Progression
whatever IT takes!™

Virtual Private Data Center

WHITEPAPER

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Introduction

Mid-sized organizations and enterprises are discovering now that running a data center is not as cost effective or efficient as it looked a few years ago. Back then, everything was spanking new, most things were under control, and growth was already provisioned for.

Today, the business has grown manifold, and more users are being added to the key enterprise application system. As the CIO or IT Head, you know that capacity exists within the data center, but you can't be sure, nor do you know how to locate it. And rapid responses to the business mean that you can't have the IT team spend all its time locating the capacity. So you end up buying more servers, storage, UPSs, diesel generator sets. And more power, air conditioning equipment, and fuel.

So from being efficient and cost effective, your inhouse data center has become more money guzzling and less efficient than ever before. One look at the IT team is enough to tell the tale of them trying to ensure that the business critical applications are available for the entire duration of the workday. Getting through the day without some issue or the other is a thing of the past. If it's not the database, it's the patches, and if it's not that, then it's some hardware failure. And most days are spent on the phone chasing vendor support.

It does not have to be this way, any more. Because CIOs and IT Heads now can run their business applications off remote data centers like clockwork, at a fraction of the cost today, at far better security, and availability. And 'remote' does not mean lack of transparency or control, as we shall demonstrate in this paper.

Welcome to Progression's Virtual Private Data Center.

What is Progression's Virtual Private Data Center?

It's your own private data center within Progression's Tier 3+ compliant data center. You get dedicated or shared current-generation infrastructure allocated for your business application needs. Progression's application infrastructure experts work with your team to design the architecture. We deploy the hardware as per your business requirements and availability needs, set up the OS environment and databases, and connect the setup to your locations.
Most importantly, once your application(s) moves to Progression's VPDC, it is fully monitored and managed by an expert technical team at our Network Operations Center (NOC). Our monitoring tools track every aspect of the infrastructure, so the team gets to know the moment things start to show up as abnormalities. So even before anything has reached its threshold limit, we have identified the issue and taken the remedial measures, while keeping clients in the know.

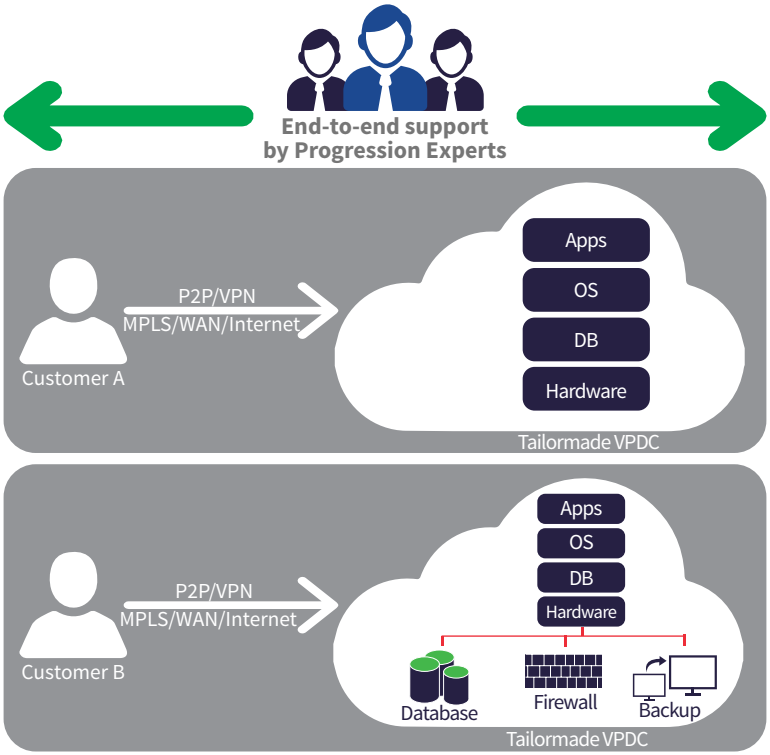

Fig 1: Progression's VPDC

Why do enterprises need a VPDC?

The answer to this emerges from a counter question to the CIO: What is your company best at doing?
Every company is best at doing its business! Manufacturing brake wheels or fuel tanks, or designing engineering projects across the world, exporting garments to different countries, publishing valuable content for experts in certain fields, and so on.
By running an inhouse data center, the company is, in a way, diluting its focus from its core business. Because running a data center is a hugely challenging ongoing effort. And beyond delivering availability has no active role to plan in enabling the business to grow.
By moving the data center operations out, the IT team can actually focus on the core business. What new technologies should we test so it can help us achieve our business goals? How can we upskill our team so we are able to leverage our ERP better for business? Can we find processes that are causing revenue leakages and find ways to stop them? Or can we tweak a few processes to enable us to deliver more value to our customers, and hence command a higher pricing?
The VPDC truly liberates the IT team to focus on its real job: leveraging IT to ensure the business reaches its goals.

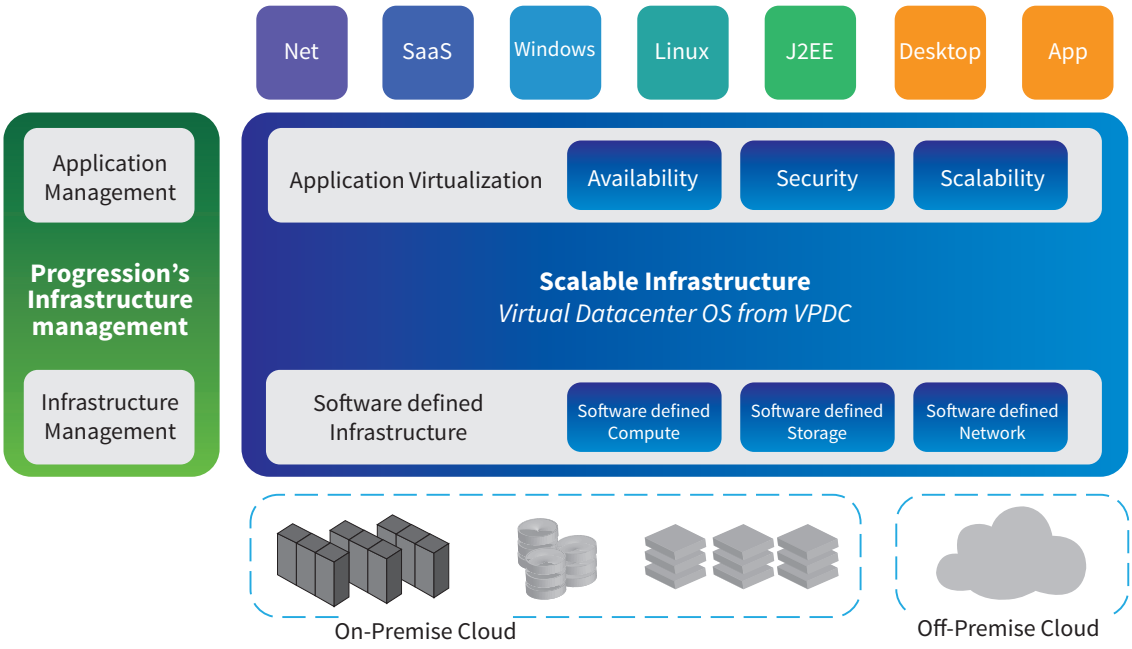

Fig 2: Progression's Infrastructure Management

What are the benefits?

One of the key benefits of having a VPDC is that the IT team is freed of daily operational challenges of ensuring availability. What are the others?

Cost savings:
In one fell swoop, you go from being Capex and Opex heavy, to zero spend on Capex, and reduced Opex. Progression's data center already has the high-performance infrastructure you need. And your monthly bills of power, air conditioning, diesel, hiring temp resources, etc also go down significantly.

Availability as the business demands it:
With Progression's VPDC offering, enterprises get the availability their business demands from their business critical applications. This is because of various reasons:

- Our Tier 3+ compliant data center is designed in such a way that redundancy is built in at every level, from the power supply to the rack level, down to the PDUs and sockets. .
- Our team of experts are well versed in not just the infrastructure technologies, but also OS environments, databases and how business applications work.
- Our state-of-the-art monitoring tools throw up alerts about oncoming issues, well in time. So they can be addressed well before they become a threat to uptime or performance.

Zero headache of managing a data center:
When a business can hardly withstand a few hours of the downtime of its most critical IT application, it can mean a lot of headache (and heartache) for the CIO and his team. With Progression's VPDC, the headache is all ours while you are assured of high uptime.

Transparency:
Are you getting the performance that your applications need? Can you check what is the availability delivered to you, as against what was promised in the SLAs? Progression's VPDC clients get a dashboard where they can see in real-time how their infrastructure is performing. Even before they have noticed any issues coming up, the Progression NOC team swings into action and does the needful tasks to ensure uptime.

Control:
One of the fears that CIOs have with moving their IT infrastructure out to a service provider's is that they will lose control of their application and IT setup. With Progression, that fear is baseless, as we ensure that IT company's IT team gets the same or better visibility into the systems than they have with their inhouse setup.

Agility:
Progression's VPDC gives you guaranteed uptime of your business critical application, and thus predictability about business outcomes. If there is a new business requirement, it could be set up and rolled out within hours, so the business team is able to respond to market needs in real time. For example, requirements such as a file sync and share server can be set up and rolled out within a few hours.

Security:
Progression's VPDC follows ITIL v3 processes, and its data center services are ISO 27001: 2013 certified. We use the top-league defence systems that are used by financial institutions worldwide. With restricted access to the VPDC, and proper following of militarized zones protocol, Progression VPDCs are far more secure than inhouse data centers, which despite the best systems, may still be vulnerable to internal threats.

Fully monitored and managed:
Progression does the monitoring and management, so your team's involvement is minuscule, and only required for critical decisions.

What can you use a VPDC for?

There are various ways in which our clients use their instances of VPDCs.

- **Business critical applications:** Some of the leading automotive manufacturers in the country run their SAP systems on a VPDC at Progression's data center. That means you can have your most critical business application on our VPDC. The reason why these companies have opted for this offering is because of the guaranteed availability of their application.

- **Testing and Development environments:** Enterprises can use VPDCs for their testing environment. Once they are satisfied that their application is running as required in this environment, it can then be moved to their production environment.

- **New applications:** When an enterprise is experimenting with a new application and is unsure of what the underlying infrastructure requirements are, it is great to go with a VPDC environment, as it allows for easy scale up or scale down.

Types of VPDC

Progression offers two classes of VPDCs for its customers: Dedicated Private Cloud and Virtual Private Cloud.

- **Dedicated Private Cloud**

  The Dedicated Private Cloud (DPC) is a tailor-made solution to meet the high availability and planned growth needs of an enterprise that wants to ensure a great end user experience of their applications. DPCs are ideal for production workloads. They use enterprise-level, high-end IT infrastructure, and have guaranteed capacity reserved for the customer. The DPC is a fully isolated environment that has no shared whatsoever.

  Since this is a custom solution, customers can continue to work in their OS and database environment of choice. Progression will architect and deploy the DPC to run the customer's business critical applications in high uptime mode.

  Progression delivers the DPC as a fully managed service. We believe that running a business application is not merely about having the best IT infrastructure systems, it's equally, or more, important to have a capable team managing the application too. An expert service and support team working proactively, using state-of-the-art monitoring tools that display the health of the systems on an ongoing basis, is imperative for businesses that cannot have their applications come to a standstill.

  The DPC is a great solution for companies with heterogeneous environments running different operating system flavours. For example, companies with ERP running on Solaris, require high-end enterprise servers to ensure high availability and reliability. Moving this environment to Progression's DPC solves the challenges of daily management, reducing costs, and ensuring business uptime.

Assess Your VPDC Needs

What kind of a VPDC should you go for? This requires you to be clear about a few parameters regarding your business IT systems.

- **Performance:**
  What kind of performance does your application need? What kind of availability?
- **Security:**
  What is the level of security your application requires? Do you want fully dedicated infrastructure?
- **Scalability:**
  What are your growth requirements? At what speed do you expect your IT infrastructure needs to grow? Over what time period?
- **Manageability:**
  Do you want the service to be fully managed, with a transparent view of what's happening? Or do you want to manage it by yourself? Or do you want something in between?
- **Cost:**
  What are your budgets? How much are you willing to spend upfront, over the next few months, and so on?

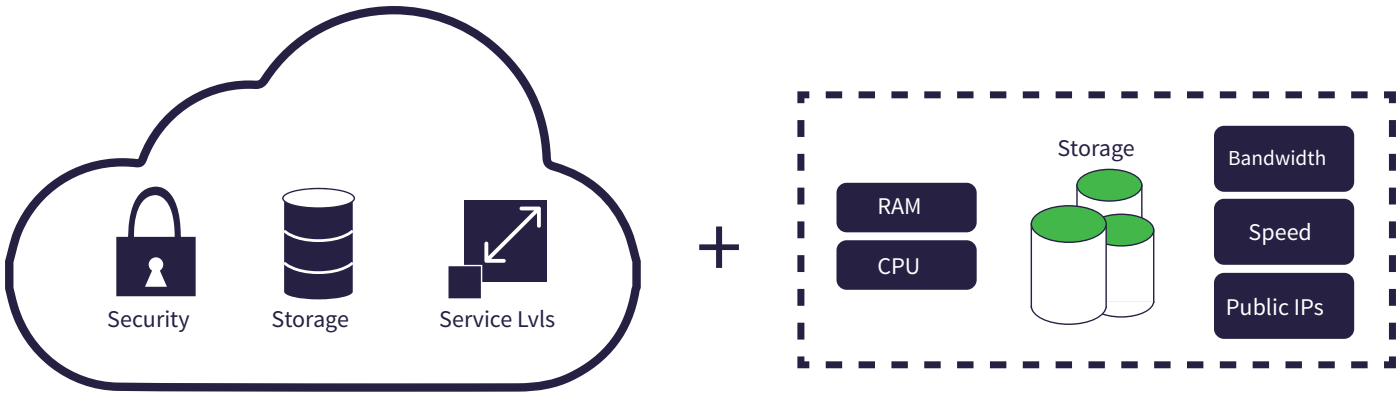

Fig 3: Dedicated Private Cloud

- **Virtual Private Cloud**

  The Virtual Private Cloud (VPC) is ideal for those applications that see rapid growth in users or traffic and need quick deployment of new resources frequently. The VPC is a standard enterprise cloud built to scale rapidly. It uses shared cloud resources and works out cost effective for companies that have high-growth applications or websites. VPCs are built with the current generation IT infrastructure, and designed in the high availability mode. They leverage VMware technologies in Windows and Linux environments. The Progression VPC is also a fully managed service, with an expert team monitoring and managing the cloud round the clock.

  The VPC are also great for pre-production workloads, and ideal for testing and development scenarios that need scalability as well as elasticity.

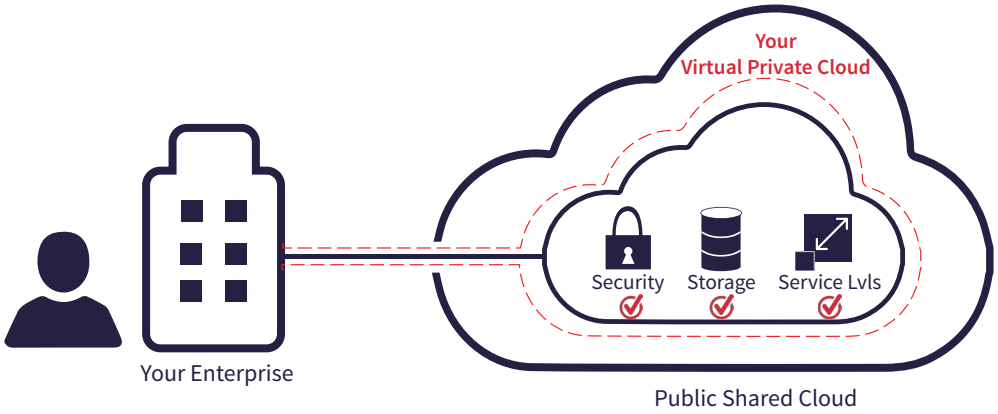

Fig 4: Virtual Private Cloud

Conclusion

An inhouse data center setup a few years ago faces many challenges today. Overprovisioning, defunct hardware, low performance, steeply climbing power bills, recurring issues with applications, databases, OSs and hardware, and so on. And IT team finds it an uphill task to run it on a daily basis. VPDCs on a state-of-the-art data center solve these challenges easily and far more cost effectively, while improving performance and uptime. Mid-size and large enterprises now realize that it makes perfect business sense to opt for Progression's VPDC.

Many of our old customers happily opted for the VPDC offering when they realized that running their own inhouse data centers was turning out to be very expensive. They trusted Progression to deliver their key applications at the availability they needed.

For those new to VPDCs, we suggest that they test the waters first. Consider moving any application that is not business critical. This way you can see how the migration shapes up and see for yourself if Progression VPDC is a great option for your IT setup. Or do a small POC with Progression for an application, in a similar manner.

Why Progression VPDC?

For an enterprise, the key issues related to IT infrastructure are cost, manageability and availability.

Current generation infrastructure:
Your enterprise applications must run on top-of-the-line hardware and software. Not commodity hardware and freeware programs and tools. We have partnerships with HP, VMware, Cisco, CheckPoint, Oracle and Microsoft.

Expert team at your service:
Our team of experts are available round the clock to address issues that are thrown up by the monitoring tools. The team has deep expertise in managing all major enterprise applications on private and public data centers.

whatever IT takes™
That's our approach to solve customer issues, so we get the job done, problem resolved, come what may. whatever IT takes™

Happy customers:
We manage the VPDCs of several mid-size and large enterprises running business critical applications.

About Progression

Ever since its inception in 1995, Progression has been at the forefront of technology delivering outstanding IT infrastructure services to create significant business value for its customers. Today, Progression is a leading IT infrastructure service provider and Managed Cloud company. Progression delivers a comprehensive range of cloud offerings, remote management services, and managed hosting and DR services to its valued customers across the world.

With a team strength of 150 and growing, Progression has engineers trained and certified in designing, architecting, selling, servicing and optimizing computing infrastructure based on products from market leaders such as VMware, HP, Oracle and Microsoft. Progression is widely recognized for its passion to stay abreast of the latest technology innovations and breakthroughs. It has been a leader in Server virtualization/consolidation solutions, and builds Private Clouds and offers Public Cloud computing services for business critical applications.

Progression is ISO 27001:2013 certified and adheres to ITIL v3 standards in service delivery. The company has been recognized for its commitment to deliver the right solutions to customers through awards instituted by Hewlett Packard, VMware, CRN, SME Channels, and ITPV.

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