End-to-end Integrated Software for Data Center Migrations, Consolidations, Transformations

Transitional Data Services (TDS) created its own purpose-built software called TransitionManager, to improve the entire process of data center transitions from initial discovery, to analysis and planning through run-book development and final move execution. TDS has invested heavily in the development of TransitionManager which is designed to increase both TDS’s and its client’s productivity while lowering the overall risk and costs associated with data center migration initiatives.

Technology Overview

**Discovery**

The discovery phase begins when TransitionManager’s centralized database is populated with relevant data provided by the customer. These data sources can include application lists, reports from VM, database, or storage environments, auto-discovery tools or asset management software. Typically the various documents and tool exports will require mapping and alignment, which is performed collaboratively in the software. In this initial phase, TransitionManager’s value is realized through the efficiency of a single source of information, greatly reducing the discovery timeline as compared to conventional, resource-centric methodologies.

**Analysis and Planning**

A complete understanding of the interdependencies between applications, servers, and other infrastructure is essential to ensuring applications work properly after migration. TransitionManager’s dependency analysis module helps project managers and SME’s visualize these interdependencies and develop move “bundles,” or assets that must be migrated simultaneously. Dependency Maps are analyzed to determine which IT assets “must” move together and which “can be” moved within a specific move event, thus optimizing the overall project while providing flexibility during the project. For each event, a step-by-step plan known as a "runbook" will be required and is created directly in TransitionManager. By carefully planning all migration events to the most detailed level, human errors are minimized and outage windows are shortened.

Real-time visibility into all project activities, improves communication and increases collaboration across the team, while accelerating migration projects and reducing the risk of unplanned outages. Project Management dashboards allow for a real-time view into specific tasks as well as executive level views for status reporting.
Automated Runbook Generation

Carefully planned migration events can minimize or eliminate human errors while significantly shortening outage windows. Step-by-step “runbooks” ensure that proper shutdown, migration and startup procedures are properly sequenced. Traditionally, runbooks were manually created, using tools like MS Excel and MS Project. This painstaking, error-prone and labor-intensive process risked missing essential steps or performing tasks out of order, potentially corrupting databases or worse. TransitionManager has revolutionized the creation of these runbooks; greater knowledge and understanding regarding the interdependency between assets, applications and storage along with customized rules for sequencing enables TransitionManager to automatically generate even the most complex runbooks in just seconds. Runbook templates called “cookbooks” are developed and archived in the system allowing TransitionManager to learn from itself on every project it completes.

Runbook

TransitionManager originated as a solution for managing the frenetic activities associated with major relocation events. Data Center Migration projects often conclude with virtual and/or physical move execution events. Great efficiencies are realized with the use of TransitionManager Command Center, and the phenomena of tasks being automatically assigned, distributed and completed through an interactive, parallel process as opposed to a serial chain of e-mailed tasks or commands barked out over a conference bridge. Real-Time communications and collaboration are at the core of TransitionManager’s efficiency gains where users login to the system and are able to update their tasks in real-time. The task sequencing is updated automatically as each task’s predecessors are completed.

Event Reporting, Improvement, & Disaster Planning

TransitionManager provides a variety of reports, including detailed timelines, task duration averages, task exceptions and incident summaries for table top planning, allowing the team to learn from previous issues and adjust plans for the next transition. The software allows for comprehensive real time reporting prior to, during, and after move events. TransitionManager also has different roles built into the system allowing administrative privileges in the command center giving the project manager an overall view of the status of an event while allowing for triage on any potential or current issues. Individual users have the ability to create customized views in real time, based on a variety of data points including, but not limited to, asset names, asset types, timing, status, personnel, roles, category or a variety of other customizable data points. Additionally, keeping TransitionManager up-to-date after the completion of the project has many benefits. For example, TransitionManager can quickly generate complete runbooks from current configurations for future disaster recovery planning and execution.