Can I use hardware compatible with the Arduino UNO R3 with the Arduino UNO R4 WiFi?

Yes, the Arduino UNO R4 WiFi was specifically designed to ensure compatibility with previous shields and compatible hardware developed for the Arduino UNO R3. The UNO R4 WiFi maintains the same mechanical and electrical compatibility, allowing you to seamlessly use your existing shields and hardware with the new board. This makes it easy to upgrade to the UNO R4 WiFi without the need for significant changes or adaptations to your projects.

Can I use hardware compatible with the Arduino UNO WiFi Rev2 with the Arduino UNO R4 WiFi?

Yes, the Arduino UNO R4 WiFi is fully compatible with previous shields and hardware developed for the UNO WiFi Rev2. Both boards share the same UNO form factor and 5 V operating voltage. However, it's important to note that depending on the design, there may be changes in the pinout elements. Please refer to the documentation and pinout diagrams for specific details and compatibility considerations.

Can I use my sketch developed for the UNO R3 in the UNO R4?

Yes, if your sketch was developed using the [Arduino API](). In case you are using instructions only available for the AVR architecture, some changes need to be made to ensure compatibility.

Are all libraries compatible with the UNO R3 also compatible with the UNO R4 WiFi?

No, some UNO R3 libraries use instructions of the AVR architecture that are not compatible with the architecture of the UNO R4 WiFi, however there are libraries that have already been ported as part of our early adopters program or are based on the [Arduino API]().

What is the on-board LED Matrix on the Arduino UNO R4 WiFi and how can I use it?

The on-board LED Matrix is a fully addressable 12x8 (96 points) red matrix that utilizes Charlieplexing to individually control each point. To get started, simply download the "Arduino UNO R4 boards" core. This will grant

you access to the user-friendly Arduino_LED_Matrix API, allowing you to program and control the LED Matrix. More information can be found [here](#).

Are there any tools available to assist with creating animations for the LED Matrix?

Absolutely! We have developed a graphic tool specifically designed to help makers create and export their own animations. This way, you can unleash your creativity and make the most of this exciting feature.