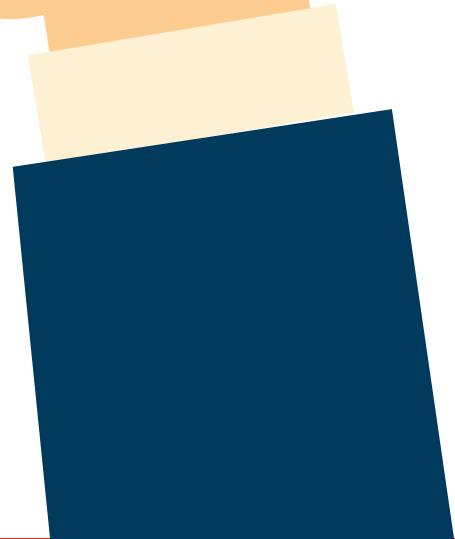
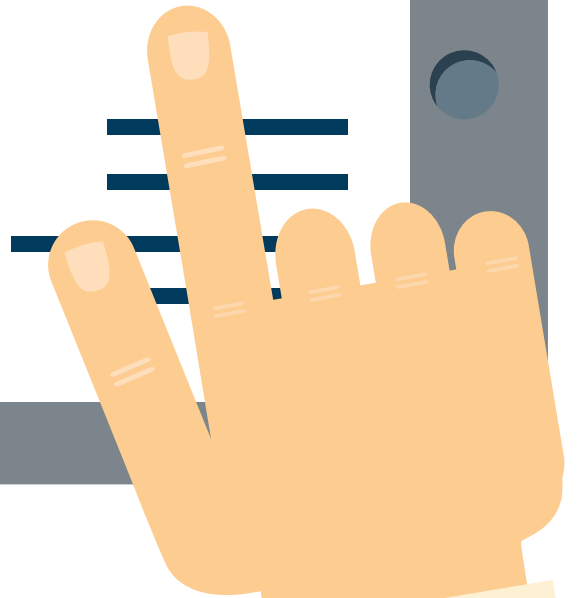




HOSTED SERVICES 101

Leveraging the Cloud

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Chapter 1: What Are Hosted Services?

Hosted Services are one potential service in the fairly nebulous scope of cloud computing technology. There are four main types of cloud services you should know about:

- Software-as-a-Service
- Platform-as-a-Service
- Backup-as-a-Service
- Infrastructure-as-a-Service

Many business owners associate working in the cloud via the online applications they've used in the past (like Salesforce, Google Drive, Dropbox, etc.) These types of remotely delivered applications fall under the category of Software-as-a-Service, or SaaS. They are fully-functional software applications that you can interact with, store information on, and run from any device. However, the software is not run from your local computer. You can only gain access to SaaS applications via login credentials and connection to the internet.

Platform-as-a-Service is important to developers. It is a remote environment developers can use to design, test, collaborate on, and run new applications.

Backup-as-a-Service is an advanced cloud computing service designed to add a layer of security to the data you already store in the cloud. Cloud-based BaaS is a service businesses can use to automatically back up data across their infrastructure, giving them the ability to recover quickly in the event of a disaster. Data can be stored in an external data center, or cloud storage, or both.

This finally leads up to the real question: ***What are Hosted Services?***

Hosted Services fall into the last category, Infrastructure-as-a-Service, or IaaS. With IaaS, a business can have the capabilities of a full-sized infrastructure without actually having one in-house. A Hosted Services provider delivers this infrastructure remotely to your computer via the internet. This means that your business will have the following infrastructure components delivered directly to your computer:

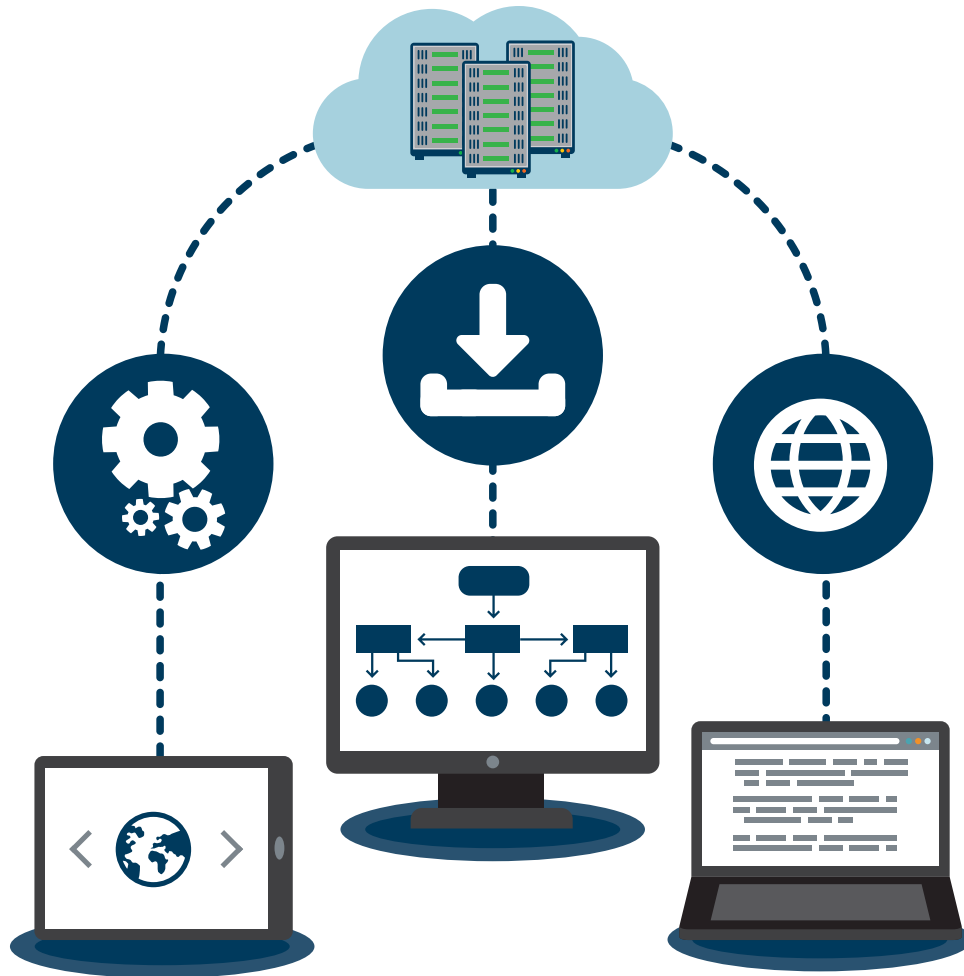
- Server
- Storage
- Network
- Load Balancing
- Operating System
- Applications
- Security

How Do Hosted Services Work?

Here are some additional names for Hosted Services to give you an idea about how it works:

- Compute on demand
- Hardware outsourcing
- Infrastructure outsourcing
- Virtual infrastructure

With Hosted Services, the provider owns, manages, and maintains all of the hardware and then delivers network, compute, and other functionalities. In a sense, you are “renting” the provider’s equipment, but you have full access and ownership of all of your company’s data.



Servers are the brain of any infrastructure. They direct traffic, deliver applications, host operating systems, and secure data with encryption. In traditional IT infrastructure, servers are physically located on-site in your organization’s building. It is physically linked by Ethernet cables or wirelessly through a router to every computer in your organization.

With a Hosted Services infrastructure, the servers that run your infrastructure are physically off-site. They deliver your infrastructure directly to your business via a network, in this case, the internet. In turn, your organization’s computers speak directly back, in real time, to the Hosted Service provider’s server. Within the connection between you and the provider, your connection is protected by a layer of security.

What can your business do with virtual infrastructure? You may be surprised with the answer.

Chapter 2: Hosted Services Portfolio

The old adage, “everything and more,” has never been truer in context than within the scope of Hosted Services. A virtual infrastructure has the capabilities of a traditional infrastructure with the added bonus of unparalleled scalability without the cost of additional capital or operational expenses.

Cloud Storage

In a traditional storage model, your data is kept in physical storage on-site at your business. When you need to add more capacity, you can add additional expansion enclosures. While modern storage has made great strides in decreasing the amount of physical space your storage occupies, some businesses still don't have the space and resources required to accommodate a secure storage room.

Cloud storage gives businesses the freedom to store and access their data completely off-site and then purchase as much or as little space as they need. The data stored in the cloud is accessible 24/7 from any computer, on-site or off-site, as long as you have login credentials.

Cloud Backup

Cloud backup solutions are a newer player on the cloud computing market, but they fulfill a critical need. Instead of relying on automated local software, cloud backup initiates backup in real-time without the cost of extra hardware or software. In other words, cloud backup is the most cost-effective way to secure your data by automatically sending your data to an external datacenter or other storage. This works hand-in-hand with a business's recovery and restore goals in the event of data loss.

Virtual Desktop

Virtual desktop infrastructure, or VDI, is a form of cloud computing that delivers an operating system to your personal computer or laptop from another server. In other words, the Hosted Services provider hosts the software and hardware on their own site and delivers the capabilities of an entire desktop to every computer in your business.

Private Cloud

Private cloud is a single-tenant hosted cloud environment. Another way to think about private cloud is remote access to your network and data via the internet. The data on a private cloud is protected by the enterprise firewall, and only users with login credentials can access a private cloud and their user-specific data.

Hosted Services vs. “Other” Cloud

The diversity in cloud computing services will only increase over time as the technology matures. The convenience of Hosted Services, as opposed to other forms of cloud, is threefold:

1. Companies with Hosted Services can enjoy the entire menu of services the cloud has to offer.
2. You can still use unique SaaS programs when using a virtual infrastructure.
3. You can scale your technology seamlessly and almost instantly.

Hosted Services Advantages

Hosted Services, as a package of available cloud computing technologies, is undoubtedly a better value than purchasing each tool separately. In fact, Hosted Services provides more advantages than even a traditional infrastructure.

Security

Hosted Services providers take cloud security, and every facet of it, seriously. They protect the data in their clouds with military-grade encryption and implement safeguards against hackers and malware. They also monitor the system 24/7 for signs of attempted intrusion and regularly assess their systems to find and remediate vulnerabilities.

Many consumers cite the 2014 Apple iCloud breach as their reason for concern. However, the breach happened as a result of a compromise in log-in credentials. For the most part, the cloud's main vulnerability is its end-users. In fact, most security breaches in 2014 were a result of hacking data-at-rest kept in on-site storage.

Personalization

Hosted Services can personalize your cloud features to have as much (or as little) capacity as you need. The provider manages your storage, database, automatic backup, VDI, and other options to deliver the features you need without destroying your budget. In short, a good Hosted Services provider knows that their services are not "one-size fits all."

Technical Staff Expertise

Partnering with a Hosted Services provider is like onboarding an entire team of technical experts into your organization without hiring them as your own full-time employees. Instead of investing in new staff to bridge the gap between your business and enterprise technology, you can rely on the certified and experienced staff at your Hosted Services provider.

Cost Savings- Capex

When you invest in on-premise infrastructure, the capital expenses can be staggering for small to medium-sized business. However, you can avoid capital expenses entirely by partnering with a local Hosted Services provider. You can easily avoid the cost of hardware, software licensing, supplies, and other fixed assets by "renting" them from your provider.

Cost Savings- Opex

In addition to capital expense savings, you also save on operational expenses. Since you don't have to maintain servers for data centers on-site, you can avoid electricity costs, cooling costs, physical space, lifecycle management, warranties, etc.

Freedom

Hosted services gives your business the flexibility to expand and scale your hosted environment to your growth. You know that your entire environment is in the capable hands of your Hosted Services partner. Without the worry of owning and operating the equipment, your organization is free to concentrate on your core business knowing that your infrastructure will grow with you.

What to Look for in a Hosted Provider

Unlike with many other IT solutions, a quick online search for a Hosted Services provider will yield some fairly disheartening results:

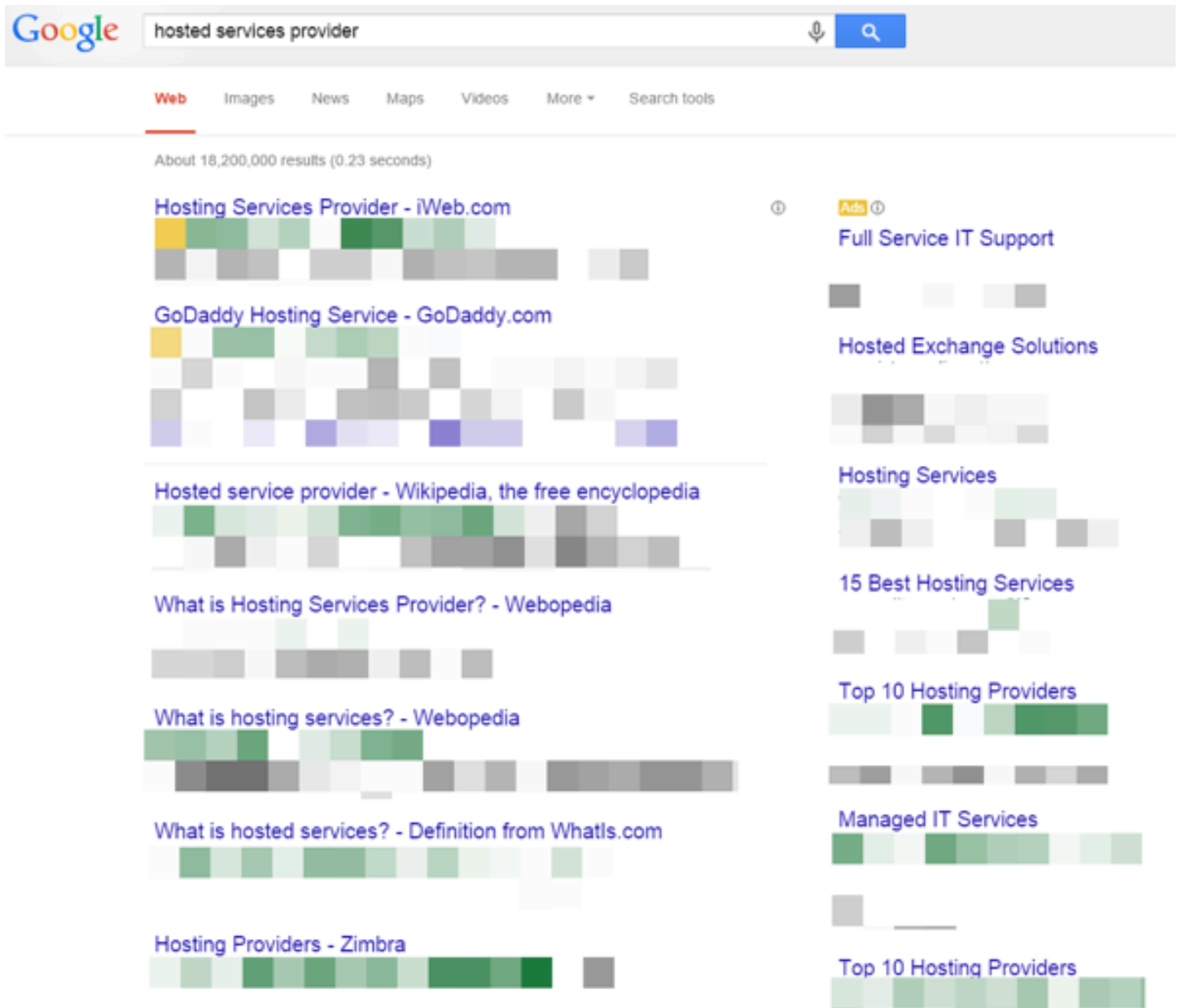


Figure 1: Search results for "Hosted Services Provider"

This is because the term "Hosted Services" can also mean web hosting. The wide scope of Hosted Services and cloud services can make it difficult to hone in on even one provider, let alone the right provider.

How to find a Hosted Services Provider

Begin your search by looking for a local IT solutions company.

An IT solutions company should provide your business with enterprise class service, which means providing critical technology services that apply to every user in the entire organization. National providers offer tools like:

- Multiple network operation centers (NOC's)
- Helpdesk/End-user support
- Delivery of services
- Technology consultation
- Analysis and reporting
- Hardware and software life-cycle maintenance
- Software configuration and core application integration
- Quality, security, assurance, and compliance (QSAC)
- Backup and disaster recovery

While you always have the option of selecting a national Hosted Services provider, your business will reap more value from the partnership if you work with a **local provider**.

They can provide “feet on the ground” with on-site support for your employees, when needed. Not all support issues can be addressed remotely, so the benefits of working with a local provider are immeasurable.

Questions to Ask Your Hosted Services Provider (and Answers)

QUESTION	ANSWER
What services are provided in your Hosted Services package?	Evaluate your business goals. Which services do you need to grow? A good Hosted Services provider understands that there is no “one-size-fits-all” package, and they will match you to a plan which can accommodate your business needs.
What is your pricing structure?	Hosted Services should be priced monthly, similar to a rental fee. This gives you the flexibility to avoid a locked-in rate in the event that you need to change your capacity or service. However, they should be able to provide services in your agreement at a predictable fixed rate. In other words, do not partner with a Hosted Services company that will unpredictable flux your rate for the same level of services.
How do you secure your cloud?	Certain industries need to meet stringent compliance regulations, like HIPAA and PCI. Find out what standards the provider meets to keep your data safe. They should be able to successfully meet the government compliances required of your industry.
What is your SLA (Service Level Agreement?)	With Hosted Services, your SLA is measured in the amount of guaranteed uptime. Ideally, you should work with a provider with an SLA of 99.5% or higher. This means that your environment should be available almost all the time.

QUESTION	ANSWER
When is customer support available?	A good Hosted Services provider should provide technical support 24/7/365. As an extension of your business, they should be available at any time you or your employees work.
How scalable is the cloud?	If you find a Hosted Services provider that only allocates a flat amount of space and capabilities, you should find another provider. A good Hosted Services provider will seamlessly scale your environment as your business grows, giving you as many virtual machines as you need to accommodate your data. Likewise, if your initial agreement is more than your business needs, the provider should reduce your capacity and costs to meet your needs.
How does the business handle downtime and disaster planning?	<p>Downtime is a situation where the provider's resources fail, leaving you without access to your data. Unless downtime is planned in advance, Hosted Services should be able to restore their own systems quickly. More importantly, they should have fail-safes with datacenters in multiple locations to support a location that experiences downtime. For example, a company-owned datacenter in central Texas can support the data load if a hurricane puts a Gulf Coast location at risk. Learn about the provider's prophylactic measures.</p> <p>In the event that your business happens to suffer downtime as a result of a disaster, your Hosted Services provider should be available to help bring your systems back up quickly within a specified recovery time objective, or RTO.</p>
How do you keep the customer informed and involved with their environment?	A good Hosted Services provider will give you access to a portal that lets you see the details of how they manage your environment. They will generate reports to keep you involved with your environment for the duration of your partnership. Never work with a provider that will not share the details of your environment activities with you.
What is your onboarding process?	<p>Every Hosted Services provider is different, but the first step in their onboarding process should be to set your expectations and learn about your company goals. Prior to any planning, your provider should gather all of your information and ensure that you understand the entirety of the process.</p> <p>Onboarding should be a painless stage that doesn't interrupt your business processes. Every stage, from designing a solution to final implementation and configuration, should be done without distracting you from running your core business. After your Hosted environment is in place, the provider should be available for on-going support.</p>

Conclusion: The Bottom Line

There are many challenges facing the modern business:

- Reaching your customers
- Managing employees
- Attracting top talent
- Federal and state regulations
- Workplace mobility
- Maintaining costs
- Technology advancements
- Network security
- Disaster recovery and business continuity
- Business growth and productivity

The bottom line: **Hosted Services give businesses the tools they need to succeed in the modern workplace at a fraction of the cost of implementing these tools in-house.**

The advantages of a full Hosted Services portfolio easily provide more value than seeking out these services on an individual basis.

Why Centre Technologies?

1. Centre is an IT solutions industry leader that never stops innovating and never stops investigating new ways to mitigate new threats.
2. Our proven methodologies ensure ultimate safety and performance for your hosted infrastructure.
3. Our solutions guarantee the security and availability of automatically backed up data.
4. We address common concerns about Hosted Services and establish a partnership based on trust and business value.
5. We work closely with our Hosted Services clients to help them reach their business goals.
6. We provide local, enterprise-class support to businesses throughout Texas and Louisiana.
7. We pass the value of working with our best-of-breed partners to you and your business.
8. Our certified and experienced IT professionals consistently meet and exceed our contractual uptime SLA's.
9. Our services combine the capabilities of an enterprise class service with the personalized attention of a local provider; the only Hosted Services provider in Texas that can provide the best of both.
10. We offer multiple network operation centers and redundant tools from two separate geographic locations to ensure 24/7/365 support.
11. Our core focus is to provide nothing short of the best value for your IT investment in the industry.

Contact Centre Technologies

If you want to personally explore what value Centre's Managed Services can bring to your business, contact us directly.

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Address: 480 N. Sam Houston Parkway E. Suite 100, Houston, TX 77060

Website: www.centretechnologies.com

About Centre Technologies

Centre Technologies is a privately-owned, leading IT company that provides IT solutions for businesses of all sizes in Texas and Louisiana. Since 2006, Centre Technologies has combined technology with business insight to create a customized set of services as unique as the organizations they were created for. Their approach to enhancing businesses with IT operates under the principle that, "Technology is the Centre of every business."



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- [1] L. Columbus, "Roundup Of Cloud Computing Forecasts And Market Estimates, 2015," Forbes, 24 January 2015. [Online]. Available: 2015. [Accessed 15 February 2015].