

## WA State Consolidated Technology Services State Data Center Projects

<b>Prepared By:</b>	Consolidated Technology Services
<b>Date:</b> 7/27/2012	<b>Period Covered:</b> August 6 – August 17

### Project Dashboard

Project Name	Scope	Schedule	Budget
SDC Program	Y	Y	G
OB2 Heat Reduction	G	G	G
SDC Facilities	G	G	G
SDC Network	Y	Y	G
SDC Firewall	G	Y	G
SDC Storage Optimization	Y	Y	G
SDC Cloud Utility Service	G	G	G
OB2/CTS Move Phase 1	Y	Y	G
Migrate WSP to SDC	G	G	G
Virtual Tape Library	G	G	G
OB2/CTS Move Phase 2	G	G	G
OB2 Data Center Optimization	G	G	G

**Scope Key:**

- G = No issues are impacting scope
- Y = Issues are being tightly managed, but may impact scope
- R = Unresolved issues are preventing progress of identified scope

**Schedule Key:**

- G = On schedule
- Y = Key milestones are more than 2 weeks late
- R = Key milestones are more than 8 weeks late

**Budget Key:**

- G = Planned spending is within 5% to 10% of agreed upon budget
- Y = Planned spending is within 11% to 20% of agreed upon budget
- R = Planned spending is greater than 20% of agreed upon budget

		Baseline Budget as of 3/6/2012 Revised with NWC, Storage, Firewall Approved Investment Plans		As of 6/30/2012
Phase #	Phase	Budget-Funded	Budget-Unfunded	Actuals
0	SDC Program	\$2,729,570		\$1,473,146
1	OB2 Reduce Heat	\$0		
2	Facilities Op Readiness	\$2,673,817		\$1,267,008
3	NW Core Op Readiness	\$8,592,141		\$6,322,279
4	Firewall	\$2,179,779	\$1,491,800	
5	Storage Optimization	\$4,294,613		\$782,641
6	Cloud Utility Service	\$1,000,000		
7	OB2 Move Phase 1	\$5,807,543	\$893,271	
8	Virtual Tape Library	\$1,950,000		
9	OB2 Move Phase 2		\$4,338,749	
10	OB2 Data Center Optimization		\$1,500,000	
11	Migrate WSP	\$800,000	\$1,200,000	
<b>Total</b>		<b>\$30,027,463</b>	<b>\$9,423,820</b>	<b>\$9,845,074</b>

This graphic shows the baseline budget for all SDC projects (includes both implementation costs and 5-yr maintenance commitments).

## SDC Projects Status

Project	Planned for this Reporting Period (August 6 – August 17)	Status of Work Performed this Reporting Period (August 6 – August 17)	Planned for Next Reporting Period (August 20 – August 31)
<b>SDC Program</b>	<ul style="list-style-type: none"> <li>• Continue work on the following design decisions                             <ul style="list-style-type: none"> <li>○ SDC Storage Switch placement</li> <li>○ SDC Network Roadmap</li> <li>○ Nexus 2k use &amp; design</li> <li>○ Converged Networking</li> </ul> </li> <li>• Continue development of the SDC migration roadmap.</li> </ul>	<ul style="list-style-type: none"> <li>• Completed the design decision documents for Storage switch placement.</li> <li>• Continue development of the SDC migration roadmap.</li> <li>• Held a Steering Committee meeting on August 15.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue work on the following design decisions                             <ul style="list-style-type: none"> <li>○ SDC Network Roadmap</li> <li>○ Nexus 2k use &amp; design</li> <li>○ Converged Networking</li> </ul> </li> <li>• Continue development of the SDC migration roadmap.</li> <li>• Work with teams on SDC Out of Band Management design</li> <li>• Work with teams on SDC Security Connectivity</li> </ul>
<b>OB2 Heat Reduction</b> Reduce the amount of heat being generated in the OB2 data center and provide an incident response plan.	<ul style="list-style-type: none"> <li>• Review TSD's completed template; input information into report.</li> <li>• Make refinements to draft report based upon feedback from sponsor.</li> <li>• Review and confirm contact information provided by agencies.</li> <li>• Meet w/ Service Desk and Facilities staff to review existing communications plan.</li> </ul>	<ul style="list-style-type: none"> <li>• All templates submitted by agencies have been reviewed and tabulated.</li> <li>• Results report has been reviewed and accepted by the project sponsor. The final piece is the contingency plan; we should have the plan in place by the end of September.</li> <li>• Reviewed the current outreach process and contact list with the CTS Service Desk. We agreed refinements could be made to the notification process in the event of a facility incident.</li> </ul>	<ul style="list-style-type: none"> <li>• Obtain a status update from facilities on progress of data input into the DCIM tool. We are exploring whether the tool could be used to provide the most up-to-date contact information.</li> <li>• File agency data collection templates on the SDC Program's SharePoint site.</li> <li>• Confirm contact information provided by agencies.</li> </ul>
<b>SDC Facilities</b> Prepare the SDC facility for customers. Includes preparing the critical environment (electrical/mechanical), floor space and physical security for customers.	<u>Space Management:</u> <ul style="list-style-type: none"> <li>• Developing operating procedures</li> <li>• Working with HR on position descriptions for 2 new staff</li> <li>• Working with OLS on contract docs for cable management tool.</li> <li>• Putting together requirements for entrance facility design.</li> <li>• Gathering requirements for OB2 to SDC fiber connectivity</li> <li>• Reviewing A/V quotes for SDC support space</li> <li>• Review requirements w/ stakeholders for Test Dev lab build out.</li> <li>• Reviewing design from KPFF for floor load plate.</li> </ul>	<u>Space Management:</u> <ul style="list-style-type: none"> <li>• Selected ASV for cable management software. Working with OLS to get contract executed.</li> <li>• Milestones</li> <li>• Entrance facility reqs will be re-visited when a customer is</li> </ul>	<u>Space Management:</u> <ul style="list-style-type: none"> <li>• Continue work on operating procedures</li> <li>• Review comments from HR on position descriptions for 2 new staff.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Submitting request for quote for Phase 2 DH enclosures.</li> <li>• Place request for quote for DH1 structured cabling for LTS.</li> </ul> <p><u>Physical Security:</u></p> <ul style="list-style-type: none"> <li>• Working on approval for procurement of security separation</li> <li>• Security office installation work underway for phones and network.</li> <li>• Schedule planning session with HSW.</li> <li>• Procure materials for enclosure security.</li> <li>• Developing operating policies and procedures</li> </ul> <p><u>Critical Environment:</u></p> <ul style="list-style-type: none"> <li>• Review quote for DC power.</li> <li>• Waiting for furniture to arrive; expected to arrive end of August.</li> <li>•</li> </ul>	<p><u>Physical Security:</u></p> <ul style="list-style-type: none"> <li>• Working on approval for procurement of security separation</li> <li>• Security office installation work underway for phones and network.</li> </ul> <p><u>Critical Environment:</u></p> <ul style="list-style-type: none"> <li>• Review quote for DC power.</li> </ul>	<p><u>Physical Security:</u></p> <ul style="list-style-type: none"> <li>• Working on approval for procurement of security separation</li> <li>• Security office installation work underway for phones and network.</li> </ul> <p><u>Critical Environment:</u></p> <p>Review quote for DC power</p>
<p><b>SDC Network Core</b> Establish the network core in the SDC and connect with the OB2 network.</p>	<ul style="list-style-type: none"> <li>• Continue discussions with Cisco and prepare a scope change order, if necessary.</li> <li>• Continue to work with CenturyLink and Cisco on shortage of (SFP) parts</li> <li>• Continue work on Cisco Engineering High Level Design deliverable.</li> <li>• Finalize Cisco Rack &amp; Stack equipment inventory and site survey deliverables.</li> <li>• Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core.</li> <li>• Continue work on OOB/FOOB Deign Decision for SDC.</li> <li>• Continue work on SDC/OB2 fiber path to support (OB2) Cisco M6 and CRS equipment moves to SDC.</li> </ul>	<ul style="list-style-type: none"> <li>• Completed 1<sup>st</sup> draft of Cisco High Level Design (HLD).</li> <li>• Completed 1<sup>st</sup> draft of Cisco Rack &amp; Stack Inventory and Site Survey.</li> <li>• Continued work on OOB/FOOB design, server installation for Cisco Network Management, and 5L/7K MPLS and Fabric Path testing.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to work with CenturyLink and Cisco on shortage of (SFP) parts</li> <li>• Finalize Cisco Engineering High Level Design (HLD) deliverable.</li> <li>• Finalize Cisco Rack &amp; Stack equipment inventory and site survey deliverables.</li> <li>• Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core.</li> <li>• Continue work on OOB/FOOB Deign Decision for SDC.</li> <li>• Continue provisioning work for SDC/OB2 fiber path to support (OB2) Cisco M6 and CRS equipment moves to SDC.</li> </ul>

Project	Planned for this Reporting Period (August 6 – August 17)	Status of Work Performed this Reporting Period (August 6 – August 17)	Planned for Next Reporting Period (August 20 – August 31)
	<ul style="list-style-type: none"> <li>Continue work on server installation to support Cisco Network Management.</li> </ul>		<ul style="list-style-type: none"> <li>Continue work on server installation to support Cisco Network Management.</li> <li>Begin work on Cisco Low Level Design (LLD).</li> <li>Turnover “Other” Cisco Equipment Inventory to SDC Facility.</li> </ul>
<b>SDC Firewall Project</b> Replace aged and over-capacity firewalls and deliver enhanced data security services to both OB2 and SDC.	<ul style="list-style-type: none"> <li>Complete Statement of Work.</li> </ul>	<ul style="list-style-type: none"> <li>Statement of Work completed</li> </ul>	<ul style="list-style-type: none"> <li>Begin work with vendor to validate firewall design.</li> </ul>
<b>SDC Storage Optimization</b> Replace aged systems and optimize the environment to reduce rates.	<ul style="list-style-type: none"> <li>Announce ASV / Begin Contract Negotiations</li> <li>Connect ESRS to network, install software</li> <li>Investment Plan to OLS (4-48 port cards for OB2 9513's)</li> </ul>	<ul style="list-style-type: none"> <li>ASV Announced – Presidio</li> <li>Vendor Debriefs</li> <li>ESRS network connections installed</li> </ul>	<ul style="list-style-type: none"> <li>Start Contract Negotiations</li> <li>Develop Statement of Work</li> <li>Install / Configure ESRS software</li> <li>Order SFP's for 5548's</li> </ul>
<b>CTS Cloud Utility Service</b> Provide a Cloud utility platform for CTS customers.	<ul style="list-style-type: none"> <li>No activity planned during this reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned during this reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned during this reporting period.</li> </ul>
<b>OB2 Risk Mitigation (CTS Move Phase 1)</b> Move selected CTS equipment that best alleviates the heat issue in OB2.	<ul style="list-style-type: none"> <li>Continue drafting the investment plan.</li> <li>Continue drafting the project charter.</li> <li>Draft a project change request to adjust the scope of the project to meet CTS business needs.</li> </ul>	<ul style="list-style-type: none"> <li>Investment Plan: Worked with service owners to obtain resource estimates for migrating systems into the SDC. This is requires for the investment plan</li> <li>No significant work done on the project charter. Waiting for a complete investment plan to complete the charter.</li> <li>Produced an initial draft of a project change request to adjust the project scope and budget to align with CTS plans. This is not complete and is targeted for approval at the next Steering Committee meeting.</li> </ul>	<ul style="list-style-type: none"> <li>Continue drafting the investment plan.</li> <li>Continue drafting project charter</li> <li>Finalize the project change request to adjust the scope of the project to meet CTS business needs.</li> <li>Continue refinement of the project task plan and schedule.</li> </ul>

Project	Planned for this Reporting Period (August 6 – August 17)	Status of Work Performed this Reporting Period (August 6 – August 17)	Planned for Next Reporting Period (August 20 – August 31)
<p><b>Migrate WSP to SDC</b> Explore the possibility of moving the WSP data center to the SDC.</p>	<ul style="list-style-type: none"> <li>Continue to refine the task plan and scheduled.</li> <li>Continue bi-weekly work sessions.</li> <li>Formalize the project's governance structure.</li> <li>Schedule work sessions to finalize the Phase 1 network design.</li> <li>Schedule informational session on future CTS firewall service offerings.</li> </ul>	<ul style="list-style-type: none"> <li>Updated the task plan and schedule to reflect new information. Extended the schedule waiting on a WSP/FBI response whether or not WSP's equipment enclosures require a fenced cage.</li> <li>Conducted the first bi-weekly project session.</li> <li>Developed a log to track and manage action items. This will be used in the bi-weekly meetings to obtain status and make assignments.</li> <li>Did not formalize the project's governance structure. This is being addressed by CTS executive management.</li> <li>Multiple sessions have been scheduled to develop the Phase 1 network design.</li> <li>The session on the CTS firewall service offering is not needed until Phase 2.</li> <li>Conducted a hardware planning session on August 9<sup>th</sup> to identify equipment enclosure/space requirements. Actions still pending on this.</li> </ul>	<ul style="list-style-type: none"> <li>Continue work to formalize the project's governance structure and steering committee.</li> <li>Initiate work sessions to develop the Phase 1 network design (these will be ongoing).</li> <li>Continue to gather hardware requirements for equipment enclosure/space planning.</li> </ul>
<p><b>Virtual Tape Library Disaster Recovery (VTL)</b> Procure additional VTL equipment to eliminate the tape backup system and support mainframe disaster recovery.</p>	<ul style="list-style-type: none"> <li>No activity was planned or performed for this reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity was planned or performed for this reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity was planned or performed for this reporting period.</li> </ul>
<p><b>OB2 Risk Mitigation (CTS Move Phase 2)</b> Continue the progress of Phase 1 by moving additional CTS equipment to the SDC.</p>	<ul style="list-style-type: none"> <li>Continue refinement of task plan and schedule.</li> </ul>	<ul style="list-style-type: none"> <li>Started work on defining WAN related projects.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>
<p><b>OB2 Data Center Optimization</b> Reconfigure remaining equipment in OB2 to optimize airflow and cooling.</p>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>

### External Project Collaboration

External Project	Planned for this Reporting Period (August 6 – August 17)	Status of Work Preformed this Reporting Period (August 6 – August 17)	Planned for Next Reporting Period (August 20 – August 31)
<b>Server Virtualization</b> Virtualize 60% of CTS physical servers by 7/1/12.	<ul style="list-style-type: none"> <li>Kick-off the Virtualization of the Teamsite production servers, bringing the total % of servers virtualized to 61%,</li> <li>Continue readiness activities for virtualization of the TSD OSS Servers on Sept 8-9.</li> </ul>	<ul style="list-style-type: none"> <li>Teamsite production servers successfully virtualized.</li> </ul>	<ul style="list-style-type: none"> <li>TSD OSS Servers – Send quote and provision the virtual servers in anticipation of Sept 8-9 virtualization.</li> </ul>
<b>Command Center</b> Establish command center support for the SDC.	<ul style="list-style-type: none"> <li>Waiting on a decision to determine the location of Command Center in the SDC or 1500 Jefferson Building before additional planning can be completed.</li> </ul>	<ul style="list-style-type: none"> <li>No action planned.</li> </ul>	<ul style="list-style-type: none"> <li>No action planned.</li> </ul>
<b>Replace Cisco MDS 9509 SAN Fabric Switches</b> Replace SAN fabric switches in OB2 that are at end of vendor support.	<ul style="list-style-type: none"> <li>Assign a project manager</li> </ul>	<ul style="list-style-type: none"> <li>A project manager has been assigned.</li> </ul>	<ul style="list-style-type: none"> <li>Assess the FMS audit and define parameters</li> </ul>
<b>VLAN Renumbering</b> Optimize VLAN numbering	<ul style="list-style-type: none"> <li>Assign a project manager</li> </ul>	<ul style="list-style-type: none"> <li>A project manager has been assigned.</li> </ul>	<ul style="list-style-type: none"> <li>Gather existing documents (charter &amp; WBS) and start planning.</li> </ul>
<b>PBX</b> Implement new PBX system	<ul style="list-style-type: none"> <li>Nothing Planned -- Waiting for Cabinets, Power, and Structured Cabling to be ready before moving forward with project.</li> </ul>	<ul style="list-style-type: none"> <li>No action planned.</li> </ul>	<ul style="list-style-type: none"> <li>Nothing Planned -- Waiting for Cabinets, Power, and Structured Cabling to be ready before moving forward with project.</li> </ul>

### Top 5 Issues \*

**Issue Key:** *Green* = Issue does not require action within 30 days, *Yellow* = Issue requires action within 30 days, *Red* = Issue requires action within 10 days or less

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
197	A decision on the Cloud procurement is needed around September 2012 or it will start impacting the server move schedule.	SDC	Y	7/16/2012	8/1/2012	9/1/2012		Open

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
145	Potential SDC Customers will need to know the billing rates for SDC products and services before they move into the SDC. Both DSHS and WSP have stated that they will not move into the SDC until they know what ongoing operations will cost.	Finance	Y	3/16/21	7/19/12	9/1/12	The CTS Finance group continues to work this.	Open
132	Roles & Responsibilities for the Storage Switches and converged network need to be defined. This includes who manages the SDC fiber channel switches and the roles and responsibilities for troubleshooting fiber channel over Ethernet (FCoE) across the converged network.	SDC	Y	11/3/2011	08/15/2012	9/1/2012	<b><i>Issue still being worked by TSD and CSD.</i></b>	Open
134	Will agencies be allowed to bring their corporate networks into the SDC? This impacts network routing, top-of-rack switches and firewalls as these components would come with an agency corporate network.	TSD	G	11/4/11	7/19/12	9/5/12	Internal Vetting is almost complete. Next steps is a discussion at next the SDC Steering committee meeting.	Open
202	The storage switching design (HLD) arrived upon by the collaboration between CTS and the Cisco Advanced Services team does not match the storage switching hardware on hand.	TSD/CSD/SDC	Y	8/15/2012		9/5/2012		Open
201	Identify fiber pathways needed to re-home storage connected devices in the WDC to the OB-2 9513s in the EDC	Datacenter team/CSD	Y	8/3/2012		9/1/2012		Open

\* New or changed items in bold italics

### Issues Closed this Period

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
196	A Pathway is needed to connect the 9513 switches in the OB2 East data center to the fiber patch panels that connect to the SDC. Running the cables under the floor tiles is not an option as this worsens the cooling problem in OB2.	SDC	Y	7/10/2012	08/13/2012	8/13/2012	The design decision was approved and the Datacenter team is proceeding with completion of the design.	Closed

### Change Requests \*

No.	Description	Requestor	Request Date	Assigned	Cost Impact	Schedule Impact	Status
	None for this reporting period						

Status (Submitted, Proposal, Approved, Opened, Resolved, Verified, Closed)

\* New or changed items in bold italics

### Top 5 Risks \*

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
1	Customers that were expecting to come into the SDC right away must now wait longer, which has end of life/investment implications	Man	3	R	G	G	Communicate with customers the new plan and schedule.	Ongoing	Program Manager
2	Timing may force a need to place hardware in OB2, which has an adverse impact on the heat reduction effort.	Cap	2	Y	G	G	<ul style="list-style-type: none"> <li>Work with customers to identify solutions that minimize additional heat in OB2.</li> <li>Institute OB2 heat reduction initiatives to turn off unused servers</li> <li>Delay implementation of new hardware in OB2 as late as possible</li> </ul>	Ongoing	Facilities
3	Because the project is large and includes substantial logistical challenges involving multiple projects/agencies, interdependencies will be complex and could be overlooked.	Man	1	R	G	G	<ul style="list-style-type: none"> <li>Apply project management practices to manage the effort.</li> <li>Break the work down into small and logical units.</li> <li>Use tools to track tasks, dependencies, issues, risks, etc. and automate the planning and communications as much as possible.</li> <li>Implement migration approaches that minimize impacts of system dependencies, such as spanning the network between the OB2 and SDC data centers.</li> <li>Use development and test platforms to verify system dependencies.</li> </ul>	Ongoing	Sr. Project Manager
4	Even though the scope has been reduced to better match the budget, it may be insufficient. Several items remain unfunded.	Res	1	R	G	G	<ul style="list-style-type: none"> <li>Request funding for unfunded projects</li> <li>Identify other funding sources (if possible)</li> <li>Reduce project scope</li> <li>Back-log unfunded projects</li> </ul>	Ongoing	Program Manager

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
5	Resource Conflict – Program relies on functional staff with competing priorities.	Res	1	<b>R</b>	<b>G</b>	<b>Y</b>	<ul style="list-style-type: none"> <li>Provide clear management guidance on priorities and carefully manage functional staff to minimize conflicts in priorities and work tasks.</li> <li>Expand resource management and track task assignments to the resource level. Identify areas in the plan where resource loading indicates a problem and take appropriate action.</li> </ul>	Ongoing	Sr. Project Manager

**Risk Category** = (Res)ources; (Man)agement; (Tec)hnology; (Fun)ctional; (Dev)elopment; (Int)erfaces; (Sec)urity; (Usa)bility; (Ava)ilability; (Per)formance; (Cap)acity; (Sca)lability; (Ext)ernal.

\* New or changed items in bold italics

**Level of Impact Key:**

- 1=major impact
- 2=significant impact
- 3=minor impact
- 0=no impact

**Likelihood Key:**

- G** = Low.
- Y** = Moderate
- R** = High

**Schedule Key:**

- G** = on schedule
- Y** = Less than 30 days behind schedule (caution)
- R** = More than 30 days behind schedule (warning)

**Ability to Meet Deadline Key:**

- G** = based on current information, it appears manageable
- Y** = there are significant obstacles or areas of uncertainty or concerns
- R** = there are clearly identifiable threats or deterioration of ability to manage and control

**Steering Committee Action Items**

Item #	Item Description	Assigned	Date Assigned	Date Due
1	No pending action items			