

# Prepare an interactive AWS Architectural Diagram using LucidChart

## Introduction:

Drawing a good AWS Architectural Diagram is an essential step to deeply understanding the application and how each component works in unison. Multiple tools, such as LucidChart, CloudCraft, AWS Application Composer and many more, can be used to make the diagram. This blog focuses on the use of LucidChart for this purpose, and instructions revolve around this application, due to its features like real-time co-authoring, in-editor chat, shape-specific comments, and collaborative cursors.

## Prerequisites:

It is necessary to have the following before preparing the architectural diagram:

- Clear idea about AWS Cloud and how the various AWS services workflow occurs.
- An Active Account on LucidChart: [Lucidchart | Diagramming Powered By Intelligence](#).
- Latest AWS Icons, which can be accessed from the AWS Official Page: [Architecture Icon Pa](#)  
[ge](#).

## Things to consider before jumping into an actual architectural diagram:

### 1. **Build A Story**

- a. Before diving into building any architectural diagram, it is needed to be sure what story it is going to tell from that diagram.

### 2. **Start High-Level Architecture**

- a. They think that a super detailed architectural diagram is better than a few details, but in reality, starting with just the major components in the diagram helps everyone understand better.

### 3. **More smaller ones are better than one detailed big diagram**

- a. As stated above, instead of a detailed, larger diagram, a small, high-level version is sufficient.
- b. However, during the process, they need to understand what exactly happens in each stage of this high-level architecture. So, each component might need to be broken down into a separate diagram to showcase the different processes happening in each stage.

### 4. **They don't always have to start from the beginning.**

- a. The clients can have none to a high level of architectural knowledge, so it is not always necessary to build from the minute components.

b. If the clients have some basic knowledge, they can skip the few beginning steps and jump straight to the main topic, showcasing it in an architectural diagram.

5. **Add a legend/index**

- a. This is a common misconception that color coding or indexing the various flows in a diagram is unnecessary.
- b. Instead, it is a very important step to add a legend for each component workflow, which provides anyone looking at the architectural diagram with what is happening and how the information is being transferred, even by someone who is looking at it for the first time.

## How to Create Engaging Architecture Diagrams Using AWS:

It is important to note that, here, LucidChart is being used for diagramming. There are multiple software programs for such a purpose, so choose the preferred one.

### Steps

1. Go to LucidChart and sign up for it (Or log in if you already have an account): [Lucidchart | Di](#)

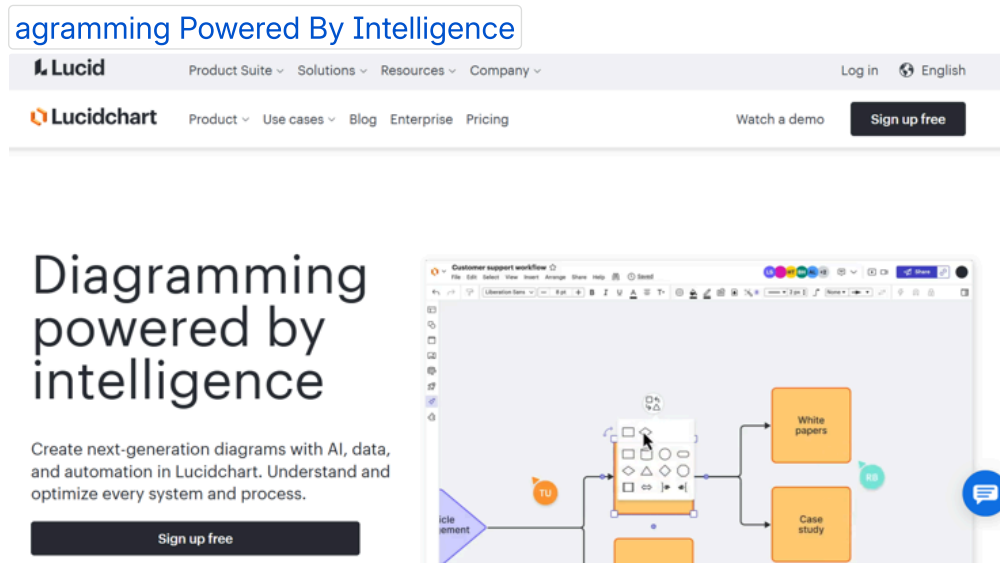


Figure: LucidChart login page

2. Then, they create a new page on LucidChart as follows.:

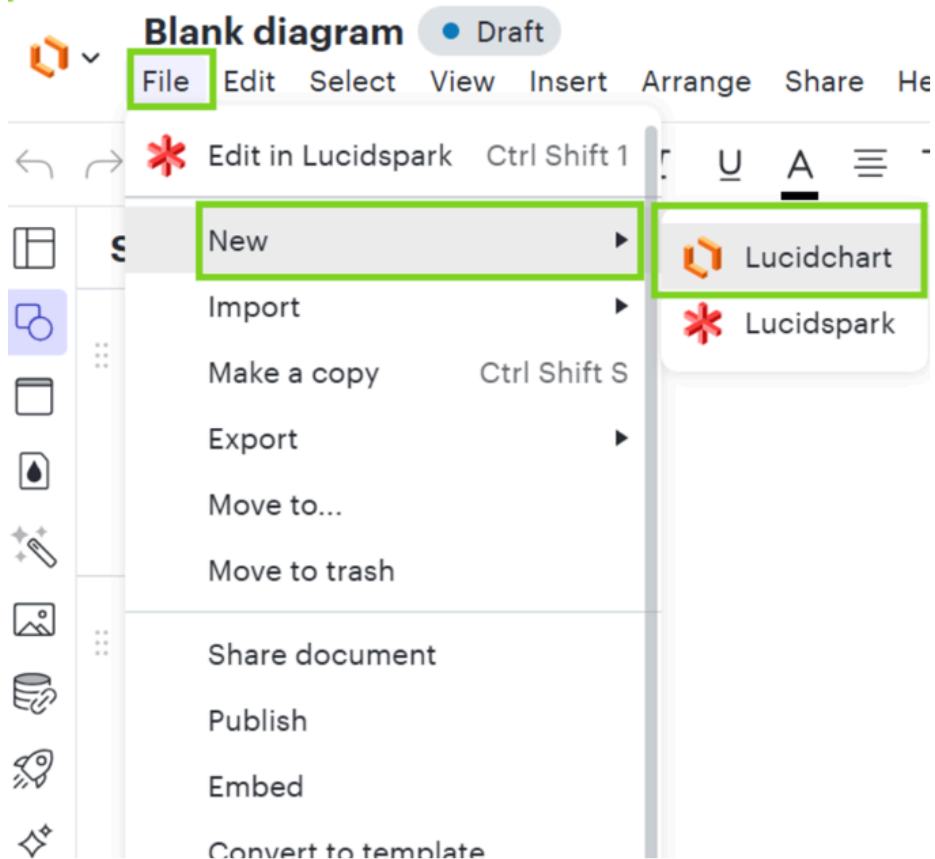


Figure: Creating a new page under LucidChart

After that, they are provided with a blank page and can select AWS templates as follows.

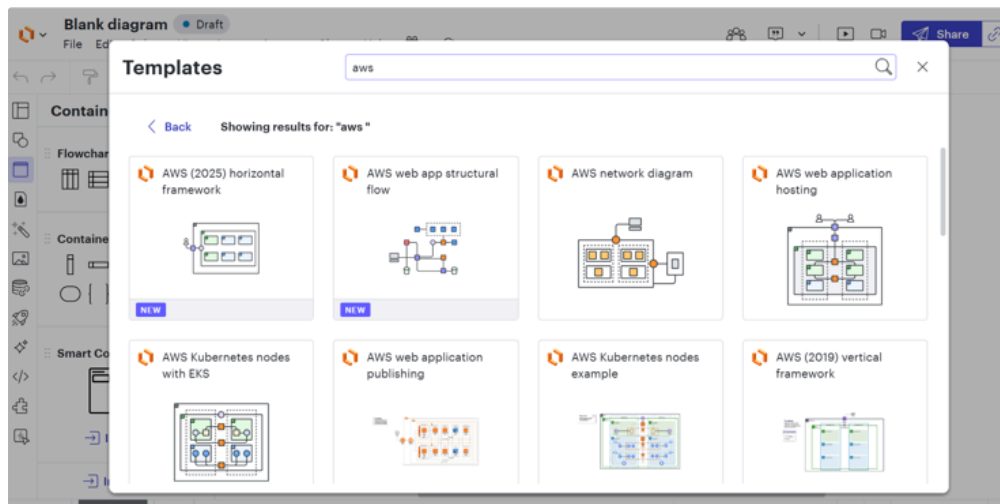
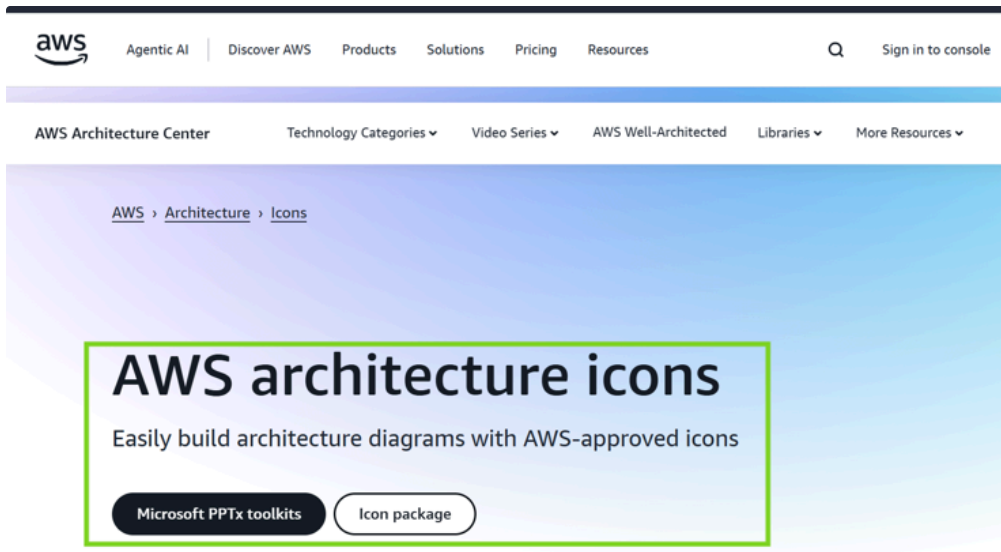


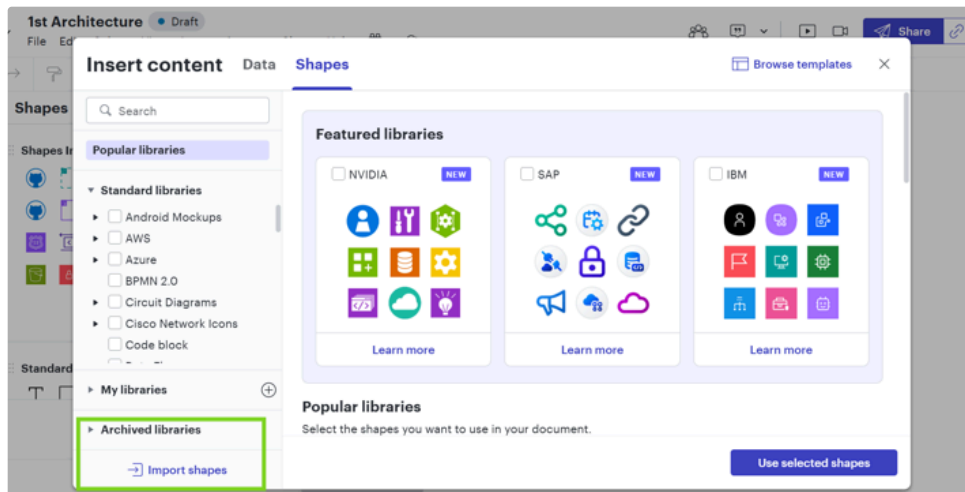
Figure: Multiple Templates for different use-cases

3. For the latest AWS Architectural Icons, go to [Architecture Icon Page](#) and download the "Icon Package" as follows:



4. To import them to LucidChart, follow the steps below:

- a. Go to LucidChart, select “Shapes“ and choose → “More Shapes“, which will provide them with the following page:



- b. Choose → Import Shapes as shown in the figure above. They can either import into their existing library or create a new one as follows:

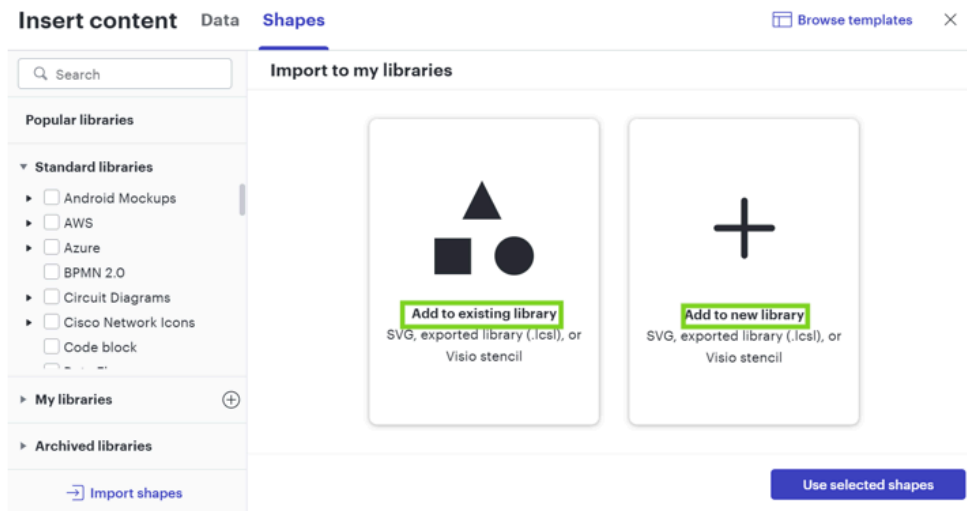


Figure: Multiple Import Options for the AWS Icons

c. After that, import the icon package, which was downloaded from the AWS official page:

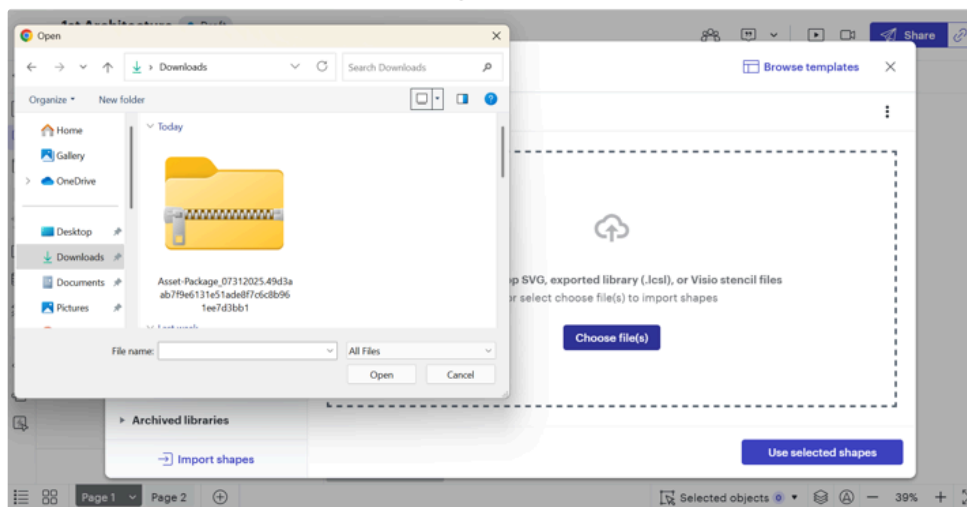




Figure: Importing Official AWS-provided Icons to the LucidChart Library

5. The next step is drawing the actual architecture.

a. Once the AWS icons have been imported, they can view them in shapes such as:

- i. EC2
- ii. Internet Gateway
- iii. RDS
- iv. S3 and so on.

AWS Services	Icons
1. EC2	
2. Internet Gateway	

3. RDS	
4. S3	

b. They can use these various components to bring together an architectural diagram. A high-level architecture, for example, the “S3 Backup,” can look similar to the following diagram:

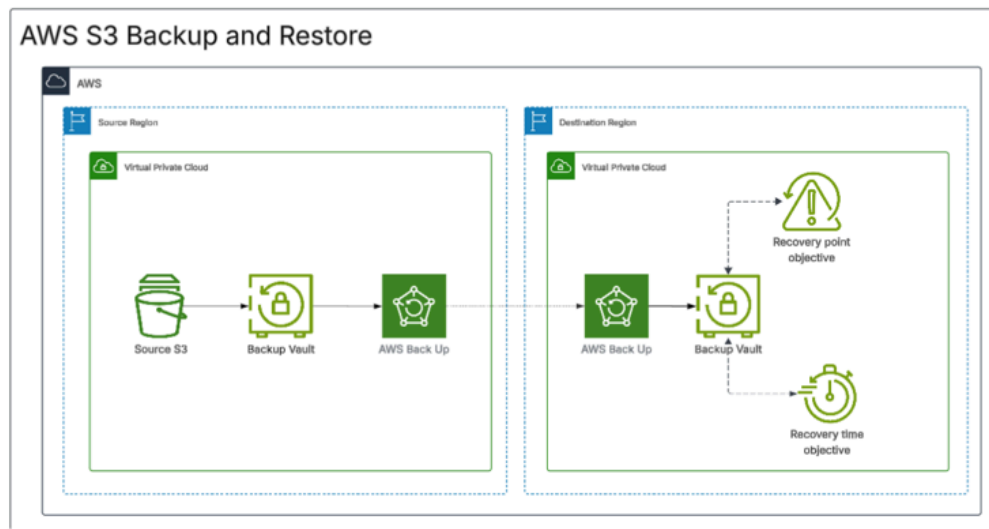


Figure: S3 Backup and Restore

c. Diagram Breakdown:

i. 1st Block is AWS cloud;

2nd is Regions (One Source and One Destination Region);

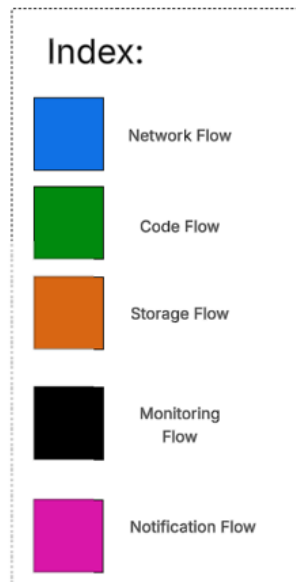
3rd is the Virtual Private Cloud (VPC) block.

ii. Under Source Region, S3 is backed up using AWS Backup with the help of the Backup Vault

iii. In the Destination Region, AWS Backup can be used to restore the S3 either manually or we can set the RPO ( Recovery Point Objective ) and RTO ( Recovery Time Objective) to restore them automatically.

d. The above architectural diagram is a high-level one, where only the major components are shown. As per the customers' requirement, we can break down this architecture into multiple smaller ones, including as many details as we can.

e. Additionally, if the architecture is too detailed, the indexes can be included to it, such as:



## Conclusion:

Hence, in this way, they can prepare a well-defined and clear AWS Architectural diagram. Having a clear view of what they want to achieve in the architectural diagram is a key factor in drawing a clear architecture. The detailed steps to create one and the prerequisites needed before drawing the actual architectural diagram have been discussed in this blog. Along with that, various evidences are included to help understand the process more smoothly and make it easier to locate the various tools and settings in LucidChart. Therefore, this blog clearly explains the method of preparing an interactive AWS architectural diagram using LucidChart.