



In-House Historical Results Import

Common Use Case Integration Package

athenahealth, Inc.

Version 18.10 Published: October 2018

Formerly Historical Lab Results

1. Table of Contents

[1 Table of Contents 2](#_Toc526526190)

[1.1 Scoping Process 3](#_Toc526526191)

[1.2 Scope Approval 3](#_Toc526526192)

[2 Project Information 4](#_Toc526526193)

[3 Product Description 5](#_Toc526526194)

[4 General Interface Configuration 6](#_Toc526526195)

[4.1 Message Samples and Specs 6](#_Toc526526196)

[4.1.1 Clinical Location Information 6](#_Toc526526197)

[5 Inbound Message Configuration 7](#_Toc526526198)

[5.1 Results 7](#_Toc526526199)

[5.1.1 Minimum Required Fields for Results Messages 7](#_Toc526526200)

[5.1.2 Matching Logic for Results 7](#_Toc526526201)

[5.1.2.1 Patient Matching Logic 7](#_Toc526526202)

[5.1.2.2 Provider and Department Routing 7](#_Toc526526203)

[5.1.2.3 Embedded PDF 8](#_Toc526526204)

[5.2 Interface Mapping Requirements 8](#_Toc526526205)

[6 Connectivity Method Overview 9](#_Toc526526206)

[7 Appendices and Other References 10](#_Toc526526207)

[7.1 Planned Maintenance Window 10](#_Toc526526208)

[7.2 Interface Message Queue Manager 10](#_Toc526526209)

[7.3 Interface Go-Live 10](#_Toc526526210)

* 1. Scoping Process

Your interface project manager is available to meet, assist with questions, and help determine the best-fit options for your project. Instructions for manual scoping are as follows:

1. **Review**:

Please read the Common Use Case Package and complete all form fields and check-boxes to the best of your ability. Should you have questions about the configuration options presented in this document please do not hesitate to discuss with your interface project manager.

If there is a customization request during the implementation process clients are subject to a fee. If there is a request to customize post go-live you will be subject to modification fees.

1. **Approve**:

When this document is completed to your satisfaction, please approve the scope of the interface by typing your name below.

* 1. Scope Approval

I,      , agree to the interface design as described here in this document.

Date:

1. Project Information

Please fill the following to the best of your ability. While not all contacts are required, you should be able to submit at least two contacts at the onset of a new interface project.

|  |  |  |  |
| --- | --- | --- | --- |
| General Information | |  |  |
| Integration Project Name (if applicable) | | |  |
| Vendor  (If applicable, third party data exchange vendor) | Company Name:  (ex. athenahealth, Inc.) | |  |
| Software Product Name:  (ex. athenaNet) | |  |
| Version:  (ex. 14.9) | |  |
| Interface Engine:  (ex. athenaNet MX Engine) | |  |
| Trading Partner Name | | |  |
| Trading Partner Type (ex. Health Information System, EHR, etc.) | | |  |
| athenahealth Practice Context ID | | |  |
| athenahealth Interface Project Manager Name | | |  |
| athenahealth Interface Project Manager Contact Information | | |  |
| Event Number (provided by Interface Project Manager, for internal athenahealth tracking) | | |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Contact | Role | Details | |
| Project Business Contact | Responsible for overall success of the project | Name: |  |
| Phone: |  |
| Email: |  |
| Project Interface Contact | Interface expert, responsible for continuing interface support | Name: |  |
| Phone: |  |
| Email: |  |
| Project IT Contact | Networking and security expert, responsible for overall connectivity | Name: |  |
| Phone: |  |
| Email: |  |
| Project Compendium Contact | Responsible for providing the facility’s compendium and order entry questions | Name: |  |
| Phone: |  |
| Email: |  |
| athenaNet Username: |  |
| Vendor Contact #1 | Role: | Name: |  |
| Phone: |  |
| Email: |  |
| Vendor Contact #2 | Role: | Name: |  |
| Phone: |  |
| Email: |  |

1. Product Description

This interface supports inbound lab, imaging or clinical documents into athenaNet from a legacy system.

This interface supports the secure and automated transfer of information between an external third-party system and athenaNet.  To ensure compatibility across a wide array of platforms and software vendors interface data is formatted according to HL7 v2 standards.

By choosing to move forward with this standard integration you are committing to the scope outlined below. If you require any customization to this integration, please contact your athenahealth project manager to engage athenahealth’s Integration Design team for detailed scoping. Please note that any customizations will result in this integration becoming a custom interface, and will incur additional fees.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enable? | Use Case | Event | https://lh6.googleusercontent.com/c4eb0UbbwgBZFm5Jww4CiQtBIzwVJNXSXDoKc4T53-e902k5qorcm5eTbaMvAZXsIBPhxVc1gsKdxPEoIG5UhCZNZH-xb5ywZvcBJd-7N04jyU12QBoTDE3Mohn8hQrb4yxpfwcXDefault Message | Functionality |
|  | Lab Result Import | Result CREATED in other system | ORU^RO1 | Result CLOSED in athenaNet |
|  | Imaging Result Import | Result CREATED in other system | ORU^RO1 | Result CLOSED in athenaNet |
|  | Clinical Document Import | Results CREATED in other system | ORU^RO1 | Result CLOSED in athenaNet |

1. General Interface Configuration
   1. Message Samples and Specs

For athenahealth samples and specifications, please see the (http://www.athenahealth.com/developer-portal/developer-toolkit/by-standard).

* + 1. Clinical Location Information

The Interface Project Manager will configure a Clinical Provider associated with the clinical location/performing facility. This Clinical Provider will represent the in-house LIS/RIS and it will define the electronic repository for the facility’s compendium. Please provide the name and full contact information for your performing facility in the table below.

|  |  |  |
| --- | --- | --- |
| Field | Description | |
| Performing Facility | Name: |  |
| Full Address: |  |
| Phone Number: |  |
| Fax Number: |  |
| Clinical Provider ID (if leveraging an existing Clinical Provider in athenaNet) |  |

**COMPENDIUMS**: If you are utilizing a net new Clinical Provider, a compendium will be built containing each electronic order code passed into athenaNet via the interface. For lab and imaging results, athenaNet auto-mapping logic will attempt to match foreign electronic order codes to athena global values. Those codes that cannot be mapped may not retain functionality related to flowsheets or quality measure data.

1. Inbound Message Configuration

Does your practice currently have a live results feed with this same vendor?

* 1. Results
     1. *Minimum Required Fields for Results Messages*

In order to process a result, the following data fields have to be specified.

|  |  |
| --- | --- |
| Data Field | Default HL7 Field |
| Sending Application (Type of Result) | MSH.3 |
| Sending Facility | MSH.4 |
| Client Account ID | MSH.6 |
| Patient Name | PID.5 |
| Patient Date of Birth | PID.7 |
| Provider | OBR.16\* |
| Result Order Code / Description | OBR.4 |
| Result Values | OBX |
| Tie to Order Document ID | ORC 2  OBR 2 |

* + 1. *Matching Logic for Results*
       1. Patient Matching Logic

The athenaNet matches results to a patient based on the below criteria. For automated patient matching to occur, the below three fields in the HL7 message must be identical to the data in the patient’s athenaClinicals chart:

* Patient full name (PID.5)
* Patient date of birth (PID.7)

If a result does not match to a patient in athenaNet, it will go into a HOLD status in the department staff bucket for the practice to review.

* + - 1. Provider and Department Routing

Historical results are mapped to a department and the Clinical Inbox of that department in athenaNet. Historical results that process successfully will auto-close and require no manual intervention. Those that cannot conclusively match to a patient are routed to the Clinical Inbox to be worked. For this reason the department used for historical result routing should be one less frequently used in Production (ex: MAIN OFFICE).

To what department should results be routed:

**HOLD VOLUME**: Generally 5-10% of result documents go into a ‘HOLD’ status to the Clinical Inbox. Please provide resource who is prepared to work this volume in athenaNet.

* + - 1. Embedded PDF

Will Embedded PDF be enabled for this interface? If no, please skip to next section.

athenaNet requires the following to process result messages with embedded PDFs:

* PDF is encoded in Base-64 and sent using “encapsulated data” datatype (OBX.2 should contain “ED”)
* Each message corresponds to a single result and contains exactly two OBR segments: the first containing discrete analyte values in as many OBX segments required and the second containing a single OBX with PDF data in OBX.5.5. Both OBR segments must contain the same accession identifier in OBR.2 and order type in OBR.4
* For result types with textual findings for which there is no discrete data, it is acceptable to send a single OBR segment containing PDF Data
  1. Interface Mapping Requirements

It is expected that the client system sends data elements as outlined in the [athenaNet inbound global tables](http://www.athenahealth.com/~/media/athenaweb/files/developer-portal/athenanet_global_tables.xls). (http://www.athenahealth.com/~/media/athenaweb/files/developer-portal/athenanet\_global\_tables.xls)

To utilize this integration athenaNet’s global values must be sent.

To complete scoping, the client or vendor is required to create in Excel a list of custom values to be mapped during implementation and provide it to your Interface Project Manager for verification and review. During the build phase of the project, the client will create these mappings based on this list provided.

For example, if ‘Abnormal Flag’ is selected in the table below, the athenahealth Interface Project Manager is expecting a list containing all available abnormal flag values and descriptions in the external system for review. In the build phase, the client will map each of these external codes to the corresponding athenaNet codes.

|  |  |  |
| --- | --- | --- |
| Data Element | Default HL7 Field | Result Type |
| Abnormal Flags | OBX.8 | Lab |
| Result Status | OBR.25 & OBX.11 | Lab |
| Priority | OBR.5 | Lab |
| Department | MSH.6 | Lab, Imaging, Clinical Document |
| Provider | OBR.16 | Clinical Document |

1. Connectivity Method Overview

As part of interface implementation, athenahealth will need to establish a secure method of transfer for electronic data to and from a third-party system. The Connectivity Method Overview contains our current connectivity offering as well as information regarding functionality and project steps.

<http://www.athenahealth.com/~/media/athenaweb/files/developer-portal/Connectivity_Methods_Overview.docx>

For questions, please contact your Interface Project Engineer.

1. Appendices and Other References
   1. Planned Maintenance Window

The athenaNet MX Engine is subject to the same maintenance windows as the general athenaNet application. Currently, 1 A.M. to 3 A.M. Eastern Time is reserved every morning for maintenance. By default, all interfaces are shut-off during this time window, and also remain disabled until 4 A.M. Eastern Time.

* 1. Interface Message Queue Manager

The athenaNet Interface Message Queue Manager (IMQM) is an interactive repository for all interface messages that pass through athenaNet. Messages can be categorized into several processing states. Please note that messages in a final state (processed or deleted) will only remain in the queue for 90 days.

|  |  |
| --- | --- |
| Message State | Explanation |
| SCHEDULED | Scheduled to be sent at a later time |
| NEW | Placeholder for a new message and ready to be sent or received |
| DISTRIBUTED | Delivery or acknowledgement is pending for Global interfaces |
| PENDING | Delivery or acknowledgement is pending |
| PROCESSED | Processed normally; remains in queue for only 90 days |
| ERROR | Generic error encountered; routed to client |
| CBOERROR | Billing related error encountered; routed to client |
| ATHENAERROR | Internal error encountered; routed to athenahealth Client Support Center |
| DELETED | Messages that have been deleted; remains in queue for only 90 days |

In order to access the IMQM in athenaNet to manually resolve common errors, such as missing providers, invalid procedure codes, or unknown departments, the following user permissions must be granted by the local system administrator:

|  |  |
| --- | --- |
| Permission | Use Case |
| Interface Admin: View Message Queue | You want to be able to view the IMQM. |
| Interface Admin: Map Insurance Messages | You need to map insurance messages. |
| Interface Admin: Map Messages (except Insurances) | You need to map all messages excluding insurance messages (e.g. provider and department mappings). |
| Interface Admin: File Upload Interface | You want to be able to upload files via the interface. |

See [athenaNet Interface Queue Management Guide](http://www.athenahealth.com/developer-portal/developer-toolkit/support) for more information on the functionality of the IMQM and on client-side cleanup for ERRORs and CBOERRORs.

* 1. Interface Go-Live

Unlike live interfaces, historical results import interfaces do not get transitioned to athenahealth support. Instead the interface resource will remain engaged to work any errors that arise during the import. Before the interface resource transitions off the project, the client connection will be disabled to prevent further messages from coming into athenaNet.