

Comparing Evidian E-Signatures in Connected Worker Platform

Nymi Connect Worker Platform (CWP) supports two authentication configurations for creating e-signatures in Evidian integration: RFID mode, and Wearable mode.

RFID mode is an NFC-only configuration, which requires only NFC readers, without the need for Bluetooth adapters. RFID mode uses the NFC Unique Identifier (UID) on the Nymi Band to validate the user identity. The NFC UID is only accessible when a Nymi Band is authenticated. As a result, only the authorized user can create an e-signature, providing superior security over an RFID card. Requiring only an NFC reader, this configuration is easy to set up.

Wearable mode can be deployed as a Bluetooth (BLE)-only configuration (when using BLE intent), or as an NFC+BLE configuration (when using NFC intent). Wearable mode takes advantage of Nymi's secure Bluetooth communication to provide enhanced security. The login or e-signature can be initiated by either tapping the Nymi Band on an NFC reader (NFC intent) or Bluetooth Adaptor (BLE intent). The NFC UID or a BLE MAC address of the Nymi Band is captured through the Nymi Band tap. Then a secure session is established between the Nymi Band and Evidian via Bluetooth. The secure session validates that only a legitimate Nymi Band can be used to create signatures. Aside from the added security, Wearable mode unlocks more possibilities of the Connected Worker Platform (CWP). With BLE, the Nymi solution can detect whether a user is near a terminal or not. A Nymi Band can be used to unlock a terminal and lock that terminal when the user walks away. In addition, Wearable mode has a quicker response for e-signatures when you deploy recent Evidian and CWP releases, boosting your production efficiency even further.

Comparing the configurations:

- Wearable mode with BLE intent and RFID mode has the advantage of requiring only a single USB port for either an NFC reader or a Bluetooth Adaptor.
- In environments where all the equipment that you use needs to be clean room ready, a suitable configuration can be selected based on available peripherals. For example, when using terminals/tablets that are encased with a built-in NFC reader that is compatible with Nymi Bands, the RFID mode can be used.
- In terms of the speed of e-signature creation, both Wearable mode and RFID mode provide speedy authentication and e-signature, with Wearable mode offering a slight speed advantage over RFID mode.
- In RFID mode, it is possible for the NFC UID to be captured and replayed. However, this is unlikely in a restricted environment, such as lab or manufacturing facility, since it requires bringing in additional equipment for capturing and replaying the NFC UID.



- Both Wearable mode and RFID mode support Remote Desktop (RDP) and Citrix deployments, where the application requiring authentication runs on an RDP session host or Citrix server, which the user terminal with the NFC reader and/or BLE dongle connects to over an RDP or Citrix session.
- In some environments, more than one hop of RDP / Citrix is used. For example, the user first connects to a virtual desktop infrastructure over RDP, and from there starts a Citrix session to connect to the application. RFID mode can work in such multi-hop RDP/Citrix deployments. Wearable mode supports only single-hop RDP/Citrix but not multi-hop.

Both Wearable mode and RFID mode offer tremendous value in reducing the cost of compliance and improving productivity, and superior security, compared with other methods like passwords.

In all configurations, CWP with Evidian technology offers superior security. Nymi Band’s biometric authentication with on-body detection eliminates common compliance issues like password / PIN sharing. A user’s Active Directory and application credentials are protected by 256-bit encryption, both at rest and in transit.

For more information on security of the Nymi-Evidian solution, please refer to the Nymi Connected Worker Platform Security Whitepaper.

The table below summarizes the characteristics of each configuration.

	RFID mode	Wearable mode with NFC Intent	Wearable mode with BLE Intent
Advantages	• Simple hardware requirement: built-in NFC reader in terminal/tablet, or standalone NFC reader (sold separately) • Good performance • Supports RDP / Citrix, including multi-hop	• Enhanced security • Nymi Band presence-based use cases • Best performance • Supports RDP / Citrix (single hop)	• Enhanced security • Nymi Band presence-based use cases • Simple hardware requirement: Bluetooth Adaptor (shipped with Nymi Bands) • Best performance • Supports RDP / Citrix (single hop)
Limitations	• No Nymi Band presence-based use cases • Possible for the NFC UID to be captured and replayed (but unlikely in a restricted environment, such as lab or manufacturing facility)	• May require two USB ports for NFC reader and BLE adaptor (except when using combined NFC+BLE readers, which require only one USB port) • Does not support multi-hop RDP / Citrix	• Does not support multi-hop RDP / Citrix
Common Security Features	• Biometric authentication + on-body detection • 256-bit encryption for active directory and application credentials at rest and in transit		