

Advance AWS

AWS Project- 2 (Day -8)

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Teacher:

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Course:

Advance AWS Cloud Computing with DevOps
Fundamentals

Institute:

Lets Upgrade

Project 02: IDENTITY AND ACCESS MANAGEMENT (IAM)

Task 1 : Creating users without permissions-IAM password policy check

Task 2 : Creating users without the IAM password policy

Task 3 : Create a user with S3 full access

Task 4 : Create a group with EC2 full access

Task 5 : Add user to a group and check if user policy and the group policy is reflecting on the user

Task 6 : Copy policies from the existing user

Task 7 : Add user to a group in the process of creating a user

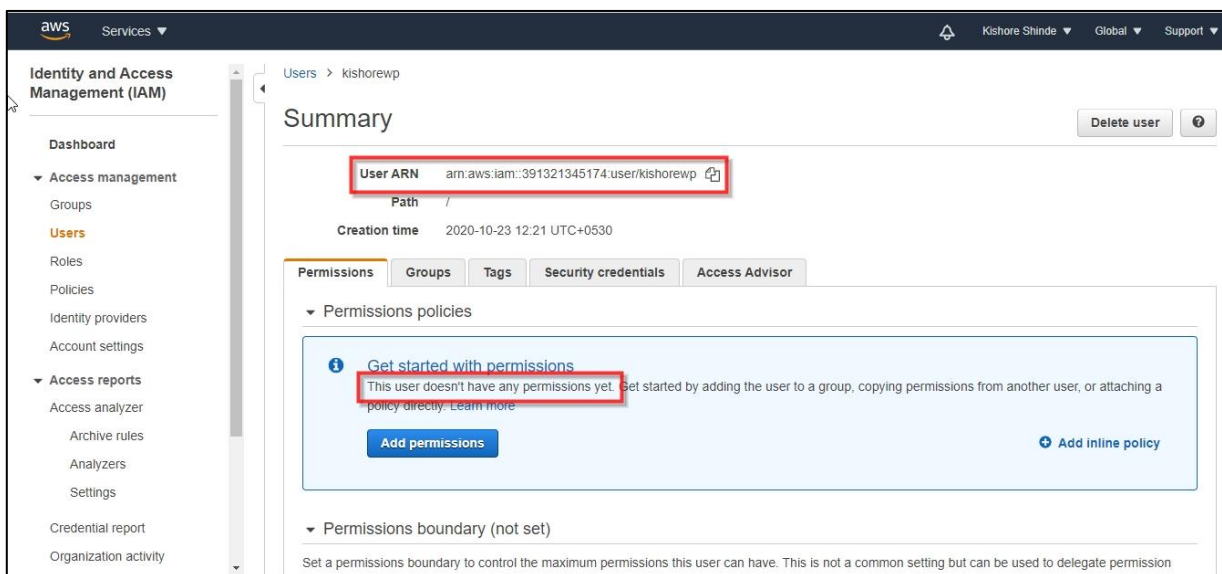
Task 8 : Setting a password policy

Task 9 : Enabling MFA and using an MFA device

Task 1 : Creating users without permissions-IAM password policy check

SS1 : User Summary

- Permissions Tab



- Groups Tab

The screenshot shows the AWS IAM console interface. On the left is a navigation menu with 'Identity and Access Management (IAM)' selected. The main area is titled 'Users > kishorewp' and 'Summary'. It displays the 'User ARN' as 'arn:aws:iam::391321345174:user:kishorewp', which is highlighted with a red box. Below this, the 'Path' is '/' and the 'Creation time' is '2020-10-23 12:21 UTC+0530'. The 'Groups' tab is selected, showing an 'Add user to groups' button and a table for 'Attached permissions' which currently has 'No results'.

Details:

S. No.	User Name	Permissions	Groups
1.	kishorewp	None	None

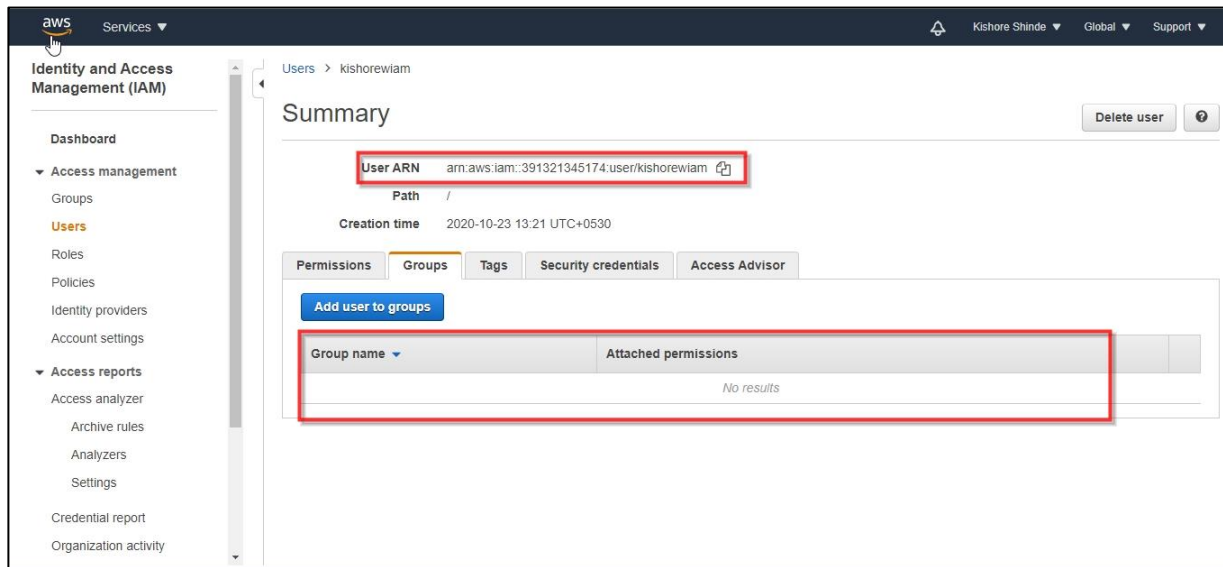
Task 2 : Creating Users without the IAM password policy

SS2 : User Summary

- Permissions Tab

The screenshot shows the AWS IAM console interface for user 'kishorewliam'. The 'Permissions' tab is selected. The 'User ARN' 'arn:aws:iam::391321345174:user:kishorewliam' is highlighted with a red box. A message box states 'Get started with permissions. This user doesn't have any permissions yet. Get started by adding the user to a group, copying permissions from another user, or attaching a policy directly. Learn more.' with an 'Add permissions' button. The 'Permissions boundary (not set)' section is also visible at the bottom.

- Groups Tab

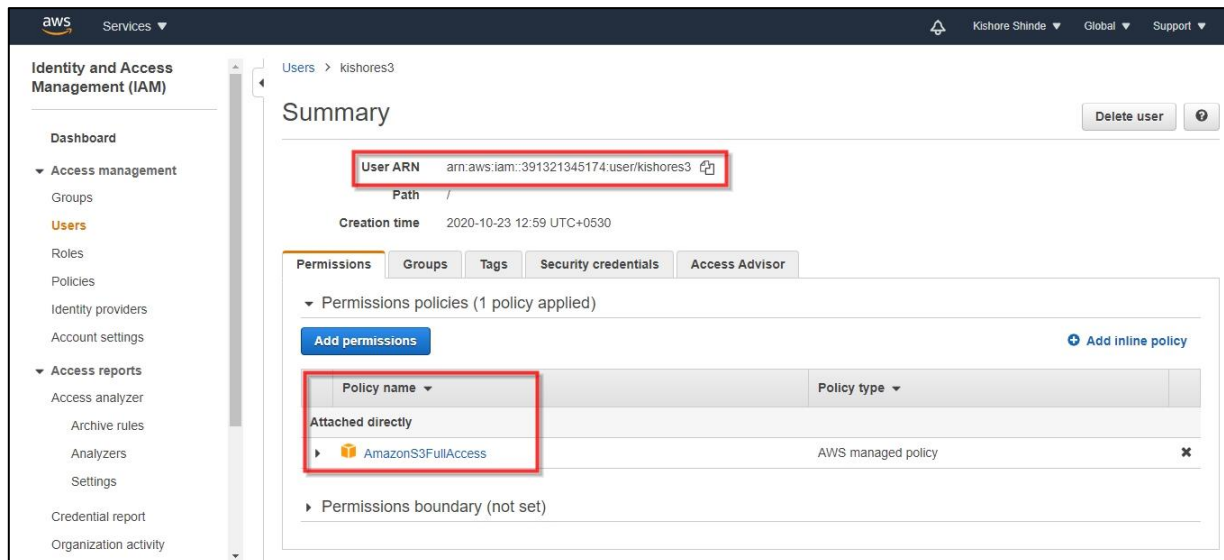


Details:

S. No.	User Name	Permissions	Groups
1.	kishorewiam	None	None

Task 3 : Create a user with S3 full access

SS3 : User Summary

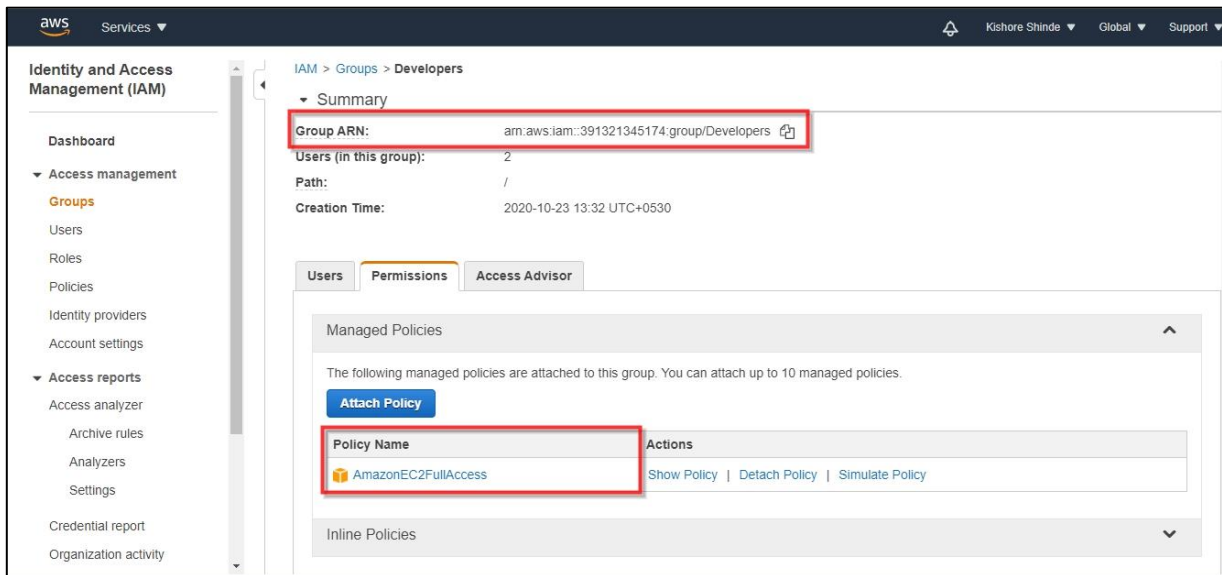


Details:

S. No.	User Name	Permissions	Policy Attached	Groups
1.	kishores3	Yes	AmazonS3FullAccess	None

Task 4 : Create a group with EC2 full access

SS4 : Group Summary



The screenshot shows the AWS IAM console interface. On the left is a navigation menu with 'Identity and Access Management (IAM)' selected. The main content area shows the 'Summary' page for the 'Developers' group. The 'Group ARN' is highlighted with a red box. Below the summary, the 'Permissions' tab is selected, showing a table of managed policies. The 'AmazonEC2FullAccess' policy is highlighted with a red box.

Policy Name	Actions
AmazonEC2FullAccess	Show Policy Detach Policy Simulate Policy

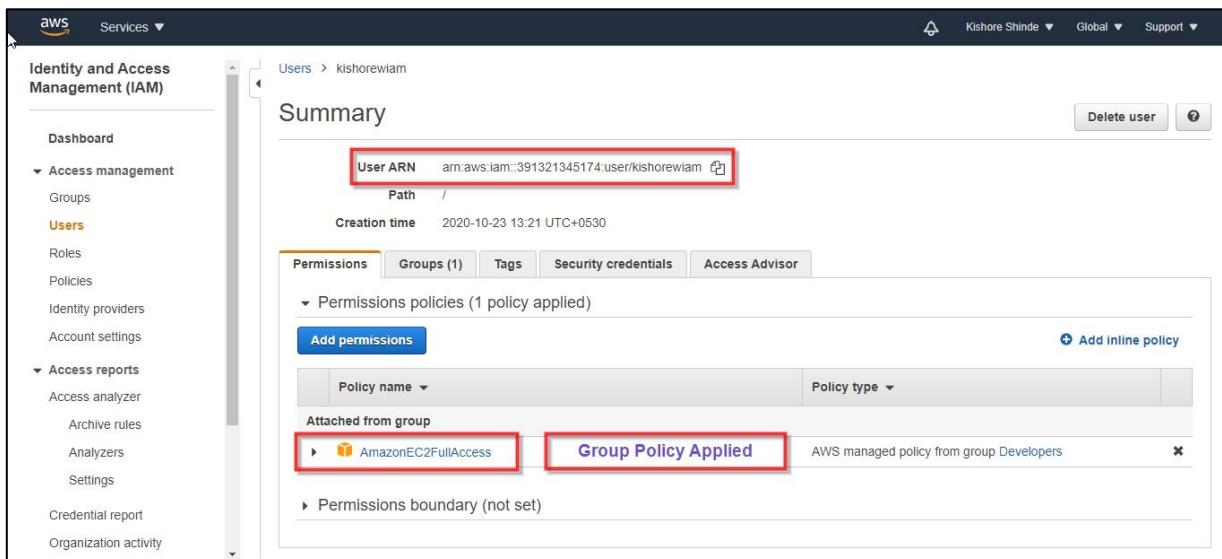
Details:

S. No.	Group Name	Permissions	Policy Attached
1.	Developers	Yes	AmazonEC2FullAccess

Task 5 : Add user to group and check if user policy and the group policy reflects on user

SS5 : User Summary with Permissions

- Group Policy Applied

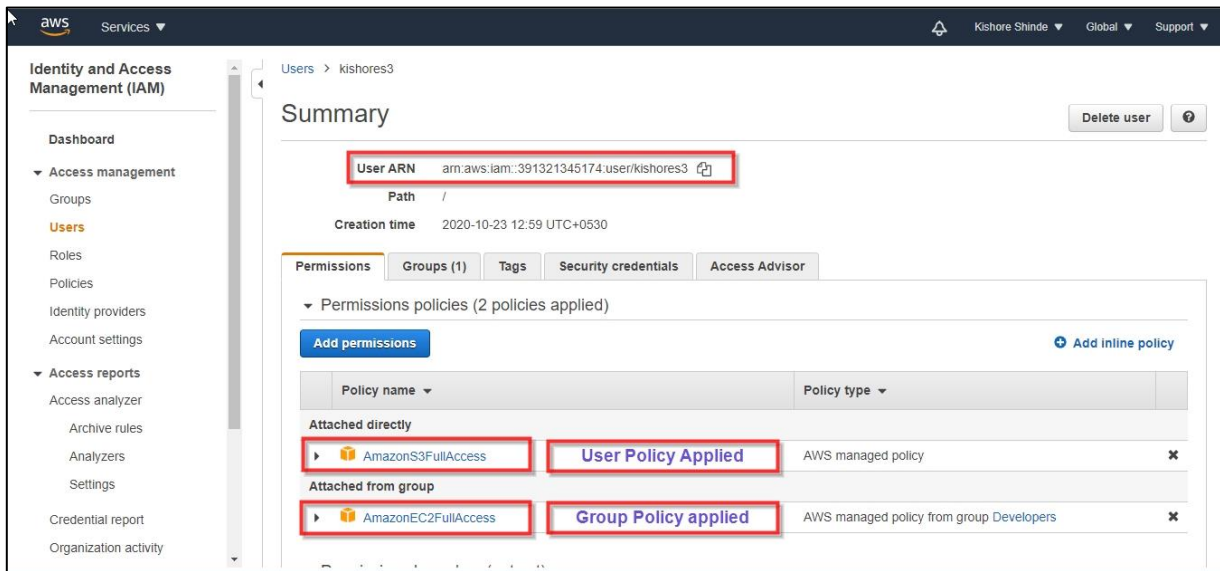


The screenshot shows the AWS IAM console interface. On the left is a navigation menu with 'Identity and Access Management (IAM)' selected. The main content area shows the 'Summary' page for the user 'kishorewiam'. The 'User ARN' is highlighted with a red box. Below the summary, the 'Permissions' tab is selected, showing a table of permissions policies. The 'AmazonEC2FullAccess' policy is highlighted with a red box, and the text 'Group Policy Applied' is also highlighted with a red box.

Policy name	Policy type
AmazonEC2FullAccess	AWS managed policy from group Developers

S. No.	User Name	Group Policy	Group Policy Attached
1.	kishorewiam	Yes	AmazonEC2FullAccess

- User Policy & Group policy Applied



Details:

S. No.	User Name	User Policy	User Policy Attached	Group Policy	Group Policy Attached
1.	kishores3	Yes	AmazonS3FullAccess	Yes	AmazonEC2FullAccess

SS6 : Log in as user and check policy effect

- User with Only Group Policy allowed. User Policy not allowed
 - Group policy effect

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance families Current generation Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, -, 1 GiB memory, EBS only)

EC2 Access Allowed

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GiB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro <small>Free tier eligible</small>	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t2	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t3	t3.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes

Cancel Previous Review and Launch Next: Configure Instance Details

Details:

S. No.	User Name	Group Policy	Access
1.	Kishorewiam	AmazonEC2FullAccess	Allowed

- User Policy effect

Amazon S3

Access S3-backed file shares on premises and reduce local storage costs using AWS Storage Gateway. [Learn more](#) Documentation

We've temporarily re-enabled the previous version of the S3 console while we continue to improve the new S3 console experience. [Switch to the new console.](#)

S3 buckets

Search for buckets

All access types

+ Create bucket Edit public access settings Empty Delete

Buckets 0 Regions

Error Access Denied

Bucket name Access Region Date created

Details:

S. No.	User Name	User Policy	Access
1.	Kishorewiam	AmazonS3FullAccess	Denied

- User with Both Group Policy and User Policy allowed
 - Group Policy Effect

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance families Current generation Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, ~, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t2	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t3	t3.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes

Buttons: Cancel Previous Review and Launch Next: Configure Instance Details

Details:

S. No.	User Name	Group Policy	Access
1.	kishores3	AmazonEC2FullAccess	Allowed

- User Policy Effect

Access S3-backed file shares on premises and reduce local storage costs using AWS Storage Gateway. [Learn more](#) Documentation

We've temporarily re-enabled the previous version of the S3 console while we continue to improve the new S3 console experience. [Switch to the new console.](#)

S3 buckets

Search for buckets All access types

+ Create bucket Edit public access settings Empty Delete

1 Buckets 1 Regions

Bucket name	Access	Region	Date created
<input checked="" type="checkbox"/> ks20201023	Bucket and objects not public	Asia Pacific (Mumbai)	Oct 23, 2020 4:47:16 PM GMT+0530

Buttons: S3 Bucket Access

Details:

S. No.	User Name	Group Policy	Access
1.	kishores3	AmazonS3FullAccess	Allowed

Task 6 : Copy Policy From Existing Users

SS7 : Attach User Summary of existing user

The screenshot shows the AWS IAM console for user 'kishores3'. The 'Summary' page is displayed. The 'User ARN' is 'arn:aws:iam::391321345174:user:kishores3'. The 'Creation time' is '2020-10-23 12:59 UTC+0530'. The 'Permissions' tab is selected, showing two policies: 'Attached directly' (AmazonS3FullAccess) and 'Attached from group' (AmazonEC2FullAccess). A red box highlights the 'Existing Users User & Group Policy Assigned' text.

Details:

S. No.	Existing User	User Policy	Group Policy
1.	kishores3	AmazonS3FullAccess	AmazonEC2FullAccess

SS8 : Login in as new user and Policy Effect

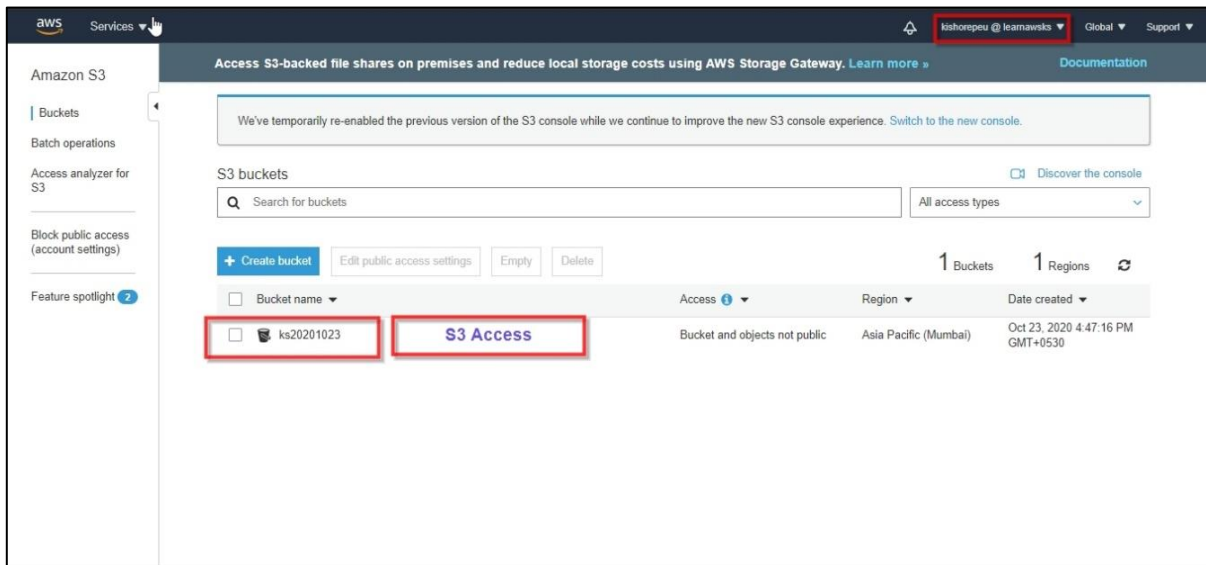
- EC2 Access

The screenshot shows the AWS console 'Step 2: Choose an Instance Type' page. The 'Currently selected' instance type is 't2.micro' (1 vCPU, 2.5 GHz, 1 GiB memory, EBS only). The 'EC2 Access' label is highlighted with a red box. The 'Review and Launch' button is visible.

Details:

S. No.	User Name	Group Policy	Access
1.	kishorepeu	AmazonEC2FullAccess	Allowed

- S3 Access



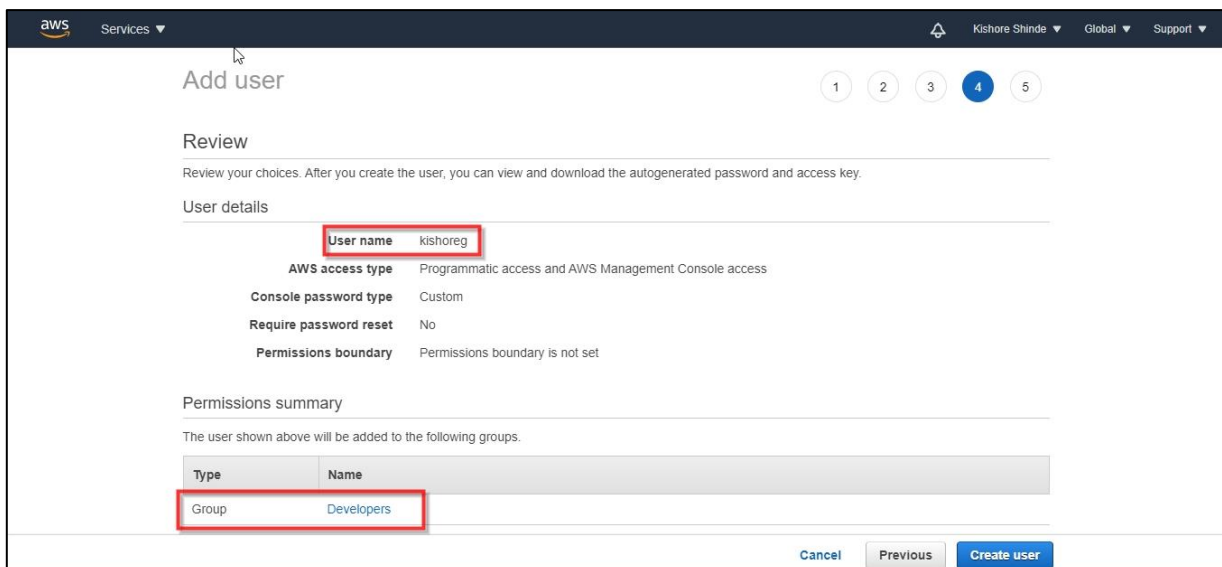
Details:

S. No.	User Name	User Policy	Access
1.	kishorepeu	AmazonS3FullAccess	Allowed

Note : Both Policies in effect- Access Allowed

Task 7 : Add User to group in process of creating user

- Add User to Group



Details:

S. No.	User Name	Group Name
1.	kishoreg	Developers

- User Added to Group

The screenshot shows the AWS IAM console interface. On the left is a navigation menu with options like Dashboard, Access management, and Access reports. The main content area is titled 'Summary' for the user 'kishoreg'. It displays the 'User ARN' and 'Creation time'. Below this, there are tabs for 'Permissions', 'Groups (1)', 'Tags', 'Security credentials', and 'Access Advisor'. The 'Groups (1)' tab is selected, showing a table with one group named 'Developers' and the permission 'AmazonEC2FullAccess' attached to it. A red box highlights the 'User ARN' field, and another red box labeled 'User Added to Group' is placed over the 'Groups' tab. A third red box highlights the 'Developers' group and its attached permissions.

Details:

S. No.	User Name	Group Name	Permissions Attached
1.	kishoreg	Developers	AmazonEC2FullAccess

Task 8 : Setting a Password Policy

SS9 : Password Policy Screen

The screenshot shows the 'Modify password policy' screen in the AWS IAM console. It includes a description of a password policy and a section titled 'Select your account password policy requirements:'. This section contains several checkboxes and input fields for configuring password rules. A red box highlights the 'Enforce minimum password length' checkbox, which is checked and set to 6 characters. Another red box highlights the complexity requirements: 'Require at least one uppercase letter from Latin alphabet (A-Z)', 'Require at least one lowercase letter from Latin alphabet (a-z)', 'Require at least one number', and 'Require at least one non-alphanumeric character (! @ # \$ % ^ & * () _ + - = [] { } | ')'. The 'Enable password expiration' checkbox is also checked, with a 90-day expiration period. Other options like 'Password expiration requires administrator reset', 'Allow users to change their own password', and 'Prevent password reuse' are also checked. At the bottom, there are 'Cancel' and 'Save changes' buttons.

SS10 : Password Incompatibility Error

The screenshot shows the 'Add user' wizard in the AWS IAM console. The user name is 'kishorepp'. Under 'Select AWS access type', both 'Programmatic access' and 'AWS Management Console access' are selected. Under 'Console password*', 'Custom password' is selected, and the password field contains '****'. A red box highlights the password field, and a blue box highlights the error message: 'The password does not conform to the account password policy: it must contain at least 6 characters, it must contain an upper case character, a special character and a digit'. The 'Next: Permissions' button is highlighted.

Details:

S. No.	User Name	Incompatibility Error
1.	kishorepp	<ul style="list-style-type: none">It must contain atleast 6 charactersIt must contain an upper case character a special character and a digit

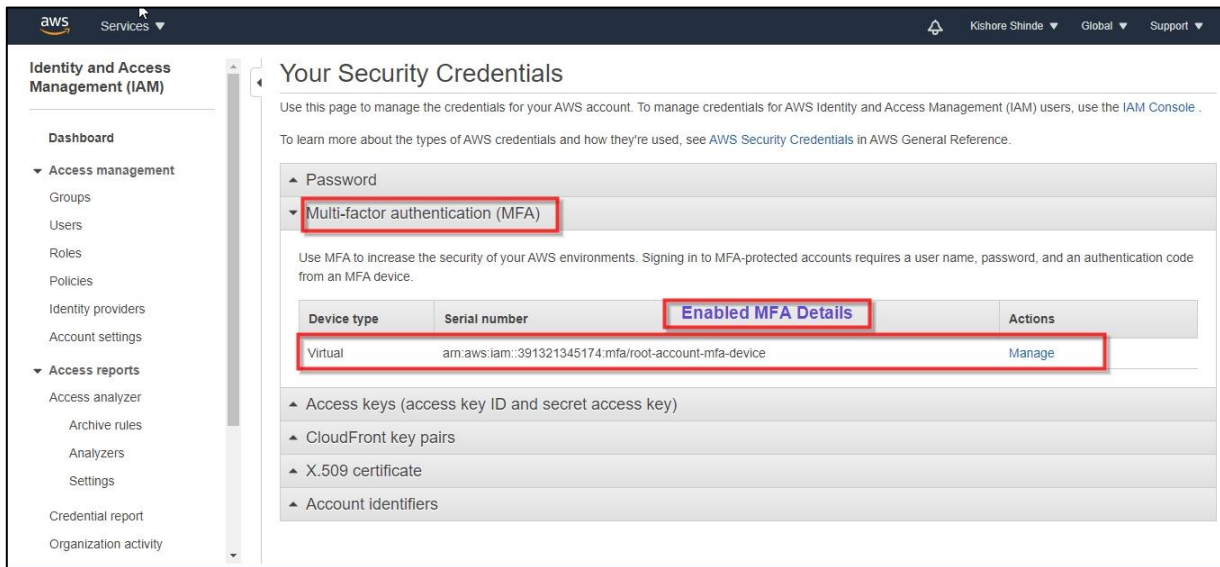
Task 9 : Enabling MFA and using an MFA Device

SS11 : Enable MFA

- Assign MFA

The screenshot shows the 'Set up virtual MFA device' dialog box. It displays a QR code and a secret key. Below, it prompts the user to 'Type two consecutive MFA codes below'. The first code is '542430' and the second code is '403945'. A red box highlights the two code input fields. The 'Assign MFA' button is highlighted.

- MFA Enabled



SS12 : Login Screen For MFA

The screenshot shows the AWS Multi-factor authentication login screen. It features the AWS logo at the top, followed by the title 'Multi-factor authentication'. Below the title, there is a message: 'Your account is secured using multi-factor authentication (MFA). To finish signing in, turn on or view your MFA device and type the authentication code below.' The 'Email address' is displayed as 'kishoreshindekyn@gmail.com'. A red box highlights the 'MFA code' input field, which contains the value '488609'. Below the input field is a blue 'Submit' button. At the bottom, there are links for 'Troubleshoot MFA' and 'Cancel'.

Project 2 Ends Here