

Cross-Boundary Collaboration and Partnerships

California County/State Network Simplification Project

Executive Summary

During the Y2K experience, the California State agencies and departments, and California counties were required to document the various connections to and from one another to determine if Y2K issues were present and for business contingency planning. Using network scanning tools, the State and the counties began a 'discovery' process to clearly define and determine the network topology and connections between the various governmental organizations. Not surprisingly, connections were found on both sides that neither organization knew about. These were sighted as weak links in the State/County network infrastructure.

The 'report' that resulted from this effort, clearly demonstrated where the State and counties had unnecessary redundancies and replication, costing the taxpayers of California potentially millions of dollars. As a result, discussion began at a California County's Information Services Directors Association (CCISDA) meeting between the two largest state data centers (Stephen P. Teale Data Center and the California Health and Human Services Agency Data Center [HHSDC]) and CCISDA about the possibility of simplifying these network configurations to assist the State and counties to increase network efficiencies and cost effectiveness, plus the added bonus of a more secure and robust network. Beneficiaries would be the State and local governments running their programs across a simplified network. Recovery and maintenance would also be much easier to perform and the new network would be more secure. Of course, the biggest beneficiaries are the California taxpayers.

An agreement was reached between the State and county representatives, where the CCISDA organization supported the initiative and selected the five counties of Contra Costa, Nevada, Santa Cruz, Sutter and Yuba to pilot the new network point of presence (POP) concept. The state departments involved included the Department of Justice, the new Department of Technology Services ([DTS] formerly HHSDC and the Stephen P. Teale Data Center), the Department of Motor Vehicles, and the Secretary of State.

A charter was drafted depicting the project, and frequent meetings began between the state departments and pilot counties on the design of the POP. At that time, the POP concept was agreed upon and significant progress was made with the pilot entities. At present all applicable counties have completed or are near completion with their migrations to the POP model. As a result of the significant success realized by this collaborative effort, the County/State Network Simplification Project recently won the Outstanding Organizational Collaboration Award at the 2007 California Public Sector CIO Academy.

Project Title - California County/State Network Simplification Project

Business Problem and Solution

Business Problem

Counties continuously emphasized that they had too many circuit connections to the State and wished for a simplified connectivity model with options for redundancy (if necessary and available).

Business Solution

DTS developed several options for the counties based on the county's size and proximity to each other. These options were presented to the five pilot counties in this project, with the goal of simplifying their connectivity to just one connection to the State via a POP router that is owned and maintained by DTS. If the ability existed, adjacent counties could opt to back each other up for operational recovery purposes, in the event of an outage within one county to the State resulting from a hardware or telco-related issue.

Significance to the Improvement of the Operation of Government

The overall total cost of ownership (TCO), return on investment (ROI), and cost avoidance is greatly enhanced via the following cost savings mechanisms:

- Minimized required number of circuits between the State and counties
- Single point of maintenance/configuration on both ends (state and county)
- Simplified network administration of connectivity, which results in shorter troubleshooting timeframes and faster meantime to repair (MTTR)
- Enhanced security perimeter via known ingress/egress points between the two entities

The above bulleted items are just some of the benefits that can significantly improve the operation of both the State and county government from an IT operational perspective.

California has 58 counties that connect into the new DTS. Of these counties, 54 received the new POP configuration. This new POP also had the future foresight to insure that no single point for failure was present. Redundant connections to additional POP's were deployed, as well as mutual aid connections between some counties where they could share each others POPs.

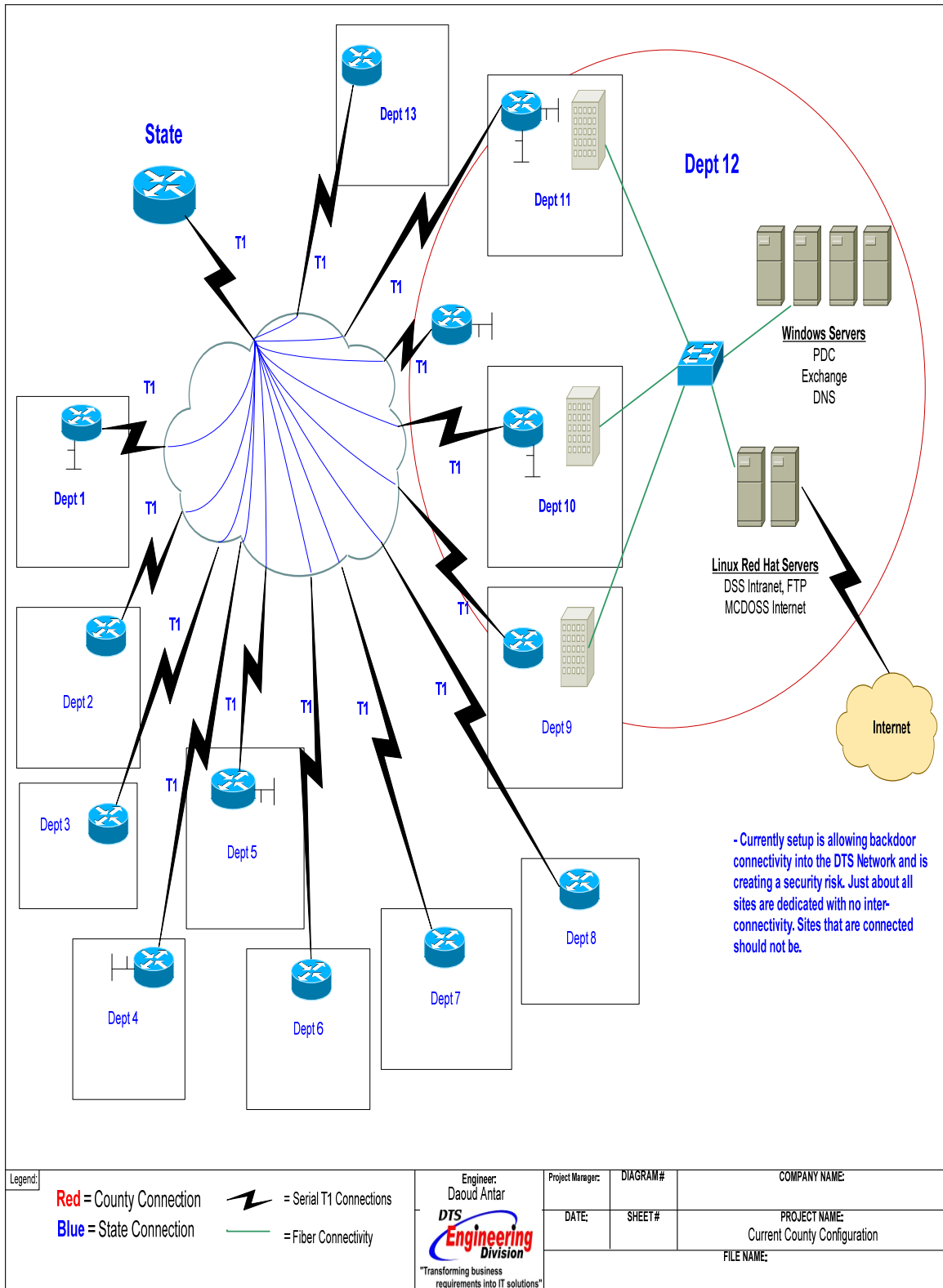
Public Value of the Project

The public value of this project comes in many different forms. Some of these include, and are not limited to, the following:

- A more reliable and faster network service (i.e., you get what you need when you need it)
- Services are cheaper to the end-point recipients (the public) over time, as costs continue to be reduced via this project
- Both the counties and the State will be viewed as being more efficient and helpful in the eyes of the public, due to the increased reliability and availability of the services needed

As a result of the County/State Network Simplification Project, the State realized a cost savings, but more significant is the more than 44 percent cost avoidance in each county that was realized upon migration completion.

Pre-migration (sample design)



Post-Migration (sample design)

