

# Preparation guide

Necessary preparations for your participation in training



That's IT.



## ▲ Preparation

- Create PTC account
- Installation Amazon AppStream 2.0
- Check system requirements


## ▲ On the training day

- Starting the virtual computer (Amazon AppStream)
- Start Creo Parametric
- Access to training material

## ▲ After the training - Training material

- Access after the training
- Functions in the digital document

# Preparation



- create PTC account
- Installation Amazon AppStream 2.0

# Create PTC Account

## How can I take part?

To take part in the training, you **must** have a PTC account.

## Who must be the account holder?

The PTC account must be created on the mail address of the booked participant.

## PTC account already available?

Test access, reset password if necessary.

## No PTC account available?

Create an account - see next page.

**IMPORTANT**  
These steps must be  
completed as long as you  
have access to your  
mailbox.

Link: [Create a PTC Account](#)

Select Basic  
account

PTC.com Accounts > Create New PTC eSupport Account

### Create New PTC eSupport Account

All fields marked with a \* are required.

\* First Name:

\* Last Name:

\* Title:

\* E-mail:

\* Confirm E-mail:

\* Telephone:

\* Company Name:

\* Address:

\* City:

State/Province:

Zip/Postal Code:

\* Country/Region:

\* Preferred Language:

I would like to receive PTC product and services related e-mail: ☐ Yes ☒ No

\* Password:

\* Confirm Password:

**Basic Account:** A Basic Account provides access to subscription-based email, such as the PTC Express newsletter, free trial downloads and easy registration for events and webcasts.

If you, or your company, have purchased a Global Support agreement with PTC please select the "New Customer" tab instead.

**PTC Security Challenge**

Please enter the underlined numbers only, in order:

PTC collects, transfers and uses your data in accordance with PTC's [Privacy Policy](#).  
By continuing you agree that you have read and agree with our Privacy Policy.

IMPORTANT

Please enter your company email address or the email address with which you are registered for the training and NO capital letters

Password min. 8 characters, no special characters

click to create  
account

By creating an account, you confirm the transfer of data to PTC.

# Installation Amazon AppStream 2.0

The installation of Amazon AppStream 2.0 is **recommended**, but not essential. Browser access is also possible.

[Download Amazon AppStream 2.0](#)

Installation (or browser access) is necessary for **online training** or training **in your company**.

The Amazon AppStream needs to be installed in the **user directory** and not as admin.

At least **Windows 8** is a requirement.

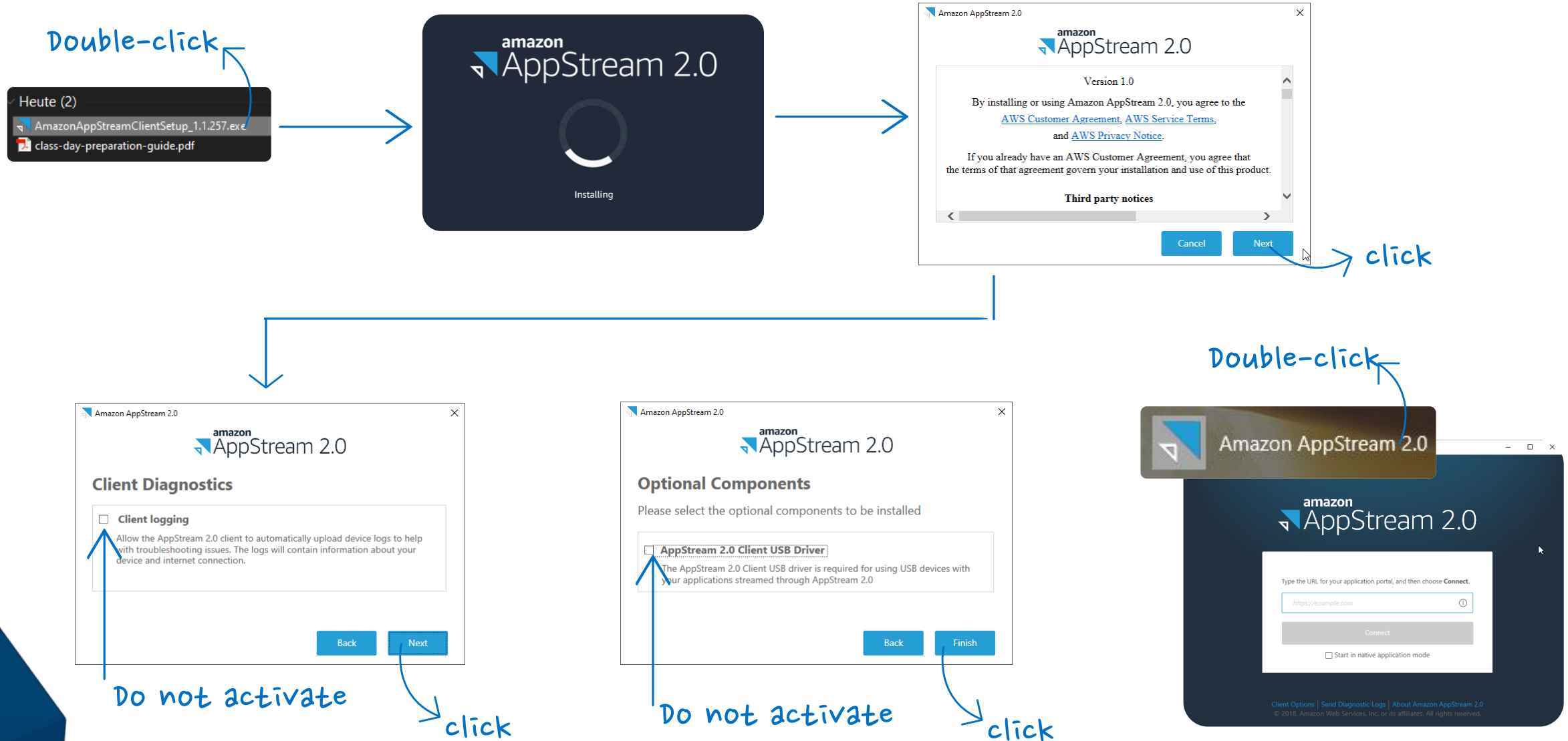
You will find further information on the next slide or here: [Setup Amazon AppStram 2.0](#)

Download  
preferred



Browser access  
is possible

# Installation Amazon AppStream 2.0





# Check system requirements

Please check the system requirements in **advance** with the help of your **internal IT**.

## Accessing Student Guides Through Vitrium



PTC University uses the digital rights management vendor Vitrium to provide students access to view and print student guides through a web browser.

### What browser should I use?

Vitrium supports the latest stable version of each browser. This does not include beta or dev releases.

### Trouble loading content?

Proxy servers and firewalls could prevent content from loading correctly in the web viewer. In order to resolve these issues, follow steps below.

### Proxy server required configuration changes:

1. The proxy **MUST** allow direct communication
2. With the DNS address
  - <https://protectedpdf.com/>
  - <http://protectedpdf.com/>
  - <https://api.protectedpdf.com/>
3. On ports 80/443

### Firewall required configuration changes:

1. Remove any blocks in Norton or other firewall software for
  - <https://protectedpdf.com/>
  - <http://protectedpdf.com/>
  - <https://api.protectedpdf.com/>
2. The firewall **MUST** allow communication with
  - <https://protectedpdf.com/>
  - <http://protectedpdf.com/>
  - <https://api.protectedpdf.com/>

🔗 IP address and port requirements

🔗 System requirements AppStream 2.0

🔗 Access for digital documents in Vitrium

## IP Address and Port Requirements for AppStream 2.0 User Devices

[PDF](#) | [RSS](#)

AppStream 2.0 users' devices require outbound access on port 443 (TCP) and port 8433 (UDP) when using the internet endpoints, and if you are using DNS servers for domain name resolution, port 53 (UDP).

- Port 443 is used for HTTPS communication between AppStream 2.0 users' devices and streaming instances when using the internet endpoints. Typically, when end users browse the web during streaming sessions, the web browser randomly selects a source port in the high range for streaming traffic. You must ensure that return traffic to this port is allowed.
- Port 8433 is used for UDP HTTPS communication between AppStream 2.0 users' devices and streaming instances when using the internet endpoints. This is currently only supported in the Windows native client. UDP is not supported if you are using VPC endpoints.

### Note

Streaming through interface VPC endpoints requires additional ports. For more information, see [Creating and Streaming from Interface VPC Endpoints](#).

- Port 53 is used for communication between AppStream 2.0 users' devices and your DNS servers. The port must be open to the IP addresses for your DNS servers so that public domain names can be resolved. This port is optional if you are not using DNS servers for domain name resolution.

## System Requirements and Considerations

The AppStream 2.0 client requires the following:


- Follow the principle of least privilege when launching the AppStream 2.0 client. The client should only run with the level of privilege required to complete a task.
- Operating system — Windows 7, Windows 8, or Windows 10 (32-bit or 64-bit)
- Microsoft Visual C++ 2015 Redistributable or later. For information about the latest Visual C++ redistributable packages for Visual Studio 2015, 2017, and 2019, see [The latest supported Visual C++ downloads](#) in the Microsoft Support documentation.
- RAM — 2 GB minimum
- Hard drive space — 200 MB minimum
- Local administrator rights — Used if you want to install the AppStream 2.0 USB driver for USB driver support.
- An AppStream 2.0 image that uses the latest AppStream 2.0 agent or agent versions published on or after November 14, 2018. For information about AppStream 2.0 agent versions, see [AppStream 2.0 Agent Release Notes](#).
- The Windows native client supports UDP as well as the default TCP-based streaming over NICE DCV. For more information about NICE DCV and UDP, see [Enabling the QUIC UDP transport protocol](#). If you want to enable UDP streaming for the Windows native client, make sure you meet the following requirements. If you don't meet the following requirements, the Windows native client will default back to TCP-based streaming.
  - Your Stack has been configured to prefer UDP in the **Streaming Setting Experience** section. For more information, see [Create an AppStream 2.0 Fleet and Stack](#).
  - Your network allows UDP traffic on port 8433 for the AWS IP Ranges. For more information, see [AWS IP address ranges](#).
  - You are using the latest base image when creating your fleet. For more information, see [AppStream 2.0 Base Image and Managed Image Update Release Notes](#).
  - Your end users are using the latest Windows native client. For more information, see [Supported clients](#).

### Note

We recommend an internet connection for AppStream 2.0 client installation. In some cases, the client can't be installed on a computer that is not connected to the internet, or USB devices might not work with applications streamed from AppStream 2.0. For more information, see [Troubleshooting AppStream 2.0 User Issues](#).



# On the training day



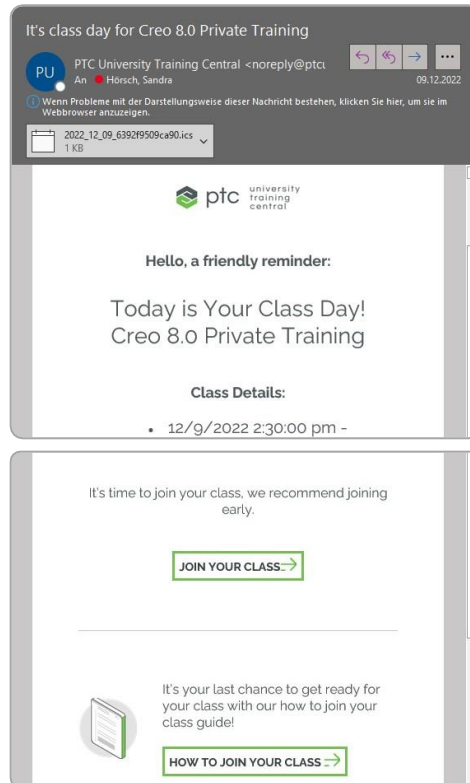
Starting the virtual computer (Amazon AppStream)  
Start creo Parametric

# Starting the virtual computer (Amazon AppStream 2.0)

On the **first day of the training** in the morning (or the evening before) you will receive this email.

The link "Join your Class" leads to <https://class.ptcu.com>

If you are training at an INNEO training centre, you **do not** need this email.




Welcome to PTC University

Please Sign In to Access Your Training.

Sign In

[Forgot Password?](#)
[Have a code?](#)


Do you have a PTC account? Sign in with your username and password.

Don't have a free account? [Create one here.](#)

Log in to your **PTC account** at <https://class.ptcu.com>

## Step 1: Select class

Step 1  
SELECT CLASS

Step 2  
ENTER CLASS

Step 3  
ACCESS STUDENT GUIDE

Step 4  
CONNECT TO CLASS ENVIRONMENT

Step 1

Select Class

Welcome, join your class by selecting from the list below. Once you've selected your upcoming class, follow the next steps to successfully join your class. Your classes will appear below 24 hours prior to the start time.

✓ Upcoming Class

Can't find your class? Try refreshing ↻

Inneo GMBH - Creo Private - 18th of November 2021 (ID B5DQEX7)  
(B5DQEX7)

Nov 18, 09:00 AM (CET) | 8 Hours

Private Training ✓

> Completed Class

Link from email:  
<https://class.ptcu.com/>

Here you can see the training that is taking place. For trainings lasting several days, please select the corresponding date.

## Step 3: Access student guide

Step 1  
SELECT CLASS

Step 2  
ENTER CLASS

Step 3  
ACCESS STUDENT GUIDE

Step 4  
CONNECT TO CLASS ENVIRONMENT

Step 3

### Access Your Student Guide

Our Student Guide provides courseware reference material that outlines the functional areas and student learning path for each course. Students will learn both conceptual topics as well as perform exercises that reinforce those concepts.

**Class Selection:**

Inneo GMBH - Creo Private - 18th of November 2021 (ID B5DQEX7)

Nov 18, 09:00 AM (CET) | 8 Hours

Private Training

**Access Class Materials:**

[Student Guide for Private Training](#) →

---

If you are experiencing issues accessing your student guide, please inform your instructor at the start of class or email [trainingcentral@ptc.com](mailto:trainingcentral@ptc.com) for assistance.

Need additional assistance? Visit our [Training Support](#) page.

Link from email:  
<https://class.ptcu.com/>

You can access your training documents here.



## Step 4: connect to class environment

Step 1  
SELECT CLASS

Step 2  
ENTER CLASS

Step 3  
ACCESS STUDENT GUIDE

Step 4  
CONNECT TO CLASS ENVIRONMENT

Step 4

Connect to Your Class Environment

Our live class environments will always support the latest product version and require no local installation. During class, you will need access to your class environment to participate in hands-on exercises and apply what you are learning in real-time. Your class environment will be available 30 minutes prior to your class.

Class Selection:

Inneo GMBH - Creo Private - 18th of November 2021 (ID B5DQEX7)

Nov 18, 09:00 AM (CET) | 8 Hours

Private Training

Your Class Environment

Select Country

Germany

✓

LAUNCH CLASS ENVIRONMENT

[Manage VMs](#)

If you are experiencing issues accessing your class environment, please inform your instructor at the start of class or email [trainingcentral@ptc.com](mailto:trainingcentral@ptc.com) for assistance.

Need additional assistance? Visit our [Training Support](#) page.

Link from email:  
<https://class.ptcu.com/>

Here you define the settings of the virtual machine. Instructions on the next two slides.

## Step 4: connect to class environment

Step 1  
SELECT CLASS
Step 2  
ENTER CLASS
Step 3  
ACCESS STUDENT GUIDE
Step 4  
CONNECT TO CLASS ENVIRONMENT

Country  
Australia  
Brazil  
Canada  
China  
Denmark  
France  
Germany  
India  
Italy  
Japan  
South Korea  
Norway  
Russia  
Sweden  
Switzerland  
Taiwan  
United Kingdom  
United States  
South Africa

### Class Environment

ways support the latest product version and require no local installation.  
s to your class environment to participate in hands-on exercises and apply  
. Your class environment will be available 30 minutes prior to your class.

of Nov 18, 09:00 AM (CET) | 8 Hours Private Training

Manage VMs

Germany

LAUNCH CLASS ENVIRONMENT

If you are experiencing issues accessing your class environment, please inform your instructor at the start of class or email [trainingcentral@ptc.com](mailto:trainingcentral@ptc.com) for assistance.

Need additional assistance? Visit our [Training Support](#) page.

Link from email:  
<https://class.ptcu.com/>

Please select your country.

click "Launch class environment"

Your Class Environment
Manage VMs →

We're working to generate your class environment, please wait...

It may take 2-10 minutes for your environment to load. Thank you for your patience.

Your Class Environment
Manage VMs →

Cloud Class Environment is ready for use!

Region Selection: Europe (Frankfurt)

You have 2 options to connect to your Class Environment. Using the Amazon AppStream Client (recommended), or directly through your web browser.



Your Class Environment Manage VMs →

✓ Cloud Class Environment is ready for use!

🌐 Region Selection: Europe (Frankfurt)

You have 2 options to connect to your Class Environment. Using the Amazon AppStream Client (recommended), or directly through your web browser.

Class Environment URL

<https://appstream2.eu-central-1.aws.amazon.com/authentic...>

Amazon AppStream Client is recommended

Option 1: Connect with Amazon AppStream - [Download](#)

Copy and Paste the above URL into Amazon AppStream and click connect

Once connected, launch your PTC Product

Option 2: Connect via Web Browser

Copy and Paste the above URL into your Web Browser, any HTML5 capable browser is supported

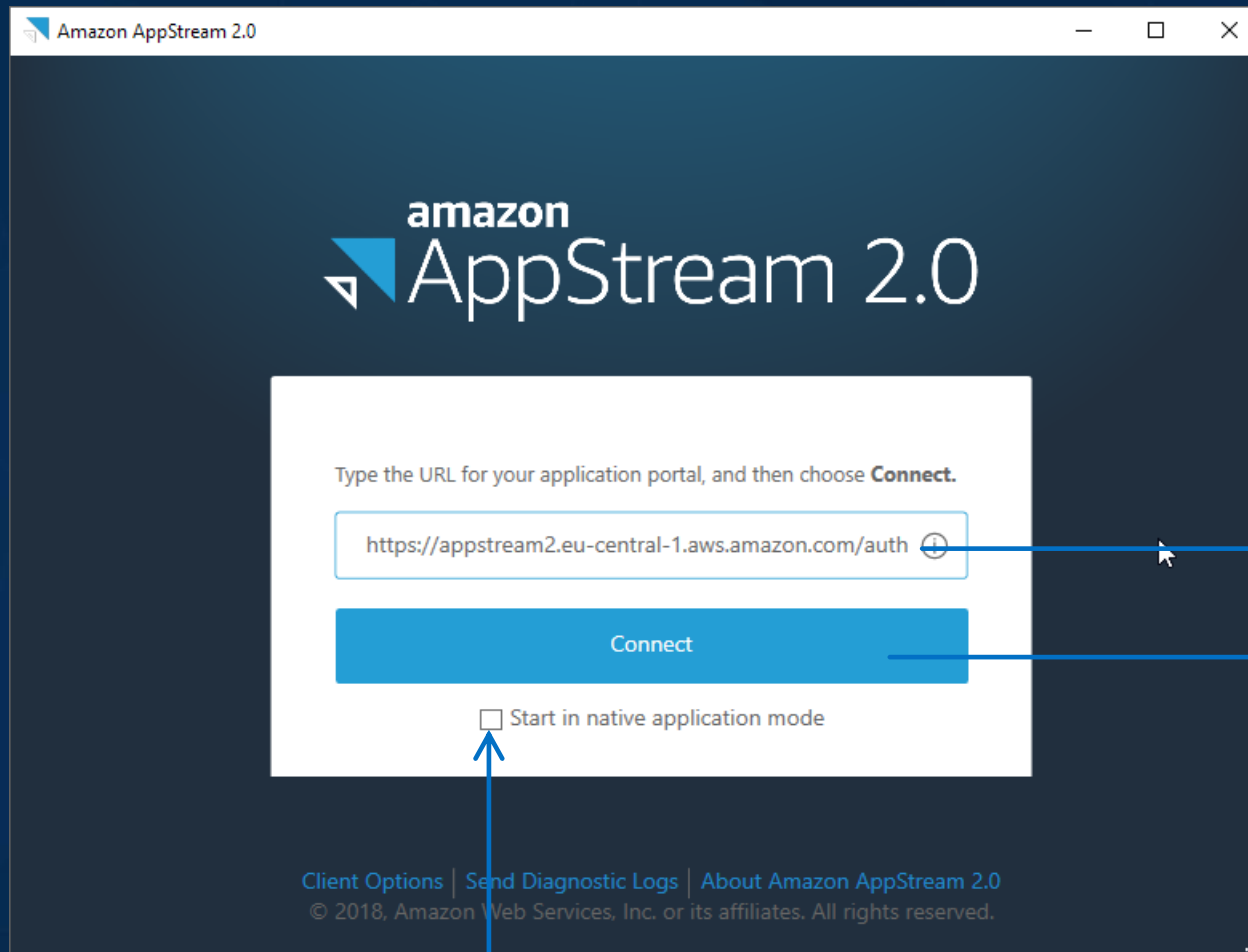
Once connected, launch your PTC Product

copy link for Amazon AppStream.

If Amazon AppStream has not yet been installed.

If you could not install Amazon AppStream: Description for access via browser.





→ Insert the link

→ connect

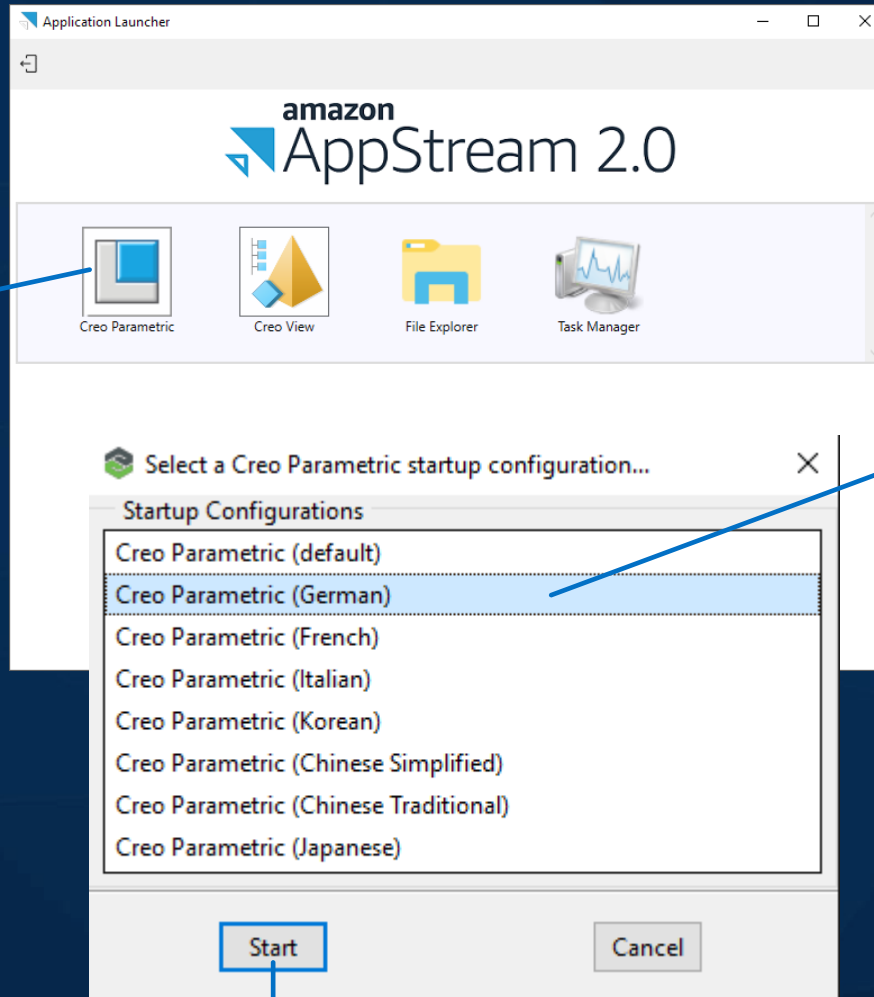
Do NOT activate

Which training  
do you join?

- Creo Parametric  
[click here](#)
- PLM Windchill  
[click here](#)
- ThingWorx  
[click here](#)

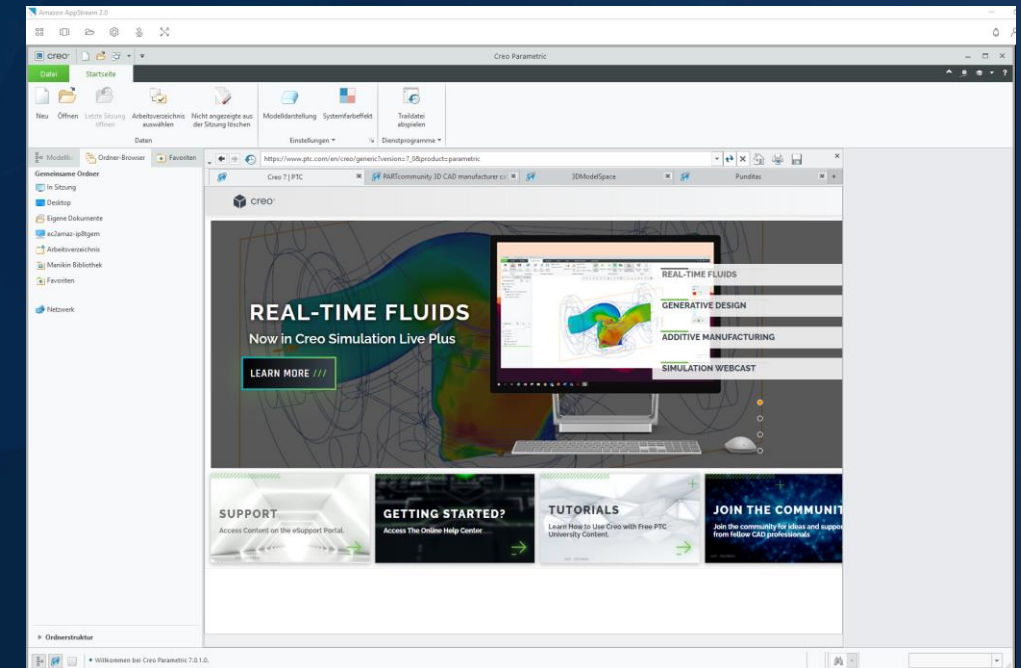
# Creo Parametric

Select creo  
Parametric

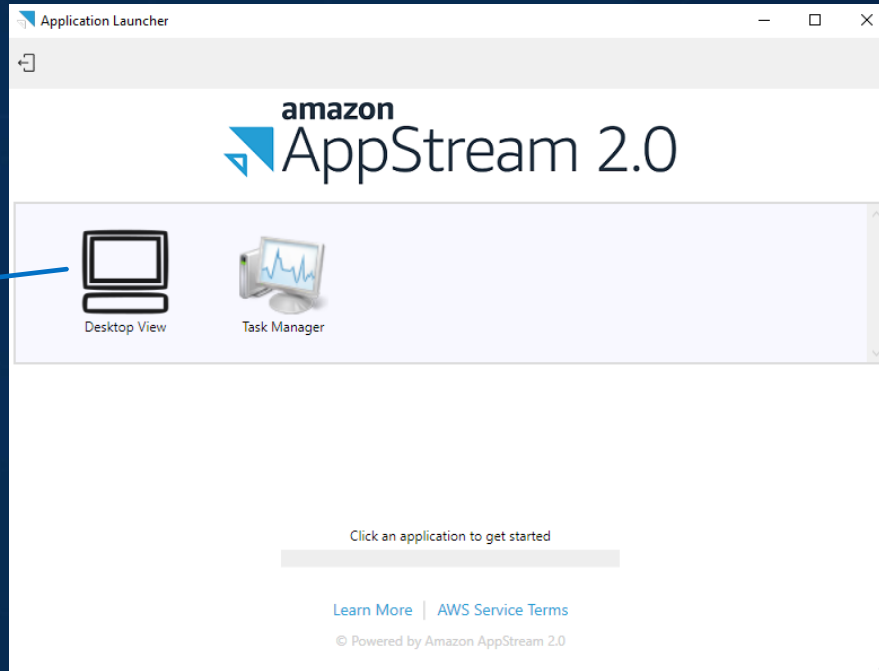


Select language

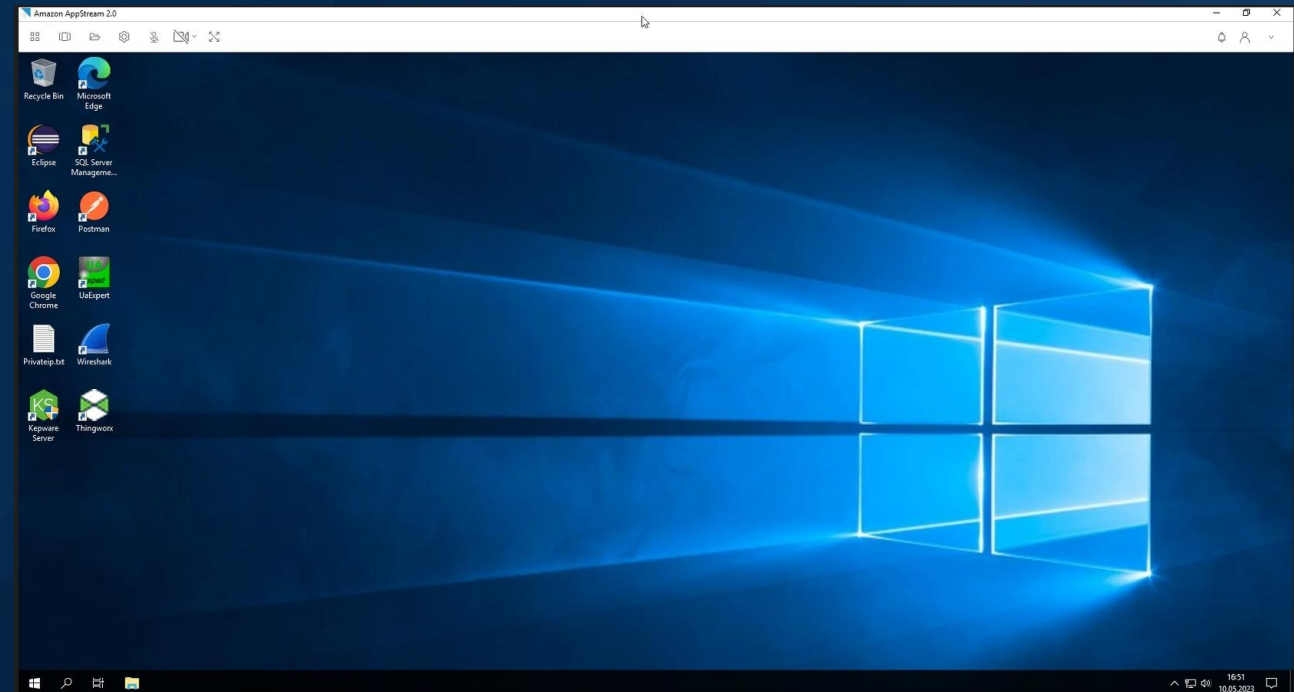
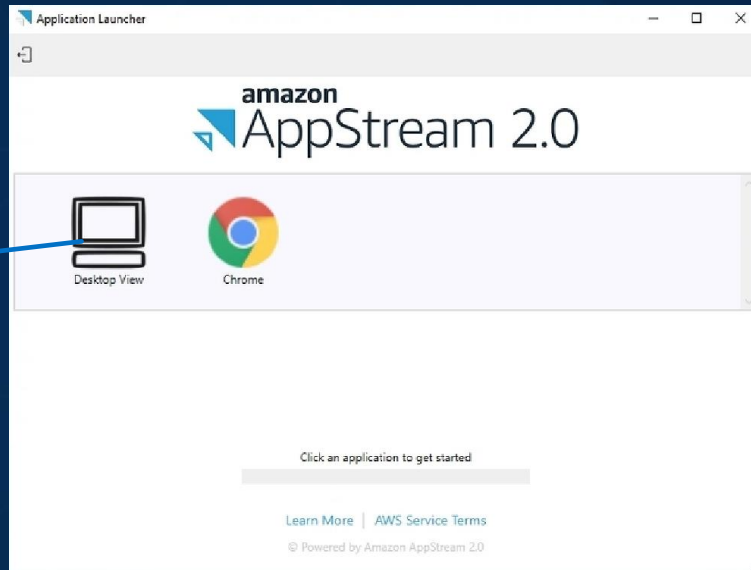
Start creo Parametric




Select Desktop  
View



Select Desktop  
View



# After the training - training materials

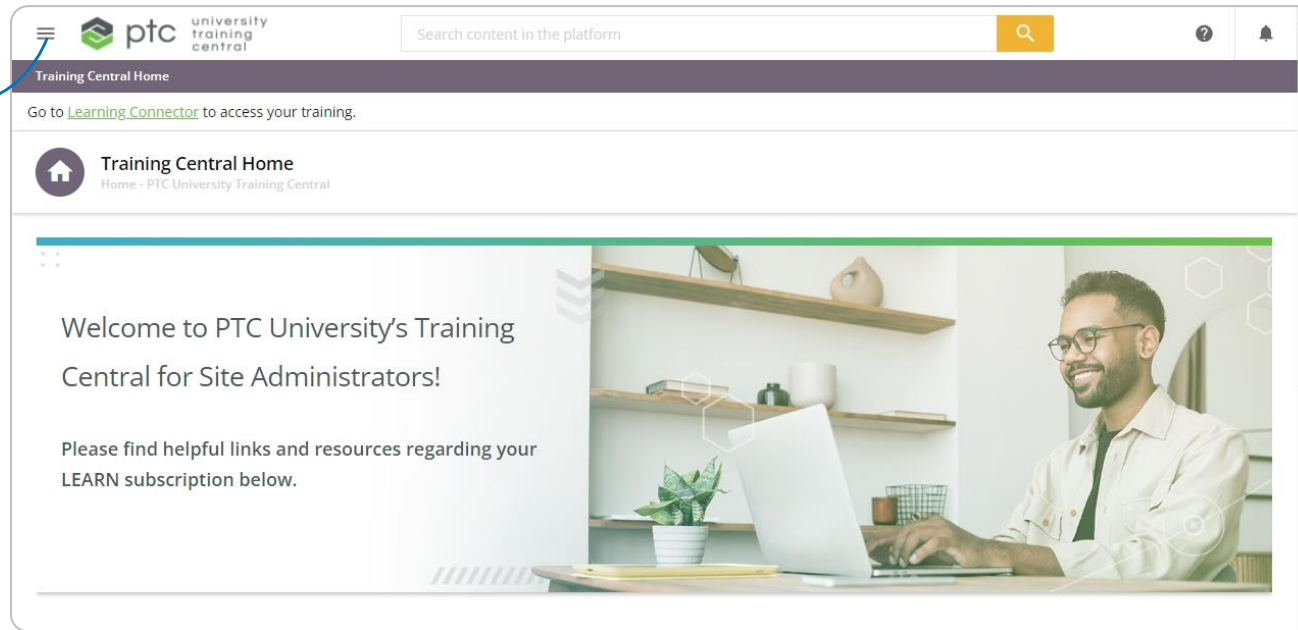


Access after training  
Functions in the digital document

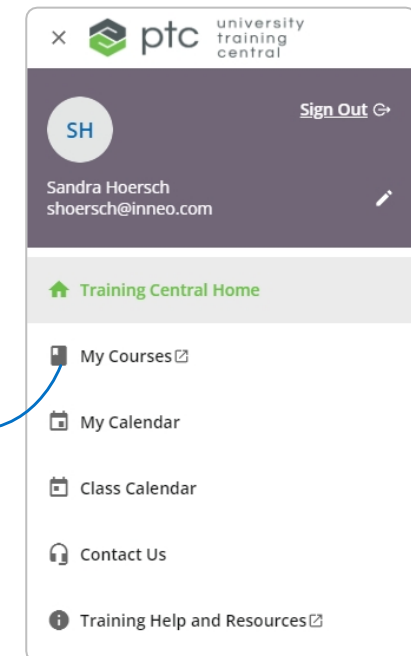
# Access after Training

Training Central is PTC's **Learning Management System**. Here you can find all completed and future ATP trainings.

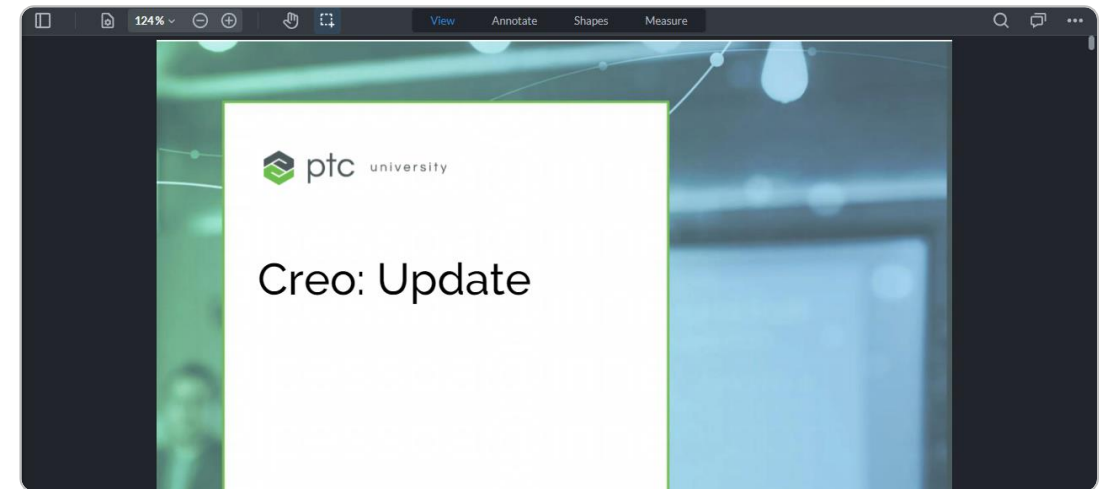
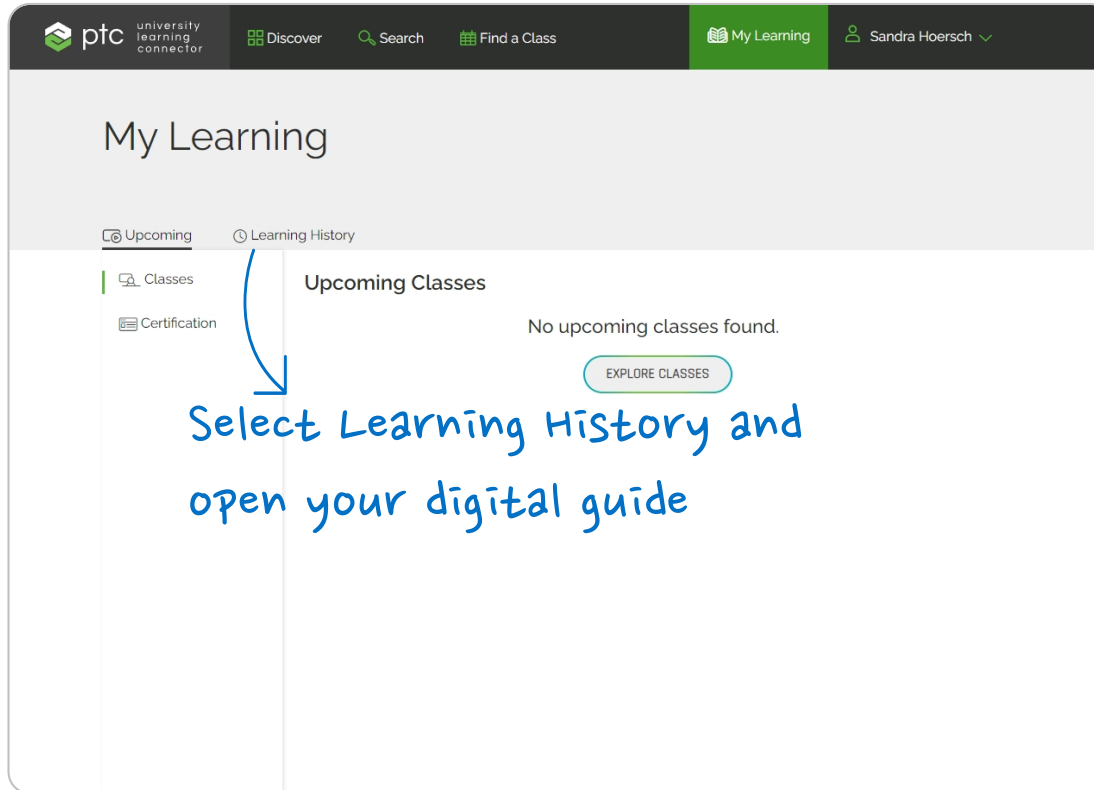
select the  
menu



Select My courses



# Access after Training

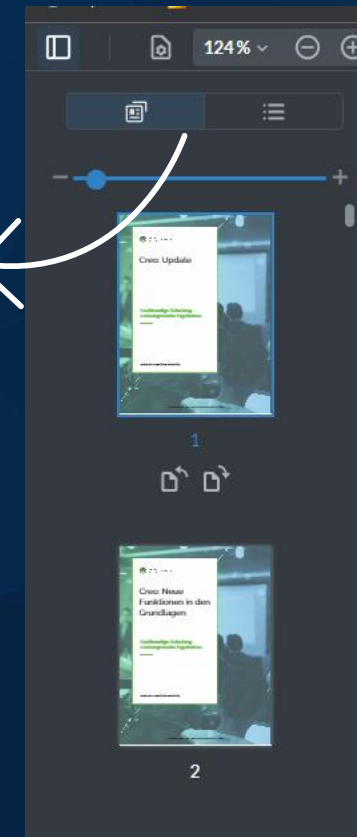




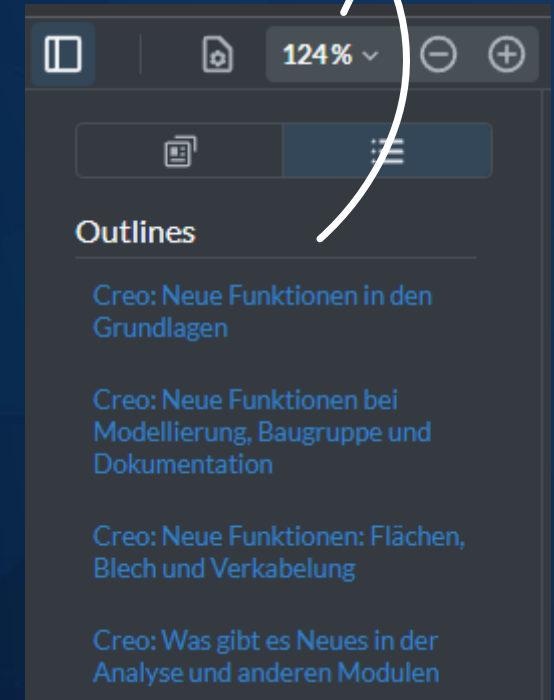
# Functions in the digital document



Here you can switch between the view and the modules.

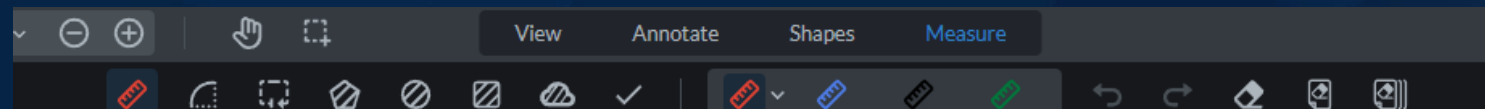
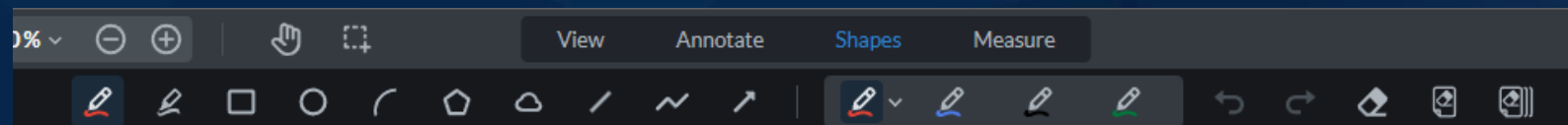
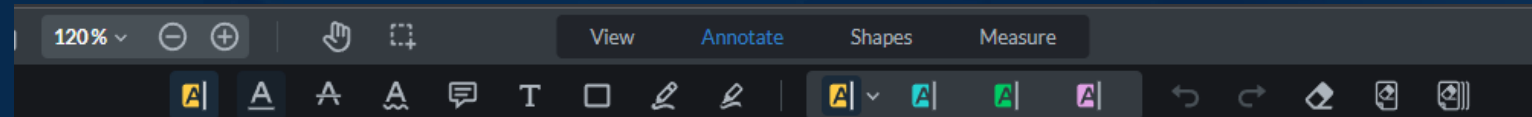
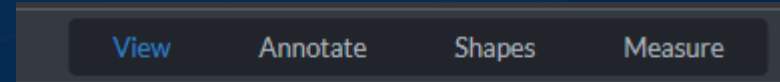


Each training course is made up of modules.



# Functions in the digital document

You can highlight and add notes in the training materials.  
On the following pages you can see the different functions.



Highlight text      Highlighter      Freehand      Underline

The screenshot shows the INNEO software interface. The top toolbar includes icons for highlighting text, freehand drawing, and underlining. Below the toolbar, there are two task cards. The left card, 'Aufgabe 3: Auf KEs im Referenz-Viewer zoomen', shows a 3D model of a part with a red highlight. The right card, 'Aufgabe 4: Skizzenbedingungen überprüfen', shows a 2D sketch of a part with various dimensions and constraints. Below the task cards, there are instructions for each task. A red circle and question mark are drawn around the text 'Cut id 564' in the instructions for Aufgabe 4.

**Aufgabe 3: Auf KEs im Referenz-Viewer zoomen**

1. Zeigen Sie das KE **ALIGN\_PINS** im Referenz-Viewer an.
2. Klicken Sie mit der rechten Maustaste auf **Cut id 791**, und wählen Sie **Zoomen bis (Zoom To)** aus.
3. Bewegen Sie den Cursor über den KE-Namen im Referenz-Viewer, und beachten Sie, dass das KE in der Mitte des Arbeitsfensters angezeigt wird.

**Aufgabe 4: Skizzenbedingungen überprüfen**

1. Editieren Sie die Definition von **Cut id 564**.
2. Editieren Sie die interne Skizze.
3. Sehen Sie sich die Skizzenbedingungen an.

**Tipps/Tricks/häufige Fehler**

- Um Referenzen des KE anzuzeigen, klicken Sie mit der rechten Maustaste auf das KE, und wählen Sie dann "Informationen" (Information) > "Referenz-Viewer" (Reference Viewer) aus.

# Functions in the digital document

create notes

The screenshot displays the INNEO digital document interface. The top toolbar includes icons for document management, zooming (88%), and navigation. The main content area shows a technical drawing titled "ÜBUNG 2 ► Referenz-Viewer und Skizzierer". The drawing is divided into two tasks: "Aufgabe 3: Auf KEs im Referenz-Viewer zoomen" and "Aufgabe 4: Skizzenbedingungen überprüfen".

**Aufgabe 3: Auf KEs im Referenz-Viewer zoomen**

1. Zeigen Sie das KE **ALIGN\_PINS** im Referenz-Viewer an.
2. Klicken Sie mit der rechten Maustaste auf **Cut id 791**, und wählen Sie **Zoomen bis (Zoom To)** aus.
3. Bewegen Sie den Cursor über den KE-Namen im Referenz-Viewer, und beachten Sie, dass das KE in der Mitte des Arbeitsfensters angezeigt wird.

**Aufgabe 4: Skizzenbedingungen überprüfen**

1. Editieren Sie die Definition von **Cut id 564**.
2. Editieren Sie die interne Skizze.
3. Sehen Sie sich die Skizzenbedingungen an.

**Tips/Tricks/häufige Fehler**

- Um Referenzen des KE anzuzeigen, klicken Sie mit der rechten Maustaste auf das KE, und wählen Sie dann "Informationen" (Information) > "Referenz-Viewer" (Reference Viewer) aus.
- Klicken Sie im Fenster "Referenz-Viewer" (Reference Viewer) mit der rechten Maustaste auf ein KE, und wählen Sie "Zoomen bis" (Zoom To) aus.
- Editieren Sie die interne Skizze auf der Registerkarte "Platzierung" (Placement) des Schaltplans.

The right sidebar shows a "Comments (6)" section with a search bar and a list of comments. The latest comment, dated Aug 30, 12:21 PM, reads: "Diese Übung nochmals durchführen!". A blue arrow points from this comment to the "Cut id 564" in the task list.

# Functions in the digital document

Start search

Text input

Next

The screenshot displays the INNEO digital document interface. The main content area shows a technical drawing task titled "ÜBUNG 2 ► Referenz-Viewer und Skizzierer" with two sub-tasks: "Aufgabe 3: Auf KEs im Referenz-Viewer zoomen" and "Aufgabe 4: Skizzenbedingungen überprüfen". The interface includes a top toolbar with icons for View, Annotate, Shapes, and Measure. A search sidebar on the right contains a search bar with the text "Skizze", a "Text input" label, and a "Next" label. The sidebar also lists search results for "4: Skizzenbedingungen überprüfen" and "interne Skizze".

Outlines

- Creo: Neue Funktionen in den Grundlagen
- Creo: Neue Funktionen bei Modellierung, Baugruppe und Dokumentation
- Creo: Neue Funktionen: Flächen, Blech und Verkabelung
- Creo: Was gibt es Neues in der Analyse und anderen Modulen

ÜBUNG 2 ► Referenz-Viewer und Skizzierer

Aufgabe 3: Auf KEs im Referenz-Viewer zoomen

Aufgabe 4: Skizzenbedingungen überprüfen

**Aufgabe 3: Auf KEs im Referenz-Viewer zoomen**

1. Zeigen Sie das KE **ALIGN\_PINS** im Referenz-Viewer an.
2. Klicken Sie mit der rechten Maustaste auf **Cut id 791**, und wählen Sie **Zoomen bis (Zoom To)** aus.
3. Bewegen Sie den Cursor über den KE-Namen im Referenz-Viewer, und beachten Sie, dass das KE in der Mitte des Arbeitsfensters angezeigt wird.

**Aufgabe 4: Skizzenbedingungen überprüfen**

1. Editieren Sie die Definition von **Cut id 564**.
2. Editieren Sie die interne **Skizze**.
3. Sehen Sie sich die **Skizzenbedingungen** an.

**Tipps/Tricks/häufige Fehler**

- Um Referenzen des KE anzuzeigen, klicken Sie mit der rechten Maustaste auf das KE, und wählen Sie dann "Informationen" (Information) > "Referenz-Viewer" (Reference Viewer) aus.
- Klicken Sie im Fenster "Referenz-Viewer" (Reference Viewer) mit der rechten Maustaste auf ein KE, und wählen Sie "Zoomen bis" (Zoom To) aus.
- Editieren Sie die interne **Skizze** auf der Registerkarte "Platzierung" (Placement) des

Skizze

Case sensitive Whole word

Page 28

4: Skizzenbedingungen überprüfen Aufgabe 3: Auf KEs im Referenz-Viewer

4: Skizzenbedingungen überprüfen 1. Editieren Sie die Definition von Cut

interne Skizze. 3. Sehen Sie sich die Skizzenbedingungen an.

die Skizzenbedingungen an. Tipps/Tricks/häufige Fehler • Um

interne Skizze auf der Registerkarte "Platzierung" (Placement)

# Enjoy your Training!



If you have any questions, please contact  
[training-admin@inneo.com](mailto:training-admin@inneo.com)