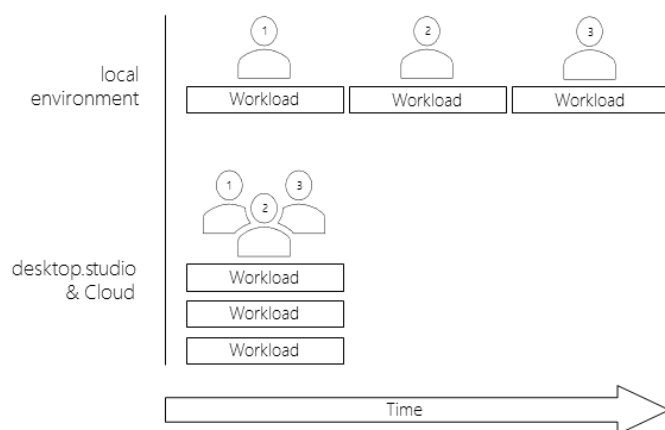# Use now scalable simulation environments on Microsoft Azure easy to manage with desktop.studio

desktop.studio gives you and your team easy access to cloud simulation environments. New environments can be created and used without upfront investment or IT know-how. desktop.studio focuses on resource-intensive graphics and computing processes in the Microsoft Azure Cloud. CAD or simulation applications are made available to users via a user-friendly web interface.



Reduce the time of individual workloads by parallelizing processes. Reduce the time you spend deploying new environments and increase productivity by creating new workspaces with a single click.

Reduce the time you spend deploying new environments and increase productivity by creating new work environments with no time.

The ability to create a virtual infrastructure "at the click of a mouse" and use it immediately allows users (and those who want to become one) to increase their productivity. The time-consuming procurement and development of an own IT infrastructure is completely eliminated.

All data is stored centrally on the cloud infrastructure assigned to you. In addition to eliminating unnecessary copying, this also enables easy sharing with other members of your organization or third parties.

## Focusing and increasing productivity

As a (future) simulation user, you do not have to worry about provision or operation and can focus entirely on your own simulation tasks.
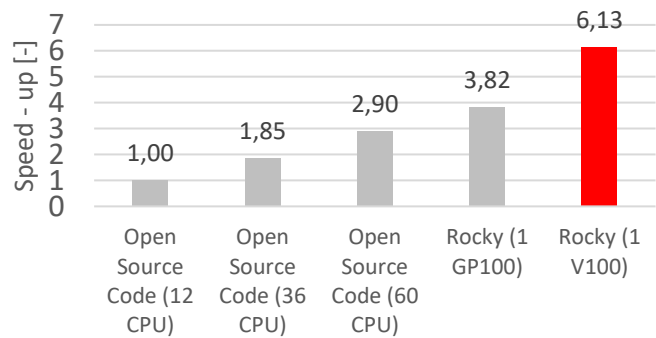
## Pay only what you actually need

- No upfront investments necessary: OPEX instead of KAPEX
- Dedicated simulation environments and cost allocation for different teams or projects.
- Costs are only incurred if employees actually use the simulation environment -> Pay per Use
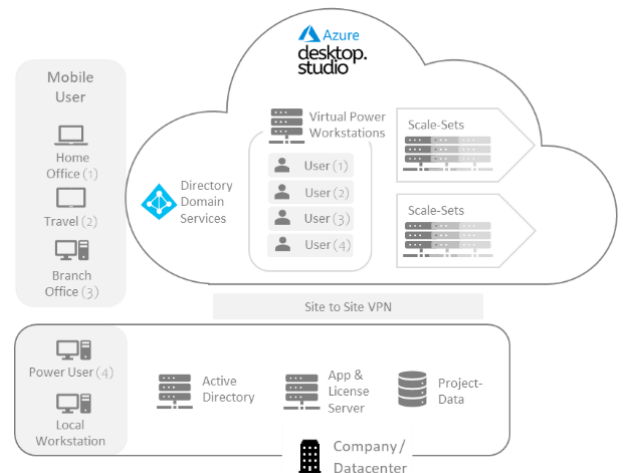
GPU Benchmark with Rocky ESSS and NVIDIA TESLA V100-GPU

**Benchmark with Bin Flow: Model 1: 300k Sphere particles**

The Tesla V100 GPU reduces the computing time of the workload by a factor of 6.13 compared to a conventional open source code (12 CPU) solver.

| Open Source Code (12 CPU) | Open Source Code (36 CPU) | Open Source Code (60 CPU) | Rocky (1 GP100) | Rocky (1 V100) |
|---|---|---|---|---|
| 1,00 | 1,85 | 2,90 | 3,82 | 6,13 |

## Maintain visibility and security under control through full integration with your existing infrastructure

- Operation on the own Azure Tenant
- Connection to your Azure Active Directory
- Integration into your company domain
- Multiple Authentication (MFA)
- Azure Session-based Firewall
- desktop.studio can be operated via container on your own Azure Tenant

## Enable your employees to adapt computing power to current workloads and model sizes

The virtual infrastructure is flexible and can be tailored to the specific requirements of your software. This allows the infrastructure to be used for the following tasks, among others:

- Graphical, interactive model preparation
- Networking and solving large simulations
- Evaluation of results

desktop.studio is especially suitable for the following applications virtualized in the Microsoft Azure Cloud: