NATIONAL PRACTITIONER DATA BANK (NPDB)

QUERYING AND REPORTING XML SERVICE (QRXS) WEB SERVICE USER GUIDE

Version 2.03

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DOCUMENT CHANGE HISTORY

The table below identifies changes that have been incorporated into each baseline of this document.

Date	Version #	Change Description
8/31/2010	1.0	Initial Release.
1/24/2011	1.01	 Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 1.01. Effective January 24, 2011, this document, version 1.01 replaces version 1.0. The changes in this version are indicated below: Updated Section 3.5, Status Codes. Code C02 was modified. Updated Section 4, Example Submissions and Responses. Removed the escape character '\' before '=' from the password element in the
		 Updated Section 5.2.3, PDS. Corrected the Data Bank Subject ID to be 88800000000111.
8/22/2011	1.02	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 1.02. Effective August 22, 2011, this document, version 1.02 replaces version 1.01. The changes in this version are indicated below:
		 Changed Proactive Disclosure Service (PDS) references to Continuous Query. Changed NPDB-HIPDB references in Status Code Descriptions to Data Bank. See Table 1.
Reserved	1.03	Reserved.
8/22/2011	1.04	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 1.04. Effective August 22, 2011, this document, version 1.04 replaces version 1.02. The changes in this version are indicated below:
		 Updated Section 1.2.2, User Account Password Policies to state that password restrictions and guidelines can be found at <u>http://www.npdb.hrsa.gov/Passwords</u>. Removed Section 1.2.4, Password Restrictions. Updated Section 3.3 Encode Password to state that password restrictions and guidelines can be found at <u>http://www.npdb.hrsa.gov/Passwords</u>. Updated the passwords. See sections 4.3, 4.4, and 4.5
1/23/2012	1.05	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 1.05. Effective January 23, 2012, this document, version 1.05 replaces version 1.04. The changes in this version are indicated below:
		• Updated Section 5.2.3, Continuous Query.

Date	Version #	Change Description
4/2/2012	1.06	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 1.06. Effective April 2, 2012, this document, version 1.06 replaces version 1.05. The changes in this version are indicated below:
		• Added status codes C68 and C69. See Section 3.5.
6/13/2013	2.00	 Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 2.00. Effective June 13, 2013, this document, version 2.00 replaces version 1.06. The changes in this version are indicated below: Updated URLs to the Data Bank's Informational Website:
		 http://www.npdb.hrsa.gov Updated the e-mail address for the NPDB Customer Service Center to <u>help@npdb.hrsa.gov</u>. Removed references to the HIPDB to reflect the merge of the two separate Data Banks into the NPDB. Updated Section 1.2.3, Resetting Passwords to state that users may reset their own passwords from the Data Bank Sign In page.
9/3/2013	2.01	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 2.01. Effective early 2014, this document, version 2.01 will replace version 2.00. The changes in this version are indicated below:
		 In Section 3, the URL for the wsdl was updated to <u>https://www.npdb.hrsa.gov/QrxsWebService.wsdl</u>.
		• In Section 3, the URL for the wsdl XML schema was updated to <u>https://www.npdb.hrsa.gov/QrxsWebService.xsd</u> .
		• The HTTP request address was updated to <u>https://www.npdb.hrsa.gov/qrxs/QrxsWebService</u> throughout.
		• The schema location in Section 4.1 was changed to xsi:schemaLocation= <u>http://www.npdb.hrsa.gov/QRXS npdb-hipdb-query.xsd</u> .
9/12/2016	2.02	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) Web Service User Guide version 2.01. Effective September 12, 2016, this document, version 2.02 replaces version 2.01. The changes in this version are indicated below:
		 Updated URLs to the Data Bank's Informational Website: <u>https://www.npdb.hrsa.gov</u>

Date	Version #	Change Description
8/20/2021	2.03	Below is a summary of changes to the Querying and Reporting XML Service (QRXS) User Guide version 2.03. Effective August 20, 2021, this document, version 2.03 will replace version 2.02. The changes in this version are indicated below:
		• Updated the example passwords to be in compliance with the new password length and complexity requirements.

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1. Introduction

1.1 Scope

The National Practitioner Data Bank (NPDB) provides the Querying and Reporting XML Service (QRXS) to users who wish to send and receive machine-readable responses. The NPDB provides a Java-based QRXS client program for sending and receiving transaction files. The web service interface described in this document is provided as an alternative to the Java-based client program. Web services are appropriate for users who are already familiar with web services, or would prefer to write their own web services client using a non-Java solution.

The transactions files that are sent to and received from the QRXS Web Service are identical to those used by the Java-based client program. File formats for QRXS submissions and responses are defined in the Interface Control Documents (ICDs) published by the NPDB, available on-line at <u>https://www.npdb.hrsa.gov/QRXS</u>. When using the QRXS, you are accessing a U.S. Government information system. System usage may be monitored, recorded, and subject to audit. Unauthorized use of this system is prohibited and subject to criminal and civil penalties. Use of this system indicates consent to monitoring and recording. Should you have questions concerning your responsibilities, please contact the NPDB Customer Service Center immediately as specified in Section 1.3, Contact Information.

1.2 User Account Security

1.2.1 User Accounts

Each entity has two types of accounts to access the NPDB, the Entity Data Bank Administrator account and user accounts. The Entity Data Bank Administrator account is used to create and manage the user accounts. User accounts are used to submit transactions and retrieve responses from the NPDB. The NPDB has established security policies in order to reduce the risk of unauthorized access to user accounts and protect the confidentiality of practitioner reports.

The NPDB ensures that QRXS transactions are verified as originating with your organization. This process involves a system that stores IP addresses for computers that have been "whitelisted" as belonging to your organization. Entity Data Bank Administrators are responsible for maintaining this list through the IQRS.

1.2.2 User Account Password Policies

A user must provide their organization's DBID, their User ID, and user account password each time they access the IQRS or the QRXS. If a valid password is not provided after three consecutive attempts, the user account is locked and the user must contact the Entity Data Bank Administrator to submit a user account password reset request.

Users are required to change their passwords periodically. A password change request can be submitted at any time to change an account's password. Password restrictions and guidelines can be found at <u>https://www.npdb.hrsa.gov/Passwords</u>.

To ensure the security and privacy of user account passwords when using the QRXS, the response to a filebased password change request transaction can only be downloaded by the same user account that submitted the transaction.

1.2.3 Resetting Passwords

When a user or administrator forgets his or her password, or is locked out of the IQRS, he or she may reset it from the NPDB Sign In page. From the Reset Password page, the user will answer pre-established Challenge Question(s) and enter a new password. An email confirming the password reset will be sent to the user with a link to the NPDB Sign In page. This link is valid for one hour.

If using the QRXS, only the administrator can submit and download transactions to reset user passwords. The administrator cannot reset his or her own password. A password change transaction should be submitted instead of a password reset transaction.

1.3 Contact Information

The QRXS is updated periodically by the NPDB. It is strongly recommended that users join the QRXS Mailing List at <u>https://www.npdb.hrsa.gov/MailingLists</u> to receive notice of updates.

The NPDB makes an effort to notify users at least 1 month in advance of an update to code lists. Users should expect code lists to be updated quarterly. Additional updates to the QRXS specifications are required periodically. Users will be notified 6 months in advance of updates to the QRXS specifications that are not backward compatible. If you are already registered for the QRXS Mailing List and would like to be removed, contact the NPDB Customer Service Center.

For additional information, visit the NPDB Web site at <u>https://www.npdb.hrsa.gov/software/aboutSoftware.jsp</u>. If you need assistance, contact the NPDB Customer Service Center by email at <u>help@npdb.hrsa.gov</u> or by phone at 1-800-767-6732 (TDD 703-802-9395). Information Specialists are available to speak with you weekdays from 8:30 a.m. to 6:00 p.m. (5:30 p.m. on Fridays) Eastern Time. The NPDB Customer Service Center is closed on all Federal holidays.

1.4 Conventions

Names of files, URLs, parameters, example Data Bank Identification Numbers (DBIDs), example passwords, or documents are presented in italics.

<u>http://www.java.com</u>

Data that must be entered into the computer, commands you must enter, contents of files, and contents of directories are presented in a different font (Verdana).

wsimport -p qrxs https://www.npdb.hrsa.gov/QrxsWebService.wsdl

Where the explicit use of upper or lower case letters are necessary due to the system interpreting upper and lower case letters as distinct characters, the text will clearly identify the command as "case sensitive."

2. Requirements

2.1 Software Requirements

Frameworks exist for most development platforms, including Java and .NET, to simplify the creation of a web service client. You may use any software you wish to develop your client and to communicate with the QRXS Web Service. However, the software must adhere to the following web service standards:

- SOAP 1.2
- Web Services Description Language (WSDL) 1.1
- SOAP Message Transmission Optimization Mechanism (MTOM)

Sending and Receiving Transactions 3.

The NPDB uses the Web Services Description Language (WSDL) to describe the interface to the QRXS web service. Download the latest version of the WSDL for QRXS at:

https://www.npdb.hrsa.gov/QrxsWebService.wsdl

The XML schema used by the WSDL is available at:

https://www.npdb.hrsa.gov/QrxsWebService.xsd

The WSDL provides all the details for how to connect to the NPDB and what format to use for submitting and receiving transactions. This section defines the content of the data records. Refer to the WSDL and schema for the exact data type specifications for each element.

Below is a guide to the format diagrams:

purpose surrounds required elements. A box with a solid line

The little box on the right side of the element displaying a "+" or "-" indicates that the element is a complex type. The "+"means that the simple elements in the complex type are not displayed in the same figure where as the "-" indicates that the simple elements are displayed.

A box with a dashed line surrounds elements that may be optional (depending on the type of transaction).

The cardinality of an element is indicated with a range 0.4 if more than one instance may be allowed.

denotes a schema sequence; elements in the sequence must appear in the order The symbol shown.

The symbol denotes a schema choice; only one of the elements shown may appear in the record.

3.1 Send

Use the send method to submit transactions to the NPDB. The send method requires your entity and user identification information as well as one or more SubmissionFiles.

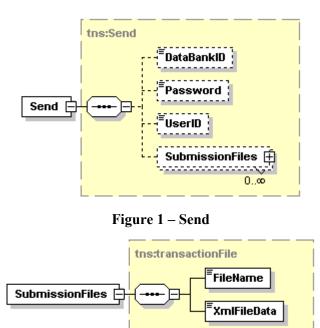


Figure 2 – SubmissionFiles

Notes:

- 1. A submission file may be a report, a one-time query, a Continuous Query transaction, or a password change transaction. No more than one password change transaction can be included at any time.
- The format of the XmlFileData in a submission file depends on the transaction being submitted. Submission formats for QRXS are defined in the Interface Control Documents (ICDs) published by the NPDB, available on-line at <u>https://www.npdb.hrsa.gov/QRXS</u>.
- 3. The XmlFileData in a submission file can be submitted as a MTOM attachment that comes after the soap envelope or as base64 encoded data within the soap envelope.
- 4. Submissions must not exceed 3 MB.
- 5. Continuous Query and one-time query submissions must not include more than 1,000 subjects.

The QRXS Web Service returns data from the send method inside of a XmlTransactionResponse.

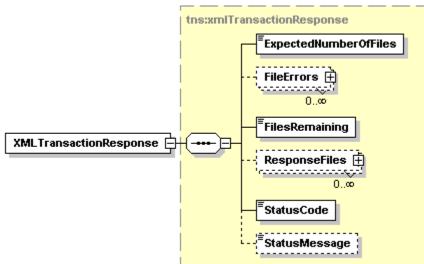


Figure 3 - Send Response

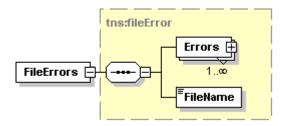
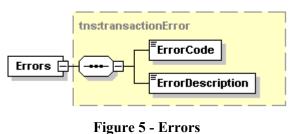


Figure 4 - FileErrors



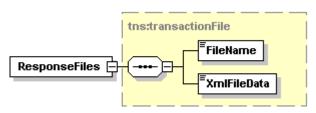


Figure 6 - ResponseFiles

Notes:

1. Some submissions will have confirmations or rejections returned immediately from the NPDB. These confirmations or rejections will be returned as MTOM attachments.

2. The format of the response data depends on the transaction being submitted. Response formats for QRXS are defined in the Interface Control Documents (ICDs) published by the NPDB, which is available on-line at *https://www.npdb.hrsa.gov/ORXS*.

3.2 Receive

Use the receive method to download responses to transactions you have previously submitted. The receive method requires your entity and user identification information.

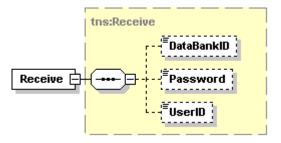


Figure 7 - Receive

The QRXS Web Service returns data from the receive method in an XmlTransactionResponse.

Notes:

- 1. The downloaded response files will have unique names.
- 2. Response files will not exceed 1MB. Responses that are larger than 1MB are separated into multiple response files. Responses for a file-based password change request will always be returned in a single response file. Users should read response files in numerical order.
- 3. The maximum number of responses that will be returned from the NPDB in one connection is 1,000. You may download more than 1,000 responses by calling the Receive method multiple times. The number returned in *FilesRemaining* will indicate if there are additional responses to download.
- 4. Responses to report, one-time query, and Continuous Query submissions are available for download within an average of 2 to 4 hours after submission. Under certain circumstances, additional processing time may be required. Please do not re-submit your report, one-time query, or Continuous Query transaction on the subject in question as this will result in duplicate transactions and duplicate fees. If your submission file is not formatted properly, the NPDB may not be able to process the file. If you do not receive your response within 2 to 3 business days of submission, please call the NPDB Customer Service Center.
- 5. Continuous Query Report Disclosures will be available within one day of a report being received.
- 6. Responses to file-based password change request submissions are generally available for download within several minutes.

3.3 EncodePassword

In order to maintain the integrity and confidentiality of the NPDB information, using the QRXS Web Service requires a valid encrypted NPDB password. A valid password and UserID is required for the successful execution of all upload and download transactions. The password is associated with a registered NPDB user, and will expire periodically. Password restrictions and guidelines can be found at <u>https://www.npdb.hrsa.gov/Passwords</u>. To

encrypt your password you may use the EncodePassword method prior to the first upload or download transaction, and each time the NPDB user updates their password.

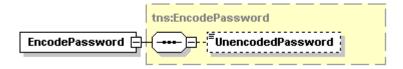


Figure 8 - EncodePassword

The QRXS Web Service returns data from the EncodePassword method inside a PasswordTranasctionResponse. The response contains the unencoded password and the encoded password, the status of the encoding request and any encode password errors.

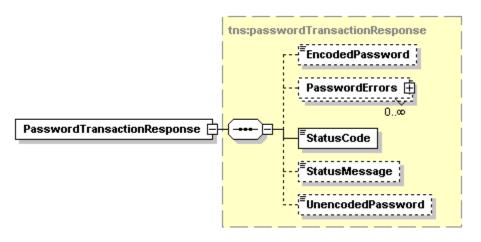


Figure 9 - PasswordTransactionResponse

3.4 Password Changes

As explained in Section 1.2.2, *User Account Password Policies*, a valid password is required to submit transactions to and download responses from the NPDB.

There are three methods for QRXS Web Service users to change user account passwords within the NPDB:

- 1. Interactively via the Internet using the Integrated Querying and Reporting Service (IQRS).
- 2. Through a QRXS Web Service method.
- 3. Through a QRXS Web Service transaction file submission, with data provided in the format specified in the Password Change XML ICD.

3.4.1 Types of Password Change Transactions

Password changes can be one of two types:

Change: Used by an entity user or Entity Data Bank Administrator to change their own account password. For file-based password change transactions, the response file can only be downloaded by the same user account that submitted the transaction.

Reset: Used by the Entity Data Bank Administrator to reset a user's password when the account is locked or the password is unknown. Only the Entity Data Bank Administrator is permitted to reset a user's password. For file-based password reset transactions, only the Entity Data Bank Administrator may download the response file. An Entity Data Bank Administrator may not reset their own password, but may change their password. The reset transaction returns a system-generated temporary password. The user must perform a password "change" transaction before submitting any other transaction.

3.4.2 ChangePassword

The change password method requires your entity and user identification information, as well as the new password you want for your user account.

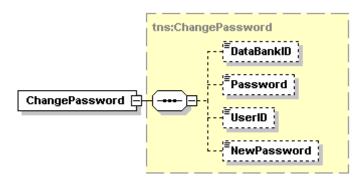


Figure 10 - ChangePassword

The QRXS Web Service returns data from the change password method inside a PasswordTranasctionResponse. The response contains the unencoded password and the encoded password, the status of the change password request and any password change errors.

3.4.3 ResetPassword

The reset password method format requires your entity and user identification information, and the new user ID of the user you want to reset.

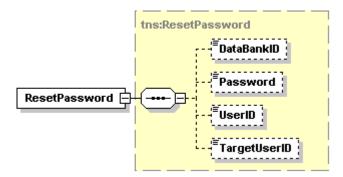


Figure 11 - ResetPassword

The QRXS Web Service returns data from the reset password method inside a PasswordTranasctionResponse. The response contains the new encoded password, the status of the reset password request and any password reset errors.

3.4.4 File-Based Password Transactions

File-based password change transactions are submitted as XML files through the QRXS web service. The Password Change XML ICD details the necessary file-format specifications.

If status code "C00" is indicated after submitting a file-based password change request transaction, the password for the specified DBID/User ID was changed successfully. The new password must be used to submit additional transactions, and download responses. For that process, follow the instructions specified in Section 3.3, EncodePassword.

If status code "C00" is not indicated after submitting a password change request transaction, the password change request for the specified DBID/User ID was unsuccessful. The password rejection file will be returned immediately. Refer to the Code Lists document at <u>https://www.npdb.hrsa.gov/Codes</u> for a list of rejection codes.

It is recommended when submitting a file-based password change transaction that you do not submit any other transactions until the password change has been successfully processed and the response file downloaded. No more than one password change transaction can submitted at any time.

3.5 Status Codes

The QRXS Web Service methods always return a status code and status message. A status code of "C00" indicates that the transaction was successful, and any other status code indicates that the transaction failed.

Table 1:Status Codes Returned

The following status codes and messages are returned:

Status	Description	
Code		
C00	Success, no errors.	
C01	Error on Data Bank server, reattempt transfer.	
C02	Authentication failed; DBID, UserID, or Password are invalid, or the user account is	
	inactive.*	
C03	Password expired for DBID and UserID.*	
C05	Error sending files to server, reattempt transfer.	
C06	Client sent an invalid request.	
C07	Inactive DBID.	
C08	Maximum upload file size exceeded; reduce file size and reattempt transfer.	
C09	All uploaded files are invalid.	
C10	Unable to communicate with Data Bank server, reattempt transfer.	
C12	Database error on Data Bank server, reattempt transfer.	
C13	Not all of the files were processed successfully.	

Status Code	Description
C16	The DBID for your organization must be renewed before you can access the Data Bank services. The NPDB requires all registered entities to periodically renew their registration information. Re-registration enables the NPDB to maintain accurate entity contact information and provides the entity with the opportunity to review the legal requirements and verify their compliance for participation with NPDB. The certifying official for your organization must review the NPDB statutory authorities, available at <i>https://www.npdb.hrsa.gov/resources/aboutLegsAndRegs.jsp</i> , as part of the renewal process. Once the statutory authorities have been reviewed, complete the on-line registration renewal form by logging in to the IQRS and selecting Renew Registration on the registration confirmation screen. The completed form must be signed and mailed to the NPDB for processing. If your organization has already mailed the registration renewal to the NPDB, it will be processed within 1 business day of its receipt by the NPDB. Data Bank Correspondence will be sent once the NPDB has successfully processed your registration renewal form. If necessary, you may complete a new form by selecting Renew Registration below. If you need further assistance, please contact the NPDB Customer Service Center at 1-800-767-6732.
C17	The DBID for your organization must be renewed before you can access the NPDB services. The NPDB requires all registered entities to periodically renew their registration information. Re-registration enables the NPDB to maintain accurate entity contact information and provides the entity with the opportunity to review the legal requirements and verify their compliance for participation with NPDB. The certifying official for your organization must review the NPDB statutory authorities, available at <u>https://www.npdb.hrsa.gov/resources/aboutLegsAndRegs.jsp</u> , as part of the renewal process. Contact the Entity Data Bank Administrator of your organization so they can renew the registration. If you need further assistance, please contact the NPDB Customer Service Center at 1-800-767-6732.
C40	Error opening connection to NPDB server, check Internet connection and reattempt transfer.
C54	Error downloading response files, reattempt transfer.
C57	Your password has expired. You may login to the IQRS to reset your password or contact your Entity Data Bank Administrator or the NPDB Customer Service Center.***
C58	Your account has been locked out. Contact your Entity Data Bank Administrator to reset the password. If you are using an Entity Data Bank Administrator account, contact the NPDB Customer Service Center to reset the password.
C59	Your account has been locked out. The number of invalid login attempts has exceeded the allowable login limit. Contact your Entity Data Bank Administrator to reset the password. If you are using an Entity Data Bank Administrator account, contact the NPDB Customer Service Center to reset the password.
C60	Your password must be changed before other transactions can be submitted.
C61	Error changing the password.
C62	Error resetting the password.
C64	No more than one password change transaction can be submitted at one time. Reduce the number of password change transactions to one, reattempt transfer.
C68	To ensure account security, the account holder must sign in at <u>https://www.npdb.hrsa.gov</u> to verify their identity.
C69	To ensure account security, the account holder must contact the NPDB Customer Service Center at 1-800-767-6732 to access the system.

* For detailed information on maintaining User IDs and passwords refer to <u>https://www.npdb.hrsa.gov/Passwords</u>. *** Under specific circumstances the IQRS password reset service is available to obtain a new password. Log in to the IQRS with your expired password to begin. You must have an e-mail address stored in your user account to use this service. You may also contact your Entity Data Bank Administrator to reset the password. If you are using an Entity Data Bank Administrator account, you may also use the IQRS password reset service or contact the NPDB Customer Service Center to reset the password.

4. Example Submissions and Responses

4.1 Send

Request

In this example, the submission files are submitted as MTOM attachments, therefore the data follows the soap envelope. For this submission we show the entire HTTP request; other examples show only the SOAP envelope.

```
POST https://www.npdb.hrsa.gov/qrxs/QrxsWebService HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: multipart/related; type="application/xop+xml"; start="<rootpart>"; start-
info="application/soap+xml"; action=""; boundary="----=_Part_1_6507439.1276874041758"
MIME-Version: 1.0
Host: www.npdb.hrsa.gov
Content-Length: 3006
```

```
-----= Part 1 6507439.1276874041758
Content-Type: application/xop+xml; charset=UTF-8; type="application/soap+xml; action=\"Send\""
Content-Transfer-Encoding: 8bit
Content-ID: <rootpart>
<soap:Envelope
xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:qrx="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
  <soap:Header/>
  <soap:Body>
   <qrx:Send>
     <qrx:DataBankID>80000000000000/qrx:DataBankID>
     <qrx:Password>bSTIrO3yVunS8272zwvjPb6fIpM=/qrx:Password>
     <qrx:UserID>bobjones</qrx:UserID>
     <qrx:SubmissionFiles>
       <FileName>query.xml</FileName>
       <XmlFileData>
          <inc:Include href="cid:guery"
          xlmns:inc="http://www.w3.org/2004/08/xop/include" />
       </XmlFileData>
    </grx:SubmissionFiles>
    </grx:Send>
  </soap:Body>
</soap:Envelope>
-----= Part 1 6507439.1276874041758
Content-Type: text/xml; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-ID: <query>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<query:querySubmission
xmlns:query="http://www.npdb-hipdb.hrsa.gov/Query"
xmlns:co="http://www.npdb-hipdb.hrsa.gov/Common"
xmlns:rqc="http://www.npdb-hipdb.hrsa.gov/ReportQueryCommon"
xmlns:rgs="http://www.npdb-hipdb.hrsa.gov/ReportQuerySubject"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="https://www.npdb.hrsa.gov/QRXS npdb-hipdb-query.xsd">
  <submitter>
   <entityDBID>80000000000000/entityDBID>
   <vendorID>1111111</vendorID>
  </submitter>
  payment>
    <creditCard>
      <number>4111111111111111</number>
      <expirationDate>2012-02-01</expirationDate>
      <cardholderName>BOB JONES</cardholderName>
      <cardholderAddress>
        <address>222 MAPLE DRIVE</address>
        <city>FAIRFAX</city>
        <state>VA</state>
        <zip>12345</zip>
      </cardholderAddress>
    </creditCard>
  </payment>
  <purpose>P</purpose>
  <certification>
     <name>BOB JONES</name>
    <title>SUPERVISOR</title>
    <phone>
       <number>1234567890</number>
       <extension>11</extension>
    </phone>
     <date>2010-09-01</date>
  </certification>
  <individual>
    <name>
       <last>DOE</last>
       <first>JOHN</first>
       <middle></middle>
       <suffix></suffix>
    </name>
     <otherName>
       <last>DOE</last>
       <first>JOHN</first>
       <middle>J</middle>
       <suffix>JR</suffix>
    </otherName>
    <gender>M</gender>
    <br/>
<br/>
birthdate>1946-12-13</birthdate>
    <organizationName>ACME ORGANIZATION</organizationName>
    <organizationType>
       <typeCode>999</typeCode>
```

```
<description>THIS IS A SPECIAL ORGANIZATION</description>
     </organizationType>
     <workAddress>
       <address>123 MAIN STREET</address>
       <address2>SUITE 400</address2>
       <city>FAIRFAX</city>
       <state>VA</state>
       <zip>22033</zip>
       <zip4>4321</zip4>
     </workAddress>
     <homeAddress>
       <address>1ST AVENUE</address>
       <address2>APT # 123</address2>
       <city>FAIRFAX</city>
       <state>VA</state>
       <zip>22033</zip>
       <zip4>1234</zip4>
    </homeAddress>
    <ssn>123457890</ssn>
    <fein>123456789</fein>
    <npi>1234567890</npi>
    <dea>123456897987</dea>
    <upin>484848</upin>
    <professionalSchool>
       <school>ACME UNIVERSITY</school>
       <graduationYear>2002</graduationYear>
    </professionalSchool>
    <occupationAndLicensure>
       <number>VA123</number>
       <state>VA</state>
       <field>030</field>
       <specialty>DA</specialty>
    </occupationAndLicensure>
    <otherOccupationAndLicensure>
       <number>45334</number>
       <state>MD</state>
       <field>030</field>
       <specialty>D6</specialty>
    </otherOccupationAndLicensure>
     <subjectID>IND00001</subjectID>
  </individual>
</query:querySubmission>
-----=_Part_1_6507439.1276874041758--
```

Response

```
HTTP/1.1 200 OK
Content-type: multipart/related;start="<rootpart*ad059c2d-4e60-44f9-935a-
c1567148f4ed@example.jaxws.sun.com>";type="application/xop+xml";boundary="uuid:ad059c2d-
4e60-44f9-935a-c1567148f4ed";start-info="application/soap+xml"
Transfer-encoding: chunked
--uuid:ad059c2d-4e60-44f9-935a-c1567148f4ed
Content-Id: <rootpart*ad059c2d-4e60-44f9-935a-c1567148f4ed@example.jaxws.sun.com>
Content-Type: application/xop+xml;charset=utf-8;type="application/soap+xml"
Content-Transfer-Encoding: binary
<?xml version='1.0' encoding='UTF-8'?>
<S:Envelope xmlns:S="http://www.w3.org/2003/05/soap-envelope">
 <S:Bodv>
  <ns2:SendResponse xmlns:ns2="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
   <ns2:XMLTransactionResponse>
       <ExpectedNumberOfFiles>1</ExpectedNumberOfFiles>
       <FilesRemaining>0</FilesRemaining>
       <ResponseFiles>
         <FileName>1400000000000745936.xml</FileName>
         <XmlFileData>
            <xop:Include xmlns:xop="http://www.w3.org/2004/08/xop/include"</pre>
               href="cid:56651a60-d121-4684-a1b0-31127602d383@example.jaxws.sun.com"/>
         </XmlFileData>
       </ResponseFiles>
     <StatusCode>C00</StatusCode>
     <StatusMessage></StatusMessage>
   </ns2:XMLTransactionResponse>
  </ns2:SendResponse>
 </S:Body>
</S:Envelope>
--uuid:ad059c2d-4e60-44f9-935a-c1567148f4ed
Content-Id: <56651a60-d121-4684-a1b0-31127602d383@example.jaxws.sun.com>
Content-Type: application/octet-stream
Content-Transfer-Encoding: binary
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<queryConfirmation xmlns="http://www.npdb-hipdb.hrsa.gov/QueryResponseCommon">
  <submitter xmlns="">
     <entityDBID>80000000000000/entityDBID>
     <vendorID>1111111</vendorID>
  </submitter>
  <submissionFilename xmlns="">f2</submissionFilename>
  <certification xmlns="">
     <name>BOB JONES</name>
     <title>SUPERVISOR</title>
     <phone>
       <number>1234567890</number>
       <extension>11</extension>
     </phone>
     <date>2010-09-01-05:00</date>
```

```
</certification>
<batchStatus xmlns="">
  <dcn>791000062298553</dcn>
  cprocessDate>2010-09-01-04:00</processDate>
  <successfullyProcessed>true</successfullyProcessed>
</batchStatus>
<subjectConfirmation xmlns="">
  <accepted>true</accepted>
  <dcn>791000062298553</dcn>
  <individual>
    <name>
       <last>DOE</last>
       <first>JOHN</first>
    </name>
     <otherName>
       <last>DOE</last>
       <first>JOHN</first>
       <middle>J</middle>
       <suffix>JR</suffix>
    </otherName>
     <gender>M</gender>
    <br/>
<br/>
birthdate>1946-12-13-05:00</birthdate>
     <organizationName>ACME ORGANIZATION</organizationName>
     <organizationType>
       <typeCode>999</typeCode>
       <description>THIS IS A SPECIAL ORGANIZATION</description>
    </organizationType>
    <workAddress>
       <address>123 MAIN STREET</address>
       <address2>SUITE 400</address2>
       <city>FAIRFAX</city>
       <state>VA</state>
       <zip>22033</zip>
       <zip4>4321</zip4>
     </workAddress>
     <homeAddress>
       <address>1ST AVENUE</address>
       <address2>APT # 123</address2>
       <city>FAIRFAX</city>
       <state>VA</state>
       <zip>22033</zip>
       <zip4>1234</zip4>
     </homeAddress>
     <ssn>****7890</ssn>
     <fein>123456789</fein>
     <npi>1234567890</npi>
     <dea>123456897987</dea>
     <upin>484848</upin>
     <professionalSchool>
       <school>ACME UNIVERSITY</school>
       <graduationYear>2002</graduationYear>
     </professionalSchool>
     <occupationAndLicensure>
```

<number>VA123</number> <state>VA</state> <field>030</field> <specialty>DA</specialty> </occupationAndLicensure> <otherOccupationAndLicensure> <number>45334</number> <state>MD</state> <field>030</field> <specialty>D6</specialty> </otherOccupationAndLicensure> </individual> </subjectConfirmation> </queryConfirmation>

--uuid:ad059c2d-4e60-44f9-935a-c1567148f4ed--

4.2 Receive

Request

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:qrx="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soap:Header/>
<soap:Body>
<qrx:Receive>
<qrx:DataBankID>80000000000000/qrx:DataBankID>
<qrx:Password>bSTIrO3yVunS8272zwvjPb6fIpM=</qrx:Password>
<qrx:UserID>bobjones</qrx:UserID>
</qrx:Receive>
</soap:Body>
</soap:Envelope>
```

Response

```
<soapenv:Envelope
xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns1="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Body>
<ns1:ReceiveResponse>
<ns1:XMLTransactionResponse>
<ExpectedNumberOfFiles>0</ExpectedNumberOfFiles>
<FilesRemaining>0</FilesRemaining>
<StatusCode>C00</StatusCode>
<StatusMessage/>
</ns1:XMLTransactionResponse>
</ns1:ReceiveResponse>
</soapenv:Body>
</soapenv:Envelope>
```

4.3 EncodePassword

Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:qrx="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Header/>
<soapenv:Header/>
<soapenv:Body>
<qrx:EncodePassword>
<qrx:UnencodedPassword>OakTreesGrowTa11</qrx:UnencodedPassword>
</qrx:EncodePassword>
</soapenv:Body>
</soapenv:Envelope>
```

The encrypted password is then returned from the QRXS Web Service:

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns1="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Body>
<ns1:encodePasswordResponse>
<ns1:PasswordTransactionResponse>
<EncodedPassword>CLHAypkeLO51kNxcUiBJzAVE+Po=</EncodedPassword>
<StatusCode>C00</StatusCode>
<StatusMessage/>
<UnencodedPassword>OakTreesGrowTa11</UnencodedPassword>
</ns1:PasswordTransactionResponse>
</ns1:EncodePasswordResponse>
</ns1:EncodePasswordResponse>
</ns1:EncodePasswordResponse>
</soapenv:Body>
```

```
</soapenv:Envelope>
```

4.4 Change Password

Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:qrx="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Header/>
<soapenv:Body>
<qrx:ChangePassword>
<qrx:DataBankID>8000000000000/qrx:DataBankID>
<qrx:Password>bSTIrO3yVunS8272zwvjPb6fIpM=</qrx:Password>
<qrx:UserID>administrator</qrx:UserID>
<qrx:NewPassword>OakTreesGrowTa11</qrx:NewPassword>
</qrx:ChangePassword>
</soapenv:Body>
</soapenv:Envelope>
```

Response

If the status code "C00" is indicated after submitting a ChangePassword method, the password change was successful:

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns1="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Body>
<ns1:ChangePasswordResponse>
<ns1:PasswordTransactionResponse>
<EncodedPassword>EQiWVf0OJuWrj3uEOCFb/evl3cA=</EncodedPassword>
<StatusCode>C00</StatusCode>
<StatusMessage/>
<UnencodedPassword>OakTreesGrowTa11</UnencodedPassword>
</ns1:PasswordTransactionResponse>
</ns1:ChangePasswordResponse>
</ns1:ChangePasswordResponse>
</soapenv:Body>
</soapenv:Envelope>
```

If the password change transaction fails, the reasons for failure will be returned:

```
<soapenv:Envelope
 xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns1="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
 <soapenv:Body>
   <ns1:ChangePasswordResponse>
     <ns1:PasswordTransactionResponse>
       <EncodedPassword/>
       <PasswordErrors>
         <ErrorCode>S9</ErrorCode>
         <ErrorDescription>The new password did not contain enough different
characters.</ErrorDescription>
       </PasswordErrors>
       <StatusCode>C61</StatusCode>
       <StatusMessage>Error changing the password</StatusMessage>
       <UnencodedPassword/>
     </ns1:PasswordTransactionResponse>
   </ns1:ChangePasswordResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

4.5 ResetPassword

Request

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:qrx="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Header/>
<soapenv:Body>
<qrx:ResetPassword>
<qrx:DataBankID>800000000000/qrx:DataBankID>
<qrx:Password> bSTIrO3yVunS8272zwvjPb6fIpM=</qrx:Password>
<qrx:UserID>administrator</qrx:UserID>
<qrx:TargetUserID>bobjones</qrx:TargetUserID>
</qrx:ResetPassword>
</soapenv:Body>
</soapenv:Envelope>
```

Response

If the status code "C00" is indicated after submitting a ResetPassword method, the password reset was successful.

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns1="http://www.npdb-hipdb.hrsa.gov/QrxsWebService">
<soapenv:Body>
<ns1:ResetPasswordResponse>
```

```
<ns1:PasswordTransactionResponse>
    <EncodedPassword>n5f1ab6IhM4eVOsYp7brg8Hvbp8=</EncodedPassword>
    <StatusCode>C00</StatusCode>
    <StatusMessage/>
    <UnencodedPassword>t5v4B8r*z</UnencodedPassword>
    </ns1:PasswordTransactionResponse>
    </ns1:ResetPasswordResponse>
    </soapenv:Body>
</soapenv:Envelope>
```

A system-generated password is displayed. This password must be changed by the user (using the ChangePassword method). The user may then use the password to submit QRXS files.

5. QRXS Test Environment

The following sections guide you through testing using the QRXS Web Service test environment. The QRXS Web Service test environment enables you to test network connectivity to the NPDB system, validate your submission files are well-formed and meet the mandatory data requirements, and download sample response files.

5.1 Overview

- Submissions that are well-formed and meet the data requirements will receive an immediate status of success.
- Rejected submissions will result in an immediate rejection response file.
- Submission files will not be processed through the system. Sample QRXS response files will be returned via QRXS Receive. See the Querying And Reporting XML Service (QRXS) Response File Test Mappings document for a full listing of available sample files that may be received. If no particular response file is specified (see Section 5.3 Receiving Test Files below), a sample Continuous Query Enrollment and Continuous Query Report Disclosure will be returned. In addition, sample response files may be found in the QRXS File Format Specifications zip file.
- QRXS test environment submissions will NOT be billed.
- Transactions can be submitted either as an entity or as an agent on behalf of an entity.
- In order to access the QRXS Web Service test environment you must obtain a "vendor ID" from <u>https://www.npdb.hrsa.gov/software/softwareSignIn.jsp</u>. Use your Vendor ID as your User ID to submit transactions.

5.2 Submitting Test Files

The entityDBID and agentDBID inside each XML submission file should be modified to match the test DBID.

 Entity DBID:
 8000000000000

 Agent DBID:
 8000000000000000

5.2.1 Configuration

The format of the messages used by the QRXS Web Service test environment do not differ from those of the normal QRXS Web Service. The only difference is that web service messages should be sent to the endpoint address specified in the *QrxsWebServiceTestPort* section of the QrxsWebService.wsdl file.

5.2.2 Payment

Users submitting one-time queries, or Continuous Query enrollments or renewals may use either:

• A pre-configured EFT account.

```
<payment>
<EFT>true</EFT>
</payment>
```

• The credit card number 411111111111111. The credit card expiration date may be any future date.

```
<payment>
<creditCard>
<number>4111111111111111/number>
<expirationDate>2011-01-11</expirationDate>
<cardholderName>JOE SMITH</cardholderName>
<cardholderAddress>
<address>123 TEST ST</address>
<city>TEST CITY</city>
<state>ND</state>
<zip>11111</zip>
</cardholderAddress>
<//creditCard>
</payment>
```

5.2.3 Continuous Query

Continuous Query enrollments, renewals, updates, cancellations, and status requests can be tested by sending Continuous Query submission files to the QRXS test environment. On submission there will be an immediate confirmation file returned.

NPDB Subject IDs 888000000000111 and 88800000000222 may be used to test renewals, updates, cancellations, and status requests. databankSubjectID 88800000000111 should be used for transactions submitted by the entity, and databankSubjectID 88800000000222 should be used for transactions submitted by the agent on behalf of the entity.

Updates may be validated against the following subject data (which will match the sample report).

```
<individual>
<name>
<last>DOE</last>
<first>JOHN</first>
</name>
<gender>M</gender>
<birthdate>1933-06-01</birthdate>
<workAddress>
<address>123 MAIN STREET</address>
<address2>12</address2>
<city>FAIRFAX</city>
<state>VA</state>
```

```
<zip>22033</zip>
   </workAddress>
   <ssn>777777777</ssn>
   <professionalSchool>
        <school>SCHOOL</school>
      <graduationYear>1998</graduationYear>
   </professionalSchool>
   <occupationAndLicensure>
      <number>123456789</number>
      <state>VA</state>
      <field>010</field>
      <specialty>03</specialty>
   </occupationAndLicensure>
   <subjectID>abc1234</subjectID>
   <customerUse>1111</customerUse>
   <department>123</department>
</individual>
```

5.2.4 Reports

Users may validate Correction Reports and Revision-to-Action Reports against test reports in our system. Use the DCNs below to test Correction and Revision-to-Action Report submissions.

DCN	Type of Report
2000000000000001	Individual State Licensure Initial Report
200000000000013	Individual State Licensure Revision to Action
	Report
200000000000002	Organization State Licensure Initial Report
200000000000012	Organization State Licensure Revision to Action
	Report

Table 2:Report DCNs for Testing

5.3 Receiving Test Files

Users may specify the type of response file they wish to receive by referring to the Querying And Reporting XML Service (QRXS) Response File Test Mappings. The Response Type column lists the exact <Response Type> to place in the UserID field. If no particular response file is specified, a sample Continuous Query Enrollment and Continuous Query Report Disclosure will be returned. The sample response files returned are identical to the response files found in the QRXS File Format Specifications zip file. Please note, the vendor ID returned within the sample files is invalid and should be ignored.

5.3.1.1 Requesting Multiple Response Files

Users may request multiple response files with a *QRXS receive* by indicating multiple <Response Type> names in the User ID field. The names must be separated by a "|" character.

For example: UserID=<your vendor ID>|SL_Ind_Initial|SL_Ind_Void|SL_Ind_Appeal

Will return the following three response files:

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SL_Ind_Initial_Response.xml SL_Ind_Void_Response.xml SL_Ind_Appeal_Response.xml

5.3.1.2 Requesting Response File Versions

Occasionally, multiple versions of a response file may exist. This may be due to an anticipated system change, where a response file will show a future file specification. Users may specify a particular file version by indicating the <Response Version> after the <Response Type>. They must be separated by a ":" character. If a version is not specified, the most current version will be provided. The version number for a particular sample file is found in the Read Me text of the sample response files.

For example: UserID=<your vendor ID>|SL_Ind_Initial:1.05|Query_Ind_Single :1.01|SL_Ind_Appeal:1.05

Will return the following three response files:

SL_Ind_Initial_Response.xml Ind_Single_Success_Response.xml SL_Ind_Appeal_Response.xml

5.3.2 Continuous Query

Sample Continuous Query Report Disclosure and sample Continuous Query Enrollment Responses will be returned with report information that matches the Sample Report with DCN 20000000000001, specified in Section 5.2.3.