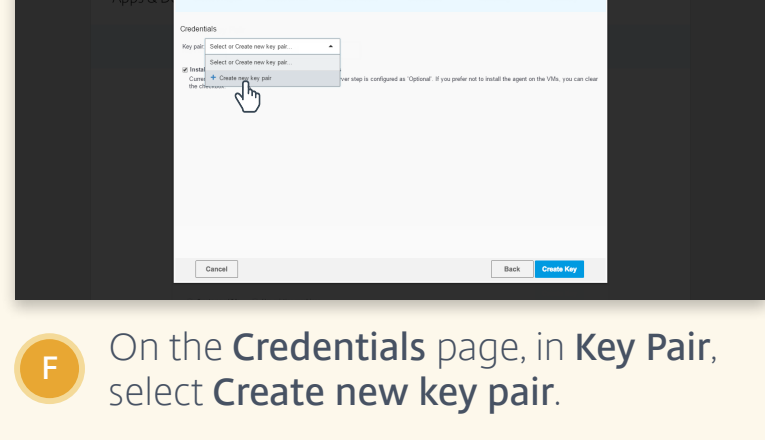
16 On the **Choose an AMI** page, on the **Quick Start** tab, select the **Windows Server 2012 R2 64-Bit Base machine image**.



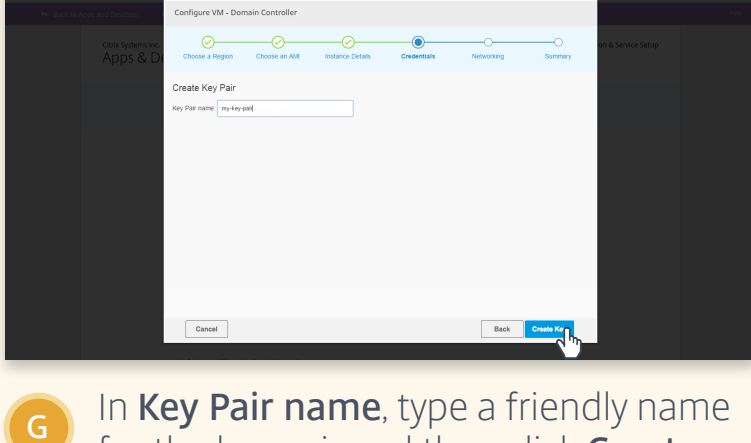
17 On the **Instance Details** page, click **Next** to accept all default values. Lifecycle Management prompts you to create a new VPC.



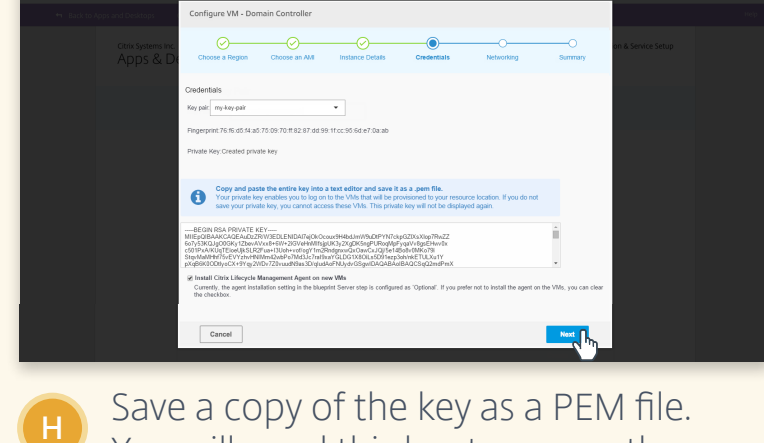
18 Enter a **VPC name** and then click **Create VPC**. Click **Next** to continue.



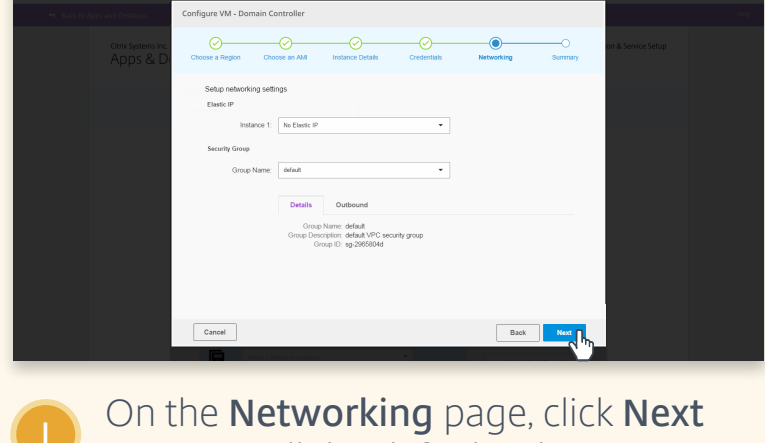
19 On the **Credentials** page, in **Key Pair**, select **Create new key pair**.



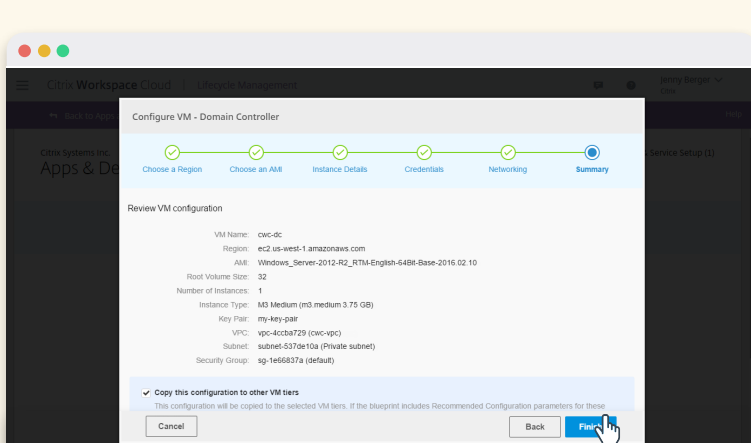
20 In **Key Pair name**, type a friendly name for the key pair and then click **Create**. Lifecycle Management creates the key file and displays it.



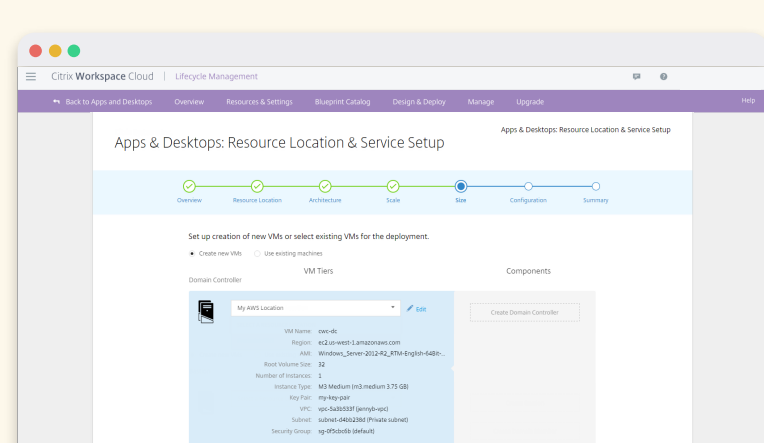
21 Save a copy of the key as a PEM file. You will need this key to access the machines in your resource location. Lifecycle Management will not display the key again. Click **Next**.



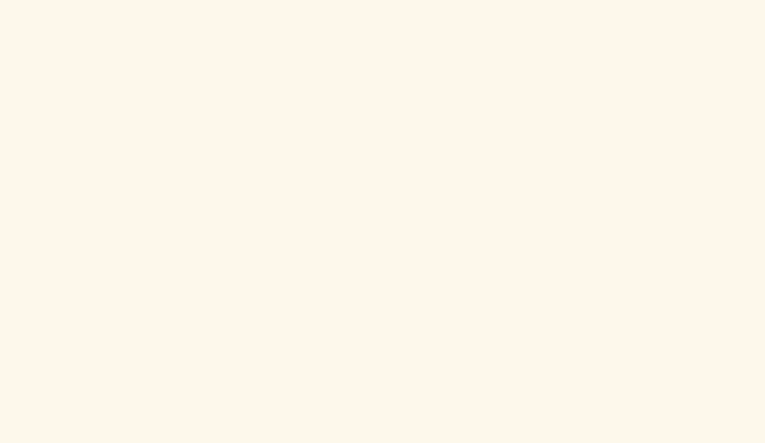
22 On the **Networking** page, click **Next** to accept all the default values.



23 On the **Summary** page, leave **Copy this configuration to other VM tiers** selected. This allows Lifecycle Management to copy the VM settings for the Domain Controller to the other machines that Lifecycle Management will provision. Click **Finish**.

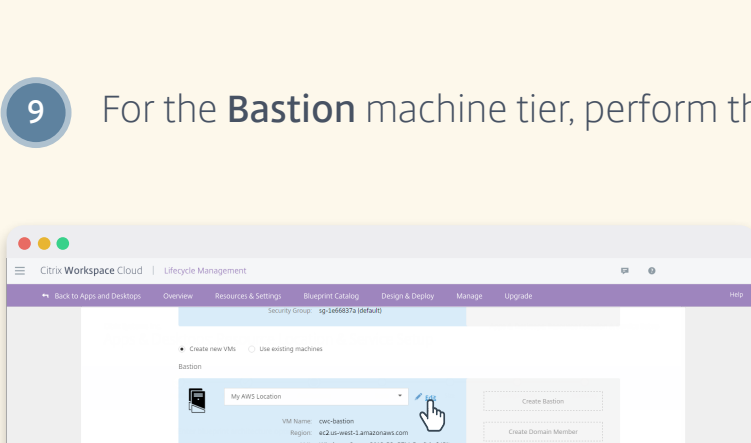


24 Lifecycle Management returns you to the **Size** page.

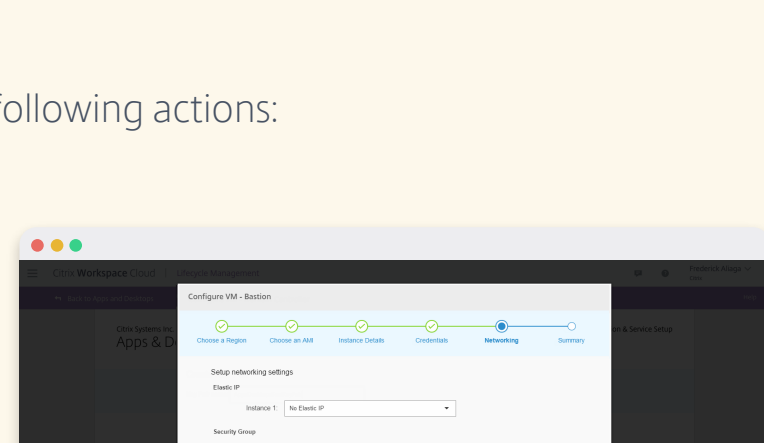


25 On the **Summary** page, click **Finish** to save your settings and return to the **Size** page.

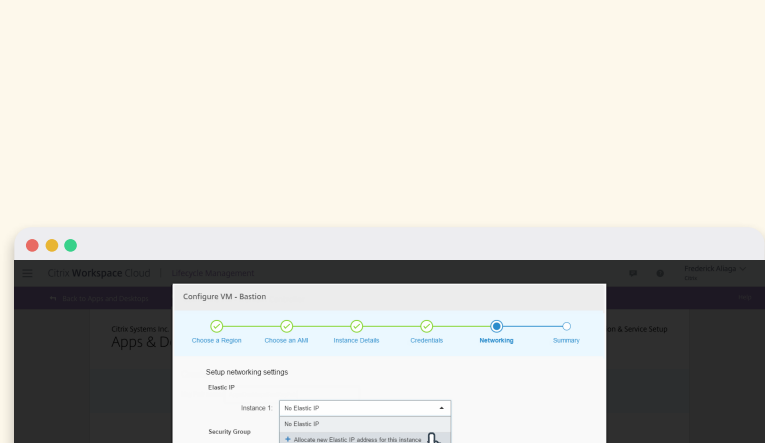
26 For the **Bastion** machine tier, perform the following actions:



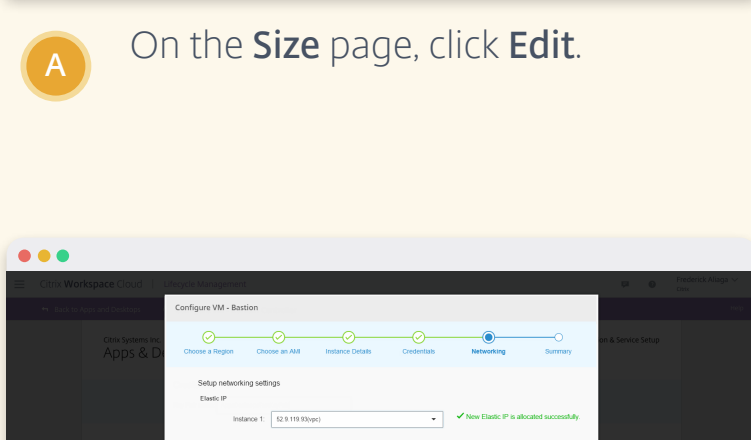
27 On the **Size** page, click **Edit**.



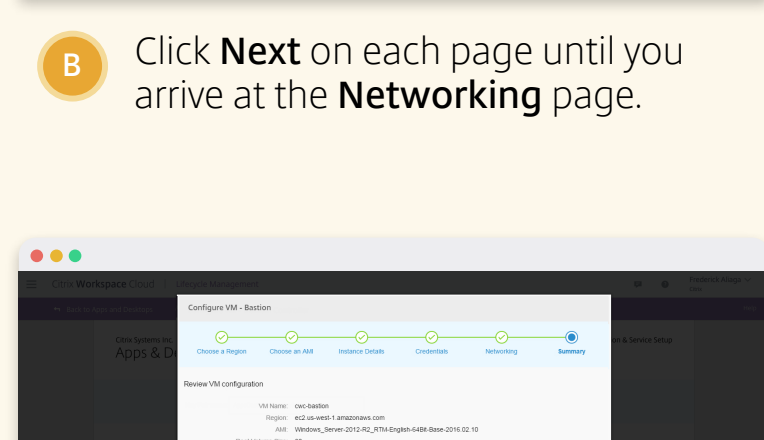
28 Click **Next** on each page until you arrive at the **Networking** page.



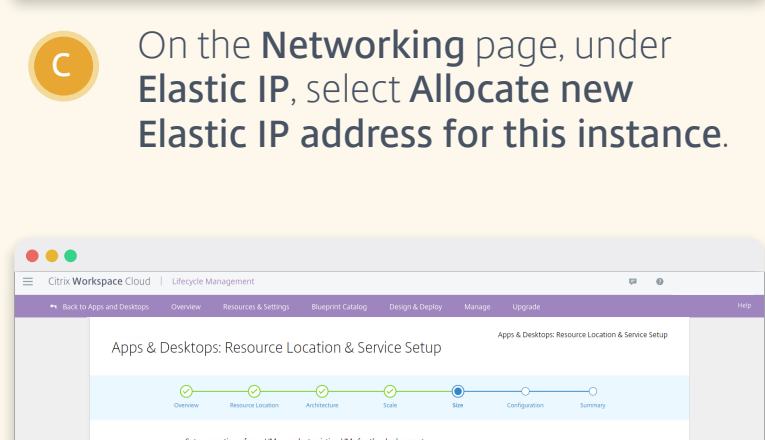
29 On the **Networking** page, under **Elastic IP**, select **Allocate new Elastic IP address** for this instance.



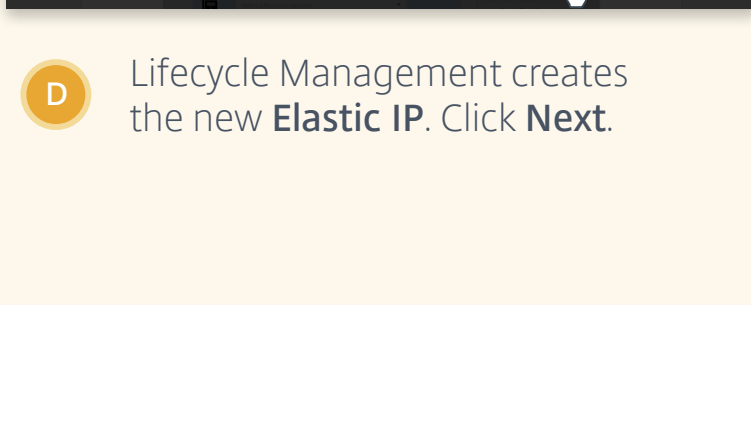
30 Lifecycle Management creates the new **Elastic IP**. Click **Next**.



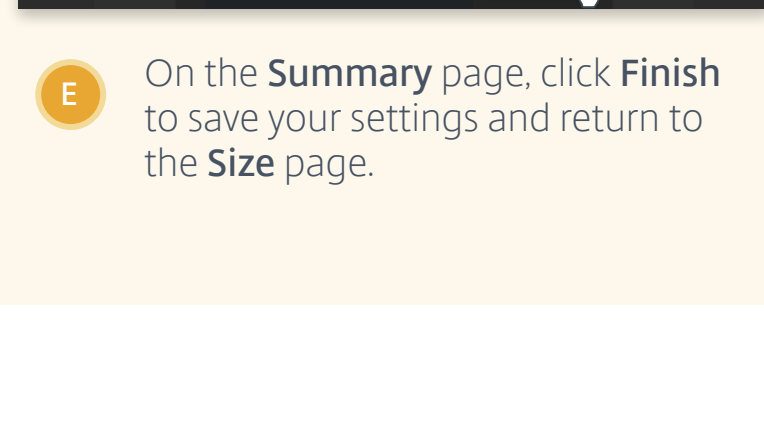
31 On the **Summary** page, click **Finish** to save your settings and return to the **Size** page.



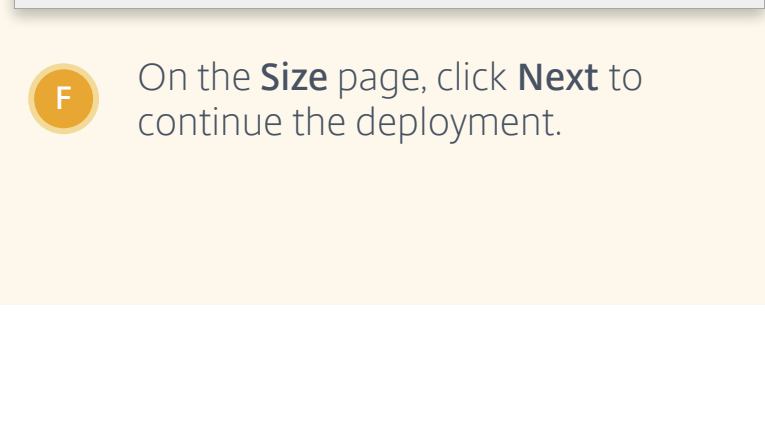
32 On the **Size** page, click **Next** to continue the deployment.



33 On the **Configuration** page, enter the following values and then click **Next**.



34 On the **Summary** page, click **Deploy**.



35 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.

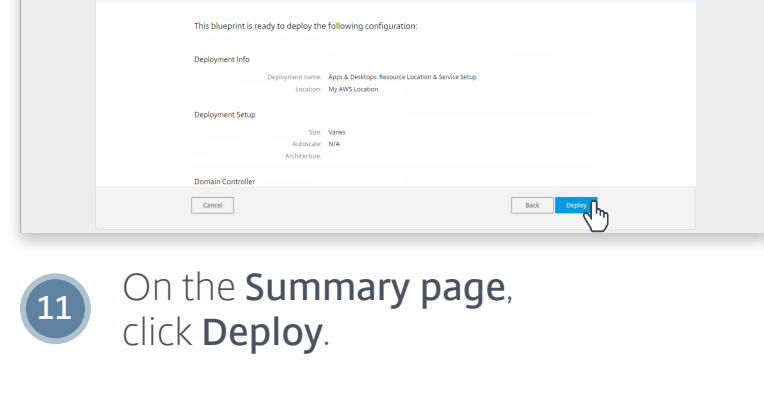
36 On the **Configuration** page, enter the following values and then click **Next**.

• In **DomainName**, enter a fully-qualified domain name for your deployment. Example: **MyNewDomain.local**.

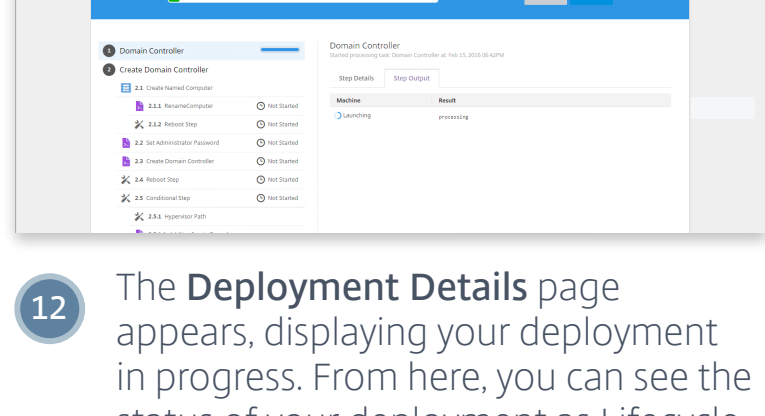
• In **AdministratorPassword**, enter a password for the domain administrator.

• In **SafeModePassword**, enter a password for Windows Safe Mode.

• In **Test User Password**, enter a password to assign to the test users that Lifecycle Management will create.



37 On the **Summary** page, click **Deploy**.



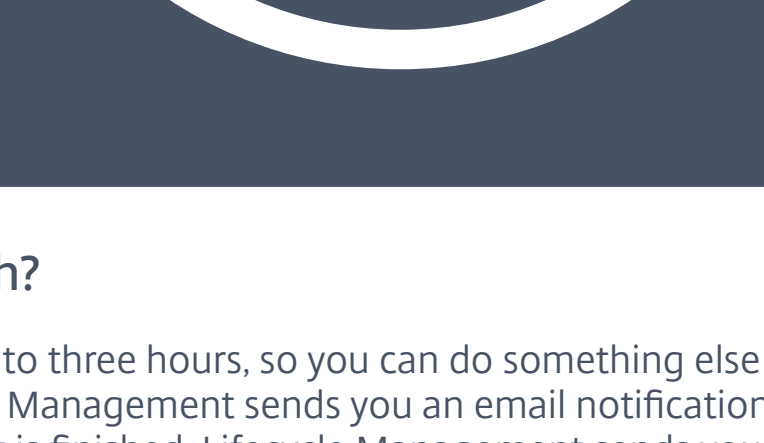
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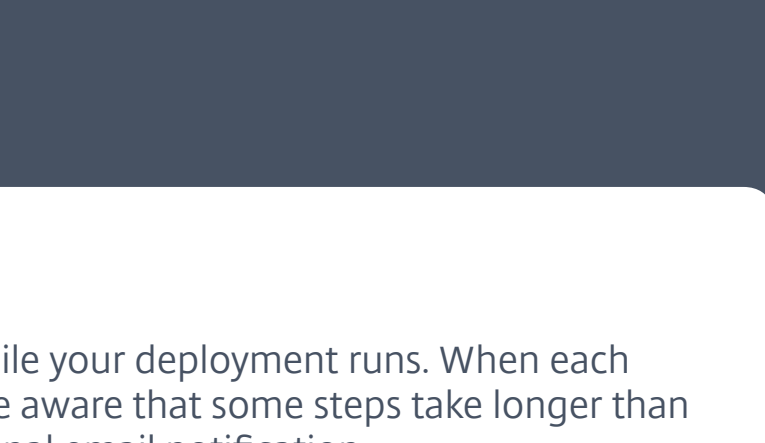
39 On the **Summary** page, click **Deploy**.



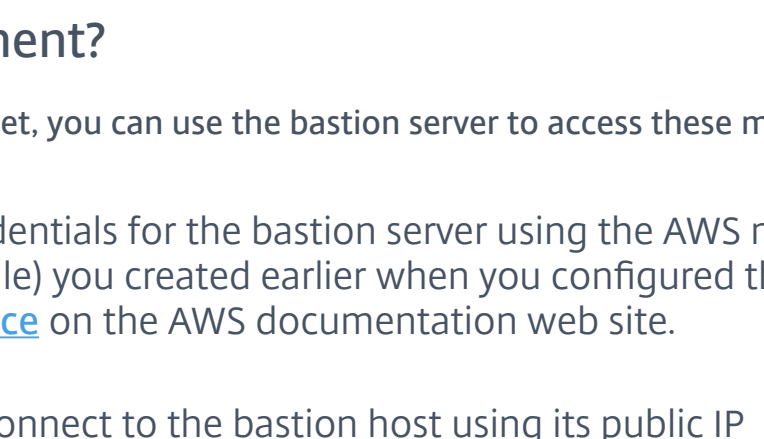
40 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.



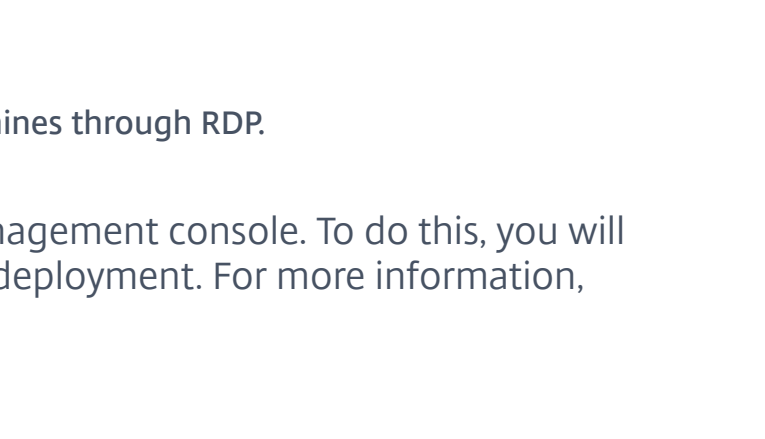
41 On the **Summary** page, click **Deploy**.



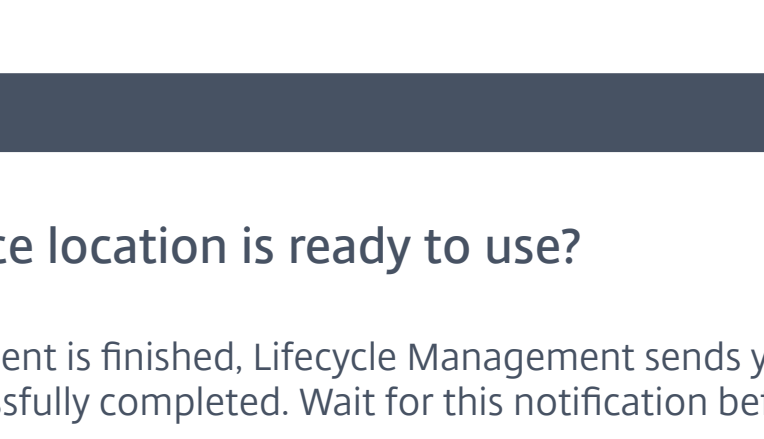
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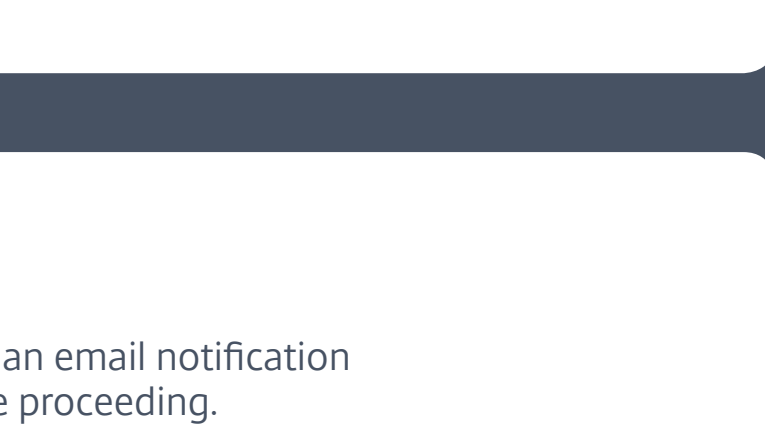
43 On the **Summary** page, click **Deploy**.



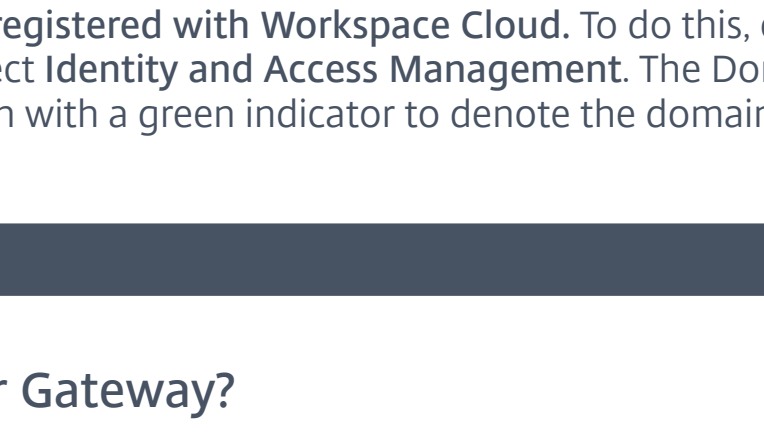
44 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.



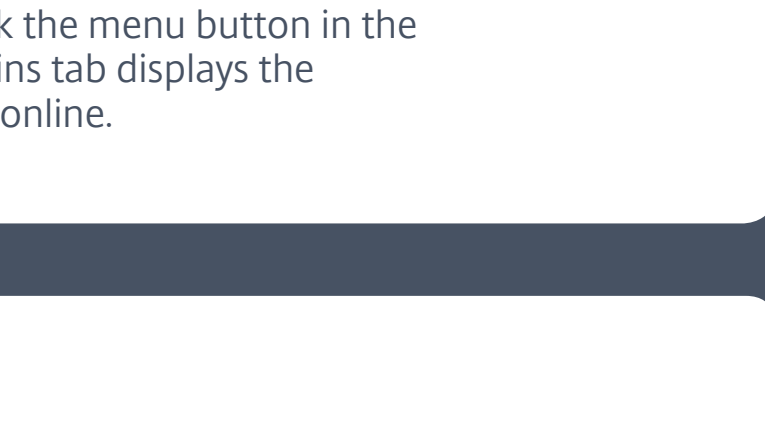
45 On the **Summary** page, click **Deploy**.



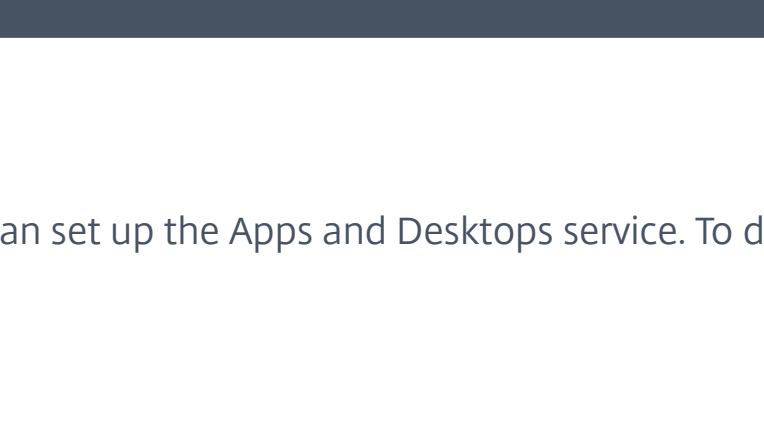
46 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.



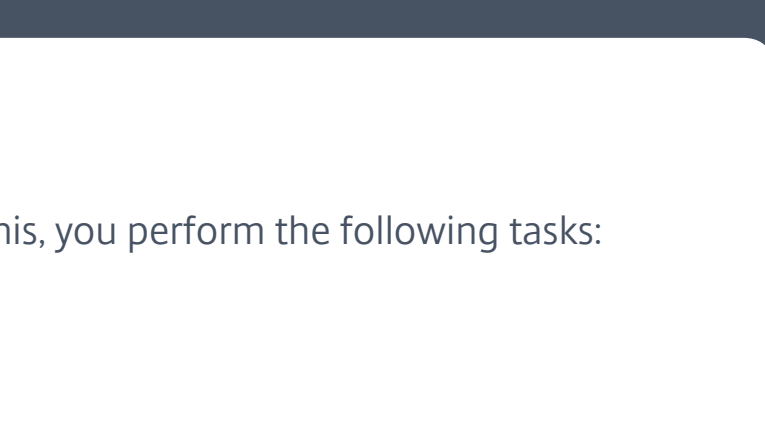
47 On the **Summary** page, click **Deploy**.



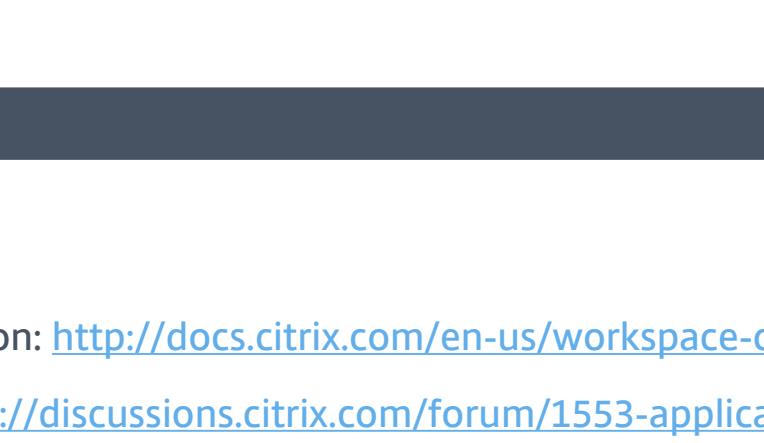
48 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.



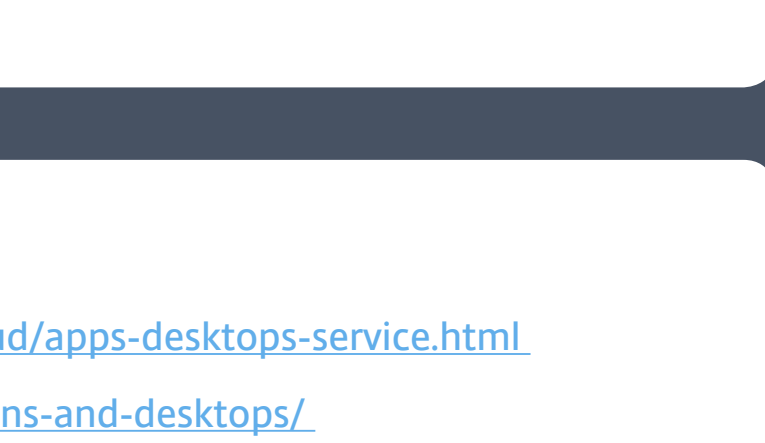
49 On the **Summary** page, click **Deploy**.



50 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.



51 On the **Summary** page, click **Deploy**.



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74 The **Deployment Details** page appears, displaying your deployment in progress. From here, you can see the status of your deployment as Lifecycle Management executes each step.

75 On the **Summary** page, click **Deploy**.

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