



How QR codes work?

A QR code is simply a method to transfer the secret key from the server to the user's phone without them having to type it manually (which would be impractical and error-prone).

- **Content:** The QR code contains a specially formatted URI (Uniform Resource Identifier), which looks something like this:
otpauth://totp/AppName:user@email.com?secret=BASE32SECRETKEY&issuer=AppName
- **Structure:**
 - otpauth://totp/: Indicates to the authenticator app that this is a key for a TOTP code.
 - AppName:user@email.com: A label for the user to easily identify the account in their list.

- secret=BASE32SECRETKEY: **The most important part.** It contains the secret key, usually encoded in Base32 format to be compatible with the URI character set.
- issuer=AppName: The name of the company/application that issued the key. It helps with better organization and display in the authenticator app.

When scanning the code, the authenticator app simply "reads" this text, extracts the secret key and the other data, and saves them to be able to generate future codes.