

Choosing the Right PMS

Local versus Cloud Property Management Systems

WEBREZPRO™
PROPERTY MANAGEMENT SYSTEM



In the hospitality industry today, there are two main courses to property management: the well-travelled, familiar route via locally installed software, and the increasingly explored path through “the Cloud.” Cloud computing is a trend expanding across many industries, from technology to tourism, and the hospitality industry is no exception.

Major hotels have traditionally relied on local server-based—or PC-based—property management systems (PMSs), which require on-property servers and other hardware as well as on-site IT expertise. While these powerful systems offer impressive functionality, they are often out of reach for small and independent properties with leaner budgets.

Cloud computing deploys IT resources (such as server databases and software) over the Internet and these resources are shared by multiple end users, effectively reducing the cost of providing those resources. With attractive pricing structures based on pay-per-use models, Cloud-based technology has opened up sophisticated property management systems to independent properties, from hotels to campgrounds.

With the wealth of hotel PMSs available today, it can be a daunting task selecting the right fit for your property. This paper will further explore the differences between local server-based and Cloud-based property management systems, and the advantages and disadvantages of both.

CONVERGING PATHS

These days, property management systems manage much more than reservations, room inventory, guest charges and billing. Comprehensive features and system interfaces that enable true property-wide management are becoming standard. Integrated accounting, GDS (Global Distribution System) connectivity, customer relationship management (CRM), yield management and housekeeping records are typical elements of the modern PMS—both locally installed and Cloud based.

Quality property management systems also co-operate with other hotel technologies like point of sale (POS), call accounting, credit card, keycard and entertainment systems. Interfaces with these systems can be purchased separately, as needed by individual properties. Modules and scalability further enhance the customizability and adaptability of PMSs, both installed on property and deployed through the Cloud.

They are also keeping current in our online world. Both local and Cloud-based systems may offer Web and mobile booking engines that allow hotel guests to make online reservations directly through a hotel’s own website. These reservations are automatically coordinated between the PMS and the online booking engine via a two-way interface. Two-way interfaces also enable today’s

property management systems to work more efficiently with GDS channels.

THE FORK IN THE ROAD

The functionality of current hotel property management systems is impressive, and it's difficult to see how we ever got by without them. Nowadays, hotel managers are spoiled for choice—not just for the variety and extent of functionality, but for the technology of the system itself: local or Cloud based.



Choosing between a local server-based PMS and a Cloud-based system is an important property management decision at a fundamental level. Each mode impacts—in a different manner—the way your business is run. Conditions like budget and ROI, property size and multiple locations, data security, and on-site technical expertise will affect your choice of PMS, and your choice of PMS will affect those conditions.

This is where we reach a fork in the road.

GOING LOCAL

As mentioned above, local server-based property management systems require a significant amount of on-property hardware. The PMS software is physically installed on a server located at the property and on each workstation from which the system will be accessed.

A data server is the most important component of the system and is where all guest, reservation and accounting data is stored. It is normally recommended that the server is dedicated to the PMS because additional large applications running on the same server can weaken overall system performance. Depending on the size of the property, multiple servers may be required. Systems that offer an integrated Web booking module likely require an additional server to manage concurrent reservations made directly by guests through the property's own website, which are then stored on the main data server. Virtual and centralized management—as in the cases of remote access to the system and centralized reservations for multiple property locations—also require terminal servers (such as Citrix).

LOCAL PMS TECHNICAL REQUIREMENTS

- Computer/workstation
- Data server(s)
- Terminal server(s)
- Operating system
- Network cards
- Removable back-up systems

ADVANTAGES OF A LOCAL PMS

- Does not rely on an Internet connection (which can be unreliable in remote locations)
- Alleviates concerns about online data security
- Robust functionality for vast amounts of data

Workstations need to conform to the operating system (Microsoft Windows, for example) supported by the PMS, and to the programs required by interfaces with call accounting, point of sale, keycard and other systems.

Network cards, firewalls, routers, and removable back-up systems like external hard drives are other technical requirements of locally installed property management systems.

In view of choosing a new PMS, property managers should consider their existing hardware; Is it current? Does it meet the system's optimum requirements? Individual vendors will have to be consulted about the technical needs of their systems as specifications vary between products.

Advantages of a Local Server-based PMS

While the Internet is now truly widespread, it may not be so easily accessible to properties in isolated locations and this is one (albeit rare) situation in which a Cloud-based PMS is not the best solution. Local server-based systems, on the other hand, do not

require an Internet connection. Access to the system itself does not depend on access to the Internet, which can be unreliable in extremely remote areas.

Therefore, local server-based systems also avoid concerns over Internet security. Online, there is threat of viruses and malware and system hacks. Considering the sensitive nature of data stored by a PMS—especially guest data—security concerns (virtual or physical) must be taken very seriously. Property managers may opt for the “peace of mind” of containing their data on site—where they can keep an eye on things—with a local server-based PMS. But, these property managers must also be aware that with total control comes total responsibility. In order for a local server-based PMS to be the “safer” option, appropriate security and maintenance measures need to be taken. Private networks need to be secured, server rooms need to be locked tight, back-up servers and computers/hard drives should be “on call” at all times, power generators are a good idea, and disaster recovery protocol should be in place. Experienced IT staff will need to be on the payroll.

The budgets of large properties and international hotel groups tend to cover the costs involved in security and maintenance of powerful local server-based property management systems, and, so far, it is these hotel giants that are more inclined to remain loyal to such systems.

Chain hotels need PMSs that can cope with gargantuan levels of reservations and other data and still respond quickly to system queries. Depending on the technical resources of the vendor, Cloud-based systems can be hindered when dealing with such a load of data and queries. While this does not tend to be an issue for smaller and independent properties, large chain hotels enjoy the robustness that local server-based systems (and big budgets) afford.

Disadvantages of a Local Server-based PMS

The disadvantages of local server-based property management systems tend to be felt more keenly by small, mid-sized and independent properties without the generous budgets for system hardware requirements, maintenance and upgrades.

A local server-based property management system can easily cost \$10,000 or more—that's a big bite out of a capital expenditure account—and we're just talking about initial costs (software licenses and computer hardware). Maintenance costs are steep, too, and include hardware replacement and upgrades, energy costs to run the machinery (not to mention environmental costs) and paychecks for IT personnel.



DISADVANTAGES OF A LOCAL PMS

- Requires complex and expensive hardware
- Expensive and complicated to maintain (hardware and software upgrades)
- Time-consuming, on-site software installation and training
- Expensive (and time-consuming) upgrades
- Additional costs and hardware required for web-enabled features (if available)
- Total responsibility of system and data security falls on the hotelier
- On-site IT expertise is required

It can also be expensive and complicated to keep the software itself current. Because software upgrades often require the purchase of the latest version, they are less frequent, more expensive and more time consuming compared to upgrades for Cloud-based software.

It is more and more common for locally installed systems to offer recently in-demand features such as Web booking engines and even limited remote access but these are not so simply executed (compared with Cloud-based systems) and come with additional costs and on-property hardware.

The large investment and upgrade costs of a locally installed PMS may discourage properties from upgrading obsolete systems, which not only decreases operational efficiency but ultimately inhibits a property's competitive edge. Inefficient management of daily operations directly impacts guest satisfaction and revenue. For example, a PMS that doesn't facilitate integrated online reservations or interface with other hotel systems (like call accounting, point-of-sale systems and credit card processing) is preventing a property from catering to today's guests' expectations of online presence and availability, and streamlined service.

In addition to the cost of hardware required by a locally installed PMS, the technical responsibility of that hardware falls on the property alone. The PMS vendor is only responsible for the PMS software itself. Such weighty technical accountability can be an unnecessary headache for a property manager, which is why hired IT help is highly recommended, if not mandatory, for a property running on a local server-based PMS.

Mentioned above as an advantage of local server-based systems, on-site data and system security can also be seen as a disadvantage. As explained earlier, the property itself is responsible for data back-up and security, as well as overall system security and access. Properties need to address and control issues such as database security, manual data back-up processes, protected system access, hardware damage and theft, and disaster recovery protocol to ensure that their PMS is air tight.

RIDING THE CLOUD

As mentioned in the introduction, Cloud-based property management systems are deployed over the Internet. The PMS software is not actually installed on the hotel's computer but is available online, accessed by the user via a browser, such as Internet Explorer or Firefox, and a unique password. The software itself—and the



property's data (reservations, guest and accounting data)—is located on one or more remote servers securely housed in the vendor's data centre.

For all intents and purposes the PMS appears, to the user, to be a program on their own computer, even though the software is located remotely and data is also saved and stored remotely. The PMS and data can actually be accessed via any computer connected to the Internet, anywhere, or even via a smartphone or tablet.

CLOUD PMS TECHNICAL REQUIREMENTS

- Computer/workstation
- Internet connection (a second, back-up connection is also recommended)

All technical resources required for the Cloud-based PMS (including software applications, databases and storage, processing power and networking) are housed and maintained by the PMS vendor. Use of these resources is distributed between the vendor's clients and provided on demand via the Internet, the clients charged accordingly, paying for what they use. This deployment model is also known as SaaS—software as a service—and it's a service that exponentially more hotels are taking advantage of.

Advantages of a Cloud-based PMS

One of the major benefits of Cloud-based property management systems, and often the first point to be made by advocates of the Cloud, is that hotels save tremendously on hardware and IT costs compared to local server-based systems. You don't need to purchase servers, network cables and back-up drives... With just a computer and an Internet connection you're good to go. And it goes without saying that if you don't need all the hardware, you don't bear the technical (and environmental) responsibility of maintaining it. Instead, experienced and qualified Cloud PMS vendors take care of the technical upkeep (both hardware and software), freeing on-property IT staff from the demands of the PMS to perhaps focus on technological improvement in other areas of the hotel.

As previously mentioned, software licensing of a traditional on-property PMS is also demanding on the budget. The pricing structure of Cloud-based PMSs, on the other hand, is typically based on pay-per-use subscription models, which means regular, predictable and relatively small payments from month to month and no costly upgrades. Another advantage of the subscription pricing model is that the PMS becomes an operational expense as opposed to a capital expense. This shift from Capex to Opex spending essentially frees properties from hefty long-term (and depreciating) commitments that can end up holding a business back and paves the way to a more flexible operational philosophy that allows properties to keep up with changing business needs and technology. Because Cloud-based

PMSs are deployed over the Internet and accessed via a browser, they offer a simplicity and flexibility that cannot be matched by a locally installed PMS.

System set-up is quick and easy. Where a local server-based PMS normally requires days or even weeks of on-site installation and training, a Cloud-based PMS requires no on-site installation, and training is conducted via live or on-demand online tutorials. A Cloud-based PMS is usually up and running within a week, or even a day. Because of the centralized and communal nature of SaaS products,

ADVANTAGES OF A CLOUD PMS

- No hardware or IT costs (only a computer and an Internet connection are required)
- No technical responsibility
- Affordable subscription pricing
- Simple, quick set-up
- Anywhere, anytime access
- Automatic data back-up
- System and data security is the responsibility of the PMS vendor
- Integrated Web bookings
- Free system upgrades
- Flexible and adaptable

system updates and upgrades are also effortlessly deployed across all users and often at no cost. There is no need to install upgraded versions on each and every workstation.

And then there's the Cloud-based system's inherent flexibility to adapt to a property's changing business needs and to fit individual properties' specific requirements. When a property grows with a local server-based PMS, additional licenses must be purchased for additional locations or even workstations (not to mention more powerful or additional servers to cope with the increased load). This is expensive business. With a Cloud-based PMS, the system grows and adapts with your property. Instead of purchasing a new server, the hotel requests—from their PMS vendor—increased room inventory allotments, which is supplied by the vendor through additional storage and data downloads—a much more affordable option. Furthermore, the system can be accessed at no extra charge from any number of workstations.

Because Cloud PMS vendors operate central and communal databases, centralized management for properties with multiple locations is an innate characteristic of the system.

Scalability and customizability of system functions are also part and parcel of a Cloud-based PMS. Features can be turned on and off as required by individual properties, and property-specific customizations are easily deployed at the flick of a virtual switch.

Many property managers are drawn to Cloud-based property management systems for the uniquely browser-based benefit of anywhere, anytime access. Users only need to be connected to the Internet

to access their password-secure PMS and can therefore log in from any online computer (or tablet or smartphone) anywhere in the world. Hotel management can determine (and limit) who has remote access, and from where. This is an attractive trait to property managers and owners who desire convenient off-site access to the system, seasonal properties that take reservations while they are closed, and businesses with satellite offices. It's also a handy feature when dealing with computer crashes; hotel staff can just log into the system with another online computer or with their smartphone.

Indispensable tools and functionality

like integrated Web booking engines and mobile applications are also natural components of a PMS that is designed to be accessed via the Internet

(the implementation

of such tools with traditional systems is much more complex and expensive).

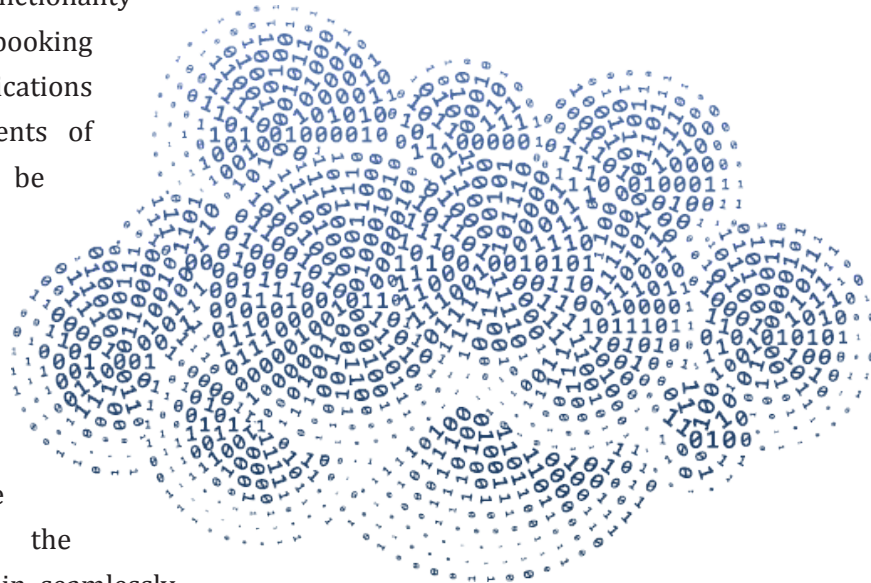
Online and mobile bookings are

immediately directed to the

central database resulting in seamlessly

integrated reservations data, eliminating

the need to allocate separate inventory for Web bookings or to update the main reservations database manually.



Previously mentioned as a debatable advantage (also shown as a disadvantage) of local server-based PMSs, data and system security is increasingly argued as a strong advantage of Cloud-based PMSs. Of course, service level agreements of individual Cloud PMS vendors need to be examined, but, in general, Cloud-based PMS vendors offer experience and expertise in the area of system and data security that well surpasses that of hoteliers.

A Cloud PMS vendor's business depends on the security and reliability of the Internet so it only makes sense that Cloud PMS vendors invest powerful resources, infrastructure and procedures to protect against online security threats (such as viruses and malware) and connection loss. Back-up servers, redundant Internet connections, firewalls, 24-hour monitoring, electrical back-up, automatic data back-up and disaster recovery protocol are some of the safety measures taken by Cloud PMS vendors to ensure reliable and secure service.

DISADVANTAGES OF A CLOUD PMS

- Not suitable for properties without a reliable Internet connection
- Concerns over online security

Disadvantages of a Cloud-based PMS

Concerns over Internet connection loss and data security are the two consistent arguments “against” Cloud-based PMSs. While these are certainly legitimate concerns that hoteliers should take seriously, they also need to be analyzed realistically. Indeed, these apprehensions should serve to help find a professional, dependable and trustworthy Cloud PMS vendor.

Access to a Cloud-based PMS depends on an Internet connection. When the connection to the Internet is lost, so is access to the PMS. Although Internet connections are increasingly failsafe these days, reliable Cloud PMS vendors ensure that the PMS is online at their end, at all times, via redundant Internet connections—in other words, multiple paths to the Internet (DSL, satellite, cable and/or wireless broadband connections and/or connections through multiple Internet service providers). At the property’s end, it is also recommended that the hotel set up an alternative Internet connection, even dial-up. Hoteliers can always take precautionary measures like printing or exporting reports of upcoming reservations, availability and current guests at the end of every day. Some Cloud PMSs automatically email upcoming check-in/check-out receipts and reservation reports to the property every night as a safety net in case the property’s Internet connection is disrupted.

It should be noted that back-up plans are a good idea for both Cloud-based and local server-based PMSs. After all, local systems are not immune to hardware and electrical failure, system crashes and bugs.

Security concerns: We have addressed the issue of data security throughout this paper, including in the section about the advantages of a Cloud-based PMS. People are, with reason, naturally fearful of online security breaches and viruses. As previously mentioned, one of the advantages of going with a Cloud PMS vendor is the expertise in this area that they can offer—expertise not typically available to small and independent properties running on locally installed systems. The important task when it comes to data security in a Cloud-based system is to find a vendor with policies and procedures that more than satisfy you. Thoroughly examine service level agreements and don’t settle for a provider that you feel anything less than very comfortable with.

Those wary of the Cloud may also argue the long-term pricing parity of a Cloud-based PMS versus a locally installed system. Questions have been raised about whether Cloud-based subscription pricing is actually cheaper in the long run. Ultimately it depends on the individual brands you may be

comparing, but, generally, local server-based systems have ongoing (and often unpredictable) costs, too; software upgrades, hardware upgrades, general hardware maintenance and IT assistance are all rather pricey. No matter which way you look at it, relatively small, regular subscription payments are easier on the budget.

SO, WHICH WAY?

In order for management to make a decision about which kind of PMS will fit their property best, property circumstances and goals need to be considered. Property size and number of locations, budget, technical resources and expertise, and online presence will all impact your choice of PMS.



While large hotel conglomerates tend to shell out the big bucks for traditional systems that provide the power required by such properties, the arguments for Cloud-based systems are becoming ever more persuasive. The hospitality industry is heading Cloudward and the evidence is in the increasing demand for Cloud-based PMSs. Even some of the industry's leading traditional systems like Maestro are offering web-enabled versions and tools such as online booking engines. Progressive hotel giants like InterContinental Hotels Group are also gaining confidence in the concept of the Cloud, turning to privately hosted clouds, hybrid clouds (a mix of private and public) and even public clouds for some applications.

Cloud-based systems are a logical fit in our increasingly online world, and as swiftly as technology moves, Cloud PMSs have developed highly sophisticated features that contend very competitively with those of traditional systems. The Cloud has made high-end property management systems an affordable reality for small, mid-sized and independent properties.

WebRezPro™ is a Cloud-based property management system designed to meet all front- and back-office needs of single independent hotels as well as hotel groups and chains. WebRezPro is currently used by hundreds of clients in 20 countries. Visit www.webrezpro.com or call 1-800-221-3429 for more information and a free demonstration.

Summary of Local vs. Cloud-based Property Management Systems

	Local Server-based PMS	Cloud-based PMS
Hardware requirements	Workstation/s (PC), data server, additional/back-up servers (depending on property size), appropriate operating system (eg. Microsoft Windows), back-up hard drives.	Workstation/s (PC) and an Internet connection.
System deployment & user access	The PMS software and data is stored on a server located at the property/office. The program is installed on each PC from which the PMS will be accessed.	PMS software and data reside on a shared server at the PMS vendor's data centre. Users access the system through a Web browser, anywhere, anytime.
System & data security and maintenance	Security and maintenance of software, data and servers/hardware is the responsibility of property management.	Security and maintenance of software, data and servers/hardware is the responsibility of the PMS vendor, including automatic data back-up. On-property staff are only responsible for the property's Internet connection and PCs.
On-site IT expertise required?	Yes.	No.
Budget/Pricing Structure	Normally an upfront licensing fee and annual support fee for the PMS software itself (not to mention hardware and IT infrastructure costs). → Capital expenditure.	Various subscription pricing models, normally charged monthly. → Operational expenditure.
Remote access & central reservations functionality	Possible, but requires additional hardware and network set-up, or system compatibility with the Internet.	Yes.
Free upgrades?	No.	Yes.