



# Getting Started with AWS



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**amazon**  
web services

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# Introduction to AWS

# Introduction to AWS

## What is AWS?



- AWS stands for **Amazon Web Services**.
- Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted **Cloud Platform**.

# Introduction to AWS

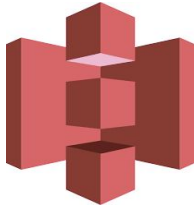
## What is AWS?



IAM



S3



EC2



Cloudformation



Elastic  
Beanstalk

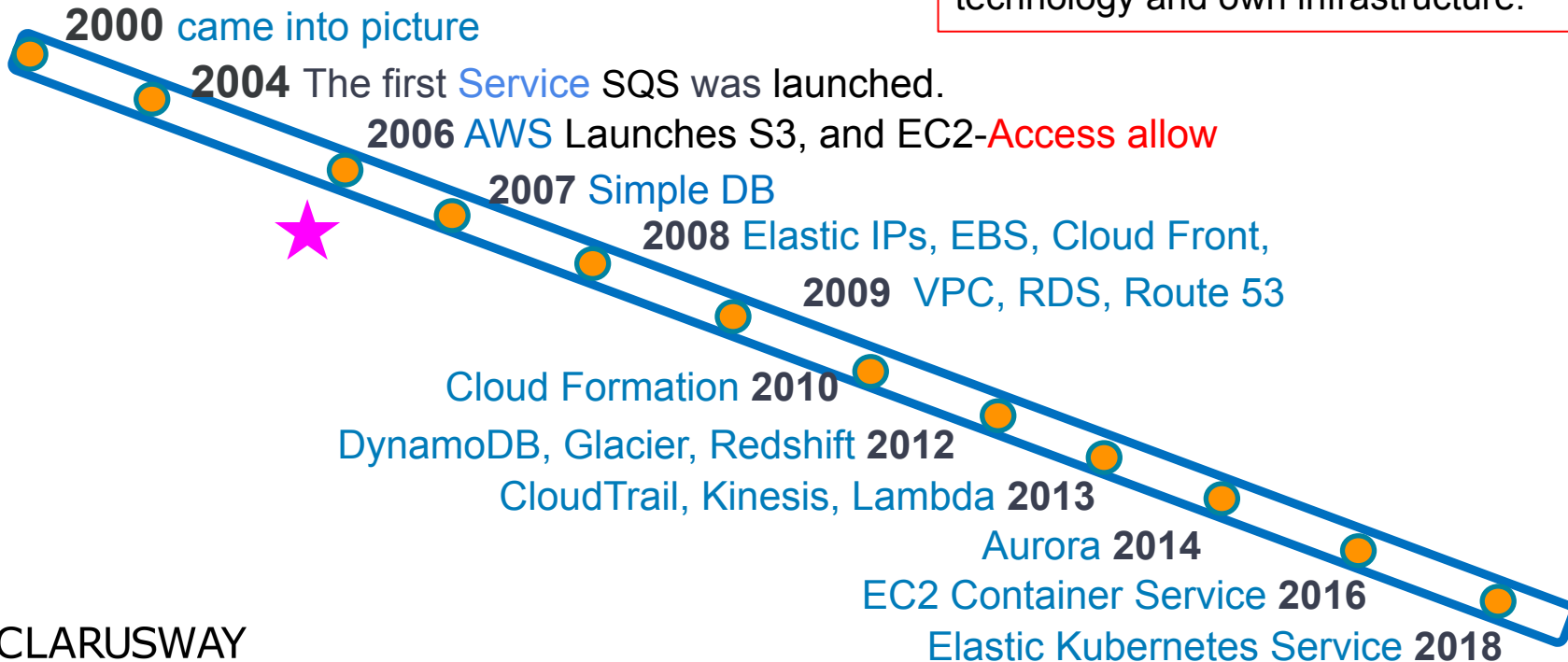


- AWS provides **on-demand** delivery of **technology services** via internet.
- It offers **over 200** fully featured services.

# Introduction to AWS

## History of AWS

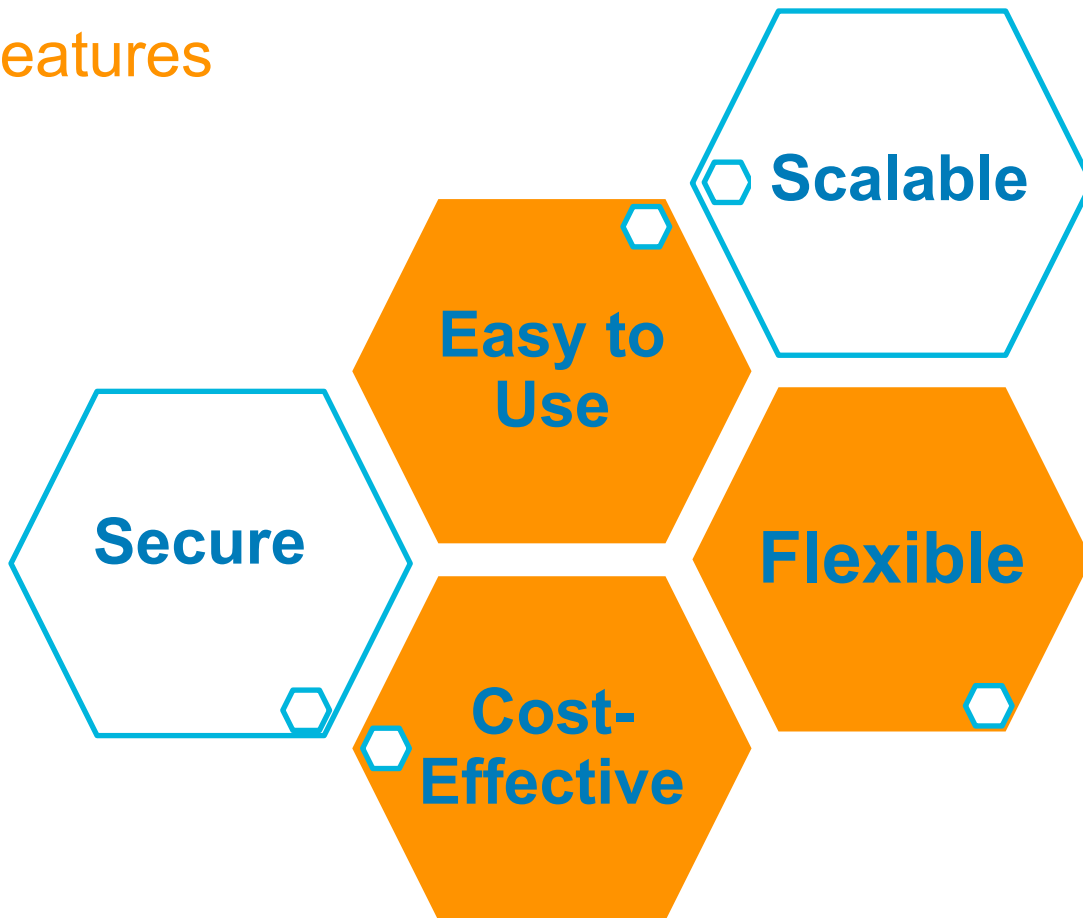
AWS launched its **first service in 2004**. Over the years, many new services were put into service. But in this diagram, **the real breaking point started in 2006**, when AWS allowed developer begin to access to Amazon's own back-end technology and own infrastructure.





# Introduction to AWS

## AWS Features



# Introduction to AWS

## AWS Market Share



**AWS 31%**  
**Azure 25%,**  
**Google Cloud 11%,**  
**Alibaba Cloud 4%**  
**Others 28.5%.**







# Introduction to AWS

## AWS Pros

- Many featured services and largest global infrastructure.
- Most comprehensive and broadly adopted provider.
- Pay-as-you-go.
- High availability and scalability.



# Introduction to AWS

## AWS Cons

- Complex service functionalities can be a challenge for beginners.
- Billing can be confusing.
- Some services can be costly in comparison to others.





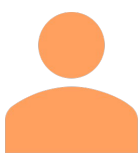
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# What does AWS offer?

# What does AWS offer?

## AWS Services





Staff



VPC



customer



www.e-commerce...



CloudFront



AWS  
Lambda

trigger



Web Server work in EC2  
machine

(**nginx-apache httpd**)

- Auto Scaling
- Load Balancing

- Register domain name  
of the website
- Publishing on Internet
- Routing policies

- Best seller images,  
Inventory List etc.
- Data Log

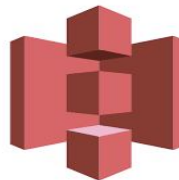
- Customer info
- System Backups



EC2



AWS  
Route 53



S3



RDS

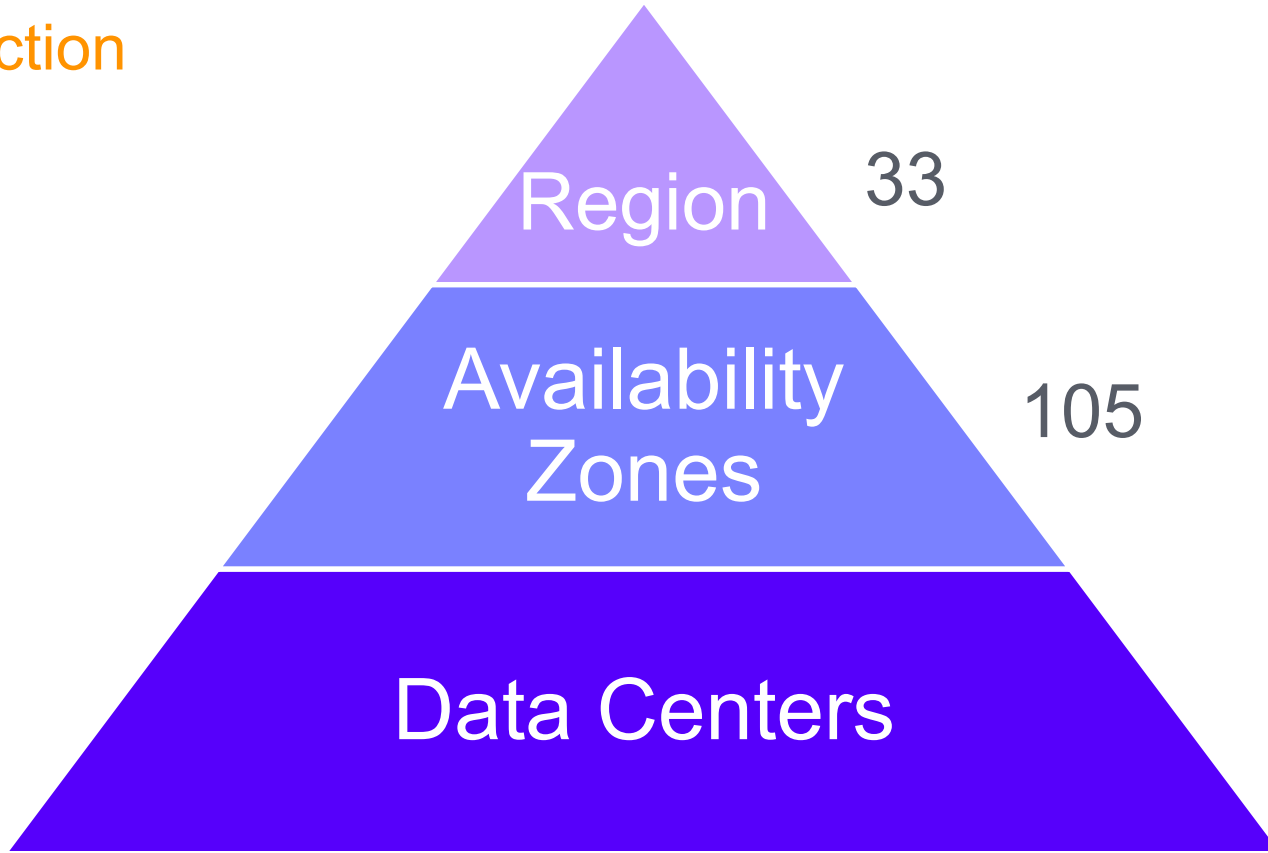


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# AWS Infrastructure

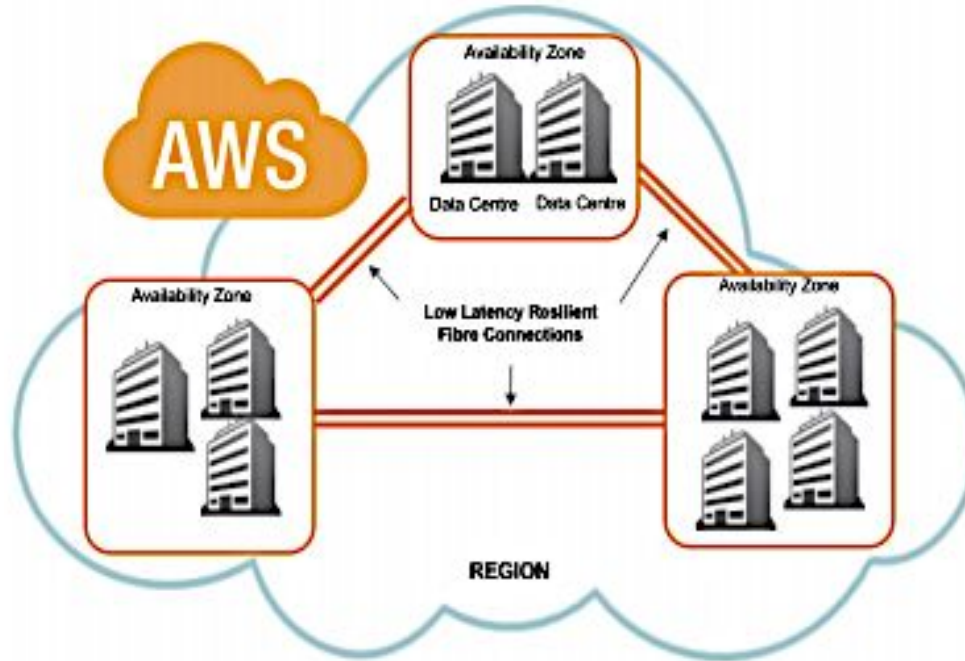
# AWS Infrastructure

## Introduction



# AWS Infrastructure

## Introduction



- Multiple Availability Zones in AWS Region
- Availability Zones consist of one or more discrete Data Centers



# AWS Infrastructure

## AWS Regions



33 Geographic Regions

N. Virginia is the region with the most service-support. In the other regions, not all services of AWS are in progress.



Current Regions



New Regions coming soon

# AWS Infrastructure

## AWS Availability Zones





# AWS Infrastructure

## AWS Availability Zones

- An Availability Zone is a facility where the data centers are located.
- There are currently 105 Availability Zones (as of Jun 2024).
- All AZ's in an AWS region are interconnected with metro fiber.
- All traffic between AZ's is encrypted.
- AZ's are physically separated by a meaningful distance, many kilometers, from any other AZ, although all are within 100 km (60 miles of each other).

# AWS Infrastructure

## AWS Data Centers



- The data center infrastructure consists of **physical or hardware-based tools and components.**
- AWS data centers are **secure** by design.

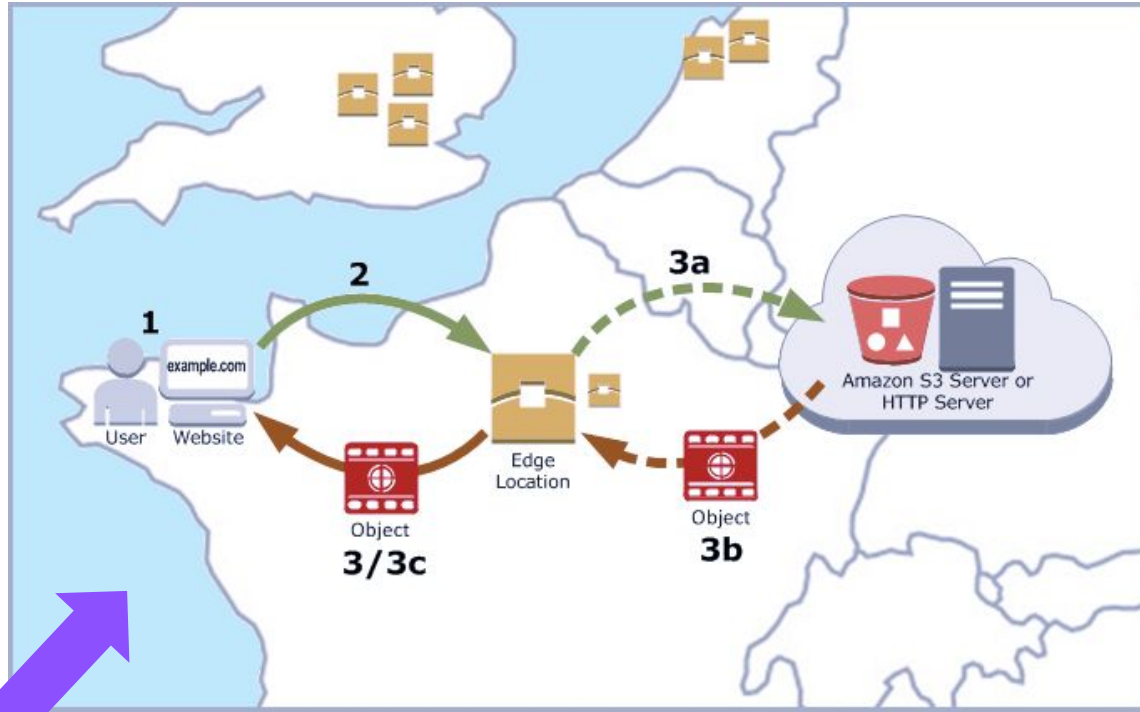


Northern Virginia Data Center

# AWS Infrastructure

## Edge Locations

- An edge location is where end-users access services located at AWS and used for **caching content**.
- **600+** Edge Locations



First Query : 1-2-3a-3b-3c-1

Second Query : 1-2-3-1

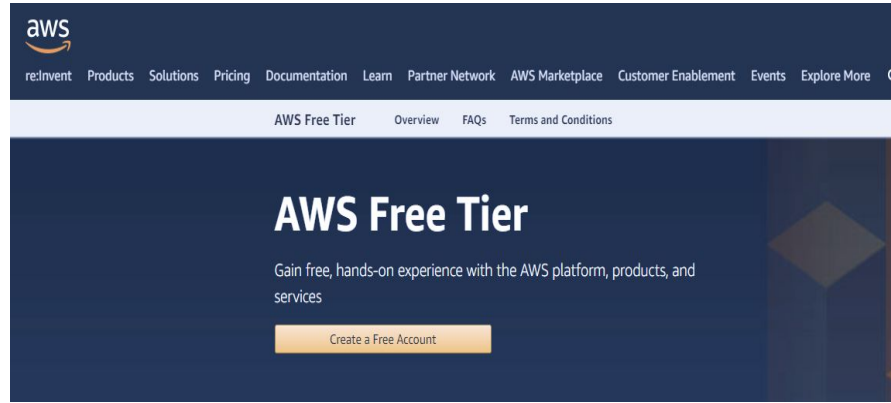


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# AWS Free Tier

# AWS Free Tier

## What is AWS Free Tier?



- The AWS free tier is a account type that lets you gain free, hands-on experience with AWS products and services.
- The AWS free tier provides customers the ability to explore and try out AWS services free of charge up to specified limits for each service.

# AWS Free Tier

## Free Tier Offer Types



The Free Tier is comprised of three different types of offerings;

- Services with a **12-month free tier** allow customers to use the product for free up to specified limits for one year from the date the account was created.
- Services with an **always free** offer allow customers to use the product for free up to specified limits as long as they are an aws customer.
- Services with a **short term trial** are free to use for a specified period of time or up to a one-time limit depending on the service selected.



# AWS Free Tier

## Billing Policy



- You are recommended to set a **billing alarm** to stay within the limits.
- If your application use exceeds the free tier limits, you simply pay standard, **pay-as-you-go service rates**.
- AWS Free Tier is applied to your **monthly usage**. It will expire on the 1st day of each month and does not accumulate.





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# Creating AWS Free Tier



# Creating AWS Free Tier

- First, Enter the browser: <https://aws.amazon.com/free>
- Then click, "**Create Free Account**"

← → ↻ <https://aws.amazon.com/free> [Icons]

**aws** Contact Sales Support ▾ English ▾ My Account ▾ [Sign In to the Console](#)

Products Solutions Pricing Documentation Learn Partner Network AWS Marketplace Customer Enablement Events Explore More 🔍

**AWS Free Tier** Overview FAQs Terms and Conditions

## AWS Free Tier

Gain free, hands-on experience with the AWS platform, products, and services

[Create a Free Account](#)



# ▶ Creating AWS Free Tier

- On clicking on the **"Create Free Account"** button, the following screen appears that requires some fields to be filled by the user including **email address, password and account name.**

## Create an AWS account

Email address

example@clarusway.com

Password

.....

Confirm password

.....

AWS account name ⓘ

awsdevopsteam

Continue

[Sign in to an existing AWS account](#)

# Creating AWS Free Tier

- Select "**Personal**" as an account Type and then fill your contact information.

## Contact Information

All fields are required.

Account type ⓘ

☐ Professional ☒ **Personal**

Full name

awsdevopsteam

Phone number

1234567889

Country/Region

United States

Address

XXXXXXXXXX

XXXXXXXXXX

City

XXXXXXXXXX

State / Province or region

XXXXXXXXXX

Postal code

XXXXXXXXXX



Check here to indicate that you have read and agree to the terms of the [AWS Customer Agreement](#)

Create Account and Continue

# Creating AWS Free Tier

- Fill your payment information.

## Payment Information

We use your payment information to verify your identity and only for usage in excess of the [AWS Free Tier Limits](#). We will not charge you for usage below the AWS Free Tier Limits. For more information, see the [frequently asked questions](#).



When you submit your payment information, we will charge \$1 USD/EUR to your credit card as a verification charge to ensure your card is valid. The amount may show as pending in your credit card statement for 3-5 days until the verification is completed, at which time the charge will be removed. You may be redirected to your bank website to authorize the verification charge.

Credit/Debit card number

XXXXXXXXXX

Expiration date

xx



xxxx



Cardholder's name

Xxxxxx. XXXXX

Billing address

☒ Use my contact address

☐ Use a new address

Verify and Add



# Creating AWS Free Tier

- Confirm your identity by entering **your phone** number and code displayed in the captcha.
- Choose "Contact me".
- If you chose to verify your account by SMS, choose "Send SMS" instead, like in the picture.
- Then enter the PIN you receive by text message or voice call, and then choose "Continue".

## Confirm your identity

Before you can use your AWS account, you must verify your phone number. When you continue, the AWS automated system will contact you with a verification code.

Country or region code

United States (+1)

Cell Phone Number

(123) 4567899

Security check



6nncap

Send SMS



# Creating AWS Free Tier

- After verification, select the support Plan. Choose the **"Basic Plan"** which is free.



### Select a Support Plan

AWS offers a selection of support plans to meet your needs. Choose the support plan that best aligns with your AWS usage. [Learn more](#)

Basic Plan	Developer Plan	Business Plan
<b>Free</b>	From \$29/month	From \$100/month
<ul style="list-style-type: none"><li>Included with all accounts</li><li>24/7 self-service access to forums and resources</li><li>Best practice checks to help improve security and performance</li><li>Access to health status and notifications</li></ul>	<ul style="list-style-type: none"><li>For early adoption, testing and development</li><li>Email access to AWS Support during business hours</li><li>1 primary contact can open an unlimited number of support cases</li><li>12-hour response time for nonproduction systems</li></ul>	<ul style="list-style-type: none"><li>For production workloads &amp; business-critical dependencies</li><li>24/7 chat, phone, and email access to AWS Support</li><li>Unlimited contacts can open an unlimited number of support cases</li><li>1-hour response time for production systems</li></ul>





# THANKS!

## Any questions?

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- ▶ @Guile - Instructor
- ▶ guile@clarusway.com

