

Configuring and managing Azure Multifactor Authentication (MFA) and self-service password reset involves several steps to enhance the security of your Azure Active Directory (Azure AD). Here's a comprehensive guide covering these aspects:

## **1. Configure & Manage Azure Multifactor Authentication (MFA)**

### **Step 1: Enable Azure MFA**

- 1. Sign in to Azure Portal:** [Azure Portal](https://portal.azure.com)
- 2. Navigate to Azure AD:**
  - Go to "Azure Active Directory" next "Security" next "Multi-Factor Authentication".
- 3. Configure MFA:**
  - Click on "MFA" under "Security" and then select "Additional cloud-based MFA settings".
  - Enable the settings as needed (e.g., app passwords, trusted IPs, verification options).

### **Step 2: Configure User Settings for MFA**

- 1. User Management:**
  - Go to "Azure Active Directory" next "Users".
  - Select a user, then click on "Authentication methods" next "Require re-register MFA".
  - This forces the user to set up MFA at the next sign-in.

## **2. Two-Factor Authentication**

Azure MFA supports multiple methods for two-factor authentication:

### **Different Methods of Two-Factor Authentication**

- 1. Mobile App:**
  - Microsoft Authenticator: Users receive a notification or use a verification code.
- 2. Phone Call:**
  - Users receive a call and press a key to authenticate.
- 3. Text Message:**
  - Users receive a verification code via SMS.
- 4. Hardware Tokens:**
  - Physical devices that generate time-based codes.

## **3. Setup Self-Service Password Reset**

### **Step 1: Enable Self-Service Password Reset (SSPR)**

- 1. Navigate to Azure AD:**
  - Go to "Azure Active Directory" next "Password reset".
- 2. Configuration:**

- Select "Self-service password reset" and choose the desired scope (e.g., All users or Selected groups).
- Click on "Save".

## **Step 2: Configure Authentication Methods for SSPR**

### **1. Authentication Methods:**

- Go to "Password reset" next "Authentication methods".
- Choose the methods users can use to reset their passwords (e.g., email, mobile phone, security questions).

### **4. Configure MFA**

This involves the same steps as described in section 1, focusing on enforcing MFA across the organization.

### **5. Configure and Deploy Self-Service Password Reset**

This involves the steps described in section 3, ensuring that users are aware of the SSPR functionality and have registered their authentication methods.

### **6. Implement and Manage Azure MFA Settings**

#### **1. Conditional Access Policies:**

- Go to "Azure Active Directory" next "Security" next "Conditional Access".
- Create policies that require MFA for certain conditions (e.g., risky sign-ins, access to specific applications).

#### **2. User Registration:**

- Ensure users have registered their MFA methods by checking "Azure Active Directory" next "Security" next "Identity Protection" next "MFA Registration".

### **7. Account Lockout**

#### **1. Azure AD Smart Lockout:**

- Azure AD has a built-in smart lockout mechanism that locks accounts for a certain period after multiple failed sign-in attempts.
- Configure the settings in "Azure Active Directory" next "Security" next "Authentication methods" next "Password protection".

### **8. Manage MFA Settings for Users**

#### **1. User-Specific Settings:**

- Go to "Azure Active Directory" next "Users" next select a user next "Authentication methods".

- Reset MFA registration, enforce MFA, and manage phone numbers.

## **9. Extend Azure AD MFA to Third-Party and On-Premises Devices**

### **1. Azure AD Application Proxy:**

- Use Azure AD Application Proxy to extend Azure AD MFA to on-premises applications.
- Configure the application in "Azure Active Directory" next "Application proxy".

### **2. Third-Party Integration:**

- Use Conditional Access policies to enforce MFA for third-party applications integrated with Azure AD.

## **10. Monitor Azure AD MFA Activity**

### **1. Sign-in Logs:**

- Go to "Azure Active Directory" next "Sign-ins".
- Filter logs by "MFA required" to monitor MFA usage.

### **2. Reports:**

- Use "Azure Active Directory" next "Reports" to get detailed insights into MFA-related activities.

## **11. OAuth Tokens**

OAuth tokens are used to authorize access to resources. Azure AD supports OAuth 2.0 for secure access delegation.

### **1. Application Registration:**

- Register applications in "Azure Active Directory" next "App registrations".
- Configure API permissions and grant admin consent.

### **2. Token Configuration:**

- Use OAuth tokens to authenticate and authorize users against Azure AD-secured resources.