

The logo for Prodware, featuring the word "prodware" in a white, lowercase, sans-serif font, with a blue stylized "P" icon to its right. The logo is positioned in the top-left corner of a black and blue graphic element that resembles a speech bubble or a ribbon.

Spare Part Finder app for Microsoft Dynamics 365 Field Service

USER GUIDE

The Microsoft Dynamics 365 logo, consisting of the Microsoft logo (four colored squares) followed by the text "Microsoft | Dynamics 365" in a white, sans-serif font, all contained within a dark blue rectangular box.

Version Control	Prepared By:	Reviewed by:	Change
01-11-2019 v1.0	Jeroen Paters		Initial version
04-11-2019 v1.1	Jeroen Paters		Changed Chapter 3 Custom Vision part

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This user document is valid for the Spare Part Finder app version 1.0 for Dynamics 365 for Field Service.

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1. INTRODUCTION

1.1 APPLICATION DESCRIPTION

Spare Part Finder is a mobile app for Microsoft Dynamics 365 for Field Service. It captures images and recognizes the product and its ID reference to allow for timely retrieval of the part.

1.2 GOAL OF THE APP

The app is a quick and easy way for technicians to locate the parts they need when on-site, whether they are in the van or held in stock.

Product benefits:

- Speeds up resolution time of interventions by shortening the process of finding the correct part that is required for the repair or replacement during the site visit
- It boosts productivity by not involving the customer service or dispatch team in locating products, as the technician can self-service on-site
- It increases customer satisfaction and retention as interventions are more efficient and communication concerning required parts can be relayed on-site

2. SETUP & INSTALLATION GUIDE

2.1 SYSTEM REQUIREMENTS

Spare Part Finder must be installed on [Dynamics 365 for Field Service, with Field Service Mobile Project installed and published](#).

It works via the two Field Service mobile apps available:

- Woodford Resco (version 12.2.3.46173 onwards)
- Field Service Mobile

The accelerator works with Windows, iOS and Android.

You need an active Azure subscription to run the Custom Vision cognitive service.

To be able to use this functionality your Dynamics 365 CEM license must be up to date. If necessary, contact Prodware for more information about your license.

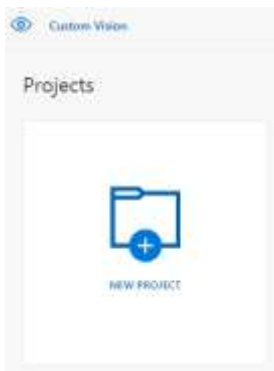
2.2 INSTALLATION

The solution architecture consists of the following components:

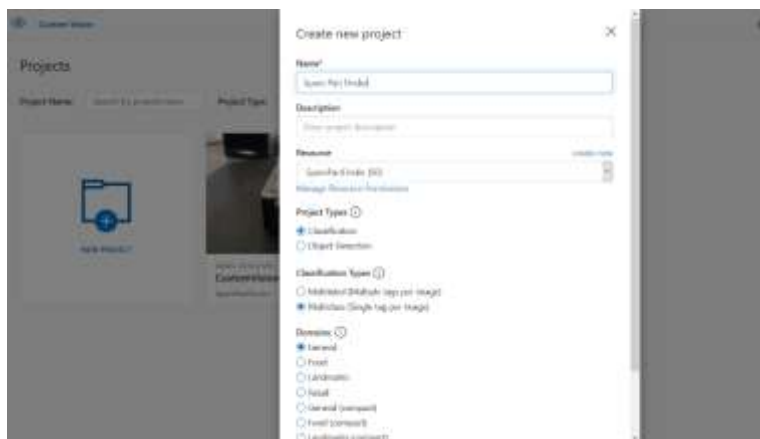
- Microsoft Azure Cognitive Service [Custom Vision]
- Microsoft PowerApps
- Microsoft Field Service Mobile powered by Resco.net
- A HTML-file that is running the PowerApp in an iFrame in Field Service Mobile

2.2.1. Configuration of Azure Custom Vision

1. Go to <https://www.customvision.ai/>
2. Sign in with your credentials and make sure you have access to an Azure subscription
3. Create a new Project:

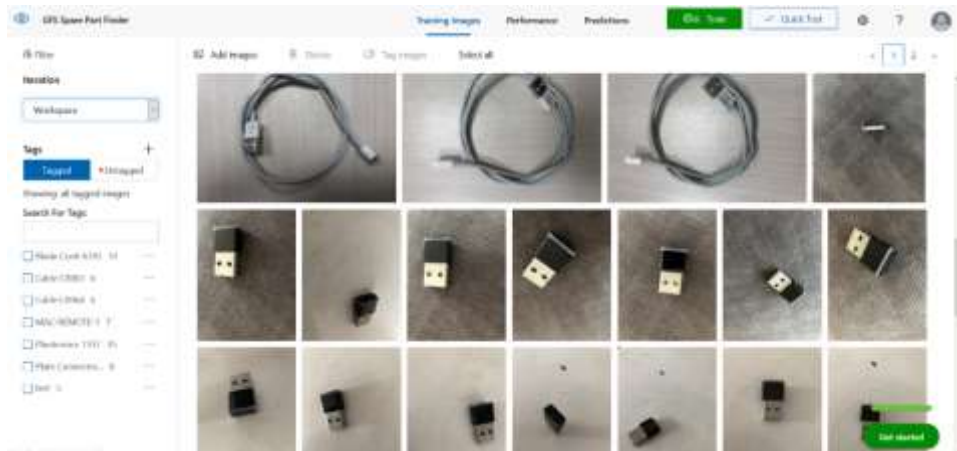


4. Enter a name for the project and choose or create Azure Resource Group you want to use/create:

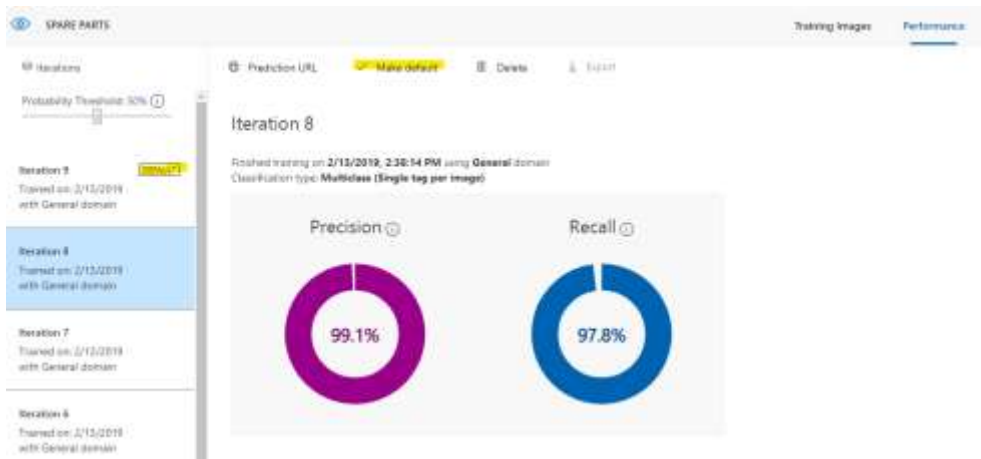


5. Select your Azure subscription:
6. Add images to your Project. It takes approximately 15 pictures per spare part from different angles and on different backgrounds **in order to "train" the AI**. When uploading the pictures

you also need to choose the Tag for that picture. This Tag will be used later to find the right Product in Microsoft Dynamics 365.



7. Train your Model by hitting the green button "Train".

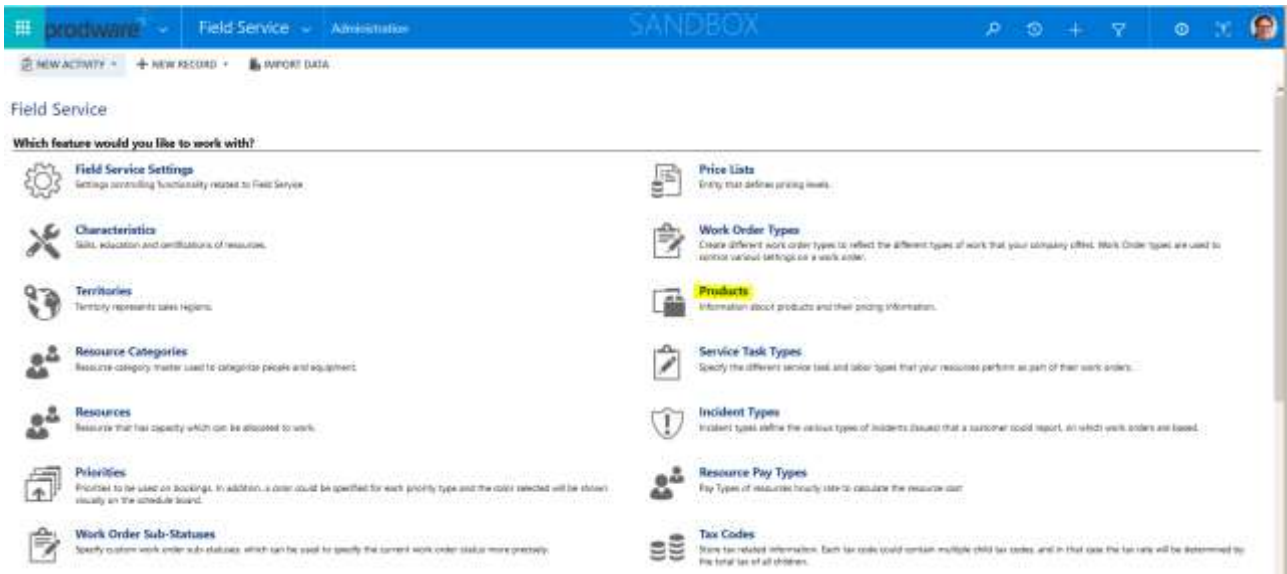


Note: Whenever you retrain your model, make sure you set that new iteration as "default".

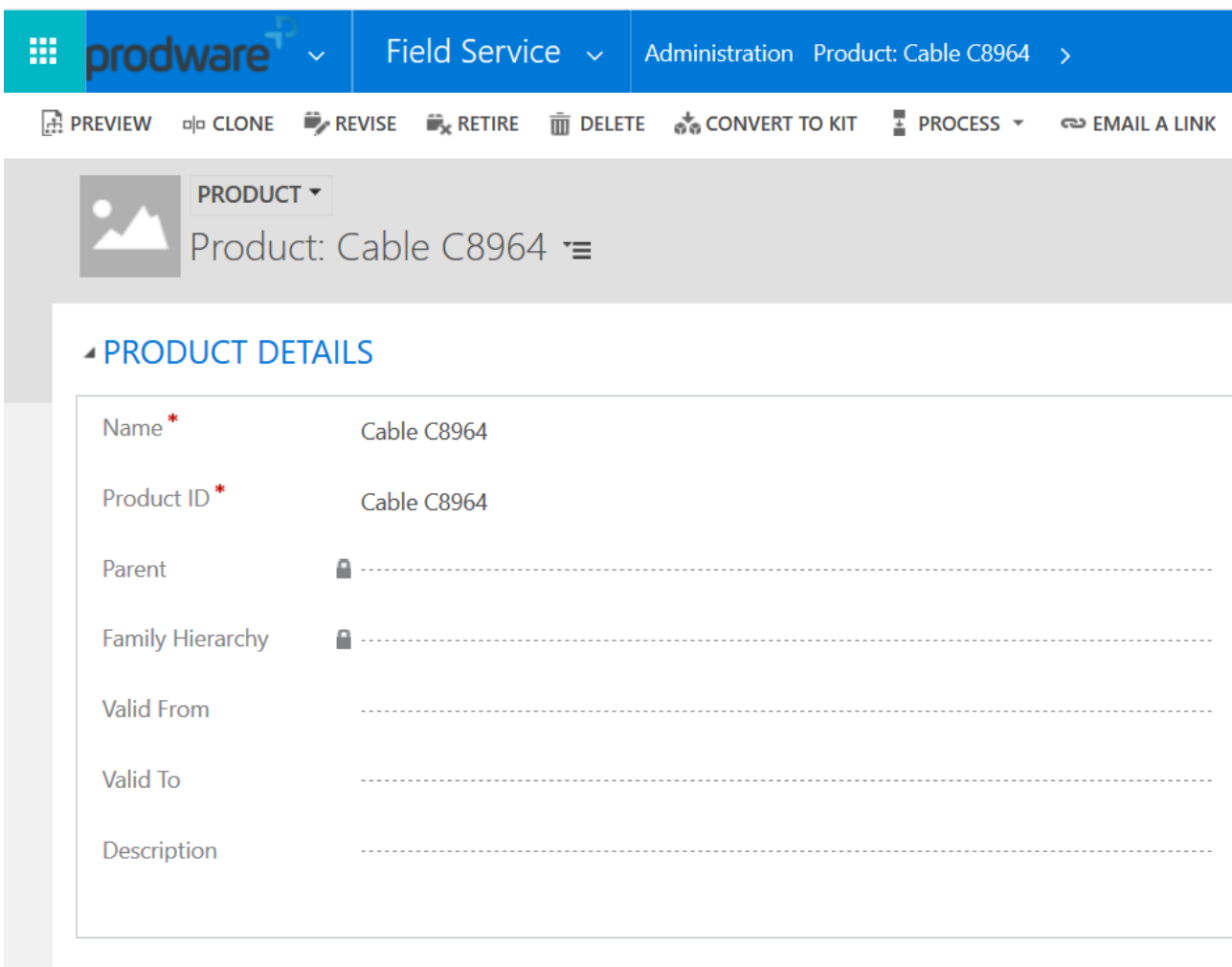
2.2.2. Map Custom Vision Tags with Dynamics 365 Product IDs

If you have not used existing Dynamics 365 Product IDs as Tags in Custom Vision, make sure you update your Dynamics 365 Products using the Tags from Custom Vision:

Go to administration and select Products:



Then create a product with exact the same name as the tag and make it an active product by publishing it.



3. FEATURES AND FUNCTIONS FOR USERS

3.1 MAIN FUNCTIONALITY

The Spare Part Finder is an extra feature in the Mobile app of Field Service and can be recognized by the Prodware Spare Part Finder logo.

The functionality has two buttons:

Take Picture: to use the camera of your mobile device to take a picture of the spare part.

When using **the app it's recommended to take the picture from a different angle** if the recognition **fails (the message "No product with enough prediction percentage found. Try again" appears)**.

When the recognition works the **following message will appear: "Spare part found with item number Cable C3963 - Probability 75%"** (as an example).

Create Follow Up Work order: to create the spare part article on the work order for purchase.

It's important that the mobile app is connected on the same environment as the mobile app with the same credentials.

Please check the work order number in the mobile app and see the change in the work order in Dynamics 365.

4. **SECURITY ROLES**

Users should have the basic Field Service Security Role in order to use the Spare Part Finder for Microsoft Dynamics 365 Field Service.