

NFC for Hoteling and Hotdesking Applications on Poly Edge E Series Phones

Contents

Introduction	2
Feature Requirements for Enabling NFC Login	2
Reading the ETH MAC Address in the NFC Tag	3
Sending NFC Data and User Account Information to a Provisioning Server.....	5
User Authentication with the Backend Service	5
Reconfiguring Shared Phones	5
Get Help	6
Privacy Policy.....	7
Copyright and Trademark Information	7



Introduction

Poly recognizes a growing trend of hotdesking or hoteling setups in companies working to keep pace with a changing work environment and increased hybrid work models. Hoteling or hotdesking setups enable users to log in to a shared phone and access their contacts, directory, speed dials, and other preferences. While these features enable customers to create more flexible working environments, manually logging in to and out of a desk phone isn't user friendly, especially on non-touch devices. This process also leads to an influx of help desk calls from users who have forgotten their passwords.

Poly Edge E Series business IP phones with integrated Near Field Communication (NFC) technology simplify the login process by enabling users to log in to a shared phone with a single tap on their mobile phones. Once logged in, users can access their personal line registrations, preferences, speed dials, and directory configurations. This secure, one-step login process eliminates the need to remember passwords and the struggle of entering text using a keypad. This feature also ensures that the user of the shared workspace is the one whose credentials and configuration are active on the shared Edge E Series phone.

Poly partners can leverage Edge E Series NFC technology to enable users with one-tap login capabilities through service provider or UC platform mobile applications. Partner applications must read the phone's NFC identification tag for key device information and use that information to send a configuration profile from the provisioning server to the shared phone.

Feature Requirements for Enabling NFC Login

You must have the following requirements in place to enable users to log into shared phones using NFC:

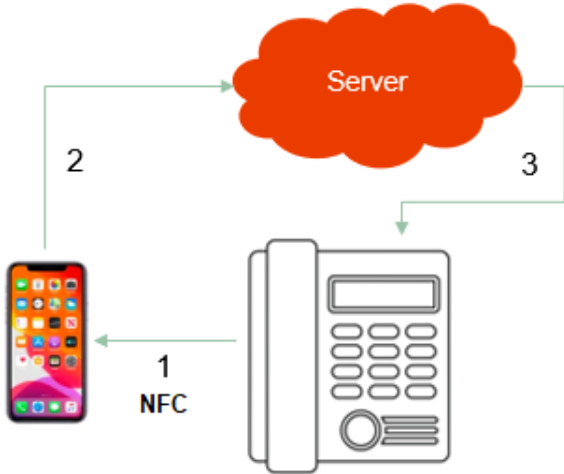
- Poly Edge E series phones configured as a shared phone and connected to a Hoteling or Hotdesking service.
- Android and iOS mobile applications that perform the following actions:
 - Read the shared phone's NFC data and the Ethernet (ETH) MAC address
 - Send the user's account information and shared phone's ETH MAC address to the partner backend service
 - Log out a user and request the provisioning server to return the phone to a shared profile or a sign-in screen

NFC Login Process on Edge E Series Phones

After you configure the Edge E Series phones, create your application, and configure the provisioning server, the following process occurs when users enter a shared workspace and connect their mobile phones to an Edge E Series phone using NFC:

- 1 Your application on the user's phone reads the shared phone's MAC address in the NFC tag.
- 2 Your application sends the user's account information and the shared Edge E Series phone's device information to the provisioning server.
- 3 The provisioning server verifies the shared Edge E Series phone and user information and honors the shared phone's request for the assigned configuration profile. The user's personal settings and data display on the shared phone.

Process for NFC server login



Reading the ETH MAC Address in the NFC Tag

The partner application must read and capture the ETH MAC address associated with the Edge E Series phone.

Example ETH MAC Address

The ETH MAC addresses for Poly phones are in the following format: **64 16 7F 9F 66 F6**.

The six bytes of the ETH MAC address are stored in the **Address 1E** and **Address 1F** data fields within the phone’s NFC memory. In the NFC tag, the ETH MAC address is a combination of the last 3 bytes of **Address 1E** and the first three bytes of **Address 1F**, for example:

- Address 1E: 30:**64:16:7F**
- Address 1F: **9F:66:F6**:64

Phone Data Stored in the NFC Tag

The following table provides example information stored within the NFC tag of Edge E Series phones, including the ETH MAC address.

Example Data Stored in the NFC Tag for Edge E Series Phones

<i>Data</i>	<i>Size (Bytes)</i>	<i>Text</i>	<i>ASCII Value</i>	<i>Hex Value</i>
HW ID	7	3111-86990-001	N/A	31 11 08 69 90 00 01
HW Rev	2	A0	N/A	41 80
ETH MAC	6	N/A	48 25 67 12 B7 00	48 25 67 12 B7 00
BT MAC	6	N/A	48 25 67 12 B7 01	48 25 67 12 B7 01

<i>Data</i>	<i>Size (Bytes)</i>	<i>Text</i>	<i>ASCII Value</i>	<i>Hex Value</i>
WIFI MAC	6	N/A	00 00 00 00 00 00	00 00 00 00 00 00
Model Num	15	Poly Edge E220	N/A	50 4F 4C 59 20 45 47 45 20 45 32 32 30
SW Version	5	8.0.0.00001	N/A	07 30 01 28 85

Application Guidelines for NFC Communication

The mobile platform determines how the partner application uses NFC to read the shared phone’s NFC data. See the following resources for using APIs to configure NFC communications:

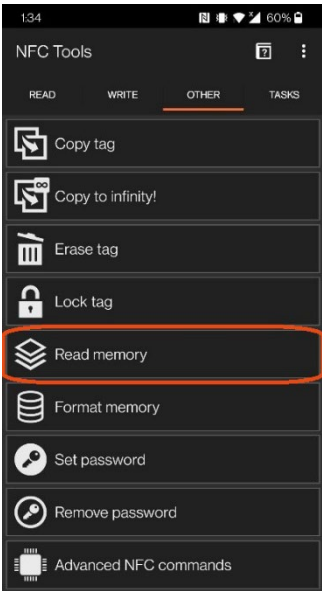
- For Android partner applications, see the [NFC API guide](#).
- For Apple iOS partner applications, see the [Core NFC framework](#).

Read NFC Data Using the NFC Tools Application

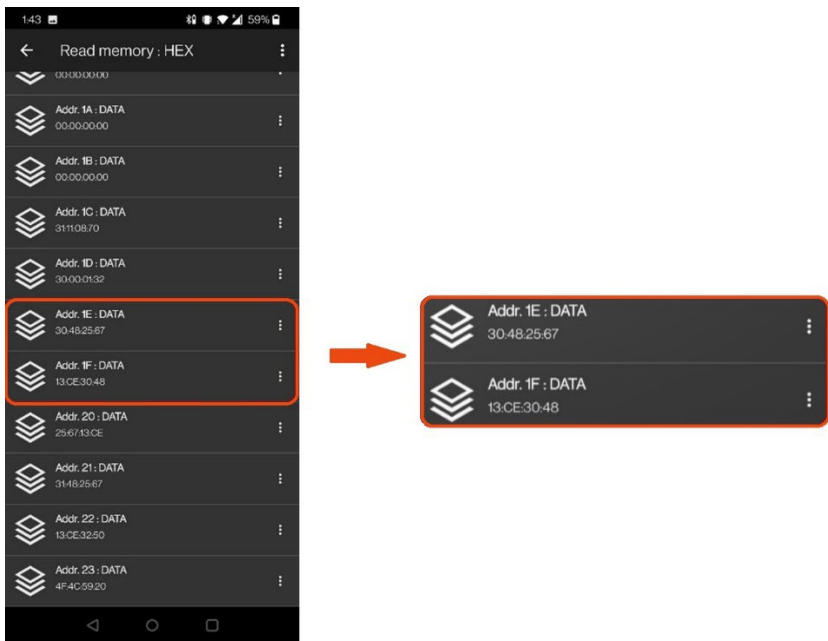
To test your application or provide a quick proof-of-concept check, download the NFC Tools application from the [Google Play](#) or [Apple App](#) stores and use it to read the NFC tag and stored data of Edge E Series phones.

Procedure

- 1 Start the NFC Tools application on a mobile phone.
- 2 Select the **Other** tab.
- 3 Select **Read Memory**, then hover the mobile phone over the Edge E Series phone display.



The application reads the phone’s NFC tag and displays the phone’s NFC data, including the ETH MAC address in the **Addr. 1E** and **Addr. 1F** data fields.



- 4 Use the information listed in the **Addr. 1E** and **Addr. 1F** fields to concatenate the phone’s MAC address and verify it matches the MAC address listed on the product label on the back of the phone.

For information on how the ETH MAC address corresponds to the phone’s MAC address, see [Example ETH MAC Address](#).

Sending NFC Data and User Account Information to a Provisioning Server

After you enable applications to read the Edge E Series phone’s NFC data, configure your application to send the phone’s ETH MAC address to the provisioning server along with the account information for the user logged in to the application.

User Authentication with the Backend Service

Determine whether your backend service authenticates a user. After the backend service authenticates the user, it directs the Poly shared phone to request a configuration profile from the provisioning server.

For information on configuring Edge E Series phones for server authentication, see [User Profile Server Authentication](#) in the *Poly Edge E Series Administrator Guide*.

Reconfiguring Shared Phones

After your backend service authenticates the user, the service creates a personalized configuration file based on the user’s profile and commands the phone to pull that personalized configuration file from the

provisioning server. The phone reconfigures its settings based on the new configuration file and displays the user's phone lines, contacts and speed dials, call history, and personalized settings.

There are a couple of methods you can use to reconfigure Edge E Series phones. However, Poly recommends using a `SIP NOTIFY` (check-sync) message.

Using Check-sync SIP NOTIFY Messages

Use a `SIP NOTIFY` message containing an `Event: check-sync` header to command the phone to reconfigure its profile settings. When the backend service sends the phone this message, the phone then sends a request to the provisioning server for a configuration file and updates its configuration profile.

By default, Poly phones always check for software and configuration file updates when they receive a check-sync command. Poly also recommends including the following parameter configurations if the backend service also manages directories or call histories:

```
voIpProt.SIP.specialEvent.checkSync.downloadDirectory="1"
voIpProt.SIP.specialEvent.checkSync.downloadCallList="1"
```

Using PDMS-SP REST API Commands

If you have Poly phones onboarded with Poly Device Management Service for Service Providers (PDMS-SP), you can use the `resyncs` REST API command to trigger a configuration update on registered shared phones.

For more information on using the `resyncs` command, see the [PDMS-SP REST API](#) documentation.

Get Help

For more information about installing, configuring, and administering Poly products or services, go to [Poly Support](#).

Related Poly and Partner Resources

See the following sites for information related to this product.

- [Poly Support](#) is the entry point to online product, service, and solution support information. Find product-specific information such as Knowledge Base articles, Support Videos, Guide & Manuals, and Software Releases on the Products page, download software for desktop and mobile platforms from Downloads & Apps, and access additional services.
- The [Poly Documentation Library](#) provides support documentation for active products, services, and solutions. The documentation displays in responsive HTML5 format so that you can easily access and view installation, configuration, or administration content from any online device.
- The [Poly Community](#) provides access to the latest developer and support information. Create an account to access Poly support personnel and participate in developer and support forums. You can find the latest information on hardware, software, and partner solutions topics, share ideas, and solve problems with your colleagues.

- The [Poly Partner Network](#) is a program where resellers, distributors, solutions providers, and unified communications providers deliver high-value business solutions that meet critical customer needs, making it easy for you to communicate face-to-face using the applications and devices you use every day.
- [Poly Services](#) help your business succeed and get the most out of your investment through the benefits of collaboration. Enhance collaboration for your employees by accessing Poly service solutions, including Support Services, Managed Services, Professional Services, and Training Services.
- With [Poly+](#) you get exclusive premium features, insights and management tools necessary to keep employee devices up, running, and ready for action.
- [Poly Lens](#) enables better collaboration for every user in every workspace. It is designed to spotlight the health and efficiency of your spaces and devices by providing actionable insights and simplifying device management.

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