

## CU\*ANSWERS REVIEW OF SAGE DIRECT, INC.'S DISASTER RECOVERY TEST

EVENT DATES: 10/21/2019, 1/03/2020.

### SUMMARY

As part of a robust business continuity program, CU\*Answers regularly assesses the preparedness of vendors who provide business critical services and supplies. This includes the audit and review of vendor disaster recovery plans and tests. A recovery test is performed by Sage Direct Inc. annually (or as otherwise requested by CU\*Answers).

On October 21, 2019, a recovery test was performed at the Sage Direct recovery site, witnessed and reviewed by Danielle Caliendo, Business Continuity Coordinator at CU\*Answers. The test was conducted in part to confirm the capability to fulfill the vendor service obligations in the event of a significant disruption at the Sage Direct primary production facility.

For the purpose of this test, daily notices, member, credit and mortgage statement files were generated and securely transmitted by the CU\*Answers production host to servers at the Sage Direct recovery site, located within the US Signal data center in Kentwood, MI. From there, the files were processed for printing and securely transmitted to their alternate print service vendor, Extend Your Reach in Lansing, MI.

Following the recovery test, teams discussed recent changes made at the Sage Direct production facility to improve the efficiency and accuracy of the inserting and mailing process. Similar changes were implemented at the EYR facility and a follow-up recovery test scheduled for January 3, 2020. Details of these processing changes are included in the body of this report.

The following sections identify challenges observed, lessons learned, and recommendations for consideration related to this recovery event.

### EVENT REVIEW

The Sage Direct continuity and recovery strategy includes three facilities:

Main office and primary production facility (IT and Printing):  
3400 Raleigh Dr. SE  
Grand Rapids, MI 49512

The vendor maintains a colocation agreement with US Signal to host their redundant servers in the Kentwood data center and provide workspace if needed for disaster recovery purposes. At this data center are computer systems and networking equipment to receive, process and transmit data files to and from clients.

Disaster Recovery Site (IT only):  
US Signal Data Center – Grand Rapids East  
4765 Barden Ct.  
Kentwood, MI 49512

The vendor maintains a contractual agreement with Extend Your Reach for emergency printing services in the event of a disruption to normal production at the primary production facility.

Extend Your Reach facility (IT and Printing):  
4908 Contec Dr.  
Lansing, MI 48910

This disaster recovery test proceeded as follows:

- The statement test files were encrypted and sent via secure FTP to the recovery site prior to the beginning of the test.
- The test files were received by systems at the site and held for processing.
- Participants arrived at the site at 9:30 AM ET.
- The test files were decrypted, processed, re-encrypted and then securely transmitted to the FTP server at Extend Your Reach for printing.
- Participants arrived at the Extend Your Reach production facility at 2:00 PM ET.
- From the processed test files transmitted, a sample of daily notices, member statements, credit card statements and mortgage statements were printed, folded, inserted into envelopes and sealed.
- The test concluded around 3:00 PM ET.
- For confirmation purposes, several print proofs and production result samples of printed, inserted and sealed statements were retained by Sage Direct for their own recovery test records. The remaining test samples were destroyed, and statement data file(s) purged.

## OBSERVATIONS

- The relocation of the Sage Direct recovery site to the US Signal data center provides enhanced physical security capabilities, including:
  - Retinal scanners installed at each ingress point between security zones.
    - During the test, Sage Direct staff demonstrated retinal access to the various parts of the building.
  - Test participants without access were required to sign in and were escorted throughout the duration of the test.
  - Interior doors are configured so that the next will not open until the former is closed (man trap).
  - Enhanced perimeter security by fully encompassed gate with telecom to gain access to the parking lot and building.
- Sage Direct uses Acronis to back up all software and routines used for financial document processing. Should needed, this back up would be restored on new hardware to be able to perform data processing functions.
- Physical security at the Extend Your Reach facility included proper visitor sign-in and badging. Participants were accompanied by an EYR employee at all times during the test and facilities tour.
- EYR provided adequate proof of sufficient (rotated) inventories of paper and envelopes on site for use in the event of a disruption at the Sage Direct primary production facility.
- Additional observations and comments are included in “Disaster Recovery Test Results” on page four of this report.

## CHALLENGES

During the initial test on October 21, it was discovered that recent changes in the production environment to improve efficiency and accuracy of the printing and insertion processes were not implemented in the DR environment. Once the changes were applied, a follow-up recovery test was conducted on January 3. These process changes include:

Process during initial test:

- Process by sheet count and using the sequence barcode in the address block to verify all the pieces are accounted for. This creates individual sheet group print files per run.
- A sequence barcode is on all statements in the statement packet.
- Multiple mailings are created according to sheet group per run.

Process changes for follow-up test:

- Process by comingling the sheet groups producing one print file per run as is done at Sage.
- Use two 2D barcodes. One in the upper left-hand corner, which tells the inserter how many sheets to pull per statement packet and the sequence barcode in the address block.
- Print only one sequence barcode on the first statement in the statement packet.
- One mailing per run is created.

Additional details about the recovery test efforts are included in the attached report provided by the vendor.

## STATEMENT PROCESSING AGREEMENT

One of the objectives for each recovery test is to confirm the following requirements from the 'Statement Processing Agreement' between Sage Direct and CU\*Answers. These include the following:

1. Sage Direct warrants that they will ship within 2 weeks of a catastrophic event.
  - a. Based on test results, there is no evidence to suggest that the vendor is unable to meet this requirement.
2. Sage Direct warrants the ability to receive and decrypt statement and notice data using the SFTP protocol.
  - a. Secure file transmissions have been tested successfully during multiple tests.
3. Testing will "ensure that the disaster recovery service will satisfactorily handle the current CU\*Answers processed volumes." This is to include details on site processing capabilities as well as material sources (paper, envelopes, etc.).
  - a. The data processing and printing capabilities (including raw material inventories) at the primary, alternate print facilities (EYR), and envelope vendor's warehouse meet and/or exceed the requirements of CU\*Answers.
4. Minimum 18-month testing cycle.
  - a. The previous test was performed in October of 2018, placing this test within the agreed upon 18-month schedule timeframe.
5. CU\*Answers has the right to audit and visit the site accompanied by a Sage Direct employee.
  - a. As noted in this report; both the recovery site and their alternate vendor site have been reviewed for production capability and security.
6. Sage Direct will maintain confidentiality of data at all times.
  - a. Proper security controls were observed as part of this test.



## SAGE DIRECT INC

### DISASTER RECOVERY TEST RESULTS

#### FIRST TEST

Date: 10-21-19

Person completing form: Evelyn Alvey, General Manager

Sage Direct's United States Postal Service (USPS) status:

Enterprise Payment System (EPS)

Mail Anywhere

Seamless

Data processing location:

Sage Direct's Disaster Recovery Colocation

US Signal

4765 Barden Ct SE

Grand Rapids MI 49512

Print and inserting location:

Extend Your Reach (EYR)

4908 Contec Drive

Lansing MI 48910-7101

Attendees:

Sage Direct: Evelyn Alvey, James Mucci

CU\*Answers: Danielle Caliendo

Extend Your Reach: Randy Hecht, Gary Syrba, Charlie Bahl

Files transmitted to Sage on 10-17-19 from CU\*Answers:

Statements: STMFLAT01.zip

Credit Card: STMFLCC.zip

Mortgage: STMFLMTG.zip

Files transmitted to Sage on 10-18-19 from CU\*Answers:

Daily Notices: NOTICES.zip

Files transmitted to EYR 10-21-19 from Sage:

Daily notices: NoticeStmt.R21.pdf

Mortgage: MortStmtR21.pdf

1-page statements: CUA StmtR1pg1.pdf

2-page statements: CUASmtR1pg2.pdf

3-page statements: CUASmtR1pg3.pdf

Statement files contain householded credit card statements.

## DISASTER RECOVERY TEST RESULTS

### Printing:

- ✓ To and from dates on the statements are correct
- ✓ Number of pages shown on statement match the number of pages printed
- ✓ All address lines are showing including name, address, city, state, and zip
- ✓ Account numbers and member's name are identical on all statement pages belonging to the same member
- ✓ The tray and pallet numbers are present

### Inserting:

- ✓ Correct envelopes were used
- ✓ Mail Run Data File (MRDF) number in the address block are identical on all statements inserted into the same envelope
- ✓ The address block placement in the window meets postal regulations
- ✓ Envelopes are sealing properly

50 random statements were opened after inserting was complete and all statement pages were correct.

### Comments:

- During this testing event, it was discussed EYR's 2D sequence barcode will only print in the address block of the first statement which shows through the envelope's window. Sage was printing this 2D sequence barcode on the first page of each statement househoulded in the same envelope. This change ensures the sequence number of each statement packet is accounted for accurately. This change has been made.
- Previously, Sage separated statement mailings by page groups creating multiple mailings. It was discussed that this was not necessary and will slow down the inserting process. The process changed to comingling all page groups creating one mailing.
- Demonstrated what happens by intentionally creating the following conditions:
  - A page of the statement is pulled from the statement packet.
  - A page of one member's statement is inserted into another member's statement.
  - A statement is pulled from the belt causing the sequence numbers on the statements to be out of order.
- In all demonstrations, the inserter stopped, the error was identified on the monitor, and the operator reconciled the error.
- Key points discussed:
  - Audit totals, provided by CU\*Answers, and job summaries are compared throughout the workflow process ensuring the correct file was transmitted and received by Sage, produced in its entirety, and printed correctly.
- US Signal's physical security controls were enhanced with added fencing and an electronic security gate.
- Documentation was made available containing US Signal's physical and cyber security controls. (Documentation available)
- Inserted statements were shredded on site; data files were deleted from EYR's servers.

## DISASTER RECOVERY TEST RESULTS

### SECOND TEST

Date: 1-3-20

Person completing form: Evelyn Alvey, General Manager

#### Data processing location:

Sage Direct's Inc  
3400 Raleigh Dr SE  
Grand Rapids MI 49512

#### Print, inserting, and mailing location:

Extend Your Reach (EYR)  
4908 Contec Drive  
Lansing MI 48910-7101

#### Attendees:

Sage Direct: Evelyn Alvey, James Mucci (processing only)  
Extend Your Reach: Randy Hecht, Gary Syrba, Charlie Bahl

#### Files transmitted to Sage on 1-2-20 from Sage Client:

Statements with substitute 1099INT and 1098 tax forms: ValleyOne\_202000103.txt

#### Files transmitted to EYR 10-21-19 from Sage:

Statements with substitute 1099INT and 1098 tax forms: ValleyOneDRmail.pdf  
Quality control proof sample: ValleyOneDrproof.pdf  
Multipage statement test: CUASmttBCtest.pdf

#### Printing:

- ✓ To and from dates on the statements are correct
- ✓ Number of pages shown on statement match the number of pages printed
- ✓ All address lines are showing including name, address, city, state, and zip
- ✓ Account numbers and member's name are identical on all statement pages belonging to the same member
- ✓ The tray and pallet numbers are present

#### Inserting:

- ✓ Correct tax envelopes were used
- ✓ Mail Run Data File (MRDF) number in the address block are identical on all statements inserted into the same envelope
- ✓ The address block placement in the window meets postal regulations
- ✓ Envelopes are sealing properly
- ✓ Live statements were processed by the USPS and entered the postal system for delivery
- ✓ The 2D barcode was read by the inserter's scanners correctly on a comingled statement run

## DISASTER RECOVERY TEST RESULTS

Comments:

- EYR's 2D sequence barcode prints in the address block of the first statement only. This barcode shows through the envelope's window.
- The data processing changed to comingling all page groups creating one mailing for both the live and test files. This change expedites the inserting and mailing processes.
- EPS, Mail Anywhere, and the Seamless were tested through the Lansing MI BMEU with no issues.

In the event of a disaster:

All statements will be printed and mailed within two-three weeks of EYR receiving data files from Sage. Statements will be printed in gray scale.

The original copy of this completed form will be kept on file at Sage Direct.

Signature: *Evelyn Alvey* Date: 2-5-2020