LAW FIRMS
DISCOVER
FLEXIBLE IT

EQUINIX WHITE PAPER
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Transformation is sweeping through the legal industry, changing how law firms are structured, where and how attorneys interact with clients, and even how work gets done. Consider these examples:

- Law firms are going global, expanding into new regions to keep pace with multinational clients and attract new business. This expansion means employees, clients and partners are often located far from centralized data centers, causing significant performance hits on enterprise applications.

- Employees and clients want to take advantage of advancements in consumer mobile technology and use tablets and smartphones to access corporate applications and data. This means access must be available anytime, anywhere, regardless of what type of device or network access the end user utilizes.

- More firms are taking advantage of Legal Process Outsourcing (LPO) services to offload tasks that can be done quickly and inexpensively by third parties. In order for these services to be effective, however, law firms need high-speed, secure and reliable connections with providers to share data and transfer workloads.

- E-discovery rules mandate that a wide variety of electronically stored data, ranging from email messages to video clips, are now considered discoverable as part of the litigation process. These rules significantly increase the amount of data that must be managed, stored and archived by litigating parties and their counsel.

- As law firms expand to serve clients in new industries and geographic locations, they need to consider new data security, privacy and compliance requirements for different industries and regions.

- The adoption by some firms of alternative organizational hierarchies and billing models aimed at promoting productivity and efficiency have IT departments searching for technology to help automate workflows and increase the accessibility of critical data.

Law firms need a new way to deliver data and applications to end users—regardless of location or access method—that offers a high-performing, yet secure and reliable, experience around the globe. They need to ensure fast access to corporate IT resources in a way that is cost-efficient and scalable. In short, they need Flexible IT.

Flexible IT is founded on colocation in network-neutral data centers in multiple locations. Decentralizing and distributing data center operations enables law firms to stage latency-sensitive applications closer to end users in key geographic locations, thus reducing the distance that data must travel. This location-based approach is perhaps the most powerful way law firms can accelerate the delivery of their applications and data. Traditional application delivery across the globe is very unpredictable. While sources of latency include network congestion and router and switch hops, Equinix estimates more than 80% of latency across a WAN is purely a function of fiber miles. Therefore, reducing the overall transmission distance between source and destination is usually the most effective way to minimize latency. And the most efficient way to reduce transmission distance is to leverage a global footprint of data centers.

Equinix’s global platform of secure, highly connected, network-neutral data centers provide the ideal environment for Flexible IT, and ultimately boosts application performance and enhances business flexibility while lowering costs.
Like multinational companies in many other industries, law firms today are forced to deal with a number of recent trends that are redefining how business is done. Heightened merger and acquisition activity, mounting compliance mandates and the increasingly global nature of business are having a significant impact on the way law firms are structured and operate in this highly competitive industry.

In addition, legal IT departments have a number of industry-specific issues to grapple with. Among the most prominent today are competitive pressure to explore new service delivery and billing models, the trend toward legal process outsourcing and, perhaps most notably, the growing challenges of electronic discovery. The volume and variety of data that is now considered potentially relevant to the litigation process has skyrocketed. Dealing with the data required for e-discovery alone will require organizations to develop far more responsive IT models for data exchange, management, archiving and analysis.

Despite the disruption brought about by this changing landscape, legal IT departments need to ensure that the right data gets to the right users in a timely and reliable manner—it’s one of the most basic and important functions of the IT department. Yet legal IT departments struggle to fulfill this mandate for a number of reasons:

1. **Higher user expectations**—The increasingly global nature of business is driving established law firms to acquire or be acquired in order to better serve multinational clients who are expanding into new markets. Law firms must also build or acquire new practice areas to provide a comprehensive set of expertise to serve their largest clients. As a result, law firm employees are more globally distributed and mobile than ever before, but they expect to have the same fast access to data and applications that they would experience at the main office. As clients are emerging in different geographies, they too expect the same service and experience as local customers.

2. **Legal process outsourcing**—As law firms globalize and the amount of information they deal with rises sharply, they must be able to share critical information with clients, partners, service providers and suppliers as quickly and easily as if these entities were located down the street. For example, as more law firms take advantage of LPO services to benefit from economies of scale and lower-wage workforces in emerging markets, they require fast, secure and reliable connections to these providers to be able to entrust them with key tasks including litigation support, compliance and regulation, patent law and contracts.

3. **Greater mobility**—Mobile device usage is rapidly proliferating in the business sphere, and the legal industry is no exception. This is an important trend for law firms to embrace, as allowing personal devices to be used for work has been shown to improve employee satisfaction at law firms (see Figure 1) while also enhancing productivity and collaboration. However, increased use of mobile devices for access to corporate applications complicates security scenarios and can impede application performance. Thanks in large part to the Bring Your Own Device (BYOD) movement that encourages employees to use personal mobile devices for work, legal IT departments have low visibility into or control over which kind of devices or connections they’re expected to support today. As the diversity of mobile platforms increases, so does this challenge.

![Figure 1: According to the 2012 AM Law Tech Survey of 487 law firms, when asked about the biggest benefits of rolling out a BYOD policy, 70% of respondents answered “more cheerful users,” while 27% pointed to “reduced budget for equipment” and 3% responded with “reduction in support tickets.”](image)
4. **E-discovery data explosion**—Today, electronically stored information including email, instant messages, video, photos, database entries and other formats may all be discoverable as part of litigation under e-discovery rules. Also included is data that is often accessed as part of a digital forensics analysis, such as metadata, including information regarding the author, date, time or version of software that was used to create a specific piece of data. With this exponential increase in potentially relevant information, data access and management quickly become burdensome for legal IT departments. Some firms are evaluating which aspects of e-discovery data management can be outsourced; however, this introduces a new round of issues regarding security and accessibility. Nevertheless, more and more law firms are outsourcing many or all aspects of e-discovery to hosted or cloud-based vendors in an effort to streamline workloads and cut costs. According to Gartner, “By 2013, software-as-a-service (SaaS) and business process utilities will account for 75% of the revenue derived from processing, review, analysis and production of electronically stored information.”

5. **Varied compliance mandates**—As law firms work with clients from a broader range of industry verticals and in different locations around the world, the necessity to satisfy a variety of compliance standards becomes more of an issue. Whether subject to FISMA when representing a U.S. federal agency or PCI-DSS when working with a banking or retail industry client, law firm employees are often privy to sensitive data that must be handled in accordance with that industry’s compliance frameworks. What’s more, these frameworks can vary greatly across different geographic regions. Law firms require IT infrastructures that can ensure compliance in these diverse environments.

6. **Alternative billing models**—The billable hour model that has long been practiced in law firms is becoming less attractive as the business world emphasizes productivity and efficiency. In response, some firms are moving to alternative fee arrangements and require technology infrastructures to automate routine tasks and enhance access to critical applications, helping legal professionals to complete their workloads in less time.

While adoption of new technological solutions is generally slow within the legal industry, these pressures have IT departments searching for solutions that can give employees access to the data they need to get their jobs done while ensuring compliance, security, reliability and a superior end user experience. They must act fast; poor application performance can quickly translate into decreased productivity among employees and lost clients who go to the competition for a better overall experience.
Traditionally, enterprises in many different industries have taken a centralized approach to their IT infrastructures, serving applications and data from the enterprise data center. Users based at or near these locations would experience good application performance, but the farther away they were from the data center, the worse application performance became, making it increasingly difficult for employees to get their jobs done.

The Old Model for Delivering IT Services
Providing IT services to all users from one central location

1 Headquarters Experience – Users located in close proximity to where applications are hosted experience good application performance.

2 Branch Office Experience – Still positive end user experience, but certain applications may be impacted

3 Remote Office Experience – Negative end user experience because of distance from application delivery

4 Mobile Experience – Users find it very difficult to do their jobs.

In this model for delivering IT services, companies often attempt to improve the overall user experience by adding more hardware—upgrading to faster servers and network equipment in the data center and deploying application acceleration appliances at branch locations. While this approach yields performance gains, it’s an expensive, unsustainable approach, requiring significant upfront investments in hardware and compounding maintenance and administration for the IT department.

Another approach is to provision additional bandwidth and consolidate network services with a single global carrier to reach all locations. This, too, is an expensive proposition that delivers diminishing returns over time and locks enterprises into a single carrier.
In order to satisfy employee demands and client requirements, law firms need a new approach to delivering IT services. They must position IT infrastructure not in centralized data centers, but in physical proximity to customers and partners. That’s because the timely delivery of data and applications often depends on reducing network latency, which can result from traffic congestion, packet processing within routers and switches and, most importantly, the distance that data must travel to reach its destination. The most effective step companies can take to shrink network-related latency is to cut the distance to their end users. In fact, Equinix estimates at least 80% of network-related latency in enterprise WANs stems from transit time: the physical limits of how fast data can travel across an optical or electronic circuit.

To reduce transmission distance and network delays for time-sensitive applications, many companies have begun distributing computing infrastructure across multiple data centers located near large populations of end users. Also, by placing IT infrastructure in strategic locations that slash data transit times, companies have enhanced the impact of hardware upgrades, software optimization and other investments made to speed up application performance.

The performance enhancements made possible by distributing data center operations across multiple locations has inspired many law firms to rethink their monolithic, centralized architecture for delivering IT services. Instead, many law firms are moving their data centers to network-neutral colocation facilities. These facilities enable them to:

- Improve network performance while reducing costs
- Provide the connectivity required to implement a range of applications and delivery approaches, including managed hosting and cloud services
- Interconnect to clients and business partners, as well as vendors specializing in legal services, including companies focused on e-discovery and IT service providers with expertise in fulfilling industry-specific compliance requirements
- Enhance the end user experience by providing high-speed access to corporate information where and when it is needed
- Satisfy complex data privacy and security requirements
- Take advantage of emerging technologies by connecting to new service providers colocated in the data center (e.g., virtual desktop, cloud services)
- Scale their data center space and connect directly to cloud service providers to expand their IT capabilities without adding office space, infrastructure, cost and complexity

Locating IT services closer to end users in secure data centers may be the single most powerful strategy for law firms seeking to boost enterprise application performance, sustain business growth and drive productivity in an increasingly global market. Data center colocation forms the foundation of Flexible IT.
Attain more control over APPLICATION, NETWORKS and DATA

What if Your Data Center Enabled You To …

Become more AGILE

- Choice
- Flexibility
- Speed-to-market

- Quickly adapt to business needs
- Stay in control through greater supplier choice
- Directly connect to the partners and serves you need

Realize better PERFORMANCE

- Speed
- Reliability
- Scale
- Security

- Higher application performance
- Improve the end user experience
- Improve scalability and availability
- Meet critical security and compliance objectives

Become more COST-EFFICIENT

- Improve integration
- Efficiently consolidate
- Cloud-enablement
- Leverage increased vendor choice
- Transition CapEx to OpEx

FLEXIBLE IT DELIVERS PERFORMANCE AND AGILITY
Optimize Service Consumption

A solid network and data foundation enables a variety of consumption strategies, such as public, private and hybrid clouds, as well as managed services and SaaS-based offerings to augment or replace legacy systems.

Distribute Applications

To improve application performance, multinational law firms must architect globally distributed applications. By distributing applications and data across the network, latency to various geographies is reduced and the end user experience is enhanced. This approach can also help law firms more easily comply with data privacy and security requirements, which can vary in different geographic locations.

Identify and Locate End Users

Start by understanding who the end users are, where they are located and what their needs are. Today, end users aren’t just employees; they are also customers, suppliers, partners and contractors. Document the locations, devices and connectivity methods they use, along with the applications and data access they require.

Establish Application Requirements

Determine the data, network and application experience that end users expect. Assess both bandwidth needs and latency limits necessary to deliver a superior end user experience for each application.

Optimize the Network

Law firms can improve scalability, performance and cost by deploying Network Performance Hubs (NPHs), which are IT service delivery nodes deployed in carrier-neutral data centers that provide connectivity through a variety of service providers. Through these network-rich carrier-neutral data centers, firms can optimize their connectivity services to incorporate options such as Layer 1 direct connection, Layer 2 Ethernet and Layer 3 Internet, as well as interconnection to mobile networks.

FIVE STEPS TO FLEXIBLE IT

1. Identify and Locate End Users
2. Establish Application Requirements
3. Optimize the Network
4. Distribute Applications
5. Optimize Service Consumption
Katten Muchin Rosenman LLP is a Chicago-based full-service law firm with 600 attorneys in the U.S., Shanghai and London. The firm’s IT infrastructure consisted of centralized systems hosted at the firm’s Chicago headquarters, plus some local resources deployed inside regional offices. By 2009, Katten experienced multiple failures of its main data center’s computer room air conditioning units, and the firm was faced with the possibility of running out of electrical capacity. In addition, Katten’s data centers in offices around the U.S. periodically experienced outages, resulting in significant lost productivity for the firm.

Upon opening a London office in 2011 that lacked dedicated IT personnel, the firm began to explore commercial data center hosting providers, and quickly determined that a single, global provider would mean fewer vendors and contracts and would result in a consistent data center experience worldwide. Katten also wanted a network-neutral data center to secure competitive carrier pricing and a wide range of choice, and the firm made a priority of choosing a data center provider with Tier III or higher standards for its Chicago colocation facility, as well as state-of-the-art security systems and dedicated cage space.

Katten chose Equinix, which offers vendor-neutral data centers in Katten’s desired locations and the firm’s required security and redundancy features. Equinix’s global footprint allowed Katten to decouple data center locations from its law offices, while still maintaining office proximity to IT infrastructure. Taking its servers out of its offices enabled Katten to create a more agile IT approach that allows the firm to move offices as its business grows without suffering the IT disruption of moving its data centers.

Equinix’s global footprint enables the firm to distribute latency-sensitive applications geographically to boost performance at Katten’s branch offices. With Equinix as its data center provider, Katten now has a rich set of options for leveraging direct and secure interconnectivity to hundreds of cloud providers. This means Katten is able to create a hybrid cloud-computing environment for deploying infrastructure in the data center or in public clouds via a direct interconnection, achieving the perfect balance of cost, performance and security.

“As we continue to grow, we may need to keep moving our offices. With Equinix, office moves are significantly easier and less costly, and we don’t have to worry about IT downtime.”

– Alexander Diaz, Manager of Enterprise Development, Katten Muchin Rosenman LLP
At Equinix, we understand the importance of Flexible IT to today’s multinational law firms. We offer the expertise and solutions to help legal IT teams transition their data center model to be more responsive to end users while containing IT costs and complexity.

Only Equinix offers more than 95 International Business Exchange™ (IBX®) data centers across five continents to put you closer to end users. Platform Equinix™’s global geographic coverage can reach populations in all the world’s top business markets within 10 milliseconds. Our globally consistent data centers make it faster and more efficient to deploy across multiple locations. They’re all built on the same operational foundations, offering an average of 99.999% uptime across our global platform. That, plus world-class physical security and N+1 redundancy, ensures Equinix can support mission-critical data center operations.

Equinix also provides complimentary expert services to help companies implement their location-based strategies for improving data center performance. Our solutions architects take a consultative, vendor-neutral approach to help customers make the best data center decisions for their business, including how to bridge networks, data centers and cloud/IT infrastructure to accelerate application performance. Custom tools such as the Equinix Latency Modeller help enterprises determine where to house infrastructure to meet application performance objectives for markets around the globe.

Finally, Equinix offers a broad choice of service providers within its data centers to help enterprises connect to customers and partners in the optimal way. For example, with the 950+ networks, 450+ cloud providers and 600+ IT service providers on Platform Equinix, companies can choose the IT services and network routes that work best for their businesses. Plus, with more than 4,000 companies inside our global network of data centers, customers are likely to find many business and supply-chain partners to connect to in order to streamline operational processes and data transfers.
About Equinix

Equinix, Inc. (Nasdaq: EQIX), connects more than 4,000 companies directly to their customers and partners inside the world’s most networked data centers. Today, enterprise, cloud, networking, digital media and financial services companies leverage the Equinix interconnection platform in 31 strategic markets across the Americas, EMEA and Asia-Pacific.

By connecting directly to their strategic partners and end users, customers are forming dynamic ecosystems inside Equinix. These interconnected ecosystems enable companies to optimize the performance of their content and applications and protect their vital digital assets.