CARRIER INTERFACE TEST PLAN

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Version 1.0

Revision History

Date	Version	Changes	Author	Reviewed by
07/22/2013	0.1	Initial Version	Dan Kazzaz	Sirisha Pallekonda Saadi Mirza
07/24/2013	0.2	SHOP and Individual updates	Sirisha Pallekonda Saadi Mirza	Sara Cormeny Dan Thomas Hannah Turner
08/06/2013	1.0	Updates to timelines and 820's from Carrier to DC	Saadi Mirza	Dan Thomas

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1   Introduction

1.1   Purpose and Scope

The Carrier Interfaces Test Plan provides a framework for coordinating, executing, and documenting tests between the District of Columbia Health Benefits Exchange (also referred to as 'DC HBX' or 'DC Exchange') system and Carriers. This is a living document, which will be updated throughout the program lifecycle as changes occur, new information is learned, and lessons learned are integrated into ongoing plans.

1.2   Background of DC Health Exchange

On March 23, 2010, President Obama signed the Patient Protection and Affordable Care Act (ACA), which extends healthcare coverage to an estimated 32 million uninsured individuals and makes coverage more affordable for many others.   The ACA requires that states set up a health insurance marketplace or take part in a federally facilitated marketplace. The DC Health Benefit Exchange Authority (DC HBX) was established as a requirement of Section 3 of the Health Benefit Exchange Authority Establishment Act of 2011, effective March 3, 2012 (D.C. Law 19-0094).

The mission of the DC Health Benefit Exchange Authority is to implement a health care exchange program in the District of Columbia in accordance with the Patient Protection and Affordable Care Act (PPACA), thereby ensuring access to quality and affordable health care to all DC residents.

The health care exchange program will enable individuals and small employers to find affordable and easier-to-understand health insurance and assist small employers in purchasing qualified health benefit plans for their employees. The exchange will facilitate the purchase of qualified health plans and assist individuals and groups to access programs, premium assistance tax credits and cost-sharing reductions.

The District of Columbia health assistance eligibility and enrollment process will:

- Feature a transparent, understandable, and easy-to-use online process that enables consumers and small business employers to make informed decisions about applying for and managing benefits.
- Accommodate a full range of user capabilities, languages, and access considerations.
- Offer seamless integration between private and public insurance options, alleviating the need for consumers to know in advance for which programs they may qualify.
- Provide strong privacy and security protection.

The goal of the project is to allow enrollment in District of Columbia Health Benefit Exchange for Medicaid plans and to determine eligibility for all District of Columbia health assistance programs within a single technology infrastructure. Over time, DC HBX intends to incorporate eligibility determinations and case management services for other human services programs into the technology platform.

District of Columbia Health Benefit Exchange is required to be simple to use and seamless in identifying people who qualify for coverage through the exchange, Advance Premium Tax Credits, cost-sharing reductions, Medicaid, and MCHP. District of Columbia Health Benefit Exchange will help qualified individuals and small employers shop for, select, and pay for high-quality, affordable private health plans that fit their individual needs. By providing a place for one-stop shopping, District of Columbia Health Benefit Exchange will make purchasing health insurance

easier and more understandable. In light of the individual insurance coverage mandate, it is imperative that they have ready access to coverage and the ability to enroll in such coverage without unnecessary barriers.

1.3   Intended Audience

This document is written for system architects, EDI developers, Quality Assurance/Testing resources, network engineers and others who are involved in the integration program of Carrier systems with DC Exchange.

1.4   Acronyms

Table 1: Acronyms

Term	Definition
ACA	Affordable Care Act
APTC	Advance Premium Tax Credit
CCB	Change Control Board
CCIIO	Center for Consumer Information and Insurance Oversight
CMS	Centers for Medicare & Medicaid Services
COTS	Commercial-off-the-Shelf
HHS	Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
HIX	Health Insurance Exchange
MAGI	Modified Adjusted Gross Income
MCHP	District of Columbia Children's Health Program
MCO	Managed Care Organization
DC HBX	District of Columbia Health Benefit Exchange

Term	Definition
PMO	Project Management Office
QHP	Qualified Health Plan
SFTP	SSH File Transfer Protocol
SHOP	Small Business Health Options Plan
SLA	Service Level Agreement
SNAP	Supplemental Nutrition Assistance Program
TANF	Temporary Assistance for Needy Families
TPA	Third Party Administrator

1.5   Related Resources

Table 2 shows the related documents that are referenced in this document.

Table 2: Related Resources

Document	Description
CMS Companion Guide for the Federally Facilitated Exchange (FFE)	Provides information on usage of 834 transaction based on 005010X220 Implementation Guide and its associated 005010X220A1 addenda
CMS Standard Companion Guide	
Trading Partner Agreements (TPA)	Outlines the requirements for the transfer of EDI information between a Carrier and DC Exchange
DC Exchange Carrier Onboarding Document	Contains all the information including interchange specifications required to onboard a Carrier on DC Exchange
DC Exchange Carrier Integration Manual	Provides a comprehensive guide to the services offered by DC Exchange
DC Exchange Benefit Enrollment Companion Guide	Provides technical information on 834 transactions supported by DC Exchange

DC Exchange Benefit Enrollment Companion Guide	Provides technical information on 834 transactions supported by DC Exchange
DC Exchange Premium Payment Companion Guide	Provides technical information on 820 transactions supported by DC Exchange
DC Exchange Carrier Testing Document	Contains the testing strategy for DC Exchange – Carriers integration
DC Exchange Transaction Error Handling Guide	Provides details
DC Exchange Broker and Employer Demographic Data Exchange Guide	Provides technical information on Broker and Demographic Data file exchanges supported by the DC Exchange.

1.6   How to Contact Us

As each Carrier is prepared to start testing, and during testing, it is anticipated that there will be a large amount of coordination needed by each party.   The DC Exchange maintains a Web site with Carrier-related information along with email and telephone support:

- **Web**:   http://dchbx.com/page/carrier-information
- **Email**:   carriersupport@dchbx.com
- **Phone**:
    - (202) 317-0287 - Concierge, general Carrier EDI support
   - (202) 320-7308 - Technical Carrier EDI support

2   DC HBX/Carrier Interfaces Overview

To ensure the accuracy and integrity of the Carrier integration test process, testing must be conducted in an emulated production environment. The user acceptance test environment will match the proposed structure as defined in the Carrier Integration Package document and shown in Figure 2.

The District of Columbia Health Insurance Exchange (DC HBX) is the system that supports the health insurance exchange functions of DC HBX. :

Figure 1: DC HBX-Carrier Batch Interaction
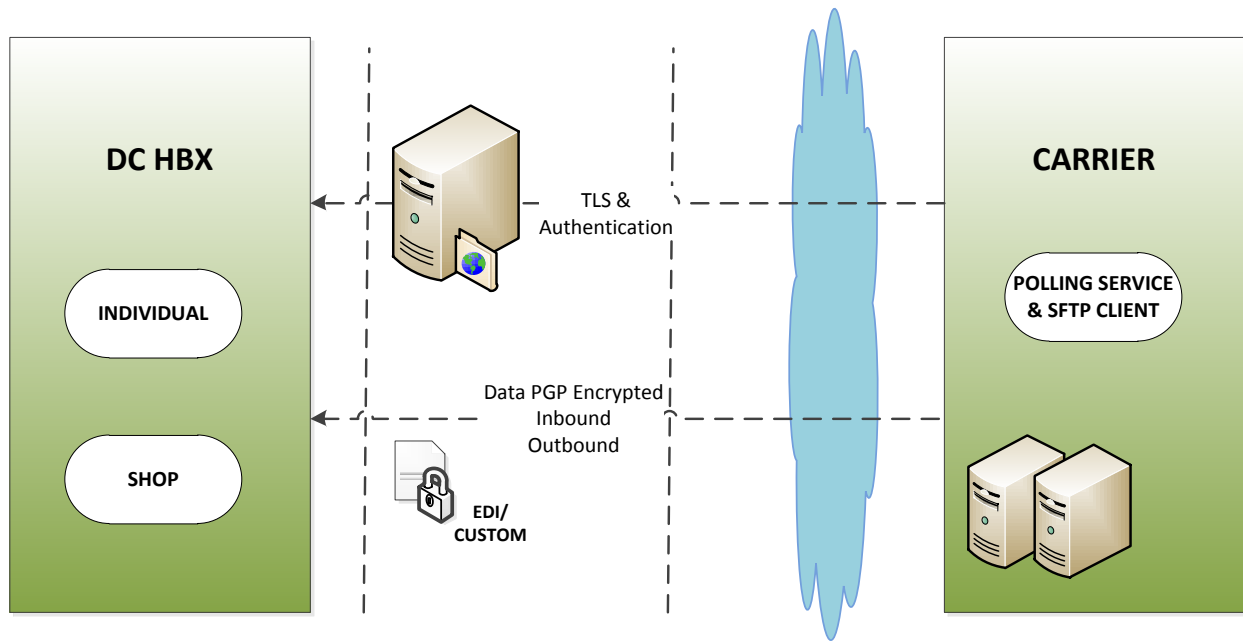
Each Carrier will log in to the DC HBX file transfer server using their entity account. Each Carrier can see two standard top-level folders in the secure file transfer protocol (SFTP) server for the file exchange with DC HBX, one each for SHOP and Individual.

Please refer to the DC Exchange Integration manual and DC Exchange companion guides for the directory structure underlying these folders

See Appendix A for testing scenarios for the DC HBX-Carrier INBOUND and DC HBX-Carrier OUTBOUND processes.

Table 4 provides a summary of all transactions to support the various programs in batch mode.

Table 3: DC HBX - Carrier Exchange –Batch Mode

Transaction	Data Exchanged	Sender	Receiver	Applicable Program
Enrollment and Changes - Subscriber and Dependents	• Enrollment • Termination • Re-enrollment • Cancellation • Reinstatement	DC HBX	Carrier	Individual SHOP
Employer Demographic Data	• New Employer Group added to DC HBX. • Updates made to existing Employer Group. • Employer Group Termination	DC HBX	Carrier	SHOP
Broker Demographic Data	• New Broker added to DC HBX. • Updates made to existing Broker data. • Broker Termination	DC HBX	Carrier	Individual SHOP
Enrollment and Changes - Subscriber and Dependents	• Termination • Cancellation • Effectuation • Reinstatement • Confirmation (out of scope for 10/1)	Carrier	DC HBX	Individual SHOP
Initial Binder Payment	• Premium Remittance Advice	DC HBX	Carrier	Individual SHOP
Individual Ongoing Payment	• Premium Remittance Advice (deferred til 01/2014)	Carrier	DC HBX	Individual
SHOP Ongoing Payment	• Premium Remittance Advice	DC HBX	Carrier	SHOP
Enrollment Data For Reconciliation From DC HBX	• Full 834 file	DC HBX	Carrier	Individual SHOP

3   Test Plan

To fully test the functionality of these interfaces, a joint team of DC HBX and Carrier members will participate in a tightly coordinated test process.   The details of this process are explained in the following sections.

3.1   Test Objectives

The successful implementation of interfaces between DC HBX and Carriers is essential. The functionality, performance, and security of the interfaces will have a tangible impact on customer satisfaction, adaptation and compliance. Ultimately successful implementation will also have financial implications for both the Carriers and DC HBX. As such, a series of incrementally complex testing sessions, designed to ensure both DC HBX team and the Carriers meet all functional and non-functional requirements, will be executed. Table 5 provides the list of test objectives along with the rationale, entrance criteria, and exit criteria.

Table 4: Interface Test Objectives

No.	Objective	Rationale	Entrance Criteria	Exit Criteria

1	Ensure secure connectivity between Carrier systems and DC HBX.	The basis of any interface is ensuring consistent, predictable connectivity. Often this requires modifications to firewalls, routing rules, virtual internet protocols, certificate exchange, and other configuration changes that must be approved by control boards and security personnel.
		
		The PGP processes and valid key exchanges will be tested
			• Carrier provided following information:
			
			   o Source IP address,
			
			   o SFTP public key
			
			   o PGP public key
			
			• Environment configured to establish connectivity between Carriers and DC HBX
			
			• Appropriate tools or test harness available for test
			
			• Inbound, Outbound are available in DC HBX Interface
			
			• Baseline test scripts are available
				• Carrier successfully logged into DC HBX Interface
				
				• Blocker and high-level defects are resolved or deferred defects are accepted by the stakeholders
				
				• Test execution completed during the specified period
				
				• Visual test of automated procedures

No.	Objective	Rationale	Entrance Criteria	Exit Criteria
2	Ensure the Carrier systems and DC HBX meet the requirements set forth in the Interface Control Document.	The Interface Control Document defines the standard for exchange of data, content, and error handling. It is critical to test the interfaces and manually verify that the data being passed complies with the Interface Control Document. This will identify early issues with the interfaces without the complexity of trying to debug data through multiple systems and services.	• Exit Criteria for Objective 1 is met • Baseline test scripts are available • Data files are available for both positive and negative scenarios • Test data exists for all transactions • Log file exists	• Dry run successfully completed as per the published schedule for Carriers and sample data files are transferred between DC HBX and Carriers without any data loss. • Blocker and high-level defects are resolved or deferred defects are accepted by the stakeholders • Test execution completed during the specified period • 834/820 dummy data in both directions • Broker and Employer demographic dummy data from DC to carrier • Validates to SNIP level-2 • 999 / TA1 are generating correctly
3	Ensure end-to-end functionality of the Carrier to DC HBX interface for nominal scenarios.	The team must verify that the interfaces support all business processes required by both DC HBX and the Carriers. The best way to perform this is to run end-to-end scenario tests and ensure that data travels back and forth through the systems seamlessly.	• Exit Criteria for Objective 2 is met • End to end test scripts are base lined. • Each side verifies X12 data • Test data files available for both positive and negative scenarios	• Blocker and high-level defects are resolved or deferred defects are accepted by the stakeholders • Data transfer is successful as outlined in the test scripts • Validates to SNIP level-2 • Test execution to be performed during the specified period

No.	Objective	Rationale	Entrance Criteria	Exit Criteria
4	Ensure end-to-end functionality of the Carrier to DC HBX interface for error scenarios.	Despite the best planning and architectures, there will be circumstances in production where networks are down, data arrives in an improper format, or other errors occur. To ensure operations are not interrupted, it is critical to test these scenarios and verify that the interfaces and applications recover gracefully.	Error scenario test scripts are base lined and supported test data files are available	- Error and exception / Invalid scenarios are successfully tested - Blocker and high-level defects are resolved or deferred defects are accepted by the stakeholders - SOPs are developed for outstanding exception scenarios for operational readiness - Overall functional testing report is shared and accepted by the stakeholders - Test execution to be performed during the specified period
5	Ensure processing Carrier data and interface throughput meet performance requirements.	Data for plan updates, enrollment, dis-enrollment, and financial transactions require timely processing. Both sides of the interface must transmit and process data correctly and also handle the anticipated volume of data within acceptable performance parameters.	- Service Level Agreement (SLA) established to process enrollment data - SLA established to process disenrollment data - SLA established to process the batch file transfers	- Transmission of the data met the specified SLAs - Blocker and high-level defects are resolved or deferred defects are accepted by the stakeholders - Performance test report has been shared and accepted by the stakeholders - Test execution to be performed during the specified period

3.2   Test Schedule

Given the number of Carriers that have to perform interface testing with DC HBX system and the varying degrees of readiness of each of the Carriers' systems, there will not be a single set schedule for Carrier testing. Instead, each Carrier will work with DC HBX to verify that all five objectives are met. It is anticipated that Carriers will each be at various states of readiness when the DC HBX is ready to start testing. As Carriers become ready for testing, they can contact the DC HBX and schedule their particular testing. DC HBX requires that all testing be completed by 9/13/2013.

Table 6 lists key milestone dates where the DC HBX will be ready to begin testing the objectives. The third column presents notional timeframes required to test each of the objectives.

Table 5: Test Readiness Milestones

No.	Objective	Earliest Test Date	Notional Time for Testing
1	Ensure secure connectivity between Carrier systems and DC HBX.	7/29/2013	Two Weeks
2	Ensure the Carrier systems and DC HBX meet the requirements set forth in the Interface Control Document.	8/12/2013	One Week
3	Ensure end-to-end functionality of the Carrier to DC HBX interface for nominal scenarios.	8/19/2013	Two Weeks
4	Ensure end-to-end functionality of the Carrier to DC HBX interface for error scenarios.	8/19/2013	Two Weeks
5	Ensure processing Carrier data and interface throughput meet performance requirements.	9/3/2013	One Week

3.3   Test Environments

The DC HBX will provide a test environment for the verification of interfaces. Figure 2 shows a simplified view of how releases will migrate between environments.
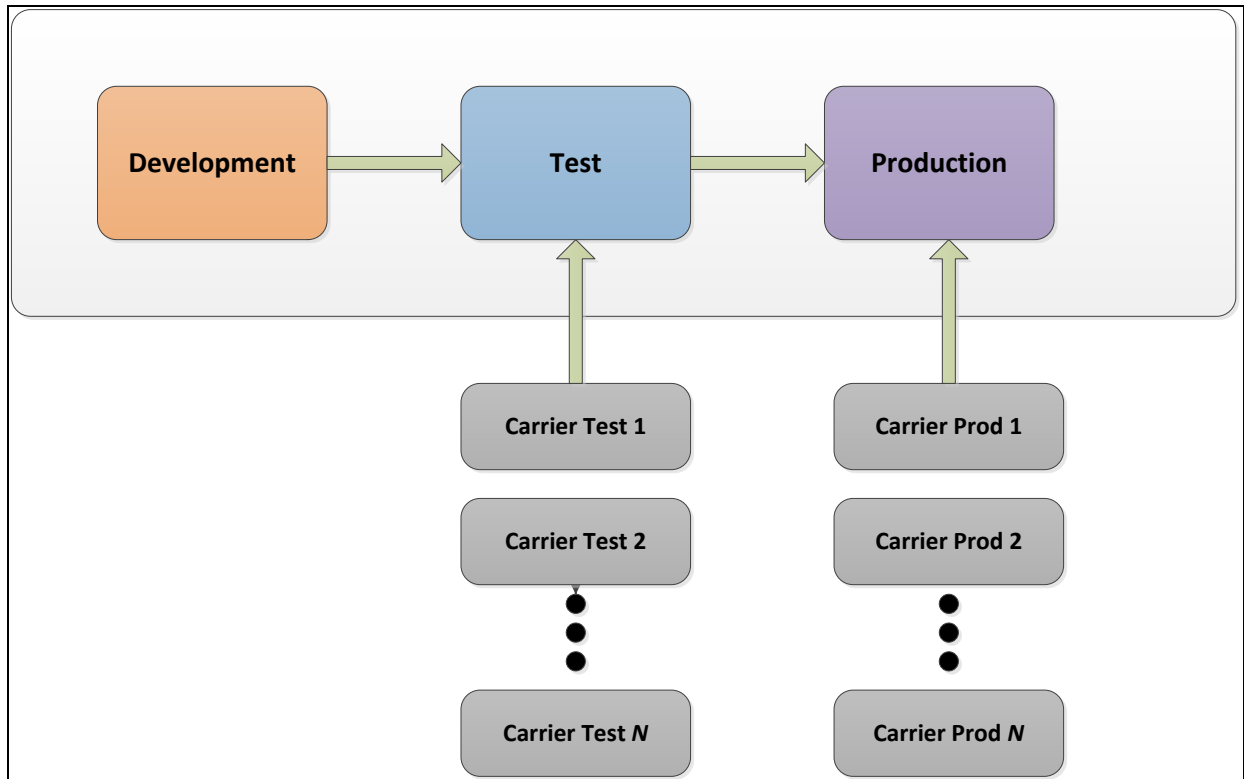
Figure 2: Test Environment Overview

The development environment is where new versions of the DC HBX system, integrates new releases of Commercial off the Shelf (COTS) tools, and fixes defects. The code in this environment changes often and is not considered suitable for formal testing. When all internal testing is complete and releases are ready for testing with external stakeholders, the applications will be moved to the test environment. All Carriers testing will take place in this test environment. As described later in Section 8, Governance, Carriers will be provided an opportunity to test with the release and identify defects or issues before it is moved to production.

3.4   Test Data

Initial testing will be performed using a set of fabricated test data. Fabricated test data has the following benefits:

- It ensures that all pre-defined operational scenarios are exercised during the test
- It cannot be confused with production data and will not inadvertently be sent to actual consumers
- It can be used for testing in non-secured environments
- It can be fabricated to test all limit and boundary scenarios that happen very infrequently in actual production data

As each Carrier prepares to test with the DC HBX solution, they must first contact the DC HBX. The DC HBX will assign the Carrier a range of unique identifiers and test data. This test data will:

- Cover all scenarios defined in the Carrier Integration Package
- Test all limit and boundary scenarios:
  - All fields set at maximum lengths
  - All fields set at minimum lengths
  - All optional fields set to "null"
- Test all error scenarios

For the purposes of Carrier testing, the DC HBX will provide the following test data:

- SHOP Employer Information
- Employee Information
- Individual Information
- 834 Enrollments
- 820 Payments
- Payment Information

The Carriers must provide the following data:

- Plan Information
- 834 Effectuation and Changes
- 820 Payment Information

If Carriers have a desire to test with real data in addition to the fabricated test data, the DC HBX will process those requests on a case-by-case basis.

4 Security

Although it is anticipated that the majority of testing will be performed using fabricated data, it is still imperative that all the security measures defined in the Carrier Integration Plan be implemented for testing. These include using protocols such as SFTP. This is to ensure that the interfaces behave as required in a "production-like" environment, and to avoid situations where adding security measures impacts functionality or performance.

For a situation where a Carrier desires testing with real data, this will be handled on a case by case basis, as it will require a separate Memorandum of Understanding, risk assessment, and assurance that the Carrier's test system adheres to all Health Insurance Portability and Accountability Act (HIPAA) and National Institute of Standards and Technology standards.

5 Test Execution

The scenarios defined in Appendix A will be executed for each Carrier. The DC HBX team will develop a set of test cases that are mapped to those scenarios, which will follow the format defined in Appendix B. Those test cases will be provided to the Carriers for review.

Each Carrier test will have a dry run test and a formal test.   It is expected that the software and system configurations on both the DC HBX and the Carrier test environment are frozen during the testing, and that the baseline that is tested will be promoted to the production environment pending a successful test.

The purpose of the dry run is to identify any issues with the software, test cases, and test data before attempting a formal test.   After the dry run is complete, the stakeholders from the DC HBX, and the Carrier will determine whether to proceed with the formal test or whether changes are needed to the software or system, test cases, or test data.   This decision may be made electronically or via an actual meeting.   The DC HBX reserves the right to request a second dry run if it is their opinion that the changes needed are significant enough to warrant it.

The DC HBX team may choose to allocate testing time slots to particular Carriers to conduct more controlled testing as deemed necessary. There may be open time available when all Carriers can participate in testing.

During the formal test, no software, system configurations, test cases, or test data should be changed and all scripts should be executed as written.

The following are the high-level test scenarios. Scenarios are applicable to both Individual and SHOP unless otherwise indicated:

1. **DC HBX – Carrier: Enrollment and Changes** (Individual/SHOP)

    a. Add a new individual/employee

    b. Update an existing individual/employee

    c. Terminate an existing individual/employee

    d. Reinstate coverage for an existing individual/employee

    e. Add a new dependent

    f. Update an existing dependent

    g. Re-enroll an existing dependent (Individual only)

    h. Terminate an existing dependent

    i. Reinstate coverage for an existing dependent

2. **Carrier - DC HBX: Enrollment and Changes** (Individual/SHOP)

    a. Effectuation

    b. Reinstate coverage

    c. Confirmation (Out of Scope – 10\1)

    d.   Cancellation (Individual only)

    e.   Termination

         i.   Non-payment (*Individual only*)

         ii.   Fraud

         iii.   Death

3. **DC HBX- Carrier: Payments** (Individual/SHOP)

    a.   Binder

    b.   Ongoing

    c.   Life Event Premium Adjustment Payments

4. **Carrier-DC HBX: Payments** (Individual only – deferred til 1/1/2014)

    a.   Binder

    b.   Ongoing

5. **DC HBX- Carrier: Reconciliation** (Individual/SHOP)

    a.   Full 834 file containing enrollment data

6. **DC HBX – Carrier: Employer Group Demographic Data** (SHOP only)

    a.   Add

    b.   Updated

    c.   Terminate

7. **DC HBX – Carrier: Broker Demographic Data** (Individual/SHOP)

    a.   Add

    b.   Updated

    c.   Terminate

6   Status Meetings

At the commencement of testing, there will be a weekly meeting scheduled to discuss test planning, results, defects, and planned resolutions. As testing progresses and more Carriers are participating, this meeting may occur more frequently. DC HBX will setup a testing kick off meeting to facilitate testing start and provide more details for dry run.

6.1   Defect Management

The DC HBX team will implement a defect management processes to ensure defects are reported and tracked in consistent manner with all Carriers. Carriers are responsible for providing priority of the defects. Identified defects by Carriers will be generated into an excel spreadsheet. These defects will be discussed with the Carriers during the Test Status Meetings, as mentioned above. Carriers would be responsible for the test data. For test data need from DC HBX end may be discussed and accommodated based on the timelines and certification date.

Appendix D provides the defect reporting and tracking template, which will be reviewed during weekly test status meetings.

Table 7 describes the qualification and SLA for defects with different priority levels.

Table 6: Defect Qualification

Priority	Definition	Qualification
Urgent	Problem causes some vital processes to come to a standstill or be severely limited, requires shifting resources and priorities for an emergency fix (usually within 24 hours).	- Currently very visible and/or detrimental to customers - Possibly immediately detrimental to revenue or reputation - Needed for time critical deadline
High	Problem may require shifting resources but does require shifting priorities to plan the fix in the next build (Within five business days).	- The defect must be resolved as soon as possible because it is impairing development/and or testing activities. System use will be severely affected until the defect is fixed - Numerous customer complaints about the issue - Critical area of the system - Will be very visible and/or detrimental when released - Does not conform to what was stated as a requirement for the release

Priority	Definition	Qualification
Medium	Problem may not require shifting resources or priorities. Required fix in the planned build as per the DRB review (usually within two weeks).	▪ The defect should be resolved in the normal course of development activities. It can wait until a new build or version is created. ▪ Should fix if time permits; not a critical areas of the system ▪ Some customers are impacted by it but there is a workaround ▪ Very few customer complaints logged about this issue
Low	Requires no specific planning as to when it will be resolved until the delivery team is ready to address the problem.	▪ The defect is an irritant which should be repaired but which can be repaired after more serious defect have been fixed ▪ Would like to fix but can be released as is; trivial, cosmetic ▪ Few customers even notice it much less are impacted by it
On Hold	Enhancement type of defect or that cannot be fixed immediately or would be taken care of at a later date.	▪ Defect repair can be put off indefinitely. It can be resolved in a future major system revision or may be later decided not to resolve at all

6.2 Test Report

After the formal test is executed, the DC Exchange will provide a test report with the following data as a minimum:

- Testing start dates and end dates
- Test participants
- Total test cases planned
- Total test cases executed
- Total test cases passed
- Total test cases failed
- Defects generated
- Enhancements requested

This test report will be distributed to the DC HBX and Carrier stakeholders. Please refer to Appendix H for the Test Summary Report template.

All Carriers participating in the testing effort would be expected to provide following data as a minimum:

- Test Summary Report

- Test Certification document

7   Roles and Responsibilities

It is important that during this testing, roles and responsibilities are clearly defined. This will allow the tests to run smoothly and will help avoid missed expectations.

7.1   DC HBX Team Roles and Responsibilities

The DC HBX team is responsible for:

- Overall test coordination

- Providing an on-going test environment after enrollment begins

- Assigning and providing test data for testing

- Managing the Carrier test schedule

- Facilitating the Change Control Board (CCB)

- Prioritizing defect fixes and enhancements

- Reviewing the Carrier Integration Package and this test plan

- Developing, updating, and maintaining the Carrier Integration Package

- Developing, updating, and maintaining the Carrier Interfaces Test Plan

- Providing the test environment until enrollment begins

- Implementing the DC HBX Carrier interfaces

- Tracking defects and enhancements reported for the Carrier interface

- Participating in the CCB

- Deploying CCB-approved updates to the test environment

7.2   Carrier Roles and Responsibilities

- Reviewing and providing comments on the Carrier Integration Package

- Reviewing and providing comments on the Carrier Interfaces Test Plan

- Providing a test environment for the Carrier's interface

- Implementing the Carrier DC HBX Interfaces

- Maintaining the Carrier interface software

- Notifying the CCB of any changes to the Carrier interface

8   Governance

It is important for all stakeholders involved to carefully coordinate any changes in requirements, DC HBX implementation, and Carrier implementations. This will avoid situations where systems that are operating in production are inadvertently broken by upgrades or updates to either side of the interface. The Change Control Board (CCB) will facilitate this coordination.

8.1   Change Control Board

The CCB shall track requests for changes, progress of changes, approve changes, and approve releases for production. The scope for the CCB includes review and oversight of:

- Interface control document changes

- Test scenario changes

- Test case changes

- Defect identification

- Defect resolution

9   Appendix

9.1   Interface Test Scenarios

9.1.1   Testing Scenario for DC HBX to the Carrier - Inbound

Figure 3 shows the sequence activities for an inbound file transfer from DC HBX to the Carrier. All inbound files to Carriers are PGP-encrypted and are available for the Carrier to retrieve from their corresponding INBOUND folder.
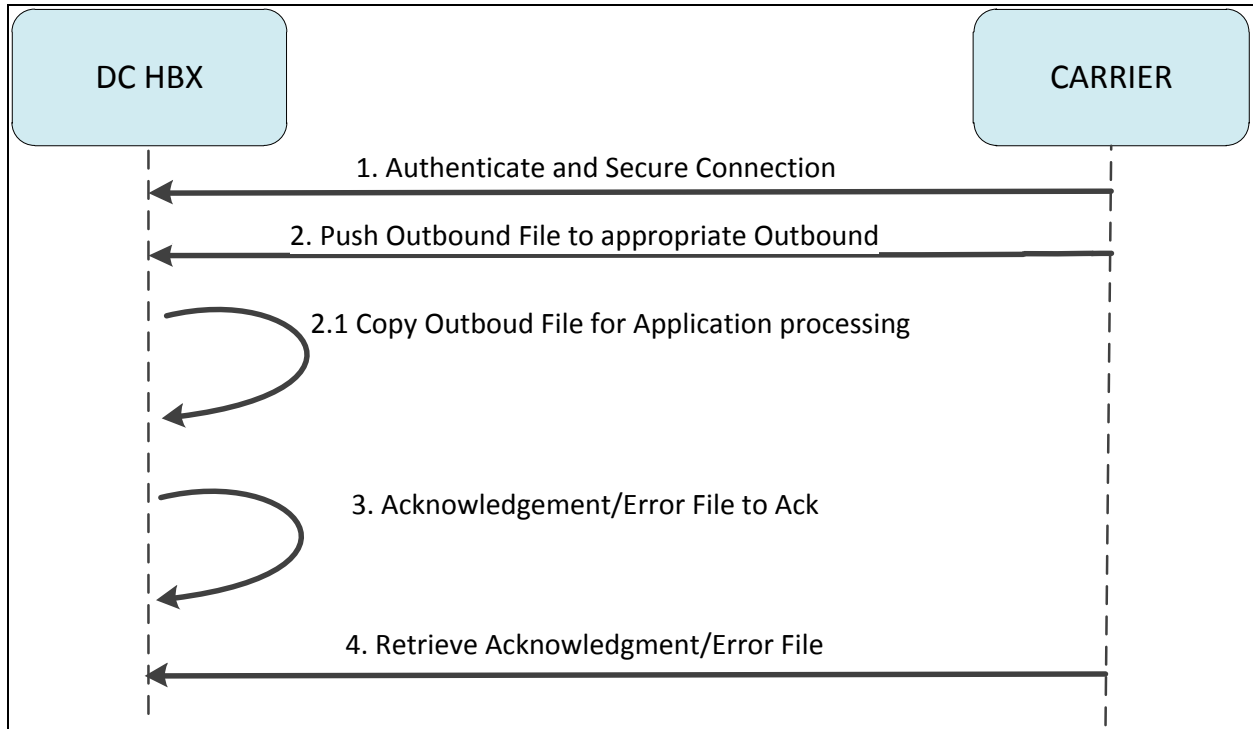
Figure 3: Testing Scenario for DC HBX to the Carrier - Inbound

1.   Carrier authenticates self with DC HBX and establishes a secure connection.

2.   Carrier downloads the inbound file from appropriate Inbound folder.   Download activity can be manual or a system interaction.

    2.1.   Carrier processes the inbound file.

3.   Carrier sends Acknowledgement/Error file after processing the inbound file to the Carrier's acknowledgement folder.

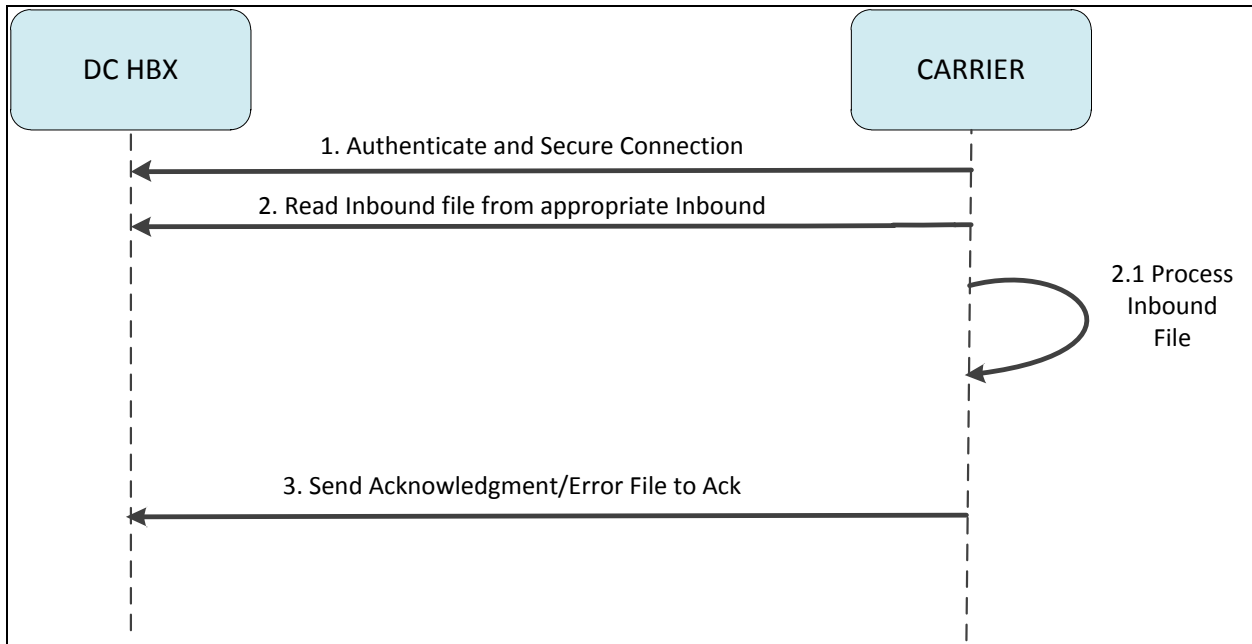Items to be tested:

    1.   SFTP connections

    2.   File transfer – from Carrier and to Carrier

3. PGP file encryption/decryption

4. DC HBX acknowledgement/error file

5. Carrier acknowledgement/error file

9.1.2 Testing Scenario for the DC HBX to the Carrier - Outbound

Figure 4 shows the sequence activities for an outbound file transfer from the Carrier to DC HBX. All outbound files from the Carrier are PGP encrypted and are available for DC HBX in the corresponding folder to

Figure 4: Testing Scenario for the DC HBX to the Carrier - Outbound

1. Carrier authenticates self with DC HBX and establishes a secure connection

2. Carrier pushes encrypted outbound file to appropriate outbound folder on DC HBX SFTP server.

    2.1. DC HBX takes a copy of the file for decryption and downstream processing.

3. DC HBX sends Acknowledgement/Error file to the Carrier's acknowledgement folder.

4. Carrier retrieves the acknowledgement/error file.

Items to be tested:

1. SFTP connections

2. File transfer – from Carrier and to Carrier

3. PGP file encryption/decryption

4. DC HBX acknowledgement/error file

5. Carrier acknowledgement/error file

9.2   Error Handling

Table 8 lists the error handling scenarios.

Table 7: Error Handling Scenarios

Scenario	Description
Error Scenario 1	*Carrier is not able to connect to DC HBX SFTP client for manual login.* **Resolution:** ▪ Carrier retries to connect to the server. ▪ Carrier to check if the browser supports the connection to SFTP server. ▪ Carrier to contact the DC HBX customer support if problem persists.
Error Scenario 2	*Carrier is getting transmission errors.* **Resolution:** ▪ Carrier retries to upload the file. ▪ Carrier escalates the issue to DC HBX customer support if problem persists.
Error Scenario 3	*Carrier is getting decryption errors.* **Resolution:** ▪ Carrier retries to decrypt the file. ▪ Carrier checks the validity of the PGP key. ▪ Carrier escalates the issue to DC HBX customer support if problem persists.
Error Scenario 4	*Carrier is getting the files with malformed structure.* **Resolution:** ▪ Carrier escalates the issue to DC HBX customer support.
Error Scenario 5	*Files are not placed in SFTP server as described in the frequency.* **Resolution:** ▪ Carrier escalates the issue with DC HBX customer support.
Error Scenario 6	*Error when downloading the file* **Resolution:** ▪ Carrier retries to download the file. ▪ Carrier escalates the issue to DC HBX customer support if problem persists.
Error Scenario 7	*File Partial Download, File Corrupt or Data Processing Errors* **Resolution:** ▪ Carrier Verifies and reprocess the file ▪ Carrier escalates the issue to DC HBX customer support if problem persists.

9.3   Integration Scenario Details

Each of the integration scenarios must be tested to completion and for accuracy.

9.3.1   834 DC Exchange – Carrier

9.3.1.1   Enrollment And Changes (Subscriber And Dependents)

Description	Individual Initial Enrollment transaction addresses all possible enrollment scenarios for "Add", "Update" or "Terminate" of the Individual and dependents from DC HBX to Carrier. ▪ Add a new individual. ▪ Update an existing Individual ▪ Terminate an existing Individual ▪ Reinstate coverage for an existing Individual ▪ Add a new dependent. ▪ Update an existing dependent ▪ Re-enroll an existing dependent ▪ Terminate an existing dependent. ▪ Reinstate coverage for an existing dependent
Interaction model	Batch
File Name	e.g. (Enrollment) 834_201305141422Z_CFBCI_INDIV_C_E_I.pgp (Maintenance) 834_201305141422Z_CFBCI_INDIV_C_M_I.pgp
Individual Program	Total number of individuals on that day.
Frequency	Daily
Inbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	DC Exchange compiles all enrollment related data corresponding to the Carrier into an EDI X12 834 file format. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.

Success	Carrier sends EDI X12 TA1 to DC Exchange as an acknowledgement after no errors are found at the interchange level. Carrier sends EDI X12 999 to DC Exchange as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ Carrier rejects the entire 834 file. ▪ Carrier generates the TA1 file with errors and sends the file back to DC Exchange. ▪ DC Exchange corrects the errors and resends the 834 file to the Carrier.
Error Scenario 2	834 file has format errors at transaction level ▪ Carrier rejects the transactions in the 834 file that have standard syntax errors or IG errors. ▪ Carrier generates the 999 file with errors and sends the file to DC Exchange. ▪ DC Exchange corrects the errors and resends the transactions.

9.3.1.2   SHOP Enrollment And Changes

Description	Individual Initial Enrollment transaction addresses all possible enrollment scenarios for "Add", "Update" or "Terminate" of the Employee and dependents from DC HBX to Carrier. ■ Add a new employee. ■ Update an existing Employee ■ Terminate an existing Employee ■ Reinstate coverage for an existing Employee ■ Add a new dependent. ■ Update an existing dependent ■ Terminate an existing dependent. ■ Reinstate coverage for an existing dependent
Interaction model	Batch
File Name	e.g. (Enrollment) 834_201305141422Z_CFBCI_GroupID_C_E_S.pgp (Maintenance) 834_ 201305141422Z _CFBCI_GroupID _C_M_S.pgp
SHOP Program	A separate 834 File is created for each group in SHOP.
Frequency	Daily
Inbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	DC Exchange compiles all enrollment related data corresponding to the Carrier into an EDI X12 834 file format. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.
Success	Carrier sends EDI X12 TA1 to DC Exchange as an acknowledgement after no errors are found at the interchange level. Carrier sends EDI X12 999 to DC Exchange as an acknowledgement after no errors are found at the functional group level.

Error Scenario 1	834 file format errors at interchange level ▪ Carrier rejects the entire 834 file. ▪ Carrier generates the TA1 file with errors and sends the file back to DC Exchange. ▪ DC Exchange corrects the errors and resends the 834 file to the Carrier
Error Scenario 2	834 file has format errors at transaction level ▪ Carrier rejects the transactions in the 834 file that have standard syntax errors or IG errors. ▪ Carrier generates the 999 file with errors and sends the file to DC Exchange. ▪ DC Exchange corrects the errors and resends the transactions.

9.3.2   834 Carriers - DC Exchange

9.3.2.1   Enrollment Effectuation - Individual

Description	An Effectuation file is created by the Carrier and sent to the Exchange for 834 EDI Individual enrollment transactions that have been successfully processed.
Interaction model	Batch
File Name	E.g.: 834_201305141422Z_CFBCI_INDIV_C_EF_I.pgp
Frequency	Daily
Inbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Outbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange.
Exchange Process	Carriers return all the information transmitted on the initial enrollment transaction in addition to effectuation related information. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.
Success	DC Exchange sends EDI X12 TA1 to Carrier as an acknowledgement after no errors are found at the interchange level. DC Exchange sends EDI X12 999 to Carrier as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ DC Exchange rejects the complete Effectuation file. ▪ DC Exchange generates the TA1 file and sends the file to DC HBX SFTP server. ▪ Carrier corrects and resends Effectuation file to DC Exchange.
Error Scenario 2	834 file has format errors at transaction level ▪ DC Exchange rejects the only the transactions that has the format errors. ▪ DC Exchange loads the transactions that are following the companion guide. ▪ DC Exchange generates the 999 file and sent the file to DC Exchange SFTP server.

	■ Carrier corrects and resends the transactions that have the format errors.

9.3.2.2 Enrollment Effectuation - SHOP

Description	An Effectuation file is created by the Carrier and sent to the Exchange for 834 EDI SHOP employee enrollment transactions that have been successfully processed.
Interaction model	Batch
File Name	E.g.: 834_201305141422Z_CFBCI_GroupID_C_EF_S.pgp
Frequency	Daily
Inbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Outbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange.
Exchange Process	Carriers return all the information transmitted on the initial enrollment transaction in addition to effectuation related information. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.
Success	DC Exchange sends EDI X12 TA1 to Carrier as an acknowledgement after no errors are found at the interchange level. DC Exchange sends EDI X12 999 to Carrier as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ DC Exchange rejects the complete Effectuation file. ▪ DC Exchange generates the TA1 file and sends the file to DC HBX SFTP server. ▪ Carrier corrects and resends Effectuation file to DC Exchange.
Error Scenario 2	834 file has format errors at transaction level ▪ DC Exchange rejects the only the transactions that has the format errors. ▪ DC Exchange loads the transactions that are following the companion guide. ▪ DC Exchange generates the 999 file and sent the file to DC Exchange SFTP server. ▪ Carrier corrects and resends the transactions that have the format errors.

9.3.2.3 Enrollment Confirmation (Out Of Scope 10/1)

Description	In response to maintenance 834 EDI files sent by either the DC Exchange such as change, cancel, terminate, and reinstatements a confirmation file is sent to confirm the successful processing. The confirmation file includes the data sent on the originating file, along with any data elements that were modified after processing by the receiving system.
Interaction model	Batch
File Name	E.g. 834_201305141422Z_CFBCI_INDIV_C_C_I.pgp 834_201305141422Z_CFBCI_GroupID_C_C_S.pgp
Frequency	In response to 834 Maintenance files
Inbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Outbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange
Exchange Process	Carriers return all the information transmitted on the maintenance transaction in addition to confirmation related information. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ DC Exchange rejects the complete Confirmation file. ▪ DC Exchange generates the TA1 file and sends the file to DC HBX SFTP server. ▪ Carrier corrects and resends Confirmation file to DC Exchange.
Error Scenario 2	834 file has format errors at transaction level ▪ DC Exchange rejects the only the transactions that has the format

	errors.
	▪ DC Exchange loads the transactions that are following the companion guide.
	▪ DC Exchange generates the 999 file and sent the file to DC Exchange SFTP server.
	▪ Carrier corrects and resends the transactions that have the format errors.

9.3.2.4 Enrollment Change - Individual

Description	Enrollment change transaction addresses all possible enrollment scenarios for "Cancel" or "Terminate" of the individual and dependents from Carrier to DC HBX. ▪ Terminate an existing Individual ▪ Cancel an existing Individual and dependents ▪ Terminate an existing dependent
Interaction model	Batch
File Name	e.g.: 834_201305141422Z_CFBCI_INDIV_C_M_I.pgp
Frequency	Daily
Inbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	Carrier compiles all enrollment change related data corresponding to the Individual into an EDI X12 834 file format. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ DC HBX rejects the complete 834 file. ▪ DC HBX generates the TA1 file and sent the file to DC HBX SFTP server. ▪ Carrier corrects and resends 834 file to DC HBX
Error Scenario 2	834 file has format errors at transaction level ▪ DC HBX rejects the only the transactions that has the format errors. ▪ DC HBX loads the transactions that are following the companion guide. ▪ DC HBX generates the 999 file and sent the file to DC HBX SFTP server. ▪ Carrier corrects and resends the transactions that have the format errors.

9.3.2.5   Enrollment Change - SHOP

Description	Enrollment change transaction entails the following for the employee and dependents from Carrier to DC HBX. ▪ Terminate an existing Employee ▪ Terminate an existing dependent
Interaction model	Batch
File Name	e.g.: 834_201305141422Z_CFBCI_GroupID_C_M_S.pgp
Frequency	Daily
Inbound File Format	EDI X12 834 - Benefit Enrollment & Maintenance as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	Carrier compiles all termination related data corresponding to the employee into an EDI X12 834 file format. Data is also customized per the DC Exchange Benefit Enrollment Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ DC HBX rejects the complete 834 file. ▪ DC HBX generates the TA1 file and sent the file to DC HBX SFTP server. ▪ Carrier corrects and resends 834 file to DC HBX
Error Scenario 2	834 file has format errors at transaction level ▪ DC HBX rejects the only the transactions that has the format errors. ▪ DC HBX loads the transactions that are following the companion guide. ▪ DC HBX generates the 999 file and sent the file to DC HBX SFTP server. ▪ Carrier corrects and resends the transactions that have the format errors.

9.3.3   Audit and Reconciliation

9.3.3.1   834 Audit and Reconciliation – Individual Enrollment

Description	The DC Exchange sends a QHP issuer a standard 834 "audit or full" file with a Maintenance Type Code of "030," which contains enrollment data for all the active enrollments present on the day of transaction. In response the QHP issuers send a reconciliation report.
Interaction model	Batch
File Name	E.g.: 834_201305141422Z_CFBCI_C_F_I.pgp
Frequency	Weekly (for first three months 10/1/2013- 12/31/2013), Monthly thereafter
Inbound File Format	EDI X12 834 – Benefit Enrollment & Maintenance as per the companion guide published by DC Exchange.
Outbound File Format	Reconciliation report Refer to Appendix for Template
Exchange Process	DC Exchange compiles data of all enrollees corresponding to the Carrier into an EDI X12 834 file format. Data is also customized *per the DC Exchange Benefit Enrollment Companion Guide*.
Success	Carrier sends EDI X12 TA1 to DC Exchange as an acknowledgement after no errors are found at the interchange level. Carrier sends EDI X12 999 to DC Exchange as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level ▪ Carrier rejects the entire 834 file. ▪ Carrier generates the TA1 file and sends the file back to DC HBX as an acknowledgement ▪ DC HBX corrects and resends 834 file to Carrier.
Error Scenario 2	834 file has format errors at transaction level ▪ Carrier rejects the only the transactions that has the format errors. ▪ Carrier loads the transactions that are following the companion guide. ▪ Carrier generates the 999 file and sent the file to DC HBX SFTP server

9.3.3.2 834 Audit and Reconciliation - SHOP Enrollment

Description	The DC Exchange sends a QHP issuer a standard 834 "audit or full" file with a Maintenance Type Code of "030," which contains enrollment data for all the active enrollments present on the day of transaction. In response the QHP issuers send a reconciliation report.
Interaction model	Batch
File Name	E.g. 834_201305141422Z_CFBCI_C_F_S.pgp
Frequency	Weekly (for first three months after 10/1/2013), Monthly thereafter
Inbound File Format	EDI X12 834 – Benefit Enrollment & Maintenance as per the companion guide published by DC Exchange.
Outbound File Format	Reconciliation report Refer to Appendix for Template
Exchange Process	DC Exchange compiles data of all enrollees corresponding to the Carrier into an EDI X12 834 file format. Data is also customized *per the DC Exchange Benefit Enrollment Companion Guide*.
Success	Carrier sends EDI X12 TA1 to DC Exchange as an acknowledgement after no errors are found at the interchange level. Carrier sends EDI X12 999 to DC Exchange as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	834 file format errors at interchange level - Carrier rejects the entire 834 file. - Carrier generates the TA1 file and sends the file back to DC HBX as an acknowledgement - DC HBX corrects and resends 834 file to Carrier.
Error Scenario 2	834 file has format errors at transaction level - Carrier rejects the only the transactions that has the format errors. - Carrier loads the transactions that are following the companion guide. - Carrier generates the 999 file and sent the file to DC HBX SFTP server

9.3.4 820 DC Exchange – Carrier

9.3.4.1 Payment – Individual

Description	For individuals: ■ Binder payments for individuals are remitted from the DC Exchange to Carriers after the full premium has been received. ■ Premium changes resulting from a life-event are also paid to the DC Exchange and remitted from the DC Exchange to Carriers.
Interaction model	Batch
File Name	E.g.: 820_201305141422Z_DCHBX_A_S_I.pgp
Frequency	Twice Monthly (10th and 24th of each month)
Inbound File Format	EDI X12 820 - Payment Order/Remittance Advice (5010) as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	DC Exchange compiles all remittance related data corresponding to Individuals into an EDI X12 820 file format. Data is also customized per the DC Exchange published 820 Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	When 820 file has Interchange Level errors: ■ Carrier rejects the entire 820 file. ■ Carrier generates the TA1 file with errors and sends the file back to DC Exchange. ■ DC Exchange corrects the errors and resends the 820 file to the Carrier.
Error Scenario 2	When 820 file has standard syntax errors or Implementation Guide (IG) level errors: ■ Carrier rejects the entire 820 file. ■ Carrier generates the 999 file with errors and sends the file to DC Exchange. ■ DC Exchange corrects the errors and resends the 820 file.

9.3.4.2 Payment – SHOP

Description	SHOP payments are always paid from the DC Exchange to the Carrier for ▪ Binder payments ▪ Ongoing payments
Interaction model	Batch
File Name	E.g.: 820_201305141422Z_CFBCI_A_S_S.pgp
Frequency	Twice Monthly (10th and 24th of each month)
Inbound File Format	EDI X12 820 - Payment Order/Remittance Advice (5010) as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	DC Exchange compiles all remittance related data corresponding to the Carrier into an EDI X12 820 file format. Data is also customized per the DC Exchange published 820 Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	When 820 file has Interchange Level errors: ▪ Carrier rejects the entire 820 file. ▪ Carrier generates the TA1 file with errors and sends the file back to DC Exchange. ▪ DC Exchange corrects the errors and resends the 820 file to the Carrier.
Error Scenario 2	When 820 file has standard syntax errors or Implementation Guide (IG) level errors: ▪ Carrier rejects the entire 820 file. ▪ Carrier generates the 999 file with errors and sends the file to DC Exchange. ▪ DC Exchange corrects the errors and resends the 820 file.

9.3.5 820 Carrier – DCHBX (Deferred til 1/1/2014)

9.3.5.1 Individual Binder Payment

Description	Individuals have a choice whether to pay the DC Exchange or Carriers directly for the binder payments Binder payments for individuals are remitted from t Carriers to DC Exchange after the full premium has been received.
Interaction model	Batch
File Name	E.g.: 820_201305141422Z_CFBCI_N_S_I.pgp
Frequency	Twice Monthly (10th and 24th of each month)
Inbound File Format	EDI X12 820 - Payment Order/Remittance Advice (5010) as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement
Exchange Process	DC Exchange compiles all remittance related data corresponding to the Carrier into an EDI X12 820 file format. Data is also customized per the DC Exchange published 820 Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	When 820 file has Interchange Level errors: ▪ Carrier rejects the entire 820 file. ▪ Carrier generates the TA1 file with errors and sends the file back to DC Exchange. ▪ DC Exchange corrects the errors and resends the 820 file to the Carrier.
Error Scenario 2	When 820 file has standard syntax errors or Implementation Guide (IG) level errors: ▪ Carrier rejects the entire 820 file. ▪ Carrier generates the 999 file with errors and sends the file to DC Exchange. ▪ DC Exchange corrects the errors and resends the 820 file.

9.3.5.2 Individual Ongoing Payment

Description	Ongoing payments are paid directly to Carriers; these payments must be reported to the DC Exchange; however no money is actually transferred.
Interaction model	Batch
File Name	E.g.: 820_201305141422Z_CFBCI_N_S_S.pgp
Inbound File Format	EDI X12 820 - Payment Order/Remittance Advice (5010) as format per the companion guide published by DC Exchange.
Outbound File Format	EDI X12 TA1 -Interchange Acknowledgement / EDI X12 999 – Functional Acknowledgement DI X12 TA1 -Interchange Acknowledgement (5010)
Exchange Process	Carrier compiles all remittance data related to ongoing payments by the subscribers into an EDI X12 820 file format. Data is also customized per the DC Exchange published 820 Companion Guide.
Success	Receiving system sends EDI X12 TA1 to the transmitting system as an acknowledgement after no errors are found at the interchange level. Receiving system sends EDI X12 999 to the transmitting system as an acknowledgement after no errors are found at the functional group level.
Error Scenario 1	820 file format errors at interchange level ■ DC HBX rejects the complete 820 file. ■ DC HBX generates the TA1 file and sends the file to DC HBX SFTP server. ■ Carrier corrects and resends 820 file to DC HBX.
Error Scenario 2	820 file has format errors at transaction level ■ DC HBX rejects the only the transactions that has the format errors. ■ DC HBX loads the transactions that are following the companion guide. ■ DC HBX generates the 999 file and sent the file to DC HBX SFTP server. ■ Carrier corrects and resends 820 file to DC HBX

9.3.6   Employer Demographic Data from DCHBX

Description	Employer demographic transaction provides employer/group related data to the Carriers via a batch process. DC Exchange compiles the demographic data in an XML file in following scenarios: ▪ New employer/group being on boarded on DC Exchange ▪ Updates to existing employer/group data ▪ Employer/Group termination
Interaction model	Batch
File Name	E.g.: EmployerData_201305141422Z_CFBCI.xml.pgp
Frequency	Daily
Inbound File Format	XML file containing the demographics data
Outbound File Format	XML response indicating success/failure
Exchange Process	DC Exchange compiles data of all newly added employers/groups as well as of updated data of existing employers/groups into an XML file. The Carriers pick up the file, process it and then send appropriate XML response to DC Exchange.
Success	XML response with appropriate response code
Error Scenario 1	Missing mandatory fields as per the Group Identification Data (for example, Group ID) ▪ XML response with appropriate error codes. ▪ DC HBX corrects and resends Group information to Carrier.
Error Scenario 2	Data elements are not following the format mentioned in the Group format ▪ XML response with appropriate error codes. ▪ DC HBX corrects the data errors and resends Group information to Carrier.

9.3.7   Broker Demographic Data from DCHBX

Description	Broker demographic transaction provides employer/group related data to the Carriers via a batch process. DC Exchange compiles the demographic data in an XML file in following scenarios: ▪ New broker being on boarded on DC Exchange ▪ Updates to existing broker data ▪ Broker termination
Interaction model	Batch
File Name	e.g.: BrokerData_201305141422Z_CFBCI.xml.pgp
Frequency	Daily
Inbound File Format	XML file containing the demographics data
Outbound File Format	XML response indicating success/failure
Exchange Process	DC Exchange compiles data of all newly added brokers as well as of updated data of existing brokers into an XML file. The Carriers pick up the file, process it and then send appropriate XML response to DC Exchange.
Success	XML response with appropriate response code
Error Scenario 1	Missing mandatory fields as per the Broker Identification XSD (for example, Account Number) ▪ XML response with appropriate error codes. ▪ DC HBX corrects and resends Broker XML information to Carrier.
Error Scenario 2	Data elements are not following the format mentioned in the Broker Identification XSD ▪ XML response with appropriate error codes. ▪ DC HBX corrects and resends Broker XML information to Carrier.

9.4   Sample Test Case Format

The following table shows a sample of the format for a test case.

Sno	Test case ID	Test case Description	Step Name	Steps Description	Step Expected Result	Actual Result	Comments
1	TC0001_CI_<Brief desc of testcase>	Verify the xml - 5010 conversion is correct for Adding an Individual	Step 1				
	E.g. TC0001_CI_AddingAnIndividualXMLAnd5010Comparison		Step 2				
			Step 3				
2			Step 1				
			Step 2				
			Step 3				

9.5   Defect Tracking Template

The following embedded document contains a template that will be used for tracking defects by Carriers during Carrier Interface Testing:

DCHBX
Testing_Defect Track

9.6   Error Report

The Error Reports will document discrepancies identified through the electronic enrollment file batch process. The following embedded spreadsheet shows the required fields.

DCHBX Error Report
Sample.xlsx

9.7   Reconciliation Data Elements

The following embedded document shows the reconciliation data elements.

Reconciliation Data
Elements.xlsx

9.8   Test Summary Report

The following embedded document shows the Test Summary Report template. The Carrier is responsible for submitting the summary and details by objective.

DCHBX Carrier
Summary Test Report