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DaoAuthenticationProvider

[DaoAuthenticationProvider](#) is an [AuthenticationProvider](#) implementation that uses a [UserDetailsService](#) and [PasswordEncoder](#) to authenticate a username and password.

This section examines how `DaoAuthenticationProvider` works within Spring Security. The following figure explains the workings of the [AuthenticationManager](#) in figures from the [Reading the Username & Password](#) section.

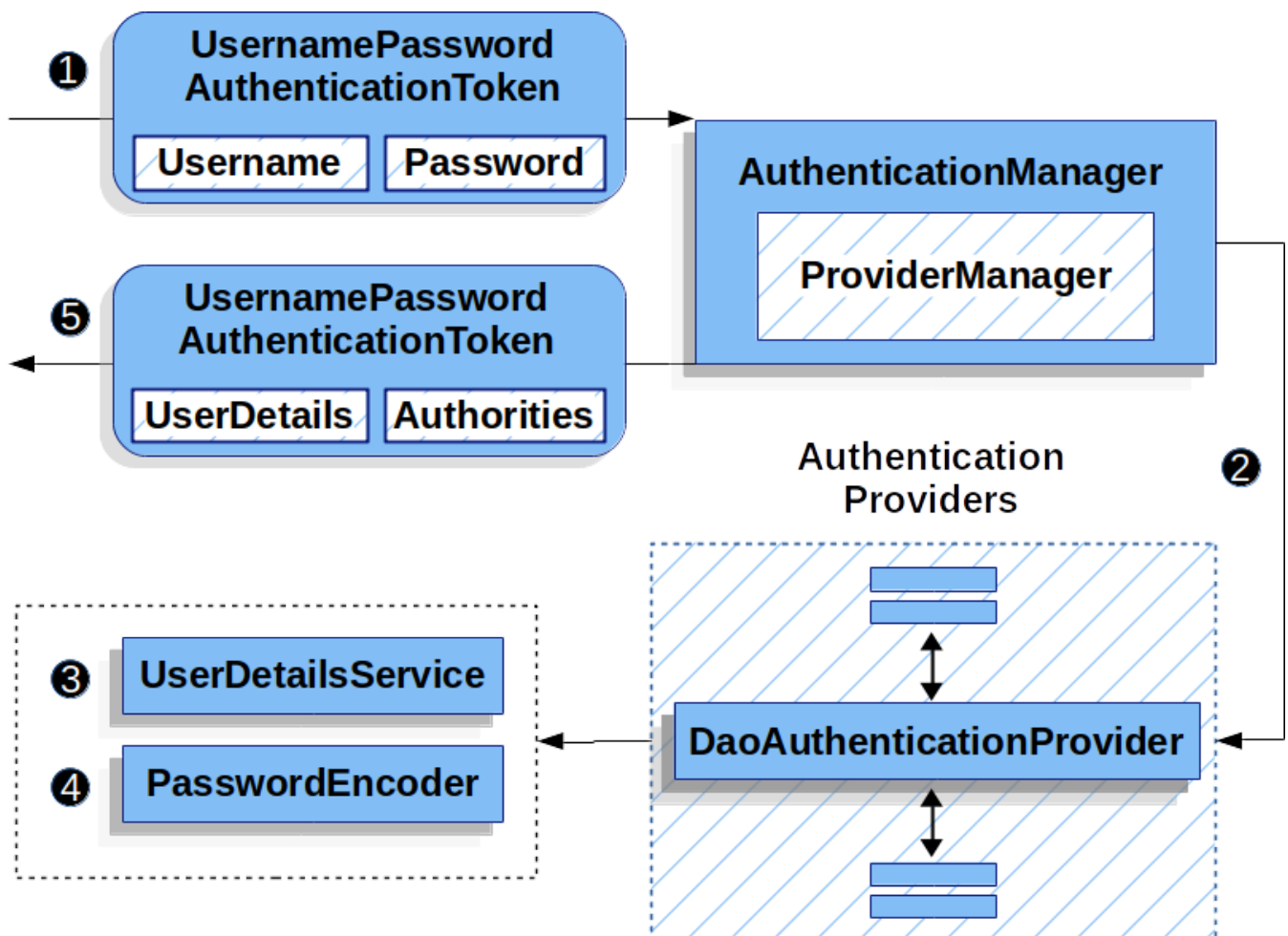


Figure 1. DaoAuthenticationProvider Usage

1 The authentication Filter from the [Reading the Username & Password](#) section passes a `UsernamePasswordAuthenticationToken` to the `AuthenticationManager`, which is implemented by [ProviderManager](#).

- 2 The `ProviderManager` is configured to use an [AuthenticationProvider](#) of type `DaoAuthenticationProvider`.
- 3 `DaoAuthenticationProvider` looks up the `UserDetails` from the `UserDetailsService`.
- 4 `DaoAuthenticationProvider` uses the [PasswordEncoder](#) to validate the password on the `UserDetails` returned in the previous step.
- 5 When authentication is successful, the [Authentication](#) that is returned is of type `UsernamePasswordAuthenticationToken` and has a principal that is the `UserDetails` returned by the configured `UserDetailsService`. Ultimately, the returned `UsernamePasswordAuthenticationToken` is set on the [SecurityContextHolder](#) by the authentication Filter.



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