



Quality
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Services

A QTS Data Center Industry Perspective

THE POWER OF ASSOCIATION: The Digital Ecosystem Arrives in the Data Center

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What is an ecosystem? An ecosystem consists of organisms living in a particular environment and interacting with one another to benefit each other.

What is a digital ecosystem? A digital ecosystem consists of organizations interacting within the data center, in ways which help them each achieve their business goals individually.

QTS is a customer-driven company, and as such, our product development centers around working with our customers to deliver solutions for data center and cloud computing needs that will best position them for the future.

Today at QTS, our customers are exhibiting strong desires to interact with their customers, vendors and partners in ways that enhance their performance, efficiency and effectiveness.

As a result, we are seeing customers cluster together in communities within our data centers.

Even among those who are not yet aligned in concert with specific partners, we've noticed a desire to create and participate in digital ecosystems that are developing in QTS data centers from coast-to-coast.

So what are these ecosystems? Who participates? And why?

To answer those questions, you need to understand what is unique about the QTS portfolio of data centers and how that is fostering the development of these ecosystems.



MULTI-TENANT
INTERACTIVITY ADVANTAGES

The Power of Association

Hosting Ecosystems, Significant Scale Required:

At QTS we have one of the largest inventories of data center space in the industry and are bringing more online in 2011 than almost anyone else. New or expanded facilities in Atlanta, Richmond and Santa Clara provide customers with the kind of scalability and flexibility they're looking for.

The economic advantages of scale are critical components for these communities to evolve.

Many aspects of data center operations benefit from scale. The QTS Atlanta Metro Data Center, at nearly 1,000,000 square feet, requires more staff to support a 24-hour security force than a 100,000 square foot data center, but certainly not 10 times as many. Similarly, it does not take two times the number of people to run and maintain the pumps, chillers, UPS and other systems in a data center that's twice as big.

There are plenty of scale advantages that have nothing to do with staffing. By creating big data centers, QTS can build for about \$6 million to \$7 million per megawatt. This provides a significant advantage over those building smaller data centers, which might cost \$11 or \$12 million per megawatt, because they can not leverage cost economies and other infrastructure as effectively.

Unless your company is an absolute behemoth, the only way to benefit from this kind of scale is to be in a multi-tenant data center. Even many of the behemoths see balance sheet advantages being in a multi-tenant data center. It enables them to avoid CapEx and dedicate their human and capital resources to activities that support their core business. Quite simply, they gain more leverage by focusing on their business than they do from being in the business of building and operating a private data center.

Industry-Specific Needs Drive Ecosystem Growth:

One thing that we've found at QTS, is that our customers have specific requirements depending on the vertical they are in. Many of those requirements involve regulation and compliance, which has led QTS to devote significant resources and human capital to an audit and compliance group that focuses on supporting the certifications needed by our customers.

We've taken steps to create the specific environments in our data centers that are desired by particular verticals. By supporting different levels of certifications and providing specialized support services desired by certain industries and niches, concentrations of companies and other organizations are developing in our data centers.

When healthcare companies see how well we support the companies they interact with, they begin to have interest in our data centers too. When they review services that our audit and control group offers to support their growing compliance needs, that interest perks up even more.

We already have concentrations of professional services and government customers for similar reasons.

There's great interest from gaming and media companies, as well as Web 2.0, as we've optimized our networks for streaming media and have taken additional steps to enhance the movement of media assets. We have the certifications required by media companies. We can speak their language and already provide the low latency and environments required for content enrichment.



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The Food Court Effect:

The situation is not very different than a food court. When my family goes to the mall and we take a break for lunch, my wife wants a salad, my kids want tacos, and I want the biggest, fattest, juiciest burger I can find. With all these choices, we don't even think of finding a restaurant to compromise on. We just head to the food court, because we know that they can take care of all of us.

Other restaurants see the food court effect and understand that the end users are being attracted by all the selections available. As crowds grow for the selection and convenience, the Asian restaurant, the hot dog stand and the baked potato bar all want in to take advantage of the traffic. These new selections attract even more people, which attracts even more restaurateurs to enter the environment.



This "food court effect" is driving a lot of customers into our data centers. We have the services they want, so key companies in that vertical come here. The presence of each new major (and even mid-size) player attracts further interest, and the growth continues to build.

Power of Association Driving Customers to Santa Clara, Richmond and Atlanta:

People often want to associate with those who are like-minded and we're seeing the same thing with companies. For example, we host a Web 2.0 company in our Santa Clara Data Center that is enjoying exponential growth in their business. In addition to their expanding footprint with us, companies that provide applications that leverage their platform want to be in the same facility to optimize their performance and connectivity.

We're currently welcoming the first customers into our massive QTS Richmond Data Center, which will grow to be over 1,000,000 square feet of raised floor. With this facility located just over 100 miles from Washington DC, outside the "blast zone" mandated by the Federal Government, it's no surprise that there is already a concentration of government agencies and government contractors in serious discussions with us about our Richmond Data Center. In fact, in order to better serve the specific needs of government entities and government contractors, we're building an entire sales team around this vertical.

We're rolling out the latest 130,000 square foot expansion of our 990,000 square foot Atlanta Metro Data Center, the world's second largest data center. Much of the space we've pre-sold supports growing communities of professional services and healthcare firms.

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Phone Factor, Positive End User Experience Drives the Demand:

More than just convenience is driving these companies' choice to interact in the same data center. Customers are demanding more out of the companies they choose to do business with. A driver of this demand is the ever-improving experience that customers are having with Droids, iPads, laptops, search engines, ecommerce and streaming media. Everything they do with their smart phone and other online devices is leading them to demand a better experience from every business they interact with online. The way they want to consume content for both business and personal use is starting to be driven back to businesses, which in turn, is creating pressure on government agencies to be more user-friendly as well.

Customers are asking new questions of those they interact with; questions like, "if I can go to Google and find out where the nearest convenience store is that I can get both gas and bananas, and then get directions to it, and do all this instantaneously... why can't this level of convenience exist in other aspects of my life?"



With the Government:

Taxpayers are asking, "why don't I fill out and file my tax forms, make a payment, and get a refund, with the same level of convenience, speed and performance that I get when I make a purchase online?"

In Healthcare:

Healthcare consumers are asking, "After my surgery, why can't we have a fast and efficient connection with the health insurer, who interacts directly with the pharmacy, the hospital, the anesthesiologist, the surgeon, the medical records storage firm and my primary care physician?"

In Finance/Investing:

Investors are asking, "How much money am I losing to these big traders who are located right next to the exchange and measure their transaction time in nanoseconds? Why can't my broker give me the same level of access?"

Proximity Matters:

In order to meet the new demands for customers, companies must be prepared to quickly share minute bits of information out of separate massive databases. Organizations that need to interact with each other need to be in the same data center. They have to be able to content enrich very, very quickly. They need to think about how their data center decision is going to impact the experience of their customers, who have become spoiled by a new level of service provided by smart phones, search engines and ecommerce providers on the cutting edge of technology.

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Positioning QTS for the Digital Ecosystem:

The investments in our facilities that QTS has made to successfully serve the individual customer provide the same infrastructure that promotes the development of the digital ecosystem. At QTS over the years we've become very good at building big facilities, having a cross-section of products and providing our customers a quick, seamless connection with the outside world.

Now we're reaching a point where there are plenty of reasons for all these customers to interact with one another in the data center. The technology is starting to come into existence that makes this possible.

For example, we can take a data center customer, like a large health insurer, and position them right next to a major drugstore chain, and place a medical records firm alongside them. Our audit and control group supports their HIPAA and HiTech certification needs with an ever-expanding menu of compliance services. This in turn becomes a very attractive place for these companies to host their IT infrastructure, while companies who want to interact with health providers see it as a no-brainer to be in the same content enrichment zone, providing additional value to the entire group.

It used to be that all the smaller players would have to come to the large health insurer. But now the insurer is forced to push out to the other players. Creation of a low latency environment providing interaction amongst all these players in the same data center would improve performance significantly. By combining this proximity with the use of new technologies to allow these companies to connect with each other and share content, QTS has created the kind of ecosystem that will enhance the performance of all the participants.

The Future:

You've seen in the news that the Apples, IBMs, Facebooks, and Googles of the world are building giant data centers just for themselves. Meanwhile, while some of our data center competitors are building good-sized data centers to be shared by just a few unrelated customers, the vision of QTS is different.

We're building some of the biggest data centers in the world, but not for a single user, or even just for a few. We provide ample space, massive amounts of power and high-volume, state-of-the-art connectivity in a redundant, secure environment to be shared by many. We fractionalize it, enabling the customer the industrial layer and capacity they need at a predictable monthly price they can afford. Now we can enable transactions and interaction while we maintain positive protection and controls that our customers could never achieve on their own. If our customers' desire, it can all be handled in a turnkey fashion with QTS managing the operations and environment for them.

We offer the customer a level of service, protection and control that would require significant CapEx, which is something most companies prefer to invest in the core functions of their business. And now there's an additional benefit, the benefit of the communities of companies that wish to interact with one another in the same facility having the opportunity to build an ecosystem in which they interconnect with who they want, how they want.



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See what's happening here? Companies are gathering in specific data centers that provide the particular environment that they require to fulfill their certification and compliance requirements. Sharing connectivity with partners, customers and vendors allows them to interact in a state of peak performance, efficiency and effectiveness. We call it the Digital Ecosystem, and expect it to become a significant part of the data center world.

About QTS:

In 12 data centers coast-to-coast, QTS provides core data center infrastructure – Custom Data Center, Colocation, and Cloud Services – to meet the demand of customers of all sizes. Whether you're interested in growing in a digital ecosystem or you're simply looking for secure, high-density data center services, QTS data center professionals know how to ask the right questions to help you customize the environment and service that's right for you. For more information call 1-877-QTS-DATA, visit www.qualitytech.com or email customer_inquiries@qualitytech.com.

