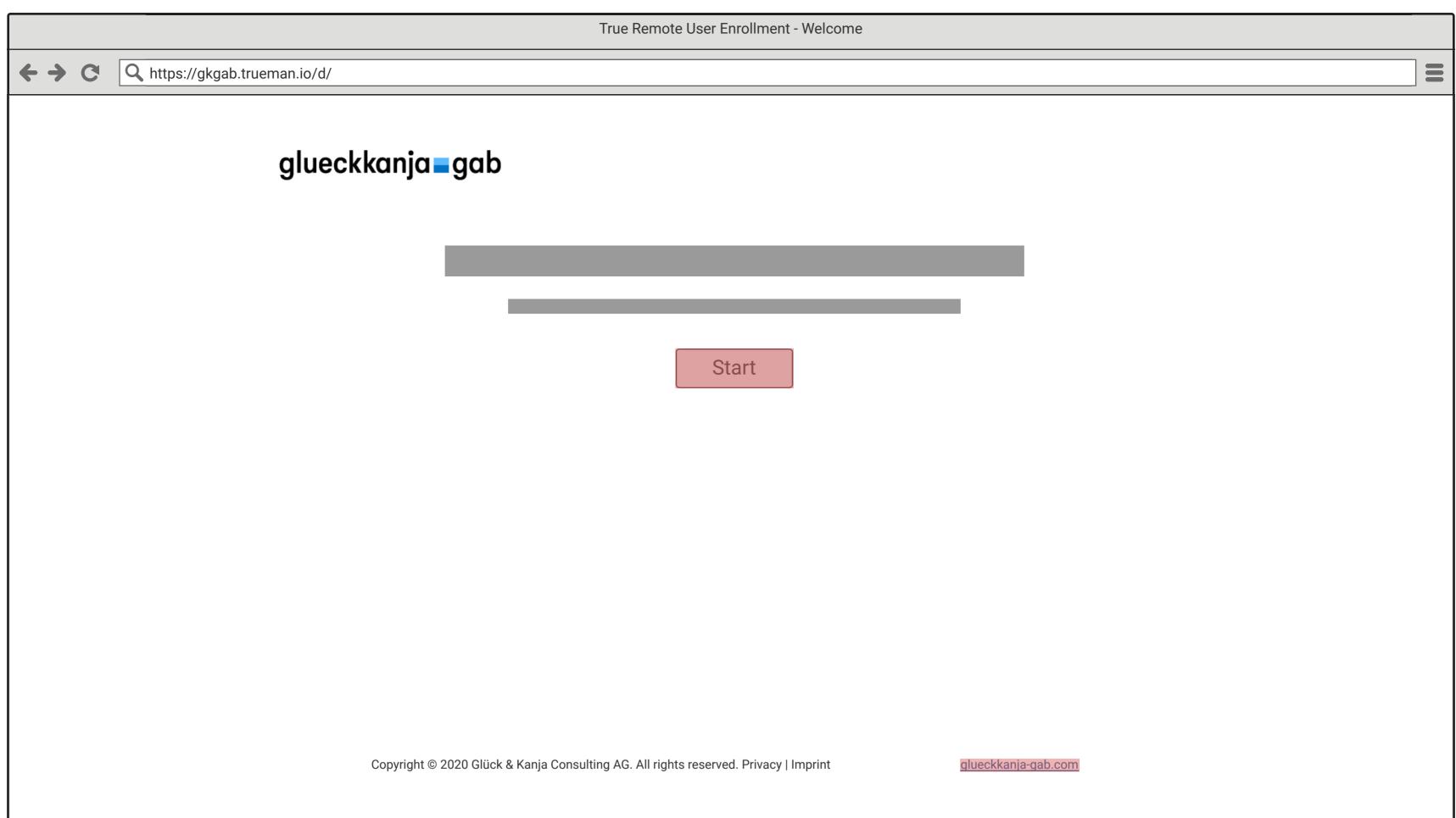
Startpage 1 / 23



This is the startpage of TRUEman

TRUEman stands for =>
True Remote User Enrollment manager

The start page should give some info on how to login.

The whole App should support multi language depnding on the browser locale. First phase is ok to start with english

Progress of the user should be stored in a backend system. So it is possible to jump to the previous position in case of an interruption or an error.

The TRUEman framework should be easily customizable to adapt logo and css to the particular tenant.

Each "page" in TRUEman should be a kind of template that does a certain task.

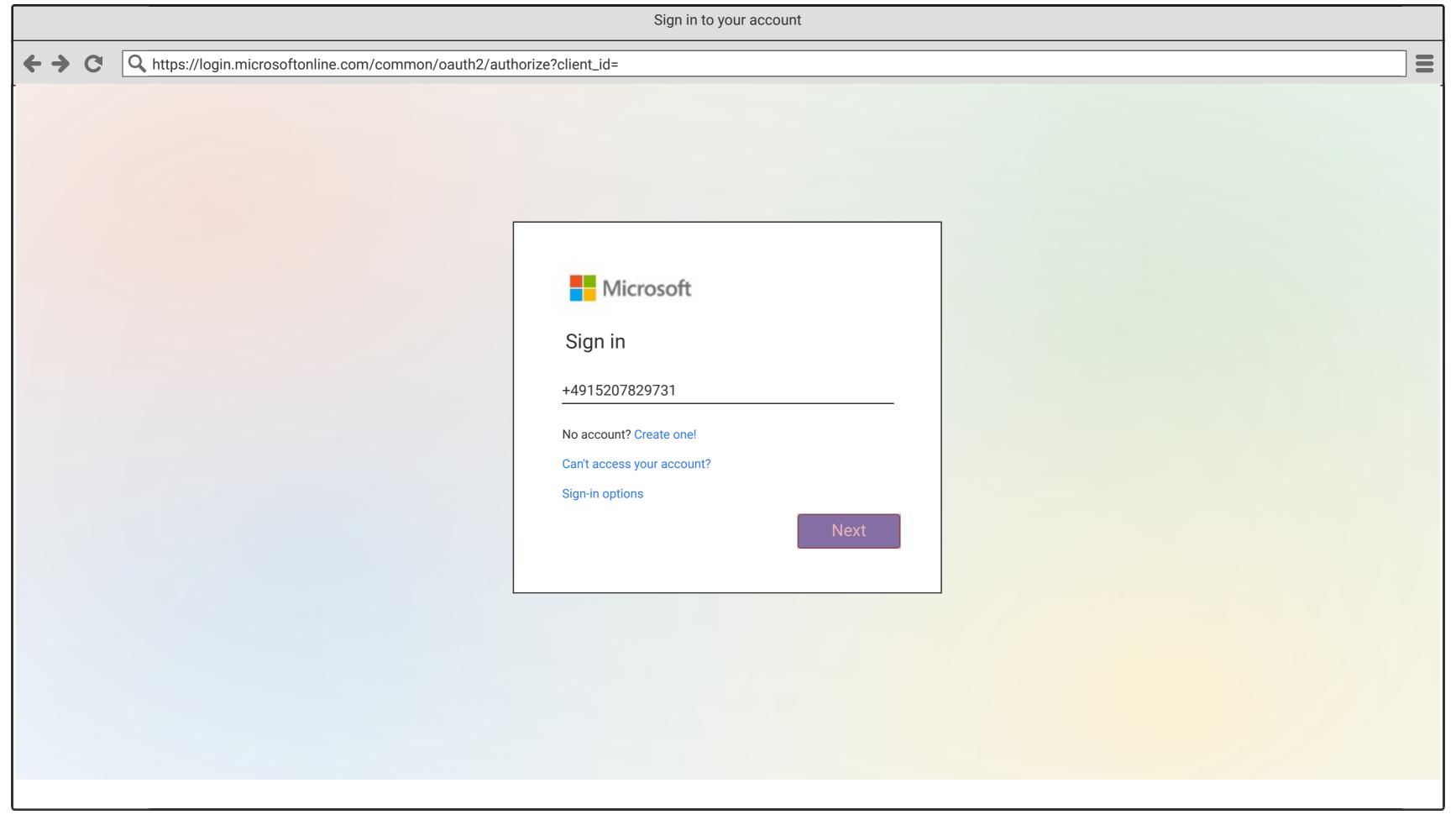
Which "pages" appear in which order should be writable in a YAML/JSON job file, so that a customization per client can be done regarding the order and number of page flows.

The URI in the example shows that a client may be mapped via a hostname (in the example Contoso) and then one of n flows follows - where a /d/ stands for the default flow. That with several flows per mandant would be optional in the phase 1 however also.

Assests etc. should come best from a (public) storage. Public would have the advantage to work with CDN from e.g. Azure. Assets we need are static content on the page and also videos.

Overall we should have a very fast "page impression".

AAD SMS SignIn 2 / 23



The login against Azure AD should currently use the v1.0 token endpoint. Background is that only here we get an AMR claim back to check how the user authenticated himself.

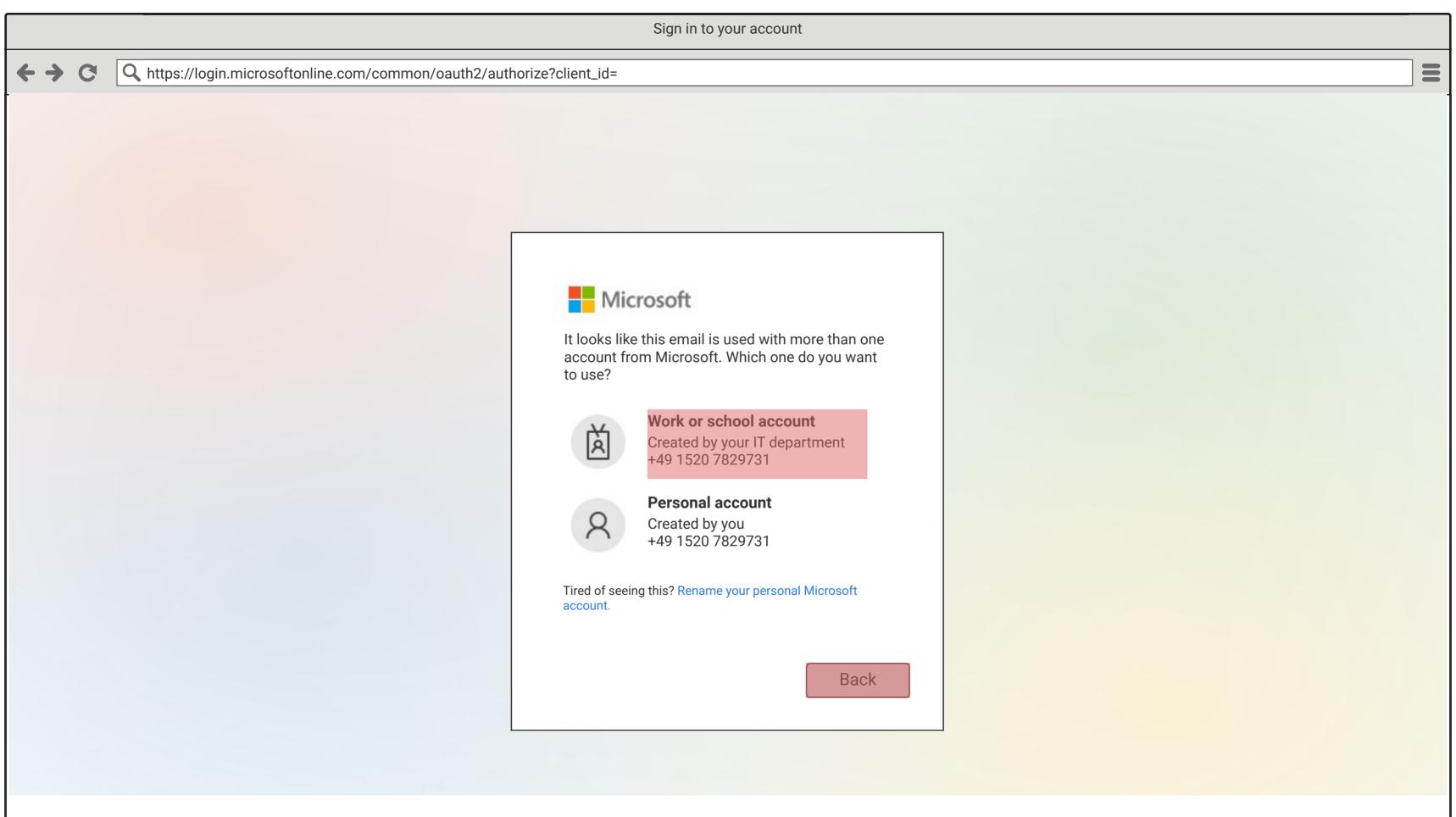
This info can help us to see if we can skip the password part later in the process, since the user may already arrive at the portal with a user name and password instead of the phone sign in.

Nevertheless the actual sign in is handled by Azure AD and does not need any special treatments from TRUEman. We should go for OIDC as our auth provider

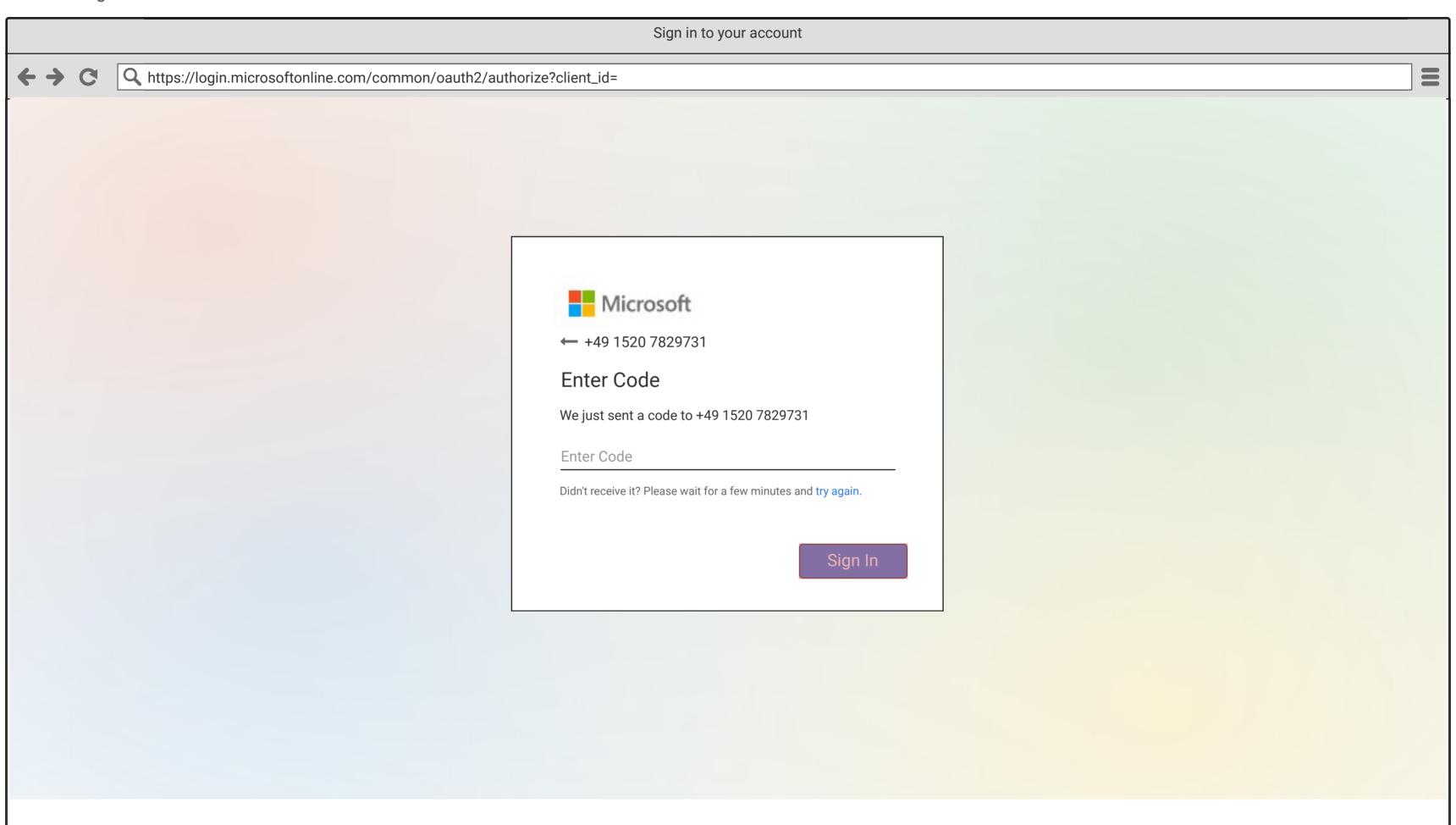
Values for AMR

OTP = SMS SignIn
PWD = Password Signin
RSA = E.g. with Hello for Business or Cert Based
MFA = MultiFactor

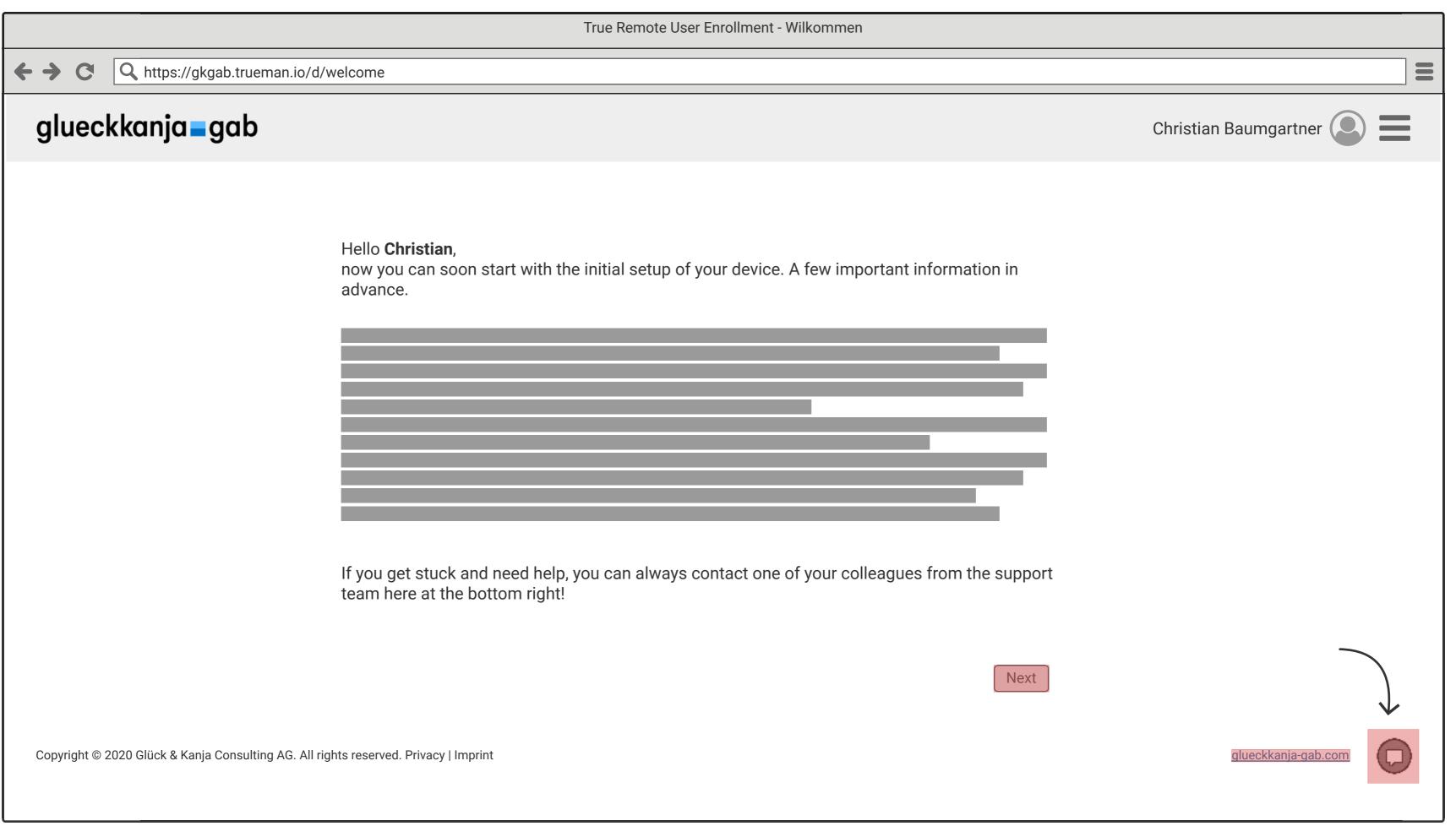
AAD SMS SignIn 2 (informal) 3 / 23



AAD SMS SignIn 3



5 / 23 **Welcome Page**



The information on this page comes from Azure AD - through authentication, all information is available to us centrally and can be dynamically integrated here.

Since we only want to map new users (new hires) in the first step, the logical next step is the onboarding of their devices. In the future, however, a check against the backend could also take place here (data sources still to be defined) whether, for example, new hardware is currently flagged for enrollment for the user or whether the user is given the opportunity to manage existing hardware here (e.g. integration of RJ /me etc.).

INPUT

AzureAD User Object incl.

- * Location
- * Roles
- * DisplayName
- * ProfilePicture

Translated with www.DeepL.com/Translator (free version)

7/23 Win10 No dovice assigned yet

will to - No device assigned yet		•	1 1 23
True Remote User Enrollment - Assign device			
← → C Q https://gkgab.trueman.io/d/de	evice/assign?\$assetId=c800d2cf-d734-4e35-8441-715fba1200b2		
glueckkanja = gab		Christian Baumgartner	
	Hello Christian , we could not find any device for you yet. If you have the device in front of you, you can tell us the serial number so we can assign the device to you now. If you need help to find the serial number look here		
	<u>Check</u>		
Copyright © 2020 Glück & Kanja Consulting AG. All rights reserved. Privacy Imprint		glueckkanja-gab.com)

Here we check against the backend if we find a deivce with this serial number. In addition to Autopilot devices, we also check for mobile devices. In the first release of TRUEman we focus on Win10 devices. So a check against Intune Autopilot is sufficient here. As a condition we have to check if the device can be found at all, if it has no user assignment, if it matches the current logged in user. If the serial number can be found and is assigned to the logged in user it must be checked if the device is already enrolled.

As a little extra we could search for devices that are assigned to the user but not yet enrolled BEFORE asking for the serial number and ask the user if the following device should be enrolled now (optional feature).

* Search for a matching AutoPilot device

If we find one

a) assign it to the currently logged in user

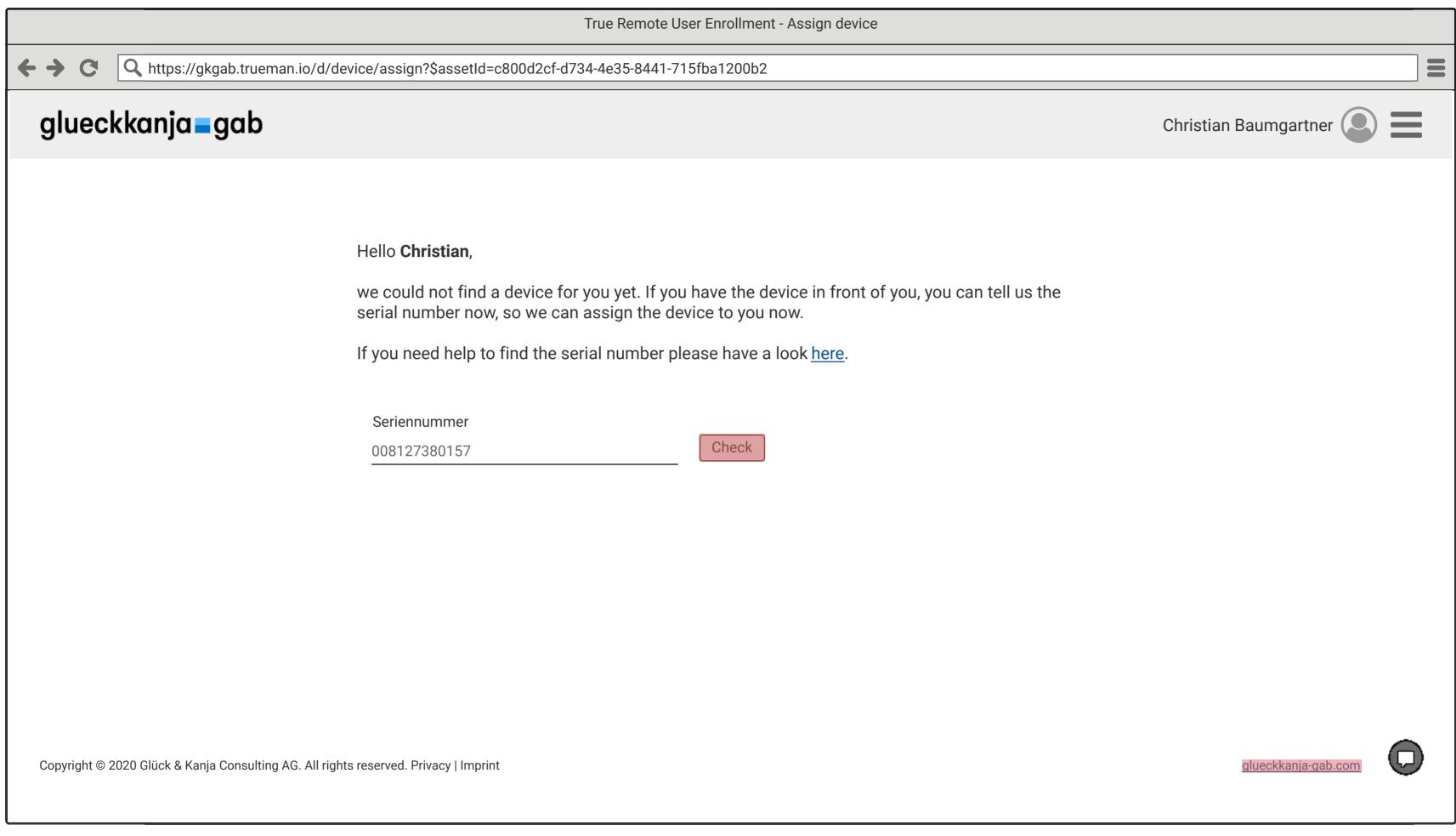
b) if we don't find one > display an appropriate message that there is a technical problem. Here you could very nicely bring a reference to Oliver Kieselbach's AutoPilot Manager Onboarding and dovetail it. (https://oliverkieselbach.com/2020/12/08/autopilotmanager/)

Optional / Phase 2

If there is more than one assignment to AP Devices from devices that are not yet enrolled and assigned to the user, we would still have to offer a selection to select the correct device (edge case - possibly also automatically selected via model).

Even more optional / Phase 3

Another option at this point would be that we know via an asset management/backend that the device has been shipped and we check the shipping status via appropriate APIs. If this is currently still in shipping, we could stop here at this point and display a shipping status.



When you click on "Check", the serial number entered is searched for in the Autopilot Devices in the backend. If a device is found which

- a) not yet enrolled &
- b) is not yet assigned to a user

this will now be assigned to the logged in user. It should also be checked whether the device has already been assigned a corresponding AP profile.

https://docs.microsoft.com/en-us/graph/api/intune-enrollment-windowsautopilotdeviceidentity-list?view=graph-rest-beta

Win10 - No device assigned yet - check

True Remote User Enrollment - Wilkommen





Q https://contoso.trueman.com







Hallo Christian,

wir konnten für dich n Gerät vor dir hast, kan zuweisen können.

Wenn du Hilfe brauchs

Seriennummer

08127380157

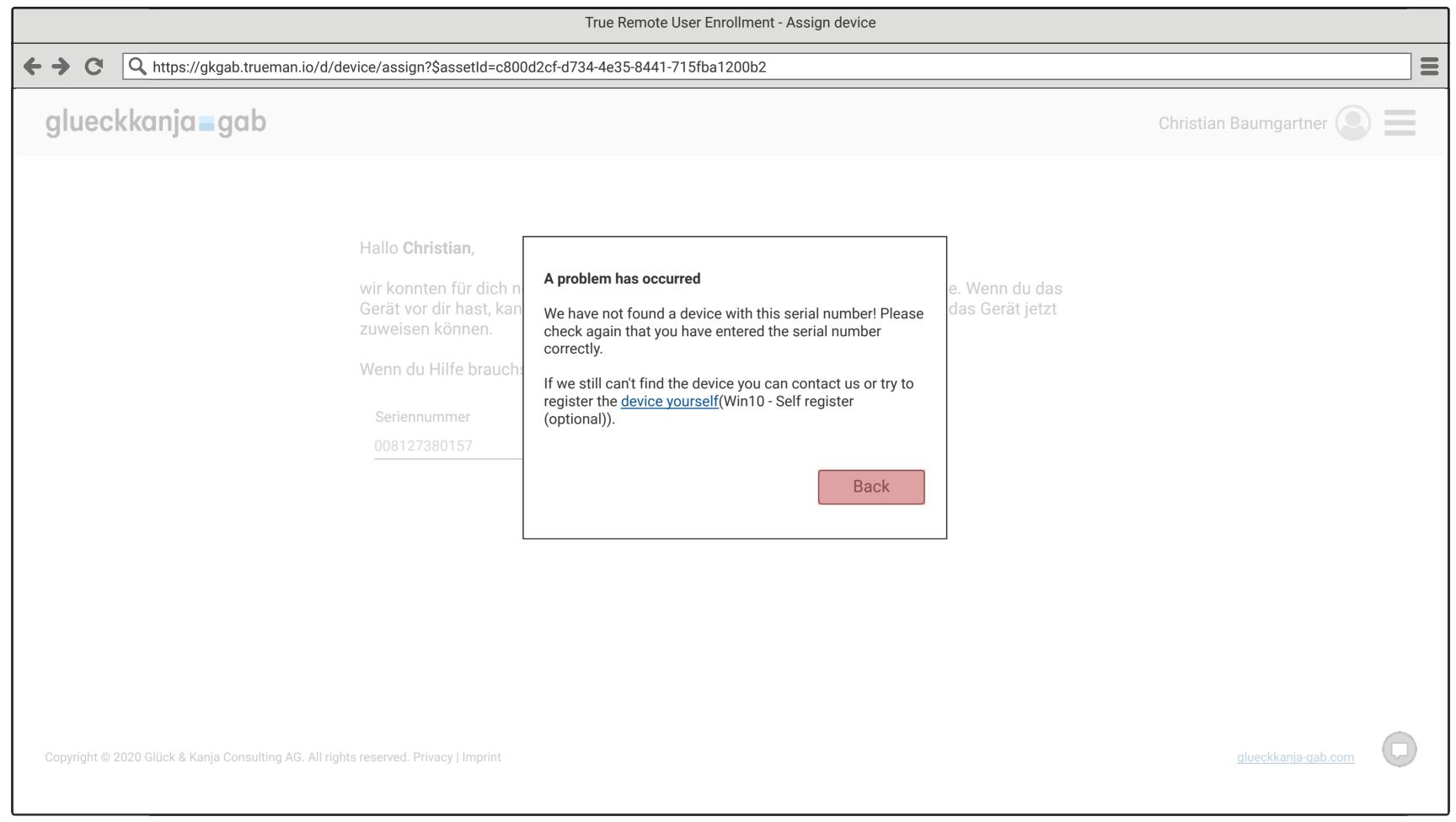
Successfully assigned

We have found a Surface Book 3 with this serial number and assigned it to your user. You can start setting it up right away.

Next

e. Wenn du das das Gerät jetzt





Win10 - How to Connect Network

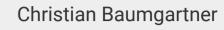
True Remote User Enrollment - Network connection







glueckkanja=gab



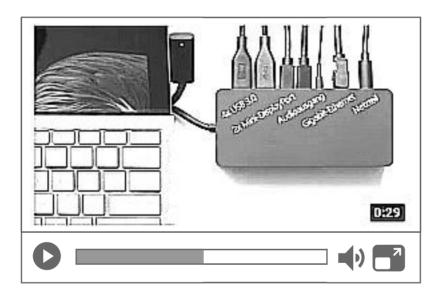




In order to start setting up your Surface Book 3, you need to connect to the Internet. Here you can find a short guide on how to connect to the network with a cable or your Wi-Fi.

If you get stuck, you can also contact our support team below.

Surface Dock und Netzwerk anschließen

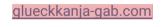


Herstellen einer Verbindung mit meinem WLAN



Next

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Here we show professional help videos for establishing a network connection. Especially for Win10 / macOS devices this is now a critical step, especially in environments that are not managed (e.g. Home Router or FritzBox).

Here, only videos suitable for the device/manufacturer should be displayed for the model/type at hand.

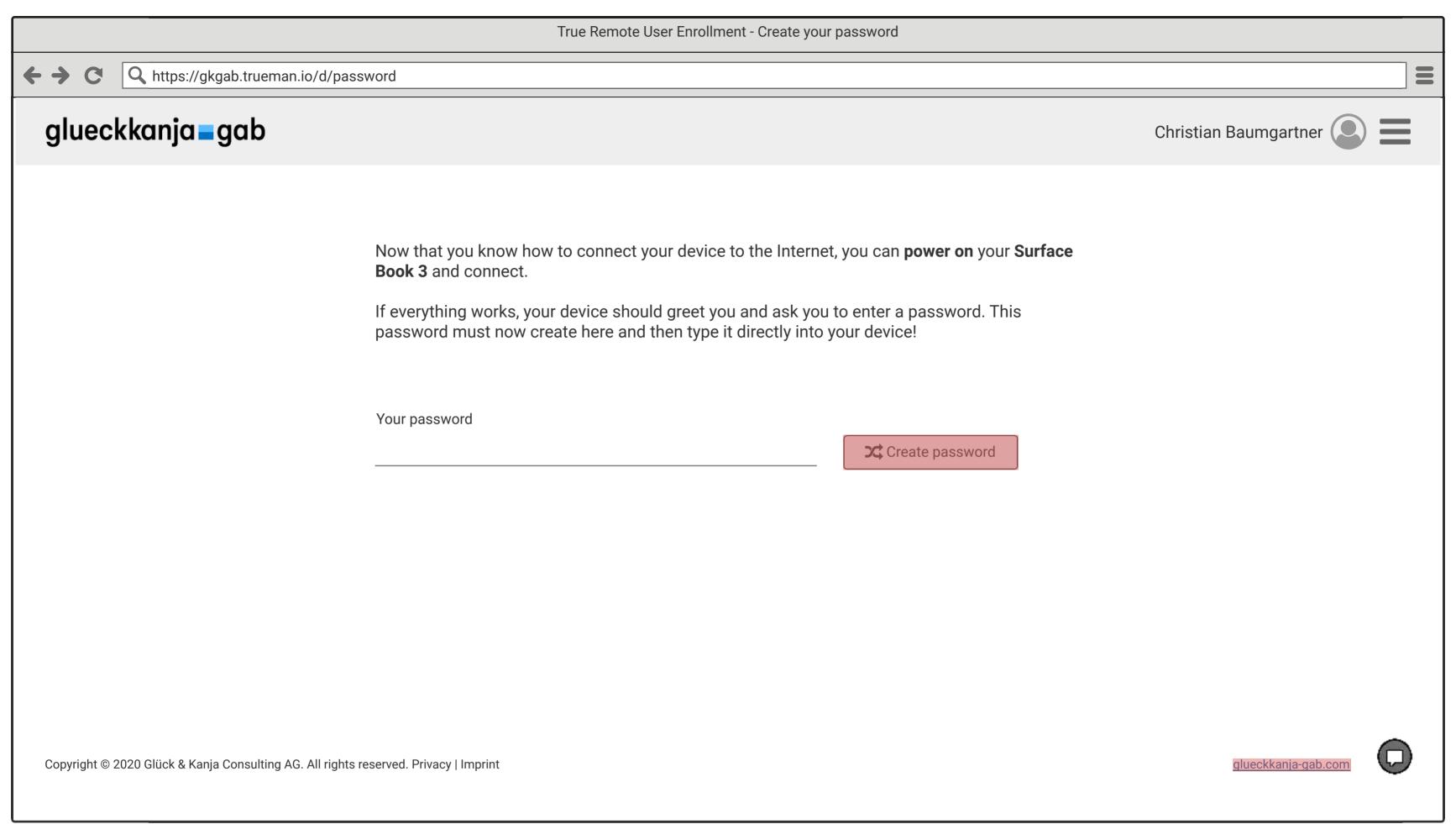
INPUT:

Device type & model

۱ ا ا

Call against an API to get back matching videos that are embedded.

Generate Password 13 / 23



For the generation of the passwords we could plan different variants.

One idea would be to use a Diceware/EFF Word List procedure. Here, different words are appended to each other. The entropy of such a password is very high. With such a password you could also define that this is not inital but the final password.

In the backend, the password could be written to an Azure Keyvault to give the user a way to retrieve the password again during setup. Only after a time X (e.g. 2 days) the password is cleaned up in the vault.

The password generator could also offer different variants - depending on what the user prefers. A nice example for different secure variants can be found here:

https://www.rempe.us/diceware/#eff resp. https://password.blue/

An alternative would be to set a password here, which the user has to change after the first use - still to be discussed.

IMPORTANT: The step should be skipped if the value in AMR is not OTP in the id_token of the login!

Generate Password Done 14 / 23

True Remote User Enrollment - Create your password







Q https://gkgab.trueman.io/d/password



Christian Baumgartner

glueckkanja=gab

Now that you know how to connect your device to the Internet, you can **power on** your **Surface Book 3** and connect.

If everything works, your device should greet you and ask you to enter a password. This password must now create here and then type it directly into your device!

Dein Kennwort

client-metapher-maxime-bohnen-haber-bier

Create password

Your new password is quite long, isn't it? But since it only consists of words, you can remember it well. After the first login you will rarely need your password because everything works with a PIN or fingerprint.

Next

Generate Password Done Dialog 15 / 23

True Remote User Enrollment - Create your password







A https://gkgab.trueman.io/d/password

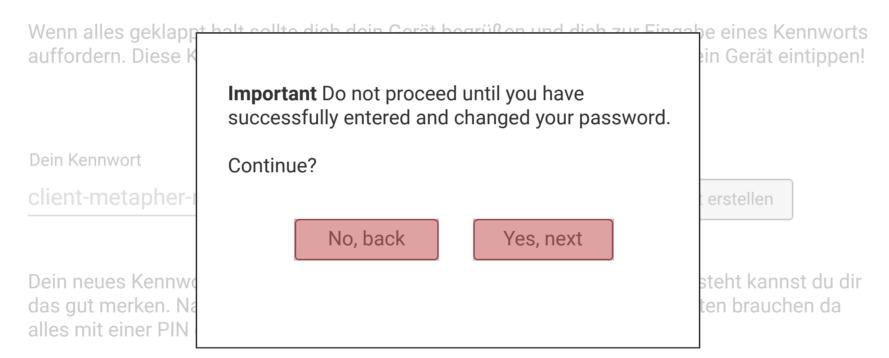


Christian Baumgartner





Nachdem du nun weist man eine Internetverbindung mit deinem Gerät herstellt kannst du nun dein Surface Book 3 einschalten und verbinden.



Hier findest du noch ein paar lustige Entropie Statistiken zu deinem Passwort

Waiting for the device 16 / 23

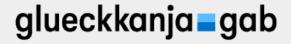
True Remote User Enrollment - Waiting for device





https://gkgab.trueman.io/d/device/checkin





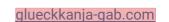




Wait until your device is ready

Approximate waiting time 4 minutes

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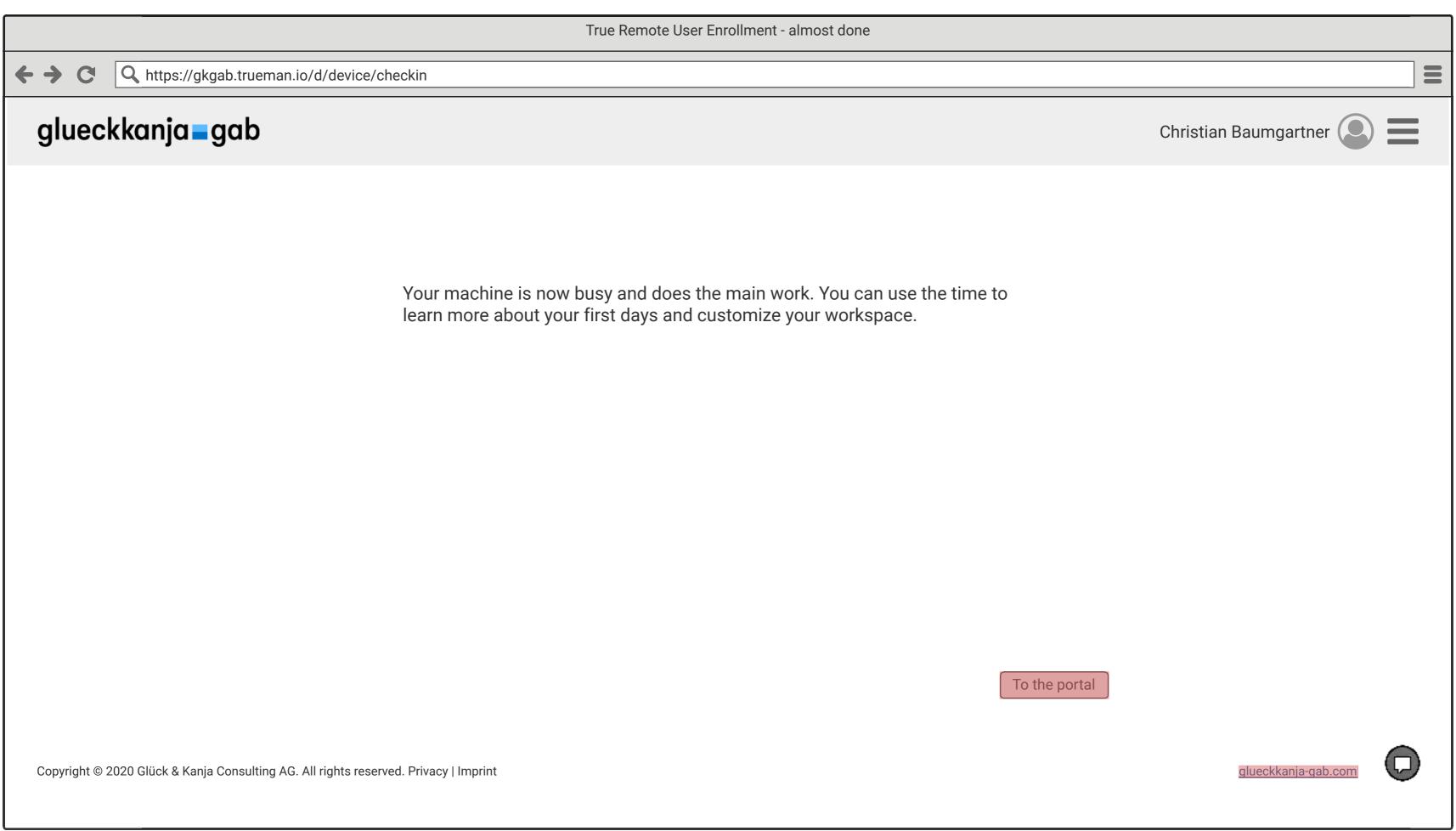
At this point, the following things have happened on the Win10 Workplace:

- 1. the device is switched on
- 2. the device has successfully connected to a network with Internet access
- 3. the device has connected via autopilot and
- 4. the user has entered his password

We now wait here and periodically check against the appropriate Graph API / Intune endpoint and poll the enrollment status of the device

Device ID from the previous link in Azure AD/Intune. Status for enrollment from Azure AD

Waiting for the device - Done 17 / 23



Here you could now start the wizard for the next device. (e.g. roll out another iOS device etc.).

If there are no more devices to be set up in the queue, the redirect to the portal can now take place.

The portal would not be in focus in the first step and the wizard would stop at this point. We could redirect to an individual URL (e.g. portal.office.com or intranet.contoso.com etc.).