



Benefits of Hosting

Superior Reliability and Security

When T2 hosts your T2 Flex™ application, your organization will realize new efficiencies, costs savings and improved customer service. T2 focuses on technology, taking care of all:

- Windows security patches
- Oracle Patches
- Anti-virus updates and upgrades
- Network firmware upgrades
- Server and other hardware upgrades, maintenance and repair
- Automatic T2 Flex upgrades

Always Connected

Because T2 Flex is a fully-hosted, web-based application, you have access to your parking information anytime, from anywhere:

- Real-time monitoring
- Real-time view of parking facility data
- Remote facility management

Highly Secure Environment

The T2 Hosting Environment uses the latest technology to ensure that equipment is always safe:

- Hosting facility processes are SSAE-16 compliant
- Biometric hand scanners
- Closed circuit video
- 24 hour on-site security
- 24 hour on-site technology staff

T2 Hosting Environment

T2 Systems has partnered with Expedient Indianapolis, a state-of-the-art, 40,000 square-foot commercial data center located in Carmel, IN that provides top-notch safety, security, power, and internet connectivity.

T2's Private Cloud Highlights

T2 knows hosting. T2's private cloud utilizes cutting edge technology and the latest hardware and software:

- Storage: Multiple EMC VNX SANs (Storage Area Networks) utilizing the latest solid state (Flash) technology
- Compute: Cisco UCS Blades with the latest Intel server processors – 8 and 4 core blades with 384 gigs of RAM each

- Platform: Windows Server 2012 High Availability Hyper-V 3.0 Clusters ensure exponential scalability
- Backup: EMC DataDomain for data protection and disaster recovery – including high-speed network link to T2's disaster recovery facility for site to site replication
- WAN Connectivity: Multiple Gigabit Internet drops to T2's Cloud, via true Carrier Neutral Internet
- LAN Connectivity: Cisco Firewalls, switches, and routers
- Security and Monitoring: F5 Web Application firewalls, ExtraHop Network Based APM, Trustwave SIEM and FIM, and Cisco IPS/IDS systems for secure transactions

Protection from External Threats and Data Loss

T2 offers you peace of mind as the T2 Hosting Environment includes hardware and software designed to protect your parking information from outside threats:

- Constant monitoring for viruses and malicious activity
- Virus definition files are automatically updated every day, protecting against viruses from the Internet, as well as files or attachments users might upload inadvertently to the server
- Daily backups are streamed to an enterprise deduplication backup device and then replicated to a second enterprise deduplication backup device at a data center approximately 150 miles away via a high-speed network link
- Oracle archive logs are copied to the enterprise deduplication backup device approximately every 10 minutes and are replicated to a secondary data center
- System is password protected and has an HA firewall pair
- SSL encryption ensures data remains secure during transfer over the Internet

PCI Data Security Standards - Level 1 Service Provider

The benefit to having T2 host your application is that T2 has received its official Report on Compliance (ROC) stating that it meets all standards for PCI DSS Version 2.0. T2 Systems is listed as a PCI DSS Level 1 Service Provider, among very few in the parking industry to achieve this designation and the first PARCS provider to do so.

Much of the work and cost associated with pursuing PCI DSS compliance for your organization is alleviated since T2 has made the investment in becoming a PCI DSS Level 1 Service Provider. And as compliance standards continue to change, T2 will be responsible for keeping up with the latest requirements.

Infrastructure Maximizes Reliability and Performance

T2 leverages the infrastructure and other IT tools that Expedient provides:

- Multiple high-speed Internet drops from multiple carriers
- Dual power from two municipal power utilities (Carmel and Indianapolis), backed up by redundant kinetic fly wheel facility-based UPS and multiple 3000-gallon diesel generators
- Redundant n+2 30 ton Liebert cooling and environmental monitoring systems
- Redundant FM 200 fire suppression

T2 Hosting Environment Maximizes Uptime

- T2's equipment is powered by load balanced and redundant power circuits that are actively monitored via SNMP with a total capacity of over 15 kilowatts
- Redundant independent 100mb uplinks to the hosting environment's multiple-carrier connection to the Internet
- Redundant Cisco network edge routers
- Redundant Cisco communication switches
- Two sets of Redundant Cisco ASA (Adaptive Security Appliances) functioning as firewalls
- Redundant Cisco Layer-3 Converged Networking switches providing 20 gbps to each server and 32 gbps to the SAN
- Redundant Cisco ASA (Adaptive Security Appliances) functioning as VPN concentrators
- Redundant DNS appliances
- Enterprise Grade servers with redundant power supplies and over 3,584 GB (3.6 TB) of RAM
- Clustered Cisco UCS Blade servers for high availability
- Oracle 11g R2 running on Windows Server 2008 R2
- EMC VNX SAN with over 57 TB (over 57,000 GB) of multi-tier storage (including the latest in Solid State technology) and redundant dedicated switching fabric
- Redundant domain controllers

Active Monitoring Keeps You Working

- Flex site availability
- eBusiness site availability
- Server availability
- Memory usage
- CPU usage
- Disk space usage
- User-configured task performance
- User-generated query performance
- Database IOPS performance
- Database memory performance
- Database tablespace allocation
- Network resource utilization
- Per-page performance
- Task execution
- Invalid Database Objects
- Excessive Database Cursor Usage
- Security Events
- Firewall and Routing Data Flows
- Cost Savings and Return on Investment

T2 Systems regularly expands and upgrades the hosting environment capacity to keep pace with the growing customer base. T2 uses a "rolling refresh" model to minimize risk and make sure that everything in the environment is up to date. Servers, hardware and other software are costly and when T2 hosts, you get the benefits of an environment designed to support hundreds of organizations. Using our hosting environment could help your organization experience a cost savings of roughly 30%.

As it relates to PCI compliance, if you host the application yourself you can expect to invest more to properly segment your network for compliance, go through the assessment and remain compliant as PCI standards continue to evolve. This cost can include adding additional servers, network equipment and other security devices and services that can be upwards of \$70K-\$100K in some cases.

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Think Technology. Think Solutions. Think T2.



Since 1994, T2 Systems has been providing the parking industry with solutions that meet the ever-changing needs of parking managers and parkers alike. T2's unified parking management platform combines quality products and services with a commitment to thought leadership and strong customer relationships. T2's intelligent platform of Solutions-as-a-Service (SaaS)—including enforcement, permits, payments, PARCS, event parking and real-time parking availability—is trusted by over 1,000 organizations in the United States and Canada, including universities, cities, towns, private operators, and airports.

For additional information about T2 Systems, Inc. products and services, visit www.T2systems.com.

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