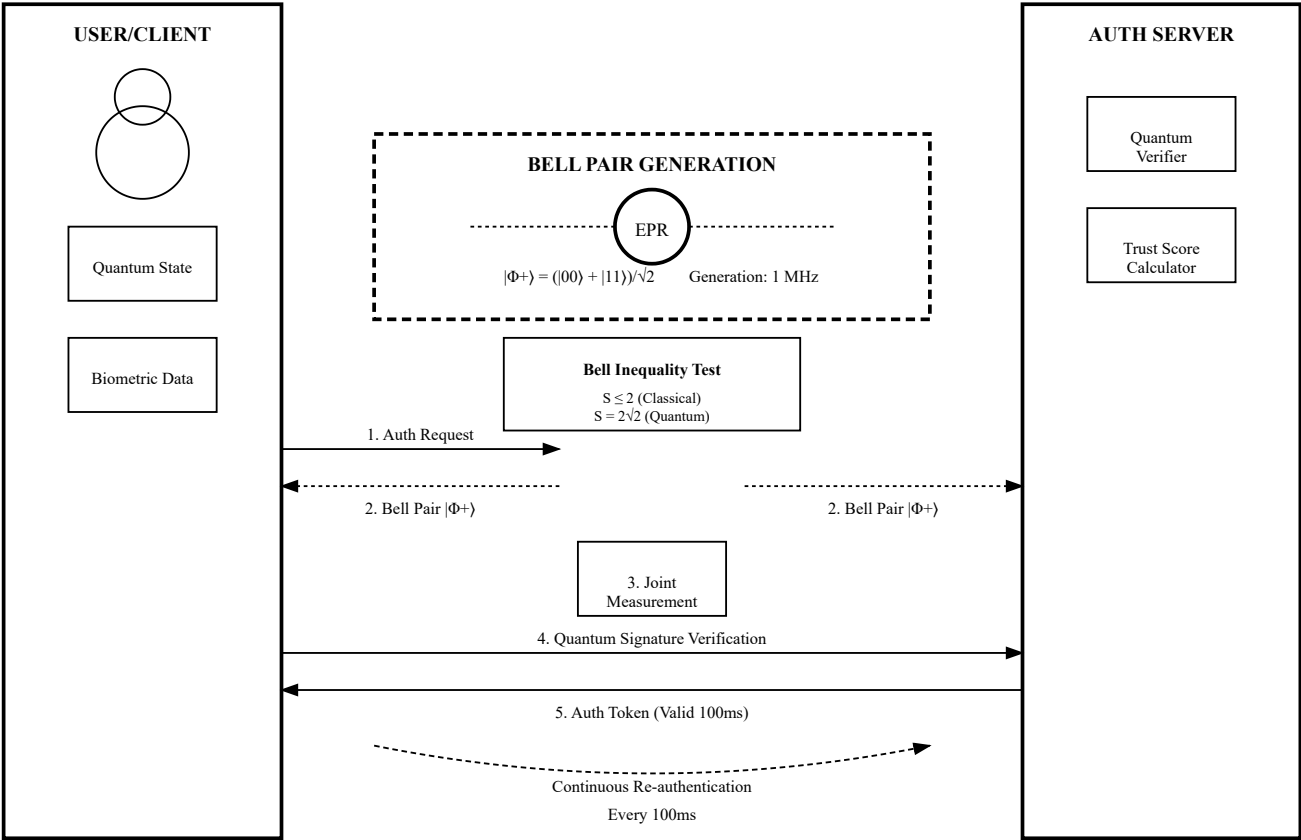


FIGURE 3: ZERO TRUST AUTHENTICATION FLOW WITH BELL PAIR GENERATION



SECURITY PROPERTIES:

- Information-theoretic security
- Authentication strength: >256 bits
- No-cloning theorem protection
- False positive rate: 10^{-9}
- Forward secrecy
- Quantum advantage: Unconditional
- Man-in-the-middle detection