

Articles / Whitepapers

Practice: Technology

Topic: Property Systems

Property Management Systems for the Entire Hotel Company

The two most interesting and challenging issues in hotel Property Management Systems (PMS) today are the ASP (Application Service Provider) model and enterprise systems that treat each property as an extension of the headquarters...



By Mark G. Haley

Let's take a quick look at these issues and understand some of the pros and cons of the various approaches to either. In the process, we will see how they are similar and in fact converging.

The strictest definition of an ASP system describes software owned and hosted by a vendor in a remote high-security facility with the hotels connected to the system using the public Internet. In this model, fees could be

structured on a transaction basis rather than a traditional one-time license fee and include support and system administration services at the hosting facility. Blended, revenue-share and flat-fee pricing models are also in the market. Many people use the term "ASP" more loosely, to include any form of remote hosting using any kind of data network, more often a private managed network.

In either case, the key benefit is that the number of servers goes from many to one. This leads directly to reduced hardware and software costs, albeit with increased network costs. In theory, it also leads to lower costs of system administration. In practice, the hard costs likely go up significantly, but the skill level and performance of the administrators increase dramatically, resulting in more reliable performance of the system. If one considers downtime or unreliability as a "cost" of system administration (which it most definitely is!),

then the total cost does in fact go down dramatically.

The looser definition of ASP often describes one form of enterprise system design. Various enterprises, Manhattan East Suite Hotels as one notable example, have been doing this for years on a metropolitan area basis. This approach uses a single PMS server (usually running some form of the Unix operating system) to support multiple properties in a single market connected by a private, managed, fault tolerant data network. In this

architecture, the properties may share a common guest history and Accounts Receivable databases, or all properties may have completely separate databases, with some modules permitting a view across hotels (i.e., Central Reservations or Telephone Operator.) This approach to centralized operations allows one to consolidate key departments and effectively reduce labor costs by having one Reservations or PBX staff for the complex rather than several.

Another enterprise design emphasizes centralizing the information, but leaving the work itself

distributed to the properties. One might find dedicated property management systems in the hotels, each connected to an enterprise host. Data from the properties is copied back to the enterprise server (via a set of processes usually called "data replication") either as they occur

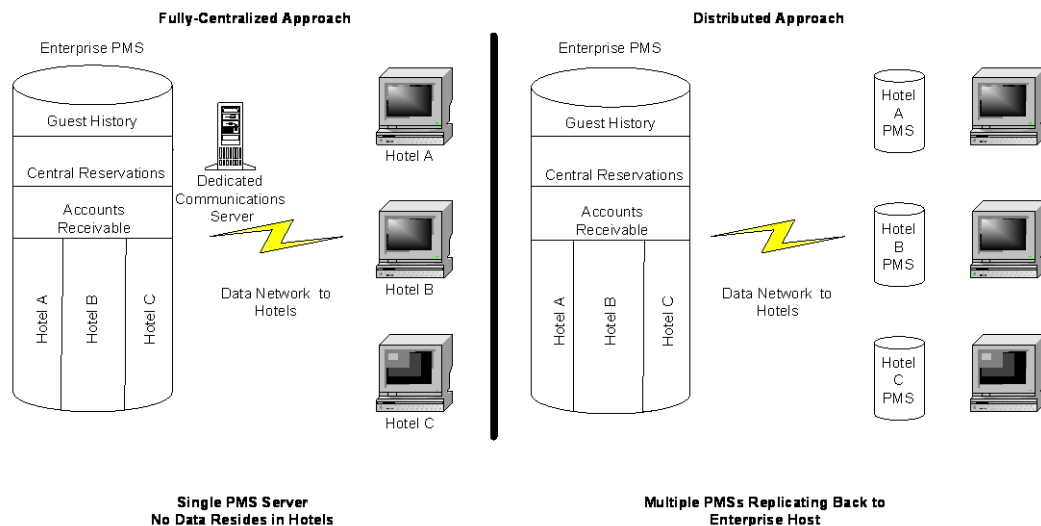
(real-time) or according to some schedule (batch mode). Reservations, availability, folio history and revenue accounting are all candidates for replication back to the enterprise host. The hotel company will then use the host system to evaluate

the performance of each property individually, as if they were at the property, or in a consolidated manner.

Either approach can support features for looking at the hotel company as an enterprise

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Two Approaches to Enterprise PMS Design



as well as property-by-property. Some systems support centralized revenue management,

applying inventory controls from the central site out to the hotels.

The illustration above shows the relative advantages and disadvantages of the two concepts. The single server approach is simpler and less costly, yet every hotel is completely dependent on the network connection. The multiple server approach allows the hotels to operate without the host or the network and allows for greater growth, but requires hardware, software and system administration at each property.

Either approach to enterprise system design can support crucial Customer Relationship Management (CRM) strategies. Once you have all of your guest history and folio detail in one place, the company can effect proactive customer

communications, utilizing observed guest preferences and behavior. This portfolio of CRM techniques allows management to relate to guests on their terms and convert them from customers of a single hotel to customers of the company.

The good news here is that prices continue to go down and capacity to go up for both servers and data communications networks. This continuing trend means that the benefits of an enterprise system become more affordable and accessible to a greater universe of hotel companies.

Let's examine some of the business issues involved in understanding which concept suits a given hotel company better:

- Is the culture of the company more suited to centralized or decentralized decision-making? Is there a business strategy in place to move in one direction or the other?

A firm with a strong Command-Control-Communications orientation will probably look at a single-server approach first. A company with autonomous property management may be better served by multiple systems with inventory and availability control maintained at the property level.

- How large is the company? Is aggressive growth planned or contemplated?

A large or rapidly growing hotel company will consider the distributed

model. As the number and size of properties increases, the benefits of scale in a single server model diminish. A small company, however, can grow very rapidly on a single server

platform by simply adding another database, increasing the software license and installing a few terminals. If the company sells properties as often as acquiring them, it is easier to sell a hotel with a system in place than without.

- What is the geographical distribution and density of the properties?

If all of the hotels are in the same geographical market (like Manhattan or Cape Cod), the benefits of a single server approach are evident. On the

This portfolio of CRM techniques allows management to relate to guests on their terms and convert them from customers of a single hotel to customers of the company.

other hand, if the properties are scattered around many markets with no particular geographical concentration, multiple servers may be more economical in the long run given reduced data networking costs.

“The most important thing for the Valued Guests is that they get what they want...”

opportunity to centralize operations like Reservations, Accounting, Telephone Operator and some guest services is generally stronger with one system as opposed to multiple replicated systems. These centralized services can often be delivered transparently to the guest.

- What are the Information Technology (IT) competencies of the company?

A hotel company with a large, capable IT staff, perhaps extending to the property level, will find property-based distributed systems a natural fit. A company with a small, centralized IT staff will be more comfortable with a single server. A company with no IT department and no tolerance to fund one should evaluate a hosted ASP solution.

- Is cutting operating costs the primary business driver of the PMS selection initiative?

If so, the single server platform offers more value here. In addition to less hardware and fewer software licenses,

These are just a few of the business issues to evaluate in the enterprise system selection process. The opportunities today for a hotel company to use the Property Management System platform are immense, allowing management to use the system to change the way they do business for the benefit of guests, owners and operators. ■

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| | Pros | Cons | Key Questions |
|-------------------------|--|--|--|
| Single Server | <ul style="list-style-type: none"> • Simple • Cost-effective • Centralized operations | <ul style="list-style-type: none"> • Total dependence on data network • More costly network requirements | <ul style="list-style-type: none"> • What files are common to all properties vs. separate? • How is property-level reporting maintained? |
| Multiple Servers | <ul style="list-style-type: none"> • Less dependence on data network • Less costly data network | <ul style="list-style-type: none"> • More servers and software mean more costs • Data replication is not a perfect science | <ul style="list-style-type: none"> • What is the replication strategy? • Can the public Internet be used for data networking? |
| Hosted ASP | <ul style="list-style-type: none"> • Often capital investment in servers or software • Less internal IT requirements | <ul style="list-style-type: none"> • Total dependence on data network • Transaction fee models more costly in the long run | <ul style="list-style-type: none"> • Does the host know anything about your business? • Carefully evaluate the pricing model to fit your needs • Who else is hosted on the same system? |