Deliver your Software, as a Service.

Software developers can host their desktop applications in the cloud with easy to deploy and manage virtualized solutions from Parallels.

Remote and hybrid working practices have become common, and competition from other independent software vendors (ISVs), Cloud Service Providers (CSPs), and Managed Service Providers (MSPs) offering virtualized application solutions is increasing. There is also an expectation for faster application development with shorter development cycles, as well as operational benefits in streamlining internal infrastructure management and gaining greater insights into customer needs.

As the market and customer demands evolve, application developers and ISVs are facing a changing landscape. There is a growing trend towards the Software-as-a-Service (SaaS) model, driven by customer demand for more flexible ways of working with their applications.

However, some applications which began life being locally installed cannot easily be ported or redeveloped to a native SaaS model. This may be due to cost, application components, authentication requirements, or other reasons. Alludo has helped many organizations overcome these specific challenges and successfully move into SaaS delivery.

This document aims to provide practical guidance for software providers interested in hosting their existing desktop/client applications "as a Service" (SaaS model). This includes deliberations onthe cost/benefit analysis, choosing the right SaaS strategy, and initial considerations for application hosting and migration.

"Parallels Secure Workspace allows us to run our application via the internet while it was not developed to do so originally."

Renaud Ziegler,
CEO of Infodidac, Belgium
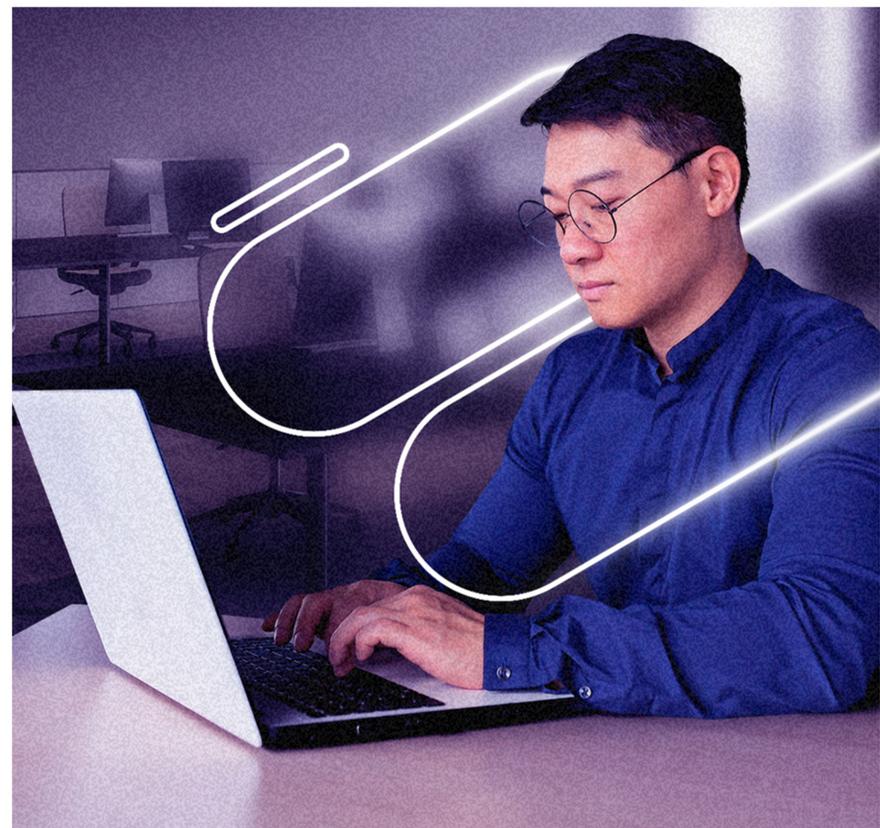
Case study: Cloud jumping

Modernizing InfoDidac's product offering with ProEco.

InfoDidac, the developer of 'ProEco', the core administration software used in 1300 schools in the Belgian French Community, has introduced a new solution called "ClouEco" built on Parallels Secure Workspace and the Microsoft Azure platform to enable schools and their staff to work more efficiently and flexibly in the 21st century. Unlike the legacy software, 'ProEco', which runs locally on PCs, 'ClouEco' is a cloud-based SaaS solution accessible through a HTML5 browser, eliminating the need for re-writing legacy code. Setting up Parallels Secure Workspace was quick, and upgrades are done seamlessly in minutes.

The Parallels Secure Workspace is customized to meet the preferences and branding of InfoDidac, and the multi-tenancy feature of Parallels Secure Workspace makes it easier to manage and support multiple shcools and users. End users of 'ClouEco' enjoy the benefits of flexibility, being able to work from anywhere and on any device, stress-free automatic backups by InfoDidac, and the convenience of accessing data from multiple schools on the same platform (ideal for administrative staff working with multiple schools).

Parallels®

Cost/benefit analysis

What to consider for the business when thinking of a move to SaaS

A cost/benefit analysis is a crucial step in evaluating the feasibility and desirability of moving to application hosting (SaaS) for a software provider. There are several elements to consider, even when planning to leverage solutions from vendors like Alludo.

Benefits and attributes for hosting applications:

ROI & value proposition

The potential return on investment (ROI) when moving to a SaaS solution includes increased feature-set offerings, improved customer satisfaction, reduced IT overhead, and streamlined business operations.

Scalability & flexibility

The architecture is designed to be scalable, offering potential cost and operational efficiencies. Scale up or down infrastructure investment with flexible, hybrid and multi-cloud support options.

Future growth & innovation

Moving to SaaS can offer abilities to leverage new features, functionality, or integrations offered by the SaaS vendor, and the potential for ongoing improvements and updates.

Security & compliance

Data security and compliance are critical factors for businesses, especially those with sensitive or regulated data. SaaS offers centralized data management and security measures at every point of the solution architecture.

User experience & adoption

Users are becoming more demanding of their applications. SaaS can offer flexible remote access, device integrations, and responsive experiences regardless of their chosen end point device.

Costs and risks for hosting applications:

Total cost of ownership (TCO)

There are several layers of costs to consider, including subscription costs, implementation, integration, data migration, training, support, and maintenance costs.

Business continuity & disaster recovery

It's important to understand the requirement for SLAs to consumers which will involve high availability, data backup and restore processes, and disaster recovery plans. Evaluate the potential costs and risks associated with data loss and system downtime.

Regulatory & legal considerations

Evaluate any regulatory or legal considerations associated with moving to a SaaS delivery model, such as data privacy, data sovereignty, and intellectual property rights. Consider the potential risks and costs associated with legal non-compliance.

Vendor reliability & support

Assess the reliability and reputation of the SaaS vendor you work with, including their uptime, performance, and customer support track record.
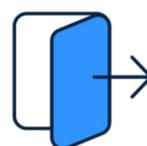
Vendor lock-in & exit strategy

Consider the risks and costs associated with vendor lock-in, including limitations in data portability or customizations and evaluate the availability of an exit strategy, such as contract termination or transition plans.

With these elements factored into cost/benefit analysis, a change management strategy can be created and presented to the companies' leadership team, providing concrete insights and evaluations for the positive move toward a SaaS business model.

How to SaaSify?

Understanding the stages of moving legacy applications to a SaaS solution.

Regardless of the chosen strategy, modernizing existing legacy applications can be achieved through the support of virtualization solution vendors like Alludo. Even if the desire is to rewrite the application as a new service-oriented model, projects like this can take years and contingencies for interim needs to be considered.

1. Assessment

1a. What does it take to run your application locally?

Before building the IT infrastructure (including database, file server, and backend resources) to support the application, the first thing that needs to be identified is how the application runs today.

- What are the operating system requirements?
- Does it only run on x86 or x64?
- Does it have custom restrictions?
    - Does it include COM (Component Object Model) code?
    - Is there C++ code that only works on x86?
    - Any hard-coded scripts on AMD/Intel/Arm extensions?

1b. Can the application be deployed as a 1:1 or 1:many?

After understanding how the application runs locally, the next phase is to understand which options are available to deploy in a virtualized environment. The highest density approach is to have the application running in multi-session deployments, maximizing resources and scaling. However, depending on the application, this might not be the case, and other deployments would be considered.

Deployment	Single-session (1:1)	Multi-session (1:many)
Windows Server 16/19/22 OS	✔	✔
Azure Virtual Desktop	✔	✔

1c. Deciding infrastructure requirements

Finally, to conclude the assessment phase, ensuring a thorough scope of the environment requirements needs to be considered.It can include the following:

- Is the application performance acceptable?
- Is the security suitable for the purpose?
- Can the environment be efficiently scaled for business growth?
- Should the environment include redundancies?
- Who is responsible for ongoing maintenance?
- Do you have the IT skills needed maintain the environment?

One size does not sit all

Choosing the right SaaS strategy

As SaaS adoption has become more prevalent in the market, so too has the establishment of different strategies to help software providers with their SaaS journey. Understanding the company's current and future position with SaaS is an important consideration, as it will help determine the strategy to take.
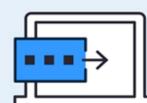
Lead with "semi" SaaS

This approach is hosting existing desktop/client applications seamlessly through a virtualization platform. This introduces most (but not all) of the SaaS benefits and offers either a permanent solution for software providers or an interim stage while applications are being rewritten.

Born in the cloud (SaaS)

An application developed with a cloud-native mindset, designed for scalability and rapid development. This is a long-term and heavy investment to transition to, but offers a flexible foundation for future development and longevity.

2. Proof of concept (PoC)

After the initial assessment, a proof of concept (PoC) can be built. Ideally, the PoC will be an isolated environment and will demonstrate the feasibility, functionality, and benefits of the virtualization technology to meet the specific use case. Some SaaS vendors can charge additional costs for this service, however Alludo's supports this stage at no extra cost. The stages of the PoC include:

Stage	Involvement
Build (1-7 days)	• Set up of a small-scale environment, either internally or over a public IP, to verify the connection.
Test & refine (Up to 80 days)	• Test and evaluate the performance, compatibility, and suitability. • Assess the system/application requirements and user density. • Implement amends to the environment from customer testing. • By the end, there should be confidence in the solution and staff is adequately trained.
User testing (Up to 60 days)	• Access will be granted to early adopters for final testing. • This is to assess user acceptance and experience of the offering. • Feedback will be added to the final production environment.

After the PoC, the next steps will be the creation of a production ready environment to rollout for an initial pilot with select customers. With the eventual roll out of becoming generally available to all customers. Sales and marketing strategies will need to be considered to help communicate and onboard more customers to the new SaaS offering.
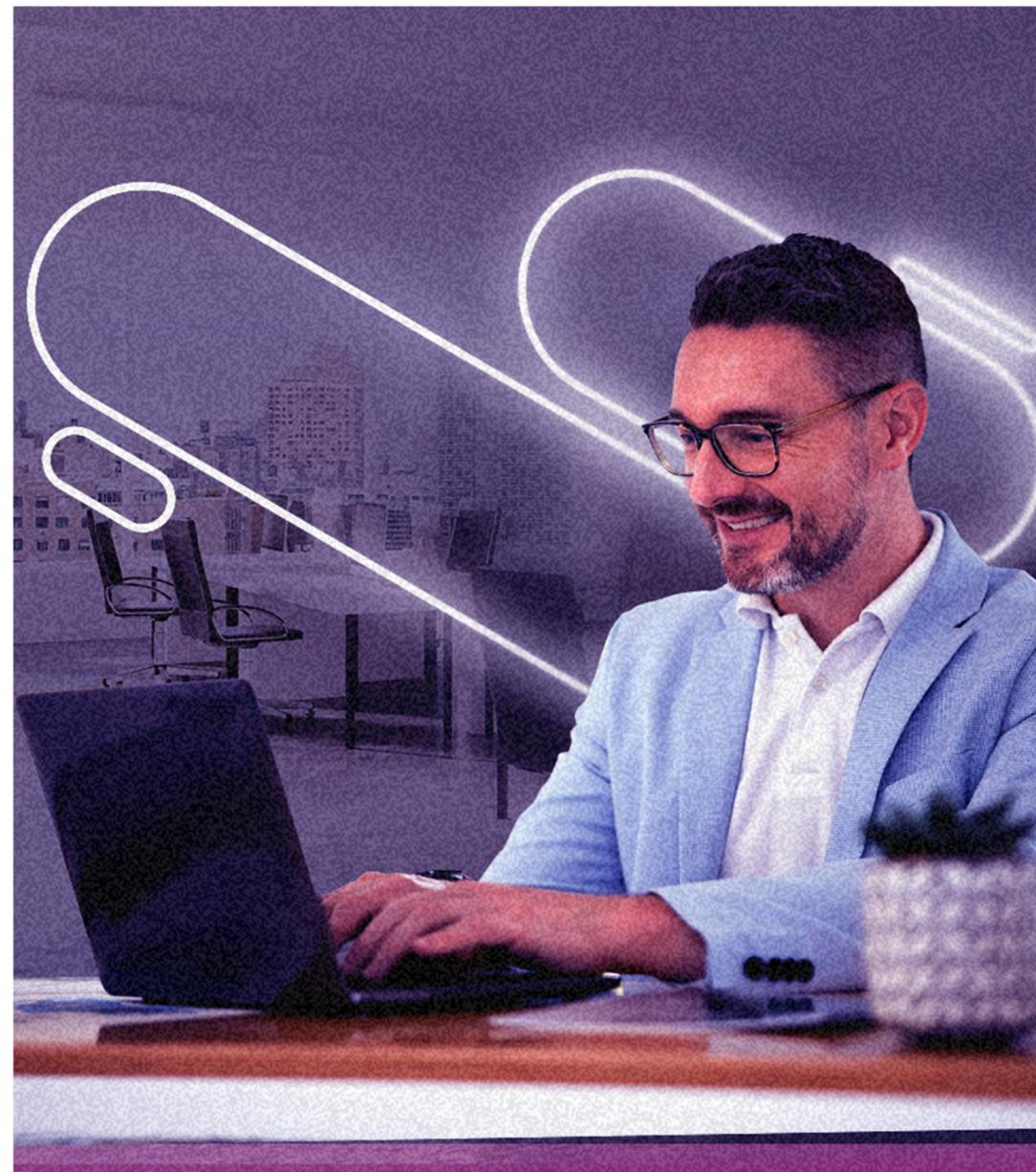
" The installation program was easy and straightforward, we had Parallels RAS up and running within 15 minutes."

Rene Hansen, **IT Manager**, Techedge ApS

Choosing right.

Modernise your software offering with Parallels.

If you are interested in modernizing a Windows desktop application and delivering it as a SaaS model, Alludo can help! Parallels Remote Application Service (RAS) and Paralles Secure Workspace are feature-rich remote application hosting solutions to help modernize and optimize a software vendor's business offerings

Great UX
Access apps and data from any device, anytime.

Enhance data security
Reduces the risk of data loss and unauthorized access

IT agility & scaling
Address business needs and quickly scale resources.

Simplifed maintaince
Simple, to deploy, configure, and maintain.

How Parallels RAS works:

> " The proposition that we make to clients is the following: with Parallels Secure Workspace you can now access Dynamics GP from anywhere at any time, even when at home or on the road. You don't need to have anything installed on the device, no need to be connected to your company network, and no need to install and configure a VPN. All you need to do is open your web browser, log in to Parallels Secure Workspace and there is your Microsoft Dynamics, just as if you would have opened it at your desk at the office. That's it - it's that simple! "

Bob Bond,
CEO, Bond Consulting Services
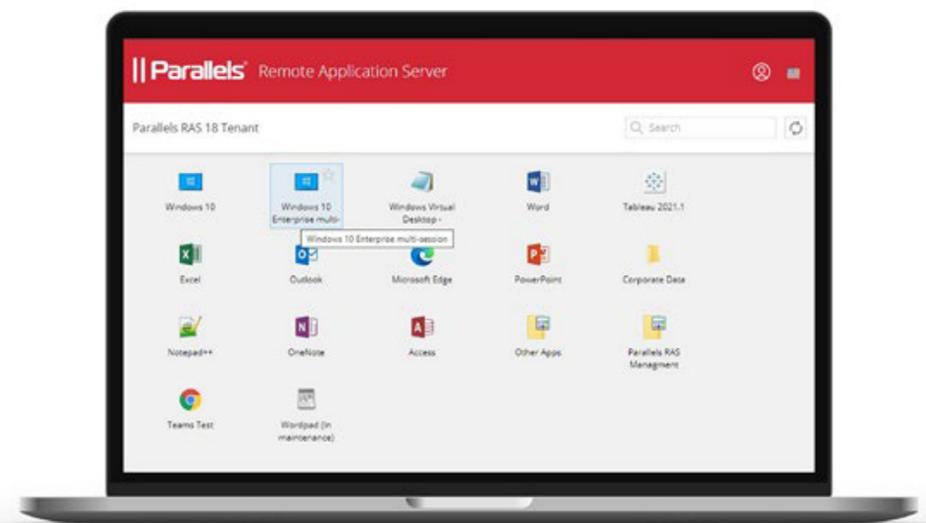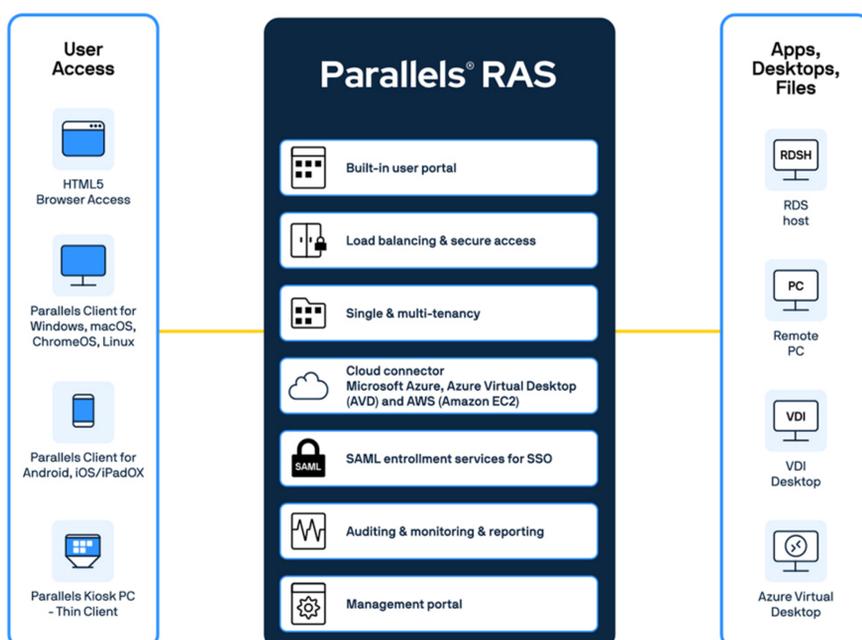
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