



DISASTER RECOVERY PLAN



Disaster Recovery

Disaster Recovery User Group Review
January 26, 2011





Agenda

- Welcome and Introductions – Megan Smith
- SCMS
 - Project Update – Phil Ruehl
 - Capacity Plan Review – Robert Jenkins
 - Disaster Recovery Good Morning Screen Review - Tom Van Dyke
 - Front End Processor Issue Review – Tom Van Dyke
- Midrange Disaster Recovery
 - Overview – Phil Ruehl
 - Project Update & Timing – Phil Ruehl
- Q&As from October 26 User Group meeting – All
- Closing Remarks – All





SCMS Project Update

- Created manual failover procedures for Vacaville Shared (Health Services and EDD)
 - Includes Network, Storage, z/OS, CICS, DB2, ADABAS, IDMS and Product Support / Licenses
- Implemented required mainframe capacity for SCMS
- Preparing for DR exercise for Health Services and EDD
- **Key Issue:** Inability to fill vacant positions to develop failover automation will impact the recovery time objective



SCMS Project Update - Schedule

| Milestone | % Complete | Due | Estimated / Actual Completion Date |
|--|------------|-----------------|------------------------------------|
| CWS | 70% | 2/4/2011 | 2/8/2011 |
| SCMS Service Documentation and Rates Created | 100% | 11/29/2010 | 11/15/2010 |
| Mainframe Procurement | 100% | 11/12/2010 | 12/13/2010 |
| Mainframe Install and Control LPAR build | 0% | 1/11/2011 | 2/8/2011 |
| SCO | 42% | 2Q2011 | 4/7/2011 |
| Document Procedure and test plan for manual failover | 81% | 1Q2011 | 2/18/2011 |
| OTech test for SCO mainframe | 0% | 1Q2011 | TBD |
| Customer exercise for SCO mainframe applications | 0% | 1Q2011 | TBD |
| Finalize documentation and remove warmsite contract | 0% | 2Q2011 | 4/7/2011 |
| Vacaville Shared | 43% | 2Q2011 | 4/22/2011 |
| Document Procedure and test plan for manual failover | 92% | 1Q2011 | 1/31/2011 |
| OTech test for Vacaville Shared mainframe | 0% | 1Q2011 | 2/11/2011 |
| Customer exercise for DHCS mainframe applications | 0% | 1Q2011 | 2/18/2011 |
| Customer exercise for EDD mainframe applications | 0% | 1Q2011 | 3/25/2011 |
| Finalize documentation and remove warmsite contract | 0% | 2Q2011 | 4/22/2011 |
| Gold Camp Shared (Triplex) | 0% | 2Q2011 | TBD |
| Update Service documentation | 0% | 2Q2011 | TBD |
| Create failover automation | 0% | 2Q2011 | TBD |
| Close | 0% | 3Q2011 | TBD |



SCMS Capacity Plan Review

| Customer | DR Mainframe | Number of MIPS for Exercise | Number of MIPS for actual DR |
|---|--------------|-----------------------------|------------------------------|
| Health Services | SY490 & SY56 | 20 | 150 |
| Employment Development Dept | SY490 | 100 | 650 |
| Horse Racing Board | Z1 | 10 | 10 |
| CA Lottery | Z1 | 20 | 20 |
| State Personnel Board | Z1 | 20 | 20 |
| Consumer Affairs | Z1 | 20 | 100 |
| Dept of Finance | Z1 | 20 | 50 |
| Contractor's State License | Z1 | 30 | 30 |
| Board of Equalization | Z1 | 50 | 350 |
| State Teachers Retirement | Z1 | 50 | 200 |
| Dept of Motor Vehicles (Including EASE) | Z1 | 100 | 400 |
| State Controller's Office | Z2 | 50 | 200 |
| Office of Systems Integration – CWS | Z2 | 200 | 1200 |



SCMS Good Morning Screen

1:3270 Display - TST2 - D - DTST2000

File Edit View Communication Actions Help

DR TEST SYSTEM STATE OF CALIFORNIA DR TEST SYSTEM
OFFICE OF TECHNOLOGY SERVICES

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000000      TTTTTTTTTT      EEEEEEEEEEE      CCCCCC      HHH      HHH
0000000000  TTTTTTTTTT      EEEEEEEEEEE      CCCCCCCCCC   HHH      HHH
0000      0000      TTT      EEE      CCCC      CCC      HHH      HHH
0000      0000      TTT      EEE      CCC      HHH      HHH
0000      0000      TTT      EEEEEEE      CCC      HHHHHHHHHHHH
0000      0000      TTT      EEE      CCC      HHH      HHH
0000      0000      TTT      EEE      CCCC      CCC      HHH      HHH
0000000000  TTT      EEEEEEEEEEE      CCCCCCCCCC   HHH      HHH
000000      TTT      EEEEEEEEEEE      CCCCCC      HHH      HHH

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DR TEST SYSTEM DR TEST SYSTEM DR TEST SYSTEM

==> _ DTST2000

MA d 23/007

Connected to server/host 158.96.2.194 and port 23

158.96.2.194:23



SCMS Front End Processor Issue

Issue

The mainframe solution at Vacaville does not have a Front End Processor. For customers that utilize the Front End Processor at Gold Camp, this connectivity will not be available for Disaster Recovery.

Impact

- SNI (mainframe to mainframe) customers (Kings, San Luis Obispo, Sonoma, and Merced Counties and City of Inglewood)
- Customers that have not migrated to SNAsw (DMV Headquarters, DMV Field Offices, and other non-DR customers)



Midrange Disaster Recovery

The Midrange DR project will establish capability that enables OTech to provide disaster recovery for the non-mainframe platforms that OTech supports

Midrange DR Value

- Reduce DR operations costs
- Minimize cost to declare a disaster
- Flexibility for DR exercises
- Improve System and Data recovery time
- Increase quality of service



Midrange DR Customers

| Customer / System | Platform | Date DR Required |
|----------------------------|---------------|--|
| SCO TFC | AIX & Windows | 6/20/2011 |
| CDCR BIS | AIX | 3Q2011 |
| DCSS CCSAS | AIX | 4Q2011 |
| DMV ITM | AIX | TBD - Under contract for IBM Warmsite, but not exercised yet |
| OSI CMIPS II | AIX | TBD - Under contract for IBM Warmsite |
| BOE ACMS | Solaris | 2Q2011 – with SCMS migration of Triplex |
| DOI Financial Applications | Solaris | TBD - Under contract for IBM Warmsite |
| CDCR TRACS | Windows | TBD - Under contract for IBM Warmsite |



Midrange DR Project Update

- Working with IBM to work on Capacity on Demand solution for AIX.
- Documenting Midrange DR Design document with planned architecture and design using SCO TFC as the pilot.



Midrange DR Project Timing





Midrange DR Project Timing

Phase 1

Kickoff – Q2, 2011

- Design, purchase, and implement AIX DR solution infrastructure
- Design Windows DR solution
- Determine budget
- Create rates and service offering
- Non-Standard DR solutions for SCO TFC, BOE ACMS, and DOI Financial Applications



Midrange DR Project Timing

Phase 2

Q3 - Q4, 2011

- Begin rollout of AIX solution
- Purchase, implement , and begin rollout of Windows solution
- Verify rates and service offering
- Standard solutions for DR customers



Midrange DR Project Timing

Phase 3

Q1 – Q2, 2012

- Continue to rollout DR for AIX and Windows systems
- Design Linux DR solution
- Determine additional tiers of service required
- Verify rates and service offering
- Standard solutions for DR customers and internal OTech systems
- Standard solutions for new customers' systems as requested



Q & As from October 26, 2010

1. What is the procedure for the Network in the event of a disaster?
 - Once implemented, routing will be dynamic and it will be initiated from the mainframe. Until this is implemented, the firewalls will be updated manually as part of the recovery.
2. What is being done to communicate to the user that a user is logging onto the DR exercise environment?
 - A DR Good Morning Screen has been created, notifying customers, when they are logging onto the DR exercise environment.
3. Was the CWS DR exercise at Gold Camp or Vacaville?
 - The CWS DR Exercise was conducted at the Vacaville site.
4. What is the plan for the IBM Boulder contract and exercises in 2011?
 - The IBM contract will continue, but we are attempting to have the next scheduled exercise be SCMS so another IBM Boulder exercise will not be required.



Future Agenda Items? Questions / Comments? Next Meeting TBD

http://www.dts.ca.gov/news_events/user_groups/scms.asp



References



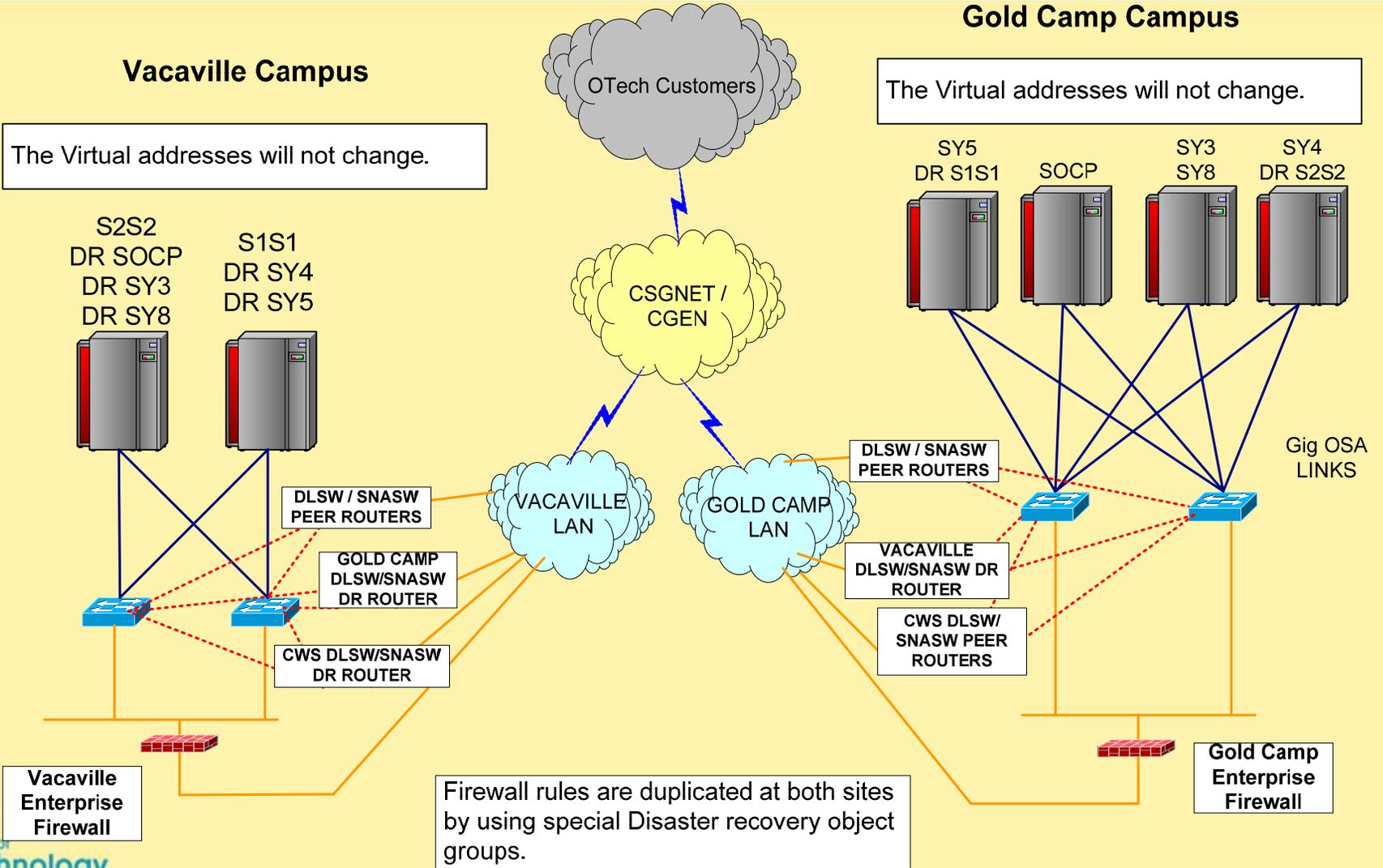
SCMS Network Design

Vacaville Campus

Gold Camp Campus

The Virtual addresses will not change.

The Virtual addresses will not change.





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

