Amazon Q + MCP Servers Step-by-Step Guide

# 1️⃣ Install Amazon Q CLI

Download the latest Amazon Q CLI:

curl --proto '=https' --tlsv1.2 -sSf "https://desktop-release.q.us-east-1.amazonaws.com/latest/q-x86\_64-linux.zip" -o q.zip

Unzip and go to the folder:

unzip q.zip -d q-cli  
cd q-cli/q

Make the installer executable:

chmod +x install.sh

Run the installer with force (as root not officially supported):

./install.sh --force

Follow the prompts:  
- Allow shell config modification: Yes  
- Login with Builder ID: confirm in browser using the code provided

Verify installation:  
q --version

# 2️⃣ Configure AWS CLI

Exit Q chat if running:  
exit

Run AWS configure:  
aws configure

Provide:  
- AWS Access Key ID  
- AWS Secret Access Key  
- Default region: us-east-1  
- Default output: json

# 3️⃣ Configure MCP Servers

Create MCP configuration folder:

mkdir -p ~/.q/mcp  
vi ~/.q/mcp/mcp.json

Paste the following content:

{  
 "mcpServers": {  
 "aws-ec2": {  
 "command": "aws",  
 "args": ["ec2"],  
 "allow-write": true,  
 "allow-sensitive-data-access": true,  
 "description": "Launch and manage EC2 instances"  
 },  
 "aws-pricing": {  
 "command": "aws",  
 "args": ["pricing"],  
 "allow-write": false,  
 "allow-sensitive-data-access": true,  
 "description": "Check AWS service pricing"  
 },  
 "aws-eks": {  
 "command": "aws",  
 "args": ["eks"],  
 "allow-write": true,  
 "allow-sensitive-data-access": true,  
 "description": "Create and manage EKS clusters"  
 }  
 }  
}

Save and exit (:wq in vi).

# 4️⃣ Start Q Chat

Start Q chat:  
q chat

Check MCP servers:  
/mcp  
You should see:  
- aws-ec2  
- aws-pricing  
- aws-eks

# 5️⃣ Launch EC2 Instance with NGINX

Inside Q chat:  
Create a t2.micro Amazon Linux 2023 EC2 instance in us-east-1 with NGINX installed and port 80 open.

Or via MCP server manually:

/mcp aws-ec2 run-instances --image-id ami-08a0d1e16fc3f61ea --instance-type t2.micro --key-name my-key --security-group-ids sg-xxxx --subnet-id subnet-xxxx --associate-public-ip-address --user-data '#!/bin/bash  
yum update -y  
amazon-linux-extras install -y nginx1  
systemctl start nginx  
systemctl enable nginx'

# 6️⃣ Check EC2 Pricing

Inside Q chat:  
Estimate the monthly on-demand price for a t2.micro in us-east-1.

Or via MCP server:

/mcp aws-pricing get-products --service-code AmazonEC2 --filters Type=TERM\_MATCH,Field=instanceType,Value=t2.micro

# 7️⃣ Create EKS Cluster

Inside Q chat:  
Create an EKS cluster named demo-cluster in us-east-1 with one node group of t3.medium.

Or via MCP server:

/mcp aws-eks create-cluster --name demo-cluster --region us-east-1 --role-arn arn:aws:iam::<account-id>:role/EKSClusterRole --resources-vpc-config subnetIds=subnet-xxxx,securityGroupIds=sg-xxxx

# 8️⃣ Notes & Tips

Ensure IAM roles have proper permissions:  
- EC2: AmazonEC2FullAccess  
- Pricing: AWSPriceListServiceFullAccess  
- EKS: AmazonEKSClusterPolicy + AmazonEKSWorkerNodePolicy

Access your EC2 instance via public IP on port 80 after launch.

Use /reload inside Q chat if MCP servers do not appear after configuration.