# Disaster Recovery for the Digital Network Control System

Description

The Disaster Recovery solution offers a redundant network platform that delivers digital video service in the event of a catastrophic incident involving the primary digital headend. This solution provides for the rapid recovery of digital broadcast video.

Figure 1. Architecture Diagram
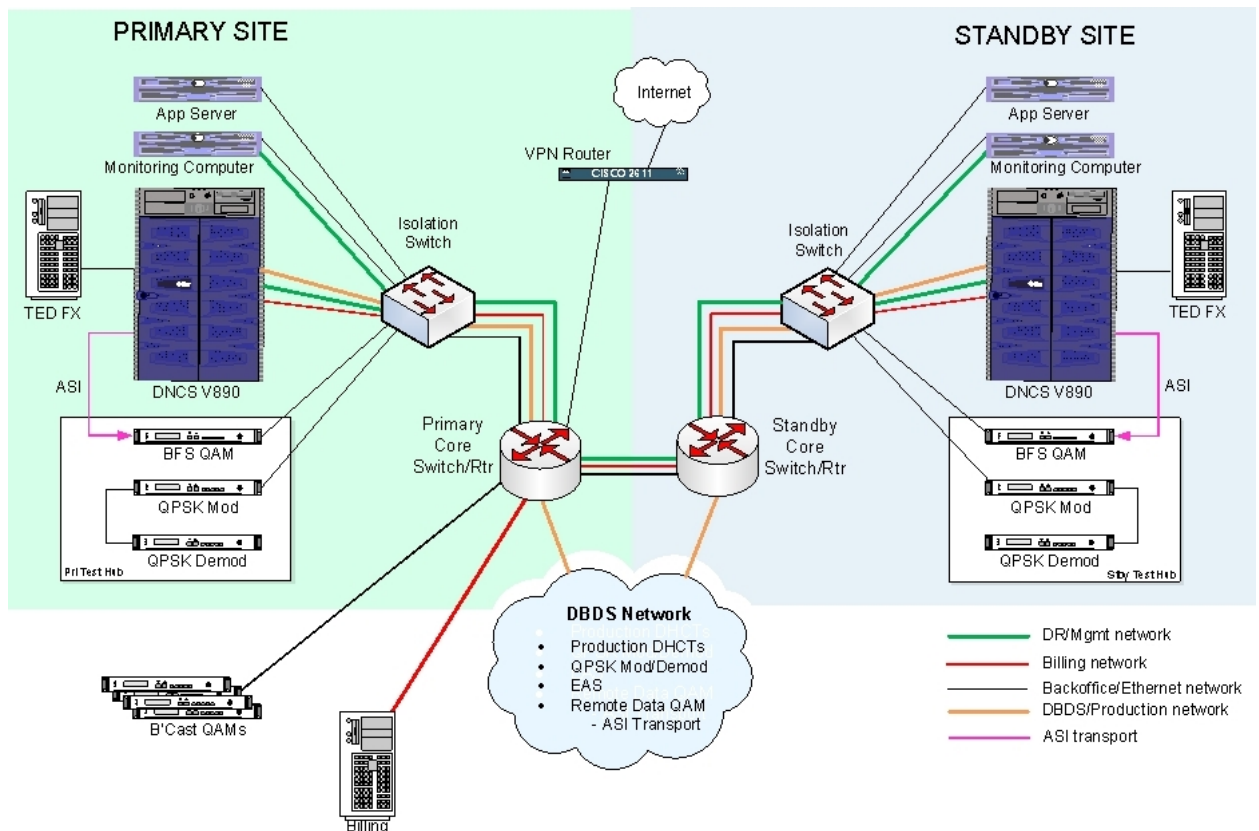
Features

- Straightforward synchronization of set-top authorizations

- Auto-detection of Digital Broadband Delivery System (DBDS) maintenance

- Redundant monitoring computer support

- Reliable, scheduled automatic database backup

- Efficient synchronization of Entitlement Management Message (EMM) installs

- Rapid fault detection/notification

- Comprehensive failover management

- Easy to navigate graphical user interface

Operational Benefits and Usage

The Disaster Recovery application helps to ensure reliable delivery of services to your subscribers in the event of most incidents involving the primary digital headend, either through natural disaster or human error. With today's complex DBDS systems, many factors can affect your ability to deliver that service:

- Software failure

- Hardware failure

- Power interruptions

- Malicious acts

- Facilities damage (water, fire, smoke)

The Disaster Recovery solution helps minimize the impact of these events. Our solution provides a live, up-to-date backup Digital Network Control System (DNCS) for rapid failover in the event of a primary DNCS failure. In the proper setting, the system can protect against the risks listed above and many more.

Minimizing customer impact is everyone's main goal. By saving you from providing customer credits and maintaining your company's positive image against competition, this solution can pay for itself in a short time.

The Disaster Recovery solution uses redundant, external monitoring computers to collect the primary DNCS updates and synchronize critical data to the standby DNCS. This arrangement provides for the rapid recovery of digital broadcast video.

Both headends are online and functioning in a redundant headend topology, but only one headend site assumes the broadcast, or active, role. In this scenario, the equipment in the broadcasting site is active and performing duties accordingly. Systems at the other site are inactive and in a standby mode, ready to assume active status should a user-initiated switchover occur.

A key role of the Disaster Recovery solution is to perform health checks on systems at both headends, so that if a switchover must be performed, it can be done with minimal network impact, and reduce subscriber downtime. To accomplish this task, the Disaster Recovery solution synchronizes the necessary data between the active and inactive DNCS systems to help ensure that the appropriate data is on both systems in the event of a failover or switchover, see Figure 2.

Figure 2. Application Screenshot
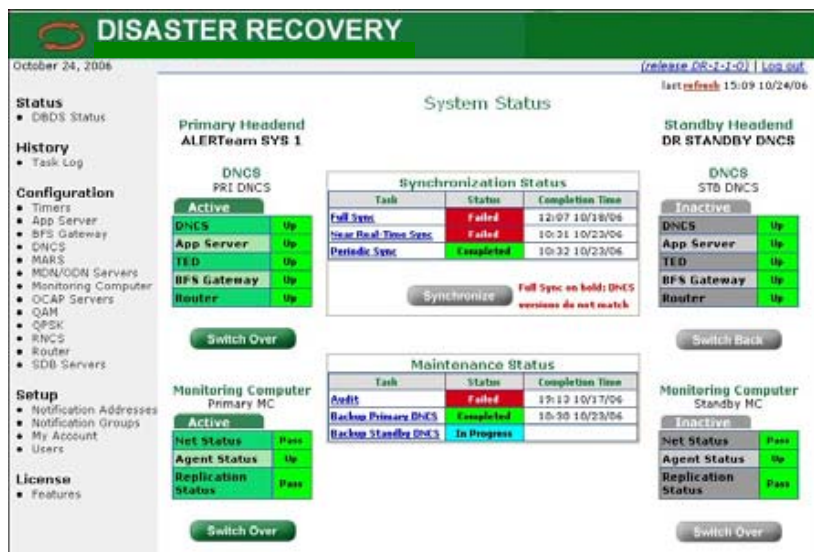
Ordering Information

Table 1.   Ordering Information

Part Number	Disaster Recovery for DNCS
4025155	DVD Disaster Recovery
752720	Disaster Recovery Solution Services
752734	Disaster Recovery Services-Lab
752610	Disaster Recovery Maintenance Agreement (Lab), 24x7 Technical Phone Support, Software Maintenance (y&z)

Cisco Services

Using the Cisco Lifecycle Services approach, Cisco and our partners offer a broad portfolio of end-to-end services to support Cisco Operations Support Systems Applications. These services are based on proven methodologies for deploying, operating, and optimizing Disaster Recovery solutions. Initial planning and design services, for example, can help you meet aggressive deployment schedules and minimize network disruption during implementation. Operate services reduce the risk of communications downtime with expert technical support, and optimize services enhance solution performance for operational excellence. Cisco and our partners offer a system-level service and support approach that can help you create and maintain a resilient, converged network that meets your business needs.

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