

Beacon südtirol - Alto Adige

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D1.1.1

Developed Applications

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1 - Introduction

The aim of this document is collect the basic information about all applications (both web and Android) that has been developed within the Beacon Project. In the next paragraph for each application it will be summarized the following informations:

- the application name;
- a short description;
- the link to the application or to the store;
- the link to the source code;
- some screenshots.

Within the beacon project has been developed seven applications out of four applications that were foreseen at the beginning of the project. This bigger number of application developed is due to:

- a great cooperation with the community that developed more ideas than expected at the beginning of the project;
- thanks to the support of the community it was possible to reduce the development costs and develop more than four applications with the foreseen budget.

The seven applications that has been developed within the project are:

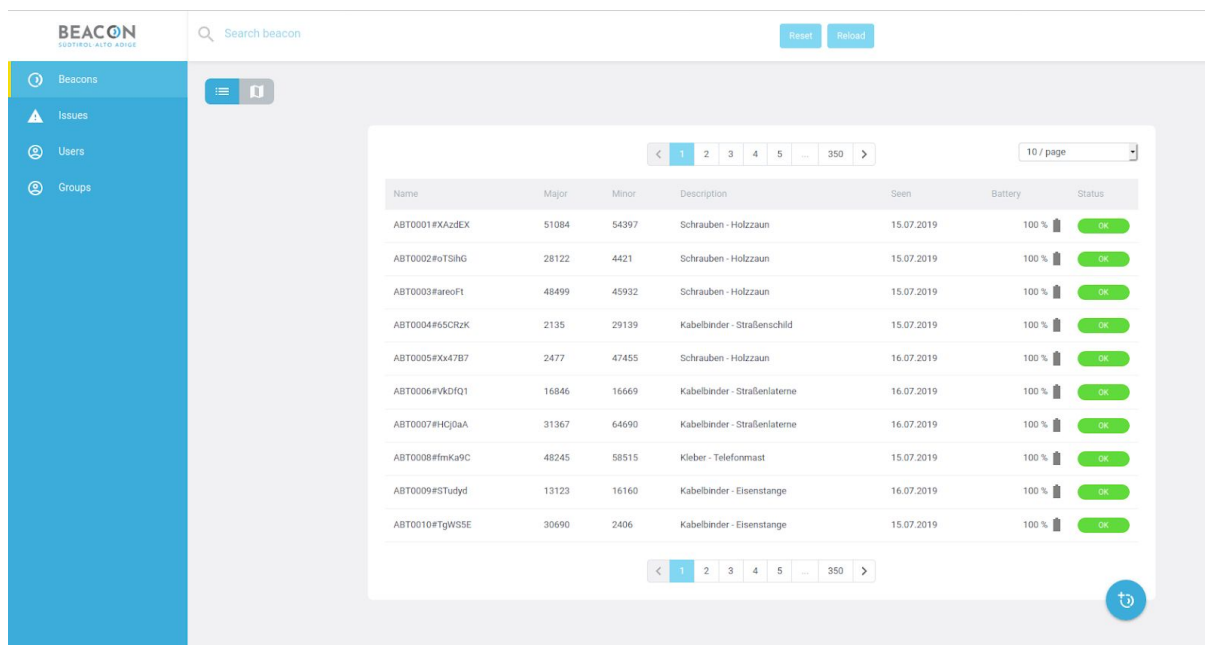
- Beacon Admin web application;
- Beacon Admin Android application;
- LoRaWAN@NOI web application;
- Maps Beacon Südtirol - Alto Adige;
- Beacon Gamification Bakend;
- Beacon Südtirol Adventure;
- EFRE Beacon Südtirol Guide

2 - The Applications

In this chapter are summarized the main information about the seven application developed within the Beacon South Tyrol project.

2.1 - Beacon Admin web application

The Beacon Admin web application is the application dedicated to the beacon managers and the beacon maintainers in order to allow them to manage and have an overview of the network when they are in the office.



The screenshot shows the Beacon Admin web application interface. On the left is a blue sidebar with navigation links: Beacons, Issues, Users, and Groups. The main area displays a table of beacons with columns: Name, Major, Minor, Description, Seen, Battery, and Status. The table contains 10 rows of data. At the top right of the main area are 'Reset' and 'Reload' buttons. Below the table are pagination controls showing '10 / page' and a list of page numbers (1, 2, 3, 4, 5, ..., 350).

Name	Major	Minor	Description	Seen	Battery	Status
ABT0001#XA2dEX	51084	54397	Schrauben - Holzzaun	15.07.2019	100 %	OK
ABT0002#oTSiHG	28122	4421	Schrauben - Holzzaun	15.07.2019	100 %	OK
ABT0003#areoFt	48499	45932	Schrauben - Holzzaun	15.07.2019	100 %	OK
ABT0004#f5CRzK	2135	29139	Kabelbinder - Straßenschild	15.07.2019	100 %	OK
ABT0005#xx47B7	2477	47455	Schrauben - Holzzaun	16.07.2019	100 %	OK
ABT0006#VkdIQ1	16846	16669	Kabelbinder - Straßenlaterne	16.07.2019	100 %	OK
ABT0007#Hqj0aA	31367	64690	Kabelbinder - Straßenlaterne	16.07.2019	100 %	OK
ABT0008#fmKa9C	48245	58515	Kleber - Telefonmast	15.07.2019	100 %	OK
ABT0009#STudyd	13123	16160	Kabelbinder - Eisenstange	16.07.2019	100 %	OK
ABT0010#TgW5SE	30690	2406	Kabelbinder - Eisenstange	15.07.2019	100 %	OK

Figure 1: beacon web app beacon table view.

The Beacon Admin web application is available at the following link:

admin.beacon.bz.it.

Since the tha application is dedicated to the management of the beacon that are used in production the access to the application is protected with username and password. Each request to access to the application can be asked by sending an email at info@beacon.bz.it or at support@beacon.bz.it.

The source code of the Beacon Admin web application is available at the following link:

<https://github.com/noi-techpark/beacon-suedtirol-administration-webapp>.

2.2 - Beacon Admin Android application

The Beacon Admin Android application is the application dedicated to the beacon managers and the beacon maintainers in order to allow them to manage and have an overview of the network when they are out of the office. Moreover the application can be used to change the configuration (e.g. signal strength, frequency of transmission, etc.) of one or more beacons.

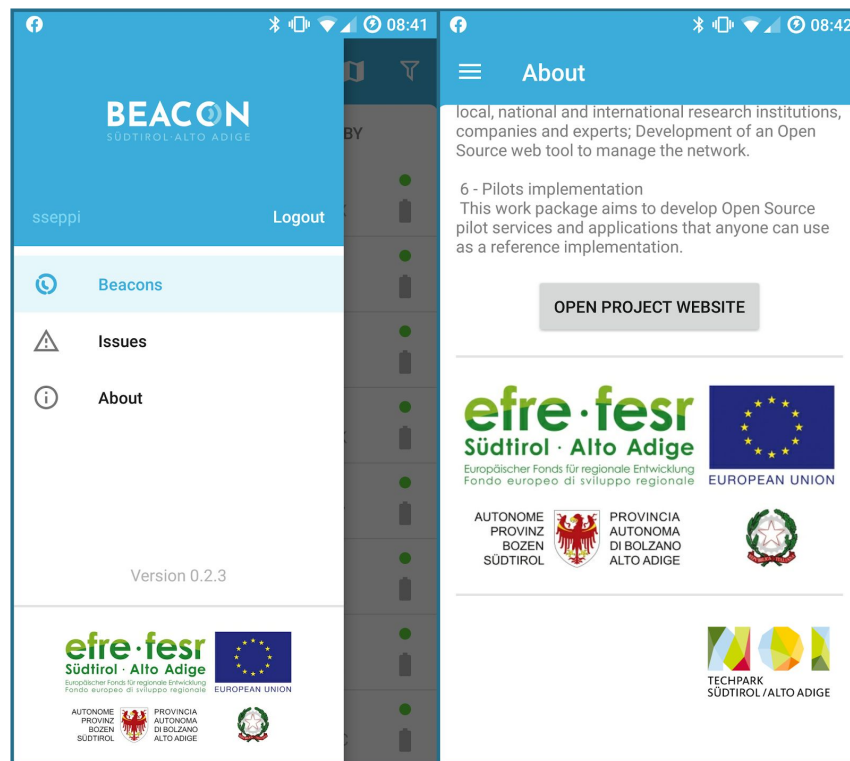


Figure 2: beacon Android app menu and about section.

The Beacon Admin Android application is available at the following link:

play.google.com/store/apps/details?id=it.bz.beacon.admin.

Since the application is dedicated to the management of the beacons that are used in production the access to the application is protected with username and password. Each request to access to the application can be asked by sending an email at info@beacon.bz.it or at support@beacon.bz.it.

The source code of the Beacon Admin web application is available at the following link:

<https://github.com/noi-techpark/beacon-suedtirol-administration-android>.

2.3 - LoRaWAN@NOI web application

The LoRaWAN@NOI web application allows the user to:

- access to the general information and to the technical documentation;
- get the login credential to access to the protected area;
- manage the nodes, the sensors and get the collected data.



Figura 3: the home of the LoRaWAN@NOI web application.

The LoRaWAN@NOI web application is available at the following link:

lorawan.beacon.bz.it.

2.4 - Maps Beacon Südtirol - Alto Adige

Maps Beacon Südtirol is a web application based on the Web Components technology that allows the user to see the list of the beacon on both a map view and a table view. Moreover, using this application the user has the possibility to see the mapping between a beacon and the nearest Point of Interest.

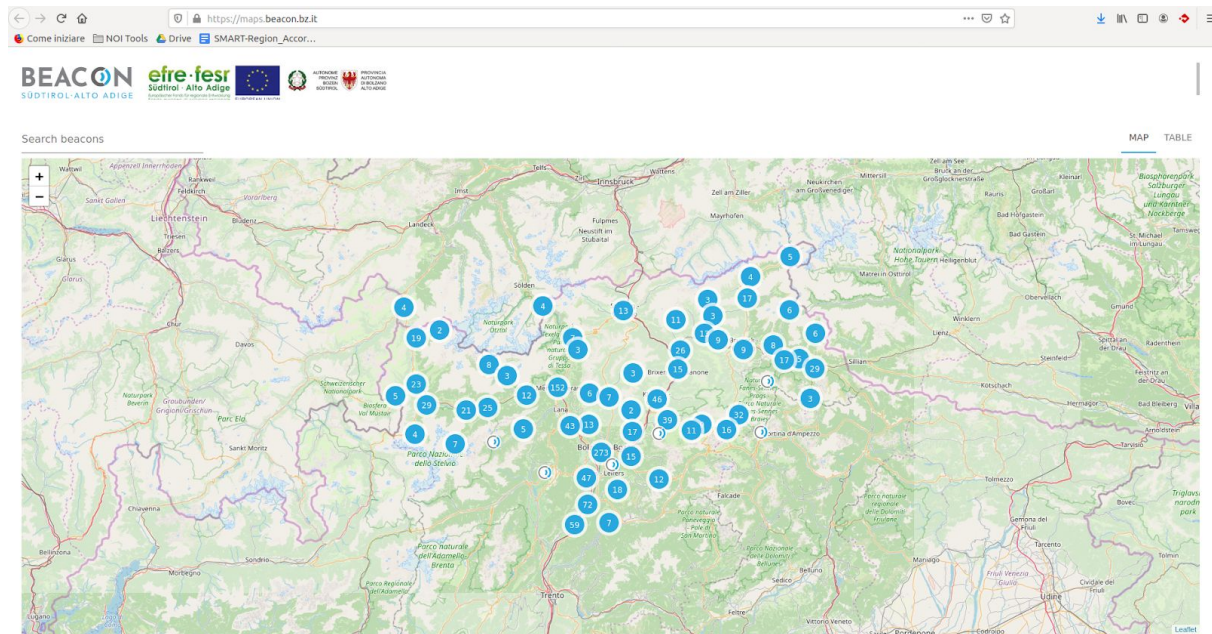


Figure 4: maps.beacon.bz.it screenshot.

The single web components that composes this application can be easily reused also by other web pages and application.

The Beacon Admin Android application is available at the following link:

maps.beacon.bz.it.

The source code of the Beacon Admin web application is available in the repositories at the following links:

github.com/noi-techpark/webcomp-beacons-map-table

github.com/noi-techpark/beacon-tourismpoimapping-demo-webapp.

2.5 - Beacon Südtirol Adventure

The Beacon South Tyrol Adventure application is a first demo prototype that can be used as best practice about the use of the beacons in application. The aim of this application is to use the beacon in an app that helps the promotion of the less famous Point of Interest through games (e.g. treasure hunt, crime game, etc.). The single games can be managed through the Beacon Gamification Backend app that will be described in the next paragraph.

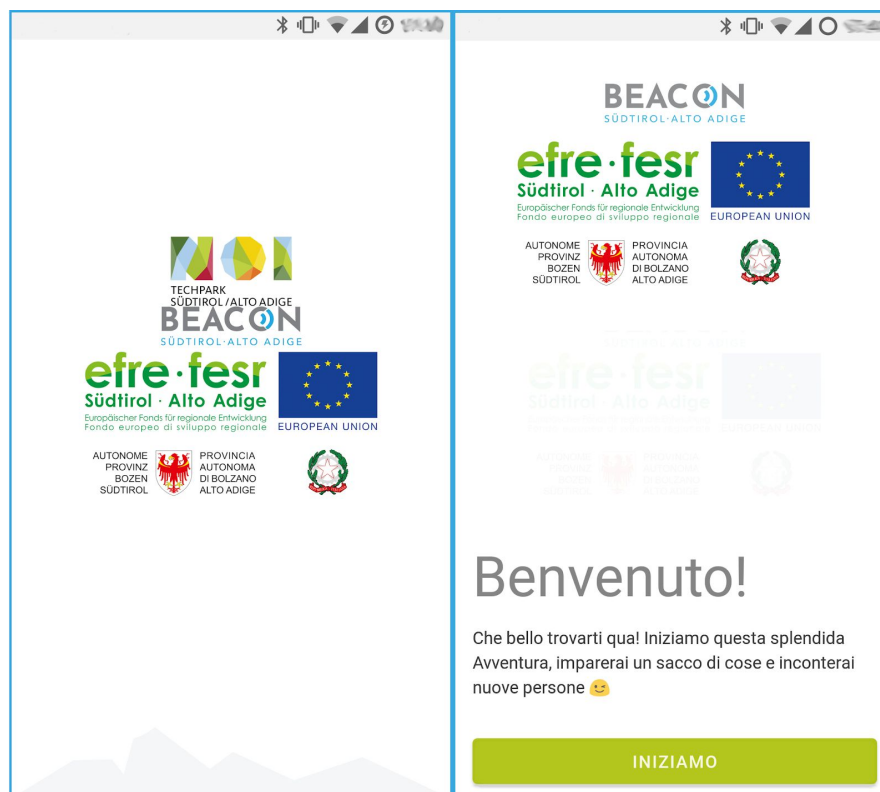


Figure 5: screenshots of the Beacon Adventure Android app.

At the following link you can get the app to install on your android phone

play.google.com/store/apps/details?id=it.bz.beacon.beaconsuedtiroladventure

The repository with the source code of the app is published at the following link:

github.com/noi-techpark/beacon-gamification-app.

2.6 - Beacon Gamification Bakend

The Beacon South Tyrol Gamification Backend platform is a first prototype that can be used by the community to create new games and manage the existing one.

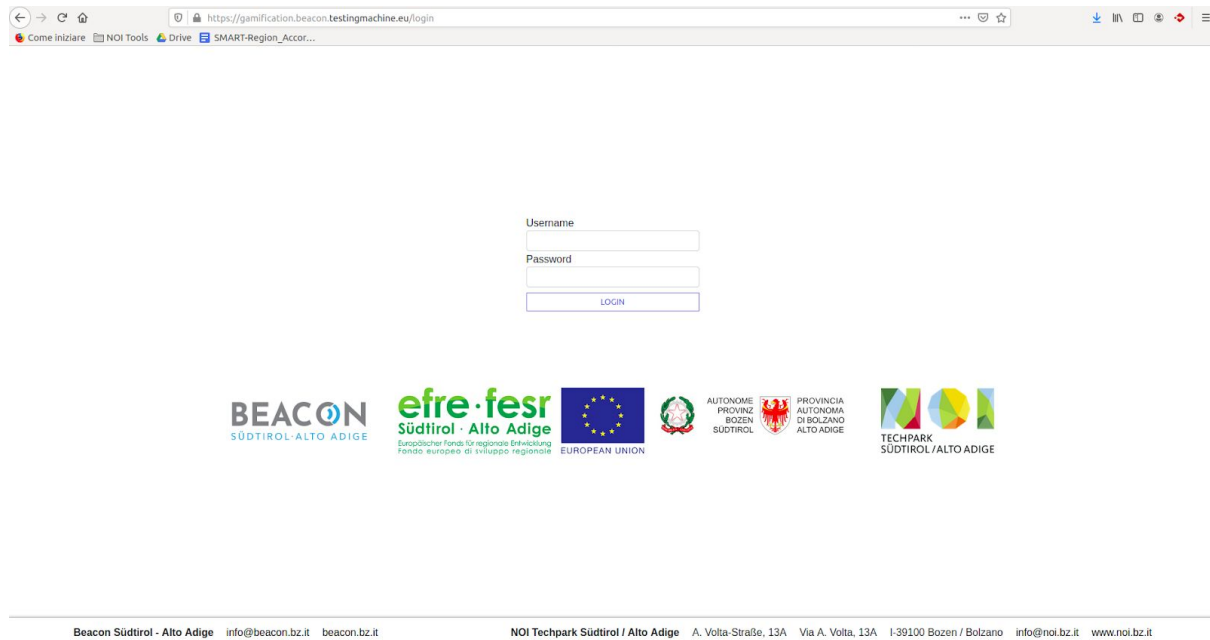


Figure 6: Gamification Backend login interface.

At the following link you can reach the Gamification Backend web application:

gamification.beacon.bz.it.

The login credentials for the platform can be asked by sending an email to the project team by using the following email address: info@beacon.bz.it.

The repository with the source code of the Gamification Backend that has been developed within the project are available at the following links:

github.com/noi-techpark/beacon-gamification-frontend

github.com/noi-techpark/beacon-gamification-backend.

2.7 - EFRE Beacon Südtirol Guide

The EFRE Beacon Südtirol Guide is a prototype Android application based on a fork of the official Südtirol Guide that integrates the interaction with the beacons and the new Recommendation module. The application is actually available as testing app in the alpha channel of the google play store



EFRE Beacon Südtirol Guide

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4 PEGI 3

i L'app è compatibile con tutti i tuoi dispositivi.

Installata



Figure 7: The EFRE Beacon Südtirol Guide on the play store.

Since the application has been published in the alpha channel of the play store, everyone who wants to become a test user and to be able to download and install the app on his Android phone, has to send an email at info@beacon.bz.it.

Once you got the access to the application you can download it at the following link:

play.google.com/store/apps/details?id=it.bz.beacon.guide.

3 - Conclusions

Within the Beacon South Tyrol project, thanks to the great cooperation with the IoT community, it was possible to develop the seven prototype applications described in this document. For each application the group of companies involved in the development of the application made an analysis of possible future development that will be presented in the reports of the respective work packages.

Since all applications are released as open source projects everyone who wants to continue the single project will be able to make it simply by forking the repositories and further develop the single application. Moreover, thanks to the IoT Community born within the project, everyone who is willing to reuse the code could become part of the community and ask for support.