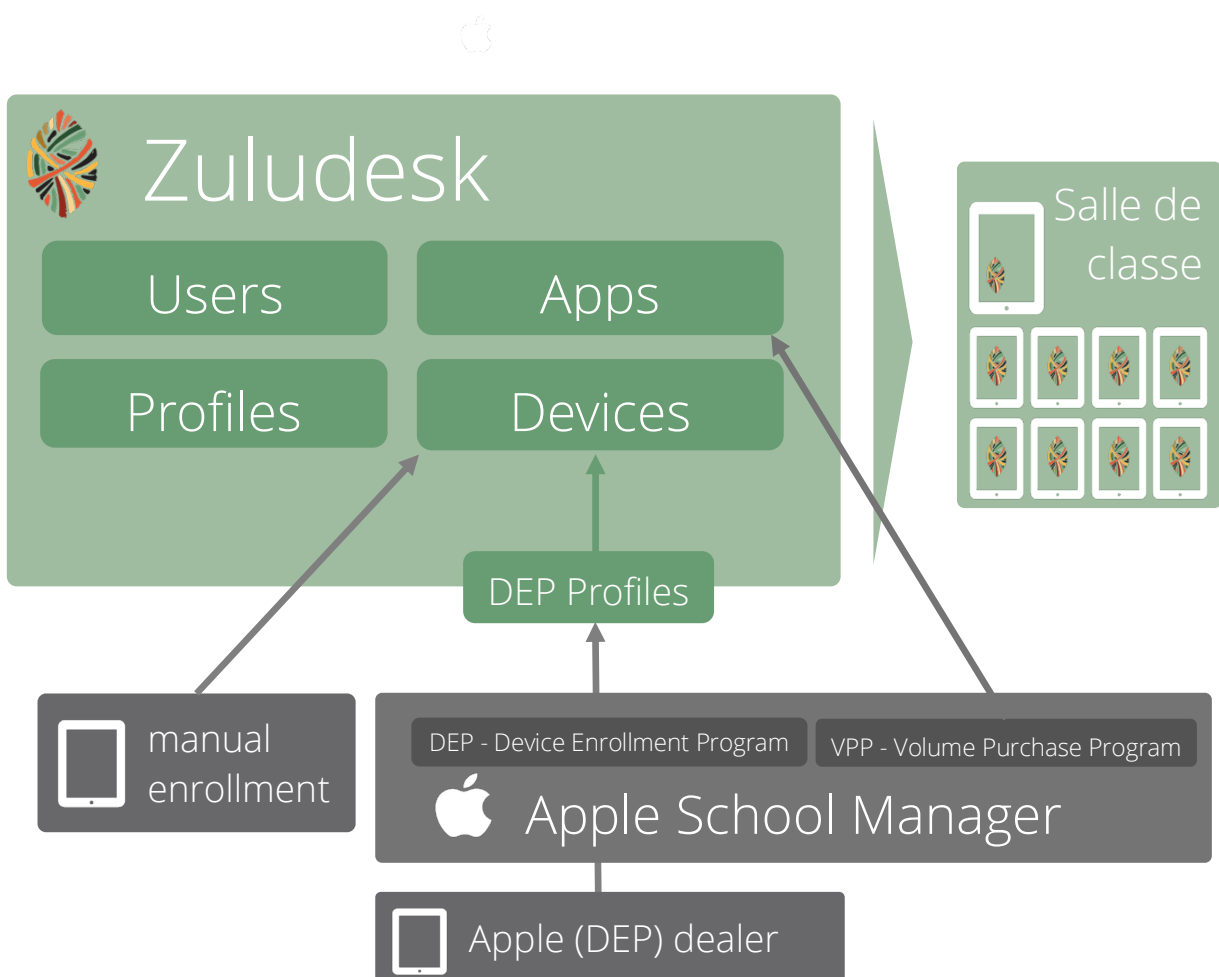May 2019

Zuludesk implementation

This document will guide you to configure your iPads using Zuludesk and Apple School Manager.

1. General Overview

The different systems used to manage iPads properly in a school environment are shown and explained below:

Zuludesk manages:

- Device – they will be either enrolled
  - Manually – this will only allow a limited number of restrictions and management possibilities
  - With DEP – this is the preferred way, as it link the devices entirely to the institution, allowing all possible restrictions, app pushing and activation lock against theft
- Apps – they can only be synced from a special VPP account using a special VPP Store to buy the apps.
- Profiles – restrictions and configurations can be set here
- DEP profiles – these are used to tell Apple servers how the devices will start up the first time
- Users – in case Zuludesk Teacher or Parent app is used, a user must be created.

Apple School Manager is used for:

- Managing the DEP devices assigned by the Apple DEP dealer
- Assign the DEP devices to a Mobile Device Management system (e.g. Zuludesk)
- Create VPP-accounts using managed AppleIDs

2. First Setup

The following setup must only be done once, before starting up any iPad.

ASM – Apple School Manager

ASM is used to

- ✓ transfer iPads that are registered with DEP at Apple to the Zuludesk instance of your school
- ✓ create VPP account to buy apps and ibooks in VPP store within ASM

ASM setup, transfer of DEP registered iPads and VPP accounts can easily be provided by CGIE.

DEP – Device Enrolment Program

Before delivery, Apple can preconfigure the iPads to be registered with DEP (Device Enrolment Program). This will allow for the iPads to get link to the MDM solution of the school even before they are unpacked. The setup is easier as only a minimum of steps are necessary to configure the iPads

VPP – Volume Purchase Program

A managed AppleID with "content manager" role is allowed to buy apps and ibooks in the VPP Education store within ASM. The account can be created in ASM (see above).

The only way today to buy apps and ibooks in VPP Education store, is using a credit card. The credit card is also needed, but not charged, for buying "free" apps and ibooks. Log in to VPP account and configure your credit card under account summary at the top right.

Zuludesk

A Zuludesk environment can only be created by a Zuludesk license reseller (e.g. Lineheart for Luxembourg).

Once set up, the following settings are essential to configure the environment.

- **VPP account link:**
  - ✓ Go to ASM and login with your VPP account
  - ✓ Select Settings under your login name on the bottom left
  - ✓ Select Apps and Books
  - ✓ Download Token for your account
  - ✓ Open Zuludesk > Organisation > Settings > VPP and add an account.
  - ✓ Upload you token from VPP
  - ✓ *Note: Multiple VPP accounts can be linked to Zuludesk.*

- **DEP account link**

  Option 1 - If you don't have an ASM account, or wish to use the ASM service offered by CGIE, please

  - ✓ provide the following DEP Customer ID to your reseller: 10142696
  - ✓ ask the reseller for provide a DEP reseller ID and send it to CGIE
  - ✓ *Note: The following resellers are already registered with CGIE: Lineheart, Supporter-Team gmbh*

  Option 2 - If you have your own ASM account, you must follow the procedure explained under Zuludesk > Organisation > Settings > DEP > configure DEP

- **More administrator accounts**
  Create more administrator accounts for your Zuludesk environment under Zuludesk > Organisation > Administrators
  Note: Administrator accounts are completely separate form User accounts in Zuludesk.

3. Configuration of shared iPad scenario (using DEP)

The following steps are to be followed for iPads used on different classes, by different teachers and different students.

Create DEP profile

A DEP profile will only define how DEP enrolled devices will behave at initial startup.

Note: An iPad that has already been initialized and used, and added later to DEP, can be completely reset (Reset All Contents and Settings) and then reinitialized with the DEP profile.

To create a DEP profile, go **to Zuludesk > Profiles > DEP Profiles > create iOS Profile**.

The following settings are recommended for shared iPads managed in a case:

- ✓ Set Device Name - leave blank
- ✓ Supervise the device – checked
- ✓ Allow pairing with other computer – checked
- ✓ Allow removal of MDM profile – unchecked
- ✓ Require MDM profile to be installed – checked
- ✓ Require authentication for enrolment – unchecked
- ✓ Enable Shared iPad – unchecked
- ✓ Location Services – unchecked = Do NOT skip
- ✓ All other settings – checked = skip

Create device group for iPads

To better assign profiles and apps to the devices later, you must now create a device group under Zuludesk > Devices > Groups.

Create a group (for example: Case 1 iPads)

Creation of "dummy" iPad user accounts and group

To be able to use Zuludesk Teacher App to controlling the iPads in class later, we need to set up a "dummy" user for each iPad and make them owner later.

Note: You can skip this step if you do not intend to user Zuludesk Teacher App.

First, create an excel-sheet with a list of Zuludesk user accounts, one to be created for each iPad. The table will look like the following:

Username	Email	FirstName	LastName	Groups	TeacherGroups	Password	StoredPassword	SerialNumber	Placeholder
Case1_01		Case 1 - 01		Case 1 students					
Case1_02		Case 1 - 02		Case 1 students					
Case1_03		Case 1 - 03		Case 1 students					
Case1_04		Case 1 - 04		Case 1 students					
Case1_05		Case 1 - 05		Case 1 students					
Case1_06		Case 1 - 06		Case 1 students					
Case1_07		Case 1 - 07		Case 1 students					
Case1_08		Case 1 - 08		Case 1 students					
Case1_09		Case 1 - 09		Case 1 students					
Case1_10		Case 1 - 10		Case 1 students					
Case1_11		Case 1 - 11		Case 1 students					
Case1_12		Case 1 - 12		Case 1 students					
Case1_13		Case 1 - 13		Case 1 students					
Case1_14		Case 1 - 14		Case 1 students					
Case1_15		Case 1 - 15		Case 1 students					
Case1_16		Case 1 - 16		Case 1 students					

With username, first name, user group

Then import this file as csv in **Zuludesk > Users & Groups > Overview > Import from csv** with the following settings:

- ✓ Comma or Semi-Colin, depending on setting of Excel export
- ✓ Automatically create groups check, to create the Usergroup "Case 1 students"

Prepare DEP devices in Zuludesk

Now you can prepare in Zuludesk all the devices to be configured properly and automatically at startup. Therefore, do the following:

- ✓ Under Zuludesk > Devices > DEP you will find a list of available devices (transferred from DEP in ASM).
- ✓ Select the iPad in the list by clicking the edit button at the right.
- ✓ Choose a DEP profile to be used at startup
- ✓ Set Device Name (for example: Case 1 – iPad 1)
- ✓ Set device group (as defined above: Case 1 iPads)
- ✓ Set device owner (dummy user defined above: Case 1 – 01)

Repeat these steps for all iPads of the case.

Create Profile with iPad Settings and restrictions

Normal profiles are used to apply settings and restrictions to iPads.

To create a profile:

- ✓ Go to Zuludesk > Profiles > create Profile
- ✓ Select iOS
- ✓ Set Name (for example: Case 1 iPads)
- ✓ Set removal policy to "Require password to remove this profile" and define a password to do so

- ✓ Set Scope to "Or - Device member of - Equal to - Case 1 iPads" to install this profile on all iPads of Case 1 for example
- ✓ Save with Create new profile

You can now select the settings button at the right of the created profile.

The following settings are recommended, but you can decide on any other setting that might be interesting for your use case:

Under Wifi, configure all Network SSIDs used in your environment. Be aware that eduroam can NOT be configured this way.

Under Webclip you can add some useful links, on the device shown as app. This can be a link to your school's website, eduroam profile download (Link to https://cat.eduroam.org/?idp=159&profile=216&lang=fr_FR) , helpdesk, …

Under Restrictions, the following point are recommended or important:

- ✓ Allow removing apps – unchecked
- ✓ All setting under iCloud: unchecked
- ✓ Allow downloading erotic content from the Bookstore: unchecked
- ✓ Allow modifying account settings (E-mail, contacts, calendars, iCloud & iTunes Store) - unchecked
  Note: this is to avoid any students or teachers to enter their account data, then buy and install apps
- ✓ Allow the use of the 'Erase All Content And Settings' setting - unchecked
- ✓ Allow modifying device name – unchecked
- ✓ Allow the user to change the wallpaper – unchecked
- ✓ Allow modifying passcode – unchecked
- ✓ Allow pairing with an Apple Watch – unchecked
- ✓ Allow Changes to Notifications settings – unchecked

More settings and restrictions can be set under iOS (Supervised only). It's up to the use case and each school to decide which setting they would like to push. Some interesting settings to consider:

- ✓ Web Content Filter: to protect against unwanted web surfing
- ✓ Layout: to make all screens and app positions the same on all iPads

Configure Apps to be installed on the devices

In order to install apps on devices, they must first be available in your Zuludesk environment. Therefore, you must buy apps in VPP Education Store. Free Apps must also be "bought" using VPP.

To buy an App:

✓ Go to school.apple.com

✓ Log in using your VPP enabled and Zuludesk linked AppleID

✓ Go to Apps and Books and search for an App you want to buy

✓ Select it and indicate the quantity you want to buy

✓ Review and place the order

✓ Wait a couple of minutes for the purchase to get processed

✓ Wait for Zuludesk to synchronise with VPP: This is normally done a few times per day. In case you want to trigger the sync manually, you can do so on the Zuludesk Dashboard page.

To assign an app to one or more devices::

✓ Go to Zuludesk > Apps

✓ Click on the edit button of the app

✓ Under Zuludesk Teacher: select Show this app in Zuludesk Teacher, Visible for all Teacher groups

✓ Set the scope to the devices you like, for example "Or - Device member of - Equal to - Case 1 iPads" to install this app on all iPads of Case 1

Finally, start up the devices

After having configured all the previous points, the initial startup of the iPads can now be done:

✓ Switch iPad on

✓ Choose language

✓ Choose a region (Luxembourg)

✓ Connect to a Wifi
Note: The iPad will now be activated on Apple servers

✓ Activate Localisation
Note: A message will show that the Ministry of Education will configure your iPad. After selecting Next, the iPad will be ready. The apps configured in Zuludesk will install within minutes

The iPad set up this way will show up in Zuludesk > Devices

4. Configuration of student owned iPads (one2one scenario)

IMPORTANT: Student owned iPads only need to be managed by Zuludesk MDM if you wish to apply restrictions, use Zuludesk Teacher App, Zuludesk Parent App or distribute apps bought centrally using Volume Purchase Program (VPP).

The following steps are to be followed for student owned iPad deployment, also called One2One scenario, in case you need Zuludesk Device Management.

Create DEP profile (for DEP devices only)

If devices are school owned, and loaned to students for example, they can be registered with DEP.

A DEP profile will only define how DEP enrolled devices will behave at initial startup.

Note: An iPad that has already been initialized and used, and added later to DEP, can be completely reset (Reset All Contents and Settings) and then reinitialized with the DEP profile.

To create a DEP profile, go **to Zuludesk > Profiles > DEP Profiles > create iOS Profile**.

The following settings are recommended for shared iPads managed in a case:

- ✓ Set Device Name - leave blank
- ✓ Supervise the device – checked
- ✓ Allow pairing with other computer – checked
- ✓ Allow removal of MDM profile – unchecked
- ✓ Require MDM profile to be installed – checked
- ✓ Require authentication for enrolment – unchecked
- ✓ Enable Shared iPad – unchecked
- ✓ Location Services – unchecked = Do NOT skip
- ✓ All other settings – checked = skip

Prepare for Supervised Mode (for non-DEP devices)

Privately owned iPads cannot be enrolled using DEP. The following configurations can therefore be applied:

Option 1 - Devices are enrolled with Zuludesk only

This will limit the restrictions that can be set. The following will NOT be possible:

- ✓ Show lockscreen message
- ✓ Apply Web Content Filter
- ✓ Block in Single App Mode
- ✓ Set Wallpaper
- ✓ Define App layout on screen
- ✓ Modify notifications settings of apps
- ✓ Whitelist and Blacklist apps
- ✓ Configure HTTP Proxy

Many other settings remain possible, Push configurations, apps, content. See www.zuludesk.com for more details.

No special configuration of the device is needed before startup.

Option 2 Devices configured to "supervised mode"

Devices are set up in "supervised mode" and enrolled with Zuludesk.

If you wish to use the full possibilities in restrictions and management of the student devices, you must set up the devices in "supervised mode". Therefore, a complete reset and restore using Apple Configurator 2 (on Mac only) must be done. To prepare the restore, you can follow this guide:

https://community.zuludesk.com/topic/118-apple-configurator-2-getting-an-ipad-ready-for-zuludesk-supervised-mode/

Note: only prepare everything under "Create a blueprint"

Create device group for iPads

Same as described under chapter 3 naming the group for example "ClasseA iPads".

Creation of student user accounts and group

To be able to use Zuludesk Teacher App to control the iPads in class later, you need to set up a user account for each student and make them owner later.

Note: You can skip this step if you do not intend to use Zuludesk Teacher app or Zuludesk Parent app.

First, create an excel-sheet with a list of Zuludesk user accounts, one to be created for each iPad. The table will look like the following:

Username	Email	FirstName	LastName	Groups	TeacherGroups	Password	StoredPassword	SerialNumber	Placeholder
Firstname1.Lastname1		Firstname1	Lastname1	ClasseA students				iPad SN 1	iPad Lastname1 Firstname1
Firstname2.Lastname2		Firstname2	Lastname2	ClasseA students				iPad SN 2	iPad Lastname2 Firstname2
Firstname3.Lastname3		Firstname3	Lastname3	ClasseA students				iPad SN 3	iPad Lastname3 Firstname3
Firstname4.Lastname4		Firstname4	Lastname4	ClasseA students				iPad SN 4	iPad Lastname4 Firstname4
Firstname5.Lastname5		Firstname5	Lastname5	ClasseA students				iPad SN 5	iPad Lastname5 Firstname5
Firstname6.Lastname6		Firstname6	Lastname6	ClasseA students				iPad SN 6	iPad Lastname6 Firstname6
Firstname7.Lastname7		Firstname7	Lastname7	ClasseA students				iPad SN 7	iPad Lastname7 Firstname7
Firstname8.Lastname8		Firstname8	Lastname8	ClasseA students				iPad SN 8	iPad Lastname8 Firstname8

With

username*, suggested to be firstname.lastname*

first name*,*

last name

user group*, normally the name of the class*

and if available

serialnumber*, the serial number of the student iPad*

placeholder*, a placeholder with all data of the iPad, this will then automatically be used once the iPad shows up in Zuludesk*

Then import this file as csv in **Zuludesk > Users & Groups > Overview > Import from csv** with the following settings:

- ✓ Comma or Semi-Colin, depending on setting of Excel export
- ✓ Automatically create groups check, to create the Usergroup "ClasseA students"

Check or create placeholders for iPads (non-DEP only)

Placeholders are only used for non-DEP devices to preconfigure the name of the device, it's owner and group membership.

If the serial number and placeholder information has been configured in the imported files (see previous step), then all necessary placeholders should be available and configured.

Otherwise, you can add a placeholder for each iPad to be enrolled later:

- ✓ Go to Zuludesk > Devices > Placeholders
- ✓ Check or create new placeholder with
- ✓ Placeholder to be "iPad Lastname Firstname"
- ✓ Device Serial Number filled with SN of student's iPad

- ✓ Set Device Name to be "iPad Lastname Firstname"
- ✓ Set Device Group to be "ClasseA iPads"
- ✓ Set Device Owner: select student user

Repeat these steps for all student iPads.

Prepare DEP devices in Zuludesk (DEP devices only)

If you use DEP devices, you can now prepare in Zuludesk all the devices to be configured properly and automatically at startup. Therefore, do the following:

- ✓ Under Zuludesk > Devices > DEP you will find a list of available devices (transferred from DEP in ASM).
- ✓ Select the iPad in the list by clicking the edit button at the right.
- ✓ Choose a DEP profile to be used at startup
- ✓ Set Device Name (for example: "iPad Lastname Firstname"
- ✓ Set device group (as defined above: "ClasseA iPads"
- ✓ Set device owner (select student user)

Repeat these steps for all student iPads.

Create Profile with iPad Settings and restrictions

Normal profiles are used to apply settings and restrictions to iPads.

To create a profile:

- ✓ Go to Zuludesk > Profiles > create Profile
- ✓ Select iOS
- ✓ Set Name (for example: ClasseA student iPads profile)
- ✓ Set removal policy to "Require password to remove this profile" and define a password to do so
- ✓ Set Scope to "Or - Device member of - Equal to - ClasseA iPads" to install this profile on all iPads of ClasseA for example
- ✓ Save with Create new profile

You can now select the settings button at the right of the created profile.

The following settings are recommended, but you can decide on any other setting that might be interesting for your use case:

Under Wifi, configure all Network SSIDs used in your environment. Be aware that eduroam can NOT be configured this way.

Under Webclip you can add some useful links, on the device shown as app. This can be a link to your school's website, eduroam profile download (Link to https://cat.eduroam.org/?idp=159&profile=216&lang=fr_FR) , helpdesk, …

Under Restrictions, the following points are recommended or important:

- ✓ Allow downloading erotic content from the Bookstore
- ✓ Allow the use of the 'Erase All Content And Settings' setting - unchecked
- ✓ Allow modifying device name – unchecked

More settings and restrictions can be set under iOS (Supervised only). It's up to the use case and each school to decide which setting they would like to push. Some interesting settings to consider:

- ✓ Web Content Filter: to protect against unwanted web surfing

Configure Apps to be installed on the devices

In order to install apps on devices, they must first be available in your Zuludesk environment. Therefore, you must buy apps in VPP Education Store. Free Apps must also be "bought" using VPP.

To buy an App:

- ✓ Go to school.apple.com
- ✓ Log in using your VPP enabled and Zuludesk linked AppleID
- ✓ Select Apps and books and search for an App you want to buy
- ✓ Select it and indicate the quantity you want to buy
- ✓ Review and place the order
- ✓ Wait a couple of minutes for the purchase to get processed
- ✓ Wait for Zuludesk to synchronise with VPP: This is normally done a few times per day. In case you want to trigger the sync manually, you can do so on the Zuludesk Dashboard page.

To assign an app to one or more devices:

- ✓ Go to Zuludesk > Apps
- ✓ Click on the edit button of the app
- ✓ Under Zuludesk Teacher: select Show this app in Zuludesk Teacher, Visible for all Teacher groups
- ✓ Set the scope to the devices you like, for example "Or - Device member of - Equal to - Case 1 iPads" to install this app on all iPads of Case 1

Finally, set up the devices

After having configured all the previous points, you can now start up, reset or enrol the devices. The following 3 options can be used, depending on the configuration selected:

DEP devices

For devices that have already been set up and used previously, you can simply reset the device under the menu (on the device): Settings > General > Reset > Erase All Content and Settings

Then these devices, also those that have never been configure yet (out of the box) can be set up following these steps:

- ✓ Switch iPad on
- ✓ Choose language
- ✓ Choose a region (Luxembourg)
- ✓ Connect to a Wifi
  Note: The iPad will now be activated on Apple servers
- ✓ Activate Localisation
  Note: A message will show that the Ministry of Education will configure your iPad. After selecting Next, the iPad will be ready. The apps configured in Zuludesk will install within minutes

An iPad set up this way will show up in Zuludesk > Devices

Non-DEP devices, but "Supervised mode"

If the student owned devices are not DEP registered, but you wish to put the in "Supervised mode", you need now to apply the previously created blueprint in Apple Configurator 2:

- ✓ Connect iPad to Apple Configurator 2
- ✓ Select iPad
- ✓ Choose the Blueprint to apply

Once the device has been restored and restarted, the startup configuration can be made as for any other normal iPad, except for one step that will require to accept the configuration pushed by Zuludesk.

An iPad set up this way will show up in Zuludesk > Devices

Non-DEP devices with simple Zuludesk enrolment

If you only wish to enrol the device in Zuludesk, without "Supervised mode", you can do so by following these steps:

- ✓ On the device, go to "zuludesk.com/manage/enrol
- ✓ Enter your Network ID (you can find it in Zuludesk > Devices > Enroll Devices > On-device enrollment)
- ✓ Press enroll
- ✓ In the Profile window that appears, press 'install', then 'install' again to confirm

The iPad set up this way will show up in Zuludesk > Devices