

Eugen: All right. Welcome to this lesson in Learn Spring Security, The State of OAuth2 in Spring Security 5. With all of the changes that are coming into the Spring Security implementation of OAuth, let's take a step back and let's have a look at the state of OAuth. Let's understand what are the legacy implementations and where heavy work is being done right now by the core team.

At the very start of 2018, the [00:00:30] core team basically announced a bold new direction in the development of OAuth functionality in the framework, and the reason I called this a bold direction is because this is pretty much unprecedented in the Spring ecosystem. What I'm talking about is a rewrite. This is highly uncommon in the Spring ecosystem, so the fact that the team took this step means one clear thing: The OAuth2 support in Spring [00:01:00] Security is getting a lot better.

This is not an incremental evolution. This is a really big step forward to not only modernize the implementation, but to set the groundwork for a lot of new OAuth work that is going on at the specification level. So to have this as the reference implementation in Java, there's a natural need to be in sync with the specifications that are coming out in OAuth. And to be clear, this will be [00:01:30] a multiyear process. Actually, it's already a multiyear process right now, because we're not yet at feature parity. We'll talk about that in a second.

Let's first have a quick look at the major areas of work. The implementation effort is split in three major areas. We first got the client support. We're now getting the resource server support, and of course, what's left is the authorization server support. Now, there is of course plenty of functionality that kind [00:02:00] of cuts across either two or all three of these areas, so there is certainly common functionality that is being built, but at the very high level, these are the major areas of focus. And as I was saying, client came out in 5.0 and in 5.1, resource server support was the focus in 5.1 and 5.2, and authorization server support is coming out in 5.3 and potentially beyond that.

Now, what does all [00:02:30] of this mean for the existing OAuth stack? Because remember, we certainly have mature OAuth support in Spring Security right now. Well, simply put, the existing OAuth stack and the existing Spring Security OAuth project is fully supported and will be fully supported for a while, but what does change is that now that project is in maintenance mode, so that means security updates and potentially minor features, but nothing [00:03:00] major is being developed there. The focus of the core team is on the new functionality and on the new projects.

All right, so which stack do we use? If we start a new project today, which OAuth stack do we go for? Well, that really depends on exactly what you're implementing and exactly when you're doing that implementation. At this point, at the point of recording this video, there is not yet feature parity between the existing stack and the new stack. [00:03:30] So simply put, what that means is that if you're doing an implementation where there is functionality in the new stack and that functionality is already in a general availability release, then definitely use the new functionality. However, on the other side, for example, if you are implementing an authorization server, and the support for that is not yet part of the new functionality, then you should be using the

existing functionality in the existing stack, since again, that [00:04:00] is still fully supported.

Finally, before I wrap up here, there is a highly useful feature matrix that basically goes over all existing features in the existing OAuth stack and in the new stack, so that you can see exactly what functionality is implemented in exactly what stack. And of course, that feature matrix is being updated as new functionality is being developed in the new stack. All right, hope that gives you a good idea [00:04:30] of exactly where to look and how to think about your OAuth decisions, especially when you're working on new projects where you actually have to make a decision and pick a stack. All right, hope you're excited. See you in the next lesson.