



# .NET SDK for WA Digital Wallet

This library enables C# applications to interact with the WA Digital Wallet service. It supports credential issuance, status checks, presentation verification and tenant administration. The SDK targets .NET 6 and later.

## Installation

Install via NuGet:

```
dotnet add package WA.DigitalWallet --version 1.0.0
```

## Configuration

Add the following configuration to your appsettings.json:

```
{
  "WalletOptions": {
    "ApiBaseUrl": "https://wallet.api.gov.wa.au/api/v1",
    "ClientId": "your-client-id",
    "ClientSecret": "your-client-secret",
    "TenantId": "tenant-id"
  }
}
```

Register the client in your service container:

```
using Wa.DigitalWallet;

builder.Services.AddDigitalWallet(options =>
{
    configuration.GetSection("WalletOptions").Bind(options);
});
```

## Issuing a credential

```
var request = new IssueCredentialRequest
{
    SchemaId = "mDL",
    SubjectDid = "did:example:12345",
    Attributes = new Dictionary<string, object>
```

```

    {
        ["familyName"] = "Citizen",
        ["givenName"] = "Jane",
        ["expiry"] = "2030-12-31"
    }
};
var response = await _walletClient.IssueCredentialAsync(request);
Console.WriteLine($"Credential issued: {response.CredentialId}");

```

## Verifying a presentation

```

var result = await _walletClient.VerifyPresentationAsync(new
VerifyPresentationRequest
{
    Presentation = jwtPresentation
});
if (result.Verified)
{
    Console.WriteLine($"Subject DID: {result.SubjectDid}");
}

```

## Tenant onboarding

```

var tenantResponse = await _walletAdminClient.CreateTenantAsync(new
CreateTenantRequest
{
    Name = "Department of Transport",
    Region = "AustraliaEast"
});

```

## Logging & telemetry

The SDK integrates with Microsoft.Extensions.Logging and emits structured logs. It also exposes diagnostic events for OpenTelemetry tracing.

## Support

Refer to the documentation and API specification for detailed information. Issues and feature requests can be submitted via the project's issue tracker.

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