

DEPARTMENT OF
**TECHNOLOGY
SERVICES**

The Consolidation Approach:
An Evolution of Excellence



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Executive Summary

Introduction

This document describes the background, approach, schedule, and next steps required to establish the State Department of Technology Services and complete the Data Center Consolidation Project (Consolidation Project). The Consolidation Project establishes the Department of Technology Services (DTS), under the jurisdiction of the State and Consumer Services Agency, and covers the integration of the Health and Human Services Agency Data Center (HHSDC), Stephen P. Teale Data Center (Teale) and the Department of General Services' (DGS) Office of Network Services (ONS). Consolidation is defined as an integration of organizational and technical functions. It does not call for a physical merger of staff and equipment in a single physical facility. This consolidation excludes the HHSDC's System Integration Division.

The strategic and historical underpinnings for this initiative come primarily from the Legislative Analyst Office (LAO)¹, California Performance Review (CPR) recommendations SO 1, SO 2, and SO 3, Governor Arnold Schwarzenegger's August 24, 2004, Executive Order S-13-04 and the November 2004 California Information Technology Strategic Plan (CAITSP) published by the State Chief Information Officer (CIO).

Key stakeholders have begun initial preparation, planning, and analysis including the establishment of advisory committees and working groups. They have begun the analysis of the three existing organizations and their functions to aid in the process for legal and legislative approvals. Initial project concepts, plans, and schedules have been developed. This plan builds upon this existing work and specifies a detailed approach for executing the remainder of the project.

The legal authority for the Data Center Consolidation Project comes with the approval of the Governor's Reorganization Plan (GRP). As prescribed by the GRP, the newly established DTS will operate under the governance of a board of directors called, the Technology Services Board (TSB). The TSB sets the strategic policies for DTS.

Approach: Merge then Integrate

The detailed methodology required to reach full consolidation follows two stages: first Merge, then Integrate.

The Merge stage involves the establishment of the DTS followed by an organizational repositioning of the existing HHSDC, Teale, and DGS ONS. The Merge will place similar functional units from both data centers under a single executive at the DTS Division level. The DGS ONS will move intact and report to a single DTS executive. The sister units within the data centers, will continue to operate largely as they do now but will report to a single position within the DTS.

Following the Merge stage, the project will begin the integration of the operational and technical functions of the data centers within the DTS. The goal of the Integrate stage is to remove overlap within the data centers and introduce

¹ Legislative Analyst's Office, 2003-04 Budget Bill Analysis, February 2003

best practices into each DTS division. No longer will the sub-divisional organization be aligned with the two data centers. Instead, there will be a single sub-divisional organization aligned by function. The completion of the Integrate stage marks the establishment of a consolidated data center function for the State. Because of the technical, security, and recoverability advantages inherent in maintaining two data center locations, both of the major data center facility locations will continue to be operational, but they will function as a single data services organization.

The two data centers, and DGS ONS, become one, both functionally and organizationally, as illustrated in Figure 1 - DTS Organization Evolution.

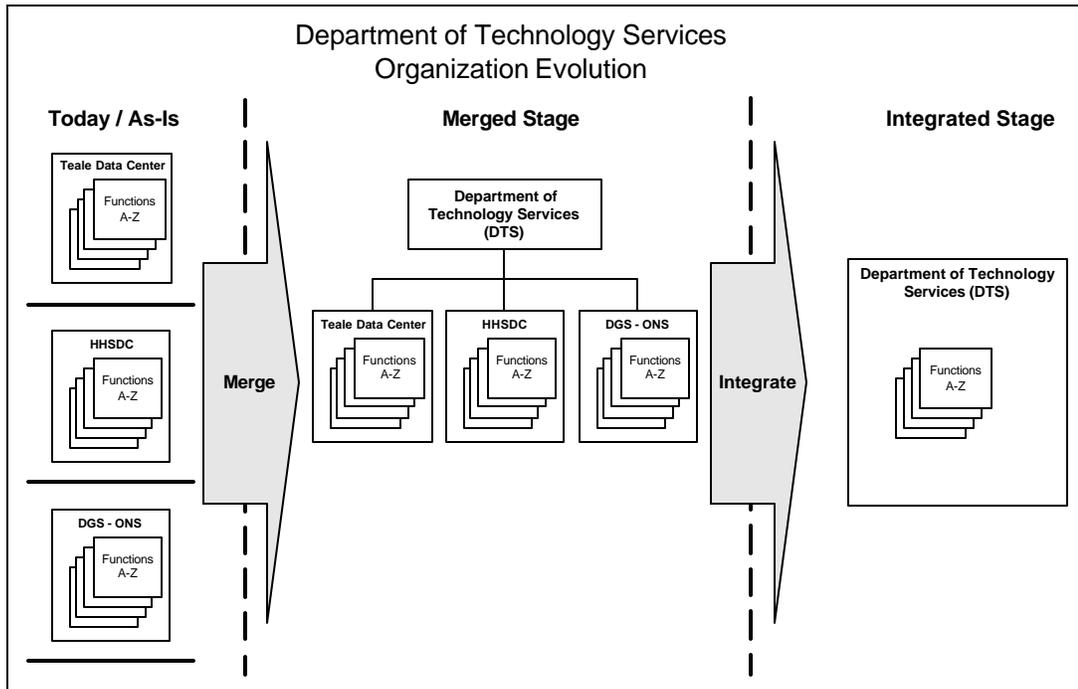


Figure 1 - DTS Organization Evolution

Introduction

Overview

The purpose of this plan is to outline the approach and schedule to establish the DTS, which will reside under the jurisdiction of the State and Consumer Services Agency. This effort encompasses the integration of the HHSDC, Teale, and the DGS ONS. Consolidation is defined as an integration of organizational and technical functions. It does not imply a physical move of staff and equipment to a single data center facility. The Consolidation Approach describes, at a high level, the tasks required to complete the Consolidation Project. Consolidation is anticipated to begin with the start of the FY 2005-06.

Background

For close to a decade, several authorities – including the LAO², the State Department of Finance (DOF), and the State CIO have recommended consolidation of the State's data centers to leverage advancements in technologies, maximize employee resources, and to reduce state spending. California Governor Arnold Schwarzenegger's August 24, 2004, Executive Order (S-13-04) directs the consolidation of the Stephen P. Teale Data Center and Health and Human Services Agency Data Center under the management authority of the newly established DTS. The Executive Order further prescribes the realignment of the broader State's information technology (IT) infrastructure and resources. Examples of realignment initiatives include statewide:

- Standardize servers and networks.
- Develop enterprise applications.
- Consolidate IT procurement/contracts.
- Enhance security and privacy.

The Consolidation Project will be accomplished to form a foundation and position the State for the broader IT realignment.

Why are we consolidating?

The most powerful reason to consolidate is to improve the process by which the new DTS and its customers deliver reliable, timely, cost effective and efficient telecommunication and technology services statewide, so California residents will receive government services when and where needed. The objectives of consolidation are to:

- Increase responsiveness to the data center customer's needs.
- Promote more effective and efficient management of the State's operations.
- Eliminate duplication of services within the State's data centers.
- Provide economy of operations and improve service delivery capacity greater than that provided by the separate structures.
- Enable greater transparency in setting and reducing rates.
- Improve the value realized from State and Federal funds.
- Implement best practices to achieve operational consistency and efficiency.
- Improve the security, quality, and risk management of the state's information systems.
- Enable participation in performance based budget initiatives for state programs.

To achieve these objectives Governor Schwarzenegger's Executive Order S-13-04 and the November 2004 California Information Technology Strategic Plan prescribed data center consolidation.

Consolidation Approach Overview

Scope of consolidation

It is important to distinguish what is in and what is out of scope of the Consolidation Project.

Consolidation is defined as the integration of the operational and technical functions of Teale, HHSDC, and DGS ONS.

Consolidation does not include:

- Undertaking the broader statewide IT realignment efforts.
- Establishing a statewide governance structure for technology.
- Establishing policies for the management of technology resources.
- Affecting the Systems Integration Division of HHSDC.

As per the Governor's Reorganization Plan (GRP) for data center consolidation, governance and strategic policy setting for the DTS are the responsibility of the Technology Services Board.

Establishing DTS

The newly formed DTS can be thought of as the "end-product" of the Consolidation Project. DTS will be a new organization within the State and Consumer Services Agency charged with the authority and responsibility for the streamlined functionalities of the two data centers and to deliver effective telecommunications and technology services statewide.

The success of the Consolidation Project and the ongoing operation of the DTS require the formation of both temporary (i.e., CMO, Data Center Consolidation Steering Committee, and TAPG) and permanent organizations (i.e., DTS and TSB) defined below.

The temporary organizations provide the guidance, oversight, and management required to establish the DTS. These organizations dissolve upon the completion of the Consolidation Project and include the following:

Consolidation Management Office - provides project management to lead and manage the consolidation project during the transformation from three organizations into one. As the data center consolidation is conducted, State agencies will require continuous delivery of services to existing systems. Keeping both the current and new activities on track will require focused leadership and fully dedicated resources. CMO resources will be different from those managing the daily operations of the existing entities. This organization will cease to exist after the Consolidation Project is complete. The project duration is estimated to be 18 to 24 months.

Data Center Consolidation Steering Committee – provides project sponsorship from each key stakeholder including: Agency Secretaries and Agency Information Officers from the Business, Transportation and Housing Agency (BTH), Health and Human Services Agency (HHS), and State and Consumer Services Agency; the State CIO; Directors from DOF and Homeland Security; the

Chief Information Officer from the State Controller's Office. As DTS becomes formalized this Steering Committee will be replaced by the permanent governing board to be known as the Technology Services Board.

Technology Advisory Peer Group (TAPG) – provides advice on the Consolidation Project from private sector leaders who have been through large technology mergers. Members, will include former Chief Information Officers and former company presidents of leading technology firms who possess broad experience with successful consolidation projects. The group charter, being developed by the State CIO, will establish the project scope and necessary operating processes and procedures including the schedule of meetings (i.e., quarterly).

The permanent organizations include:

Department of Technology Services - The DTS will be the general-purpose technology service provider for the Executive Branch with accountability to customers for providing secure, responsive, and cost effective telecommunication and technology services statewide. The DTS will provide its services in support of the goals and objectives of the CAITSP and in accordance with the policies established by the TSB.

Technology Services Board - The TSB, the permanent "board of directors" organization over DTS will:

- Create an open, accountable corporate governance structure that will ensure the DTS operates in the most appropriate customer-focused and efficient manner.
- Approve the DTS budget, rates, and plan of operations

Financial Considerations

The financial considerations for this effort are two-fold. First, the newly established DTS will be continually appropriated as specified in the GRP. Secondly, the financing of the Consolidation Project will be absorbed jointly through the current authority granted to HHSDC and Teale.

For the Consolidation Project, the financial strategy comprises two objectives:

- 1) Fund the costs of the Consolidation Project within existing resources. This approach maximizes the use of existing funding sources and fully leverages the limited resources available for the Consolidation Project.
- 2) Obtain and maintain project alignment among all key stakeholders. It is critical to establish and maintain broad support for the financing of the Consolidation Project and create realistic expectations of the timing and magnitude of the financial benefits that will be realized as a result of the Consolidation Project.

The rationale behind this strategy can be summarized as follows:

Since all key stakeholders will approve the Consolidation Approach, and that additional funding (cash) for Consolidation Project expenditures will

not be available, the DTS accepts the challenge of funding the effort within existing resources (Objective 1). DTS recognizes in order to ensure the existing resources will not be reduced prematurely through budget or rate reductions, an understanding of how the costs and savings of the project will be managed and realistic expectations for the timing and magnitude of the financial benefits will be delivered to customers (Objective 2).

Project Duration

Although informal preparatory activities are underway for consolidation, the official start of the Consolidation Project is contingent on the approval of the GRP. It is anticipated with the passage of the GRP, the Consolidation Project will begin the first quarter of 2005 and conclude by the end of 2007.

Approach

Overview

The approach for performing the Consolidation Project consists of two stages, Merge and Integrate.

The Merge stage concentrates on quickly establishing the DTS by focusing on the consolidation of functionally similar organizations under a single organizational structure. This process moves the functions under the same organizational structure, and allows them to function in the same manner as before the Merge. Upon completion of the Merge stage, there will be a Teale, and HHSDC substructure under each merged Division. The DGS ONS will move intact and report to a single DTS executive.

The Integrate stage completes consolidation by creating a single functional organization within DTS. Each Division will be organized without duplicate sub-functions. The organizations become one, functionally and organizationally, as illustrated in Figure 3 - DTS Organization Evolution.

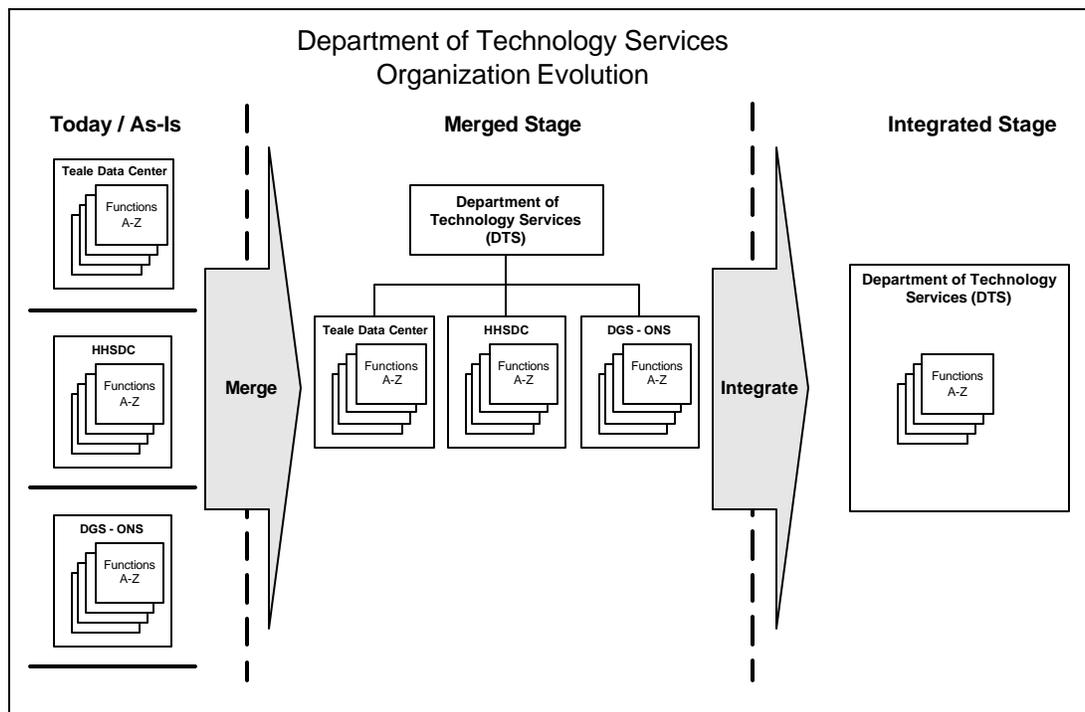


Figure 3 - DTS Organization Evolution

The Consolidation Management Office (CMO) will lead and manage the Consolidation Project during both stages. The CMO will provide the focused leadership for the transformation activities and independent, objective project management.

The consolidation of the State's two largest data centers comprises a series of complex projects with an array of human resource, technology, policy and political issues that require careful coordination and expert management. Moreover, while consolidation is being conducted, their clients will require continuity of services on which they depend. Maintaining operations while conducting the Merge and Integrate approach to consolidation will require focused leadership and dedicated resources.

The benefits of this two-stage approach will:

- 1) Establish the final fully integrated DTS in a rapid and efficient manner.
- 2) Minimize risk by compartmentalizing the initial DTS establishment and Merge stage from the more complex functional integration tasks.
- 3) Allow more time for the detailed analysis required for the Integrate stage while moving forward with the establishment of the DTS organization.

Consolidation Principles

Consolidation of the State's two existing data centers and the transference of DGS ONS into a single organization is a complex effort. The necessity of the consolidation effort to minimize the impact on each entity's customers is paramount. Consolidation will occur while each organization maintains the existing level of service required by their respective clients. In addition, the impact on the personnel of the organizations must be considered. To ensure decision-making during the Consolidation Project takes into consideration these primary stakeholders and their requirements, the following Consolidation Principles will be adhered to throughout both the Merge and Integrate stages:

- 1) Do no harm during or as a result of consolidation - All services to clients of both data centers remain at contractual service levels or better.
- 2) Execute consolidation with absolute integrity and appropriate transparency.
- 3) Begin and maintain open two-way communications with all stakeholders.
- 4) Base newly designed processes on industry best practices (i.e., Information Technology Infrastructure Library [ITIL], International Electrical and Electronics Engineers [IEEE], Software Engineering Institute's Capability Maturity Model [CMM]).
- 5) Consider efficiency, speed, cost, risk, and quality when deciding to consolidate similar systems using existing or new systems.

Merge Approach

Why?

The purpose of the Merge stage is to quickly establish an operating DTS organization. As illustrated in Figure 4 below, this is accomplished through adopting changes to the reporting structures at the highest organizational unit possible (preferably at the Division level), and maintaining most of the existing organizational structures for HHSDC and Teale. The organizational units within each DTS Division continue to perform their day-to-day activities the same as before the Merge stage, with the exception they report to a single DTS Deputy Director. During the Merge stage, the DGS ONS will move intact and report to a single DTS executive.

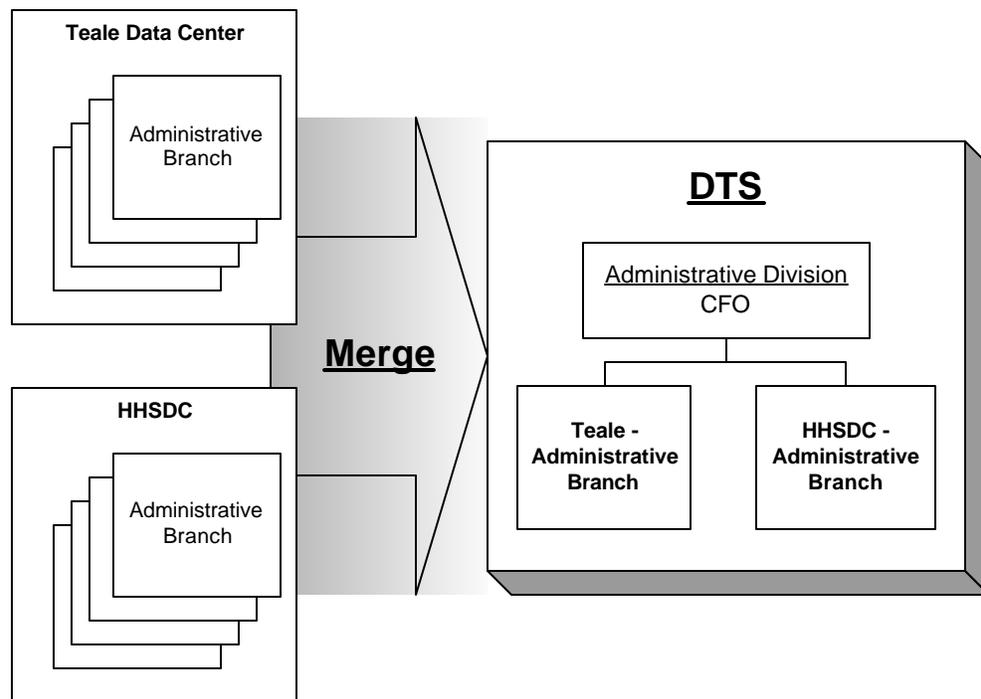


Figure 4 – Merge Stage Example

How?

When the order to proceed with consolidation is executed, the Merge stage will commence. The process will create the DTS superstructure, emplacing the Divisions with their Deputy Directors, and make the required policy and organizational changes for each functional unit from Teale and HHSDC to report to the appropriate DTS Division.

Even though the Merge stage is the first step toward consolidation, the creation and establishment of the Consolidation Management Office must be completed before this stage can begin. For additional information related to the creation of the CMO, please refer to page 15.

The major tasks and activities of the Merge stage include the following:

- Approve the GRP – the establishment of the DTS is dependent on the approval of the GRP. While some work on consolidation can be undertaken before the GRP is in force, the official creation of the DTS cannot occur without this authority.
- Assign DTS executives and DTS division deputies – in order to establish any organization, capable leadership must be identified and in place. Interim executives and deputies will be assigned to lead the new department / divisions for this initial phase until the formal hiring process is complete. This will establish and maintain the momentum of the Consolidation Project. As an additional consideration, the re-assignment of management already in progress to these interim positions provides continuity of leadership, an important stability factor for the management and staff reporting to the newly assigned executive.
- Develop DTS mission statement – the DTS executives and deputies must develop the organization’s mission statement describing the DTS’ overall purpose.
- Develop DTS Division-level mission statements – each DTS Division is charged with providing certain functions, a single, well-written mission statement clearly communicates the purpose of each Division in support of the DTS’ overall mission.
- Complete the high-level organizational analysis to decide which units will report to which DTS Divisions.
- Reassign functionally similar units within Teale and HHSDC into the appropriate DTS Division.

During the Merge stage, the organizations performing similar functions within Teale and HHSDC move intact, refer to Figure 5 below, reporting to the appropriate Officer designated in the DTS Organization Chart. By moving the boxes on the organization chart from one entity (i.e., Teale) underneath the newly formed DTS, the consolidation can be achieved quickly.

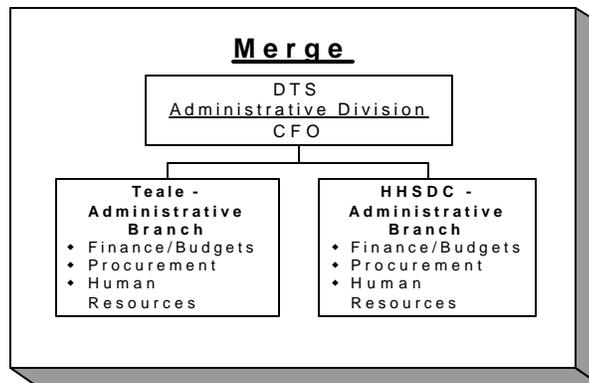


Figure 5 - Merge Example

Integrate Approach

Why?

To realize all of the benefits and efficiencies of consolidation, the organizations must be fully integrated and not merely combined. The Merge stage allows the DTS to be established and for the leadership to be emplaced. The Integration stage eliminates duplicity and reengineers the organization's functions and systems to incorporate best practices and enable the future of California State Government information technology.

How?

The second stage, Integrate, is more difficult and time consuming than Merge. Integrate focuses on the establishment of a single cohesive functional organization, as illustrated below in Figure 6:

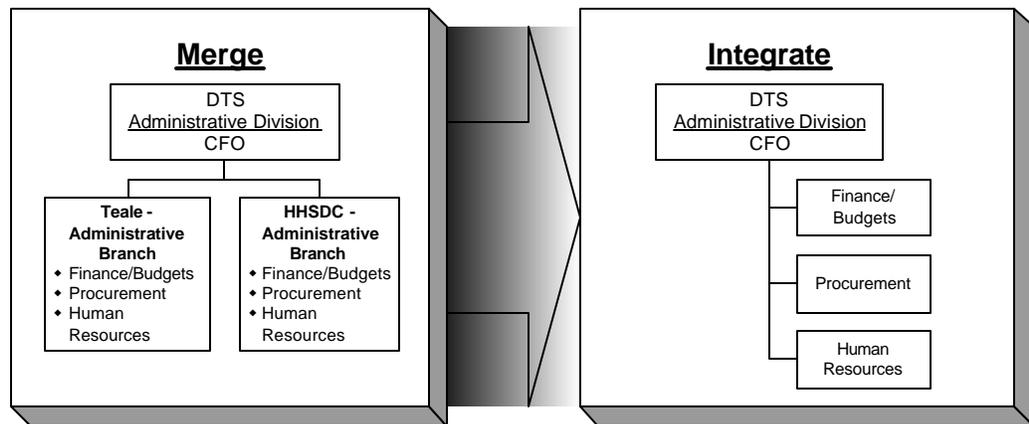


Figure 6 - Integrate Example

To Integrate, a number of activities must be performed including, but not limited to, the following:

- Define/refine business processes and service delivery models.
- Analyze information technology systems and standards.
- Establish integrated sub-organizations.
- Create duty statements for all staff within each sub-organization.
- Dissolve the duplicated functions and reorganize under the new sub-organization structure.

Over the past few months, much of this integration preparation work has been initiated by joint workgroups consisting of personnel from Teale, HHSDC, and DGS ONS. Progress has been made on many fronts including initial planning and analysis, establishment of advisory committees, analysis of the three existing

organizations and their functions, and the development of integration concepts, plans, structures, and schedules. In addition, these workgroups will continue to work on the Integrate tasks while the Merge stage is underway. Much of the analysis work can be performed in advance while the Merge stage is being conducted.

The Administration Division is the natural choice as the first merged organization to commence the Integrate stage. Having centralized and integrated human resource, procurement, budget, and finance functions will allow DTS to act as a single entity. This approach will allow DTS to prove and practice the integration approach prior to attempting to integrate the more technically and operationally complex divisions. The initial analysis of similar administrative functions within Teale, HHSDC, and DGS ONS has been completed. For these reasons the DTS Administrative Division is a priority for the Integrate stage. Figure 7 - Administrative Division Integration below shows the progression from the Merged to the Integrated stage and provides sample functionalities for illustration.

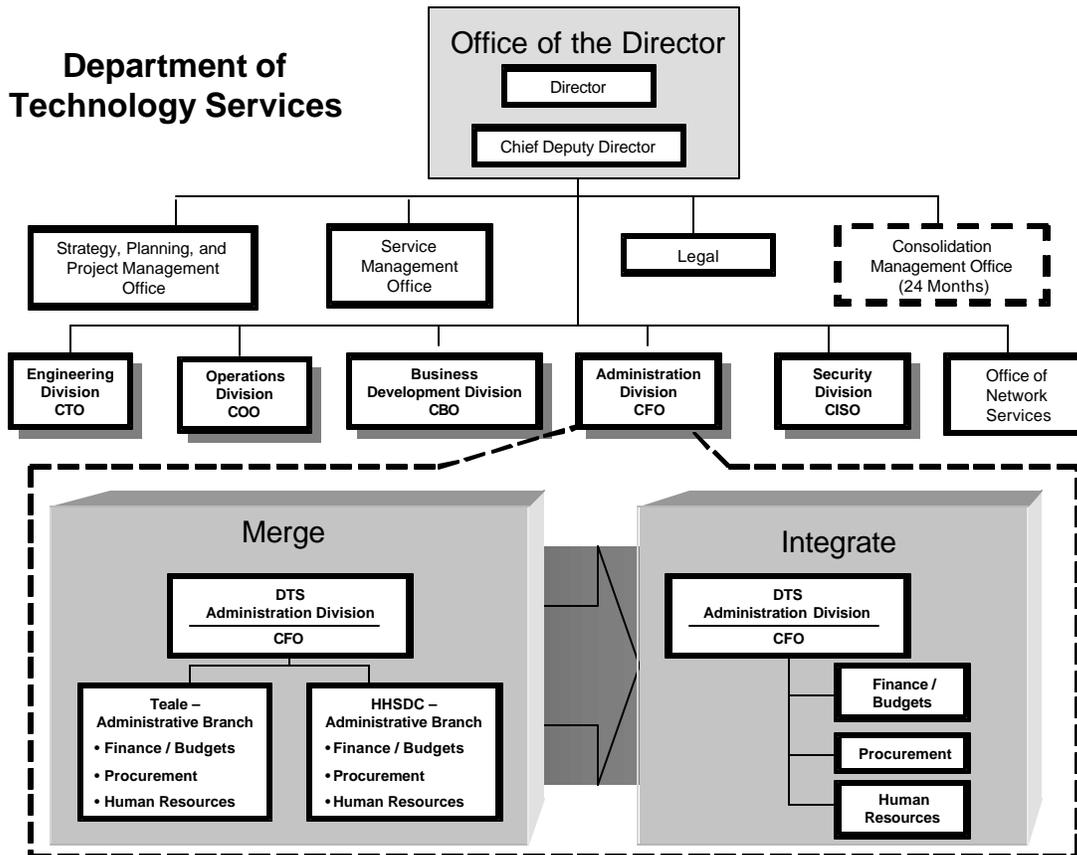


Figure 7 - Administrative Division Integration

Consolidation Management Office

Overview

The Consolidation Management Office will provide a coordinated, independent and objective approach to manage the data center Consolidation Project. The CMO will leverage both external (consultant services) and internal (state) resources to form an interdisciplinary project management office with the capability and capacity to plan and successfully carry out consolidation.

The CMO will supply the focused leadership required for the success of the Consolidation Project, and an independent, objective approach to its management. The CMO will provide the essential: leadership and planning; project management and organization; risk, issue and quality management; communications and change management; and, stakeholder relationship management.

CMO Structure and Responsibilities

The CMO will be organized as a strong project management office, with broad responsibilities for planning, project management, problem resolution, and above all, leadership. This leadership is the most critical element of the CMO because the most difficult challenges to overcome will be human rather than technical.

A capable CMO will be centered on a highly skilled team committed to managing the initiative's complex issues and demands. Each team member will specialize in the most critical areas of policy, governance, organization, finance, technology, data center operations and customer service.

The CMO will be established for a period of up to 24 months, with each team member being a limited-term appointment. The CMO Structure is depicted in Figure 8 on the following page.

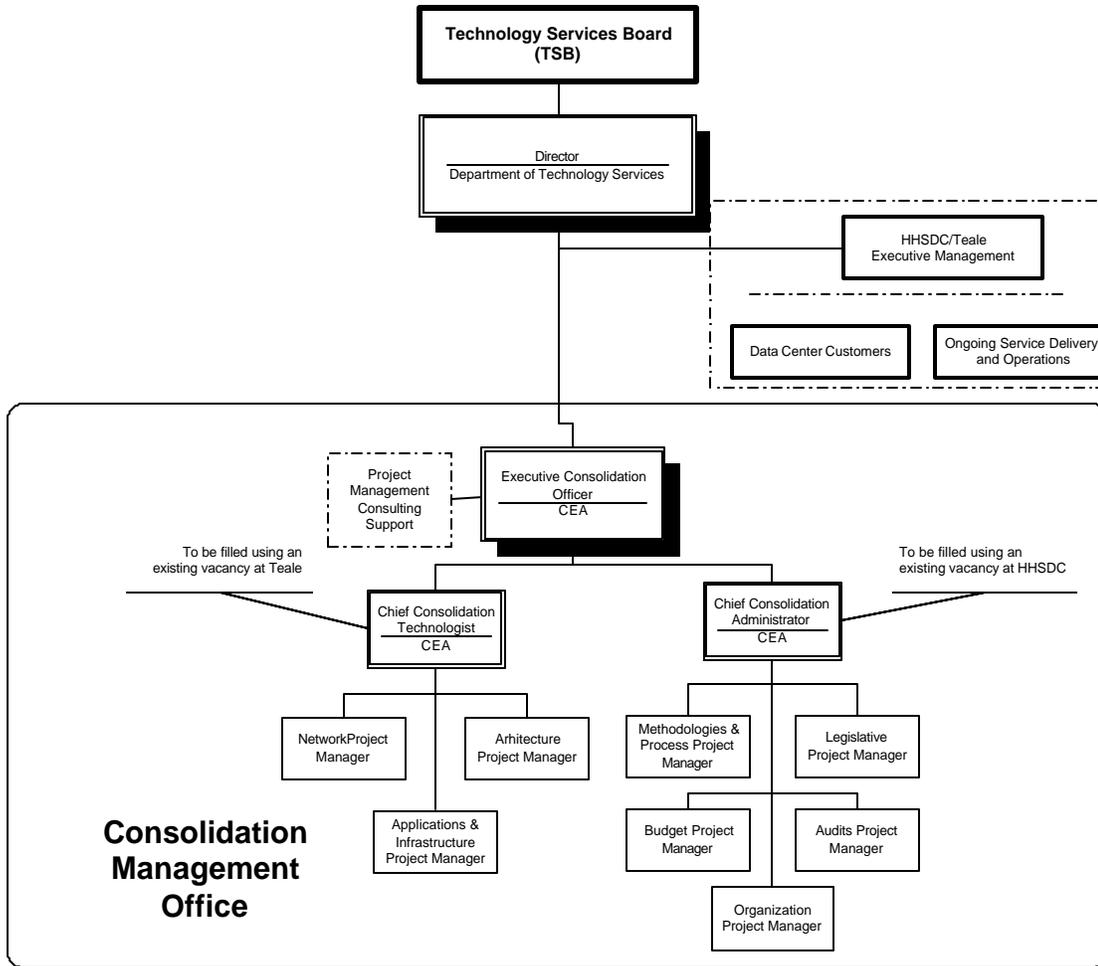


Figure 8 - CMO Structure

Successful data center consolidation depends on getting the people who are currently involved in supporting disparate technologies to willingly contribute their unique knowledge and support to the consolidation. They will not do this unless they understand where the consolidation is headed, how it will affect them, how their individual concerns will be addressed and what the value of it will be to the state and to them. The CMO is therefore a change management leadership body. The following paragraphs highlight some of the major activities and corresponding results of the CMO:

Leadership Activities - As stated above, the most critical activity of the CMO is to provide the change leadership. This leadership will keep the initiative focused. It will specifically address the human challenges associated with bringing two very different operational cultures together into a single organization and then merging them with other consolidated and newly established functions.

Planning - The critical leading activity of the CMO will be to develop a detailed project plan for the Consolidation Project.

Scope and Objectives Management - The clarity of purpose and mandate for the CMO will be contained in the scope and objectives. The CMO will plan the implementation of the Consolidation Project based on a scope definition provided by and with the support of executive sponsors, and with direct traceability to Executive Order S-13-04 and the California IT Strategic Plan.

Communication and Management Reporting - Effective communication is essential to the success of data center consolidation. It can be expected this initiative will be under close scrutiny from the public, the Legislature, and control agencies. The CMO will develop a communications plan and reporting process that makes sure the right information is provided to the right people at the right times.

Stakeholder Relationship Management - The CMO will ensure communication and interaction with key program stakeholders at all levels. This activity will facilitate buy-in on critical project decisions and overall program direction.

It is important to note that the CMO must be fully established and operational as a prerequisite for undertaking the initial Merge stage.

Next Steps

The consolidation effort has already begun in many respects with the formation of the Data Center Consolidation Steering Committee and numerous workgroups currently performing analysis into the organizational and technical hurdles associated with this extensive undertaking. The immediate next steps for completing the consolidation effort include:

- 1) Gather support and approval of this Consolidation Approach within the Executive and Legislative Branches.
- 2) Finalize the Technology Advisory Peer Group.
- 3) Establish the Consolidation Management Office.
- 4) Establish the Technology Services Board.
- 5) Develop detailed plans for the Merge stage to be executed upon the approval of the Governor's Reorganization Plan (GRP).
- 6) Obtain GRP approval.
- 7) Begin the Executive assignments for the DTS organization and the realignment of staff, as required.

Consolidation Approach Approvals



California State Data Center Consolidation – Consolidation Approach

Consolidation Approach Approvals Executive Sponsors

Governor's Office, J. Clark Kelso, State Chief Information Officer

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Sunne Wright McPeak, Secretary
Business, Transportation and Housing Agency

Date

Kim Belshe, Secretary
Health and Human Services Agency

Date

Fred Aguiar, Secretary
State and Consumer Services Agency

Date

Fred Klass, Program Budget Manager
Department of Finance

Date