Today’s data center has evolved beyond its roots as a “traditional enterprise data center” — it is substantially more diverse and fluid than its previous incarnation. The core of this fluidity springs from data center managers embracing the concept of a “virtual” data center: in essence, a pool of physical and virtual resources that can be scaled as needed. The flexibility of a virtual data center allows its managers to tailor departmental infrastructure for increased responsiveness for their internal and external clients’ needs.

A virtual data center’s resource pool includes — computational, storage, network, and security infrastructures. These easily scale up and down as requirements change. As a result, more data centers worldwide are adopting a New Normal-informed paradigm. At the same time, the rate of change is soaring inside these increasingly dynamic data center environments.

**Your Situation Now?**

Organizations embark on data center relocations, migrations, or consolidations for different reasons, with examples including:

- Company leadership is seeking cost and resource efficiency
- Your current data center can no longer support your need for growth in terms of space, power, or cooling
- Organizational restructuring such as a mergers or acquisition has created the need to consolidate data centers
- An older data center design has too many single points of failure and the risk of outages is too high for current business needs

**Choose Your Move. Make Your Move.**

There are so many options when considering a data center transition. Strategy is important but it’s vital that you know your baseline and then from there – design a strategy that fulfills all of your goals. The real power of any solution is working with people who understand the world of data center transitions – and can recommend solutions on an unbiased basis. There are many choices to consider, including:

**Data Center Move Strategy:** Ensure the strategy minimizes downtime and risk. Ensure the strategy accelerates move events, reduces planned downtime and minimizes the risk of unplanned outages. The strategy should determine the destination environment for all assets (new data center, cloud, retire, etc.)

- Develop the move strategy based upon the Current State Analysis
- Assign applications and servers to move bundles
- Utilize tools like TDS CostModeler to understand financial impact of migration to the cloud
- Analyze and understand all non-financial reasons before virtualizing/migration to the cloud

**Virtual & Cloud Migration:** Analyze opportunities for virtualization and cloud computing. Analyze organizational and application opportunities for virtualization and cloud computing

- Develop and execute virtual move strategy
- Implementation of new hardware, where appropriate
- Migrate data according to industry best practices
• Assist with cloud provider selection

**Colocation Data Center Site Selection:** Choose the right facility for your organization and its future growth needs

• Create Data Center Requirements Document
• Develop, disseminate and collect RFP’s
• Normalize responses and identify irregularities. Assist with site selection recommendations & contract negotiations
• Consult on build/design/layout of data center space

**Environment? You Can Choose That Too!**

The TDS data center relocation methodology follows a specific process to ensure smooth and successful data center migration events. With the help of our purpose-built system, TDS’s unique TransitionManager, our engineers are capable of executing even the most complex physical, virtual, or hybrid relocations.

**Physical**

The foundation of any relocation event is a thorough inventory of your data center’s assets. Working with your team, our engineers inventory all of the applications, servers, storage, network and other hardware. Dependencies between assets are discovered, and a dependency map of your specific environment is developed to be used as the basis for planning the relocation events. TransitionManager is used to automatically generate custom run books, which serve as step-by-step plans for the move event. As part of the planning process, all assets are tagged with barcode labels generated by TransitionManager, which also maintains complete source and destination room layouts and rack elevation diagrams. During move events every task is controlled and logged by TransitionManager, providing the entire project team with real-time status for all assets. A project manager or lead move engineer performs audits on rail installation, server locations and cabling throughout the move, and a final audit is performed upon completion of the project to ensure move accuracy.

**Virtual**

Planning a “virtual” relocation begins in the same manner as planning for a physical relocation; by identifying the assets running in your virtual environment and their interdependencies. With the dependency maps and information from current systems in hand, our engineers will analyze your current environment, design the new one, and make recommendations on hardware and/or software purchases to run the new virtual environment. In the case of a physical to virtual move, the next step is to install the hardware that will host the virtual servers, and then perform test migrations. After a successful test migration, our engineers will do a complete conversion of your physical servers to their virtual counterparts, as well as converting/migrating any existing virtual servers. For a virtual to virtual migration, our engineers act as project managers for your staff to ensure a smooth transition from your existing servers to their new environment. The final step for both processes is to test application performance in the new environment.

**Hybrid**

Today, data centers aren’t what they used to be. In recent years, data centers have transformed from large physical spaces filled with racks of gear and critical infrastructure into a broad variety of new forms of computing. Virtualization, SaaS and cloud computing are now key elements of most organization’s data center environment and absolutely must be considered and analyzed when deciding how to relocate your data center.

It is worth considering moving data off individual physical servers and into more efficient, and often less expensive, computing environments. But how do you decide which applications to move and where to move them? How do you ensure that business needs

**Clients love TDS …**

“What a great partner! TDS brought the right people, tools and experience to assure a worry-free data center relocation. And with the help of TransitionManager, our complex data center move went off like clockwork with full visibility throughout the process.”

“TDS has helped us grow our server farm by 300% and network traffic by 1000%, all of which has allowed us to become a top 10 travel web site.”

“TDS applied their expert knowledge, organization and TransitionManager software to efficiently migrate hundreds of applications and servers from California to Nevada, with zero unplanned downtime.”

“We needed an experienced partner capable of delivering an end-to-end data center migration project to our new state-of-the-art data center, with no adverse impact to the business.”