

Introduction to Cloud Computing

LAB 10

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BS-SE 7B

Task 1: Create a Policy assignment

- From the **All services** blade, search for and select **Policy**.

Microsoft Azure

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Sign out

Home > Policy

Policy | Definitions

Search

Filter by name or ID...

Scope: Azure for Students Definition type: All definition types Policy type: All policy types Category: Compute

Name	Latest version	Definition location	Policy type	Type	Definition type	Category
Audit virtual machines without disaster recovery configuration	1.0.0		Builtin	Policy	Compute	...
Audit VMs that do not use managed disks	1.0.0		Builtin	Policy	Compute	...
Virtual machines should be migrated to new Azure Resource Manager	1.0.0		Builtin	Policy	Compute	...
Deploy default Microsoft IaaS Antimalware extension for Windows VMs	1.1.0		Builtin	Policy	Compute	...
Require automatic OS image patching on Virtual Machines	1.0.0		Builtin	Policy	Compute	...
Configure disk access resources with private endpoints	1.0.0		Builtin	Policy	Compute	...
OS and data disks should be encrypted with a customer-managed key	3.0.0		Builtin	Policy	Compute	...
Managed disks should disable public network access	2.1.0		Builtin	Policy	Compute	...
Configure managed disks to disable public network access	2.0.0		Builtin	Policy	Compute	...
Microsoft IaaS Antimalware extension should be deployed on Windows VMs	1.1.0		Builtin	Policy	Compute	...
Configure disaster recovery on virtual machines by enabling Azure Site Recovery	2.1.1		Builtin	Policy	Compute	...

Add or remove favorites by pressing Ctrl+Shift+F

Give feedback

- Notice the **Allowed virtual machine size SKUs** definition.

The screenshot shows the 'Allowed virtual machine size SKUs' policy definition in the Microsoft Azure portal. The page includes a header with navigation links and a search bar. Below the header, there are tabs for 'Definition', 'Assignments (0)', and 'Parameters (1)'. The 'Definition' tab is active, displaying the policy's JSON definition. The JSON includes properties like 'displayname', 'policytype', 'mode', 'description', 'metadata', and 'parameters'. The 'parameters' section defines 'listofAllowedSKUs'.

```

1 {
2   "properties": {
3     "displayName": "Allowed virtual machine size SKUs",
4     "policyType": "BuiltIn",
5     "mode": "Indexed",
6     "description": "This policy enables you to specify a set of virtual machine size SKUs that your organization can deploy.",
7     "metadata": {
8       "version": "1.0.1",
9       "category": "Compute"
10    },
11    "version": "1.0.1",
12    "parameters": {
13      "listofAllowedSKUs": {
14        "type": "Array",
15        "minLength": 1,
16        "items": {
17          "type": "String"
18        }
19      }
20    }
21  }
22 }

```

- Click **Assign Policy** at the top of the **Policy - Assignments** page.
- Click **Review + create**, and then **Create**.

The screenshot shows the 'Assign policy' form in the Microsoft Azure portal. The form has tabs for 'Basics', 'Parameters', 'Remediation', 'Non-compliance messages', and 'Review + create'. The 'Basics' tab is active, showing fields for 'Scope', 'Exclusions', 'Resource selectors', 'Policy definition', 'Overrides', 'Assignment name', and 'Description'. The 'Policy definition' field is set to 'Allowed virtual machine size SKUs'. The 'Review + create' tab is also visible, showing the 'Policy enforcement' toggle set to 'Enabled'. On the right side, the 'Available Definitions' panel is open, displaying a table of policy definitions. The 'Allowed locations' policy is selected.

Policy name	Latest version (pr...)	Category	Type
Azure Cosmos DB allowed locations	1.1.0	Cosmos DB	BuiltIn
<input checked="" type="checkbox"/> Allowed locations	1.0.0	General	BuiltIn
Allowed locations for resource groups	1.0.0	General	BuiltIn

- The **Allowed locations** policy assignment is now listed on the **Policy - Assignments** pane.

Home > Policy

Policy | Assignments

Search resources, services, and docs (G+)

Assign policy Assign initiative Refresh

Search

Filter by name or ID...

Scope: Azure for Students Definition type: All definition types

Total Assignments 3 Initiative Assignments 1 Policy Assignments 2

Edit columns Export to CSV

Assignment name	Scope	Type
Allowed resource deployment regions	Azure for Students	Policy
Allowed locations	Azure for Students	Policy
ASC Default (subscription: db878fcc-8781-42d0-a61d-55de3d976446)	Azure for Students	Initiative

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Task 2: Test Allowed location policy

- Create a storage Account.

Microsoft Azure

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Home > Storage center | Blob Storage >

Create a storage account

Basics Advanced Networking Data protection Encryption Tags Review + create

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. [Learn more about Azure storage accounts](#)

Project details

Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.

Subscription * Azure for Students

Resource group * (New) myRGPolicy
[Create new](#)

Instance details

Storage account name * sorageaccount909

Region * (Asia Pacific) Central India
[Deploy to an Azure Extended Zone](#)
Allowed locations (Policy details)

Preferred storage type Choose preferred storage type

Previous Next Review + create

[Give feedback](#)

- You will receive the deployment failed error stating that resource was disallowed by policy.

Microsoft Azure

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Home > Storage center | Blob Storage >

Create a storage account

Validation failed. Required information is missing or not valid.

Basics Advanced Networking Data protection Encryption Tags Review + create

Basics

Subscription	Azure for Students
Resource group	myRGPolicy
Location	Central India
Storage account name	sorageaccount909
Preferred storage type	

Task 3: Delete the policy assignment

- From the **All services** blade, search for and select **Policy**, and then click your **Allowed locations** policy.
- Click **Allowed Locations** It will open an Allowed locations Policy Compliance window.

The screenshot displays the Microsoft Azure portal interface for a policy assignment named 'Allowed locations'. The top navigation bar includes the Microsoft Azure logo, a search bar, and a Copilot button. The breadcrumb trail shows 'Home > Policy | Assignments > Allowed locations'. Below the title, there are several action buttons: 'Edit assignment', 'Delete assignment', 'Duplicate assignment', 'View compliance', 'View definition', 'Create exemption', and 'Create remediation task'. The 'Essentials' section provides key details about the assignment, including its name, definition version, description, assignment ID, and assigned by. Below this, a tabbed interface shows various views: 'Parameters (1)', 'Resource selectors (0)', 'Overrides (0)', 'Exemptions (0)', 'Remediation (0)', 'Deployed resources', and 'Managed Identity'. The 'Parameters (1)' tab is active, displaying a table with one parameter. The table has columns for 'Parameter ID', 'Parameter name', 'Parameter value', and 'Policy assignment parameter reference type'. The single parameter listed is 'listOfAllowedLocations' with the name 'Allowed locations' and a value of '["japanwest"]'. An 'Edit columns' button is located to the right of the table. At the bottom right, there is a 'Give feedback' link.

Parameter ID	Parameter name	Parameter value	Policy assignment parameter reference type
listOfAllowedLocations	Allowed locations	["japanwest"]	User defined parameter

- Click **Delete Assignment** in the top menu. Confirm you wish to delete the policy assignment by clicking **Yes**.

The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with 'Home > Policy | Assignments >'. The main heading is 'Allowed locations' with a sub-heading 'Policy Assignment'. Below this, there's a toolbar with options: 'Edit assignment', 'Delete assignment', 'Duplicate assignment', 'View compliance', 'View definition', 'Create exemption', and 'Create remediation task'. The 'Delete assignment' option is highlighted. A modal dialog box titled 'Delete assignment' is open in the center, asking 'Do you want to delete the policy assignment 'Allowed locations'?'. It has two buttons: 'Yes' and 'No'. In the background, the 'Essentials' section shows details for the policy assignment, including Name, Definition version, Description, Assignment ID, and Assigned by. Below this, there's a 'Parameters (1)' section with a table showing the parameter 'listOfAllowedLocations' with the value 'Allowed locations'.

- Try to create another storage account to ensure the policy is no longer in effect.

The screenshot shows the Microsoft Azure portal interface for a storage account named 'storageaccount497'. The top navigation bar shows 'Home > storageaccount497_1762421596598 | Overview >'. The main heading is 'storageaccount497' with a sub-heading 'Storage account'. Below this, there's a toolbar with options: 'Upload', 'Open in Explorer', 'Delete', 'Move', 'Refresh', 'Open in mobile', 'CLI / PS', and 'Feedback'. The 'Overview' section is active, showing details for the storage account, including Resource group, Location, Performance, Replication, Account kind, Provisioning state, and Created date. The 'Blob service' and 'Security' sections are expanded, showing various settings like Hierarchical namespace, Default access tier, Blob anonymous access, Blob soft delete, Container soft delete, Versioning, Change feed, Require secure transfer for REST API operations, Storage account key access, Minimum TLS version, Infrastructure encryption, and Public network access.