



# Disaster Recovery

**Disaster Recovery User Group Review  
June 28, 2011**





# Agenda

- **Welcome and Introductions** – Jack Sturges
- **SCMS**
  - CGEN Network Connectivity – Brian Parks / Steve Rushing
  - Project Update – Phil Ruehl
  - June Exercise Results – BOE, CalSTRS, DMV, SCO
- **Midrange Disaster Recovery**
  - Project Update – Phil Ruehl
- **Closing Remarks** – All





# CGEN Network Connectivity

Steve Rushing / Brian Parks



# SCMS Project Update

- Completed June DR exercise for SCO (re-test external connections, CalSTRS (re-test connection to SCO and printing), BOE, and DMV
- Updating SCMS Service Offering documentation
- Distributed email to all SCMS customers (except OSI – CWS) that the DR service will officially move to SCMS effective August 1 (see next slide)
- **Key Issue:** Inability to fill vacant positions to develop failover automation will impact the recovery time objective



# SCMS Project Update

Email sent on June 27<sup>th</sup> at 8:31 am from Jack Sturges

Dear OTech DR Customer,

This communication is to notify you that as part of the Service Continuity Mainframe Service (SCMS) project, OTech has established a new Disaster Recovery (DR) service capability for the Mainframe platform. The solution has been tested and verified by all participating DR customers. OTech will now migrate all mainframe DR customers to the SCMS service offering and will discontinue the legacy IBM Boulder DR solution. This process will include cancelling the IBM contract for mainframe DR service, eliminating the DR backups and updating the billing to reflect the approved SCMS rates. You do not need to submit an SR, **this change will be effective August 1, 2011.**

If you have any questions or issues, please contact your Customer Representative or your OTech DR Coordinator.



# SCMS Project Update - Schedule

Milestone	% Comp	Baseline	Estimated/ Actual	Status (Color)	Comments
1. CWS	100%	2/4/11	2/14/11	B	
2. Mainframe Install and Control LPAR build	10%	1/11/11	8/4/11	G	HWDR utilized until it is created.
<b>3. Vacaville Shared</b>	<b>79%</b>	<b>4/22/11</b>	<b>8/1/11</b>	<b>G</b>	
a. Customer exercise for DHCS & EDD mainframe applications	100%	1Q11	3/25/11	B	
b. Remove customers from warm site contract	25%	3Q11	8/1/11	G	
<b>4. SCO &amp; Gold Camp Shared</b>	<b>49%</b>	<b>3Q11</b>	<b>8/1/11</b>	<b>G</b>	
a. Document Procedure and test plan for manual failover	100%	1Q11	4/28/11	B	
b. OTech test for mainframe	100%	1Q11	5/4/11	B	
c. Customer exercise for mainframe applications	100%	1Q11	5/13/11	B	
d. Remove customers from warm site contract	15%	3Q11	8/1/11	G	
5. Update Service documentation	30%	2Q11	7/15/11	G	
6. Create failover automation	0%	2Q11	TBD	Y	Cannot be scheduled until resources are provided
7. Close	0%	3Q11	TBD	G	

Key	B	G	Y	R
	Complete	On Track – No issues	Minor Risk or Issue or Variance	Major Risk or Issue or Variance (needs Sponsor attention)



# June Exercise Review

- **Lessons Learned**

- The Exercise did show that we could do the Fail-Over on Monday, the week of the Exercise, instead of the previous Friday.
- There is a requirement to have SMTP service at Vacaville in the event of a disaster



# Exercise Results (Customer Perspective)

Christine Rajan (DMV)

## DMV Test Scope

- DMV's applications that have both mid-tier and mainframe components (distributed systems).
- Legacy mainframe applications.

## DMV Advantages

- DMV DB2 staff no longer load and configure data. This process used to take several hours during an exercise.
- Some testers no longer had to perform configuration changes or recreate data in the test environment.
- Elimination of aggregate maintenance.
  - \* DR now matches production and is not dependent of administrators remembering to update their aggregates.



# Exercise Results (Customer Perspective)

## DMV Advantages Continued

- Testers were able to identify an error in production via SCMS.
- Testers use the DR test environment to test items such as configuration changes to determine how these changes would actually impact production.
- Change from two day exercises to four + day exercise allowed a less compacted testing schedule and additional time to resolve testing issues.



## Exercise Results (Customer Perspective)

### DMV Growing Pains

- Due to recovery issues, the distributed systems could not be tested.
- Changes from IBM Boulder testing.
  - \* Test scripts
  - \* Unavailable components
  - \* New requirements
- Some tasks took longer in SCMS than in production or the IBM Boulder environment.



# Exercise Results (Customer Perspective)

## DMV Results

- Overall, SCMS worked well.



# Midrange Disaster Recovery



# Midrange DR – Project Update

Created design for SCO 21<sup>st</sup> Century (TFC) that will be leveraged for the standard solution

Building Secure File Transfer and SCO TFC LPARS at Vacaville

Creating point solutions for Solaris (BOE and DOI)

- BOE to be leveraging their test / development environment

AIX upgrade at Vacaville purchased. Planning upgrade in July

Creating Midrange DR rate for AIX and Solaris Platforms



# Midrange DR Project Update - Schedule

Milestone	% Comp	Baseline	Estimated/ Actual	Status (Color)	Comments
1. SCO TFC Solution Design Created	100%	1Q11	6/24/11	B	
2. SCO TFC Failover Procedures Created	15%	2Q2011	7/1/11	G	
3. SCO TFC required purchased	100%	2Q2011	5/24/11	B	
4. SCO TFC solution Build (using existing Hardware)	75%	2Q2011	7/15/11	G	
5. SCO TFC Tested	0%	2Q2011	7/29/11	G	
6. DHSS CCSAS Solution Documented	100%	5/24/11	5/24/11	B	
7. DHSS CCSAS Create Recovery Plan	0%	6/1/11	8/31/11	G	June 1 Go-Live no longer required by DCSS
8. BOE ABIS (Solaris) Solution Design Created	50%	4Q2010	7/8/11	G	Determining refresh plans for non-production servers and impact to this project
9. Enterprise Solution Architecture Created	100%	1Q2011	6/10/11	B	
10. Initial Rates Approved	0%	2Q2011	TBD	G	
11. Enterprise Solution Installed & Configured	0%	3Q2011	TBD	Y	See Risk #24
12. Other Existing and New Customers Tested and Migrated	0%	2Q2012	TBD	Y	See Risk #30

Key	B	G	Y	R
	Complete	On Track – No issues	Minor Risk or Issue or Variance	Major Risk or Issue or Variance (needs Sponsor attention)



# **Future Agenda Items? Questions / Comments? Next Meeting - August 2011**

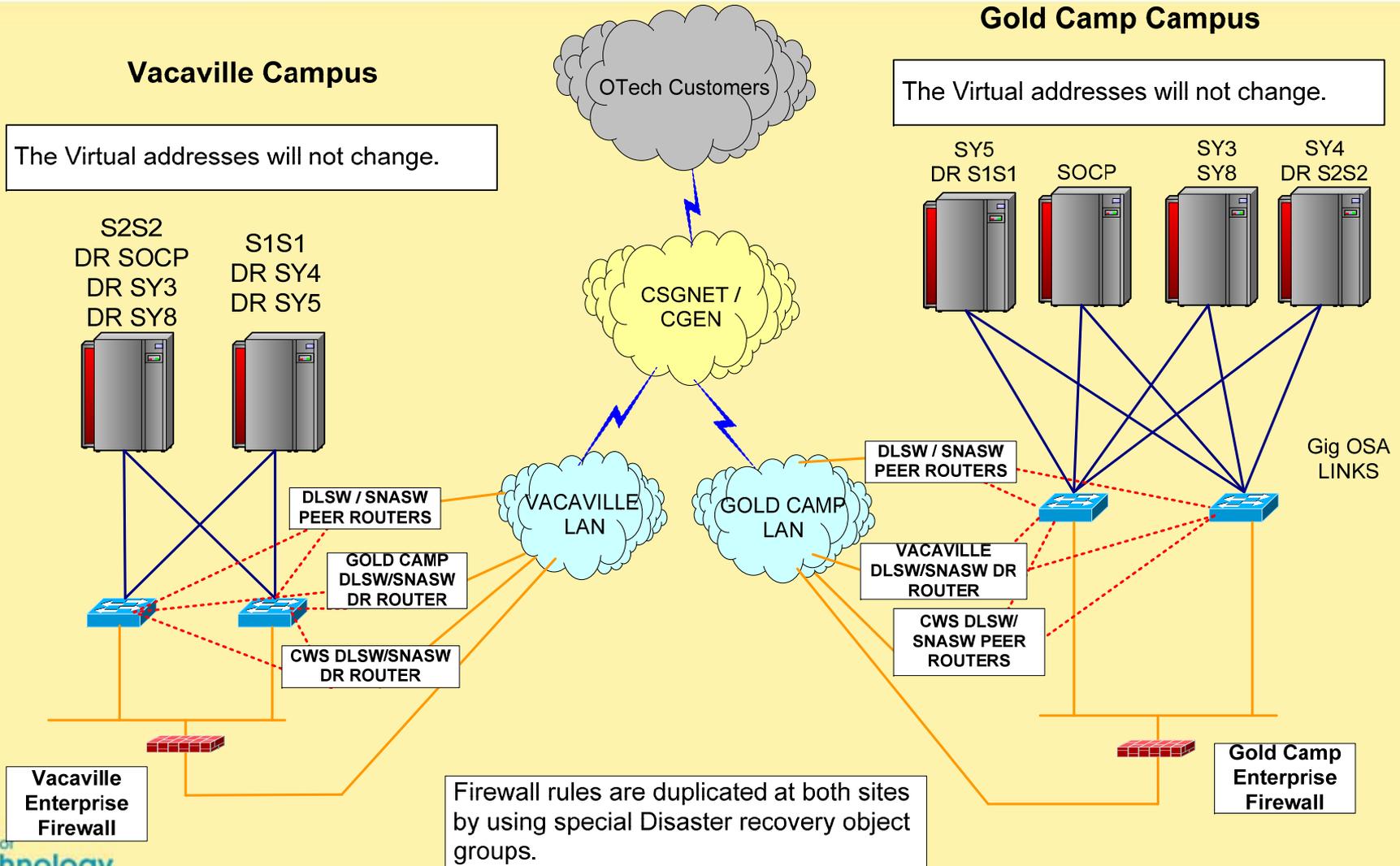
[http://www.dts.ca.gov/news\\_events/user\\_groups/scms.asp](http://www.dts.ca.gov/news_events/user_groups/scms.asp)



# References



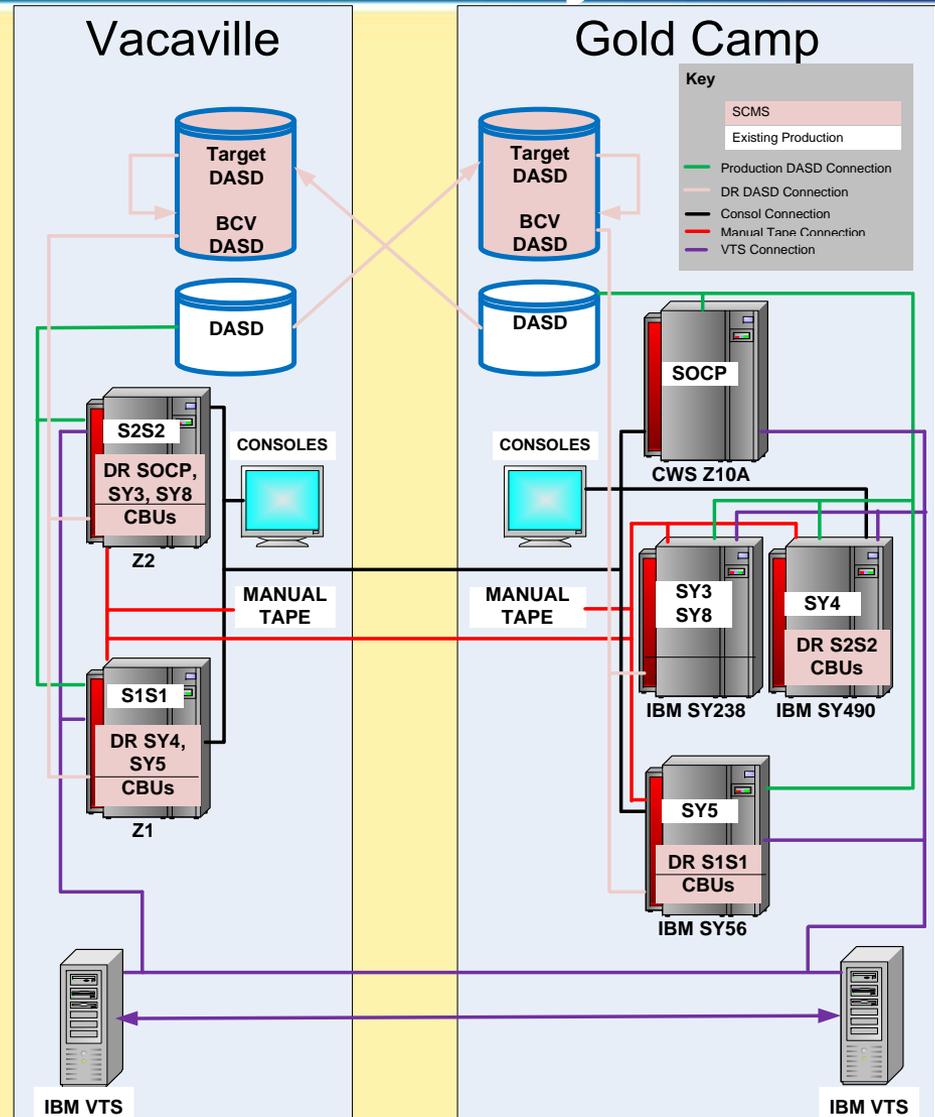
# SCMS Network Design





# SCMS Production & DR Connectivity

- DR systems access Business Continuity Volume (BCV) DASD
- Communication between sites utilizes two OTech OC-192 circuits
- Redundant connections not shown





# SCMS Rates (Monthly)

- For each Mainframe customer
  - \$5000 base
  - \$60 Per MIP required in a Disaster (1 – 500)
  - \$75 Per MIP required in a Disaster (501 and over)
- Example 1: 50 MIPS required in a Disaster
  - $5000 + (60 * 50) = \$8000$
- Example 2: 650 MIPS required in a Disaster
  - $5000 + (60 * 500) + (75 * 150) = \$46,250$

# Midrange DR – DNS

