Amazon WorkSpaces: AutoCAD Deployment Guide

Build an Amazon WorkSpaces environment to host AutoCAD or AutoCAD LTE for your users

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https://aws.amazon.com/workspaces/
Before You Begin

- You must have an AWS account to create or administer a WorkSpace. Users do not need an AWS account to connect to and use their WorkSpaces. For information about how to sign up for and activate an AWS account, see Appendix A.

- When you launch a WorkSpace, you must select a **GPU-enabled** WorkSpace bundle to be able to run AutoCAD. For more information, see GPU-enabled Bundles.

- When you launch a WorkSpace, you must specify profile information for the user, including a username and email address. Users complete their profiles by specifying a password. Information about WorkSpaces and users is stored in a directory.

- Amazon WorkSpaces is available in most AWS Regions. Verify the supported regions and select a region for your WorkSpaces. For more information about the supported regions, see AWS Region Table.

- AutoCAD Subscribers with Single User Subscription (SUS) license as well as Enterprise Business Agreement (EBA) licenses are eligible to use AutoCAD in a virtual environment. For more information, please reference the Autodesk Virtualization Policy.

- The hardware and software requirements for AutoCAD are available on the Autodesk website. While users are free to choose their WorkSpaces bundle, you may find best results with the Graphics or GraphicsPro bundle based on your performance needs. Pricing for WorkSpaces Bundles can be found here.

- Note on Product Support: Autodesk is not obligated to provide support services for support requests where the reported incident cannot be reproduced by Autodesk on a physical machine, outside of any virtualization environment. If you experience difficulties with AutoCAD in a virtual environment, please attempt to re-produce the issue on a physical device before creating a support request with Autodesk.
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Step 1: Launch the WorkSpace

Using Quick Setup, you can launch your first WorkSpace in minutes.

To launch a WorkSpace

1. Open the Amazon WorkSpaces console at https://console.aws.amazon.com/workspaces/.
2. Choose Get Started Now.
3. On the Get Started with Amazon WorkSpaces page, next to Quick Setup, choose Launch.

4. For Bundles, select a bundle for the user. (The GraphicsPro bundle is suggested for AutoCAD, however users may choose other bundles based on performance needs)
5. For **Enter User Details**, complete **Username**, **First Name**, **Last Name**, and **Email**.

<table>
<thead>
<tr>
<th>Bundle</th>
<th>CPU</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value with Amazon Linux 2</td>
<td>1 vCPU</td>
<td>2 GiB</td>
</tr>
<tr>
<td>Standard with Amazon Linux 2</td>
<td><strong>Free tier eligible</strong></td>
<td>2 vCPU</td>
</tr>
<tr>
<td>Performance with Amazon Linux 2</td>
<td>2 vCPU</td>
<td>7.5 GiB</td>
</tr>
<tr>
<td>Power with Amazon Linux 2</td>
<td>4 vCPU</td>
<td>16 GiB</td>
</tr>
<tr>
<td>Standard with Windows 7</td>
<td><strong>Free tier eligible</strong></td>
<td>2 vCPU</td>
</tr>
<tr>
<td>Standard with Windows 10</td>
<td><strong>Free tier eligible</strong></td>
<td>2 vCPU</td>
</tr>
<tr>
<td>Standard with Windows 7 and Office 2010</td>
<td>2 vCPU</td>
<td>4 GiB</td>
</tr>
<tr>
<td>Standard with Windows 7 and Office 2013</td>
<td>2 vCPU</td>
<td>4 GiB</td>
</tr>
</tbody>
</table>

6. Choose **Launch WorkSpaces**.

7. On the confirmation page, choose **View the WorkSpaces Console**. The initial status of the WorkSpace is “PENDING”. When the launch is complete, the status is “AVAILABLE” and an invitation is sent to the email address that you specified for the user.

**Quick Setup**

Quick Setup completes the following tasks on your behalf:

- Creates an IAM role to allow the Amazon WorkSpaces service to create elastic network interfaces and list your Amazon WorkSpaces directories. This role has the name `workspaces_DefaultRole`.
- Creates a virtual private cloud (VPC).
- Sets up a Simple AD directory in the VPC that is used to store user and WorkSpace information. The directory has an administrator account and it is enabled for Amazon WorkDocs.
- Creates the specified user accounts and adds them to the directory.
• Creates WorkSpace instances. Each WorkSpace receives a public IP address to provide Internet access. The running mode is **AlwaysOn**. For more information, see [Manage the WorkSpace Running Mode](#).

• Sends invitation emails to the specified users.

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**Step 2: Connect to the WorkSpace**

Users will receive a welcome email with instructions to set up a WorkSpaces account, set up a Workspaces client, and get started with their virtual desktop. Users will need to download the [Amazon WorkSpaces client application](#) to access their WorkSpaces.

**Note**

When you are connected to your WorkSpace from a Windows or MacOS client, you can toggle the **fullscreen** display by using following command shortcuts:

- Windows client: **Ctrl+Alt+Enter**
- MacOS client: **Control+Option+Return**

**To connect to the WorkSpace**

1. If you haven't set up credentials for the user already, open the link in the invitation email and follow the directions. Remember the password that you specify as you will need it to connect to your WorkSpace.

   Note that passwords are case-sensitive and must be between 8 and 64 characters in length, inclusive. Passwords must contain at least one character from three of the following categories: lowercase letters (a-z), uppercase letters (A-Z), numbers (0-9), and the set ~!@#$%^&*_+-=\|(){}[]:;"'<>,.?/.
2. When prompted, download one of the client applications or launch Web Access. For more information about the requirements for each client, see Amazon WorkSpaces Clients in the Amazon WorkSpaces User Guide.

If you aren't prompted and you haven't installed a client application already, open https://clients.amazonworkspaces.com and follow the directions.

3. Start the client, enter the registration code from the invitation email, and choose Register.

4. When prompted to sign in, type the username and password, and then choose Sign In.
5. (Optional) When prompted to save your credentials, choose Yes.

**Step 3: Install AutoCAD**

**Install AutoCAD**

1. From a browser within your WorkSpace, navigate to the Autodesk Accounts portal. Choosing the “Install Now” option will enable the fastest install. Be sure to accept any pop-ups from the browser to enable the AutoCAD installation to begin.

2. Choose to accept the licensing terms and conditions and click **Next**.
3. The install will complete, and AutoCAD will launch in your WorkSpace. Sign in and begin using AutoCAD in your virtual environment.

Appendix A: Create and activate an AWS account

If you do not already have an AWS account, complete the following steps to create and activate one. During this process, you do the following:

- Create your AWS account.
- Add a payment method.
- Verify your phone number.
- Select an AWS Support plan.
- Watch for three account confirmation emails.

Create your AWS account

1. In a browser window, open the Amazon Web Services webpage.
2. Choose Create an AWS Account. If you’ve signed in to AWS recently, you might see Sign In to the Console instead. If Create a new AWS account isn’t visible, choose Sign in to a different account, Create a new AWS account.
3. On the Create an AWS Account page, type a valid email address, a password and password confirmation, and an AWS account name.
4. You must note the account name, email address, and password that you choose for your AWS account because you need these credentials to sign in to AWS.
5. Choose Continue.
6. On the Contact Information page, the option to choose a company account or personal account is available. These two account types function identically. For the exercises in this guide, choose Personal Account, and then enter the requested contact information.
7. Review the AWS Customer Agreement and select the corresponding check box.
8. Choose Create Account and Continue.

Note: After you receive an email to confirm that your account is created, you can sign in to your new account by using the email address and password that you provided. However, you must continue with the activation process before you can use AWS services.
Add a payment method

On the Payment Information page, type the requested information associated with your payment method. If the address for your payment method is the same as the address you provided for your account, choose Secure Submit. Otherwise, choose Use a new address, type the billing address for your payment method, and then choose Secure Submit.

Verify your phone number

1. On the Phone Verification page, type a phone number that you can use to accept incoming calls.
2. Type the code displayed in the captcha.
3. When you’re ready to receive the call, choose Call me Now. In a few moments, you’ll receive an automated call from AWS that prompts you to enter your PIN to validate the AWS account.
4. When you receive the call, enter the provided PIN on your phone’s keypad.
5. After the process is complete, choose Continue.

Choose an AWS Support plan

On the Select a Support Plan page, choose Basic. For information about AWS Support, see AWS Support Features.

After you choose a Support plan, a confirmation page indicates that your AWS account is being activated. Accounts are usually activated within a few minutes, but the process may take up to 24 hours. If you attempt to sign in to the AWS Management Console before your account is active, the following message appears:

Your service sign-up is almost complete!

Thanks for signing up with Amazon Web Services. Your services may take up to 24 hours to fully activate. If you’re unable to access AWS services after that time, here are a few things you can do to expedite the process:

1. Make sure you provided all necessary information during signup. Complete your AWS registration.
2. Check your email to see if you have received any requests for additional information. If you have, please respond to those emails with the information requested.
3. Verify your credit card information is correct. Also, check your credit card activity to see if there’s a $1 authorization (this is not a charge). You may need to contact your card issuer to approve the authorization.

If the problem persists, please contact Support:
Watch for three AWS account confirmation emails

When you sign up for your account, you receive three account confirmation emails:

- The first email, with a subject line of “Welcome to Amazon Web Services,” confirms the creation of your AWS account and is sent almost immediately after you verify your phone number.
- The second email, with a subject line of “AWS Support (Basic) Sign-Up Confirmation,” confirms the AWS Support option that you selected during the account creation process.
- The third email, with a subject line of “Your AWS Account is Ready - Get Started Now,” is sent after your AWS account ID is ready to use. After you receive this email, you can access AWS services by using the AWS Management Console.

Appendix B. Additional resources

1. For more information about Autodesk’s Virtualization Policy and support for Autodesk Products in virtual environments, please visit the Autodesk Virtualization Policy

2. For more information about WorkSpaces, please visit the following resources:

- Amazon WorkSpaces Overview
- Amazon WorkSpaces Bundles
- Amazon WorkSpaces Client Download
- Manage the WorkSpace Running Mode.
- https://aws.amazon.com/workspaces/pricing/
- https://aws.amazon.com/workspaces/resources/