Testing failover

Simulate a failover at regular intervals to ensure that the failover system operates properly. Perform a failover test immediately after installing the failover server, and at least once every quarter afterwards. By testing the failover system, you ensure that when you need the failover system urgently, it will operate smoothly. It also helps you to know what to expect during a failover.
The test takes about 30 minutes. Allow more time when you first run the test because you need to configure the failover server to match the primary server's configuration.
For testing, simulate primary and tertiary server failure by disconnecting the server network connection.
You can then follow the procedures for:

- Failing over to the Hot Standby server
- Restoring the primary server to normal operation

Requirements: For a planned failover, you must have a current Oracle database backup and must disconnect the primary server network connection to simulate failure.

1. Disconnect the primary server from the network by either unplugging the network cable or disabling the network adapter.
2. On the Hot Standby server, start Prinergy Administrator, and stop the Prinergy software on all servers by selecting **File** > **Emergency Shutdown**.
3. If an InSite Prepress Portal or InSite Storefront server is connected to the Prinergy primary server, stop InSite services:
   a. On the InSite Prepress Portal/Storefront server desktop, double-click **InSite Administrator**.
   b. On the home page, click **Maintenance**.
   c. Click **Shutdown**, and type a shutdown message to notify users.
   d. Click **Shutdown now**.

   Note: This procedure is to test the Prinergy Hot Standby server functions only. In an actual Emergency Failover, follow the complete steps to include InSite and Business Link functionality and account for Rules Based Automation changes needed as well.
4. On the Hot Standby server, open Prinergy Administrator, and switch Prinergy to primary mode by selecting **File** > **Switch To Primary**.
   If a message appears indicating that the license key and unique server ID do not match, proceed with step 5 below to manually retrieve a license.
5. Check that the Hot Standby server is licensed. If necessary, retrieve or load a license for it:
   a. To open the License Information dialog box, select **License** > **Manage License Key**.
   b. If the server is licensed, go to the next step. If it is not licensed, click **Add License Key**.
   c. In the Add License Key dialog box, verify that your correct License ID is entered in the **License ID** box.
   d. In the Add License Key dialog box, verify that your correct Partner Place username is entered in the **Partner Place username** box.
   Note: If necessary, you can create a new Partner Place account or change the one you are using, by clicking the **Create\Update Partner Place username** link.
   e. Select **License Key**.

f. Click **Retrieve**.
   If your server is able to communicate directly with the Product Registration and License Activation System (PLAS), your license(s) will be retrieved and you can start your system. Go to the next step.
   If your server is behind a firewall or otherwise unable to communicate directly with PLAS, you will be given an opportunity to save an XML license request file.
g. Save the XML license request file and transfer it to a system that has internet access.
h. Use a web browser to navigate to the PLAS web page: http://ecentral.kodak.com/productregistration/fileupload.aspx.
i. On the PLAS web page, click **Browse**, browse to the location where you saved the XML license request file, and click **Open**.
j. To submit the request file and initiate creation of an XML license response file, click **Upload file**.
k. Save the XML license response file, and transfer it to your Prinergy primary server.
l. In the Add License Key dialog box in Prinergy Administrator, select **Load License key from file (main/trial)**.
m. Click **Browse** and navigate to the location where you saved the XML response file.
n. Click **Read File**.
o. When the license appears in the the **License Key** field, click **Apply**.

6. On the Hot Standby server, start the Prinergy software.

The Hot Standby server is now the primary server, and all jobs are present. Start Prinergy Workshop and direct it to the Hot Standby server to connect. You can test system functions by opening an existing job and doing a test proof or output (do not add any files or refine pages, as this is just a test and any changes will not be restored to the production server). Test other functions by creating one test job, adding and refining input, imposing files, making VPS files, and testing vital proof and plate functions. Note that this test job will not be present when you return to normal production as this is only a test failover procedure that does not include the full failback process needed after running emergency production.

If JTP or path errors are indicated in processing failures, correct them in the Process Plan Editor for the failover situation. These changes do not affect the production Primary process plans and will need to be done in any emergency failover situation as well. If needed files are missing from the Hot Standby server (ICC profiles, etc.), this indicates that further setup configuration should be done per the Preparing for failover section.

Restoring operations after a Failover Test:

Once testing is completed, quit Workshop and follow these steps to restore the system to normal operations.

Note: the following should only be used in a test scenario. When restoring a server after an actual emergency failover, the instructions outlined in Restoring the primary server to normal operation should be followed.

1. On the Hot Standby server, start Prinergy Administrator, and stop the Prinergy software on all servers by selecting **File** > **Stop** > **All Servers** (if more than one is present) > **Stop**.

2. On the primary server, re-enable the network card or plug the network cable back in to place the primary server back on the network.
3. On the failover server, switch the failover server to a secondary server again by selecting **Administrator** > **Revert to Secondary**.
4. Start Prinergy on all servers.
5. Restart InSite by restarting the server, or entering `net start insite` in a command prompt.

The system should now be ready for normal operations.

Ensure that the Double-Take replication is operating properly by opening the Double-Take Console and selecting **Go** > **Manage Jobs** to verify that the PrinergyDB replication job is running. The activity should be **Synchronizing** or **Protecting**.

If you created a failover test job, it created an additional job folder on the Job Home which is not in the current Prinergy Jobs in Job Finder. This folder can now be manually deleted to clean up the job home location.