

ASP.NET Identity

What is ASP.NET Identity?

ASP.NET Identity is a framework for security and user management.

- Developed by Microsoft.
- ASP.NET Identity replaces the previous membership and security solutions.
- ASP.NET Identity 2.0 was released in the spring 2014
- Works with ASP.NET MVC, Web API, Web Pages, SignalR and Web Forms.
- Compatible from .NET 4.5

What is ASP.NET Identity?

ASP.NET Identity was developed to create a robust security solution which can cope with modern demands.

It also relieves the developers from creating a new user management system for every new application.

Giving us a framework for creating secure and modern security solutions.

Why ASP.NET Identity?

ASP.NET Identity is a security library from Microsoft, part of the .NET stack.

ASP.NET Identity is currently the preferred way to handle user authentication in ASP.NET applications

It comes with modern safety features like:

- Account confirmation
 - Both email and/or SMS confirmation
- Improved password handling
- Delegated authorization
- Two-Factor Authentication

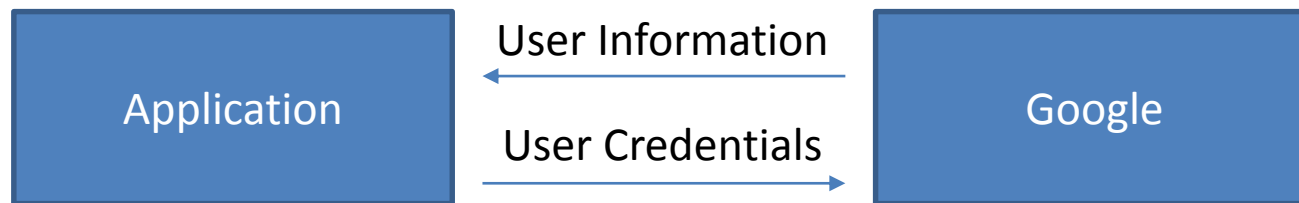
Why ASP.NET Identity?

ASP.NET Identity also gives us delegated authorization, using for example OAuth.

Easy use of social login providers thanks to OAuth

Allowing you to delegate the user authentication process.

Example of such providers : Google, Facebook or Twitter



Claims-based authentication

Allows the developer to create more detailed identities and control the authorization in greater detail.

You can look at claims as a users properties, for example the users name, age or address.

ASP.NET Identity works great with following project types:

- MVC
- Web Forms
- Web API
- Single Page Application
- SignalR

Why ASP.NET Identity

You can easily add ASP.NET Identity via the Package Manager Console, and implement your own functionality

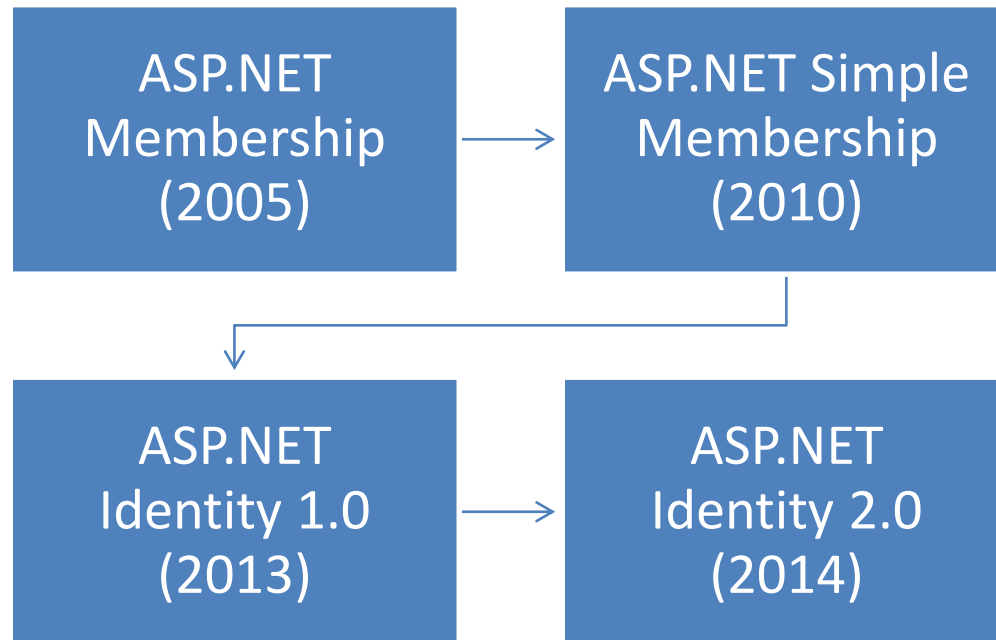
```
PM> Install-Package Microsoft.AspNet.Identity.Core  
PM> Install-Package Microsoft.AspNet.Identity.EntityFramework  
PM> Install-Package Microsoft.AspNet.Identity.Owin
```

When should I use ASP.NET Identity?

- When your application will handle a number of external users
- When you don't want to handle user authentication yourself
- When you feel the need for flexibility which claims-based authorization gives you
- When you want your application to follow the best practices of modern security

Before ASP.NET Identity?

What was before ASP.NET Identity?



What was before ASP.NET Identity?

General flaws with the previous security libraries:

- Difficulties adding additional information to the user-identity.
- No longer up to date with todays security standards
 - Not using modern password storage techniques
 - Does not support two-factor authentication
 - Does not support claims-based authentication

Think twice about using membership and simplemembership

<http://brockallen.com/2012/09/02/think-twice-about-using-membershipprovider-and-simplemembership/>

What was before ASP.NET Identity?

ASP.NET Membership

- Forms based authentication.
- Designed with only SQL servers in mind.
- No Owin integration.
- No social login providers.
- Difficult to customize user information
- Poor architecture

What was before ASP.NET Identity?

ASP.NET Simple Membership

- Built upon ASP.NET Membership
- Designed for ASP.NET MVC
- Supports OAuth/OpenId
- Tied to Microsoft databases (SQL)

What was before ASP.NET Identity?

ASP.NET Identity 1.0

- Released in 2013
- Simple & flexible way to store and handle user data
- Supports Roles & Claims
- Social Login Providers using OAuth
- Supports external Identity providers
- Supports customized databases
- Requires .NET 4.5

What was before ASP.NET Identity?

ASP.NET Identity 2.0

- Released in 2014
- Security Token Provider
- Two-Factor authentication
- Account confirmation (Email/SMS)
- Account lockout (Configure lockout time and number of attempts)
- Password reset (Email/SMS)

Resources

- ASP.NET official site
<http://www.asp.net/identity>
- ASP.NET security forum
<http://forums.asp.net/25.aspx/1?Security>
- Brock Allen (Blog)
<http://brockallen.com/category/asp-net-security/>
- Dominick Baier (Blog) Mostly focused on Web-API
<http://leastprivilege.com/category/net-security/>

- Pro ASP.NET MVC 5 Platform

