



# MOBILE BADGING

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# Mobile Badging

[iOS](#) [Android](#) [Token](#) [Badging](#) [RCDevs in the Cloud](#) [Cloud Services](#) [Cloud Badging](#)

## 1. Overview

This document demonstrates how to set up and use the mobile badging feature of OpenOTP.

To enable that feature in your WebADM infrastructure you must meet the following requirements :

- > Push mechanisms configured with your WebADM infrastructure,
- > Minimal version of WebADM is 2.1.16,
- > Minimal Version of OpenOTP is 2.1.6,
- > Minimal version of OpenOTP Token application is 1.5.16,
- > Mobile Badging and Remote Reporting option part of your freeware, enterprise or trial license.
- > Optionally [Sign & Seal](#) features included in your license with signature credits in order to use an eiDas trusted certificate for the timestamping of each transaction.

## 2. Feature Set up

This chapter describes how to configure WebADM/OpenOTP with mobile badging.

### 2.1 Enabling Mobile Badging

To configure mobile badging, you need to go on WebADM Admin interface and select [Applications](#) tab, under which you should select the [CONFIGURE](#) link under [MFA Authentication Server](#) .

On the following page go to [Mobile Badging](#) section, where you can enable [Mobile Badging](#) feature and choose between 3 possible modes, [BADGE](#) , [CHECK](#) or [MIXED](#) . As explained underneath, the [BADGE](#) mode offers you the possibility to [badge-in](#) and [badge-out](#) with a [time-tracking](#) feature and [badged-only](#) access policies while the [CHECK](#) mode allows you only to [check-in](#) . Finally, the [MIXED](#) mode is a combination of the 2 previous modes relying on your geolocalisation.

**Mobile Badging**

Mobile Badging BADGE ▾

- BADGE: Badge-in and badge-out with time-tracking and badged-only access policies.
- CHECK: Badge-in only (no badge-out and no time-tracking).
- MIXED: Check from office location and Badge-in elsewhere.

Data Collection  GPS  DN  IP  Mobile  [None]

Data to be collected in the exportable XML data during mobile badge-in and badge-out.

Timestamping LocalCA ▾

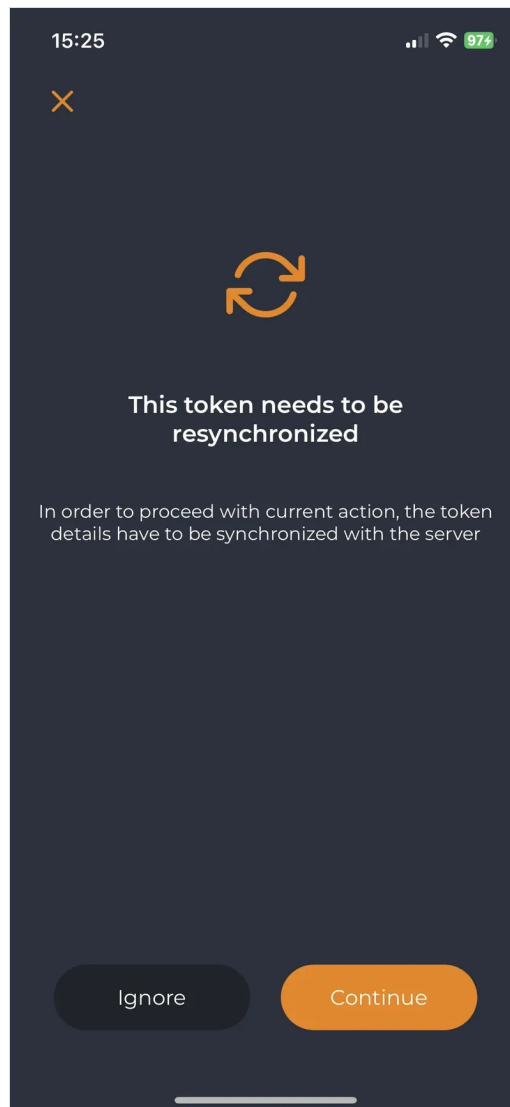
Seal and timestamp the collected badging details with your local CA or eIDAS.  
Note: eIDAS requires your license to include the Sign & Seal options for OpenOTP!

Allowed Locations LU,FR Edit

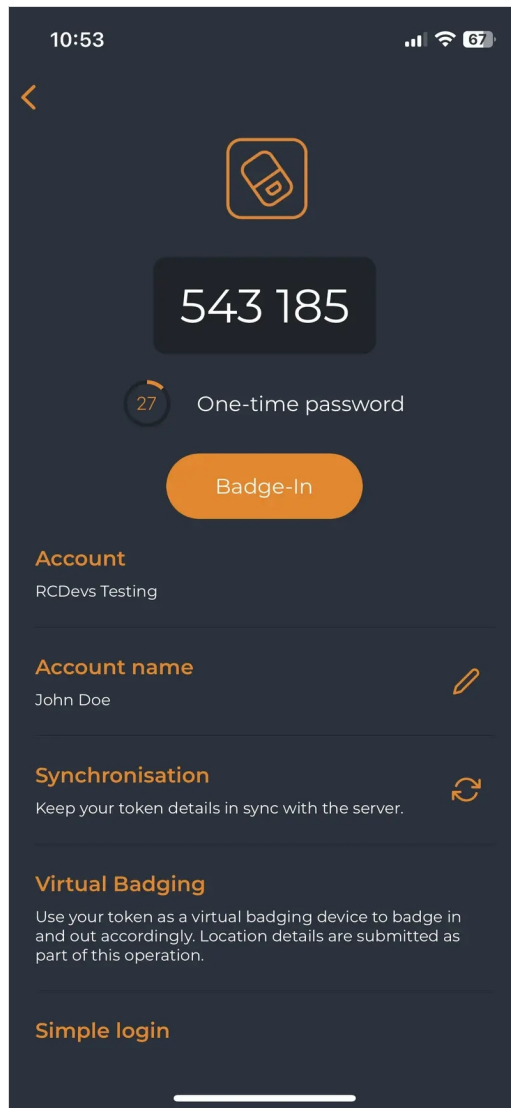
When enabled badge-in is limited to the listed countries.

Mixed to client policies, you can prevent a user to login on a system if he didn't **badge-in** during the current day.

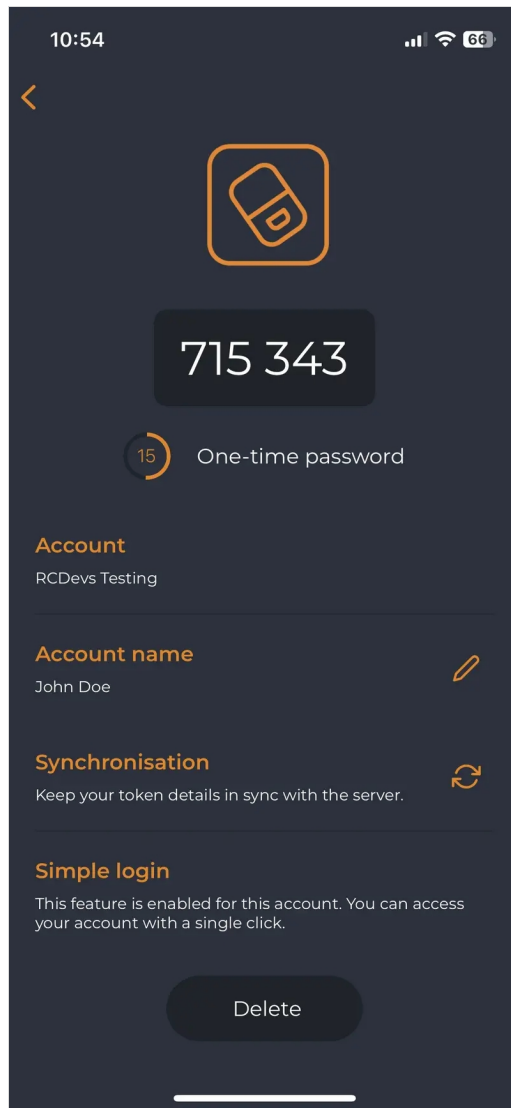
If you enabled the badging feature after push token registrations, users will be prompted to resynchronize their token during the next push request they will receive.



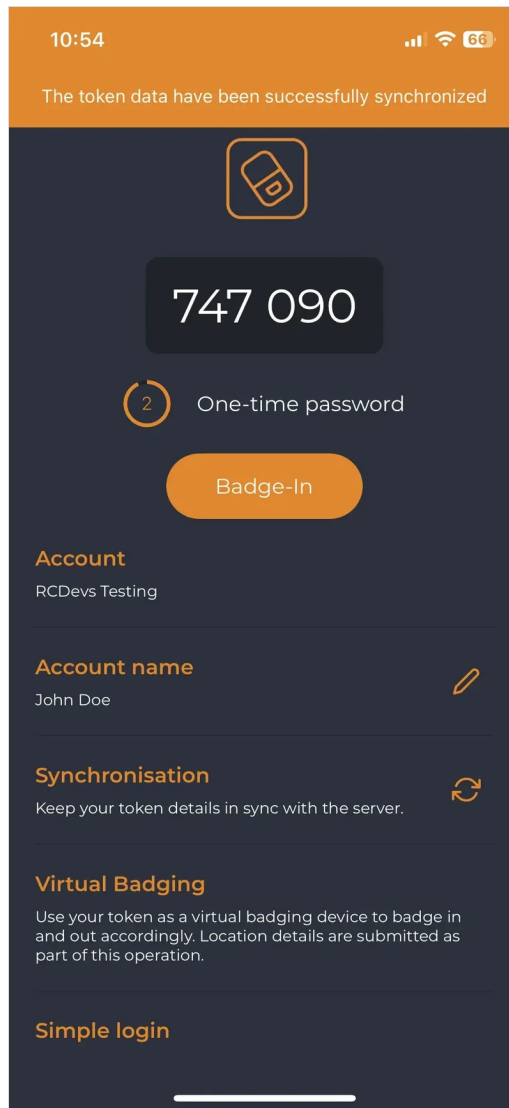
The user has to click on **Continue** button to perform the sync.



Afterward, the badging feature will appear on their Token. The Token can also be manually resynchronized by the user himself. In that case, he just had to access his token and click **Synchronisation** button:



After a successful resync, a message is prompted at the top of the screen:



## 2.2 Managing options

On the previous image, we can see that 3 other options are available in the **Mobile Badging** section.

Firstly, we can choose which are the information gathered by checking **Data Collection** and then checking every option that you want between GPS, DN, IP and Mobile. Those data will be stored in the SQL database configured with your WebADM and are submitted from the mobile to your OpenOTP mobile endpoint URL directly. They are never forwarded through RCDevs cloud infrastructure and RCDevs do not has any access to those data.

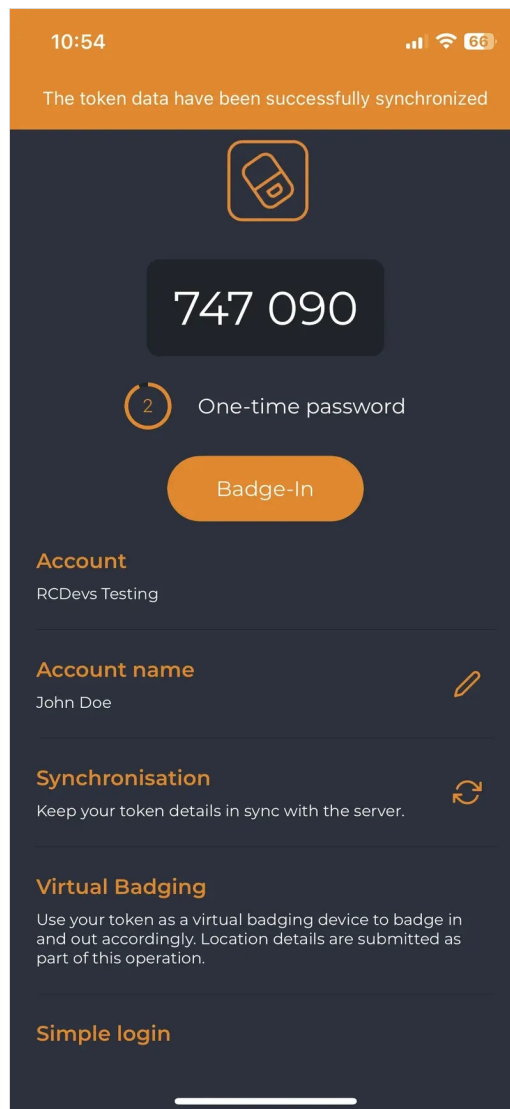
The following option concerns the certificate used for the timestamping of each operation. The first choice is the **local CA** and the second is **eIDAS** which requires **Sign** option part of your OpenOTP license with signature credits purchased and available with your license.

Regarding the last option, it is about the possibility to allow only certain location(s) from where the badging operation is allowed (users locations). By checking this option, you can choose the countries where the badging operation will work. If not enabled, then all locations are allowed.

## 3. OpenOTP Token Badging

## 3.1 Badge Mode

Once you have this token, you can click on it, and then you will see the option to badge-in.



Then, when you click on the buttons **Badge In** or **Badge Out**, a confirmation message will appear at the top of the screen.



Badging operation completed successfully.



306 065

20 One-time password

Badge-Out

Account

RCDevs Testing

Account name

John Doe



Synchronisation

Keep your token details in sync with the server.

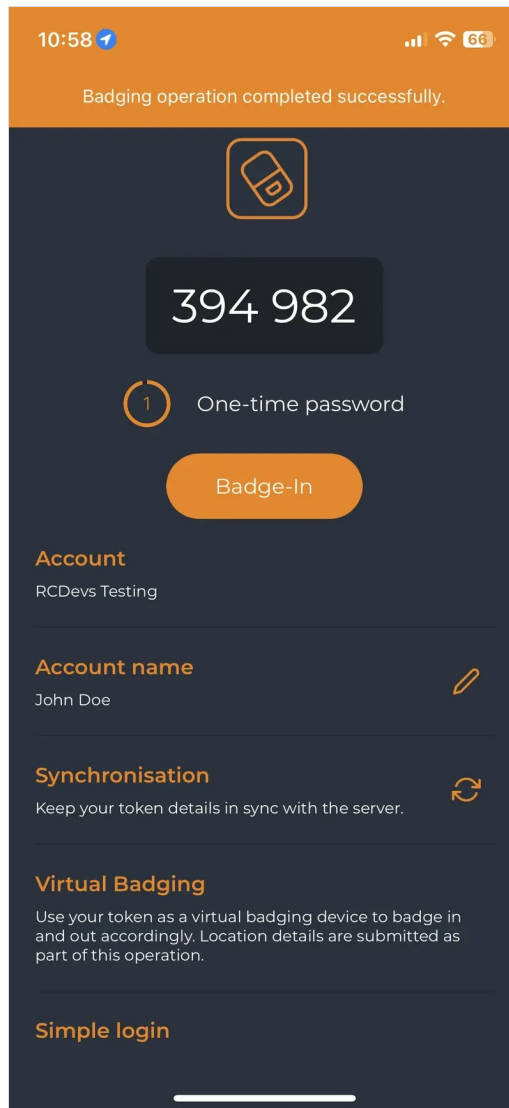


Virtual Badging

Last Check-In: 2 Dec 2022 at 10:56:39  
Use your token as a virtual badging device to badge in and out accordingly. Location details are submitted as part of this operation.

Simple login

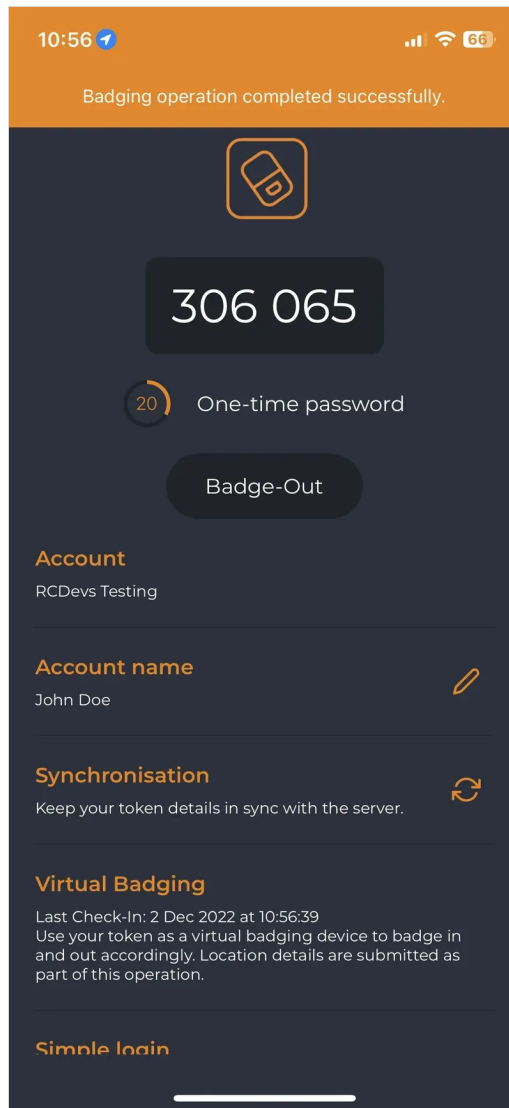




The time between the use of the two buttons is held in WebADM to calculate the time that the user has been badged in.

### 3.2 Check Mode

On the same token, but this time with the check mode activated instead of the badge mode, we have the option **Check In** to use to proceed our check.



Check operations are not requiring a **Check Out** operation. There is no **time tracking** with that mode.

### 3.3 Mixed Mode

To enable this mode, a geolocation of the office is required in the settings, or it won't be able to work. Indeed, this mode adapts to the user's geolocalisation.

If the user is located in his office, then the badging will work as **CHECK** mode. However, if the user is in remote, works from his home or anywhere else, then the mobile badging will work as **BADGE** mode (with time tracking).

## 4. WebADM Configuration

### 4.1 LDAP Option Sets

#### 4.1.1 Mobile Badging

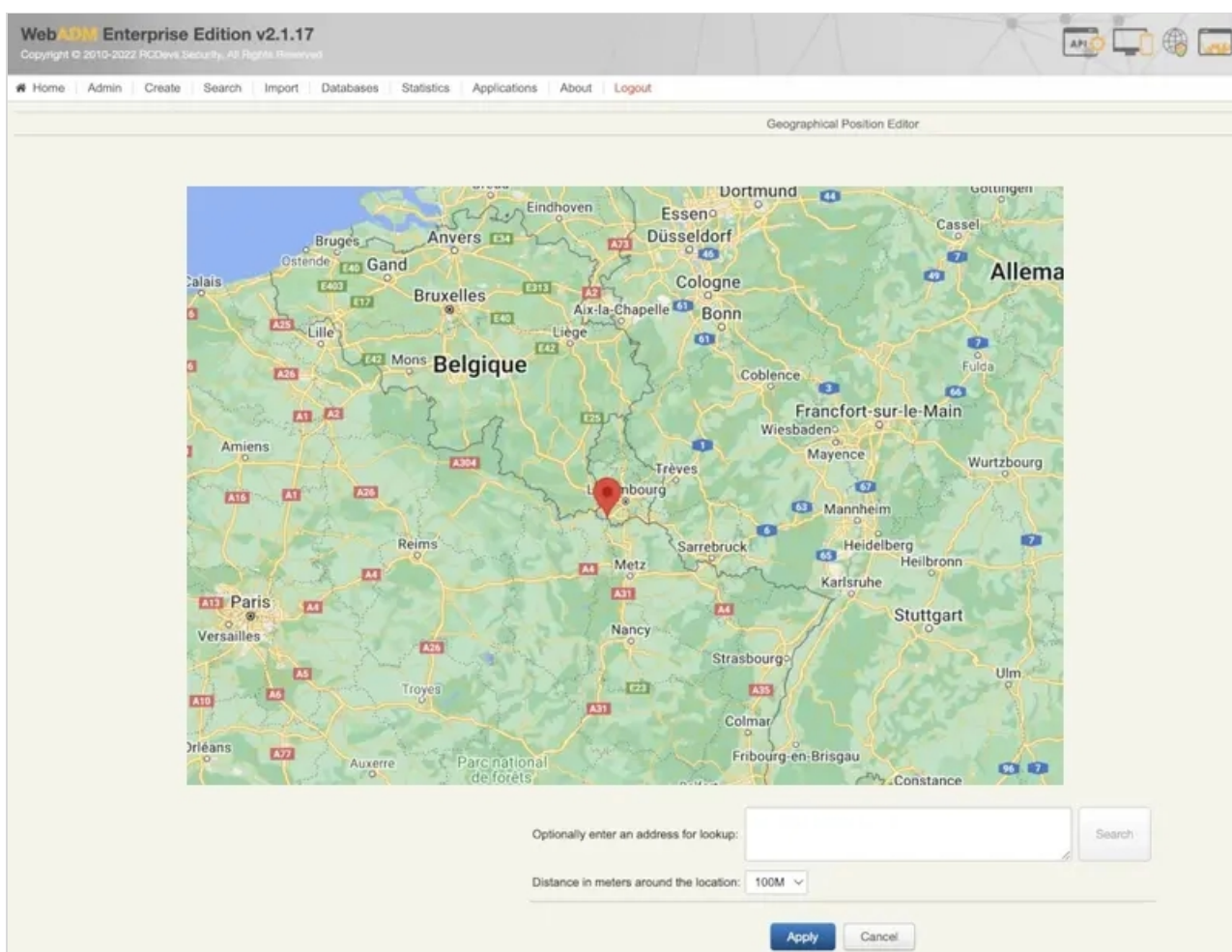
Just like for the Client Policy, the mobile badging bring some options to configure part of the **LDAP Option Sets** feature of WebADM. **Multiple LDAP option sets** can be configured in order to apply different settings according to the branch of your LDAP tree where the **Option Sets** is applied.

Thus, in the **Admin** tab, select **LDAP Option Sets** box and click **CONFIGURE** button in the **LDAP Option Sets** that you want to edit.

If you do not have any **LDAP Option Sets** created, then please refer to WebADM Administrator guide in order to create and configure it.

Reach now the **Mobile Badging** section in your **LDAP Option Sets**. You can configure the following settings:

- > **Office Coordinates**: Configure your office(s) location(s) in order to detect badging/check operations from your office(s). You can define the country (or countries) where your office is located in order not to be considered working remotely when badging in this place as it gathers your GPS coordinates. To distinguish working in the office or just in the same country as the office, the GPS coordinates are configurable in that option. By clicking the edit button, it is possible to define the office position from Google Maps and the radius accepted around the coordinates. To define the office position, two ways are possible: entering the address desired or pinging it directly on the map.



- > **Office Networks**: Configure your different office(s) network subnets in order to detect badging/check operations from your office(s) networks. This feature requires the **Office Coordinates** setting configured.
- > **Check Badging Expire**: Minimum time for which access remains allowed after a badging in Check mode (in hours). If not set, client accesses will remain allowed for one hour anyway.
- > **Check Badging Hours**: Daily hour chunks within which a badging in Check mode remains active.
- > **Badged Users Group**: LDAP group to be auto populated with badged-in users.

> **Office Users Group**: LDAP group to be auto populated with users badged-in from office.

### Mobile Badging

**Office Coordinates**    
GPS coordinates used to detect badging from office (ex. 49.502105712890625,5.944442179558995).

**Office Networks**   
Network(s) with mask to be considered as internal office IP subnets (requires Office Position).  
Needs to be set in order to allow auto-badging at first login from office.

**Check Badging Expire**    
Minimum time for which access remains allowed after a badging in Check mode (in hours).  
If not set, client accesses will remain allowed for one hour anyway.

**Check Badging Hours**    
Daily hour chunks within which a badging in Check mode remains active.

**Badged Users Group**    
LDAP group to be auto-populated with badged-in users.

**Office Users Group**    
LDAP group to be auto-populated with users badged-in from office.

## Multiple offices/countries

If you have multiple offices location, you may configure multiple **LDAP Option Sets** in order to apply different settings per office (office location, office networks, badging hours...). In that case, your LDAP database should be structured by country or by office for example, in order apply different configuration per country/office as the **LDAP option Set** is applied on a specific LDAP container, Organizational Unit or Organization and can not enter in conflict on the target subtree with another **LDAP option Set**.

### 4.1.2 Remote Work Accounting

There is a whole section dedicated to the **Remote Work Accounting** which is related to the mobile badging.

### Remote Work Accounting

**Local Country**    
The country which should not be considered as remote work in the badging reports.

**Remote Quota**   
Maximum number of remote work days in the selected countries.  
Use a comma-separated list in the form 'FR:32,BE:25' to set per user country quotas.  
Per user country quota requires users to have the country 'c' LDAP attribute set.

Depending on the country from which you work, the quota for remote work differs. That's why the option remote quota offers you the opportunity to dedicate a specific number of remote work allowed per country.

## 4.2 Client Policy

Client policies defined for your systems can be configured to require a daily **badging/check** operation from your users in

order to access that 3rd party system with their account. The advantage of that feature is to prevent access to a system when user is not **badged-in** or **checked** on the servers. Users' authentication become automatically unusable on these third-party systems until the user who is trying to login perform the **badge-in/check** operation from his mobile.

**Default Badging Policy**

**Require Badging**       Yes    No (default)

Prevent access unless the user badged-in the same day with RCDevs Mobile Token.  
Any access will be denied while the user is in badged-out or un-checked state.

**Badging IP Match**      Address ▾

Permit only requests originating from the badging public IP address or country.  
This restriction is not enforced when the request source is not available.

The first of these two options allow you to enforce the badging in this particular client policy. It means that the user won't be able to authenticate without being badged-in or checked-in, depending on the mode of badging activated.

The second option is to enforce an IP address matching between the badging operation and the user IP retrieved during the authentication on a third party system.

- > If you use **Address**, then the user must **badge-in/check** from the same network location than where he is establishing an authentication on that third party system.
- > If you use **Country** then the user must **badge-in/check** from the same country as where he is establishing an authentication on that third party system.

## 4.3 Database

Go to the Databases tab where you will find the database **Physical Access & Mobile Badging** in the section SQL Data Tables. That's where information about checks and badging of the users are stored.

WebADM Enterprise Edition v2.1.17  
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Home Admin Create Search Import Databases Statistics Applications About Logout

User Presence Viewer for Physical Access & Mobile Badging (0 results)

Entry Selection: Domain: Default, Period: Three Week, From Date: 2022-11-11, Time Range: [Any] to [Any], Display Only: [Unrestricted]

Entry Actions: Access Log Viewer, Export as CSV / XML, Fix Missing Countries

Presence Legend: No Badging, Badging Ok, No Badge-Out, Out Of Range, Inconsistent, In Office, Remote Work

User	Fri 11/11	Sat 11/12	Sun 11/13	Mon 11/14	Tue 11/15	Wed 11/16	Thu 11/17	Fri 11/18	Sat 11/19	Sun 11/20	Mon 11/21	Tue 11/22	Wed 11/23	Thu 11/24	Fri 11/25	Sat 11/26	Sun 11/27	Mon 11/28	Tue 11/29	Wed 11/30	Thu 12/01	Presence / Period	Remote > Jan 01	Remote / 12 Mon	
SpanKey																						[NA]	-	-	
																							[NA]	-	-
																							[NA]	-	-
																							[NA]	-	-
																							[NA]	-	-
pki_tester																							[NA]	-	-
rcdevs																							[NA]	-	-
																							[NA]	-	-
sharepointadm																							[NA]	-	-
super_admin																							[NA]	-	-
test																							[NA]	-	-
testing for jenkins																							[NA]	-	-
testscript (ext)																							[NA]	-	-
vagrant																							[NA]	-	-
																							[NA]	-	-
xrdp																							[NA]	-	-

Time Range: 5m, 2h37m, 12h39m, 1m, 12m, 15h37m

Type: Badged Out, Badged In, Location: Office, Country: [Flag]

Time: 2022-11-29 10:22:09, 2022-11-29 10:20:10, 2022-11-29 10:20:06, 2022-11-29 10:20:00, 2022-11-29 08:42:12, 2022-11-29 08:33:57, 2022-11-29 08:32:17, 2022-11-29 08:29:42

In this table, there is the time spent while being badged-in or checked-in by each user each day for the last month. While being badged-in, the case of the day remains orange until the user badge-out, then it runs into green.

A Time range is configurable to define the range the users are allowed to badge-in and badge-out. However, being out of this range won't block the badging, but it will turn the cases in pink and the time spent outside the range won't be counted in the column presence.

There is also the possibility to restrain the choice among the users you want to display on the database with filters such as: Active Users, Remote Work, Office Work, Has Absences, No Badge-out.

You can also create some filters to display only relevant information :

User Presence Viewer for Physical Access & Mobile Badging (0 results)

Entry Selection: Domain: Default, Period: Three Week, From Date: 2022-11-12, Time Range: [Unrestricted], Display Only: Active Users, Remote Work, Office Work, Has Absences, No Badge-Out

Entry Actions: Access Log Viewer, Export as CSV / XML, Fix Missing Countries

Presence Legend: No Badging, Badging Ok, No Badge-Out, Out Of Range, Inconsistent, In Office, Remote Work

User	FR	Mon 11/14	Tue 11/15	Wed 11/16	Thu 11/17	Fri 11/18	Sat 11/19	Sun 11/20	Mon 11/21	Tue 11/22	Wed 11/23	Thu 11/24	Fri 11/25	Sat 11/26	Sun 11/27	Mon 11/28	Tue 11/29	Wed 11/30	Thu 12/01	Fri 12/02	Presence / Period	Remote > Jan 01	Remote / 12 Mon	
John Doe	FR	4h56m	40m	1h11m	1m				29m			6h51m				8h13m	6h36m	5h48m	8h27m		1d19h17m	-	-	
	[NA]																					1m	-	-
	FR				12m	1m				7m		11h38m										12h1m	-	-



## Note

To have the location **In Office** and the little white triangle in the cases, the Office Position must be configured in the LDAP Option Sets.

Every single check-in, badge-in or badge-out is stored and available to see all the details of these actions. To have a view on the information of these actions, just click on the time spent one day, and you will then find everything.

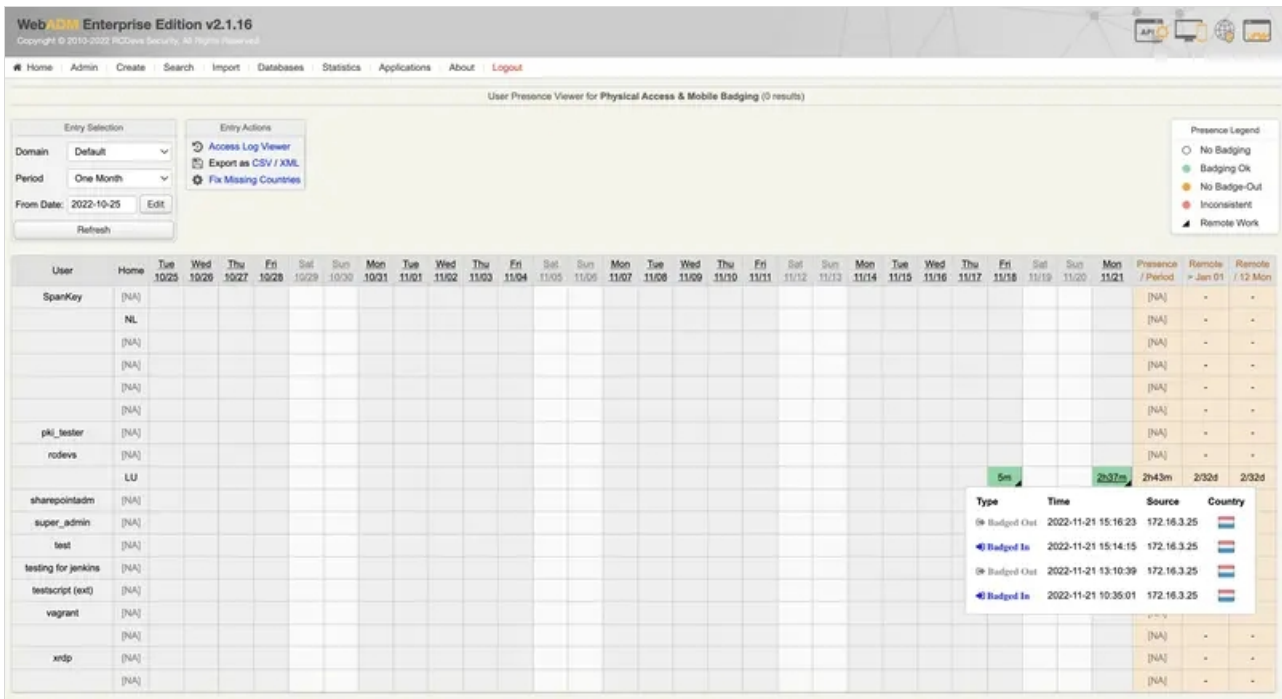
The screenshot displays the WebADM Enterprise Edition v2.1.16 interface. The top navigation bar includes Home, Admin, Create, Search, Import, Databases, Statistics, Applications, About, and Logout. Below the navigation bar, there are filters for Action (set to 'Equals') and a search input field. A time filter is set to 'This Minute'. The interface includes several control panels: 'Display Options' (Retrieve max: 1000, Page results: 35), 'Log Actions' (Delete selected items, Export as CSV/XML, Statistics as CSV/XML, Draw source map), 'Statistic Options' (Show first: ALL, Group by: None), and 'Database Pruning' (Delete log entries older than: 6 Month). The main data table has columns for Action, User DN, Time, User IP, Location, Country, and Collected Details. The table shows four entries for user 'remi' (CN=remi.OU=SUPAdmins.DC=suppor...):

Action	User DN	Time	User IP	Location	Country	Collected Details
Badge Out	CN=remi.OU=SUPAdmins.DC=suppor...	2022-11-21 15:16:23	172.16.3.25	49.5021288 5.9443432	LU	FullName: remi (Download XML) LdapDN: CN=remi.OU=SUPAdmins.DC=suppor... Organization: RCDDevs Support (VATLU-00000000) ServerTime: 2022-11-21 15:16:23 MobileTime: 2022-11-21T15:16:23.746Z IPAddress: 172.16.3.25 Location: 49.5021288.5.9443432 Address: Boucherie Remmans, Porte de France, Belval, Esch-sur-Alzette, Canton Esch-sur-Alzette, 4360, Luxembourg Country: Luxembourg MobileToken: #2 (TOTP) MobileModel: HUAWEI EML-L09 (Huawei Rémi) MobileSerial: s3ca4c936ee7413 Signature: ✓ Ok (Local CA)
Badge In	CN=remi.OU=SUPAdmins.DC=suppor...	2022-11-21 15:14:15	172.16.3.25	49.5021288 5.9443432	LU	FullName: remi (Download XML) LdapDN: CN=remi.OU=SUPAdmins.DC=suppor... Organization: RCDDevs Support (VATLU-00000000) ServerTime: 2022-11-21 15:14:15 MobileTime: 2022-11-21T15:14:15.331Z IPAddress: 172.16.3.25 Location: 49.5021288.5.9443432 Address: Boucherie Remmans, Porte de France, Belval, Esch-sur-Alzette, Canton Esch-sur-Alzette, 4360, Luxembourg Country: Luxembourg MobileToken: #2 (TOTP) MobileModel: HUAWEI EML-L09 (Huawei Rémi) MobileSerial: s3ca4c936ee7413 Signature: ✓ Ok (Local CA)
Badge Out	CN=remi.OU=SUPAdmins.DC=suppor...	2022-11-21 13:10:39	172.16.3.25	49.5021307 5.9443657	LU	FullName: remi (Download XML) LdapDN: CN=remi.OU=SUPAdmins.DC=suppor... Organization: RCDDevs Support (VATLU-00000000) ServerTime: 2022-11-21 13:10:39 MobileTime: 2022-11-21T13:10:39.474Z IPAddress: 172.16.3.25 Location: 49.5021307.5.9443657 Address: Boucherie Remmans, Porte de France, Belval, Esch-sur-Alzette, Canton Esch-sur-Alzette, 4360, Luxembourg Country: Luxembourg MobileToken: #2 (TOTP) MobileModel: HUAWEI EML-L09 (Huawei Rémi) MobileSerial: s3ca4c936ee7413 Signature: ✓ Ok (Local CA)
Badge In	CN=remi.OU=SUPAdmins.DC=suppor...	2022-11-21 10:35:01	172.16.3.25	49.5021201 5.9443454	LU	FullName: remi (Download XML) LdapDN: CN=remi.OU=SUPAdmins.DC=suppor... Organization: RCDDevs Support (VATLU-00000000) ServerTime: 2022-11-21 10:35:01 MobileTime: 2022-11-21T10:34:59.317Z IPAddress: 172.16.3.25 Location: 49.5021201.5.9443454 Address: Boucherie Remmans, Porte de France, Belval, Esch-sur-Alzette, Canton Esch-sur-Alzette, 4360, Luxembourg Country: Luxembourg MobileToken: #2 (TOTP) MobileModel: HUAWEI EML-L09 (Huawei Rémi) MobileSerial: s3ca4c936ee7413 Signature: ✓ Ok (Local CA)

A 'Back to Access & Badging Viewer' button is located at the bottom right of the interface.

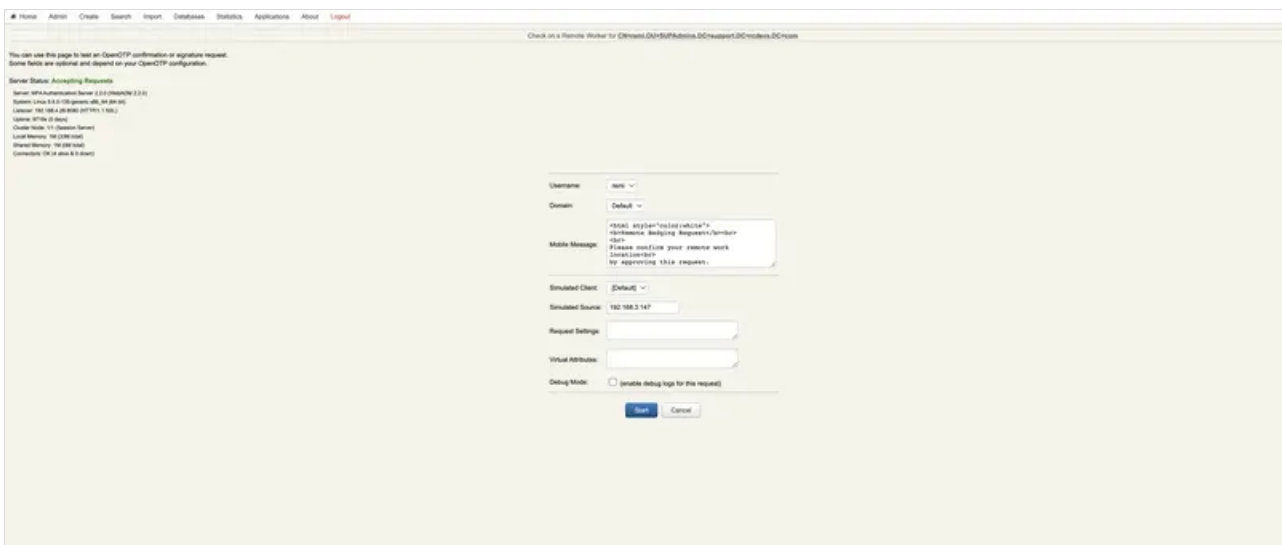
If you have configured the remote options in the LDAP option sets, two more columns are added at the right of the table. It will display the days worked remotely out of the days allowed by the quota defined in the options available during the configuration of the LDAP option sets.





## 5. Requiring a check from a User

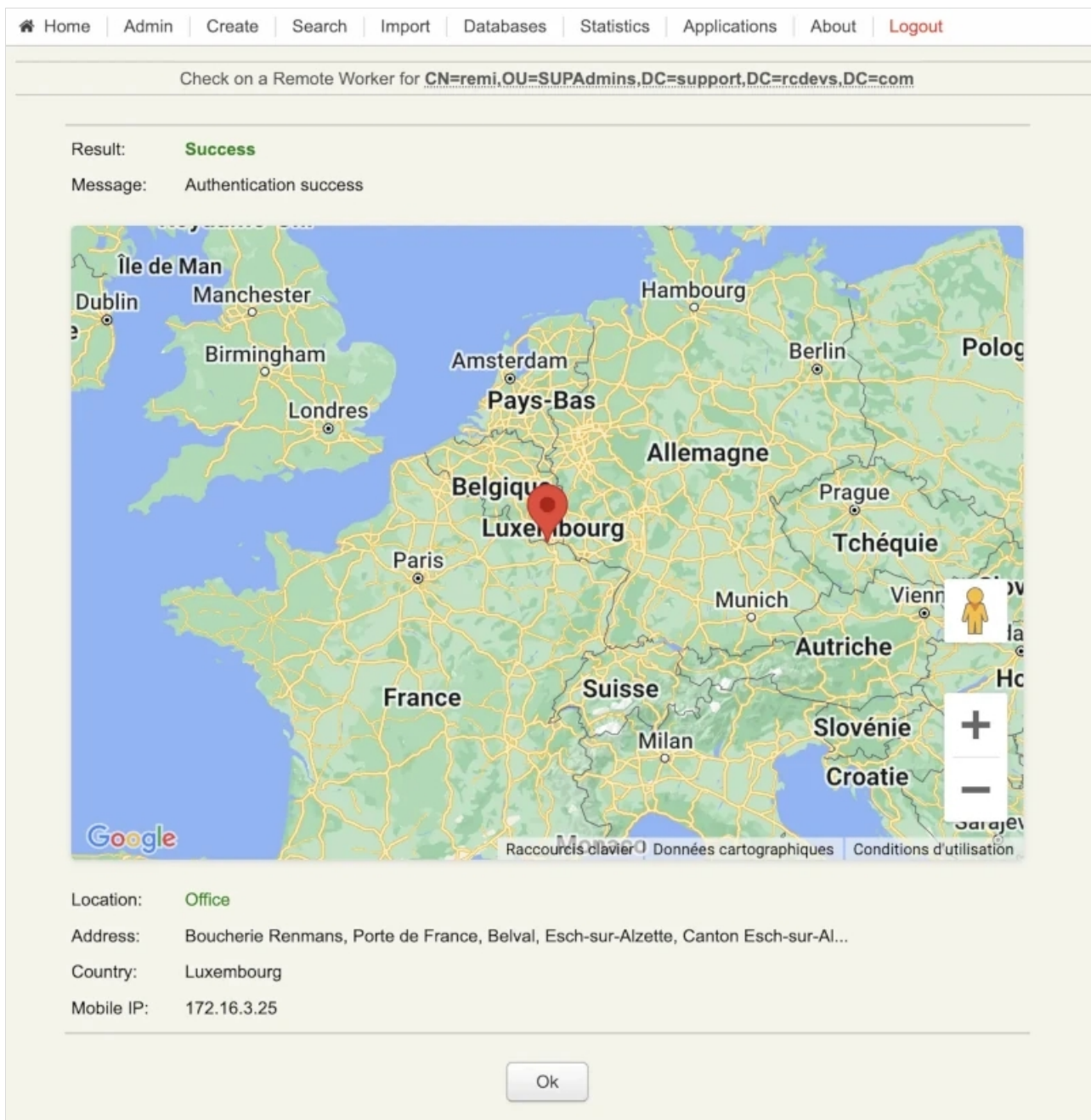
Mobile badging also brings the feature and the possibility to ask a check from a remote user. From the WebADM GUI, choose the user from whom you want to be asked a check on his mobile and click on **MFA Authentication Server**. Then go on the bottom of the page and click on the last option **Check on a Remote Worker**.



Once arrived at this page, you can change and set up the different settings and then just click on start to send the notification to

the user's mobile phone.

Finally, you have the confirmation of the check and the location of the user on the WebADM GUI after the actions on the mobile phone have been completed.



The screenshot displays the WebADM GUI interface. At the top, there is a navigation menu with items: Home, Admin, Create, Search, Import, Databases, Statistics, Applications, About, and Logout. Below the menu, a header indicates the user being checked: "Check on a Remote Worker for CN=remi.OU=SUPAdmins.DC=support.DC=rcdevs.DC=com".

The main content area shows the following information:

- Result:** Success
- Message:** Authentication success

Below this information is a map of Europe. A red pin is placed on the map, indicating the location of the user in Luxembourg. The map includes labels for various countries and cities, such as Île de Man, Dublin, Manchester, Birmingham, Londres, Amsterdam, Pays-Bas, Belgique, Luxembourg, Paris, France, Suisse, Allemagne, Autriche, Slovénie, Croatie, Hambourg, Berlin, Pologne, Prague, Tchéquie, Munich, Vienne, and Milan. A person icon and zoom controls (+/-) are visible on the right side of the map.

Below the map, the following location details are provided:

- Location:** Office
- Address:** Boucherie Renmans, Porte de France, Belval, Esch-sur-Alzette, Canton Esch-sur-Al...
- Country:** Luxembourg
- Mobile IP:** 172.16.3.25

An "Ok" button is located at the bottom center of the interface.

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