Root Cause Analysis

Event: Voice mail outage, January 14, 2010

Summary: On Thursday January 14, 2010, at approximately 11:00 AM, Telephone Services received a report that unanswered phones were not going to voice mail. Troubleshooting identified a bad utility card. The card was replaced and normal system operations were restored.

Detail: On Thursday January 14, 2010 at approximately 11:00 AM, Telephone Services received a report that unanswered phones were not going to voice mail. It quickly became apparent that the entire UAF voice mail system was down and troubleshooting ensued. The system returned an error code which led technicians to an inoperable utility card. The first course of action was to reboot the system. The reboot took 20 to 30 minutes. After the reboot, the card remained in a failed state. The next step was to replace the card with an on-hand spare which required a second reboot of the system. After the second reboot, the system returned to a fully operational state.

Action Items and Future Prevention: The current voice mail system does not have any automatic failover built in. Because of this, Telephone Services maintains on-hand spares. In this case, the on-hand spare was used to bring the system back online. Telephone Services ordered another spare card in the event of a future problem.

UAF is currently looking to replace the current aging telephone switch with a VoIP switch. As part of the selection process, vendors have been asked to design with survivability in mind. A vision of the future telephone system includes redundancy and automatic failover.